



Lexmark™

CS943 Printer

Service Manual

Product information

Product name:

Imprimante Lexmark CS943de

Machine type:

5080

Model(s):

435

Edition notice

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tales como engranajes, puertas, bandejas y cubiertas. Vorsichtsmaßnahmen bei der Demontage: 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. Andere: Dieses Produkt verwendet einen elektronischen Leistungsschalter. Er trennt die Eingangswechselfspannung nicht physikalisch. Um das Risiko eines elektrischen Schlags zu vermeiden, ziehen Sie stets das Netzkabel vom Drucker ab, wenn eine Abtrennung der Eingangswechselfspannung erforderlich ist. Andere: 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. Andere: Das Innere des Druckers kann sehr heiß sein. Vermeiden Sie Verletzungen, indem Sie heiße Komponenten stets abkühlen lassen, bevor Sie ihre Oberfläche berühren. Andere: 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.

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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 1 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:

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.

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 Lexmark 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-Lexmark surge protection devices may result in a risk of fire, property damage, or poor printer performance.



CAUTION—POTENTIAL INJURY

Do not use this product with an inline surge protector. The use of a surge protection device 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.



CAUTION—SHOCK HAZARD

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

Pour éviter tout risque d'électrocution ou d'incendie, branchez le câble d'alimentation directement à une prise électrique répondant aux exigences

requisites et correctement mise à la terre, proche du produit et facile d'accès.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

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 Lexmark comporte un risque d'incendie et de dégâts matériels, et peut amoindrir les performances de l'imprimante.



CAUTION—POTENTIAL INJURY

N'utilisez pas ce produit avec un parasurtenseur en ligne. L'utilisation de parasurtenseurs comporte un risque d'incendie et de dégâts matériels, et peut réduire les performances de l'imprimante.



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.

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

Solo debe usarse con este producto un protector de sobretensión insertable Lexmark 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 Lexmark puede dar lugar a que el rendimiento de la impresora sea bajo, a daños materiales o a posibles incendios.



CAUTION—POTENTIAL INJURY

No utilice este producto con un protector de sobretensión. El uso de un dispositivo de protección contra sobretensión puede dar lugar a que el rendimiento de la impresora sea bajo, a daños materiales o a posibles incendios.



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.

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

Mit diesem Produkt darf nur ein Lexmark Inline Surge Protector verwendet werden, der vorschriftsgemäß zwischen dem Drucker und dem mitgelieferten Netzkabel angeschlossen ist. Die Verwendung von nicht von Lexmark stammenden Überspannungsschutzgeräten kann zu Brandgefahr, Beschädigung von Eigentum oder einer eingeschränkten Druckerleistung führen.



CAUTION—POTENTIAL INJURY

Verwenden Sie dieses Produkt nicht mit einem Inline-Überspannungsschutz. Die Verwendung von Überspannungsschutzgeräten kann zu Brandgefahr, Beschädigung von Eigentum oder einer eingeschränkten Druckerleistung führen.



CAUTION—POTENTIAL INJURY

Wenn der Drucker mehr als 20 kg wiegt, sind zum sicheren Anheben mindestens zwei Personen notwendig.

Change history

Change history

December 1, 2023

- Added the Replacing the dual catch bin topic in the Parts removal chapter. See [See "Replacing the dual catch bin" on page 1806](#).
- Added the Hole punch capacity topic in the Theory of operations chapter. See [See "Hole punch capacity" on page 2263](#).
- Updated the Trifold, Z-fold, Staple, and Fold information in the A4 and Letter rows in the General information chapter. See [See "Supported paper sizes" on page 55](#).

November 16, 2023

- Updated the Halftone controller board removal topic in the Parts removal chapter. See [See "Halftone controller board removal" on page 1216](#).

August 9, 2023

- Added error code 8.07 to the 2-9 user attendance messages topic of the Diagnostics and troubleshooting chapter. See [See "2-9 user attendance messages" on page 615](#).
- Updated step 3 of the Booklet finisher sensor (paper transport cover open) error service check topic of the Diagnostics and troubleshooting chapter. See [See "Booklet finisher sensor \(paper transport cover open\) error service check" on page 641](#).

July 27, 2023

- Updated the following information in the Miscellaneous assembly of the Parts catalog chapter:
 - Updated PN 41X1873 to 41X1872.
 - Updated the description of PN 41X1872 to Wireless network card.See [See "Miscellaneous" on page 2161](#).

July 11, 2023

- Updated PN 40X0588 to 41X3975 in the following assemblies of the Parts catalog chapter:
 - SHPF compile tray 2. See [See "SHPF compile tray 2" on page 2137](#).
 - SHPF eject chute. See [See "SHPF eject chute" on page 2155](#).
 - SHPF eject motor drive. See [See "SHPF eject motor drive" on page 2157](#).
 - SHPF stacker. See [See "SHPF stacker" on page 2159](#).
 - SHPF stapler rail. See [See "SHPF stapler rail" on page 2143](#).

June 6, 2023

- Added the topic Port locations to the Component locations chapter. See [See "Port locations" on page 1825](#).
- Added the topic group Optional 2000-sheet tray to the Theory of operation chapter.
- Updated the Wiring diagram.

May 31, 2023

- Updated the following topics in the Parts removal chapter:
 - Sensor (trifold/Z-fold bin full transmit) removal. See ["Sensor \(trifold/Z-fold bin full transmit\) removal" on page 1584](#).
 - Sensor (trifold/Z-fold transport 2) removal. See ["Transport 2" on page 1904](#).
 - Sensor (trifold/Z-fold first fold) removal. See ["Sensor \(trifold/Z-fold first fold\) removal" on page 1586](#).
 - Sensor (trifold/Z-fold second fold catch) removal. See ["Sensor \(trifold/Z-fold second fold catch\) removal" on page 1591](#).
- Updated the following assemblies in the Parts catalog chapter:
 - Registration transport. See ["Registration transport" on page 1910](#).
 - Transport 2. See ["Transport 2" on page 1904](#).
 - Booklet finisher puncher. See ["Booklet finisher puncher" on page 2057](#).
 - Booklet finisher covers 1. See ["Booklet finisher covers 1" on page 2059](#).
 - Booklet finisher covers 2. See ["Booklet finisher covers 2" on page 2061](#).
 - Booklet finisher electronics 1. See ["Booklet finisher electronics 1" on page 2063](#).
 - Booklet finisher electronics 2. See ["Booklet finisher electronics 2" on page 2065](#).
 - Booklet finisher drive 1. See ["Booklet finisher drive 1" on page 2071](#).
 - Booklet finisher drive 2. See ["Booklet finisher drive 2" on page 2073](#).
 - Booklet finisher booklet maker. See ["Booklet finisher booklet maker" on page 2076](#).
 - Booklet finisher booklet maker covers. See ["Booklet finisher booklet maker" on page 2076](#).
 - Booklet finisher booklet maker drive 1. See ["Booklet finisher booklet maker" on page 2076](#).
 - Booklet finisher booklet maker tray. See ["Booklet finisher booklet maker" on page 2076](#).
 - Booklet finisher booklet maker rollers. See ["Booklet finisher booklet maker" on page 2076](#).
 - Booklet finisher booklet maker guide 1. See ["Booklet finisher booklet maker" on page 2076](#).
 - Booklet finisher booklet maker guide 2. See ["Booklet finisher booklet maker" on page 2076](#).
 - Booklet finisher booklet maker guide 3. See ["Booklet finisher booklet maker" on page 2076](#).
 - Booklet finisher stacker bracket 1. See ["Booklet finisher stacker bracket 1" on page 2097](#).
 - Booklet finisher stacker bracket 2. See ["Booklet finisher stacker bracket 2" on page 2099](#).
 - Booklet finisher guide 1. See ["Booklet finisher guide 1" on page 2101](#).
 - Booklet finisher guide 2. See ["Booklet finisher guide 2" on page 2103](#).
 - Booklet finisher guide 3. See ["Booklet finisher guide 3" on page 2105](#).
 - Booklet finisher compile tray stapler. See ["Booklet finisher compile tray stapler" on page 2111](#).
 - Booklet finisher rollers. See ["Booklet finisher rollers" on page 2119](#).
 - Booklet finisher stapler unit. See ["Booklet finisher stapler unit" on page 2123](#).
 - Booklet finisher end guide bracket. See ["Booklet finisher end guide bracket" on page 2125](#).

May 24, 2023

- Updated the following assemblies in the Parts catalog chapter:
 - Trifold/Z-fold end guide 1. See ["Trifold/Z-fold end guide 1" on page 2053](#).
 - Trifold/Z-fold end guide 2. See ["Trifold/Z-fold end guide 2" on page 2055](#).
 - Trifold/Z-fold transport 2. See ["Transport 2" on page 1904](#).

Change history

- Trifold/Z-fold upper guide. See ["Trifold/Z-fold upper guide" on page 2043](#).
- Trifold/Z-fold folder transport. See ["Trifold/Z-fold folder transport" on page 2045](#).
- Trifold/Z-fold guide 4. See ["Trifold/Z-fold guide 4" on page 2035](#).
- Updated the Wiring diagram.

May 17, 2023

- Added the following topics in the Diagnostics and troubleshooting chapter:
 - Standard bin 2 service check. See ["Standard bin 2 service check" on page 621](#)
 - Tray module mismatch error service check. See ["Tray module mismatch error service check" on page 769](#).
 - ATC sensor malfunction service check (Y toner). See ["ATC sensor malfunction service check \(Y toner\)" on page 765](#).
 - Motor (2000-sheet tray transport) failure service check. See ["Motor \(2000-sheet tray transport\) failure service check" on page 763](#).
 - Trifold/Z-fold door switch error service check. See ["Trifold/Z-fold door switch error service check" on page 655](#).
- Updated the following topics in the Diagnostics and troubleshooting chapter:
 - 2-9 user attendance messages. See ["2-9 user attendance messages" on page 615](#)
 - 8y user attendance messages. See ["8y user attendance messages" on page 701](#).
 - 55y error messages. See ["55y error messages" on page 927](#).
 - 100-102 error messages. See ["100-102 error messages" on page 727](#)
 - 980 error messages. See ["980 error messages" on page 968](#).

May 15, 2023

- Added the following topics in the Diagnostics and troubleshooting chapter:
 - Photoconductor drum failure service check. See ["Photoconductor drum failure service check" on page 721](#).
 - Toner cartridge error service check. See ["Toner cartridge error service check" on page 722](#).
 - Motor (toner supply) failure service check. See ["Motor \(toner supply\) failure service check" on page 831](#).
- Updated the following topics in the Diagnostics and troubleshooting chapter:
 - 8y user attendance messages. See ["8y user attendance messages" on page 701](#).
 - 12y error messages. See ["12y error messages" on page 777](#)
 - 13y-15y error messages. See ["13y-15y error messages" on page 823](#).
 - 100-102 error messages. See ["100-102 error messages" on page 727](#)

May 9, 2023

- Added the following parts to these assemblies in the Parts catalog chapter:
 - Miscellaneous. See ["Miscellaneous" on page 2161](#)
 - PN 41X4785 (Input option installation bracket (for CS94x and CX94x models only))
 - PN 41X4919 (SHPF installation kit)
 - PN 40X6683 (Optional tray installation screw)
 - PN 41X4161 (Trifold/Z-fold installation kit)
 - Printer covers 3. See ["Printer covers 3" on page 1938](#)
 - PN 41X2939 (Gap filler cover)

- 2000-sheet tray covers 2. See ["2000-sheet tray covers 2" on page 1984](#).
 - PN 41X4042 (2000-sheet tray insert front cover)
 - PN 41X4127 (2000-sheet tray end guide)
 - PN 41X4125 (2000-sheet tray latch)
- Booklet finisher covers 2. See ["Booklet finisher covers 2" on page 2061](#).
 - PN 41X4921 (Staple cartridge holder)

May 2, 2023

- Added the following topics in the Diagnostics and troubleshooting chapter:
 - Paper type error service check. See ["Paper type error service check" on page 757](#).
 - Procedure before starting the 9yy service checks. See ["Procedure before starting the 9yy service checks" on page 837](#).
 - Front door/cover open error service check. See ["Front door/cover open error service check" on page 650](#).
 - Left jam door open error service check. See ["Left jam door open error service check" on page 652](#).
 - Motor (tray pick/lift) failure for tray 1 service check. See ["Motor \(tray pick/lift\) failure for tray 1 service check" on page 191](#).
 - Sensor (2000-sheet tray feed) failure service check. See ["Sensor \(2000-sheet tray feed\) failure service check" on page 226](#).
 - Sensor (registration) failure for tray 1 service check. See ["Sensor \(registration\) failure for tray 1 service check" on page 292](#).
 - Sensor (registration) failure for tray 2 service check. See ["Sensor \(registration\) failure for tray 2 service check" on page 196](#).
 - Sensor (registration) failure for tray 3 service check (printer and 2 x 520-sheet tray). See ["Sensor \(registration\) failure for tray 3 service check \(printer and 2000-sheet tandem tray\)" on page 208](#).
 - Sensor (registration) failure for tray 3 service check (printer and 2000-sheet tandem tray). See ["Sensor \(registration\) failure for tray 3 service check \(printer and 2000-sheet tandem tray\)" on page 208](#).
 - Sensor (registration) failure for tray 4 service check (printer and 2 x 520-sheet tray). See ["Sensor \(registration\) failure for tray 4 service check \(printer and 2000-sheet tandem tray\)" on page 220](#).
 - Sensor (registration) failure for tray 4 service check (printer and 2000-sheet tandem tray). See ["Sensor \(registration\) failure for tray 4 service check \(printer and 2000-sheet tandem tray\)" on page 220](#).
 - Engine board failure 15 service check. See ["Engine board failure 15 service check" on page 902](#).
 - Engine board failure 16 service check. See ["Engine board failure 16 service check" on page 904](#).
 - Sensor (first transfer roll retract) failure service check. See ["Sensor \(first transfer roll retract\) failure service check" on page 760](#).
 - Printhead failure service check. See ["Printhead failure service check" on page 775](#).
 - Motor (fuser) failure to turn on service check. See ["Motor \(fuser\) failure to turn on service check" on page 812](#).
 - Motor (fusing drive) error service check. See ["Motor \(fusing drive\) error service check" on page 815](#).
 - K developer motor failure to turn on service check. See ["K developer motor failure to turn on service check" on page 825](#).
 - CMYK motors failure service check. See ["CMYK motors failure service check" on page 828](#).

- Updated the following topics in the Diagnostics and troubleshooting chapter:
 - 2-9 user attendance messages. See [.See "2-9 user attendance messages" on page 615](#)
 - 8y user attendance messages. See [See "8y user attendance messages" on page 701.](#)
 - 11y error messages. See [See "11y error messages" on page 771.](#)
 - 12y error messages. See [.See "12y error messages" on page 777](#)
 - 13y-15y error messages. See [See "13y-15y error messages" on page 823.](#)
 - 17y-18y error messages. See [See "17y-18y error messages" on page 833.](#)
 - 100-102 error messages. See [.See "100-102 error messages" on page 727](#)
 - 100-102 error messages. See [.See "100-102 error messages" on page 727](#)
 - 200-201 paper jam messages. See [.See "200-201 paper jam messages" on page 175](#)
 - 202-203 paper jam messages. See [.See "202-203 paper jam messages" on page 232](#)
 - 221-222 paper jam messages. See [See "221-222 paper jam messages" on page 245.](#)
 - 240-241 paper jam messages. See [.See "240-241 paper jam messages" on page 260](#)
 - 4yy paper jam messages (booklet finisher). See [See "4yy paper jam messages \(booklet finisher\)" on page 523.](#)
 - 940-950 error messages. See [See "940-950 error messages" on page 843.](#)
- Added the following parts in the Parts catalog chapter:
 - PN 41X3641 (Staple finisher transport assembly). See [See "Staple finisher covers" on page 1998.](#)
 - PN 41X4920 (Staple cartridge holder). See [See "Staple finisher components" on page 2011.](#)

April 12, 2023

- Updated the assembly index of the parts in the SHPF transport assembly in the Parts catalog chapter. See [See "SHPF transport" on page 2149.](#)

March 9, 2023

- Updated the topic LVPS removal in the Parts removal chapter. See [.See "LVPS removal" on page 1251](#)
- Updated the topic Maintenance kits in the Maintenance chapter. See [.See "Maintenance kits" on page 1866](#)
- Updated the topic EP process in the Theory of operation chapter. See [.See "EP process" on page 2176](#)
- Removed the topic Finisher sections from the Theory of operations chapter.

February 28, 2023

- Updated the following topics in the Service menus chapter:
 - Out of Service Erase. See [See "Out of Service Erase" on page 988.](#)
 - Panel test. See [See "Panel Test" on page 990.](#)
 - Output device diagnostics. See [See "Output device diagnostics" on page 996.](#)
 - Reset Maintenance Counter. See [See "Reset Maintenance Counter" on page 1005.](#)
 - Engine factory information. See [See "Engine factory information" on page 1006.](#)
 - Reset engine service error. See [See "Reset engine service error" on page 1007.](#)
 - NVM functions. See [See "NVM Functions" on page 1008.](#)
 - Adjustments. See [See "Adjustments" on page 1013.](#)
 - Motor tests. See [.See "Motor tests" on page 1016](#)
 - Imaging process adjustments. See [See "Adjustments" on page 1013.](#)
 - Disable Engine Calibration. See [See "Disable Engine Calibration" on page 1022.](#)

January 30, 2023

Change history

- Added error codes to the following topics in the Diagnostics and troubleshooting chapter:
 - 2-9 user attendance messages
 - 8y user attendance messages
 - 100 error messages
 - 17y-18y error messages
 - 200-201 paper jam messages
 - 202-203 paper jam messages
 - 221-222 paper jam messages
 - 240-241 paper jam messages
 - 4yy paper jam messages (booklet finisher)
 - 940-950 error messages
 - 100-102 error messages
 - 12y error messages
 - 4yy paper jam messages (SHPF)
- Added the following topics to the Diagnostics and troubleshooting chapter:
 - 11y error messages
 - 13y-15y error messages
 - 38y error messages

January 18, 2023

- Added the error code 950.20 in the Diagnostics and troubleshooting chapter. See [See "940-950 error messages" on page 843](#).
- Updated the following assemblies in the Parts catalog chapter:
 - Staple finisher covers. See [See "Staple finisher covers" on page 1998](#).
 - Staple finisher stapler bin. See [See "Staple finisher stapler bin" on page 2000](#).
 - Staple finisher stacker base. See [See "Staple finisher stacker base" on page 2002](#).
 - Staple finisher stapler transport 1. See [.See "Transport 1" on page 1902](#)
 - Staple finisher stapler transport 2. See [.See "Transport 2" on page 1904](#)
 - Staple finisher components. See [See "Staple finisher components" on page 2011](#).
 - Staple finisher compiler components. See [See "Staple finisher compiler components" on page 2013](#).
 - Trifold/Z-fold brackets. See [See "Trifold/Z-fold brackets" on page 2015](#).
 - Trifold/Z-fold covers. See [See "Trifold/Z-fold covers" on page 2017](#).
 - Trifold/Z-fold electronics. See [See "Trifold/Z-fold electronics" on page 2021](#).

January 8, 2023

- Added the topic group Securing the printer in the Diagnostics and troubleshooting chapter. It includes these topics:
 - Resetting the printer without admin credentials. See [.See "Resetting the printer without admin credentials" on page 91](#)
 - Using the security reset jumper. See [.See "Using the security reset jumper" on page 92](#)

December 13, 2022

- Added and updated the following topics in the Parts removal chapter:
 - Backing up eSF solutions and settings. See [See "Backing up eSF solutions and settings" on page 1050](#).
 - Critical information for controller board or control panel replacement. See [See "Controller board" on page 1940](#).
 - Controller board removal. See [See "Controller board" on page 1940](#).

Change history

- Changed the control panel PN from 41X2834 to 41X4351. See [See "Control panel" on page 1872](#).

November 17, 2022

- Updated the following assemblies in the Parts catalog chapter:
 - Controller board. See [See "Controller board" on page 1940](#).
 - Maintenance kits. See [See "Maintenance kits" on page 1866](#)

November 3, 2022

- Updated the following topics in the Parts removal chapter:
 - Developer unit (CMYK) removal. See [See "Developer unit \(CMYK\) removal" on page 1179](#).
 - 2000-sheet tandem tray transport guide (tray 3) removal. See [See "2000-sheet tandem tray transport guide \(tray 3\) removal" on page 1304](#).
- Updated the following assemblies in the Parts catalog chapter:
 - Fuser 2. See [.See "Fuser 2" on page 1880](#)
 - Fuser 3. See [.See "Fuser 3" on page 1882](#)
 - Tray paper feed. See [.See "Tray paper feed" on page 1948](#)
 - Printer covers 2. See [.See "Printer covers 2" on page 1936](#)
 - Wire harness. See [.See "Wire harness" on page 1932](#)
 - Exit 1 transport components. See [See "Exit 1 transport components" on page 1914](#).
 - Developer 1. See [See "Developer 1" on page 1884](#).
 - 2000-sheet tandem tray transport and feed. See [See "2000-sheet tandem tray transport and feed" on page 1972](#).
 - 2000-sheet tandem tray feeder (tray 3). See [See "2000-sheet tandem tray feeder \(tray 3\)" on page 1976](#).
 - 2000-sheet tandem tray feeder (tray 4). See [See "2000-sheet tandem tray feeder \(tray 4\)" on page 1978](#).
 - 2000-sheet tray covers 1. See [See "2000-sheet tray covers 1" on page 1982](#).
 - 2000-sheet tray insert. See [See "2000-sheet tray insert" on page 1986](#).
 - 2000-sheet tray feed 2. See [See "2000-sheet tray feed 2" on page 1990](#).
 - 2000-sheet tray transport 1. See [.See "Transport 1" on page 1902](#)
 - 2000-sheet tray transport 2. See [.See "Transport 2" on page 1904](#)

October 13, 2022

- Added the following topics in the Diagnostics and troubleshooting chapter:
 - Software download failure (trifold/Z-fold and booklet finishers) service check. See [See "Software download failure \(trifold/Z-fold and booklet finishers\) service check" on page 976](#).
 - Communication failure (trifold/Z-fold and booklet finishers) service check. See [See "Communication failure \(trifold/Z-fold and booklet finishers\) service check" on page 979](#).
- Updated the following topics in the Parts removal chapter:
 - Developer unit (CMYK) removal. See [See "Developer unit \(CMYK\) removal" on page 1179](#).
 - Sensor (trifold/Z-fold bin full transmit) removal. See [See "Sensor \(trifold/Z-fold bin full transmit\) removal" on page 1584](#).
 - Sensor (trifold/Z-fold bin full receive) removal. See [See "Sensor \(trifold/Z-fold bin full receive\) removal" on page 1589](#).
- Updated the following assemblies in the Parts catalog chapter:

- 2000-sheet tandem tray transport and feed. See ["2000-sheet tandem tray transport and feed" on page 1972](#).
- 2000-sheet tandem tray drive. See ["2000-sheet tandem tray drive" on page 1974](#).
- Trifold/Z-fold end guide 2. See ["Trifold/Z-fold end guide 2" on page 2055](#).
- Trifold/Z-fold guide 3. See ["Trifold/Z-fold guide 3" on page 2033](#).

October 4, 2022

- Added the following topics in the Diagnostics and troubleshooting chapter:
 - Door interlock failure (trifold/Z-fold and booklet finishers) service check. See ["Door error \(trifold/Z-fold and booklet finishers\) service check" on page 966](#).
 - Booklet finisher software download failure service check. See ["Booklet finisher software download failure service check" on page 972](#).
 - Booklet finisher communication failure service check. See ["Booklet finisher communication failure service check" on page 974](#).
- Added the topic Booklet finisher puncher removal in the Parts removal chapter. See ["Booklet finisher puncher" on page 2057](#).
- Updated the following assemblies in the Parts catalog chapter:
 - Trifold/Z-fold covers. See ["Trifold/Z-fold covers" on page 2017](#).
 - Staple finisher covers. See ["Staple finisher covers" on page 1998](#).

September 27, 2022

- Updated the topic Identifying jam locations in the Diagnostics and troubleshooting chapter. See ["Identifying jam locations" on page 172](#).
- Updated the following topics in the Service menus chapter:
 - Entering the Diagnostics menu. See ["Entering the Diagnostics menu" on page 984](#)
 - Entering the Diagnostics menu using the POR key. See ["Entering the Diagnostics menu using the POR key" on page 985](#).
- Updated the following topics in the Removals chapter:
 - Second transfer roller removal. See ["Second transfer roller removal" on page 1068](#).
 - Booklet finisher booklet maker controller board removal. See ["Controller board" on page 1940](#).
 - Booklet finisher booklet maker removal. See ["Booklet finisher booklet maker" on page 2076](#).
 - Booklet finisher controller board removal. See ["Controller board" on page 1940](#).
 - Booklet finisher LVPS removal. See ["LVPS removal" on page 1251](#)
 - Booklet finisher relay board removal. See ["Booklet finisher relay board removal" on page 1532](#).
 - Booklet finisher stapler head removal. See ["Booklet finisher stapler head removal" on page 1421](#).
 - Booklet finisher relay board removal. See ["Booklet finisher relay board removal" on page 1532](#).
 - Booklet finisher stapler head removal. See ["Booklet finisher stapler head removal" on page 1421](#).
 - Trifold/Z-fold controller board removal. See ["Controller board" on page 1940](#).
 - Trifold/Z-fold LVPS removal. See ["LVPS removal" on page 1251](#)
- Updated the topic Maintenance kits in the Maintenance chapter. See ["Maintenance kits" on page 1866](#)
- Added the assembly Maintenance kits to the Parts catalog chapter. See ["Maintenance kits" on page 1866](#)
- Updated the following assemblies in the Parts catalog chapter:

- Control panel. See ["Control panel" on page 1872](#).
- Printhead. See ["Printhead failure service check" on page 775](#)
- Transport 1. See ["Transport 1" on page 1902](#)
- Left jam door components. See ["Left jam door components" on page 1900](#)
- MPF. See ["MPF" on page 1896](#).
- Registration transport. See ["Registration transport" on page 1910](#).
- Registration drive. See ["Registration drive" on page 1912](#).
- Exit 2 transport components 1. See ["Exit 2 transport components 1" on page 1916](#).
- Electronics (rear 1). See ["Electronics \(rear 1\)" on page 1920](#)
- Electronics (rear 2). See ["Electronics \(rear 2\)" on page 1922](#).
- Electronics (rear 3). See ["Electronics \(rear 3\)" on page 1924](#)
- Controller board chassis 1. See ["Controller board" on page 1940](#).
- Controller board chassis 2. See ["Controller board" on page 1940](#).
- 2 x 520-sheet tray insert. See ["2 x 520-sheet tray insert" on page 1954](#).
- 2 x 520-sheet tray drive. See ["2 x 520-sheet tray drive" on page 1958](#).
- 2 x 520-sheet tray 3 and tray 4 feeder 1. See ["2 x 520-sheet tray 3 and tray 4 feeder 1" on page 1960](#).
- 2 x 520-sheet tray 3 and tray 4 feeder 2. See ["2 x 520-sheet tray 3 and tray 4 feeder 2" on page 1962](#).
- 2000-sheet tandem tray covers 1. See ["2000-sheet tandem tray covers 1" on page 1964](#).
- 2000-sheet tandem tray covers 2. See ["2000-sheet tandem tray covers 2" on page 1966](#).

September 20, 2022

- Updated the following assemblies in the Parts catalog chapter:
 - Main drive. See ["Main drive" on page 1876](#).
 - Fuser 3. See ["Fuser 3" on page 1882](#)
 - Developer 1. See ["Developer 1" on page 1884](#).
 - Developer 2. See ["Developer 2" on page 1886](#).
 - Transfer. See ["Transfer" on page 1888](#)
 - Waste toner 2. See ["Waste toner 2" on page 1892](#).
 - MPF. See ["MPF" on page 1896](#).
 - Trays. See ["Trays" on page 1942](#).
 - Trifold/Z-fold rollers 2. See ["Trifold/Z-fold rollers 2" on page 2039](#).

September 13, 2022

- Added the following topics in the Diagnostics and troubleshooting chapter:
 - Sensor (trifold/Z-fold first fold) failure service check. See ["Sensor \(trifold/Z-fold first fold\) failure service check" on page 937](#).
 - Sensor (trifold/Z-fold transport 2) failure service check. See ["Transport 2" on page 1904](#)
 - Sensor (trifold/Z-fold exit) failure 2 service check. See ["Sensor \(trifold/Z-fold exit\) failure 2 service check" on page 952](#).
 - Sensor (trifold/Z-fold first fold catch) failure service check. See ["Sensor \(trifold/Z-fold first fold catch\) failure service check" on page 956](#).
 - Sensor (trifold/Z-fold first fold catch) failure 2 service check. See ["Sensor \(trifold/Z-fold first fold catch\) failure 2 service check" on page 959](#).
 - Trifold/Z-fold bin switch failure service check. See ["Trifold/Z-fold bin switch failure service check" on page 963](#).
- Updated the following assemblies in the Parts catalog chapter:
 - Fuser 2. See ["Fuser 2" on page 1880](#)

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- Waste toner 2. See [See "Waste toner 2" on page 1892.](#)
- Trifold/Z-fold guide 4. See [See "Trifold/Z-fold guide 4" on page 2035.](#)
- Trifold/Z-fold folder transport. See [See "Trifold/Z-fold folder transport" on page 2045.](#)

September 6, 2022

- Added the following topics in the Diagnostics and troubleshooting chapter:
 - Sensor (trifold/Z-fold transport 1) failure service check. See [.See "Transport 1" on page 1902](#)
 - Sensor (trifold/Z-fold second fold) failure service check. See [See "Sensor \(trifold/Z-fold second fold\) failure service check" on page 942.](#)
 - Sensor (trifold/Z-fold second fold) failure 2 service check. See [See "Sensor \(trifold/Z-fold second fold\) failure 2 service check" on page 946.](#)
 - Sensor (trifold/Z-fold exit) failure service check. See [See "Sensor \(trifold/Z-fold exit\) failure service check" on page 949.](#)
- Updated the following assemblies in the Parts catalog chapter:
 - Fuser 3. See [.See "Fuser 3" on page 1882](#)

August 29, 2022

- Added the following topics to the Diagnostics and troubleshooting chapter:
 - Sensor (booklet finisher fold knife home position) failure service check. See [See "Sensor \(booklet finisher fold knife home position\) failure service check" on page 606.](#)
 - Sensor (booklet finisher compile paper presence 1 & 2) failure service check. See [See "Sensor \(booklet finisher compile paper presence 1 & 2\) failure service check" on page 610.](#)
 - Booklet finisher stapler failure service check. See [See "Booklet finisher stapler failure service check" on page 613.](#)
- In the Service menus chapter, updated the Entering the Diagnostics menu using the POR key topic. See [See "Entering the Diagnostics menu using the POR key" on page 985.](#)
- In the Removals chapter, updated the Halftone controller board removal topic. See [See "Controller board" on page 1940.](#)
- Updated the following assemblies in the Parts catalog chapter:
 - 2 x 520-sheet tray 3 and tray 4 feeder 1. See [See "2 x 520-sheet tray 3 and tray 4 feeder 1" on page 1960.](#)
 - Booklet finisher covers 2. See [See "Booklet finisher covers 2" on page 2061.](#)
 - Miscellaneous. See [.See "Miscellaneous" on page 2161](#)

August 15, 2022

- Added Entering the Diagnostics menu using the POR key topic to the Service menus chapter. See [See "Entering the Diagnostics menu using the POR key" on page 985.](#)
- Added the following topics under the Removals chapter:
 - Booklet finisher LVPS removal. See [.See "LVPS removal" on page 1251](#)
 - Booklet finisher relay board removal. See [See "Booklet finisher relay board removal" on page 1532.](#)
- Updated the following topics under the Removals chapter:
 - Rear cover removal. See [.](#)
 - Halftone controller board removal. See [See "Controller board" on page 1940.](#)
 - Booklet finisher rear lower cover removal. See [See "Booklet finisher rear lower cover removal" on page 1387.](#)

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- Booklet finisher booklet maker controller board removal. See ["Controller board" on page 1940](#).
- Booklet finisher booklet maker controller board tray removal. See ["Booklet finisher booklet maker" on page 2076](#).
- Booklet finisher controller board removal. See ["Controller board" on page 1940](#).
- Booklet finisher stack clamp clutch removal. See ["Booklet finisher stack clamp clutch removal" on page 1526](#).
- Booklet finisher stapler head removal. See ["Booklet finisher stapler head removal" on page 1421](#).
- Booklet finisher booklet maker stapler unit removal. See ["Booklet finisher booklet maker" on page 2076](#).
- Updated the following assemblies under the Parts Catalog chapter:
 - Fuser 2. See ["Fuser 2" on page 1880](#)
 - Wire harness. See ["Wire harness" on page 1932](#)
 - 2000-sheet tandem tray feeder (tray 4). See ["2000-sheet tandem tray feeder \(tray 4\)" on page 1978](#).

August 2, 2022

- Added the following topics to the Diagnostics and troubleshooting chapter:
 - Booklet finisher staple head failure service check. See ["Booklet finisher staple head failure service check" on page 584](#).
 - Sensor (booklet finisher compiler catch) failure service check. See ["Sensor \(booklet finisher compiler catch\) failure service check" on page 603](#).
 - Sensor (booklet finisher exit) failure service check. See ["Sensor \(booklet finisher exit\) failure service check" on page 595](#).
 - Sensor (booklet finisher in) failure service check. See ["Sensor \(booklet finisher in\) failure service check" on page 591](#).
 - Sensor (booklet finisher stack height 2) failure service check. See ["Sensor \(booklet finisher stack height 2\) failure service check" on page 580](#).
 - Sensor (booklet finisher stapler position) failure service check. See ["Sensor \(booklet finisher stapler position\) failure service check" on page 587](#).
 - Sensor (booklet finisher tamper home position) failure service check. See ["Sensor \(booklet finisher tamper home position\) failure service check" on page 599](#).
- Updated the Halftone controller board removal topic under Parts removal chapter to include procedures on backing up and retrieving NVM data before and after removal. See ["Controller board" on page 1940](#).
- Updated the following assemblies under Parts catalog chapter:
 - Printer covers 3. Changed product numbers for fuser exhaust cover and rear cover. See ["Printer covers 3" on page 1938](#)
 - Fuser 3. Added the FRU waste toner bottle guide with sensor. See ["Fuser 3" on page 1882](#)
- Updated the descriptions for the topics Folder components and Folder end guide components (both for trifold/Z-fold finisher) under Theory of operation chapter. See ["Folder components" on page 2217](#) and ["Folder end guide components" on page 2219](#).

July 18, 2022

- In the Service menus chapter, changed 'Color alignment adjust' to 'Color registration adjust' to reflect firmware specifications. See ["Adjustments" on page 1013](#).

July 12, 2022

- Added the following topics to the Diagnostics and troubleshooting chapter:

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- Sensor (booklet finisher set clamp home) failure service check. See ["Sensor \(booklet finisher set clamp home\) failure service check" on page 576](#).
- Sensor (booklet finisher rear tamper home) failure service check. See ["Sensor \(booklet finisher rear tamper home\) failure service check" on page 572](#).
- Added the 2000-sheet tray removals topics to the Parts removal chapter. See the "Optional 2000-sheet tray removals" section.
- Added the Booklet finisher upper guide assembly topic to the Parts catalog chapter. See ["Booklet finisher upper guide assembly" on page 2107](#).
- Removed the following FRUs from the Parts catalog chapter:
 - 41X3310 - Input option cooling fan
 - 41X3657 - Sensor (staple finisher stack height)
- Added the following FRU to the Parts catalog chapter:
 - 41X4082 - Tray 1 compartment cover

June 7, 2022

- Product announce.

General information

Printer model configurations

The Lexmark™ CS943 printer is a color, network-capable, laser printer. All information in this *Service Manual* pertains to all models unless explicitly noted. The printer is available in the following models:

Printer model configurations

Model name	Configuration / description	Machine type / model number
CS943de	Color A3 laser SFP, network ready, duplex print, and e-task	5080-435

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/m² (16 lb) may not be stiff enough to feed properly, and may cause jams. For more information, see the “Supported paper weights” topic.

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 the “Supported paper weights” topic.

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*.
- When printing on letterhead, load the paper in the proper orientation for your printer.

Supported paper sizes

Paper sizes supported by the standard tray, MPF, envelope tray, two-sided printing, and ADF

Paper size	Standard 2 x 520-sheet tray	Multipurpose feeder	Envelope tray	Two-sided printing	ADF ⁷
A3 ¹ 297 x 420 mm (11.69 x 16.54 in.)	✓	✓	X	✓	✓
A4 210 x 297 mm (8.27 x 11.7 in.)	✓	✓ ²	X	✓	✓
A5 148 x 210 mm (5.83 x 8.27 in.)	✓ ¹	✓ ²	X	✓	✓
A6 105 x 148 mm (4.13 x 5.83 in.)	✓ ¹	✓ ¹	X	X	✓
Arch B 304.8 x 457.2 mm (12 x 18 in.)	✓ ⁶	✓	X	X	✓
Executive	✓	✓ ²	X	✓	✓

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Paper size	Standard 2 x 520-sheet tray	Multipurpose feeder	Envelope tray	Two-sided printing	ADF ⁷
184.2 x 266.7 mm (7.25 x 10.5 in.)					
Folio ¹ 215.9 x 330.2 mm (8.5 x 13 in.)	✓	✓	X	✓	✓
Hagaki 100 x 148 mm (3.94 x 5.83 in.)	X	✓ ¹	X	X	X
JIS B4 ¹ 257 x 364 mm (10.12 x 14.33 in.)	✓	✓	X	✓	✓
JIS B5 182 x 257 mm (7.17 x 10.1 in.)	✓	✓ ²	X	✓	✓
Ledger ¹ 279.4 x 4431.8 mm (11 x 17 in.)	✓	✓	X	✓	✓
Legal ¹ 215.9 x 355.6 mm	✓	✓	X	✓	✓

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Paper size	Standard 2 x 520-sheet tray	Multipurpose feeder	Envelope tray	Two-sided printing	ADF ⁷
(8.5 x 14 in.)					
Letter 215.9 x 279.4 mm (8.5 x 11 in.)	✓	✓ ²	X	✓	✓
Oficio (Mexico)¹ 215.9 x 340.4 mm (8.5 x 13.4 in.)	✓	✓	X	✓	✓
SRA3 320.04 x 449.58 mm (12.6 x 17.7 in.)	✓ ⁶	✓	X	X	X
Statement 139.7 x 215.9 mm (5.5 x 8.5 in.)	✓ ¹	✓ ²	X	✓	✓
Universal	✓ ³	✓ ⁴	X	✓ ⁵	✓ ⁸
7 3/4 Envelope 98.4 x 190.5 mm (3.875 x 7.5 in.)	X	✓ ²	✓	X	X
9 Envelope	X	✓ ²	✓	X	X

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Paper size	Standard 2 x 520-sheet tray	Multipurpose feeder	Envelope tray	Two-sided printing	ADF ⁷
98.4 x 225.4 mm (3.875 x 8.9 in.)					
10 Envelope 104.8 x 241.3 mm (4.12 x 9.5 in.)	X	√ ²	✓	X	X
B5 Envelope 176 x 250 mm (6.93 x 9.84 in.)	X	√ ¹	✓	X	X
C5 Envelope 162 x 229 mm (6.38 x 9.01 in.)	X	√ ²	✓	X	X
DL Envelope 110 x 220 mm (4.33 x 8.66 in.)	X	√ ²	✓	X	✓

¹ Loads only in short-edge orientation.

² Loads only in long-edge orientation.

³ Supports paper sizes ranging from 99.99 x 147.99 mm (3.93 x 5.83 in.) to 296.93 x 431.8 mm (11.69 x 17 in.).

⁴ Supports paper sizes ranging from 88.9 x 98.38 mm (3.5 x 3.87 in.) to 320.04 x 1320.8 mm (12.6 x 52 in.).

General information

⁵ Supports paper sizes ranging from 128 x 139.7 mm (5 x 5.5 in.) to 320.04 x 482.6 mm (12.6 x 19 in.).

⁶ Supported only in tray 2.

⁷ Supported only in MFP models.

⁸ Supports paper sizes ranging from 125 x 85 mm (4.92 x 3.35 in.) to 297 x 482.60 mm (11.69 x 19 in.).

Paper sizes supported by the optional trays

Paper size	Optional 2 x 520-sheet tray	Optional 2000-sheet tandem tray	Optional 2000-sheet tray
A3 ¹ 297 x 420 mm (11.69 x 16.54 in.)	✓	X	X
A4 210 x 297 mm (8.27 x 11.7 in.)	✓	✓ ²	✓ ²
A5 ¹ 148 x 210 mm (5.83 x 8.27 in.)	✓ ¹	X	X
A6 105 x 148 mm (4.13 x 5.83 in.)	✓ ¹	X	X
Arch B 304.8 x 457.2 mm (12 x 18 in.)	✓	X	X
Executive 184.2 x 266.7 mm (7.25 x 10.5 in.)	✓	✓ ²	✓ ²
Folio ¹ 215.9 x 330.2 mm	✓	X	X

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Paper size	Optional 2 x 520-sheet tray	Optional 2000-sheet tandem tray	Optional 2000-sheet tray
(8.5 x 13 in.)			
Hagaki 100 x 148 mm (3.94 x 5.83 in.)	√ ¹	X	X
JIS B4 ¹ 257 x 364 mm (10.12 x 14.33 in.)	√ ¹	X	X
JIS B5 182 x 257 mm (7.17 x 10.1 in.)	√	√ ²	√ ²
Ledger ¹ 279.4 x 4431.8 mm (11 x 17 in.)	√ ¹	X	X
Legal ¹ 215.9 x 355.6 mm (8.5 x 14 in.)	√ ¹	X	X
Letter 215.9 x 279.4 mm (8.5 x 11 in.)	√	√ ²	√ ²
Oficio (Mexico) ¹ 215.9 x 340.4 mm (8.5 x 13.4 in.)	√	X	X
SRA3 320.04 x 449.58 mm (12.6 x 17.7 in.)	√	X	X
Statement ¹	√ ¹	X	X

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Paper size	Optional 2 x 520-sheet tray	Optional 2000-sheet tandem tray	Optional 2000-sheet tray
139.7 x 215.9 mm (5.5 x 8.5 in.)			
Universal	√ ³	√ ⁴	√ ⁴
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
B5 Envelope 176 x 250 mm (6.93 x 9.84 in.)	X	X	X
C5 Envelope 162 x 229 mm (6.38 x 9.01 in.)	X	X	X
DL Envelope 110 x 220 mm (4.33 x 8.66 in.)	X	X	X

¹ Loads only in short-edge orientation.

² Loads only in long-edge orientation.

³ Supports paper sizes ranging from 99.99 x 147.99 mm (3.93 x 5.83 in.) to 296.93 x 431.8 mm (11.69 x 17 in.).

⁴ Supports paper sizes ranging from 99.99 x 147.99 mm (3.93 x 5.83 in.) to 320.04 x 457.2 mm (12.6 x 18 in.).

Paper sizes supported by the output bins

Paper size	Standard bin		Dual catch bin
	Stack	Offset	Stack
A3 ¹ 297 x 420 mm (11.69 x 16.54 in.)	✓	✓	✓
A4 210 x 297 mm (8.27 x 11.7 in.)	✓	✓	✓
A5 148 x 210 mm (5.83 x 8.27 in.)	✓	✓	✓
A6 ¹ 105 x 148 mm (4.13 x 5.83 in.)	✓	✓	✓
Arch B 304.8 x 457.2 mm (12 x 18 in.)	✓	X	✓
Banner Max width: 215.9 mm (8.5 in.) Max length: 1320.8 mm (52 in.)	✓	X	✓
Executive 184.2 x 266.7 mm (7.25 x 10.5 in.)	✓	✓	✓
Folio ¹ 215.9 x 330.2 mm (8.5 x 13 in.)	✓	✓	✓

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Paper size	Standard bin		Dual catch bin
	Stack	Offset	Stack
Hagaki ¹ 100 x 148 mm (3.94 x 5.83 in.)	✓	✓	✓
JIS B4 ¹ 257 x 364 mm (10.12 x 14.33 in.)	✓	✓	✓
JIS B5 182 x 257 mm (7.17 x 10.1 in.)	✓	✓	✓
Ledger ¹ 279.4 x 4431.8 mm (11 x 17 in.)	✓	✓	✓
Legal ¹ 215.9 x 355.6 mm (8.5 x 14 in.)	✓	✓	✓
Letter 215.9 x 279.4 mm (8.5 x 11 in.)	✓	✓	✓
Oficio (Mexico) ¹ 215.9 x 340.4 mm (8.5 x 13.4 in.)	✓	✓	✓
SRA3 320.04 x 449.58 mm (12.6 x 17.7 in.)	✓	X	✓
Statement	✓	✓	✓

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Paper size	Standard bin		Dual catch bin
	Stack	Offset	Stack
139.7 x 215.9 mm (5.5 x 8.5 in.)			
Universal	√ ³	√ ⁴	X
7 3/4 Envelope ² 98.4 x 190.5 mm (3.875 x 7.5 in.)	√	√	√
9 Envelope ² 98.4 x 225.4 mm (3.875 x 8.9 in.)	√	√	√
10 Envelope ² 104.8 x 241.3 mm (4.12 x 9.5 in.)	√	√	√
B5 Envelope ² 176 x 250 mm (6.93 x 9.84 in.)	√	√	√
C5 Envelope ² 162 x 229 mm (6.38 x 9.01 in.)	√	√	√
DL Envelope ² 110 x 220 mm (4.33 x 8.66 in.)	√	√	√

¹ Loads only in short-edge orientation.

² Loads only in long-edge orientation.

³ Supports paper sizes ranging from 88.9 x 98.38 mm (3.5 x 3.87 in.) to 320.04 x 1320.8 mm (12.6 x 52 in.).

⁴ Supports paper sizes ranging from 88.9 x 98.38 mm (3.5 x 3.87 in.) to 296.93 x 431.8 mm (11.69 x 17 in.).

Paper sizes supported by the staple finisher and the staple, hole punch finisher

Paper size	Staple finisher			Staple, hole punch finisher			
	Stack	Offset	Staple	Stack	Offset	Staple	Hole punch
A3 ¹ 297 x 420 mm (11.69 x 16.54 in.)	✓	✓	✓	✓	✓	✓	✓
A4 210 x 297 mm (8.27 x 11.7 in.)	✓	✓	✓	✓	✓	✓	✓
A5 148 x 210 mm (5.83 x 8.27 in.)	✓	✓ ²	X	✓	✓ ²	✓ ²	✓ ⁶
A6 105 x 148 mm (4.13 x 5.83 in.)	✓	X	X	✓	X	X	X
Arch B 304.8 x 457.2 mm (12 x 18 in.)	✓	X	X	✓	X	X	X

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Paper size	Staple finisher			Staple, hole punch finisher			
	Stack	Offset	Staple	Stack	Offset	Staple	Hole punch
Banner Max width: 215.9 mm (8.5 in.) Max length: 1320.8 mm (52 in.)	√ ¹	X	X	√ ¹	X	X	X
Executive 184.2 x 266.7 mm (7.25 x 10.5 in.)	√ ²	√ ²	√ ²	√	√ ²	√ ²	√ ²
Folio ¹ 215.9 x 330.2 mm (8.5 x 13 in.)	√	√	√	√	√	√	√
Hagaki 100 x 148 mm (3.94 x 5.83 in.)	√	X	X	√	X	X	X
JIS B4 ₁ 257 x 364 mm	√	√	√	√	√	√	√

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Paper size	Staple finisher			Staple, hole punch finisher			
	Stack	Offset	Staple	Stack	Offset	Staple	Hole punch
(10.12 x 14.33 in.)							
JIS B5 182 x 257 mm (7.17 x 10.1 in.)	✓	✓ ²	✓ ²	✓	✓ ²	✓ ²	✓ ⁷
Ledger₁ 279.4 x 4431.8 mm (11 x 17 in.)	✓	✓	✓	✓	✓	✓	✓
Legal¹ 215.9 x 355.6 mm (8.5 x 14 in.)	✓	✓	✓	✓	✓	✓	✓
Letter 215.9 x 279.4 mm (8.5 x 11 in.)	✓	✓	✓	✓	✓	✓	✓
Oficio (Mexico)₁ 215.9 x 340.4 mm	✓	✓	✓	✓	✓	✓	✓

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Continued from page 67

Paper size	Staple finisher			Staple, hole punch finisher			
	Stack	Offset	Staple	Stack	Offset	Staple	Hole punch
(8.5 x 13.4 in.)							
SRA3 320.04 x 449.58 mm (12.6 x 17.7 in.)	✓	X	X	✓	X	X	X
Statement 139.7 x 215.9 mm (5.5 x 8.5 in.)	✓	√ ²	X	X	X	X	X
Universal	√ ³	√ ⁴	√ ⁵	√ ⁸	√ ⁹	√ ⁹	X
7 3/4 Envelope 98.4 x 190.5 mm (3.875 x 7.5 in.)	✓	X	X	X	X	X	X
9 Envelope 98.4 x 225.4 mm (3.875 x 8.9 in.)	✓	X	X	X	X	X	X
10 Envelope	✓	X	X	X	X	X	X

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Continued from page 68

Paper size	Staple finisher			Staple, hole punch finisher			
	Stack	Offset	Staple	Stack	Offset	Staple	Hole punch
104.8 x 241.3 mm (4.12 x 9.5 in.)							
B5 Envelope 176 x 250 mm (6.93 x 9.84 in.)	√ ²	X	X	X	X	X	X
C5 Envelope 162 x 229 mm (6.38 x 9.01 in.)	√ ¹	X	X	X	X	X	X
DL Envelope 110 x 220 mm (4.33 x 8.66 in.)	√	X	X	X	X	X	X

¹ Loads only in short-edge orientation.

² Loads only in long-edge orientation.

³ Supports paper sizes ranging from 88.9 x 98.38 mm (3.5 x 3.87 in.) to 296.93 x 431.8 mm (11.69 x 17 in.).

⁴ Supports paper sizes ranging from 190 x 139.7 mm (7.48 x 5.5 in.) to 296.93 x 431.8 mm (11.69 x 17 in.).

⁵ Supports paper sizes ranging from 202.9 x 182.03 mm (7.99 x 7.17 in.) to 296.93 x 431.8 mm (11.69 x 17 in.).

General information

⁶ Supports only up to two-hole punching.

⁷ Supports only up to two-hole punching when loaded in short-edge orientation.

⁸ Supports paper sizes ranging from 88.9 x 98.38 mm (3.5 x 3.87 in.) to 320.04 x 1320.8 mm (12.6 x 52 in.).

⁹ Supports paper sizes ranging from 209.97 x 148 mm (8.27 x 5.83 in.) to 296.93 x 431.8 mm (11.69 x 17 in.).

Paper sizes supported by the trifold/Z-fold finisher and the booklet finisher

Paper size	Trifold/Z-fold finisher		Booklet finisher				
	Trifold	Z-fold	Stack	Offset	Staple	Hole punch	Fold
A3 297 x 420 mm (11.69 x 16.54 in.)	X	X	√ ¹	√ ¹	X	√ ¹	X
A4 210 x 297 mm (8.27 x 11.7 in.)	√ ¹	√ ¹	√	√	√	√	√ ¹
A5 148 x 210 mm (5.83 x 8.27 in.)	X	X	√	X	X	√ ³	X
A6 105 x 148 mm	X	X	√ ¹	X	X	X	X

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Paper size	Trifold/Z-fold finisher		Booklet finisher				
	Trifold	Z-fold	Stack	Offset	Staple	Hole punch	Fold
(4.13 x 5.83 in.)							
Arch B 304.8 x 457.2 mm (12 x 18 in.)	X	X	✓	X	X	X	X
Banner Max width: 215.9 mm (8.5 in.) Max length: 1320.8 mm (52 in.)	X	X	✓ ¹	X	X	X	X
Executive 184.2 x 266.7 mm (7.25 x 10.5 in.)	X	X	✓	✓ ²	✓ ²	✓ ²	X
Folio 215.9 x 330.2 mm (8.5 x 13 in.)	X	X	✓ ¹	✓ ¹	X	✓ ¹	X
Hagaki	X	X	✓ ¹	X	X	X	X

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Paper size	Trifold/Z-fold finisher		Booklet finisher				
	Trifold	Z-fold	Stack	Offset	Staple	Hole punch	Fold
100 x 148 mm (3.94 x 5.83 in.)							
JIS B4 ¹ 257 x 364 mm (10.12 x 14.33 in.)	X	✓	✓ ¹	✓ ¹	X	✓ ¹	X
JIS B5 182 x 257 mm (7.17 x 10.1 in.)	X	X	✓	✓ ²	X	✓ ²	X
Ledger ¹ 279.4 x 4431.8 mm (11 x 17 in.)	X	✓	✓ ¹	✓ ¹	X	✓ ¹	X
Legal ¹ 215.9 x 355.6 mm (8.5 x 14 in.)	X	X	✓ ¹	✓ ¹	X	✓ ¹	X
Letter	✓ ¹	✓ ¹	✓	✓	✓	✓	✓ ¹

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Continued from page 72

Paper size	Trifold/Z-fold finisher		Booklet finisher				
	Trifold	Z-fold	Stack	Offset	Staple	Hole punch	Fold
215.9 x 279.4 mm (8.5 x 11 in.)							
Oficio (Mexico) 1 215.9 x 340.4 mm (8.5 x 13.4 in.)	X	X	√ ¹	√ ¹	X	√ ¹	X
SRA3 320.04 x 449.58 mm (12.6 x 17.7 in.)	X	X	√	X	X	X	X
Statement 139.7 x 215.9 mm (5.5 x 8.5 in.)	X	X	√	X	X	X	X
Universal	X	X	√ ⁴	√ ⁵	√ ⁵	X	X
7 3/4 Envelope 98.4 x 190.5 mm	X	X	X	X	X	X	X

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Continued from page 73

Paper size	Trifold/Z-fold finisher		Booklet finisher				
	Trifold	Z-fold	Stack	Offset	Staple	Hole punch	Fold
(3.875 x 7.5 in.)							
9 Envelope 98.4 x 225.4 mm (3.875 x 8.9 in.)	X	X	X	X	X	X	X
10 Envelope 104.8 x 241.3 mm (4.12 x 9.5 in.)	X	X	X	X	X	X	X
B5 Envelope 176 x 250 mm (6.93 x 9.84 in.)	X	X	√ ¹	X	X	X	X
C5 Envelope 162 x 229 mm (6.38 x 9.01 in.)	X	X	√ ¹	X	X	X	X
DL Envelope	X	X	X	X	X	X	X

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Continued from page 74

Paper size	Trifold/Z-fold finisher		Booklet finisher				
	Trifold	Z-fold	Stack	Offset	Staple	Hole punch	Fold
110 x 220 mm (4.33 x 8.66 in.)							

¹ Loads only in short-edge orientation.

² Loads only in long-edge orientation.

³ Supports only up to two-hole punching when loaded in long-edge orientation.

⁴ Supports paper sizes ranging from 202.9 x 181.86 mm (7.99 x 7.16 in.) to 320.04 x 482.94 mm (12.6 x 19.01 in.).

⁵ Supports paper sizes ranging from 202.9 x 181.86 mm (7.99 x 7.16 in.) to 296.93 x 431.8 mm (17 x 11.69 in.)

Supported paper types

Paper types supported by the standard tray, MPF, envelope tray, two-sided printing, and ADF

Paper type	Standard 2 x 520-sheet tray	Multipurpose feeder	Envelope tray	Two-sided printing	ADF ¹
Bond	✓	✓	X	✓	✓
Card Stock	✓	✓	X	✓	X
Colored Paper	✓	✓	X	✓	✓
Custom Type	✓	✓	X	✓	✓
Envelope	X	✓	✓	X	X
Glossy	✓	✓	X	✓	✓
Heavy Glossy	✓	✓	X	✓	✓
Heavy Paper	✓	✓	X	✓	✓
Labels	✓	✓	X	X	X
Letterhead	✓	✓	X	✓	✓
Light Paper	✓	✓	X	✓	✓
Plain Paper	✓	✓	X	✓	✓
Preprinted	✓	✓	X	✓	✓
Recycled	✓	✓	X	✓	✓
Rough Envelope	X	✓	✓	X	X
Rough Cotton	✓	✓	X	✓	✓
Transparencies	X	X	X	X	X

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Paper type	Standard 2 x 520-sheet tray	Multipurpose feeder	Envelope tray	Two-sided printing	ADF ¹
Vinyl Labels	X	X	X	X	X

¹Supported only in MFP models.

Paper types supported by the optional trays

Paper type	Optional 2 x 520-sheet tray	Optional 2000-sheet tandem tray	Optional 2000-sheet tray
Bond	✓	✓	✓
Card Stock	✓	✓	✓
Colored Paper	✓	✓	✓
Custom Type	✓	✓	✓
Envelope	X	X	X
Glossy	✓	✓	✓
Heavy Glossy	✓	✓	✓
Heavy Paper	✓	✓	✓
Labels	✓	✓	✓
Letterhead	✓	✓	✓
Light Paper	✓	✓	✓
Plain Paper	✓	✓	✓
Preprinted	✓	✓	✓
Recycled	✓	✓	✓
Rough Envelope	X	X	X
Rough Cotton	✓	✓	✓
Transparencies	X	X	X
Vinyl Labels	X	X	X

Paper types supported by the output bins

Paper type	Standard bin		Dual catch bin
	Stack	Offset	Stack
Bond	✓	✓	✓
Card Stock	✓	✓	✓
Colored Paper	✓	✓	✓
Custom Type	✓	✓	✓
Envelope	✓	✓	✓
Glossy	✓	✓	✓
Heavy Glossy	✓	✓	✓
Heavy Paper	✓	✓	✓
Labels	✓	✓	✓
Letterhead	✓	✓	✓
Light Paper	✓	✓	✓
Plain Paper	✓	✓	✓
Preprinted	✓	✓	✓
Recycled	✓	✓	✓
Rough Envelope	✓	✓	✓
Rough Cotton	✓	✓	✓
Transparencies	X	X	X
Vinyl Labels	X	X	X

Paper types supported by the staple finisher and the staple, hole punch finisher

Paper type	Staple finisher			Staple, hole punch finisher			
	Stack	Offset	Staple	Stack	Offset	Staple	Hole punch
Bond	✓	✓	✓	✓	✓	✓	✓
Card Stock	✓	✓	X	✓	✓	X	✓

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Continued from page 78

Paper type	Staple finisher			Staple, hole punch finisher			
	Stack	Offset	Staple	Stack	Offset	Staple	Hole punch
Colored Paper	✓	✓	✓	✓	✓	✓	✓
Custom Type	✓	✓	✓	✓	✓	✓	✓
Envelope	✓	X	X	X	X	X	X
Glossy	✓	✓	✓	✓	✓	✓	✓
Heavy Glossy	✓	✓	X	✓	✓	X	✓
Heavy Paper	✓	✓	X	✓	✓	X	✓
Labels	✓	✓	X	X	X	X	X
Letterhead	✓	✓	✓	✓	✓	✓	✓
Light Paper	✓	✓	✓	✓	✓	✓	✓
Plain Paper	✓	✓	✓	✓	✓	✓	✓
Preprinted	✓	✓	✓	✓	✓	✓	✓
Recycled	✓	✓	✓	✓	✓	✓	✓
Rough Envelope	✓	X	X	X	X	X	X
Rough Cotton	✓	✓	X	✓	✓	X	✓
Transparencie s	X	X	X	X	X	X	X
Vinyl Labels	X	X	X	X	X	X	X

Paper types supported by the trifold/Z-fold finisher and the booklet finisher

Paper type	Trifold/Z-fold finisher		Booklet finisher				
	Trifold	Z-fold	Stack	Offset	Staple	Hole punch	Fold
Bond	✓	X	✓	✓	✓	✓	X
Card Stock	X	X	✓	✓	X	✓	X
Colored Paper	✓	✓	✓	✓	✓	✓	✓
Custom Type	✓	✓	✓	✓	✓	✓	✓
Envelope	X	X	X	X	X	X	X
Glossy	✓	X	✓	✓	✓	✓	✓
Heavy Glossy	X	X	✓	✓	X	✓	X
Heavy Paper	X	X	✓	✓	X	✓	X
Labels	X	X	X	X	X	X	X
Letterhead	X	X	✓	✓	✓	✓	✓
Light Paper	✓	✓	✓	✓	✓	✓	✓
Plain Paper	✓	✓	✓	✓	✓	✓	✓
Preprinted	✓	✓	✓	✓	X	✓	X
Recycled	✓	✓	✓	✓	✓	✓	✓
Rough Envelope	X	X	X	X	X	X	X
Rough Cotton	X	X	✓	✓	X	✓	X
Transparencies	X	X	X	X	X	X	X
Vinyl Labels	X	X	X	X	X	X	X

- Labels, envelopes, and card stock always print at reduced speed.
- Card stock is supported in two-sided printing only up to 163 g/m² (90-lb bond). Anything heavier is supported only in one-sided printing.
- Vinyl labels are supported for occasional use only and must be tested for acceptability. Some vinyl labels may feed more reliably from the multipurpose feeder.

Supported paper weights

Paper weights supported by the printer

Standard or optional 2 x 520-sheet tray, and optional 2000-sheet tandem tray	Multipurpose feeder	Envelope tray	Optional 2000-sheet tray
60–256 g/m ² (12–68-lb bond)	60–216 g/m ² (12–57-lb bond)	75–90 g/m ² (20–24-lb bond)	60–216 g/m ² (12–57-lb bond)

- For 60–176 g/m² (16–47-lb bond) paper, grain long fibers are recommended.
- Paper less than 75 g/m² (20-lb bond) must be printed with Paper Type set to Light Paper. Failure to do so may cause excessive curl which can lead to feeding errors, especially in more humid environments.
- Two-sided printing supports paper weight from 60–162 g/m² (16–43-lb bond) paper.
- 100% cotton content maximum weight is 90 g/m² (24-lb bond).

Finding the printer serial number

Find the printer serial number and take note of it before calling customer support.

1. Open the front door.



2. Locate the serial number at the left side of the printer.



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 (T10 head)
- Needle-nose pliers
- Diagonal side cutters
- Spring hook
- Feeler gauges
- Analog or digital multimeter
- 3-mm ball hex wrench
- Toner vacuum
- Flashlight

Diagnostics and troubleshooting

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



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—HOT SURFACE

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.



CAUTION—PINCH HAZARD

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



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—HOT SURFACE

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.



CAUTION—PINCH HAZARD

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



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—HOT SURFACE

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



CAUTION—PINCH HAZARD

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

- With the power cord unplugged from the electrical outlet, check if the cord is free from breakage, short circuits, disconnected wires, or incorrect connections.
- Make sure that the printer is properly grounded.
- Make sure that the power supply line voltage is within 10% of the rated line voltage.
- Make sure that the printer is securely installed on a level surface in a well-ventilated area.
- Make sure that the temperature and relative humidity are within the specifications. See [See "Temperature information" on page 2175.](#)
- Avoid locations that:
 - Generate ammonia gas
 - Are exposed to direct sunlight
 - Are near open flames
 - Are dusty
- Make sure that the recommended paper for this printer is used.
- Do a test print with paper from a newly opened package, and then check the result.

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.

NOTES

This setting cannot be used if the sensor (tray present) is damaged.

WARNING—POTENTIAL DAMAGE

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

Enter Safe Mode from the Configuration menu, and then POR the printer. See [.See "Configuration Menu" on page 1024](#)

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

Securing the printer

Resetting the printer without admin credentials

- 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 [See "Data security notice" on page 94](#).

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.

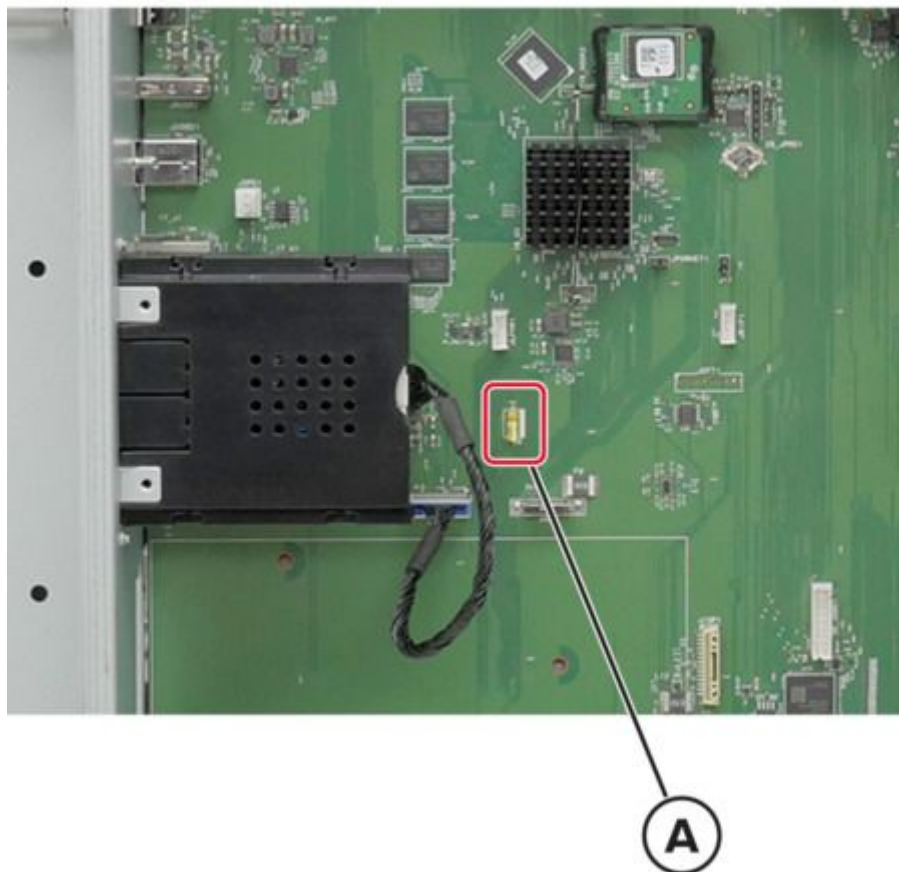
2. If Out of Service Erase is unavailable, then use the security reset jumper to reset the printer to factory defaults. For more information, see [.See "Using the security reset jumper" on page 92](#)
3. If the effect of the jumper reset is disabled, then replace the controller board. For more information, see [See "Controller board removal" on page 1207](#).

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.

- 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 or [See "Controller board removal" on page 1207.](#) [See "Resetting the printer without admin credentials" on page 91](#)

1. Turn off the printer.
2. Remove the controller board shield.
3. Locate the security jumper (A) on the controller board.



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

NOTES

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

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

- 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.

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, scanner and bookmark settings, and embedded solutions.
- **Hard disk memory**—Some printers have a hard 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.
- **Intelligent storage drive (ISD)**—Some printers may have an ISD installed. ISD uses non-volatile flash memory to store user data from complex print jobs, form data, and font data.

The following parts can store memory:

- Printer control panel
- User interface controller card (UICC)
- Controller board
- Optional hard disks
- Intelligent storage drive (ISD)

NOTES

The printer control panel and controller board contain NVRAM.

Erasing printer memory

To erase volatile memory or buffered data in your printer, turn off the printer.

To erase nonvolatile memory, device and network settings, security settings, and embedded solutions, do the following:

1. From the home screen, touch **Settings > Device > Maintenance > Out of Service Erase**.
2. Touch the **Sanitize all information on nonvolatile memory** check box, and then touch **ERASE**.
3. Touch **Start initial setup wizard** or **Leave printer offline**, and then touch **Next**.
4. Start the operation.

NOTES

This process also destroys the encryption key that is used to protect user data. Destroying the encryption key makes the data irrecoverable.

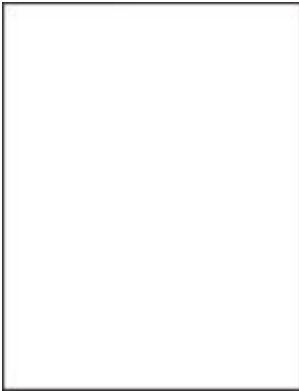
Fixing print quality issues

Initial print quality check

Before troubleshooting print problems, perform the following:

- Make sure that the printer is located in an area that follows the recommended operating environment and power requirement specifications.
- Check the status of supplies. Replace supplies that are low or empty.
- Load 20-lb plain letter or A4 paper. Make sure that the paper guides are properly set and locked. From the control panel, set the paper size and type to match the paper loaded in the tray.
- Print and keep the Menu settings page. The page will be used to restore the custom settings, if necessary.
- Make sure that the print resolution and toner darkness on the Menu settings page are set to their default values.
- Check the print cartridge for damage, and replace if necessary.
- Print the advanced print quality samples to see if the problem remains. Use tray 1 to test print quality problems. Look for variations in the print from what is expected.
- Make sure that the correct print driver is used to prevent print problems. If the wrong driver is installed, then incorrect characters may print and the copy may not fit the page correctly.

Blank or white pages check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95](#).

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Run a full calibration.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Full calibration.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

4. Perform the following tests:

Check the affected printhead for the following items:

- Damage
- Improper installation

Is the affected printhead free any issues?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Reconnect or replace the printhead cable.
2. Reinstall or replace the printhead. See [See "Printhead \(CMYK\) removal" on page 1190.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination

- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation
- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**
Go to the next step.
- **No:**
Go to step 13.

11. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

12. Perform the following tests:

1. Reconnect or replace the developer assembly cables.
2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust and Developer ATC Adjust.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

Check the charge roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the charge roller HVPS free of any issues?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

14. Reinstall or replace the charge roller HVPS. See [See "Charge roller HVPS removal" on page 1140.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Perform the following tests:

Check the transfer roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the transfer roller HVPS free of any issues?

- **Yes:**
Go to step 17.
- **No:**
Go to the next step.

16. Reinstall or replace the transfer roller HVPS. See [See "Transfer roller HVPS removal" on page 1238.](#)

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

17. Perform the following tests:

Check the developer HVPS for the following:

- Image
- Contamination
- Improper installation

Is the developer HVPS free of any issues?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

18. Reinstall or replace the developer HVPS. See [See "Developer HVPS removal" on page 1256.](#)

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Dark print check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Run a full calibration.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Full calibration.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

4. Perform the following tests:

1. Run a toner density adjustment.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Toner density.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

Check the second transfer roller for the following:

- Damage
- Contamination
- Improper installation

Is the roller free of any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Reinstall or replace the second transfer roller. See [See "Second transfer roller removal" on page 1068.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Go to step 9.
- **No:**

Go to the next step.

8. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187](#).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

Check the charge roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the charge roller HVPS free of any issues?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Reinstall or replace the charge roller HVPS. See [See "Charge roller HVPS removal" on page 1140](#).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

Check the transfer roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the transfer roller HVPS free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Reinstall or replace the transfer roller HVPS. See [See "Transfer roller HVPS removal" on page 1238](#).

Does the problem remain?

- **Yes:**

- Contact the next level of support.
- **No:**
The problem is solved.

Ghost images check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Run a color registration test.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Color registration test.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

4. Perform the following tests:

1. Run a image registration adjustment.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Image registration.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation
- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**
Go to the next step.
- **No:**
Go to step 9.

8. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Reconnect or replace the developer assembly cables.
2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust and Developer ATC Adjust.**

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

Check the fuser and its cables and paper guides for the following:

- Damage
- Obstruction in the paper path
- Improper installation

Is the fuser and its connectors and paper guides free of any issues?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

13. Check if the fuser and induction heater voltage rating matches the induction heater power supply voltage rating.

Do the voltage ratings match?

- **Yes:**
Go to the next step.
- **No:**
Go to step 15.

14. Perform a fuser error reset. Enter the Diagnostics menu, and then navigate to:

Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Perform the following tests:

1. Reconnect or reinstall the fuser cables.
2. Reinstall or replace the fuser. See [See "Fuser removal" on page 1052.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:
Output device diagnostics > Motor tests.
2. Select each motor in the main drive.

Does the motor run?

- **Yes:**
Contact the next level of support.

- **No:**

Go to the next step.

17. Perform the following tests:

Check the main drive for the following:

- Damage
- Improper installation

Is the main drive free of the above items?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

18. Reinstall and replace the main drive. See [See "Main drive removal" on page 1257.](#)

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Gray or colored background check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Run a full calibration.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Full calibration.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

Check the affected printhead for the following items:

- Damage
- Improper installation

Is the affected printhead free any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Reconnect or replace the printhead cable.
2. Reinstall or replace the printhead. See [See "Printhead \(CMYK\) removal" on page 1190.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

9. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

10. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187.](#)

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation
- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**

Go to the next step.

- **No:**

Go to step 13.

12. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Perform the following tests:

1. Reconnect or replace the developer assembly cables.

2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust and Developer ATC Adjust.**

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

Check the charge roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the charge roller HVPS free of any issues?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Reinstall or replace the charge roller HVPS. See [See "Charge roller HVPS removal" on page 1140.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

Check the transfer roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the transfer roller HVPS free of any issues?

- **Yes:**
Go to step 18.

- **No:**
Go to the next step.

17. Reinstall or replace the transfer roller HVPS. See [See "Transfer roller HVPS removal" on page 1238.](#)

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

18. Perform the following tests:

Check the developer HVPS for the following:

- Image
- Contamination
- Improper installation

Is the developer HVPS free of any issues?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

19. Reinstall or replace the developer HVPS. See [See "Developer HVPS removal" on page 1256.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Horizontal dark lines check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Print multiple copies of the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.
2. Check the frequency of the defect based on the print quality test page.
3. Identify the problematic part based on the print quality test page.

Can the problematic part be identified?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Replace the suspected problematic part.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation
- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**
Go to the next step.
- **No:**
Go to step 8.

7. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Reconnect or replace the developer assembly cables.
2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust and Developer ATC Adjust.**

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

Check the developer HVPS for the following:

- Image
- Contamination
- Improper installation

Is the developer HVPS free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

10. Reinstall or replace the developer HVPS. See [See "Developer HVPS removal" on page 1256.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Horizontal white lines check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

Check the affected printhead for the following items:

- Damage
- Improper installation

Is the affected printhead free any issues?

- **Yes:**
Go to step 5.
- **No:**

Go to the next step.

4. Perform the following tests:

1. Reconnect or replace the printhead cable.
2. Reinstall or replace the printhead. See ["Printhead \(CMYK\) removal" on page 1190](#).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation
- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**
Go to the next step.
- **No:**
Go to step 9.

8. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**
Go to step 10.

- **No:**
Go to the next step.

9. Perform the following tests:

1. Reconnect or replace the developer assembly cables.
2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust and Developer ATC Adjust.**

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

Check the developer HVPS for the following:

- Image
- Contamination
- Improper installation

Is the developer HVPS free of any issues?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Reinstall or replace the developer HVPS. See [See "Developer HVPS removal" on page 1256.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Check if any cable is damaged.

Are all the cables free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Reconnect or replace the affected cable.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Incorrect margins check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Open the left door and the affected tray insert.
2. Check the transport, pick, and feed rollers for damage and contamination.

Are the rollers free of any issues?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Clean the rollers.

2. Reinstall or replace the rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Run a registration adjustment.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Registration adjust > Engine.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Run a color registration adjustment.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Color registration adjustment > Select the affected color.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the affected printhead for the following items:

- Damage
- Improper installation

Is the affected printhead free any issues?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Reconnect or replace the printhead cable.
2. Reinstall or replace the printhead. See [See "Printhead \(CMYK\) removal" on page 1190.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Light print check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95](#).

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Run a full calibration.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Full calibration.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

4. Perform the following tests:

1. Run a toner density adjustment.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Toner density.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

Check the second transfer roller for the following:

- Damage
- Contamination
- Improper installation

Is the roller free of any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Reinstall or replace the second transfer roller. See [See "Second transfer roller removal" on page 1068.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Go to step 9.
- **No:**

Go to the next step.

8. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187](#).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

Check the charge roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the charge roller HVPS free of any issues?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Reinstall or replace the charge roller HVPS. See [See "Charge roller HVPS removal" on page 1140](#).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

Check the transfer roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the transfer roller HVPS free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Reinstall or replace the transfer roller HVPS. See [See "Transfer roller HVPS removal" on page 1238](#).

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Missing colors check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Run a full calibration.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Full calibration.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

4. Perform the following tests:

Check the affected printhead for the following items:

- Damage
- Improper installation

Is the affected printhead free any issues?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Reconnect or replace the printhead cable.
2. Reinstall or replace the printhead. See [See "Printhead \(CMYK\) removal" on page 1190.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation

- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**
Go to the next step.
- **No:**
Go to step 10.

9. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Reconnect or replace the developer assembly cables.
2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust** and **Developer ATC Adjust**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.
12. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187](#).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Check if any cable is damaged.
- Are all the cables free of damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Reconnect or replace the affected cable.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Perform the following tests:
- Check the charge roller HVPS for the following:
- Damage
 - Contamination
 - Improper installation
- Is the charge roller HVPS free of any issues?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Reinstall or replace the charge roller HVPS. See [See "Charge roller HVPS removal" on page 1140](#).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
17. Perform the following tests:
- Check the transfer roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the transfer roller HVPS free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

18. Reinstall or replace the transfer roller HVPS. See [See "Transfer roller HVPS removal" on page 1238.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Mottled print and single color dots check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Open the left door and the affected tray insert.
2. Check the transport, pick, and feed rollers for damage and contamination.

Are the rollers free of any issues?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Clean the rollers.

2. Reinstall or replace the rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Open the left door.
2. Check the paper guides for damage and contamination.

Are the paper guides free of any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Clean the paper guides.
2. Replace the paper guides.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation
- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**
Go to the next step.
- **No:**
Go to step 11.

10. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Perform the following tests:

1. Reconnect or replace the developer assembly cables.
2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust and Developer ATC Adjust.**

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

Check the developer HVPS for the following:

- Image
- Contamination
- Improper installation

Is the developer HVPS free of any issues?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

13. Reinstall or replace the developer HVPS. See [See "Developer HVPS removal" on page 1256](#).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

Check the affected toner dispenser for the following:

- Damage
- Improper installation
- Improper alignment of the toner delivery pipe and toner cartridge inlet
- Leaks and spills
- Residual toner in the toner delivery pipe

Is the affected toner dispenser free of any issues?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

15. Perform the following tests:

1. Clean the affected toner dispenser area.
2. Reinstall or replace the affected toner dispenser. See [.See "Toner dispenser assembly \(CMYK\) removal" on page 1193](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Mottled print and multiple color dots check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Open the left door and the affected tray insert.
2. Check the transport, pick, and feed rollers for damage and contamination.

Are the rollers free of any issues?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Clean the rollers.

2. Reinstall or replace the rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Open the left door.
2. Check the paper guides for damage and contamination.

Are the paper guides free of any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Clean the paper guides.
2. Replace the paper guides.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187](#).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

Check the second transfer roller for the following:

- Damage
- Contamination
- Improper installation

Is the roller free of any issues?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Reinstall or replace the second transfer roller. See [See "Second transfer roller removal" on page 1068.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

Check the fuser and its cables and paper guides for the following:

- Damage
- Obstruction in the paper path
- Improper installation

Is the fuser and its connectors and paper guides free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Check if the fuser and induction heater voltage rating matches the induction heater power supply voltage rating.

Do the voltage ratings match?

- **Yes:**
Go to the next step.
- **No:**
Go to step 14.

13. Perform a fuser error reset. Enter the Diagnostics menu, and then navigate to:

Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Reconnect or reinstall the fuser cables.
2. Reinstall or replace the fuser. See [See "Fuser removal" on page 1052.](#)

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Paper curl check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Check if the printer power voltage matches with the fuser voltage type.

Do the voltage ratings match?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Set the correct input voltage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

Check the fuser and its cables and paper guides for the following:

- Damage
- Obstruction in the paper path
- Improper installation

Is the fuser and its connectors and paper guides free of any issues?

- **Yes:**
Go to step 7.
- **No:**

Go to the next step.

4. Check if the fuser and induction heater voltage rating matches the induction heater power supply voltage rating.

Do the voltage ratings match?

- **Yes:**
Go to the next step.
- **No:**
Go to step 6.

5. Perform a fuser error reset. Enter the Diagnostics menu, and then navigate to:

Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Reconnect or reinstall the fuser cables.
2. Reinstall or replace the fuser. See [See "Fuser removal" on page 1052.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the induction heater and its cables for the following:

- Damage
- Improper installation

Is the induction heater and its connectors free of any issues?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

8. Check if the fuser and induction heater voltage rating matches the induction heater power supply voltage rating.

Do the voltage ratings match?

- **Yes:**
Go to the next step.
- **No:**
Go to step 10.

9. Perform a fuser error reset. Enter the Diagnostics menu, and then navigate to:

Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Reconnect or reinstall the induction heater cables.
2. Reinstall or replace the induction heater.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

Check the induction heater power supply and its cables for the following:

- Correct voltage
- Damage
- Improper installation

Is the induction heater and its connectors free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Check if the fuser and induction heater voltage rating matches the induction heater power supply voltage rating.

Do the voltage ratings match?

- **Yes:**
Go to the next step.
- **No:**
Go to step 14.

13. Perform a fuser error reset. Enter the Diagnostics menu, and then navigate to:

Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

14. Perform the following tests:

1. Reconnect or reinstall the induction heater power supply.
2. Reinstall or replace the induction heater power supply. See [See "Induction heater power supply removal" on page 1239.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Print crooked or skewed check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95](#).

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Open the left door and the affected tray insert.
2. Check the transport, pick, and feed rollers for damage and contamination.

Are the rollers free of any issues?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Clean the rollers.

2. Reinstall or replace the rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Run a registration adjustment.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Registration adjust > Engine.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Run a color registration adjustment.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Color registration adjustment > Select the affected color.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Repeating defects check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Print multiple copies of the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.
2. Check the frequency of the defect based on the print quality test page.
3. Identify the problematic part based on the print quality test page.

Can the problematic part be identified?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Replace the suspected problematic part.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Open the left door and the affected tray insert.
2. Check the transport, pick, and feed rollers for damage and contamination.

Are the rollers free of any issues?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Perform the following tests:
 1. Clean the rollers.
 2. Reinstall or replace the rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:
 1. Open the left door.
 2. Check the paper guides for damage and contamination.

Are the paper guides free of any issues?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Perform the following tests:
 1. Clean the paper guides.
 2. Replace the paper guides.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

Check the second transfer roller for the following:

- Damage
- Contamination
- Improper installation

Is the roller free of any issues?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Reinstall or replace the second transfer roller. See [See "Second transfer roller removal" on page 1068.](#)

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation
- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**

Go to the next step.

- **No:**

Go to step 16.

15. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**

Go to step 17.

- **No:**

Go to the next step.

16. Perform the following tests:

1. Reconnect or replace the developer assembly cables.
2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust and Developer ATC Adjust.**

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

17. Perform the following tests:

Check the fuser and its cables and paper guides for the following:

- Damage
- Obstruction in the paper path

- Improper installation

Is the fuser and its connectors and paper guides free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

18. Check if the fuser and induction heater voltage rating matches the induction heater power supply voltage rating.

Do the voltage ratings match?

- **Yes:**
Go to the next step.
- **No:**
Go to step 20.

19. Perform a fuser error reset. Enter the Diagnostics menu, and then navigate to:

Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

20. Perform the following tests:

1. Reconnect or reinstall the fuser cables.
2. Reinstall or replace the fuser. See [See "Fuser removal" on page 1052.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Solid color or black images check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95](#).

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Run a full calibration.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Full calibration.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

Check the affected printhead for the following items:

- Damage
- Improper installation

Is the affected printhead free any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Reconnect or replace the printhead cable.
2. Reinstall or replace the printhead. See [See "Printhead \(CMYK\) removal" on page 1190.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

9. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

10. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187.](#)

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation
- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**

Go to the next step.

- **No:**

Go to step 13.

12. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Perform the following tests:

1. Reconnect or replace the developer assembly cables.

2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust and Developer ATC Adjust.**

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

Check the charge roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the charge roller HVPS free of any issues?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Reinstall or replace the charge roller HVPS. See [See "Charge roller HVPS removal" on page 1140.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

Check the transfer roller HVPS for the following:

- Damage
- Contamination
- Improper installation

Is the transfer roller HVPS free of any issues?

- **Yes:**
Go to step 18.

- **No:**
Go to the next step.

17. Reinstall or replace the transfer roller HVPS. See [See "Transfer roller HVPS removal" on page 1238](#).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

18. Perform the following tests:

Check the developer HVPS for the following:

- Image
- Contamination
- Improper installation

Is the developer HVPS free of any issues?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

19. Reinstall or replace the developer HVPS. See [See "Developer HVPS removal" on page 1256](#).

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Text or images cut off check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95](#).

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Run a full calibration.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Full calibration.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

4. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

Check the affected toner dispenser for the following:

- Damage
- Improper installation
- Improper alignment of the toner delivery pipe and toner cartridge inlet
- Leaks and spills
- Residual toner in the toner delivery pipe

Is the affected toner dispenser free of any issues?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Clean the affected toner dispenser area.
2. Reinstall or replace the affected toner dispenser. See [.See "Toner dispenser assembly \(CMYK\) removal" on page 1193](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

Check the affected printhead for the following items:

- Damage
- Improper installation

Is the affected printhead free any issues?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Reconnect or replace the printhead cable.
2. Reinstall or replace the printhead. See [See "Printhead \(CMYK\) removal" on page 1190.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

Check the developer HVPS for the following:

- Image
- Contamination
- Improper installation

Is the developer HVPS free of any issues?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Reinstall or replace the developer HVPS. See [See "Developer HVPS removal" on page 1256.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination

- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Toner easily rubs off check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Check if the printer power voltage matches with the fuser voltage type.

Do the voltage ratings match?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Set the correct input voltage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

Check the fuser and its cables and paper guides for the following:

- Damage
- Obstruction in the paper path
- Improper installation

Is the fuser and its connectors and paper guides free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**

Go to the next step.

4. Check if the fuser and induction heater voltage rating matches the induction heater power supply voltage rating.

Do the voltage ratings match?

- **Yes:**

Go to the next step.

- **No:**

Go to step 6.

5. Perform a fuser error reset. Enter the Diagnostics menu, and then navigate to:

Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

6. Perform the following tests:

1. Reconnect or reinstall the fuser cables.
2. Reinstall or replace the fuser. See [See "Fuser removal" on page 1052.](#)

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Uneven print density check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Run a full calibration.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Full calibration.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

4. Perform the following tests:

1. Run a toner density adjustment.
2. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics and adjustments > Imaging process adjustments > Toner density.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check the developer assembly for the following:

- Damage
- Improper installation
- Insufficient carrier powder
- Contamination in the high voltage contact

Is the developer assembly free of any issues?

- **Yes:**
Go to the next step.
- **No:**
Go to step 9.

8. Check the ATC sensor for damage.

IS the ATC sensor free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Reconnect or replace the developer assembly cables.
2. Reinstall or replace the developer assembly.

NOTES

After replacing the developer assembly, perform the ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then navigate to:

3. **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust and Developer ATC Adjust.**

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

Check the affected printhead for the following items:

- Damage
- Improper installation

Is the affected printhead free any issues?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Perform the following tests:

1. Reconnect or replace the printhead cable.
2. Reinstall or replace the printhead. See [See "Printhead \(CMYK\) removal" on page 1190.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

Check the transfer belt for the following:

- Damage
- Contamination
- Obstruction in the paper path
- Improper installation

Is the transfer belt free of any issues?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Reinstall or replace the transfer belt. See [See "Transfer belt removal" on page 1187.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

Check the developer HVPS for the following:

- Image
- Contamination
- Improper installation

Is the developer HVPS free of any issues?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Reinstall or replace the developer HVPS. See [See "Developer HVPS removal" on page 1256.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

Check the charge roller HVPS for the following:

- Damage
- Contamination

- Improper installation

Is the charge roller HVPS free of any issues?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

17. Reinstall or replace the charge roller HVPS. See [See "Charge roller HVPS removal" on page 1140.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Vertical white lines check



NOTES

Before performing this print quality check, print the Print Quality Test Pages. From the control panel, navigate to **Settings > Troubleshooting > Print Quality Test Pages**, and then perform the initial print quality check. See [See "Initial print quality check" on page 95.](#)

1. Clean the affected printhead using the provided cleaning tools.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Print the Print Quality Test Pages. Navigate to **Settings > Troubleshooting > Print Quality Test Pages**.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

Check the affected printhead for the following items:

- Damage
- Improper installation

Is the affected printhead free any issues?

- **Yes:**
Go to step 5.
- **No:**

Go to the next step.

4. Perform the following tests:

1. Reconnect or replace the printhead cable.
2. Reinstall or replace the printhead. See [.See "Printhead \(CMYK\) removal" on page 1190](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

Check the affected photoconductor and its contact for the following items:

- Damage
- Contamination

Is the photoconductor free of any issues?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Reinstall or replace the photoconductor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Check if any cable is damaged.

Are all the cables free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Reconnect or replace the affected cable.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Paper jams



Avoiding jams

Find out how to prevent paper jams in the printer.

Load paper properly

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

Correct and incorrect loading of paper

Correct loading of paper	Incorrect loading of paper
	

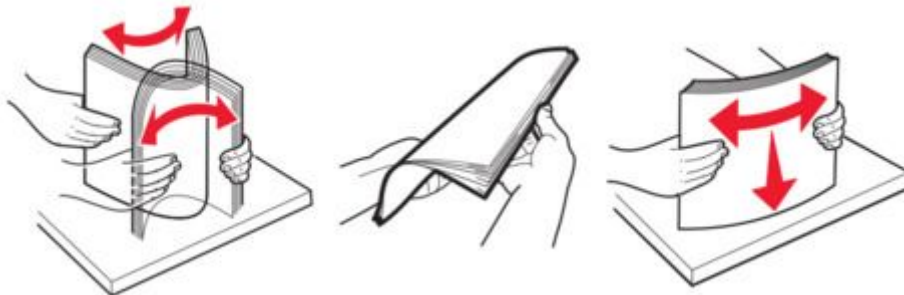
- Do not load or remove a tray while the printer is printing.
- Do not load too much paper. Make sure that the stack height is below the maximum paper fill indicator.
- Do not slide paper into the tray. Load paper as shown in the illustration.



- 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.

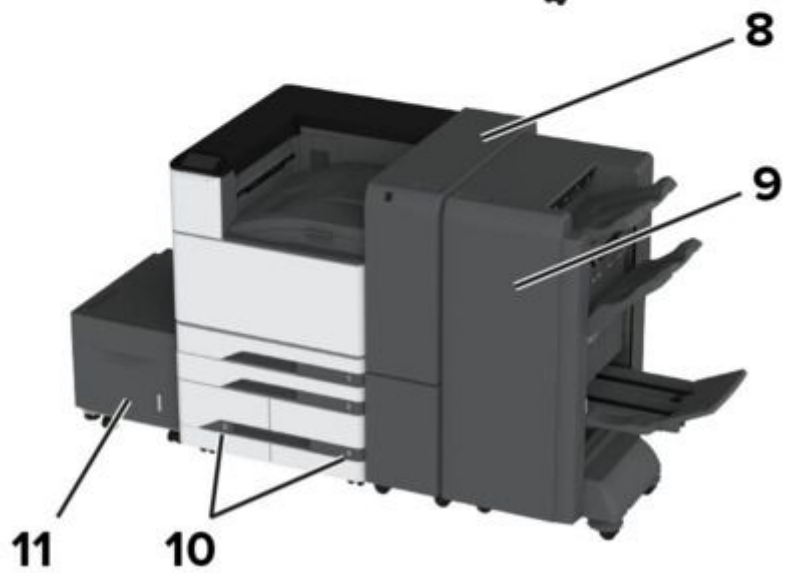
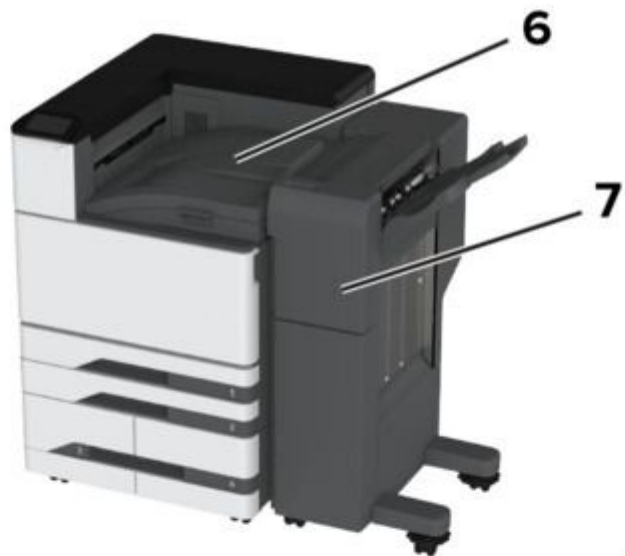
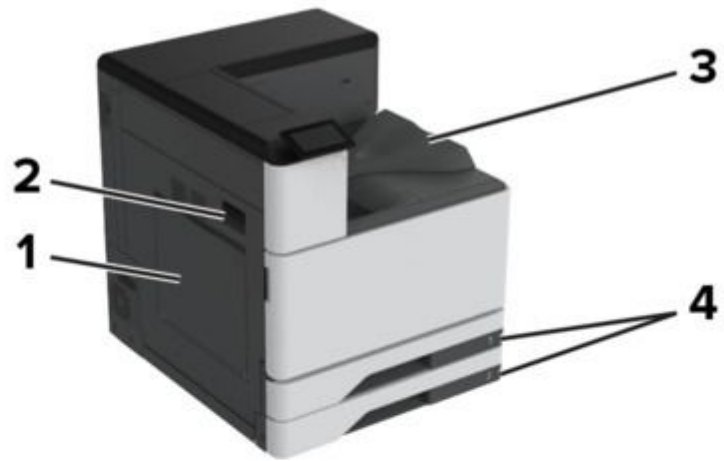


- Do not use paper that has been cut or trimmed by hand.
- Do not mix paper sizes, weights, or types in the same tray.
- Make sure that the paper size and type are set correctly on the computer or printer control panel.
- Store paper according to manufacturer recommendations.

Identifying jam locations

Fixing paper jams can be time-consuming. Learning about where paper jams usually happen allows you to solve the problem quickly.

- 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 or Auto, the printer reprints jammed pages.



Jam locations

	Jam locations
1	Multipurpose feeder (MPF)
2	Door A (left door or left jam door)
3	Standard bin
4	Standard trays
5	Staple finisher
6	Paper transport
7	Staple, hole punch finisher
8	Trifold/Z-fold finisher
9	Booklet finisher
10	Optional trays
11	2000-sheet tray (HCF)

200-201 paper jams

200-201 paper jam messages

200-201 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 (registration).	See "Sensor (registration): Paper never or arrives late service check" on page 177.
200.16	Paper jam in tray 1. Sensor (registration) did not turn on before or within the specified time.	See "Motor (tray pick/lift) failure for tray 1 service check" on page 191.
200.26	Paper jam in tray 2. Sensor (registration) did not turn on before or within the specified time.	See "Sensor (registration) failure for tray 2 service check" on page 196.
200.36	Paper jam in tray 3. Sensor (registration) did not turn on before or within the specified time.	See "Sensor (registration) failure for tray 3 service check (printer and 2000-sheet tandem tray)" on page 208 or See "Sensor (registration) failure for tray 3 service check (printer and 2000-sheet tandem tray)" on page 208.
200.46	Paper jam in tray 4. Sensor (registration) did not turn on before or within the specified time.	See "Sensor (registration) failure for tray 4 service check (printer and 2000-sheet tandem tray)" on page 220 or See "Sensor (registration) failure for tray 4 service check (printer and 2000-sheet tandem tray)" on page 220.
200.56	Paper jam in 2000-sheet tray. Sensor (2000-sheet tray feed) did not turn on within the specified time.	See "Sensor (2000-sheet tray feed) failure service check" on page 226.
200.91	Paper remains detected at the sensor (registration) Continued on page 176	See "Static jam service check" on page 181.

Continued from page 175

Error code	Description	Action
	after the printer is turned on.	
200.95	Paper jam at unknown source. Sensor (registration) did not turn off within the specified time.	N/A
201.96	Paper never reached the sensor (transfer jam).	See "Sensor (transfer jam) failure service check" on page 186.

Sensor (registration): Paper never or arrives late service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Enter the Diagnostics menu, and then select **Input tray quick print.**
 2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the MPF tray for proper installation and damage.

Is the tray properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the MPF tray.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

11. Perform the following tests:

1. Check the left jam door for proper installation and damage.
2. Check if the door can close properly and its path clear of debris and obstruction.
3. Check the rollers, latches, and hinges for wear, damage, and contamination.

Is the left jam door properly installed and free of damage?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

12. Replace the left jam door.

NOTES

Before replacing the part, check the other assemblies inside the door and parts related to the door's operation.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

14. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

16. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Static jam service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Transfer jam.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Bin 2 exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**

Go to step 12.

- **No:**

Go to the next step.

11. Replace the sensor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**

Go to the next step.

- **No:**

Go to step 14.

13. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**

Go to step 15.

- **No:**

The problem is solved.

14. Replace the fuser.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**

Go to step 19.

- **No:**
Go to the next step.

16. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

17. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

18. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

19. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

20. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

21. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

22. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (transfer jam) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Transfer jam.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the second transfer roller for proper installation, contamination, and damage.

Is the roller properly installed and free of damage?

- **Yes:**
Go to step 7.
 - **No:**
Go to the next step.
6. Replace the second transfer roller.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
7. Check the transfer belt for proper installation, contamination, obstruction, and damage.
- Is the transfer belt properly installed and free of damage?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
8. Replace the transfer belt.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**
- Does the sensor status change while toggling the sensor?
- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
10. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
 2. Find the motor (registration).
- Did the motor run?
- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
11. Perform the following tests:
1. Check the motor (registration) for proper installation and damage.
 2. Make sure that the motor cables are properly connected and free of damage.

3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

12. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

14. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the registration drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Check the registration transport for proper installation, contamination, and damage.

Is the registration transport properly installed and free of damage?

- **Yes:**
Go to step 18.
- **No:**

Go to the next step.

17. Replace the registration transport.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Check the left jam door for proper installation and damage.
2. Check if the door can close properly and its path clear of debris and obstruction.
3. Check the rollers, latches, and hinges for wear, damage, and contamination.

Is the left jam door properly installed and free of damage?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

19. Replace the left jam door.

NOTES

Before replacing the part, check the other assemblies inside the door and parts related to the door's operation.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

20. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 22.
- **No:**
Go to the next step.

21. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

22. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

23. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Motor (tray pick/lift) failure for tray 1 service check

1. Perform the following tests:
 1. Open the printer and/or input option doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the tray 1 paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the tray 1 paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the tray 1 paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Find the motor (tray pick/lift).

Did the motor run?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Check the transport guide for proper installation, obstruction, and damage.

Is the guide properly installed and free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.
11. Replace the transport guide.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Check the upper transport guide for proper installation, obstruction, and damage.
- Is the guide properly installed and free of damage?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Replace the upper transport guide.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Check the registration transport for proper installation, contamination, and damage.
- Is the registration transport properly installed and free of damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the registration transport.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
 2. Perform the registration and transport tests one after the other.
- Did the motors (registration and transport) run?
- **Yes:**
Go to step 19.
 - **No:**

Go to the next step.

17. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**

Go to step 19.

- **No:**

Go to the next step.

18. Replace the registration drive unit.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

19. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Go to step 21.

- **No:**

Go to the next step.

20. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

21. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

22. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (registration) failure for tray 2 service check

1. Perform the following tests:
 1. Open the printer and/or input option doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

9. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

10. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

11. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the pick rollers.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Find the motor (tray pick/lift).

Did the motor run?

- **Yes:**

Go to step 16.

- **No:**

Go to the next step.

14. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**

Go to step 16.

- **No:**

Go to the next step.

15. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

16. Check the tray feed guide for proper installation, wear, and damage.

Is the tray feed guide properly installed and free of damage?

- **Yes:**

Go to step 18.

- **No:**

Go to the next step.

17. Replace the tray feed guide.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

18. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 21.

- **No:**
Go to the next step.

19. Perform the following tests:

1. Check the tray 2 paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the tray 2 paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 21.

- **No:**
Go to the next step.

20. Replace the tray 2 paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

21. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 24.

- **No:**
Go to the next step.

22. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 24.
 - **No:**
Go to the next step.
23. Replace the registration drive unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
24. Perform the following tests:
1. Enter the Diagnostics menu, and then select **Input tray quick print**.
 2. Select a paper source, and select whether to print a single or continuous test page.
- Did the test page print correctly?
- **Yes:**
Go to step 28.
 - **No:**
Go to the next step.
25. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.
- Does the sensor status change while toggling the sensor?
- **Yes:**
Go to step 28.
 - **No:**
Go to the next step.
26. Perform the following tests:
1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
 2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
 3. Check the pick and feed rollers for damage and contamination.
 4. Reseat the cables.
- Is the MPF properly installed and free of damage?
- **Yes:**
Go to step 28.
 - **No:**
Go to the next step.
27. Replace the MPF.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**

The problem is solved.

28. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 30.

- **No:**
Go to the next step.

29. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

30. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

31. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (registration) failure for tray 3 service check (printer and 2 x 520-sheet tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

12. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat the cables at both ends.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the motor (2 x 520-sheet tray transport).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Check the 2 x 520-sheet tray pick rollers for proper installation, obstruction, wear, and damage.

Are the rollers properly installed and free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the 2 x 520-sheet tray pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

17. Perform the following tests:

1. Check the 2 x 520-sheet tray paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2 x 520-sheet tray paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

18. Replace the 2 x 520-sheet tray paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

19. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 22.
- **No:**
Go to the next step.

20. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 22.
- **No:**
Go to the next step.

21. Replace the registration drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

22. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

23. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

24. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

25. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

26. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 28.
- **No:**
Go to the next step.

27. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

28. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

29. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (registration) failure for tray 3 service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

12. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Check the 2000-sheet tandem tray pick rollers for proper installation, obstruction, wear, and damage.

Are the rollers properly installed and free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the 2000-sheet tandem tray pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

17. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Tray 3 pick/lift.**

Did the motor run?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

18. Perform the following tests:

1. Check the 2000-sheet tandem tray 3 feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

19. Replace the 2000-sheet tandem tray 3 feeder.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.

21. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.

22. Replace the registration drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

23. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 27.
- **No:**
Go to the next step.

24. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 27.
- **No:**
Go to the next step.

25. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 27.
- **No:**
Go to the next step.

26. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

27. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 29.

- **No:**
Go to the next step.

28. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

29. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

30. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (registration) failure for tray 4 service check (printer and 2 x 520-sheet tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the 2 x 520-sheet tray pick rollers for proper installation, obstruction, wear, and damage.

Are the rollers properly installed and free of damage?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

12. Replace the 2 x 520-sheet tray pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

14. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat the cables at both ends.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the motor (2 x 520-sheet tray transport).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print.**
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

17. Perform the following tests:

1. Check the 2 x 520-sheet tray paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

18. Replace the 2 x 520-sheet tray paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

19. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 22.
- **No:**
Go to the next step.

20. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 22.
- **No:**
Go to the next step.

21. Replace the registration drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

22. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

23. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

24. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

25. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

26. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 28.
- **No:**
Go to the next step.

27. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

28. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

29. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (registration) failure for tray 4 service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the 2000-sheet tandem tray pick rollers for proper installation, obstruction, wear, and damage.

Are the rollers properly installed and free of damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the 2000-sheet tandem tray pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 16.

- **No:**
Go to the next step.

14. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 16.

- **No:**
Go to the next step.

15. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

16. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print.**
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 19.

- **No:**
Go to the next step.

17. Perform the following tests:

1. Check the 2000-sheet tandem tray horizontal transport (tray 4) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the horizontal transport, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

18. Replace the 2000-sheet tandem tray horizontal transport (tray 4).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

19. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 22.
- **No:**
Go to the next step.

20. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 22.
- **No:**
Go to the next step.

21. Replace the registration drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

22. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

23. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

24. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

25. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

26. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 28.
- **No:**
Go to the next step.

27. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

28. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

29. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (2000-sheet tray feed) failure service check

1. Perform the following tests:
 1. Open the printer and/or input option doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the 2000-sheet tray top door for proper installation and damage.

Is the door properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the door.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Check the 2000-sheet tray pick rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the 2000-sheet tray feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the 2000-sheet tray feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tray motor tests > Transport**.

Did the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat the cables at both ends.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the motor (2000-sheet tray transport).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tray sensor tests > Feed.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

13. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

14. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

16. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 18.

- **No:**
Go to the next step.
17. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
18. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**
- Did the motor run?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
19. Check the transport drive for proper installation and damage.
- Is the transport drive installed and free of damage?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
20. Replace the transport drive.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
21. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
 2. Perform the registration and transport tests one after the other.
- Did the motors (registration and transport) run?
- **Yes:**
Go to step 24.
 - **No:**
Go to the next step.
22. Perform the following tests:
1. Check the registration drive unit for proper installation and damage.
 2. Check the motors (registration and transport) and gears for damage.
- Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 24.
 - **No:**
Go to the next step.
23. Replace the registration drive unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
24. Check the registration transport for proper installation, contamination, and damage.
- Is the registration transport properly installed and free of damage?
- **Yes:**
Go to step 26.
 - **No:**
Go to the next step.
25. Replace the registration transport.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
26. Check the 2000-sheet tray controller board for proper installation and damage.
- Is the board properly installed and free of damage?
- **Yes:**
Go to step 28.
 - **No:**
Go to the next step.
27. Replace the board.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
28. Perform the following tests:
1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.
- Is the engine board properly installed and free of damage?
- **Yes:**
Contact the next level of support.

- **No:**

Go to the next step.

29. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

202-203 paper jams

202-203 paper jam messages

202-203 paper jam messages

Error code	Description	Action
202.91	Paper remains detected at the sensor (fuser exit) after the printer is turned on.	See "Static jam service check" on page 181.
202.93	Paper never reached the sensor (fuser exit). The paper source is undetermined.	See "Sensor (fuser exit) failure to turn on in time service check" on page 233.
202.94	Paper cleared the sensor (fuser exit) earlier than expected. The paper source is undetermined.	See "Sensor (fuser exit) turned off before specified time service check" on page 237.
202.95	Paper never cleared the sensor (fuser exit). The paper source is undetermined.	See "Sensor (fuser exit) turned off before specified time service check" on page 237.
203.93	Paper never reached the sensor (bin 1 offset home). The paper source is undetermined.	See "Sensor (bin 1 offset home) failure to turn on in time service check" on page 242.

Sensor (fuser exit) failure to turn on in time service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Check the fuser, connectors, and paper guides for proper installation and damage.
 2. Check the fuser rollers for paper jams.
 3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:
 1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
 2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

5. Perform the following tests:

1. Check the motor (fusing drive) for proper installation and damage.
2. Reseat the cable.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Motor tests > Fuser**.

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the second transfer roller for proper installation, contamination, and damage.

Is the roller properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the second transfer roller.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Pressure roller latch**.

Did the motor run?

- **Yes:**
Go to step 13.
- **No:**

Go to the next step.

11. Perform the following tests:

1. Check the motor (fuser pressure roller) for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Check the left jam door for proper installation and damage.
2. Check if the door can close properly and its path clear of debris and obstruction.
3. Check the rollers, latches, and hinges for wear, damage, and contamination.

Is the left jam door properly installed and free of damage?

- **Yes:**

Go to step 15.

- **No:**

Go to the next step.

14. Replace the left jam door.

NOTES

Before replacing the part, check the other assemblies inside the door and parts related to the door's operation.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (fuser exit) turned off before specified time service check

1. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

5. Perform the following tests:

1. Check the motor (fusing drive) for proper installation and damage.
2. Reseat the cable.

Is the motor properly installed and free of damage?

- **Yes:**

Go to the next step.

- **No:**

Go to step 7.

6. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Motor tests > Fuser**.

Did the motor run?

- **Yes:**

Go to step 8.

- **No:**

Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

8. Check the exit 1 transport unit for proper installation, obstruction, and damage.

Is the exit 1 transport unit properly installed and free of damage?

- **Yes:**

Go to step 10.

- **No:**

Go to the next step.

9. Replace the exit 1 transport unit.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Check the exit 1 drive belt for proper installation and damage.

Is the exit 1 drive belt properly installed and free of damage?

- **Yes:**

Go to step 12.

- **No:**

Go to the next step.

11. Replace the exit 1 drive belt.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 1 diverter solenoid**. Also perform a test for motor (bin 2 drive).

Did the motors run?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

13. Perform the following tests:

1. Check the exit 2 transport unit for proper installation, obstruction, and damage.
2. Check the exit 1 diverter gate for obstruction.

Is the exit 2 transport unit properly installed and free of damage?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

14. Replace the exit 2 transport unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

15. Check the exit 2 transport guide for proper installation and damage.

Is the exit 2 transport guide properly installed and free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the exit 2 transport guide.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

17. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 2 drive.**

Did the motor run?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

18. Perform the following tests:

1. Check the motor (bin 2 drive) for proper installation and damage.
2. Reseat all cables.

Is the motor (bin 2 drive) properly installed and free of damage?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

19. Replace the motor (bin 2 drive).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 22.

- **No:**
Go to the next step.

21. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

22. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

23. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (bin 1 offset home) failure to turn on in time service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Bin 1 offset home.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the exit 1 transport unit for proper installation, obstruction, and damage.

Is the exit 1 transport unit properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the exit 1 transport unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

221-222 paper jams

221-222 paper jam messages

221-222 paper jam messages

Error code	Description	Action
221.91	Paper remains detected at the sensor (exit 2) after the printer is turned on.	See "Static jam service check" on page 181.
221.93	Paper never reached the sensor (exit 2). The paper source is undetermined.	See "Sensor (exit 2) failure to turn on in time service check" on page 246.
221.95	Paper never cleared the sensor (exit 2). The paper source is undetermined.	See "Sensor (bin 2 exit) failure to turn off in time service check" on page 251.
222.91	Paper remains detected at the sensor (exit 3) after the printer is turned on.	See "Static jam service check" on page 181.

Sensor (exit 2) failure to turn on in time service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Check the fuser, connectors, and paper guides for proper installation and damage.
 2. Check the fuser rollers for paper jams.
 3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:
 1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
 2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

5. Perform the following tests:

1. Check the motor (fusing drive) for proper installation and damage.
2. Reseat the cable.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Motor tests > Fuser**.

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the exit 1 transport unit for proper installation, obstruction, and damage.

Is the exit 1 transport unit properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the exit 1 transport unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Check the exit 1 drive belt for proper installation and damage.

Is the exit 1 drive belt properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the exit 1 drive belt.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 1 diverter solenoid**. Also perform a test for motor (bin 2 drive).

Did the motors run?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

13. Perform the following tests:

1. Check the exit 2 transport unit for proper installation, obstruction, and damage.
2. Check the exit 1 diverter gate for obstruction.

Is the exit 2 transport unit properly installed and free of damage?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

14. Replace the exit 2 transport unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Check the exit 2 transport guide for proper installation and damage.

Is the exit 2 transport guide properly installed and free of damage?

- **Yes:**
Go to step 17.
- **No:**
Go to the next step.

16. Replace the exit 2 transport guide.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

17. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 2 drive.**

Did the motor run?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

18. Perform the following tests:

1. Check the motor (bin 2 drive) for proper installation and damage.
2. Reseat all cables.

Is the motor (bin 2 drive) properly installed and free of damage?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

19. Replace the motor (bin 2 drive).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 22.

- **No:**
Go to the next step.

21. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

22. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

23. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (bin 2 exit) failure to turn off in time service check

1. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

5. Perform the following tests:

1. Check the motor (fusing drive) for proper installation and damage.
2. Reseat the cable.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Motor tests > Fuser**.

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Bin 2 exit**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
11. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 1 diverter solenoid**. Also perform a test for motor (bin 2 drive).
- Did the motors run?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
12. Perform the following tests:
1. Check the exit 2 transport unit for proper installation, obstruction, and damage.
 2. Check the exit 1 diverter gate for obstruction.
- Is the exit 2 transport unit properly installed and free of damage?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Replace the exit 2 transport unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Check the exit 2 transport guide for proper installation and damage.
- Is the exit 2 transport guide properly installed and free of damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the exit 2 transport guide.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 2 drive**.
- Did the motor run?

- **Yes:**
Go to step 19.
 - **No:**
Go to the next step.
17. Perform the following tests:
1. Check the motor (bin 2 drive) for proper installation and damage.
 2. Reseat all cables.
- Is the motor (bin 2 drive) properly installed and free of damage?
- **Yes:**
Go to step 19.
 - **No:**
Go to the next step.
18. Replace the motor (bin 2 drive).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
19. Perform the following tests:
1. Check the cables for damage.
 2. Check the connectors for damage.
- Are the cables free of damage?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
20. Replace damaged cables. See the parts catalog section for specifications.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
21. Perform the following tests:
1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.
- Is the engine board properly installed and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
22. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

232 paper jams

232 paper jam messages

232 paper jam messages

Error code	Description	Action
232.93	During a duplex print job, paper never reached the sensor (registration). The paper source is undetermined.	See See "Sensor (registration) failure to turn on in time service check" on page 257.

Sensor (registration) failure to turn on in time service check

1. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Bin 2 exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Check the duplex guide for proper installation and damage.

Is the duplex guide properly installed and free of damage?

- **Yes:**
Go to step 10.

- **No:**
Go to the next step.

9. Replace the duplex guide.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

10. Check the duplex entrance guide for proper installation, obstruction, and damage.

Is the duplex entrance guide properly installed and free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the duplex entrance guide.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

15. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

240-241 paper jams

240-241 paper jam messages

240-241 paper jam messages

Error code	Description	Action
240.06	The sensor (MPF feed) did not turn on within the specified time after paper was fed from the MPF.	See "Sensor (MPF feed) failure to turn on in time service check" on page 262.
240.16	The sensor (pick position) did not turn on within the specified time after paper was fed from the MPF.	See "Sensor (pick position) failure service check" on page 288.
240.25	Paper fed from tray 2 never cleared the sensor (MPF feed).	See "Sensor (MPF feed) failure to turn on in time (tray 2 source) service check" on page 265.
240.35	Paper fed from tray 3 never cleared the sensor (MPF feed).	See "Sensor (MPF feed) failure for trays 3 and 4 service check (printer and 2000-sheet tandem optional tray)" on page 276 or "Sensor (MPF feed) failure for trays 3 and 4 service check (printer and 2000-sheet tandem optional tray)" on page 276.
240.45	Paper fed from tray 4 never cleared the sensor (MPF feed).	See "Sensor (MPF feed) failure for trays 3 and 4 service check (printer and 2000-sheet tandem optional tray)" on page 276 or "Sensor (MPF feed) failure for trays 3 and 4 service check (printer and 2000-sheet tandem optional tray)" on page 276.
240.55	Paper fed from the 2000-sheet tray never cleared the sensor (MPF feed).	See "Sensor (MPF feed) failure to turn on in time (2000-sheet tray source) service check" on page 282.

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Error code	Description	Action
240.91	Paper fed from the MPF remains detected at the sensor (registration) after the printer is turned on.	See "Static jam service check" on page 181.
241.16	The sensor (tray 1 feed) did not turn on within the specified time after paper was fed from tray 1.	See "Sensor (registration) failure for tray 1 service check" on page 292.

Sensor (MPF feed) failure to turn on in time service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
 2. Find the motor (pick/lift).

Did the motor run?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the motor for proper installation and damage.
 2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Enter the Diagnostics menu, and then select **Input tray quick print**.

2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the MPF rollers for proper installation, obstruction, wear, and damage.

Are the MPF rollers properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the MPF rollers.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

14. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (MPF feed) failure to turn on in time (tray 2 source) service check

1. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 6.

- **No:**
Go to the next step.

5. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the registration drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

13. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

14. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

15. Check the transport roller for proper installation, contamination, wear, and damage.

Is the transport roller properly installed and free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the transport roller.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

17. Check the pick roller kit for proper installation, contamination, wear, and damage.

Is the pick roller kit properly installed and free of damage?

- **Yes:**

Go to step 19.

- **No:**

Go to the next step.

18. Replace the pick roller kit.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

19. Check the registration transport for proper installation, contamination, and damage.

Is the registration transport properly installed and free of damage?

- **Yes:**

Go to step 21.

- **No:**

Go to the next step.

20. Replace the registration transport.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

21. Perform the following tests:

1. Check the left jam door for proper installation and damage.
2. Check if the door can close properly and its path clear of debris and obstruction.
3. Check the rollers, latches, and hinges for wear, damage, and contamination.

Is the left jam door properly installed and free of damage?

- **Yes:**

Go to step 23.

- **No:**

Go to the next step.

22. Replace the left jam door.

NOTES

Before replacing the part, check the other assemblies inside the door and parts related to the door's operation.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

23. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 25.
- **No:**
Go to the next step.

24. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

25. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

26. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (MPF feed) failure for trays 3 and 4 service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 6.

- **No:**
Go to the next step.

5. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the registration drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

13. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

14. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

15. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 18.

- **No:**
Go to the next step.

16. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat the cables at both ends.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace the motor (2 x 520-sheet tray transport).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray motor tests.**
2. Find the motor (2 x 520-sheet tray 3/4 pick/lift).

Did the motor run?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

19. Perform the following tests:

1. Check the motor (2 x 520-sheet tray 3/4 pick/lift) for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

20. Replace the motor (2 x 520-sheet tray 3/4 pick/lift).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

21. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 23.
- **No:**

Go to the next step.

22. Replace the pick rollers.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

23. Check the registration transport for proper installation, contamination, and damage.

Is the registration transport properly installed and free of damage?

- **Yes:**

Go to step 25.

- **No:**

Go to the next step.

24. Replace the registration transport.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

25. Perform the following tests:

1. Check the left jam door for proper installation and damage.
2. Check if the door can close properly and its path clear of debris and obstruction.
3. Check the rollers, latches, and hinges for wear, damage, and contamination.

Is the left jam door properly installed and free of damage?

- **Yes:**

Go to step 27.

- **No:**

Go to the next step.

26. Replace the left jam door.

NOTES

Before replacing the part, check the other assemblies inside the door and parts related to the door's operation.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

27. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are the cables and connectors all free of damage?

- **Yes:**
Go to step 29.

- **No:**
Go to the next step.

28. Replace the damaged cables and connectors. See the Parts Catalog section for more details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

29. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

30. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (MPF feed) failure for trays 3 and 4 service check (printer and 2000-sheet tandem optional tray)

1. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 6.

- **No:**
Go to the next step.

5. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the registration drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

13. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

14. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

15. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 18.

- **No:**
Go to the next step.

16. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Find the motor (tray pick/lift).

Did the motor run?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

19. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

20. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

21. Check the pick roller kit for proper installation, contamination, wear, and damage.

Is the pick roller kit properly installed and free of damage?

- **Yes:**
Go to step 23.
- **No:**

Go to the next step.

22. Replace the pick roller kit.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

23. Check the registration transport for proper installation, contamination, and damage.

Is the registration transport properly installed and free of damage?

- **Yes:**

Go to step 25.

- **No:**

Go to the next step.

24. Replace the registration transport.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

25. Perform the following tests:

1. Check the left jam door for proper installation and damage.
2. Check if the door can close properly and its path clear of debris and obstruction.
3. Check the rollers, latches, and hinges for wear, damage, and contamination.

Is the left jam door properly installed and free of damage?

- **Yes:**

Go to step 27.

- **No:**

Go to the next step.

26. Replace the left jam door.

NOTES

Before replacing the part, check the other assemblies inside the door and parts related to the door's operation.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

27. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 29.

- **No:**
Go to the next step.

28. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

29. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

30. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (MPF feed) failure to turn on in time (2000-sheet tray source) service check

1. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 6.

- **No:**
Go to the next step.

5. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the registration drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

13. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

14. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print.**
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

16. Perform the following tests:

1. Check the 2000-sheet tray feeder for proper installation and damage.

2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 18.

- **No:**
Go to the next step.

17. Replace the 2000-sheet tray feeder.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

18. Check the second transfer roller for proper installation, contamination, and damage.

Is the roller properly installed and free of damage?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

19. Replace the second transfer roller.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Check the 2000-sheet tray pick rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of damage?

- **Yes:**
Go to step 22.

- **No:**
Go to the next step.

21. Replace the rollers.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

22. Check the registration transport for proper installation, contamination, and damage.

Is the registration transport properly installed and free of damage?

- **Yes:**
Go to step 24.
- **No:**
Go to the next step.

23. Replace the registration transport.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

24. Perform the following tests:

1. Check the left jam door for proper installation and damage.
2. Check if the door can close properly and its path clear of debris and obstruction.
3. Check the rollers, latches, and hinges for wear, damage, and contamination.

Is the left jam door properly installed and free of damage?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

25. Replace the left jam door.

NOTES

Before replacing the part, check the other assemblies inside the door and parts related to the door's operation.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

26. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 28.
- **No:**
Go to the next step.

27. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

28. Check the 2000-sheet tray controller board for proper installation and damage.

Is the board properly installed and free of damage?

- **Yes:**
Go to step 30.
- **No:**
Go to the next step.

29. Replace the board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

30. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

31. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (pick position) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests.**
 2. Find the sensor (pick position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Find the motor (pick/lift).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:
 1. Check the motor for proper installation and damage.
 2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:
 1. Enter the Diagnostics menu, and then select **Input tray quick print**.
 2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:
 1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
 2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.

3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Check the MPF rollers for proper installation, obstruction, wear, and damage.

Are the MPF rollers properly installed and free of damage?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the MPF rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

17. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (registration) failure for tray 1 service check

1. Perform the following tests:
 1. Open the printer and/or input option doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**

Did the motor run?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

9. Check the transport drive for proper installation and damage.

Is the transport drive installed and free of damage?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

10. Replace the transport drive.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

11. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
2. Find the motor (tray pick/lift).

Did the motor run?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

12. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Perform the registration and transport tests one after the other.

Did the motors (registration and transport) run?

- **Yes:**
Go to step 19.
- **No:**

Go to the next step.

17. Perform the following tests:

1. Check the registration drive unit for proper installation and damage.
2. Check the motors (registration and transport) and gears for damage.

Are the registration drive unit, motors, and gears properly installed and free of damage?

- **Yes:**

Go to step 19.

- **No:**

Go to the next step.

18. Replace the registration drive unit.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

19. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Go to step 21.

- **No:**

Go to the next step.

20. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

21. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

22. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

242 paper jams

242 paper jam messages

242 paper jam messages

Error code	Description	Action
242.26	Paper fed from tray 2 never reached the sensor (tray 2 feed).	See "Sensor (tray 2 feed) failure service check" on page 298.

Sensor (tray 2 feed) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > Tray 2 feed.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

2. Find the motor (tray pick/lift).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor (tray pick/lift) for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the pick roller kit for proper installation, contamination, wear, and damage.

Is the pick roller kit properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the pick roller kit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Check the tray feed guide for proper installation, wear, and damage.

Is the tray feed guide properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the tray feed guide.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

13. Perform the following tests:

1. Check the tray 2 paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the tray 2 paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

14. Replace the tray 2 paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 17.
- **No:**
Go to the next step.

16. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

243-245 paper jams

243-245 paper jam messages

243-245 paper jam messages

Error code	Description	Action
243.33	Paper fed from tray 3 never reached the sensor (transport).	See "Tray 3 sensor (transport) failure service check (printer and 2 x 520-sheet optional tray)" on page 304 or See "Tray 3 sensor (transport) failure service check (printer and 2000-sheet tandem tray)" on page 308.
243.36	Tray empty; paper fed from tray 3 never reached the sensor (feed).	See "Tray 3 sensor (feed) failure service check (printer and 2 x 520-sheet optional tray)" on page 320 or See "Tray 3 sensor (feed) failure service check (printer and 2000-sheet tandem tray)" on page 323.
243.43	Paper fed from tray 4 never reached the sensor (transport).	See "Tray 3 sensor (transport) failure 2 service check (printer and 2 x 520-sheet optional tray)" on page 312 or See "Tray 3 sensor (transport) failure 2 service check (printer and 2000-sheet tandem tray)" on page 316.
243.91	Static jam between tray 2 and tray 3.	See "Tray 2 and tray 3 static jam service check (printer and 2 x 520-sheet optional tray)" on page 336 or See "Tray 2 and tray 3 static jam service check (printer and 2000-sheet tandem tray)" on page 341.
244.43	Paper fed from tray 4 never reached the sensor (horizontal transport).	See "Tray 4 sensor (horizontal transport) failure service check (printer and 2000-sheet tandem tray)" on page 332.

Continued on page 303

Continued from page 302

Error code	Description	Action
244.46	Tray empty; paper fed from tray 4 never reached the sensor (feed).	See "Tray 4 sensor (feed) failure service check (printer and 2 x 520-sheet optional tray)" on page 326 or See "Tray 4 sensor (feed) failure service check (printer and 2000-sheet tandem tray)" on page 329.
244.91	Static jam between tray 3 and tray 4.	See "Tray 3 and tray 4 static jam service check (printer and 2 x 520-sheet optional tray)" on page 347 or See "Tray 3 and tray 4 static jam service check (printer and 2000-sheet tandem tray)" on page 352.

Tray 3 sensor (transport) failure service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray sensor tests > Transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray motor tests.**
2. Find the motor (2 x 520-sheet tray 3/4 pick/lift).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor (2 x 520-sheet tray 3/4 pick/lift) for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor (2 x 520-sheet tray 3/4 pick/lift).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Check the 2 x 520-sheet tray transport roller for proper installation, wear, and damage.

Is the roller properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the 2 x 520-sheet tray transport roller.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Check the 2 x 520-sheet tray door for proper installation and damage.

Is the door properly installed and free of damage?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the door.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check all cables for damage.
2. Check all connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

17. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Tray 3 sensor (transport) failure service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print.**

2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

6. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Tray 3 pick/lift.**

Did the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the 2000-sheet tandem tray feeder (tray 3) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2000-sheet tandem tray feeder (tray 3), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the 2000-sheet tandem tray feeder (tray 3).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.
11. Check the 2000-sheet tandem tray transport roller for proper installation, wear, and damage.
Is the roller properly installed and free of damage?
- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the 2000-sheet tandem tray transport roller.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Check the 2000-sheet tandem tray door for proper installation and damage.
Is the door properly installed and free of damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the door.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Perform the following tests:
1. Check all the cables for damage.
 2. Check all the connectors for damage.
- Are all the cables and connectors free of damage?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Replace the damaged cables and connectors. See the Parts Catalog section for details.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Tray 3 sensor (transport) failure 2 service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray sensor tests > Transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray motor tests.**
2. Choose the motor (tray 3/4 pick/lift).

Did the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the motor (tray 3/4 pick lift).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.
11. Check the 2 x 520-sheet tray transport roller for proper installation, wear, and damage.
- Is the roller properly installed and free of damage?
- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the 2 x 520-sheet tray transport roller.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Check the pick rollers for proper installation, contamination, wear, and damage.
- Are the pick rollers properly installed and free of damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the pick rollers.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Perform the following tests:
1. Check all the cables for damage.
 2. Check all the connectors for damage.
- Are all the cables and connectors free of damage?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Replace the damaged cables and connectors. See the Parts Catalog section for details.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Tray 3 sensor (transport) failure 2 service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Tray 4 Horizontal transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

11. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

12. Perform the following tests:

1. Check the 2000-sheet tandem tray horizontal transport (tray 4) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2000-sheet tandem tray horizontal transport (tray 4), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the 2000-sheet tandem tray horizontal transport (tray 4).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 17.
- **No:**
Go to the next step.

15. Replace the pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check all the cables for damage.

2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 19.

- **No:**
Go to the next step.

17. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

18. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

19. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Tray 3 sensor (feed) failure service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray sensor tests.**
2. Choose the tray (feed).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray motor tests.**
2. Choose the motor (tray 3/4 pick/lift).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat the cables at both ends.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor (tray 3/4 pick/lift).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Go to step 12.

- **No:**

Go to the next step.

11. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Tray 3 sensor (feed) failure service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Open the printer and input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Tray 3 feed.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print.**

2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

6. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Tray 3 pick/lift.**

Did the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the 2000-sheet tandem tray feeder (tray 3) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2000-sheet tandem tray feeder (tray 3), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the 2000-sheet tandem tray feeder (tray 3).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

14. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Tray 4 sensor (feed) failure service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray sensor tests.**
2. Choose the tray (feed).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the 2 x 520-sheet tray paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2 x 520-sheet tray paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the 2 x 520-sheet tray paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Tray 4 sensor (feed) failure service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Tray 4 feed.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the tray feed guide for proper installation, wear, and damage.

Is the tray feed guide properly installed and free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace the tray feed guide.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

7. Check the pick rollers for proper installation, contamination, wear, and damage.

Are the pick rollers properly installed and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the pick rollers.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the 2000-sheet tandem tray horizontal transport (tray 4) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2000-sheet tandem tray horizontal transport (tray 4), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 12.

- **No:**

Go to the next step.

11. Replace the 2000-sheet tandem tray horizontal transport (tray 4).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Replace the damaged cables and connectors. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

15. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Tray 4 sensor (horizontal transport) failure service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Open the printer and/or input option doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Tray 4 Horizontal transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print.**

2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the 2000-sheet tandem tray horizontal transport (tray 4) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2000-sheet tandem tray horizontal transport (tray 4), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the 2000-sheet tandem tray horizontal transport (tray 4).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
11. Check the pick rollers for proper installation, contamination, wear, and damage.
- Are the pick rollers properly installed and free of damage?
- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the pick rollers.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Check the 2000-sheet tandem tray door for proper installation and damage.
- Is the door properly installed and free of damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the door.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Perform the following tests:
1. Check all the cables for damage.
 2. Check all the connectors for damage.
- Are all the cables and connectors free of damage?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Replace the damaged cables and connectors. See the Parts Catalog section for details.
- Does the problem remain?
- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Tray 2 and tray 3 static jam service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Transfer jam.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Bin 2 exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the sensor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Perform the following tests:
1. Check the fuser, connectors, and paper guides for proper installation and damage.
 2. Check the fuser rollers for paper jams.
 3. Reseat the fuser.
- Is the fuser properly installed and free of damage?
- **Yes:**
Go to the next step.
 - **No:**
Go to step 14.
13. Perform the following tests:
1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
 2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.
- Does the problem remain?
- **Yes:**
Go to step 15.
 - **No:**
The problem is solved.
14. Replace the fuser.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Check the 2 x 520-sheet tray transport guide (tray 3) for proper installation, obstruction, and damage.
- Is the 2 x 520-sheet tray transport guide (tray 3) properly installed and free of damage?
- **Yes:**
Go to step 17.

- **No:**
Go to the next step.
16. Replace the 2 x 520-sheet tray transport guide (tray 3).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
17. Perform the following tests:
1. Enter the Diagnostics menu, and then select **Input tray quick print**.
 2. Select a paper source, and select whether to print a single or continuous test page.
- Did the test page print correctly?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
18. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.
- Does the sensor status change while toggling the sensor?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
19. Perform the following tests:
1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
 2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
 3. Check the pick and feed rollers for damage and contamination.
 4. Reseat the cables.
- Is the MPF properly installed and free of damage?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
20. Replace the MPF.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
21. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.

22. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

23. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

24. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Tray 2 and tray 3 static jam service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Transfer jam.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Bin 2 exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the sensor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Perform the following tests:
1. Check the fuser, connectors, and paper guides for proper installation and damage.
 2. Check the fuser rollers for paper jams.
 3. Reseat the fuser.
- Is the fuser properly installed and free of damage?
- **Yes:**
Go to the next step.
 - **No:**
Go to step 14.
13. Perform the following tests:
1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
 2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.
- Does the problem remain?
- **Yes:**
Go to step 15.
 - **No:**
The problem is solved.
14. Replace the fuser.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Transport**.
- Does the sensor status change while toggling the sensor?
- **Yes:**
Go to step 18.

- **No:**
Go to the next step.

16. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Tray 4 Horizontal transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

19. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

20. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

21. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 24.
- **No:**
Go to the next step.

22. Check the 2000-sheet tandem tray transport guide assembly for proper installation, obstruction, and damage.

Is the assembly properly installed and free of damage?

- **Yes:**
Go to step 24.
- **No:**
Go to the next step.

23. Replace the 2000-sheet tandem tray transport guide assembly.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

24. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 28.
- **No:**
Go to the next step.

25. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 28.
- **No:**
Go to the next step.

26. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 28.
 - **No:**
Go to the next step.
27. Replace the MPF.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
28. Perform the following tests:
1. Check the cables for damage.
 2. Check the connectors for damage.
- Are the cables free of damage?
- **Yes:**
Go to step 30.
 - **No:**
Go to the next step.
29. Replace damaged cables. See the parts catalog section for specifications.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
30. Perform the following tests:
1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.
- Is the engine board properly installed and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
31. Replace the engine board.
- Does the problem remain?
- **Yes:**
Contact the next level of support.
 - **No:**
The problem is solved.

Tray 3 and tray 4 static jam service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Transfer jam.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Bin 2 exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the sensor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Perform the following tests:
1. Check the fuser, connectors, and paper guides for proper installation and damage.
 2. Check the fuser rollers for paper jams.
 3. Reseat the fuser.
- Is the fuser properly installed and free of damage?
- **Yes:**
Go to the next step.
 - **No:**
Go to step 14.
13. Perform the following tests:
1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
 2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.
- Does the problem remain?
- **Yes:**
Go to step 15.
 - **No:**
The problem is solved.
14. Replace the fuser.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Check the 2 x 520-sheet tray transport guide (tray 3) for proper installation, obstruction, and damage.
- Is the 2 x 520-sheet tray transport guide (tray 3) properly installed and free of damage?
- **Yes:**
Go to step 17.

- **No:**
Go to the next step.
16. Replace the 2 x 520-sheet tray transport guide (tray 3).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
17. Perform the following tests:
1. Enter the Diagnostics menu, and then select **Input tray quick print**.
 2. Select a paper source, and select whether to print a single or continuous test page.
- Did the test page print correctly?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
18. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.
- Does the sensor status change while toggling the sensor?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
19. Perform the following tests:
1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
 2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
 3. Check the pick and feed rollers for damage and contamination.
 4. Reseat the cables.
- Is the MPF properly installed and free of damage?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
20. Replace the MPF.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
21. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.

22. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

23. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

24. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Tray 3 and tray 4 static jam service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Transfer jam.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Bin 2 exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the sensor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Perform the following tests:
1. Check the fuser, connectors, and paper guides for proper installation and damage.
 2. Check the fuser rollers for paper jams.
 3. Reseat the fuser.
- Is the fuser properly installed and free of damage?
- **Yes:**
Go to the next step.
 - **No:**
Go to step 14.
13. Perform the following tests:
1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
 2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.
- Does the problem remain?
- **Yes:**
Go to step 15.
 - **No:**
The problem is solved.
14. Replace the fuser.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Transport**.
- Does the sensor status change while toggling the sensor?
- **Yes:**
Go to step 18.

- **No:**
Go to the next step.

16. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Tray 4 Horizontal transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

19. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

20. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

21. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 24.
- **No:**
Go to the next step.

22. Check the 2000-sheet tandem tray transport guide assembly for proper installation, obstruction, and damage.

Is the assembly properly installed and free of damage?

- **Yes:**
Go to step 24.
- **No:**
Go to the next step.

23. Replace the 2000-sheet tandem tray transport guide assembly.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

24. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 28.
- **No:**
Go to the next step.

25. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 28.
- **No:**
Go to the next step.

26. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 28.

- **No:**
Go to the next step.

27. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

28. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 30.

- **No:**
Go to the next step.

29. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

30. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

31. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

253 paper jams

253 paper jam messages

253 paper jam messages

Error code	Description	Action
253.93	Paper never reached the sensor (exit 2). The paper source is undetermined.	See "Sensor (exit 2) failure service check" on page 359 .

Sensor (exit 2) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > Paper transport sensor tests > Bin 2 offset home.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 2 offset.**

Did the motor run?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 2 drive.**

Did the motor run?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the motor (bin 2 drive) for proper installation and damage.
2. Reseat all cables.

Is the motor (bin 2 drive) properly installed and free of damage?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

10. Replace the motor (bin 2 drive).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

12. Perform the following tests:

1. Check the exit 2 transport unit for proper installation, obstruction, and damage.
2. Check the exit 1 diverter gate for obstruction.

Is the exit 2 transport unit properly installed and free of damage?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the exit 2 transport unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**

Go to the next step.

17. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

4yy paper jams (staple finisher)

4yy paper jam messages (staple finisher)

4yy paper jam messages (staple finisher)

Error code	Description	Action
420.11	The sensor (staple finisher paper path) detected paper.	See "Sensor (staple finisher output option 1 position) failure 6 service check" on page 426.
420.13	Sensor (pass-through): The paper arrives too late or never arrives.	See "Sensor (staple finisher output option 1 position) failure 2 service check" on page 412.
420.15	The paper does not clear the sensor (pass-through) in time.	See "Sensor (staple finisher output option 1 position) failure 1 service check" on page 409.
420.54	The sensor (compile exit) is not turned off by a fed sheet within the set time.	See "Sensor (staple finisher output option 1 position) failure 3 service check" on page 415.
421.13	The sensor (front tamper home) is not covered in time.	See "Sensor (staple finisher output option 1 position) failure 9 service check" on page 436.
421.15	The sensor (front tamper home) is not uncovered in time.	See "Sensor (staple finisher output option 1 position) failure 9 service check" on page 436.
422.13	The sensor (rear tamper home) is not covered in time.	See "Sensor (staple finisher output option 1 position) failure 8 service check" on page 433.
422.15	The sensor (rear tamper home) is not uncovered in time.	See "Sensor (staple finisher output option 1 position) failure 8 service check" on page 433.
423.13	The quick exit or ejector failed to reach the sensor (home).	See "Sensor (staple finisher output option 1 position) failure 5 service check" on page 422.

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Error code	Description	Action
423.15	The quick exit or ejector failed to leave the sensor (home).	See "Sensor (staple finisher output option 1 position) failure 5 service check" on page 422.
425.13	The tray holder failed to reach the home position.	See "Sensor (staple finisher output option 1 position) failure 5 service check" on page 422.
425.15	The tray holder failed to leave the home position.	See "Sensor (staple finisher output option 1 position) failure 5 service check" on page 422.
428.15	The staple finisher stapler head failed to leave the home position.	See "Sensor (staple finisher output option 1 position) failure 7 service check" on page 429.
430.19	The staple finisher stapler head failed to prime.	See "Sensor (staple finisher output option 1 position) failure 4 service check" on page 418.
431.13	The sensor (staple finisher elevator beam) is not blocked in time.	See "Sensor (staple finisher elevator beam) failure 2 service check" on page 398.
431.15	The sensor (staple finisher elevator beam) is not unblocked in time.	See "Sensor (staple finisher elevator beam) failure service check" on page 395.
450.23	Sensor (MTU entry): The paper arrives too late or never arrives.	See "Sensor (staple finisher MTU entry) failure service check" on page 386.
450.33	Sensor (MTU entry): The paper arrives too late or never arrives (with trifold/Z-fold finisher).	See "Sensor (staple finisher MTU entry) failure service check" on page 386.
450.91	Remaining paper detected on the paper path sensor of the staple finisher.	See "Sensor (staple finisher paper path) failure service check" on page 383.
454.23	Sensor (outer staging path bottom): The paper arrived too late.	See "Sensor (staple finisher outer staging path

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Error code	Description	Action
		bottom) failure service check" on page 389.
454.25	Sensor (outer staging path bottom): The paper does not clear the sensor in time.	See See "Sensor (staple finisher outer staging path bottom) failure service check" on page 389.
454.33	Sensor (outer staging path bottom): The paper arrived too late (with trifold/Z-fold finisher).	See See "Sensor (staple finisher outer staging path bottom) failure service check" on page 389.
454.35	Sensor (outer staging path bottom): The paper does not clear the sensor in time (with trifold/Z-fold finisher).	See See "Sensor (staple finisher outer staging path bottom) failure service check" on page 389.
457.25	Sensor (accumulator): The paper does not clear the sensor in time.	See See "Sensor (staple finisher compiler tray paper presence) failure service check" on page 375.
457.35	Sensor (accumulator): The paper does not clear the sensor in time (with trifold/Z-fold finisher).	See See "Sensor (staple finisher compiler tray paper presence) failure service check" on page 375.
461.90	The sensor (staple finisher stack height) failed to detect an off status three times consecutively within the set time.	See See "Sensor (staple finisher stack height) failure service check" on page 392.
465.23	The exit roller cam failed to reach the home position.	See See "Sensor (staple finisher compiler exit roller) failure service check" on page 371.
465.25	The exit roller cam failed to leave the home position.	See See "Sensor (staple finisher compiler exit roller) failure service check" on page 371.
468.23	The front tamper failed to reach the home position.	See See "Sensor (staple finisher tamper front) failure service check" on page 443.
468.25	The front tamper failed to leave the home position.	See See "Sensor (staple finisher tamper front) failure service check" on page 443.

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Error code	Description	Action
468.33	The front tamper failed to reach the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher tamper front) failure service check" on page 443.
468.35	The front tamper failed to leave the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher tamper front) failure service check" on page 443.
469.23	The rear tamper failed to reach the home position.	See "Sensor (staple finisher tamper rear) failure service check" on page 446.
469.25	The rear tamper failed to leave the home position.	See "Sensor (staple finisher tamper rear) failure service check" on page 446.
469.33	The rear tamper failed to reach the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher tamper rear) failure service check" on page 446.
469.35	The rear tamper failed to leave the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher tamper rear) failure service check" on page 446.
470.23	The tray holder failed to reach the home position.	See "Sensor (staple finisher compiler tray) failure service check" on page 379.
470.25	The tray holder failed to leave the home position.	See "Sensor (staple finisher compiler tray) failure service check" on page 379.
470.33	The tray holder failed to reach the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher compiler tray) failure service check" on page 379.
470.35	The tray holder failed to leave the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher compiler tray) failure service check" on page 379.
477.64	The motor (staple finisher bin elevator) was unable to	See "Motor (staple finisher bin elevator) failure

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Error code	Description	Action
	adjust the height within the set time.	service check" on page 919.
480.23	The staple finisher stapler head failed to reach the home position.	See "Sensor (staple finisher stapler head) failure 2 service check" on page 405.
480.25	The staple finisher stapler head failed to leave the home position.	See "Sensor (staple finisher stapler head) failure 2 service check" on page 405.
480.33	The staple finisher stapler head failed to reach the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher stapler head) failure service check" on page 401.
480.35	The staple finisher stapler head failed to leave the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher stapler head) failure 2 service check" on page 405.
481.29	The staple finisher stapler head failed to prime.	See "Sensor (staple finisher stapler head) failure service check" on page 401.
481.39	The staple finisher stapler head failed to prime (with trifold/Z-fold finisher).	See "Sensor (staple finisher stapler head) failure service check" on page 401.
484.23	The staple finisher stapler transport failed to reach the home position.	See "Sensor (staple finisher stapler transport) failure service check" on page 439.
484.25	The staple finisher stapler transport failed to leave the home position.	See "Sensor (staple finisher stapler transport) failure service check" on page 439.
484.33	The staple finisher stapler transport failed to reach the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher stapler transport) failure service check" on page 439.
484.35	The staple finisher stapler transport failed to leave the home position (with trifold/Z-fold finisher).	See "Sensor (staple finisher stapler transport) failure service check" on page 439.

Motor (staple finisher bin elevator) failure service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher stacker height).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher stacker bin) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
 - **No:**
Go to step 7.
6. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
 2. Find the motor (staple finisher stacker bin).
- Did the motor run?
- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the staple finisher lift shaft unit for proper installation.
- Is the staple finisher lift shaft unit properly installed?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Reseat the staple finisher lift shaft unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Perform the following tests:
1. Check the staple finisher lift shaft unit for damage.
 2. Check the staple finisher lift shaft unit gears and rollers for wear or damage.
- Are the staple finisher lift shaft unit and its gears and rollers free of wear or damage?
- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the staple finisher lift shaft unit.
- Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher compiler exit roller) failure service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Make sure that the staple finisher lower ejector unit is properly installed and free of damage.
2. Check the staple finisher lower ejector unit gears and rollers for wear and damage.

Are the gears and rollers properly installed and free of wear or damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the defective rollers or gears.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher ejector clamp/paddle).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher stack clamp).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (compiler eject).

Did the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Replace the staple finisher lower ejector unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the bin clamp clutch for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the bin clamp clutch properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 15.

14. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (bin clamp clutch).

Did the motor run?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the bin clamp clutch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

17. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher compiler tray paper presence) failure service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Make sure that the staple finisher lower ejector unit is properly installed and free of damage.
2. Check the staple finisher lower ejector unit gears and rollers for wear and damage.

Are the gears and rollers properly installed and free of wear or damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the defective rollers or gears.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher ejector clamp/paddle).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher stack clamp).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (compiler eject).

Did the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Replace the staple finisher lower ejector unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the bin clamp clutch for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the bin clamp clutch properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 15.

14. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (bin clamp clutch).

Did the motor run?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the bin clamp clutch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

17. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher compiler tray) failure service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Make sure that the staple finisher lower ejector unit is properly installed and free of damage.
 2. Check the staple finisher lower ejector unit gears and rollers for wear and damage.

Are the gears and rollers properly installed and free of wear or damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the defective rollers or gears.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher ejector clamp/paddle).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher stack clamp).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (compiler eject).

Did the motor run?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Replace the staple finisher lower ejector unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Perform the following tests:
1. Check the bin clamp clutch for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.
- Is the bin clamp clutch properly installed and free of damage?
- **Yes:**
Go to the next step.
 - **No:**
Go to step 15.
14. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
 2. Find the motor (bin clamp clutch).
- Did the motor run?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the bin clamp clutch.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Perform the following tests:
1. Check the staple finisher controller board for proper installation and damage.

2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

17. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher paper path) failure service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the staple finisher transport rollers, gears, and belt for wear, damage, and obstruction.

Are the staple finisher transport rollers, gears, and belt free of wear, damage, and obstruction?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the staple finisher transport rollers, gears, or belt.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Replace the staple finisher stapler transport.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher feed).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher transport).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

10. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

11. Check the motor (staple finisher transport) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 13.

12. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (staple finisher transport).

Did the motor run?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher MTU entry) failure service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher feed).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher transport) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
 - **No:**
Go to step 7.
6. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
 2. Find the motor (staple finisher transport).
- Did the motor run?
- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the staple finisher lower transport guide rollers and gears for wear, damage, and obstruction.
- Are the staple finisher lower transport guide rollers and gears free of wear, damage, and obstruction?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Replace the staple finisher lower transport guide rollers or gears.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Replace the staple finisher lower transport guide.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
11. Check the staple finisher transport rollers, gears, and belt for wear, damage, and obstruction.

Are the staple finisher transport rollers, gears, and belt free of wear, damage, and obstruction?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the staple finisher transport rollers, gears, or belt.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Replace the staple finisher stapler transport.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (staple finisher outer staging path bottom) failure service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher transport).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher transport) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (staple finisher transport).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher lower transport guide rollers and gears for wear, damage, and obstruction.

Are the staple finisher lower transport guide rollers and gears free of wear, damage, and obstruction?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the staple finisher lower transport guide rollers or gears.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Replace the staple finisher lower transport guide.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the staple finisher upper ejector unit rollers and gears for wear, damage, and obstruction.

Are the staple finisher upper ejector unit rollers and gears free of wear, damage, and obstruction?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the staple finisher upper ejector unit rollers and gears.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Replace the staple finisher upper ejector unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (staple finisher stack height) failure service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher stacker height).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher stacker bin) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
 - **No:**
Go to step 7.
6. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
 2. Find the motor (staple finisher stacker bin).
- Did the motor run?
- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the staple finisher lift shaft unit for proper installation.
- Is the staple finisher lift shaft unit properly installed?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Reseat the staple finisher lift shaft unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Perform the following tests:
1. Check the staple finisher lift shaft unit for damage.
 2. Check the staple finisher lift shaft unit gears and rollers for wear or damage.
- Are the staple finisher lift shaft unit and its gears and rollers free of wear or damage?
- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the staple finisher lift shaft unit.
- Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher elevator beam) failure service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher stack height).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher stacker bin) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
 - **No:**
Go to step 7.
6. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
 2. Find the motor (staple finisher stacker bin).
- Did the motor run?
- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the staple finisher lift shaft unit for proper installation.
- Is the staple finisher lift shaft unit properly installed?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Reseat the staple finisher lift shaft unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Perform the following tests:
1. Check the staple finisher lift shaft unit for damage.
 2. Check the staple finisher lift shaft unit gears and rollers for wear or damage.
- Are the staple finisher lift shaft unit and its gears and rollers free of wear or damage?
- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the staple finisher lift shaft unit.
- Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher elevator beam) failure 2 service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the motor (staple finisher stacker bin) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
 2. Find the motor (staple finisher stacker bin).

Did the motor run?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (stack height).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher lift shaft unit for proper installation.

Is the staple finisher lift shaft unit properly installed?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Reseat the staple finisher lift shaft unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher lift shaft unit for damage.
2. Check the staple finisher lift shaft unit gears and rollers for wear or damage.

Are the staple finisher lift shaft unit and its gears and rollers free of wear or damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the staple finisher lift shaft unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher stapler head) failure service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher unit carriage position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher unit carriage position) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
 - **No:**
Go to step 7.
6. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
 2. Find the motor (staple finisher unit carriage position).
- Did the motor run?
- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the staple finisher stapler head for proper installation.
- Is the staple finisher stapler head properly installed?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Reseat the staple finisher stapler head.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Perform the following tests:
1. Check the staple finisher stapler head for damage.
 2. Make sure that the staple finisher stapler head cable is properly connected.
- Is the staple finisher stapler head free of wear or damage?
- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the staple finisher stapler head.
- Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Check the staple finisher drive unit for proper installation.
- Is the staple finisher drive unit properly installed?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Reseat the staple finisher drive unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Perform the following tests:
1. Check the staple finisher drive unit for damage.
 2. Check the staple finisher drive unit gears for wear or damage.
- Are the staple finisher drive unit and its gears free of wear or damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the staple finisher drive unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Perform the following tests:
1. Reseat the staple finisher stapler cable.
 2. Check the staple finisher stapler cable for damage.
- Is the staple finisher stapler cable free of damage?
- **Yes:**
Go to step 18.
 - **No:**
Go to the next step.
17. Replace the staple finisher stapler cable.
- Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

19. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher stapler head) failure 2 service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher unit carriage position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher unit carriage position) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
 - **No:**
Go to step 7.
6. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
 2. Select the motor (staple finisher unit carriage position).

Did the motor run?

- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the staple head for proper installation.

Is the staple finisher stapler head properly installed?

- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Reseat the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Perform the following tests:
1. Check the staple finisher stapler head for damage.
 2. Make sure that the staple finisher stapler head cable is properly connected.

Is the staple finisher stapler head free of wear or damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Check the staple finisher drive unit for proper installation.
- Is the staple finisher drive unit properly installed?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Reseat the staple finisher drive unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Perform the following tests:
1. Check the staple finisher drive unit for damage.
 2. Check the staple finisher drive unit gears for wear or damage.
- Are the staple finisher drive unit and its gears free of wear or damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the staple finisher drive unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Perform the following tests:
1. Make sure that the staple finisher position bracket cables are properly connected.
 2. Check the staple finisher position bracket for damage, wear, and obstruction.
- Is the staple finisher position bracket free of damage, wear, and obstruction?
- **Yes:**
Go to step 18.
 - **No:**
Go to the next step.
17. Replace the staple finisher position bracket.
- Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

18. Perform the following tests:

1. Reseat the staple finisher stapler cable.
2. Check the staple finisher stapler cable for damage.

Is the staple finisher stapler cable free of damage?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

19. Replace the staple finisher stapler cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

21. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (staple finisher output option 1 position) failure 1 service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher transport).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher transport) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (staple finisher transport).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher lower transport guide rollers and gears for wear, damage, and obstruction.

Are the staple finisher lower transport guide rollers and gears free of wear, damage, and obstruction?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the staple finisher lower transport guide rollers or gears.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Replace the staple finisher lower transport guide.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the staple finisher upper ejector unit rollers and gears for wear, damage, and obstruction.

Are the staple finisher upper ejector unit rollers and gears free of wear, damage, and obstruction?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the staple finisher upper ejector unit rollers and gears.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Replace the staple finisher upper ejector unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (staple finisher output option 1 position) failure 2 service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher feed).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher transport) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (staple finisher transport).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher lower transport guide rollers and gears for wear, damage, and obstruction.

Are the staple finisher lower transport guide rollers and gears free of wear, damage, and obstruction?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the staple finisher lower transport guide rollers or gears.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Replace the staple finisher lower transport guide.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the staple finisher transport rollers, gears, and belt for wear, damage, and obstruction.

Are the staple finisher transport rollers, gears, and belt free of wear, damage, and obstruction?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the staple finisher transport rollers, gears, or belt.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Replace the staple finisher stapler transport.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (staple finisher output option 1 position) failure 3 service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher transport).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher transport) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (staple finisher transport).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher lower transport guide rollers and gears for wear, damage, and obstruction.

Are the staple finisher lower transport guide rollers and gears free of wear, damage, and obstruction?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the staple finisher lower transport guide rollers or gears.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Replace the staple finisher lower transport guide.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the staple finisher upper ejector unit rollers and gears for wear, damage, and obstruction.

Are the staple finisher upper ejector unit rollers and gears free of wear, damage, and obstruction?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the staple finisher upper ejector unit rollers and gears.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Replace the staple finisher upper ejector unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (staple finisher output option 1 position) failure 4 service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher unit carriage position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher unit carriage position) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (staple finisher unit carriage position).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher stapler head for proper installation.

Is the staple finisher stapler head properly installed?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Reseat the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher stapler head for damage.
2. Make sure that the staple finisher stapler head cable is properly connected.

Is the staple finisher stapler head free of wear or damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Check the staple finisher drive unit for proper installation.

Is the staple finisher drive unit properly installed?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Reseat the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher drive unit for damage.
2. Check the staple finisher drive unit gears for wear or damage.

Are the staple finisher drive unit and its gears free of wear or damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Reseat the staple finisher stapler cable.
2. Check the staple finisher stapler cable for damage.

Is the staple finisher stapler cable free of damage?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace the staple finisher stapler cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

19. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher output option 1 position) failure 5 service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Make sure that the staple finisher lower ejector unit is properly installed and free of damage.
2. Check the staple finisher lower ejector unit gears and rollers for wear and damage.

Are the gears and rollers properly installed and free of wear or damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the defective rollers or gears.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher ejector clamp/paddle).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher stack clamp).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (compiler eject).

Did the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Replace the staple finisher lower ejector unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the bin clamp clutch for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the bin clamp clutch properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 15.

14. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (bin clamp clutch).

Did the motor run?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the bin clamp clutch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

17. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher output option 1 position) failure 6 service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the staple finisher transport rollers, gears, and belt for wear, damage, and obstruction.

Are the staple finisher transport rollers, gears, and belt free of wear, damage, and obstruction?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the staple finisher transport rollers, gears, or belt.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Replace the staple finisher stapler transport.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher feed).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher transport).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

10. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

11. Check the motor (staple finisher transport) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 13.

12. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (staple finisher transport).

Did the motor run?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher output option 1 position) failure 7 service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher unit carriage position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher unit carriage position) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (staple finisher unit carriage position).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher stapler head for proper installation.

Is the staple finisher stapler head properly installed?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Reseat the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher stapler head for damage.
2. Make sure that the staple finisher head cable is properly connected.

Is the staple finisher stapler head free of wear or damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Check the staple finisher drive unit for proper installation.

Is the staple finisher drive unit properly installed?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Reseat the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher drive unit for damage.
2. Check the staple finisher drive unit gears for wear or damage.

Are the staple finisher drive unit and its gears free of wear or damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Make sure that the staple finisher position bracket cables are properly connected.
2. Check the staple finisher position bracket for damage, wear, and obstruction.

Is the staple finisher position bracket free of damage, wear, and obstruction?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace the staple finisher position bracket.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Reseat the staple finisher stapler cable.
2. Check the staple finisher stapler cable for damage.

Is the staple finisher stapler cable free of damage?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

19. Replace the staple finisher stapler cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

20. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

21. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher output option 1 position) failure 8 service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher rear tamper home).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (compiler rear tamper) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (compiler rear tamper).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Reseat the staple finisher tamper sensor cable.
2. Check the staple finisher tamper sensor cable for damage.

Is the staple finisher tamper sensor cable free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the staple finisher tamper sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Reseat the staple finisher tamper cable.
2. Check the staple finisher tamper cable for damage.

Is the staple finisher tamper cable free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the staple finisher tamper cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Perform the following tests:

1. Check if the staple finisher compiler tray front and rear tamper guides are movable.
2. Check the staple finisher compiler tray gears for wear and damage.

Are the staple finisher compiler tray tamper guides movable, and the gears free of wear and damage?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

13. Replace the staple finisher compiler tray.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (staple finisher output option 1 position) failure 9 service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher front tamper home).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (compiler front tamper) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (compiler front tamper).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Reseat the staple finisher tamper sensor cable.
2. Check the staple finisher tamper sensor cable for damage.

Is the staple finisher tamper sensor cable free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the staple finisher tamper sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Reseat the staple finisher tamper cable.
2. Check the staple finisher tamper cable for damage.

Is the staple finisher tamper cable free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the staple finisher tamper cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Perform the following tests:

1. Check if the staple finisher compiler tray front and rear tamper guides are movable.
2. Check the staple finisher compiler tray gears for wear and damage.

Are the staple finisher compiler tray tamper guides movable, and the gears free of wear and damage?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

13. Replace the staple finisher compiler tray.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (staple finisher stapler transport) failure service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher unit carriage position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher unit carriage position) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
 - **No:**
Go to step 7.
6. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
 2. Find the motor (staple finisher unit carriage position).
- Did the motor run?
- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the staple finisher stapler head for proper installation.
- Is the staple finisher stapler head properly installed?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Reseat the staple finisher stapler head.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Perform the following tests:
1. Check the staple finisher stapler head for damage.
 2. Make sure that the staple finisher head cable is properly connected.
- Is the staple finisher stapler head free of wear or damage?
- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the staple finisher stapler head.
- Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Check the staple finisher drive unit for proper installation.
- Is the staple finisher drive unit properly installed?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Reseat the staple finisher drive unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Perform the following tests:
1. Check the staple finisher drive unit for damage.
 2. Check the staple finisher drive unit gears for wear or damage.
- Are the staple finisher drive unit and its gears free of wear or damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the staple finisher drive unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Perform the following tests:
1. Make sure that the staple finisher position bracket cables are properly connected.
 2. Check the staple finisher position bracket for damage, wear, and obstruction.
- Is the staple finisher position bracket free of damage, wear, and obstruction?
- **Yes:**
Go to step 18.
 - **No:**
Go to the next step.
17. Replace the staple finisher position bracket.
- Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
18. Perform the following tests:
1. Reseat the staple finisher stapler cable.
 2. Check the staple finisher stapler cable for damage.
- Is the staple finisher stapler cable free of damage?
- **Yes:**
Go to step 20.
 - **No:**
Go to the next step.
19. Replace the staple finisher stapler cable.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
20. Perform the following tests:
1. Check the staple finisher controller board for proper installation and damage.
 2. Reseat all the connectors on the controller board.
- Is the staple finisher controller board properly installed and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
21. Replace the staple finisher controller board.
- Does the problem remain?
- **Yes:**
Contact the next level of support.
 - **No:**
The problem is solved.

Sensor (staple finisher tamper front) failure service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher front tamper home).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (compiler front tamper) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (compiler front tamper).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Reseat the staple finisher tamper sensor cable.
2. Check the staple finisher tamper sensor cable for damage.

Is the staple finisher tamper sensor cable free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the staple finisher tamper sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Reseat the staple finisher tamper cable.
2. Check the staple finisher tamper cable for damage.

Is the staple finisher tamper cable free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the staple finisher tamper cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Check if the staple finisher compiler tray front and rear tamper guides are movable.
2. Check the staple finisher compiler tray gears for wear and damage.

Are the staple finisher compiler tray tamper guides movable, and the gears free of wear and damage?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the staple finisher compiler tray.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (staple finisher tamper rear) failure service check

1. Perform the following tests:
 1. Open the left door, and then remove the jammed paper.
 2. Open the upper left door, and then remove the jammed paper.
 3. Remove the tray insert, and then remove the jammed paper.
 4. Remove the jammed paper in the staple finisher bin.
 5. Make sure that the staple finisher paper path is free from obstructions.
 6. Make sure that the fuser area is free from obstructions.
 7. Open the finisher front door, and then turn the knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
 2. Find the sensor (staple finisher rear tamper home).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (compiler rear tamper) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Find the motor (compiler rear tamper).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Reseat the staple finisher tamper sensor cable.
2. Check the staple finisher tamper sensor cable for damage.

Is the staple finisher tamper sensor cable free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the staple finisher tamper sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Reseat the staple finisher tamper cable.
2. Check the staple finisher tamper cable for damage.

Is the staple finisher tamper cable free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the staple finisher tamper cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Check if the staple finisher compiler tray front and rear tamper guides are movable.
2. Check the staple finisher compiler tray gears for wear and damage.

Are the staple finisher compiler tray tamper guides movable, and the gears free of wear and damage?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Replace the staple finisher compiler tray.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

4yy paper jams (SHPF)

4yy paper jam messages (SHPF)

4yy paper jam messages (SHPF)

Error code	Description	Action
400.13	Paper arrived at the sensor (HPT transport) too late.	See "Sensor (HTU transport) late-arriving or -leaving jam service check" on page 454.
420.11	Paper remains detected at the sensor (SHPF finisher paper path).	See "Sensor (SHPF paper path) static jam service check" on page 510.
420.13	The paper arrives at the sensor (SHPF feed) too late or never arrives.	See "Sensor (SHPF feed) late- or never-arriving jam service check" on page 460.
420.15	The paper does not clear the sensor (pass-through) in time.	See "Sensor (SHPF transport) late-arriving or -leaving jam service check" on page 467.
420.54	The sensor (compile exit) is not turned off by a sheet fed within the set time.	See "Sensor (SHPF transport) late-arriving or -leaving jam service check" on page 467.
421.13	The sensor (front tamper home) is not covered in time.	See "Sensor (SHPF compiler front tamper) never-arriving or -leaving jam service check" on page 484.
421.15	The sensor (front tamper home) is not uncovered in time.	See "Sensor (SHPF compiler front tamper) never-arriving or -leaving jam service check" on page 484.
422.13	The sensor (rear tamper home) is not covered in time.	See "Sensor (SHPF compiler rear tamper) never-arriving or -leaving jam service check" on page 487.

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Error code	Description	Action
422.15	The sensor (rear tamper home) is not uncovered in time.	See "Sensor (SHPF compiler rear tamper) never-arriving or -leaving jam service check" on page 487.
423.13	The quick exit or ejector failed to reach the sensor (home).	See "Sensor (SHPF ejector clamp/paddle) failure service check" on page 512.
423.15	The quick exit or ejector failed to leave the sensor (home).	See "Sensor (SHPF ejector clamp/paddle) failure service check" on page 512.
425.13a	The paper does not clear the sensor (SHPF compile paper present) in time.	See "Sensor (SHPF compiler paper present) never-arriving jam service check" on page 478.
428.13	The stapler head failed to reach the home position.	See "Sensor (SHPF staple unit carriage position) failure service check" on page 505.
428.15	The stapler head failed to leave the home position.	See "Sensor (SHPF staple unit carriage position) failure service check" on page 505.
430.19	The stapler head failed to prime.	See "SHPF staple unit failure service check" on page 515.
431.13	The sensor (stapler elevator beam) is not blocked in time.	See "Motor (SHPF stacker bin) failure service check" on page 490.
431.15	The sensor (stapler elevator beam) is not unblocked in time.	See "Sensor (SHPF stack height) failure service check" on page 518.
440.19	Finisher out of specification jam.	See "Sensor (SHPF transport) out of range speed jam service check" on page 473.
450.23	The paper arrives at the sensor (MTU entry) too late or never arrives.	See "Sensor (SHPF feed) late- or never-arriving jam service check" on page 460.

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Error code	Description	Action
450.33	The paper arrives at the sensor (MTU entry) too late or never arrives (with trifold/Z-fold finisher).	See "Sensor (SHPF feed) late- or never-arriving jam service check" on page 460.
450.91	Paper remains detected at the sensor (SHPF finisher paper path).	See "Sensor (SHPF paper path) static jam service check" on page 510.
454.23	Sensor (outer staging path bottom): The paper arrived too late.	See "Sensor (SHPF transport) late-arriving or -leaving jam service check" on page 467.
454.25	Sensor (outer staging path bottom): The paper does not clear the sensor in time.	See "Sensor (SHPF transport) late-arriving or -leaving jam service check" on page 467.
454.33	Sensor (outer staging path bottom): The paper arrived too late (with trifold/Z-fold finisher).	See "Sensor (SHPF transport) late-arriving or -leaving jam service check" on page 467.
457.25	Sensor (accumulator): The paper does not clear the sensor in time.	See "Sensor (SHPF compiler paper present) never-arriving jam service check" on page 478.
457.33	Sensor (accumulator): The paper does not clear the sensor in time (with trifold/Z-fold finisher).	See "Sensor (SHPF compiler paper present) never-arriving jam service check" on page 478.
457.35	Sensor (accumulator): The paper does not clear the sensor in time (with trifold/Z-fold finisher).	See "Sensor (SHPF compiler paper present) never-arriving jam service check" on page 478.
461.90	The sensor (inline stack height) failed to detect an off status three times consecutively within the set time.	See "Sensor (SHPF stack height) failure service check" on page 518.
465.23	The exit roller cam failed to reach the home position.	See "Sensor (SHPF ejector clamp/paddle) failure service check" on page 512.
465.25	The exit roller cam failed to leave the home position.	See "Sensor (SHPF ejector clamp/paddle)

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Error code	Description	Action
		failure service check" on page 512.
468.23	The front tamper failed to reach the home position.	See See "Sensor (SHPF compiler front tamper) never-arriving or -leaving jam service check" on page 484.
468.25	The front tamper failed to leave the home position.	See See "Sensor (SHPF compiler front tamper) never-arriving or -leaving jam service check" on page 484.
468.33	The front tamper failed to reach the home position (with trifold/Z-fold finisher).	See See "Sensor (SHPF compiler front tamper) never-arriving or -leaving jam service check" on page 484.
468.35	The front tamper failed to leave the home position (with trifold/Z-fold finisher).	See See "Sensor (SHPF compiler front tamper) never-arriving or -leaving jam service check" on page 484.
469.23	The rear tamper failed to reach the home position.	See See "Sensor (SHPF compiler rear tamper) never-arriving or -leaving jam service check" on page 487.
469.25	The rear tamper failed to leave the home position.	See See "Sensor (SHPF compiler rear tamper) never-arriving or -leaving jam service check" on page 487.
469.33	The rear tamper failed to reach the home position (with trifold/Z-fold finisher).	See See "Sensor (SHPF compiler rear tamper) never-arriving or -leaving jam service check" on page 487.
469.35	The rear tamper failed to leave the home position (with trifold/Z-fold finisher).	See See "Sensor (SHPF compiler rear tamper) never-arriving or -leaving jam service check" on page 487.
477.64	The stapler bin elevator motor was unable to adjust	See See "Sensor (SHPF stack height) failure service check" on page 518.

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Error code	Description	Action
	the height within the set time.	
479.25	The sensor (SHPF stacker bin) detected a level lower than the set limit.	See "Motor (SHPF stacker bin) failure service check" on page 490.
479.35	The sensor (SHPF stacker bin) detected a level lower than the set limit.	See "Motor (SHPF stacker bin) failure service check" on page 490.
480.23	The stapler head failed to reach the home position.	See "Sensor (SHPF staple unit carriage position) failure service check" on page 505.
480.25	The stapler head failed to leave the home position.	See "Sensor (SHPF staple unit carriage position) failure service check" on page 505.
481.25	The staple stacker failed.	See "Sensor (SHPF staple unit carriage position) failure service check" on page 505.
481.29	The stapler head failed to prime.	See "SHPF staple unit failure service check" on page 515.
481.39	The stapler head failed to prime (with trifold/Z-fold finisher).	See "SHPF staple unit failure service check" on page 515.
484.23	The stapler transport failed to reach the home position.	See "Sensor (SHPF staple unit carriage position) failure service check" on page 505.
484.25	The stapler transport failed to leave the home position.	See "Sensor (SHPF staple unit carriage position) failure service check" on page 505.
484.33	The stapler transport failed to reach the home position (with trifold/Z-fold finisher).	See "Sensor (SHPF staple unit carriage position) failure service check" on page 505.
484.35	The stapler transport failed to leave the home position (with trifold/Z-fold finisher).	See "Sensor (SHPF staple unit carriage position) failure service check" on page 505.

Sensor (HTU transport) late-arriving or -leaving jam service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Remove, and then load a supported paper into the tray. For more information on loading paper, see [See "Avoiding jams" on page 171](#). For more information on supported paper, see the "Selecting paper" section.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Change the settings to match the size, type, and weight of the paper loaded.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform a print test on paper from a fresh package.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the paper path for paper fragments and partially fed paper.

Is the paper path free of paper fragments and partially fed paper?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Remove the paper fragments and partially fed paper.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Check if the HTU is properly installed.

Is the HTU properly installed?

- **Yes:**

Go to the next step.

- **No:**

Go to step 9.

8. Check if the HTU is free of damage.

Is the HTU free of damage?

- **Yes:**

Go to step 10.

- **No:**

Go to the next step.

9. Reinstall or replace the HTU.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Motor tests.

2. Select the **Motor (HTU transport)**.

Does the motor run?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

11. Perform the following tests:

Check the motor (HTU transport) and its cable for the following:

- improper connection/installation
- damage

Is the motor (HTU transport) free of the previous items?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

12. Reconnect or replace the HTU transport motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Reinstall or replace the motor (HTU transport). See [See "Horizontal transport motor assembly removal" on page 1713.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Check if the HTU transport is free of damage and separation.

Is the HTU transport free of damage and separation?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the HTU transport.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (HTU transport).

2. Find the sensor (HTU transport).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

17. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

18. Perform the following tests:

Check the sensor (HTU transport) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (HTU transport) free of the previous items?

- **Yes:**
Go to step 21.

- **No:**
Go to the next step.

19. Reconnect or replace the HTU transport sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Reinstall or replace the sensor (HTU transport).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

21. Check the SHPF top door, SHPF top door actuator, and SHPF top door hinge for the following:

- improper installation
- damage

Are the parts free of the previous items?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.

22. Reinstall or replace the SHPF top door. See [See "Finisher top cover assembly removal" on page 1664.](#)

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

23. Perform the following tests:

Check the SHPF transport roller for the following:

- pick failure
- wear
- damage
- revolution failure

Is the SHPF transport roller free of the previous items?

- **Yes:**
Go to step 25.
- **No:**
Go to the next step.

24. Reinstall or replace the SHPF transport roller.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

25. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 27.
- **No:**
Go to the next step.

26. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

27. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

28. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (SHPF feed) late- or never-arriving jam service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Remove, and then load a supported paper into the tray. For more information on loading paper, see [See "Avoiding jams" on page 171](#). For more information on supported paper, see the "Selecting paper" section.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Change the settings to match the size, type, and weight of the paper loaded.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform a print test on paper from a fresh package.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the paper path for paper fragments and partially fed paper.

Is the paper path free of paper fragments and partially fed paper?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Remove the paper fragments and partially fed paper.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.
7. Check if the HTU is properly installed.
- Is the HTU properly installed?
- **Yes:**
Go to the next step.
 - **No:**
Go to step 9.
8. Check if the HTU is free of damage.
- Is the HTU free of damage?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Reinstall or replace the HTU.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Perform the following tests:
- Check the HTU docking bracket for the following:
- improper connection/installation
 - damage
- Is the HTU docking bracket free of the previous items?
- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Reinstall or replace the HTU docking bracket.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to:
Output device diagnostics > Motor tests.
 2. Select the **Motor (HTU transport).**

Does the motor run?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

13. Perform the following tests:

Check the motor (HTU transport) and its cable for the following:

- improper connection/installation
- damage

Is the motor (HTU transport) free of the previous items?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

14. Reconnect or replace the HTU transport motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Reinstall or replace the motor (HTU transport). See [See "Horizontal transport motor assembly removal" on page 1713.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:
Output device diagnostics > Sensor tests > Sensor (SHPF feed).
2. Find the sensor (SHPF feed).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

17. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

18. Perform the following tests:

Check the sensor (SHPF feed) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF feed) free of the previous items?

- **Yes:**
Go to step 21.

- **No:**
Go to the next step.

19. Reconnect or replace the SHPF feed sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Reinstall or replace the sensor (SHPF feed).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

21. Perform the following tests:

Check the SHPF transport roller for the following:

- pick failure
- wear
- damage
- revolution failure

Is the SHPF transport roller free of the previous items?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.

22. Reinstall or replace the SHPF transport roller.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

23. Check the SHPF top door, SHPF top door actuator, SHPF top door hinge for the following:

- improper installation
- damage

Are the parts free of the previous items?

- **Yes:**
Go to step 25.

- **No:**
Go to the next step.

24. Reinstall or replace the SHPF top door. See [See "Finisher top cover assembly removal" on page 1664.](#)

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

25. Check if the HTU transport is free of damage and separation.

Is the HTU transport free of damage and separation?

- **Yes:**
Go to step 27.

- **No:**
Go to the next step.

26. Replace the HTU transport.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

27. Perform the following tests:

Check the hole punch unit (2/4 hole) for the following:

- improper installation
- damage
- separation

Is the hole punch unit (2/4 hole) free of the previous items?

- **Yes:**
Go to step 29.

- **No:**
Go to the next step.
28. Reinstall or replace the hole punch unit (2/4 hole).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
29. Perform the following tests:
- Check the hole punch unit (2/3 hole) for the following:
- improper installation
 - damage
 - separation
- Is the hole punch unit (2/3 hole) free of the previous items?
- **Yes:**
Go to step 31.
 - **No:**
Go to the next step.
30. Reinstall or replace the hole punch unit (2/3 hole).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
31. Check if the connectors on the SHPF controller board are properly connected.
- Are the connectors properly connected?
- **Yes:**
Go to step 33.
 - **No:**
Go to the next step.
32. Reconnect the connectors on the SHPF controller board.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
33. Check if the SHPF controller board is free of damage.
- Is the controller board free of damage?
- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

34. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (SHPF transport) late-arriving or -leaving jam service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Remove, and then load a supported paper into the tray. For more information on loading paper, see [See "Avoiding jams" on page 171](#). For more information on supported paper, see the "Selecting paper" section.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Change the settings to match the size, type, and weight of the paper loaded.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform a print test on paper from a fresh package.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the paper path for paper fragments and partially fed paper.

Is the paper path free of paper fragments and partially fed paper?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Remove the paper fragments and partially fed paper.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Motor tests.

2. Select the **Motor (HTU transport)**.

Does the motor run?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

8. Perform the following tests:

Check the motor (HTU transport) and its cable for the following:

- improper connection/installation
- damage

Is the motor (HTU transport) free of the previous items?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

9. Reconnect or replace the HTU transport motor cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Reinstall or replace the motor (HTU transport). See [See "Horizontal transport motor assembly removal" on page 1713.](#)

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Motor tests.

2. Select the **Motor (SHPF transport)**.

Does the motor run?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

12. Perform the following tests:

Check the motor (SHPF transport) and its cable for the following:

- improper connection/installation
- damage

Is the motor (SHPF transport) free of the previous items?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

13. Reconnect or replace the SHPF transport motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Reinstall or replace the motor (SHPF transport). See [See "Finisher transport motor removal" on page 1686](#).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF transport).

2. Find the sensor (SHPF transport).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

16. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

17. Perform the following tests:

Check the sensor (SHPF transport) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF transport) free of the previous items?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

18. Reconnect or replace the SHPF transport sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

19. Reinstall or replace the sensor (SHPF transport).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

20. Perform the following tests:

Check the SHPF transport roller for the following:

- pick failure
- wear
- damage
- revolution failure

Is the SHPF transport roller free of the previous items?

- **Yes:**
Go to step 22.
- **No:**
Go to the next step.

21. Reinstall or replace the SHPF transport roller.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

22. Perform the following tests:

Check the SHPF feed roller for the following:

- pick failure
- wear
- damage
- revolution failure

Is the SHPF feed roller free of the previous items?

- **Yes:**
Go to step 24.
- **No:**
Go to the next step.

23. Reinstall or replace the SHPF feed roller.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

24. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 26.
- **No:**
Go to the next step.

25. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

26. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

27. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (SHPF transport) out of range speed jam service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Motor tests.

2. Select the **Motor (SHPF transport)**.

Does the motor run?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

3. Perform the following tests:

Check the motor (SHPF transport) and its cable for the following:

- improper connection/installation
- damage

Is the motor (SHPF transport) free of the previous items?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Reconnect or replace the SHPF transport motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Reinstall or replace the motor (SHPF transport). See [See "Finisher transport motor removal" on page 1686.](#)

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF feed).

2. Find the sensor (SHPF feed).

Does the sensor status change while toggling the sensor?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

7. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

8. Perform the following tests:

Check the sensor (SHPF feed) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF feed) free of the previous items?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

9. Reconnect or replace the SHPF feed sensor cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Reinstall or replace the sensor (SHPF feed).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF transport).

2. Find the sensor (SHPF transport).

Does the sensor status change while toggling the sensor?

- **Yes:**

Go to step 16.

- **No:**

Go to the next step.

12. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

Check the sensor (SHPF transport) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF transport) free of the previous items?

- **Yes:**

Go to step 16.

- **No:**

Go to the next step.

14. Reconnect or replace the SHPF transport sensor cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Reinstall or replace the sensor (SHPF transport).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

16. Perform the following tests:

Check the SHPF transport roller for the following:

- pick failure
- wear
- damage
- revolution failure

Is the SHPF transport roller free of the previous items?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Reinstall or replace the SHPF transport roller.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

19. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

20. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

21. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (SHPF compiler paper present) never-arriving jam service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Motor tests.

2. Select the **Motor (SHPF compiler eject).**

Does the motor run?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

3. Perform the following tests:

Check the motor (SHPF compiler eject) and its cable for the following:

- improper connection/installation
- damage

Is the motor (SHPF compiler eject) free of the previous items?

- **Yes:**
Go to the next step.
- **No:**
Go to step 6.

4. Reconnect or replace the SHPF compiler eject motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Reinstall or replace the motor (SHPF compiler eject).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF compiler paper present).

2. Find the sensor (SHPF compiler paper present).

Does the sensor status change while toggling the sensor?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

7. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

8. Perform the following tests:

Check the sensor (SHPF compiler paper present) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF compiler paper present) free of the previous items?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

9. Reconnect or replace the SHPF compiler paper present sensor cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Reinstall or replace the sensor (SHPF compiler paper present).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF ejector clamp/paddle).

2. Find the sensor (SHPF ejector clamp/paddle).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

12. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

Check the sensor (SHPF ejector clamp/paddle) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF ejector clamp/paddle) free of the previous items?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

14. Reconnect or replace the SHPF ejector clamp/paddle sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Reinstall or replace the sensor (SHPF ejector clamp/paddle).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF stack clamp).

2. Find the sensor (SHPF stack clamp).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 21.

- **No:**
Go to the next step.

17. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

18. Perform the following tests:

Check the sensor (SHPF stack clamp) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF stack clamp) free of the previous items?

- **Yes:**
Go to step 21.

- **No:**
Go to the next step.

19. Reconnect or replace the SHPF stack clamp sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Reinstall or replace the sensor (SHPF stack clamp).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

21. Check the drive gearbox section properly operates.

Does the drive gearbox section properly operate?

- **Yes:**
Go to step 24.

- **No:**
Go to the next step.

22. Perform the following tests:

Check the SHPF compiler eject gearbox connection on the SHPF controller board for the following:

- open circuit
- short circuit
- improper connection

Is the connection free from the previous items?

- **Yes:**
Go to step 24.

- **No:**
Go to the next step.

23. Reinstall or replace the SHPF compiler gear box.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

24. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 26.

- **No:**
Go to the next step.

25. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

26. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

27. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (SHPF compiler front tamper) never-arriving or -leaving jam service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Motor tests.

2. Select the **Motor (SHPF compiler front tamper)**.

Does the motor run?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

3. Perform the following tests:

Check the motor (SHPF compiler front tamper) and its cable for the following:

- improper connection/installation
- damage

Is the motor free of the previous items?

- **Yes:**
Go to the next step.
- **No:**
Go to step 6.

4. Reconnect or replace the SHPF compiler front tamper motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Reinstall or replace the motor (SHPF compiler front tamper).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF front tamper).

2. Find the sensor (SHPF front tamper).

Does the sensor status change while toggling the sensor?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

7. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

8. Perform the following tests:

Check the sensor (SHPF front tamper) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF front tamper) free of the previous items?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

9. Reconnect or replace the SHPF front tamper sensor cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Reinstall or replace the sensor (SHPF front tamper).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Check if the SHPF compiler front tamper slide section for deformity.

Is the slide section deformed?

- **Yes:**
Go to the next step.
- **No:**
Go to step 13.

12. Replace the SHPF compiler front tamper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

14. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

16. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (SHPF compiler rear tamper) never-arriving or -leaving jam service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Motor tests.

2. Select the **Motor (SHPF compiler rear tamper)**.

Does the motor run?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

3. Perform the following tests:

Check the motor (SHPF compiler rear tamper) and its cable for the following:

- improper connection/installation
- damage

Is the motor free of the previous items?

- **Yes:**
Go to the next step.
- **No:**
Go to step 6.

4. Reconnect or replace the SHPF compiler rear tamper motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Reinstall or replace the motor (SHPF compiler rear tamper).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF rear tamper).

2. Find the sensor (SHPF rear tamper).

Does the sensor status change while toggling the sensor?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

7. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

8. Perform the following tests:

Check the sensor (SHPF rear tamper) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF rear tamper) free of the previous items?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

9. Reconnect or replace the SHPF rear tamper sensor cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Reinstall or replace the sensor (SHPF rear tamper).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Check if the SHPF compiler rear tamper slide section for deformity.

Is the slide section deformed?

- **Yes:**
Go to the next step.
- **No:**
Go to step 13.

12. Replace the SHPF compiler rear tamper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

14. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

16. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667](#).

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Motor (SHPF stacker bin) failure service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Motor tests.

2. Select the **Motor (SHPF stacker bin)**.

Does the motor run?

- **Yes:**
Go to step 6.
- **No:**
Go to step 4.

3. Perform the following tests:

Check the motor (SHPF stacker bin) and its cable for the following:

- improper connection/installation
- damage

Is the motor (SHPF stacker bin) free of the previous items?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Reconnect or replace the SHPF stacker bin motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Reinstall or replace the motor (SHPF stacker bin). See [See "Stacker motor assembly removal" on page 1680.](#)

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF stack height).

2. Find the sensor (SHPF stack height).

Does the sensor status change while toggling the sensor?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

7. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

8. Perform the following tests:

Check the sensor (SHPF stack height) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF stack height) free of the previous items?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

9. Reconnect or replace the SHPF stack height sensor cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Reinstall or replace the sensor (SHPF stack height).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Check the drive gearbox section properly operates.

Does the drive gearbox section properly operate?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

12. Perform the following tests:

Check the SHPF compiler eject gearbox connection on the SHPF controller board for the following:

- open circuit
- short circuit
- improper connection

Is the connection free from the previous items?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

13. Reinstall or replace the SHPF compiler gear box.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

1. Remove paper in the SHPF bin.
2. Check the bin for paper fragments and debris.

Is the bin free of paper fragments and debris?

- **Yes:**
Go to step 16.

- **No:**
Go to the next step.

15. Remove the paper fragments and debris in the bin.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

16. Check the SHPF bin paper path for any paper fragment and debris.

Is the bin paper path free of paper fragments and debris?

- **Yes:**
Go to step 18.
 - **No:**
Go to the next step.
17. Remove the paper fragments and debris in the bin paper path.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
18. Perform the following tests:
- Check the SHPF bin front belt for the following:
- loose tension
 - separation
- Is the front belt free of the previous items?
- **Yes:**
Go to step 20.
 - **No:**
Go to the next step.
19. Reinstall or replace the SHPF bin front belt. See [See "Stacker belt removal" on page 1674.](#)
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
20. Perform the following tests:
- Check the SHPF bin rear belt for the following:
- loose tension
 - separation
- Is the rear belt free of the previous items?
- **Yes:**
Go to step 22.
 - **No:**
Go to the next step.
21. Reinstall or replace the SHPF bin rear belt. See [See "Stacker belt removal" on page 1674.](#)
- Does the problem remain?
- **Yes:**
Go to the next step.

- **No:**
The problem is solved.
22. Check if the SHPF stack clamp clutch properly operates.
- Does the stack clamp clutch properly operate?
- **Yes:**
Go to step 25.
 - **No:**
Go to the next step.
23. Perform the following tests:
- Check the SHPF stack clamp clutch connection on the SHPF controller board for the following:
- open circuit
 - short circuit
 - improper connection
- Is the connection free from the previous items?
- **Yes:**
Go to step 25.
 - **No:**
Go to the next step.
24. Reinstall or replace the SHPF stack clamp clutch.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
25. Check if the SHPF stack clamp sensor actuator properly operates.
- Does the sensor actuator properly operate?
- **Yes:**
Go to step 27.
 - **No:**
Go to the next step.
26. Replace the SHPF stack clamp sensor actuator.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
27. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF stack clamp).

2. Find the sensor (SHPF stack clamp).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 32.

- **No:**
Go to the next step.

28. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

29. Perform the following tests:

Check the sensor (SHPF stack clamp) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF stack clamp) free of the previous items?

- **Yes:**
Go to step 32.

- **No:**
Go to the next step.

30. Reconnect or replace the SHPF stack clamp sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

31. Reinstall or replace the sensor (SHPF stack clamp).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

32. Check if the SHPF stack clamp properly operates.

Does the SHPF stack clamp properly operate?

- **Yes:**
Go to step 35.

- **No:**

Go to the next step.

33. Perform the following tests:

Check the SHPF stack clamp for the following:

- failure to revolve
- failure to slide

Is the SHPF stack clamp free of the previous items?

- **Yes:**

Go to step 35.

- **No:**

Go to the next step.

34. Replace the SHPF stack clamp.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

35. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**

Go to step 37.

- **No:**

Go to the next step.

36. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

37. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

38. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (puncher home) failure service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

2. Remove, and then load a supported paper into the tray. For more information on loading paper, see [See "Avoiding jams" on page 171](#). For more information on supported paper, see the "Selecting paper" section.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Change the settings to match the size, type, and weight of the paper loaded.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

4. Perform a print test on paper from a fresh package.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Check the paper path for paper fragments and partially fed paper.

Is the paper path free of paper fragments and partially fed paper?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Remove the paper fragments and partially fed paper.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

7. Check the hole punch unit paper path for paper fragments and partially fed paper.

Is the paper path free of paper fragments and partially fed paper?

- **Yes:**

Go to step 9.

- **No:**

Go to the next step.

8. Remove the paper fragments and partially fed paper.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

9. Perform the following tests:

Check the hole punch unit (2/4 hole) for the following:

- improper installation
- damage
- separation

Is the hole punch unit (2/4 hole) free of the previous items?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

10. Reinstall or replace the hole punch unit (2/4 hole).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

Check the hole punch unit (2/3 hole) for the following:

- improper installation
- damage
- separation

Is the hole punch unit (2/3 hole) free of the previous items?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Reinstall or replace the hole punch unit (2/3 hole).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

Check if the HPU controller board for the following:

- improper connection
- open circuit
- short circuit

Is the HPU controller board free of the previous items?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

14. Reinstall or replace the HPU controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (SHPF stack clamp) failure service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Motor tests.

2. Select the **Motor (SHPF compiler eject).**

Does the motor run?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

3. Perform the following tests:

Check the motor (SHPF compiler eject) and its cable for the following:

- improper connection/installation
- damage

Is the motor (SHPF compiler eject) free of the previous items?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Reconnect or replace the SHPF compiler eject motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Reinstall or replace the motor (SHPF compiler eject).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.
6. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to:
Output device diagnostics > Sensor tests > Sensor (SHPF stack clamp).
 2. Find the sensor (SHPF stack clamp).
Does the sensor status change while toggling the sensor?
 - **Yes:**
Go to step 11.
 - **No:**
Go to the next step.
7. Remove any debris or obstruction near the sensor.
Does the problem remain?
 - **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Perform the following tests:
Check the sensor (SHPF stack clamp) and its cable for the following:
- improper connection/installation
 - damage
- Is the sensor (SHPF stack clamp) free of the previous items?
 - **Yes:**
Go to step 11.
 - **No:**
Go to the next step.
9. Reconnect or replace the SHPF stack clamp sensor cable.
Does the problem remain?
 - **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Reinstall or replace the sensor (SHPF stack clamp).
Does the problem remain?
 - **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
11. Check if the SHPF stack clamp clutch properly operates.

Does the stack clamp clutch properly operate?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

12. Perform the following tests:

Check the SHPF stack clamp clutch connection on the SHPF controller board for the following:

- open circuit
- short circuit
- improper connection

Is the connection free from the previous items?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Reinstall or replace the SHPF stack clamp clutch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Check if the SHPF stack clamp properly operates.

Does the SHPF stack clamp properly operate?

- **Yes:**
Go to step 17.
- **No:**
Go to the next step.

15. Perform the following tests:

Check the SHPF stack clamp for the following:

- failure to revolve
- failure to slide

Is the SHPF stack clamp free of the previous items?

- **Yes:**
Go to step 17.
- **No:**
Go to the next step.

16. Replace the SHPF stack clamp.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

17. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

18. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

19. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

20. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (SHPF staple unit carriage position) failure service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Remove, and then load a supported paper into the tray. For more information on loading paper, see [See "Avoiding jams" on page 171](#). For more information on supported paper, see the "Selecting paper" section.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Change the settings to match the size, type, and weight of the paper loaded.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform a print test on paper from a fresh package.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the paper path for paper fragments and partially fed paper.

Is the paper path free of paper fragments and partially fed paper?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Remove the paper fragments and partially fed paper.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Check if the SHPF staple unit properly operates.

Does the SHPF staple unit properly operate?

- **Yes:**

Go to step 12.

- **No:**

Go to the next step.

8. Check if the motor (SHPF staple) properly operates.

Does the motor properly operate?

- **Yes:**

Go to step 12.

- **No:**

Go to the next step.

9. Remove any debris or obstruction near the staple unit.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Perform the following tests:

Check the staple cartridge for the following:

- improper installation
- damage

Is the staple cartridge free of the previous items?

- **Yes:**

Go to step 12.

- **No:**

Go to the next step.

11. Replace the SHPF staple unit. See [See "Stapler assembly removal" on page 1705.](#)

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF staple unit carriage position).

2. Find the sensor (SHPF staple unit carriage position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 17.
- **No:**
Go to the next step.

13. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

Check the sensor (SHPF staple unit carriage position) and its cable for the following:

- improper connection/installation
- damage

Is the sensor free of the previous items?

- **Yes:**
Go to step 17.
- **No:**
Go to the next step.

15. Reconnect or replace the SHPF staple unit carriage position sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Reinstall or replace the sensor (SHPF staple unit carriage position).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

17. Remove any debris or obstruction near the SHPF staple carriage rail.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

18. Perform the following tests:

Check the SHPF staple carriage rail for the following:

- damage
- deformation

Is the SHPF staple carriage rail free of the previous items?

- **Yes:**

Go to step 20.

- **No:**

Go to the next step.

19. Replace the SHPF staple carriage rail. See [See "Rail assembly removal" on page 1707](#).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

20. Perform the following tests:

Check if the SHPF staple unit carriage board for the following:

- improper connection
- open circuit
- short circuit

Is the board free of the previous items?

- **Yes:**

Go to step 22.

- **No:**

Go to the next step.

21. Reinstall or replace the SHPF staple unit carriage board.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

22. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**

Go to step 24.

- **No:**

Go to the next step.

23. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

24. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

25. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (SHPF paper path) static jam service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the paper path for paper fragments and partially fed paper.

Is the paper path free of paper fragments and partially fed paper?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Remove the paper fragments and partially fed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

7. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (SHPF ejector clamp/paddle) failure service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (SHPF ejector clamp/paddle).

2. Find the sensor (SHPF ejector clamp/paddle).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

3. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

Check the sensor (SHPF ejector clamp/paddle) and its cable for the following:

- improper connection/installation
- damage

Is the sensor (SHPF ejector clamp/paddle) free of the previous items?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Reconnect or replace the SHPF ejector clamp/paddle sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.
6. Reinstall or replace the sensor (SHPF ejector clamp/paddle).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
7. Check the drive gearbox section properly operates.
- Does the drive gearbox section properly operate?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
8. Perform the following tests:
- Check the SHPF compiler eject gearbox connection on the SHPF controller board for the following:
- open circuit
 - short circuit
 - improper connection
- Is the connection free from the previous items?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Reinstall or replace the SHPF compiler gear box.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Check if the eject pinch cam and paddle cam for fail to slide.
- Do the cams fail to slide?
- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the SHPF eject clamp/paddle. See [See "Eject chute assembly removal" on page 1689.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

15. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

SHPF staple unit failure service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check if the SHPF staple unit properly operates.

Does the SHPF staple unit properly operate?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

3. Check if the motor (SHPF staple) properly operates.

Does the motor properly operate?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

4. Remove any debris or obstruction near the staple unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

Check the staple cartridge for the following:

- improper installation
- damage

Is the staple cartridge free of the previous items?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the SHPF staple unit. See [See "Stapler assembly removal" on page 1705.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

Check if the SHPF staple unit carriage board for the following:

- improper connection
- open circuit
- short circuit

Is the board free of the previous items?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Reinstall or replace the SHPF staple unit carriage board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (SHPF stack height) failure service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

Check the SHPF bin front belt for the following:

- loose tension
- separation

Is the front belt free of the previous items?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Reinstall or replace the SHPF bin front belt. See [See "Stacker belt removal" on page 1674.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

Check the SHPF bin rear belt for the following:

- loose tension
- separation

Is the rear belt free of the previous items?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Reinstall or replace the SHPF bin rear belt. See [See "Stacker belt removal" on page 1674.](#)

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:
Output device diagnostics > Motor tests.

2. Select the **Motor (SHPF stacker bin).**

Does the motor run?

- **Yes:**
Go to step 10.
- **No:**
Go to step 8.

7. Perform the following tests:

Check the motor (SHPF stacker bin) and its cable for the following:

- improper connection/installation
- damage

Is the motor (SHPF stacker bin) free of the previous items?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Reconnect or replace the SHPF stacker bin motor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Reinstall or replace the motor (SHPF stacker bin). See [See "Stacker motor assembly removal" on page 1680.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Remove paper in the SHPF bin.
2. Check the bin for paper fragments and debris.

Is the bin free of paper fragments and debris?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.
11. Remove the paper fragments and debris in the bin.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Check the SHPF bin paper path for any paper fragment and debris.
- Is the bin paper path free of paper fragments and debris?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Remove the paper fragments and debris in the bin paper path.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Perform the following tests:
1. Enter the Diagnostics menu, and then navigate to:
Output device diagnostics > Sensor tests > Sensor (SHPF stack height).
 2. Find the sensor (SHPF stack height).
- Does the sensor status change while toggling the sensor?
- **Yes:**
Go to step 19.
 - **No:**
Go to the next step.
15. Remove any debris or obstruction near the sensor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Perform the following tests:
- Check the sensor (SHPF stack height) and its cable for the following:
- improper connection/installation
 - damage

Is the sensor (SHPF stack height) free of the previous items?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

17. Reconnect or replace the SHPF stack height sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Reinstall or replace the sensor (SHPF stack height).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

19. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

20. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

21. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

22. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667](#).

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

4yy paper jams (booklet finisher)

4yy paper jam messages (booklet finisher)

4yy paper jam messages (booklet finisher)

Error code	Description	Action
400.13	Booklet finisher horizontal paper transport: Input sensor covered too long..	See "Booklet finisher sensor (paper transport exit) failure service check" on page 538.
400.15	Booklet finisher horizontal paper transport: Sheet arrives too late or never arrives.	See "Booklet finisher sensor (paper transport exit) failure service check" on page 538.
403.13	The booklet finisher puncher failed to reach the home position. The sensor (hole punch home) does not turn on within the set time.	See "Booklet finisher puncher failure service check" on page 532.
403.15	The booklet finisher puncher failed to reach the home position. The sensor (home punch home) does not turn off within the set time.	See "Booklet finisher puncher failure service check" on page 532.
403.23	The booklet finisher puncher failed to reach the home position (no trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.
403.25	The booklet finisher puncher failed to leave the home position (no trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.
404.25	The booklet finisher puncher failed to leave the home position (no trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.
403.33	The booklet finisher puncher failed to reach the home position (with trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.

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Error code	Description	Action
403.35	The booklet finisher puncher failed to leave the home position (with trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.
404.35	The booklet finisher puncher failed to leave the home position (with trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.
403.63	Booklet finisher puncher motor stall (no trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.
403.64	Booklet finisher puncher motor underspeed (no trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.
403.73	Booklet finisher puncher motor stall (with trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.
403.74	Booklet finisher puncher motor underspeed (with trifold/Z-fold finisher).	See "Booklet finisher puncher failure service check" on page 532.
420.15	Sensor (booklet finisher compile exit): Sheet does not clear the sensor in time.	See "Sensor (booklet finisher compile exit) failure service check" on page 547.
450.23	Sensor (booklet finisher entrance): Sheet arrives too late or never arrives (no trifold/Z-fold finisher).	See "Sensor (booklet finisher entrance) failure service check" on page 542.
451.23	Sensor (booklet finisher top tray exit): Sheet arrives too late or never arrives (no trifold/Z-fold finisher).	See "Sensor (booklet finisher top tray exit) failure service check" on page 562.
451.25	Sensor (booklet finisher top tray exit): Sheet does not clear the sensor in time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher top tray exit) failure service check" on page 562.
451.35	Sensor (booklet finisher top tray exit): Sheet does not clear the sensor in time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher top tray exit) failure service check" on page 562.

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Error code	Description	Action
454.23	Sensor (booklet finisher compile exit): Sheet arrives too late or never arrives (no trifold/Z-fold finisher).	See "Sensor (booklet finisher compile exit) failure service check" on page 547.
454.25	Sensor (booklet finisher compile exit): Sheet does not clear the sensor in time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher compile exit) failure 2 service check" on page 552.
454.26	Sensor (booklet finisher compile exit) is not turned on within the set time by a single sheet ejected from the buffer path following a buffer cancellation (no trifold/Z-fold finisher).	See "Sensor (booklet finisher compile exit) failure service check" on page 547.
454.27	Sensor (booklet finisher compile exit) is not turned on within the set time when sheets from the straight path and sheets from the buffer path are stacked together, with buffer control enabled (no trifold/Z-fold finisher).	See "Sensor (booklet finisher compile exit) failure service check" on page 547.
454.36	Sensor (booklet finisher compile exit) is not turned on within the set time by a single sheet ejected from the buffer path following a buffer cancellation (with trifold/Z-fold finisher).	See "Sensor (booklet finisher compile exit) failure service check" on page 547.
454.37	Sensor (booklet finisher compile exit) is not turned on within the set time when sheets from the straight path and sheets from the buffer path are stacked together, with buffer control enabled (with trifold/Z-fold finisher).	See "Sensor (booklet finisher compile exit) failure service check" on page 547.
457.23	Sensor (booklet finisher compile tray paper presence): Sheet arrives too late or never arrives (no trifold/Z-fold finisher).	See "Sensor (booklet finisher compile tray paper presence) failure service check" on page 555.

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Error code	Description	Action
457.25	Sensor (booklet finisher compile tray paper presence): Sheet does not clear the sensor in time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher compile tray paper presence) failure service check" on page 555.
461.23	The booklet finisher offset stacker failed to reach home (no trifold/Z-fold finisher).	See "Motor (booklet finisher offset with offset sensor) assembly failure service check" on page 560.
461.25	The booklet finisher offset stacker failed to leave home (no trifold/Z-fold finisher).	See "Motor (booklet finisher offset with offset sensor) assembly failure service check" on page 560.
461.33	The booklet finisher offset stacker failed to reach home (with trifold/Z-fold finisher).	See "Motor (booklet finisher offset with offset sensor) assembly failure service check" on page 560.
461.35	The booklet finisher offset stacker failed to leave home (with trifold/Z-fold finisher).	See "Motor (booklet finisher offset with offset sensor) assembly failure service check" on page 560.
461.90	The sensor (booklet finisher stack height 1) fails to detect an off status three times consecutively within the set time.	See "Sensor (booklet finisher stack height 1) error service check" on page 534.
465.23	The sensor (booklet finisher eject clamp home) is not turned on within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher eject clamp home) failure service check" on page 565.
465.25	The sensor (booklet finisher eject clamp home) is not turned off within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher eject clamp home) failure service check" on page 565.
465.33	The sensor (booklet finisher eject clamp home) is not turned on within the set time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher eject clamp home) failure service check" on page 565.
465.35	The sensor (booklet finisher eject clamp home) is not	See "Sensor (booklet finisher eject clamp home)

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Error code	Description	Action
	turned off within the set time (with trifold/Z-fold finisher).	failure service check " on page 565.
468.23	The booklet finisher front tamper failed to reach home (no trifold/Z-fold finisher).	See "Sensor (booklet finisher front tamper home) failure service check" on page 568.
468.25	The booklet finisher front tamper failed to leave home (no trifold/Z-fold finisher).	See "Sensor (booklet finisher front tamper home) failure service check" on page 568.
468.33	The booklet finisher front tamper failed to reach home (with trifold/Z-fold finisher).	See "Sensor (booklet finisher front tamper home) failure service check" on page 568.
468.35	The booklet finisher front tamper failed to leave home (with trifold/Z-fold finisher).	See "Sensor (booklet finisher front tamper home) failure service check" on page 568.
469.23	The booklet finisher rear tamper failed to reach home (no trifold/Z-fold finisher).	See "Sensor (booklet finisher rear tamper home) failure service check" on page 572.
469.25	The booklet finisher rear tamper failed to leave home (no trifold/Z-fold finisher).	See "Sensor (booklet finisher rear tamper home) failure service check" on page 572.
469.33	The booklet finisher rear tamper failed to reach home (with trifold/Z-fold finisher).	See "Sensor (booklet finisher rear tamper home) failure service check" on page 572.
469.35	The booklet finisher rear tamper failed to leave home (with trifold/Z-fold finisher).	See "Sensor (booklet finisher rear tamper home) failure service check" on page 572.
470.23	The booklet finisher tray holder failed to reach home (no trifold/Z-fold finisher).	See "Sensor (booklet finisher set clamp home) failure service check" on page 576.
470.25	The booklet finisher tray holder failed to leave home (no trifold/Z-fold finisher).	See "Sensor (booklet finisher set clamp home) failure service check" on page 576.

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Error code	Description	Action
470.33	The booklet finisher tray holder failed to reach home (with trifold/Z-fold finisher).	See "Sensor (booklet finisher set clamp home) failure service check" on page 576.
470.35	The booklet finisher tray holder failed to leave home (with trifold/Z-fold finisher).	See "Sensor (booklet finisher set clamp home) failure service check" on page 576.
479.25	The booklet finisher stacker tray fell below the defined lower limit (no trifold/Z-fold finisher).	See "Sensor (booklet finisher stack height 2) failure service check" on page 580.
479.35	The booklet finisher stacker tray fell below the defined lower limit (with trifold/Z-fold finisher).	See "Sensor (booklet finisher stack height 2) failure service check" on page 580.
480.23	The booklet finisher staple head failed to reach home (no trifold/Z-fold finisher).	See "Booklet finisher staple head failure service check" on page 584.
480.25	The booklet finisher staple head failed to leave home (no trifold/Z-fold finisher).	See "Booklet finisher staple head failure service check" on page 584.
480.33	The booklet finisher staple head failed to reach home (with trifold/Z-fold finisher).	See "Booklet finisher staple head failure service check" on page 584.
480.35	The booklet finisher staple head failed to leave home (with trifold/Z-fold finisher).	See "Booklet finisher staple head failure service check" on page 584.
481.29	The booklet finisher staple head failed to prime (no trifold/Z-fold finisher).	See "Booklet finisher staple head failure service check" on page 584.
481.39	The booklet finisher staple head failed to prime (with trifold/Z-fold finisher).	See "Booklet finisher staple head failure service check" on page 584.
484.23	The booklet finisher stapler transport failed to reach home (no trifold/Z-fold finisher).	See "Sensor (booklet finisher stapler position) failure service check" on page 587.
484.25	The booklet finisher stapler transport failed to leave home (no trifold/Z-fold finisher).	See "Sensor (booklet finisher stapler position) failure service check" on page 587.

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Error code	Description	Action
484.33	The booklet finisher stapler transport failed to reach home (with trifold/Z-fold finisher).	See "Sensor (booklet finisher stapler position) failure service check" on page 587.
484.35	The booklet finisher stapler transport failed to leave home (with trifold/Z-fold finisher).	See "Sensor (booklet finisher stapler position) failure service check" on page 587.
485.23	The booklet finisher sensor (stapler carriage position) failed to turn on.	See "Motor (staple finisher staple carriage position) too slow service check" on page 907.
485.25	The booklet finisher sensor (stapler carriage position) failed to turn off.	See "Motor (staple finisher staple carriage position) too slow service check" on page 907.
490.23	The sensor (booklet finisher in) is not turned on within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher in) failure service check" on page 591.
490.25	The sensor (booklet finisher in) is not turned off within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher in) failure service check" on page 591.
490.33	The sensor (booklet finisher in) is not turned on within the set time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher in) failure service check" on page 591.
491.23	The sensor (booklet finisher exit) is not turned on within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher exit) failure service check" on page 595.
491.25	The sensor (booklet finisher exit) is not turned off within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher exit) failure service check" on page 595.
491.33	The sensor (booklet finisher exit) is not turned on within the set time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher exit) failure service check" on page 595.
491.35	The sensor (booklet finisher exit) is not turned off within	See "Sensor (booklet finisher exit) failure service check" on page 595.

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Error code	Description	Action
	the set time (with trifold/ Z-fold finisher).	
492.23	The sensor (booklet finisher tamper home position) is not turned on within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher tamper home position) failure service check" on page 599.
492.25	The sensor (booklet finisher tamper home position) is not turned off within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher tamper home position) failure service check" on page 599.
492.33	The sensor (booklet finisher tamper home position) is not turned on within the set time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher tamper home position) failure service check" on page 599.
492.35	The sensor (booklet finisher tamper home position) is not turned off within the set time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher tamper home position) failure service check" on page 599.
493.23	The sensor (booklet finisher compiler catch) is not turned on within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher compiler catch) failure service check" on page 603.
493.25	The sensor (booklet finisher compiler catch) is not turned off within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher compiler catch) failure service check" on page 603.
493.33	The sensor (booklet finisher compiler catch) is not turned on within the set time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher compiler catch) failure service check" on page 603.
493.35	The sensor (booklet finisher compiler catch) is not turned off within the set time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher compiler catch) failure service check" on page 603.
494.23	The sensor (booklet finisher fold knife home position) is not turned on within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher fold knife home position) failure service check" on page 606.

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Error code	Description	Action
494.25	The sensor (booklet finisher fold knife home position) is not turned off within the set time (no trifold/Z-fold finisher).	See "Sensor (booklet finisher fold knife home position) failure service check" on page 606.
494.33	The sensor (booklet finisher fold knife home position) is not turned on within the set time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher fold knife home position) failure service check" on page 606.
494.35	The sensor (booklet finisher fold knife home position) is not turned off within the set time (with trifold/Z-fold finisher).	See "Sensor (booklet finisher fold knife home position) failure service check" on page 606.
496.23	The sensor (booklet finisher compile paper presence 1) is not turned off when stapling started (no trifold/Z-fold finisher).	See "Sensor (booklet finisher compile paper presence 1 & 2) failure service check" on page 610.
496.33	The sensor (booklet finisher compile paper presence 1) is not turned off when stapling started (with trifold/Z-fold finisher).	See "Sensor (booklet finisher compile paper presence 1 & 2) failure service check" on page 610.
497.23	The booklet finisher stapler failed to reach home (no trifold/Z-fold finisher).	See "Booklet finisher stapler failure service check" on page 613.
497.33	The booklet finisher stapler failed to reach home (with trifold/Z-fold finisher).	See "Booklet finisher stapler failure service check" on page 613.

Booklet finisher puncher failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check if the paper type and weight are supported. See the "Selecting paper" section.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Check the cables and connectors for proper connection and damage.
2. Check the interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the damaged cable/s. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the booklet finisher puncher (2-hole and 4-hole) for proper installation, operation, and damage.

Is the puncher properly installed, operational, and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the booklet finisher puncher (2-hole and 4-hole).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet finisher stack height 1) error service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stack height 1.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher stack height 1) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher stack height 1).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Check the booklet finisher stacker belt for proper installation, operation, wear, and damage.

Is the belt properly installed, operational, and free of wear and damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the booklet finisher stacker belt.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the stack height actuator for proper installation, operation, and damage.

Is the actuator properly installed, operational, and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the stack height actuator.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Stacker.**

Does the motor run?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

11. Check the booklet finisher stacker bracket for proper installation, operation, and damage.

Is the stacker bracket properly installed, operational, and free of damage?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the booklet finisher stacker bracket.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Check the booklet finisher set clamp shaft for proper installation, operation, and damage.

Is the set clamp shaft properly installed, operational, and free of damage?

- **Yes:**

Go to step 15.

- **No:**

Go to the next step.

14. Replace the booklet finisher set clamp shaft.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Check the booklet finisher stacker tray for proper installation and damage.

Is the tray properly installed and free of damage?

- **Yes:**

Go to step 17.

- **No:**

Go to the next step.

16. Replace the booklet finisher stacker tray.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

17. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

18. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Booklet finisher sensor (paper transport exit) failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > HTU exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor (paper transport exit) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (paper transport exit).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > HTU.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor (paper transport drive) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (paper transport drive).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the paper transport top cover for proper installation, operation, and damage.

Is the cover properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the cover.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the booklet finisher horizontal paper transport rollers and gear for proper installation, contamination, and damage.

Are the HPT rollers and gear properly installed and free of contamination and damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the affected rollers and gear.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Check the paper transport belt for proper installation, operation, wear, and damage.

Is the belt properly installed, operational, and free of wear and damage?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

14. Replace the paper transport belt.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

15. Check the paper transport belt 3 for proper installation, operation, wear, and damage.

Is the belt properly installed, operational, and free of wear and damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the paper transport belt 3.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

17. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.

2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

18. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet finisher entrance) failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Feed.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher entrance) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher entrance).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Check the booklet finisher upper entrance guide for proper installation, operation, and damage.

Is the guide properly installed, operational, and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the booklet finisher upper entrance guide.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Transport.**

Does the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the motor (booklet finisher main transport) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the motor (booklet finisher main transport).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

11. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > HTU.**

Does the motor run?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

12. Perform the following tests:

1. Check the motor (paper transport drive) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

13. Replace the motor (paper transport drive).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Check the paper transport top cover for proper installation, operation, and damage.

Is the cover properly installed, operational, and free of damage?

- **Yes:**
Go to step 16.

- **No:**
Go to the next step.

15. Replace the cover.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

16. Check the booklet finisher horizontal paper transport rollers and gear for proper installation, contamination, and damage.

Are the HPT rollers and gear properly installed and free of contamination and damage?

- **Yes:**
Go to step 18.

- **No:**
Go to the next step.
17. Replace the affected rollers and gear.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
18. Check the paper transport belt for proper installation, operation, wear, and damage.
- Is the belt properly installed, operational, and free of wear and damage?
- **Yes:**
Go to step 20.
 - **No:**
Go to the next step.
19. Replace the paper transport belt.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
20. Check the paper transport belt 3 for proper installation, operation, wear, and damage.
- Is the belt properly installed, operational, and free of wear and damage?
- **Yes:**
Go to step 22.
 - **No:**
Go to the next step.
21. Replace the paper transport belt 3.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
22. Perform the following tests:
1. Check the booklet finisher controller board for proper installation, operation, and damage.
 2. Reseat all cables.
- Is the booklet finisher controller board properly installed, operational, and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**

Go to the next step.

23. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet finisher compile exit) failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher compile exit) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher compile exit).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Feed diverter solenoid.**

Does the solenoid operate?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the booklet finisher transport gate solenoid for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the solenoid properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the booklet finisher transport gate solenoid.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the booklet finisher gate for proper installation, operation, and damage.

Is the gate properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the booklet finisher gate.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Transport.**

Does the motor run?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

12. Perform the following tests:

1. Check the motor (booklet finisher main transport) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

13. Replace the motor (booklet finisher main transport).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Exit.**

Does the motor run?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

15. Perform the following tests:

1. Check the motor (booklet finisher exit) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the motor (booklet finisher exit).

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
17. Check the booklet finisher belts for proper installation, operation, wear, and damage.
Are the belts properly installed, operational, and free of wear and damage?
- **Yes:**
Go to step 19.
 - **No:**
Go to the next step.
18. Replace the damaged booklet finisher belt/s.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
19. Check the booklet finisher paper path guides for proper installation, operation, and damage.
Are the guides properly installed, operational, and free of damage?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
20. Replace the affected booklet finisher paper path guide/s.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
21. Check the booklet finisher rollers for proper installation, contamination, wear, and damage.
Are the rollers properly installed and free of contamination, wear, and damage?
- **Yes:**
Go to step 23.
 - **No:**
Go to the next step.
22. Replace the affected booklet finisher roller/s.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.

23. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

24. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet finisher compile exit) failure 2 service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Transport.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher compile exit) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher compile exit).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Exit.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor (booklet finisher exit) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (booklet finisher exit).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the booklet finisher belts for proper installation, operation, wear, and damage.

Are the belts properly installed, operational, and free of wear and damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the damaged booklet finisher belt/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the booklet finisher rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of contamination, wear, and damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the affected booklet finisher roller/s.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the cables and connectors for proper connection and damage.
2. Check the interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

14. Replace the damaged cable/s. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

15. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

16. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (booklet finisher compile tray paper presence) failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stack compile paper present.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor (booklet finisher compile tray paper presence) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher compile tray paper presence).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Exit.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor (booklet finisher exit) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (booklet finisher exit).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Compiler exit cam.**

Does the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor (booklet finisher eject clamp) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the motor (booklet finisher eject clamp).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Paddle solenoid.**
- Does the solenoid operate?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
13. Perform the following tests:
1. Check the booklet finisher subpaddle solenoid for proper installation, operation, and damage.
 2. Make sure that the cables are properly connected and free of damage.
 3. Reseat the cables at both ends.
- Is the solenoid properly installed, operational, and free of damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the booklet finisher subpaddle solenoid.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Check the booklet finisher eject roll assembly for proper installation, operation, and damage.
- Is the eject roll assembly properly installed, operational, and free of damage?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Replace the booklet finisher eject roll assembly.
- Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
17. Check the booklet finisher rollers for proper installation, contamination, wear, and damage.
Are the rollers properly installed and free of contamination, wear, and damage?
- **Yes:**
Go to step 19.
 - **No:**
Go to the next step.
18. Replace the affected booklet finisher roller/s.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
19. Check the booklet finisher belts for proper installation, operation, wear, and damage.
Are the belts properly installed, operational, and free of wear and damage?
- **Yes:**
Go to step 21.
 - **No:**
Go to the next step.
20. Replace the damaged booklet finisher belt/s.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
21. Perform the following tests:
1. Check the booklet finisher controller board for proper installation, operation, and damage.
 2. Reseat all cables.
- Is the booklet finisher controller board properly installed, operational, and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
22. Replace the booklet finisher controller board.
Does the problem remain?
- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Motor (booklet finisher offset with offset sensor) assembly failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Standard bin offset.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to the next step.
- **No:**
Go to step 5.

4. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Standard bin offset.**

Does the motor run?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the motor (booklet finisher offset with offset sensor) assembly for proper installation, operation, and damage.

2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the motor (booklet finisher offset with offset sensor) assembly.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Check the booklet finisher rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of contamination, wear, and damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the affected booklet finisher roller/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

10. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet finisher top tray exit) failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Standard bin exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher top tray exit) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher top tray exit).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Check the booklet finisher right buffer guide for proper installation, operation, and damage.

Is the guide properly installed, operational, and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the booklet finisher right buffer guide.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Exit.**

Does the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the motor (booklet finisher exit) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the motor (booklet finisher exit).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the booklet finisher rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of contamination, wear, and damage?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

12. Replace the affected booklet finisher roller/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the cables and connectors for proper connection and damage.
2. Check the interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 15.
- **No:**
Go to the next step.

14. Replace the damaged cable/s. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

15. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

16. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet finisher eject clamp home) failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Eject clamp.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor (booklet finisher eject clamp home) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor (booklet finisher eject clamp home).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the eject clamp actuator for proper installation, operation, and damage.

Is the actuator properly installed, operational, and free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.
6. Replace the eject clamp actuator.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
7. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Compiler exit cam.**
- Does the motor run?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
8. Perform the following tests:
1. Check the motor (booklet finisher eject clamp) for proper installation, operation, and damage.
 2. Make sure that the cables are properly connected and free of damage.
 3. Reseat the cables at both ends.
- Is the motor properly installed, operational, and free of damage?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Replace the motor (booklet finisher eject clamp).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Check the booklet finisher belts for proper installation, operation, wear, and damage.
- Are the belts properly installed, operational, and free of wear and damage?
- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the damaged booklet finisher belt/s.
- Does the problem remain?
- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Check the booklet finisher gears for proper installation, contamination, and damage.

Are the gears properly installed and free of contamination and damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Replace the damaged gear/s.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

15. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (booklet finisher front tamper home) failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Front tamper.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor (booklet finisher front tamper home) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher front tamper home).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Front tamper.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Check the motor (booklet finisher front tamper) for proper installation, operation, and damage.

Is the tamper properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (booklet finisher front tamper).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the booklet finisher front tamper for proper installation, operation, and damage.

Is the tamper properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the booklet finisher front tamper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the rack for proper installation, operation, and damage.

Is the rack properly installed, operational, and free of damage?

- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the rack.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Perform the following tests:
1. Check the cables and connectors for proper connection and damage.
 2. Check the interface cables for proper connection and damage.
- Are the cables, connectors, and interface cables properly connected and free of damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the damaged cable/s. See the Parts Catalog section for details.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Check the booklet finisher gears for proper installation, contamination, and damage.
- Are the gears properly installed and free of contamination and damage?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Replace the damaged gear/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
17. Perform the following tests:
1. Check the booklet finisher controller board for proper installation, operation, and damage.
 2. Reseat all cables.
- Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

18. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet finisher rear tamper home) failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Rear tamper.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor (booklet finisher rear tamper home) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher rear tamper home).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Rear tamper.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Check the motor (booklet finisher rear tamper) for proper installation, operation, and damage.

Is the tamper properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (booklet finisher rear tamper).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the booklet finisher rear tamper for proper installation, operation, and damage.

Is the tamper properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the booklet finisher rear tamper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the rack for proper installation, operation, and damage.

Is the rack properly installed, operational, and free of damage?

- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the rack.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Perform the following tests:
1. Check the cables and connectors for proper connection and damage.
 2. Check the interface cables for proper connection and damage.
- Are the cables, connectors, and interface cables properly connected and free of damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the damaged cable/s. See the Parts Catalog section for details.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Check the booklet finisher gears for proper installation, contamination, and damage.
- Are the gears properly installed and free of contamination and damage?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Replace the damaged gear/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
17. Perform the following tests:
1. Check the booklet finisher controller board for proper installation, operation, and damage.
 2. Reseat all cables.
- Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

18. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet finisher set clamp home) failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stack clamp home.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher set clamp home) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher set clamp home).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Eject.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Check the motor (booklet finisher eject) for proper installation, operation, and damage.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (booklet finisher eject).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the booklet finisher set clamp shaft for proper installation, operation, and damage.

Is the shaft properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the booklet finisher set clamp shaft.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the stack clamp actuator for proper installation, operation, and damage.

Is the actuator properly installed, operational, and free of damage?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the stack clamp actuator.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Check the booklet finisher belts for proper installation, operation, wear, and damage.

Are the belts properly installed, operational, and free of wear and damage?

- **Yes:**

Go to step 15.

- **No:**

Go to the next step.

14. Replace the damaged booklet finisher belt/s.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Check the booklet finisher gears for proper installation, contamination, and damage.

Are the gears properly installed and free of contamination and damage?

- **Yes:**

Go to step 17.

- **No:**

Go to the next step.

16. Replace the damaged gear/s.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

17. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

18. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (booklet finisher stack height 2) failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stack height 2.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher stack height 2) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher stack height 2).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stack height 1.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor (booklet finisher stack height 1) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor (booklet finisher stack height 1).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stacker tray paper present.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the sensor (booklet finisher stacker tray paper present) for proper installation and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the sensor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Stacker.**
- Does the motor run?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
13. Check the booklet finisher stacker bracket for proper installation, operation, and damage.
- Is the stacker bracket properly installed, operational, and free of damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the booklet finisher stacker bracket.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Check the booklet finisher belts for proper installation, operation, wear, and damage.
- Are the belts properly installed, operational, and free of wear and damage?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Replace the damaged booklet finisher belt/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**

The problem is solved.

17. Check the booklet finisher gears for proper installation, contamination, and damage.

Are the gears properly installed and free of contamination and damage?

- **Yes:**

Go to step 19.

- **No:**

Go to the next step.

18. Replace the damaged gear/s.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

19. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

20. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Booklet finisher staple head failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check if there are enough staples left in the staple cartridge.
 2. Check the staple cartridge for damaged and stuck staples.
 3. Reseat the staples and the staple cartridge.

Are there enough staples left, and is the staple cartridge free of damaged and stuck staples?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the staple cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the booklet finisher staple head for damage and obstruction.
 2. Remove the staple cartridge and turn the gears to check if the head pincher works.

3. Reseat the cable at both ends.

Is the booklet finisher staple head free of damage and obstruction, and does the head pincher work?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace the booklet finisher staple head.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the booklet finisher staple wire harness for proper installation, operation, and damage.
2. Reseat the cable at both ends.

Is the harness properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the booklet finisher staple wire harness.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

10. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (booklet finisher stapler position) failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stapler carriage position.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher stapler position) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher stapler position).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Staple unit carriage.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor (booklet finisher staple unit carriage) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (booklet finisher staple unit carriage).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the upper stopper bracket for proper installation, operation, and damage.

Is the bracket properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the upper stopper bracket.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check the booklet finisher stapler rail base for proper installation, operation, and damage.

Is the stapler rail base properly installed, operational, and free of damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the booklet finisher stapler rail base.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the booklet finisher staple wire harness for proper installation, operation, and damage.
2. Reseat the cable at both ends.

Is the harness properly installed, operational, and free of damage?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

14. Replace the booklet finisher staple wire harness.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

15. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

16. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (booklet finisher in) failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Booklet feed.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher in) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher in).

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Exit.**
- Does the motor run?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
7. Perform the following tests:
1. Check the motor (booklet finisher exit) for proper installation, operation, and damage.
 2. Make sure that the cables are properly connected and free of damage.
 3. Reseat the cables at both ends.
- Is the motor properly installed, operational, and free of damage?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
8. Replace the motor (booklet finisher exit).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
9. Check the booklet finisher paper path guides for proper installation, operation, and damage.
- Are the guides properly installed, operational, and free of damage?
- **Yes:**
Go to step 11.
 - **No:**
Go to the next step.
10. Replace the affected booklet finisher paper path guide/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
11. Check the booklet finisher rollers for proper installation, contamination, wear, and damage.
- Are the rollers properly installed and free of contamination, wear, and damage?

- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the affected booklet finisher roller/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Check the booklet finisher belts for proper installation, operation, wear, and damage.
- Are the belts properly installed, operational, and free of wear and damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the damaged booklet finisher belt/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Check the booklet finisher gears for proper installation, contamination, and damage.
- Are the gears properly installed and free of contamination and damage?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Replace the damaged gear/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
17. Perform the following tests:
1. Check the booklet finisher controller board for proper installation, operation, and damage.
 2. Reseat all cables.
- Is the booklet finisher controller board properly installed, operational, and free of damage?
- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

18. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (booklet finisher exit) failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Booklet sensor test > Exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher exit) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher exit).

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Booklet fold knife solenoid.**
- Does the solenoid operate?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
7. Perform the following tests:
1. Check the booklet finisher fold solenoid for proper installation, operation, and damage.
 2. Make sure that the cables are properly connected and free of damage.
 3. Reseat the cables at both ends.
- Is the solenoid properly installed, operational, and free of damage?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
8. Replace the booklet finisher fold solenoid.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
9. Check the booklet finisher fold knife aligner for proper installation, operation, and damage.
- Is the aligner properly installed, operational, and free of damage?
- **Yes:**
Go to step 11.
 - **No:**
Go to the next step.
10. Replace the booklet finisher fold knife aligner.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
11. Perform the following tests:
1. Check the booklet finisher fold roller for proper installation and operation.
 2. Check for wear, contamination, and damage.

Is the roller properly installed, operational, and free of wear, contamination, and damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the booklet finisher fold roller.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the booklet finisher booklet maker controller board for proper installation and damage.
2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

14. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

15. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

16. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**

The problem is solved.

Sensor (booklet finisher tamper home position) failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Booklet sensor test > Tamper.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor (booklet finisher tamper home position) for proper installation, operation, and damage.
2. Check the mating actuator for damage and misalignment.
3. Make sure that the sensor cables are properly connected and free of damage.
4. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**

Go to the next step.

5. Replace the sensor (booklet finisher tamper home position).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Booklet tamper.**

Does the motor run?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor (booklet finisher compiler paddle) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the motor (booklet finisher compiler paddle).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Check the booklet finisher unit compiler plate for proper installation, operation, and damage.

Is the compiler plate properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

10. Replace the booklet finisher unit compiler plate.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.
11. Check the booklet finisher belts for proper installation, operation, wear, and damage.
Are the belts properly installed, operational, and free of wear and damage?
- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the damaged booklet finisher belt/s.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Check the booklet finisher gears for proper installation, contamination, and damage.
Are the gears properly installed and free of contamination and damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the damaged gear/s.
Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Perform the following tests:
1. Check the booklet finisher booklet maker controller board for proper installation and damage.
 2. Reseat all cables.
- Is the controller board properly installed and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
16. Replace the booklet finisher booklet maker controller board.
Does the problem remain?
- **Yes:**
Contact the next level of support.
 - **No:**

The problem is solved.

Sensor (booklet finisher compiler catch) failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Booklet sensor test > Compiler catch.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (booklet finisher compiler catch) for proper installation, operation, and damage.
 2. Check the mating actuator for damage and misalignment.
 3. Make sure that the sensor cables are properly connected and free of damage.
 4. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher compiler catch).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Booklet compiler catch.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor (booklet finisher compiler catch) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (booklet finisher compiler catch).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the booklet finisher belt 1 for proper installation, operation, wear, and damage.

Is the belt properly installed, operational, and free of wear and damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the booklet finisher belt 1.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

11. Check the booklet finisher gears for proper installation, contamination, and damage.

Are the gears properly installed and free of contamination and damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the damaged gear/s.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the booklet finisher booklet maker controller board for proper installation and damage.
2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

14. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (booklet finisher fold knife home position) failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Booklet sensor test > Fold knife.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor (booklet finisher fold knife home position) for proper installation, operation, and damage.
2. Check the mating actuator for damage and misalignment.
3. Make sure that the sensor cables are properly connected and free of damage.
4. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**

Go to the next step.

5. Replace the sensor (booklet finisher fold knife home position).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Booklet fold.**

Does the motor run?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor (booklet finisher fold) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the motor (booklet finisher fold).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Booklet fold knife solenoid.**

Does the solenoid operate?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the booklet finisher fold solenoid for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the solenoid properly installed, operational, and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the booklet finisher fold solenoid.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Check the booklet finisher fold knife aligner for proper installation, operation, and damage.
- Is the aligner properly installed, operational, and free of damage?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Replace the booklet finisher fold knife aligner.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Check the booklet finisher gears for proper installation, contamination, and damage.
- Are the gears properly installed and free of contamination and damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the damaged gear/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Perform the following tests:
1. Check the booklet finisher booklet maker controller board for proper installation and damage.
 2. Reseat all cables.
- Is the controller board properly installed and free of damage?
- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

17. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (booklet finisher compile paper presence 1 & 2) failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Booklet sensor test > Compiler paper present 1.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor (booklet finisher compile paper presence 1) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (booklet finisher compile paper presence 1).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Booklet sensor test > Compiler paper present 2.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor (booklet finisher compile paper presence 2) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor (booklet finisher compile paper presence 2).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the cables and connectors for proper connection and damage.
2. Check the interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the damaged cable/s. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Check the booklet finisher booklet maker controller board for proper installation and damage.
2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

12. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Booklet finisher stapler failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check the booklet finisher stapler unit for proper installation, operation, and damage.
 2. Reseat the staple cartridge.
 3. Reseat the cables at both ends.

Is the booklet finisher stapler unit properly installed, operational, and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the booklet finisher stapler unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the cables and connectors for proper connection and damage.
 2. Check the interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace the damaged cable/s. See the Parts Catalog chapter for details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the booklet finisher stapler unit for proper installation, operation, and damage.
2. Reseat the staple cartridge.
3. Reseat the cables at both ends.

Is the booklet finisher stapler unit properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

8. Replace the booklet finisher stapler unit.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

User attendance messages

Top user attendance errors

2-9 user attendance messages

2-9 user attendance messages

Error code	Description	Action
2.12	The booklet finisher is low on staples or does not have staples.	See "Booklet finisher staple supply errors service check" on page 631.
3.01	The standard bin is full.	See "Sensor (bin 1 full) error service check" on page 618.
3.02	The standard bin 2 is full.	See "Standard bin 2 service check" on page 621.
3.41	The staple finisher bin is full.	See "Staple finisher stacker tray is full service check" on page 628.
3.42	The staple finisher bin is full.	See "Staple finisher stacker tray is full service check" on page 628.
3.43	The staple finisher bin is full.	See "Staple finisher stacker tray is full service check" on page 628.
3.44	The staple finisher bin is full.	See "Staple finisher stacker tray is full service check" on page 628.
3.45	The staple finisher bin is full.	See "Staple finisher stacker tray is full service check" on page 628.
3.46	The staple finisher bin is full.	See "Staple finisher stacker tray is full service check" on page 628.
3.47	The staple finisher bin is full.	See "Staple finisher stacker tray is full service check" on page 628.

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Error code	Description	Action
3.41	The booklet finisher stacker tray is full.	See "Sensor (booklet finisher stacker tray) error service check" on page 635.
3.43	The booklet finisher stacker tray is full.	See "Sensor (booklet finisher stacker tray) error service check" on page 635.
3.47	The booklet finisher stacker tray is full.	See "Sensor (booklet finisher stacker tray) error service check" on page 635.
3.42	The sensor (booklet finisher top tray full) detected an ON status for 10 seconds.	See "Sensor (booklet finisher top tray full) error service check" on page 633.
3.45	The booklet finisher stacker tray is full.	See "Sensor (booklet finisher bin paper present) error service check" on page 637.
7.41	Insert the finisher tray.	See "Trifold/Z-fold bin switch failure service check" on page 963.
8.01	Close the front door or cover.	See "Front door/cover open error service check" on page 650.
8.03	Close the left jam door. The interlock switch cover was detected as open.	See "Left jam door open error service check" on page 652.
8.07	Close paper transport cover F.	See "Booklet finisher sensor (paper transport cover open) error service check" on page 641.
8.11	The tray left cover was detected as open (with 2 x 520-sheet tray or 2000-sheet tandem tray).	See "Sensor (2 x 520-sheet tray jam door switch) error service check" on page 622 or "Sensor (2000-sheet tandem tray jam door switch) error service check" on page 624.

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Error code	Description	Action
8.21	The 2000-sheet tandem tray door was detected as open.	See "2000-sheet tandem tray door open error service check" on page 626.
8.41	An SHPF door or cover was detected as open.	See "Undetected SHPF front cover service check" on page 645 or See "Undetected HTU door service check" on page 647.
8.49	An SHPF door or cover was detected as open.	See "Undetected SHPF front cover service check" on page 645 or See "Undetected HTU door service check" on page 647.
8.42	The booklet finisher front cover, top cover, or front door interlock switch is detected as open.	See "Booklet finisher front door interlock switch error service check" on page 639.
8.47	The booklet finisher front cover, top cover, or front door interlock switch is detected as open.	See "Booklet finisher front door interlock switch error service check" on page 639.
8.43	The booklet finisher paper transport top cover is detected as open.	See "Booklet finisher sensor (paper transport cover open) error service check" on page 641.
8.48	The booklet finisher paper transport top cover is detected as open.	See "Booklet finisher sensor (paper transport cover open) error service check" on page 641.
8.44	The sensor (booklet maker set) is detected as open.	See "Sensor (booklet maker set) error service check" on page 643.
8.46	The trifold/Z-fold finisher door switch is detected as open.	See "Trifold/Z-fold door switch error service check" on page 655.

Sensor (bin 1 full) error service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > Paper transport sensor tests > Bin 1 full.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the exit 1 paper bail 2 for proper installation, proper operation, and damage.

Is the paper bail properly installed and free of damage?

- **Yes:**
Go to step 7.
 - **No:**
Go to the next step.
6. Replace the paper bail.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
7. Check the exit 1 transport unit for proper installation, obstruction, and damage.
- Is the exit 1 transport unit properly installed and free of damage?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
8. Replace the exit 1 transport unit.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
9. Perform the following tests:
1. Check the cables for damage.
 2. Check the connectors for damage.
- Are the cables free of damage?
- **Yes:**
Go to step 11.
 - **No:**
Go to the next step.
10. Replace damaged cables. See the parts catalog section for specifications.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
11. Perform the following tests:
1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.
- Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Standard bin 2 service check

1. Perform the following tests:
 1. Remove paper from the output bin.
 2. Check for and clear the bin of any obstruction.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the printer and/or input option doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (2 x 520-sheet tray jam door switch) error service check

1. Perform the following tests:

1. Open the printer doors, and clear any paper jam.
2. Check the paper path for any debris and obstruction.
3. Check the fuser and output bin for any paper jam and obstruction.
4. Open the tray insert and remove any paper jam.
5. Check the MPF for any paper jam.
6. Check if the paper being used is listed in the supported media list.
7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray sensor tests > Jam door switch.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the 2 x 520-sheet tray door for proper installation and damage.

Is the door properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the door.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

10. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (2000-sheet tandem tray jam door switch) error service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then touch: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Jam door switch.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the 2000-sheet tandem tray jam door for proper installation and damage.

Is the door properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the door.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

10. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

2000-sheet tandem tray door open error service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then select **Input tray quick print**.
 2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the 2000-sheet tandem tray horizontal transport (tray 4) for proper installation and damage.
 2. Check the sensor flag for damage.
 3. Check the pick and feed rollers for damage and contamination.
 4. Reseat the cables.

Are the 2000-sheet tandem tray horizontal transport (tray 4), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the 2000-sheet tandem tray horizontal transport (tray 4).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

5. Perform the following tests:
 1. Check the cables for damage.
 2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:
 1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Staple finisher stacker tray is full service check

1. Perform the following tests:

1. Clear the bin of jammed paper.
2. Open the finisher front door, and then remove the jammed paper.
3. Remove paper from the bin.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher stack height).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher stacker bin) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**

Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Select the **motor (staple finisher stacker bin).**

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher lift shaft unit for proper installation.

Is the staple finisher lift shaft unit properly installed?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Reseat the staple finisher lift shaft unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher lift shaft unit for damage.
2. Check the staple finisher lift shaft unit gears and rollers for wear or damage.

Are the staple finisher lift shaft unit and its gears and rollers free of wear or damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the staple finisher lift shaft unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.
12. Check if the upper and lower bins can be lifted.
- Can you lift the upper and lower bins?
- **Yes:**
Go to the next step.
 - **No:**
Go to step 14.
13. Check the staple finisher upper bin for wear and damage.
- Is the staple finisher upper bin free of wear and damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the staple finisher upper bin.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Perform the following tests:
1. Check the staple finisher controller board for proper installation and damage.
 2. Reseat all the connectors on the controller board.
- Is the staple finisher controller board properly installed and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
16. Replace the staple finisher controller board.
- Does the problem remain?
- **Yes:**
Contact the next level of support.
 - **No:**
The problem is solved.

Booklet finisher staple supply errors service check

1. Perform the following tests:
 1. Check if there are enough staples left in the staple cartridge.
 2. Check the staple cartridge for damaged and stuck staples.
 3. Reseat the staples and the staple cartridge.

Are there enough staples left, and is the staple cartridge free of damaged and stuck staples?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the staple cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check the interface cables for proper connection and damage.
 2. Reseat the cables at both ends.

Are the interface cables properly connected and free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the damaged interface cable/s. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the booklet finisher staple head for damage and obstruction.
 2. Remove the staple cartridge and turn the gears to check if the head pincher works.
 3. Reseat the cable at both ends.

Is the booklet finisher staple head free of damage and obstruction, and does the head pincher work?

- **Yes:**
Go to step 7.

- **No:**

Go to the next step.

6. Replace the booklet finisher staple head.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

8. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (booklet finisher top tray full) error service check

1. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Standard bin full.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor (booklet finisher top tray full) for proper installation and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the interface cables for proper connection and damage.
2. Reseat the cables at both ends.

Are the interface cables properly connected and free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace the damaged interface cable/s. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet finisher stacker tray) error service check

1. Perform the following tests:

1. Open the booklet finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the booklet finisher stacker tray for proper installation and damage.

Is the tray properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the booklet finisher stacker tray.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stacker tray paper present.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the sensor (booklet finisher stacker tray paper present) for proper installation and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**

Go to step 7.

- **No:**

Go to the next step.

6. Replace the sensor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

8. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (booklet finisher bin paper present) error service check

1. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Booklet sensor test > Bin paper present.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the booklet finisher bin actuator for proper installation, operation, and damage.

Is the actuator properly installed and free of damage?

- **Yes:**
Go to step 7.

- **No:**

Go to the next step.

6. Replace the actuator.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the booklet finisher booklet maker controller board for proper installation and damage.
2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

8. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Booklet finisher front door interlock switch error service check

1. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Front door switch.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

2. Perform the following tests:

1. Check the booklet finisher front door interlock switch for proper installation and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the switch properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the booklet finisher front door interlock switch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the booklet finisher front cover, actuator, and hinges for proper installation, operation, and damage.
2. Check if the cover can close properly.

Is the cover properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the booklet finisher front cover.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

6. Perform the following tests:

1. Check the booklet finisher booklet maker controller board for proper installation and damage.
2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

7. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Booklet finisher sensor (paper transport cover open) error service check

1. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > HTU Cover.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

2. Perform the following tests:

1. Check the sensor (paper transport cover open) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the sensor (paper transport cover open). See [See "Horizontal transport open sensor removal" on page 1716.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Check the paper transport top cover for proper installation, operation, and damage.

Is the cover properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the cover.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Check the booklet finisher booklet maker controller board for proper installation and damage.
2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

7. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (booklet maker set) error service check

1. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Booklet sensor test > Booklet.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

2. Perform the following tests:

1. Check the sensor (booklet maker set) for proper installation and damage.
2. Check the booklet maker set actuator for proper installation, damage, and alignment.
3. Make sure that the sensor cables are properly connected and free of damage.
4. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Check the booklet finisher left rail for proper installation, operation, and damage.

Is the rail properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the rail.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Check the booklet finisher right rail for proper installation, operation, and damage.

Is the rail properly installed, operational, and free of damage?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the rail.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the booklet finisher booklet maker controller board for proper installation and damage.
2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

9. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Undetected SHPF front cover service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Remove any debris or obstruction near the SHPF front door switch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

Check the SHPF front door switch for the following:

- failure to operate
- improper installation

Is the SHPF front door switch free of the previous items?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Reinstall or replace the SHPF front door switch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the
2. SHPF front cover,
3. SHPF front cover actuator,
4. SHPF front cover door hinge,
5. SHPF front cover magnet for the following:
 - failure to operate
 - improper installation
 - damage

Are the parts free of the previous items?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Reinstall or replace the SHPF front cover. See [See "Finisher front cover removal" on page 1656.](#)

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

10. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Undetected HTU door service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to:

Output device diagnostics > Sensor tests > Sensor (HTU door).

2. Find the sensor (HTU door).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

3. Remove any debris or obstruction near the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

Check the sensor (HTU door) and its cable for the following:

- improper connection/installation
- damage

Is the sensor free of the previous items?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Reconnect or replace the HTU door sensor cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

6. Reinstall or replace the sensor (HTU door).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the
2. HTU door,
3. HTU door actuator,
4. HTU door hinge for the following:
 - failure to operate
 - improper installation
 - damage

Are the parts free of the previous items?

- **Yes:**

Go to step 9.

- **No:**

Go to the next step.

8. Reinstall or replace the HTU door.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

9. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**

Go to step 11.

- **No:**

Go to the next step.

10. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Front door/cover open error service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the front door for proper installation and damage.

Is the front door properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the front door.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Other sensors.**
2. Find the sensor (front door switch).

Does the value change between 1 and 0 when you toggle the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the front door switch for proper installation and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables.

Is the switch properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**

Go to the next step.

6. Replace the front door switch.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Go to step 9.

- **No:**

Go to the next step.

8. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

9. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

10. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Left jam door open error service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests.**
2. Find the sensor (left door switch).

Does the value change between 1 and 0 when you toggle the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the left door switch for proper installation and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables.

Is the switch properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the left door switch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the left jam door for proper installation and damage.
2. Check if the door can close properly and its path clear of debris and obstruction.
3. Check the rollers, latches, and hinges for wear, damage, and contamination.

Is the left jam door properly installed and free of damage?

- **Yes:**
Go to step 7.
 - **No:**
Go to the next step.
6. Replace the left jam door.

NOTES

Before replacing the part, check the other assemblies inside the door and parts related to the door's operation.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
7. Perform the following tests:
1. Check all the cables for damage.
 2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
8. Replace the damaged cables and connectors. See the Parts Catalog for details.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
9. Perform the following tests:
1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
10. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Trifold/Z-fold door switch error service check

1. Perform the following tests:

1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > Door switch.**

Does the status change while toggling the switch?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the trifold/Z-fold door switch for improper installation, malfunction, and damage.
2. Make sure that the switch cables are properly connected and free of damage.
3. Reseat the switch cables at both ends.

Is the switch properly installed, operational, and free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the trifold/Z-fold door switch.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Check the trifold/Z-fold door for improper installation, malfunction, and damage.

Is the door properly installed, operational, and free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace the trifold/Z-fold door.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Check the cables, connectors, and interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the damaged cables, connectors, and interface cables. See the Parts Catalog for more details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

10. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

1y user attendance errors

11-12 user attendance messages

11-12 user attendance messages

Error code	Description	Action
11.92	A wrong paper type, size, or orientation was detected on the MPF.	See "Supported paper or media error service check" on page 658.
12.99	A wrong setting for paper type, size, or orientation was detected on the finisher.	See "Unsupported paper in SHPF service check" on page 661.

Supported paper or media error service check

1. Check if the paper being used is listed in the supported media list. See the "Selecting paper" section.

Is the paper or media being used supported?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Replace with supported paper or media.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

4. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper input tray sensor tests > MPF feed**.

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the MPF for proper installation, damage, or any obstruction along its paper path.
2. Check the pick assembly, sensor (MPF feed), and sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Is the MPF properly installed and free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace the MPF.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

7. Check the MPF tray for proper installation and damage.

Is the tray properly installed and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the MPF tray.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 11.

- **No:**
Go to the next step.

10. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

11. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**

Go to the next step.

12. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Unsupported paper in SHPF service check

1. Restart the printer.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

2. Remove, and then load a supported paper into the tray. For more information on loading paper, see [See "Avoiding jams" on page 171](#). For more information on supported paper, see the "Selecting paper" section.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Change the settings to match the size, type, and weight of the paper loaded.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

4. Perform a print test on paper from a fresh package.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Remove any debris or obstruction near the SHPF front door switch.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

6. Perform the following tests:

Check the SHPF front door switch for the following:

- failure to operate
- improper installation

Is the SHPF front door switch free of the previous items?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Reinstall or replace the SHPF front door switch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Remove any debris or obstruction near the SHPF top door switch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

Check the SHPF top door switch for the following:

- failure to operate
- improper installation

Is the SHPF top door switch free of the previous items?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Reinstall or replace the SHPF top door switch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Remove any debris or obstruction near the SHPF front door switch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

Check the SHPF front door switch for the following:

- failure to operate
- improper installation

Is the SHPF front door switch free of the previous items?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Reinstall or replace the SHPF front door switch.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the
2. SHPF top door,
3. SHPF top door actuator,
4. SHPF top door hinge for the following:
 - improper installation
 - damage

Are the parts free of the previous items?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Reinstall or replace the SHPF top door.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Check if the connectors on the SHPF controller board are properly connected.

Are the connectors properly connected?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Reconnect the connectors on the SHPF controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Check if the SHPF controller board is free of damage.

Is the controller board free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

19. Replace the SHPF controller board. See [See "Finisher controller board removal" on page 1667.](#)

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

3y user attendance errors

31 user attendance messages

31 user attendance messages

Error code	Description	Action
31.00	<ul style="list-style-type: none"> An MICR print cartridge is required. The staple finisher stapler supply is low or near low. 	<p>See "Staple finisher stapler supply near low service check" on page 689.</p> <p>See "Staple finisher stapler supply low service check" on page 692.</p>
31.00a 31.00b 31.00c 31.00d	The booklet finisher staple supply level is near low or low.	See "Booklet finisher staple supply errors service check" on page 631.
31.00e	The booklet finisher does not detect refilled staples.	See "Booklet finisher staple supply errors service check" on page 631.
31.00f	The booklet finisher front staple supply level is near low or low.	See "Booklet finisher staple refill detection failure service check" on page 695.
31.00g	The booklet finisher front staple supply level is near low or low.	See "Booklet finisher staple refill detection failure service check" on page 695.
31.00h	The booklet finisher rear staple supply level is near low or low.	See "Booklet finisher rear staple supply level service check" on page 697.
31.00i	The booklet finisher rear staple supply level is near low or low.	See "Booklet finisher rear staple supply level service check" on page 697.
31.00j	The booklet finisher hole punch box is missing.	See "Booklet finisher hole punch box errors service check" on page 699.

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Error code	Description	Action
31.00k	The booklet finisher hole punch box is nearly full.	See "Booklet finisher hole punch box errors service check" on page 699.
31.00m	The booklet finisher hole punch box is full.	See "Booklet finisher hole punch box errors service check" on page 699.
31.35	A waste toner bottle smart chip or sensor communication error was detected.	See "Sensor (waste toner bottle) communication error service check" on page 684.
31.40	A black (K) toner cartridge smart chip or sensor communication error was detected.	See "Black (K) toner cartridge communication error service check" on page 668.
31.41	A cyan (C) toner cartridge smart chip or sensor communication error was detected.	See "Cyan (C) toner cartridge communication error service check" on page 670.
31.42	A magenta (M) toner cartridge smart chip or sensor communication error was detected.	See "Magenta (M) toner cartridge communication error service check" on page 672.
31.43	A yellow (Y) toner cartridge smart chip or sensor communication error was detected.	See "Yellow (Y) toner cartridge communication error service check" on page 674.
31.60	Imaging unit/ photoconductor (K) smart chip or sensor communication problem was detected.	See "Black (K) photoconductor communication error service check" on page 676.
31.61	Imaging unit/ photoconductor (C) smart chip or sensor communication problem was detected.	See "Cyan (C) photoconductor communication error service check" on page 678.
31.62	Imaging unit/ photoconductor (M) smart chip or sensor communication problem was detected.	See "Magenta (M) photoconductor communication error service check" on page 680.

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Error code	Description	Action
31.63	Imaging unit/ photoconductor (Y) smart chip or sensor communication problem was detected.	See "Yellow (Y) photoconductor communication error service check" on page 682.
31.80	Fuser/maintenance kit smart chip or sensor communication problem was detected.	See "Fuser or maintenance kit communication error service check" on page 687.

Black (K) toner cartridge communication error service check

1. Perform the following tests:

1. Check if the toner cartridge is compatible with the printer.
2. Check the toner cartridge for proper installation, damage, or leaks.
3. Check if there is enough toner in the toner cartridge.
4. Check if the toner contacts are clean and not contaminated.

Is the toner cartridge properly installed, in good condition, and compatible with the printer?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the toner cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Check the toner contact chip for damage.

Is the contact chip free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the contact chip.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Cyan (C) toner cartridge communication error service check

1. Perform the following tests:

1. Check if the toner cartridge is compatible with the printer.
2. Check the toner cartridge for proper installation, damage, or leaks.
3. Check if there is enough toner in the toner cartridge.
4. Check if the toner contacts are clean and not contaminated.

Is the toner cartridge properly installed, in good condition, and compatible with the printer?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the toner cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Check the toner contact chip for damage.

Is the contact chip free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the contact chip.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Magenta (M) toner cartridge communication error service check

1. Perform the following tests:

1. Check if the toner cartridge is compatible with the printer.
2. Check the toner cartridge for proper installation, damage, or leaks.
3. Check if there is enough toner in the toner cartridge.
4. Check if the toner contacts are clean and not contaminated.

Is the toner cartridge properly installed, in good condition, and compatible with the printer?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Replace the toner cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Check the toner contact chip for damage.

Is the contact chip free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the contact chip.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Yellow (Y) toner cartridge communication error service check

1. Perform the following tests:

1. Check if the toner cartridge is compatible with the printer.
2. Check the toner cartridge for proper installation, damage, or leaks.
3. Check if there is enough toner in the toner cartridge.
4. Check if the toner contacts are clean and not contaminated.

Is the toner cartridge properly installed, in good condition, and compatible with the printer?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the toner cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Check the toner contact chip for damage.

Is the contact chip free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the contact chip.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Black (K) photoconductor communication error service check

1. Perform the following tests:

1. Check the photoconductor drum for proper installation, damage, and leaks.
2. Check if the photoconductor drum is supported.
3. Make sure the contacts are clean and free of contamination.

Is the photoconductor drum properly installed, supported, and free of damage, leaks, and contamination?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the photoconductor drum.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Perform the following tests:

1. Check the photoconductor drum contact for damage.
2. Reseat the connector.

Is the drum contact free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the drum contact.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.

- **No:**

Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Cyan (C) photoconductor communication error service check

1. Perform the following tests:

1. Check the photoconductor drum for proper installation, damage, and leaks.
2. Check if the photoconductor drum is supported.
3. Make sure the contacts are clean and free of contamination.

Is the photoconductor drum properly installed, supported, and free of damage, leaks, and contamination?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the photoconductor drum.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Perform the following tests:

1. Check the photoconductor drum contact for damage.
2. Reseat the connector.

Is the drum contact free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the drum contact.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.

- **No:**

Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Magenta (M) photoconductor communication error service check

1. Perform the following tests:

1. Check the photoconductor drum for proper installation, damage, and leaks.
2. Check if the photoconductor drum is supported.
3. Make sure the contacts are clean and free of contamination.

Is the photoconductor drum properly installed, supported, and free of damage, leaks, and contamination?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the photoconductor drum.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Perform the following tests:

1. Check the photoconductor drum contact for damage.
2. Reseat the connector.

Is the drum contact free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the drum contact.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.

- **No:**

Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Yellow (Y) photoconductor communication error service check

1. Perform the following tests:

1. Check the photoconductor drum for proper installation, damage, and leaks.
2. Check if the photoconductor drum is supported.
3. Make sure the contacts are clean and free of contamination.

Is the photoconductor drum properly installed, supported, and free of damage, leaks, and contamination?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the photoconductor drum.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Perform the following tests:

1. Check the photoconductor drum contact for damage.
2. Reseat the connector.

Is the drum contact free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the drum contact.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.

- **No:**

Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (waste toner bottle) communication error service check

1. Perform the following tests:
 1. Check the waste toner bottle for damage and contamination.
 2. Check if the waste toner bottle is inserted properly.
 3. Reseat the waste toner bottle.

Is the waste toner bottle inserted properly and is free of damage and contamination?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Replace the waste toner bottle.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle position.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle full.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Waste toner bottle agitator.**

Did the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

15. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Fuser or maintenance kit communication error service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then touch **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Staple finisher stapler supply near low service check

1. Replace the staple finisher staple cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

2. Check the staple finisher stapler head for proper installation.

Is the staple finisher stapler head properly installed?

- **Yes:**
Go to step 4.

- **No:**
Go to the next step.

3. Reseat the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the staple finisher stapler head for damage.
2. Make sure that the staple finisher head cable is properly connected.

Is the staple finisher stapler head free of wear or damage?

- **Yes:**
Go to step 6.

- **No:**
Go to the next step.

5. Replace the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

6. Perform the following tests:

1. Make sure that the staple finisher position bracket cables are properly connected.
2. Check the staple finisher position bracket for damage, wear, and obstruction.

Is the staple finisher position bracket free of damage, wear, and obstruction?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the staple finisher position bracket.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Check the staple finisher drive unit for proper installation.

Is the staple finisher drive unit properly installed?

- **Yes:**
Go to step 10.

- **No:**
Go to the next step.

9. Reseat the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher drive unit for damage.
2. Check the staple finisher drive unit gears for wear or damage.

Are the staple finisher drive unit and its gears free of wear or damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Perform the following tests:

1. Reseat the staple finisher stapler cable.
2. Check the staple finisher stapler cable for damage.

Is the staple finisher stapler cable free of damage?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

13. Replace the staple finisher stapler cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

15. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Staple finisher stapler supply low service check

1. Replace the staple finisher staple cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

2. Check the staple finisher stapler head for proper installation.

Is the staple finisher stapler head properly installed?

- **Yes:**
Go to step 4.

- **No:**
Go to the next step.

3. Reseat the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the staple finisher stapler head for damage.
2. Make sure that the staple finisher head cable is properly connected.

Is the staple finisher stapler head free of wear or damage?

- **Yes:**
Go to step 6.

- **No:**
Go to the next step.

5. Replace the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

6. Perform the following tests:

1. Make sure that the staple finisher position bracket cables are properly connected.
2. Check the staple finisher position bracket for damage, wear, and obstruction.

Is the staple finisher position bracket free of damage, wear, and obstruction?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the staple finisher position bracket.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Check the staple finisher drive unit for proper installation.

Is the staple finisher drive unit properly installed?

- **Yes:**
Go to step 10.

- **No:**
Go to the next step.

9. Reseat the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher drive unit for damage.
2. Check the staple finisher drive unit gears for wear or damage.

Are the staple finisher drive unit and its gears free of wear or damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Booklet finisher staple refill detection failure service check

1. Perform the following tests:
 1. Check if there are enough staples left in the booklet finisher front staple cartridge.
 2. Check the staple cartridge for damaged and stuck staples.
 3. Reseat the staples and the staple cartridge.

Are there enough staples left, and is the staple cartridge free of damaged and stuck staples?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the staple cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check the booklet finisher stapler unit for proper installation, operation, and damage.
 2. Reseat the staple cartridge.
 3. Reseat the cables at both ends.

Is the booklet finisher stapler unit properly installed, operational, and free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the booklet finisher stapler unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the booklet finisher booklet maker controller board for proper installation and damage.
 2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**

- Go to the next step.

6. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**

- Contact the next level of support.

- **No:**

- The problem is solved.

Booklet finisher rear staple supply level service check

1. Perform the following tests:
 1. Check if there are enough staples left in the booklet finisher rear staple cartridge.
 2. Check the staple cartridge for damaged and stuck staples.
 3. Reseat the staples and the staple cartridge.

Are there enough staples left, and is the staple cartridge free of damaged and stuck staples?

- **Yes:**
Go to step 3.

- **No:**
Go to the next step.

2. Replace the staple cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check the booklet finisher stapler unit for proper installation, operation, and damage.
 2. Reseat the staple cartridge.
 3. Reseat the cables at both ends.

Is the booklet finisher stapler unit properly installed, operational, and free of damage?

- **Yes:**
Go to step 5.

- **No:**
Go to the next step.

4. Replace the booklet finisher stapler unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the booklet finisher booklet maker controller board for proper installation and damage.
 2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**

- Go to the next step.

6. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**

- Contact the next level of support.

- **No:**

- The problem is solved.

Booklet finisher hole punch box errors service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the hole punch box for proper installation and damage.
2. Empty the hole punch box.

Is the hole punch box properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the hole punch box.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Check the booklet finisher puncher (Swedish) for proper installation, operation, and damage.

Is the puncher properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the booklet finisher puncher (Swedish).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Check the cables and connectors for proper connection and damage.

2. Check the interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the damaged cable/s. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

9. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

8y user attendance errors

8y user attendance messages

8y user attendance messages

Error code	Description	Action
80.01a	The maintenance kit is nearly low (second transfer roller).	See "Maintenance kit nearly low or very low service check" on page 706.
80.01b	The maintenance kit is nearly low (transfer module and fuser).	See "Maintenance kit nearly low or very low service check" on page 706.
80.21a	The maintenance kit is very low (second transfer roller).	See "Maintenance kit nearly low or very low service check" on page 706.
80.21b	The maintenance kit is very low (transfer module and fuser).	See "Maintenance kit nearly low or very low service check" on page 706.
80.31	The transfer belt cleaner must be replaced.	See "Transfer belt cleaner replacement service check" on page 708.
81.01	The fuser is nearly low.	See "Maintenance kit nearly low or very low service check" on page 706.
81.21	The fuser is very low.	See "Maintenance kit nearly low or very low service check" on page 706.
81.31	The fuser must be replaced.	See "Maintenance kit nearly low or very low service check" on page 706.
82.00	The waste toner bottle capacity is nearly low.	See "Waste toner bottle nearly low service check" on page 715.

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Error code	Description	Action
82.12	The waste toner bottle capacity is low.	See "Waste toner bottle low service check" on page 718.
82.22	The waste toner bottle is near EOL, and needs to be replaced soon.	See "Waste toner bottle near EOL service check" on page 712.
82.42	The waste toner bottle is at absolute EOL, and must be replaced.	See "Waste toner bottle replacement service check" on page 709.
83.01	The transfer module is nearly low.	See "Maintenance kit nearly low or very low service check" on page 706.
83.21	The transfer module is very low.	See "Maintenance kit nearly low or very low service check" on page 706.
83.31	The transfer module is at EOL and needs to be replaced soon..	See "Maintenance kit nearly low or very low service check" on page 706.
83.30	The staple finisher stapler supply is low or missing.	See "Staple finisher stapler supply low or missing service check" on page 724.
84.01c	Imaging unit/ photoconductor drum (cyan) nearly low.	See "Photoconductor drum failure service check" on page 721.
84.01k	Imaging unit/ photoconductor drum (black) nearly low.	See "Photoconductor drum failure service check" on page 721.
84.01m	Imaging unit/ photoconductor drum (magenta) nearly low.	See "Photoconductor drum failure service check" on page 721.
84.01y	Imaging unit/ photoconductor drum (yellow) nearly low.	See "Photoconductor drum failure service check" on page 721.
84.11c	Imaging unit/ photoconductor drum (cyan) low.	See "Photoconductor drum failure service check" on page 721.

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Error code	Description	Action
84.11k	Imaging unit/ photoconductor drum (black) low.	See "Photoconductor drum failure service check" on page 721.
84.11m	Imaging unit/ photoconductor drum (magenta) low.	See "Photoconductor drum failure service check" on page 721.
84.11y	Imaging unit/ photoconductor drum (yellow) low.	See "Photoconductor drum failure service check" on page 721.
84.21c	Imaging unit/ photoconductor drum (cyan) very low.	See "Photoconductor drum failure service check" on page 721.
84.21k	Imaging unit/ photoconductor drum (black) very low.	See "Photoconductor drum failure service check" on page 721.
84.21m	Imaging unit/ photoconductor drum (magenta) very low.	See "Photoconductor drum failure service check" on page 721.
84.21y	Imaging unit/ photoconductor drum (yellow) very low.	See "Photoconductor drum failure service check" on page 721.
84.31c	Imaging unit/ photoconductor drum (cyan) EOL.	See "Photoconductor drum failure service check" on page 721.
84.31k	Imaging unit/ photoconductor drum (black) EOL.	See "Photoconductor drum failure service check" on page 721.
84.31m	Imaging unit/ photoconductor drum (magenta) EOL.	See "Photoconductor drum failure service check" on page 721.
84.31y	Imaging unit/ photoconductor drum (yellow) EOL.	See "Photoconductor drum failure service check" on page 721.
84.41c	Imaging unit/ photoconductor drum (cyan) absolute EOL.	See "Photoconductor drum failure service check" on page 721.
84.41k	Imaging unit/ photoconductor drum (black) absolute EOL.	See "Photoconductor drum failure service check" on page 721.

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Error code	Description	Action
84.41m	Imaging unit/ photoconductor drum (magenta) absolute EOL.	See "Photoconductor drum failure service check" on page 721.
84.41y	Imaging unit/ photoconductor drum (yellow) absolute EOL.	See "Photoconductor drum failure service check" on page 721.
85.01c	The cyan developer/ developer kit is nearly low.	N/A
85.01k	The black developer/ developer kit is nearly low.	N/A
85.01m	The magenta developer/ developer kit is nearly low.	N/A
85.01y	The yellow developer/ developer kit is nearly low.	N/A
85.31c	The cyan developer/ developer kit is at EOL and needs to be replaced soon.	N/A
85.31k	The black developer/ developer kit is at EOL and needs to be replaced soon.	N/A
85.31m	The magenta developer/ developer kit is at EOL and needs to be replaced soon.	N/A
85.31y	The yellow developer/ developer kit is at EOL and needs to be replaced soon.	N/A
88.00c	Toner cartridge (cyan) nearly low.	See "Toner cartridge error service check" on page 722.
88.00k	Toner cartridge (black) nearly low.	See "Toner cartridge error service check" on page 722.
88.00m	Toner cartridge (magenta) nearly low.	See "Toner cartridge error service check" on page 722.
88.00y	Toner cartridge (yellow) nearly low.	See "Toner cartridge error service check" on page 722.

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Error code	Description	Action
88.10c	Toner cartridge (cyan) low.	See "Toner cartridge error service check" on page 722.
88.10k	Toner cartridge (black) low.	See "Toner cartridge error service check" on page 722.
88.10m	Toner cartridge (magenta) low.	See "Toner cartridge error service check" on page 722.
88.10y	Toner cartridge (yellow) low.	See "Toner cartridge error service check" on page 722.
88.20c	Toner cartridge (cyan) very low.	See "Toner cartridge error service check" on page 722.
88.20k	Toner cartridge (black) very low.	See "Toner cartridge error service check" on page 722.
88.20m	Toner cartridge (magenta) very low.	See "Toner cartridge error service check" on page 722.
88.20y	Toner cartridge (yellow) very low.	See "Toner cartridge error service check" on page 722.
88.40c	Toner cartridge (cyan) absolute EOL.	See "Toner cartridge error service check" on page 722.
88.40k	Toner cartridge (black) absolute EOL.	See "Toner cartridge error service check" on page 722.
88.40m	Toner cartridge (magenta) absolute EOL.	See "Toner cartridge error service check" on page 722.
88.40y	Toner cartridge (yellow) absolute EOL.	See "Toner cartridge error service check" on page 722.

Maintenance kit nearly low or very low service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the second transfer roller for proper installation and damage.

Is the roller properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the second transfer roller.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer setup > Reset Maintenance Counter.**
2. Find the maintenance kit you want to reset.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Fuser and maintenance kit nearly low or very low service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the transfer module and fuser kit for proper installation and damage.

Are the transfer module and fuser kit properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the module and kit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer setup > Reset Maintenance Counter.**
2. Find the maintenance kit you want to reset.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Transfer belt cleaner replacement service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the transfer belt for proper installation, contamination, and damage.
2. Reseat the cleaner.

Is the transfer belt cleaner properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

3. Replace the transfer belt cleaner.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Waste toner bottle replacement service check

1. Perform the following tests:
 1. Check the waste toner bottle for damage and contamination.
 2. Check if the waste toner bottle is inserted properly.
 3. Reseat the waste toner bottle.

Is the waste toner bottle inserted properly and is free of damage and contamination?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Replace the waste toner bottle.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle position.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle full.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Waste toner bottle agitator.**

Did the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

15. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Waste toner bottle near EOL service check

1. Perform the following tests:
 1. Check the waste toner bottle for damage and contamination.
 2. Check if the waste toner bottle is inserted properly.
 3. Reseat the waste toner bottle.

Is the waste toner bottle inserted properly and is free of damage and contamination?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Replace the waste toner bottle.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle position.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle full.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Waste toner bottle agitator.**

Did the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

15. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Waste toner bottle nearly low service check

1. Perform the following tests:
 1. Check the waste toner bottle for damage and contamination.
 2. Check if the waste toner bottle is inserted properly.
 3. Reseat the waste toner bottle.

Is the waste toner bottle inserted properly and is free of damage and contamination?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Replace the waste toner bottle.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle position.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle full.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Waste toner bottle agitator.**

Did the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

15. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Waste toner bottle low service check

1. Perform the following tests:
 1. Check the waste toner bottle for damage and contamination.
 2. Check if the waste toner bottle is inserted properly.
 3. Reseat the waste toner bottle.

Is the waste toner bottle inserted properly and is free of damage and contamination?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Replace the waste toner bottle.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle position.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor for proper installation, obstruction, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics and adjustments > Sensor tests > EP sensor tests > Waste toner bottle full.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Waste toner bottle agitator.**

Did the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

15. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Photoconductor drum failure service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the photoconductor drum for improper installation, damage, and leaks.
2. Make sure the photoconductor drum is supported.
3. Make sure the contacts are clean and free of contamination.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:

1. Upgrade the firmware.

NOTES

Contact your next level of support for the correct firmware level to use.

2. Reset the printer.
3. Perform a print job.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Replace the photoconductor drum.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Toner cartridge error service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Check if the toner cartridge is compatible with the printer.
 2. Check the toner cartridge for improper installation, damage, or leaks. Reseat the cartridge.
 3. Check if there is enough toner in the toner cartridge.
 4. Check if the toner contacts are clean and not contaminated.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Upgrade the firmware.

NOTES

Contact your next level of support for the correct firmware level to use.

2. Reset the printer.
3. Perform a print job.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Replace the toner cartridge.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**

The problem is solved.

Staple finisher stapler supply low or missing service check

1. Replace the staple finisher staple cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

2. Check the staple finisher stapler head for proper installation.

Is the staple finisher stapler head properly installed?

- **Yes:**
Go to step 4.

- **No:**
Go to the next step.

3. Reseat the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the staple finisher stapler head for damage.
2. Make sure that the staple finisher head cable is properly connected.

Is the staple finisher stapler head free of wear or damage?

- **Yes:**
Go to step 6.

- **No:**
Go to the next step.

5. Replace the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

6. Perform the following tests:

1. Make sure that the staple finisher position bracket cables are properly connected.
2. Check the staple finisher position bracket for damage, wear, and obstruction.

Is the staple finisher position bracket free of damage, wear, and obstruction?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the staple finisher position bracket.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Check the staple finisher drive unit for proper installation.

Is the staple finisher drive unit properly installed?

- **Yes:**
Go to step 10.

- **No:**
Go to the next step.

9. Reseat the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher drive unit for damage.
2. Check the staple finisher drive unit gears for wear or damage.

Are the staple finisher drive unit and its gears free of wear or damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Printer hardware errors

100-102 errors

100-102 error messages

100-102 error messages

Error code	Description	Action
100.21	The sensor (tray 1 level) does not turn on within the specified time during the tray 1 lift up.	See "Sensor (tray 1 level) failure service check" on page 729.
100.22	The sensor (tray 2 level) does not turn on within the specified time during the tray 2 lift up.	See "Sensor (tray 2 level) failure service check" on page 733.
100.23	The sensor (2 x 520-sheet tray 3 level) does not turn on within the specified time during the tray 3 lift up.	See "Sensor (2 x 520-sheet tray 3 level) failure service check" on page 737.
100.23	The sensor (2000-sheet tandem tray 3 level) does not turn on within the specified time during the tray 3 lift up.	See "sensor (2000-sheet tandem tray 3 level) failure service check" on page 740.
100.24	The sensor (2 x 520-sheet tray 4 level) does not turn on within the specified time during the tray 4 lift up.	See "Sensor (2 x 520-sheet tray 4 level) failure service check" on page 743.
100.24	The sensor (2000-sheet tandem tray 4 level) does not turn on within the specified time during the tray 4 lift up.	See "Sensor (2000-sheet tandem tray 4 level) failure service check" on page 746.
100.26	The motor (2000-sheet tray pick/lift) did not lift properly.	See "Motor (2000-sheet tray transport) failure service check" on page 763.
100.30	Yellow (Y) calibration warning.	See "ATC sensor malfunction service check (Y toner)" on page 765.

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Error code	Description	Action
100.31	Magenta (M) calibration warning.	See "ATC sensor malfunction service check (Y toner)" on page 765.
100.32	Cyan (C) calibration warning.	See "ATC sensor malfunction service check (Y toner)" on page 765.
100.33	Black (K) calibration warning.	See "ATC sensor malfunction service check (Y toner)" on page 765.
100.50	All trays connected to the printer and options are unusable.	See "All trays unusable error service check (printer and 2000-sheet tandem tray)" on page 751 or See "All trays unusable error service check (printer and 2 x 520-sheet optional tray)" on page 754.
100.51	All trays connected to the printer and options are unusable.	See "All trays unusable error service check (printer and 2000-sheet tandem tray)" on page 751 or See "All trays unusable error service check (printer and 2 x 520-sheet optional tray)" on page 754.
100.52	Power cord disconnected.	See "Power cord disconnection service check" on page 749.
100.60a	Paper type does not match paper setting.	See "Paper type error service check" on page 757.
100.60b	Paper type does not match paper setting.	See "Paper type error service check" on page 757.
100.80	Bias transfer roller error.	See "Sensor (first transfer roll retract) failure service check" on page 760.
102.00	Tray module mismatch. A different type of tray is connected.	N/A

Sensor (tray 1 level) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
 2. Find the sensor (pick position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
2. Find the motor (tray pick/lift).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor (tray pick/lift) for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
2. Find the sensor (paper size).

Does the value change when you move the paper size actuator check?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

1. Check the tray 1 insert for proper installation and damage.
2. Check the paper guides for damage and obstruction.

Is the tray 1 insert movable, and the paper guides free of damage and obstruction?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

12. Replace the tray 1 insert.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

14. Perform the following tests:

1. Check the tray 1 paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the tray 1 paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the tray 1 paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

19. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (tray 2 level) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
 2. Find the sensor (pick position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
2. Find the motor (tray pick/lift).

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:
 1. Check the motor (tray pick/lift) for proper installation and damage.
 2. Make sure that the motor cables are properly connected and free of damage.
 3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
 2. Find the sensor (paper size).

Does the value change when you move the paper size actuator check?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

1. Check the tray 2 insert for proper installation and damage.
2. Check the paper guides for damage and obstruction.

Is the tray 2 insert movable, and the paper guides free of damage and obstruction?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

12. Replace the tray 2 insert.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

14. Perform the following tests:

1. Check the tray 2 paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the tray 2 paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the tray 2 paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

19. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (2 x 520-sheet tray 3 level) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
 2. Find the sensor (pick position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the 2 x 520-sheet tray insert (tray 3) for proper installation and damage.
2. Check the paper guides for damage and obstruction.

Is the 2 x 520-sheet tray insert (tray 3) movable, and the paper guides free of damage and obstruction?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the 2 x 520-sheet tray insert (tray 3).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the 2 x 520-sheet tray paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2 x 520-sheet tray paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the 2 x 520-sheet tray paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the cables for damage.

2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

sensor (2000-sheet tandem tray 3 level) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
 2. Find the sensor (pick position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the 2000-sheet tandem tray insert (tray 3) for proper installation and damage.
2. Check the paper guides for damage and obstruction.
3. Check for obstructions when inserting the tray.

Is the 2000-sheet tandem tray insert (tray 3) movable, and the paper guides free of damage and obstruction?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the 2000-sheet tandem tray insert (tray 3).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Additional input tray diagnostics**.
2. Select the tray motor test, and select the specific part.

Did the motor run?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the 2000-sheet tandem tray feeder (tray 3) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2000-sheet tandem tray feeder (tray 3), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**

Go to the next step.

10. Replace the 2000-sheet tandem tray feeder (tray 3).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

12. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

14. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (2 x 520-sheet tray 4 level) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
 2. Find the sensor (pick position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the 2 x 520-sheet tray insert (tray 4) for proper installation and damage.
2. Check the paper guides for damage and obstruction.
3. Check for obstructions when inserting the tray.

Is the 2 x 520-sheet tray insert (tray 4) movable, and the paper guides free of damage and obstruction?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the 2 x 520-sheet tray insert (tray 4).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the 2 x 520-sheet tray paper feeder for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2 x 520-sheet tray paper feeder, sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the 2 x 520-sheet tray paper feeder.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

11. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (2000-sheet tandem tray 4 level) failure service check

1. Perform the following tests:
 1. Open the printer doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
 2. Find the sensor (pick position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the 2000-sheet tandem tray insert (tray 4) for proper installation and damage.
2. Check the paper guides for damage and obstruction.
3. Check for obstructions when inserting the tray.

Is the 2000-sheet tandem tray insert (tray 4) movable, and the paper guides free of damage and obstruction?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the 2000-sheet tandem tray insert (tray 4).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print**.
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the 2000-sheet tandem tray horizontal transport (tray 4) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2000-sheet tandem tray horizontal transport (tray 4), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the 2000-sheet tandem tray horizontal transport (tray 4).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:
 1. Check the cables for damage.
 2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

11. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

12. Perform the following tests:
 1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Power cord disconnection service check

1. Perform the following tests:

1. Turn off the printer.
2. Check all optional tray and finisher connections to the printer.
3. Reseat cables connected to the printer.
4. Check if the power cords for both printer and options have the correct input voltage.
5. Turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the power cord for damage and correct voltage rating.

Is the power cord free of damage and is of the correct voltage rating?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the power cord.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the LVPS.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:
 1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

7. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

All trays unusable error service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Turn off the printer.
2. Check all optional tray and finisher connections to the printer.
3. Reseat cables connected to the printer.
4. Check if the power cords for both printer and options have the correct input voltage.
5. Turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Disconnect or detach all options connected to the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Check the printer for the error.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
Check the input option for the error.

4. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

6. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the LVPS.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the 2000-sheet tandem tray cable for damage.
2. Reseat the cable at both ends.

Is the 2000-sheet tandem tray cable free of damage and properly connected?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the 2000-sheet tandem tray cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

11. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

All trays unusable error service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Turn off the printer.
2. Check all optional tray and finisher connections to the printer.
3. Reseat cables connected to the printer.
4. Check if the power cords for both printer and options have the correct input voltage.
5. Turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Disconnect or detach all options connected to the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Check the printer for the error.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
Check the input option for the error.

4. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

6. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**

Go to step 8.

- **No:**

Go to the next step.

7. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

8. Perform the following tests:

1. Check the 2 x 520-sheet tray cable for damage.
2. Reseat the cable at both ends.

Is the 2 x 520-sheet tray cable free of damage and properly connected?

- **Yes:**

Go to step 10.

- **No:**

Go to the next step.

9. Replace the 2 x 520-sheet tray cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

11. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Paper type error service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check if the paper being used is listed in the supported media list.

Is the paper or media being used supported?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace with supported paper or media.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the tray 1 insert for proper installation and damage.
2. Check the paper guides for damage and obstruction.

Is the tray 1 insert movable, and the paper guides free of damage and obstruction?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the tray 1 insert.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Check the tray 2 insert for proper installation and damage.
2. Check the paper guides for damage and obstruction.

Is the tray 2 insert movable, and the paper guides free of damage and obstruction?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the tray 2 insert.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
2. Find the sensor (paper size).

Does the value change when you move the paper size actuator check?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

12. Replace the damaged cables and connectors. See the Parts Catalog for details.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (first transfer roll retract) failure service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > EP sensor tests.**
2. Find the sensor (first transfer retract).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for improper installation and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the transfer roller clutch for improper installation and damage.

Is the transfer roller clutch properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**

Go to the next step.

6. Replace the motor (fusing drive).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the motor (fusing drive) for improper installation and damage.
2. Reseat the cable.

Is the motor properly installed and free of damage?

- **Yes:**

Go to the next step.

- **No:**

Go to step 9.

8. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Motor tests > Fuser**.

Did the motor run?

- **Yes:**

Go to step 10.

- **No:**

Go to the next step.

9. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Check the transfer belt for improper installation, contamination, obstruction, and damage.

Is the transfer roller properly installed and free of damage?

- **Yes:**

Go to step 12.

- **No:**

Go to the next step.

11. Replace the transfer belt.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the engine board for improper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Motor (2000-sheet tray transport) failure service check

1. Perform the following tests:
 1. Open the printer and/or input option doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Check all the cables for damage.
 2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:
 1. Check the motor for proper installation and damage.
 2. Reseat the cables at both ends.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 7.
 - **No:**
Go to the next step.
6. Replace the motor (2000-sheet tray transport).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
7. Check the 2000-sheet tray insert gearbox for improper installation and damage.
- Is the gearbox properly installed and free of damage?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
8. Replace the gearbox.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
9. Check the 2000-sheet tray controller board for improper installation and damage.
- Is the board properly installed and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
10. Replace the board.
- Does the problem remain?
- **Yes:**
Contact the next level of support.
 - **No:**
The problem is solved.

ATC sensor malfunction service check (Y toner)

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check if the toner cartridge is compatible with the printer.
2. Check the toner cartridge for proper installation, damage, or leaks.
3. Check if there is enough toner in the toner cartridge.
4. Check if the toner contacts are clean and not contaminated.

Is the toner cartridge properly installed, in good condition, and compatible with the printer?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the toner cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > ATC error reset >** find the error.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the developer assembly for proper installation and damage.
2. Check if there is enough developer carrier powder in the developer.

3. Check the ATC sensor and high voltage contact in the developer assembly for damage and contamination.
4. Reseat all cables.

Is the developer assembly free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the developer assembly.

NOTES

After replacing the developer assembly, perform ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Imaging process adjustment >** find the adjustment.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:
 1. Check the toner dispenser Y for proper installation and damage.
 2. Check if the dispenser pipe outlet and developer toner inlet are properly aligned.
 3. Check for toner in the dispenser pipe.

Is the toner dispenser Y properly installed and free of damage and blockage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the toner dispenser Y.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:
 1. Check the main drive for proper installation and damage.
 2. Reseat all cables.

Is the main drive properly installed and free of damage?

- **Yes:**

Go to the next step.

- **No:**

Go to step 11.

10. Check if each motor works. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > motor tests >** find the motor.

Does the problem remain?

- **Yes:**

Go to step 12.

- **No:**

The problem is solved.

11. Replace the main drive.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the developer HVPS for voltage compatibility, proper installation, and damage.
2. Check if the high voltage contacts are aligned.
3. Reseat all cables.

Is the developer HVPS properly installed and free of damage?

- **Yes:**

Go to step 14.

- **No:**

Go to the next step.

13. Replace the developer HVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

14. Perform the following tests:

1. Check the charge roller HVPS for voltage compatibility, proper installation, and damage.
2. Check if the high voltage contacts are aligned.
3. Reseat all cables.

Is the charge roller HVPS properly installed and free of damage?

- **Yes:**

Go to step 16.

- **No:**

Go to the next step.

15. Replace the charge roller HVPS.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

19. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Tray module mismatch error service check

1. Perform the following tests:
 1. Open the printer and/or input option doors, and clear any paper jam.
 2. Check the paper path for any debris and obstruction.
 3. Check the fuser and output bin for any paper jam and obstruction.
 4. Open the tray insert and remove any paper jam.
 5. Check the MPF for any paper jam.
 6. Check if the paper being used is listed in the supported media list.
 7. Check if the paper and the paper guides are set correctly in the paper trays.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Disconnect or detach all options connected to the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Check the printer for the error.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
Check the input option for the error.

4. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

5. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

11y errors

11y error messages

11y error messages

Error code	Description	Action
111.91a	C printhead failure.	See "Printhead failure service check" on page 775.
111.91b	C printhead failure.	See "Printhead failure service check" on page 775.
111.91c	C printhead failure.	See "Printhead failure service check" on page 775.
111.91d	C printhead failure.	See "Printhead failure service check" on page 775.
111.91e	C printhead failure.	See "Printhead failure service check" on page 775.
111.91f	C printhead failure.	See "Printhead failure service check" on page 775.
111.91g	C printhead failure.	See "Printhead failure service check" on page 775.
111.91h	C printhead failure.	See "Printhead failure service check" on page 775.
111.91i	C printhead failure.	See "Printhead failure service check" on page 775.
111.91j	C printhead failure.	See "Printhead failure service check" on page 775.
112.91a	K printhead failure.	See "Printhead failure service check" on page 775.

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Error code	Description	Action
112.91b	K printhead failure.	See "Printhead failure service check" on page 775.
112.91c	K printhead failure.	See "Printhead failure service check" on page 775.
112.91d	K printhead failure.	See "Printhead failure service check" on page 775.
112.91e	K printhead failure.	See "Printhead failure service check" on page 775.
112.91f	K printhead failure.	See "Printhead failure service check" on page 775.
112.91g	K printhead failure.	See "Printhead failure service check" on page 775.
112.91h	K printhead failure.	See "Printhead failure service check" on page 775.
112.91i	K printhead failure.	See "Printhead failure service check" on page 775.
112.91j	K printhead failure.	See "Printhead failure service check" on page 775.
113.91a	M printhead failure.	See "Printhead failure service check" on page 775.
113.91b	M printhead failure.	See "Printhead failure service check" on page 775.
113.91c	M printhead failure.	See "Printhead failure service check" on page 775.
113.91d	M printhead failure.	See "Printhead failure service check" on page 775.

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Error code	Description	Action
113.91e	M printhead failure.	See "Printhead failure service check" on page 775.
113.91f	M printhead failure.	See "Printhead failure service check" on page 775.
113.91g	M printhead failure.	See "Printhead failure service check" on page 775.
113.91h	M printhead failure.	See "Printhead failure service check" on page 775.
113.91i	M printhead failure.	See "Printhead failure service check" on page 775.
113.91j	M printhead failure.	See "Printhead failure service check" on page 775.
114.91a	Y printhead failure.	See "Printhead failure service check" on page 775.
114.91b	Y printhead failure.	See "Printhead failure service check" on page 775.
114.91c	Y printhead failure.	See "Printhead failure service check" on page 775.
114.91d	Y printhead failure.	See "Printhead failure service check" on page 775.
114.91e	Y printhead failure.	See "Printhead failure service check" on page 775.
114.91f	Y printhead failure.	See "Printhead failure service check" on page 775.
114.91g	Y printhead failure.	See "Printhead failure service check" on page 775.

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Error code	Description	Action
114.91h	Y printhead failure.	See "Printhead failure service check" on page 775.
114.91i	Y printhead failure.	See "Printhead failure service check" on page 775.
114.91j	Y printhead failure.	See "Printhead failure service check" on page 775.
115.00a	All printheads failure (CMYK).	See "Printhead failure service check" on page 775.
115.00b	All printheads failure (CMYK).	See "Printhead failure service check" on page 775.

Printhead failure service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the printhead for improper installation and damage.
2. Clean the printhead with the printhead cleaner.
3. Reseat the cables.
4. Move the affected printhead to a different printhead color to see if the error still occurs.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Replace the affected printhead.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Check the printhead cable for improper installation and damage.

Is the cable properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the printhead cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Check the black plane card for improper installation and damage.
2. Reseat all cables.
3. Reseat the cards connected.

Is the card properly installed and free of damage?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the black plane card.

Does the problem remain?

- **Yes:**
Contact the next level of support

- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the halftone controller board for improper installation and damage.
2. Reseat all cables.

Is the board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

9. Replace the halftone controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

12y errors

12y error messages

12y error messages

Error code	Description	Action
120.80a	The motor (fuser) does not turn on.	See "Motor (fuser) failure to turn on service check" on page 812.
120.80b	Motor (fusing drive) revolution failure was detected.	See "Motor (fusing drive) error service check" on page 815.
120.82	The motor (fuser) failed to achieve the expected speed.	See "Motor (fusing drive) error service check" on page 815.
120.83	The motor (fuser) stalled.	See "Motor (fuser) stall service check" on page 809.
121.00	The fuser failed to reach the required temperature during warm up.	See "Fuser temperature issues service check" on page 788.
121.01	During an attempt to heat up, the fuser was not detected.	See "Fuser not installed error service check" on page 780.
121.03	The fuser hardware and driver are mismatched.	See "Fuser hardware mismatch error service check" on page 784.
121.11	The fuser reached the required temperature (during final EWC/line voltage detection) too late.	See "Fuser temperature issues service check" on page 788.
121.13	The fuser reached the required temperature (during final EWC/line voltage detection) too fast.	See "Fuser temperature issues service check" on page 788.
121.14	The fuser is heating too fast.	See "Fuser temperature issues service check" on page 788.

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Error code	Description	Action
121.16	The fuser measured heater power is too low.	See "Fuser measured heater power issues service check" on page 792.
121.17	A fuser heater error (runaway on LV machine) was detected.	See "Fuser temperature issues service check" on page 788.
121.50	The fuser has gotten too hot.	See "Fuser temperature issues service check" on page 788.
121.56	The fuser temperature is out of range (middle thermistor).	See "Fuser temperature issues service check" on page 788.
121.57	The fuser temperature change rate is out of range (middle thermistor).	See "Fuser temperature issues service check" on page 788.
121.58	The fuser temperature is out of range (edge thermistor).	See "Fuser temperature issues service check" on page 788.
121.59	The fuser temperature change rate is out of range (edge thermistor).	See "Fuser temperature issues service check" on page 788.
121.71	An open fuser main heater thermistor was detected.	See "Fusing thermostat broken service check" on page 796.
121.99	A fuser wrap was detected.	See "Fuser wrap (paper detected issues) service check" on page 800.
126.20	The fuser power supply failed.	See "Fuser power supply failure service check" on page 806.
127.01	The main HVPS was not detected.	See "Main HVPS not detected error service check" on page 804.
129.03	Black ATC sensor malfunction.	See "ATC sensor malfunction service check (Y toner)" on page 765.
129.13	Cyan ATC sensor malfunction.	See "ATC sensor malfunction service check (Y toner)" on page 765.

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Error code	Description	Action
129.23	Magenta ATC sensor malfunction.	See "ATC sensor malfunction service check (Y toner)" on page 765.
129.33	Yellow ATC sensor malfunction.	See "ATC sensor malfunction service check (Y toner)" on page 765.

Fuser not installed error service check

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the induction heater for proper installation and damage.
2. Reseat the cable.

Is the induction heater properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 8.
- **No:**
The problem is solved.

7. Replace the induction heater.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 10.

9. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**

Go to step 11.

- **No:**

The problem is solved.

10. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Check the induction heater power supply cable for damage.
2. Reseat the cable at both ends.

Is the induction heater power supply cable free of damage and properly connected?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the induction heater power supply cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**

Go to step 15.

- **No:**

Go to the next step.

14. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Perform the following tests:

1. Check if the input power voltage is compatible with the AC voltage board.
2. Check the AC voltage board for damage.
3. Reseat all cables.

Is the AC voltage board free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the AC voltage board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Fuser hardware mismatch error service check

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the induction heater for proper installation and damage.
2. Reseat the cable.

Is the induction heater properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 8.
- **No:**
The problem is solved.

7. Replace the induction heater.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 10.

9. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**

Go to step 11.

- **No:**

The problem is solved.

10. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Check the induction heater power supply cable for damage.
2. Reseat the cable at both ends.

Is the induction heater power supply cable free of damage and properly connected?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the induction heater power supply cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**

Go to step 15.

- **No:**

Go to the next step.

14. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Perform the following tests:

1. Check if the input power voltage is compatible with the AC voltage board.
2. Check the AC voltage board for damage.
3. Reseat all cables.

Is the AC voltage board free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the AC voltage board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Fuser temperature issues service check

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the induction heater for proper installation and damage.
2. Reseat the cable.

Is the induction heater properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 8.
- **No:**
The problem is solved.

7. Replace the induction heater.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 10.

9. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**

Go to step 11.

- **No:**

The problem is solved.

10. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Check the induction heater power supply cable for damage.
2. Reseat the cable at both ends.

Is the induction heater power supply cable free of damage and properly connected?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the induction heater power supply cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**

Go to step 15.

- **No:**

Go to the next step.

14. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Perform the following tests:

1. Check if the input power voltage is compatible with the AC voltage board.
2. Check the AC voltage board for damage.
3. Reseat all cables.

Is the AC voltage board free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the AC voltage board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Fuser measured heater power issues service check

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the induction heater for proper installation and damage.
2. Reseat the cable.

Is the induction heater properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 8.
- **No:**
The problem is solved.

7. Replace the induction heater.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 10.

9. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**

Go to step 11.

- **No:**

The problem is solved.

10. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Check the induction heater power supply cable for damage.
2. Reseat the cable at both ends.

Is the induction heater power supply cable free of damage and properly connected?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the induction heater power supply cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**

Go to step 15.

- **No:**

Go to the next step.

14. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Perform the following tests:

1. Check if the input power voltage is compatible with the AC voltage board.
2. Check the AC voltage board for damage.
3. Reseat all cables.

Is the AC voltage board free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the AC voltage board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Fusing thermostat broken service check

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the induction heater for proper installation and damage.
2. Reseat the cable.

Is the induction heater properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 8.
- **No:**
The problem is solved.

7. Replace the induction heater.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 10.

9. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**

Go to step 11.

- **No:**

The problem is solved.

10. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Check the induction heater power supply cable for damage.
2. Reseat the cable at both ends.

Is the induction heater power supply cable free of damage and properly connected?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the induction heater power supply cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**

Go to step 15.

- **No:**

Go to the next step.

14. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Perform the following tests:

1. Check if the input power voltage is compatible with the AC voltage board.
2. Check the AC voltage board for damage.
3. Reseat all cables.

Is the AC voltage board free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the AC voltage board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Fuser wrap (paper detected issues) service check

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the induction heater for proper installation and damage.
2. Reseat the cable.

Is the induction heater properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 8.
- **No:**
The problem is solved.

7. Replace the induction heater.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 10.

9. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**

Go to step 11.

- **No:**

The problem is solved.

10. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

11. Perform the following tests:

1. Check the induction heater power supply cable for damage.
2. Reseat the cable at both ends.

Is the induction heater power supply cable free of damage and properly connected?

- **Yes:**

Go to step 13.

- **No:**

Go to the next step.

12. Replace the induction heater power supply cable.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

13. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**

Go to step 15.

- **No:**

Go to the next step.

14. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

15. Perform the following tests:

1. Check if the input power voltage is compatible with the AC voltage board.
2. Check the AC voltage board for damage.
3. Reseat all cables.

Is the AC voltage board free of damage?

- **Yes:**
Go to step 17.

- **No:**
Go to the next step.

16. Replace the AC voltage board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

17. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

18. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Main HVPS not detected error service check

1. Perform the following tests:

1. Turn off the printer.
2. Check all optional tray and finisher connections to the printer.
3. Reseat cables connected to the printer.
4. Check if the power cords for both printer and options have the correct input voltage.
5. Turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.

2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Fuser power supply failure service check

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the induction heater power supply cable for damage.
2. Reseat the cable at both ends.

Is the induction heater power supply cable free of damage and properly connected?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace the induction heater power supply cable.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

7. Perform the following tests:

1. Check if the input power voltage is compatible with the AC voltage board.
2. Check the AC voltage board for damage.
3. Reseat all cables.

Is the AC voltage board free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the AC voltage board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

10. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Motor (fuser) stall service check

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for proper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the motor (fusing drive) for proper installation and damage.
2. Reseat the cable.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Motor tests > Fuser**.

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**

Go to step 12.

- **No:**

Go to the next step.

11. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Motor (fuser) failure to turn on service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for improper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then touch **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Pressure roller latch**.

Did the motor run?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor (fuser pressure roller) for improper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.

- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 10.

- **No:**
Go to the next step.

9. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the engine board for improper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

11. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Motor (fusing drive) error service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fuser, connectors, and paper guides for improper installation and damage.
2. Check the fuser rollers for paper jams.
3. Reseat the fuser.

Is the fuser properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then touch **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the motor (fusing drive) for improper installation and damage.
2. Reseat the cable.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
 - **No:**
Go to step 7.
6. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Motor tests > Fuser**.
- Did the motor run?
- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check engine board cable 1 for improper installation and damage.
- Is the cable properly installed and free of damage?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Replace the engine board cable 1.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Perform the following tests:
1. Check the engine board for improper installation and damage.
 2. Reseat all cables on the engine board.
- Is the engine board properly installed and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
11. Replace the engine board.
- Does the problem remain?
- **Yes:**

- Contact the next level of support.
- **No:**
The problem is solved.

ATC sensor malfunction service check

1. Perform the following tests:

1. Turn off the printer.
2. Check if the correct voltage is supplied to the printer.
3. Check if the fuser voltage is compatible with the input voltage.
4. Check the printer for damage.
5. Reseat the power cord.
6. Perform a POR.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check if the toner cartridge is compatible with the printer.
2. Check the toner cartridge for proper installation, damage, or leaks.
3. Check if there is enough toner in the toner cartridge.
4. Check if the toner contacts are clean and not contaminated.

Is the toner cartridge properly installed, in good condition, and compatible with the printer?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the toner cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > ATC error reset >** find the error.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the developer assembly for proper installation and damage.
2. Check if there is enough developer carrier powder in the developer.

3. Check the ATC sensor and high voltage contact in the developer assembly for damage and contamination.
4. Reseat all cables.

Is the developer assembly free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the developer assembly.

NOTES

After replacing the developer assembly, perform ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Imaging process adjustment >** find the adjustment.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:
 1. Check the toner dispenser K for proper installation and damage.
 2. Check if the dispenser pipe outlet and developer toner inlet are properly aligned.
 3. Check for toner in the dispenser pipe.

Is the toner dispenser K properly installed and free of damage and blockage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the toner dispenser K.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:
 1. Check the toner dispenser C for proper installation and damage.
 2. Check if the dispenser pipe outlet and developer toner inlet are properly aligned.
 3. Check for toner in the dispenser pipe.

Is the toner dispenser C properly installed and free of damage and blockage?

- **Yes:**
Go to step 11.
 - **No:**
Go to the next step.
10. Replace the toner dispenser C.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
11. Perform the following tests:
1. Check the toner dispenser M for proper installation and damage.
 2. Check if the dispenser pipe outlet and developer toner inlet are properly aligned.
 3. Check for toner in the dispenser pipe.
- Is the toner dispenser M properly installed and free of damage and blockage?
- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the toner dispenser M.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Perform the following tests:
1. Check the toner dispenser M for proper installation and damage.
 2. Check if the dispenser pipe outlet and developer toner inlet are properly aligned.
 3. Check for toner in the dispenser pipe.
- Is the toner dispenser M properly installed and free of damage and blockage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the toner dispenser M.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Perform the following tests:

1. Check the main drive for proper installation and damage.
2. Reseat all cables.

Is the main drive properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 17.

16. Check if each motor works. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > motor tests >** find the motor.

Does the problem remain?

- **Yes:**
Go to step 18.
- **No:**
The problem is solved.

17. Replace the main drive.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Check the developer HVPS for voltage compatibility, proper installation, and damage.
2. Check if the high voltage contacts are aligned.
3. Reseat all cables.

Is the developer HVPS properly installed and free of damage?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

19. Replace the developer HVPS.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

20. Perform the following tests:

1. Check the charge roller HVPS for voltage compatibility, proper installation, and damage.
2. Check if the high voltage contacts are aligned.
3. Reseat all cables.

Is the charge roller HVPS properly installed and free of damage?

- **Yes:**
Go to step 22.
 - **No:**
Go to the next step.
21. Replace the charge roller HVPS.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
22. Perform the following tests:
1. Check the cables for damage.
 2. Check the connectors for damage.
- Are the cables free of damage?
- **Yes:**
Go to step 24.
 - **No:**
Go to the next step.
23. Replace damaged cables. See the parts catalog section for specifications.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
24. Perform the following tests:
1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.
- Is the engine board properly installed and free of damage?
- **Yes:**
Contact the next level of support.
 - **No:**
Go to the next step.
25. Replace the engine board.
- Does the problem remain?
- **Yes:**
Contact the next level of support.
 - **No:**
The problem is solved.

13y-15y errors

13y-15y error messages

13y-15y error messages

Error code	Description	Action
136.80a	K developer drive motor does not turn on.	See "K developer motor failure to turn on service check" on page 825.
136.80b	K developer drive motor does not turn on.	See "K developer motor failure to turn on service check" on page 825.
137.80a	C (or CMY) developer drive motor does not turn on.	See "CMYK motors failure service check" on page 828.
137.80b	C (or CMY) developer drive motor does not turn on.	See "CMYK motors failure service check" on page 828.
137.80c	C (or CMY) developer drive motor does not turn on.	See "CMYK motors failure service check" on page 828.
141.80a	K (or KCMY) photoconductor motor does not turn on.	See "CMYK motors failure service check" on page 828.
141.80b	K (or KCMY) photoconductor motor does not turn on.	See "CMYK motors failure service check" on page 828.
155.80	K bottle motor does not turn on.	See "Motor (toner supply) failure service check" on page 831.
156.80	C bottle motor does not turn on.	See "Motor (toner supply) failure service check" on page 831.
157.80	M bottle motor does not turn on.	See "Motor (toner supply) failure service check" on page 831.

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Error code	Description	Action
158.80	Y bottle motor does not turn on.	See "Motor (toner supply) failure service check" on page 831.

K developer motor failure to turn on service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the main drive for improper installation and damage.
2. Reseat all cables.

Is the main drive properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Check if each motor works. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > motor tests >** find the motor.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the main drive.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Check the transfer belt for improper installation, contamination, obstruction, and damage.

Is the transfer roller properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the transfer belt.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the photoconductor drum for improper installation, damage, and leaks.
2. Check if the photoconductor drum is supported.
3. Make sure the contacts are clean and free of contamination.

Is the photoconductor drum properly installed, supported, and free of damage, leaks, and contamination?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the photoconductor drum.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

1. Check the developer assembly for improper installation and damage.
2. Check if there is enough developer carrier powder in the developer.
3. Check the ATC sensor and high voltage contact in the developer assembly for damage and contamination.
4. Reseat all cables.

Is the developer assembly free of damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the developer assembly.

NOTES

After replacing the developer assembly, perform ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Imaging process adjustment >** find the adjustment.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the engine board for improper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

14. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

CMYK motors failure service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the main drive for improper installation and damage.
2. Reseat all cables.

Is the main drive properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Check if each motor works. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > motor tests >** find the motor.

Does the problem remain?

- **Yes:**
Go to step 5.
- **No:**
The problem is solved.

4. Replace the main drive.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the photoconductor drum for improper installation, damage, and leaks.
2. Check if the photoconductor drum is supported.
3. Make sure the contacts are clean and free of contamination.

Is the photoconductor drum properly installed, supported, and free of damage, leaks, and contamination?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the photoconductor drum.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the developer assembly for improper installation and damage.
2. Check if there is enough developer carrier powder in the developer.
3. Check the ATC sensor and high voltage contact in the developer assembly for damage and contamination.
4. Reseat all cables.

Is the developer assembly free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the developer assembly.

NOTES

After replacing the developer assembly, perform ATC sensor and developer ATC adjustments. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Imaging process adjustment >** find the adjustment.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

1. Check the engine board for improper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Motor (toner supply) failure service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check if the toner cartridge is compatible with the printer.
2. Check the toner cartridge for improper installation, damage, or leaks.
3. Check if there is enough toner in the toner cartridge.
4. Check if the toner contacts are clean and not contaminated.

Is the toner cartridge properly installed, in good condition, and compatible with the printer?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the toner cartridge.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the damaged cables and connectors. See the Parts catalog for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Find the motor for the color you want to test (toner supply).

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Check the toner dispenser drive assembly for improper installation and damage.

Is the assembly properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the toner dispenser drive assembly.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the engine board for improper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

10. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

17y-18y errors

17y-18y error messages

17y error messages

Error code	Description	Action
171.82	Main fan error.	See "Fan errors service check" on page 835.
172.82	LVPS fan error.	See "Fan errors service check" on page 835.
173.82	Toner cartridge fan error.	See "Fan errors service check" on page 835.
176.82	LH fan error.	See "Fan errors service check" on page 835.
177.82	FH fan error.	See "Fan errors service check" on page 835.
178.82	P1 fan error.	See "Fan errors service check" on page 835.
179.82	P2 fan error.	See "Fan errors service check" on page 835.
180.82	Exhaust fan error.	See "Fan errors service check" on page 835.
181.82	M fan error.	See "Fan errors service check" on page 835.
182.82	Fuser power supply fan error.	See "Fan errors service check" on page 835.
183.82	Toner exhaust fan error.	See "Fan errors service check" on page 835.

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Continued from page 833

Error code	Description	Action
184.82	Marking fan error.	See "Fan errors service check" on page 835.

Fan errors service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the fan for damage and obstruction.
2. Reseat the cables.

Is the fan free of damage and obstruction?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Printer diagnostics and adjustments > Motor tests**.
2. Select the fan.

Did the fan operate?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the fan.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the cables for damage.
2. Check the connectors for damage.

Are the cables free of damage?

- **Yes:**
Go to step 7.

- **No:**

Go to the next step.

6. Replace damaged cables. See the parts catalog section for specifications.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

9yy errors

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.

NOTES

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

A. Collecting the history information from the SE menu

NOTES

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**.

- `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. Email the text file to your next level of support.

B. Collecting the firmware logs (Fwdebug and logs.tar.gz) from the SE menu

- 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**.

NOTES

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. Email the logs to your next level of support.

NOTES

To download the FWdebug log to a flash drive, see [See "" on page 0](#).

C. Collecting the settings from the Menu Settings Page

NOTES

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)

NOTES

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`, 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. Email 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
2. Print the Menu Settings Page, and then email a scanned copy of the page to your next level of support.

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 error messages

900 error messages

Error code	Description	Action
900.yy	RIP firmware errors.	See See "System software error service check" on page 841.

System software error service check

Different types of 900.xx errors can occur. There may be a communication problem (bad cable, network connection, and software issues), or a hardware problem with the controller board. Check the communication and software problems first. Determine if the problem is constant or intermittent. Use the following troubleshooting procedure to isolate the issue. Take notes as instructed. You will need that information in the event that you need to contact your next level of support.

Before troubleshooting:

1. Perform the [See "Procedure before starting the 9yy service checks" on page 837.](#)
2. Determine the operating system used when the error occurred. If possible, determine whether a PostScript or PCL file was sent to the printer when the error occurred. Ask the customer which Lexmark Solutions applications are installed on the printer.

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
2. Perform the following tests:
 1. Upgrade the firmware.

NOTES

Contact your next level of support for the correct firmware level to use.

2. Reset the printer.
3. Perform a print job.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
3. Perform the following tests:
 1. Check all the cables for damage.
 2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Go to step 5.

- **No:**

Go to the next step.

4. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

5. Perform the following tests:

1. Perform a POR.
2. Disconnect all output and electronic options.
3. Reseat all cables.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

6. Check if the controller board jumper is set to the correct engine (SFP or MFP).

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

940-950 error messages

940-950 error messages

Error code	Description	Action
940.00	RIP to engine communication failure (controller board and MCU board).	See "System software error service check" on page 841.
940.01a	RIP to engine communication failure (software configuration mismatch).	See "System software error service check" on page 841.
940.01b	RIP to engine communication failure (different type of MCU board software installed).	See "System software error service check" on page 841.
940.00a 940.00b 940.00c	RIP to engine communication failure (controller board and engine board).	See "RIP to engine communication failure service check" on page 846.
940.90a 940.90b 940.90c 940.90d	RIP to engine communication failure. Irregular output of data from the controller board was detected.	See "RIP to engine communication failure 2 service check" on page 849.
941.00a	Engine board failure. Power off fail.	See "Engine board failure 15 service check" on page 902.
941.00b	A fatal error was detected in marking control.	See "Engine board failure 9 service check" on page 889.
941.00c	A fatal error was detected in the tray module.	See "Engine board failure 10 service check" on page 891.
941.01a	Incorrect NVM installed.	See "Engine board failure 11 service check" on page 894.

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Error code	Description	Action
941.01c	NVM access error.	See See "Engine board failure 11 service check" on page 894.
941.01e	NVM values are not in their specified addresses.	See See "Engine board failure 11 service check" on page 894.
941.01d	NVM write/read verify error has occurred.	See See "Engine board failure 12 service check" on page 896.
941.70a	Unable to read/write to the video ASIC.	See See "Engine board failure 12 service check" on page 896.
941.70b	Broken access in units of bytes was detected during CS negate.	See See "Engine board failure 12 service check" on page 896.
941.71	Interface error between engine board and induction heater power supply detected.	See See "Engine board failure service check" on page 852.
941.81	Fuse 1 on the engine board has blown.	See See "Engine board failure 2 service check" on page 854.
941.82	Fuse 2 on the engine board has blown.	See See "Engine board failure 4 service check" on page 861.
941.83	Fuse 3 on the engine board has blown.	See See "Engine board failure 3 service check" on page 857.
941.85	Fuse 5 on the engine board has blown.	See See "Engine board failure 5 service check" on page 863.
941.87	Fuse 7 on the engine board has blown.	See See "Engine board failure 6 service check" on page 865.
941.88	Fuse 8 on the engine board has blown.	See See "Engine board failure 7 service check (printer and 2 x 520-sheet optional tray)" on page 868 or See "Engine board failure 7 service check (printer and 2000-sheet tandem tray)" on page 871.

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Error code	Description	Action
941.89	Fuse 9 on the engine board has blown (communication to staple finisher).	See "Engine board failure 15 service check" on page 902.
941.90	Fuse 10 on the engine board has blown (communication to 2000-sheet tray).	See "Engine board failure 16 service check" on page 904
941.91a	Fuse 11 on the engine board has blown.	See "Engine board failure 13 service check" on page 899.
941.93a	Fuse 13 on the engine board has blown.	See "Engine board failure 14 service check" on page 900.
941.99	Fuse 21 on the engine board has blown.	See "Engine board failure 8 service check (printer and 2 x 520-sheet optional tray)" on page 875 or "Engine board failure 8 service check (printer and 2000-sheet tandem tray)" on page 882.
950.20	Engine factory data mismatch.	See "Halftone controller board removal" on page 1216.

RIP to engine communication failure service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the halftone and motor drive FFC cable for damage.
2. Reseat the cable at both ends.

Is the cable properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Check the half-tone controller board for proper installation and damage.
2. Reseat all cables.

Is the board properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the half-tone controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Perform a POR.
2. Disconnect all output and electronic options.
3. Reseat all cables.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check if the controller board jumper is set to the correct engine (SFP or MFP).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

11. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

RIP to engine communication failure 2 service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Upgrade the firmware.

NOTES

Contact your next level of support for the correct firmware level to use.

2. Reset the printer.
3. Perform a print job.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check all the cables for damage.
 2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the halftone and motor drive FFC cable for damage.

2. Reseat the cable at both ends.

Is the cable properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Perform a POR.
2. Disconnect all output and electronic options.
3. Reseat all cables.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check if the controller board jumper is set to the correct engine (SFP or MFP).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the black plane card for proper installation and damage.
2. Reseat all cables.
3. Reseat the cards connected.

Is the card properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

10. Replace the black plane card.

Does the problem remain?

- **Yes:**
Contact the next level of support

- **No:**
The problem is solved.

Engine board failure service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Upgrade the firmware.

NOTES

Contact your next level of support for the correct firmware level to use.

2. Reset the printer.
3. Perform a print job.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check all the cables for damage.
 2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the induction heater power supply for proper installation and damage.

2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 8.
- **No:**
The problem is solved.

7. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

9. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Engine board failure 2 service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Fuser power supply cooling fan.**

Did the fuser power supply cooling fan operate?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the fan for proper installation, obstruction, and damage.
 2. Reseat all cables.

Is the fan properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the fuser power supply cooling fan.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Toner cartridge fan.**

Did the fan operate?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the fan for proper installation, obstruction, and damage.
2. Reseat all cables.

Is the fan properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the fan.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Toner cartridge exhaust fan.**

Did the fan operate?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

9. Perform the following tests:

1. Check the fan for proper installation, obstruction, and damage.
2. Reseat all cables.

Is the fan properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the fan.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**
Go to step 15.

- **No:**
Go to the next step.

14. Replace the LVPS.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

15. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

16. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Engine board failure 3 service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the fan operate?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:
 1. Check the fan for proper installation, obstruction, and damage.
 2. Reseat all cables.

Is the fan properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the fan.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the jam door cooling fan for proper installation, obstruction, and damage.
 2. Reseat all cables.

Is the fan properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Replace the fan.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Fuser power supply cooling fan.**

Did the fuser power supply cooling fan operate?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the fan for proper installation, obstruction, and damage.
2. Reseat all cables.

Is the fan properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the fuser power supply cooling fan.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Front right cooling fan.**

Did the fan operate?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

11. Perform the following tests:

1. Check the fan for proper installation, obstruction, and damage.
2. Reseat all cables.

Is the fan properly installed and free of damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the fan.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 16.

- **No:**
Go to the next step.

14. Check the bin 1 diverter solenoid for proper installation and damage.

Is the solenoid properly installed and free of damage?

- **Yes:**
Go to step 16.

- **No:**
Go to the next step.

15. Replace the exit 2 transport unit.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

16. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 18.

- **No:**
Go to the next step.

17. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

18. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

19. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Engine board failure 4 service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the transfer roller clutch for proper installation and damage.

Is the transfer roller clutch properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the motor (fusing drive).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Check the image density shutter solenoid for proper installation and damage.

Is the solenoid properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the image density sensor assembly.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Check the EP area cooling fan for proper installation, obstruction, and damage.
2. Reseat all cables.

Is the fan properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the fan.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

11. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Engine board failure 5 service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Pressure roller latch.**

Did the motor run?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the motor (fuser pressure roller) for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**
Go to step 7.
- **No:**

Go to the next step.

6. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

7. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Go to step 9.

- **No:**

Go to the next step.

8. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

9. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

10. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Engine board failure 6 service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

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

Did the motor run?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 2 offset.**

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the LVPS.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Engine board failure 7 service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat the cables at both ends.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the motor (2 x 520-sheet tray transport).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests.**
2. Find the motor (tray pick/lift).

Did the motor run?

- **Yes:**
Go to step 8.

- **No:**

Go to the next step.

6. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**

Go to step 8.

- **No:**

Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

8. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**

Go to step 10.

- **No:**

Go to the next step.

9. Replace the LVPS.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

10. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**

Go to step 12.

- **No:**

Go to the next step.

11. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Engine board failure 7 service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the motor for proper installation and damage.
2. Reseat all cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print.**
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 9.
- **No:**

Go to the next step.

6. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray motor tests > Tray 3 pick/lift.**

Did the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the 2000-sheet tandem tray feeder (tray 3) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2000-sheet tandem tray feeder (tray 3), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the 2000-sheet tandem tray feeder (tray 3).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Enter the Diagnostics menu, and then select **Input tray quick print.**
2. Select a paper source, and select whether to print a single or continuous test page.

Did the test page print correctly?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the 2000-sheet tandem tray horizontal transport (tray 4) for proper installation and damage.
2. Check the sensor flag for damage.
3. Check the pick and feed rollers for damage and contamination.
4. Reseat the cables.

Are the 2000-sheet tandem tray horizontal transport (tray 4), sensor flag, and pick and feed rollers properly installed and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the 2000-sheet tandem tray horizontal transport (tray 4).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Perform the following tests:
1. Check the LVPS for voltage compatibility and damage.
 2. Reseat the cables.
- Is the LVPS free from damage, and is voltage compatible?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Replace the LVPS.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Perform the following tests:
1. Check all the cables for damage.
 2. Check all the connectors for damage.
- Are all the cables and connectors free of damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the damaged cables and connectors. See the Parts Catalog section for details.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Perform the following tests:
1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

17. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Engine board failure 8 service check (printer and 2 x 520-sheet optional tray)

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray sensor tests > Jam door switch.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
2. Find the sensor (paper size).
3. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray sensor tests.**
4. Find the sensor (paper size).

For the 2 x 520-sheet optional tray:

1. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2 x 520-sheet tray sensor tests.**
2. Find the sensor (paper size).

Does the value change when you move the paper size actuator check?

- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
6. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the MPF tray for proper installation and damage.

Is the tray properly installed and free of damage?

- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Replace the MPF tray.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
11. Perform the following tests:
1. Check the motor for proper installation and damage.
 2. Reseat all cables.
- Is the motor properly installed and free of damage?
- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**
- Did the motor run?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
14. Check the transport drive for proper installation and damage.
- Is the transport drive installed and free of damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the transport drive.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**
- Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

17. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Find the motor (registration).

Did the motor run?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

18. Perform the following tests:

1. Check the motor (registration) for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

19. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 2 drive**.

Did the motor run?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.

21. Perform the following tests:

1. Check the motor (bin 2 drive) for proper installation and damage.
2. Reseat all cables.

Is the motor (bin 2 drive) properly installed and free of damage?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.
22. Replace the motor (bin 2 drive).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
23. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Duplex.**
- Did the motor run?
- **Yes:**
Go to step 26.
 - **No:**
Go to the next step.
24. Perform the following tests:
1. Check the motor for proper installation and damage.
 2. Reseat all cables.
- Is the motor properly installed and free of damage?
- **Yes:**
Go to step 26.
 - **No:**
Go to the next step.
25. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
26. Perform the following tests:
1. Check the fuser, connectors, and paper guides for proper installation and damage.
 2. Check the fuser rollers for paper jams.
 3. Reseat the fuser.
- Is the fuser properly installed and free of damage?
- **Yes:**
Go to the next step.
 - **No:**
Go to step 28.
27. Perform the following tests:
1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.

2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then touch **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 29.
- **No:**
The problem is solved.

28. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

29. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 31.

30. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 32.
- **No:**
The problem is solved.

31. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

32. Perform the following tests:

1. Check all the cables for damage.

2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 34.
- **No:**
Go to the next step.

33. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

34. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

35. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Engine board failure 8 service check (printer and 2000-sheet tandem tray)

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests > Jam door switch.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation, obstruction, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests.**
2. Find the sensor (paper size).
3. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests.**
4. Find the sensor (paper size).

For the 2000-sheet tandem tray:

1. Enter the Diagnostics menu, and then navigate to: **Additional input tray diagnostics > 2000-sheet tandem tray sensor tests.**
2. Find the sensor (paper size).

Does the value change when you move the paper size actuator check?

- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
6. Perform the following tests:
 1. Check the sensor for proper installation and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the MPF tray for proper installation and damage.

Is the tray properly installed and free of damage?

- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Replace the MPF tray.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Transport.**

Did the motor run?

- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
11. Perform the following tests:
1. Check the motor for proper installation and damage.
 2. Reseat all cables.
- Is the motor properly installed and free of damage?
- **Yes:**
Go to step 13.
 - **No:**
Go to the next step.
12. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
13. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Optional tray transport.**
- Did the motor run?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
14. Check the transport drive for proper installation and damage.
- Is the transport drive installed and free of damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the transport drive.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Sensor tests > Paper transport sensor tests > Registration.**
- Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

17. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests**.
2. Find the motor (registration).

Did the motor run?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

18. Perform the following tests:

1. Check the motor (registration) for proper installation and damage.
2. Make sure that the motor cables are properly connected and free of damage.
3. Reseat the motor cables.

Is the motor properly installed and free of damage?

- **Yes:**
Go to step 20.

- **No:**
Go to the next step.

19. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

20. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Bin 2 drive**.

Did the motor run?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.

21. Perform the following tests:

1. Check the motor (bin 2 drive) for proper installation and damage.
2. Reseat all cables.

Is the motor (bin 2 drive) properly installed and free of damage?

- **Yes:**
Go to step 23.

- **No:**
Go to the next step.
22. Replace the motor (bin 2 drive).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
23. Enter the Diagnostics menu, and then navigate to: **Printer diagnostics & adjustments > Motor tests > Duplex.**
- Did the motor run?
- **Yes:**
Go to step 26.
 - **No:**
Go to the next step.
24. Perform the following tests:
1. Check the motor for proper installation and damage.
 2. Reseat all cables.
- Is the motor properly installed and free of damage?
- **Yes:**
Go to step 26.
 - **No:**
Go to the next step.
25. Replace the motor.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
26. Perform the following tests:
1. Check the fuser, connectors, and paper guides for proper installation and damage.
 2. Check the fuser rollers for paper jams.
 3. Reseat the fuser.
- Is the fuser properly installed and free of damage?
- **Yes:**
Go to the next step.
 - **No:**
Go to step 28.
27. Perform the following tests:
1. Check the voltage compatibility of the fuser induction heater, induction heater power supply, AC voltage board, and input power.

2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then touch **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 29.
- **No:**
The problem is solved.

28. Replace the fuser.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

29. Perform the following tests:

1. Check the induction heater power supply for proper installation and damage.
2. Reseat the cables.

Is the induction heater power supply properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 31.

30. Perform the following tests:

1. Check the voltage compatibility of the induction heater, induction heater power supply, AC voltage board, and input power.
2. After confirming voltage compatibility, perform a fuser error reset. Enter the Diagnostics menu, and then select **Printer setup > Reset engine service error > Fuser error reset > Fuser 121.XX**.

Does the problem remain?

- **Yes:**
Go to step 32.
- **No:**
The problem is solved.

31. Replace the induction heater power supply.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

32. Perform the following tests:

1. Check all the cables for damage.

2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 34.
- **No:**
Go to the next step.

33. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

34. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

35. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Engine board failure 9 service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
2. Perform the following tests:
 1. Upgrade the firmware.

NOTES

Contact your next level of support for the correct firmware level to use.

2. Reset the printer.
3. Perform a print job.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
3. Perform the following tests:
 1. Check all the cables for damage.
 2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 5.
 - **No:**
Go to the next step.
4. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
5. Perform the following tests:
 1. Check the engine board for proper installation and damage.

2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace the engine board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

7. Perform the following tests:

1. Perform a POR.
2. Disconnect all output and electronic options.
3. Reseat all cables.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

8. Check if the controller card jumper is set to the correct engine (SFP or MFP).

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Engine board failure 10 service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Check all the cables for damage.
 2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:
 1. Check the halftone and motor drive FFC cable for damage.
 2. Reseat the cable at both ends.

Is the cable properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the engine board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the halftone controller board for proper installation and damage.
2. Reseat all cables.

Is the board properly installed and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the halftone controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Perform a POR.
2. Disconnect all output and electronic options.
3. Reseat all cables.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Check if the controller board jumper is set to the correct engine (SFP or MFP).

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Engine board failure 11 service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Upgrade the firmware.

NOTES

Contact your next level of support for the correct firmware level to use.

2. Reset the printer.
3. Perform a print job.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Find the printer NVM factory sheet.
 2. Note the NVM values for the printer.
 3. Enter the Diagnostics menu, and then navigate to: **Printer setup > NVM functions > Write NVM data.**
 4. Follow the instructions on the control panel.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:
 1. Check the halftone controller board for proper installation and damage.
 2. Reseat all cables.

Is the board properly installed and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

5. Replace the halftone controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Engine board failure 12 service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Upgrade the firmware.

NOTES

Contact your next level of support for the correct firmware level to use.

2. Reset the printer.
3. Perform a print job.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check all the cables for damage.
 2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the halftone and motor drive FFC cable for damage.

2. Reseat the cable at both ends.

Is the cable properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the halftone controller board for proper installation and damage.
2. Reseat all cables.

Is the board properly installed and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the halftone controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the black plane card for proper installation and damage.
2. Reseat all cables.
3. Reseat the cards connected.

Is the card properly installed and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the black plane card.

Does the problem remain?

- **Yes:**
Contact the next level of support
- **No:**

The problem is solved.

11. Perform the following tests:

1. Perform a POR.
2. Disconnect all output and electronic options.
3. Reseat all cables.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

12. Check if the controller card jumper is set to the correct engine (SFP or MFP).

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Engine board failure 13 service check

1. Perform the following tests:
 1. Perform a POR.
 2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Check all the cables for damage.
 2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:
 1. Check the engine board for proper installation and damage.
 2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

5. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Engine board failure 14 service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the LVPS.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

7. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Engine board failure 15 service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Disconnect the finisher interface cable.

Does the problem remain?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Replace the finisher interface cable/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Replace the finisher controller board (depending on what is installed).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

8. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Engine board failure 16 service check

1. Perform the following tests:

1. Perform a POR.
2. Wait for 10 seconds, and then turn on the printer.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check all the cables for damage.
2. Check all the connectors for damage.

Are all the cables and connectors free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the damaged cables and connectors. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the 2000-sheet tray interface cable for damage and improper installation.
2. Reseat the cable.

Is the cable free of damage and properly installed?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the damaged cable. See the Parts Catalog for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Check the 2000-sheet tray controller board for proper installation and damage.

Is the board properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the LVPS for voltage compatibility and damage.
2. Reseat the cables.

Is the LVPS free from damage, and is voltage compatible?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the LVPS.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the engine board for proper installation and damage.
2. Reseat all cables on the engine board.

Is the engine board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

11. Replace the engine board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Finisher hardware errors

335 errors

335 error messages

335 error messages

Error code	Description	Action
335.53	The motor (staple finisher staple carriage position) stalled.	See "Motor (staple finisher staple carriage position) stalled service check" on page 911.
335.53a	The motor (booklet finisher staple unit carriage) stalled.	See "Motor (booklet finisher staple unit carriage) failure service check" on page 915.
335.53b	The motor (booklet finisher staple unit carriage) stalled.	See "Motor (booklet finisher staple unit carriage) failure service check" on page 915.
335.55	The motor (staple finisher staple carriage position) is too slow.	See "Motor (staple finisher staple carriage position) too slow service check" on page 907.
335.55a	The motor (booklet finisher staple unit carriage) is too slow.	See "Motor (booklet finisher staple unit carriage) failure service check" on page 915.
335.55b	The motor (booklet finisher staple unit carriage) is too slow.	See "Motor (booklet finisher staple unit carriage) failure service check" on page 915.

Motor (staple finisher staple carriage position) too slow service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open Finisher Front Door and turn knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher unit carriage position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher unit carriage position) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Select the **motor (inline staple unit carriage position).**

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher stapler head for proper installation.

Is the staple finisher stapler head properly installed?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Reseat the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher stapler head for damage.
2. Make sure that the staple finisher head cable is properly connected.

Is the staple finisher stapler head free of wear or damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Check the staple finisher drive unit for proper installation.

Is the staple finisher drive unit properly installed?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Reseat the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher drive unit for damage.
2. Check the staple finisher drive unit gears for wear or damage.

Are the staple finisher drive unit and its gears free of wear or damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Make sure that the staple finisher position bracket cables are properly connected.
2. Check the staple finisher position bracket for damage, wear, and obstruction.

Is the staple finisher position bracket free of damage, wear, and obstruction?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace the staple finisher position bracket.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Reseat the staple finisher stapler cable.
2. Check the staple finisher stapler cable for damage.

Is the staple finisher stapler cable free of damage?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

19. Replace the staple finisher stapler cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

20. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

21. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Motor (staple finisher staple carriage position) stalled service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open Finisher Front Door and turn knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher unit carriage position).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

3. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the motor (staple finisher unit carriage position) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 7.

6. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Select the **motor (inline staple unit carriage position).**

Did the motor run?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher stapler head for proper installation.

Is the staple finisher stapler head properly installed?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Reseat the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher stapler head for damage.
2. Make sure that the staple finisher head cable is properly connected.

Is the staple finisher stapler head free of wear or damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the staple finisher stapler head.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Check the staple finisher drive unit for proper installation.

Is the staple finisher drive unit properly installed?

- **Yes:**
Go to step 14.
- **No:**
Go to the next step.

13. Reseat the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

14. Perform the following tests:

1. Check the staple finisher drive unit for damage.
2. Check the staple finisher drive unit gears for wear or damage.

Are the staple finisher drive unit and its gears free of wear or damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the staple finisher drive unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Perform the following tests:

1. Make sure that the staple finisher position bracket cables are properly connected.
2. Check the staple finisher position bracket for damage, wear, and obstruction.

Is the staple finisher position bracket free of damage, wear, and obstruction?

- **Yes:**
Go to step 18.
- **No:**
Go to the next step.

17. Replace the staple finisher position bracket.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Reseat the staple finisher stapler cable.
2. Check the staple finisher stapler cable for damage.

Is the staple finisher stapler cable free of damage?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

19. Replace the staple finisher stapler cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

20. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

21. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Motor (booklet finisher staple unit carriage) failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Check the stapler head carriage for obstruction and debris.
2. Check the cable for any entanglement.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Staple unit carriage.**

Does the motor run?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the motor (booklet finisher staple unit carriage) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the motor (booklet finisher staple unit carriage).

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
6. Check the booklet finisher stapler rail base for proper installation, operation, and damage.
- Is the stapler rail base properly installed, operational, and free of damage?
- **Yes:**
Go to step 8.
 - **No:**
Go to the next step.
7. Replace the booklet finisher stapler rail base.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
8. Check the upper stopper bracket for proper installation, operation, and damage.
- Is the bracket properly installed, operational, and free of damage?
- **Yes:**
Go to step 10.
 - **No:**
Go to the next step.
9. Replace the upper stopper bracket.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
10. Perform the following tests:
1. Check the cables and connectors for proper connection and damage.
 2. Check the interface cables for proper connection and damage.
- Are the cables, connectors, and interface cables properly connected and free of damage?
- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the damaged cable/s. See the Parts Catalog section for details.
- Does the problem remain?
- **Yes:**
Go to the next step.

- **No:**

The problem is solved.

12. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

13. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

377 errors

377 error messages

377 error messages

Error code	Description	Action
377.60	The motor (staple finisher bin elevator) does not turn on (no trifold/Z-fold finisher).	See "Motor (staple finisher bin elevator) failure service check" on page 919.
377.70	The motor (staple finisher bin elevator) does not turn on (with trifold/Z-fold finisher).	See "Motor (staple finisher bin elevator) failure service check" on page 919.
377.60	The sensor (booklet finisher stack height 1 or 2) does not turn on/off within the set time (no trifold/Z-fold finisher).	See "Booklet finisher stacker tray failure service check" on page 922.
377.61	The booklet finisher stacker tray rose to an abnormal height (no trifold/Z-fold finisher).	See "Booklet finisher stacker tray failure service check" on page 922.
377.70	The sensor (booklet finisher stack height 1 or 2) does not turn on/off within the set time (with trifold/Z-fold finisher).	See "Booklet finisher stacker tray failure service check" on page 922.
377.71	The booklet finisher stacker tray rose to an abnormal height (with trifold/Z-fold finisher).	See "Booklet finisher stacker tray failure service check" on page 922.

Motor (staple finisher bin elevator) failure service check

1. Perform the following tests:

1. Open the left door, and then remove the jammed paper.
2. Open the upper left door, and then remove the jammed paper.
3. Remove the tray insert, and then remove the jammed paper.
4. Remove the jammed paper in the staple finisher bin.
5. Make sure that the staple finisher paper path is free from obstructions.
6. Make sure that the fuser area is free from obstructions.
7. Open Finisher Front Door and turn knob to remove any jammed paper.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the motor (staple finisher stacker bin) for proper installation and damage.

Is the motor properly installed and free of damage?

- **Yes:**
Go to the next step.
- **No:**
Go to step 4.

3. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Motor tests.**
2. Select the **motor (inline stacker bin).**

Did the motor run?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the motor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Enter the Diagnostics menu, and then navigate to: **Output device diagnostics > Sensor tests.**
2. Find the sensor (staple finisher stack height).

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

6. Perform the following tests:

1. Check the sensor for proper installation and damage.
2. Make sure that the sensor cable is properly connected and free of damage.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Check the staple finisher lift shaft unit for proper installation.

Is the staple finisher lift shaft unit properly installed?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Reseat the staple finisher lift shaft unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the staple finisher lift shaft unit for damage.
2. Check the staple finisher lift shaft unit gears and rollers for wear or damage.

Are the staple finisher lift shaft unit and its gears and rollers free of wear or damage?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

11. Replace the staple finisher lift shaft unit.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

12. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

13. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Booklet finisher stacker tray failure service check

1. Perform the following tests:

1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the booklet finisher stacker tray for proper installation and damage.

Is the tray properly installed and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the booklet finisher stacker tray.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stack height 2.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

5. Perform the following tests:

1. Check the sensor (booklet finisher stack height 2) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 7.
- **No:**

Go to the next step.

6. Replace the sensor (booklet finisher stack height 2).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

7. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stack height 1.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 10.

- **No:**
Go to the next step.

8. Perform the following tests:

1. Check the sensor (booklet finisher stack height 1) for proper installation, operation, and damage.
2. Make sure that the sensor cables are properly connected and free of damage.
3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 10.

- **No:**
Go to the next step.

9. Replace the sensor (booklet finisher stack height 1).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

10. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher sensor tests > Finisher sensor test > Stacker tray paper present.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

11. Perform the following tests:

1. Check the sensor (booklet finisher stacker tray paper present) for proper installation and damage.
2. Make sure that the sensor cables are properly connected and free of damage.

3. Reseat the sensor cables at both ends.

Is the sensor properly installed and free of damage?

- **Yes:**
Go to step 13.
- **No:**
Go to the next step.

12. Replace the sensor.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

13. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Booklet finisher motor tests > Stacker.**

Does the motor run?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

14. Perform the following tests:

1. Check the booklet finisher stacker bracket for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 16.
- **No:**
Go to the next step.

15. Replace the booklet finisher stacker bracket.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

16. Check the booklet finisher stacker belt for proper installation, operation, wear, and damage.

Is the belt properly installed, operational, and free of wear and damage?

- **Yes:**
Go to step 18.
- **No:**

Go to the next step.

17. Replace the booklet finisher stacker belt.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

18. Perform the following tests:

1. Check the cables and connectors for proper connection and damage.
2. Check the interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**

Go to step 20.

- **No:**

Go to the next step.

19. Replace the damaged cable/s. See the Parts Catalog section for details.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

20. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

21. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

38y errors

38y error messages

38y error messages

Error code	Description	Action
385.60	The trifold/Z-fold finisher fan does not turn on.	N/A
388.60	The sensor (trifold/Z-fold decurler home) does not turn on.	N/A

55y errors

55y error messages

55y error messages

Error code	Description	Action
550.23	The sensor (trifold/Z-fold transport 1) is not turned on by a fed sheet within the set time.	See "Sensor (trifold/Z-fold transport 1) failure service check" on page 929.
551.23	The sensor (trifold/Z-fold first fold) is not turned on by a fed sheet within the set time.	See "Sensor (trifold/Z-fold first fold) failure service check" on page 937.
552.23	The sensor (trifold/Z-fold second fold) is not turned on by a fed sheet within the set time.	See "Sensor (trifold/Z-fold second fold) failure service check" on page 942.
553.23	The sensor (trifold/Z-fold transport 2) is not turned on by a fed sheet within the set time.	See "Sensor (trifold/Z-fold transport 2) failure service check" on page 933.
553.25	The sensor (trifold/Z-fold second fold) is not turned off by a fed sheet within the set time.	See "Sensor (trifold/Z-fold second fold) failure 2 service check" on page 946.
555.23	The sensor (trifold/Z-fold exit) is not turned on within the set time by a folded sheet.	See "Sensor (trifold/Z-fold exit) failure service check" on page 949.
556.23	The sensor (trifold/Z-fold exit) is not turned on within the set time by a sheet that is not folded.	See "Sensor (trifold/Z-fold exit) failure 2 service check" on page 952.
557.23	The sensor (trifold/Z-fold first fold catch) is not turned on within the set time after the end guide starts to rise.	See "Sensor (trifold/Z-fold first fold catch) failure service check" on page 956.
557.25	The sensor (trifold/Z-fold first fold catch) is not turned off within the set time after	See "Sensor (trifold/Z-fold first fold catch) failure service check" on page 956.

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Continued from page 927

Error code	Description	Action
	the motor (first fold catch) starts.	
557.29	Trifold/Z-fold end guide undefined error.	See "Sensor (trifold/Z-fold first fold catch) failure service check" on page 956.
558.23	The sensor (trifold/Z-fold first fold catch) is not turned on within the set time after the operation starts.	See "Sensor (trifold/Z-fold first fold catch) failure 2 service check" on page 959.
558.25	The sensor (trifold/Z-fold first fold catch) is not turned off within the set time after the motor (second fold catch) starts.	See "Sensor (trifold/Z-fold first fold catch) failure 2 service check" on page 959.

Sensor (trifold/Z-fold transport 1) failure service check

1. Perform the following tests:
 1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > Transport 1.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (trifold/Z-fold transport 1) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (trifold/Z-fold transport 1).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Trifold diverter solenoid.**

Does the solenoid operate?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the trifold/Z-fold feed solenoid for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the solenoid properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the trifold/Z-fold feed solenoid.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the trifold/Z-fold diverter feed for proper installation, operation, and damage.

Is the feed properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the trifold/Z-fold diverter feed.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Feed and exit.**

Does the motor run?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

12. Perform the following tests:

1. Check the motor (trifold/Z-fold feed) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 14.

- **No:**
Go to the next step.

13. Replace the motor (trifold/Z-fold feed).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

14. Check the trifold/Z-fold finisher belts for proper installation, operation, wear, and damage.

Are the belts properly installed, operational, and free of wear and damage?

- **Yes:**
Go to step 16.

- **No:**
Go to the next step.

15. Replace the damaged belt/s.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

16. Check the trifold/Z-fold finisher gears for proper installation, contamination, and damage.

Are the gears properly installed and free of contamination and damage?

- **Yes:**
Go to step 18.

- **No:**
Go to the next step.

17. Replace the damaged gear/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Check the trifold/Z-fold finisher rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of contamination, wear, and damage?

- **Yes:**
Go to step 20.
- **No:**
Go to the next step.

19. Replace the affected roller/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

20. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

21. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (trifold/Z-fold transport 2) failure service check

1. Perform the following tests:
 1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > Transport 2.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (trifold/Z-fold transport 2) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (trifold/Z-fold transport 2).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Bin diverter solenoid.**

Does the solenoid operate?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the trifold/Z-fold bin diverter solenoid for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the solenoid properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the trifold/Z-fold bin diverter solenoid.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Transport 2.**

Does the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor (trifold/Z-fold transport 2) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the motor (trifold/Z-fold transport 2).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Check the trifold/Z-fold finisher paper path guides for proper installation, operation, and damage.
- Are the guides properly installed, operational, and free of damage?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Replace the affected paper path guide/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Check the trifold/Z-fold finisher rollers for proper installation, contamination, wear, and damage.
- Are the rollers properly installed and free of contamination, wear, and damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the affected roller/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Perform the following tests:
1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
 2. Reseat all cables.
- Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

17. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (trifold/Z-fold first fold) failure service check

1. Perform the following tests:
 1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > First fold.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (trifold/Z-fold first fold) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (trifold/Z-fold first fold).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Roller release solenoid.**

Does the solenoid operate?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the roller release solenoid for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the solenoid properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the roller release solenoid.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Transport 1.**

Does the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor (trifold/Z-fold transport 1) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the motor (trifold/Z-fold transport 1).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Transport 2.**
- Does the motor run?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
13. Perform the following tests:
1. Check the motor (trifold/Z-fold transport 2) for proper installation, operation, and damage.
 2. Make sure that the cables are properly connected and free of damage.
 3. Reseat the cables at both ends.
- Is the motor properly installed, operational, and free of damage?
- **Yes:**
Go to step 15.
 - **No:**
Go to the next step.
14. Replace the motor (trifold/Z-fold transport 2).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
15. Check the trifold/Z-fold finisher paper path guides for proper installation, operation, and damage.
- Are the guides properly installed, operational, and free of damage?
- **Yes:**
Go to step 17.
 - **No:**
Go to the next step.
16. Replace the affected paper path guide/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

17. Check the trifold/Z-fold finisher belts for proper installation, operation, wear, and damage.

Are the belts properly installed, operational, and free of wear and damage?

- **Yes:**
Go to step 19.
- **No:**
Go to the next step.

18. Replace the damaged belt/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

19. Check the trifold/Z-fold finisher gears for proper installation, contamination, and damage.

Are the gears properly installed and free of contamination and damage?

- **Yes:**
Go to step 21.
- **No:**
Go to the next step.

20. Replace the damaged gear/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

21. Check the trifold/Z-fold finisher rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of contamination, wear, and damage?

- **Yes:**
Go to step 23.
- **No:**
Go to the next step.

22. Replace the affected roller/s.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

23. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

24. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (trifold/Z-fold second fold) failure service check

1. Perform the following tests:
 1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > Second fold.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (trifold/Z-fold second fold) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (trifold/Z-fold second fold).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > C fold guide solenoid.**

Does the solenoid operate?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the trifold/Z-fold guide solenoid for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the solenoid properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the trifold/Z-fold guide solenoid.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Transport 2.**

Does the motor run?

- **Yes:**
Go to step 12.
- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor (trifold/Z-fold transport 2) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 12.
 - **No:**
Go to the next step.
11. Replace the motor (trifold/Z-fold transport 2).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Check the trifold/Z-fold finisher paper path guides for proper installation, operation, and damage.
- Are the guides properly installed, operational, and free of damage?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Replace the affected paper path guide/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Check the trifold/Z-fold finisher belts for proper installation, operation, wear, and damage.
- Are the belts properly installed, operational, and free of wear and damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the damaged belt/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Check the trifold/Z-fold finisher gears for proper installation, contamination, and damage.
- Are the gears properly installed and free of contamination and damage?
- **Yes:**
Go to step 18.
 - **No:**

Go to the next step.

17. Replace the damaged gear/s.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

18. Check the trifold/Z-fold finisher rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of contamination, wear, and damage?

- **Yes:**

Go to step 20.

- **No:**

Go to the next step.

19. Replace the affected roller/s.

Does the problem remain?

- **Yes:**

Go to the next step.

- **No:**

The problem is solved.

20. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

21. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Sensor (trifold/Z-fold second fold) failure 2 service check

1. Perform the following tests:
 1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > Second fold.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (trifold/Z-fold second fold) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (trifold/Z-fold second fold).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Bin diverter solenoid.**

Does the solenoid operate?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the trifold/Z-fold bin diverter solenoid for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the solenoid properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the trifold/Z-fold bin diverter solenoid.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the trifold/Z-fold finisher paper path guides for proper installation, operation, and damage.

Are the guides properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the affected paper path guide/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

11. Check the trifold/Z-fold finisher rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of contamination, wear, and damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the affected roller/s.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

14. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (trifold/Z-fold exit) failure service check

1. Perform the following tests:
 1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > Exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (trifold/Z-fold exit) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (trifold/Z-fold exit).

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Transport 2.**
- Does the motor run?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
7. Perform the following tests:
1. Check the motor (trifold/Z-fold transport 2) for proper installation, operation, and damage.
 2. Make sure that the cables are properly connected and free of damage.
 3. Reseat the cables at both ends.
- Is the motor properly installed, operational, and free of damage?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
8. Replace the motor (trifold/Z-fold transport 2).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
9. Check the trifold/Z-fold finisher paper path guides for proper installation, operation, and damage.
- Are the guides properly installed, operational, and free of damage?
- **Yes:**
Go to step 11.
 - **No:**
Go to the next step.
10. Replace the affected paper path guide/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.

11. Check the trifold/Z-fold finisher rollers for proper installation, contamination, wear, and damage.

Are the rollers properly installed and free of contamination, wear, and damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the affected roller/s.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

14. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Sensor (trifold/Z-fold exit) failure 2 service check

1. Perform the following tests:
 1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > Exit.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (trifold/Z-fold exit) for proper installation, operation, and damage.
 2. Make sure that the sensor cables are properly connected and free of damage.
 3. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (trifold/Z-fold exit).

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Bin diverter solenoid.**

Does the solenoid operate?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the trifold/Z-fold bin diverter solenoid for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the solenoid properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the trifold/Z-fold bin diverter solenoid.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Feed and exit.**

Does the motor run?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.

10. Perform the following tests:

1. Check the motor (trifold/Z-fold feed) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 12.

- **No:**
Go to the next step.
11. Replace the motor (trifold/Z-fold feed).
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
12. Check the trifold/Z-fold feed assembly for proper installation, operation, and damage.
- Is the assembly properly installed, operational, and free of damage?
- **Yes:**
Go to step 14.
 - **No:**
Go to the next step.
13. Replace the trifold/Z-fold feed assembly.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
14. Check the trifold/Z-fold finisher paper path guides for proper installation, operation, and damage.
- Are the guides properly installed, operational, and free of damage?
- **Yes:**
Go to step 16.
 - **No:**
Go to the next step.
15. Replace the affected paper path guide/s.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
16. Check the trifold/Z-fold finisher rollers for proper installation, contamination, wear, and damage.
- Are the rollers properly installed and free of contamination, wear, and damage?
- **Yes:**
Go to step 18.
 - **No:**
Go to the next step.

17. Replace the affected roller/s.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

18. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

19. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (trifold/Z-fold first fold catch) failure service check

1. Perform the following tests:
 1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > First fold catch.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the sensor (trifold/Z-fold first fold catch) for proper installation, operation, and damage.
 2. Check the mating actuator for damage and misalignment.
 3. Make sure that the sensor cables are properly connected and free of damage.
 4. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (trifold/Z-fold first fold catch).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > First fold catch.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor (first fold catch) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (first fold catch).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the trifold/Z-fold first fold assembly for proper installation, operation, and damage.

Is the assembly properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the trifold/Z-fold first fold assembly.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Sensor (trifold/Z-fold first fold catch) failure 2 service check

1. Perform the following tests:

1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > First fold catch.**

Does the sensor status change while toggling the sensor?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:

1. Check the sensor (first fold catch) for proper installation, operation, and damage.
2. Check the mating actuator for damage and misalignment.
3. Make sure that the sensor cables are properly connected and free of damage.
4. Reseat the sensor cables at both ends.

Is the sensor properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the sensor (first fold catch).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Second fold catch.**

Does the motor run?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

7. Perform the following tests:

1. Check the motor (trifold/Z-fold second fold catch) for proper installation, operation, and damage.
2. Make sure that the cables are properly connected and free of damage.
3. Reseat the cables at both ends.

Is the motor properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.
- **No:**
Go to the next step.

8. Replace the motor (trifold/Z-fold second fold catch).

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

9. Check the trifold/Z-fold second fold assembly for proper installation, operation, and damage.

Is the assembly properly installed, operational, and free of damage?

- **Yes:**
Go to step 11.
- **No:**
Go to the next step.

10. Replace the trifold/Z-fold second fold assembly.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

11. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

12. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

6yy errors

6yy error messages

6yy error messages

Error code	Description	Action
626.91	The trifold/Z-fold bin switch is not turned off within the set time after the trifold/Z-fold bin lock solenoid is turned on.	See "Trifold/Z-fold bin switch failure service check" on page 963.
626.92	After the door interlock open signal detected a closed status, power cannot be detected.	See "Door error (trifold/Z-fold and booklet finishers) service check" on page 966.

Trifold/Z-fold bin switch failure service check

1. Perform the following tests:
 1. Clear the printer and trifold/Z-fold finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the trifold/Z-fold finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher sensor tests > Bin open switch.**

Does the status change while toggling the switch?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

4. Perform the following tests:
 1. Check the trifold/Z-fold bin switch for proper installation, operation, and damage.
 2. Make sure that the switch cables are properly connected and free of damage.
 3. Reseat the switch cables at both ends.

Is the switch properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the trifold/Z-fold bin switch.

Does the problem remain?

- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
6. Enter the Diagnostics menu, and then touch: **Output device diagnostics > Trifold finisher motor tests > Bin lock solenoid.**
- Does the solenoid operate?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
7. Perform the following tests:
1. Check the trifold/Z-fold bin lock solenoid for proper installation, operation, and damage.
 2. Make sure that the cables are properly connected and free of damage.
 3. Reseat the cables at both ends.
- Is the solenoid properly installed, operational, and free of damage?
- **Yes:**
Go to step 9.
 - **No:**
Go to the next step.
8. Replace the trifold/Z-fold bin lock solenoid.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
9. Check the trifold/Z-fold bin lock solenoid spring for proper installation, operation, and damage.
- Is the spring properly installed, operational, and free of damage?
- **Yes:**
Go to step 11.
 - **No:**
Go to the next step.
10. Replace the trifold/Z-fold bin lock solenoid spring.
- Does the problem remain?
- **Yes:**
Go to the next step.
 - **No:**
The problem is solved.
11. Check the trifold/Z-fold bin for proper installation, operation, and damage.

Is the bin properly installed, operational, and free of damage?

- **Yes:**
Go to step 13.

- **No:**
Go to the next step.

12. Replace the trifold/Z-fold bin.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

13. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

14. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

Door error (trifold/Z-fold and booklet finishers) service check

1. Perform the following tests:
 1. Clear the printer and finishers of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the finishers' doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check if all doors are closed properly.
 2. Check each door sensor actuator for damage.
 3. Check the door switches for proper installation and damage.

Are the doors, actuators, and switches operational, properly installed, and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the non-working part/s. See the Parts Catalog for more details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Check the cables, connectors, and interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 7.

- **No:**
Go to the next step.

6. Replace the damaged cables, connectors, and interface cables. See the Parts Catalog for more details.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Go to step 9.

- **No:**
Go to the next step.

8. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Go to the next step.

- **No:**
The problem is solved.

9. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.

- **No:**
Go to the next step.

10. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.

- **No:**
The problem is solved.

980 errors

980 error messages

980 error messages

Error code	Description	Action
980.03a	Staple finisher communication failure.	See "Staple finisher communication failure service check" on page 970.
980.03b	Staple finisher communication failure.	See "Staple finisher communication failure service check" on page 970.
980.20a	Staple finisher communication failure.	See "Staple finisher communication failure service check" on page 970.
980.20b	Staple finisher communication failure.	See "Staple finisher communication failure service check" on page 970.
980.30a	Staple finisher communication failure.	See "Staple finisher communication failure service check" on page 970.
980.30b	Staple finisher communication failure.	See "Staple finisher communication failure service check" on page 970.
980.30c	Staple finisher communication failure.	See "Staple finisher communication failure service check" on page 970.
980.30d	Staple finisher communication failure.	See "Staple finisher communication failure service check" on page 970.
980.31a	Staple finisher software download failure.	See "Staple finisher software download failure service check" on page 971.

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Error code	Description	Action
980.31b	Staple finisher software download failure.	See "Staple finisher software download failure service check" on page 971.
980.31c	Staple finisher software download failure.	See "Staple finisher software download failure service check" on page 971.
980.31d	Staple finisher software download failure.	See "Staple finisher software download failure service check" on page 971.
980.31e	Staple finisher software download failure.	See "Staple finisher software download failure service check" on page 971.
980.31f	Staple finisher software download failure.	See "Staple finisher software download failure service check" on page 971.
980.31b	Booklet finisher software download failure.	See "Booklet finisher software download failure service check" on page 972.
980.31c	Software download failure (trifold/Z-fold finisher and booklet finisher).	See "Software download failure (trifold/Z-fold and booklet finishers) service check" on page 976.
980.33a	Communication failure detected between the printer and booklet finisher.	See "Booklet finisher communication failure service check" on page 974.
980.33b	Communication failure detected between the printer and booklet finisher.	See "Booklet finisher communication failure service check" on page 974.
980.33c	Communication failure (trifold/Z-fold finisher and booklet finisher).	See "Communication failure (trifold/Z-fold and booklet finishers) service check" on page 979.
980.34	Communication failure (printer and SHPF).	N/A

Staple finisher communication failure service check

1. Perform the following tests:
 1. Perform a POR.
 2. Reseat the staple finisher cable.
 3. Check the staple finisher cable for damage.

Is the staple finisher cable free of damage?

- **Yes:**
Go to step 3.
- **No:**
Go to the next step.

2. Replace the staple finisher cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check the controller board for proper installation and damage.
 2. Reseat all the connectors on the controller board.

Is the controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

4. Replace the controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Staple finisher software download failure service check

1. Make sure that the printer is using the latest firmware version, and update if necessary.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Perform a POR.
2. Reseat the staple finisher cable.
3. Check the staple finisher cable for damage.

Is the staple finisher cable free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the staple finisher cable.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the staple finisher controller board for proper installation and damage.
2. Reseat all the connectors on the controller board.

Is the staple finisher controller board properly installed and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

5. Replace the staple finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Booklet finisher software download failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Open the booklet finisher doors, and clear any paper jam.
 2. Check the paper path for debris and obstruction.
 3. Check if the jam doors and paper path doors can close properly.
 4. Remove paper from the output bin.
 5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Perform the following tests:
 1. Check the cables and connectors for proper connection and damage.
 2. Check the interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the damaged cable/s. See the Parts Catalog chapter for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:
 1. Check the control panel for error messages, and resolve the errors accordingly.
 2. Remove any paper jams.
 3. Ensure all doors are closed properly.

4. Update the printer firmware.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

6. Perform the following tests:

1. Check the booklet finisher booklet maker controller board for proper installation and damage.
2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**
Go to step 8.
- **No:**
Go to the next step.

7. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

9. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Booklet finisher communication failure service check

1. Perform the following tests:
 1. Clear the printer and booklet finisher of any jams, obstruction, and debris.
 2. Perform a POR for the printer.
 3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:
 1. Check the cables and connectors for proper connection and damage.
 2. Check the interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the damaged cable/s. See the Parts Catalog chapter for details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:
 1. Check the booklet finisher booklet maker controller board for proper installation and damage.
 2. Reseat all cables.

Is the controller board properly installed and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the booklet finisher booklet maker controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

6. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

7. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Software download failure (trifold/Z-fold and booklet finishers) service check

1. Perform the following tests:

1. Clear the printer and the finishers of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Perform the following tests:

1. Open the finishers' doors, and clear any paper jam.
2. Check the paper path for debris and obstruction.
3. Check if the jam doors and paper path doors can close properly.
4. Remove paper from the output bin.
5. Check the rollers for contamination and damage.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

3. Check the cables, connectors, and interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 5.
- **No:**
Go to the next step.

4. Replace the damaged cables, connectors, and interface cables. See the Parts Catalog for more details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

5. Perform the following tests:

1. Check the trifold/Z-fold LVPS for proper installation, operation, and damage.
2. Check the power cords and cables for damage and proper connection.
3. Reseat all cables.

Is the LVPS operational, and are the power cords and cables properly connected and free of damage?

- **Yes:**
Go to step 7.
- **No:**
Go to the next step.

6. Replace the non-working part. See the Parts Catalog for more details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

7. Perform the following tests:

1. Check the control panel for error messages, and resolve the errors accordingly.
2. Remove any paper jams.
3. Ensure that all doors are closed properly.
4. Update the printer firmware.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

8. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Go to step 10.
- **No:**
Go to the next step.

9. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

10. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**
Contact the next level of support.
- **No:**
Go to the next step.

11. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**
Contact the next level of support.
- **No:**
The problem is solved.

Communication failure (trifold/Z-fold and booklet finishers) service check

1. Perform the following tests:

1. Clear the printer and the finishers of any jams, obstruction, and debris.
2. Perform a POR for the printer.
3. Wait for 10 seconds.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

2. Check the cables, connectors, and interface cables for proper connection and damage.

Are the cables, connectors, and interface cables properly connected and free of damage?

- **Yes:**
Go to step 4.
- **No:**
Go to the next step.

3. Replace the damaged cables, connectors, and interface cables. See the Parts Catalog for more details.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**
The problem is solved.

4. Perform the following tests:

1. Check the trifold/Z-fold finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the controller board properly installed, operational, and free of damage?

- **Yes:**
Go to step 6.
- **No:**
Go to the next step.

5. Replace the trifold/Z-fold controller board.

Does the problem remain?

- **Yes:**
Go to the next step.
- **No:**

The problem is solved.

6. Perform the following tests:

1. Check the booklet finisher controller board for proper installation, operation, and damage.
2. Reseat all cables.

Is the booklet finisher controller board properly installed, operational, and free of damage?

- **Yes:**

Contact the next level of support.

- **No:**

Go to the next step.

7. Replace the booklet finisher controller board.

Does the problem remain?

- **Yes:**

Contact the next level of support.

- **No:**

The problem is solved.

Service menus

Understanding the printer control panel

Using the control panel

Use the features of the control panel to navigate easily through the printer functions and settings.



Control panel parts and their functions

	Control panel part	Function
1	Power button	<ul style="list-style-type: none"> • Turn on or turn off the printer. <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;"> <p>NOTES To turn off the printer, press and hold the power button for</p> </div>

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	Control panel part	Function
		<p>five seconds.</p> <ul style="list-style-type: none"> • Set the printer to Sleep or Hibernate mode. • Wake the printer from Sleep or Hibernate mode.
2	Display	<ul style="list-style-type: none"> • 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

The following information helps you learn about the status of your printer.

Indicator light color and its corresponding printer status

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.

Diagnosics menu

Entering the Diagnosics menu

NOTES

For a video demonstration, see [Entering the Diagnosics menu](#).

The Diagnosics menu contains tests that are used to help isolate printer issues.

1. From the home screen, touch the on-screen keypad.
2. Touch ****36**.
3. Touch the start icon or **OK**.

Entering the Diagnostics menu using the POR key

NOTES

For a video demonstration, see [Entering the Diagnostics menu](#).

1. Turn off the printer.
2. Open the front door, turn on the printer, and then close the front door when the loading icon appears.



3. On the control panel, touch **DIAGNOSTICS_MODE > Boot**.

Wait for the printer to boot and for the Diagnostics menu to appear.

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

Out of Service Erase

This setting allows erasure of nonvolatile memory, device and network settings, security settings, and embedded solutions.

1. Enter the Diagnostics menu, and then navigate to **Out of Service Erase**.
2. Touch **Start**.

- This process also destroys the encryption key that is used to protect user data. Destroying the encryption key makes the data irrecoverable.
- To erase volatile memory or buffered data in your printer, turn off the printer.

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

Panel Test

This test verifies whether the control panel display functions as designed. Enter the Diagnostics menu, and then touch **Panel Test > Start**.

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.
Enter the Diagnostics menu, and then navigate to:

Event Log > Print Log > Start

NOTES

Depending on the operational history of the printer, the events that appear in the report vary.

Print Log Summary

This setting lists a brief summary of the various printer events.
Enter the Diagnostics menu, and then navigate to:

Event Log > Print Log Summary > Start

NOTES

Depending on the operational history of the printer, the events that appear in the report vary.

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, 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.

Output device diagnostics

This setting allows running tests and making adjustments to the output devices and finishers connected to the printer.

1. Enter the Diagnostics menu, and then touch **Output device diagnostics**.
2. Select the output or finisher test or adjustment to run.
3. Follow the instructions on the screen, as needed.

Printer setup

Printed page count (mono)

This setting displays the number of pages printed in mono.

1. Enter the Diagnostics menu, and then select **Printer setup**.
2. View the printed page count for mono.

Printed page count (color)

This setting displays the number of pages printed in color.

1. Enter the Diagnostics menu, and then select **Printer setup**.
2. View the printed page count for color.

Permanent page count

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

1. Enter the Diagnostics menu, and then select **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.

NOTES

Contamination of the second transfer roller may result from printing up 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.

NOTES

This feature does not work in PPDS emulation.

Enable edge-to-edge (copy)

This setting determines whether the printer accepts the ADF or flatbed edge erase value when performing an ADF or flatbed copy.

1. Enter the Diagnostics menu, and then navigate to:
Printer setup > Enable edge-to-edge (copy)
2. Select a setting.

Processor ID

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

1. Enter the Diagnostics menu, and then select **Printer setup**.
2. View the processor ID.

Serial number

This setting shows the serial number of the printer.

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.

Reset Maintenance Counter

This setting enables resetting the counter after installing a new supply item or maintenance kit.

1. Enter the Diagnostics menu, and then navigate to:
Printer setup > Reset Maintenance Counter
2. Find the kit or item with the counter you want to reset.

Engine factory information

1. Enter the Diagnostics menu, and then navigate to:
Printer setup > Engine factory information
2. Choose **Restore engine factory information** or **Clear controller factory information**.

Reset engine service error

This setting allows the reset of toner cartridge and fuser errors.

1. Enter the Diagnostics menu, and then navigate to:
Printer setup > Reset engine service error
2. Choose **ATC error reset** or **Fuser error reset**.

NVM Functions

This setting features functions related to the printer's birth certificate data.

1. Enter the Diagnostics menu, and then navigate to:
Printer setup > NVM Functions
2. Choose whether to read, write, backup, or restore NVM data.

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 select **Input tray quick print**.
2. Select a paper source.
3. Select whether to print a single or continuous test page.

Additional input tray diagnostics

Sensor tests

1. Enter the Diagnostics menu, and then touch **Additional input tray diagnostics**.
2. Select a tray.

A list of sensor tests appears.

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.

List of sensor tests

List of sensor tests

2 x 520-sheet tray sensor tests	Tray 3 paper present
Tray 3 pick position	
Tray 3 paper size	
Tray 3 feed	
Tray 3 lift plate level	
Tray 4 paper present	
Tray 4 pick position	
Tray 4 paper size	
Tray 4 feed	
Tray 4 lift plate level	
Transport	
Jam door switch	
2000-sheet tandem tray sensor tests	Tray 3 paper present
Tray 3 pick position	

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Tray 3 paper size	
Tray 3 feed	
Tray 4 paper present	
Tray 4 pick position	
Tray 4 paper size	
Tray 4 feed	
Tray 4 horizontal transport	
Transport	
Jam door switch	
2000-sheet tray sensor tests	Door switch
Feed	
Paper present	
Paper size, A4	
Paper size, letter	
Pick position	
Transport	
Tray present	
Tray set switch	

Motor tests

1. Enter the Diagnostics menu, and then touch **Additional input tray diagnostics**.
2. Select a tray and a motor, and then touch **Start**.

- 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.

List of motor tests

List of motor tests

2 x 520-sheet tray motor tests	Tray 3 pick/lift
Tray 4 pick/lift	
Transport	
2000-sheet tandem tray motor tests	Tray 3 pick/lift
	Tray 4 pick/lift
	Transport
2000-sheet tray motor tests	Pick
	Lift
	Transport

Adjustments

This setting enables adjustments for the 2000-sheet tray.

1. Enter the Diagnostics menu, and then navigate to:
Printer setup > Additional input tray diagnostics
2. Choose **2000-sheet tray adjustment > Media width guide adjustment**.

Printer diagnostics and adjustments

Sensor tests

1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments > Sensor tests**.
2. From the Sensor tests section, touch **Start**.
A list of sensor tests appears.
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.

List of sensor tests

List of sensor tests

Paper transport sensor tests	Bin 1 full
Bin 1 offset home	
Bin 2 exit	
Bin 2 offset home	
Left door switch	
Registration	
Transfer jam	
EP sensor tests	First transfer retract
C toner control	
Front ITM toner density	
Fuser exit	
Fuser roller/pressure roller	
Fuser speed	

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ITM temperature and humidity	
K toner control	
M toner control	
Rear ITM toner density	
Toner density	
Waste toner bottle full	
Waste toner bottle position	
Y toner control	
Paper input tray sensor tests	MPF empty
MPF feed	
MPF paper size	
MPF pick position	
Tray 1 feed	
Tray 1 lift plate level	
Tray 1 paper present	
Tray 1 paper size	
Tray 1 pick position	
Tray 2 feed	
Tray 2 lift plate level	
Tray 2 paper present	
Tray 2 paper size	
Tray 2 pick position	
Other sensors	Front door switch
Motion	
Temperature and humidity	
Humidity	

Motor tests

1. Enter the Diagnostics menu, and then touch **Printer diagnostics & adjustments > Motor tests**.
2. Select a motor, and then touch **Start**.

- 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.

List of motor tests

List of motor tests

Bin 1 diverter solenoid
Bin 1 offset
Bin 2 drive
Bin 2 offset
First transfer retract clutch (black-only retract clutch)
C toner supply
CMY drum/developer
Cooling fan
Duplex
Front left cooling fan
Front right cooling fan
Fuser
Fuser fan
Fuser power supply cooling fan
K drum/Developer/ITM

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K toner supply
LVPS fan
M toner supply
MPF
Optional tray transport
Pressure roller latch
Registration
RIP board fan
Toner cartridge exhaust fan
Toner cartridge fan
Toner density shutter solenoid
Transport
Tray 1 pick/lift
Tray 2 pick/lift
Waste toner bottle agitator
Y toner supply

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.

Color registration adjustments

This setting lets you adjust the color registration and print or reset the default settings.

1. Enter the Diagnostics menu, and then navigate to:
Printer diagnostics and adjustments > Color registration adjust
2. Select a color to adjust.

Imaging process adjustments

This setting lets you adjust the elements involved in the imaging process.

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

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.

Disable Engine Calibration

This setting prevents any engine calibration from being run.

1. Enter the Diagnostics menu, and then navigate to:

Printer diagnostics & adjustments > Disable Engine Calibration

Configuration Menu

Entering Configuration Menu

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

Configuration Menu

Configuration Menu items and their descriptions

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 Scan to Local On* Off	Set whether the USB device driver enumerates as a USB Simple device (single interface) or as a USB Composite device (multiple interfaces).
USB Configuration USB Speed Full Auto*	Set the USB port to run at full speed and disable its high-speed capabilities.
Tray Configuration Size Sensing Tray [x] Sensing Off On* A6/Hagaki Sensing	Set the tray to sense automatically the paper size loaded into it.
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	Set the paper source that the user fills when a prompt to load paper appears.

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Menu item	Description
<p>Paper Prompts</p> <p>Auto* Multipurpose Feeder Manual Paper</p>	<p>NOTES For Multipurpose Feeder to appear, in the Paper menu, set Configure MP to Cassette.</p>
<p>Tray Configuration</p> <p>Envelope Prompts</p> <p>Auto* Multipurpose Feeder Manual Envelope</p>	<p>Set the paper source that the user fills when a prompt to load envelope appears.</p> <p>NOTES For Multipurpose Feeder to appear, in the Paper menu, set Configure MP to Cassette.</p>
<p>Tray Configuration</p> <p>Action for Prompts</p> <p>Prompt user* Continue Use current</p>	<p>Set the printer to resolve paper- or envelope-related change prompts.</p>
<p>Tray Configuration</p> <p>Envelope Tray Setup</p> <p>Off* On</p>	<p>Enable the envelope tray to print envelopes.</p>
<p>Tray Configuration</p> <p>Multiple Universal Sizes</p> <p>Off* On</p>	<p>Set the tray to support multiple universal paper sizes.</p>
<p>Reports</p> <p>Menu Settings Page Event Log Event Log Summary</p>	<p>Print reports about printer menu settings, status, and event logs.</p>
<p>Supply Usage And Counters</p> <p>Clear Supply Usage History</p>	<p>Reset the supply usage history, such as number of pages and days remaining, to the factory shipped level.</p>
<p>Supply Usage And Counters</p>	<p>Allow adjustments when printing for large or thick media.</p>

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Menu item	Description
<p>Large Media Adjustments</p> <p>Off*</p> <p>On</p>	
<p>Supply Usage And Counters</p> <p>Tiered Coverage Ranges</p> <p>Tiered Coverage Metrics</p> <p>Show*</p> <p>Hide</p> <p>Tiered Coverage Ranges</p> <p>Highlight Range: 0% - 3%</p> <p>Business Range: 4% - 14%</p> <p>Graphics Range: 15% - 100%</p>	<p>Adjust the amount of color coverage for each printing range.</p>
<p>Printer Emulations</p> <p>PPDS Emulation</p> <p>Off*</p> <p>On</p>	<p>Set the printer to recognize and use the PPDS data stream.</p>
<p>Printer Emulations</p> <p>PS Emulation</p> <p>Off</p> <p>On*</p>	<p>Set the printer to recognize and use the PS data stream.</p>
<p>Printer Emulations</p> <p>Enable Prescribe</p> <p>Off*</p> <p>On</p>	<p>Activate Prescribe.</p> <div style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> <p>NOTES The Prescribe license must be installed.</p> </div>
<p>Printer Emulations</p> <p>Emulator Security</p> <p>Page Timeout</p> <p>0–60 (60*)</p>	<p>Set the page timeout during emulation.</p>
<p>Printer Emulations</p> <p>Emulator Security</p>	<p>Reset the emulator after a print job.</p>

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Menu item	Description
Reset Emulator After Job Off* On	
Printer Emulations Emulator Security Disable Printer Message Access Off On*	Disable access to printer message during emulation.
Printer Emulations Emulator Security Enable Formsmerge	Activate Formsmerge if supported.
Print Configuration Black Only Mode Off* On	Print non-copy jobs in grayscale.
Print Configuration Color Trapping Off 1 2* 3 4 5	Enhance the printed output to compensate for misregistration in the printer.
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.
Device Operations Quiet Mode Off* On	Set the printer to operate in Quiet Mode. <div style="background-color: #f0f0f0; padding: 10px; border: 1px solid #ccc;"> <p>NOTES Enabling this setting slows down the overall performance of the printer.</p> </div>

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Menu item	Description
<p>Device Operations</p> <p>Panel Menus</p> <p>Off On*</p>	<p>Enable access to the printer menus from the control panel.</p>
<p>Device Operations</p> <p>Safe Mode</p> <p>Off* On</p>	<p>Set the printer to operate in a special mode, in which it attempts to continue offering as much functionality as possible, despite known issues.</p> <p>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.</p>
<p>Device Operations</p> <p>Clear Custom Status</p>	<p>Erase user-defined strings for the Default or Alternate custom messages.</p>
<p>Device Operations</p> <p>Clear All Remotely Installed Messages</p>	<p>Erase messages that were remotely installed.</p>
<p>Device Operations</p> <p>Automatically Display Error Screens</p> <p>Off On*</p>	<p>Show existing error messages on the display after the printer remains inactive on the home screen for a length of time.</p>
<p>App Configuration</p> <p>LES Applications</p> <p>Off On*</p>	<p>Enable Lexmark Embedded Solutions (LES) applications.</p>
<p>Finisher Configuration</p> <p>Hole Punch Configuration Mixed Size Bin Full Detection Exit Tray 2 Setting</p>	<p>Configure the output options.</p>

NOTES

An asterisk (*) next to a value indicates the factory default setting.

Entering Invalid engine mode

This mode lets the printer load the correct firmware code.

1. Open the front door.
2. Turn off the power switch.
3. Turn on the power switch.
4. When the loading icon appears on the display, close the front door.



5. On the menu that appears on the display, touch -> until ENGINE_FLASH appears.
6. Touch **ENGINE_FLASH** only once.

- The menu is selected when it turns green.
- Make sure that ENGINE_FLASH does not have an asterisk (*).

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.

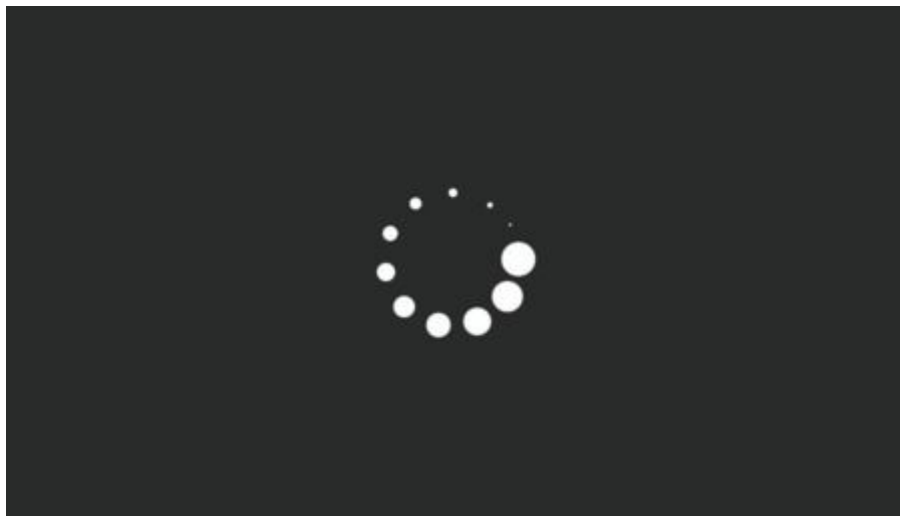
Depending on your printer model, do any of the following:

For LED display

1. Turn off the printer.
2. Open the front door.
3. Press and hold the **Stop** button.
4. Turn on the printer.
5. When all the icons flash, release the button.

For 2-line display

1. Turn off the printer.
2. Press and hold the **OK** and **Back** buttons.
3. Turn on the printer.
4. When the display shows the following icon, release the buttons.



For 2.4-, 4.3-, 7-, and 10-inch displays with number pads

1. Turn off the printer.
2. Press and hold the **2**, **7**, and **8** buttons.
3. Turn on the printer.
4. When the display shows the following icon, release the buttons.



For 2.8-, 4.3-, 7-, and 10-inch displays without number pads

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

NOTES

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.

NOTES

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

Service Engineer (SE) Menu

Entering the SE Menu

1. From the home screen, touch the on-screen keypad.
2. Touch **** 411**.
3. Touch the start icon or **GO**.

General SE

Enter the Service Engineer (SE) menu, and then select **General SE**.
The following settings are available:

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

Network SE

Enter the Service Engineer (SE) menu, and then select **Network SE**.

NOTES

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

Service engineer menu

Top level menu	Intermediate menu
History	<ul style="list-style-type: none"> • Print History • Mark History
MAC	<ul style="list-style-type: none"> • Set Card Speed • LAA • Keep Alive
NPAP	Print Alerts
TCP/IP	<ul style="list-style-type: none"> • DHCP Request Options • netstat • arp • Allow SNMP Set • MTU • Meditech Mode • RAW LPR Mode • Garp Interval
Wireless Settings	<ul style="list-style-type: none"> • Wireless Performance Enhancement • Unset Wireless Region • Disable Wireless 11n • Disable PMF
Ping Test <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p>NOTES This setting is only available if a wireless module is installed.</p> </div>	<ul style="list-style-type: none"> • Ping Address • Attempts • Packet Size • Ping

Continued on page 1035

Continued from page 1034

Top level menu	Intermediate menu
Other Actions	<ul style="list-style-type: none">• ifconfig• IPtables [Firewall Dump]• IP6tables [Firewall Dump]• IPsec Dump
Enable DHCPD Debugging	N/A
Enable WPA-suplicant Debugging	N/A
Enable Ethernet Gigabit	N/A
Enable Dual-NIC	N/A
Enable BLE	N/A
Netconfig Debug Level	N/A
IPP ICONS	<ul style="list-style-type: none">• Delete intermediate icons• Delete current icons

Parts removal

Important removal information

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



CAUTION—SHOCK HAZARD

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. Tenez-les uniquement par leurs extrémités ou le boîtier en métal.



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—HOT SURFACE

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.



CAUTION—PINCH HAZARD

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



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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.



CAUTION—HOT SURFACE

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.



CAUTION—PINCH HAZARD

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



CAUTION—SHOCK HAZARD

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.



CAUTION—SHOCK HAZARD

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



CAUTION—SHOCK HAZARD

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.



CAUTION—HOT SURFACE

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



CAUTION—PINCH HAZARD

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.

Handling ESD-sensitive parts

To prevent damage to the electrostatic discharge (ESD)-sensitive parts in the printer, 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.
- Use the ESD wrist strap. 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 in 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 control panel 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.



CAUTION—POTENTIAL INJURY

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'incinerez pas une batterie lithium. Mettez les batteries lithium usagées au rebut selon les instructions du fabricant et les réglementations locales.



CAUTION—POTENTIAL INJURY

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.



CAUTION—POTENTIAL INJURY

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.

WARNING—POTENTIAL DAMAGE

Observe all precautions when handling ESD sensitive parts. See [.See "Handling ESD-sensitive parts" on page 1040](#)

WARNING—POTENTIAL DAMAGE

Carefully remove cables and connectors. Make sure they are not damaged.

NOTES

Some models have eSF solutions, it is recommended to back up the eSF solutions and settings before replacing the controller board. See [See "Backing up eSF solutions and settings" on page 1050](#).

WARNING—POTENTIAL DAMAGE

To avoid damaging the part or experience NVRAM mismatch issues, replace only one of the following components at a time:

- Control panel
- 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. The Diagnostics Menu allows you to temporarily use the replacement part.

WARNING—POTENTIAL DAMAGE

Some printers will perform a POR automatically if the Diagnostics Menu 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 to the manufacturer.

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 to complete the replacement service. Use the Service Restore Tool to download the software bundle, and then flash the printer settings and embedded solutions.

NOTES

If you do not have access to Service Restore Tool, then contact your next level of support.

NOTES

The software bundle contains the latest version of the firmware, applications, and software licenses from the Lexmark CFM and Package Builder. The printer firmware may be at a different level from what is used before replacement of the part.

Using the Service Restore Tool

1. Go to <https://cdp.lexmark.com/service-restore-tool/> to access the tool.
2. Log in using your Lexmark or partner login.

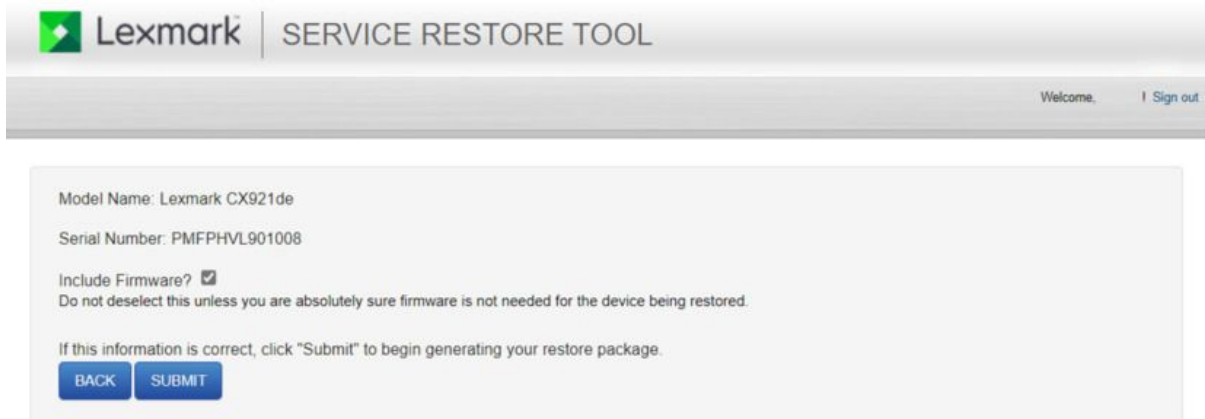
If your login fails, then contact your next level of support.

3. Enter the printer serial number, and then submit the information.

The screenshot shows the Lexmark Service Restore Tool interface. At the top left is the Lexmark logo, followed by the text 'SERVICE RESTORE TOOL'. In the top right corner, there is a 'Welcome.' message and a 'Sign out' link. Below the header is a large text input field with the placeholder text 'Enter serial number of device to restore'. A blue button labeled 'SUBMIT' is positioned below the input field.

NOTES

Make sure that the serial number that appears on the verification screen is correct.



The screenshot shows the Lexmark Service Restore Tool web interface. At the top left is the Lexmark logo. To its right is the text "SERVICE RESTORE TOOL". In the top right corner, there are links for "Welcome" and "Sign out". The main content area contains the following information:

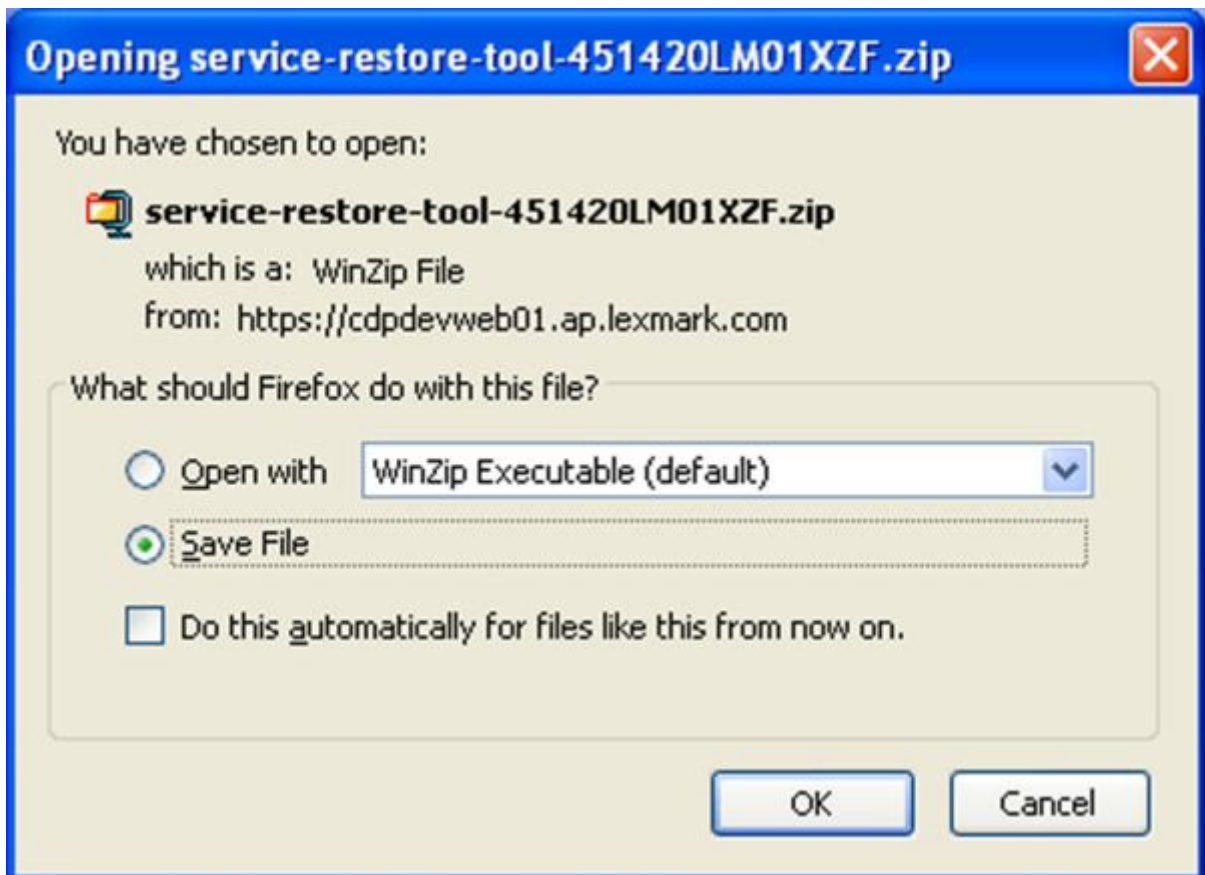
Model Name: Lexmark CX921de
Serial Number: PMFPHVL901008
Include Firmware?
Do not deselect this unless you are absolutely sure firmware is not needed for the device being restored.
If this information is correct, click "Submit" to begin generating your restore package.

At the bottom of the form are two buttons: "BACK" and "SUBMIT".

4. Save the zip file.

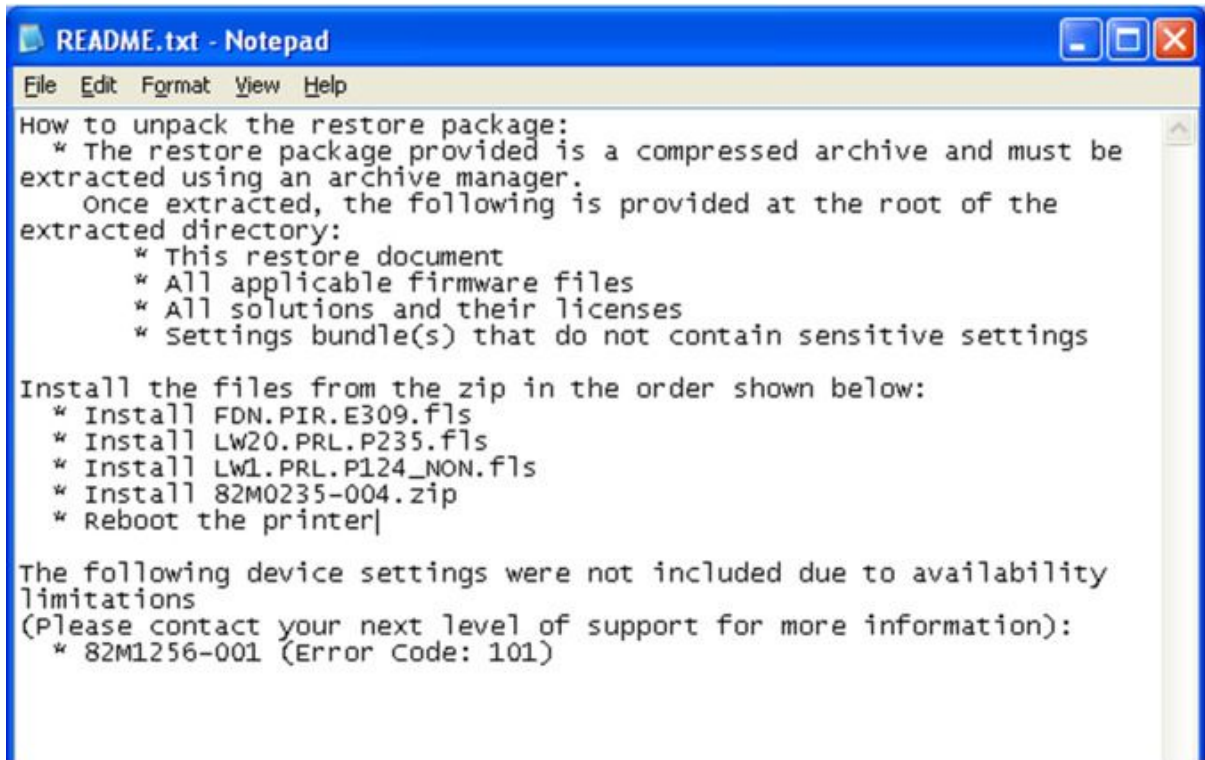
NOTES

Make sure that the serial number in the zip file matches the serial number of the printer being restored.



5. Extract the contents of the zip file, open the *Readme* file, and then follow the instructions in the file.

- Perform the install instructions on the *Readme* file in the exact order shown. Restart the printer only if the file says so.
- For more information on how to flash the downloaded files, see [See "Updating the printer firmware" on page 1048](#).
- To load the zip files that are extracted from the Service Restore Tool, see [See "Restoring licenses and configuration settings" on page 1046](#).



```
README.txt - Notepad
File Edit Format View Help
How to unpack the restore package:
* The restore package provided is a compressed archive and must be
extracted using an archive manager.
  Once extracted, the following is provided at the root of the
extracted directory:
  * This restore document
  * All applicable firmware files
  * All solutions and their licenses
  * Settings bundle(s) that do not contain sensitive settings

Install the files from the zip in the order shown below:
* Install FDN.PIR.E309.fls
* Install LW20.PRL.P235.fls
* Install LW1.PRL.P124_NON.fls
* Install 82M0235-004.zip
* Reboot the printer

The following device settings were not included due to availability
limitations
(Please contact your next level of support for more information):
* 82M1256-001 (Error Code: 101)
```

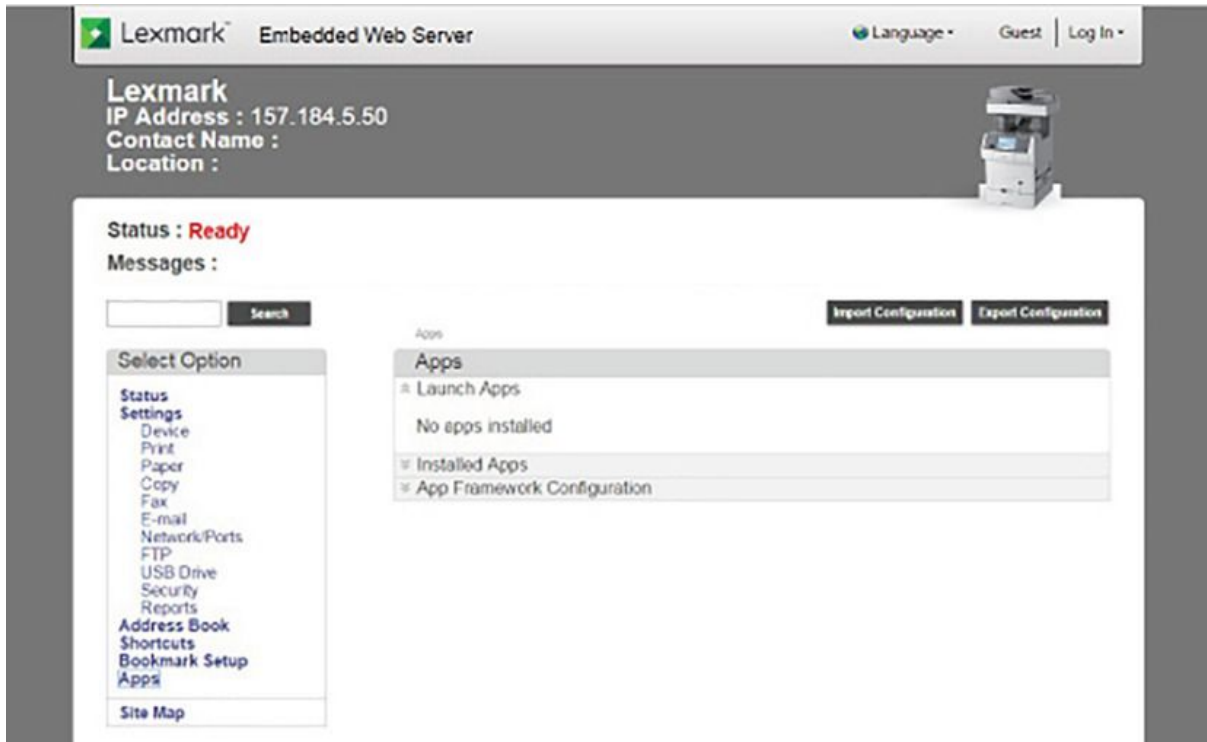
6. If the printer had eSF apps previously installed, then confirm from the customer if all the eSF apps have been installed after performing the installation instructions in the *Readme* file.

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

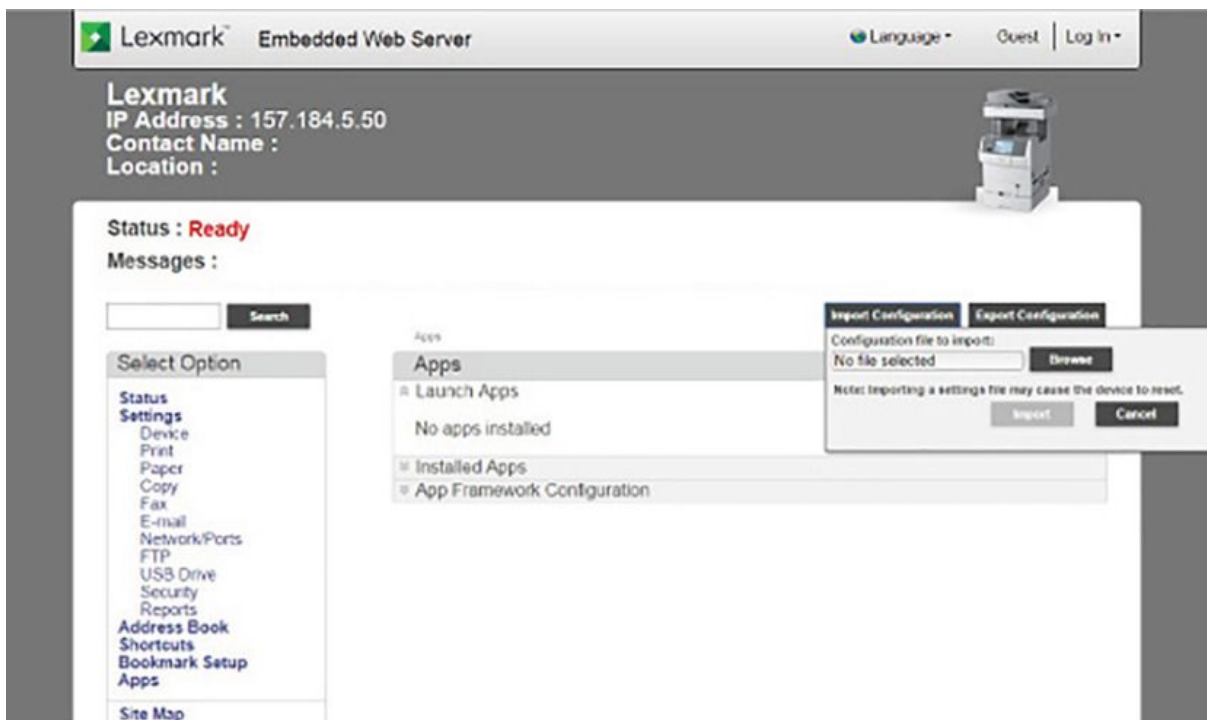
Restoring licenses and configuration settings

To load the zip files that are extracted from the Service Restore Tool, do the following:

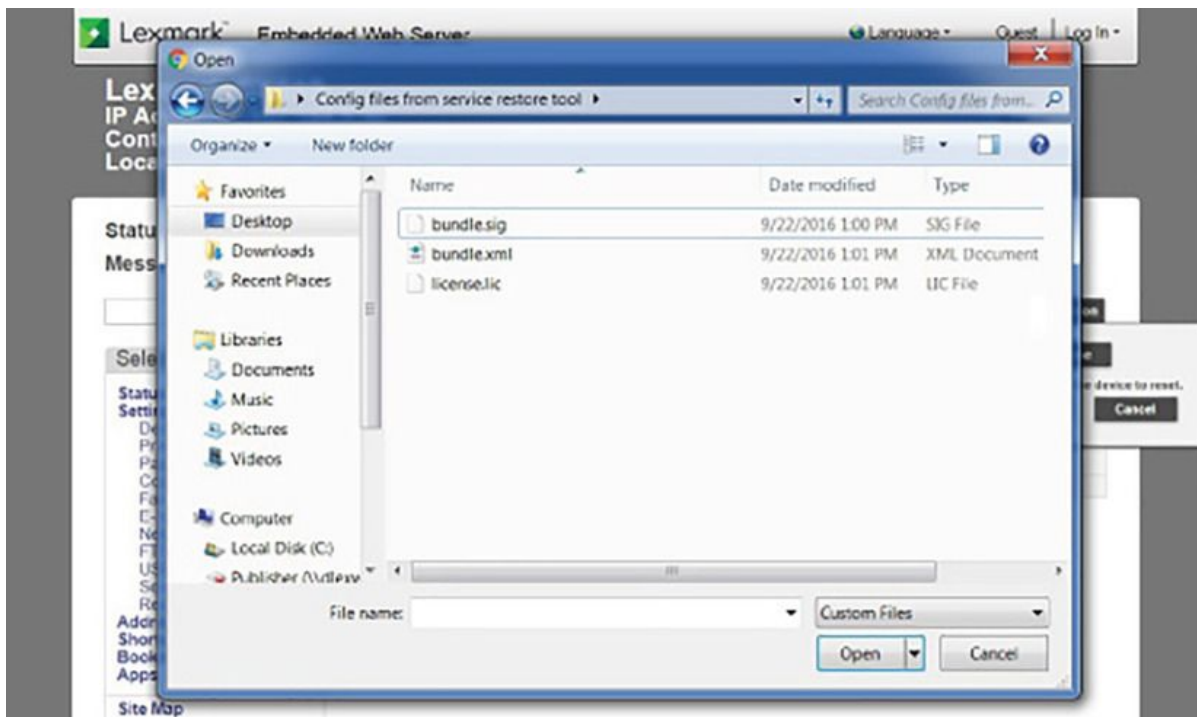
1. Open a web browser, and then type the printer IP address to access the Embedded Web Server.



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



3. Navigate to the folder where the zip files are extracted from the Service Restore Tool.



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.

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

Using a flash drive

This procedure applies only to printer models with front USB support.

1. Insert the flash drive.
2. Select the file that you need to flash.

NOTES

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

Using a network computer

Using the File Transfer Protocol (FTP)

Make sure that the printer is in ready state before flashing.

1. Turn on the printer.
2. Obtain the IP address:
 - From the home screen
 - From the Network Overview section of the Network/Ports menu
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.

5. Repeat step 2 through step 4 for the other files.

Using the Embedded Web Server

Make sure that the printer is in ready state before flashing.

1. Open a web browser, and then type the printer IP address.
2. From the home page, navigate to:

Settings > Device > Update Firmware

3. Select the file to use.

The printer performs a POR sequence.

4. Repeat step 2 through step 4 for the other files.

Backing up eSF solutions and settings

NOTES

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 [.See "Entering Invalid engine mode" on page 1029](#)
2. Open a web browser, and then type the printer IP address.

NOTES

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. Click **Apps**, click **Export Configuration**, and then select one of the options in the dropdown menu.
4. Click **Export**.

NOTES

The size limit of the export file is 128 KB.

Removal procedures

When replacing printer parts, take note of the following:

- Some removal procedures require removing cable ties. Do not forget to install these cable ties during reassembly to avoid pinching wires, obstructing the paper path, or restricting mechanical movement.
- Remove the cartridges before removing other printer parts. Carefully set the cartridges on a clean, smooth, and flat surface. Protect the cartridges from light while out of the printer.
- Disconnect all external cables from the printer to prevent possible damage during service.
- Unless otherwise stated, install the parts in reverse order of removal.
- When installing a part held with several screws, start all screws before the final tightening.
- For printers that have an electronic power switch, make sure to unplug the power cord after powering off.

Left side removals

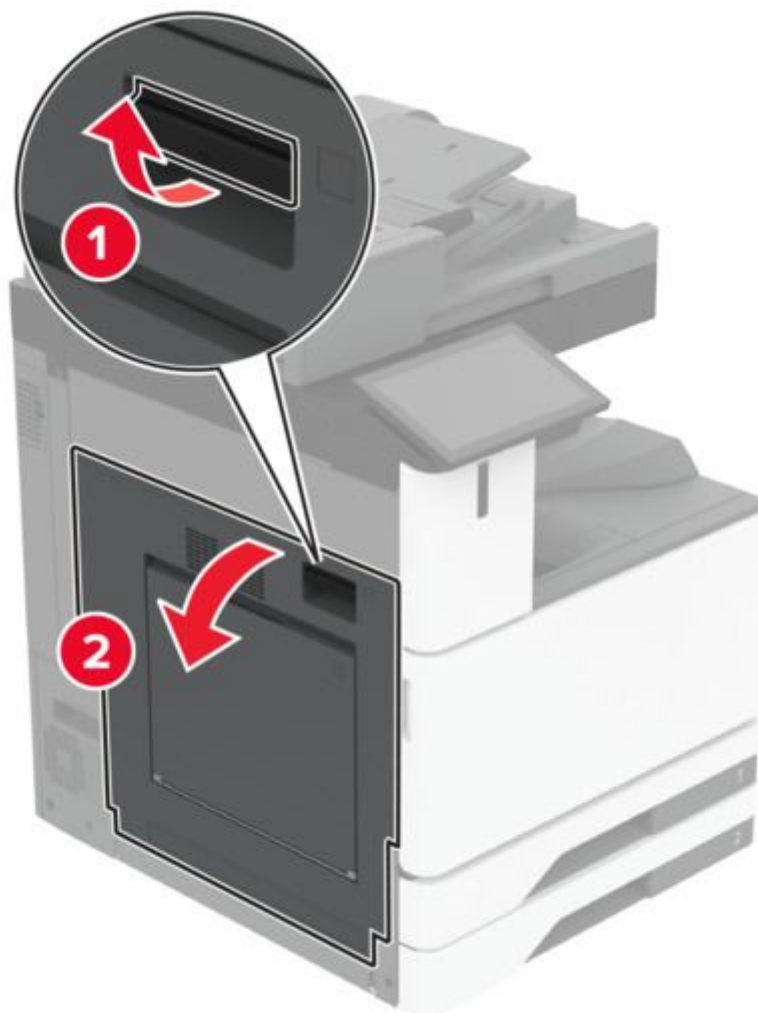
Fuser removal

1. Turn off the printer.
2. Open the left door.

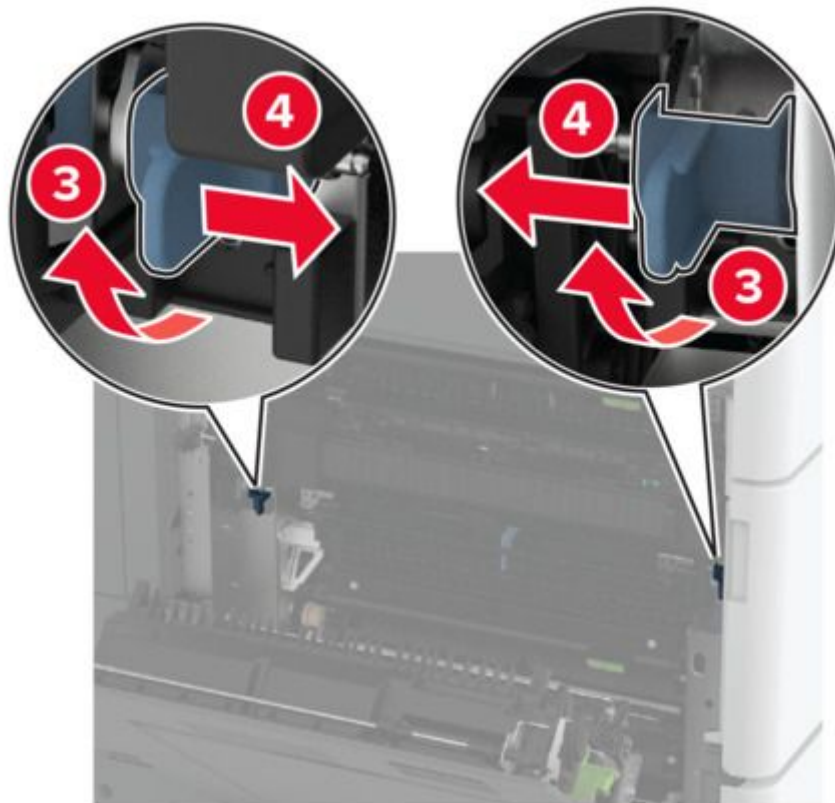
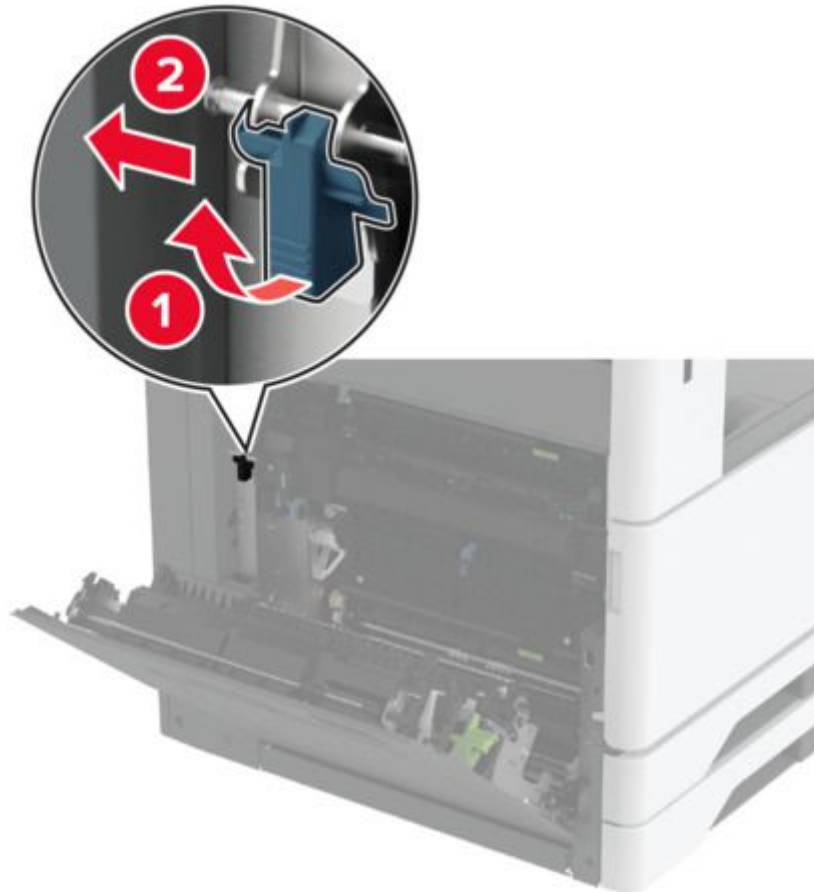


CAUTION—HOT SURFACE

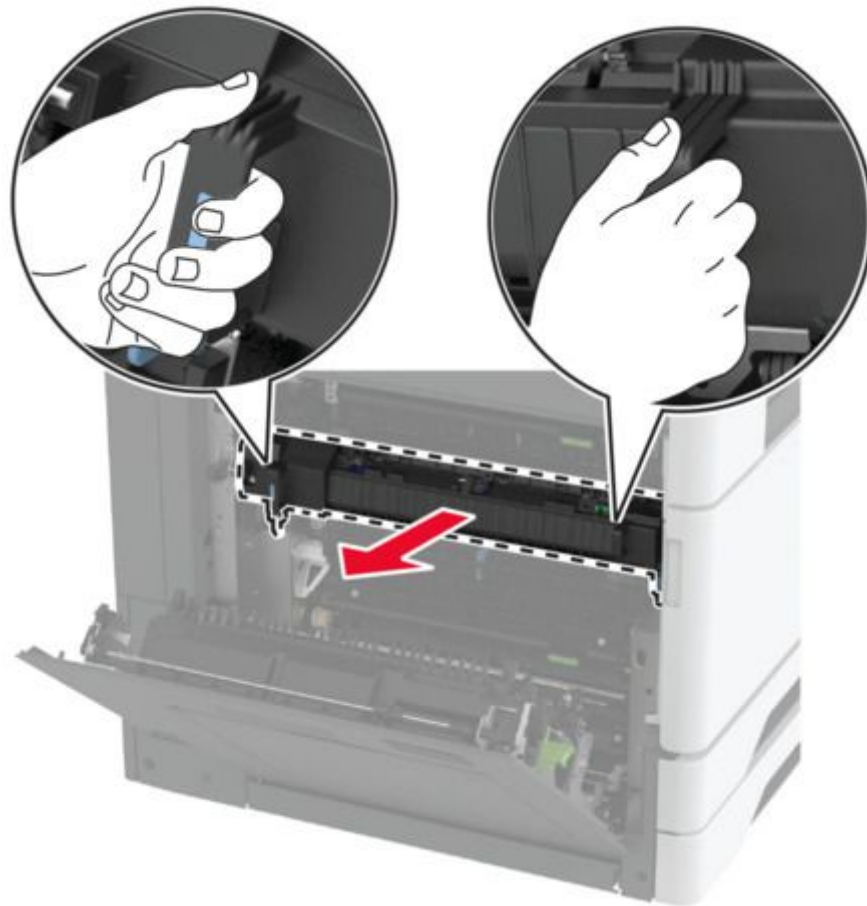
The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.



3. Unlock the fuser.

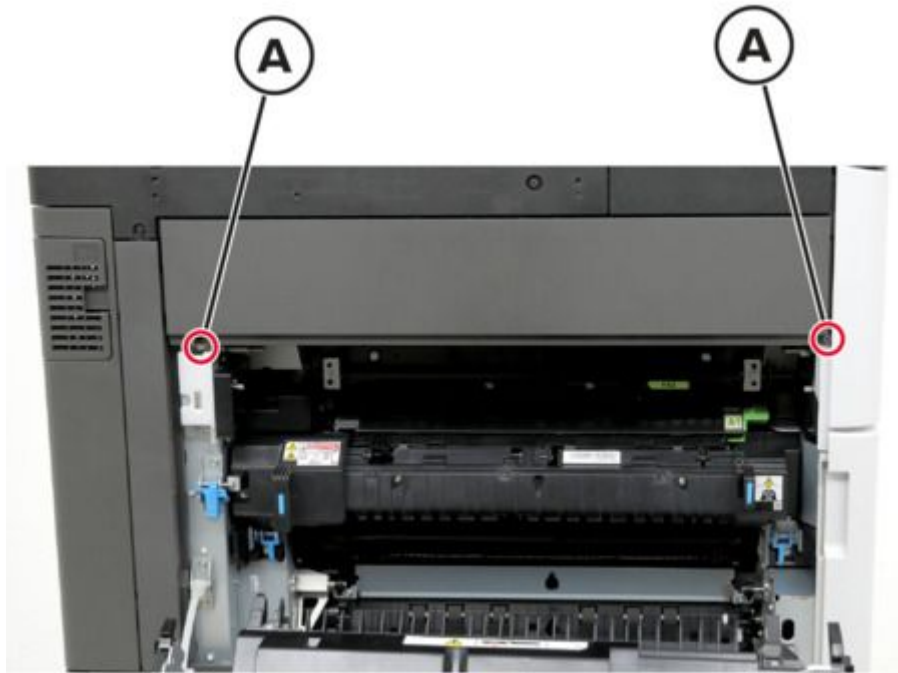


4. Remove the fuser.



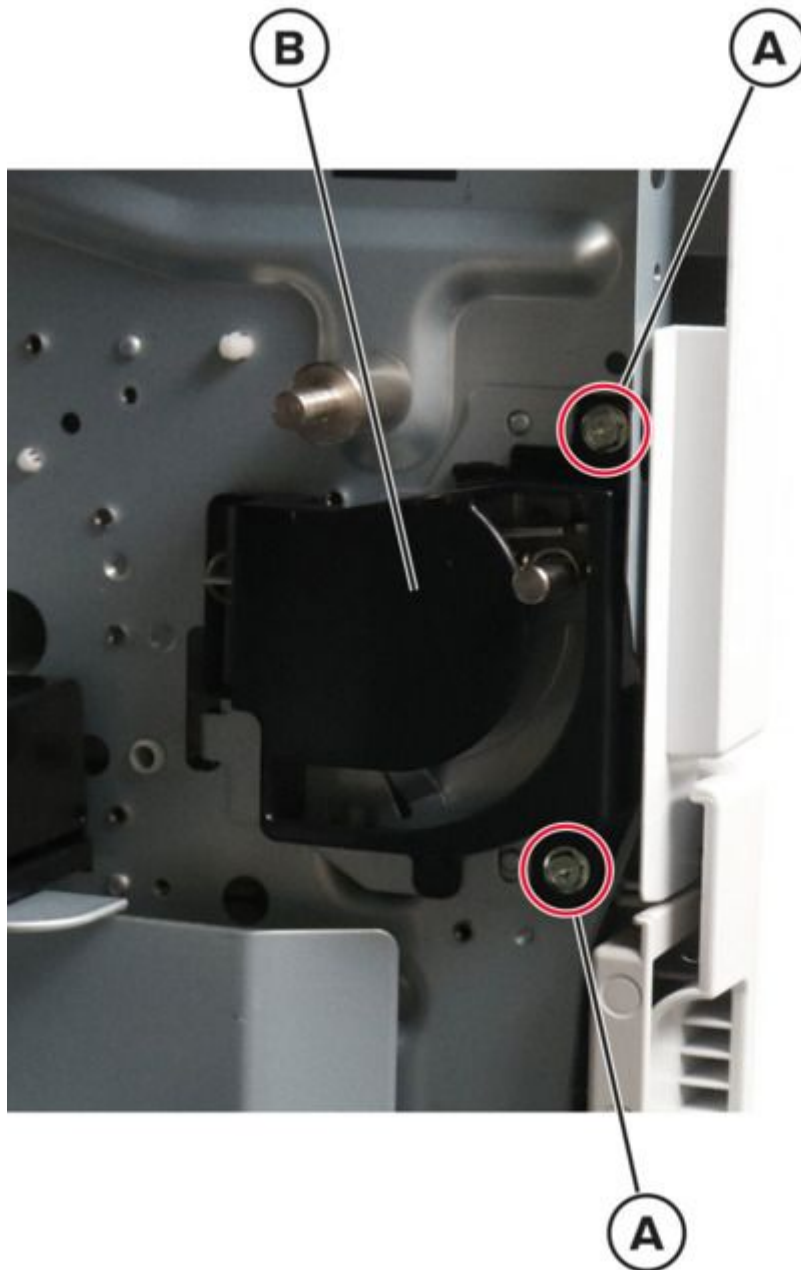
Upper left cover removal

1. Remove the front left cover. See ["Front left cover removal"](#) on page 1147.
2. Open the left jam door.
3. Remove the two screws (A), and then remove the cover.



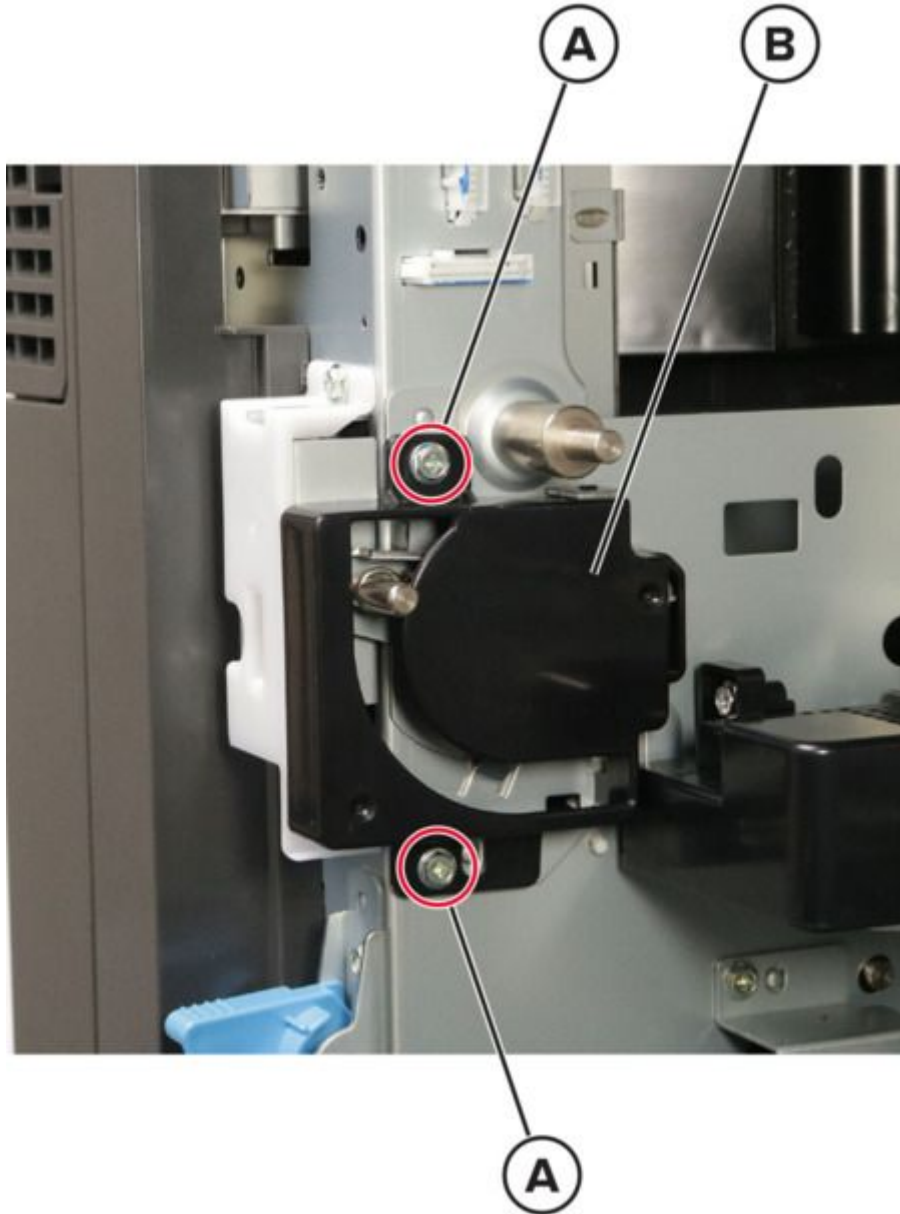
Front toggle guide removal

1. Open the left jam door.
2. Remove the two screws (A), and then remove the front toggle guide (B).



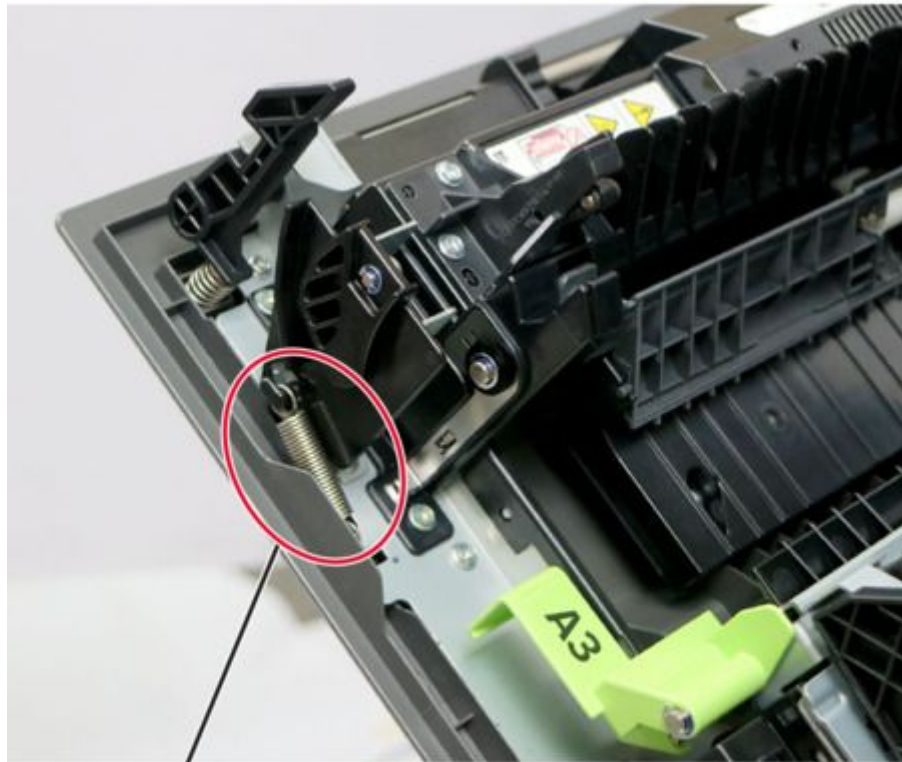
Rear toggle guide removal

1. Open the left jam door.
2. Remove the two screws (A), and then remove the rear toggle guide (B).

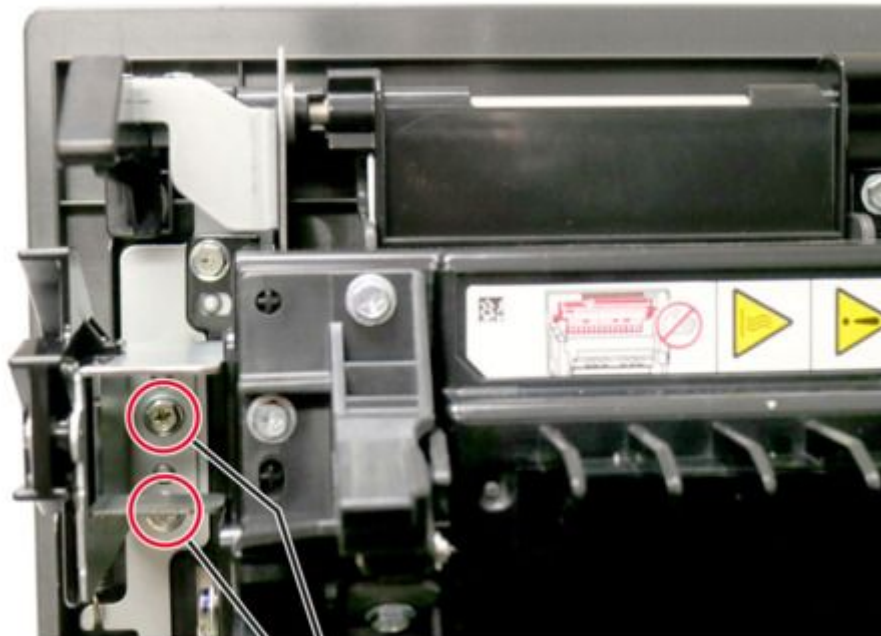


Front toggle guide assembly removal

1. Open the left jam door.
2. Remove the spring (A), and then remove the two screws (B).



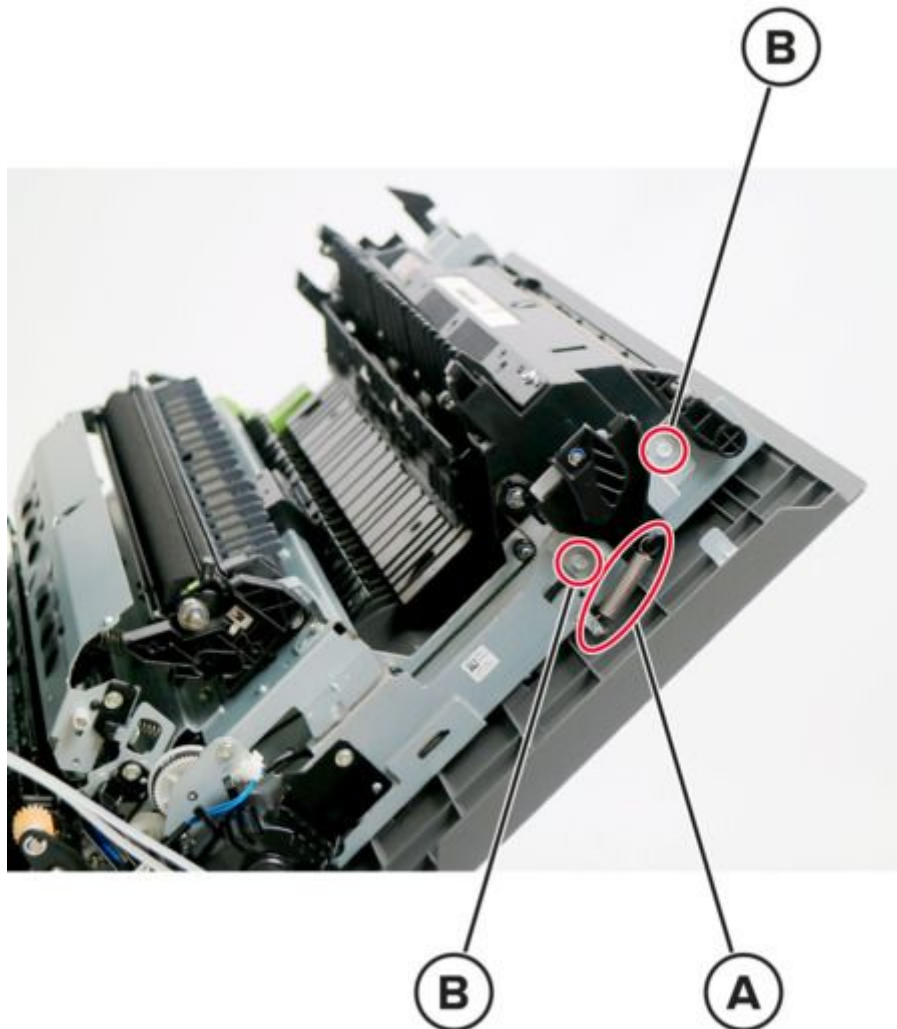
A



B

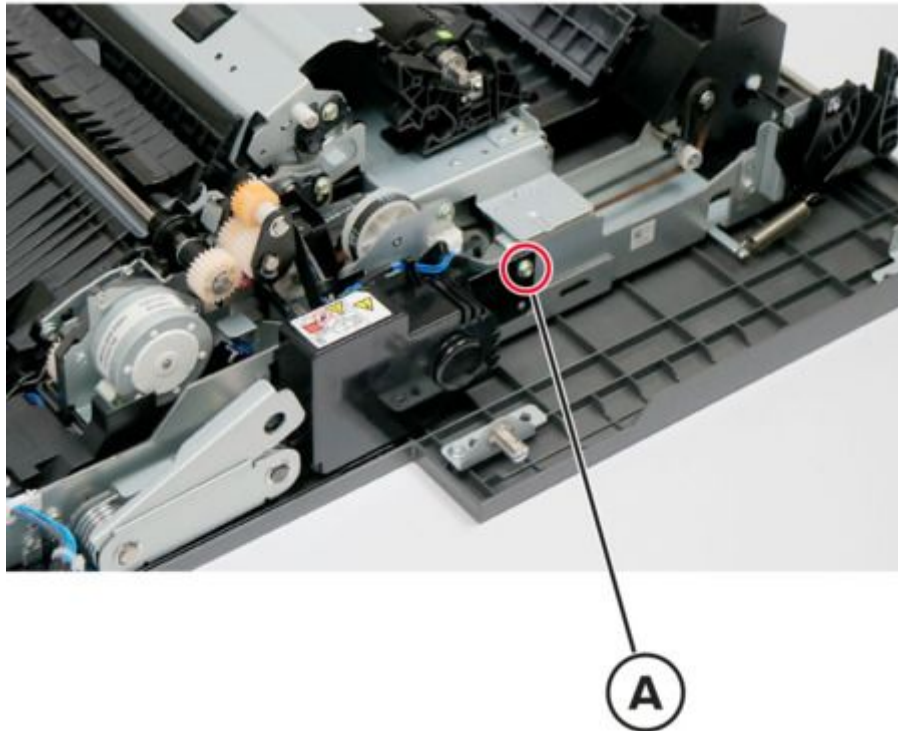
Rear toggle guide assembly removal

1. Open the left jam door.
2. Remove the spring (A), and then remove the two screws (B).

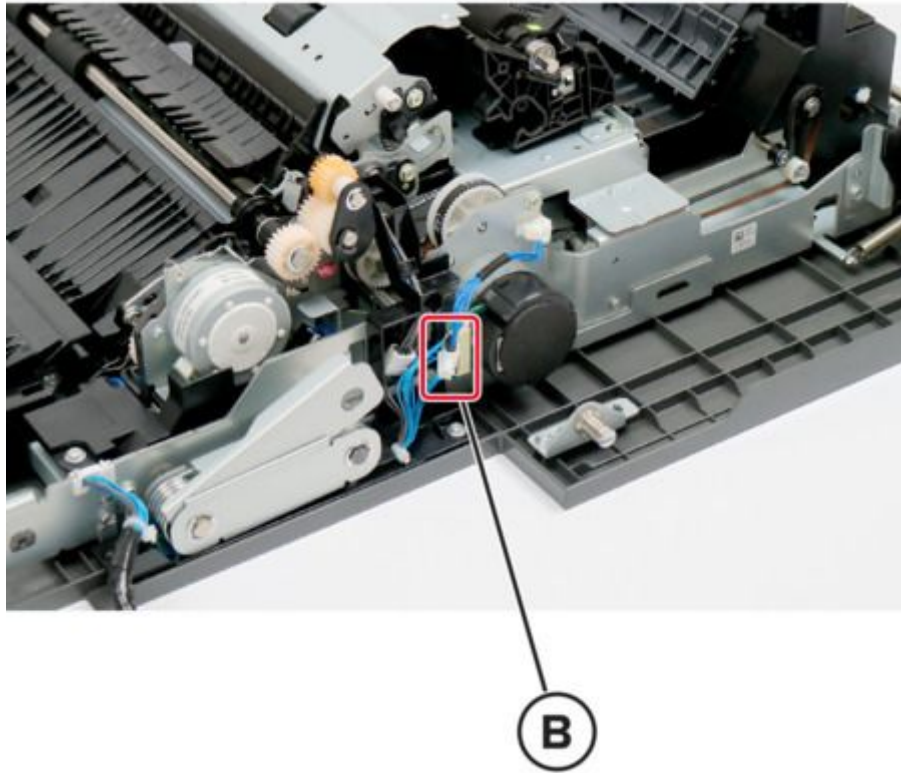


Duplex entrance guide removal

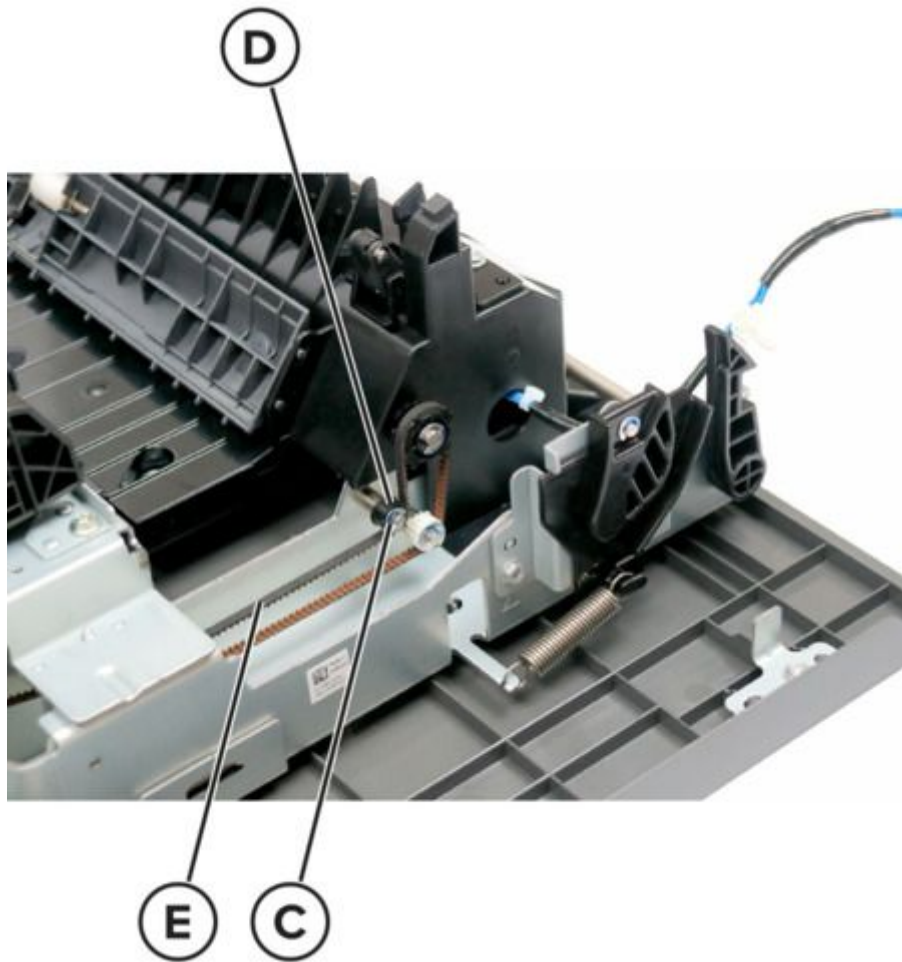
1. Remove the front toggle guide assembly. See ["Front toggle guide assembly removal"](#) on [page 1058](#).
2. Remove the lower rear left cover. See ["Lower rear left cover removal"](#) on [page 1203](#).
3. Remove the LH cover assembly. See ["LH cover assembly removal"](#) on [page 1204](#).
4. Remove the left jam door. See ["Left jam door removal"](#) on [page 1075](#).
5. Remove the screw (A), and then remove the cover.



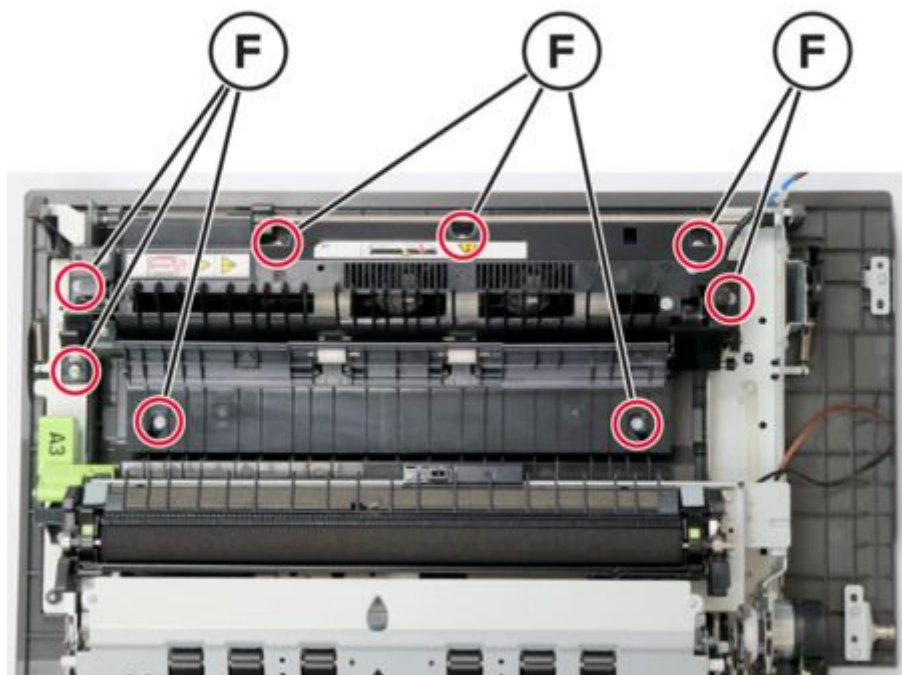
6. Disconnect the cable (B).



7. Remove the E-clip (C), remove the belt guide (D), and then remove the belt (E).

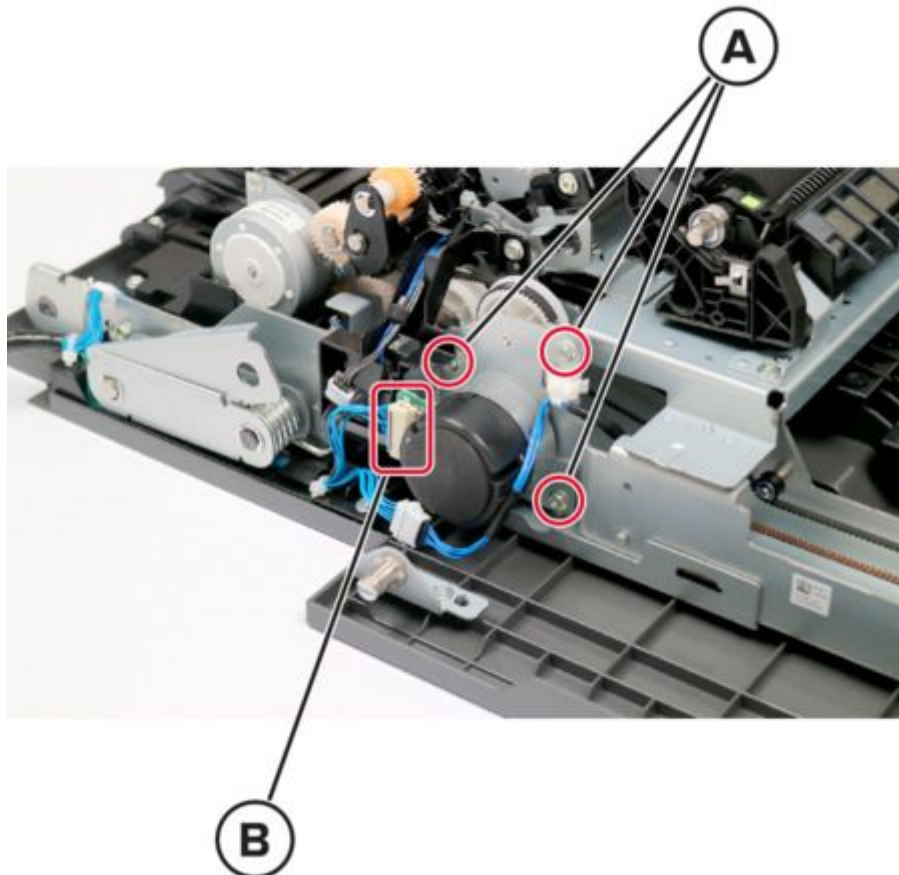


8. Remove the eight screws (F).



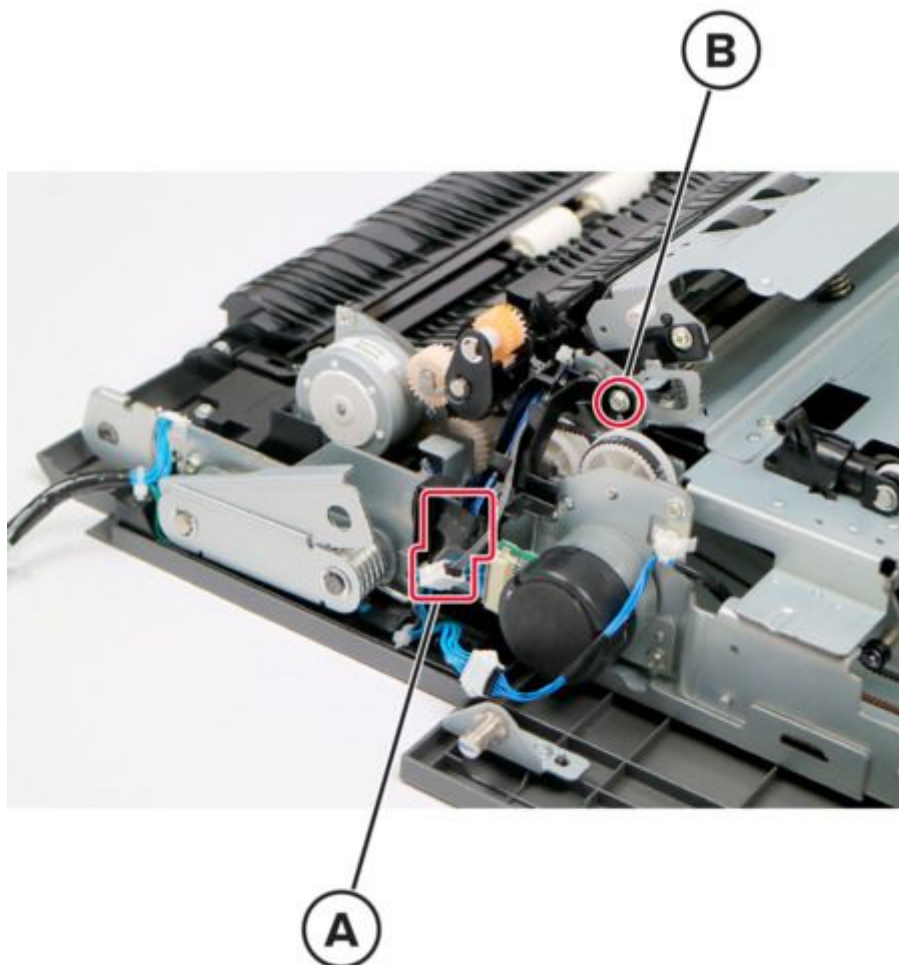
Motor (duplex) removal

1. Remove the front toggle guide assembly. See ["Front toggle guide assembly removal"](#) on [page 1058](#).
2. Remove the lower rear left cover. See ["Lower rear left cover removal"](#) on [page 1203](#).
3. Remove the LH cover assembly. See ["LH cover assembly removal"](#) on [page 1204](#).
4. Remove the left jam door. See ["Left jam door removal"](#) on [page 1075](#).
5. Remove the three screws (A), and then disconnect the cable (B).

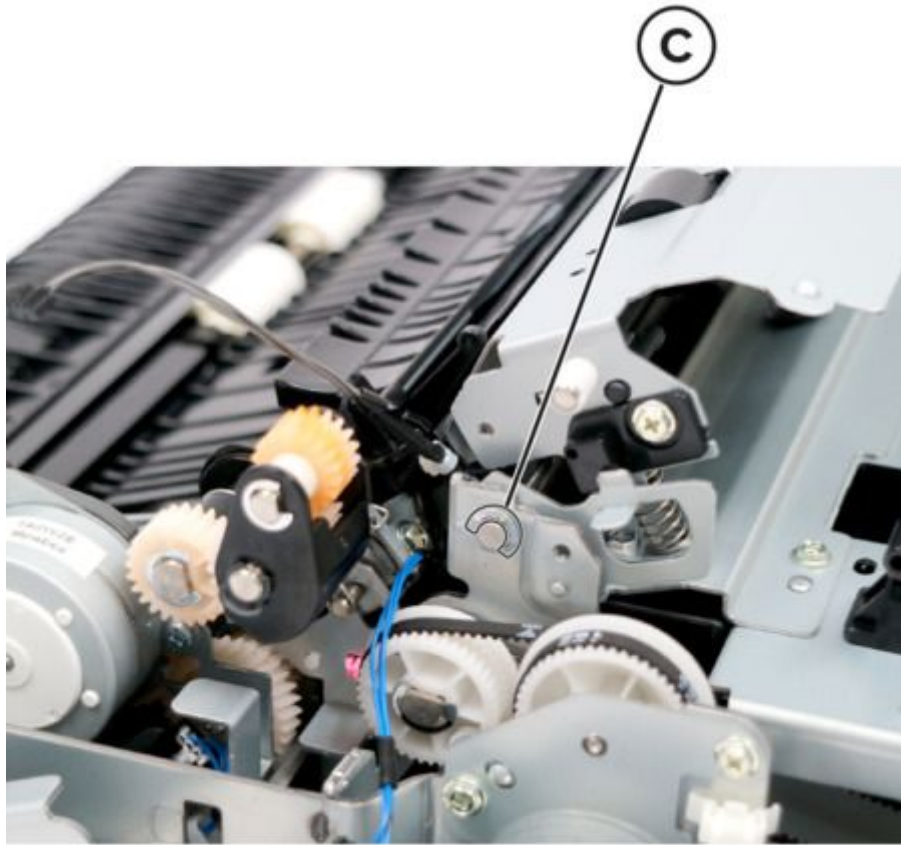


Duplex inner guide removal

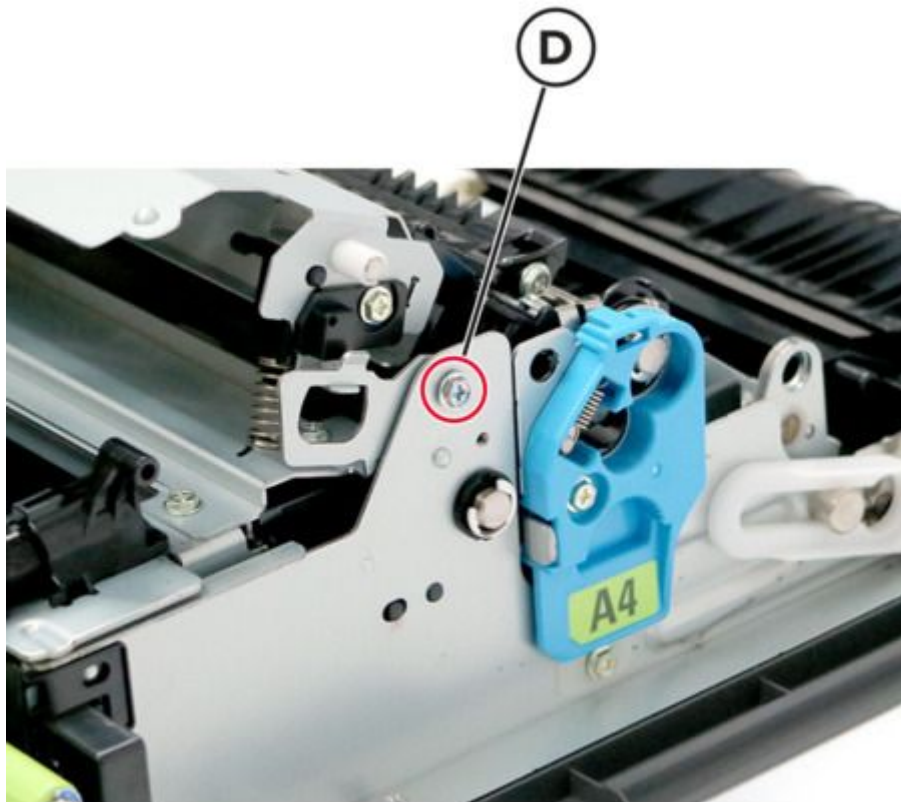
1. Remove the front toggle guide assembly. See ["Front toggle guide assembly removal"](#) on [page 1058](#).
2. Remove the lower rear left cover. See ["Lower rear left cover removal"](#) on [page 1203](#).
3. Remove the LH cover assembly. See ["LH cover assembly removal"](#) on [page 1204](#).
4. Remove the left jam door. See ["Left jam door removal"](#) on [page 1075](#).
5. Remove the duplex guide assembly. See ["Duplex entrance guide removal"](#) on [page 1061](#).
6. Remove the duplex guide assembly fan.
7. Disconnect the two cables (A), and then remove the screw (B).



8. Remove the E-clip (C).

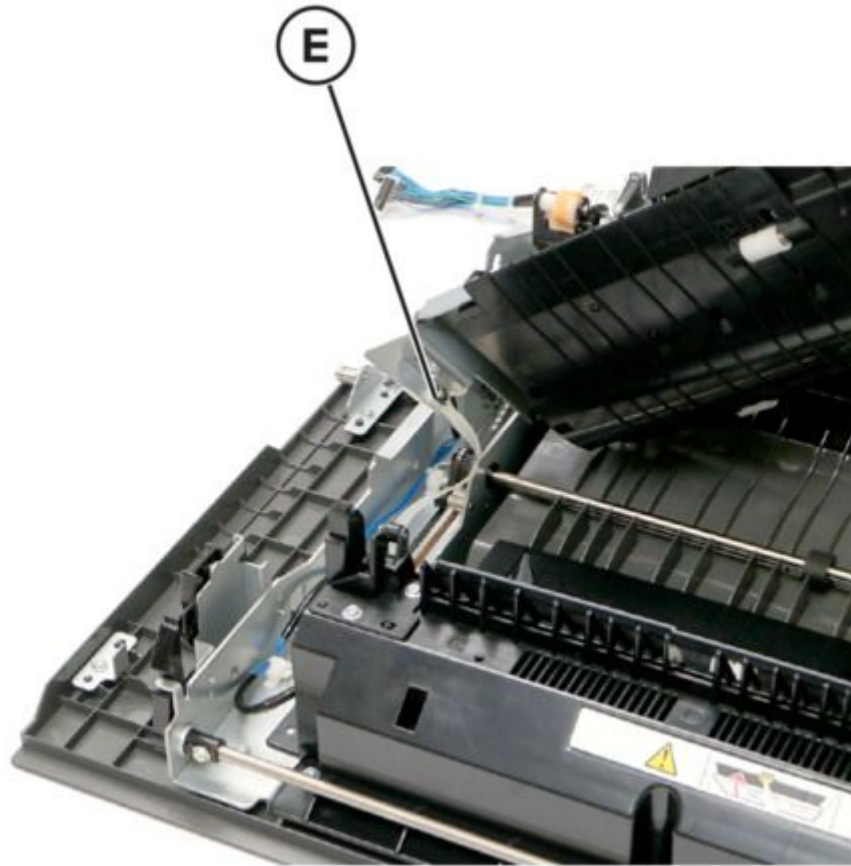


9. Remove the screw (D).



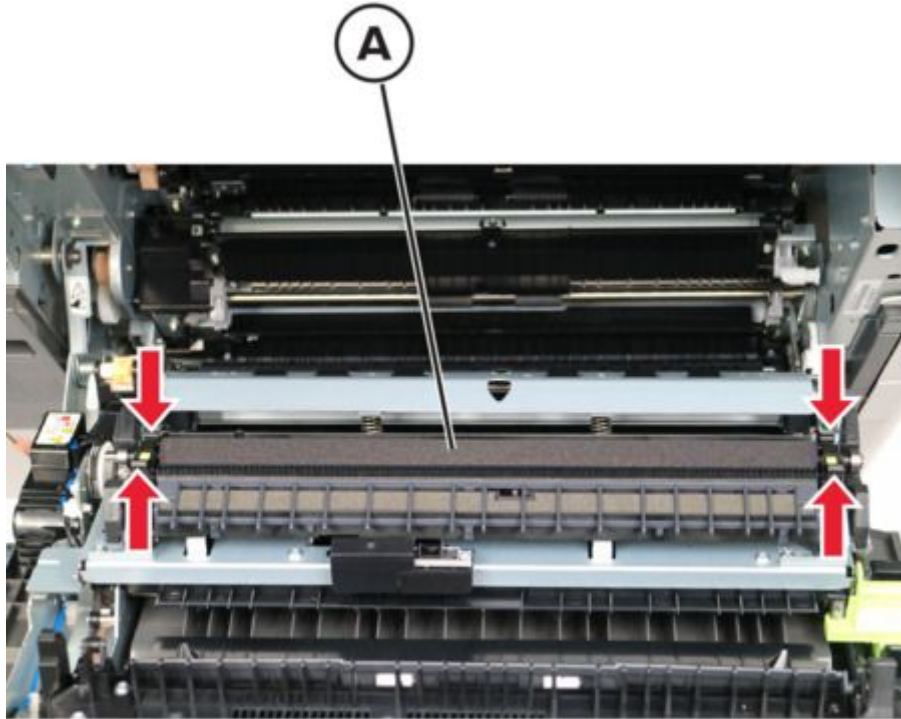
Parts removal

10. Raise the duplex inner guide.
11. Remove the E-clip (E).



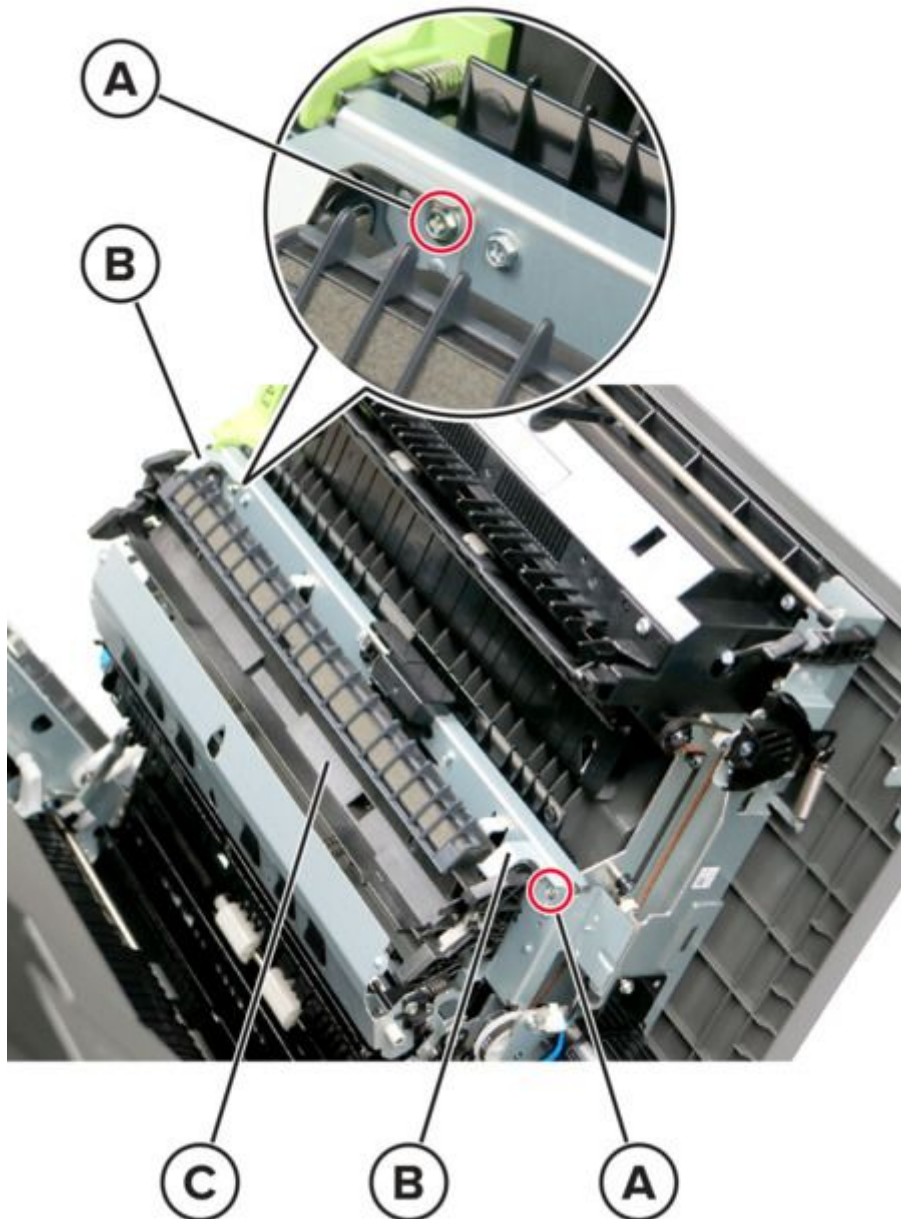
Second transfer roller removal

1. Open the left jam door.
2. Remove the second transfer roller (A).



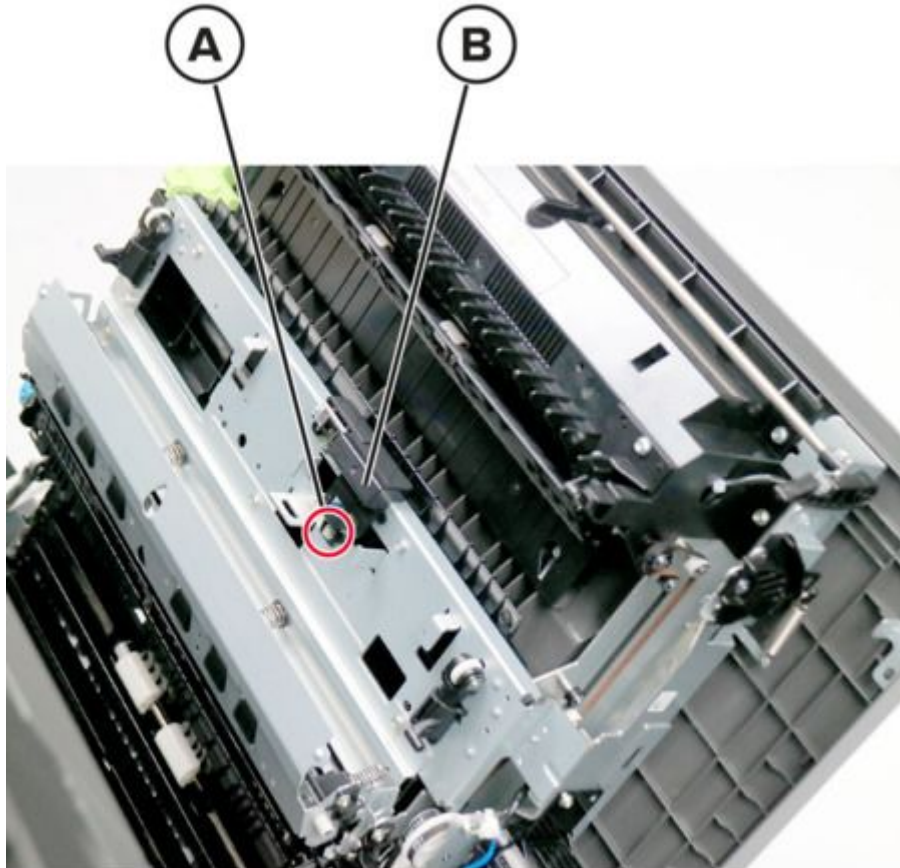
Second transfer roller housing assembly removal

1. Open the left jam door.
2. Remove the second transfer roller. See [See "Second transfer roller removal" on page 1068.](#)
3. Remove the two screws, remove the two brackets, and then remove the roller housing assembly.

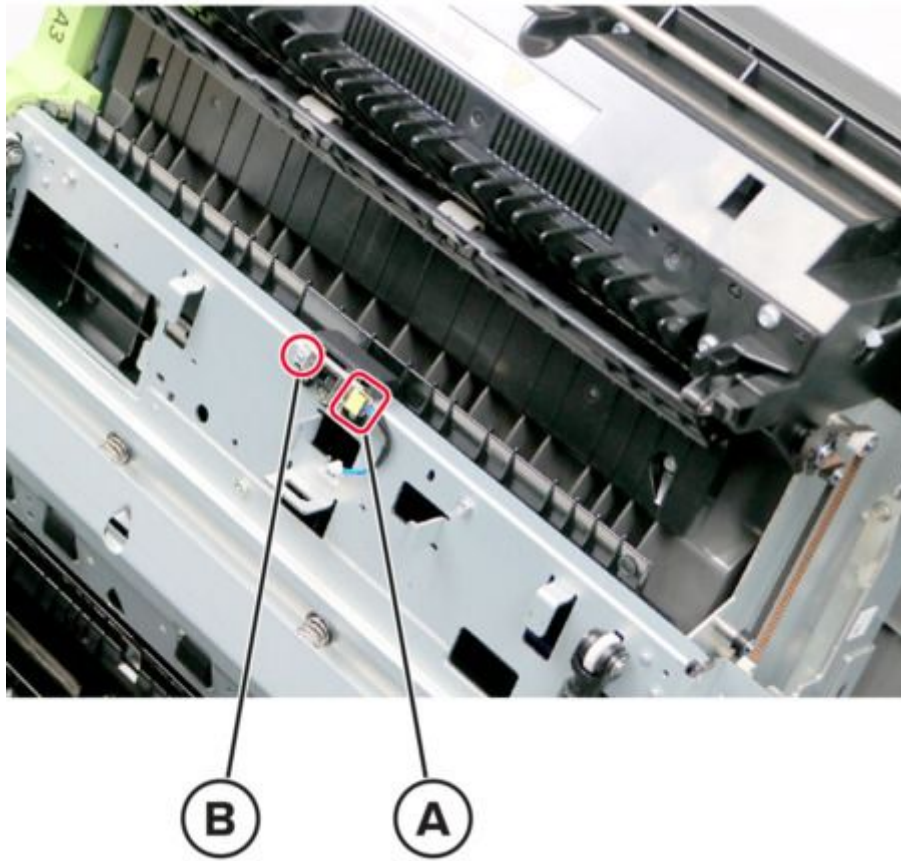


Sensor (transfer jam) removal

1. Open the left jam door.
2. Remove the screw (A), and then remove the cover (B).

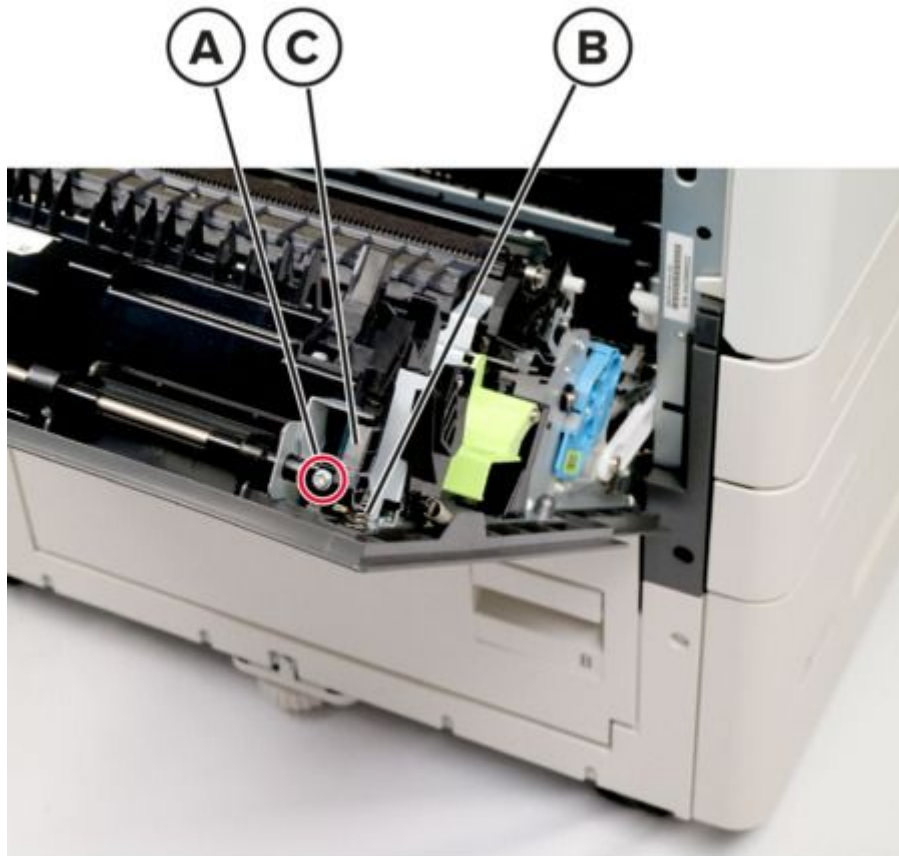


3. Disconnect the cable (C), and then remove the screw (D).



Left jam door front latch removal

1. Open the left jam door.
2. Remove the screw (A), remove the spring (B), and then remove the front latch (C).

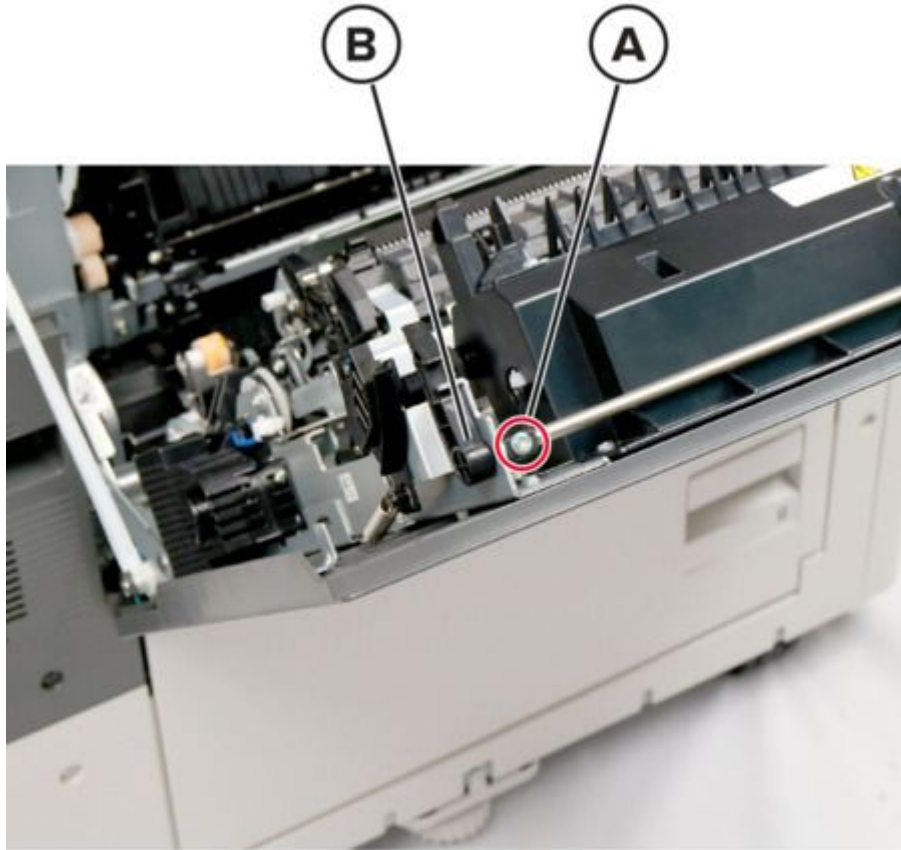


NOTES

Do not lose the spring.

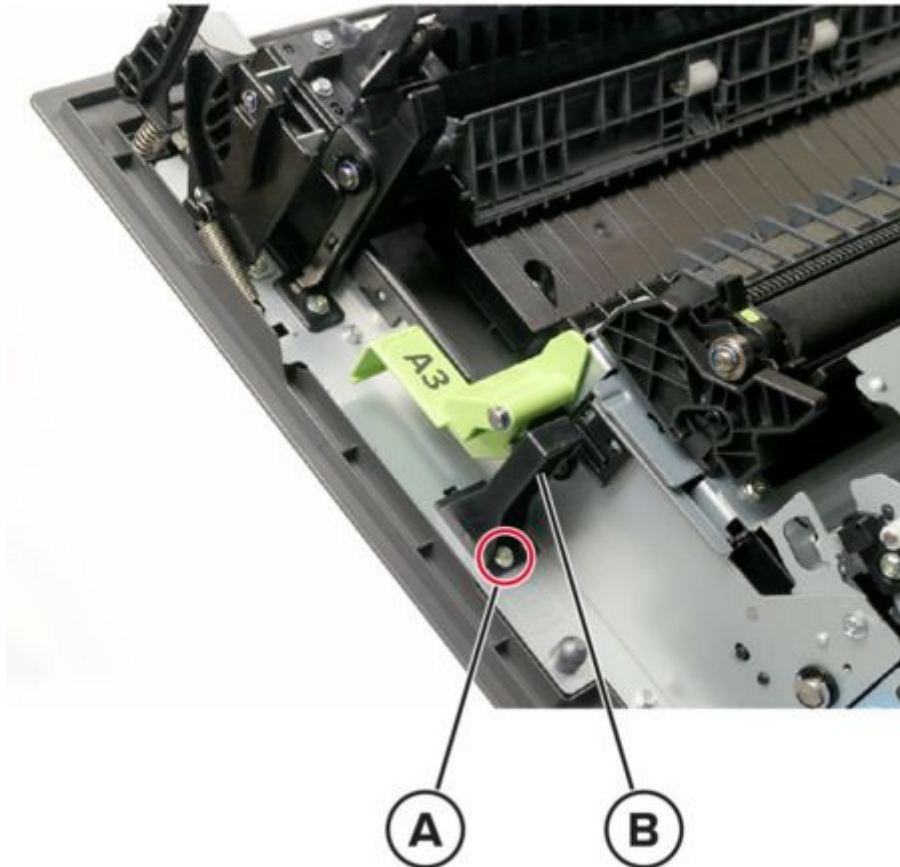
Left jam door rear latch removal

1. Open the left jam door.
2. Remove the screw (A), and then remove the rear latch (B).



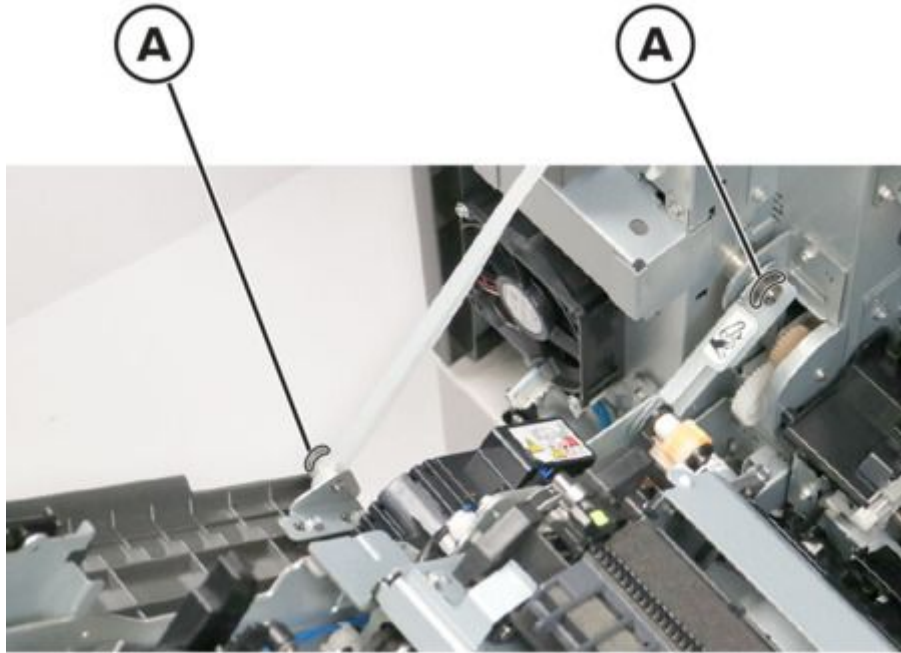
Left jam door stopper removal

1. Open the left jam door.
2. Remove the screw (A), and then remove the door stopper (B).

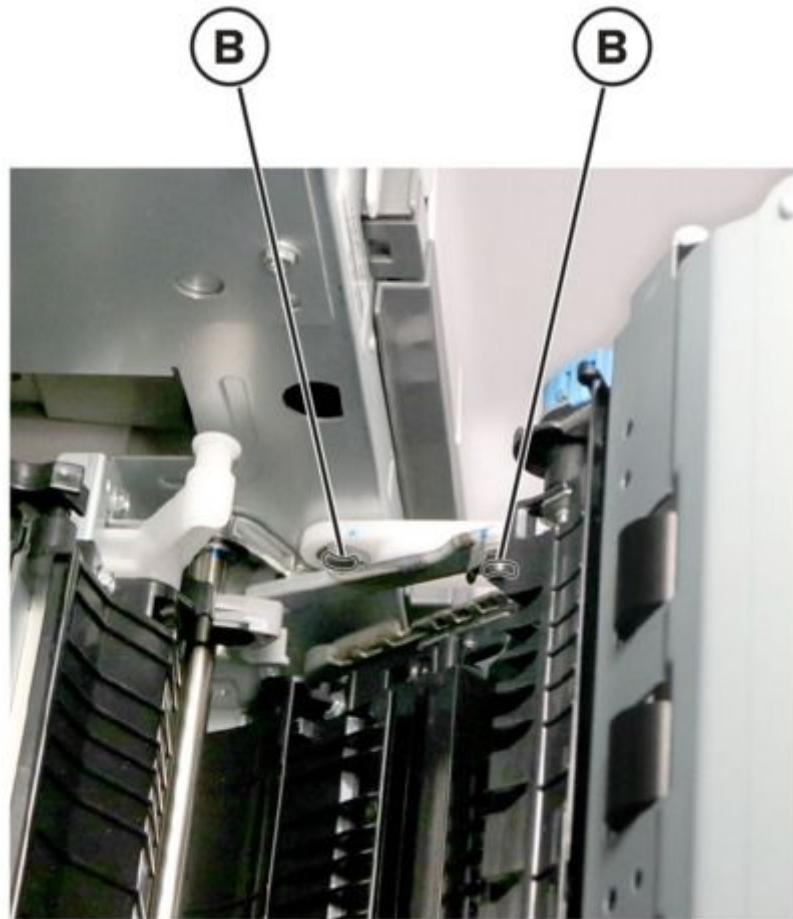


Left jam door removal

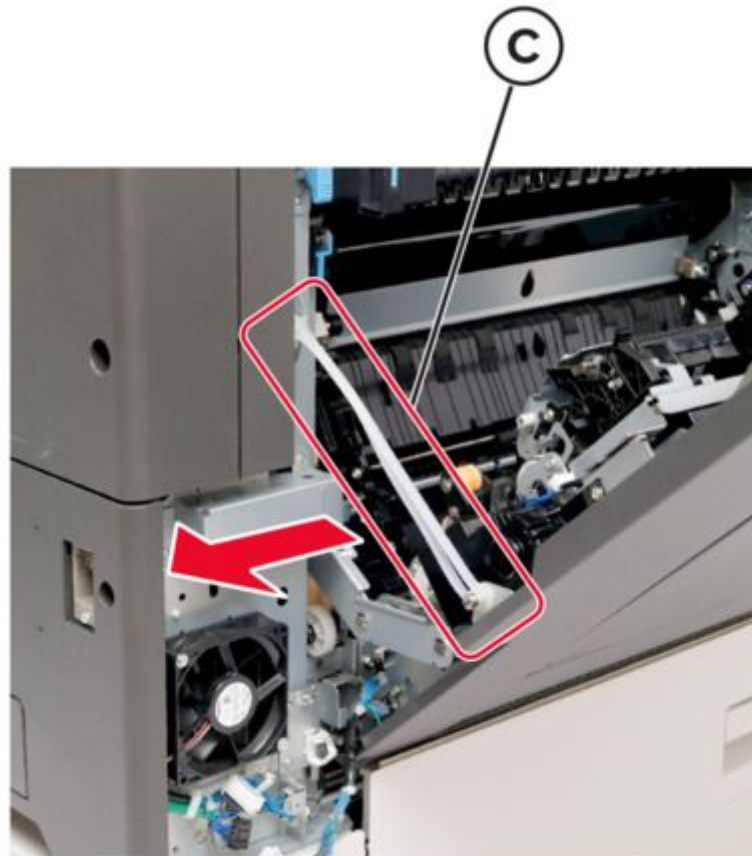
1. Remove the lower rear left cover. See ["Lower rear left cover removal"](#) on page 1203.
2. Remove the LH cover assembly. See ["LH cover assembly removal"](#) on page 1204.
3. Remove the two E-clips (A).



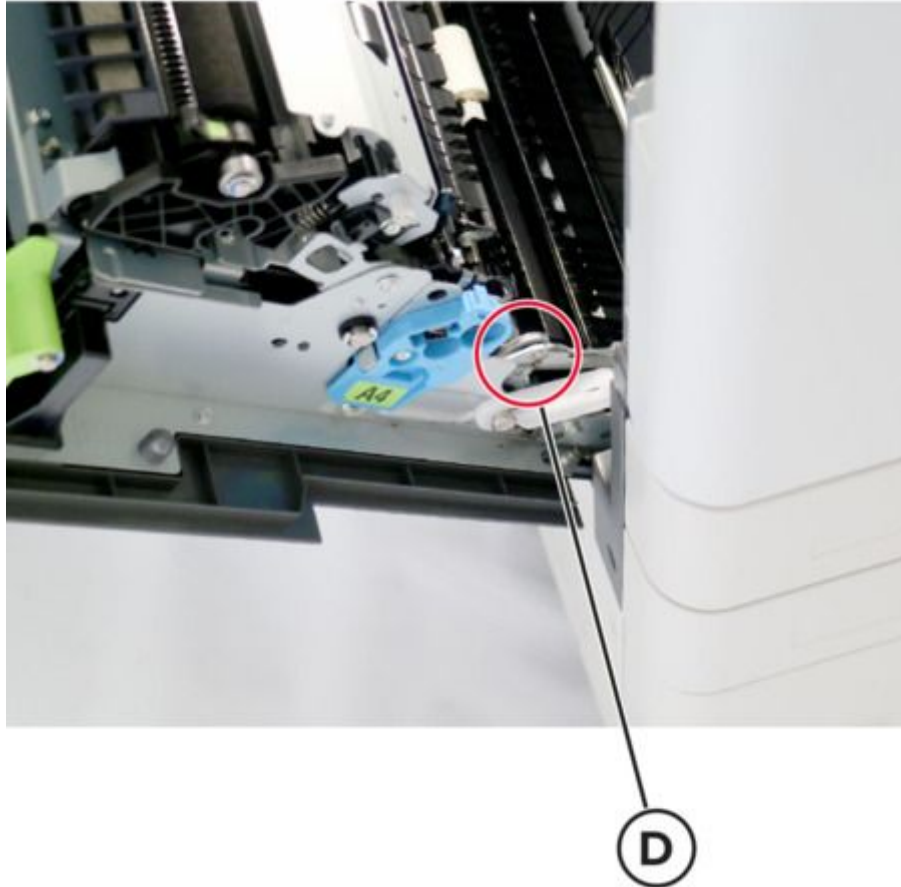
4. Remove the two E-clips (B).



5. Release the rear left door strap (C).



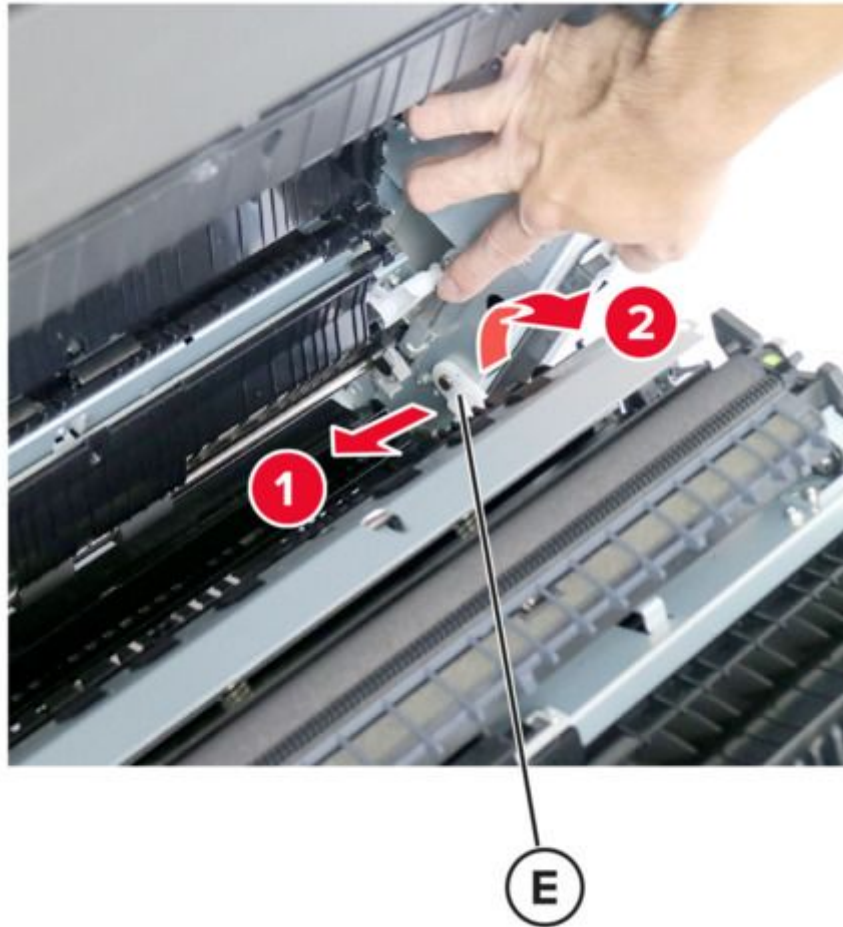
6. Release the front left door support bracket (D).



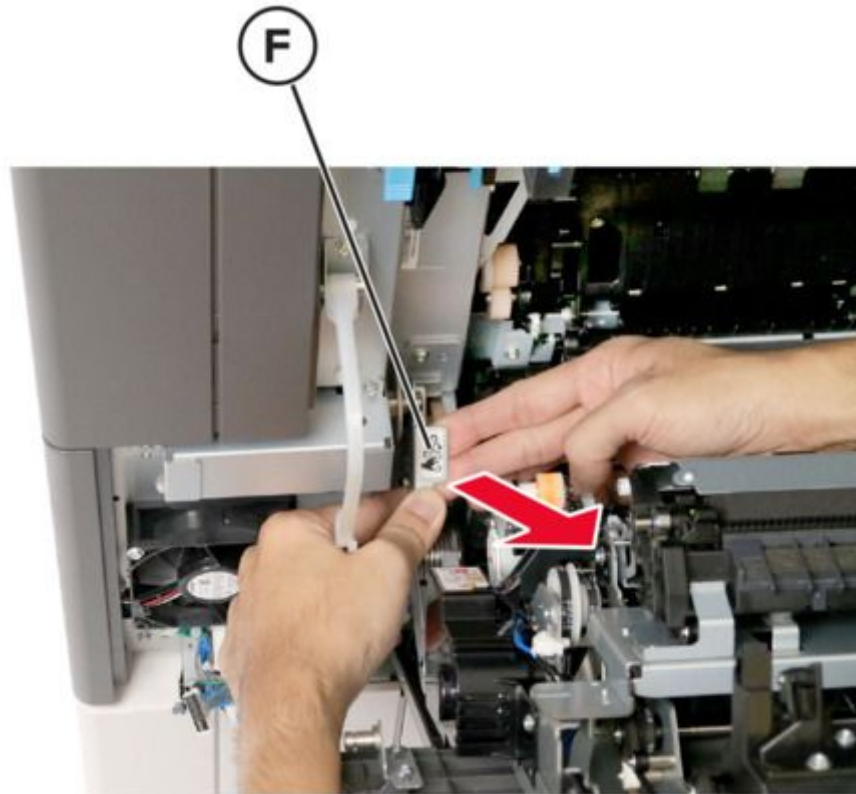
NOTES

Hold the door when removing the support brackets.

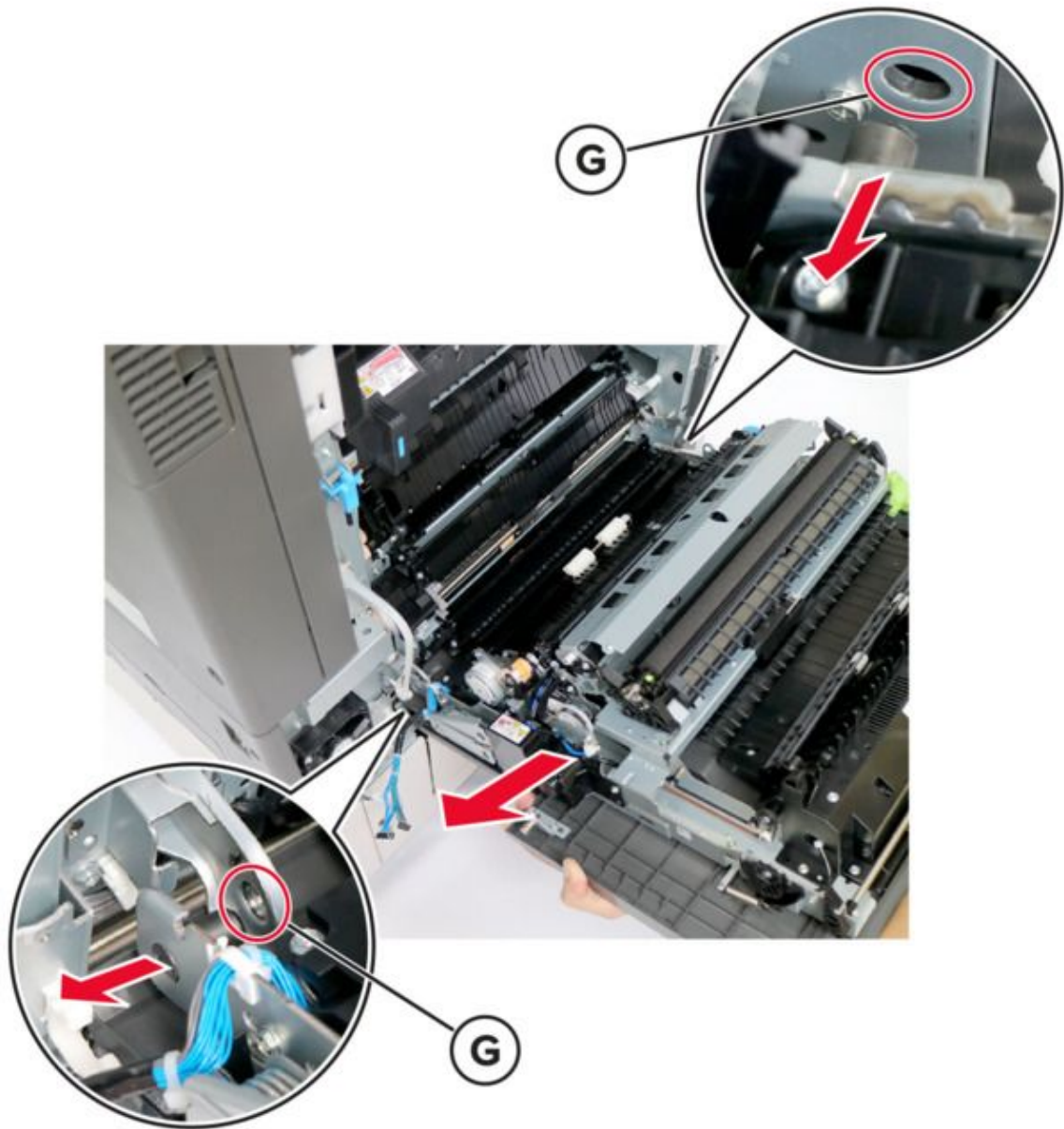
7. Release the front left door support (E).



8. Pull the lock (F) to release it from the door link.

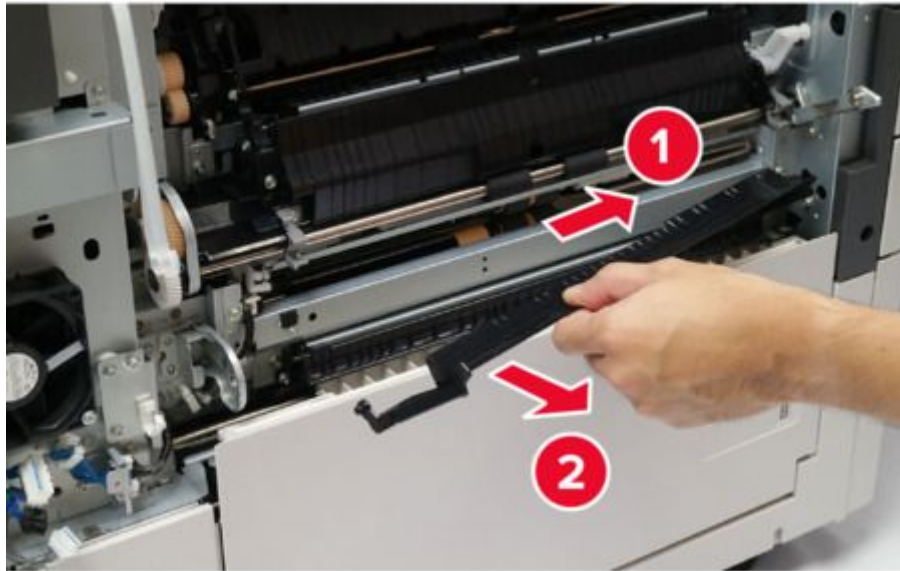


9. Move the left door to the left to release the door from the two links (G).



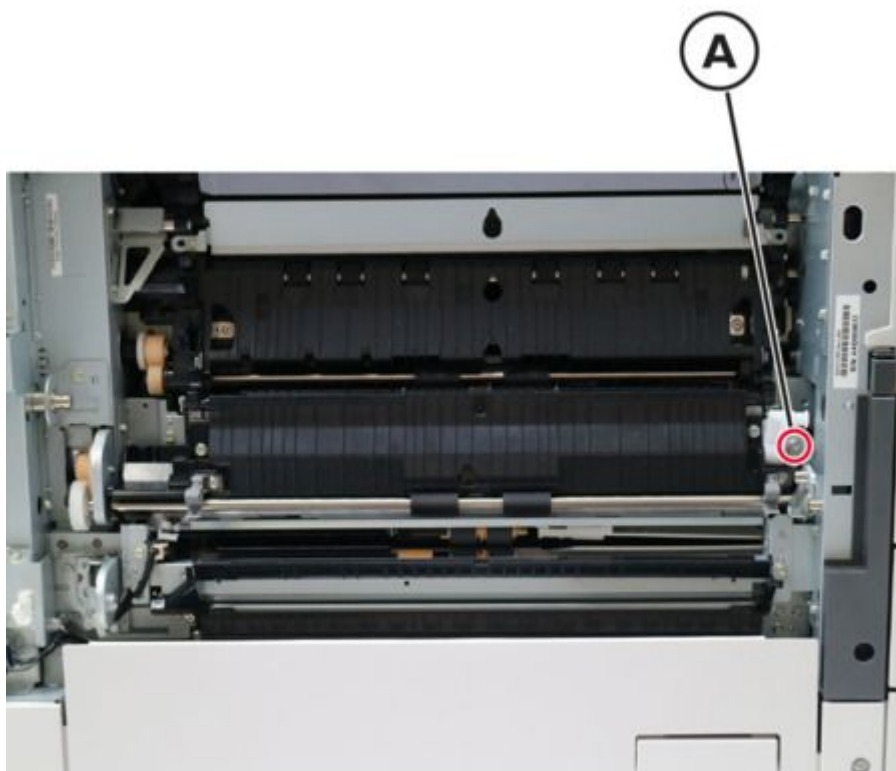
Transport feed guide removal

1. Remove the lower rear left cover. See [See "Lower rear left cover removal" on page 1203.](#)
2. Remove the left jam door. See [See "Left jam door removal" on page 1075.](#)
3. Remove the guide.

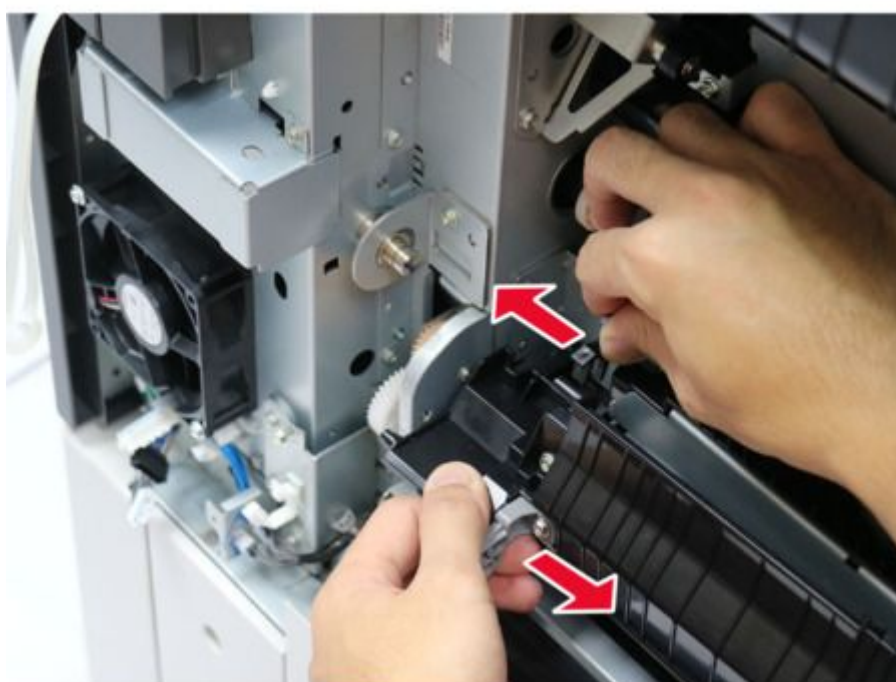


Transport assembly removal

1. Remove the lower rear left cover. See ["Lower rear left cover removal"](#) on page 1203.
2. Remove the left jam door. See ["Left jam door removal"](#) on page 1075.
3. Remove the screw (A).



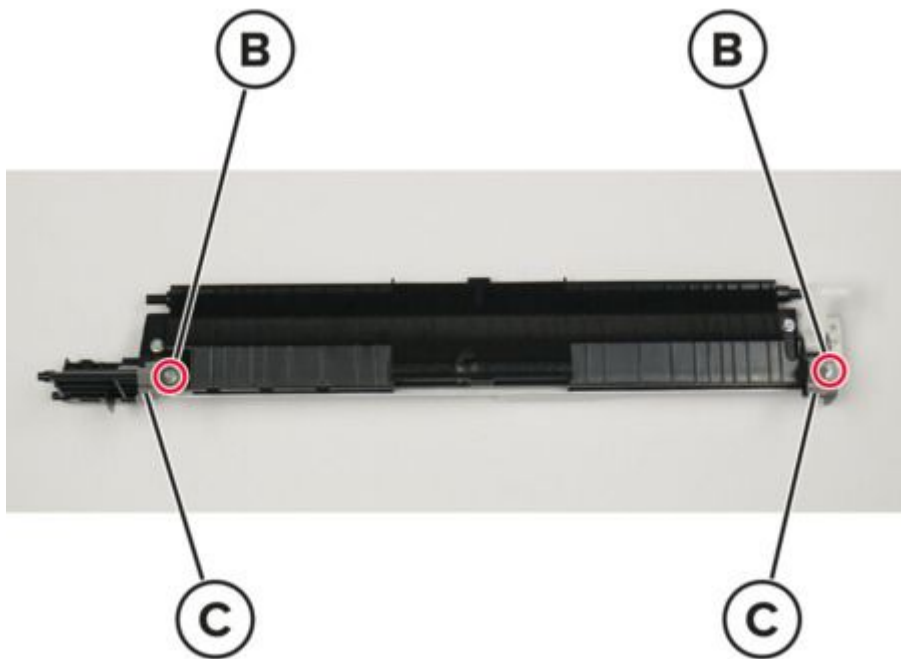
4. Release the transport assembly from the hinge.



5. Remove the transport guide.



6. Remove the two screws (B), and then remove the two guide holders (C).

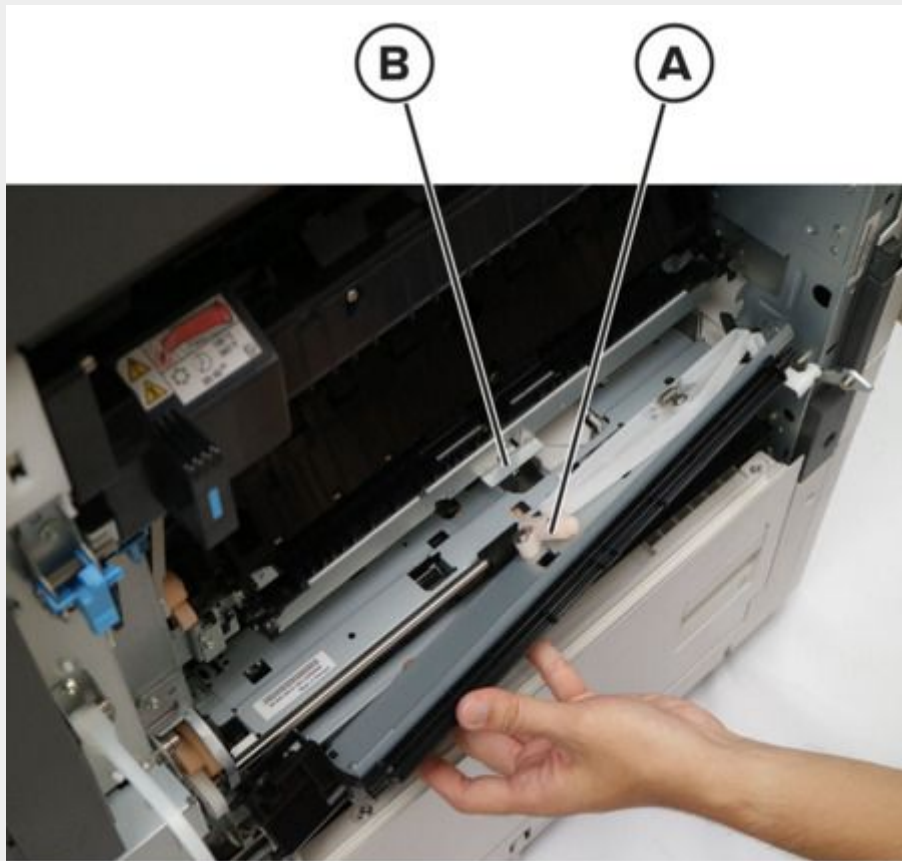


INSTALLATION NOTE

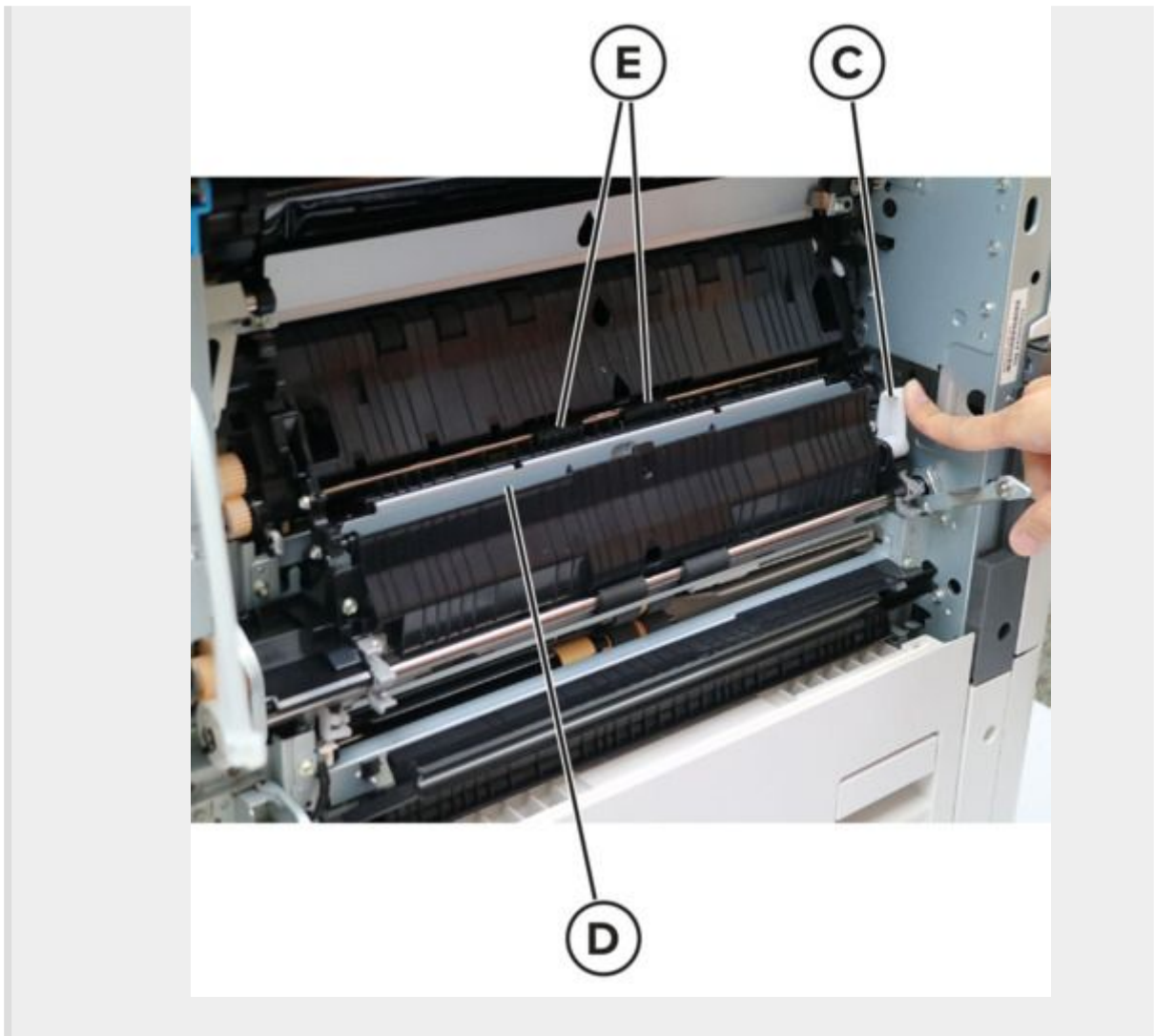
1. Make sure to install the two guide holders to the new transport assembly.



2. Properly align the actuator (A) with the transport guide under the feeder guide assembly (B) of the tray.

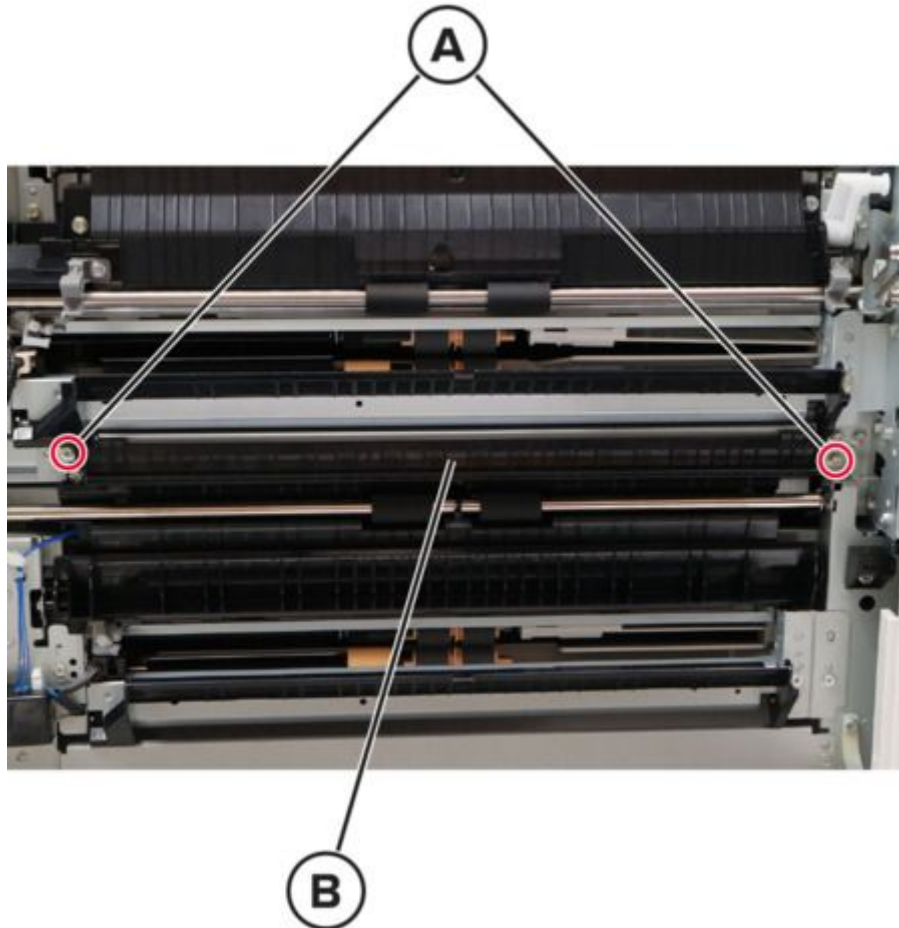


3. Toggle the lever (C) to check if the feeder guide assembly (D) raises and nips the two rollers (E).



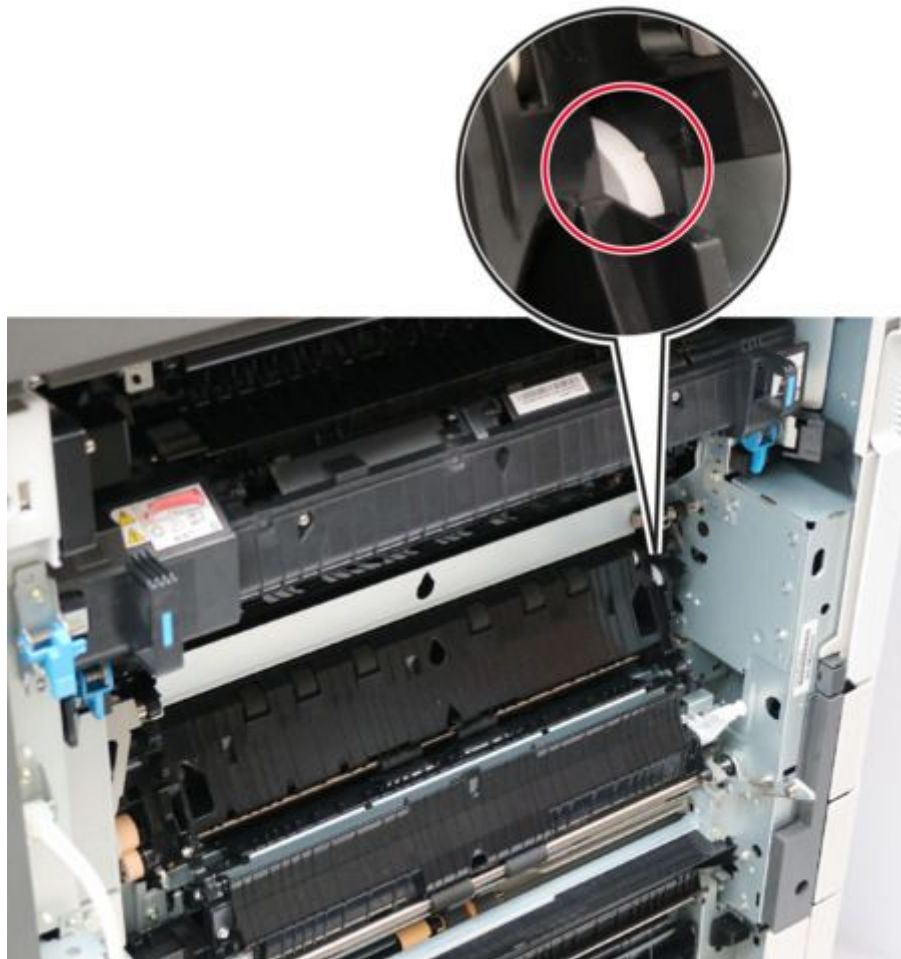
Transport guide removal

1. Remove the lower rear left cover. See ["Lower rear left cover removal"](#) on page 1203.
2. Remove the left jam door. See ["Left jam door removal"](#) on page 1075.
3. Open the input option jam door.
4. Remove the two screws (A), and then remove the guide (B).

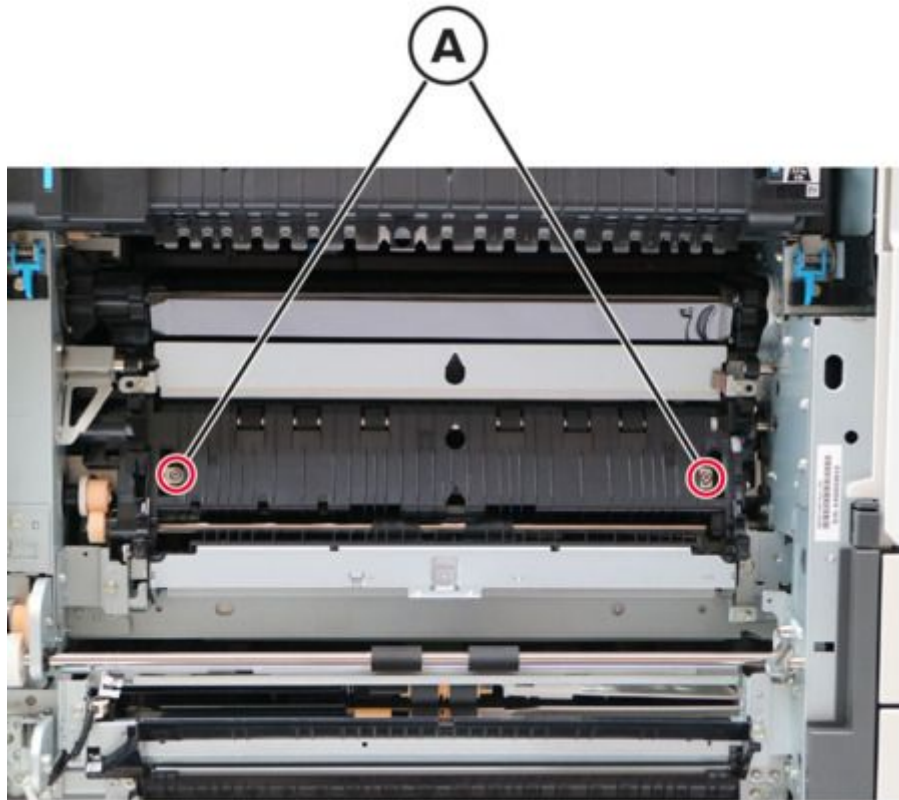


Registration transport assembly removal

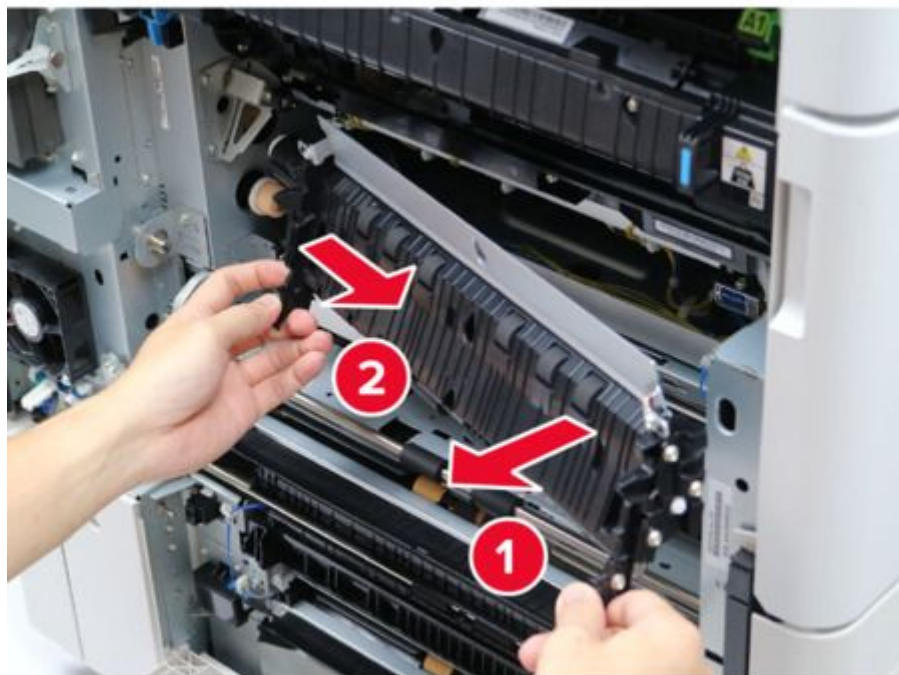
1. Remove the lower rear left cover. See [See "Lower rear left cover removal" on page 1203.](#)
2. Remove the left jam door. See [See "Left jam door removal" on page 1075.](#)
3. Remove the transport assembly. See [See "Transport assembly removal" on page 1083.](#)
4. Take note of the position of the adjust cam. Make sure that the adjust cam is in the same position after replacing the registration transport assembly.



5. Remove the two screws.



6. Remove the registration transport assembly.



INSTALLATION NOTE

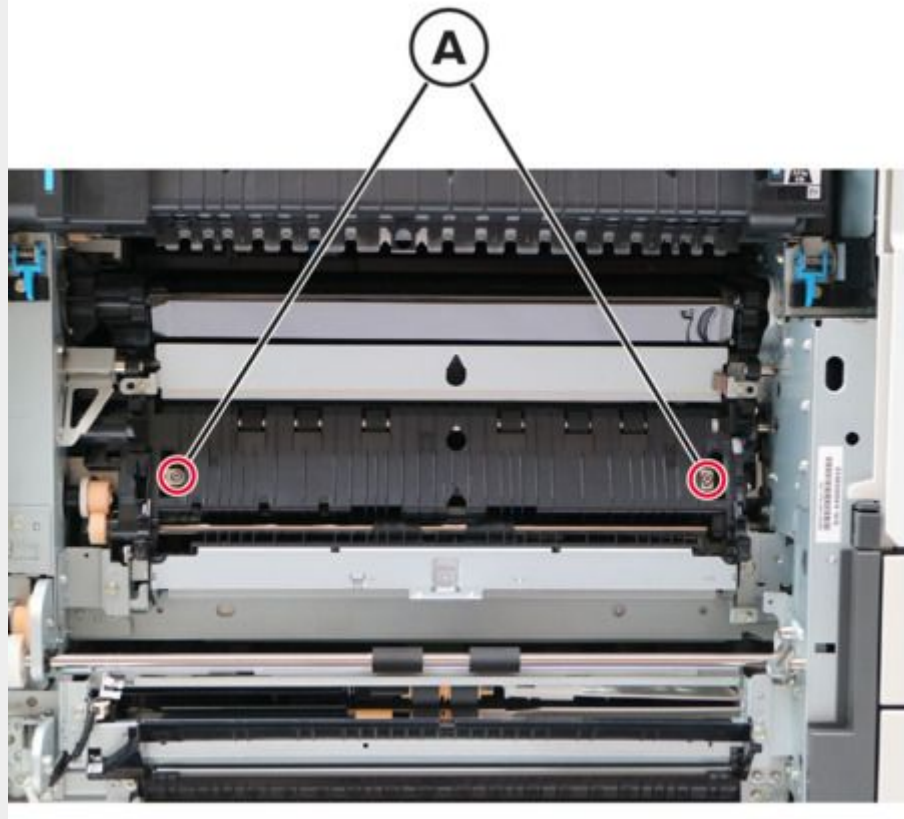
1. Properly align the registration transport assembly with its drive gear on the printer.



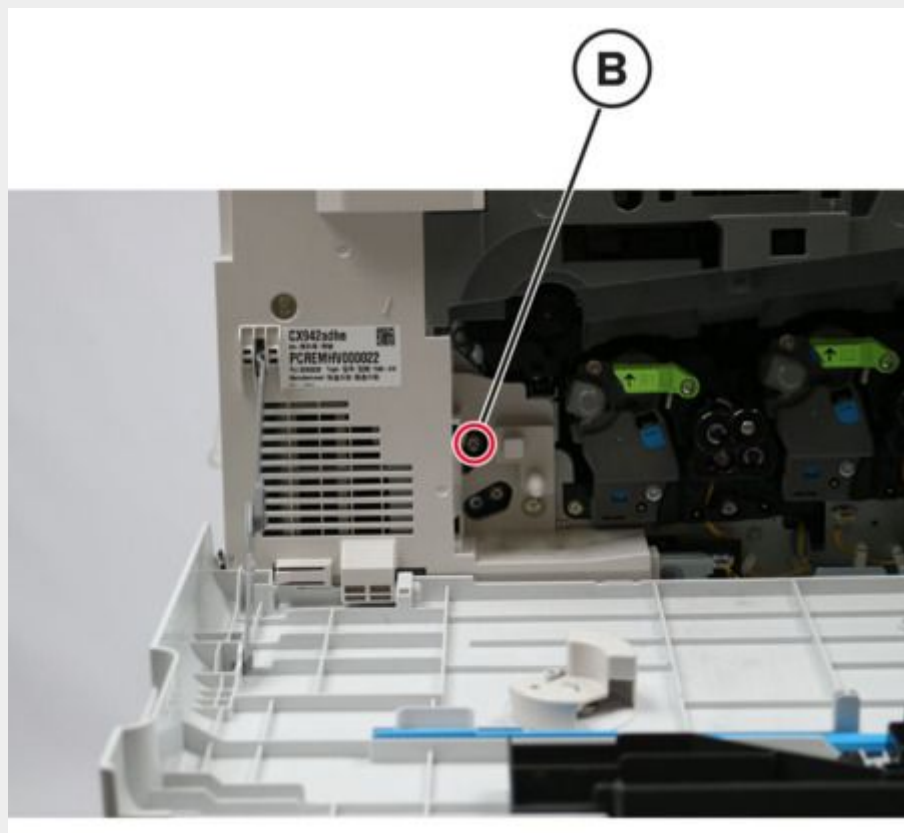
2. Open the front door, and then remove the waste toner transfer unit. See [See "Waste toner transfer unit removal" on page 1154.](#)
3. Install the two screws (A) on the registration transport assembly.

NOTES

Do not fully tighten the two screws yet.

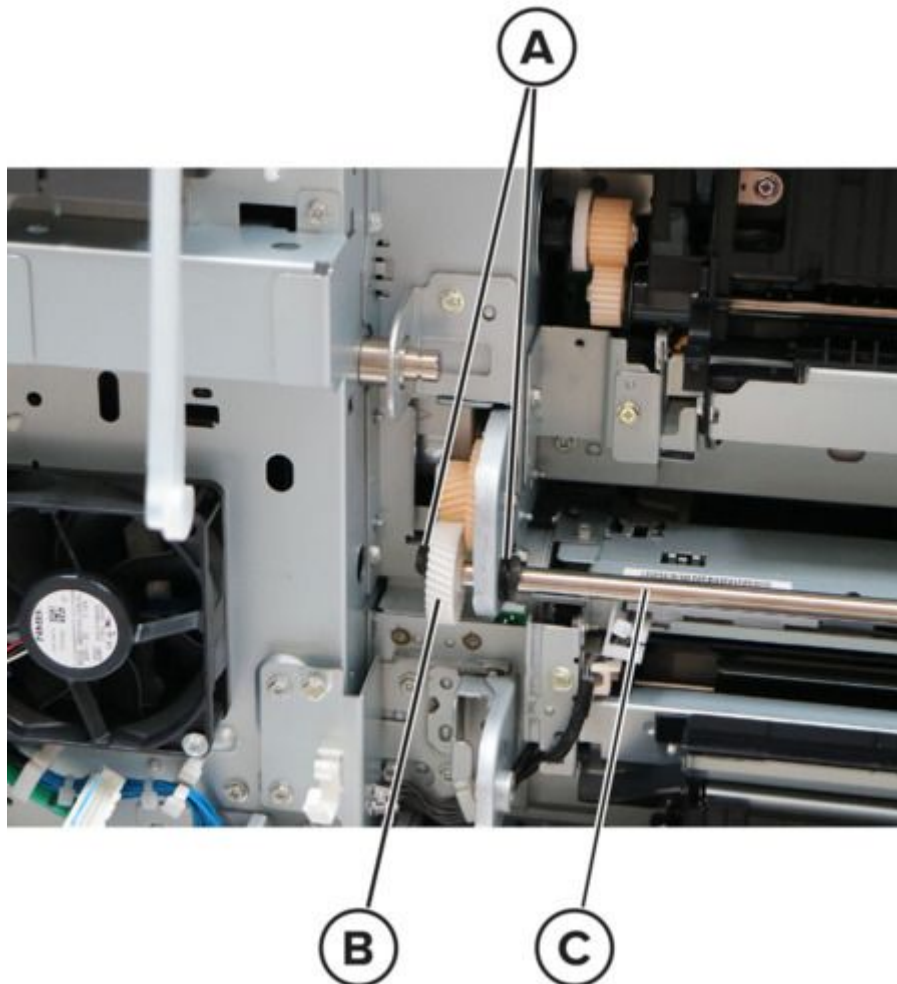


4. Turn the gear (B) to return the adjust cam back to its original position, and then fully tighten the two screws on the registration transport assembly.



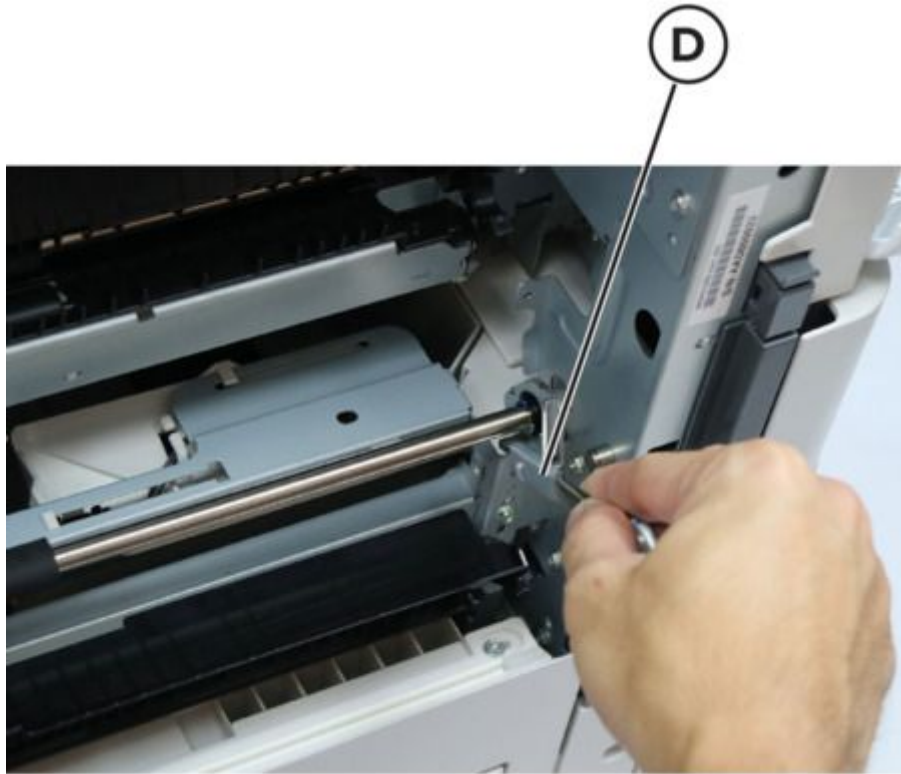
Registration roller removal

1. Remove the lower rear left cover. See ["Lower rear left cover removal"](#) on page 1203.
2. Remove the left jam door. See ["Left jam door removal"](#) on page 1075.
3. Remove the transport assembly. See ["Transport assembly removal"](#) on page 1083.
4. Remove the two E-clips (A), remove the gear (B), and then remove the registration roller (C).



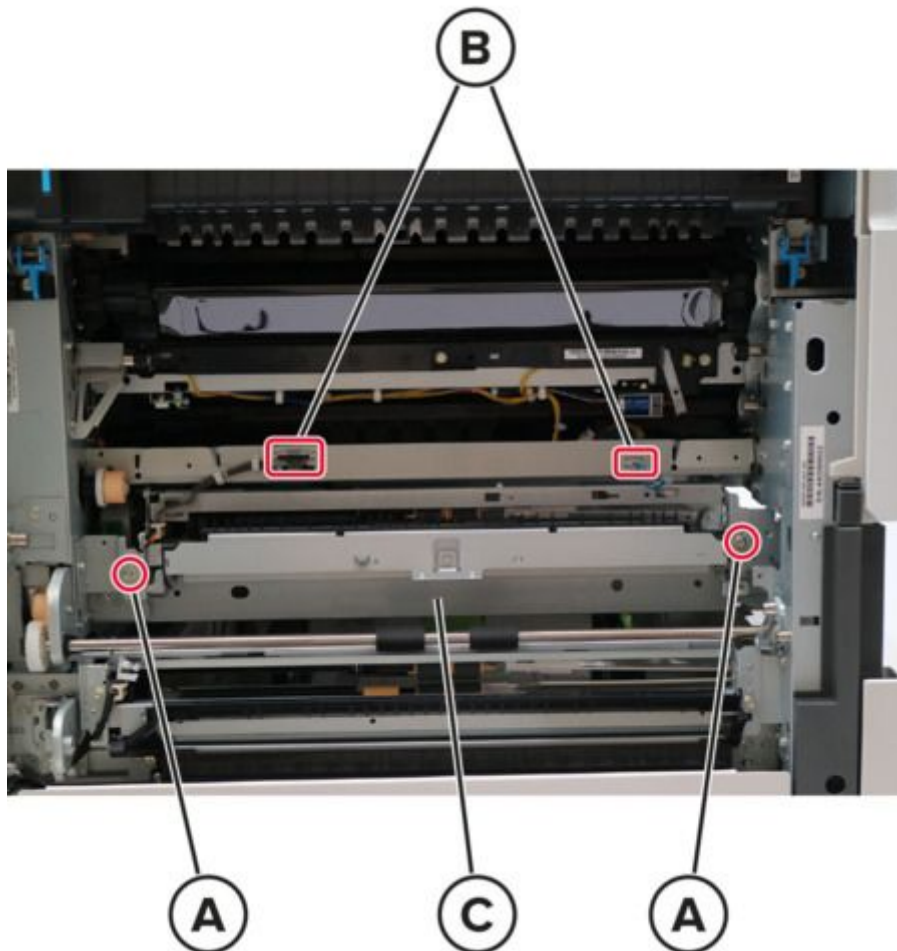
WARNING—POTENTIAL DAMAGE

While removing the roller, make sure to hold the bracket (D) to avoid losing the washers on the roller shaft.

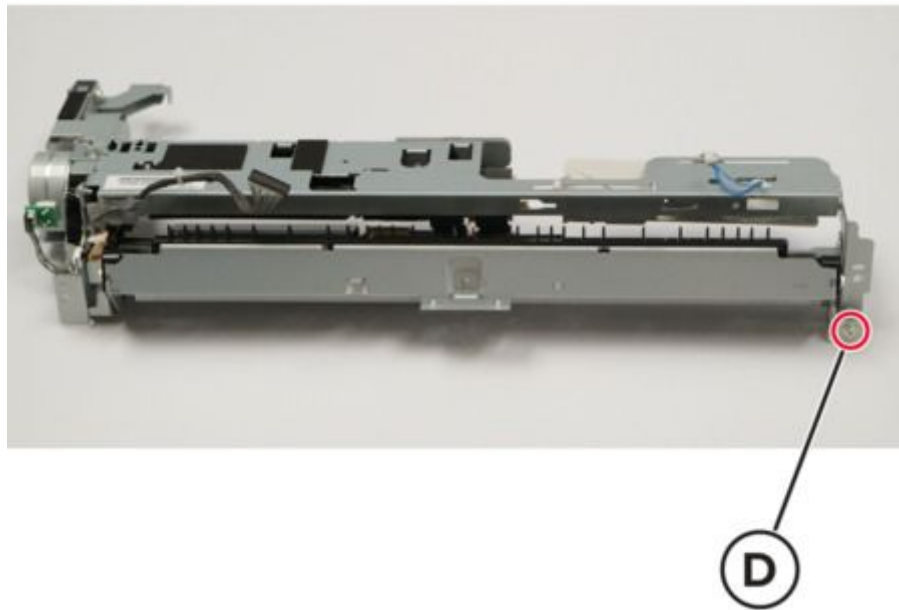


Tray 1 feed assembly removal

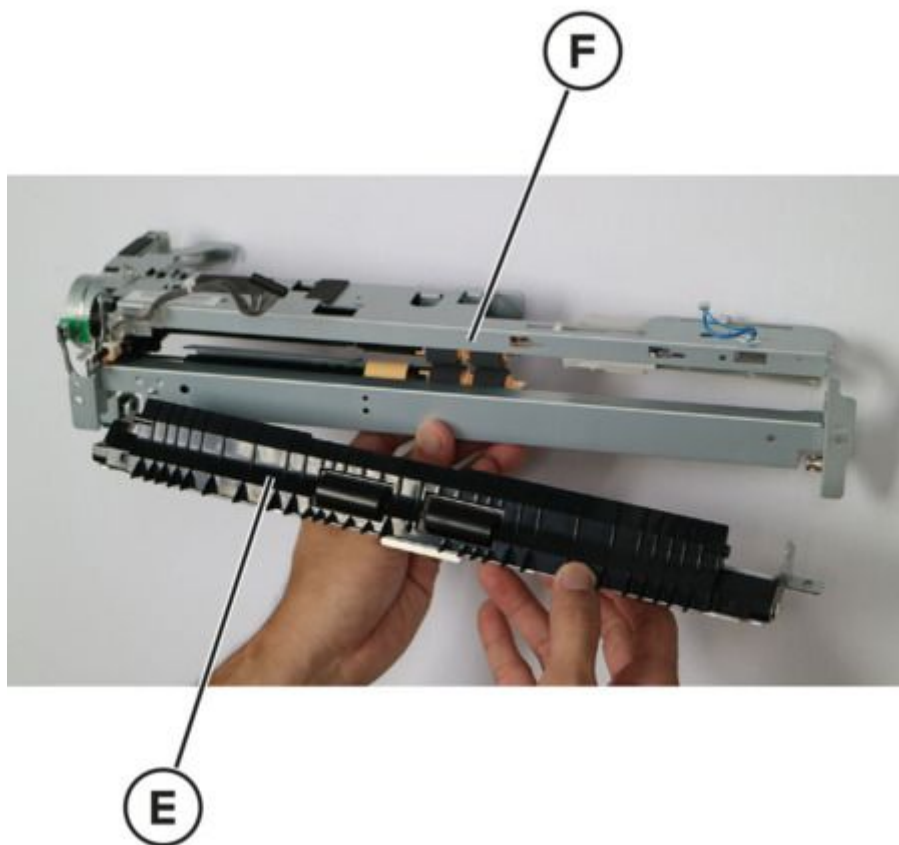
1. Remove tray 1.
2. Remove the lower rear left cover. See [See "Lower rear left cover removal" on page 1203.](#)
3. Remove the left jam door. See [See "Left jam door removal" on page 1075.](#)
4. Remove the transport assembly. See [See "Transport assembly removal" on page 1083.](#)
5. Remove the registration transport assembly. See [See "Transport assembly removal" on page 1083.](#)
6. Remove the two screws (A), disconnect the two cables (B), release the two cables from their guides, and then remove the tray 1 feed assembly (C).



7. Remove the screw (D).

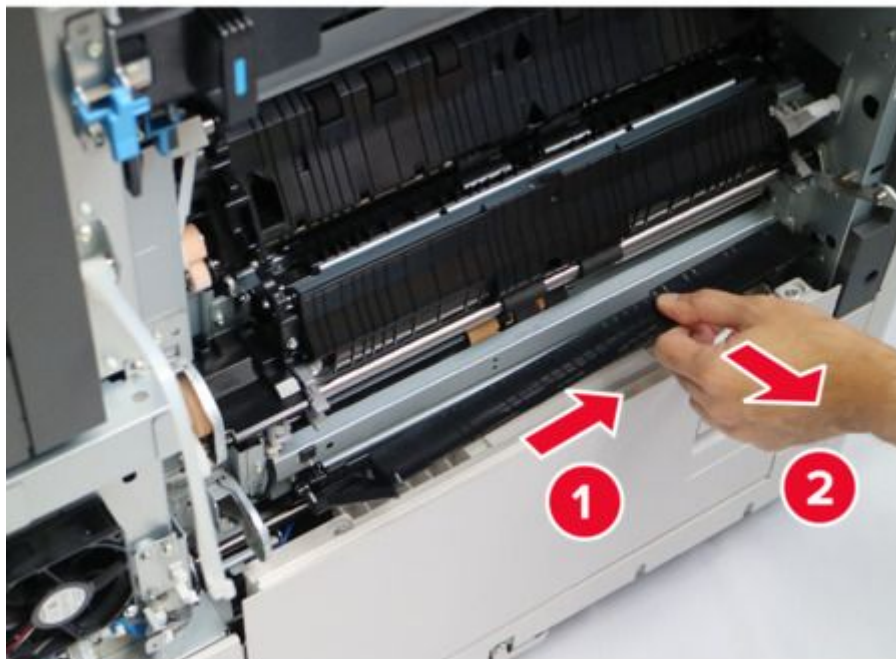


8. Remove the tray 1 feed guide (E) from the tray 1 feed assembly (F).



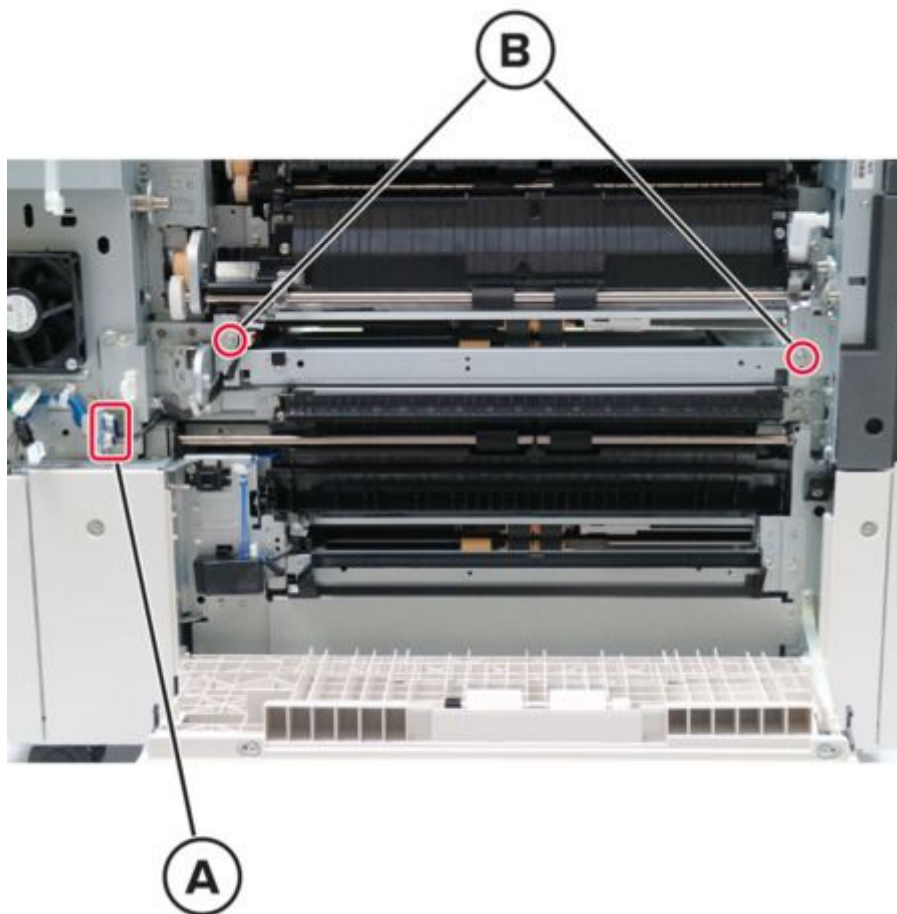
Input option transport guide removal

1. Remove the lower rear left cover. See [See "Lower rear left cover removal" on page 1203.](#)
2. Remove the left jam door. See [See "Left jam door removal" on page 1075.](#)
3. Open the input option jam door.
4. Remove the input option transport guide.



Tray 2 feed assembly removal

1. Remove the tray insert from tray 2.
2. Remove the lower rear left cover. See [See "Lower rear left cover removal" on page 1203.](#)
3. Remove the left jam door. See [See "Left jam door removal" on page 1075.](#)
4. Remove the input option transport guide. See [See "Input option transport guide removal" on page 1096.](#)
5. Open the input option jam door.
6. Disconnect the two cables (A), remove the cable from their guides, and then remove the two screws (B).

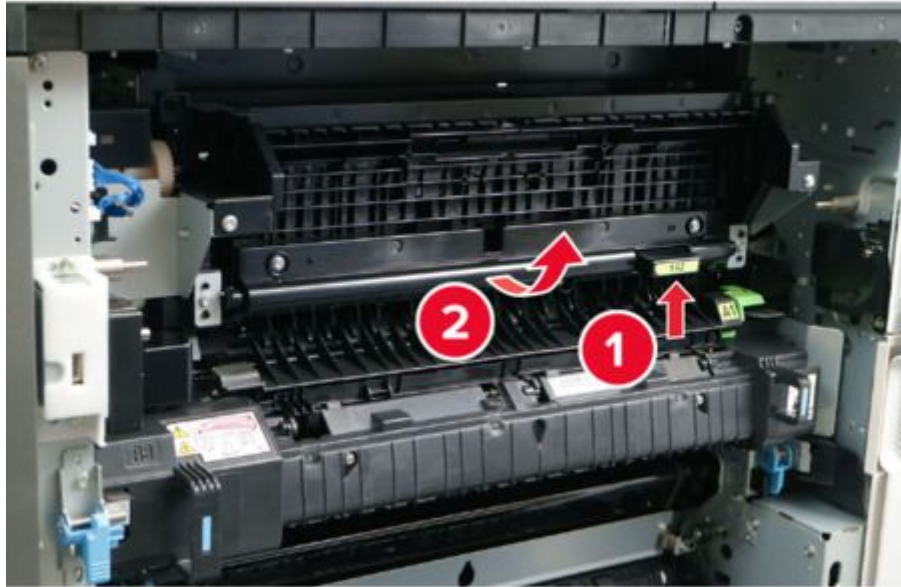


7. Remove the tray 2 feed assembly.

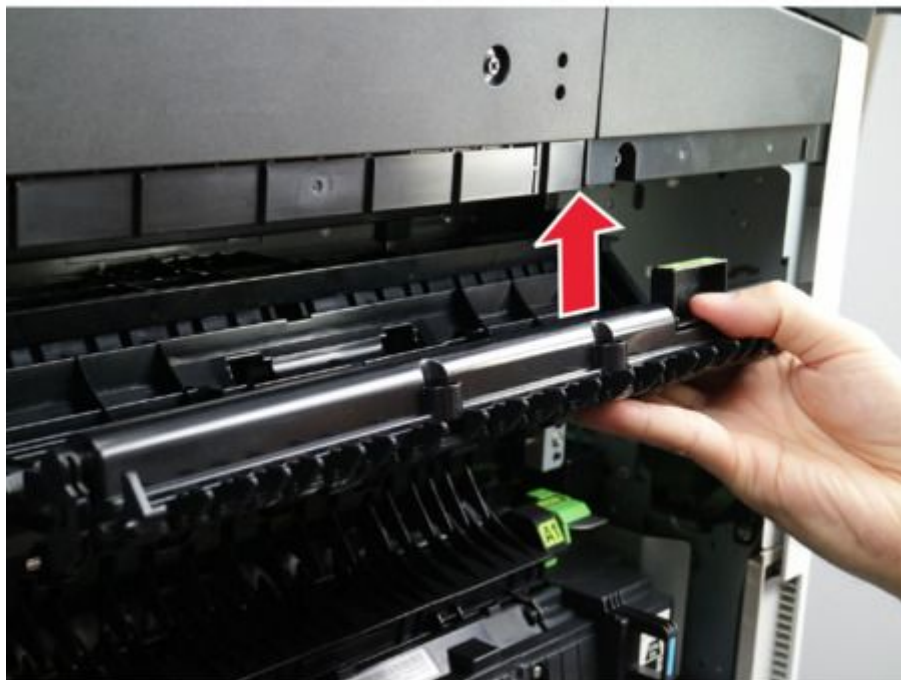


Exit 2 transport guide removal

1. Open the left jam door.
2. Remove the upper left cover. See ["Upper left cover removal"](#) on page 1055
3. Release the latch, and then raise the exit 2 transport guide.

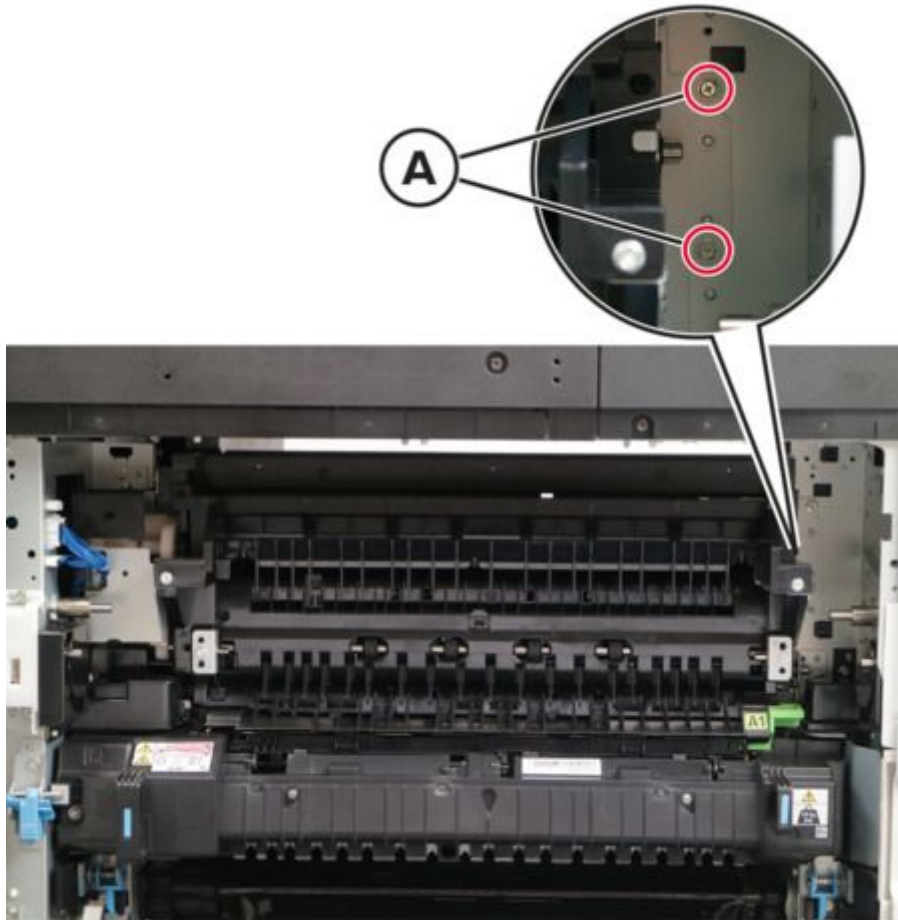


4. Remove the exit 2 transport guide.

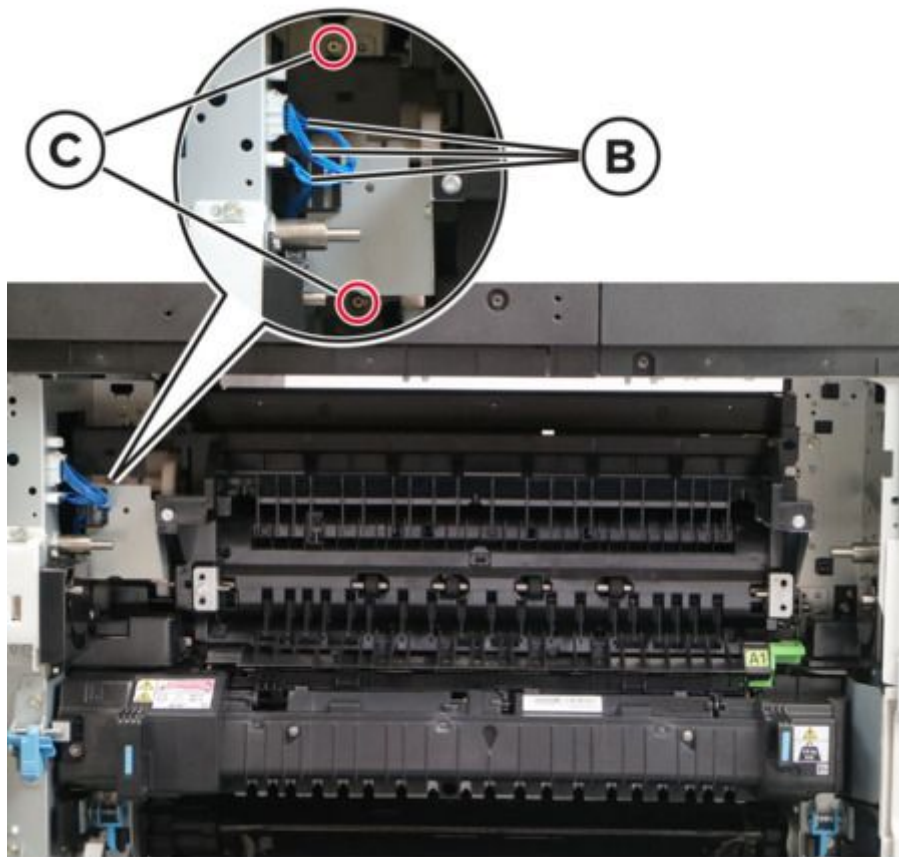


Exit 2 transport assembly removal

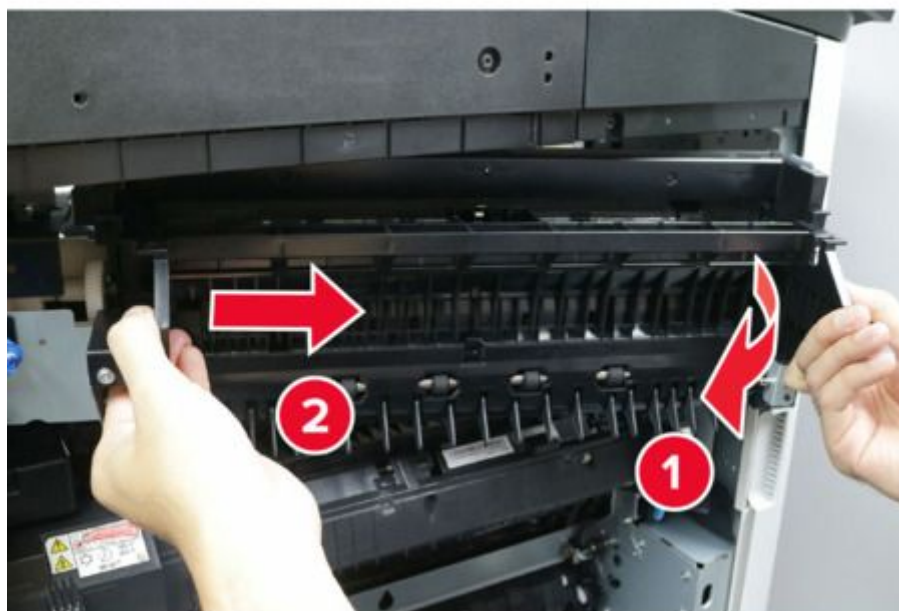
1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277](#).
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099](#).
6. Remove the two screws (A).



7. Disconnect the three cables (B), and then remove the two screws (C).

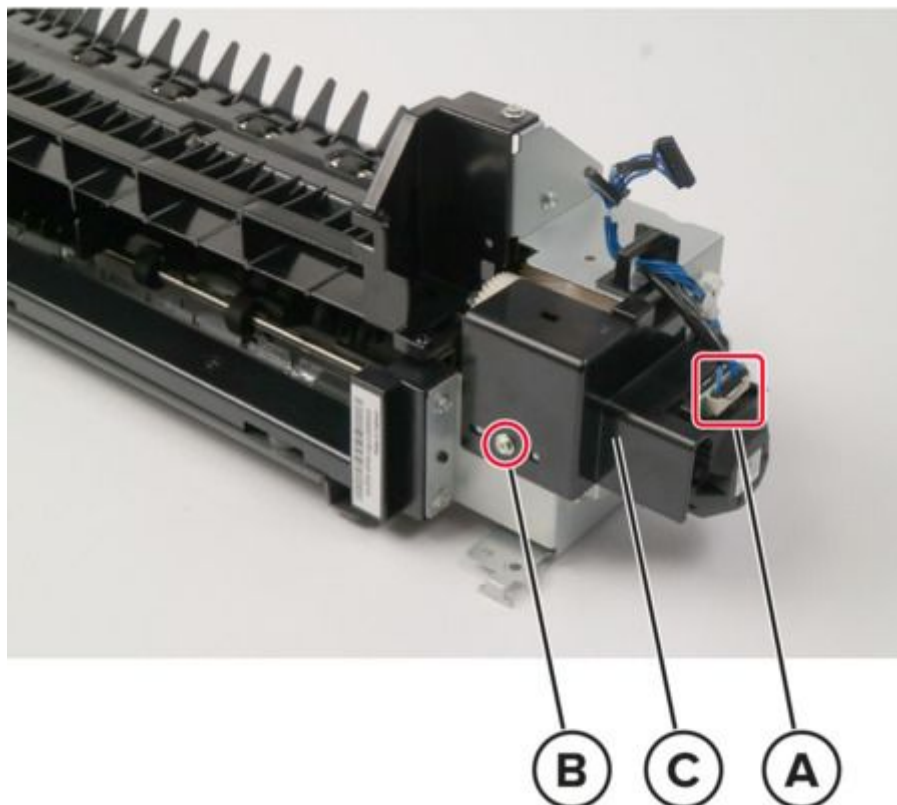


8. Remove the exit 2 transport assembly.

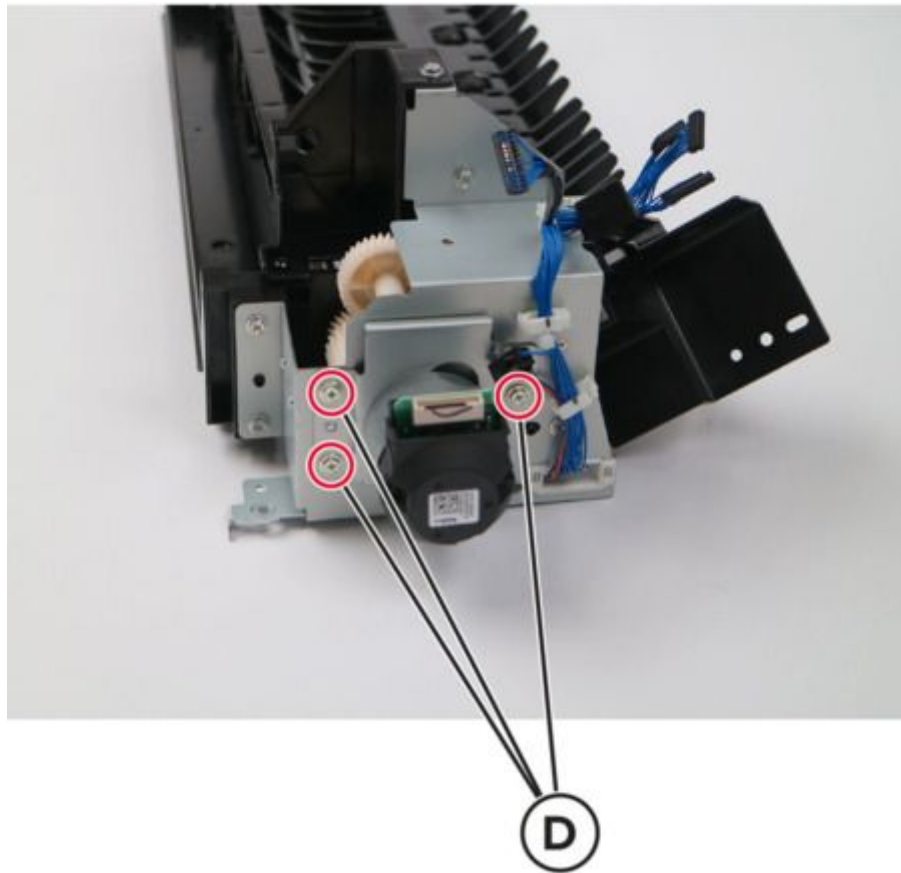


Motor (bin 2 drive) removal

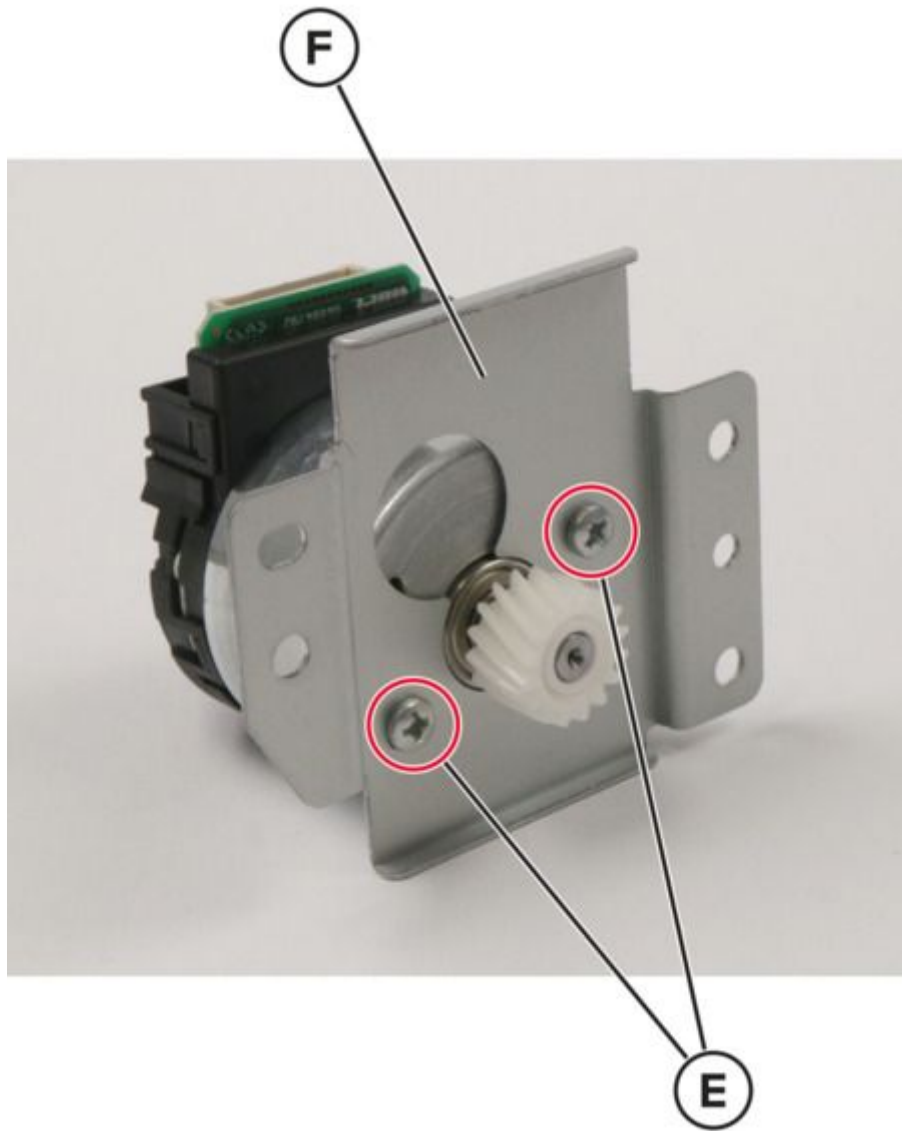
1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277.](#)
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099.](#)
6. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100.](#)
7. Disconnect the cable (A), remove the screw (B), and then remove the cover (C).



8. Remove the three screws (D), and then remove the motor assembly.

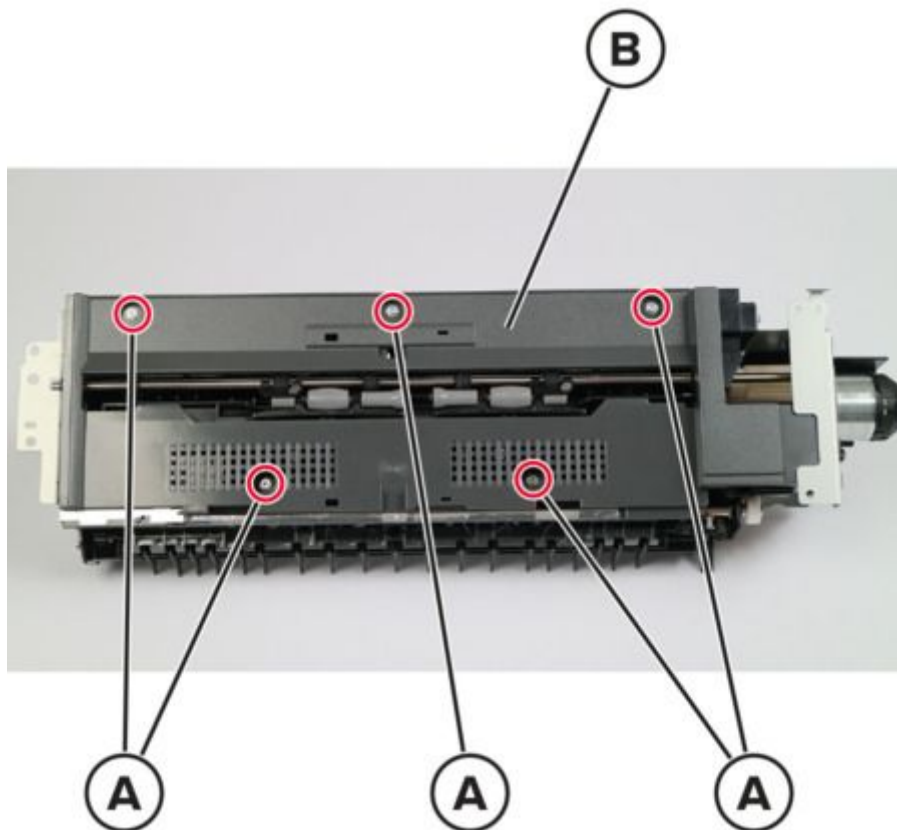


9. Remove the two screws (E), and then remove the bracket (F) from the motor.



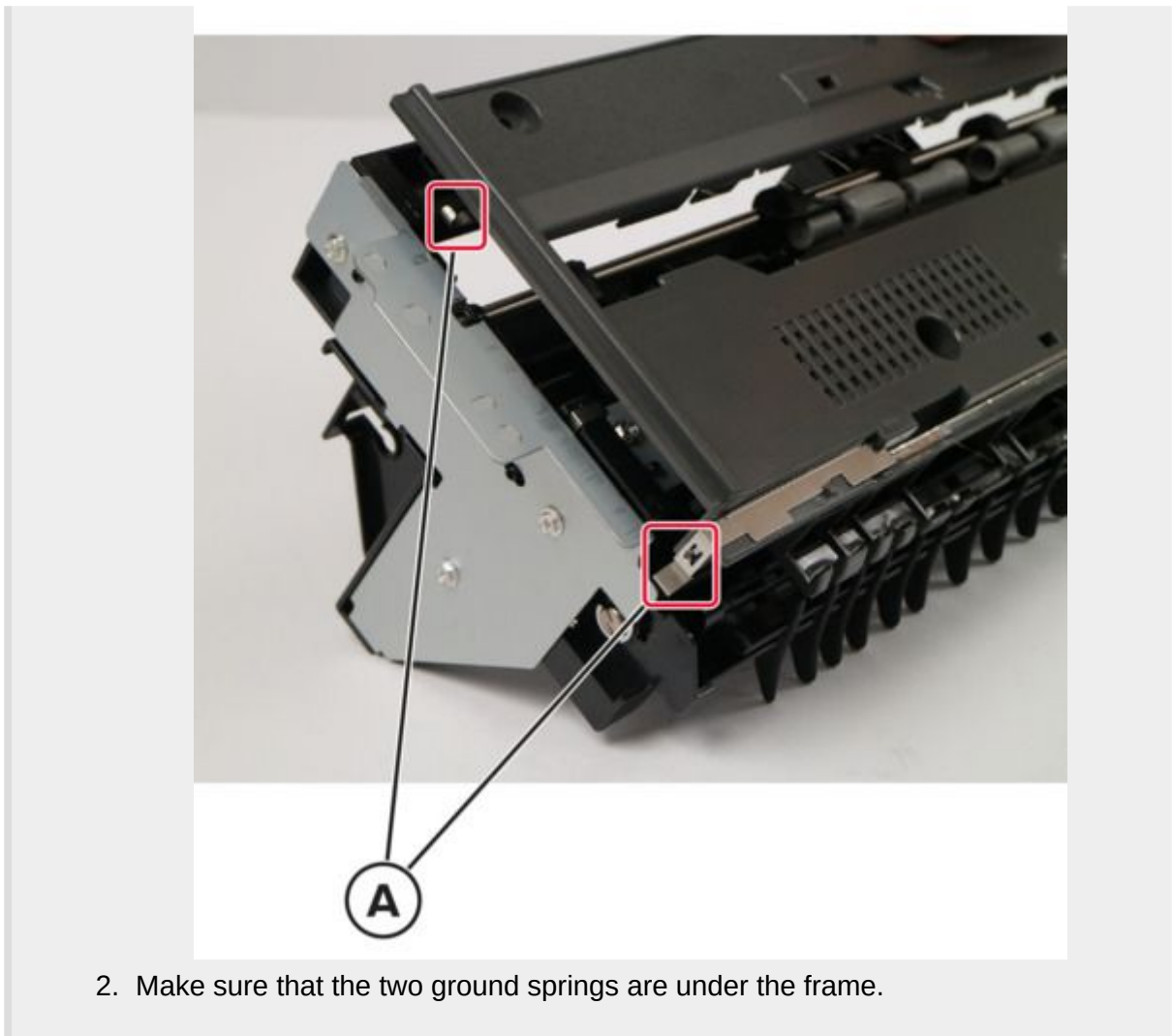
Motor (bin 2 offset) removal

1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277](#).
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099](#).
6. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100](#).
7. Remove the five screws (A), and then remove the cover (B).



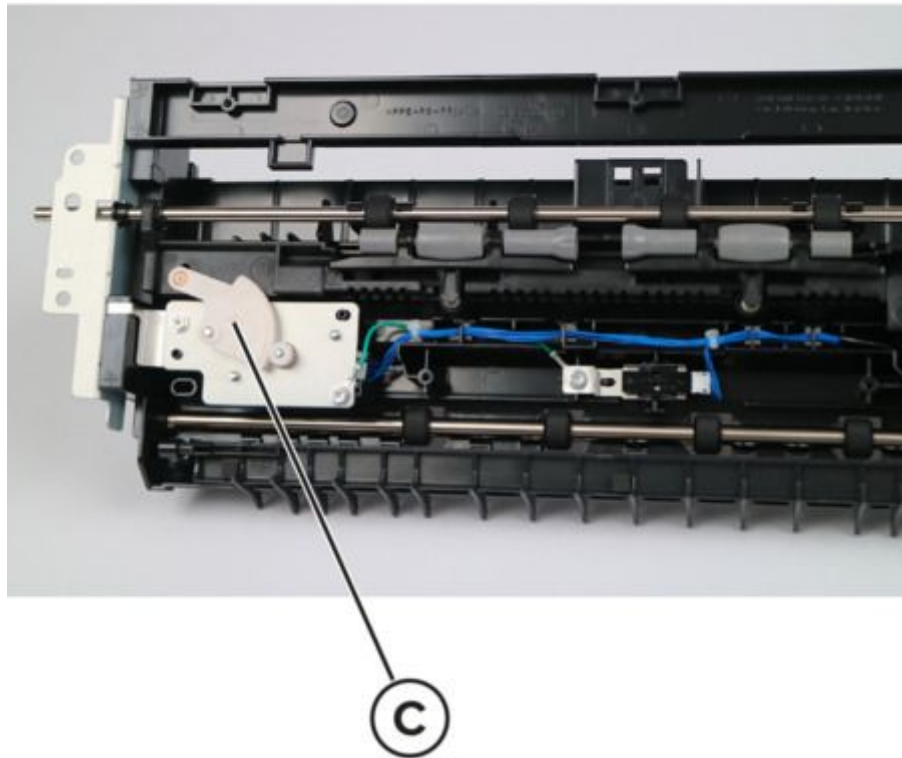
INSTALLATION NOTE

1. Make sure not to damage the two ground springs (A).

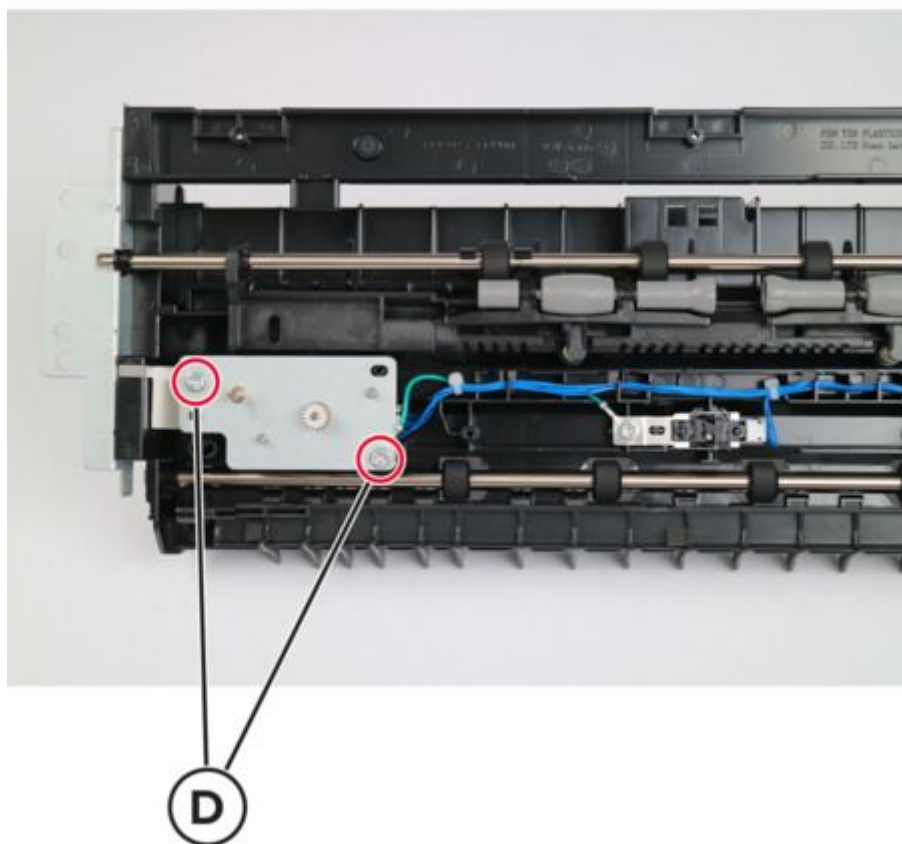


2. Make sure that the two ground springs are under the frame.

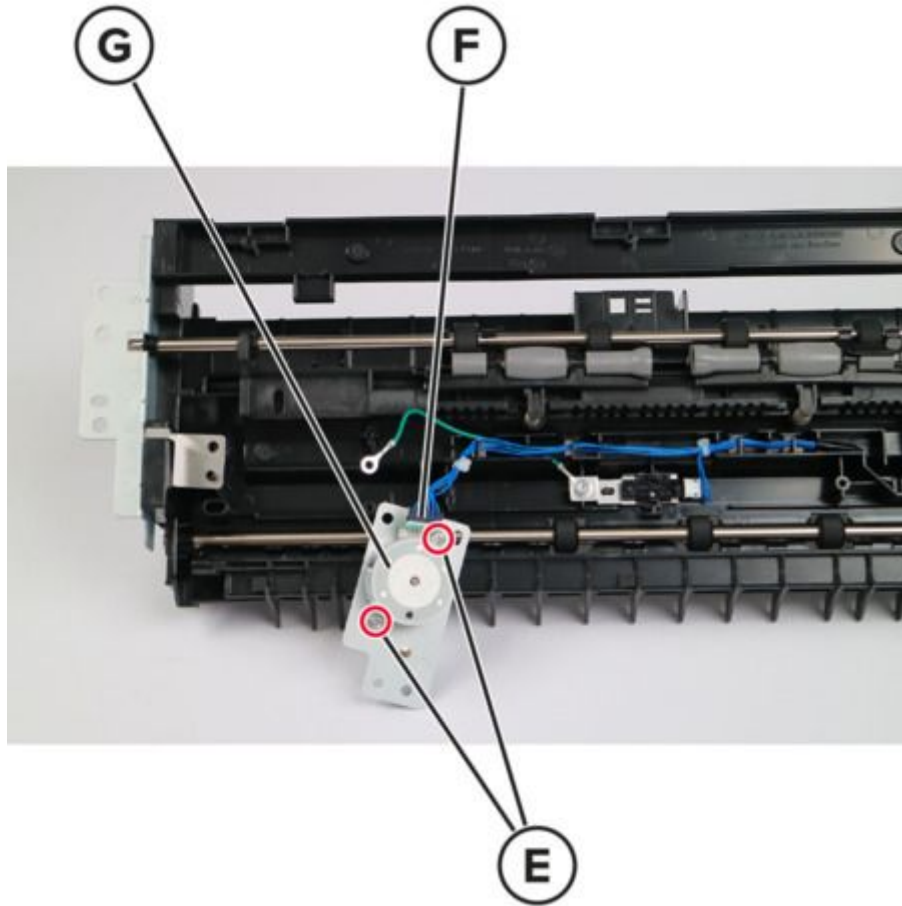
8. Remove the offset gear (C).



9. Remove the two screws (D).

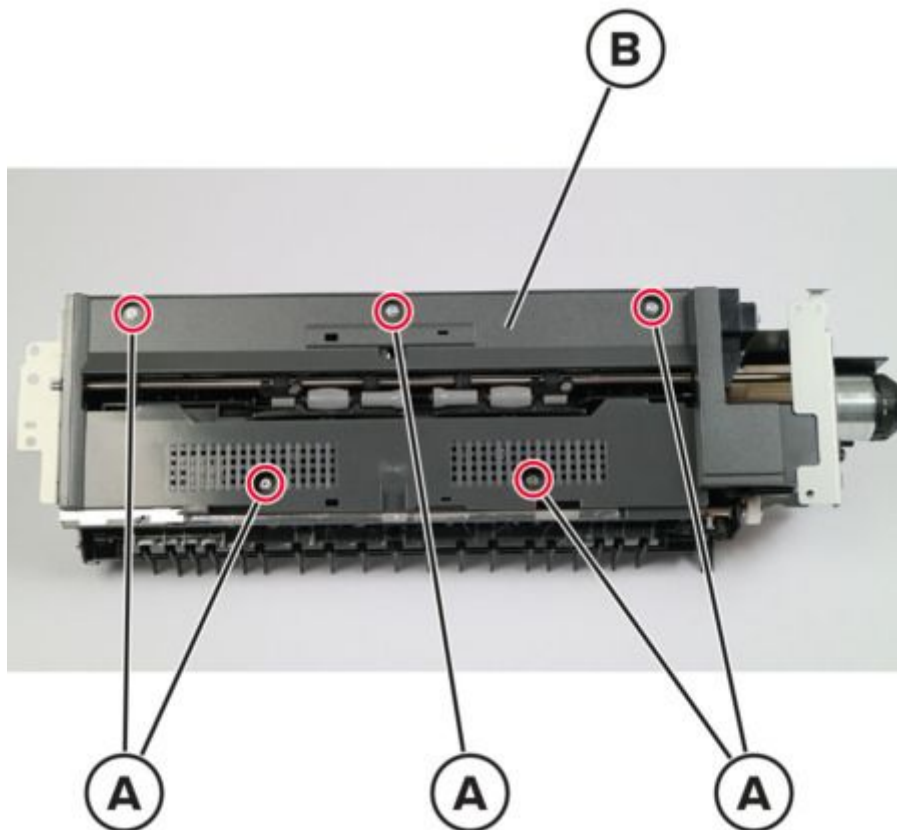


10. Remove the two screws (E), disconnect the cable (F), and then remove the motor (G) from the bracket.



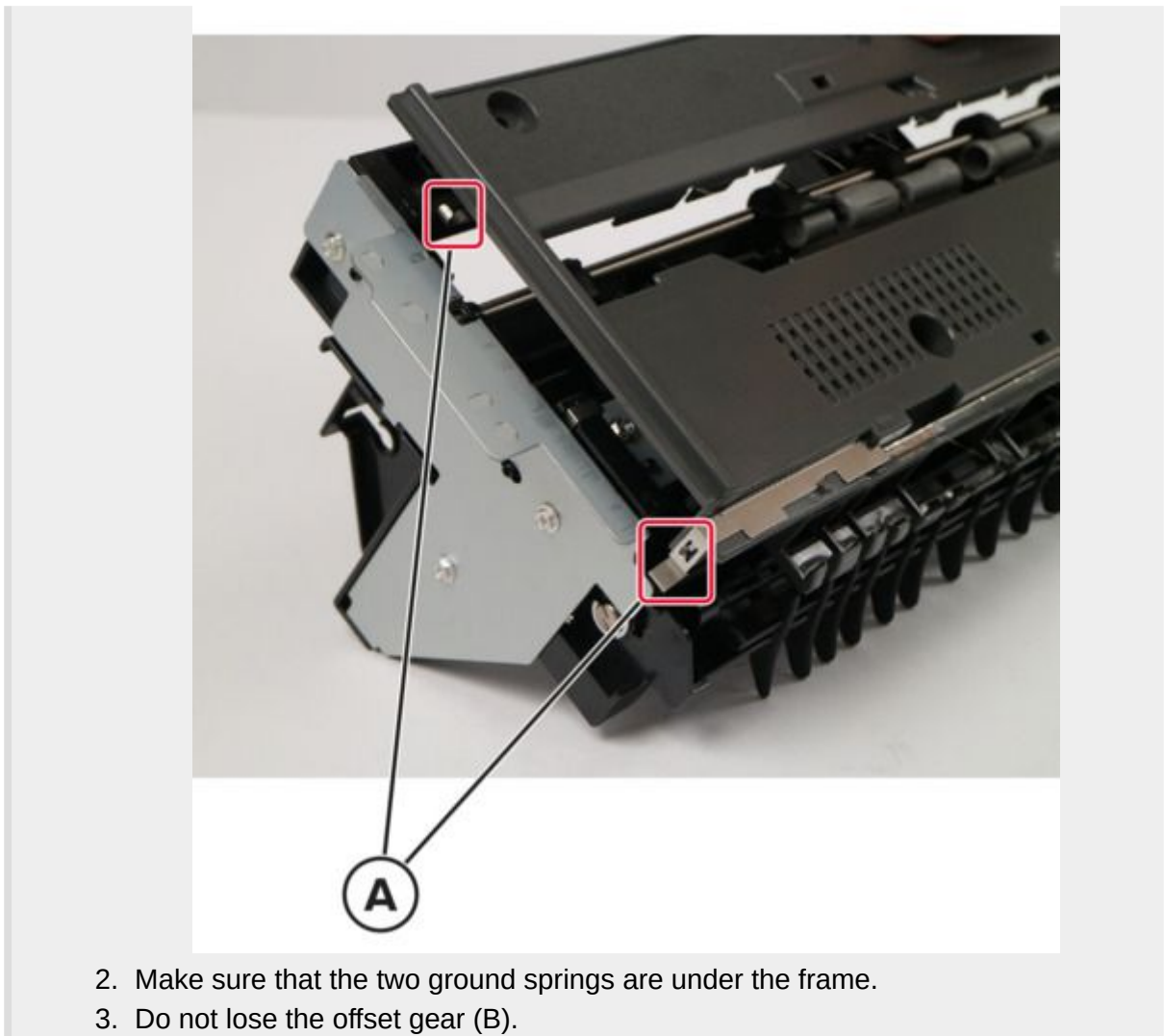
Sensor (bin 2 exit) removal

1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277](#).
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099](#).
6. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100](#).
7. Remove the five screws (A), and then remove the cover (B).

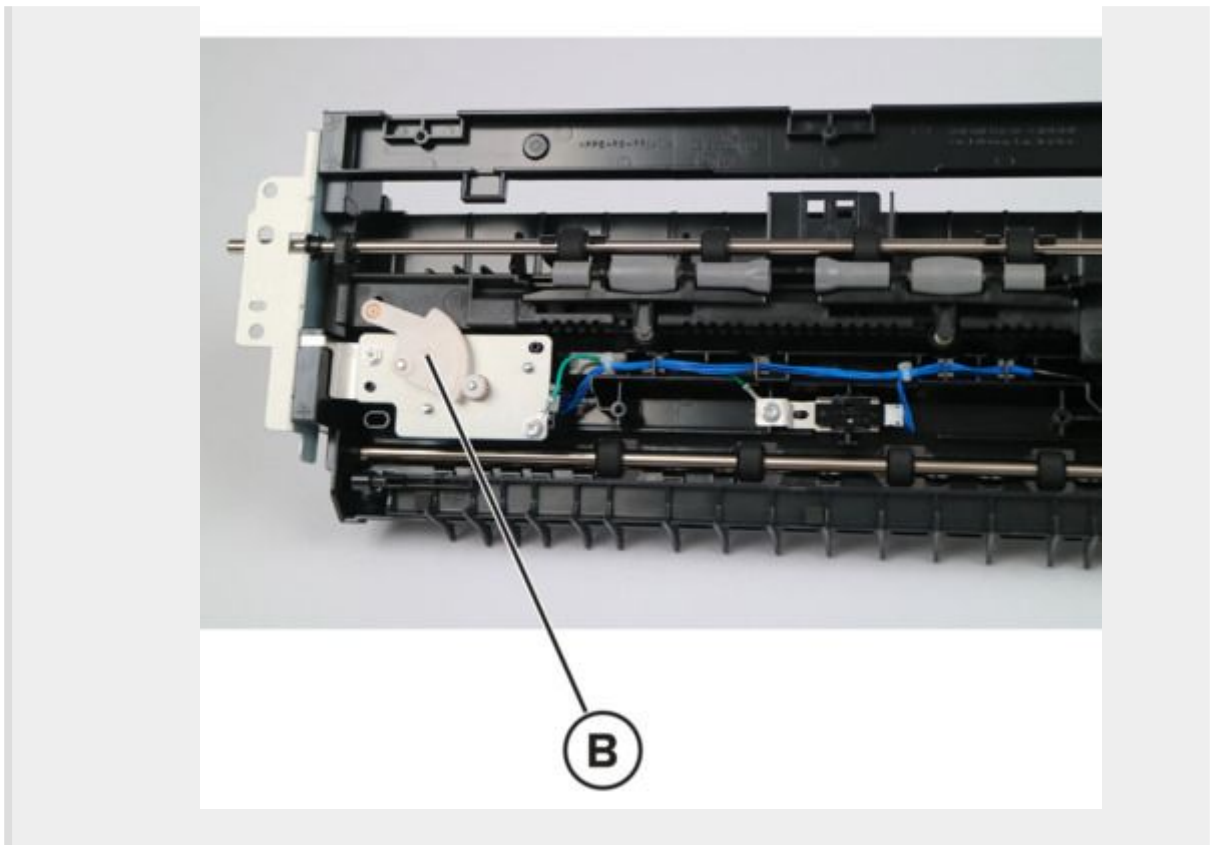


INSTALLATION NOTE

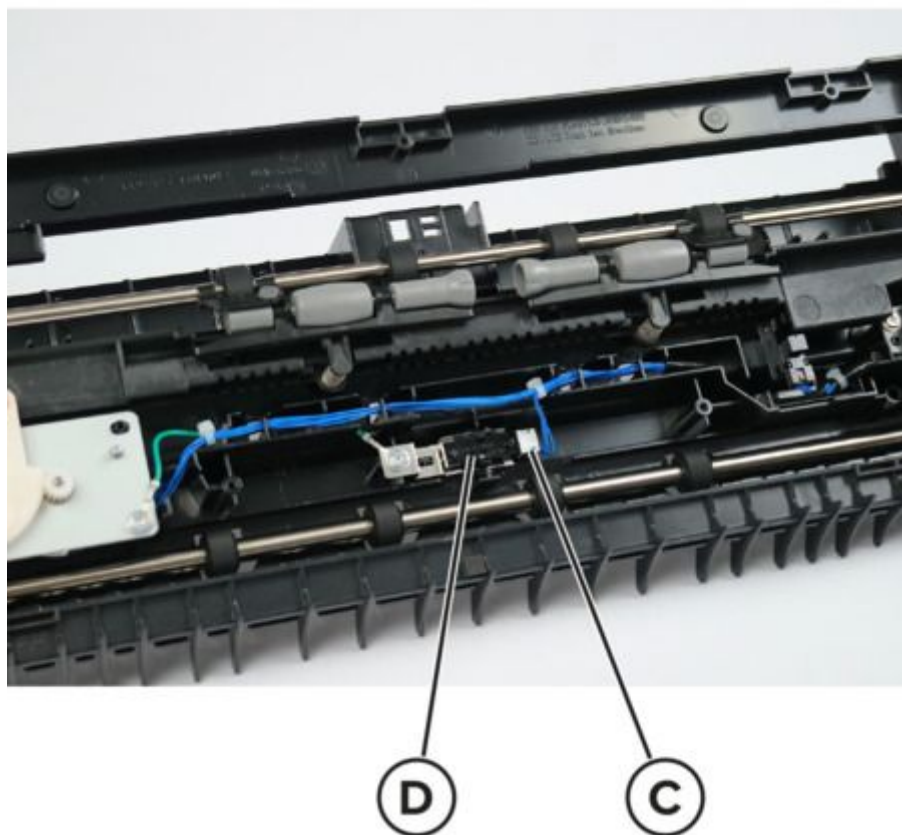
1. Make sure not to damage the two ground springs (A).



2. Make sure that the two ground springs are under the frame.
3. Do not lose the offset gear (B).

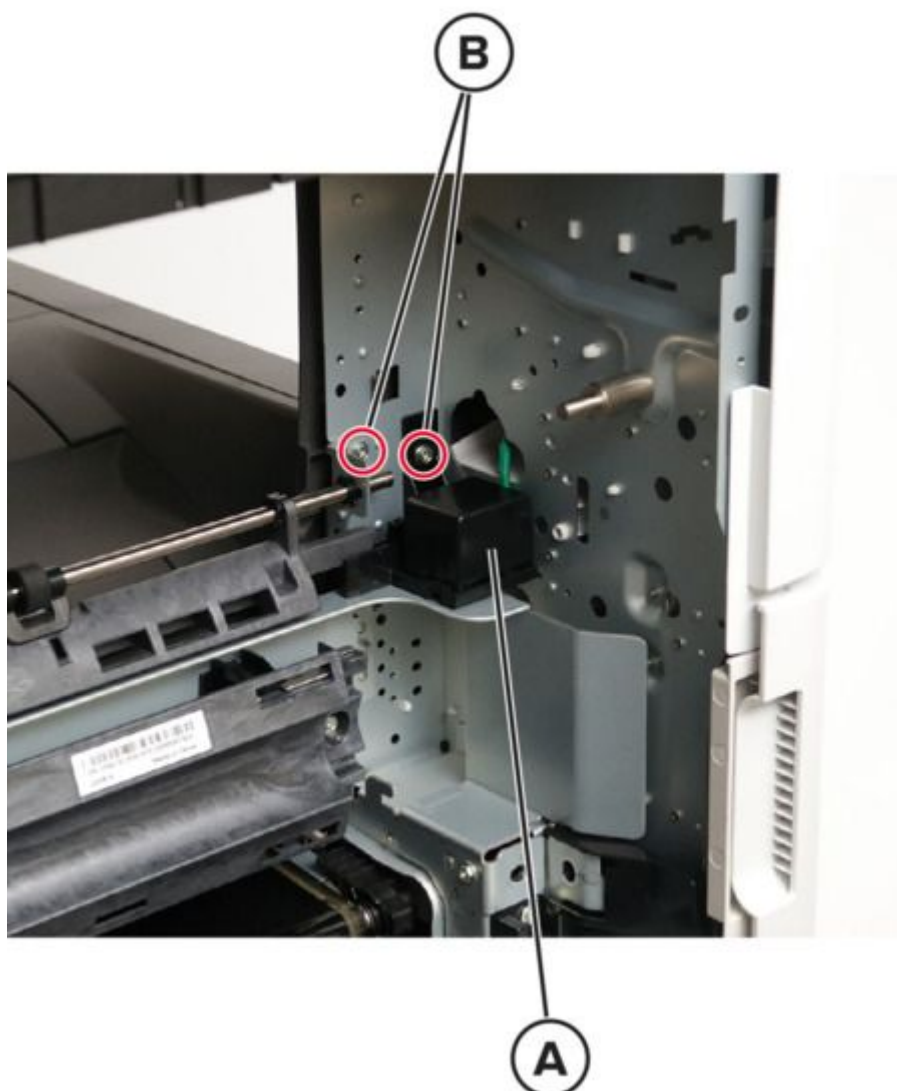


8. Disconnect the cable (C), and then remove the sensor (D).

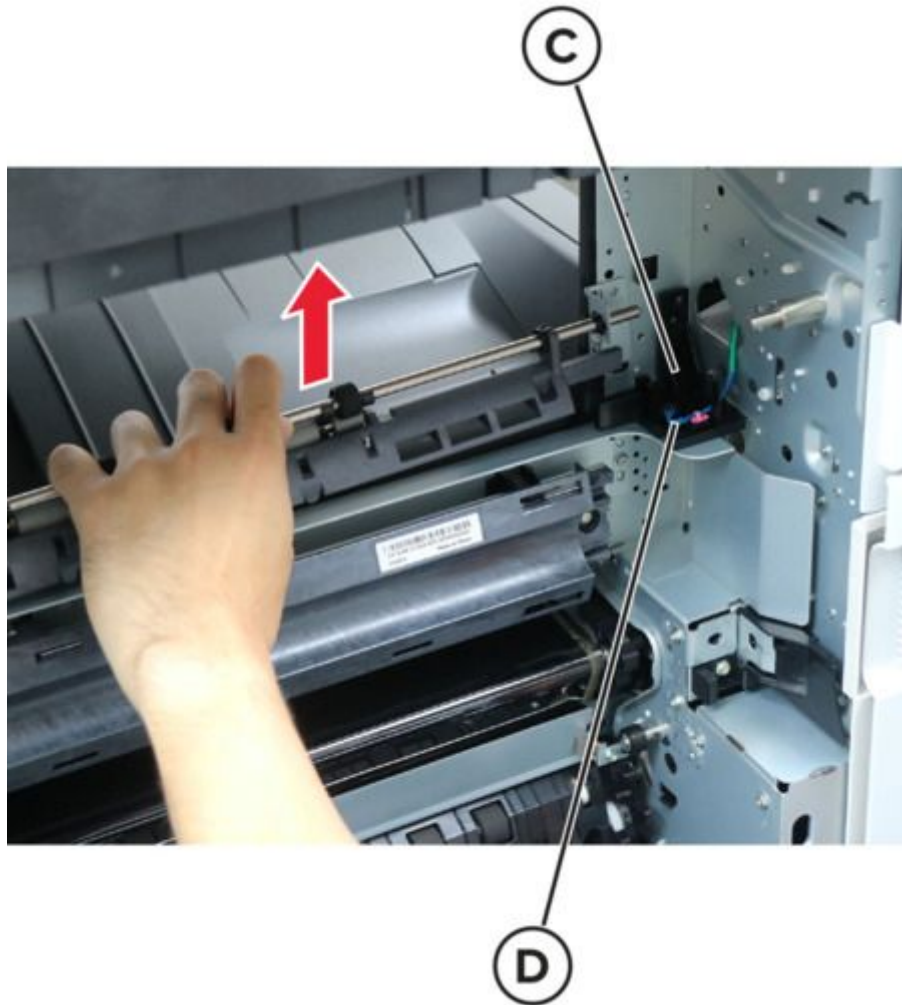


Sensor (bin 1 offset home) removal

1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277.](#)
3. Open the left jam door.
4. Remove the upper left cover.
5. Remove the fuser. See [See "Fuser removal" on page 1052.](#)
6. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099.](#)
7. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100.](#)
8. Remove the front toggle lever. See [See "Front toggle guide removal" on page 1056.](#)
9. Remove the cover (A), and then remove the two screws (B).

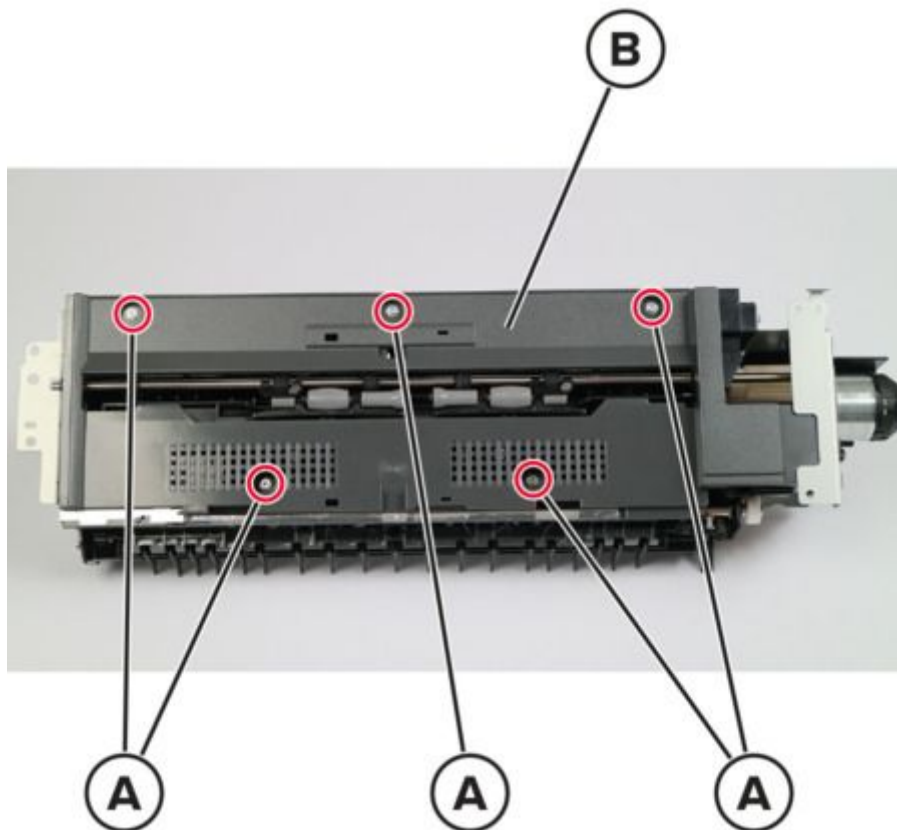


10. Raise the roller, remove the sensor assembly (C), and then disconnect the cable (D).



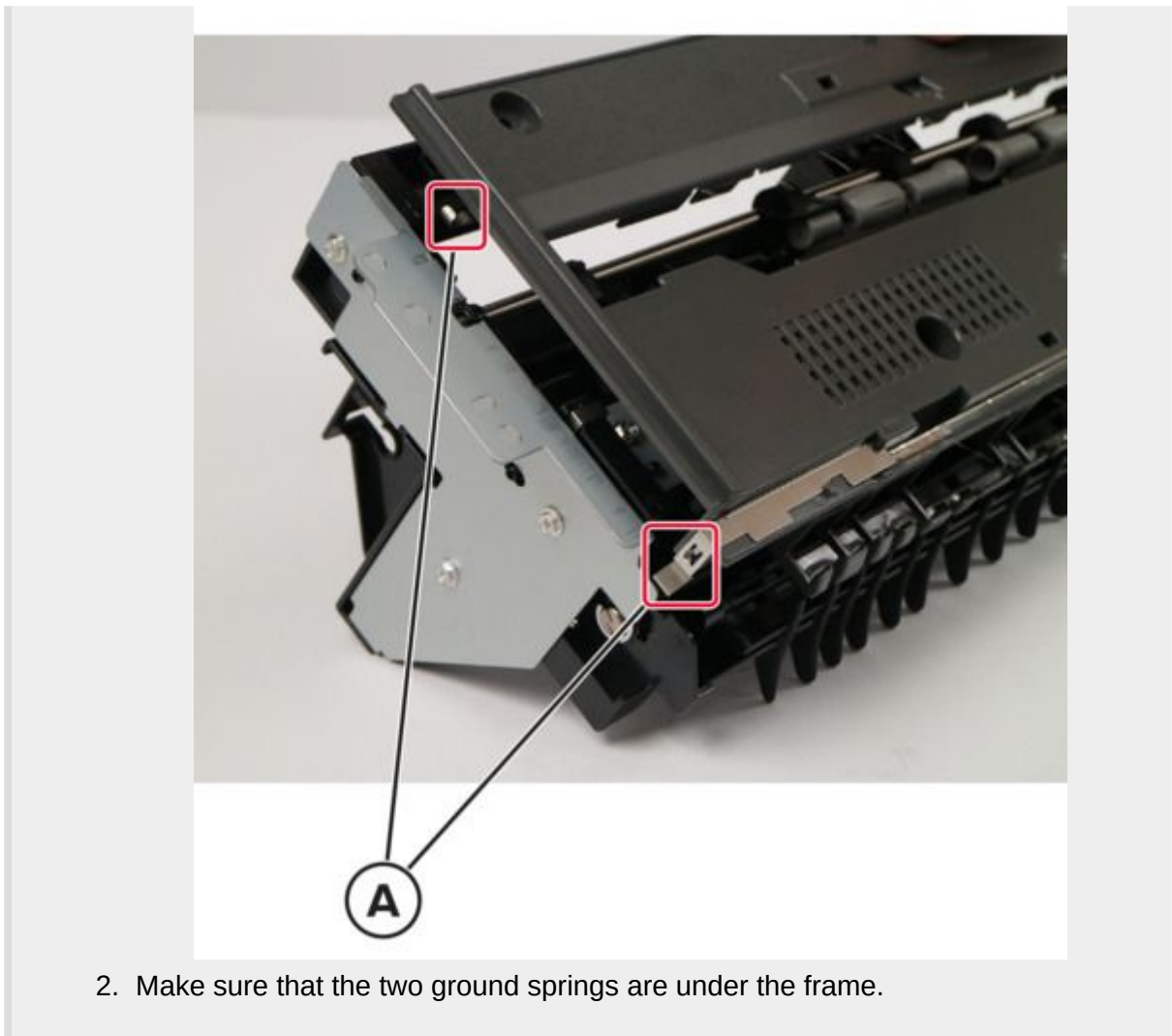
Sensor (bin 2 offset home) removal

1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277](#).
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099](#).
6. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100](#).
7. Remove the five screws (A), and then remove the cover (B).



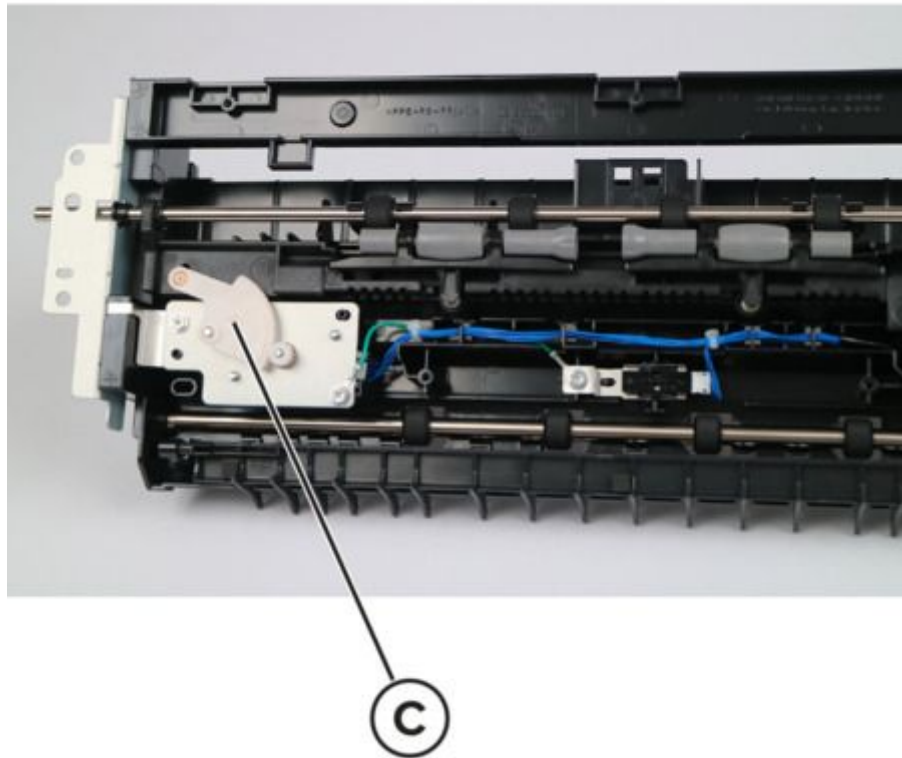
INSTALLATION NOTE

1. Make sure not to damage the two ground springs (A).

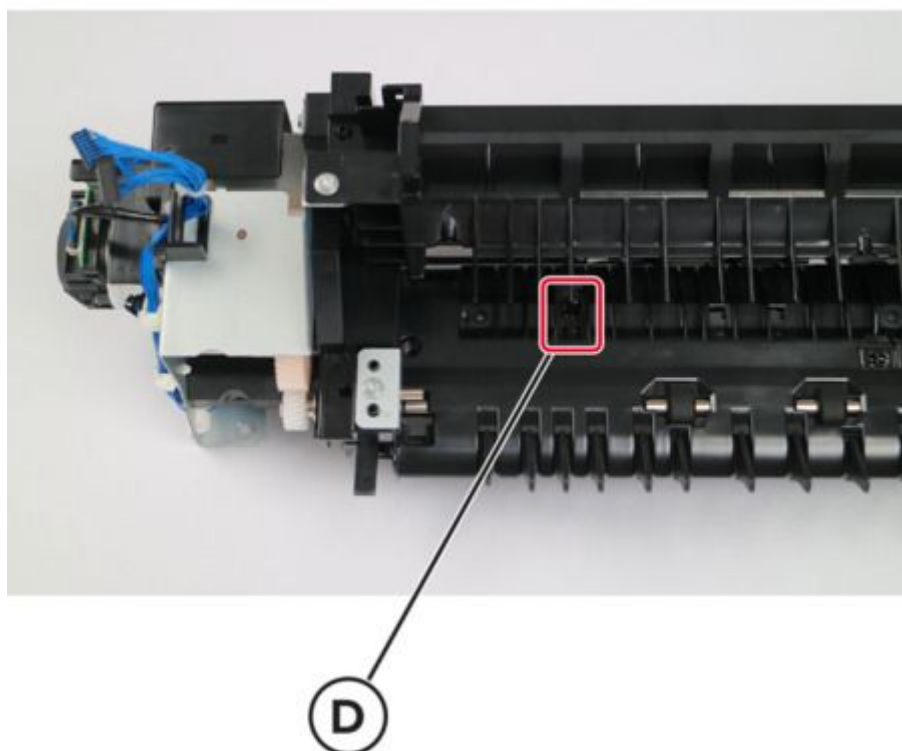


2. Make sure that the two ground springs are under the frame.

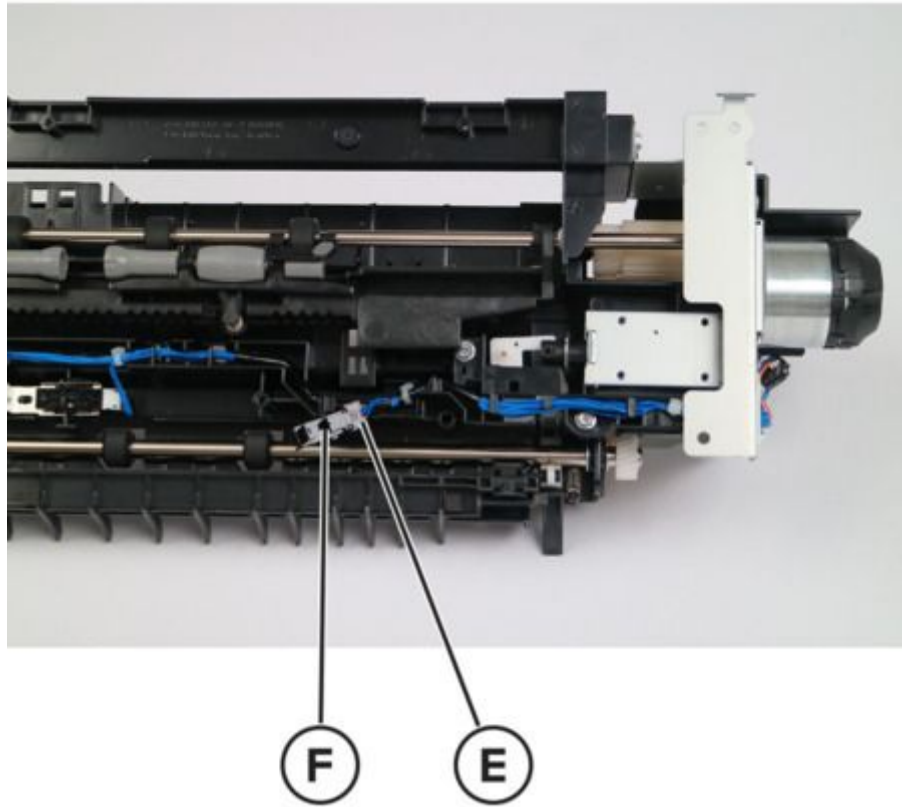
8. Remove the offset gear (C).



9. Turn over the exit 2 transport assembly, and then release the sensor latch (D).

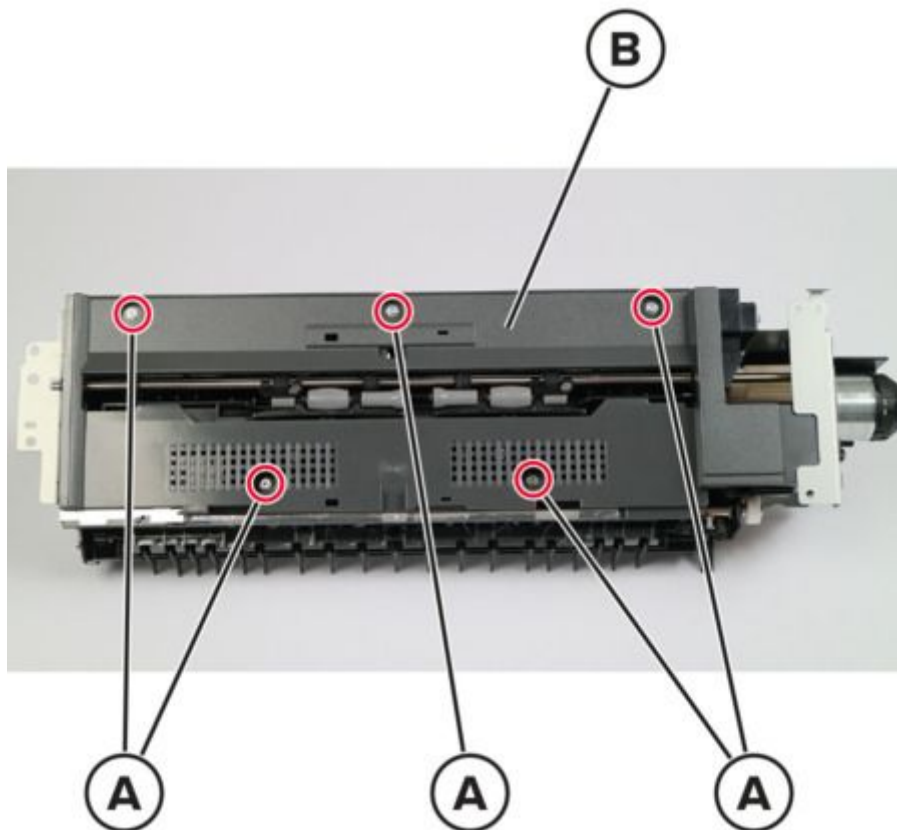


10. Disconnect the cable (E), and then remove the sensor (F).



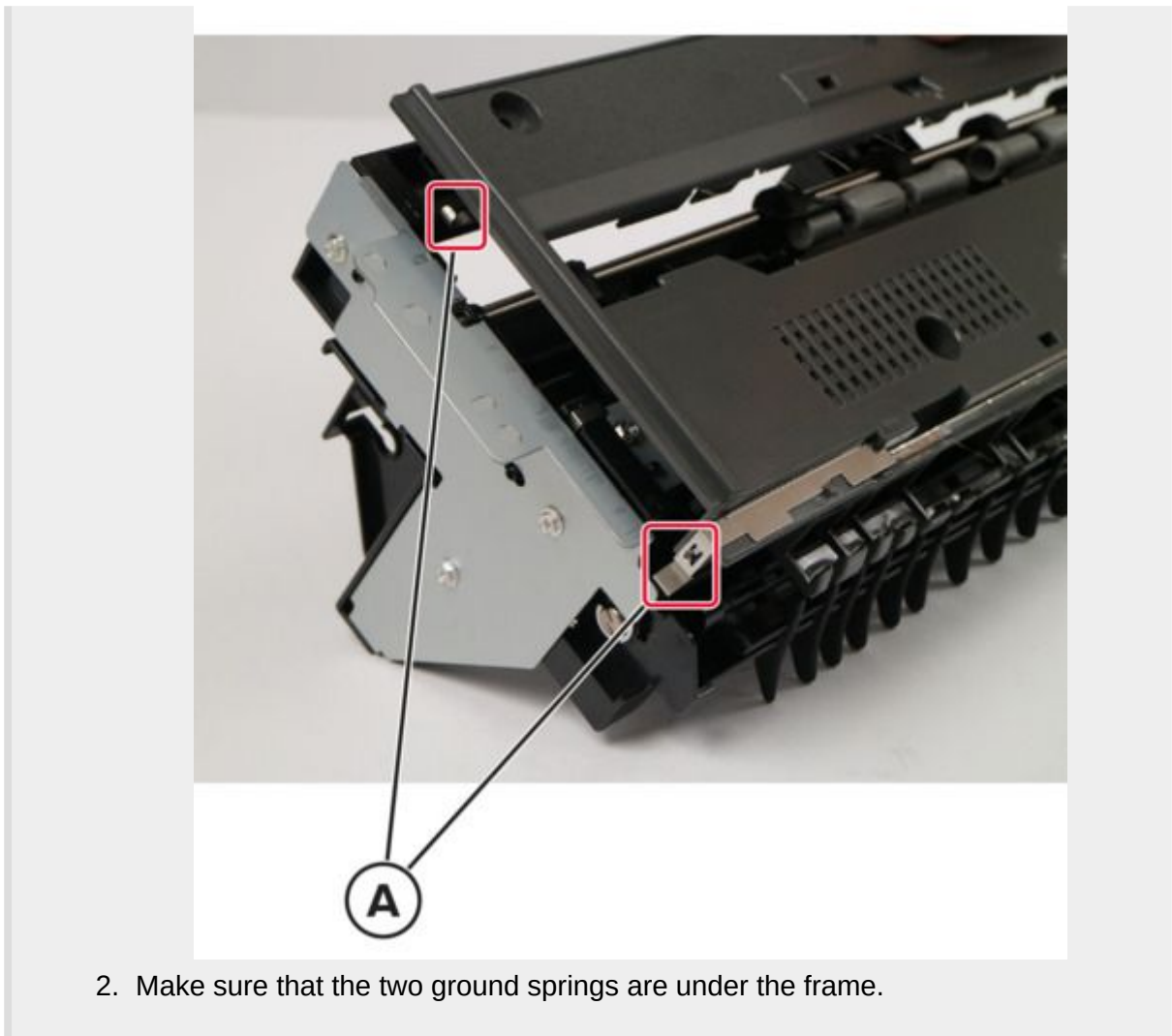
Exit 2 offset assembly removal

1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277](#).
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099](#).
6. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100](#).
7. Remove the five screws (A), and then remove the cover (B).



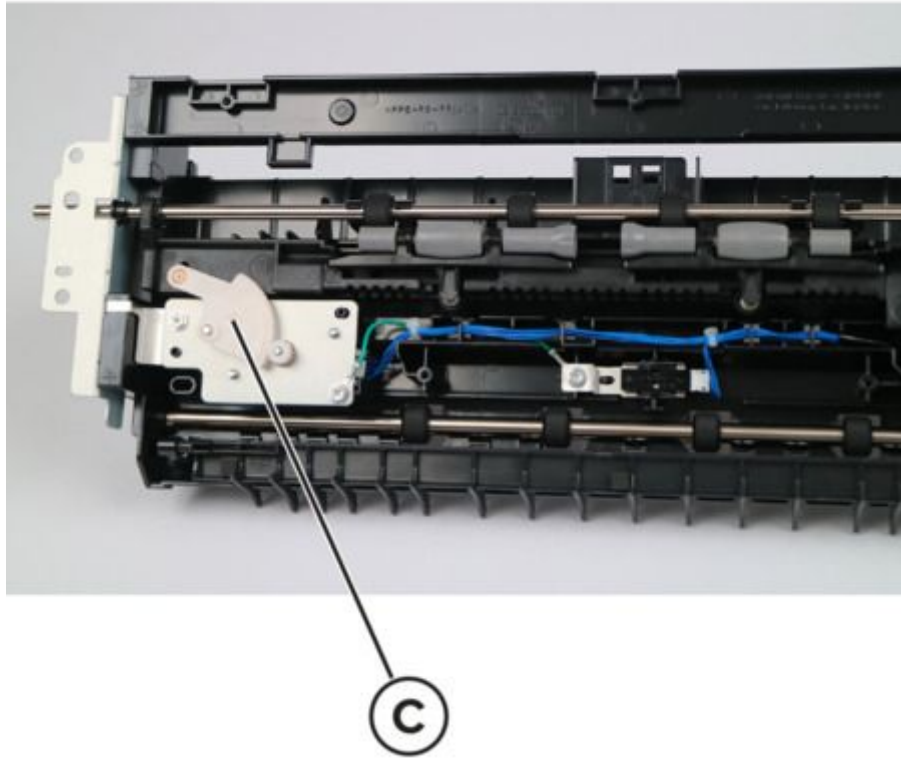
INSTALLATION NOTE

1. Make sure not to damage the two ground springs (A).

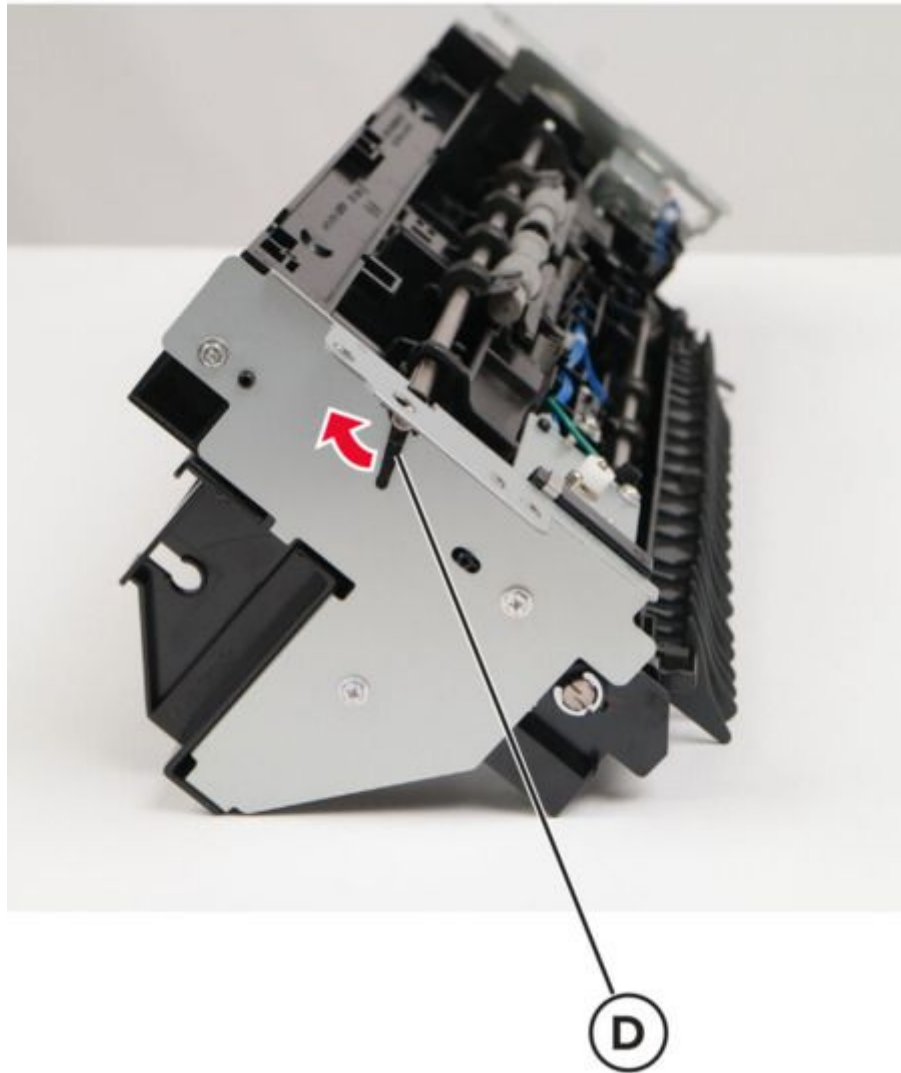


2. Make sure that the two ground springs are under the frame.

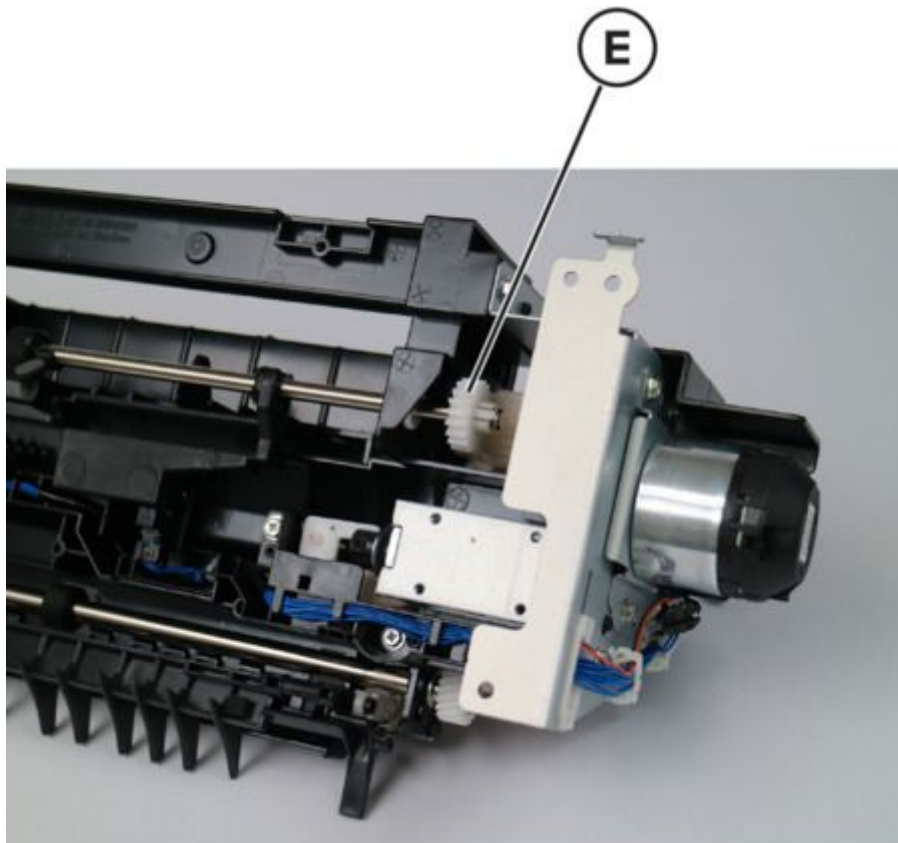
8. Remove the offset gear (C).



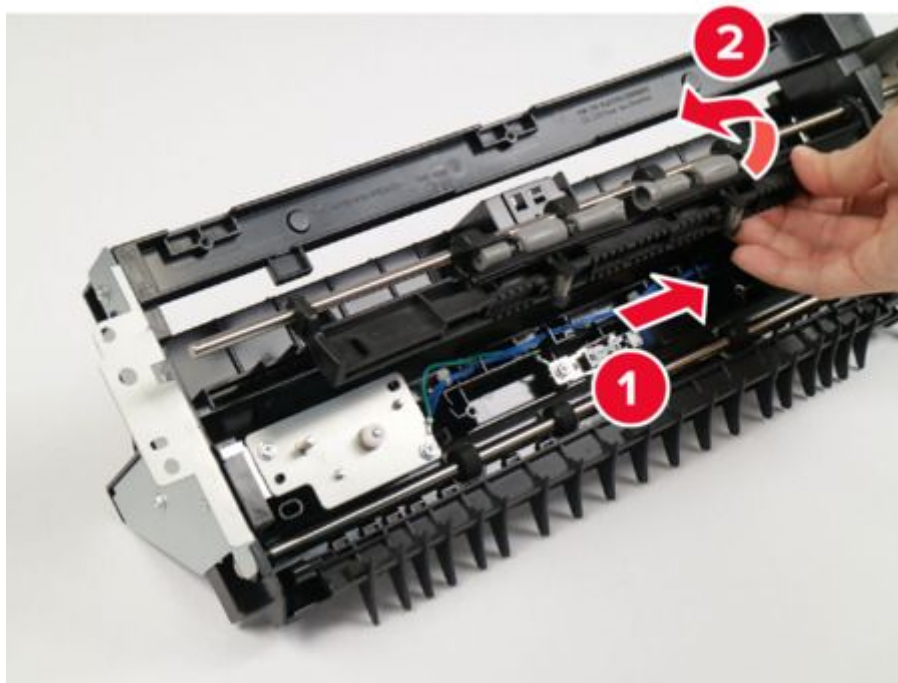
9. Unlock the bushing (D), and then remove it.



10. Remove the gear (E).



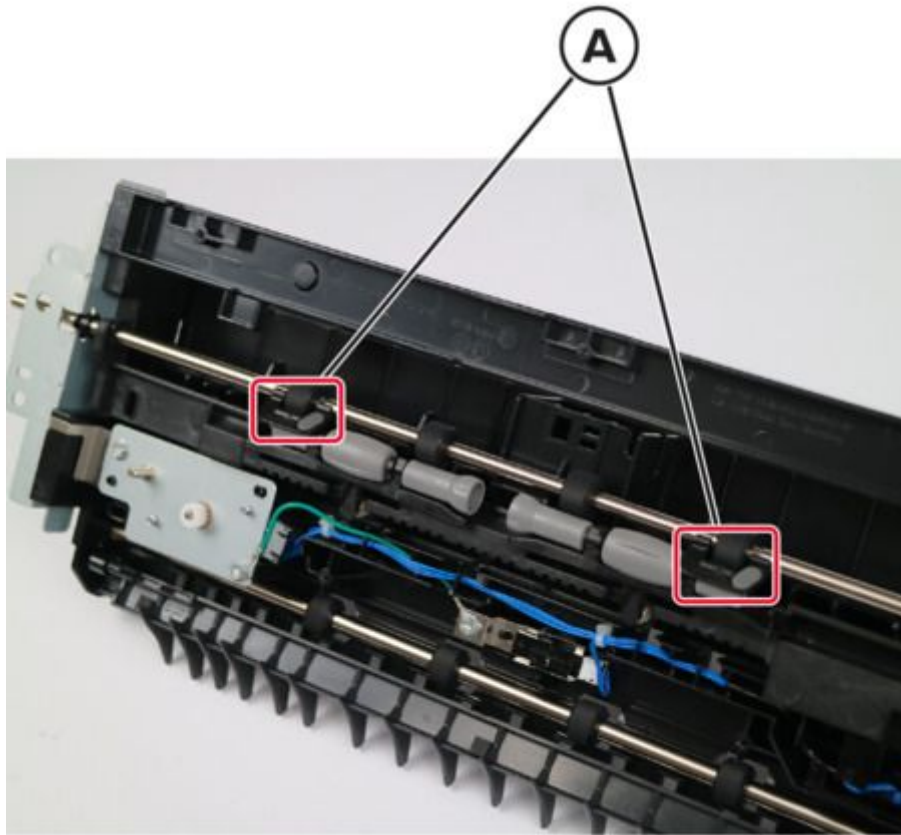
11. Remove the exit 2 offset assembly.



INSTALLATION NOTE

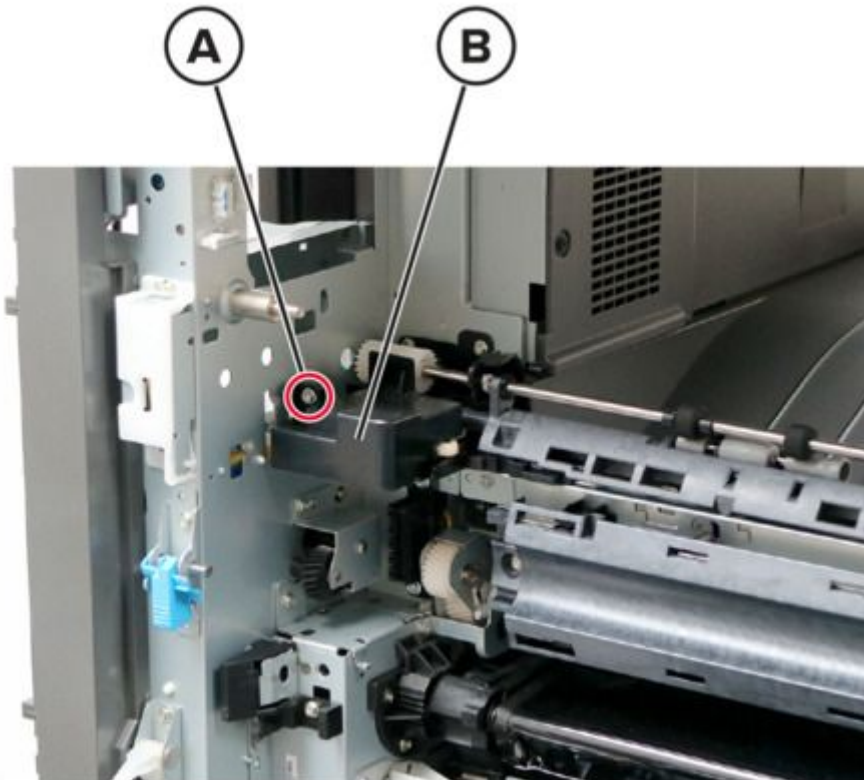
Parts removal

Make sure that the two exit guard flaps (A) are properly positioned.

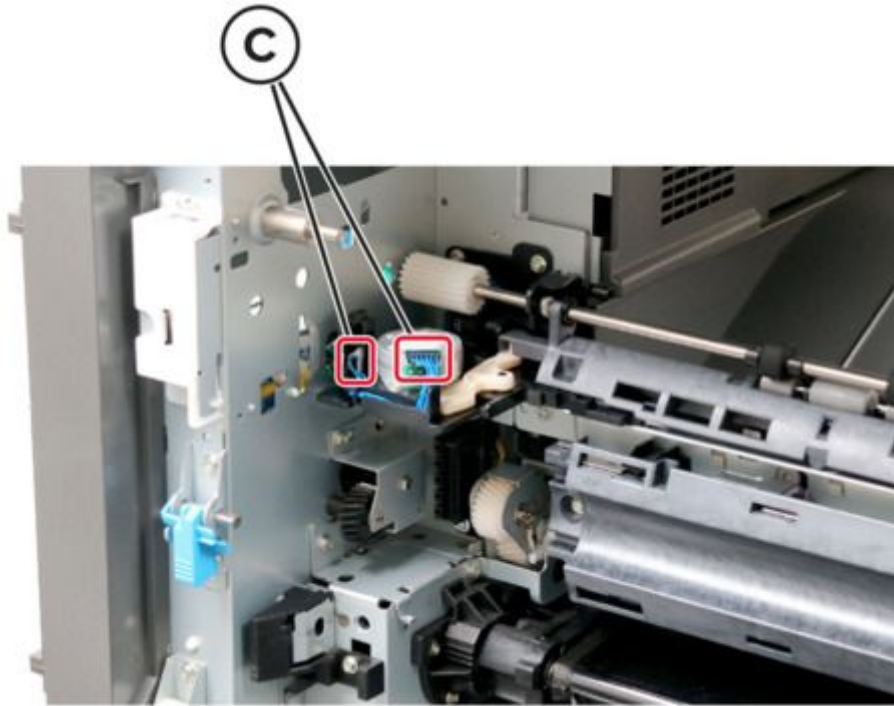


Exit 1 transport unit removal

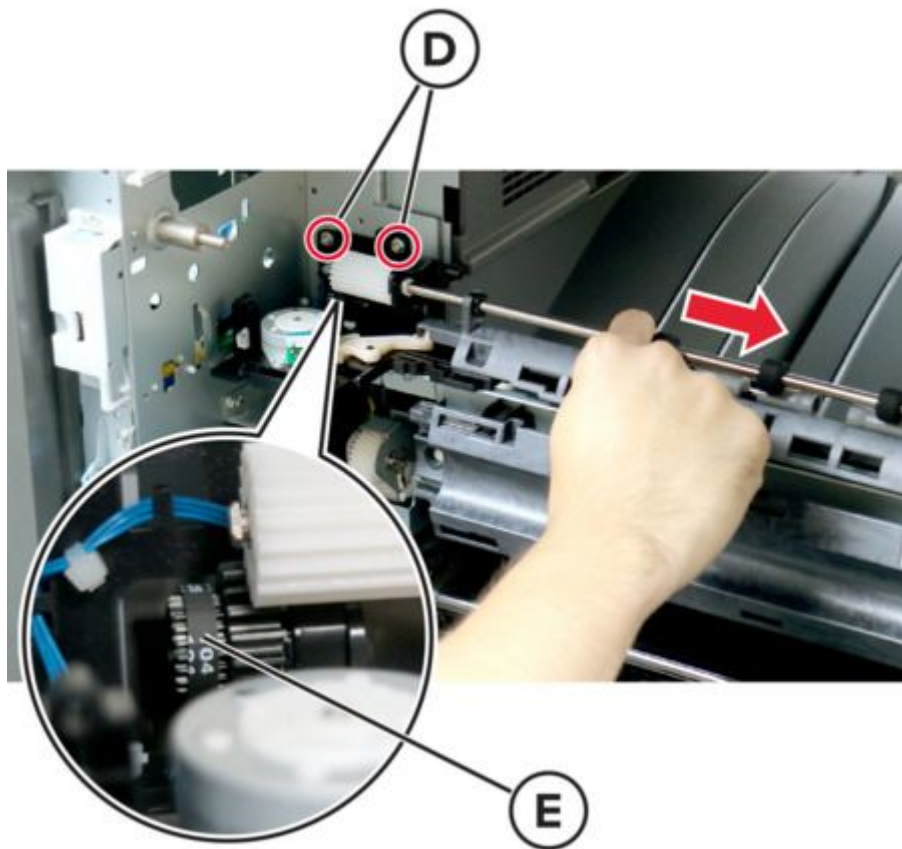
1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277.](#)
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the fuser. See [See "Fuser removal" on page 1052.](#)
6. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099.](#)
7. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100.](#)
8. Remove the front toggle lever. See [See "Front toggle guide removal" on page 1056.](#)
9. Remove the rear toggle. See [See "Rear toggle guide removal" on page 1057.](#)
10. Remove the sensor (bin 1 offset home position). See [See "Sensor \(bin 1 offset home\) removal" on page 1112.](#)
11. Remove the screw (A), and then remove the cover (B).



12. Disconnect the two cables (C), and then remove the cables from their guides.

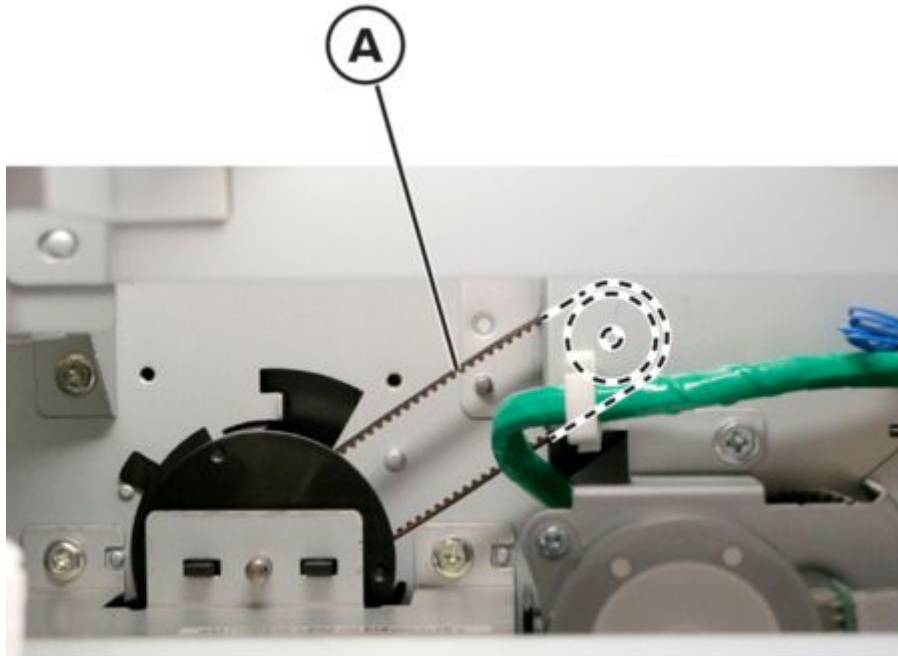


13. Move the roller, remove the two screws (D), and then remove the belt (E).



INSTALLATION NOTE

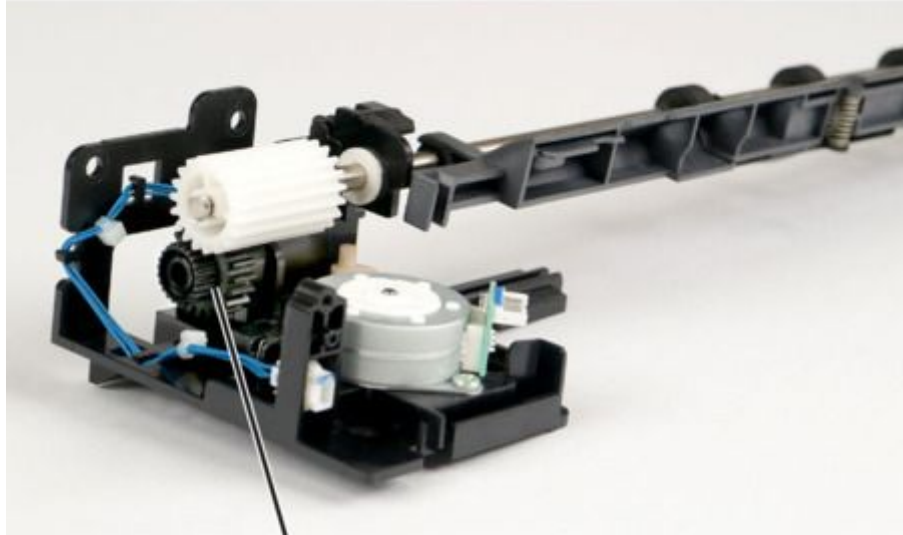
Install the belt (A) at the rear of the printer.



14. Remove the exit 1 transport unit.

WARNING—POTENTIAL DAMAGE

Make sure not to lose the gear (A).



A

WARNING—POTENTIAL DAMAGE

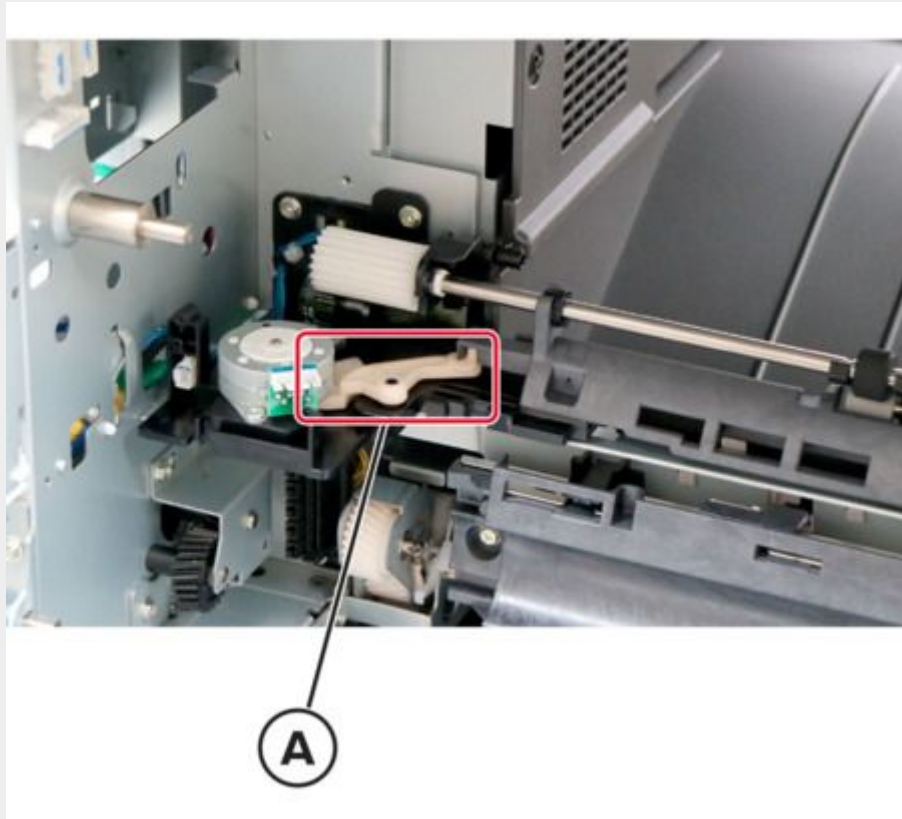
Make sure not to lose the bracket (B).



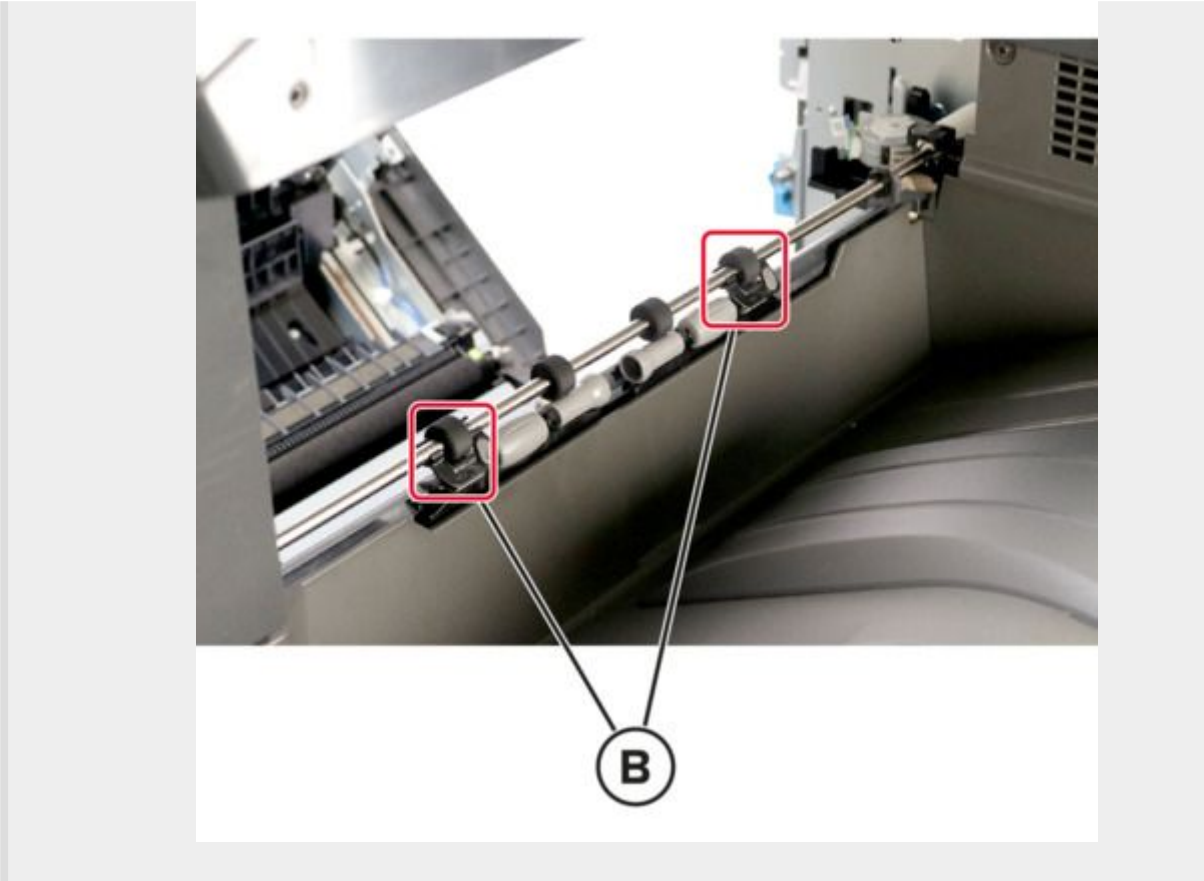
B

INSTALLATION NOTE

1. Make sure that the exit 1 offset gear (A) is properly installed.

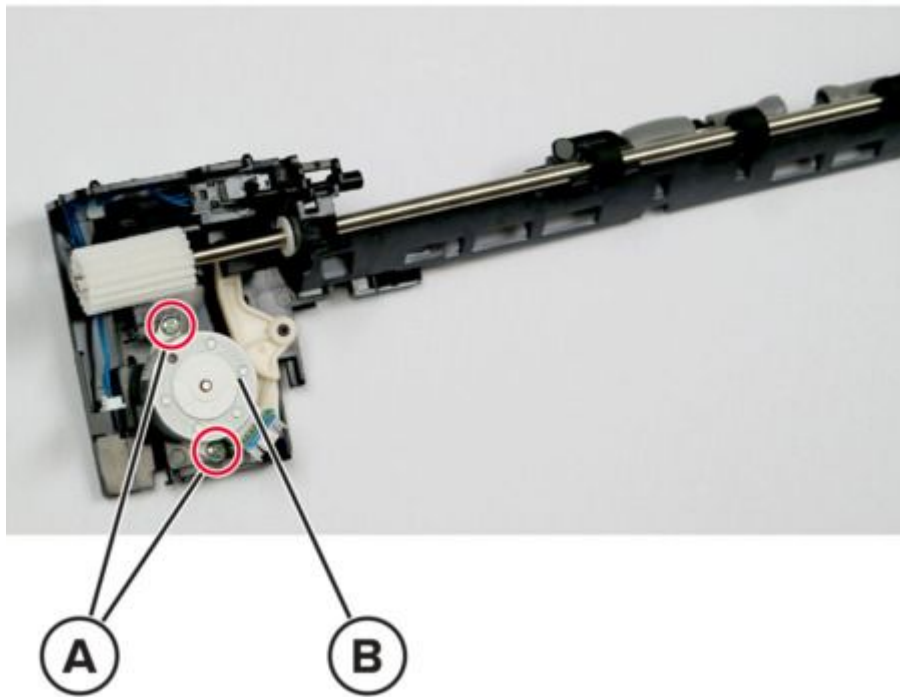


2. Make sure that the two exit guard flaps (B) are properly positioned.



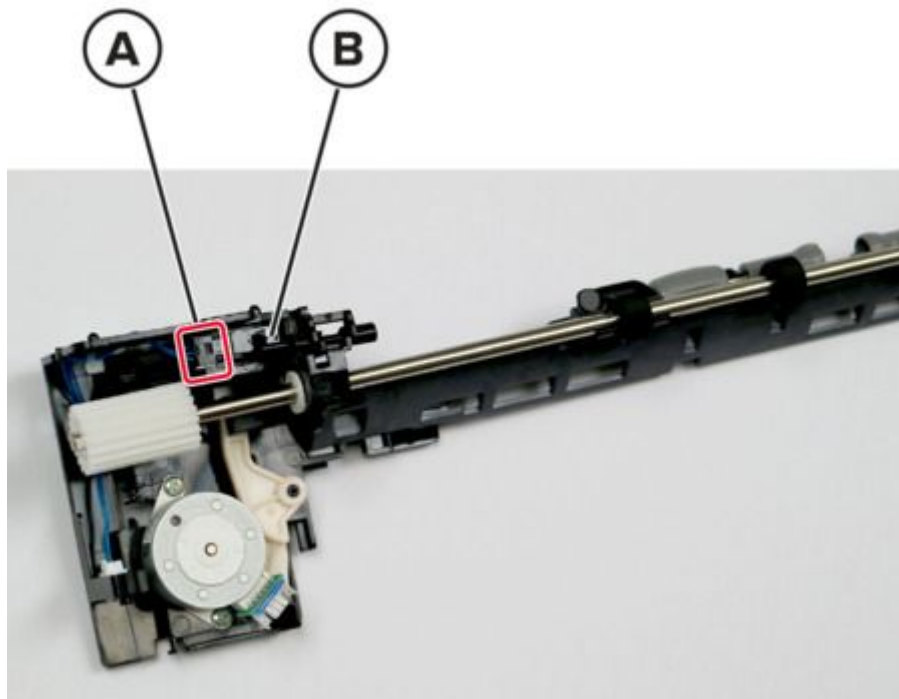
Motor (bin 1 offset) removal

1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277.](#)
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the fuser. See [See "Fuser removal" on page 1052.](#)
6. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099.](#)
7. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100.](#)
8. Remove the front toggle lever. See [See "Front toggle guide removal" on page 1056.](#)
9. Remove the rear toggle. See [See "Rear toggle guide removal" on page 1057.](#)
10. Remove the exit 1 transport unit. See [See "Exit 1 transport unit removal" on page 1124.](#)
11. Remove the two screws (A), and then remove the motor (B).



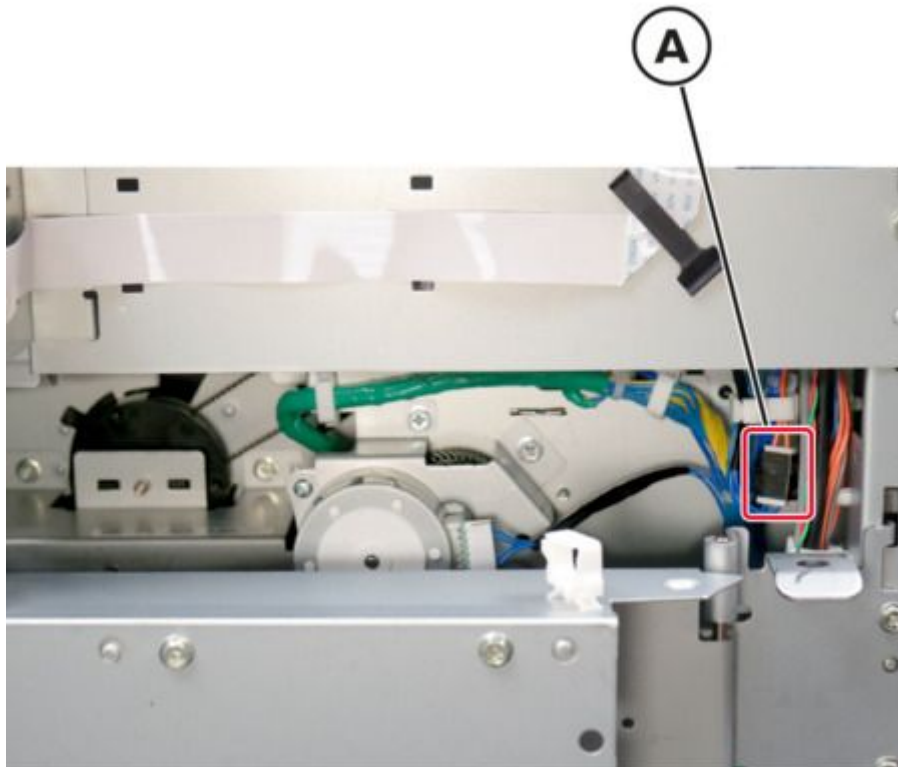
Sensor (bin 1 full) removal

1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277.](#)
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the fuser. See [See "Fuser removal" on page 1052.](#)
6. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099.](#)
7. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100.](#)
8. Remove the front toggle lever. See [See "Front toggle guide removal" on page 1056.](#)
9. Remove the rear toggle. See [See "Rear toggle guide removal" on page 1057.](#)
10. Remove the exit 1 transport unit. See [See "Exit 1 transport unit removal" on page 1124.](#)
11. Disconnect the cable (A), and then remove the sensor (B).

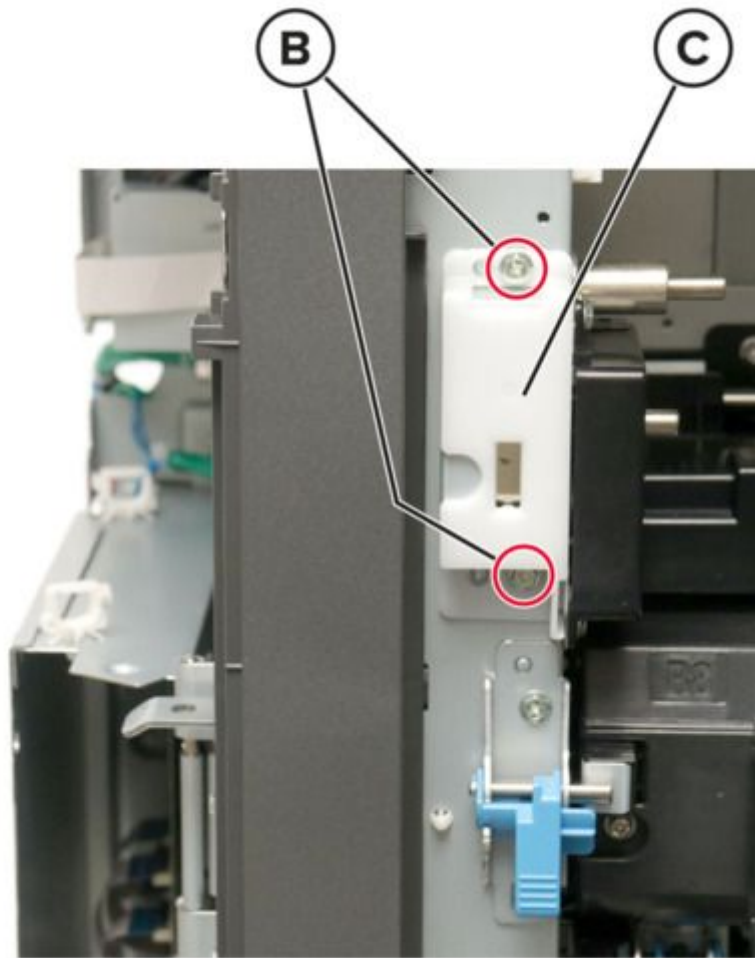


Left door switch removal

1. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
2. Disconnect the cable (A).



3. Open the left jam door.
4. Remove the two screws (B), and then remove the left door switch (C).

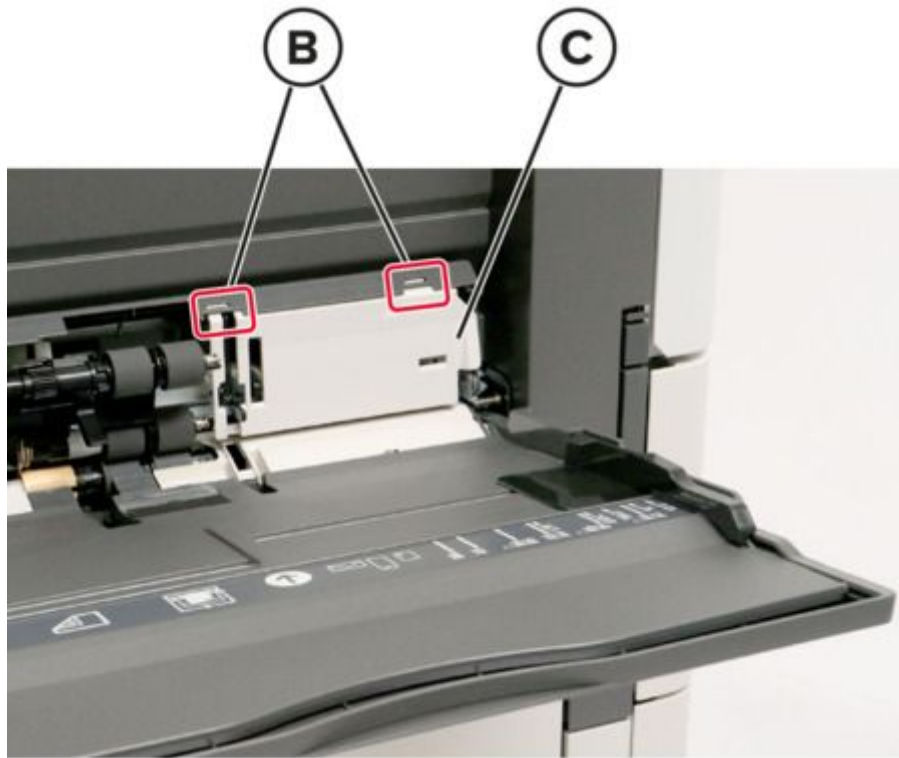


MPF tray hinge removal

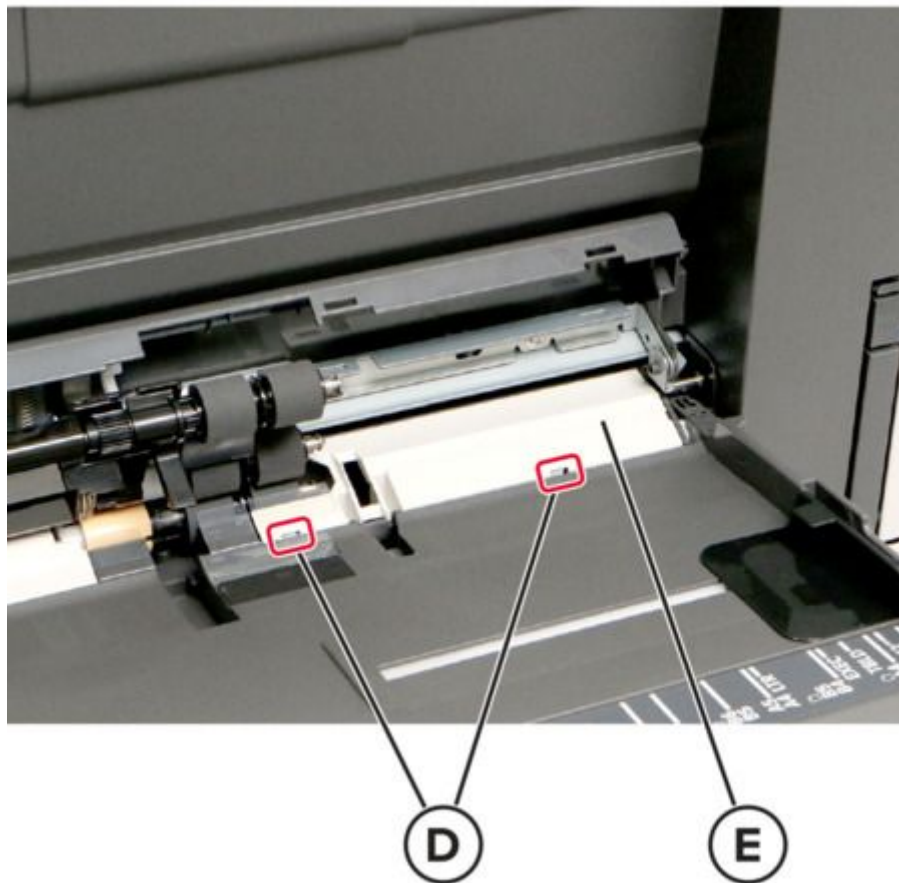
1. Open the MPF tray.
2. Remove the two screws (A).



3. Release the two tabs (B), and then remove the cover (C).

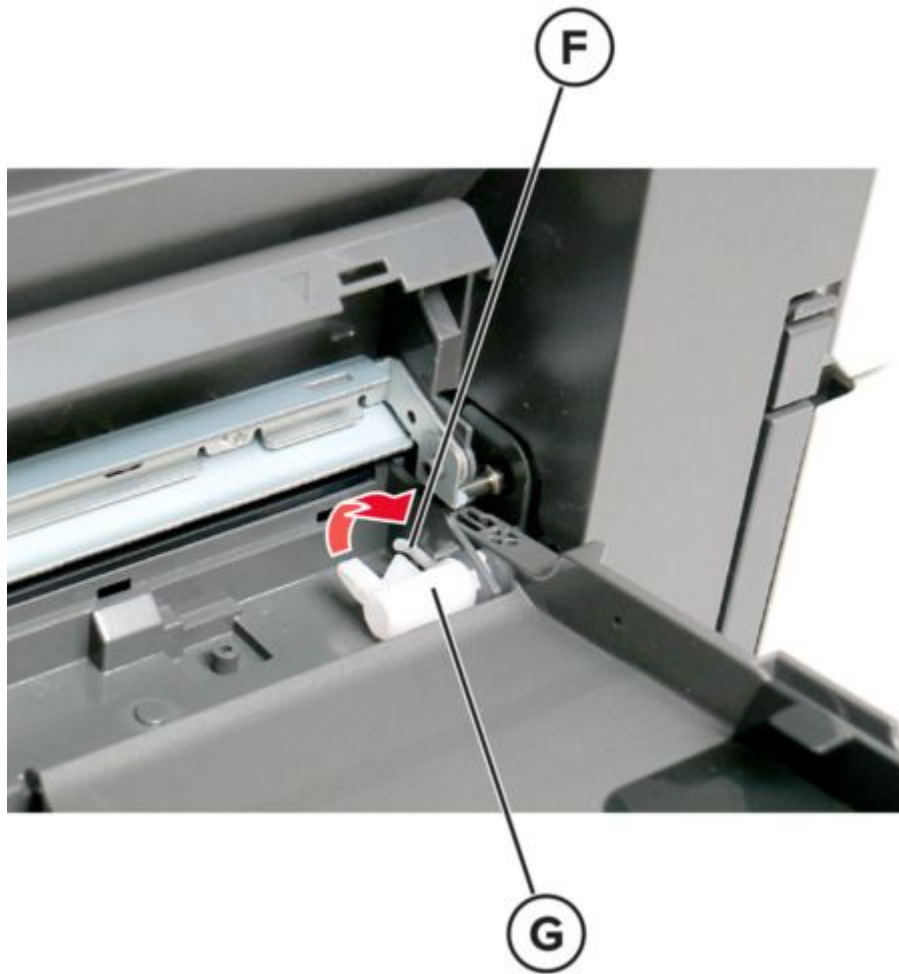


4. Release the two tabs (D), and then remove the cover (E).



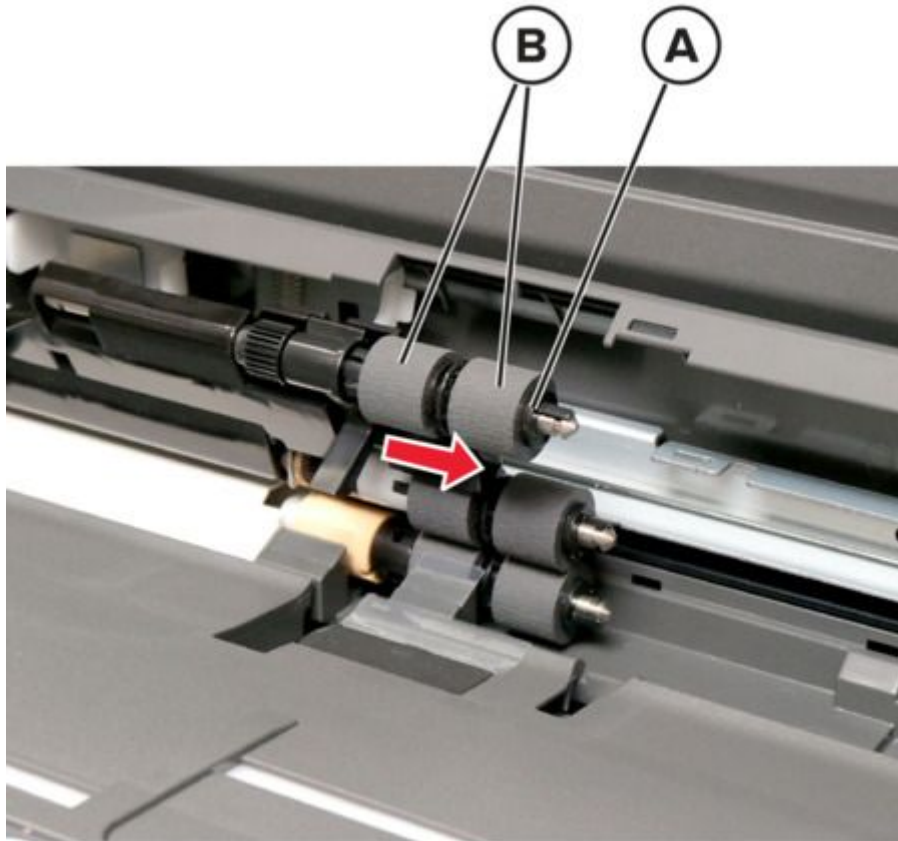
Parts removal

5. Release the lock (F), and then rotate and pull to remove the hinge (G).



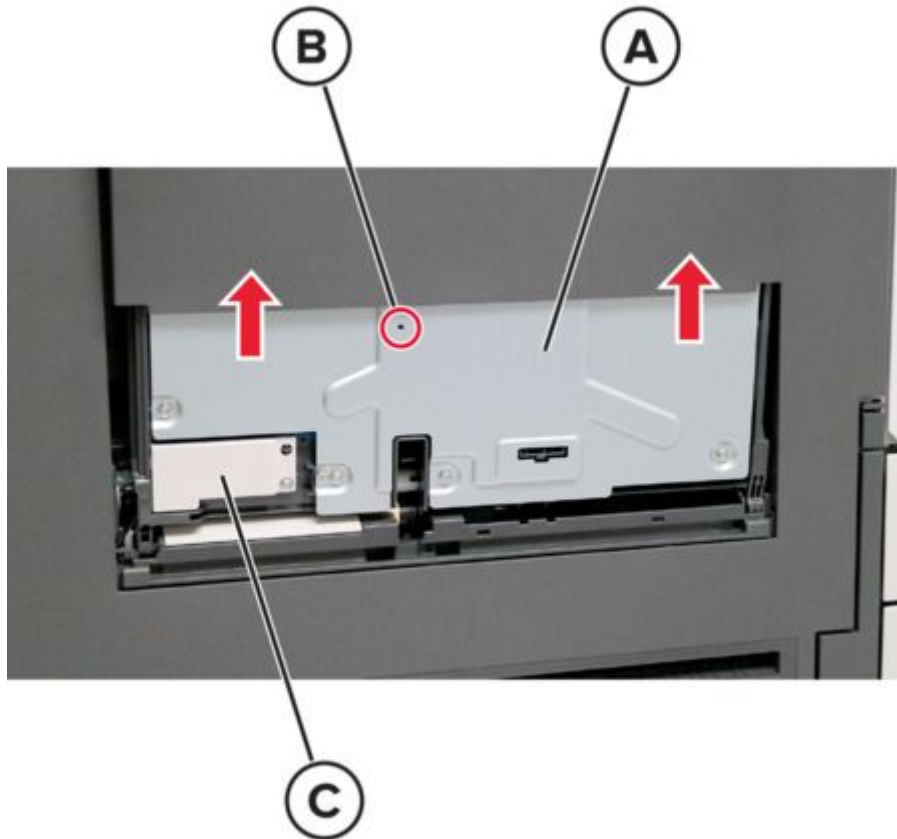
MPF rollers removal

1. Remove the MPF tray hinge. See ["MPF tray hinge removal"](#) on page 1134.
2. Release the latch (A), and then slide the two rollers (B) to remove.



MPF tray removal

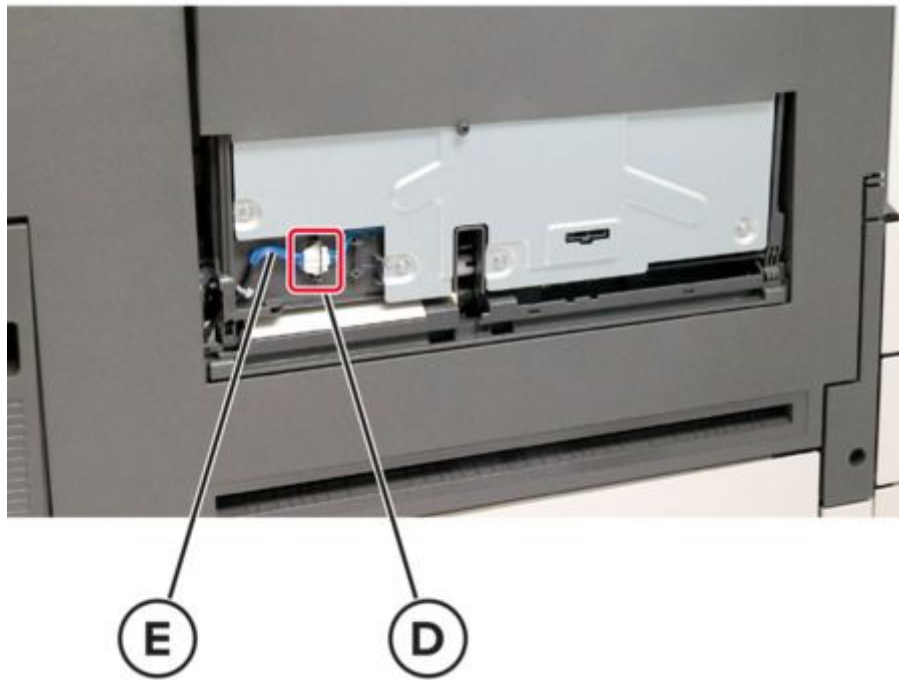
1. Remove the MPF tray hinge. See [See "MPF tray hinge removal" on page 1134](#).
2. Slide the tray cover (A) upward, secure a screw at the middle spot (B) to prevent the cover from sliding down, and then remove the cover (C).



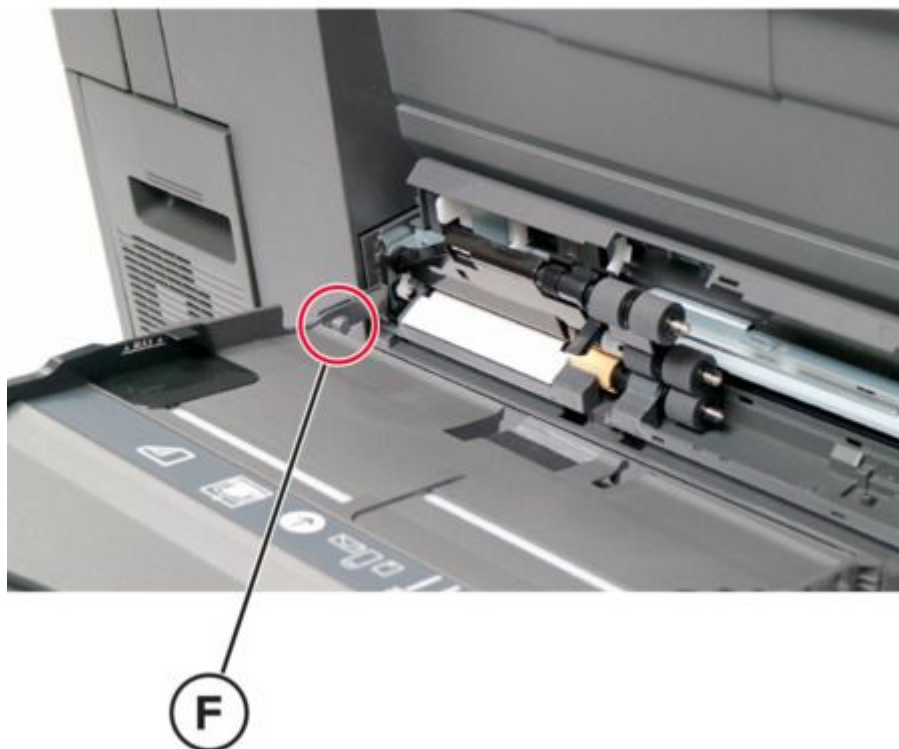
NOTES

Make sure to remove the screw after removing the cover.

3. Disconnect the cable (D), and then remove the left cable (E).



4. Release the tab (F), and then remove the MPF tray.

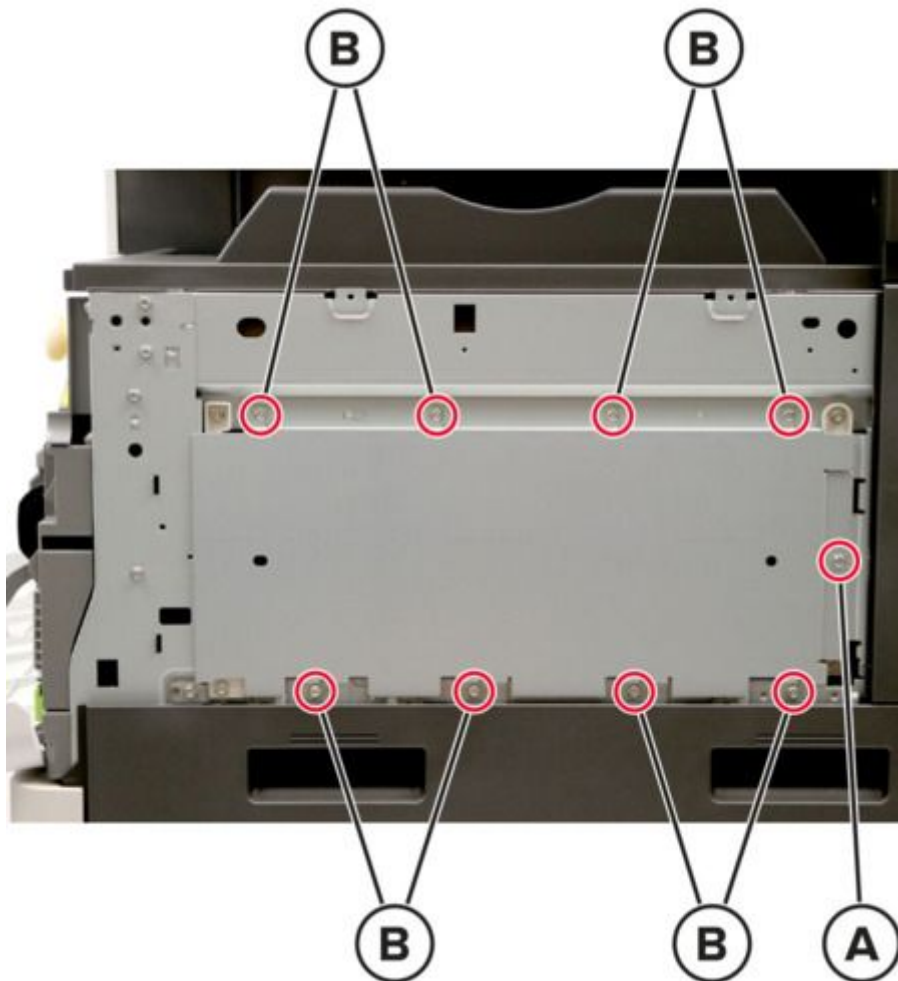


Right side removals

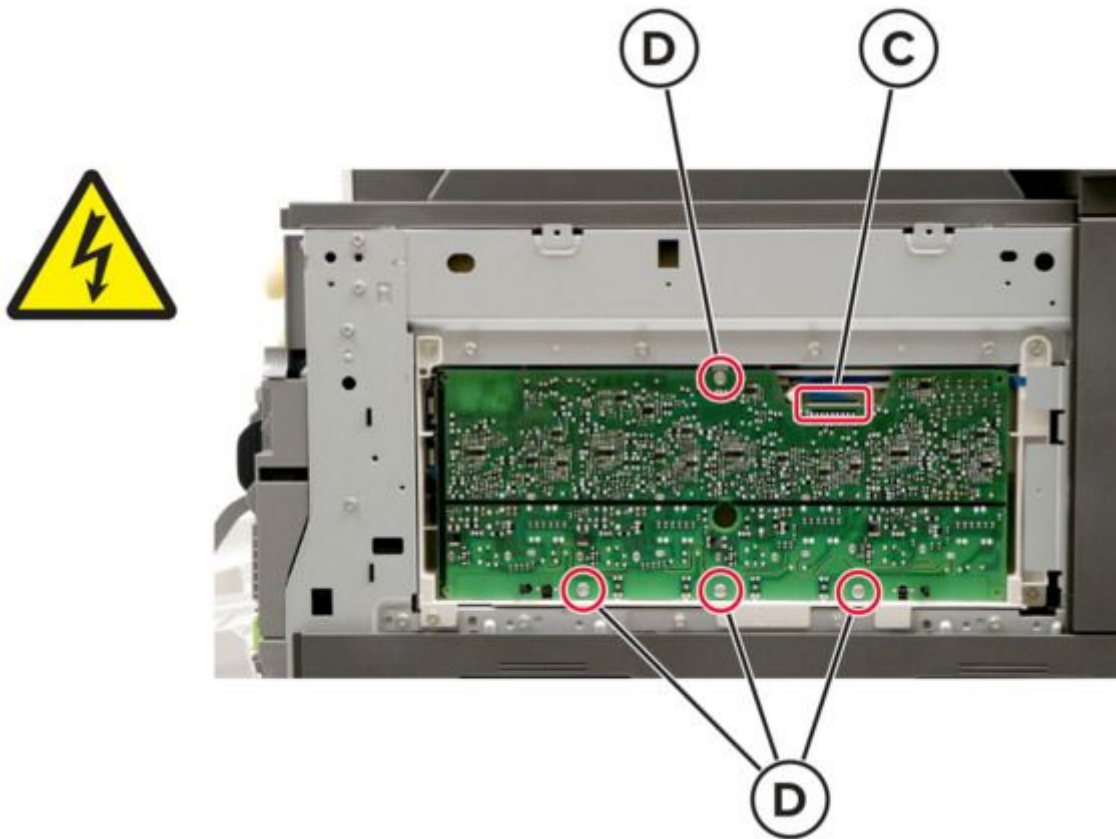
Charge roller HVPS removal

For a video demonstration, see [Removing the charge roller HVPS](#).

1. Remove the right cover. See ["Right cover removal" on page 1143](#)
2. Remove the screw (A), loosen the eight screws (B), and then remove the shield.

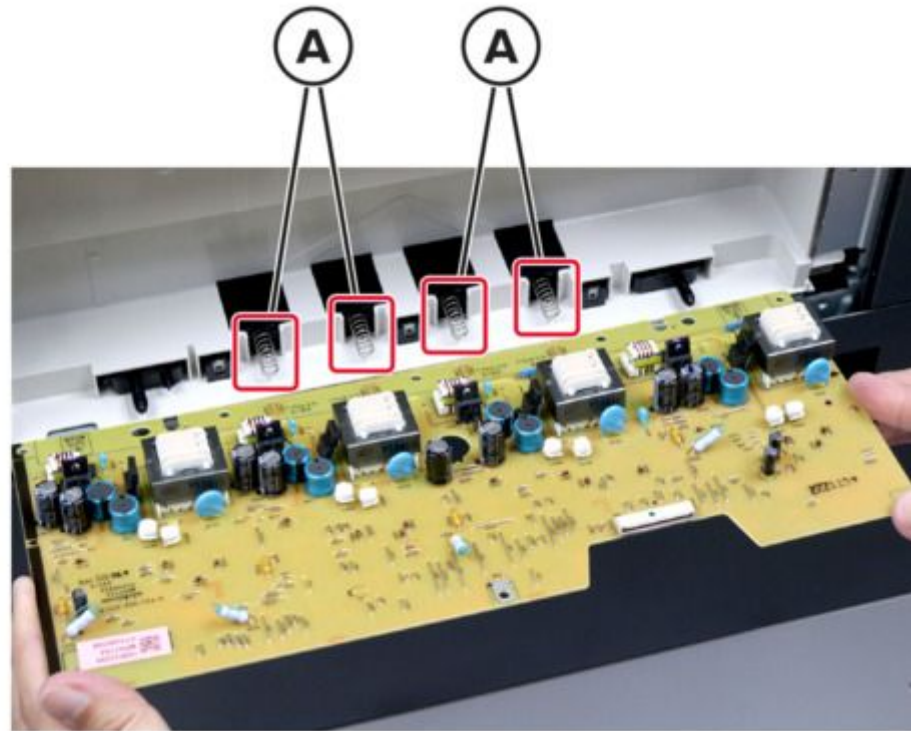


3. Disconnect the cable (C), and then remove the four screws (D).



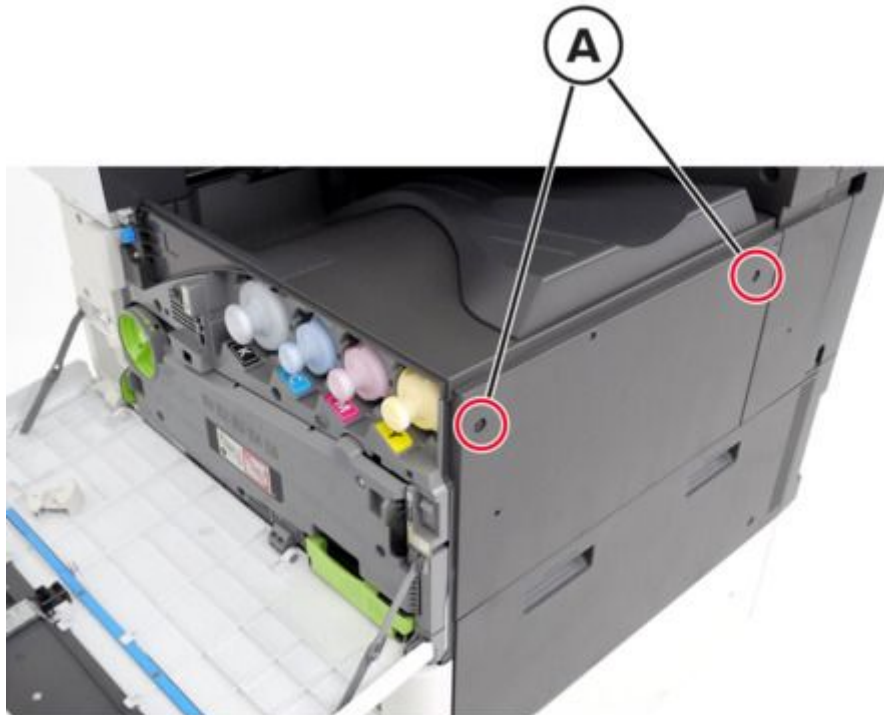
INSTALLATION NOTE

Take note of the position of the four contact springs (A).



Right cover removal

1. Open the front door.
2. Remove the two screws (A).



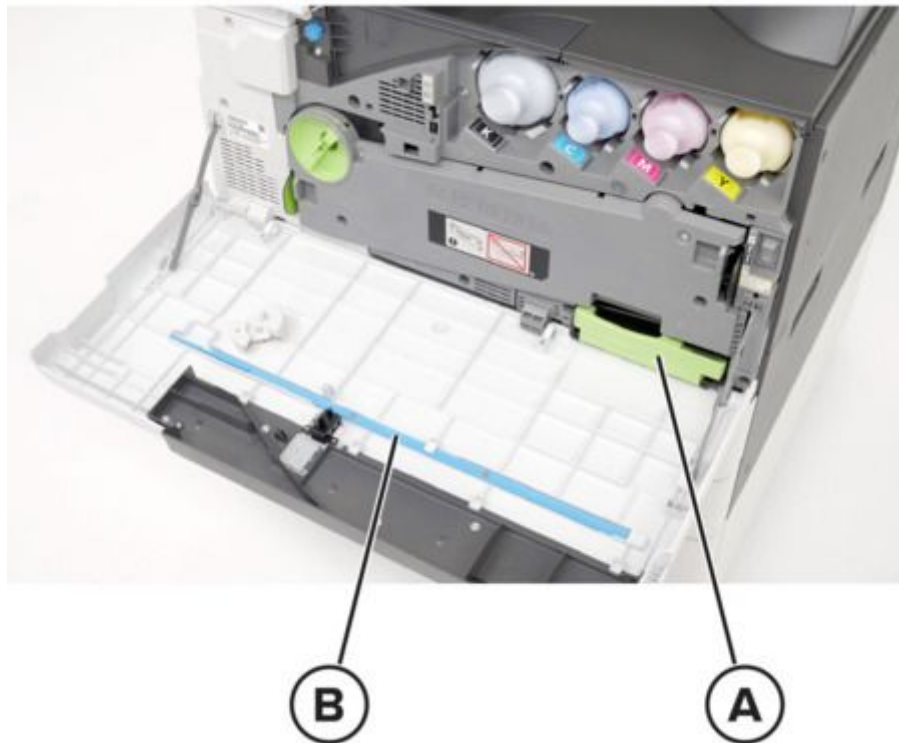
3. Remove the right cover.



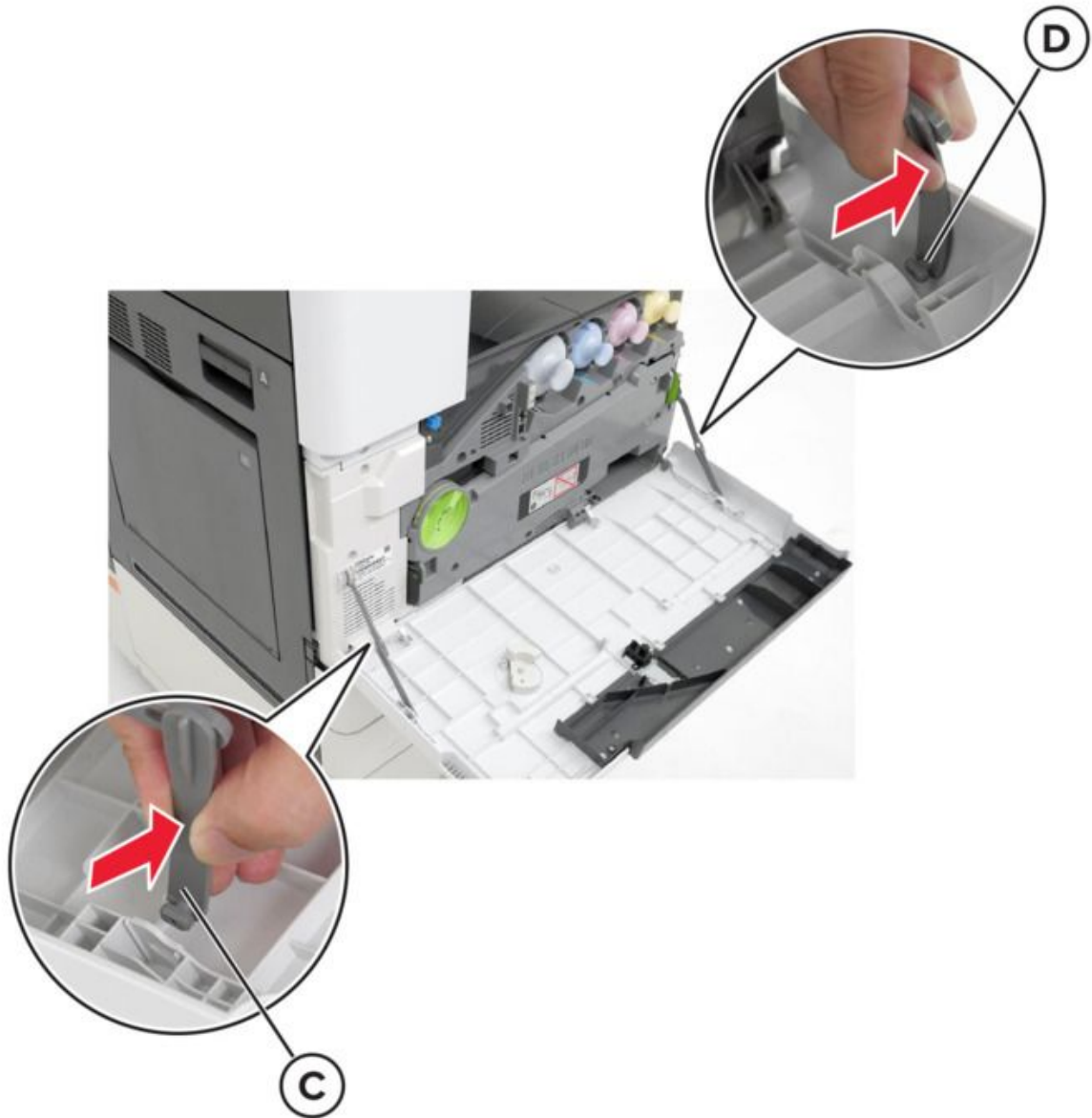
Front side removals

Front door removal

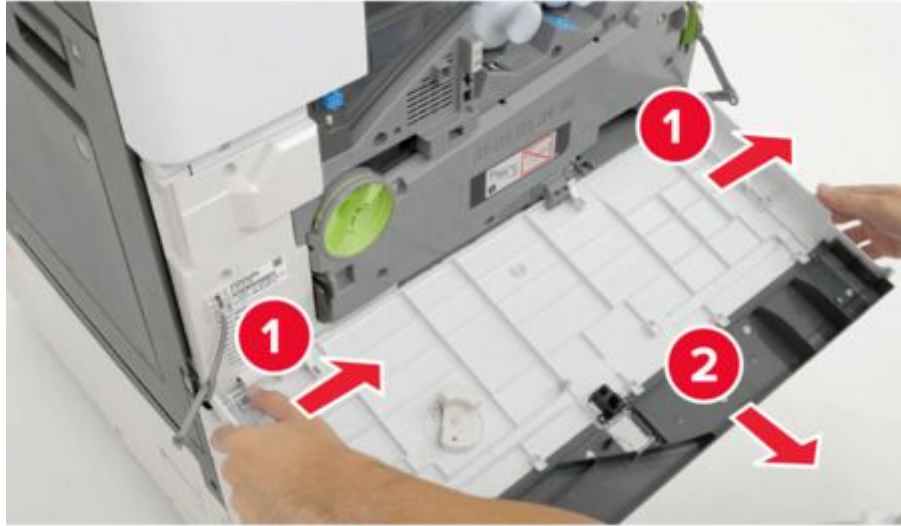
1. Open the front door.
2. Remove the waste toner bottle (A), and then remove the printhead cleaner (B).



3. Detach the left front door link (C), and then detach the right front door link (D).



4. Remove the front door.



Front left cover removal

1. Push the lock to release the control panel stand.



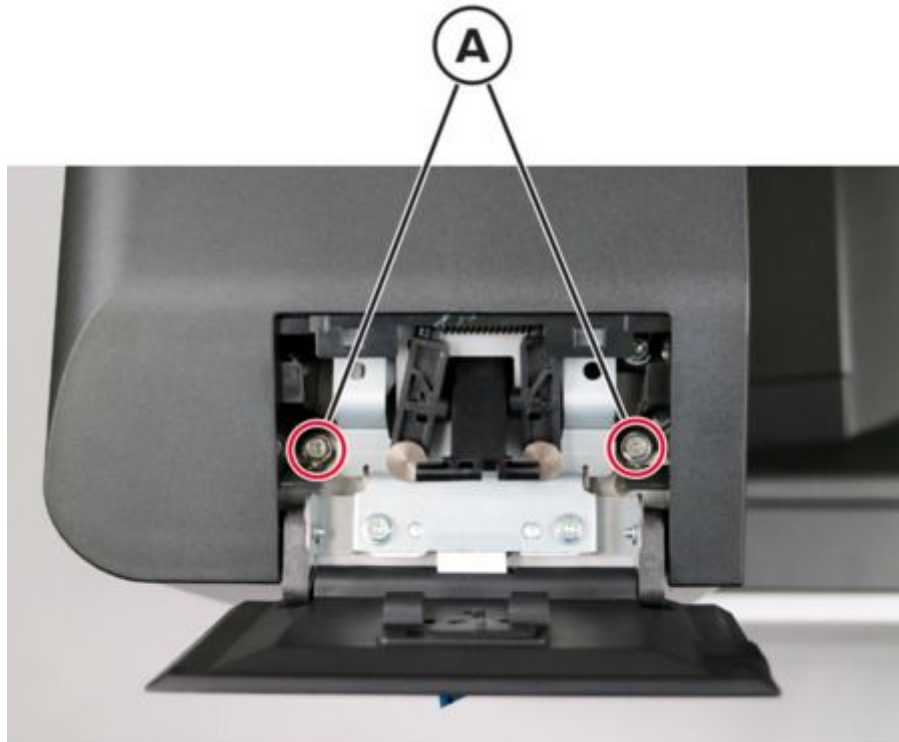
2. Push down the stand to release the control panel.



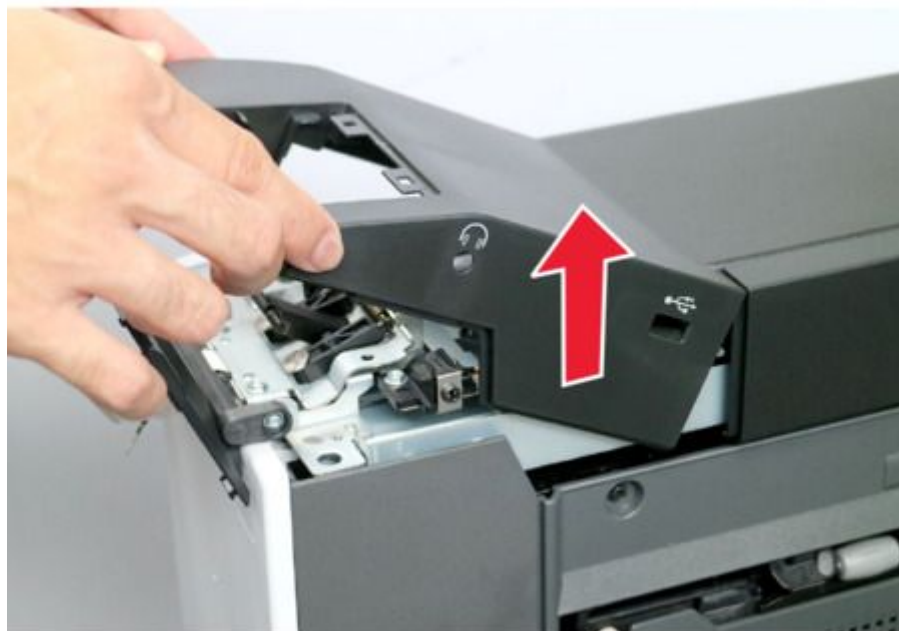
3. Remove the hinge cover.



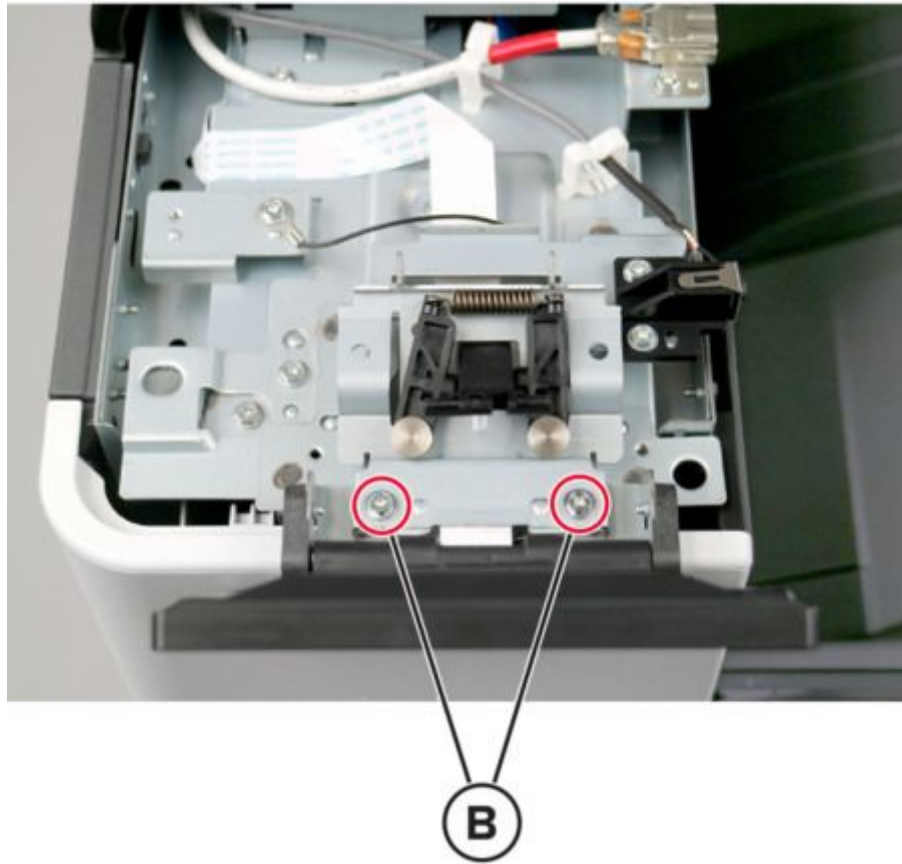
4. Remove the two screws (A).



5. Remove the control panel base cover.



6. Remove the two screws (B).

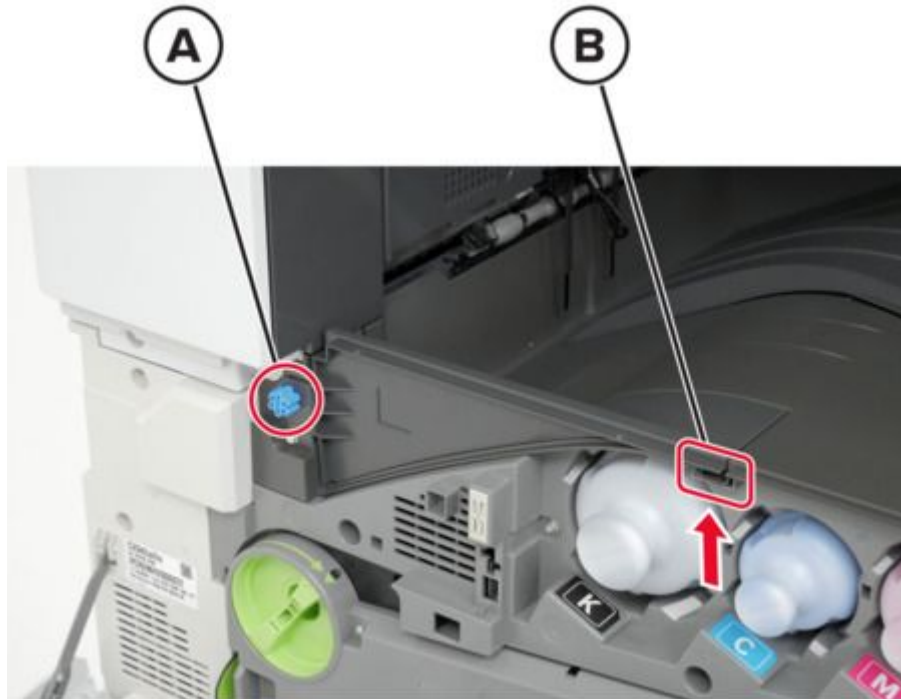


7. Open the front door, and then remove the two screws (C) to remove the left cover.



Bin front cover removal

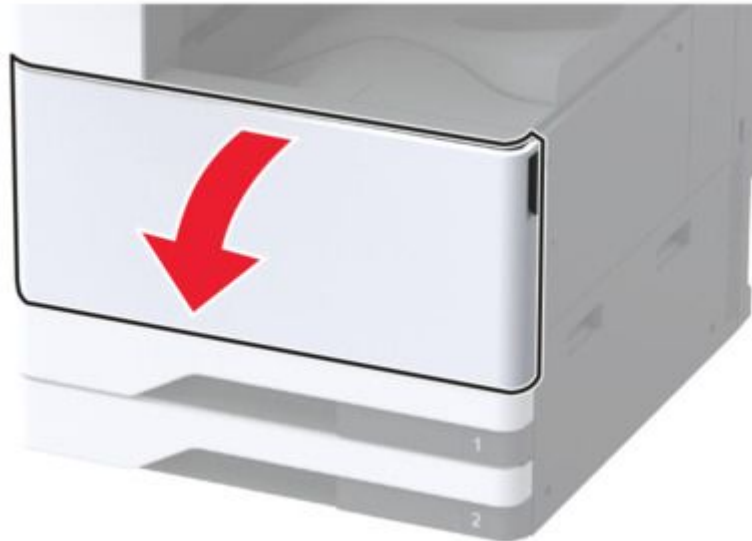
1. Open the front door.
2. Remove the thumb screw (A), and then press the tab (B) upward to remove the cover.



Waste toner bottle removal

Learn how to replace the waste toner bottle of your printer. Changing the waste toner bottle regularly prevents toner spillage.

1. Open the front door.

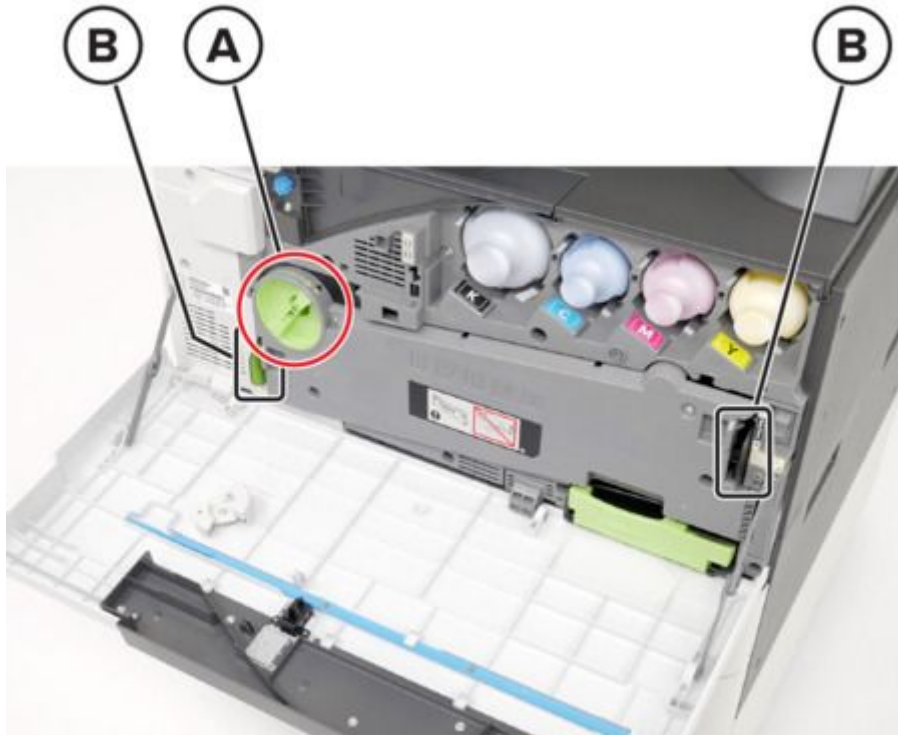


2. Remove the waste toner bottle.



Waste toner transfer unit removal

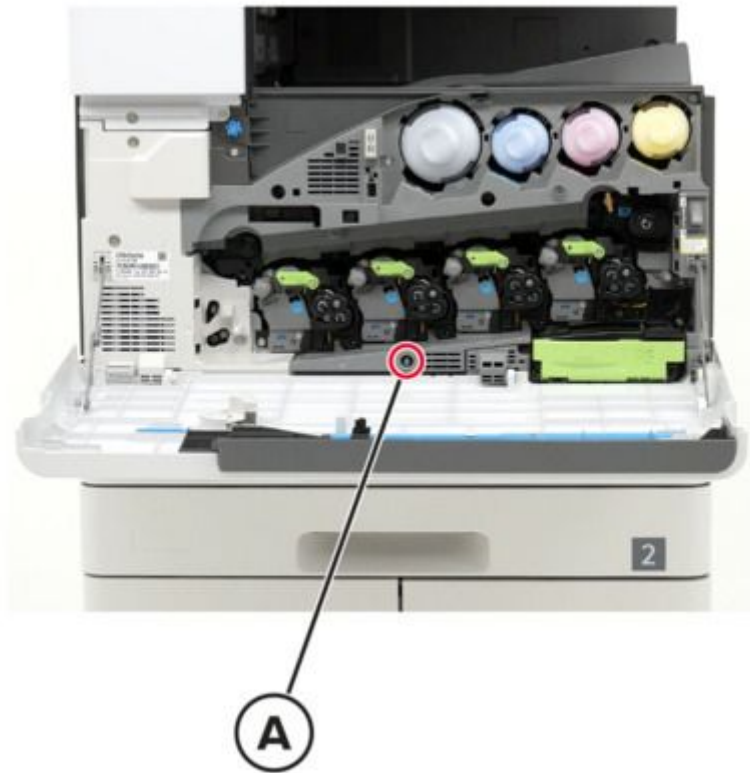
1. Open the front door.
2. Release the lock (A), and then press the two tabs (B) to release the waste toner transfer unit.



3. Remove the waste toner transfer unit.

Developer cable cover removal

1. Remove the waste toner transfer unit. See ["Waste toner transfer unit removal"](#) on page 1154.
2. Remove the screw (A), and then remove the cable cover.



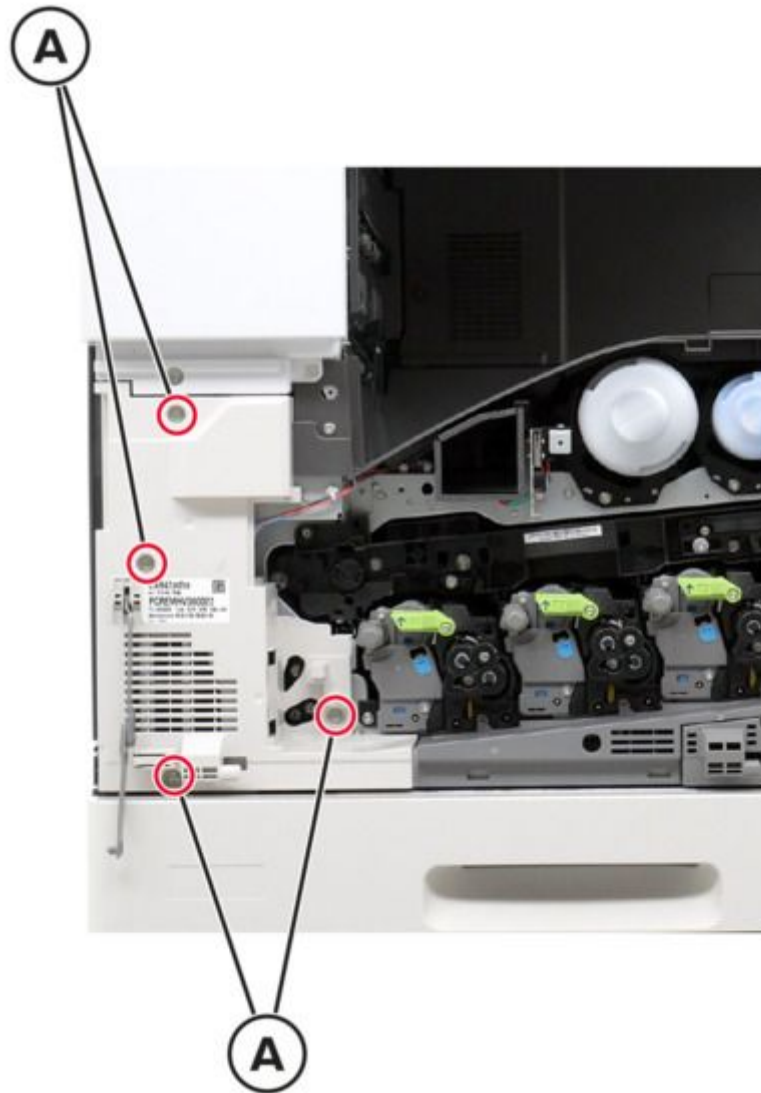
Toner inner front cover removal

1. Remove the waste toner transfer unit. See [See "Waste toner transfer unit removal" on page 1154.](#)
2. Remove the four screws (A), and then remove the cover.



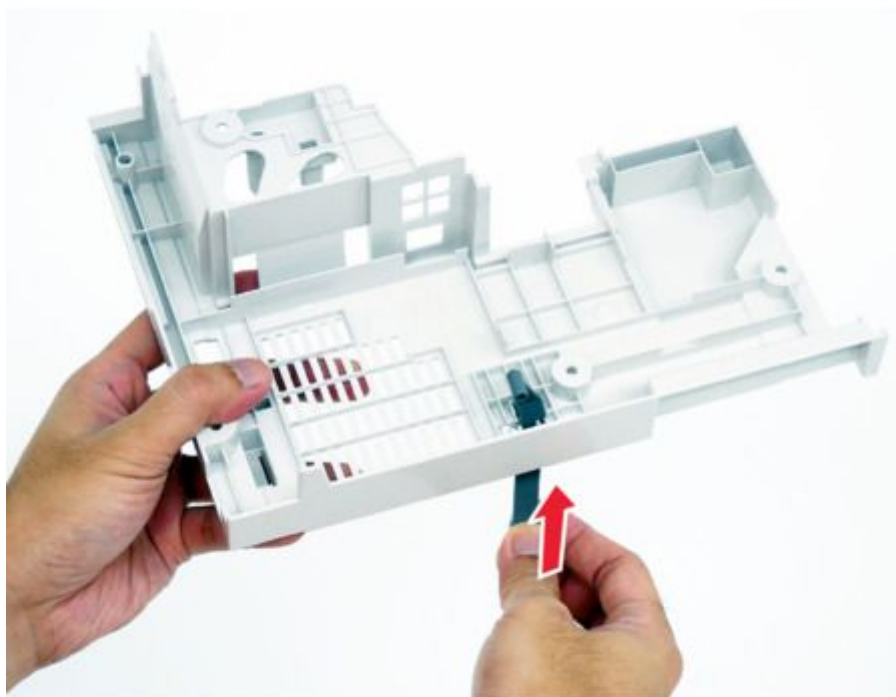
Inner front left cover removal

1. Remove the front door. See ["Front door removal" on page 1144](#)
2. Remove the waste toner transfer unit. See ["Waste toner transfer unit removal" on page 1154](#).
3. Remove the toner inner front cover. See ["Toner inner front cover removal" on page 1156](#).
4. Remove the four screws (A), and then remove the cover.



Left door link removal

1. Remove the front door. See [.See "Front door removal" on page 1144](#)
2. Remove the waste toner transfer unit. See [See "Waste toner transfer unit removal" on page 1154.](#)
3. Remove the toner inner front cover. See [See "Toner inner front cover removal" on page 1156.](#)
4. Remove the inner front left cover. See [See "Inner front left cover removal" on page 1157.](#)
5. Remove the left door link.



Right door link removal

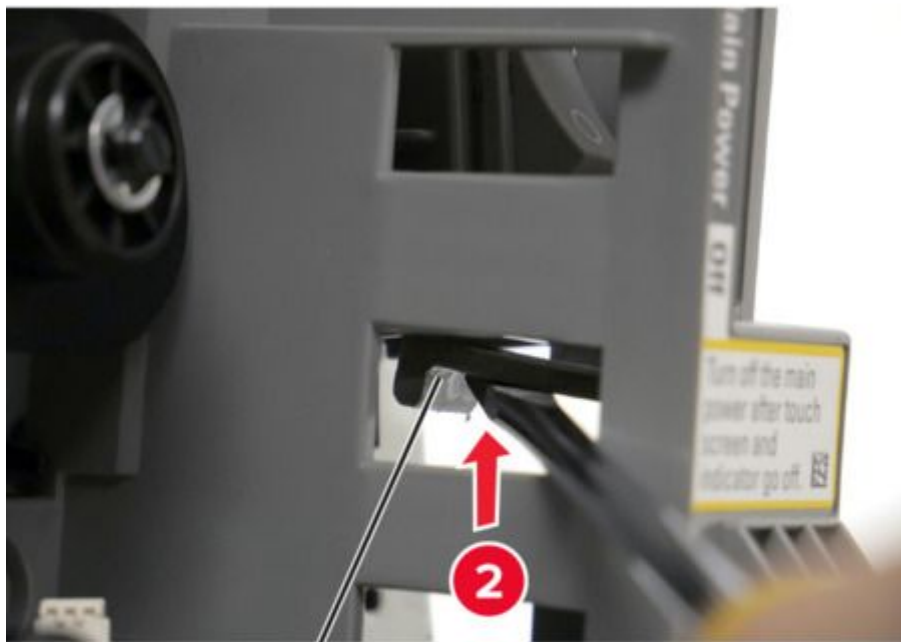
1. Remove the front door. See [.See "Front door removal" on page 1144](#)
2. Remove the waste toner transfer unit. See [See "Waste toner transfer unit removal" on page 1154.](#)
3. Remove the toner inner front cover. See [See "Toner inner front cover removal" on page 1156.](#)
4. Remove the screw (A), and then remove the cover (B).



5. Disconnect the cable (C), and then remove the screw (D).



6. Pull the cover, and then release the latch (E) to remove the cover.



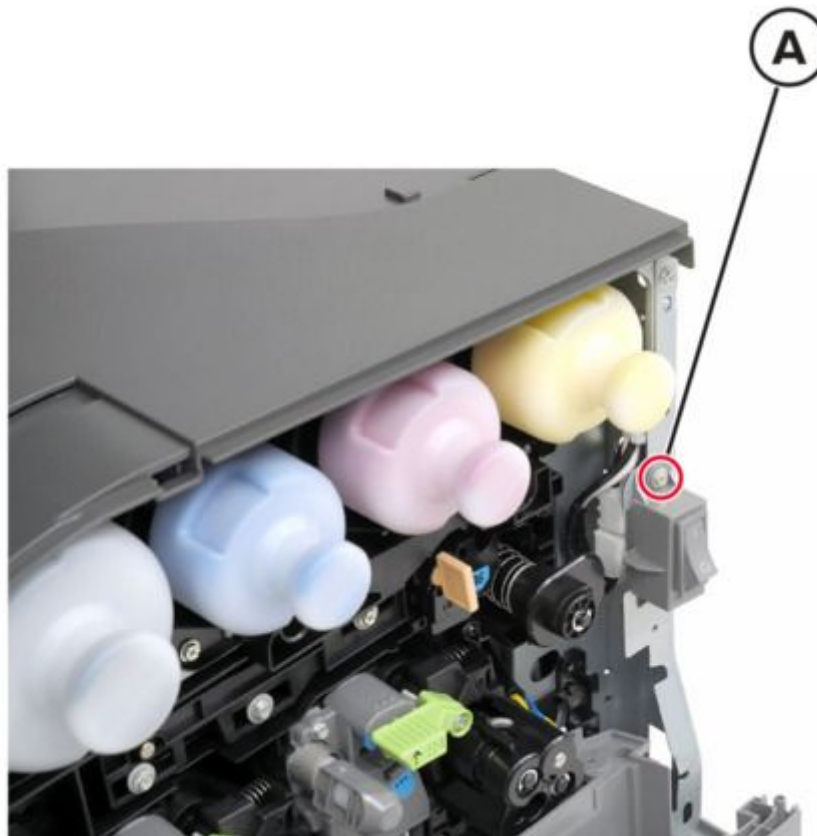
(E)

7. Remove the right door link.

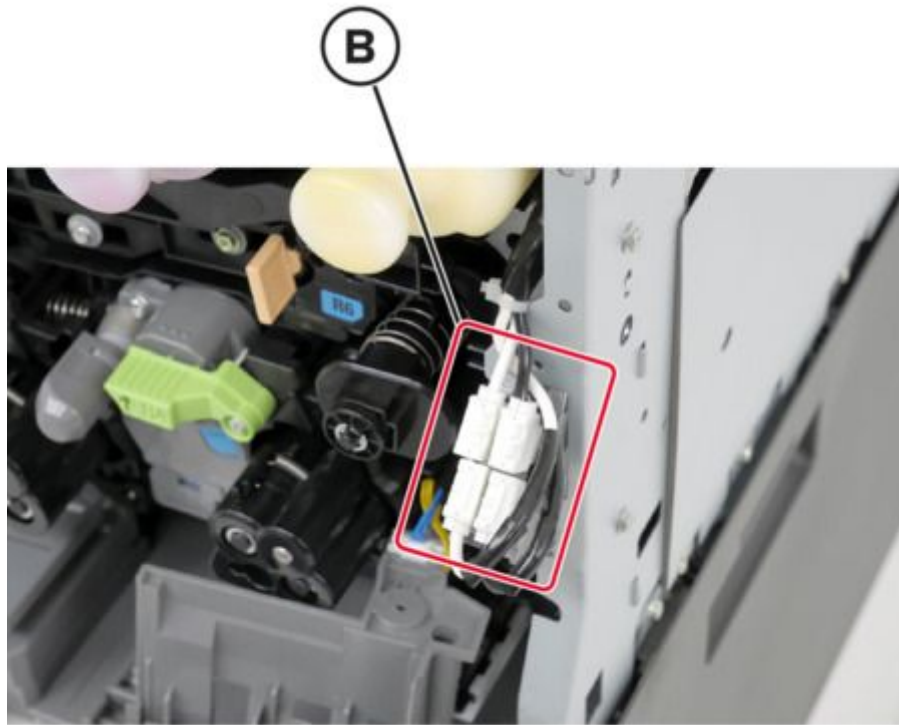


Switch removal

1. Remove the front door. See [.See "Front door removal" on page 1144](#)
2. Remove the waste toner transfer unit. See [See "Waste toner transfer unit removal" on page 1154.](#)
3. Remove the toner inner front cover. See [See "Toner inner front cover removal" on page 1156.](#)
4. Remove the right door link. See [See "Right door link removal" on page 1159.](#)
5. Remove the screw (A).



6. Disconnect the four cables (B), and then remove the switch.



INSTALLATION NOTE

1. Pay attention to where the cables are connected.
2. Make sure that the cables are connected to their proper slot on the switch.

Control panel removal

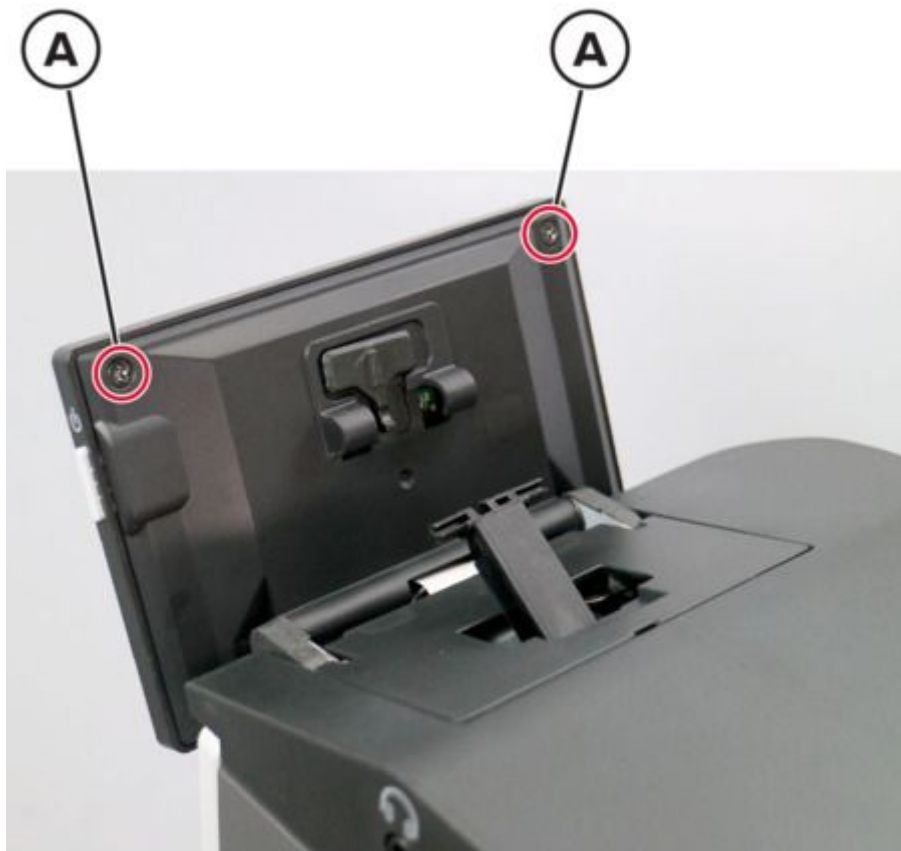
1. Push the lock to release the control panel stand.



2. Push down the stand to release the control panel.



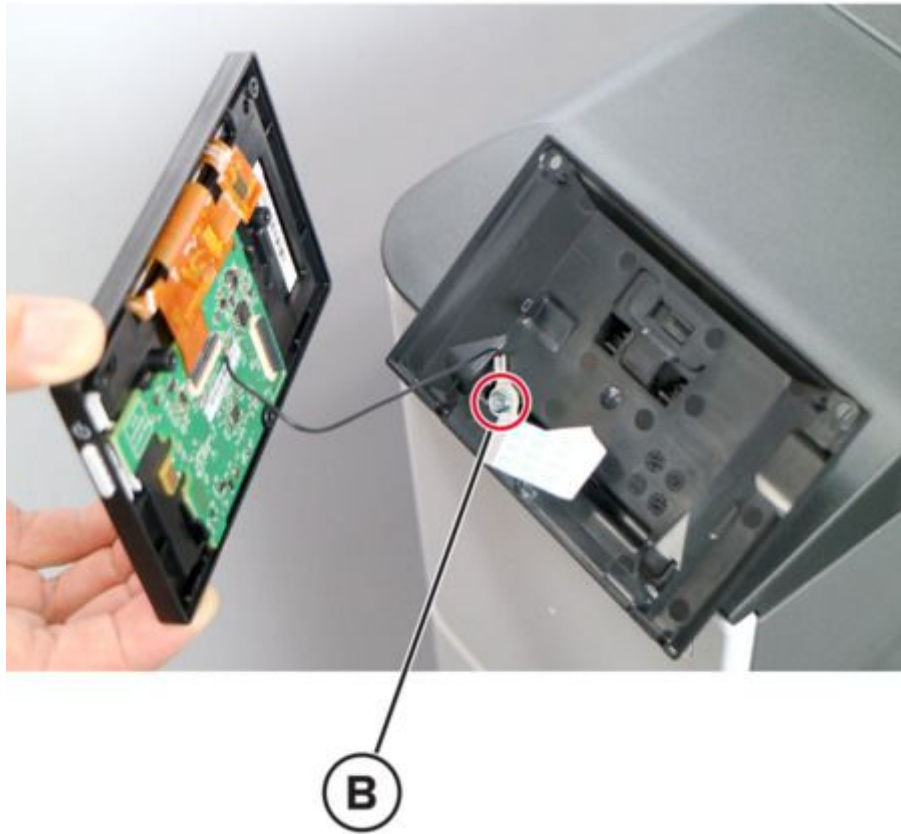
3. Remove the two screws (A), and then detach the control panel from the control panel rear cover.



4. Disconnect the cable.



5. Remove the ground screw (B).



Control panel hinge cover removal

1. Push the lock to release the control panel stand.



2. Push down the stand to release the control panel.

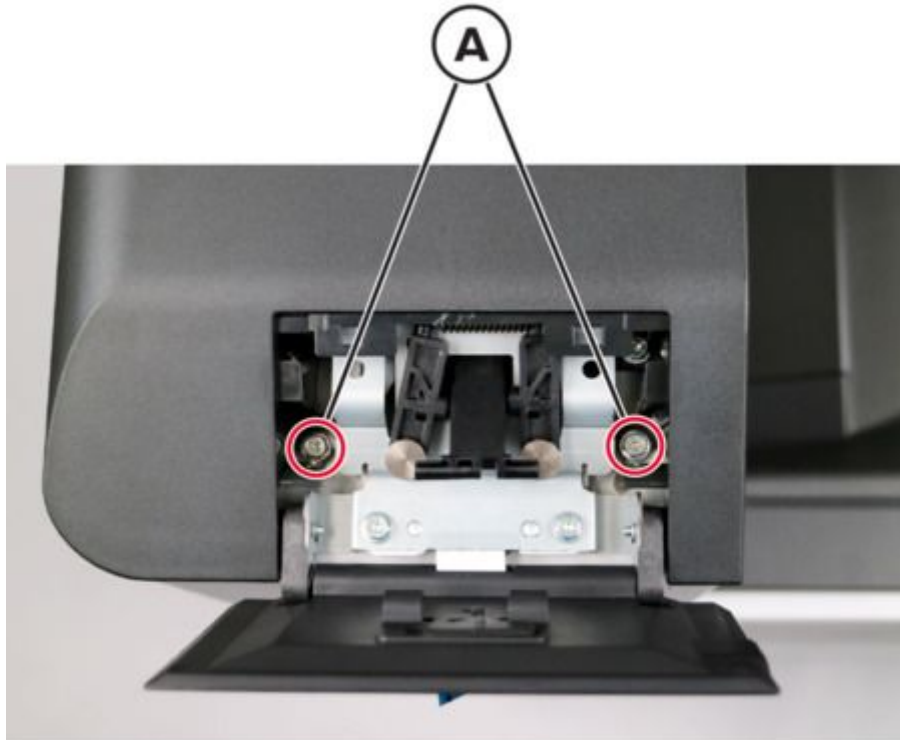


3. Remove the hinge cover.

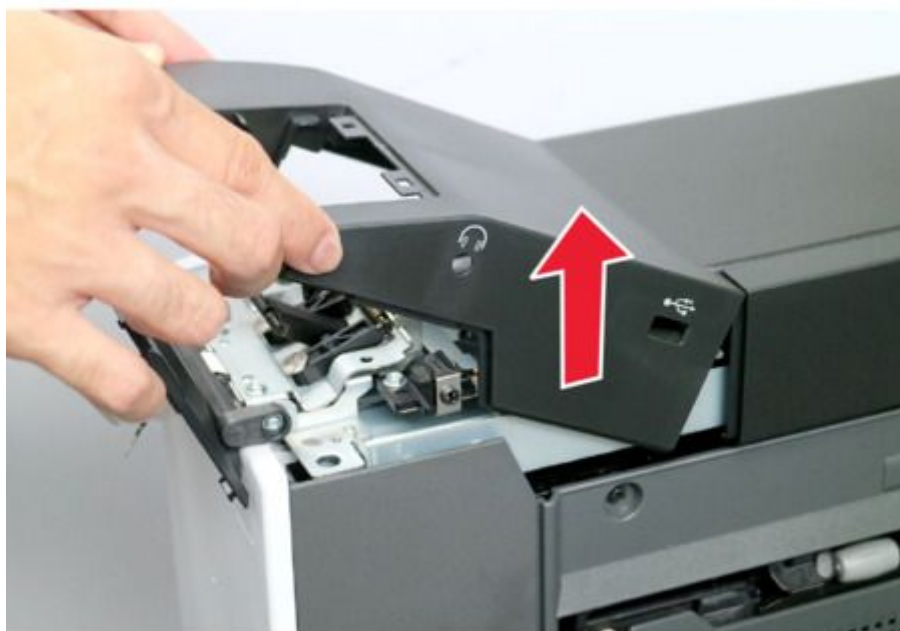


Control panel base cover removal

1. Remove the control panel hinge cover. See [See "Control panel hinge cover removal" on page 1169.](#)
2. Remove the two screws (A).



3. Remove the cover.

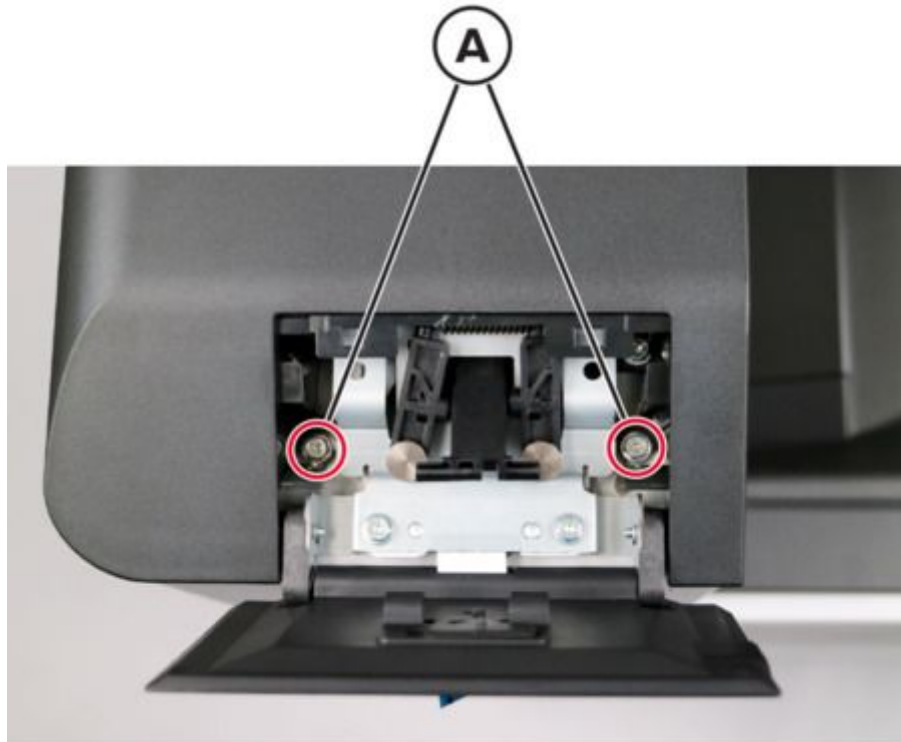


Control panel hinge removal

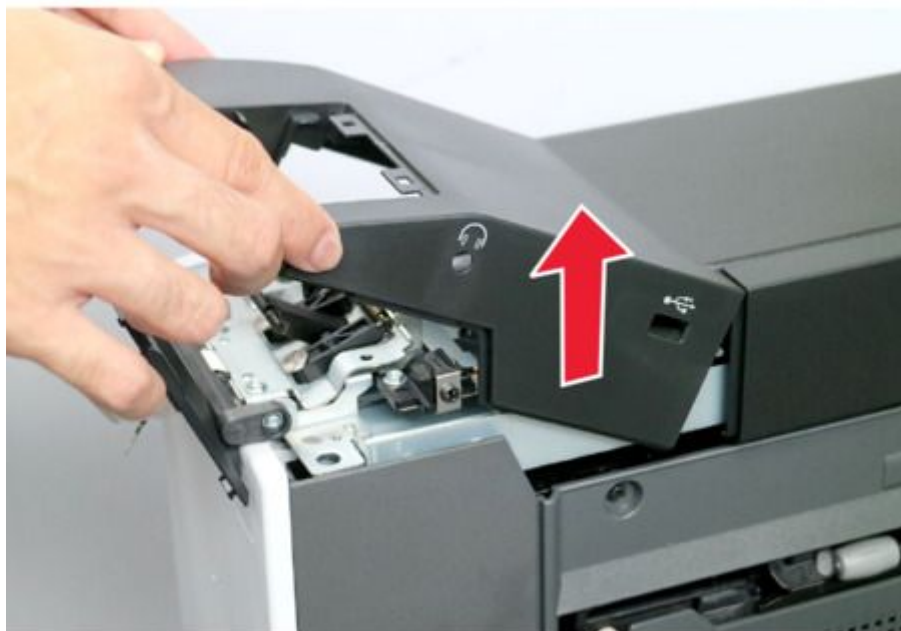
1. Remove the control panel. See [See "Control panel removal" on page 1165.](#)
2. Remove the hinge cover.



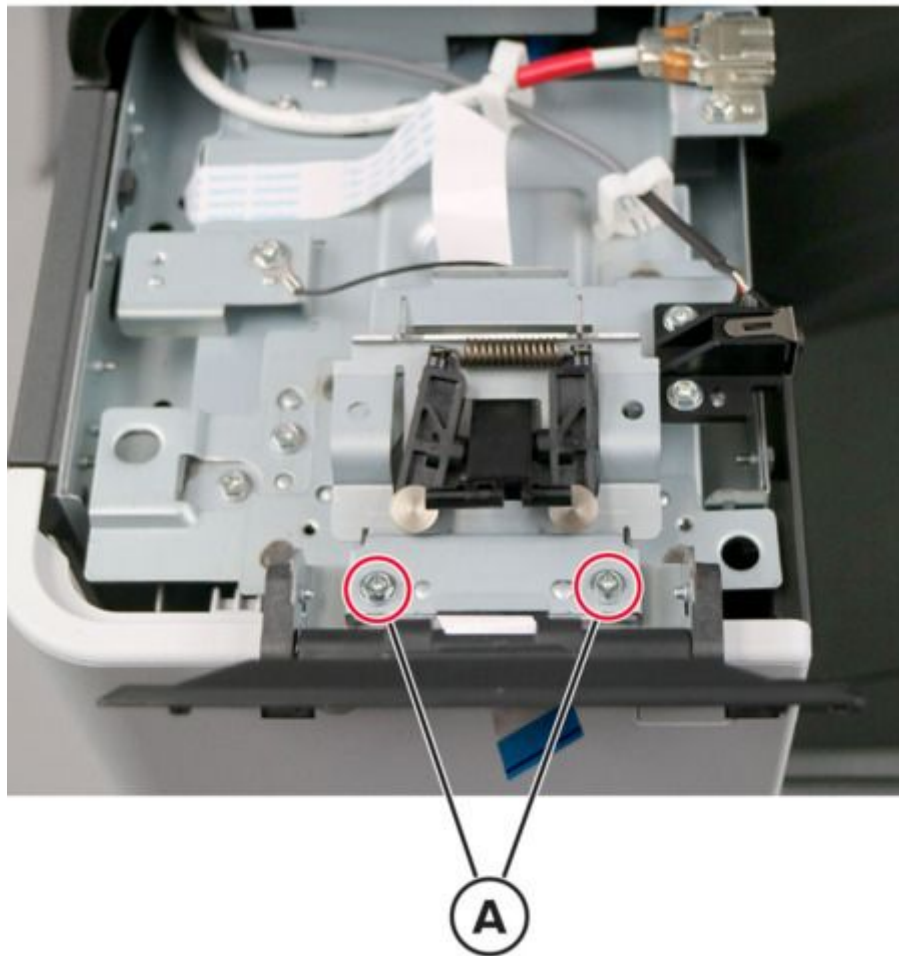
3. Remove the two screws (A).



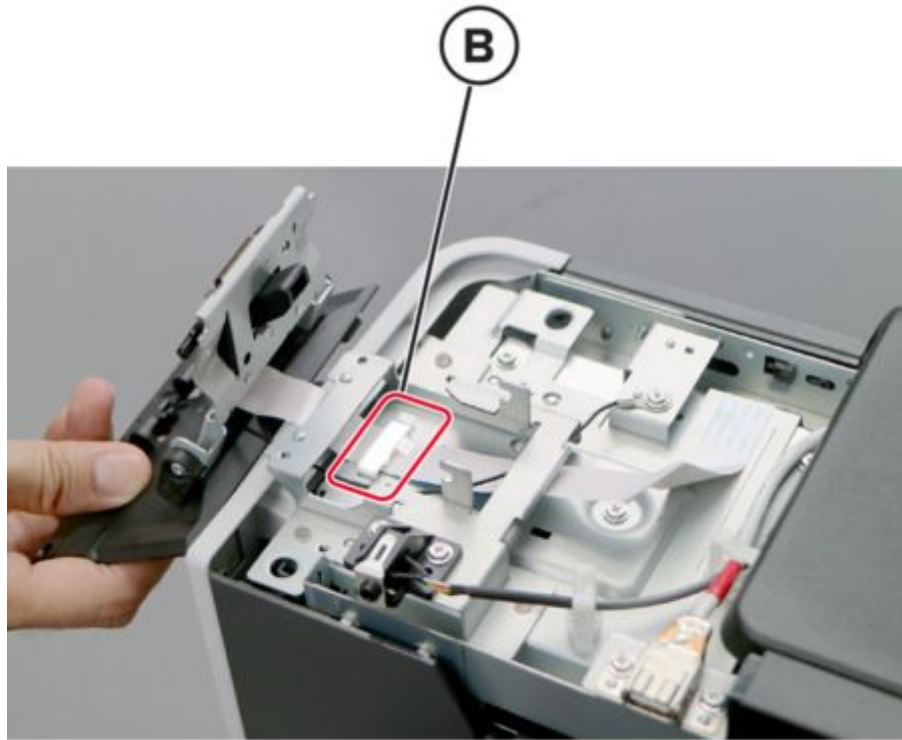
4. Remove the control panel base cover.



5. Remove the two screws (A).

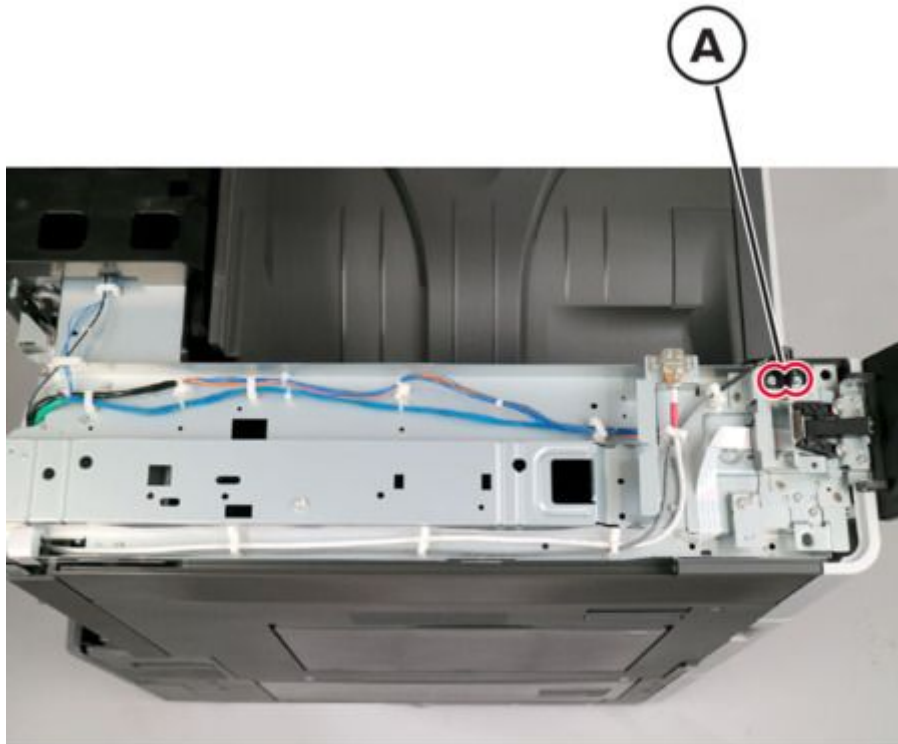


6. Detach the cable guide (B), and then slide out the cable and wire from the control panel hinge.



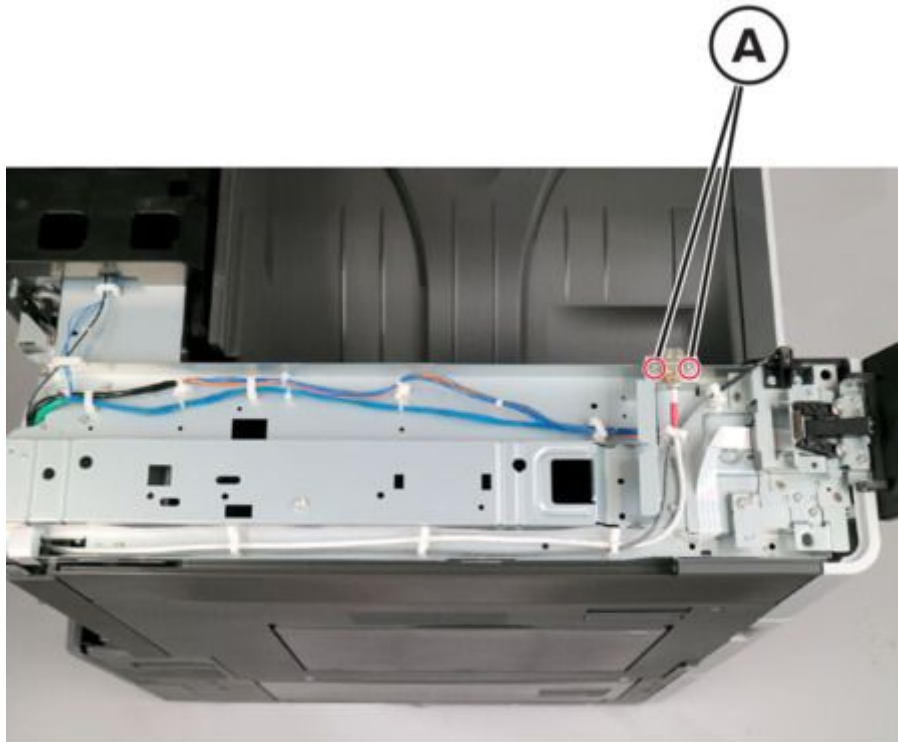
Control panel headphone jack removal

1. Remove the control panel base cover. See [See "Control panel base cover removal" on page 1171.](#)
2. Remove the top cover. See [See "Top cover removal" on page 1280.](#)
3. Remove the left cover. See [See "Front left cover removal" on page 1147.](#)
4. Remove the two screws (A), and then remove the control panel headphone jack.



Control panel USB removal

1. Remove the control panel base cover. See [See "Control panel base cover removal" on page 1171.](#)
2. Remove the top cover. See [See "Top cover removal" on page 1280.](#)
3. Remove the left cover. See [See "Front left cover removal" on page 1147.](#)
4. Remove the two screws (A), and then remove the control panel USB cable.



Photoconductor drum (CMYK) removal

1. Open the front door.
2. Remove the waste toner transfer unit. See [See "Waste toner transfer unit removal" on page 1154.](#)
3. Remove the photoconductor drum.

Developer unit (CMYK) removal

For a video demonstration, see [Removing the developer unit \(CMYK\)](#).

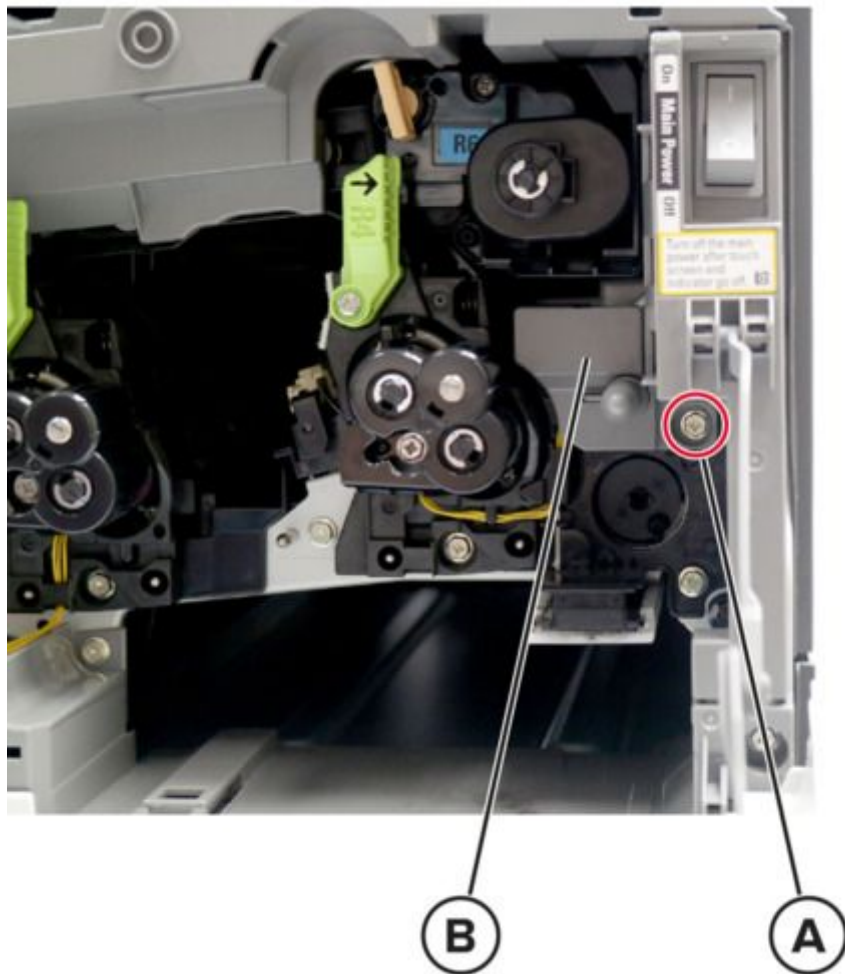
Perform step 1 only if you intend to replace the developer unit (CMYK) after removing it.

1. Enter the Diagnostics menu, and then touch: **Printer diagnostics and adjustments > Imaging process adjustment > ATC sensor adjust**.
 1. Note down the value/s for **ATC sensor bar code** for the developer unit/s you will replace.
 2. Touch **ATC sensor adjust > ATC sensors setup coefficient**, and then note down the value/s for the developer unit/s you will replace.

NOTES

These values should change after replacing the developer unit.

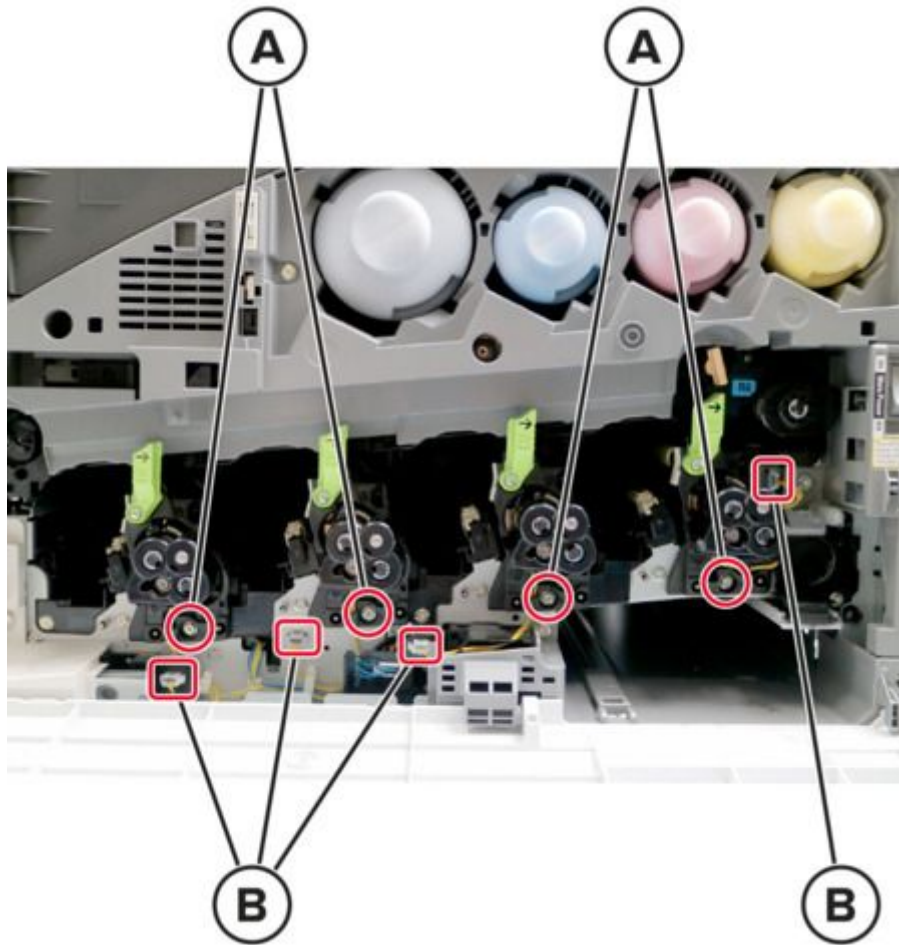
2. Turn off the printer.
3. Remove the waste toner transfer unit. See [See "Waste toner transfer unit removal" on page 1154](#).
4. Remove the waste toner bottle. See [.See "Waste toner bottle removal" on page 1153](#)
5. Remove the developer cable cover. See [See "Developer cable cover removal" on page 1155](#).
6. Remove the photoconductor drum (CMYK). See [See "Photoconductor drum \(CMYK\) removal" on page 1178](#).
7. For the yellow developer unit, remove the screw (A), and then remove the cable cover (B).



8. Disconnect the four cables (C), remove the four screws (D), and then remove the developer unit.

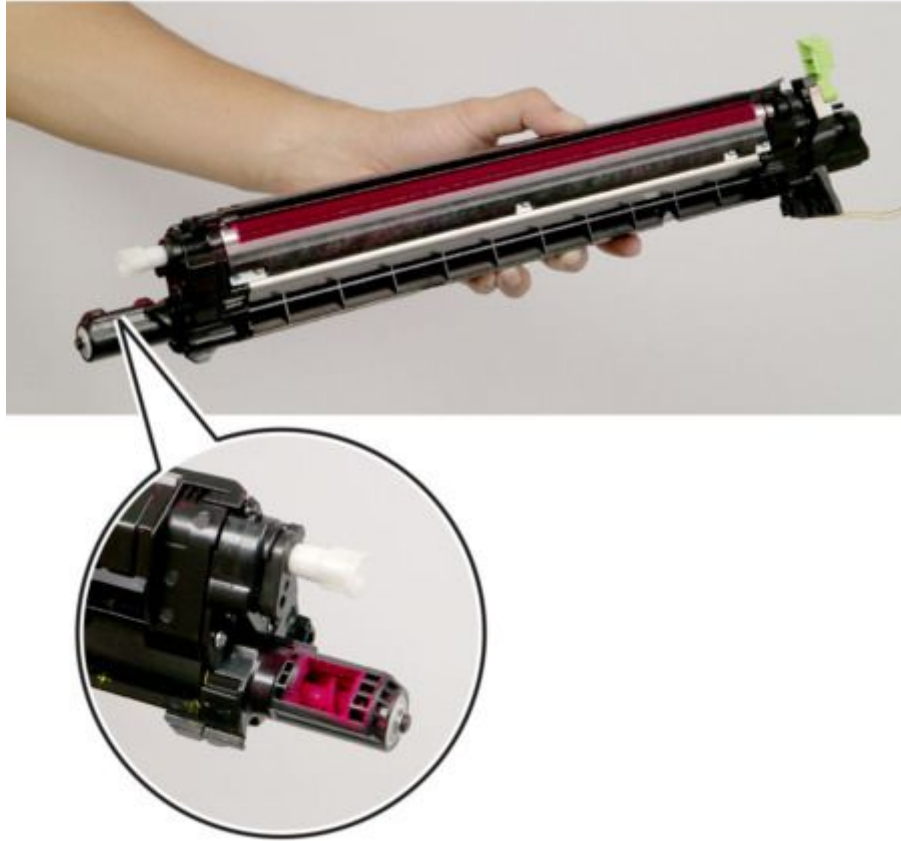
NOTES

Make sure to remove only the defective developer unit.



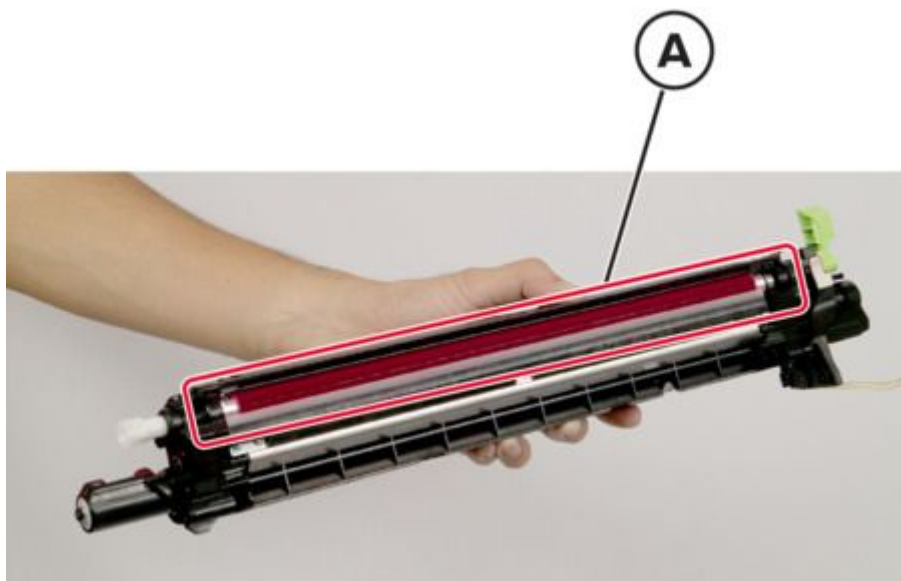
WARNING—POTENTIAL DAMAGE

When removing the developer unit, make sure to keep it in the upright position to avoid spilling the toner.

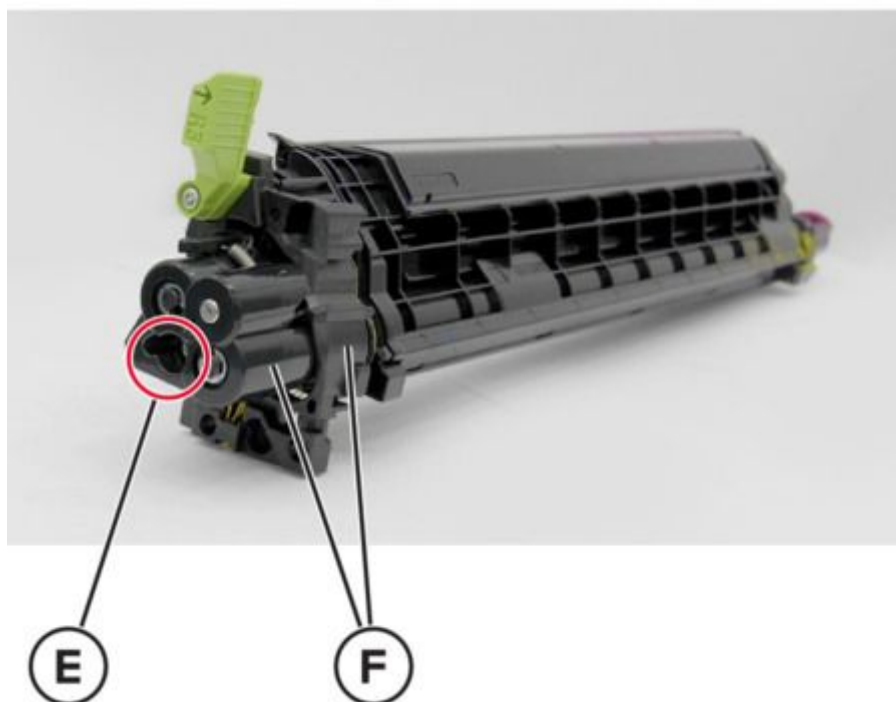


WARNING—POTENTIAL DAMAGE

Do not touch the developer roller (A) on the developer unit.



9. Remove the screw (E), and then remove the gear cover (F).



Developer unit (CMYK) installation

- Make sure to perform [See "Developer unit \(CMYK\) removal" on page 1179](#) before removing the developer unit/s you want to replace.
- Cover the work surface with paper before unpacking the new developer unit and developer carrier powder.

1. Pry the developer unit cover open to remove it.



2. Apply enough powder to coat the magnet roll fully, and then turn the knob to apply the powder evenly.



3. Reinstall the developer unit cover, and then remove the excess powder with a brush.
4. Install the gear cover on the new developer unit.



5. Note down the value printed on the bar code sticker on the developer unit.



6. After installing the new developer unit, enter the Diagnostics menu, and then touch: **Printer diagnostics and adjustments > Imaging process adjustments > ATC Sensor Adjust.**
7. Touch the **ATC Sensor Bar Code** of the developer unit you installed. Enter the value from the bar code sticker, and then touch **OK > Start.**
8. After getting a **Test Passed** message, touch the back button, and then touch **Developer ATC.** Touch **ATC Sensor Control** for the developer unit you replaced, and then touch **On > Start.**
9. After getting a **Test Passed** message, touch the back button, and then touch **ATC Sensor Adjust.**

Check that the value for **ATC Sensor Bar Code** for the developer unit you replaced has changed to the value you entered.

10. Touch **ATC Sensors Setup Coefficient**.

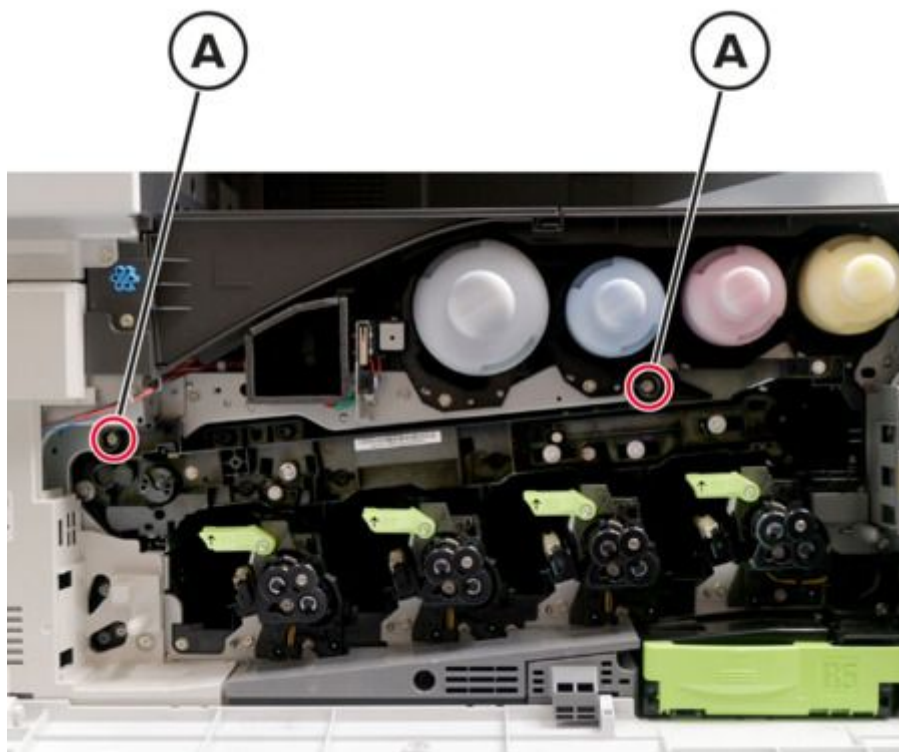
Check that the value for **ATC Sensor Setup Coefficient** has changed for the developer unit you replaced.

11. Perform a POR.

Transfer belt removal

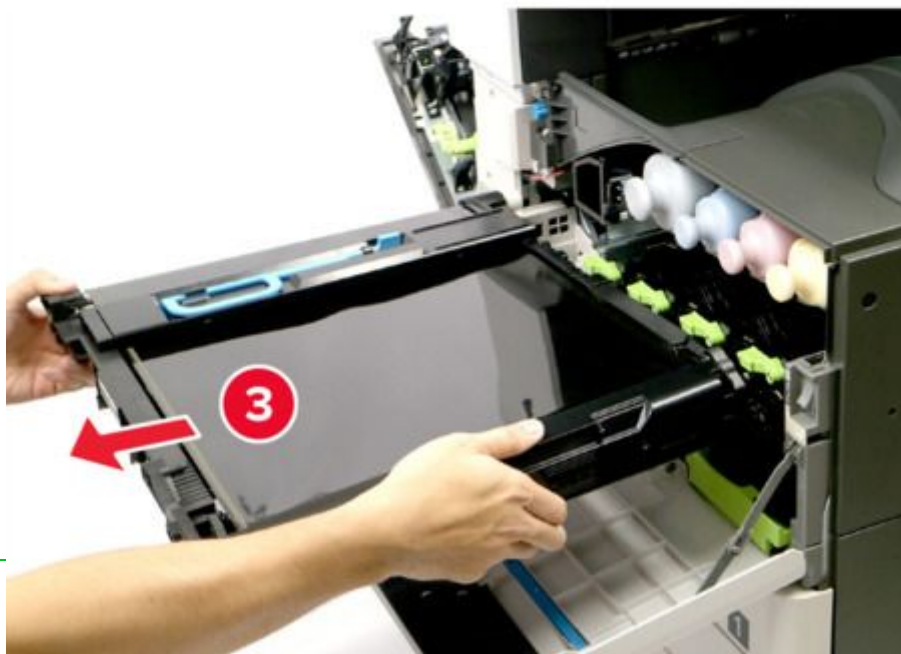
For a video demonstration, see [Removing the transfer belt](#).

1. Open the left door.
2. Remove the toner inner front cover. See [See "Toner inner front cover removal" on page 1156](#).
3. Remove the waste toner transfer unit. See [See "Waste toner transfer unit removal" on page 1154](#).
4. Remove the photoconductor drum. See [See "Photoconductor drum \(CMYK\) removal" on page 1178](#).
5. Remove the transfer belt cleaner.
6. Remove the two screws (A).



7. Remove the transfer belt.

Parts removal



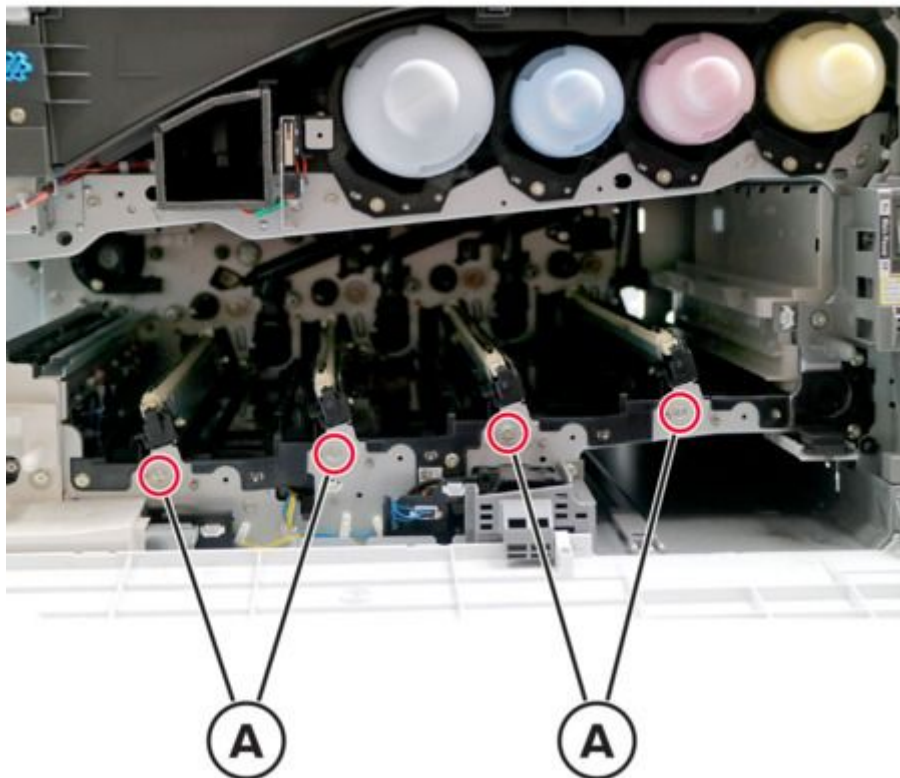
INSTALLATION NOTE

Make sure to clean the printhead using the printhead cleaner.

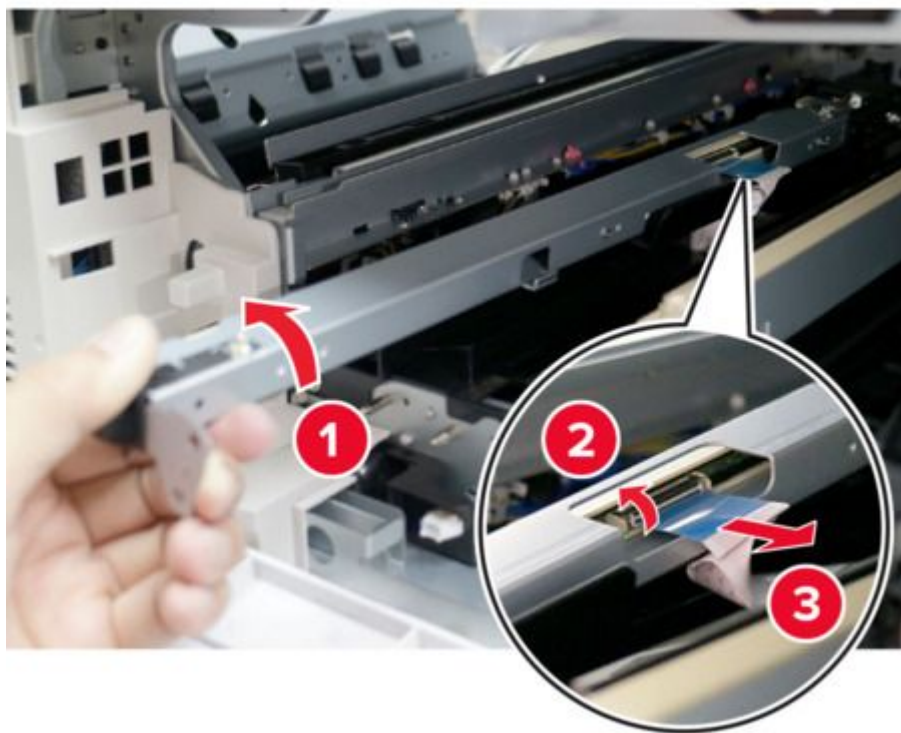
Printhead (CMYK) removal

For a video demonstration, see [Removing the printhead \(CMYK\)](#).

1. Open the front door.
2. Remove the toner inner front cover. See [See "Toner inner front cover removal" on page 1156](#).
3. Remove the waste toner transfer unit. See [See "Waste toner transfer unit removal" on page 1154](#).
4. Remove the photoconductor drum. See [See "Photoconductor drum \(CMYK\) removal" on page 1178](#).
5. Remove the waste toner bottle. See [.See "Waste toner bottle removal" on page 1153](#)
6. Remove the transfer the belt cleaner.
7. Remove the developer unit cable cover.
8. Remove the developer unit (CMYK). See [See "Developer unit \(CMYK\) removal" on page 1179](#).
9. Remove the transfer belt. See [See "Transfer belt removal" on page 1187](#).
10. Remove the four screws (A).



11. Remove the printhead.



INSTALLATION NOTE

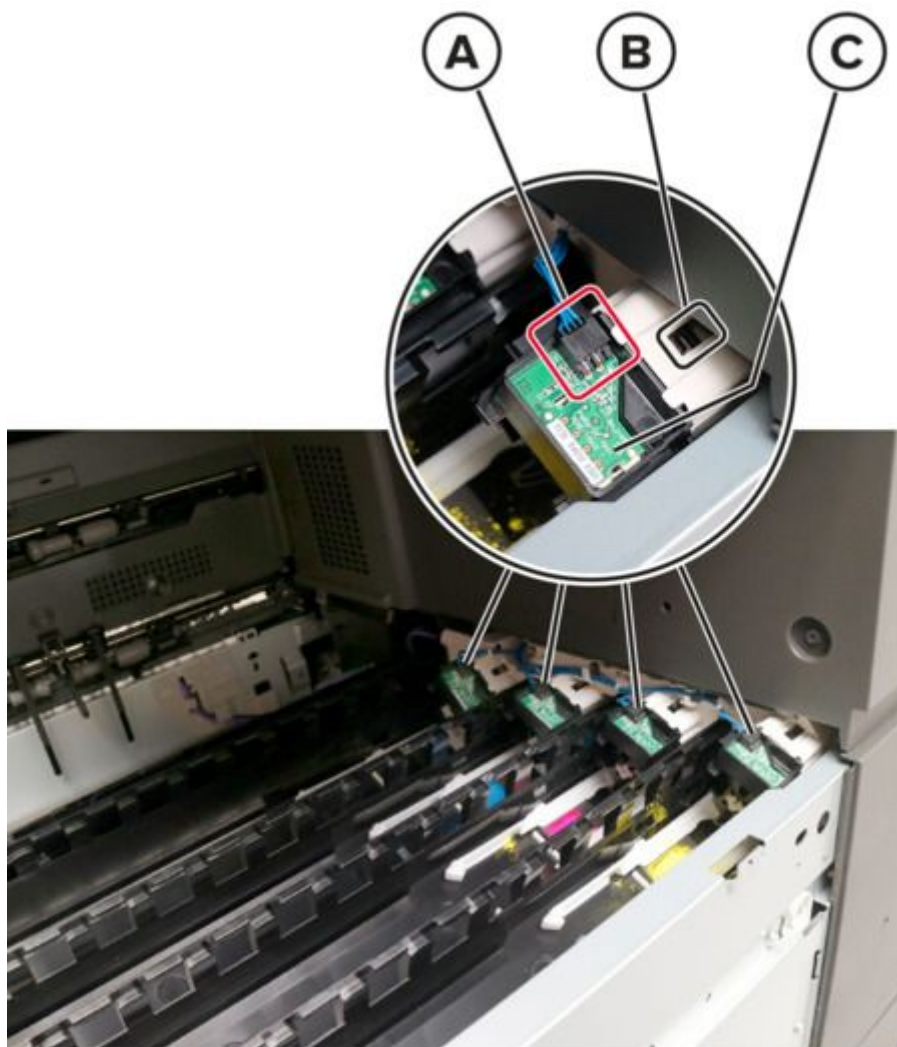
Make sure to clean the printhead using the printhead cleaner.

Toner contact chip (CMYK) removal

NOTES

Make sure to remove only the defective toner contact chip.

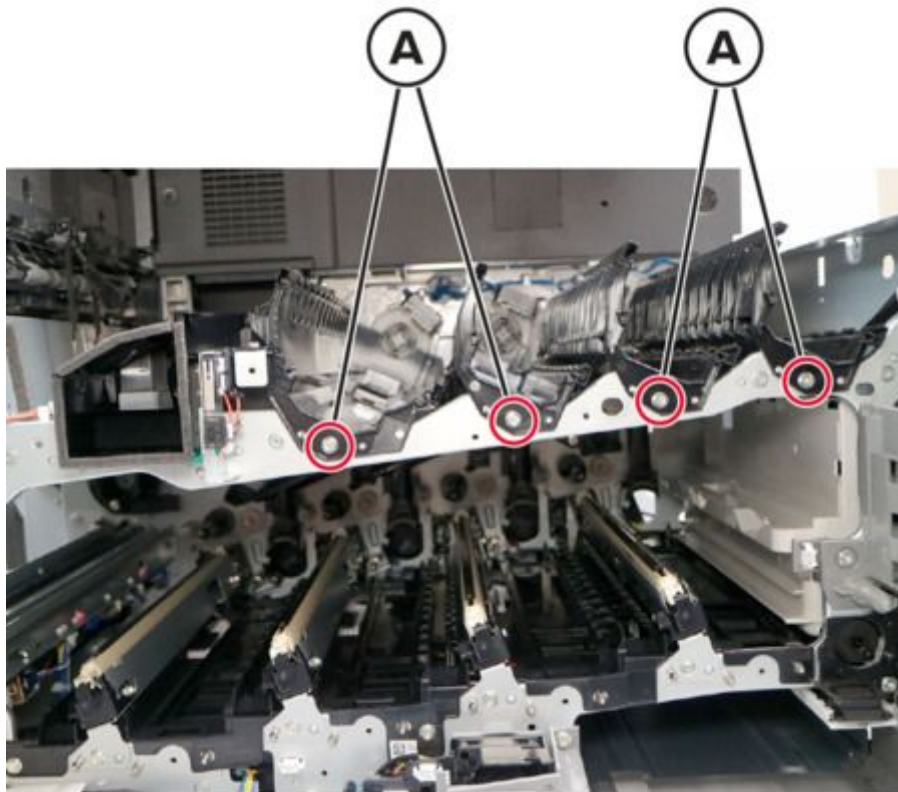
1. Remove the bin top cover. See [See "Bin top cover removal" on page 1272.](#)
2. Remove the right cover. See [.See "Right cover removal" on page 1143](#)
3. Remove the front left cover. See [See "Front left cover removal" on page 1147.](#)
4. Remove the bin front cover. See [See "Bin front cover removal" on page 1152.](#)
5. Remove the bin cover. See [.See "Bin cover removal" on page 1273](#)
6. Disconnect the cable (A), release the latch (B), and then remove the toner contact chip (C).



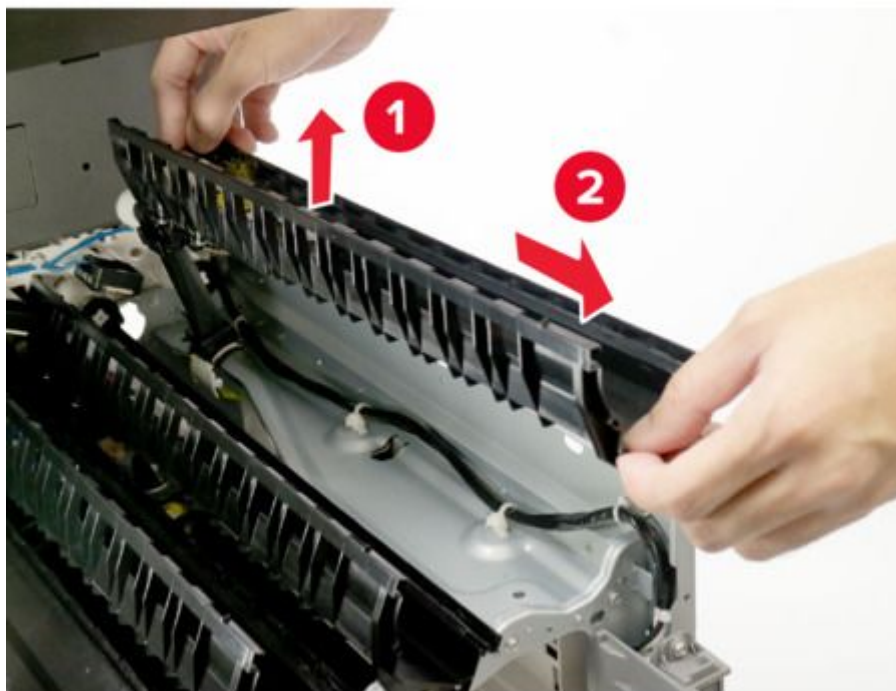
Toner dispenser assembly (CMYK) removal

- Make sure to remove only the defective toner dispenser assembly.
- When removing the black (K) toner dispenser assembly, make sure to remove the cyan printhead first.

1. Remove the bin top cover. See ["Bin top cover removal"](#) on page 1272.
2. Remove the right cover. See ["Right cover removal"](#) on page 1143
3. Remove the front left cover. See ["Front left cover removal"](#) on page 1147.
4. Remove the bin front cover. See ["Bin front cover removal"](#) on page 1152.
5. Remove the bin cover. See ["Bin cover removal"](#) on page 1273
6. Remove the toner inner front cover. See ["Toner inner front cover removal"](#) on page 1156.
7. Remove the waste toner transport unit. See ["Waste toner transfer unit removal"](#) on page 1154.
8. Remove the developer unit (CMYK). See ["Developer unit \(CMYK\) removal"](#) on page 1179.
9. Remove the transfer the belt cleaner.
10. Remove the transfer belt. See ["Transfer belt removal"](#) on page 1187.
11. Remove the four screws (A).



12. Gently pull, and then raise the toner dispenser assembly to remove it.



WARNING—POTENTIAL DAMAGE

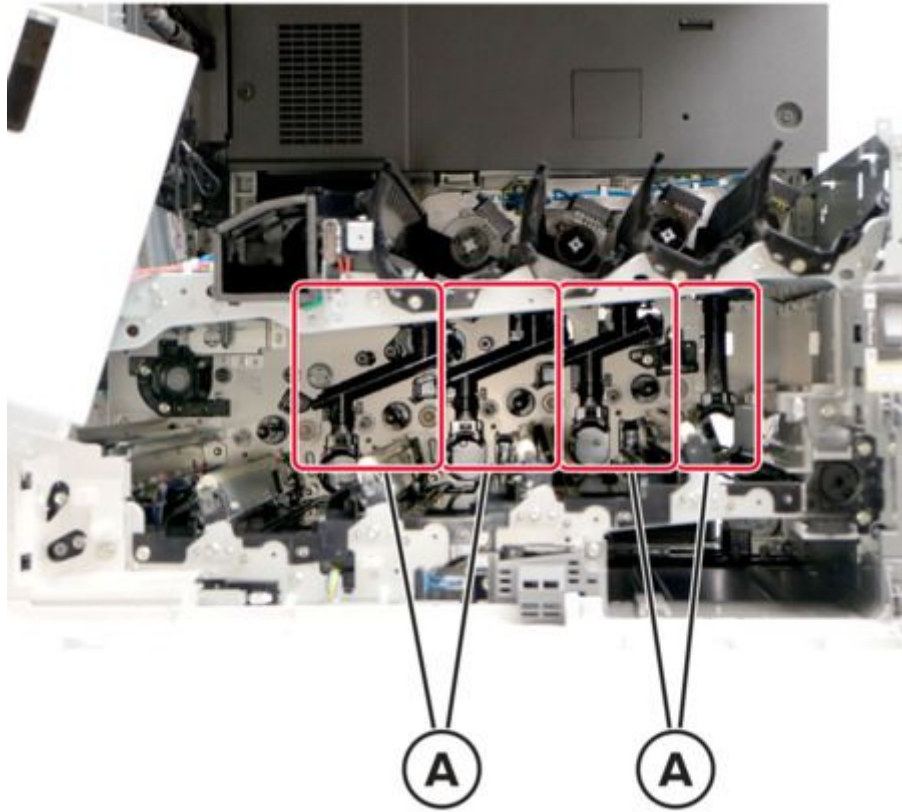
Make sure not to damage the toner dispenser pipe.

WARNING—POTENTIAL DAMAGE

When removing the toner dispenser assembly, make sure to keep it in the upright position to avoid spilling toner.

INSTALLATION NOTE

Pay attention to the position of the four toner dispenser pipes (A).



Plunger (CMYK) removal

NOTES

Make sure to remove only the defective toner dispenser assembly.

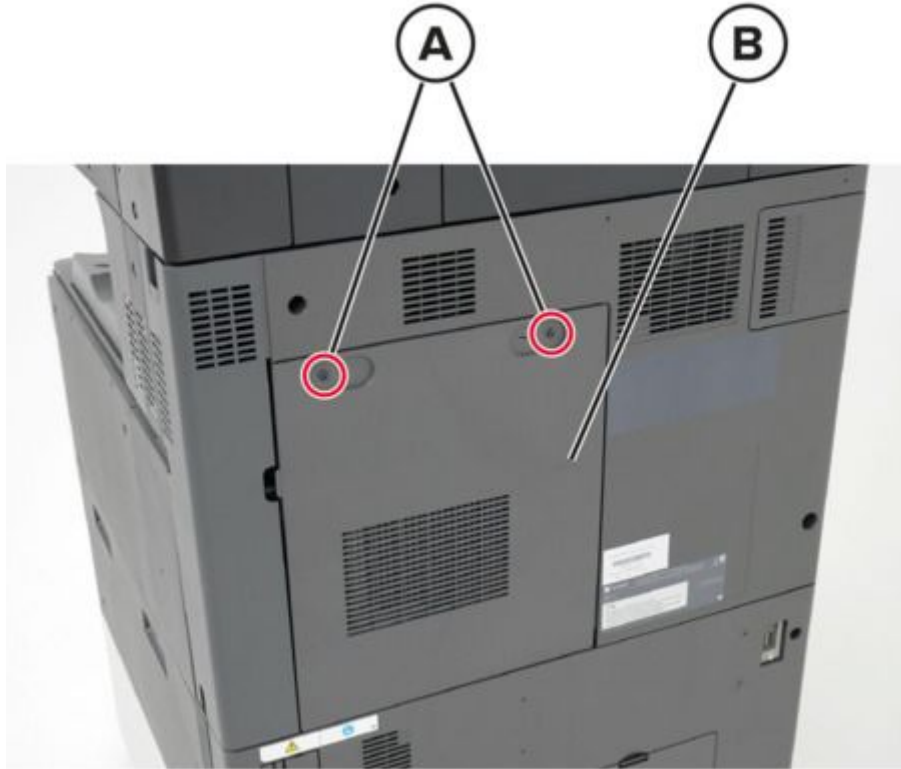
1. Remove the bin top cover. See [See "Bin top cover removal" on page 1272.](#)
2. Remove the right cover. See [.See "Right cover removal" on page 1143](#)
3. Remove the front left cover. See [See "Front left cover removal" on page 1147.](#)
4. Remove the bin front cover. See [See "Bin front cover removal" on page 1152.](#)
5. Remove the bin cover. See [.See "Bin cover removal" on page 1273](#)
6. Remove the toner inner front cover. See [See "Toner inner front cover removal" on page 1156.](#)
7. Remove the waste toner transport unit. See [See "Waste toner transfer unit removal" on page 1154.](#)
8. Remove the developer unit (CMYK). See [See "Developer unit \(CMYK\) removal" on page 1179.](#)
9. Remove the transfer the belt cleaner.
10. Remove the transfer belt. See [See "Transfer belt removal" on page 1187.](#)
11. Remove the toner dispenser assembly (CMYK). See [.See "Toner dispenser assembly \(CMYK\) removal" on page 1193](#)
12. Press, and then turn the plunger clockwise to remove it.



Rear side removals

Controller board access cover removal

1. Remove the two screws (A).



2. Remove the controller board access cover (B).

Controller board port cover removal

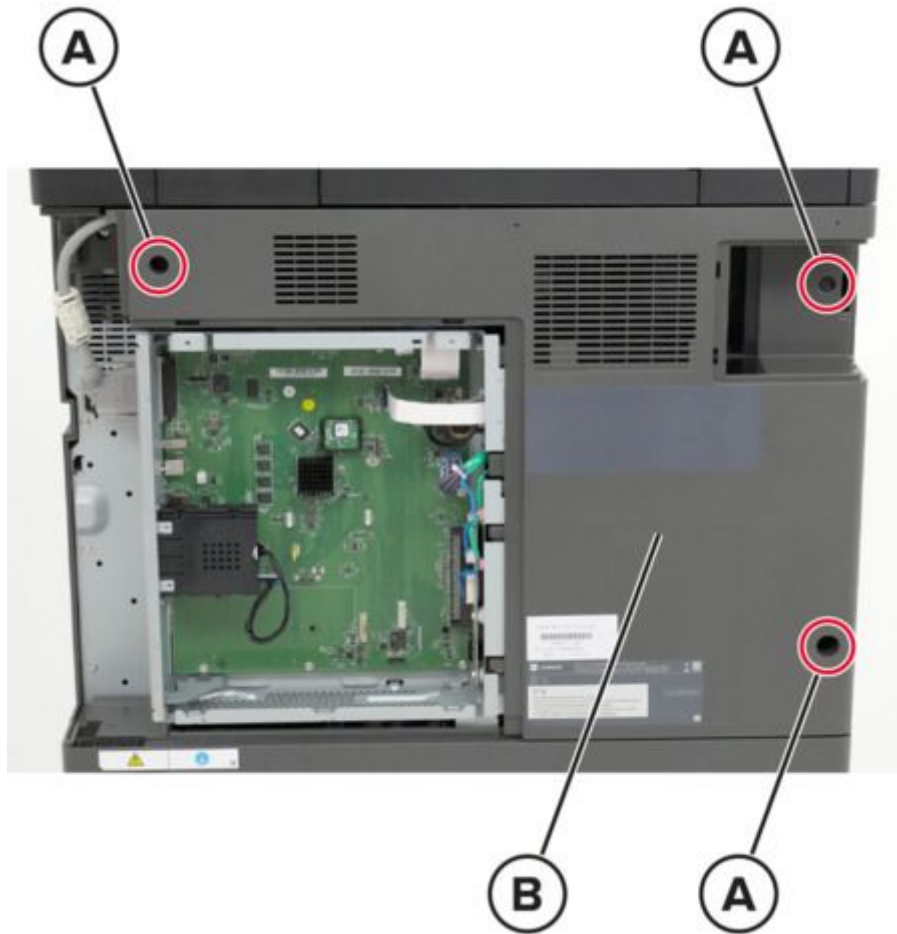
1. Press the latch.



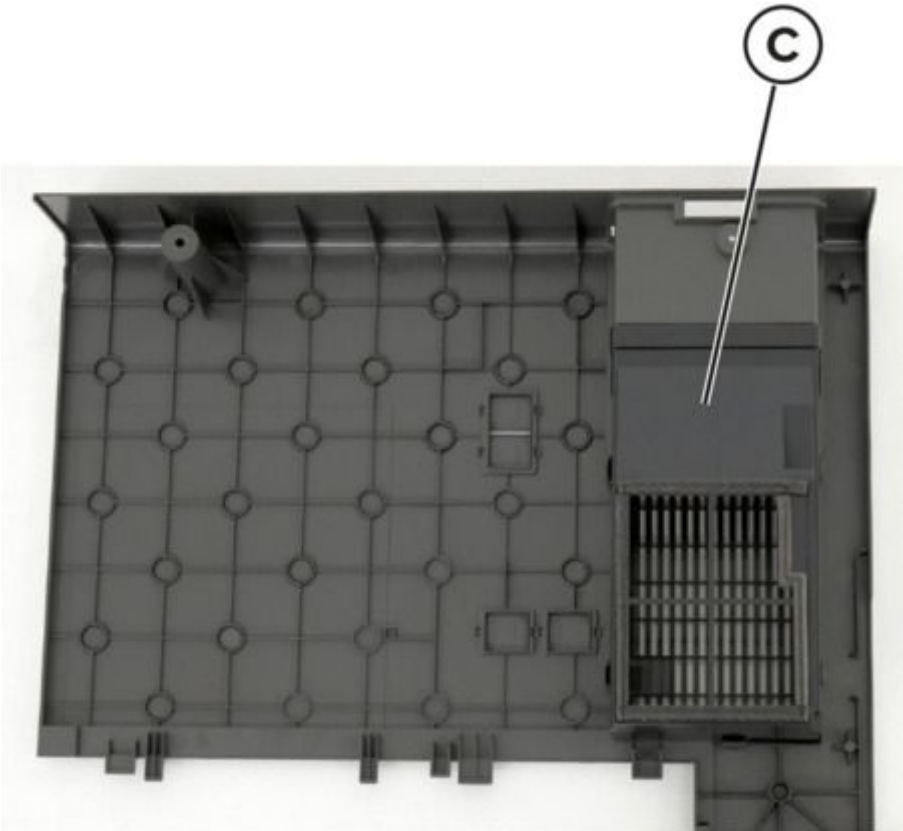
2. Remove the controller board port cover.

Rear cover removal

1. Remove the controller board port cover. See ["Controller board port cover removal"](#) on page 1199.
2. Remove the controller board access cover. See ["Controller board access cover removal"](#) on page 1198.
3. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal"](#) on page 1205.
4. Remove the three screws (A), and then remove the cover (B).

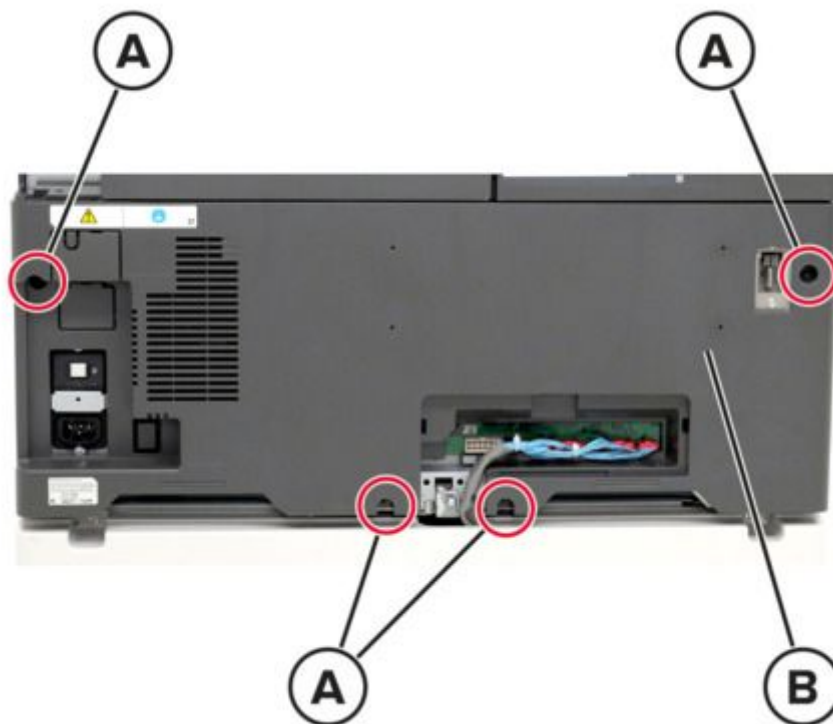


5. Remove the exhaust fan duct (C).



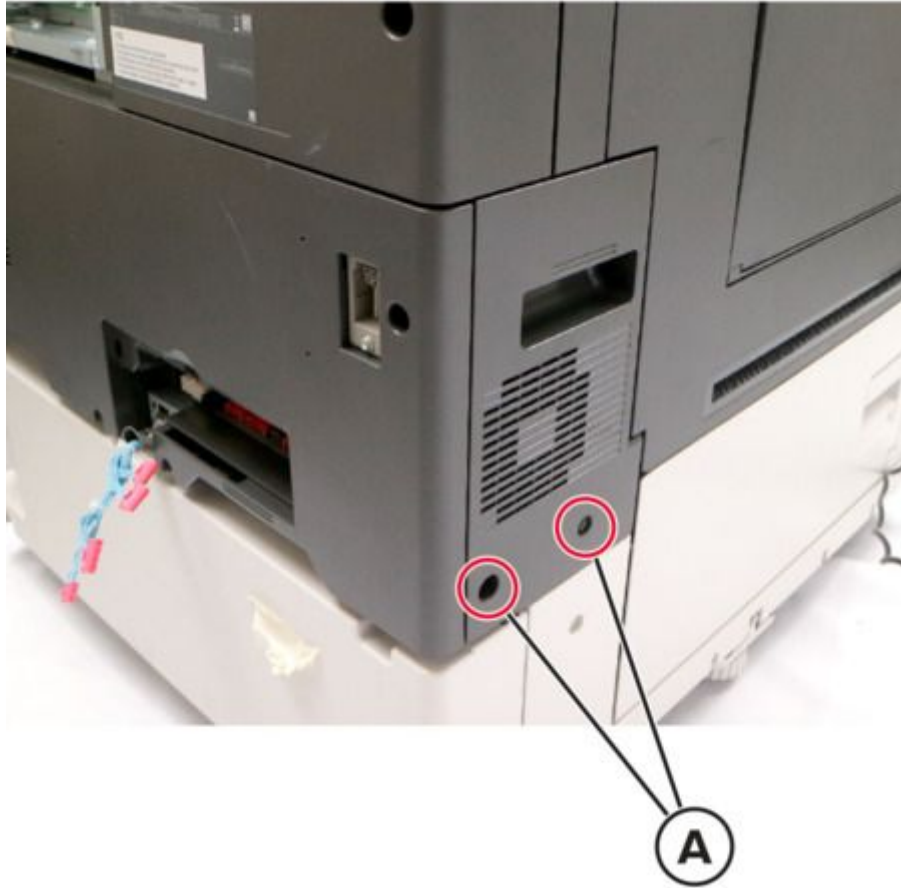
Lower rear cover removal

1. Remove the controller board port cover. See ["Controller board port cover removal"](#) on page 1199.
2. Remove the controller board access cover. See ["Controller board access cover removal"](#) on page 1198.
3. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal"](#) on page 1205.
4. Remove the input option cable cover. See ["Input option cable cover removal"](#) on page 1206.
5. Remove the four screws (A), and then remove the cover (B).



Lower rear left cover removal

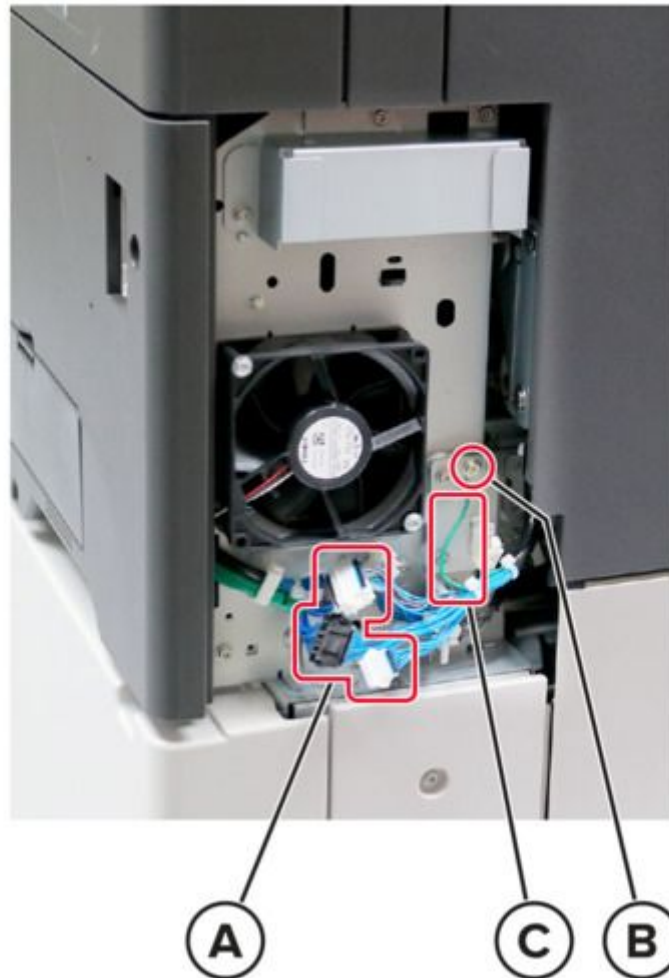
1. Remove the two screws (A).



2. Remove the cover.

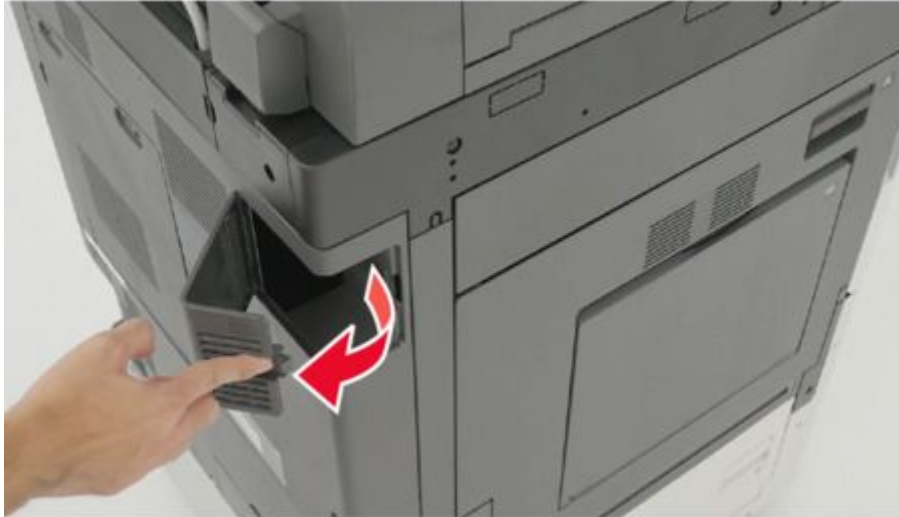
LH cover assembly removal

1. Remove the lower rear left cover. See [See "Lower rear left cover removal" on page 1203](#).
2. Disconnect the three cables (A), remove the screw (B), and disconnect the cable (C).



Fuser exhaust cover removal

1. Press the edge of the fuser exhaust cover.



2. Remove the fuser exhaust cover.

Input option cable cover removal

1. Press the edge of the input option cable cover.



2. Remove the cover.

Controller board removal

WARNING—POTENTIAL DAMAGE

Before removing the controller board, see [See "Critical information for controller board or control panel replacement" on page 1041.](#)

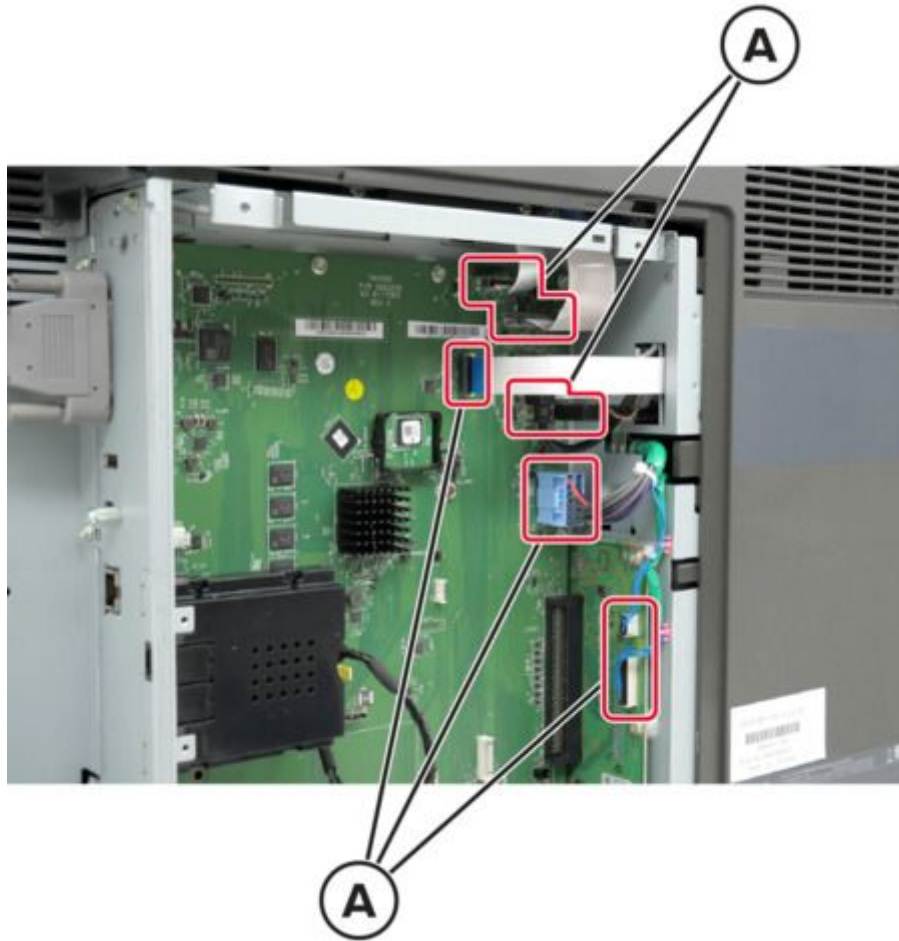
NOTES

For a video demonstration, see [Removing the controller board.](#)

1. Remove the controller board cover. See [See "Controller board access cover removal" on page 1198.](#)
2. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
3. Disconnect the eight cables (A).

NOTES

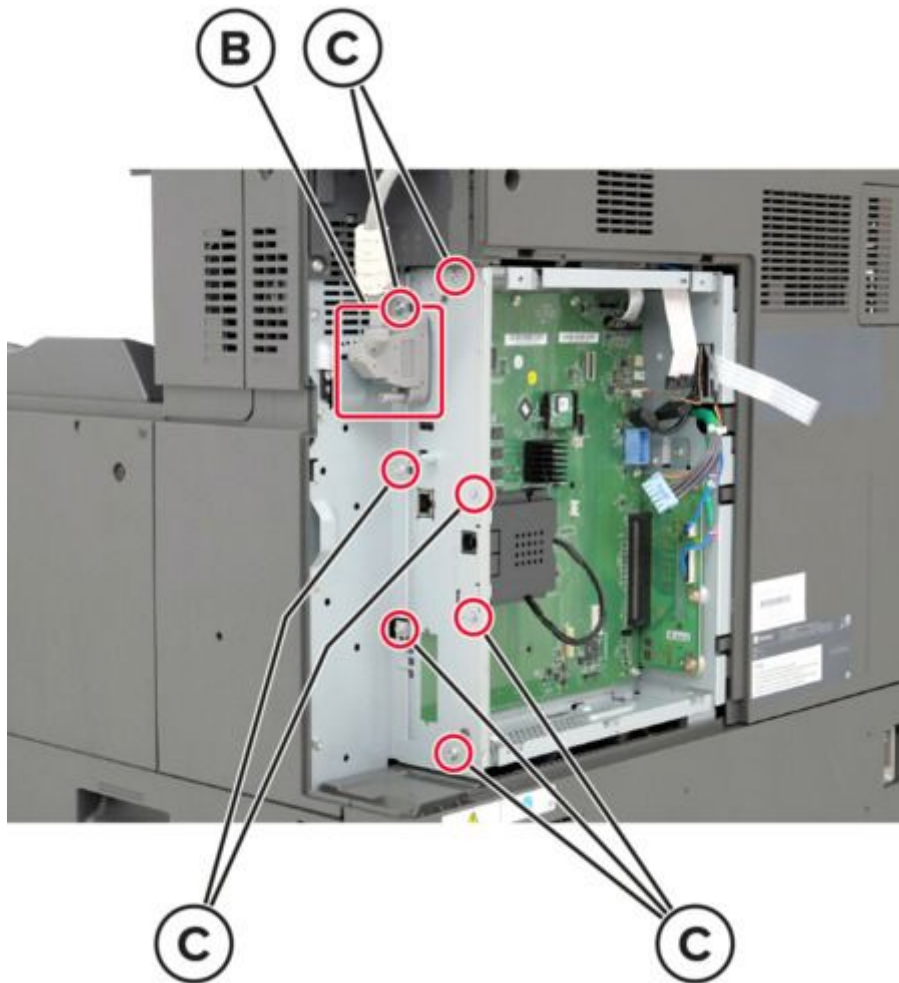
Some cables are present only in MFP models.



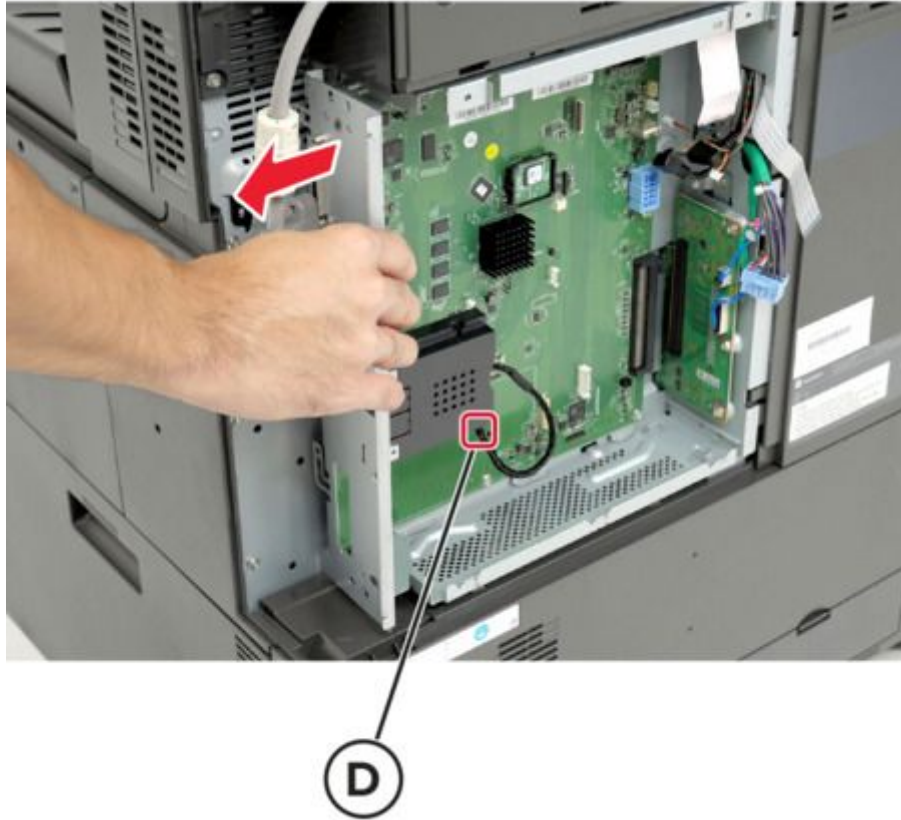
4. Disconnect the scanner connector (B) (MFP only), and then remove the seven screws (C).

NOTES

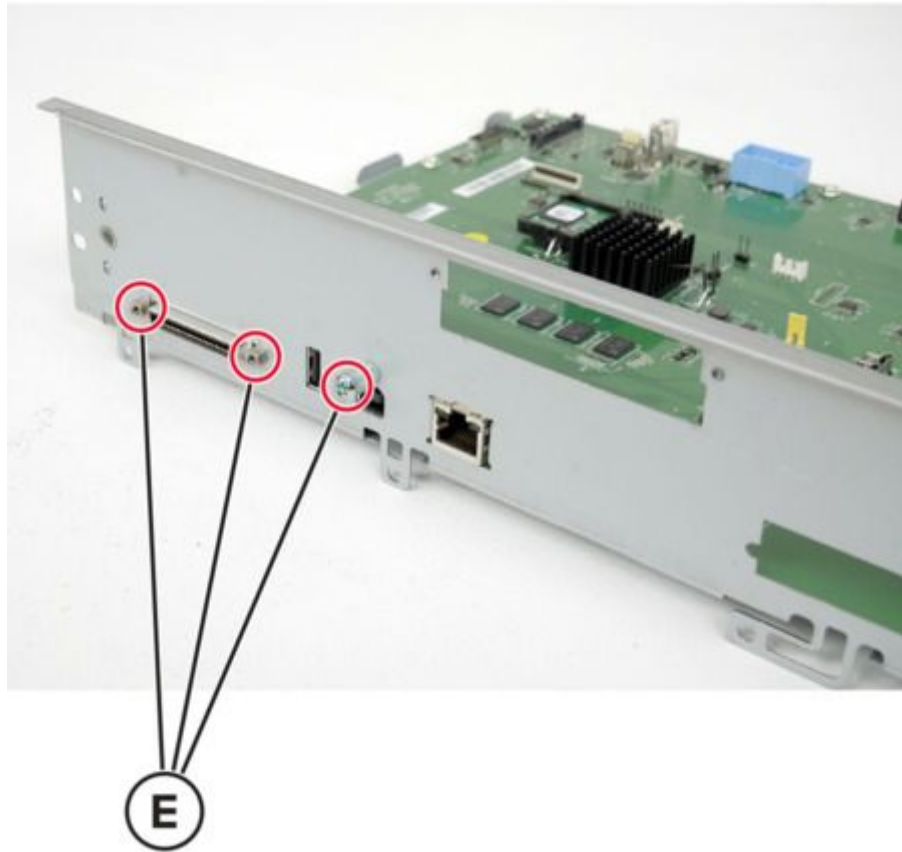
Some screws are present only in MFP models.



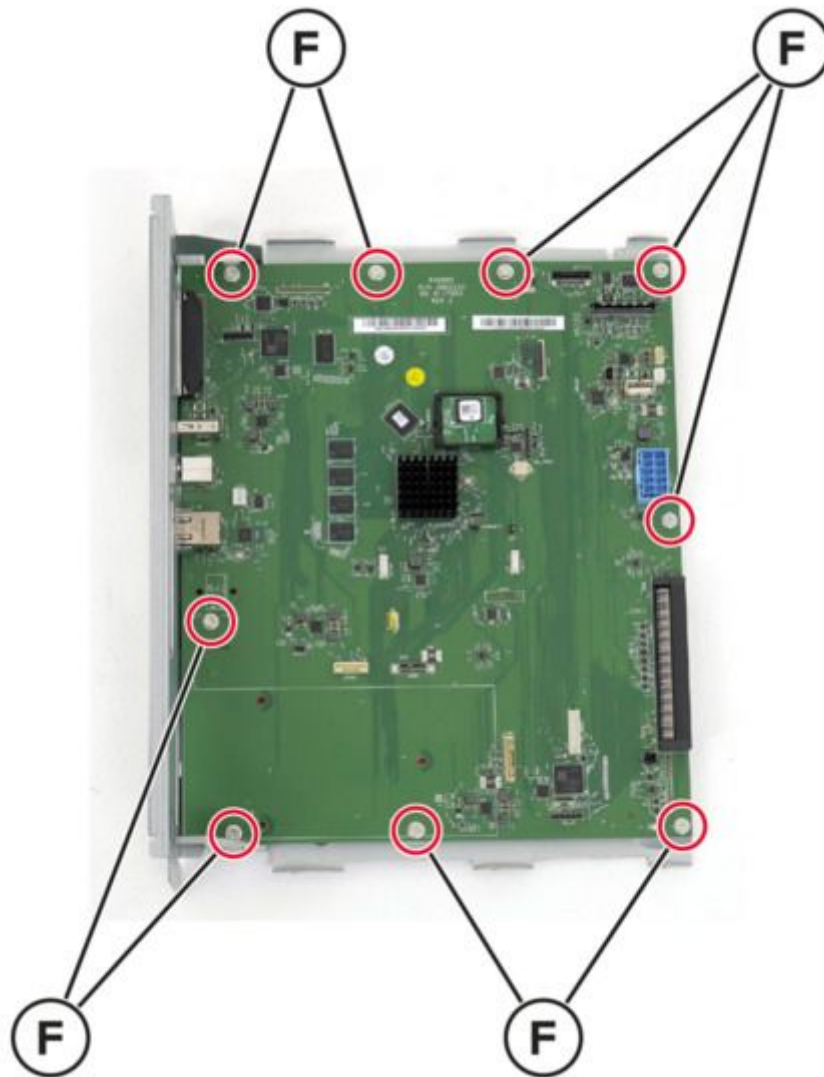
5. Disconnect the fax card cable (D) (MFP only), and then remove the controller board tray.



6. Remove the three screws (E).



7. Remove the nine screws (F), and then remove the controller board from the tray.

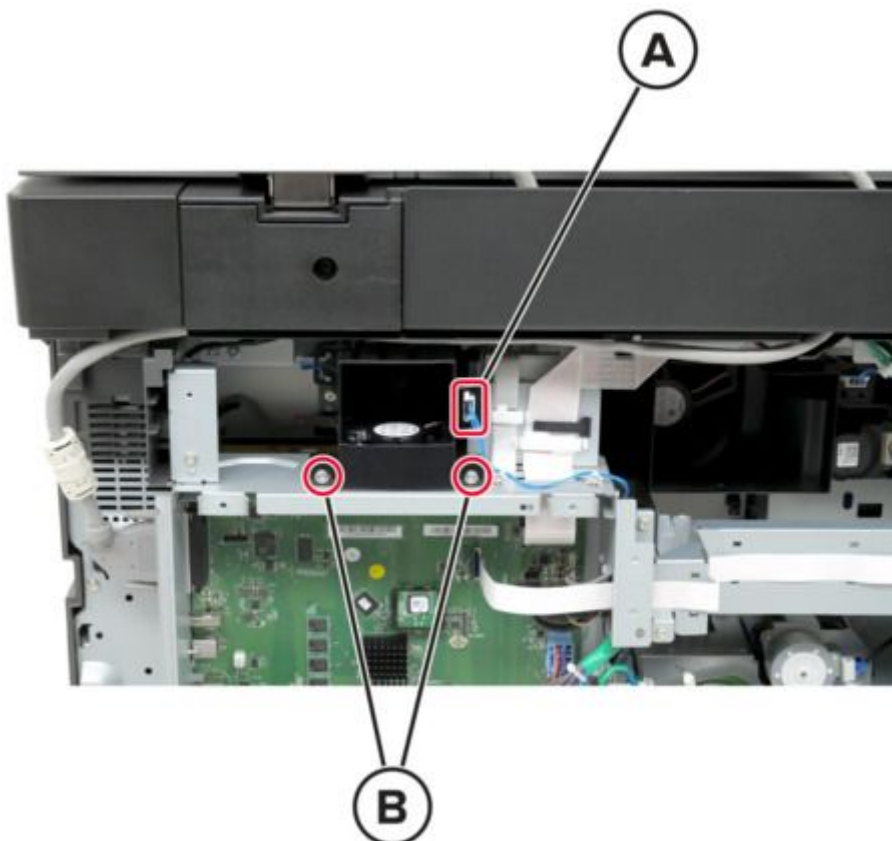


INSTALLATION NOTE

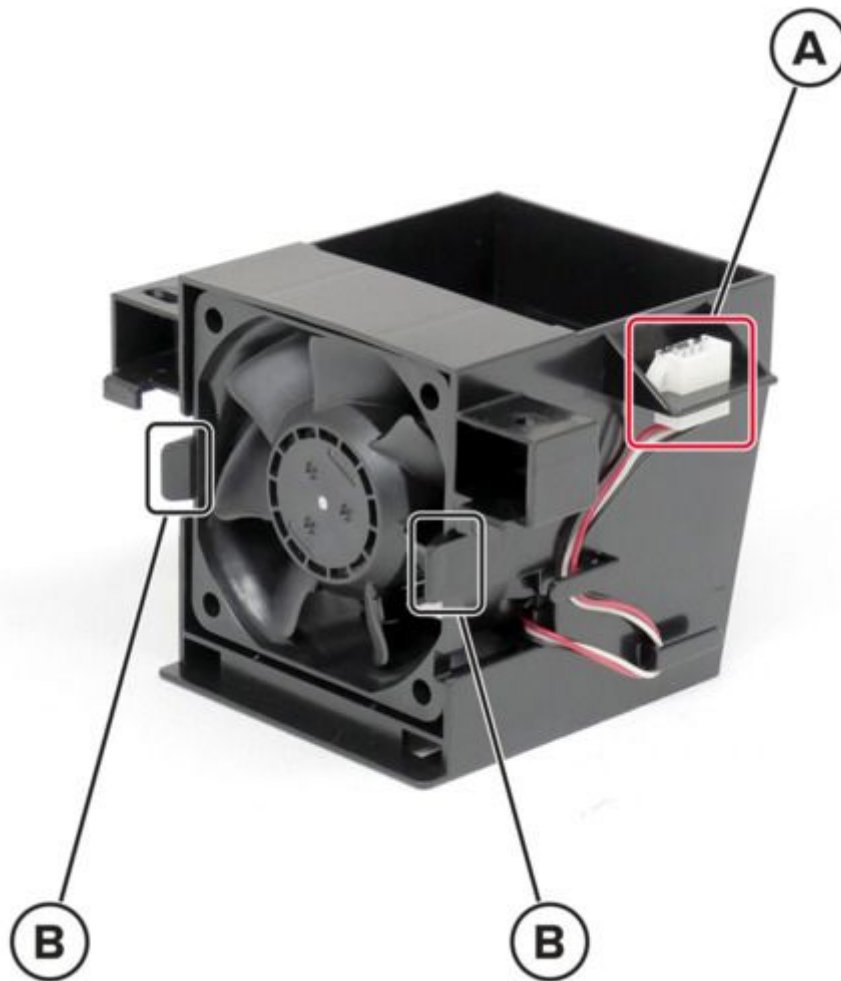
- Some controller boards have a TPM card or ISD card attached. Make sure to install these cards to the new controller board.
- After the new controller board is installed, restore the printer configuration. See ["Restoring the printer configuration" on page 1043.](#)

Controller board exhaust fan removal

1. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
2. Disconnect the cable (A), and then remove the two screws (B).

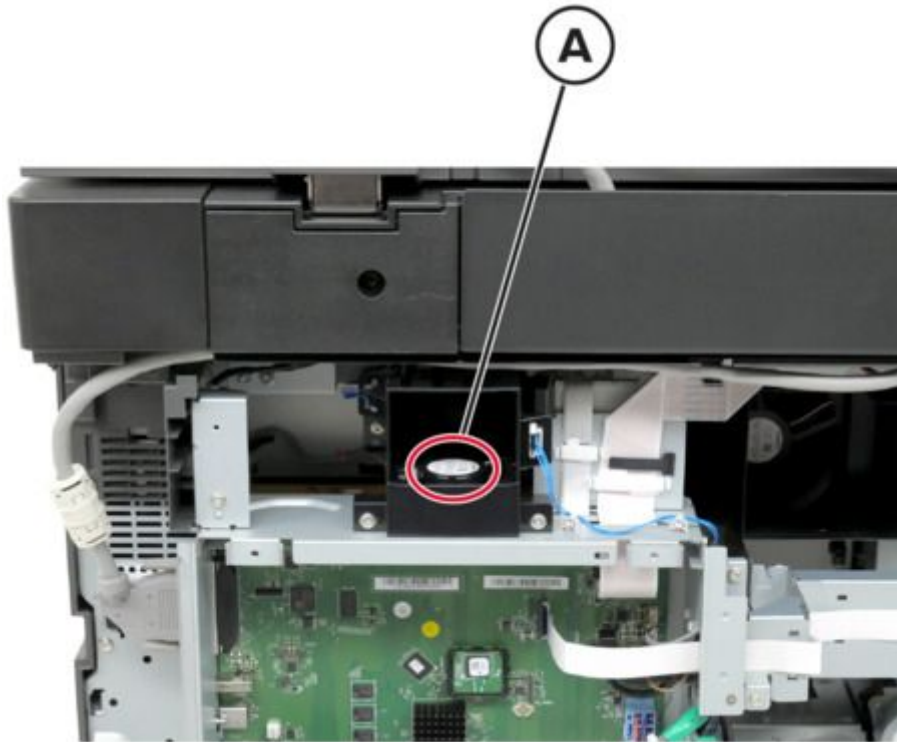


3. Remove the cable (C) from the guide, and then release the fan from the two latches (D).



INSTALLATION NOTE

Make sure that the fan sticker side is facing upward.



Halftone controller board removal

For a video demonstration, see [Removing the halftone controller board](#).

WARNING—POTENTIAL DAMAGE

Do not replace the halftone controller board and controller board together to avoid potential loss of NVM data.

Backing up the NVM data

Before replacing the engine drive board, back up the NVM data.

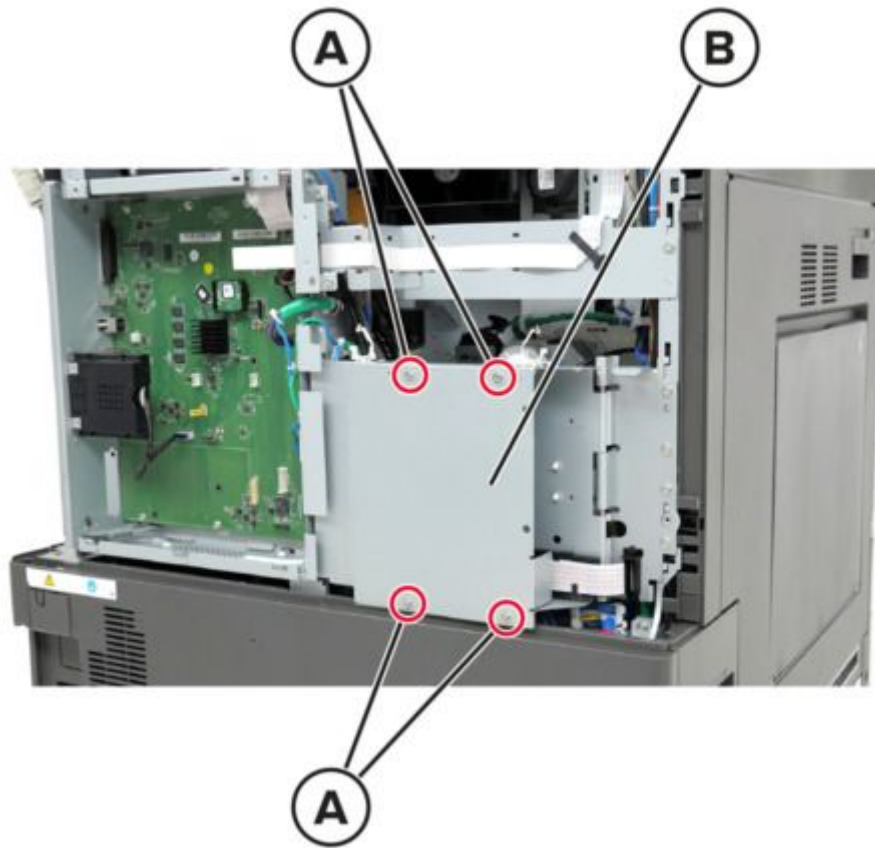
WARNING—POTENTIAL DAMAGE

If the NVM data is not backed up before removing the halftone controller board, the NVM data needs to be manually entered after installing a new halftone controller board. For more information, see 'Entering the NVM data' in the succeeding 'Installation Notes.'

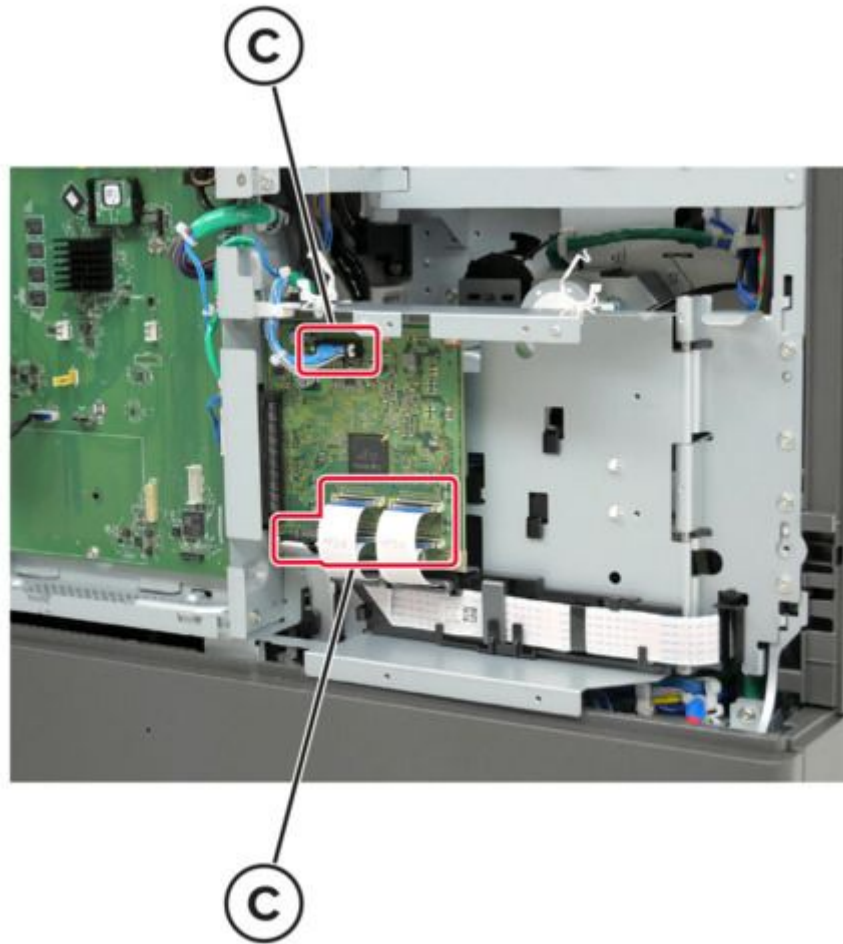
1. Enter the Diagnostics menu.
2. Touch **Printer setup** > **NVM Functions** > **Backup NVM data**.
3. Wait for the backup process to complete.

Removing the halftone controller board

1. Remove the rear cover. See [See "Rear cover removal" on page 1200](#).
2. Remove the four screws (A), and then remove the cover (B).

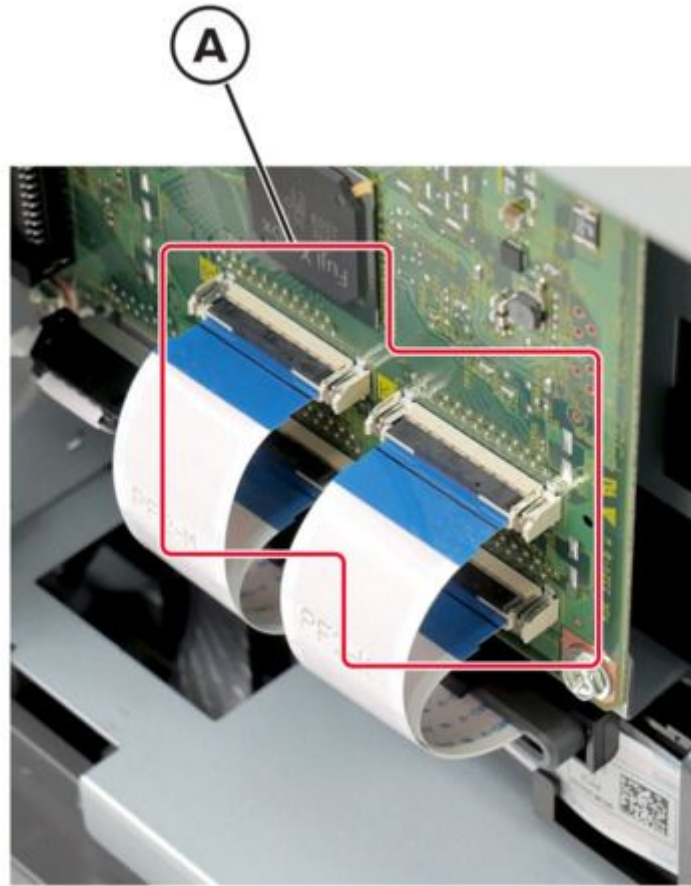


3. Disconnect the six cables (C) on the half-tone controller board.



WARNING—POTENTIAL DAMAGE

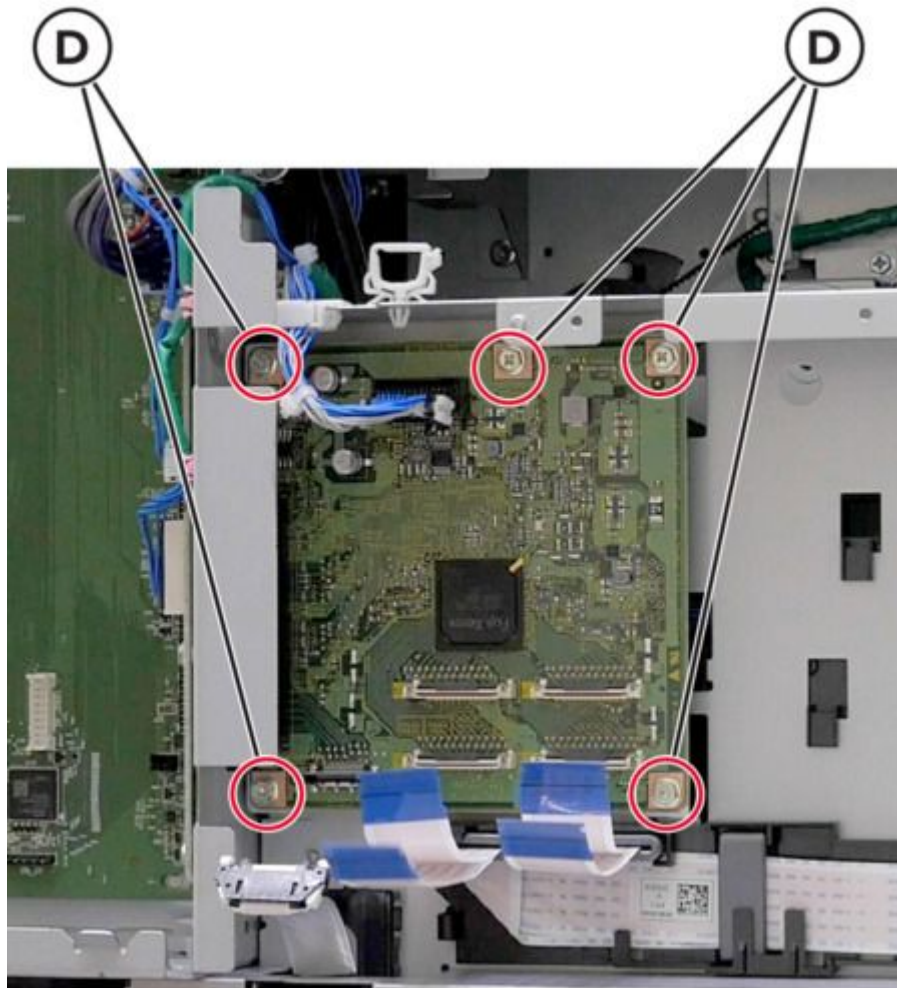
Make sure to release the four latches (A) on the four FFC cables before removing the cables.



WARNING—POTENTIAL DAMAGE

Make sure to release the two tabs before removing the cable.

4. Remove the five screws (D) to remove the halftone controller board.



Installation Notes

- Some controller boards have a TPM card or ISD card attached. Make sure to install these cards to the new controller board.
- After the new controller board is installed, restore the printer configuration. See ["Restoring the printer configuration" on page 1043](#).

Restoring the NVM Data

After a new halftone controller board is installed, restore the NVM data backed up before removing the older halftone controller board. If backup and restoration of NVM data are not possible, see 'Entering the NVM data' (succeeding topic).

1. Enter the Diagnostics menu using the POR key. See ["Entering the Diagnostics menu using the POR key" on page 985](#).

If the printer is turned on without using the POR key, the following error message may appear on the control panel display: 950.20 Engine factory data mismatch. See service manual.

2. Touch **Printer setup** › **Engine factory information** › **Restore engine factory information**.

The printer reboots automatically.

3. Enter the Diagnostics menu. See [See "Entering the Diagnostics menu" on page 984](#).
4. Touch **Printer setup** › **NVM functions** › **Restore NVM data**.
5. Wait for the restoration process to complete.

The printer then reboots automatically.

Entering the NVM data

If backup and restoration of NVM data are not possible because of a damaged halftone controller board, or backup was not performed before the board's removal, the printer's engine birth certificate values need to be entered.

1. Find the printer NVM factory sheet.

The NVM factory sheet is located inside the Tray 1 compartment.

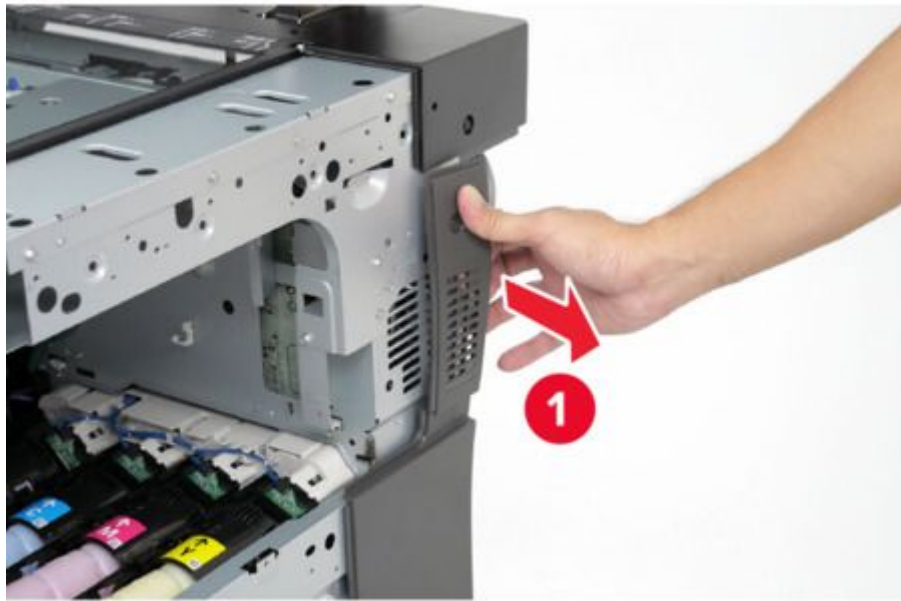
2. Note the NVM values for the printer
3. Enter the Diagnostics menu.
4. Touch **Printer setup** › **NVM functions** › **Write NVM Data**.
5. Enter the required values.

Rear right cover removal

1. Remove the bin top cover. See [See "Bin top cover removal" on page 1272.](#)
2. Remove the right cover. See [.See "Right cover removal" on page 1143](#)
3. Remove the front left cover. See [See "Front left cover removal" on page 1147.](#)
4. Remove the bin front cover. See [See "Bin front cover removal" on page 1152.](#)
5. Remove the bin cover. See [.See "Bin cover removal" on page 1273](#)
6. Remove the rear bin cover. See [.See "Bin cover removal" on page 1273](#)
7. Remove the screw (A).

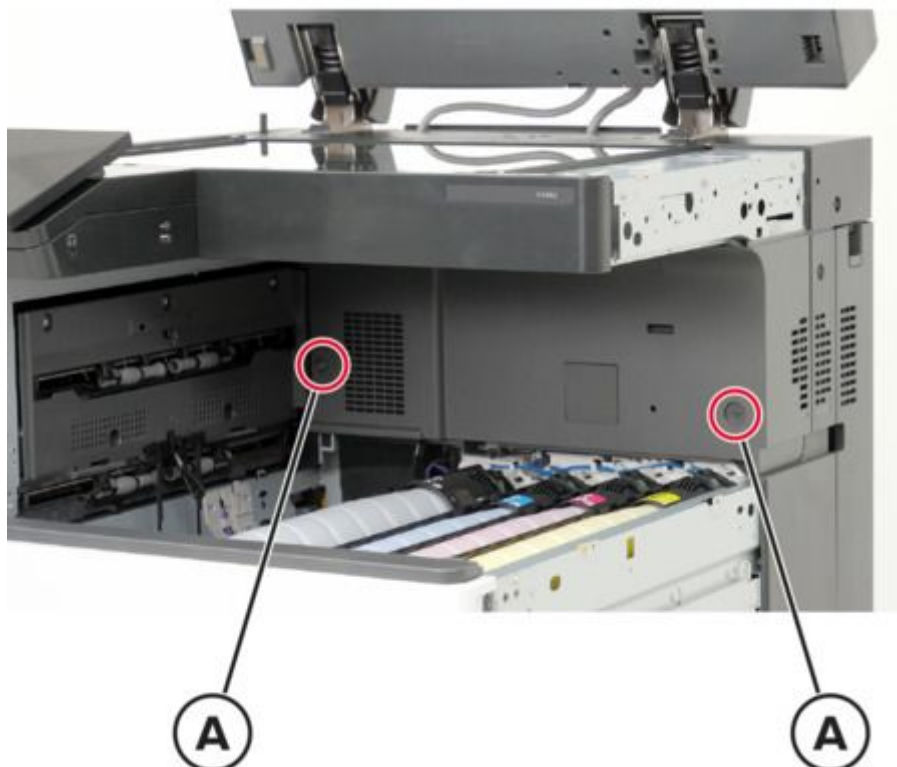


8. Remove the cover.



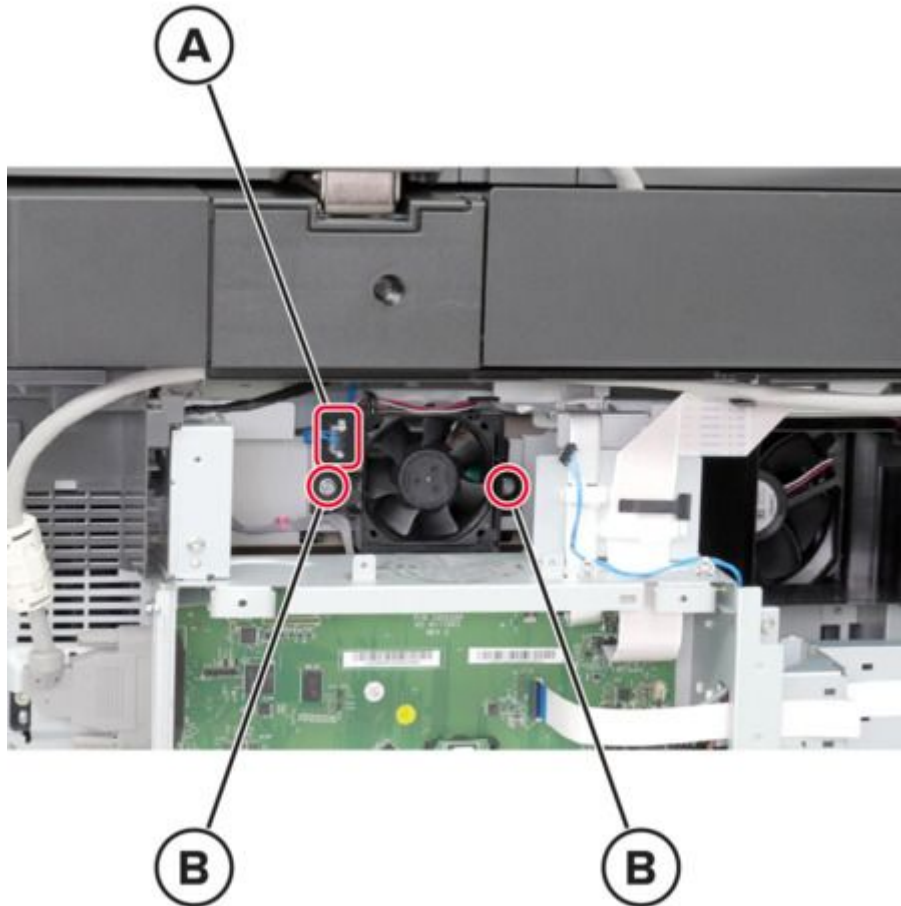
Rear bin cover removal

1. Remove the bin top cover. See ["Bin top cover removal"](#) on page 1272.
2. Remove the right cover. See ["Right cover removal"](#) on page 1143
3. Remove the front left cover. See ["Front left cover removal"](#) on page 1147.
4. Remove the bin front cover. See ["Bin front cover removal"](#) on page 1152.
5. Remove the bin cover. See ["Bin cover removal"](#) on page 1273
6. Remove the two screws (A), and then remove the cover.

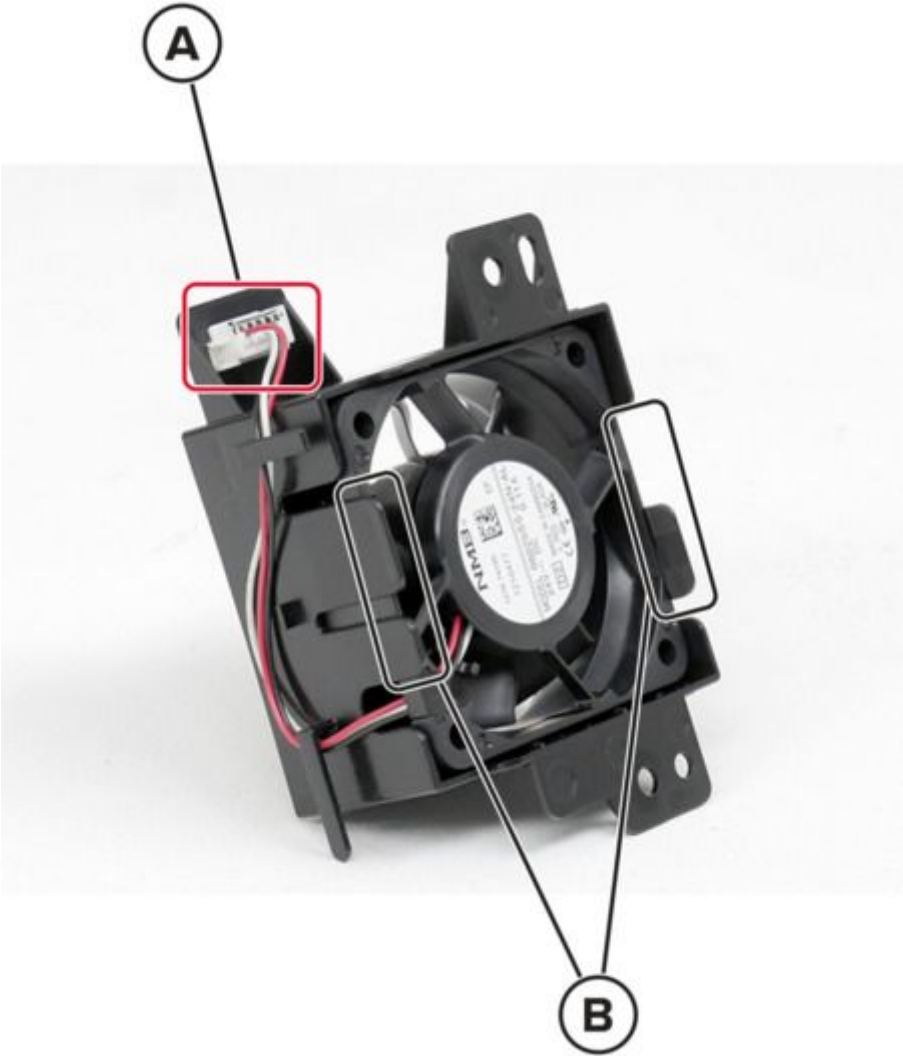


Induction heater power supply fan removal

1. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
2. Remove the controller board exhaust fan. See [See "Controller board exhaust fan removal" on page 1213.](#)
3. Disconnect the cable (A), and then remove the two screws (B).

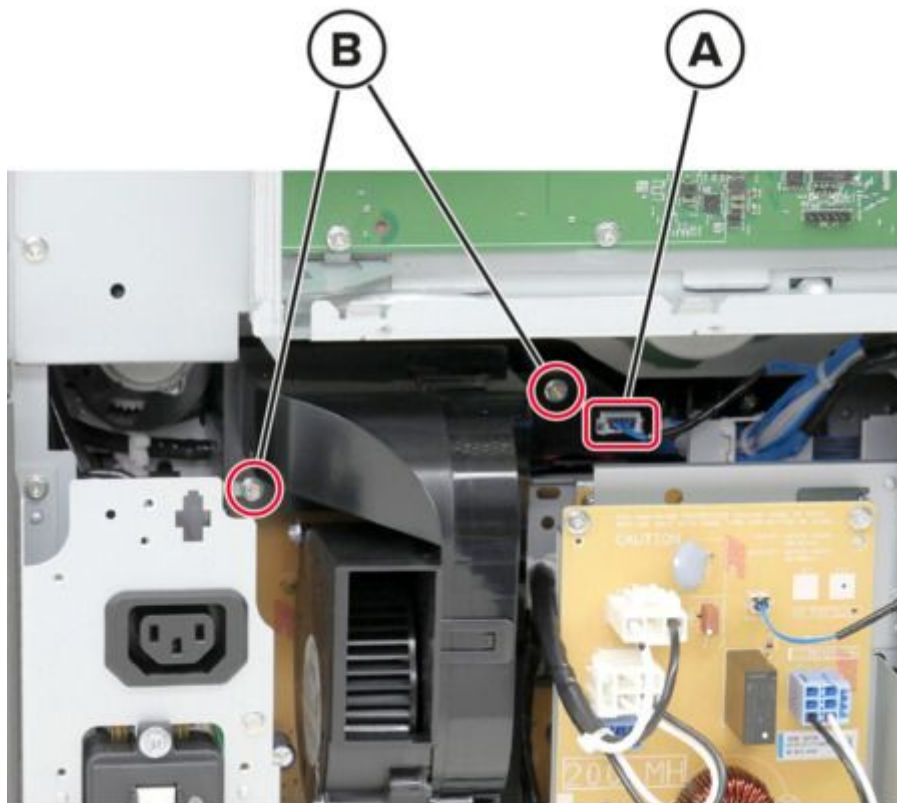


4. Remove the cable (C), and then release the fan from the two latches (D).



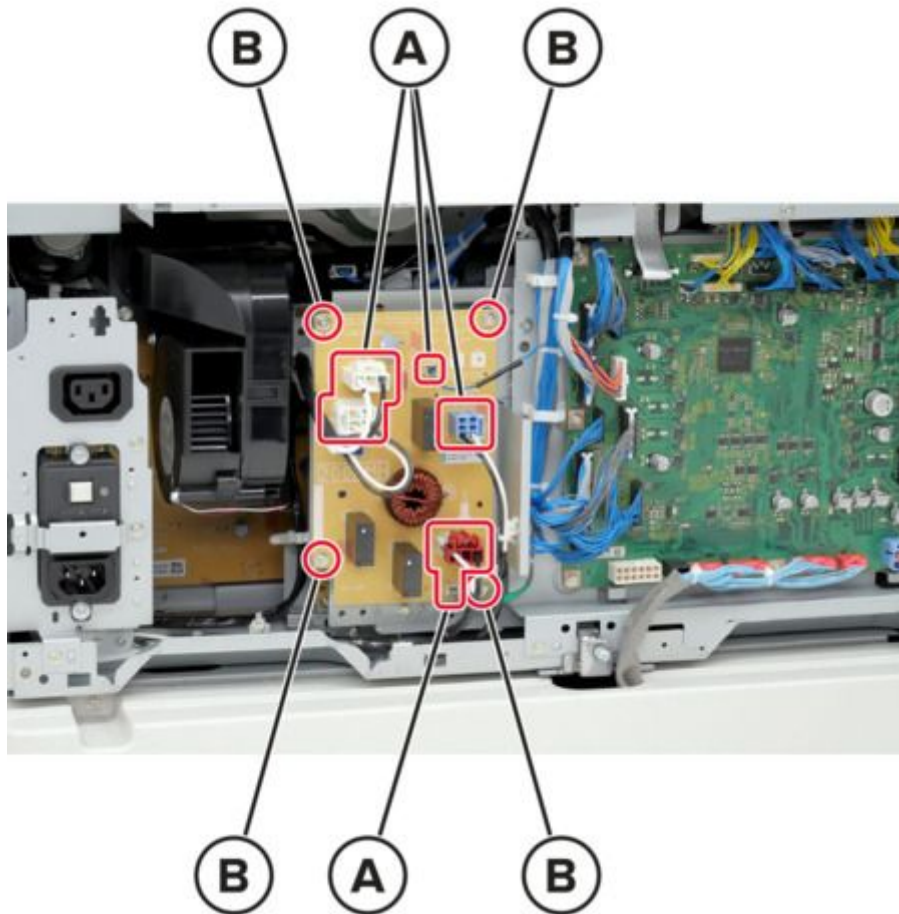
LVPS exhaust fan removal

1. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
2. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
3. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
4. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
5. Disconnect the cable (A), and then remove the two screws (B).



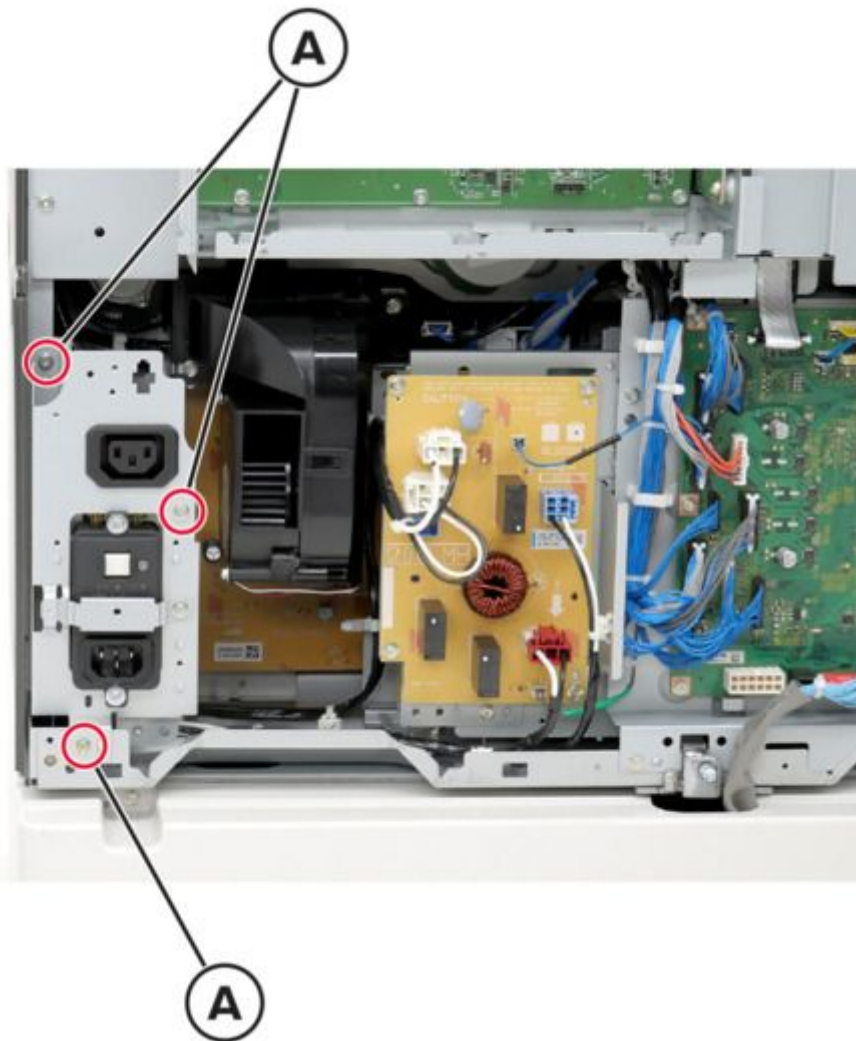
AC drive board removal

1. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
2. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
3. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205.](#)
4. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
5. Disconnect the six cables (A), and then remove the four screws (B).



Power socket removal

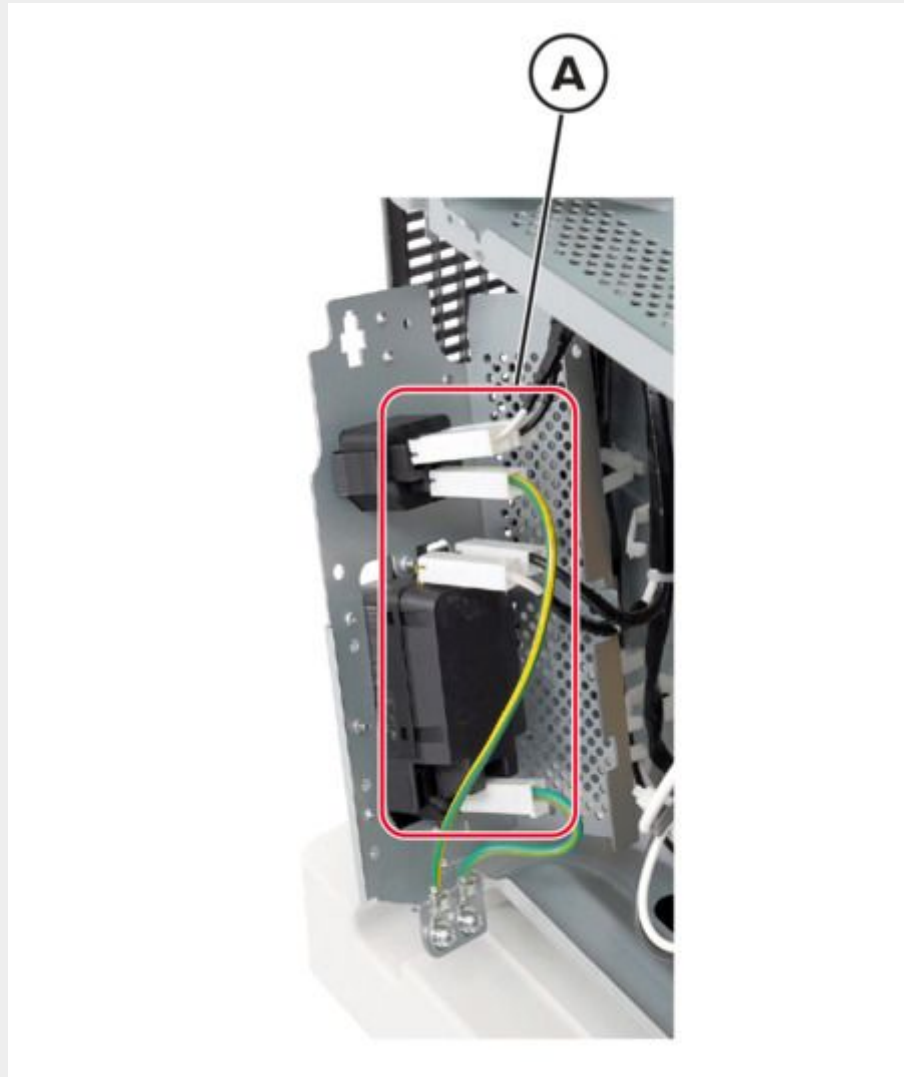
1. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198.](#)
2. Remove the rear cover. See ["Rear cover removal" on page 1200.](#)
3. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199.](#)
4. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205.](#)
5. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202](#)
6. Disconnect the five cables (A).



INSTALLATION NOTE

1. Make sure that the five cables (A) are properly connected to their specified connectors as shown.

2. Make sure not to interchange the position of the cables when reconnecting them.



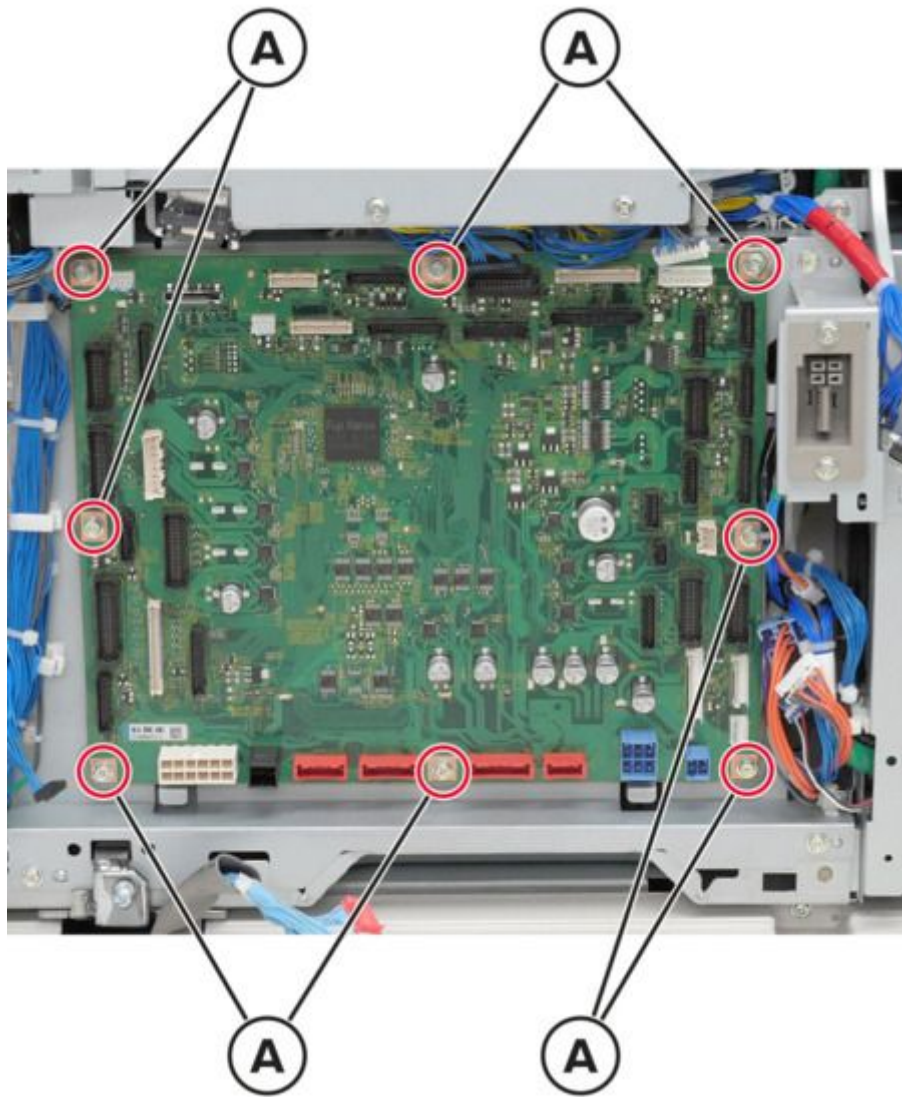
Engine board removal

For a video demonstration, see [Removing the engine board](#).

1. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198](#).
2. Remove the rear cover. See [See "Rear cover removal" on page 1200](#).
3. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199](#).
4. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205](#).
5. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
6. Disconnect all the 43 cables from the engine board.



7. Remove the eight screws (A).



Opening the controller board frame

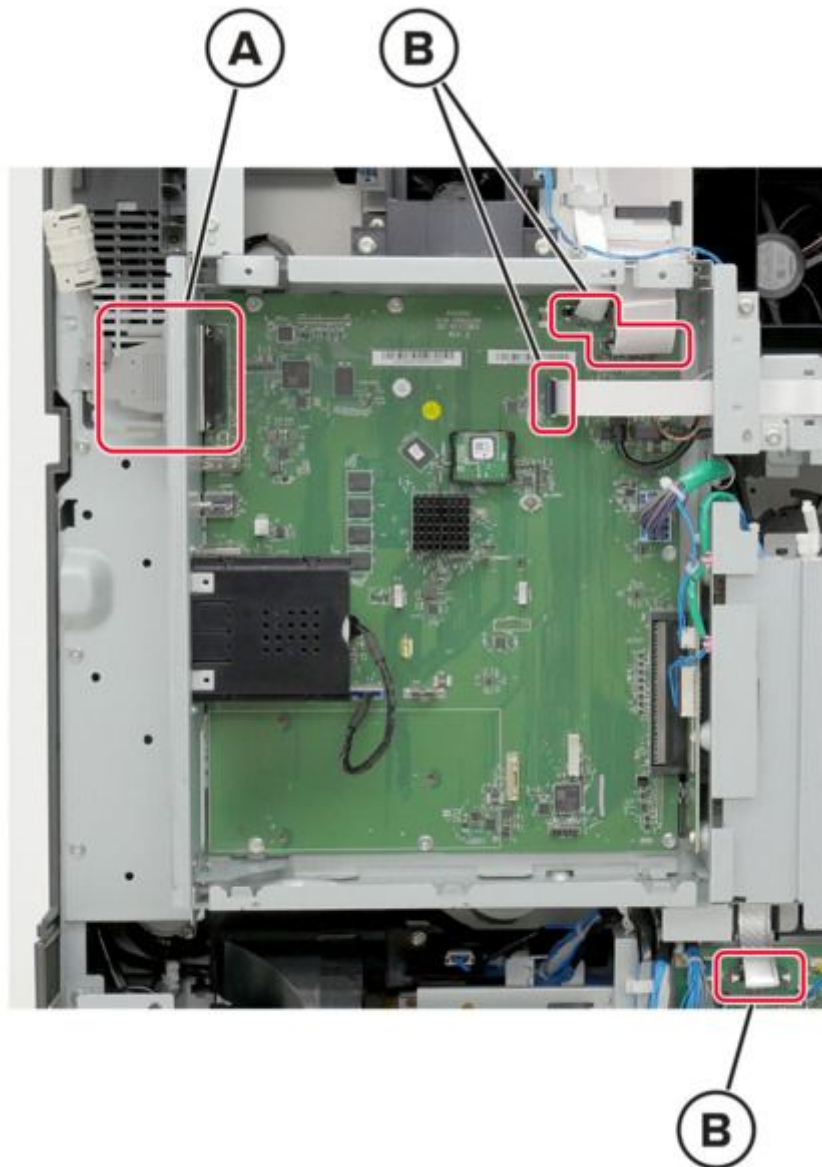
NOTES

For a video demonstration, see [Opening the controller board frame](#).

1. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198](#).
2. Remove the rear cover. See [See "Rear cover removal" on page 1200](#).
3. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199](#).
4. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205](#).
5. Remove the lower rear cover. See [See "Rear cover removal" on page 1200](#).
6. Disconnect the scanner cable (A) (MFP only), and then disconnect and remove the four FFC cables (B) from the cable holders.

NOTES

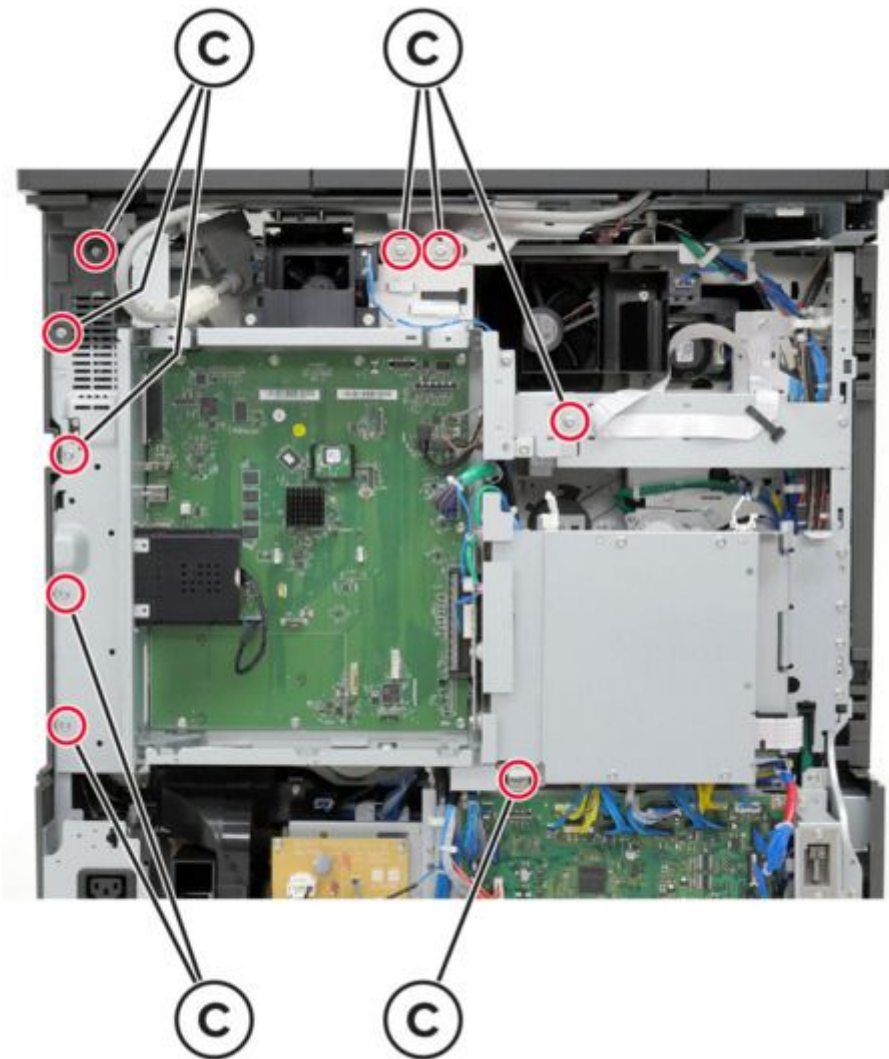
Some cables are present only in MFP models.



7. Remove the nine screws (C).

NOTES

Some screws are present only in MFP models.

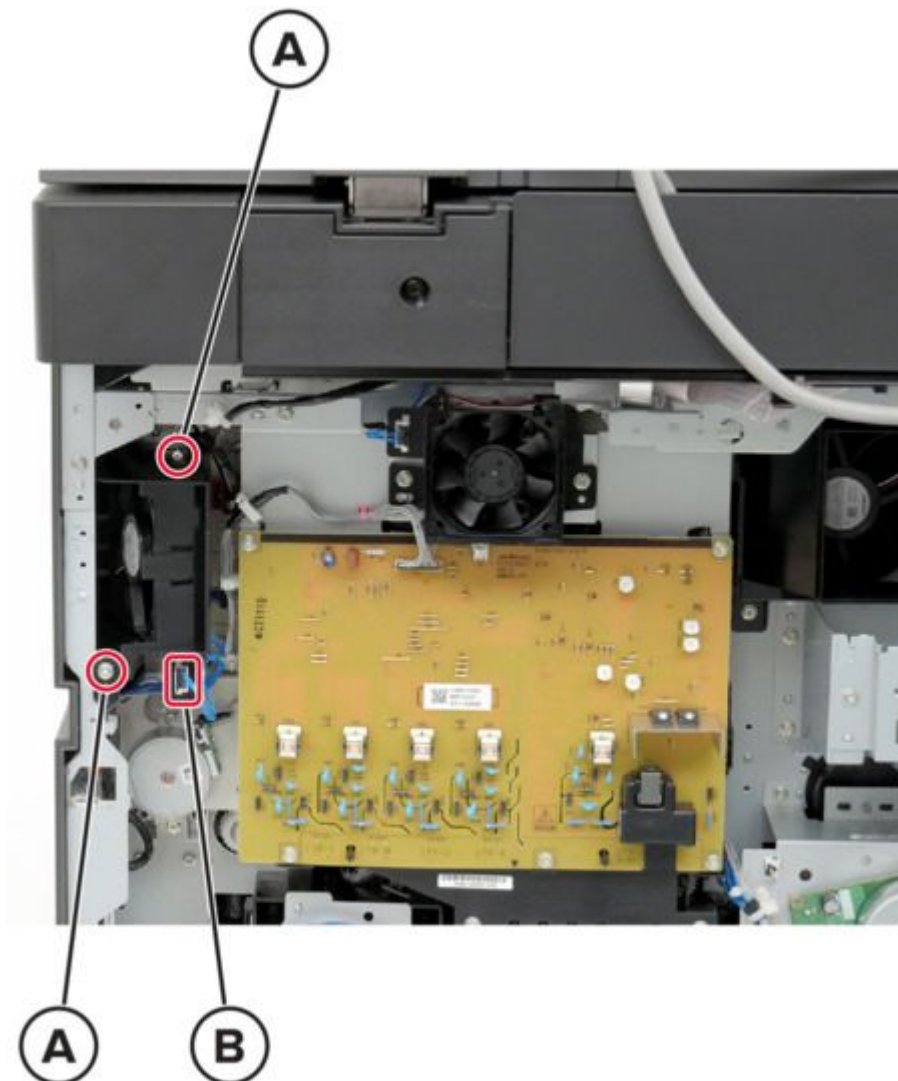


8. Open the controller board frame.



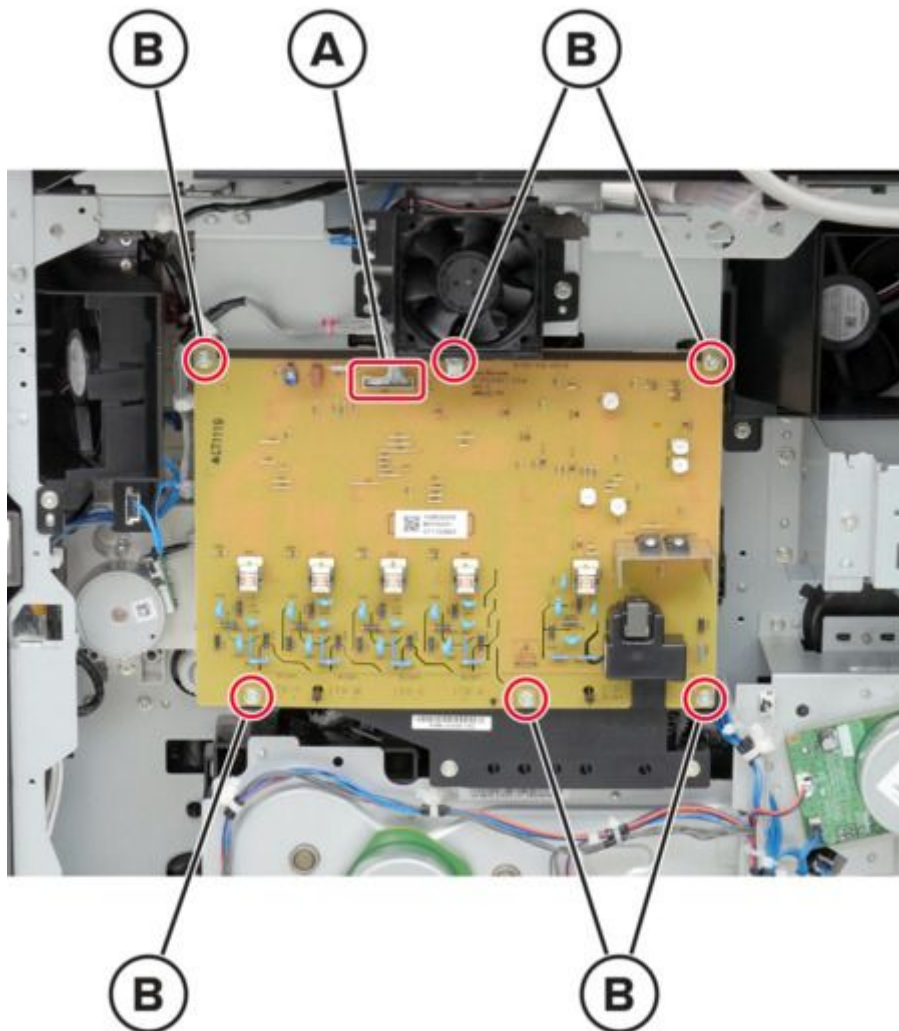
Toner cartridge exhaust fan removal

1. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
2. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
3. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
4. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205.](#)
5. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
6. Open the controller board frame. See [.See "Opening the controller board frame" on page 1233](#)
7. Remove the two screws (A), and then disconnect the cable (B).



Transfer roller HVPS removal

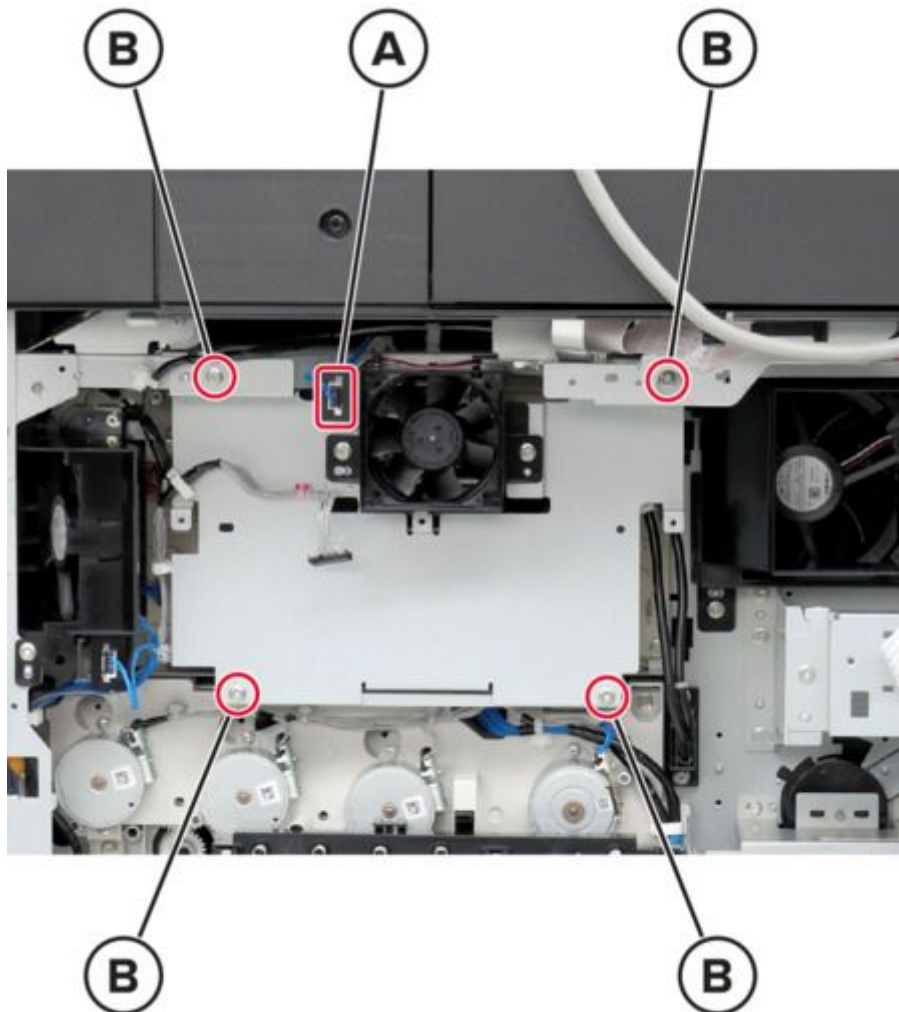
1. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
2. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
3. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
4. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205.](#)
5. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
6. Open the controller board frame. See [.See "Opening the controller board frame" on page 1233](#)
7. Disconnect the cable (A), and then remove the six screws (B).



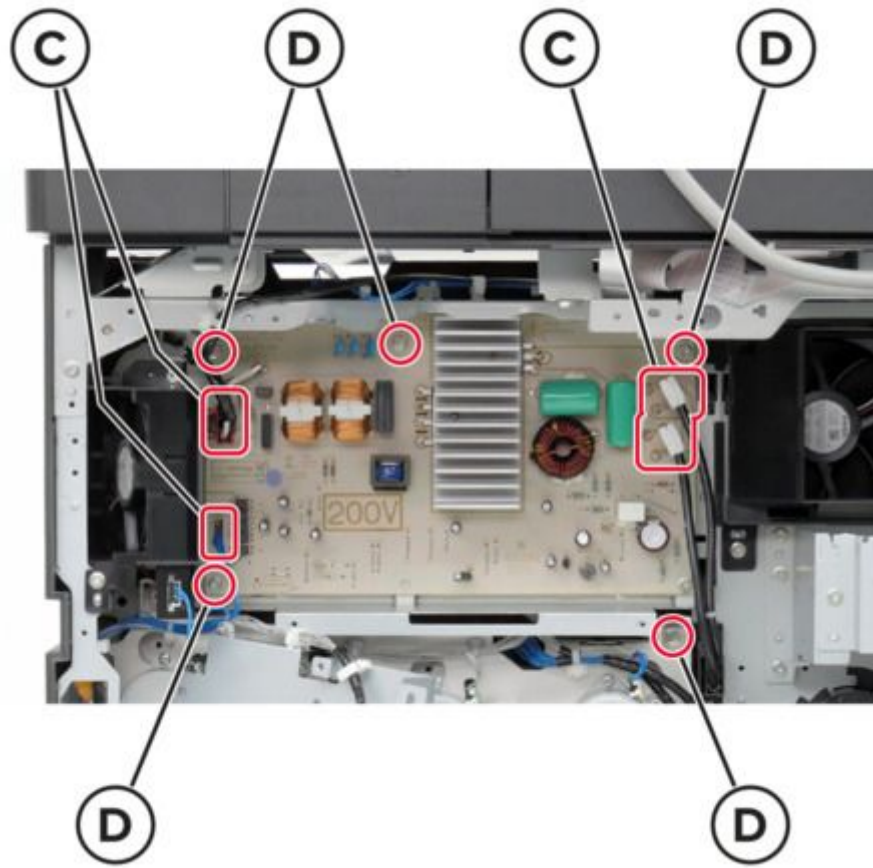
Induction heater power supply removal

For a video demonstration, see [Removing the induction heater power supply](#).

1. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198](#).
2. Remove the rear cover. See ["Rear cover removal" on page 1200](#).
3. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199](#).
4. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205](#).
5. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202](#).
6. Open the controller board frame. See ["Opening the controller board frame" on page 1233](#).
7. Remove the transfer roller HVPS. See ["Transfer roller HVPS removal" on page 1238](#).
8. Disconnect the cable (A), and then remove the four (B) screws.



9. Disconnect the four cables (C), and then remove the five screws (D).

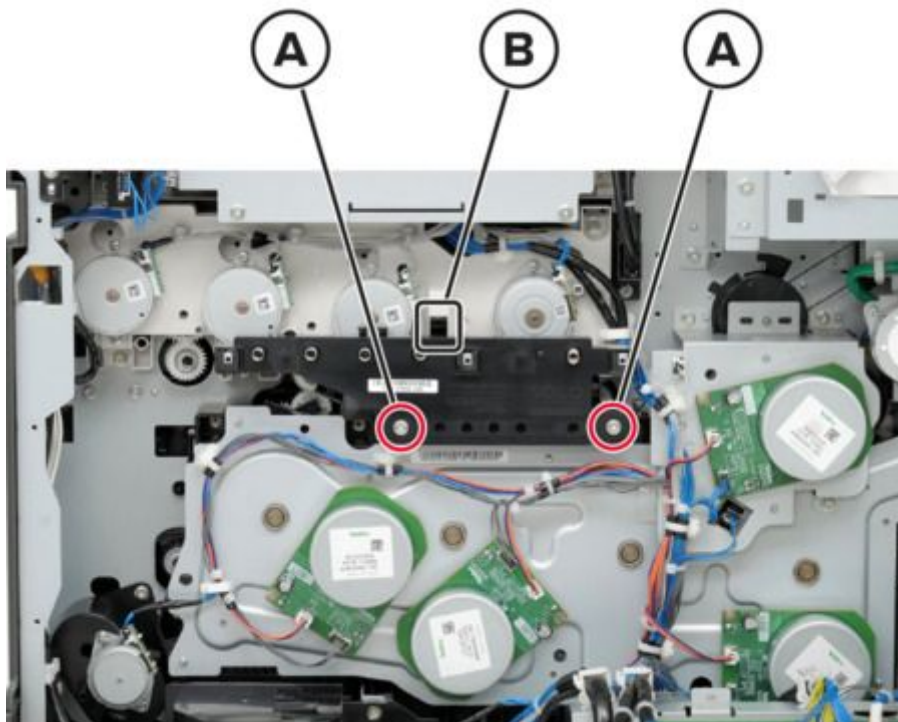


Transfer roller HVPS contacts removal

NOTES

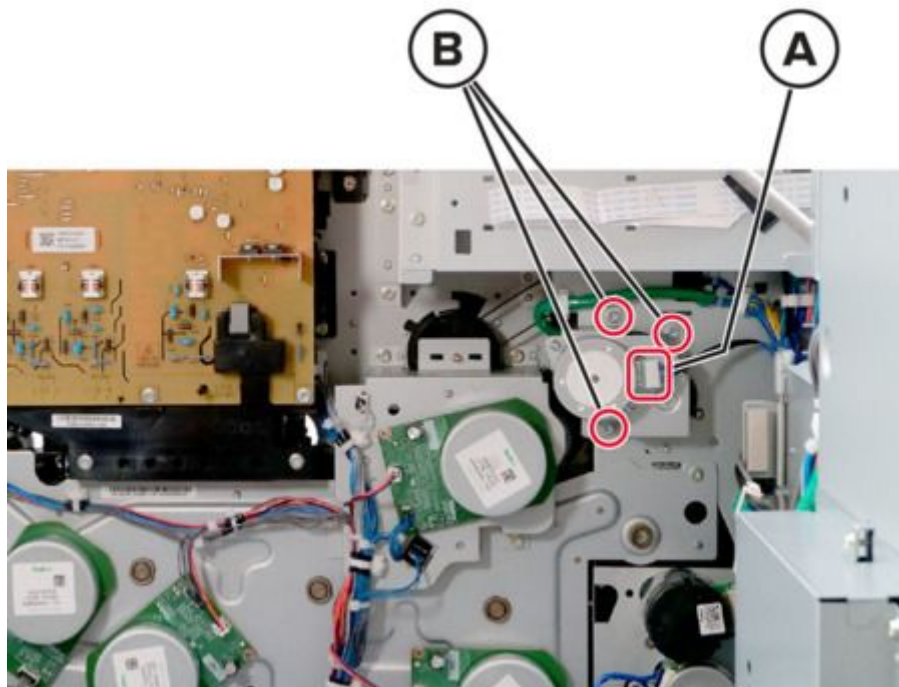
This part is not a FRU.

1. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
2. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
3. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
4. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205.](#)
5. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
6. Open the controller board frame. See [.See "Opening the controller board frame" on page 1233](#)
7. Remove the transfer roller HVPS. See [See "Transfer roller HVPS removal" on page 1238.](#)
8. Remove the two screws (A), and then release the latch (B).



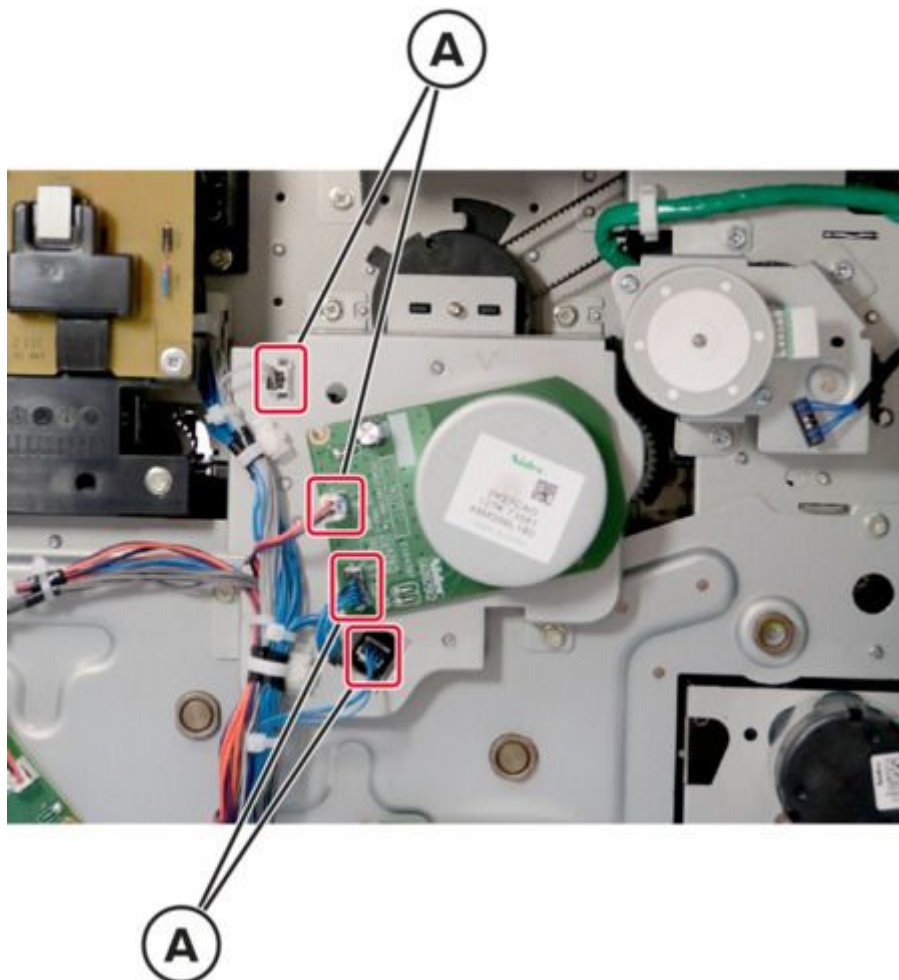
Motor (retract) removal

1. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
2. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
3. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
4. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205.](#)
5. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
6. Open the controller board frame. See [.See "Opening the controller board frame" on page 1233](#)
7. Disconnect the cable (A), and then remove the three screws (B).

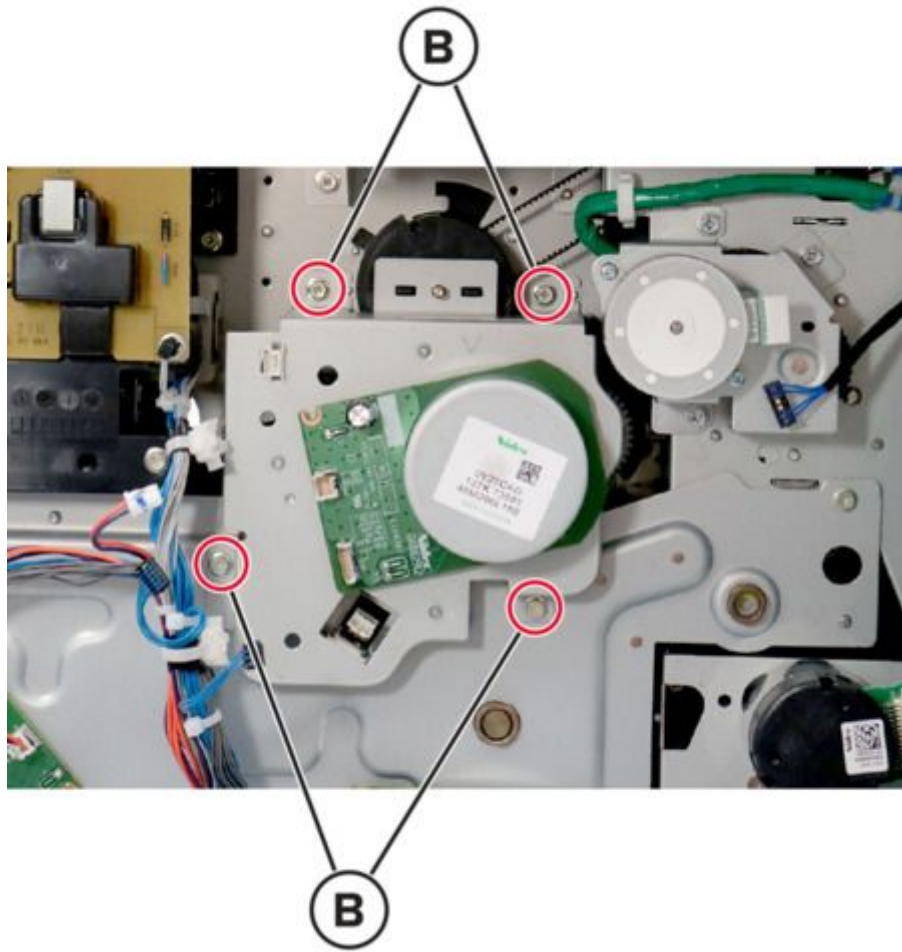


Motor (fusing drive) removal

1. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
2. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
3. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
4. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205.](#)
5. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
6. Open the controller board frame. See [.See "Opening the controller board frame" on page 1233](#)
7. Disconnect the four cables (A).

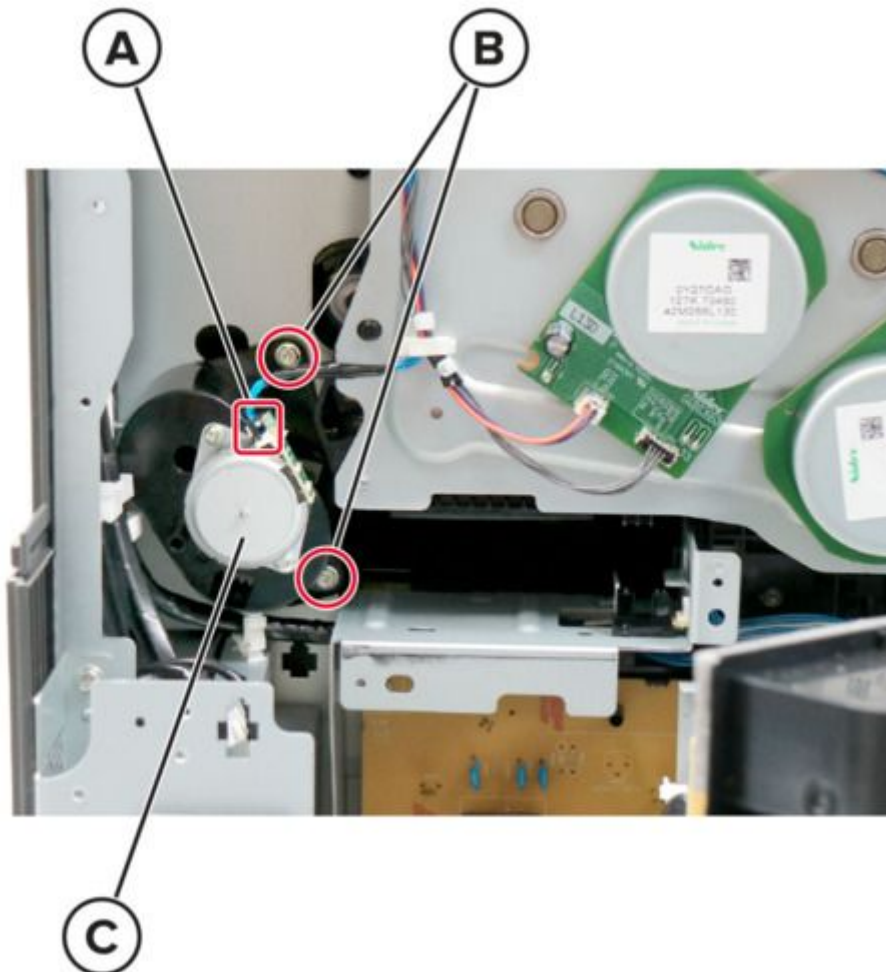


8. Remove the four screws (B).



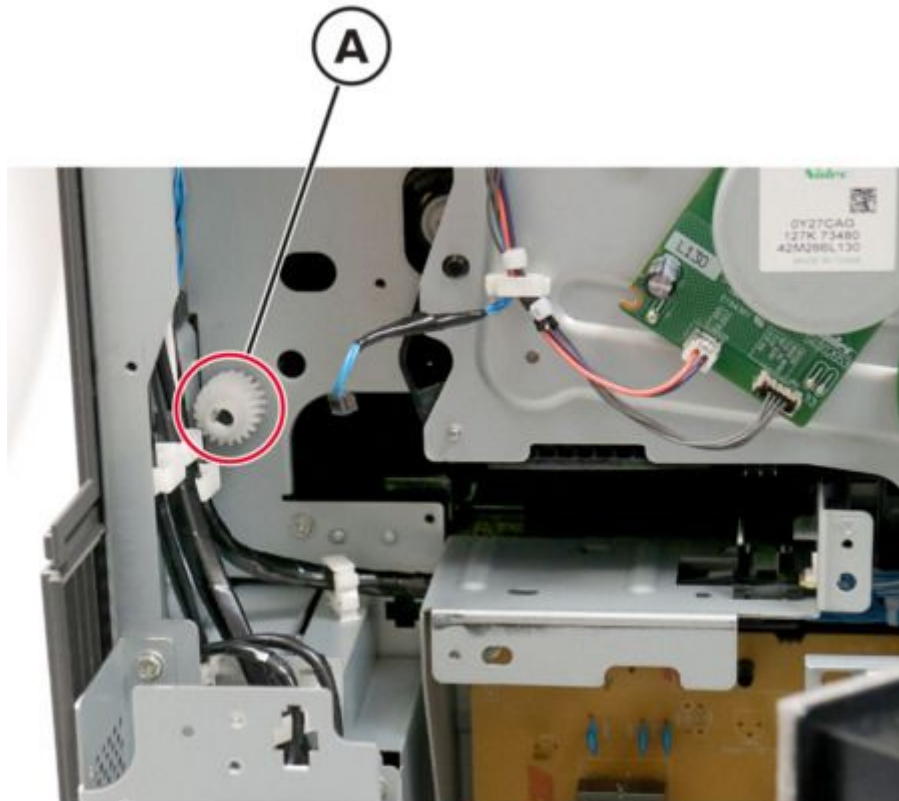
Motor (waste toner bottle agitator) removal

1. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205.](#)
2. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
3. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
4. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
5. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
6. Remove the LVPS exhaust fan. See [See "LVPS exhaust fan removal" on page 1227.](#)
7. Remove the controller board frame. See [.See "Opening the controller board frame" on page 1233](#)
8. Disconnect the cable (A), remove the two screws (B), and then remove the motor assembly (C).



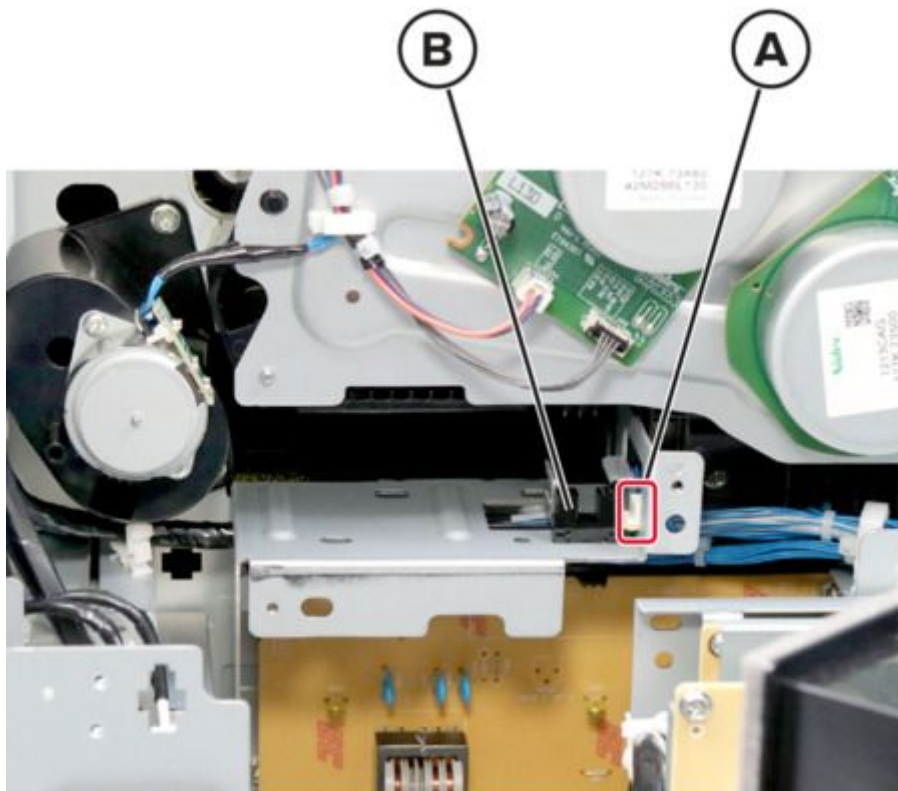
Agitator gear removal

1. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal"](#) on page 1205.
2. Remove the controller board access cover. See ["Controller board access cover removal"](#) on page 1198.
3. Remove the controller board port cover. See ["Controller board port cover removal"](#) on page 1199.
4. Remove the rear cover. See ["Rear cover removal"](#) on page 1200.
5. Remove the lower rear cover. See ["Lower rear cover removal"](#) on page 1202
6. Remove the LVPS exhaust fan. See ["LVPS exhaust fan removal"](#) on page 1227.
7. Remove the controller board frame. See ["Opening the controller board frame"](#) on page 1233
8. Remove the motor (waste toner bottle agitator). See ["Motor \(waste toner bottle agitator\) removal"](#) on page 1245.
9. Remove the gear (A).



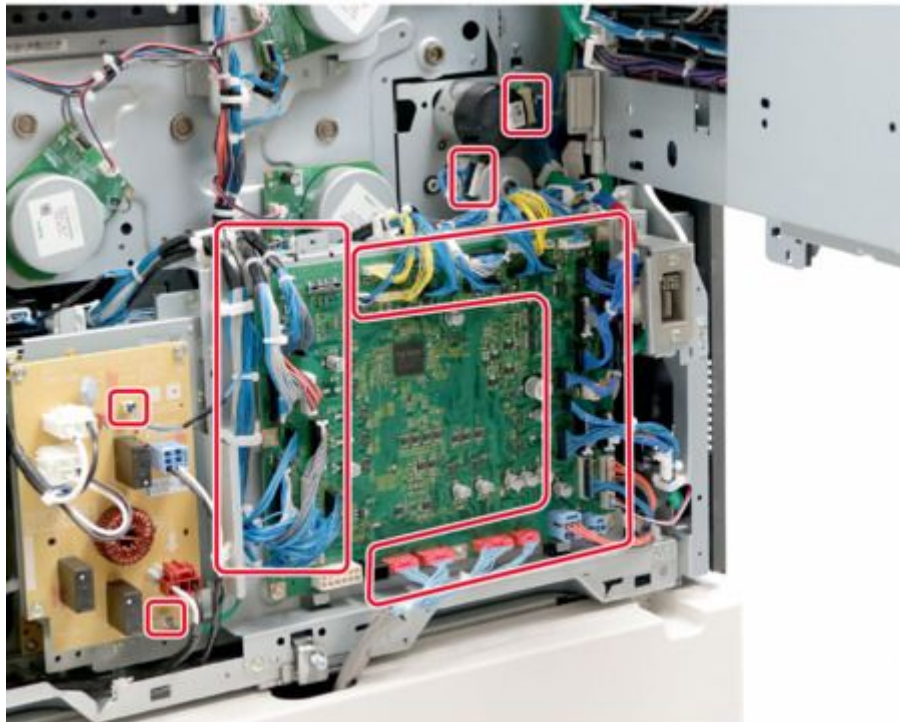
Sensor (waste toner bottle position) removal

1. Remove the waste toner bottle. See [.See "Waste toner bottle removal" on page 1153](#)
2. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205.](#)
3. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
4. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
5. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
6. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
7. Remove the LVPS exhaust fan. See [See "LVPS exhaust fan removal" on page 1227.](#)
8. Remove the controller board frame. See [.See "Opening the controller board frame" on page 1233](#)
9. Remove the motor (waste toner bottle agitator). See [See "Motor \(waste toner bottle agitator\) removal" on page 1245.](#)
10. Disconnect the cable (A), and then remove the sensor (B).

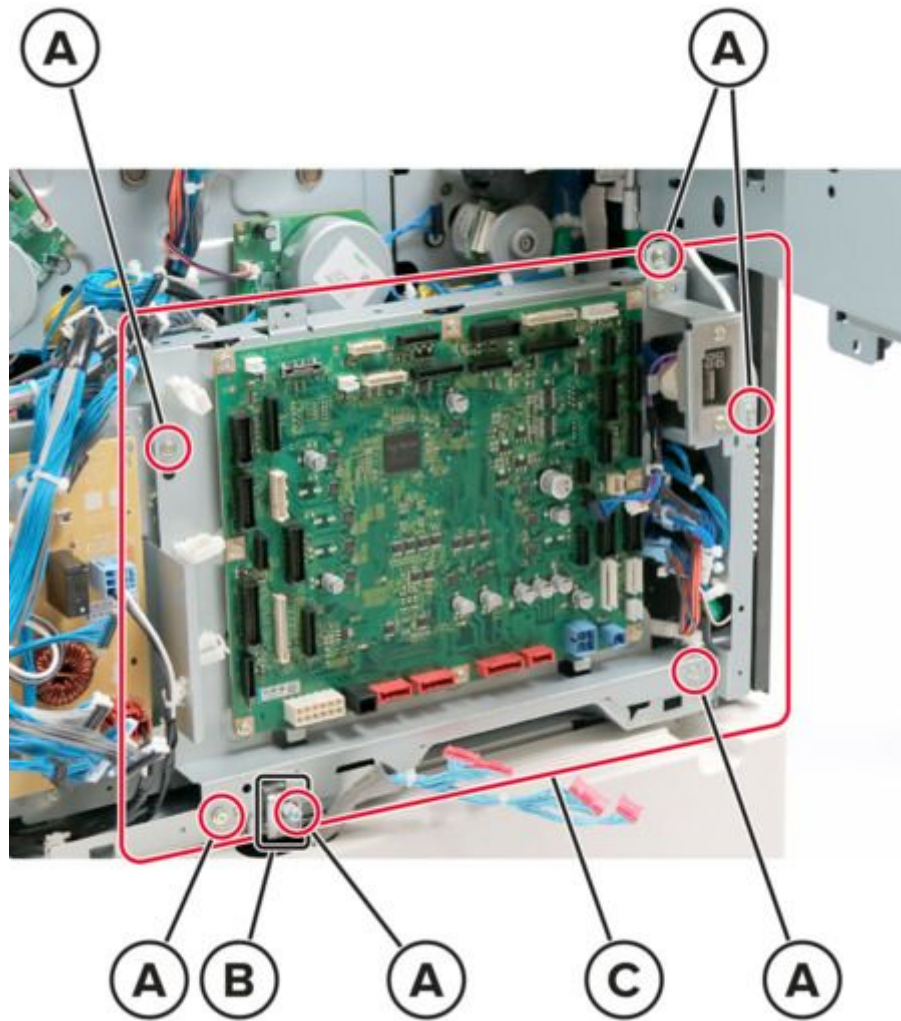


Registration drive unit removal

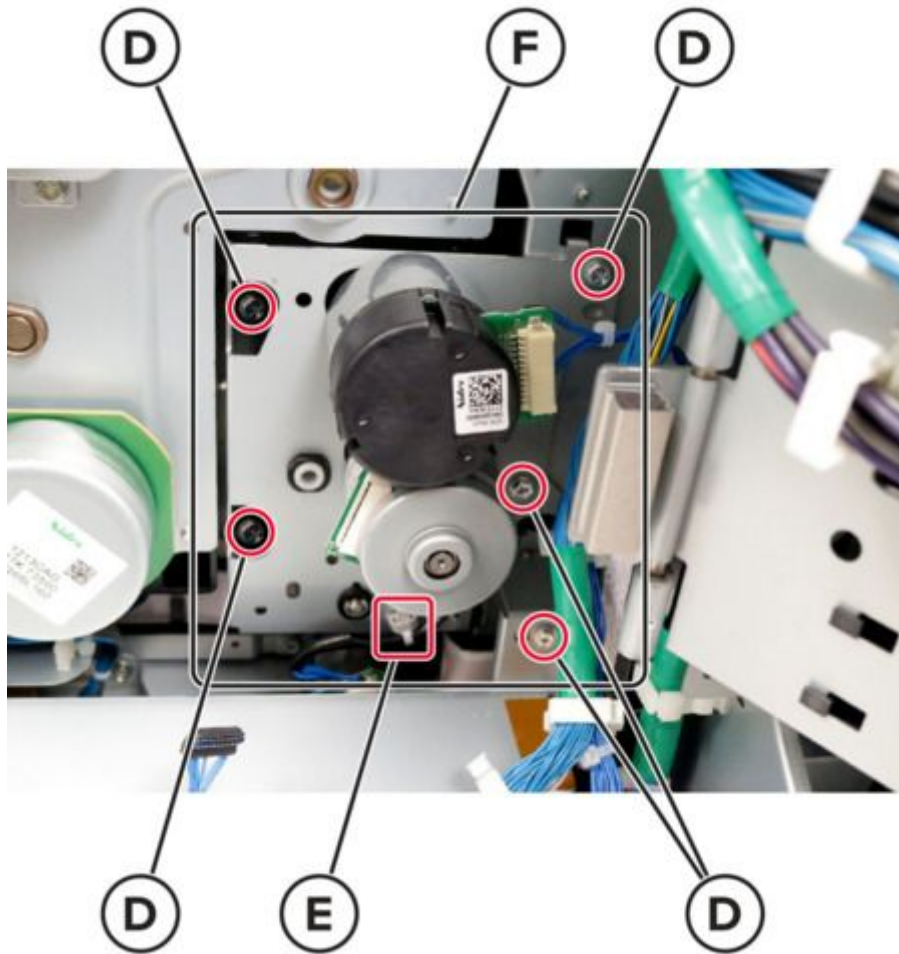
1. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205](#).
2. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198](#).
3. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199](#).
4. Remove the rear cover. See ["Rear cover removal" on page 1200](#).
5. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202](#).
6. Remove the LVPS exhaust fan. See ["LVPS exhaust fan removal" on page 1227](#).
7. Remove the controller board frame. See ["Opening the controller board frame" on page 1233](#).
8. Remove the motor (waste toner bottle agitator). See ["Motor \(waste toner bottle agitator\) removal" on page 1245](#).
9. Disconnect all cables from the engine board, and then remove the cables from their guides.



10. Remove the six screws (A), remove the bracket (B), and then remove the engine board housing (C).



11. Remove the five screws (D), detach the cable guide (E), and then remove the registration drive unit (F).

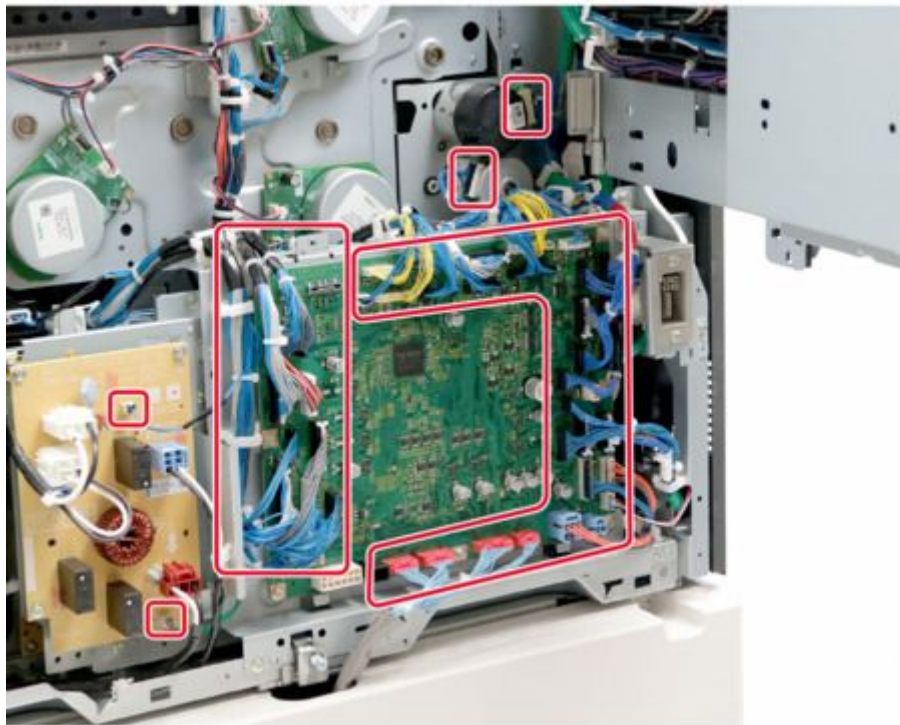


WARNING—POTENTIAL DAMAGE

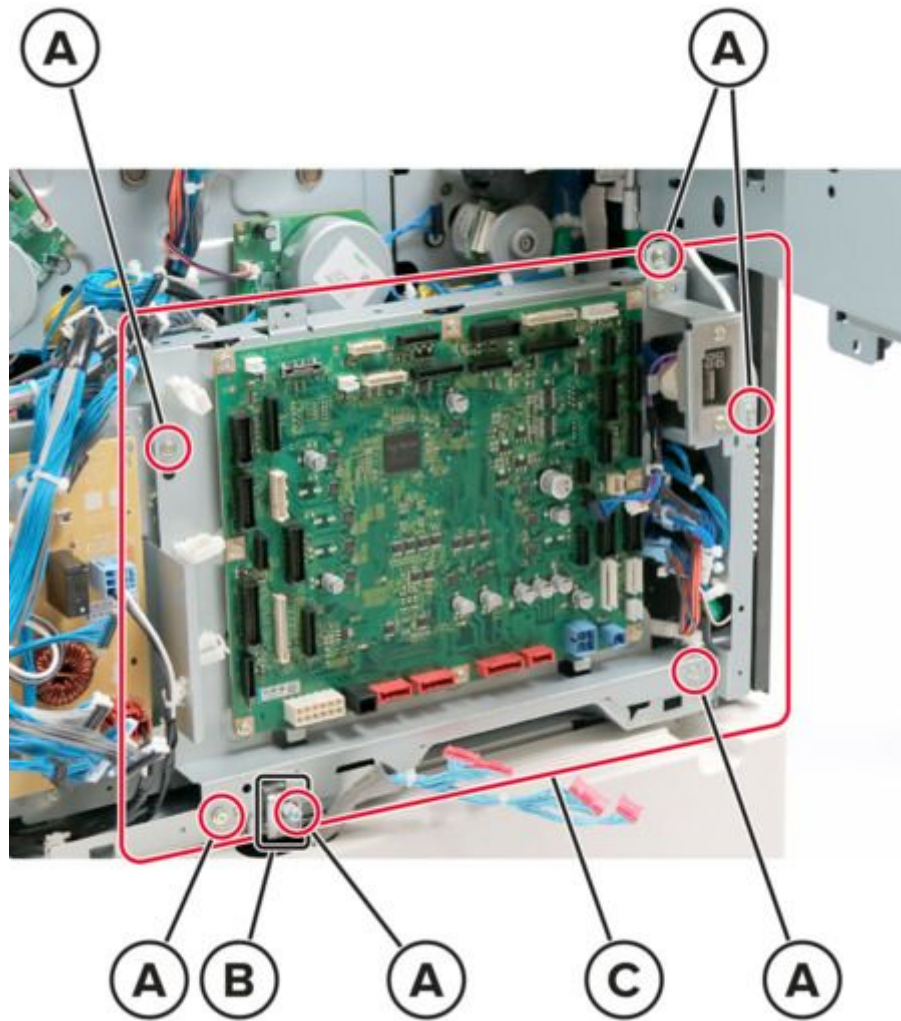
Be careful not to damage the surrounding cables.

LVPS removal

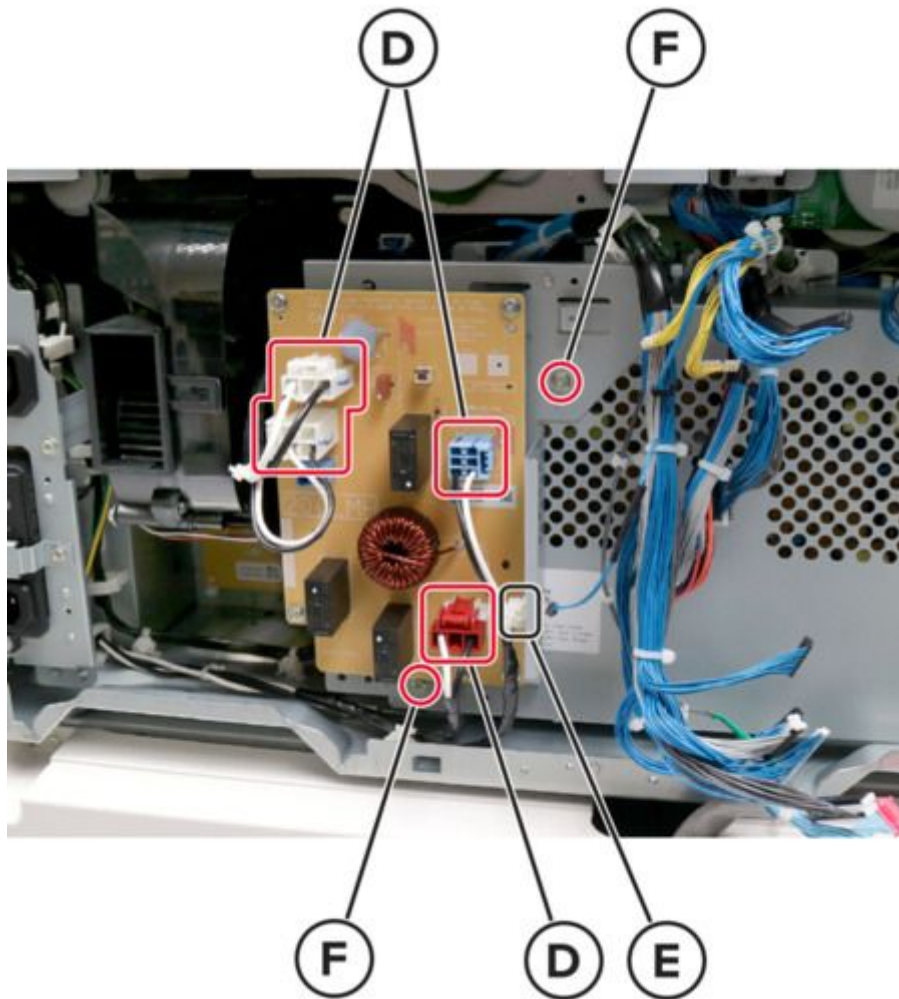
1. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205](#).
2. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198](#).
3. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199](#).
4. Remove the rear cover. See ["Rear cover removal" on page 1200](#).
5. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202](#)
6. Open the controller board frame. See ["Opening the controller board frame" on page 1233](#)
7. Disconnect all the cables from the engine board, and then remove the cables from their guides.



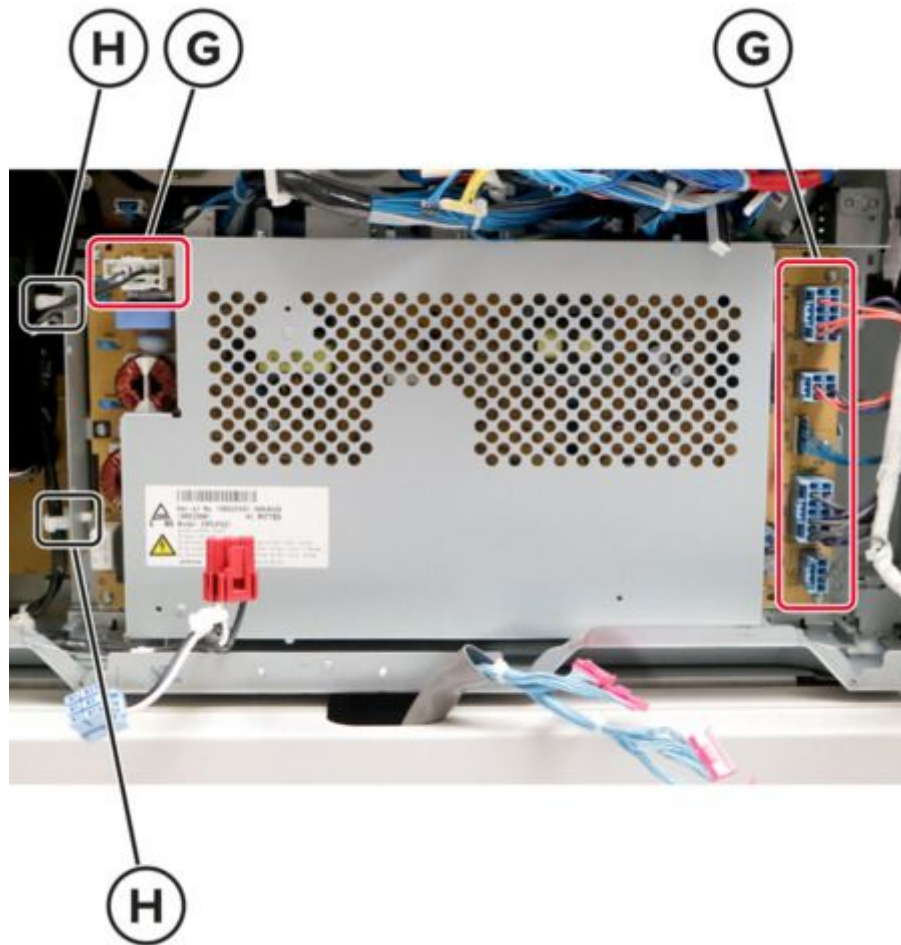
8. Remove the six screws (A), remove the bracket (B), and then remove the engine board housing (C).



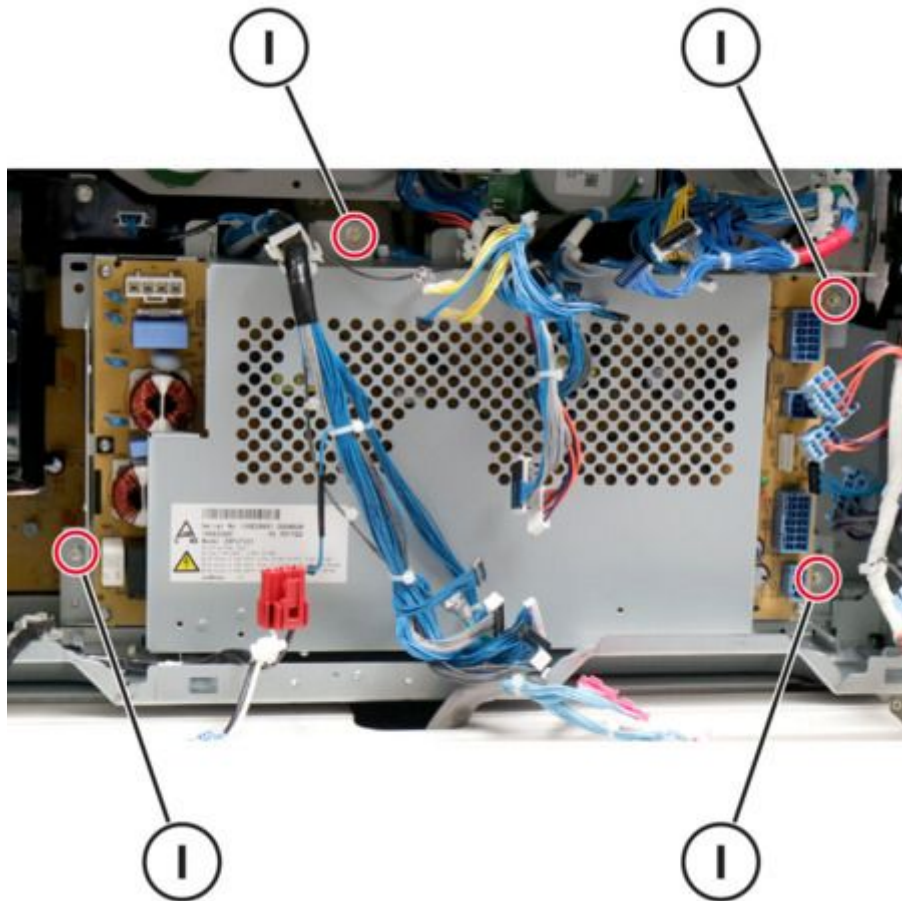
9. Disconnect the four cables (D), detach the cable guide (E), and then remove the two screws (F).



10. Remove the AC drive board. See ["AC drive board removal"](#) on page 1228.
11. Disconnect the six cables (G), and then detach the two cable guides (H).

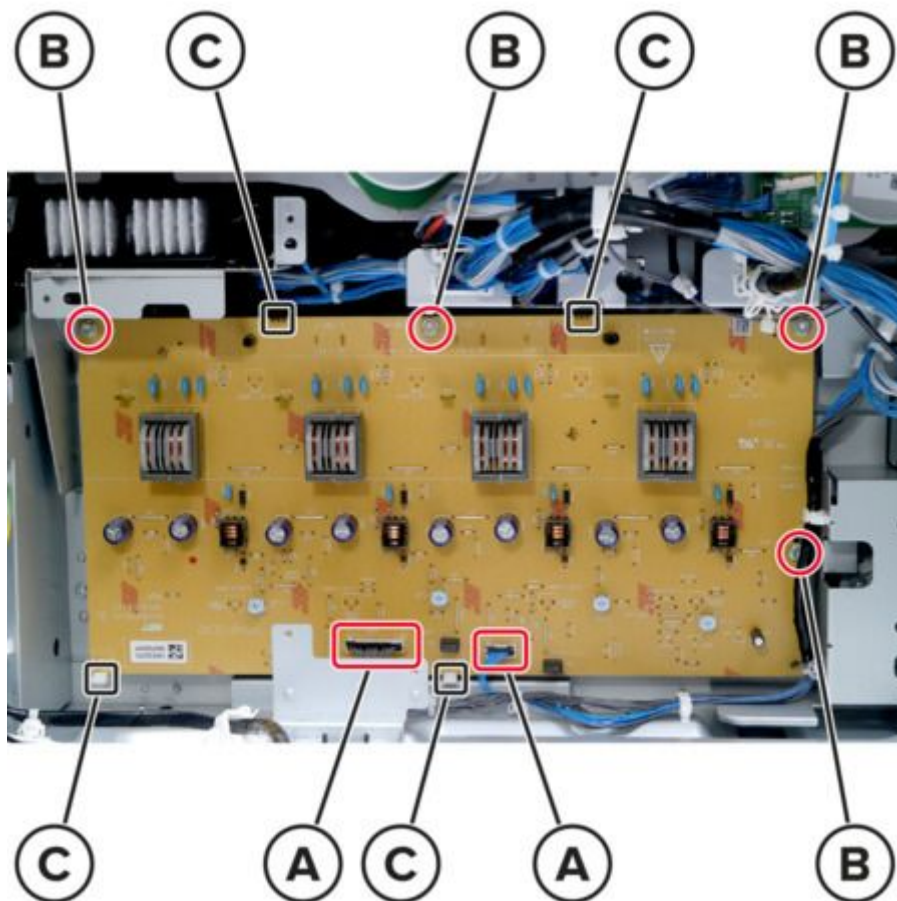


12. Remove the four screws (I), and then remove the LVPS.



Developer HVPS removal

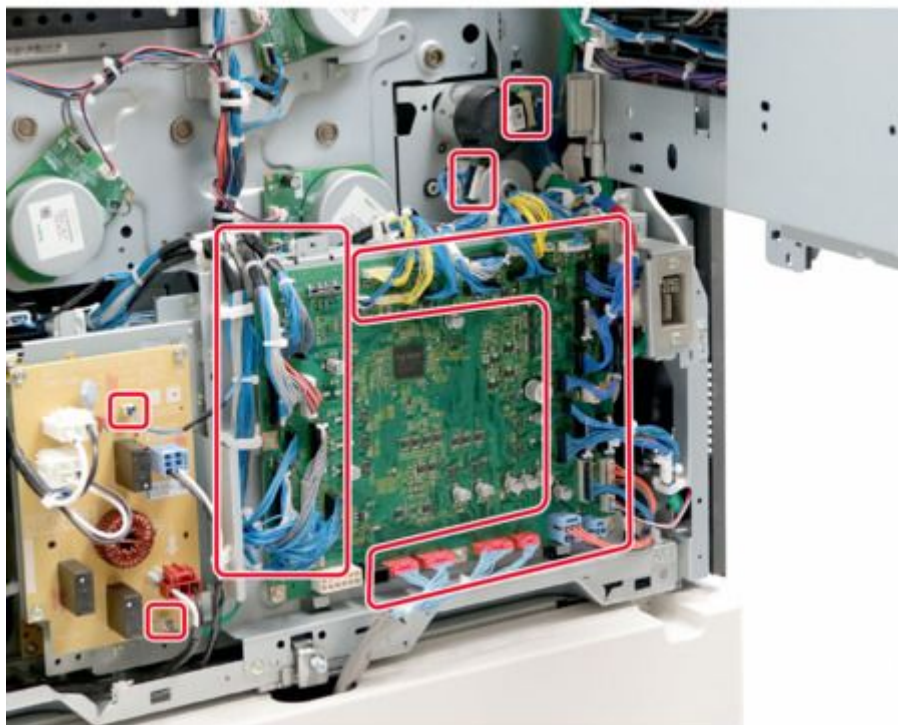
1. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205.](#)
2. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198.](#)
3. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199.](#)
4. Remove the rear cover. See ["Rear cover removal" on page 1200.](#)
5. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202](#)
6. Remove the LVPS. See ["LVPS removal" on page 1251](#)
7. Remove the waste toner fan.
8. Disconnect the two cables (A), remove the four screws (B), and then release the four latches (C).



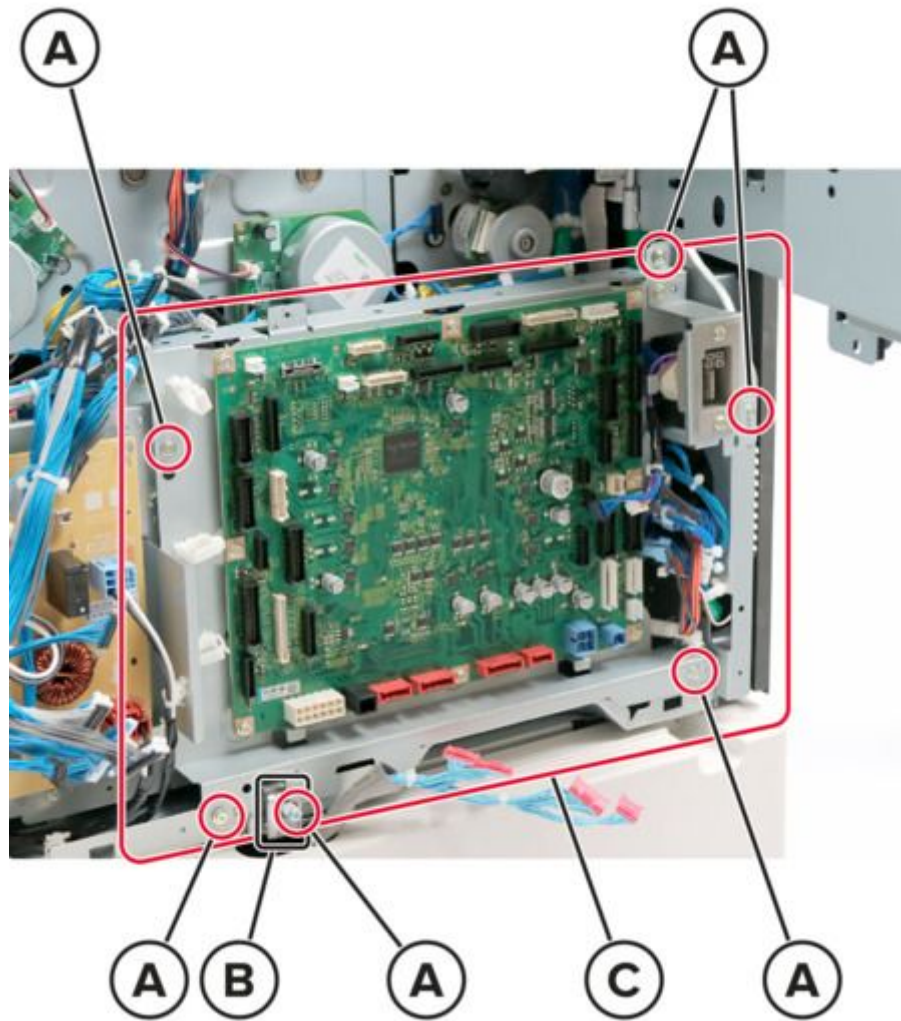
9. Remove the developer HVPS.

Main drive removal

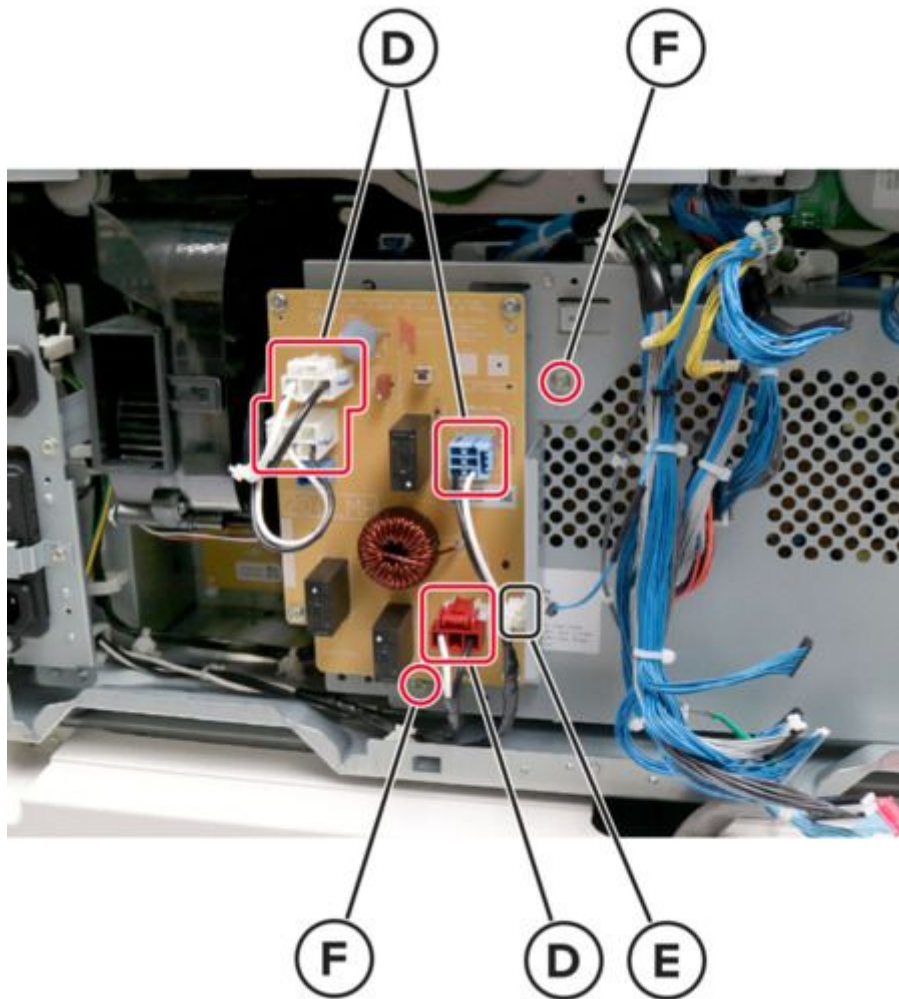
1. Remove the photoconductor drum (CMYK). See ["Photoconductor drum \(CMYK\) removal" on page 1178.](#)
2. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205.](#)
3. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198.](#)
4. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199.](#)
5. Remove the rear cover. See ["Rear cover removal" on page 1200.](#)
6. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202](#)
7. Open the controller board frame. See ["Opening the controller board frame" on page 1233](#)
8. Remove the motor (fusing drive). See ["Motor \(fusing drive\) removal" on page 1243.](#)
9. Disconnect all the cables from the engine board, and then remove the cables from their guides.



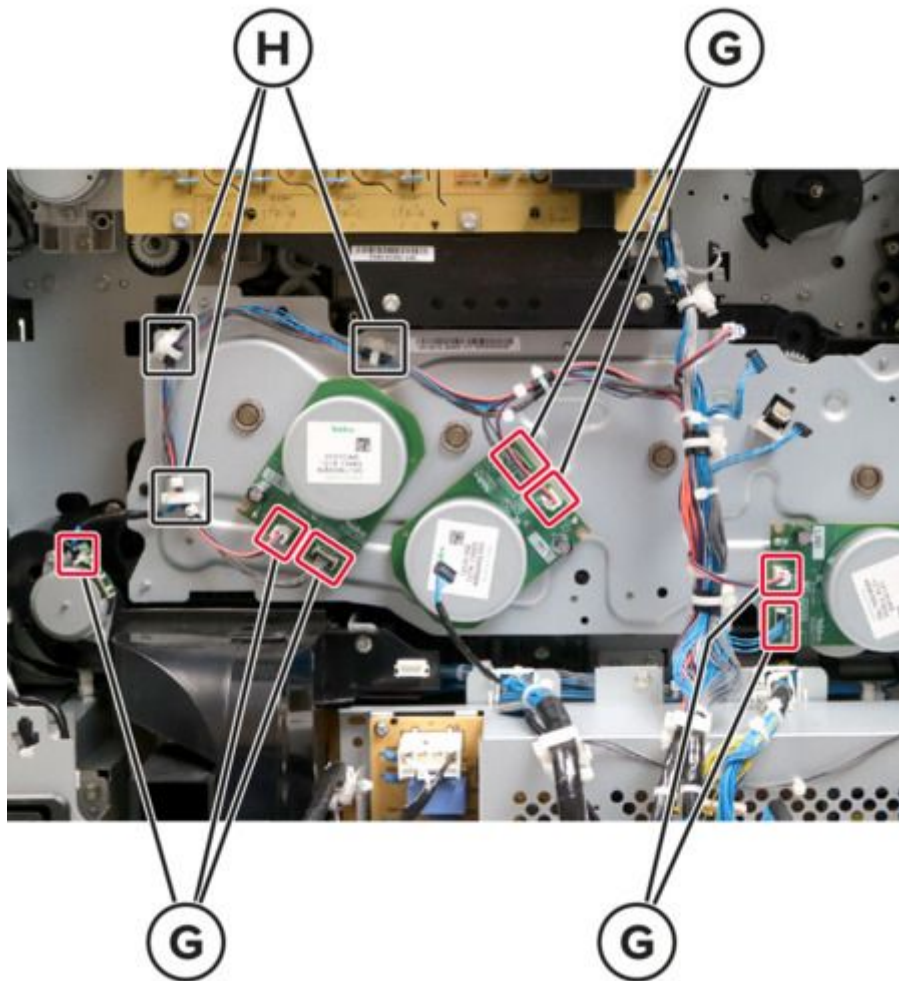
10. Remove the screws (A), remove the bracket (B), and then remove the engine board housing (C).



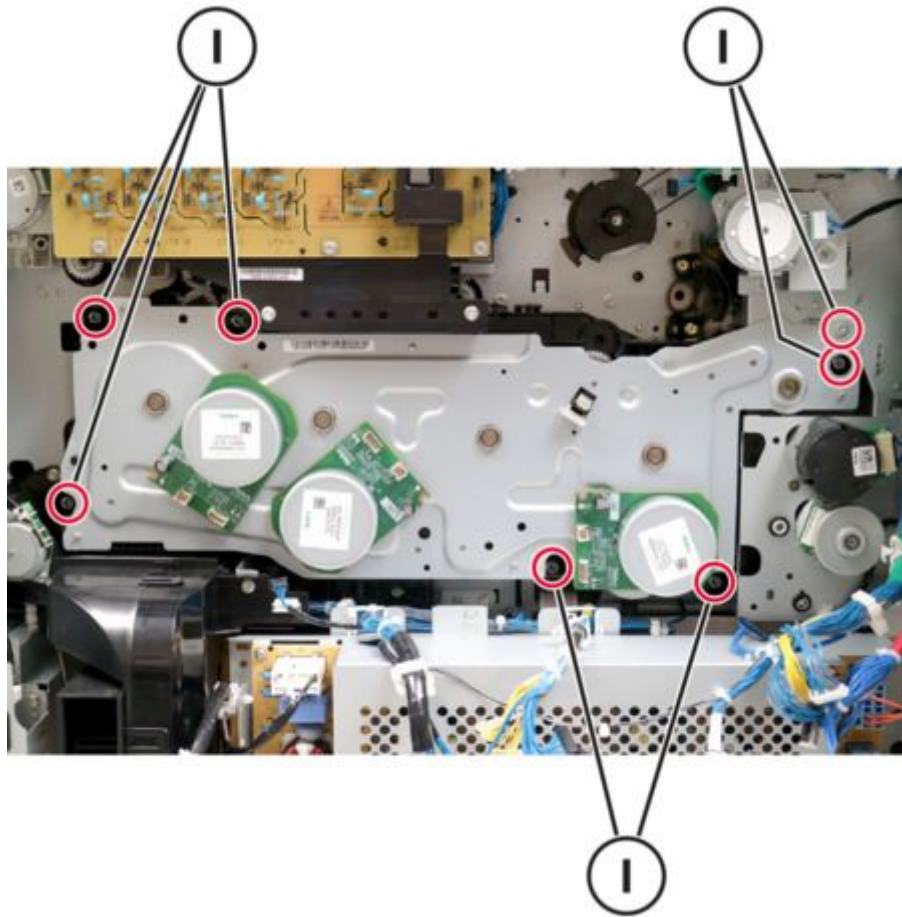
11. Disconnect the four cables (D), detach the cable guide (E), and then remove the two screws (F).



12. Remove the AC drive board. See [See "AC drive board removal" on page 1228.](#)
13. Disconnect the seven cables (G), and then remove the cable from the three guides (H).

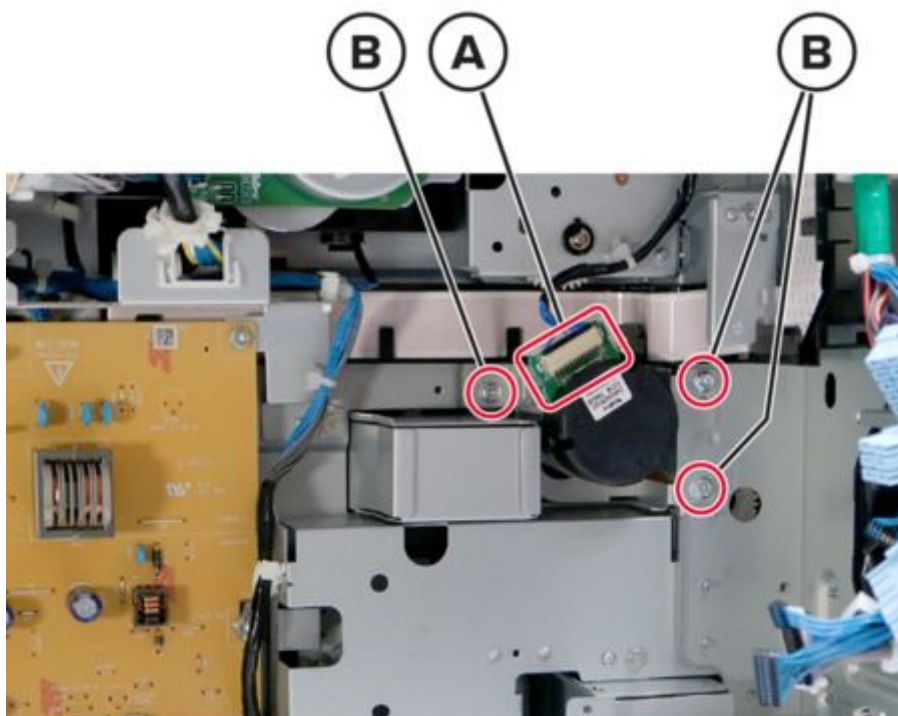


14. Remove the seven screws (I), and then remove the main drive.



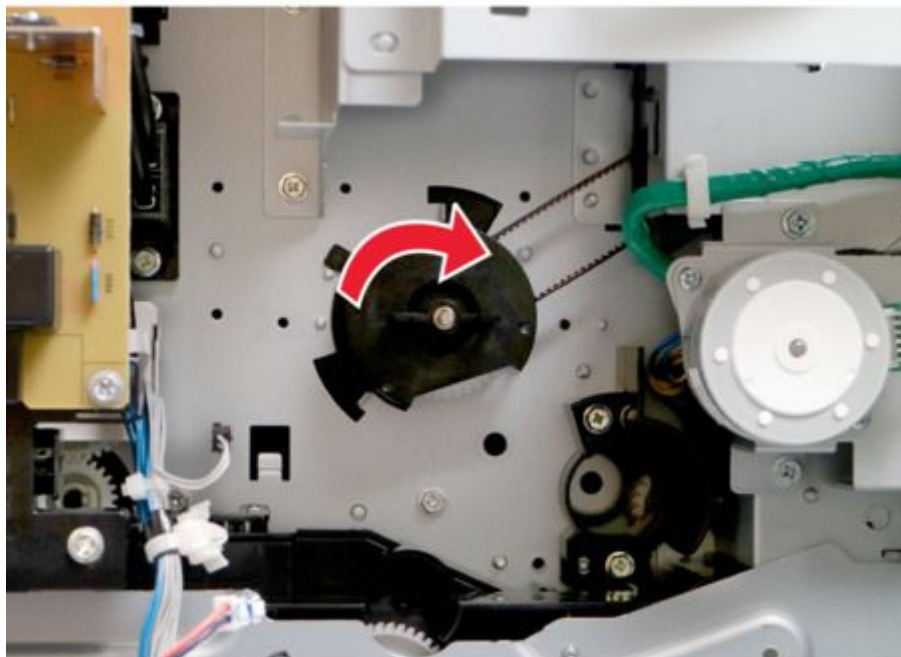
Transport drive removal

1. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205](#).
2. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198](#).
3. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199](#).
4. Remove the rear cover. See ["Rear cover removal" on page 1200](#).
5. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202](#).
6. Remove the LVPS. See ["LVPS removal" on page 1251](#).
7. Disconnect the cable (A), remove the three screws (B), and then remove the transport drive.

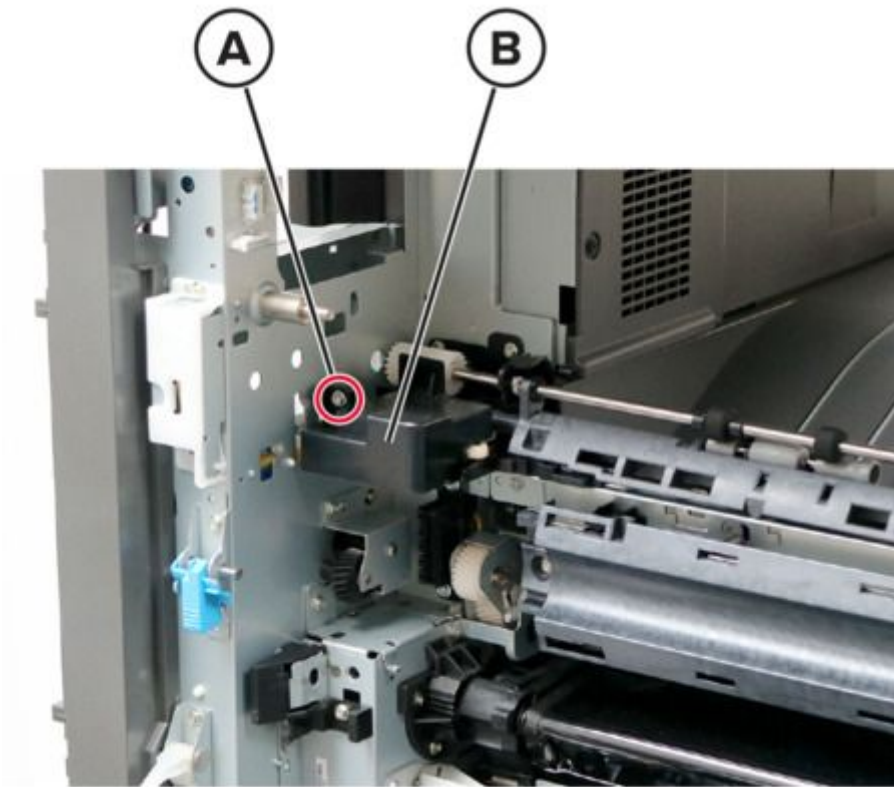


Exit 1 drive belt removal

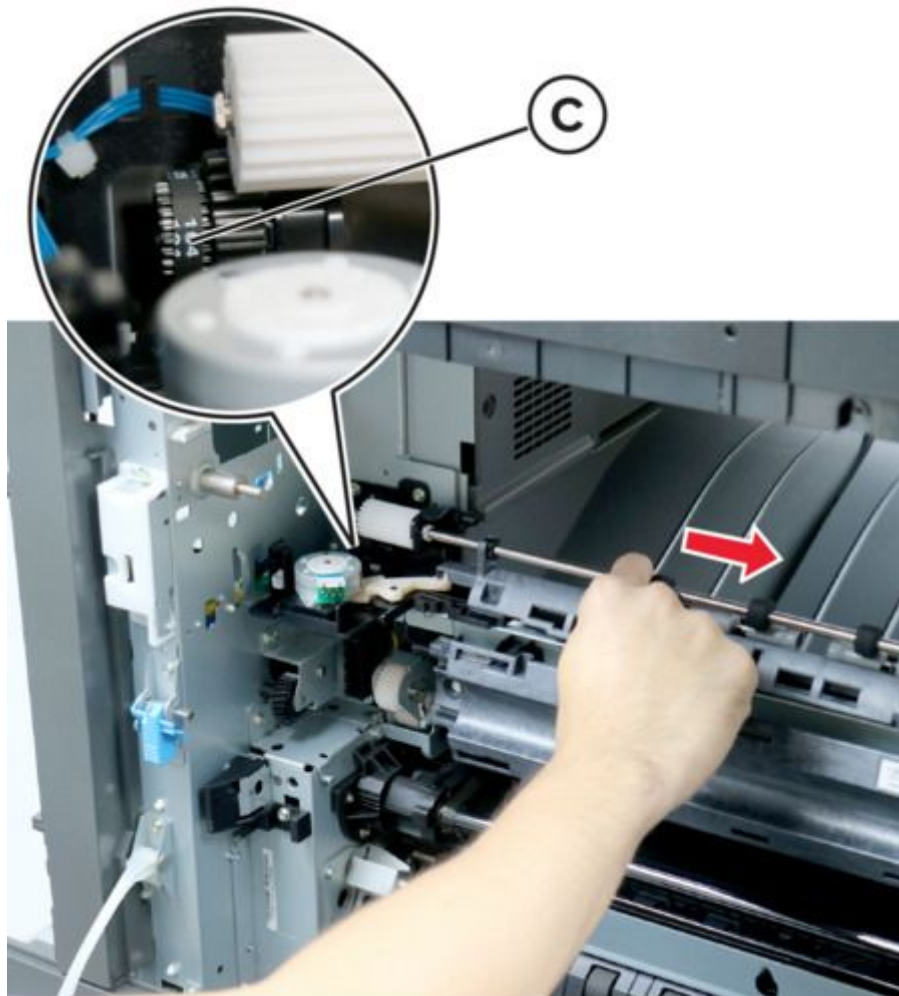
1. Remove the upper exit bin bail.
2. Remove the lower exit bin bail. See [See "Lower exit bin bail removal" on page 1277.](#)
3. Open the left jam door.
4. Remove the upper left cover. See [.See "Upper left cover removal" on page 1055](#)
5. Remove the fuser. See [See "Fuser removal" on page 1052.](#)
6. Remove the exit 2 transport guide. See [See "Exit 2 transport guide removal" on page 1099.](#)
7. Remove the exit 2 transport assembly. See [See "Exit 2 transport assembly removal" on page 1100.](#)
8. Remove the front toggle lever. See [See "Front toggle guide removal" on page 1056.](#)
9. Remove the rear toggle. See [See "Rear toggle guide removal" on page 1057.](#)
10. Remove the sensor (bin 1 offset home position). See [See "Sensor \(bin 1 offset home\) removal" on page 1112.](#)
11. Remove the fuser exhaust cover. See [See "Fuser exhaust cover removal" on page 1205.](#)
12. Remove the controller board access cover. See [See "Controller board access cover removal" on page 1198.](#)
13. Remove the controller board port cover. See [See "Controller board port cover removal" on page 1199.](#)
14. Remove the rear cover. See [See "Rear cover removal" on page 1200.](#)
15. Remove the lower rear cover. See [See "Lower rear cover removal" on page 1202](#)
16. Open the controller board frame. See [.See "Opening the controller board frame" on page 1233](#)
17. Remove the motor (fusing drive). See [See "Motor \(fusing drive\) removal" on page 1243.](#)
18. Remove the cover.



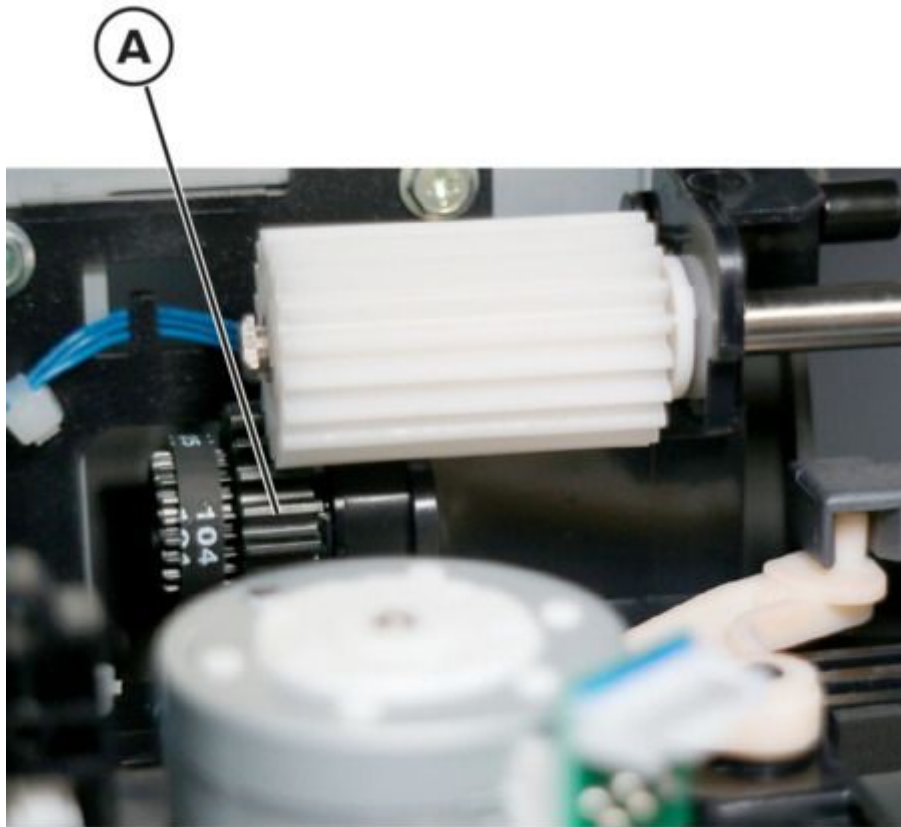
19. Remove the screw (A), and then remove the cover (B).



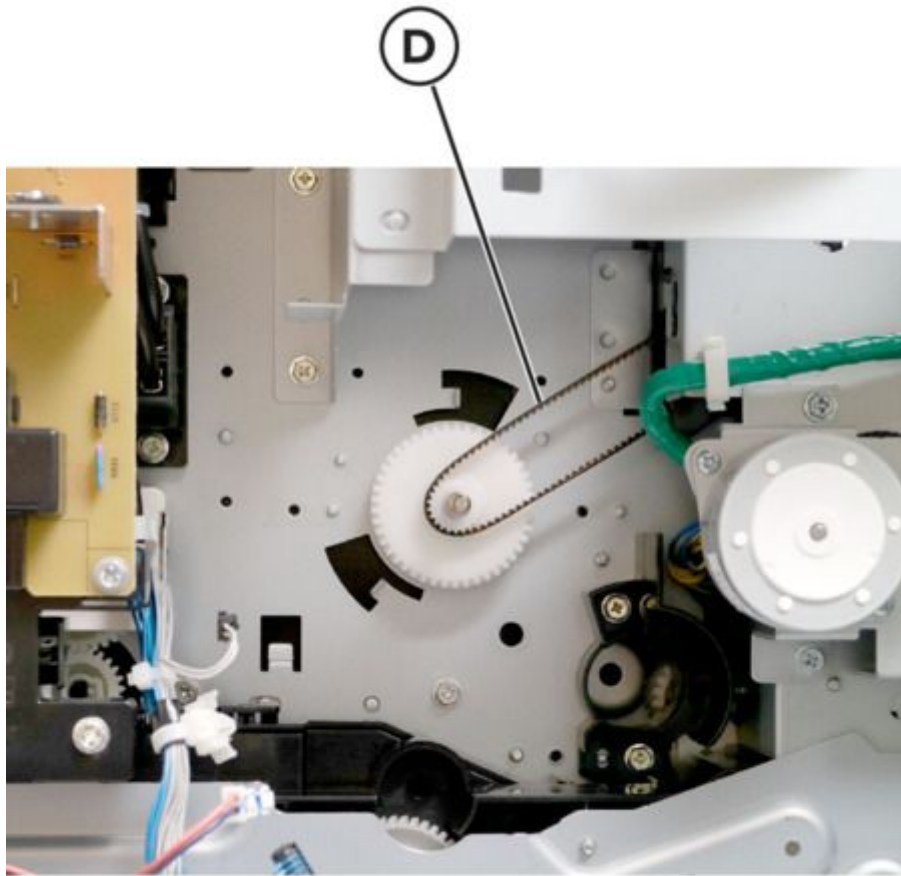
20. Move the roller, and then remove the belt (C).



WARNING—POTENTIAL DAMAGE
Make sure not to lose the gear (A).

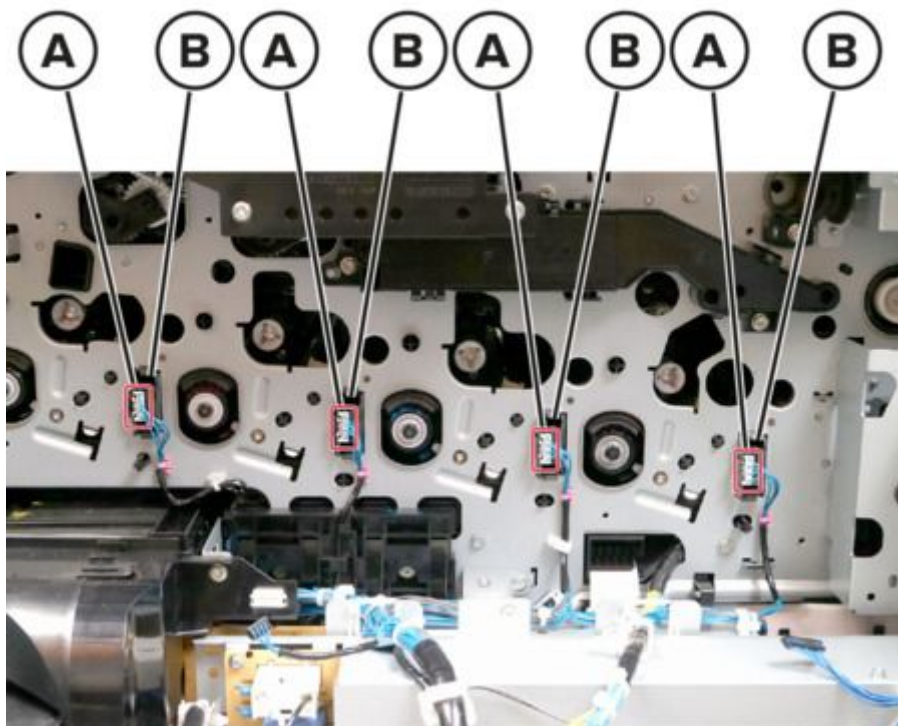


21. Remove the belt (D).



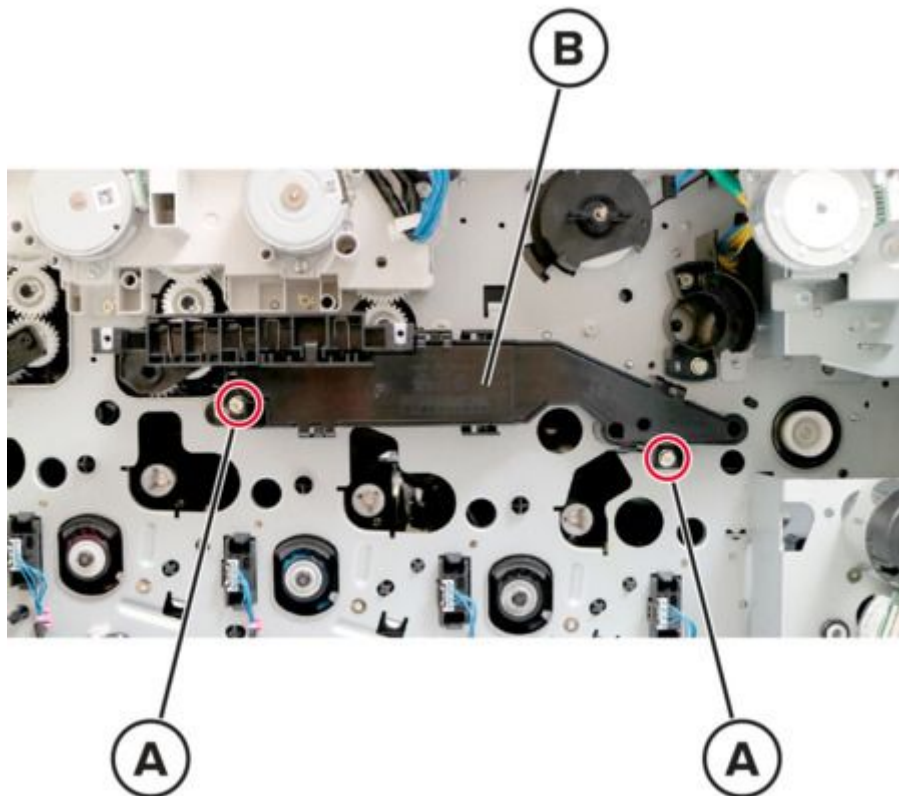
YMCK panel connector removal

1. Remove the photoconductor drum (CMYK). See ["Photoconductor drum \(CMYK\) removal" on page 1178](#).
2. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205](#).
3. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198](#).
4. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199](#).
5. Remove the rear cover. See ["Rear cover removal" on page 1200](#).
6. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202](#).
7. Open the controller board frame. See ["Opening the controller board frame" on page 1233](#).
8. Remove the motor (fusing drive). See ["Motor \(fusing drive\) removal" on page 1243](#).
9. Remove the main drive. See ["Main drive removal" on page 1257](#).
10. Disconnect the cable (A), then remove the defective YMCK panel connector (B).



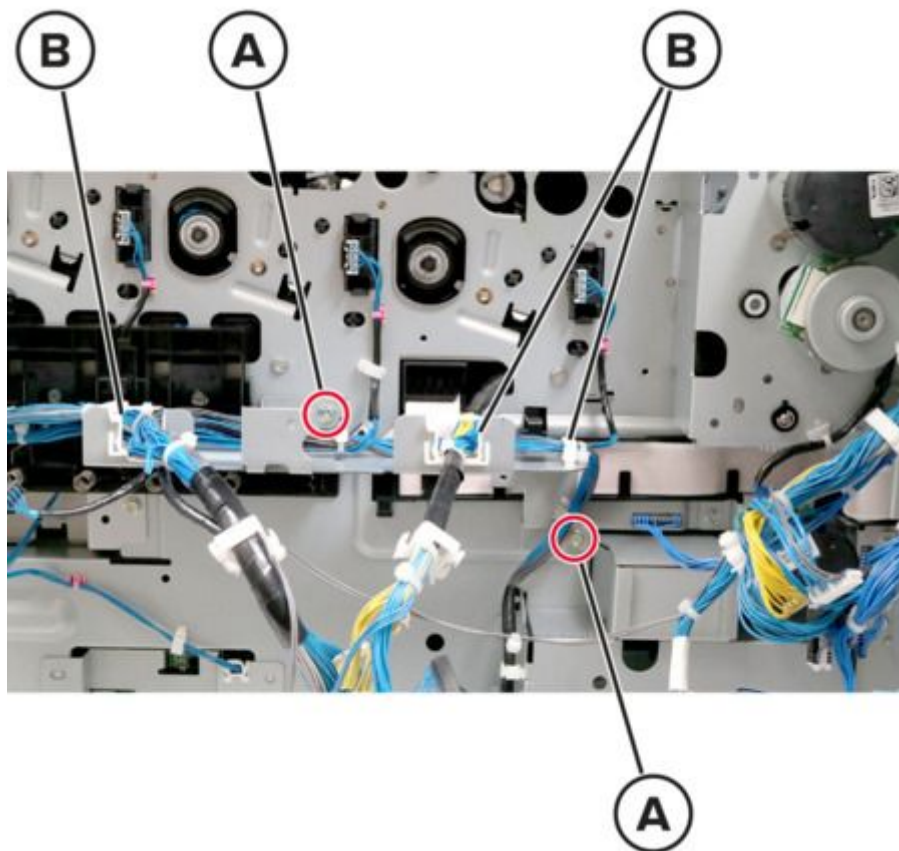
Transfer module high voltage contact removal

1. Remove the photoconductor drum (CMYK). See ["Photoconductor drum \(CMYK\) removal" on page 1178.](#)
2. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205.](#)
3. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198.](#)
4. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199.](#)
5. Remove the rear cover. See ["Rear cover removal" on page 1200.](#)
6. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202.](#)
7. Open the controller board frame. See ["Opening the controller board frame" on page 1233.](#)
8. Remove the transfer roller HVPS. See ["Transfer roller HVPS removal" on page 1238.](#)
9. Remove the motor (fusing drive). See ["Motor \(fusing drive\) removal" on page 1243.](#)
10. Remove the main drive. See ["Main drive removal" on page 1257.](#)
11. Remove the two screws (A), and then remove the transfer module high voltage contact (B).

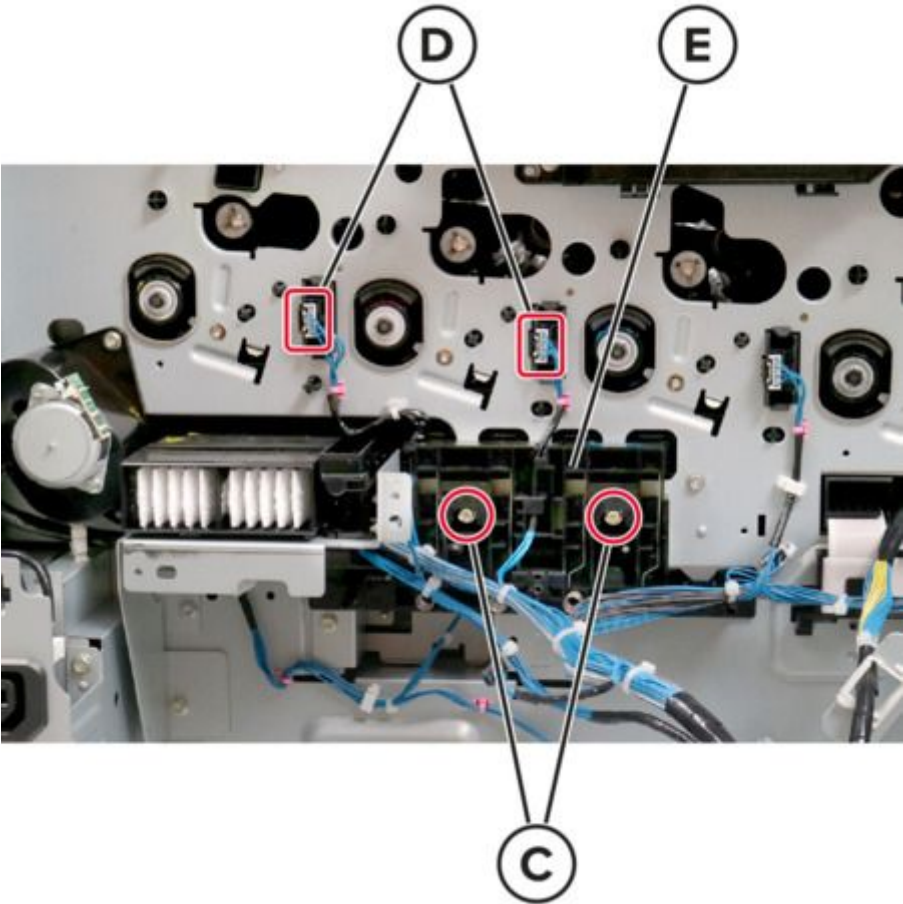


Developer high voltage contact removal

1. Remove the photoconductor drum (CMYK). See ["Photoconductor drum \(CMYK\) removal" on page 1178.](#)
2. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205.](#)
3. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198.](#)
4. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199.](#)
5. Remove the rear cover. See ["Rear cover removal" on page 1200.](#)
6. Remove the lower rear cover. See ["Lower rear cover removal" on page 1202.](#)
7. Open the controller board frame. See ["Opening the controller board frame" on page 1233.](#)
8. Remove the transfer roller HVPS. See ["Transfer roller HVPS removal" on page 1238.](#)
9. Remove the motor (fusing drive). See ["Motor \(fusing drive\) removal" on page 1243.](#)
10. Remove the main drive. See ["Main drive removal" on page 1257.](#)
11. Remove the LVPS. See ["LVPS removal" on page 1251.](#)
12. Remove the waste toner fan.
13. Remove the developer HVPS. See ["Developer HVPS removal" on page 1256.](#)
14. Remove the two screws (A), and then remove the cables (B) from the guides.



15. Remove the two screws (C), disconnect the two cables (D) and remove them from their guides, and then remove the developer high voltage contact (E).



Top side removals

Bin top cover removal

1. Hold the bin top cover.



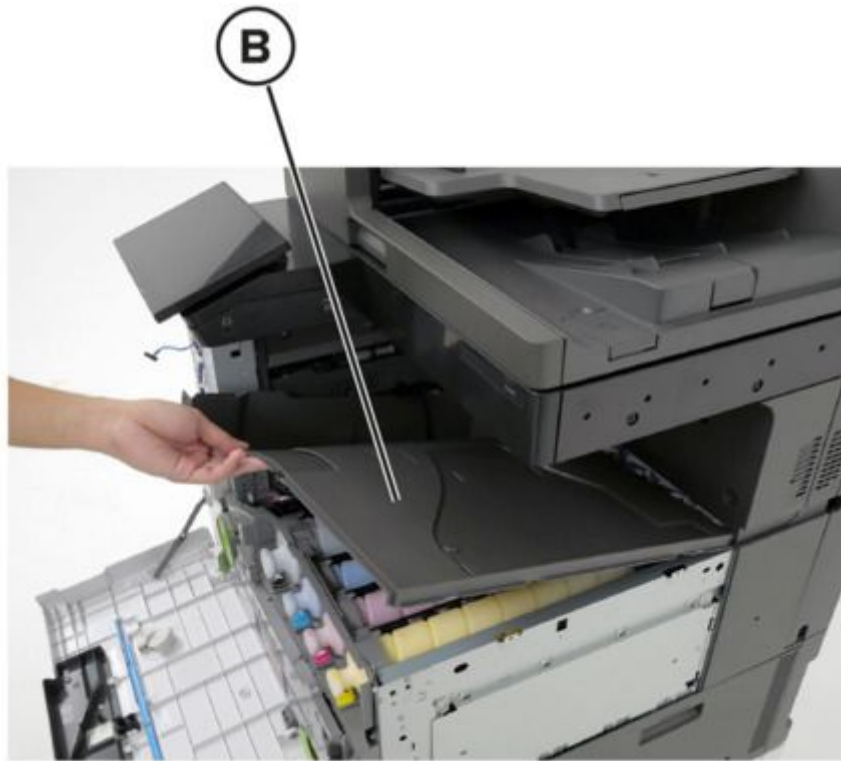
2. Remove the bin top cover.

Bin cover removal

1. Remove the bin top cover. See ["Bin top cover removal"](#) on page 1272.
2. Remove the right cover. See ["Right cover removal"](#) on page 1143
3. Remove the front left cover. See ["Front left cover removal"](#) on page 1147.
4. Remove the bin front cover. See ["Bin front cover removal"](#) on page 1152.
5. Remove the two screws (A).

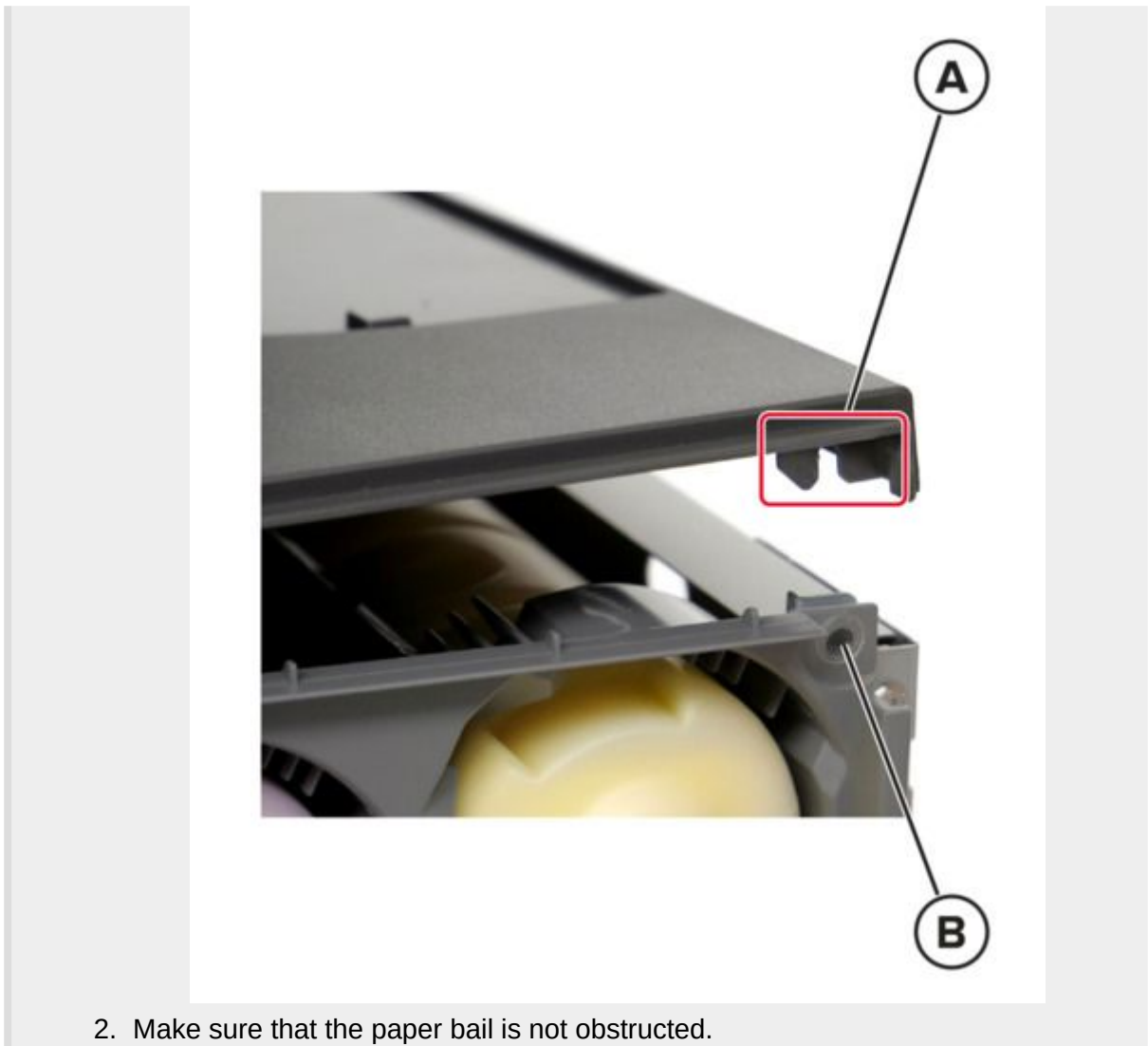


6. Remove the cover.



INSTALLATION NOTE

1. Make sure to insert the tab (A) on the bin cover into the toner bottle cover (B).

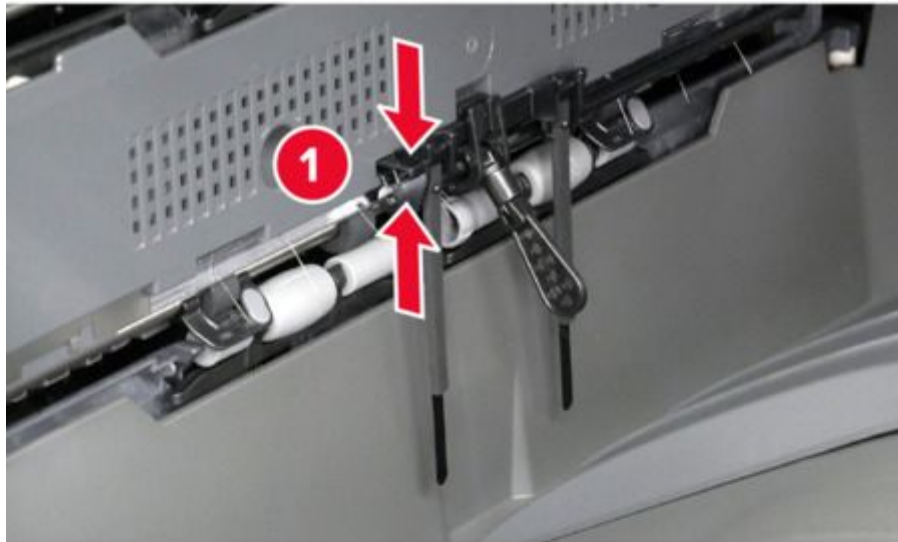


2. Make sure that the paper bail is not obstructed.



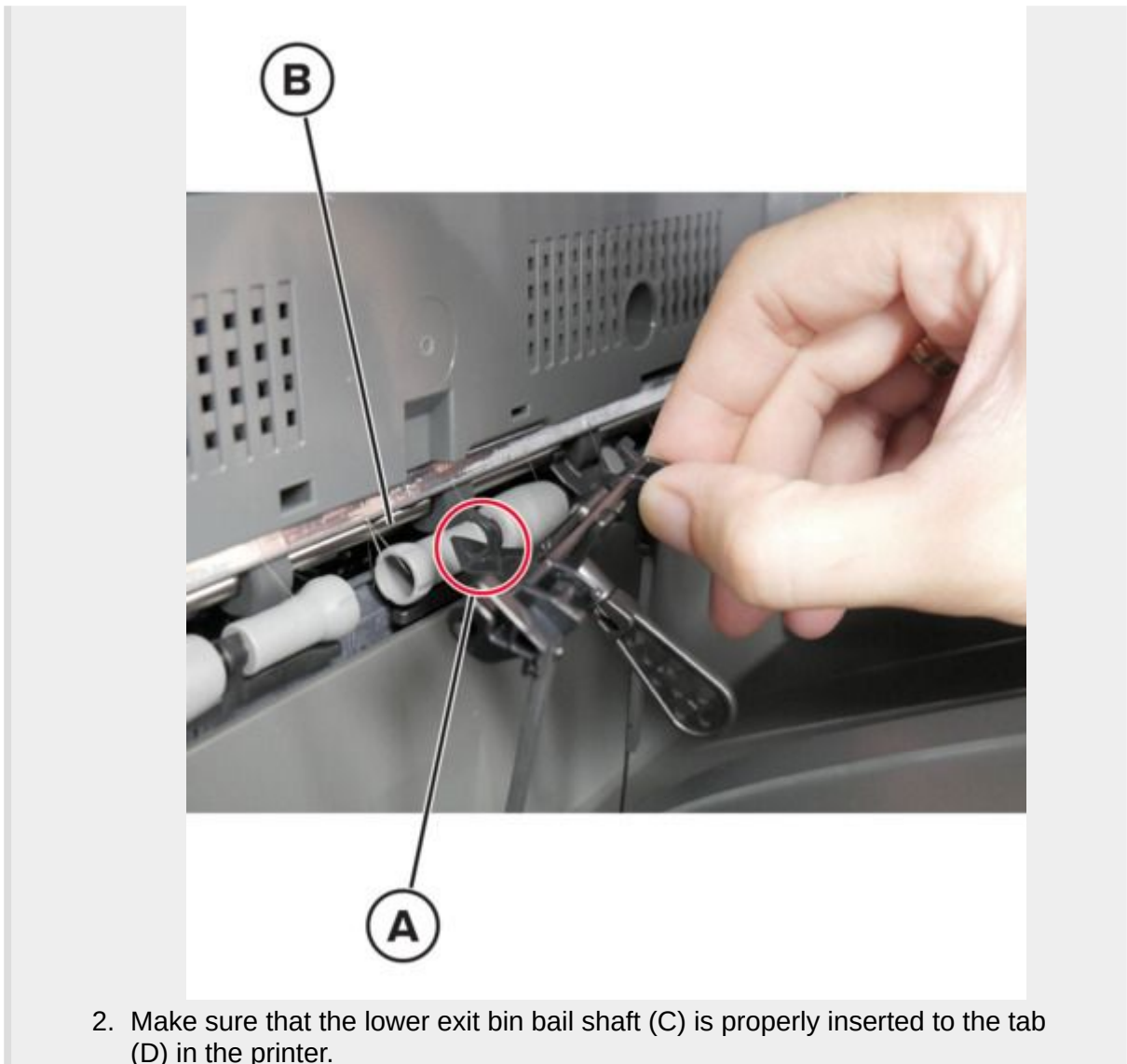
Lower exit bin bail removal

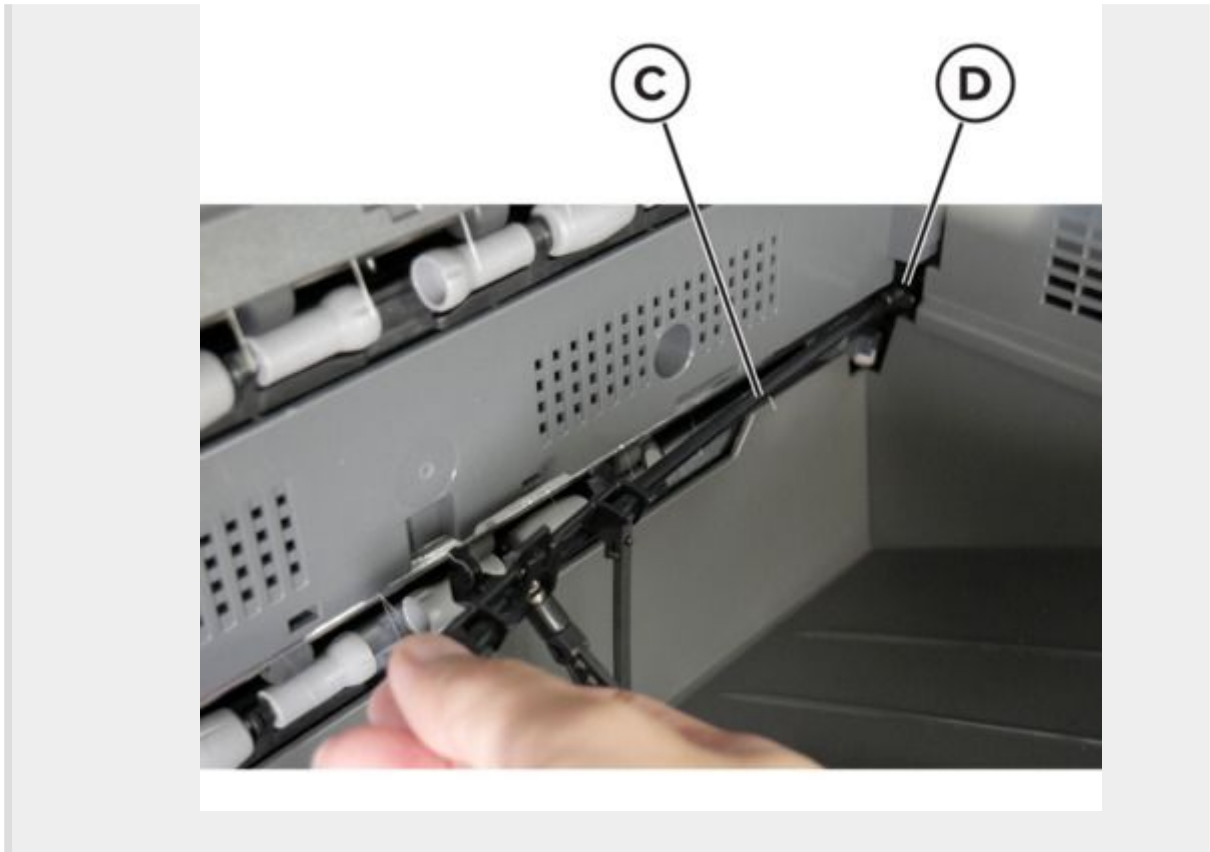
1. Find the lower exit bin bail.
2. Remove the lower exit bin bail.



INSTALLATION NOTE

1. Make sure that the hook (A) is properly attached to the exit roller shaft (B).





Top cover removal

1. Remove the controller board port cover. See ["Controller board port cover removal" on page 1199.](#)
2. Remove the controller board access cover. See ["Controller board access cover removal" on page 1198.](#)
3. Remove the fuser exhaust cover. See ["Fuser exhaust cover removal" on page 1205.](#)
4. Remove the rear cover. See ["Rear cover removal" on page 1200.](#)
5. Remove the two screws (A), and then remove the top cover.



Top left cover removal

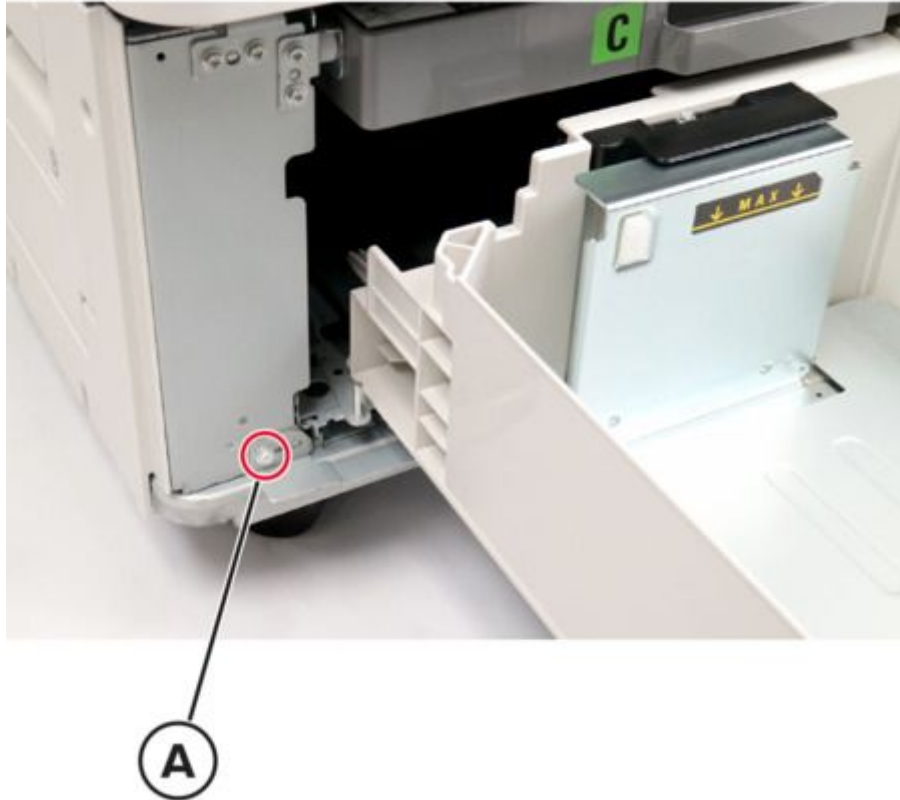
1. Remove the top cover. See [See "Top cover removal" on page 1280](#).
2. Remove the top left cover.



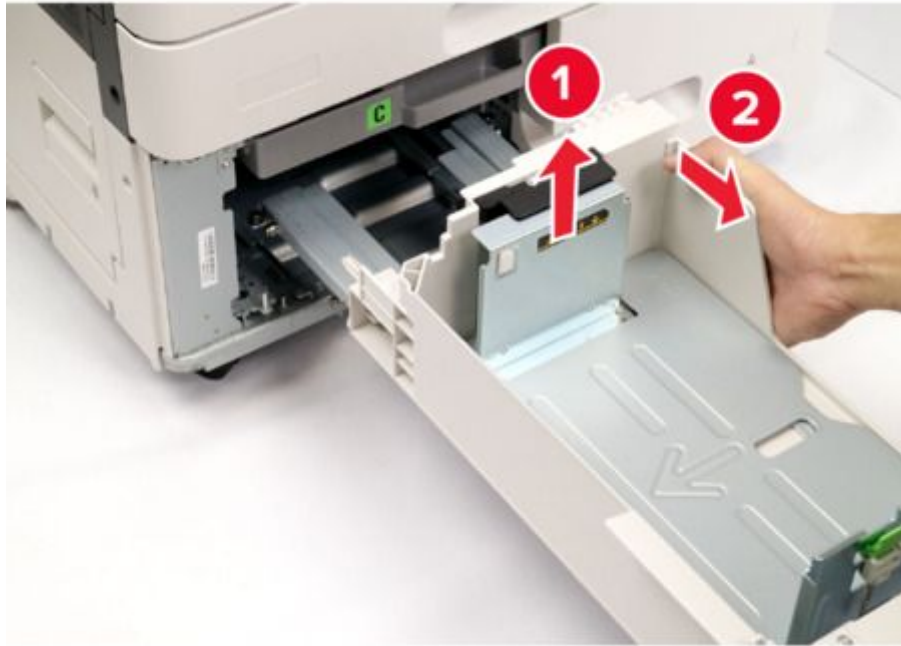
2000-sheet tandem tray removals

2000-sheet tandem tray insert (tray 3) removal

1. Pull out the 2000-sheet tandem tray insert (tray 3), and then remove the screw (A).

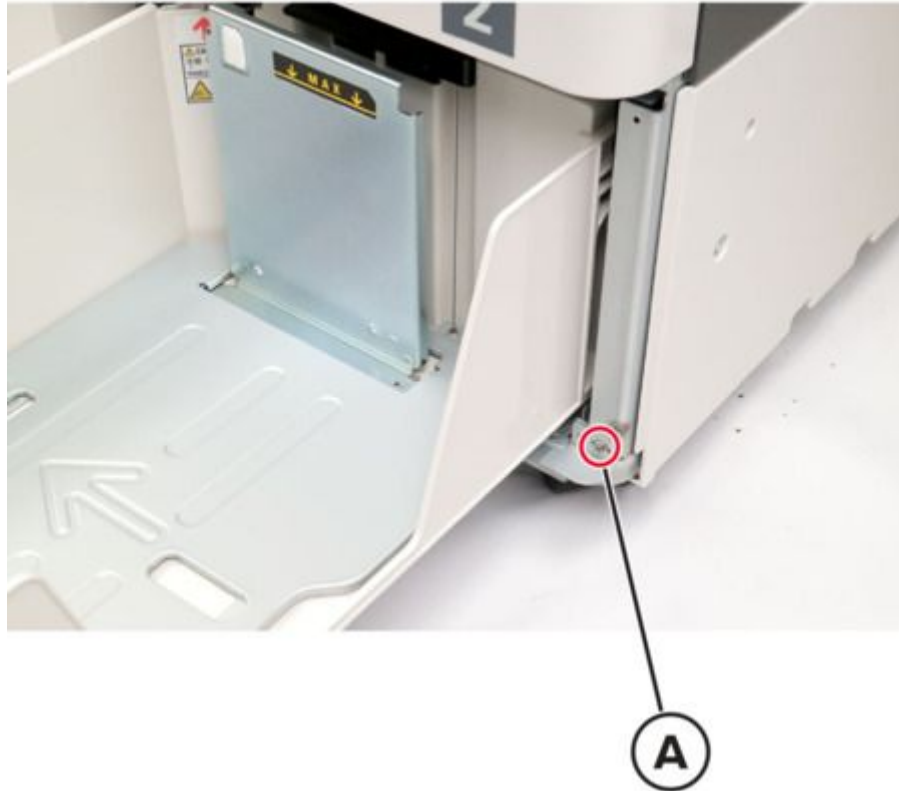


2. Remove the 2000-sheet tandem tray insert (tray 3).

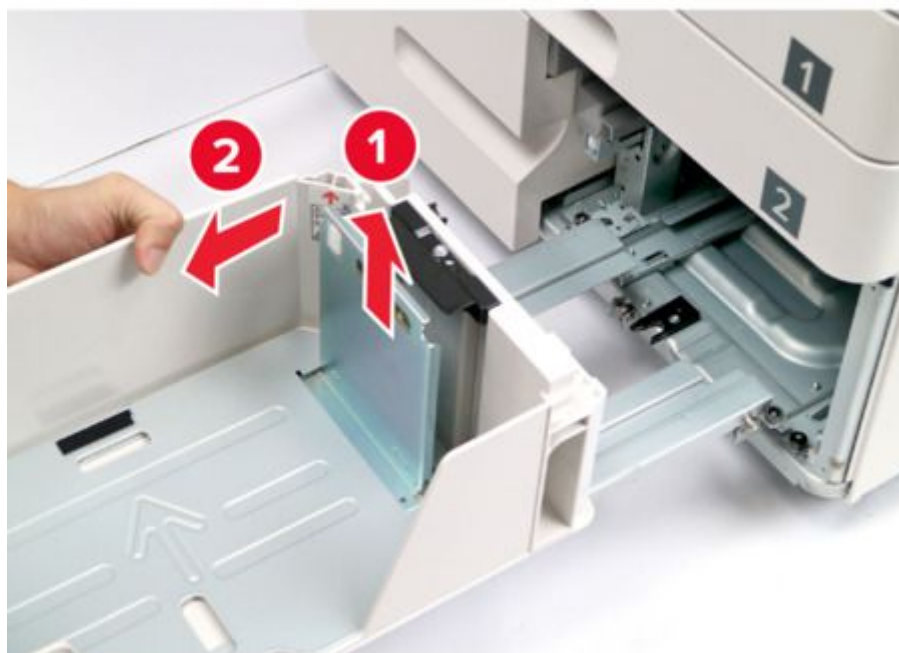


2000-sheet tandem tray insert (tray 4) removal

1. Pull out the 2000-sheet tandem tray insert (tray 4), and then remove the screw (A).

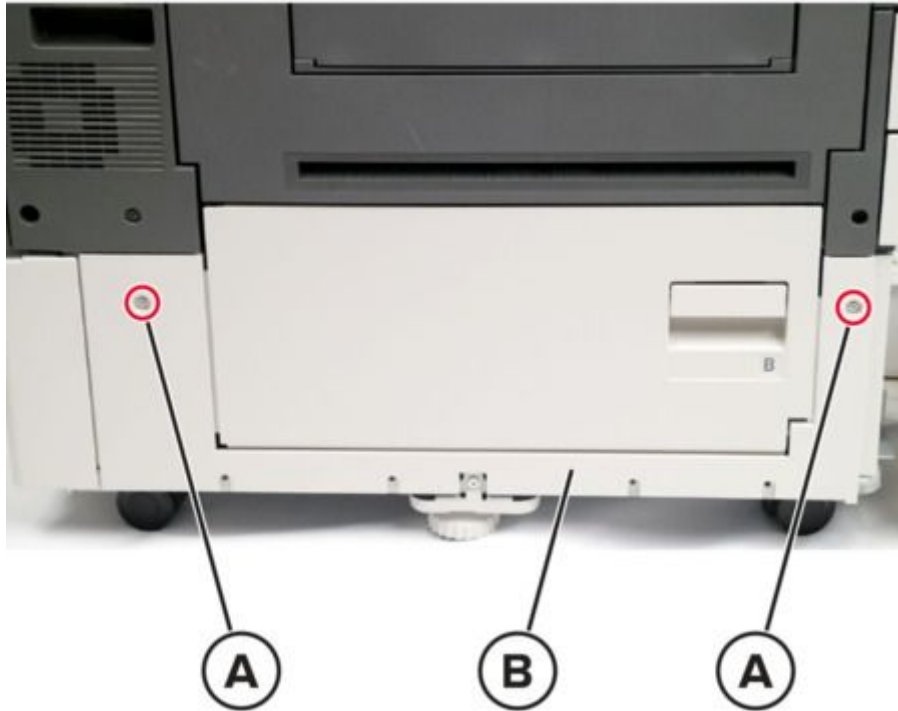


2. Remove the 2000-sheet tandem tray insert (tray 4).



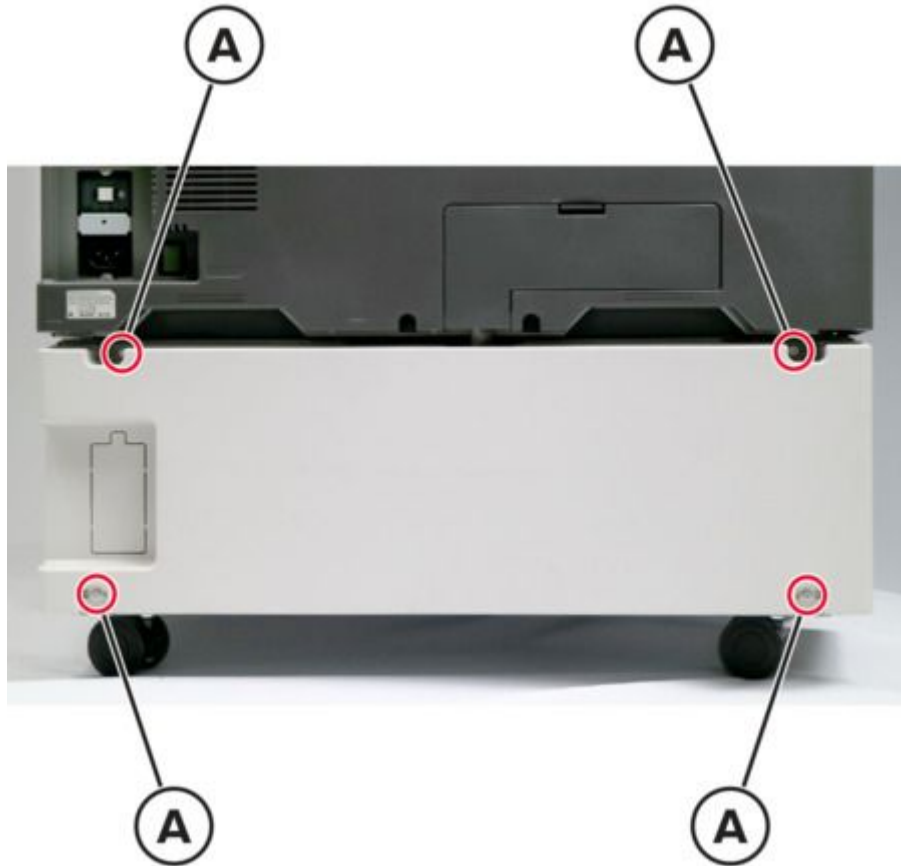
2000-sheet tandem tray left cover removal

1. Slightly open the 2000-sheet tandem tray insert (tray 3).
2. Remove the two screws (A), and then remove the 2000-sheet tandem tray left cover (B).



2000-sheet tandem tray rear cover removal

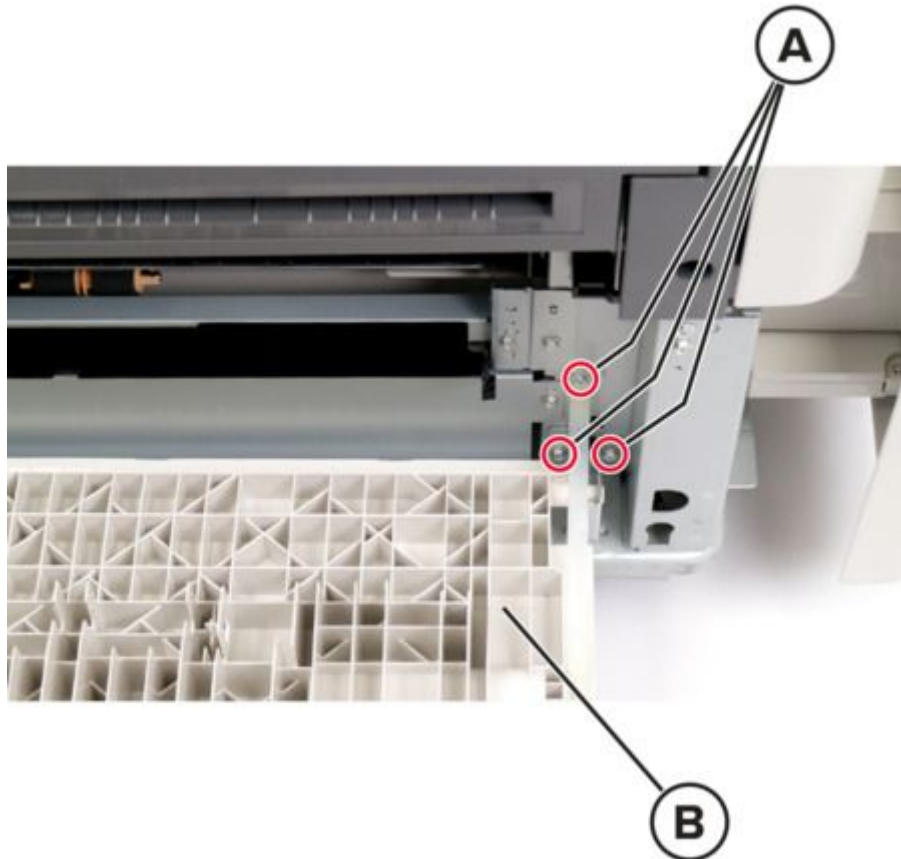
1. Remove the four screws (A).



2. Remove the cover.

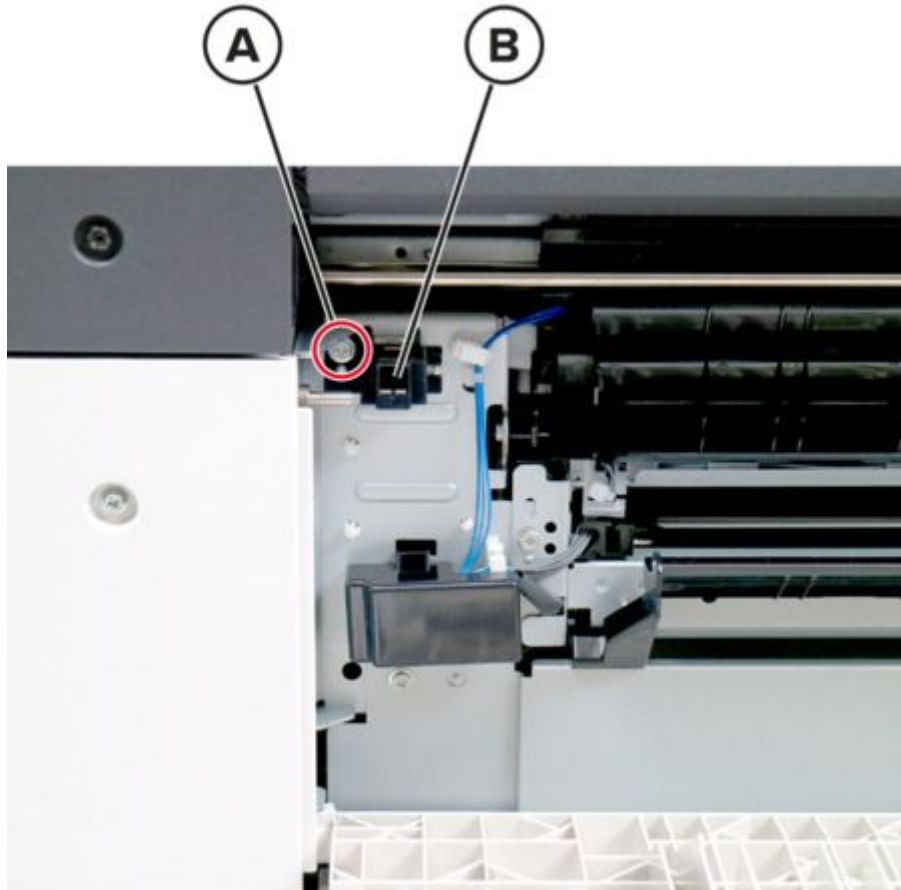
2000-sheet tandem tray door removal

1. Remove the 2000-sheet tandem tray left cover. See [See "2000-sheet tandem tray left cover removal" on page 1285](#).
2. Open the 2000-sheet tandem tray door, remove the three screws (A), and then remove the door (B).

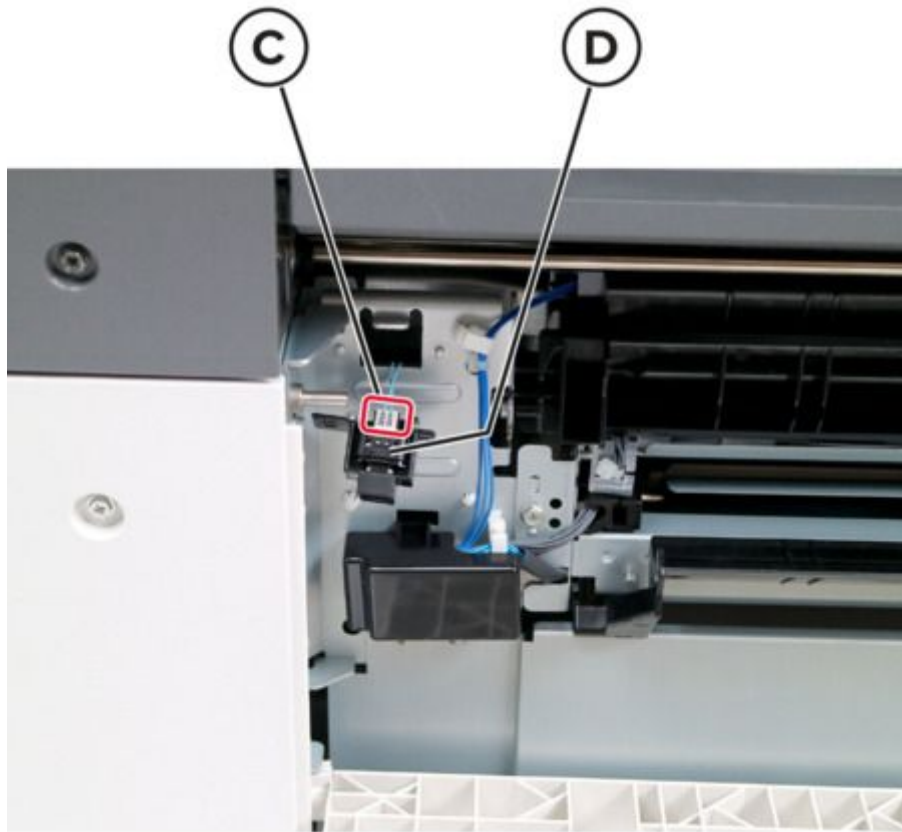


2000-sheet tandem tray jam door switch removal

1. Open the 2000-sheet tandem tray door.
2. Remove the screw (A), and then remove the cover (B).

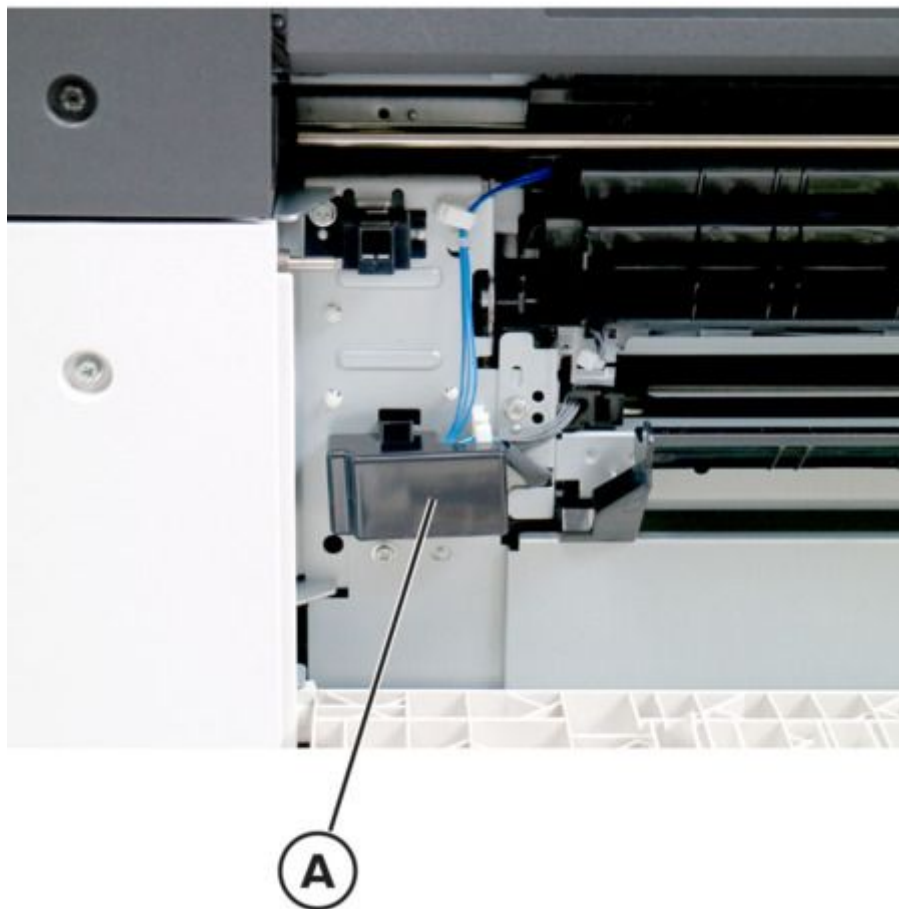


3. Disconnect the cable (C), and then remove the 2000-sheet tandem tray jam door switch (D).

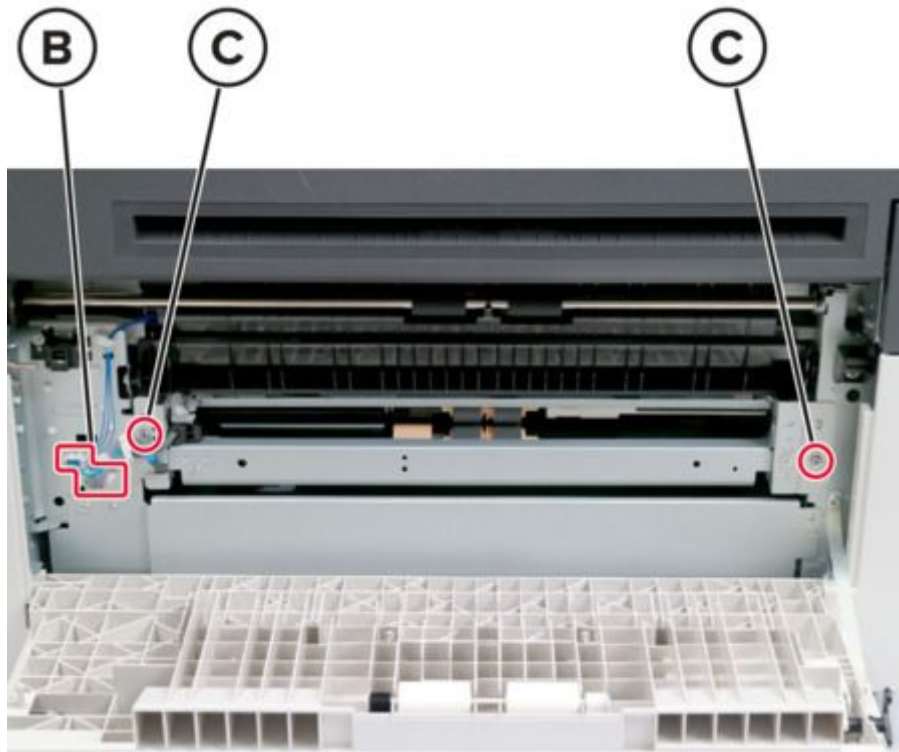


2000-sheet tandem tray feeder (tray 3) removal

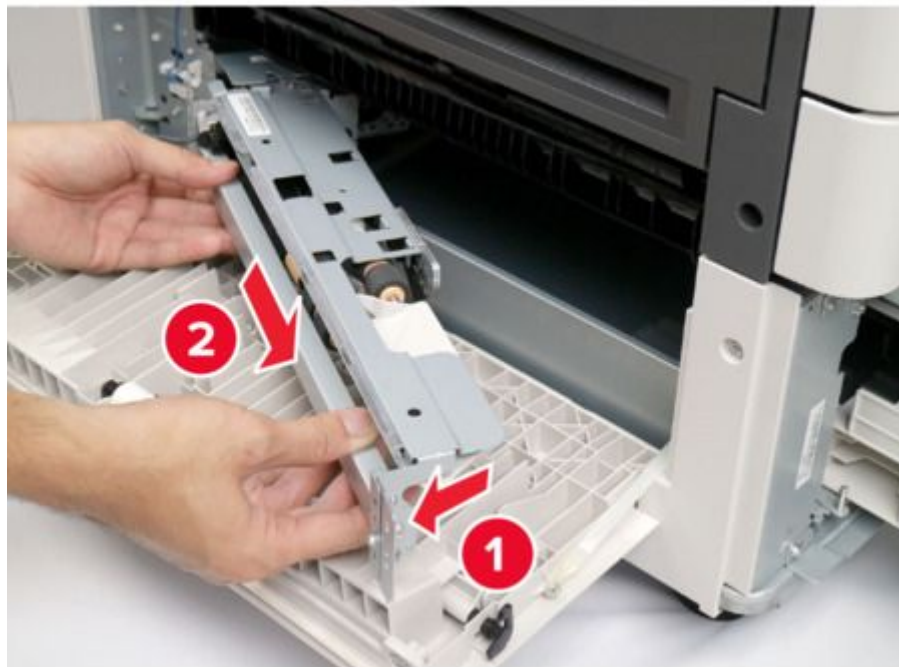
1. Open the 2000-sheet tandem tray door.
2. Open the 2000-sheet tandem tray insert (tray 3).
3. Open the 2000-sheet tandem tray insert (tray 4).
4. Open the 2000-sheet tandem tray horizontal transport (tray 4).
5. Remove the 2000-sheet tandem tray feed guide (tray 3). See [See "2000-sheet tandem tray feed guide \(tray 3\) removal" on page 1305.](#)
6. Remove the cable cover (A).



7. Disconnect the two cables (B), and then remove the two screws (C).



8. Remove the 2000-sheet tandem tray feeder (tray 3).



2000-sheet tandem tray horizontal transport (tray 4) removal

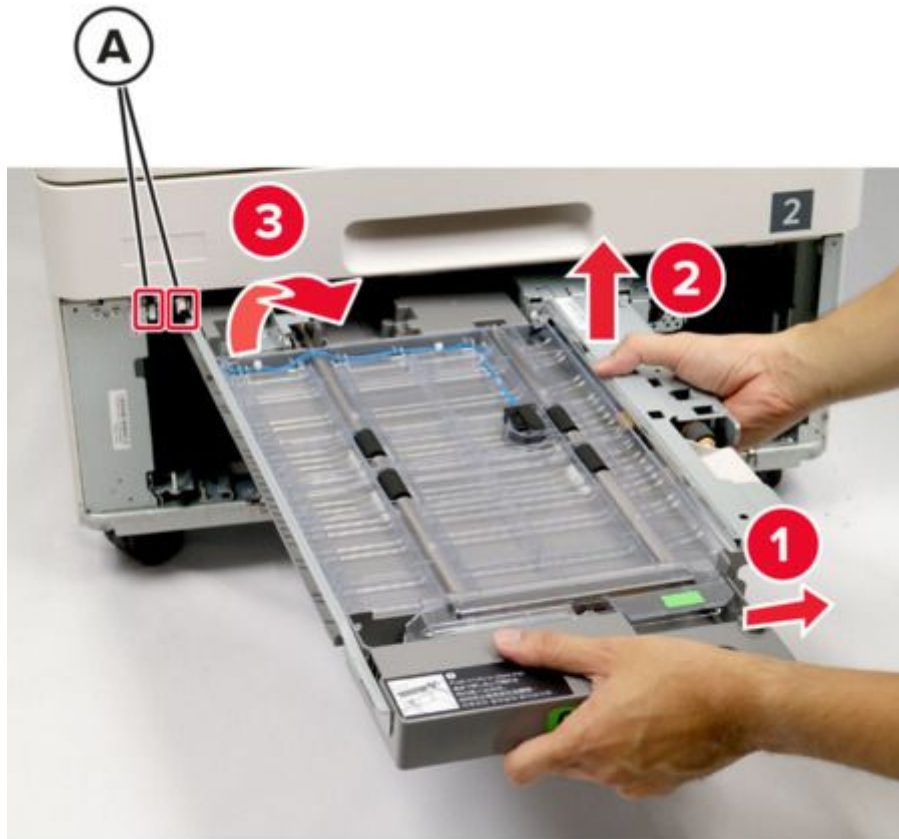
1. Remove the 2000-sheet tandem tray insert (tray 3). See [See "2000-sheet tandem tray insert \(tray 3\) removal" on page 1282.](#)
2. Remove the 2000-sheet tandem tray insert (tray 4). See [See "2000-sheet tandem tray insert \(tray 4\) removal" on page 1284.](#)
3. Pull out the 2000-sheet tandem tray horizontal transport (tray 4).



4. Remove the 2000-sheet tandem tray horizontal transport (tray 4).

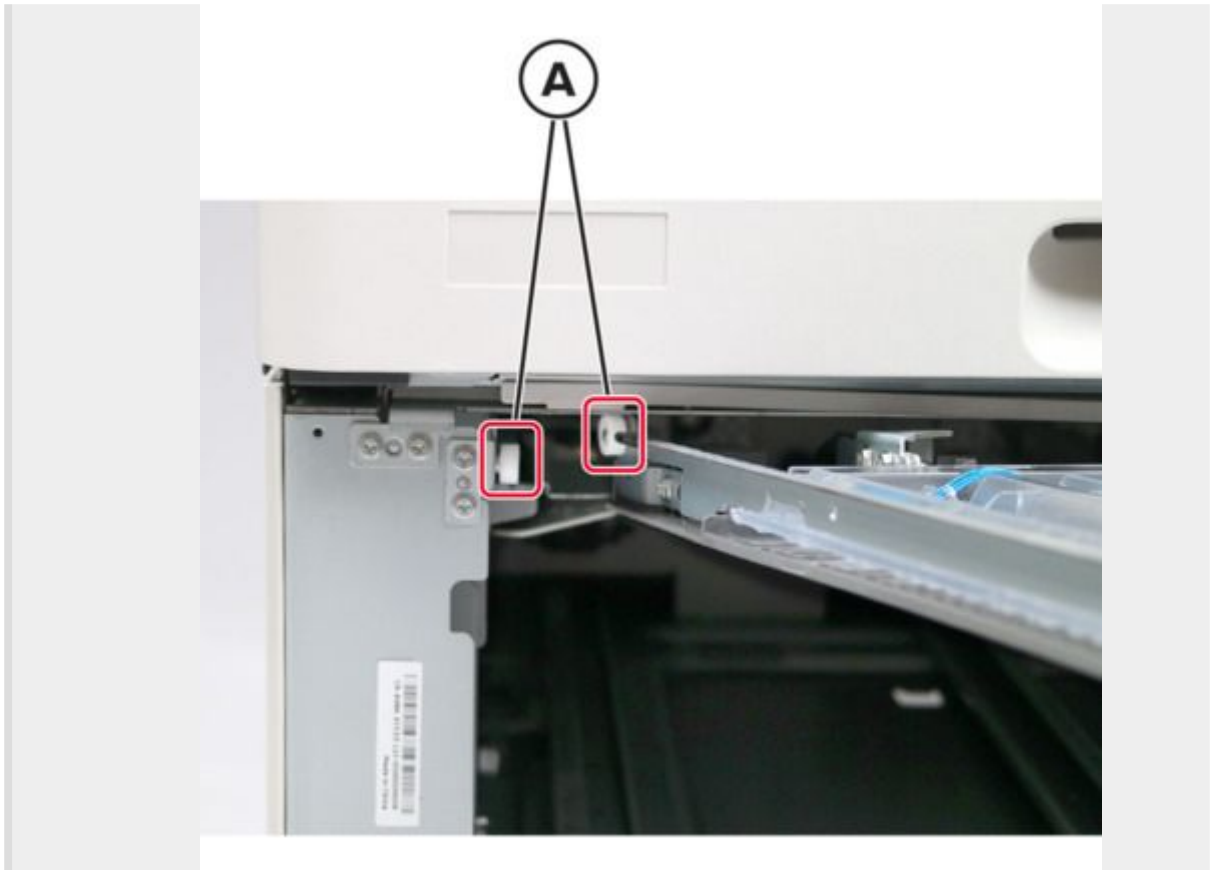
NOTES

Make sure to clear the two rollers (A) from their rails.

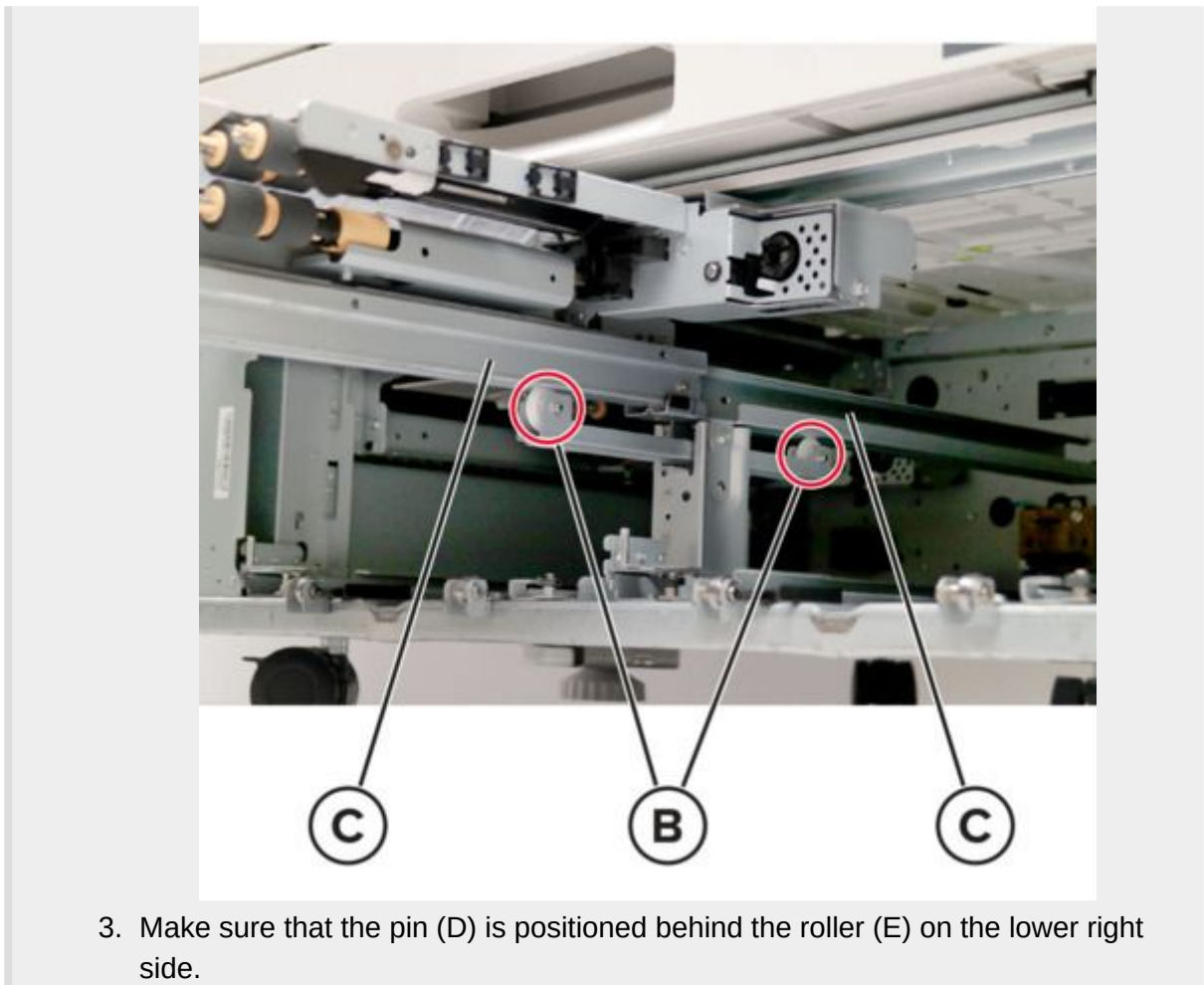


INSTALLATION NOTE

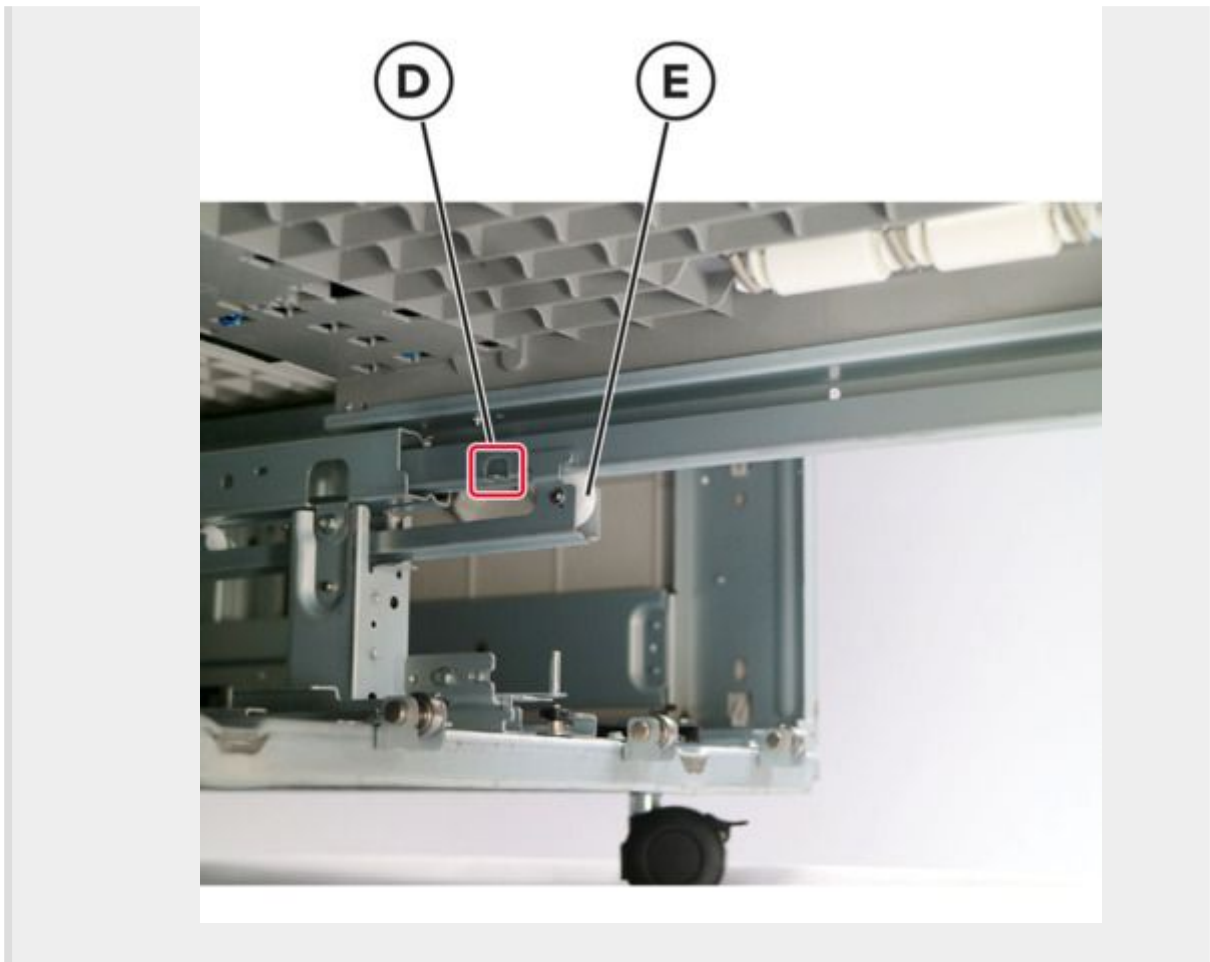
1. Make sure to properly align the two rollers (A) with their rails on the left side.



2. Make sure to properly align the two rollers (B) with the two rails (C), which is on the lower right side.

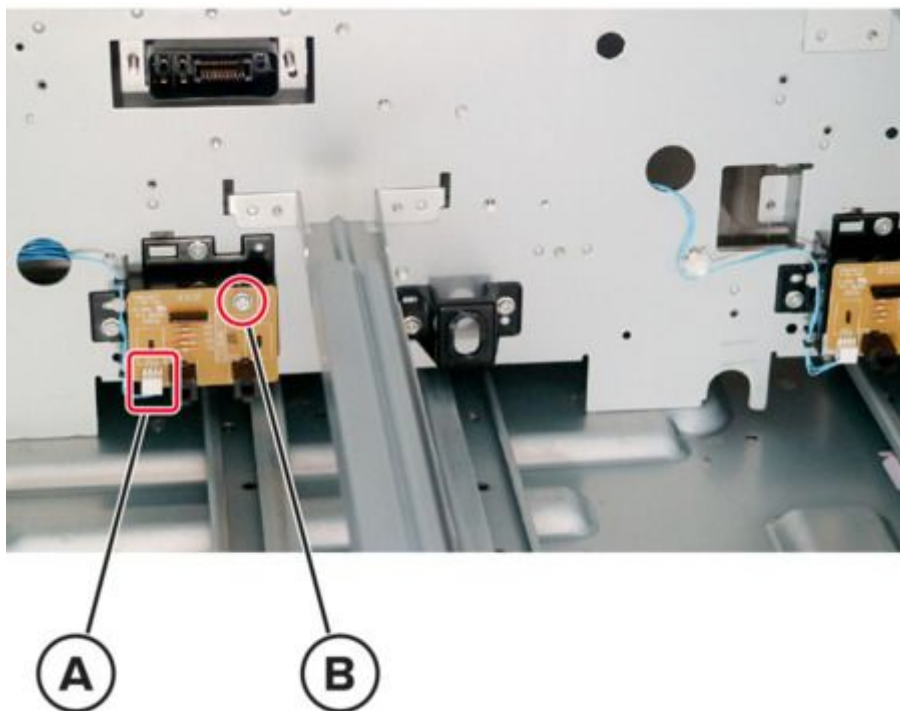


3. Make sure that the pin (D) is positioned behind the roller (E) on the lower right side.



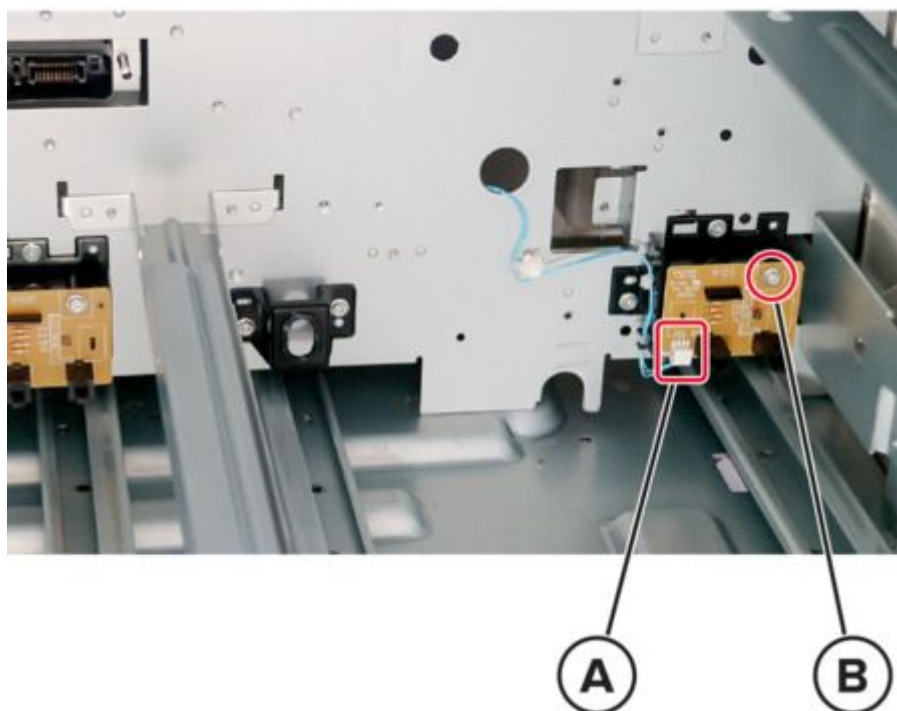
Sensor (2000-sheet tandem tray 3 paper size) removal

1. Remove the tray 1 insert.
2. Remove the tray 2 insert.
3. Remove the 2000-sheet tandem tray insert (tray 3). See [See "2000-sheet tandem tray insert \(tray 3\) removal" on page 1282.](#)
4. Remove the 2000-sheet tandem tray insert (tray 4) insert. See [See "2000-sheet tandem tray insert \(tray 4\) removal" on page 1284.](#)
5. Remove the 2000-sheet tandem tray horizontal transport (tray 4). See [See "2000-sheet tandem tray horizontal transport \(tray 4\) removal" on page 1292.](#)
6. Disconnect the cable (A), remove the screw (B), and then remove the sensor.



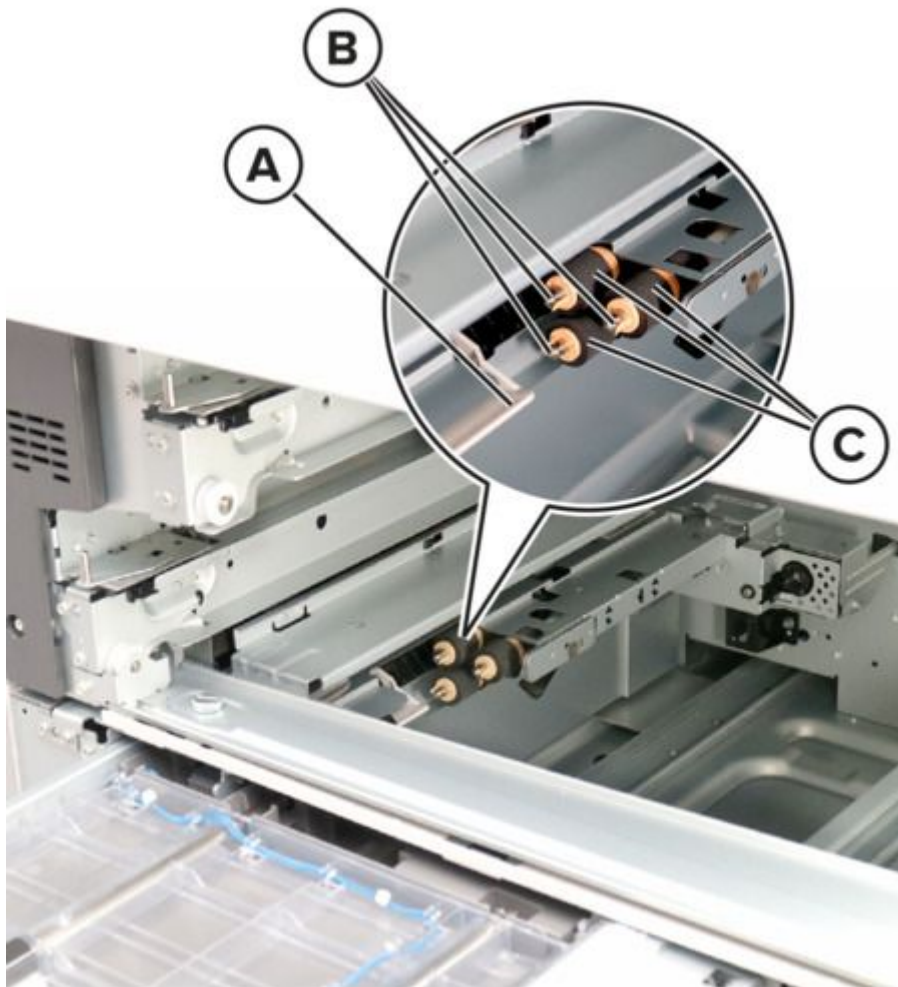
Sensor (2000-sheet tandem tray 4 paper size) removal

1. Remove the tray 1 insert.
2. Remove the tray 2 insert.
3. Remove the 2000-sheet tandem tray insert (tray 3). See [See "2000-sheet tandem tray insert \(tray 3\) removal" on page 1282.](#)
4. Remove the 2000-sheet tandem tray insert (tray 4). See [See "2000-sheet tandem tray insert \(tray 4\) removal" on page 1284.](#)
5. Remove the 2000-sheet tandem tray horizontal transport (tray 4). See [See "2000-sheet tandem tray horizontal transport \(tray 4\) removal" on page 1292.](#)
6. Disconnect the cable (A), remove the screw (B), and then remove the sensor.



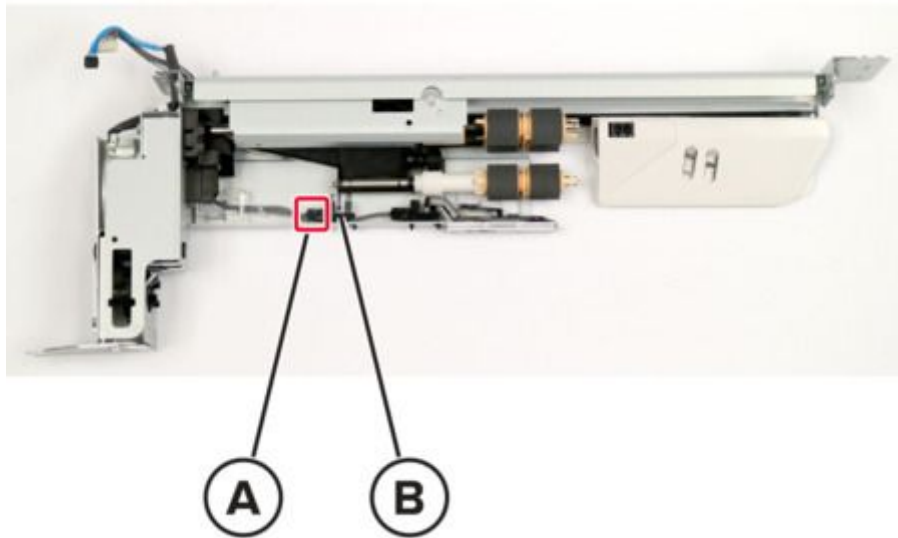
2000-sheet tandem tray roller kit (tray 3) removal

1. Remove the tray 1 insert.
2. Remove the tray 2 insert.
3. Remove the 2000-sheet tandem tray insert (tray 3). See [See "2000-sheet tandem tray insert \(tray 3\) removal" on page 1282.](#)
4. Remove the 2000-sheet tandem tray insert (tray 4). See [See "2000-sheet tandem tray insert \(tray 4\) removal" on page 1284.](#)
5. Remove the 2000-sheet tandem tray horizontal transport (tray 4). See [See "2000-sheet tandem tray horizontal transport \(tray 4\) removal" on page 1292.](#)
6. Move out the feed guide (A), release the three roller locking pins (B), and then remove the three rollers (C).



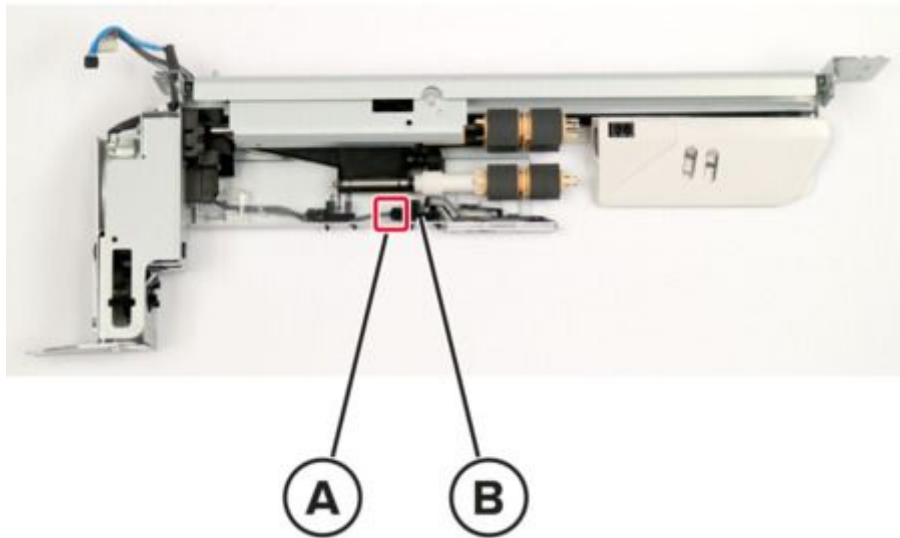
Sensor (2000-sheet tandem tray 3 pick position) removal

1. Open the 2000-sheet tandem tray door.
2. Open the 2000-sheet tandem tray insert (tray 3).
3. Remove the 2000-sheet tandem tray feeder (tray 3). See ["2000-sheet tandem tray feeder \(tray 3\) removal" on page 1290](#).
4. Disconnect the cable (A), and then remove the sensor (B).



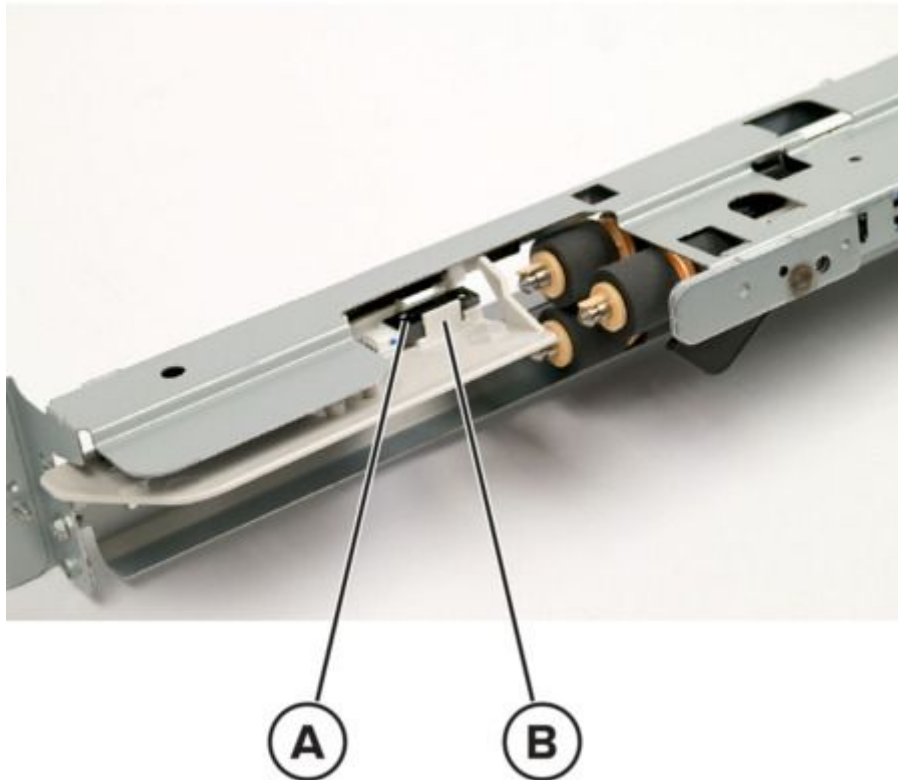
Sensor (2000-sheet tandem tray 3 paper present) removal

1. Open the 2000-sheet tandem tray door.
2. Open the 2000-sheet tandem tray insert (tray 3).
3. Remove the 2000-sheet tandem tray feeder (tray 3). See [See "2000-sheet tandem tray feeder \(tray 3\) removal" on page 1290.](#)
4. Disconnect the cable (A), and then remove the sensor (B).

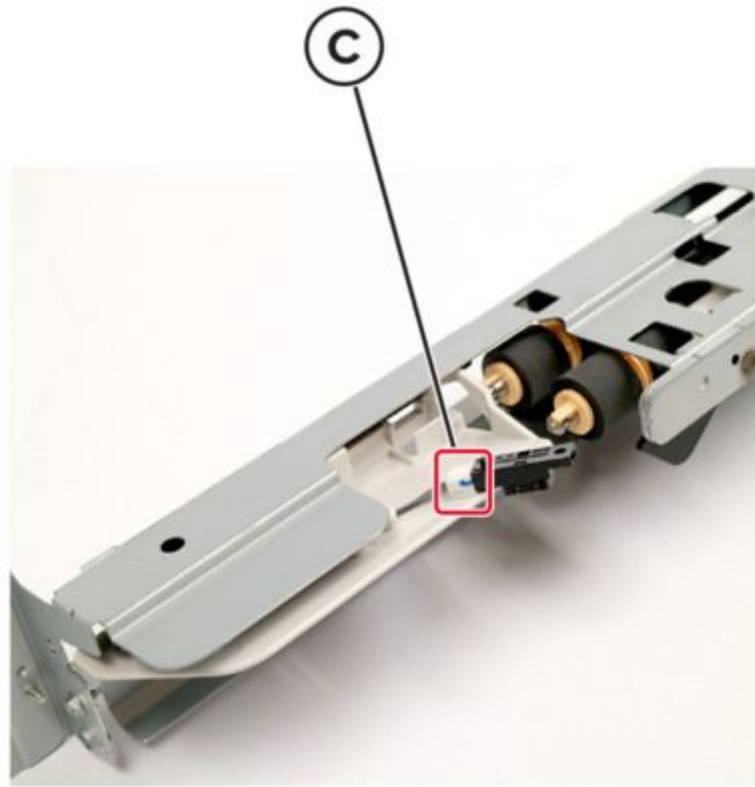


Sensor (2000-sheet tandem tray 3 feed) removal

1. Open the 2000-sheet tandem tray door.
2. Open the 2000-sheet tandem tray insert (tray 3).
3. Remove the 2000-sheet tandem tray feeder (tray 3). See [See "2000-sheet tandem tray feeder \(tray 3\) removal" on page 1290.](#)
4. Release the sensor (A) from the latch (B).

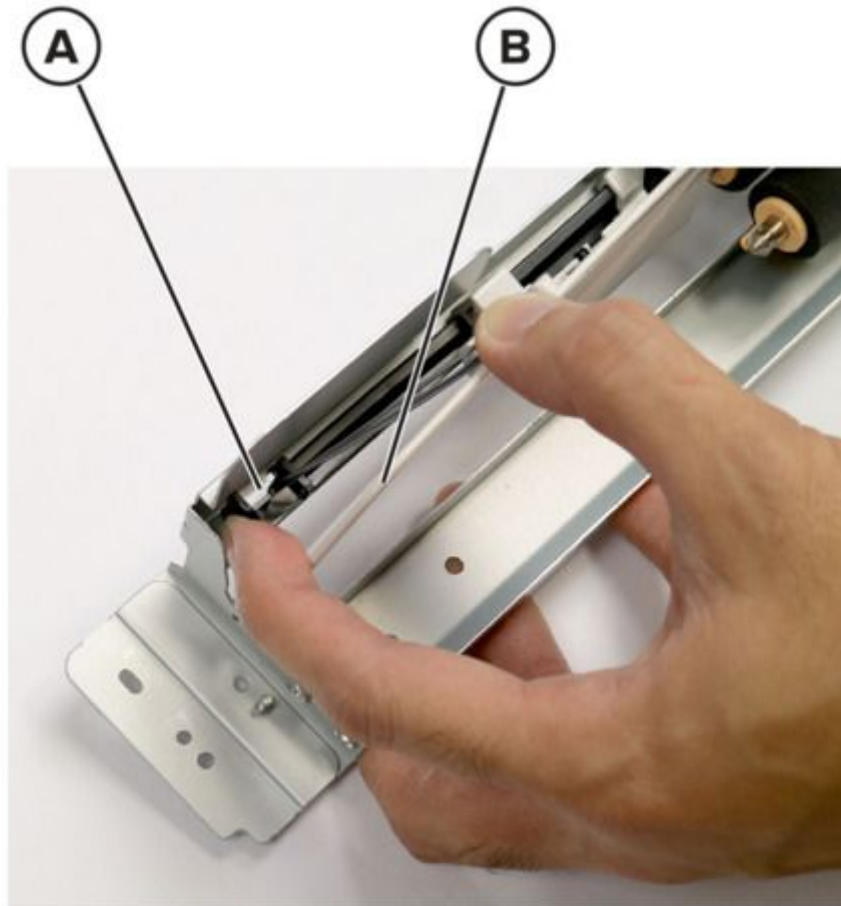


5. Disconnect the cable (C), and then remove the sensor.



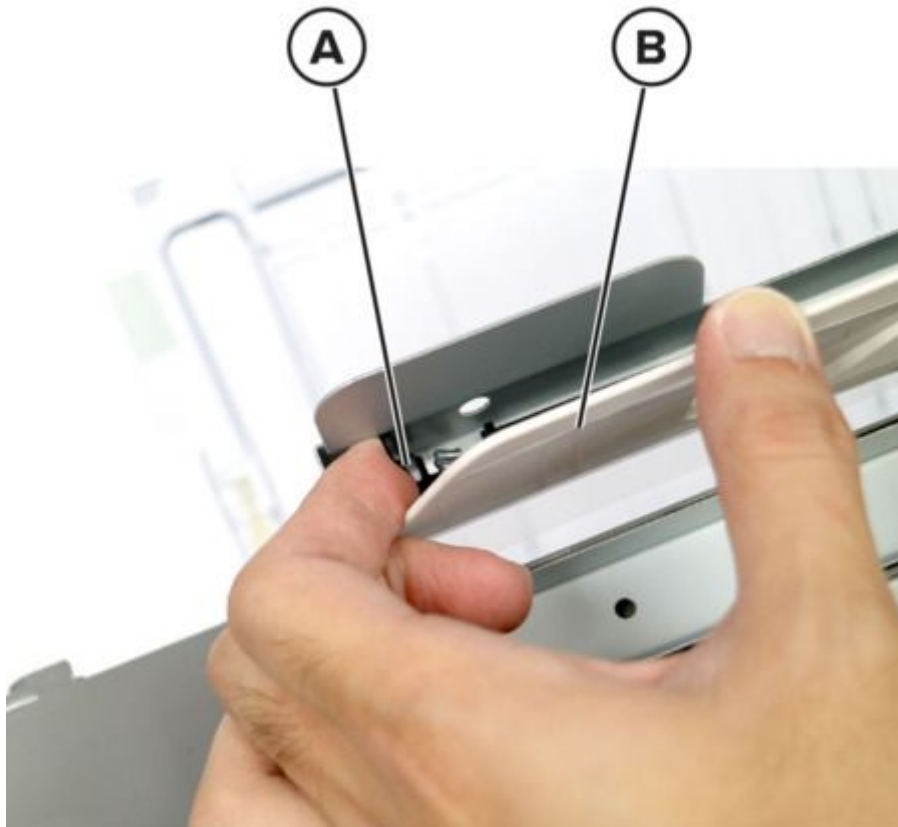
2000-sheet tandem tray transport guide (tray 3) removal

1. Open the 2000-sheet tandem tray door.
2. Remove the 2000-sheet tandem tray transport guide (tray 3).



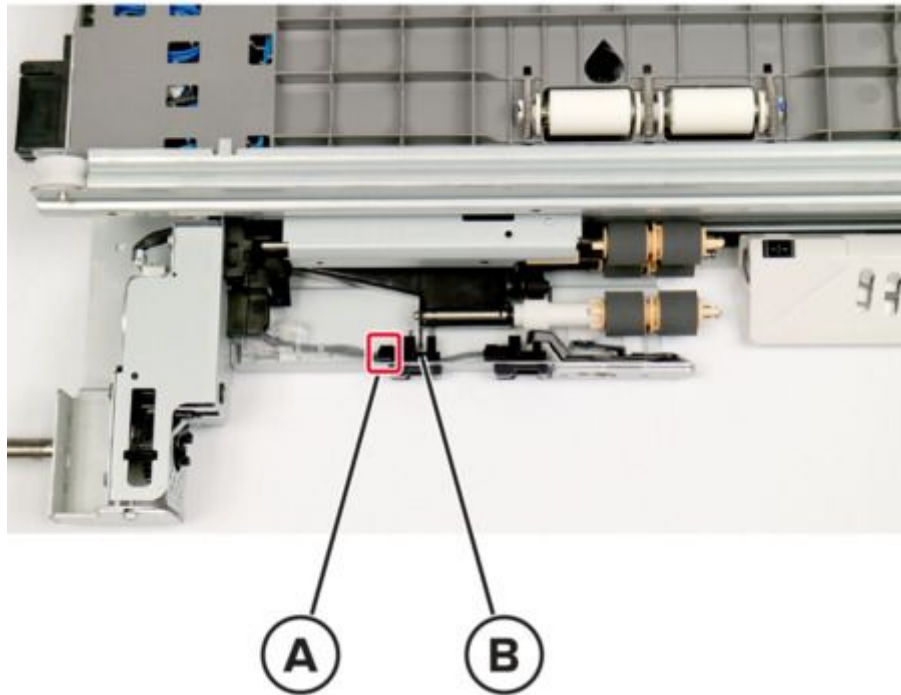
2000-sheet tandem tray feed guide (tray 3) removal

1. Open the 2000-sheet tandem tray door.
2. Open the 2000-sheet tandem tray insert (tray 3).
3. Remove the 2000-sheet tandem tray feeder (tray 3). See [See "2000-sheet tandem tray feeder \(tray 3\) removal" on page 1290.](#)
4. Unlock the rail (A), and then remove the 2000-sheet tandem tray feed guide (tray 3) (B).



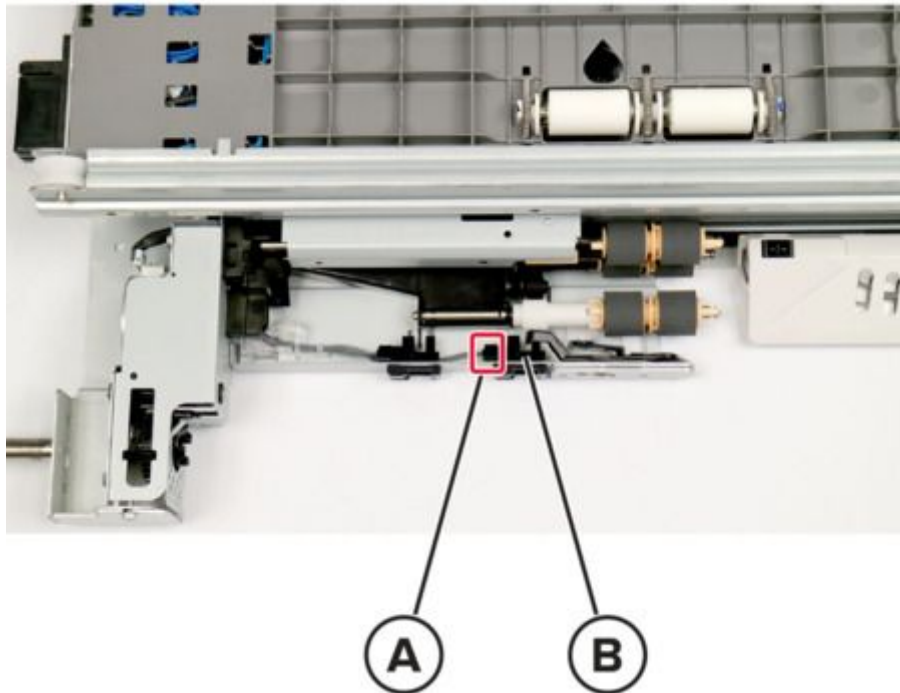
Sensor (2000-sheet tandem tray 4 pick position) removal

1. Open the 2000-sheet tandem tray door.
2. Open the 2000-sheet tandem tray insert (tray 4).
3. Remove the 2000-sheet tandem tray horizontal transport (tray 4). See [See "2000-sheet tandem tray horizontal transport \(tray 4\) removal" on page 1292.](#)
4. Disconnect the cable (A), and then remove the sensor (B).



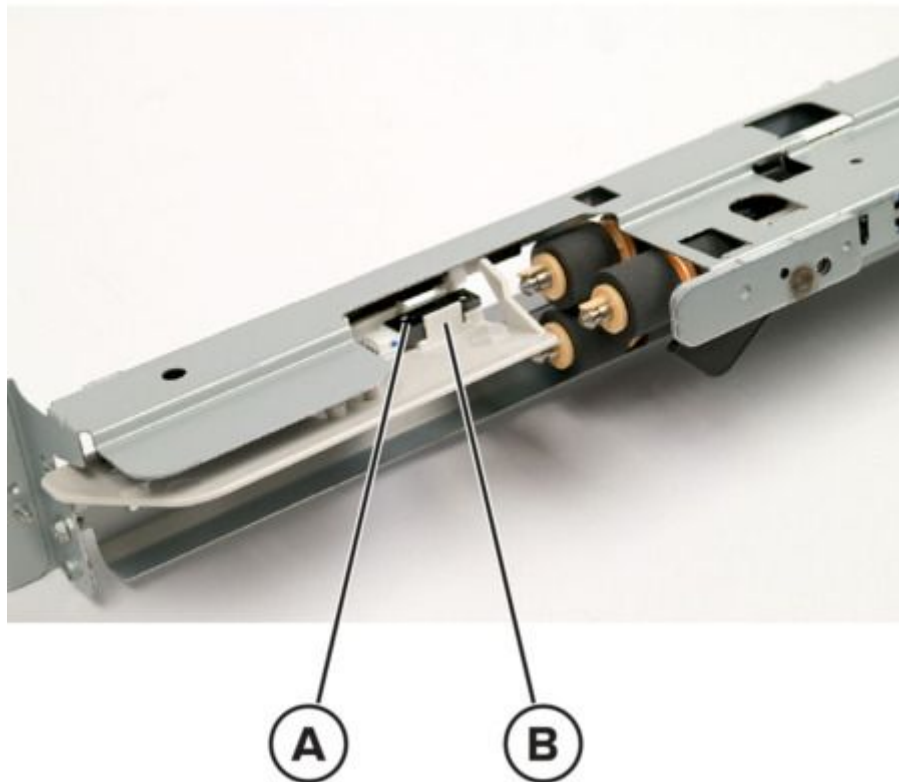
Sensor (2000-sheet tandem tray 4 paper present) removal

1. Open the 2000-sheet tandem tray door.
2. Open the 2000-sheet tandem tray insert (tray 4).
3. Remove the 2000-sheet tandem tray horizontal transport (tray 4). See [See "2000-sheet tandem tray horizontal transport \(tray 4\) removal" on page 1292.](#)
4. Disconnect the cable (A), and then remove the sensor (B).

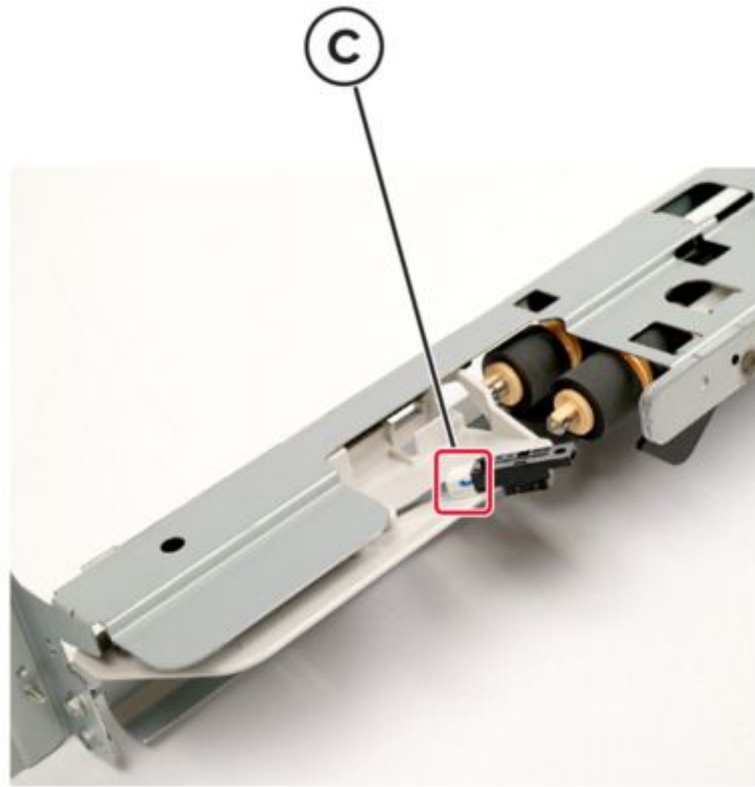


Sensor (2000-sheet tandem tray 4 feed) removal

1. Open the 2000-sheet tandem tray door.
2. Open the 2000-sheet tandem tray insert (tray 4).
3. Remove the 2000-sheet tandem tray horizontal transport (tray 4). See [See "2000-sheet tandem tray horizontal transport \(tray 4\) removal" on page 1292.](#)
4. Release the sensor (A) from the latch (B).

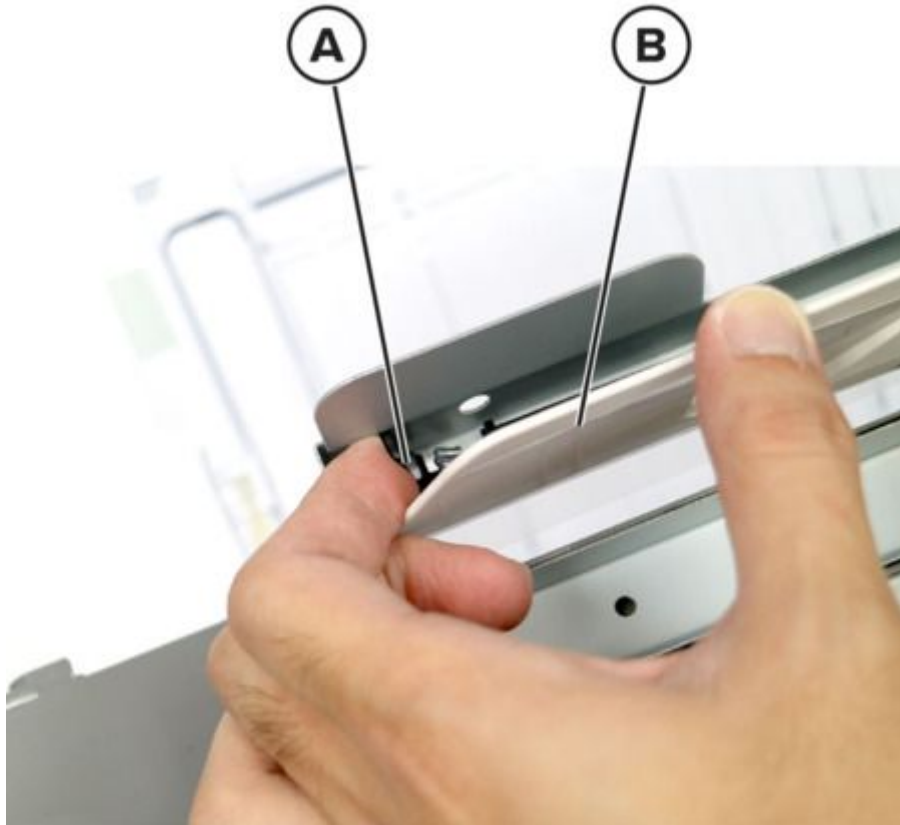


5. Disconnect the cable (C), and then remove the sensor.



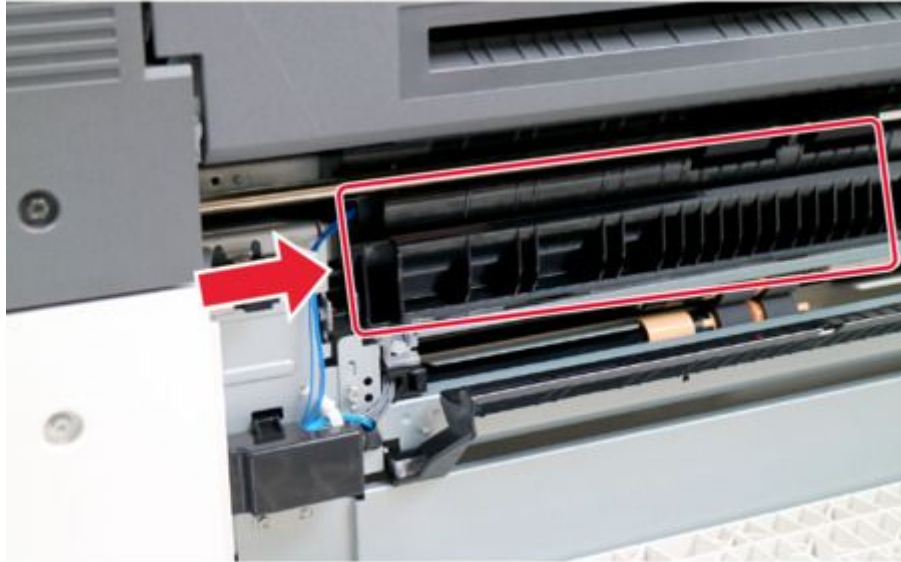
2000-sheet tandem tray feed guide (tray 4) removal

1. Open the 2000-sheet tandem tray door.
2. Open the 2000-sheet tandem tray insert (tray 4).
3. Remove the 2000-sheet tandem tray horizontal transport (tray 4). See [See "2000-sheet tandem tray horizontal transport \(tray 4\) removal" on page 1292.](#)
4. Unlock the rail (A), and then remove the 2000-sheet tandem tray feed guide (tray 4) (B).



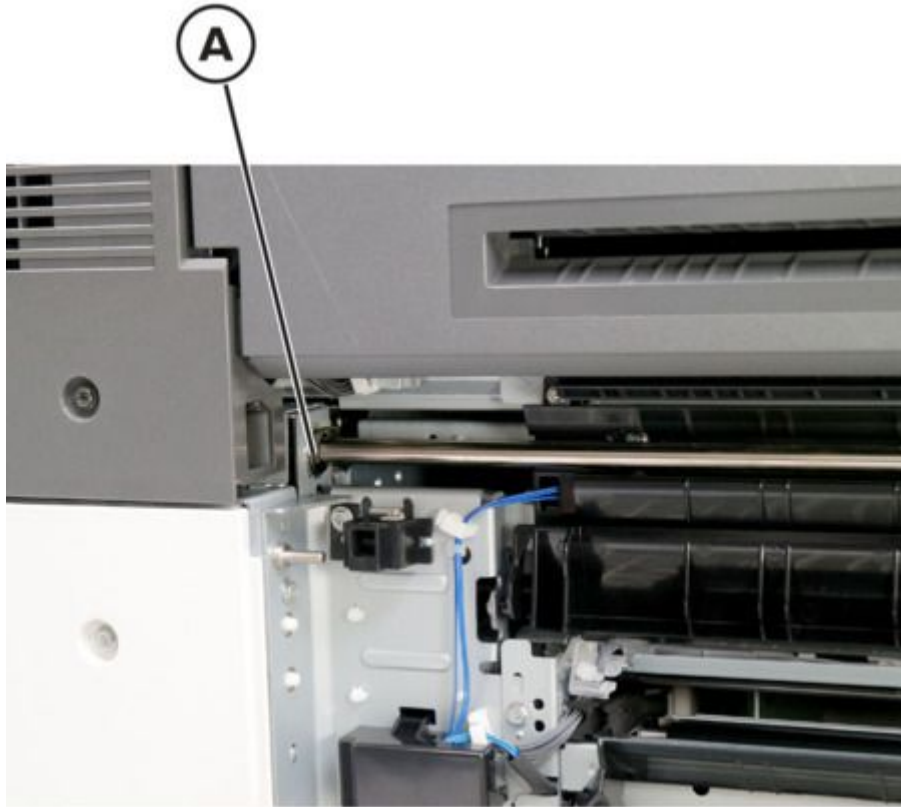
2000-sheet tandem tray transport guide (tray 4) removal

1. Open the 2000-sheet tandem tray door.
2. Remove the 2000-sheet tandem tray transport guide (tray 4) (A).



2000-sheet tandem tray 3 transport roller removal

1. Open the 2000-sheet tandem tray 3 door.
2. Remove the E-clip (A).



3. Push the transport roller to the left to release it, and then pull to remove it.



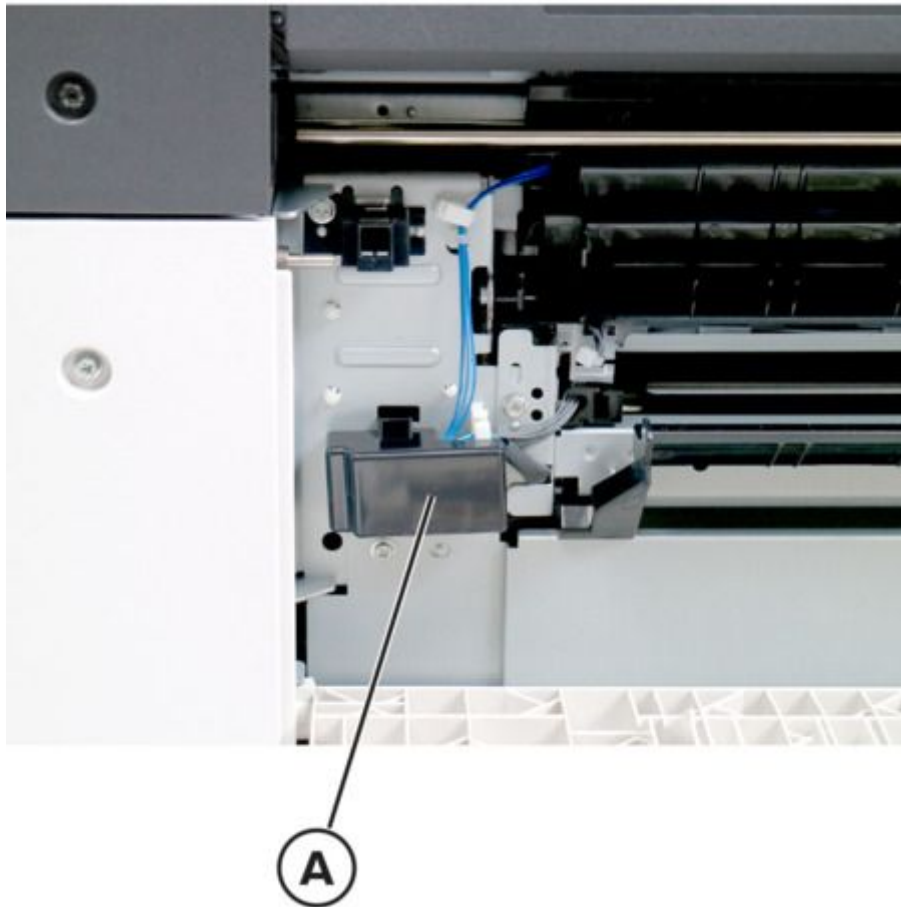
WARNING—POTENTIAL DAMAGE

Do not lose the bearing and washer (A).

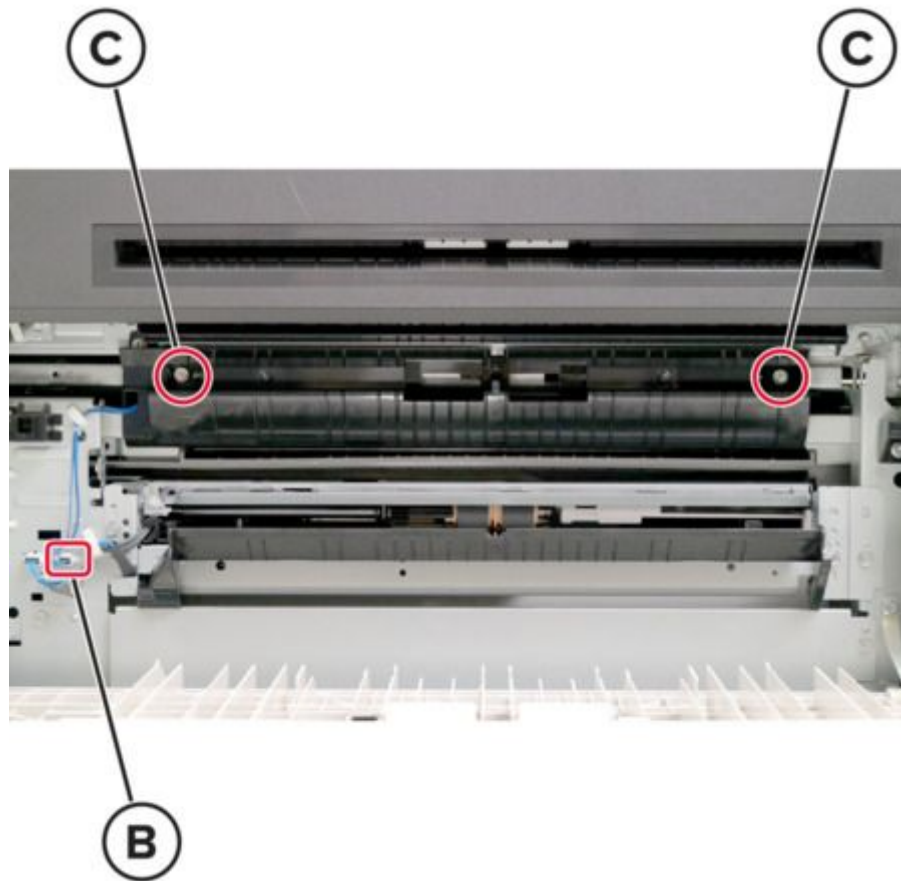


2000-sheet tandem tray transport guide assembly removal

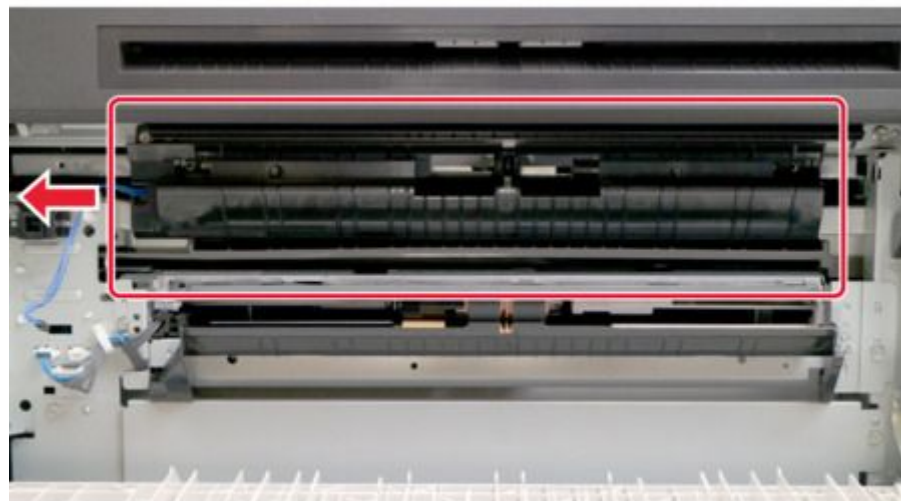
1. Remove the 2000-sheet tandem tray transport guide (tray 4). See [See "2000-sheet tandem tray transport guide \(tray 4\) removal" on page 1311.](#)
2. Remove the 2000-sheet tandem tray transport roller. See [See "2000-sheet tandem tray 3 transport roller removal" on page 1312.](#)
3. Remove the cable cover (A).



4. Disconnect the cable (B), and then remove the two screws (C).

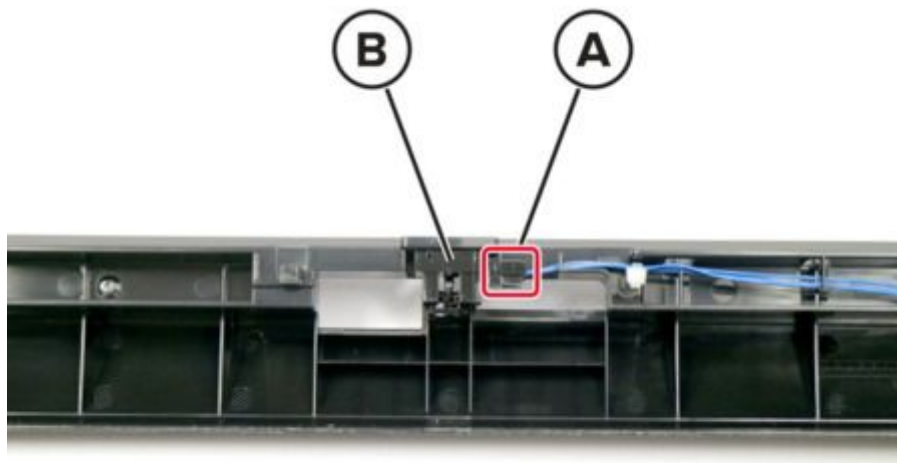


5. Remove the 2000-sheet tandem tray transport guide assembly (D).



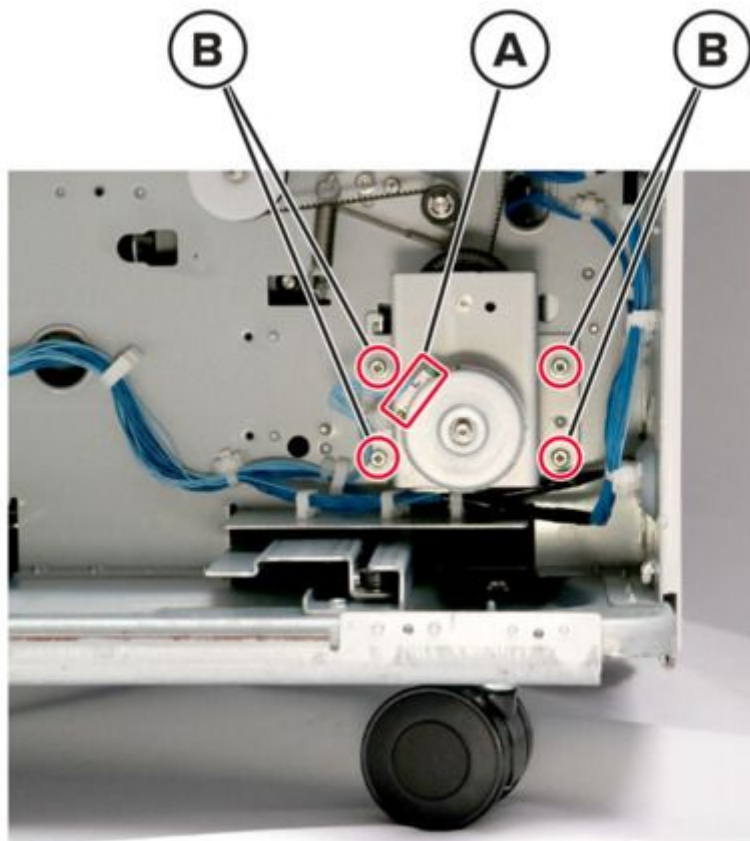
Sensor (2000-sheet tandem tray transport) removal

1. Remove the 2000-sheet tandem tray transport guide (tray 4). See [See "2000-sheet tandem tray transport guide \(tray 4\) removal" on page 1311.](#)
2. Remove the 2000-sheet tandem tray transport roller. See [See "2000-sheet tandem tray 3 transport roller removal" on page 1312.](#)
3. Remove the 2000-sheet tandem tray transport guide assembly. See [See "2000-sheet tandem tray transport guide assembly removal" on page 1314.](#)
4. Disconnect the cable (A), and then remove the sensor (B).



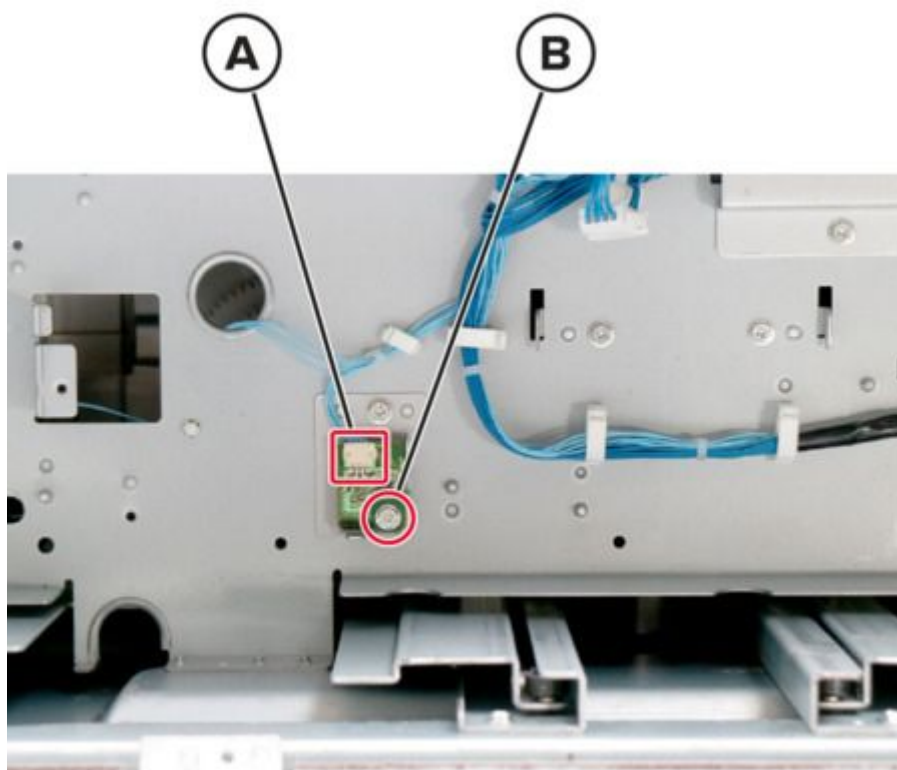
Motor (2000-sheet tandem tray transport) removal

1. Remove the 2000-sheet tandem tray rear cover. See [See "2000-sheet tandem tray rear cover removal" on page 1286.](#)
2. Disconnect the cable (A), and then remove the four screws (B).



2000-sheet tandem tray NV card removal

1. Remove the 2000-sheet tandem tray rear cover. See [See "2000-sheet tandem tray rear cover removal" on page 1286.](#)
2. Disconnect the cable (A), remove the screw (B), and then remove the 2000-sheet tandem tray NV card.



INSTALLATION NOTE

1. Find the input option factory NVM settings that came with the option.

NOTES

If the NVM settings that came with the option is not found, then contact the next level of support.

2. Set the type of input option to 2000-sheet tandem tray:

Enter the Diagnostics menu, and touch **Printer Setup > NV data information > Write NV data.**

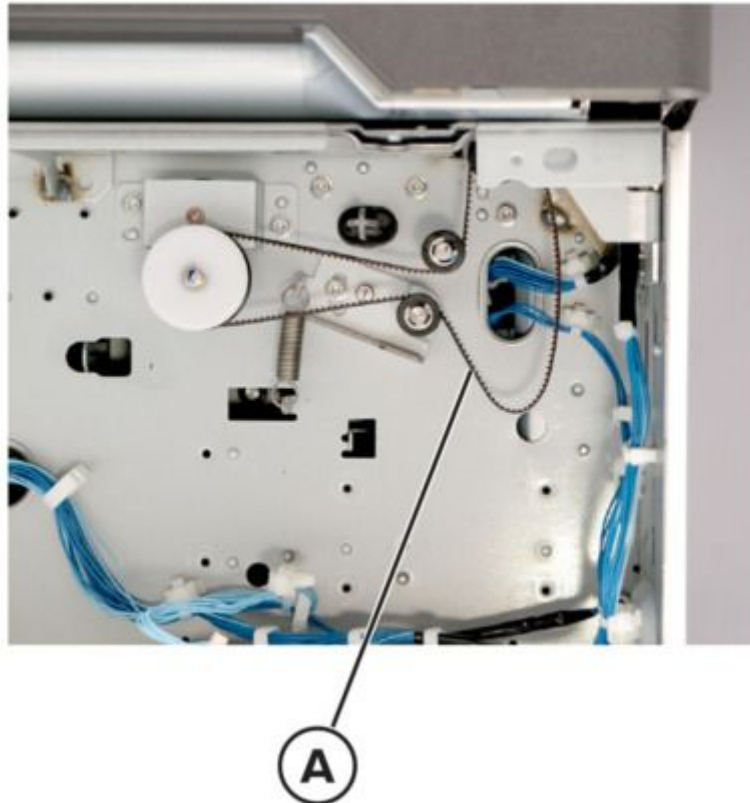
NV description	Chain number	Link number	NVM value
Setting the input option type	743	147	5
Setting the input option ID	743	269	See the NVM sheet

3. Perform tray 3 and tray 4 registration:

Enter the Diagnostics menus, and then touch **Printer Setup > Printer diagnostics and adjustments > Registration adjust > Tray 3/Tray 4**

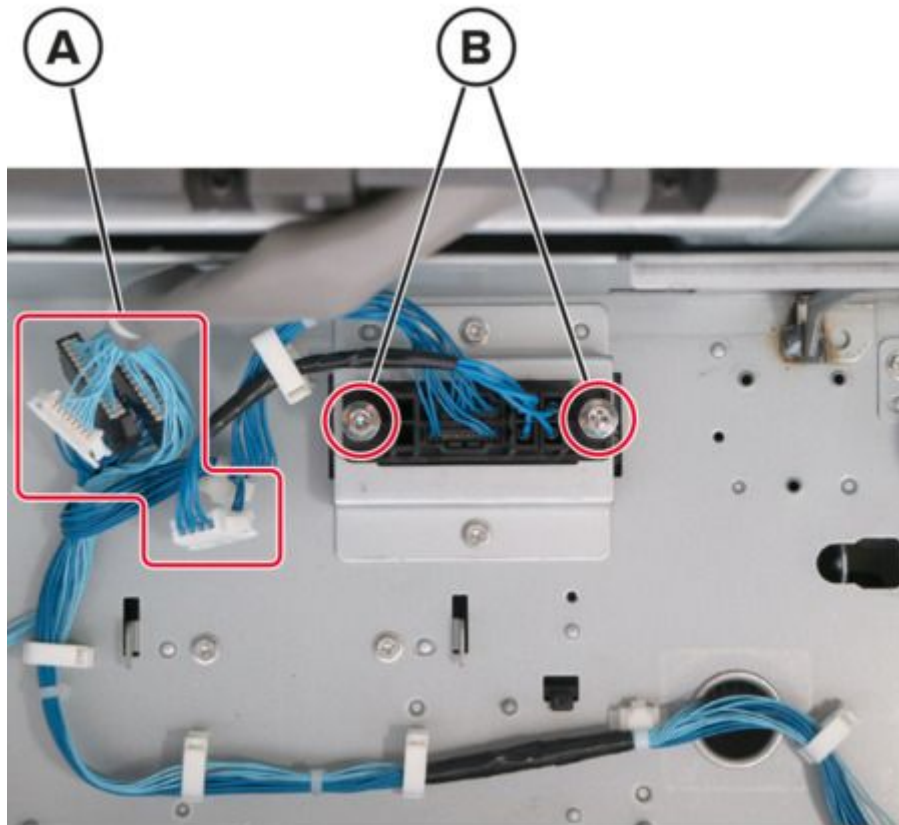
2000-sheet tandem tray belt removal

1. Remove the 2000-sheet tandem tray rear cover. See [See "2000-sheet tandem tray rear cover removal" on page 1286.](#)
2. Remove the motor (2000-sheet tandem tray transport). See [See "Motor \(2000-sheet tandem tray transport\) removal " on page 1317.](#)
3. Remove the belt (A).



2000-sheet tandem tray cable 1 removal

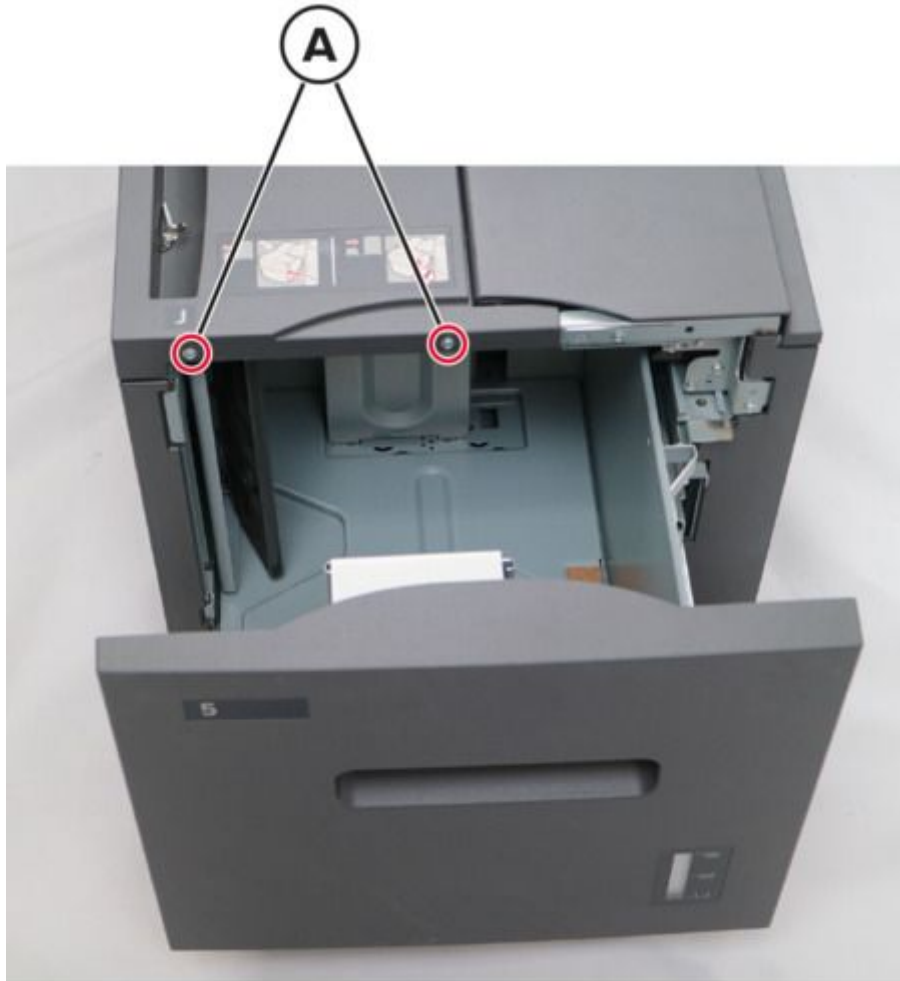
1. Remove the 2000-sheet tandem tray rear cover. See [See "2000-sheet tandem tray rear cover removal" on page 1286.](#)
2. Disconnect the four cables (A), remove the two screws (B), and then remove the 2000-sheet tandem tray cable 1.



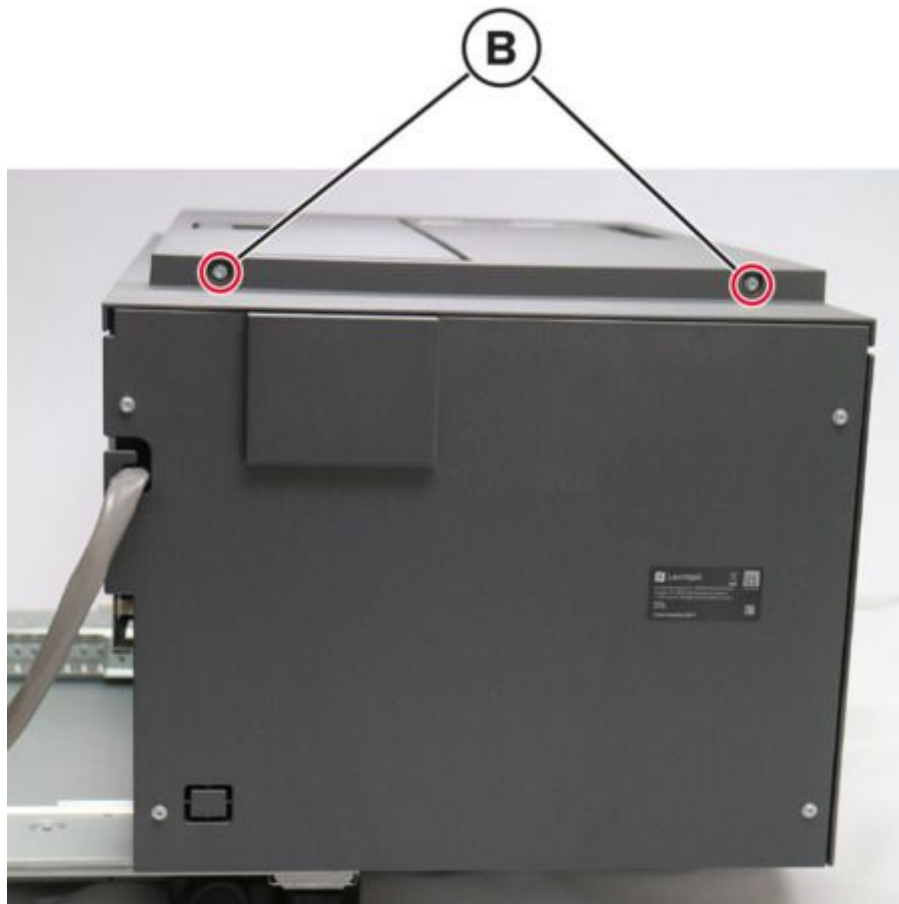
Optional 2000-sheet tray removals

2000-sheet tray top cover removal

1. Pull the tray insert.
2. Remove the two screws (A).



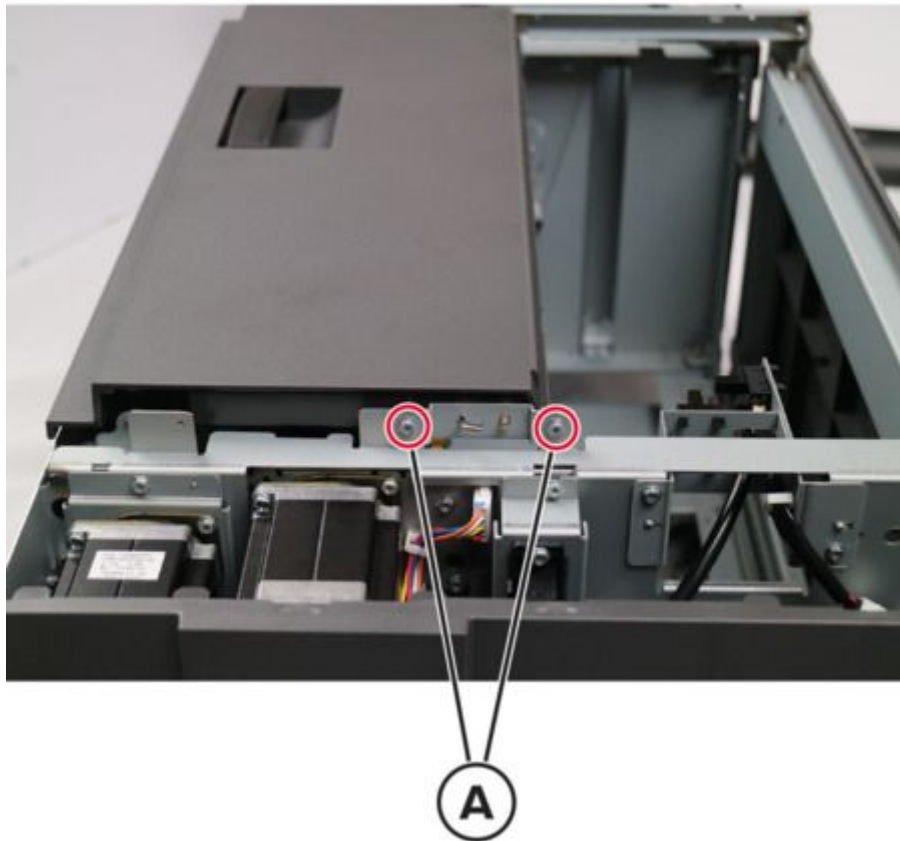
3. Remove the two screws (B).



4. Remove the top cover.

2000-sheet tray top door removal

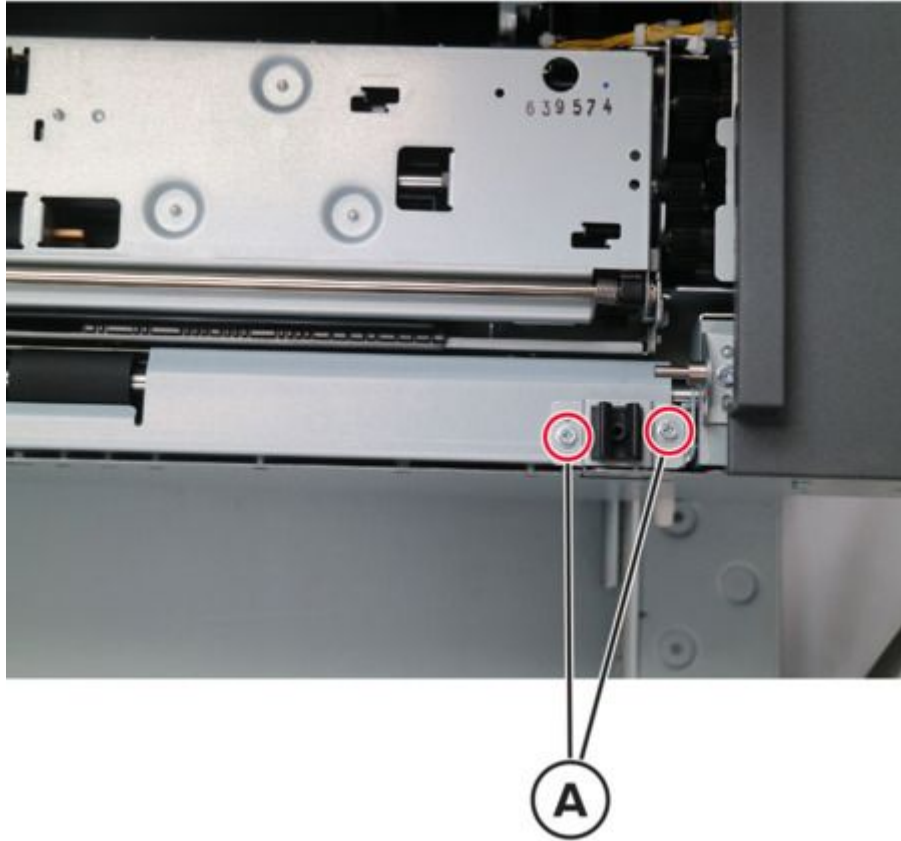
1. Remove the top cover. See "2000-sheet tray top cover removal" on page 1322.
2. Remove the two screws (A).



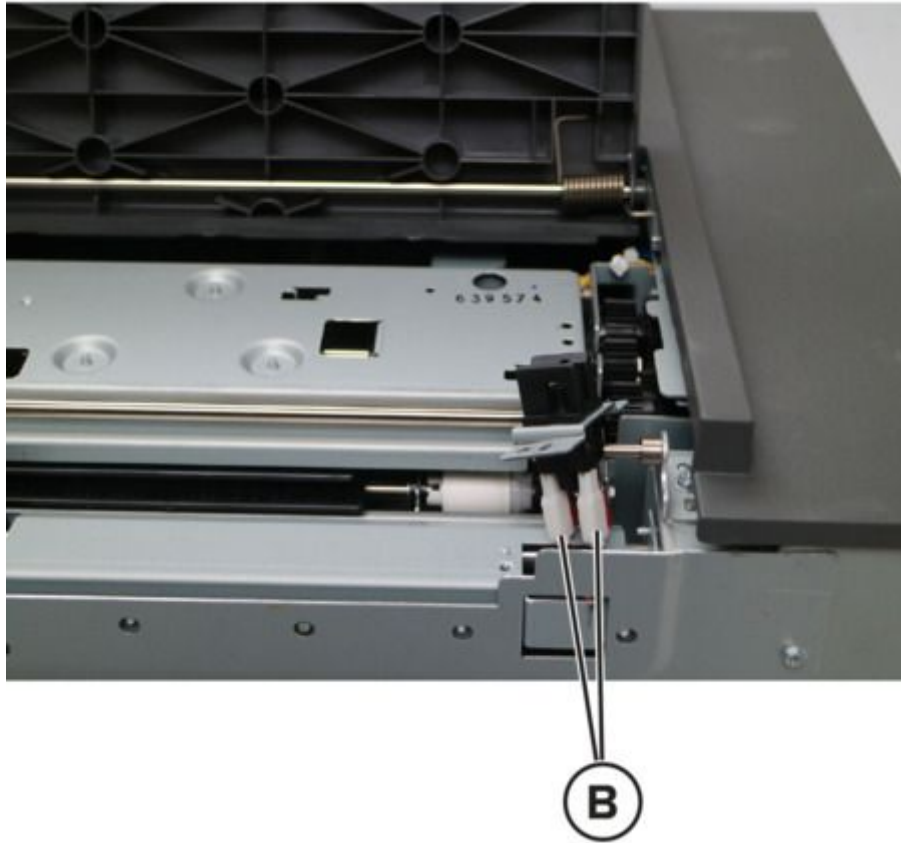
3. Remove the bracket, and then remove the top door.

2000-sheet tray top door interlock switch removal

1. Open the top door.
2. Open the inner top cover.
3. Remove the two screws (A).



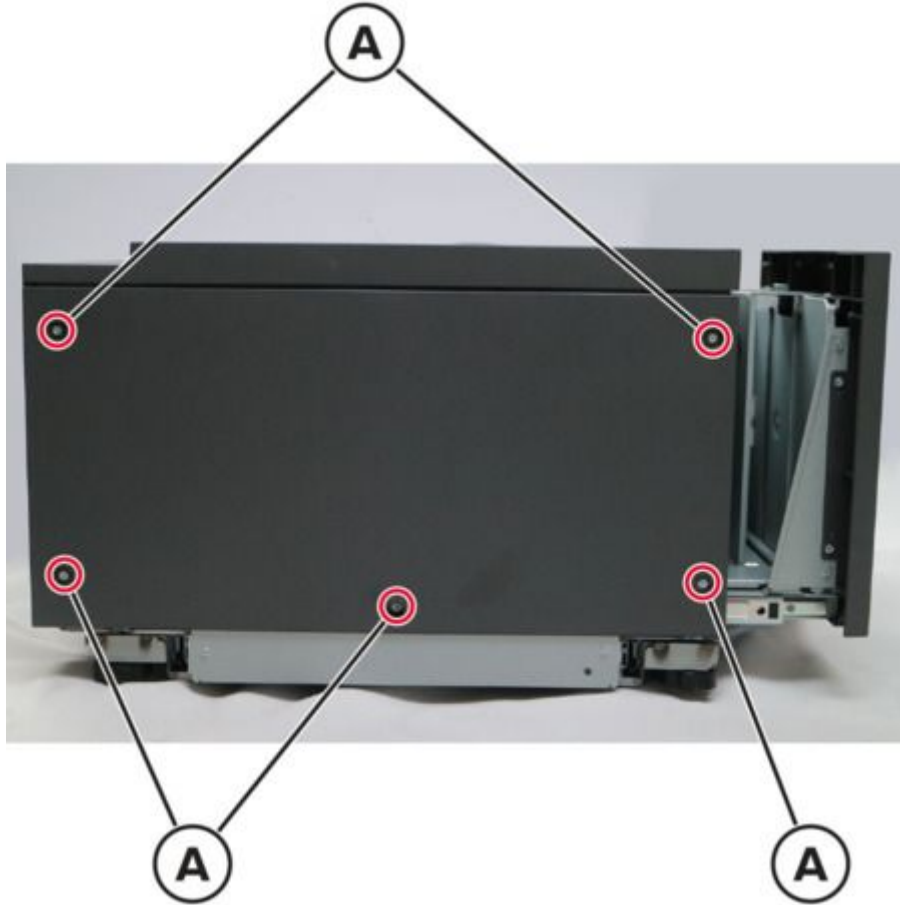
4. Remove the two connectors (b).



5. Remove the top door interlock switch.

2000-sheet tray left cover removal

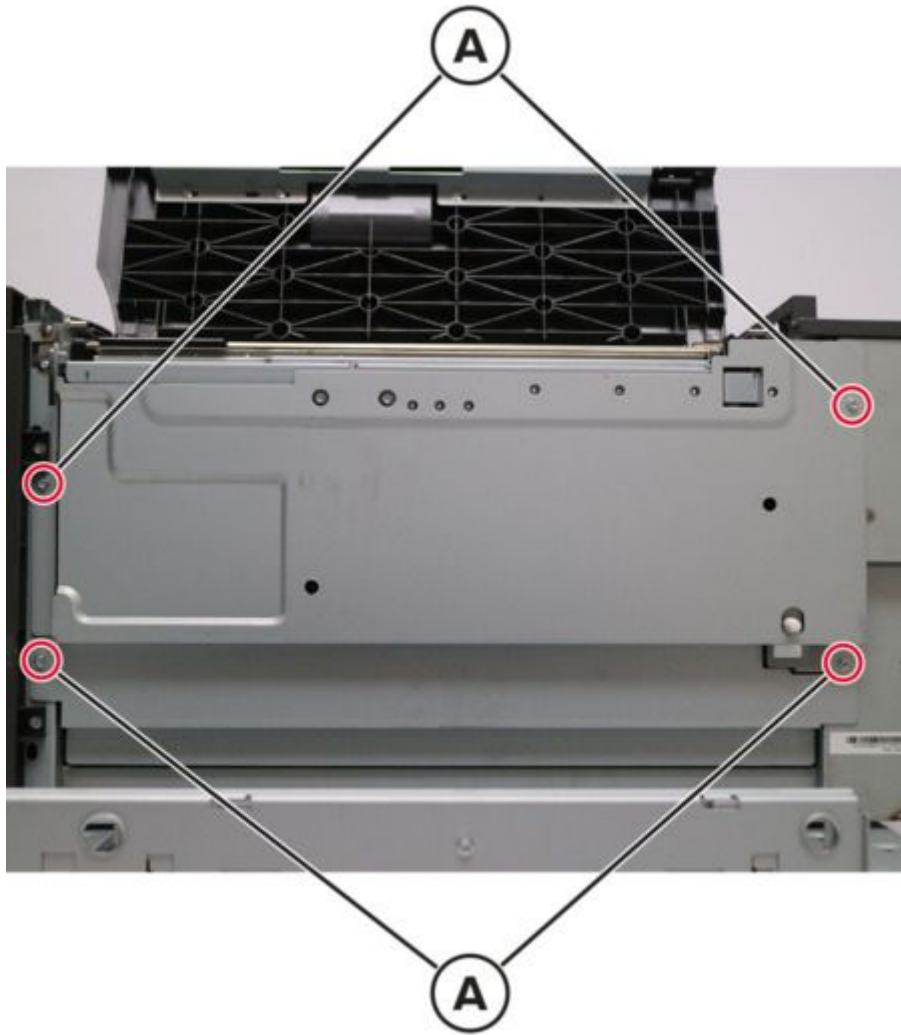
1. Remove the five screws (A).



2. Remove the left cover.

2000-sheet tray right cover removal

1. Remove the four screws (A).



2. Remove the right cover.

2000-sheet tray rear cover removal

1. Remove the four screws (A).



2. Remove the rear cover.

2000-sheet tray caster wheel removal

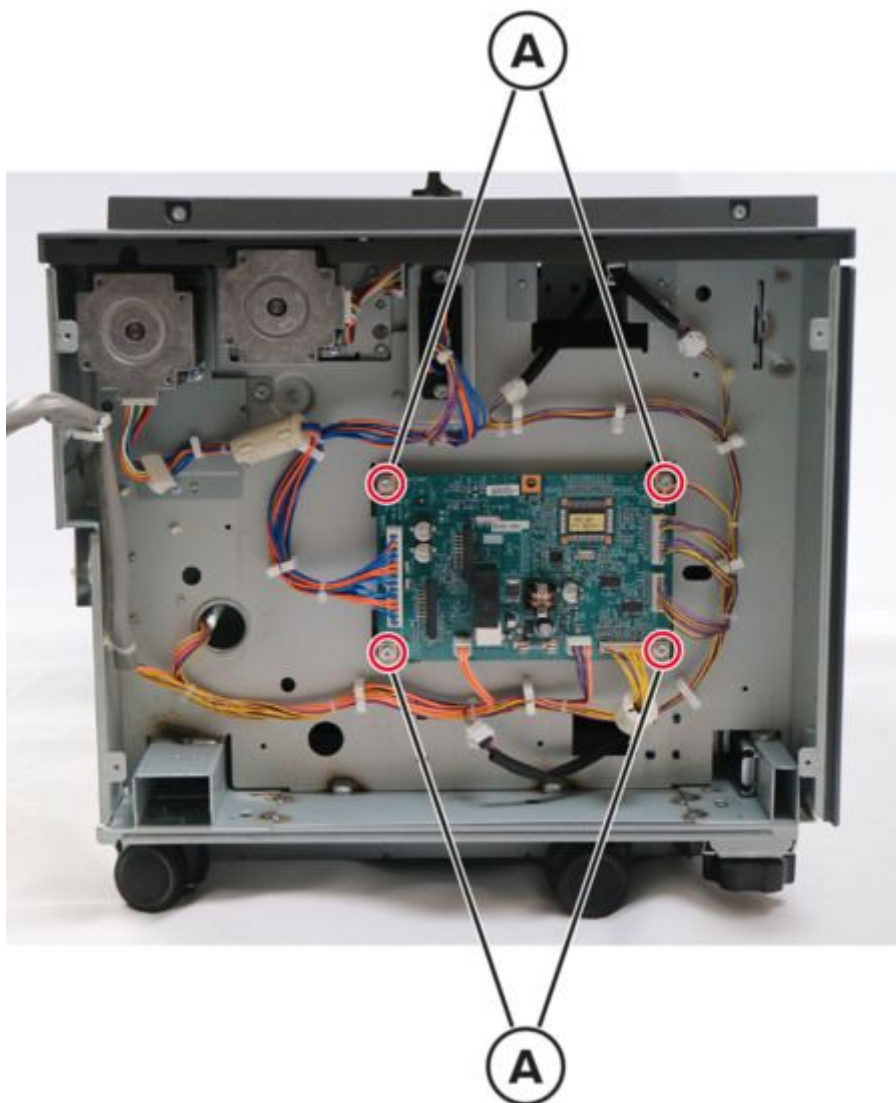
1. Remove the three screws (A).



2. Remove the caster wheel.

2000-sheet tray controller board removal

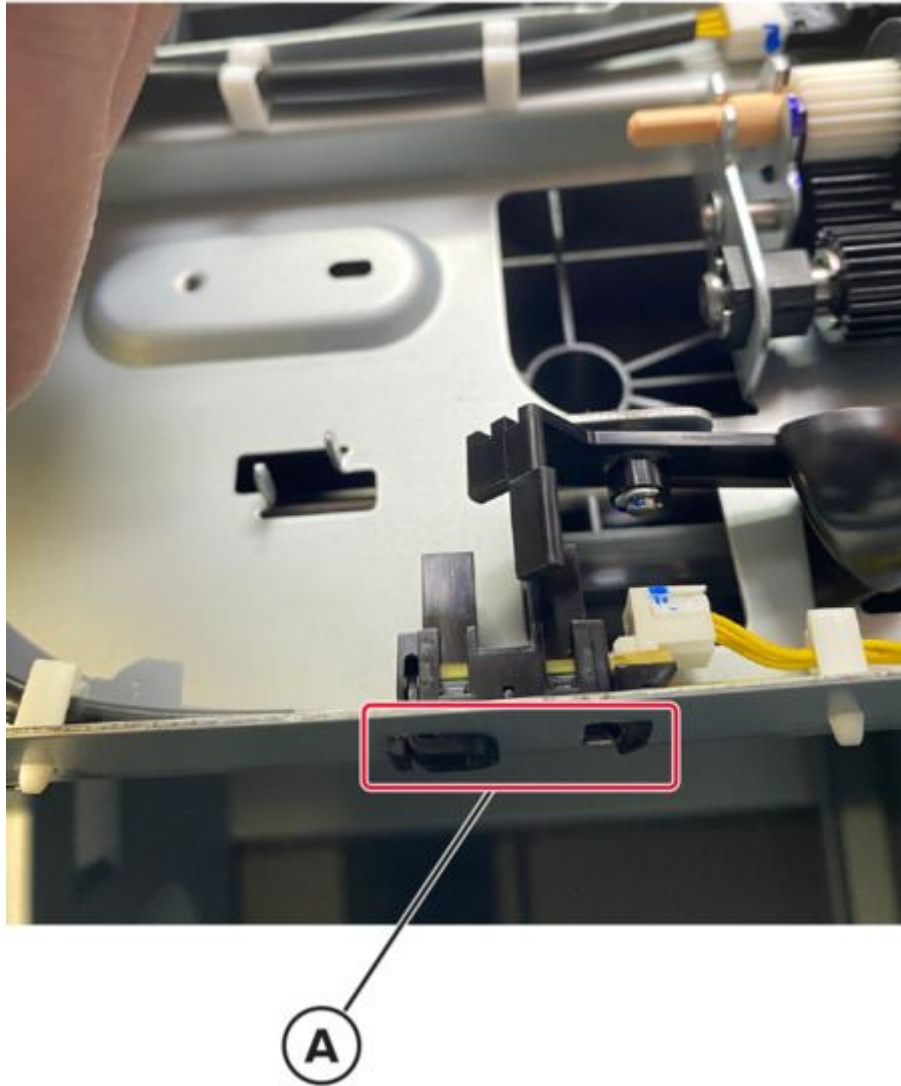
1. Remove the left cover. See [See "2000-sheet tray left cover removal" on page 1327.](#)
2. Remove the connectors on the controller board.
3. Remove the four screws (A).



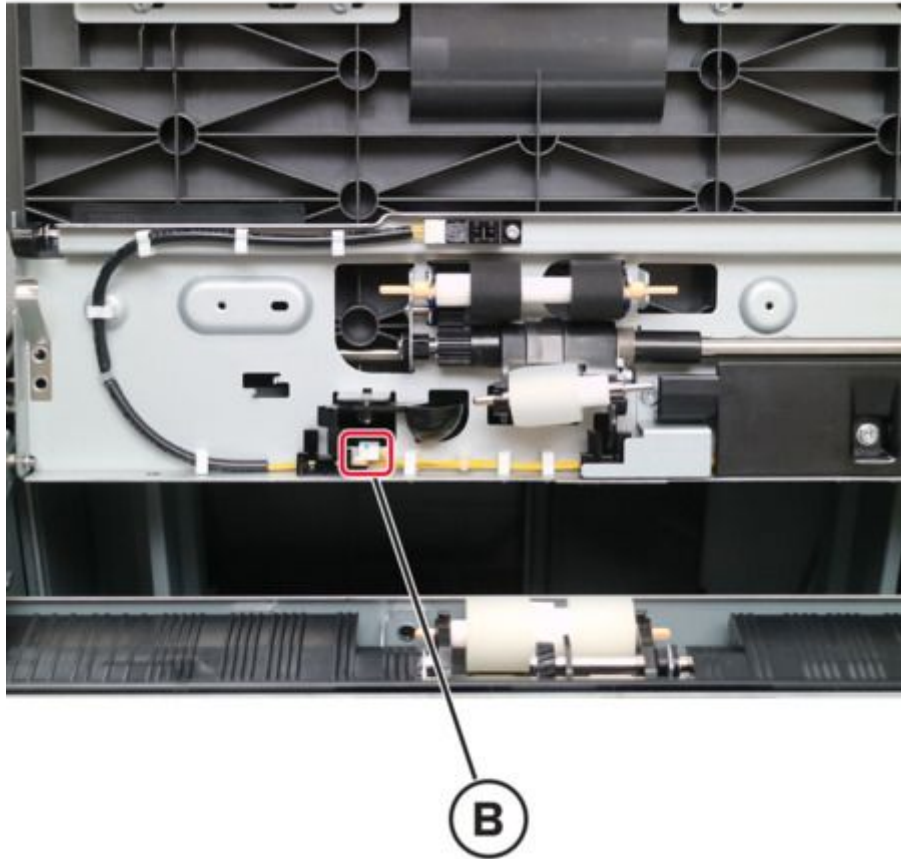
4. Remove the controller board.

Sensor (2000-sheet tray paper present) removal

1. Open the top door.
2. Open the inner top cover.
3. Release the latch (A) behind the sensor.



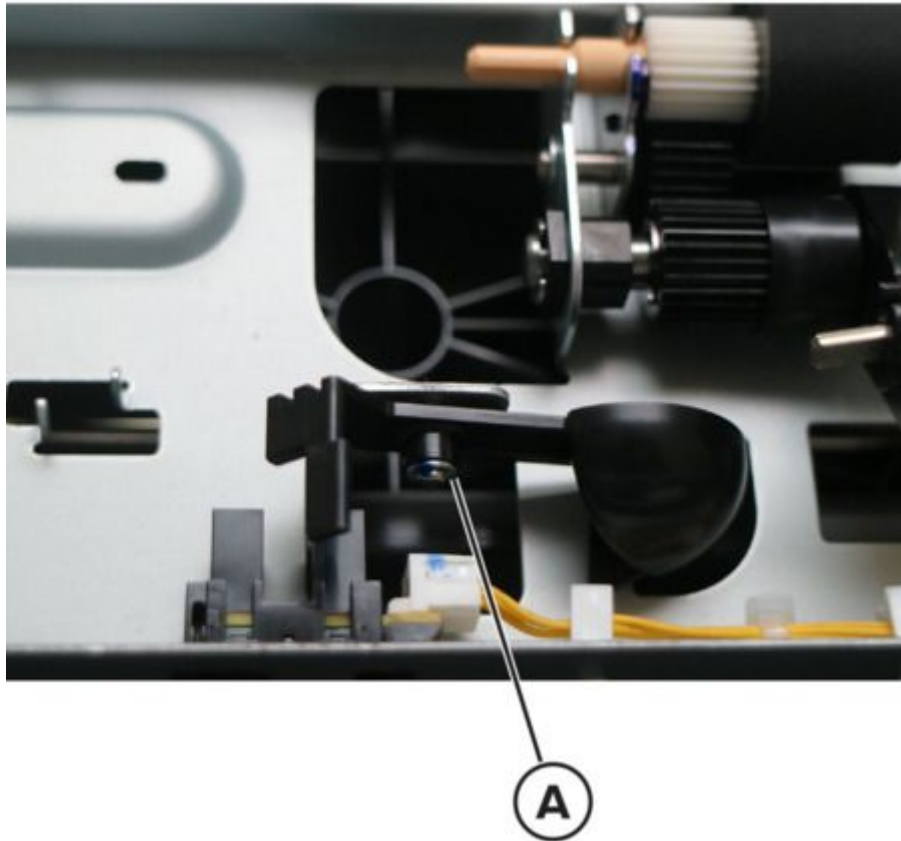
4. Remove the connector (B).



5. Remove the sensor.

2000-sheet tray paper present flag removal

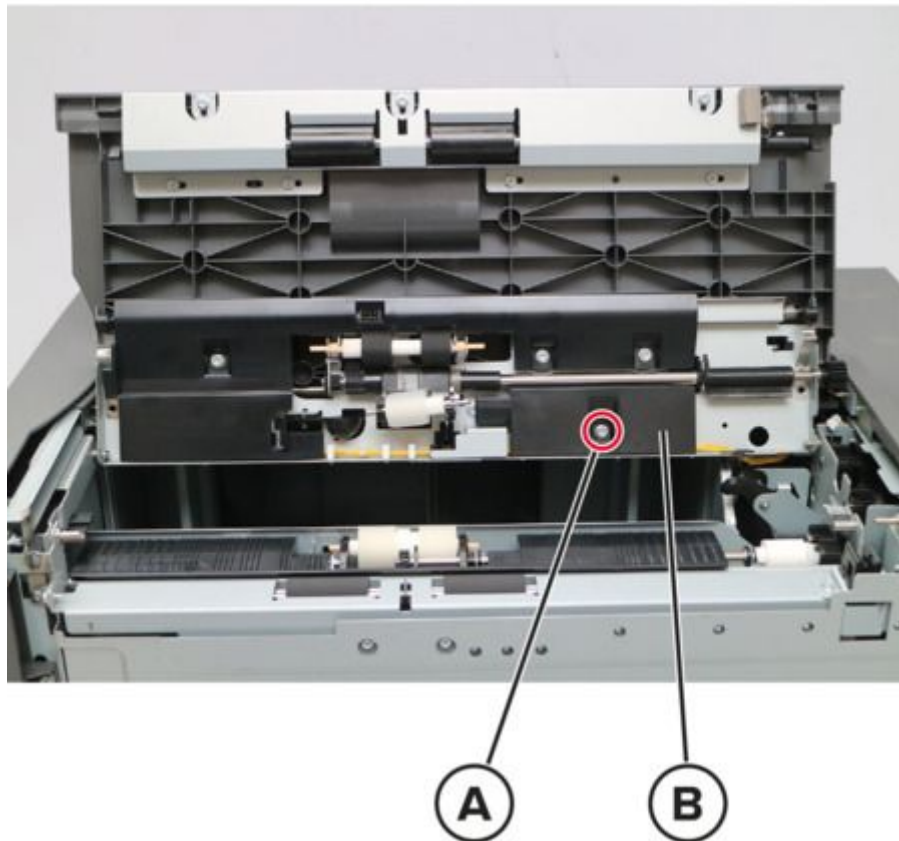
1. Open the top door.
2. Open the inner top cover.
3. Remove the e-clip (A).



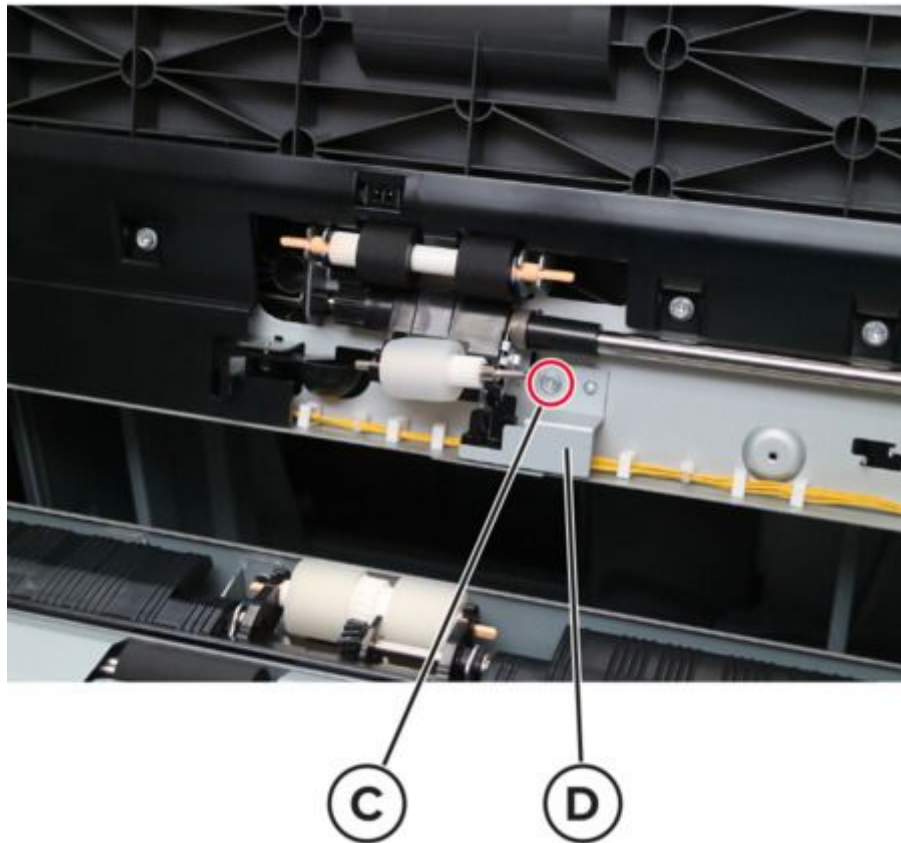
4. Remove the paper present flag.

Sensor (2000-sheet tray pick position) removal

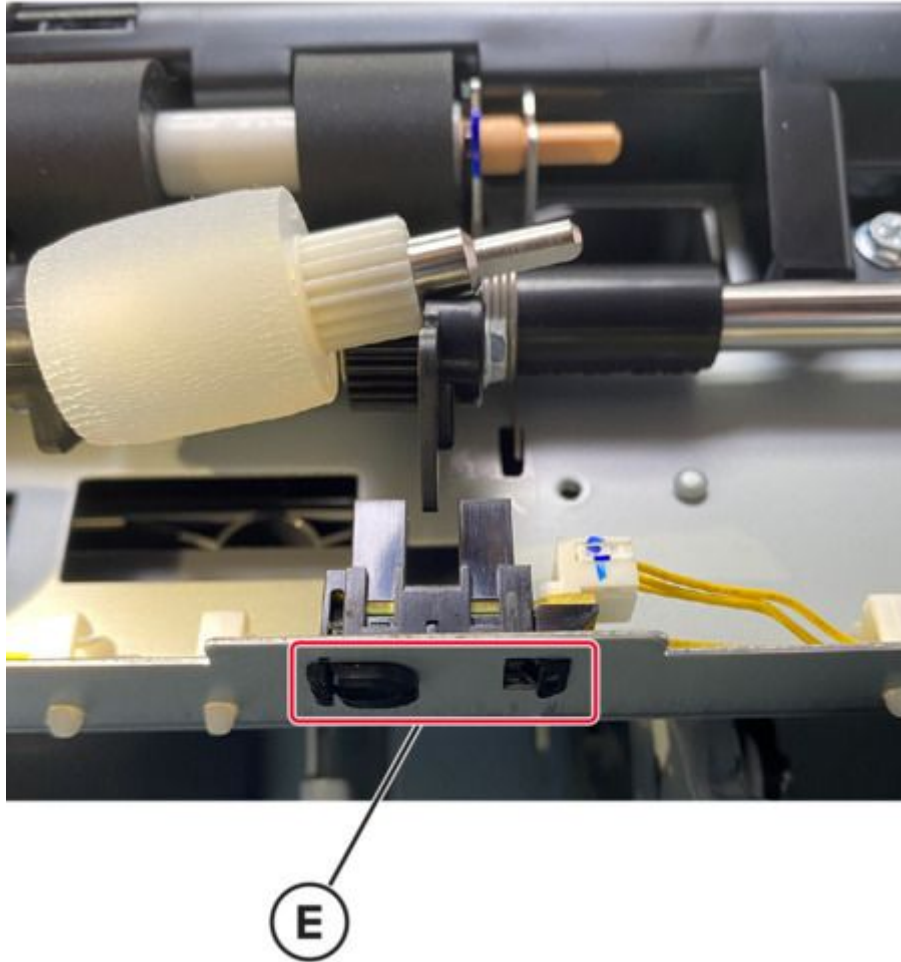
1. Open the top door.
2. Open the inner top cover.
3. Remove the screw (A), and then remove the cover (B).



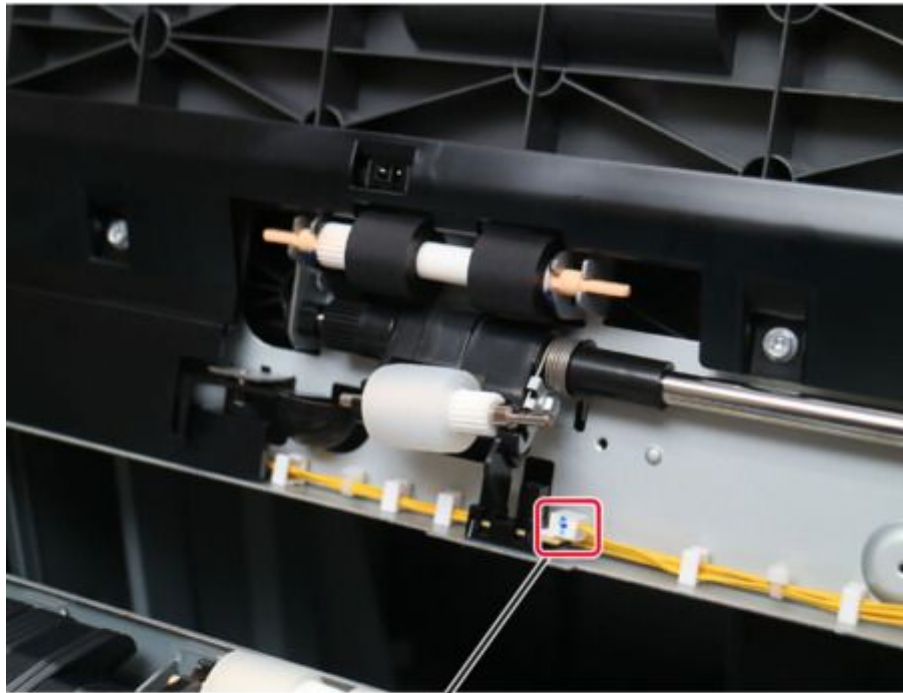
4. Remove the screw (C), and then remove the bracket (D).



5. Remove the latch (E) behind the sensor.



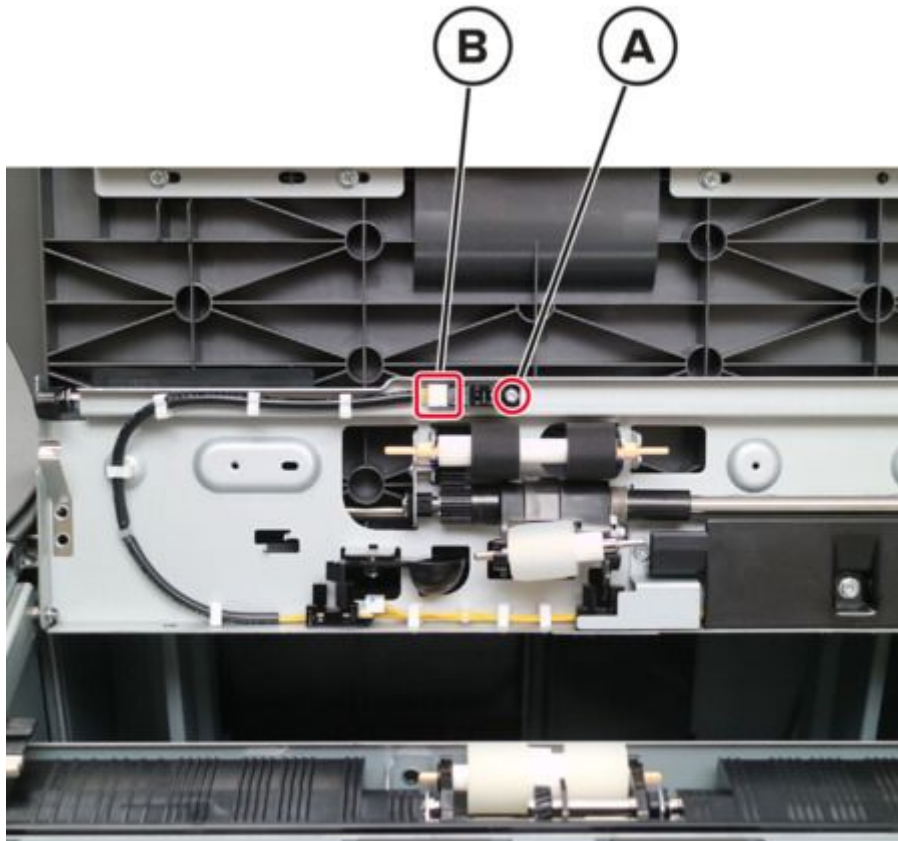
6. Remove the connector (F), and then remove the sensor.



F

Sensor (2000-sheet tray feed) removal

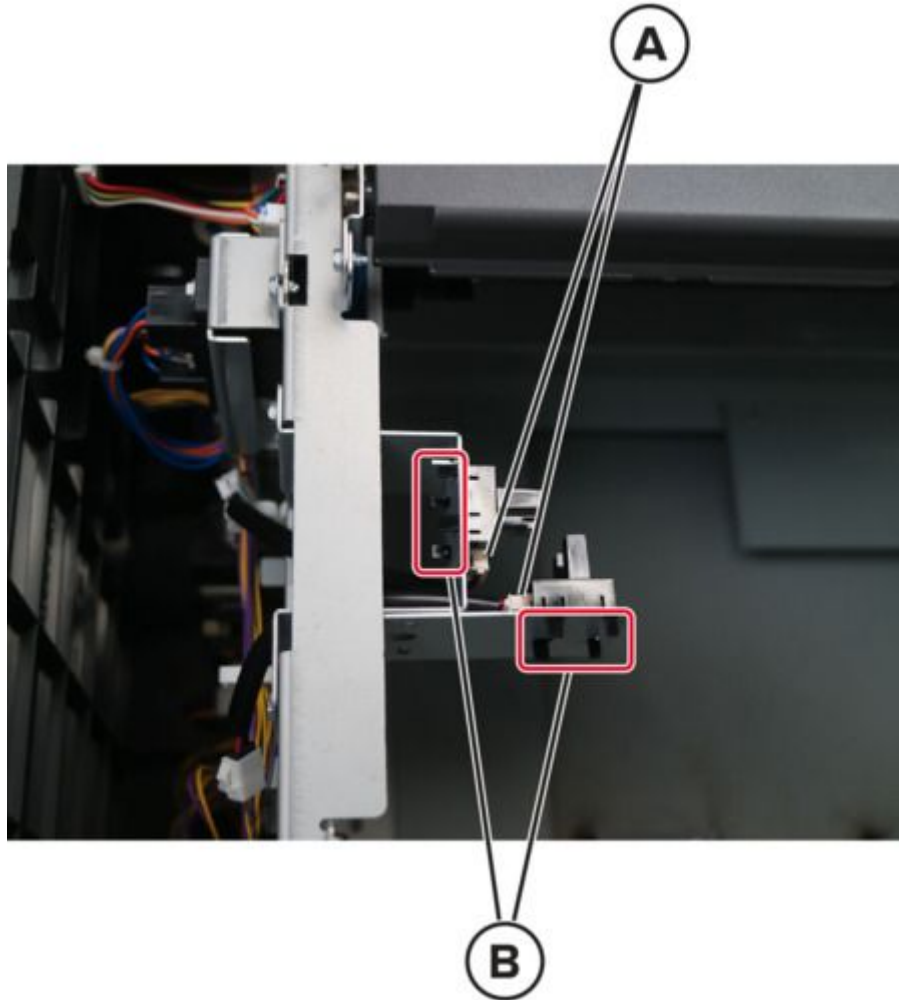
1. Open the top door.
2. Open the inner top cover.
3. Remove the screw (A), and then remove the connector (B).



4. Remove the sensor.

Sensor (2000-sheet tray paper size 1 and 2) removal

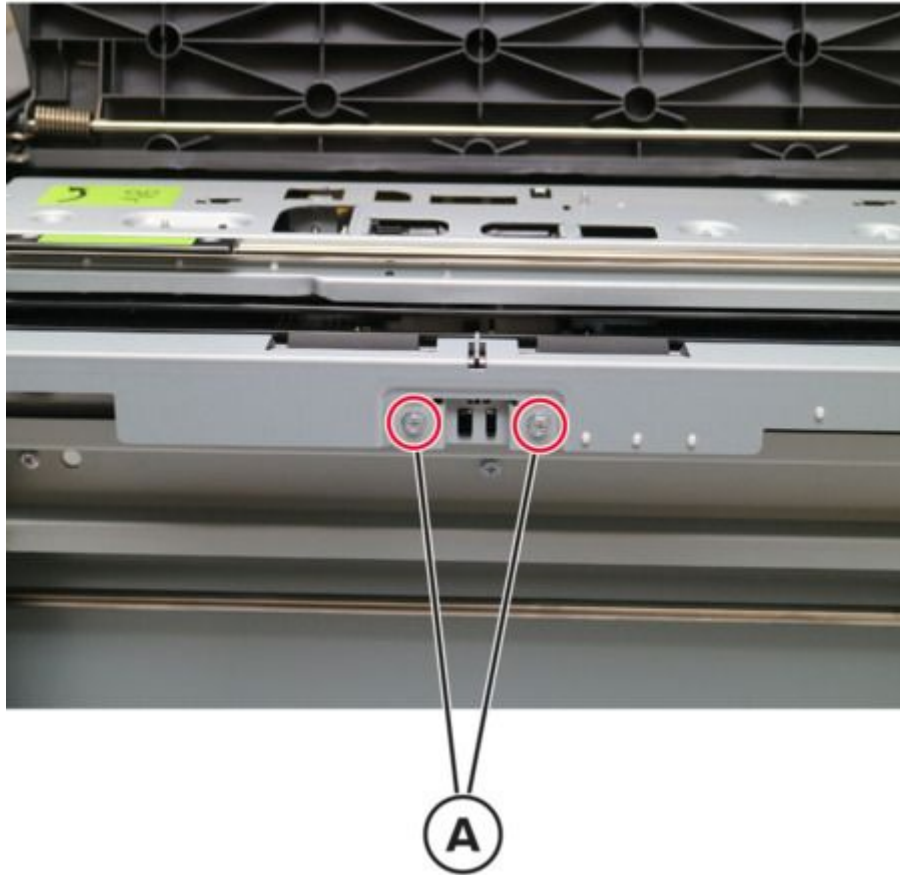
1. Remove the top cover. See ["2000-sheet tray top cover removal"](#) on page 1322.
2. Remove the two connectors (A), and then release the latches (B).



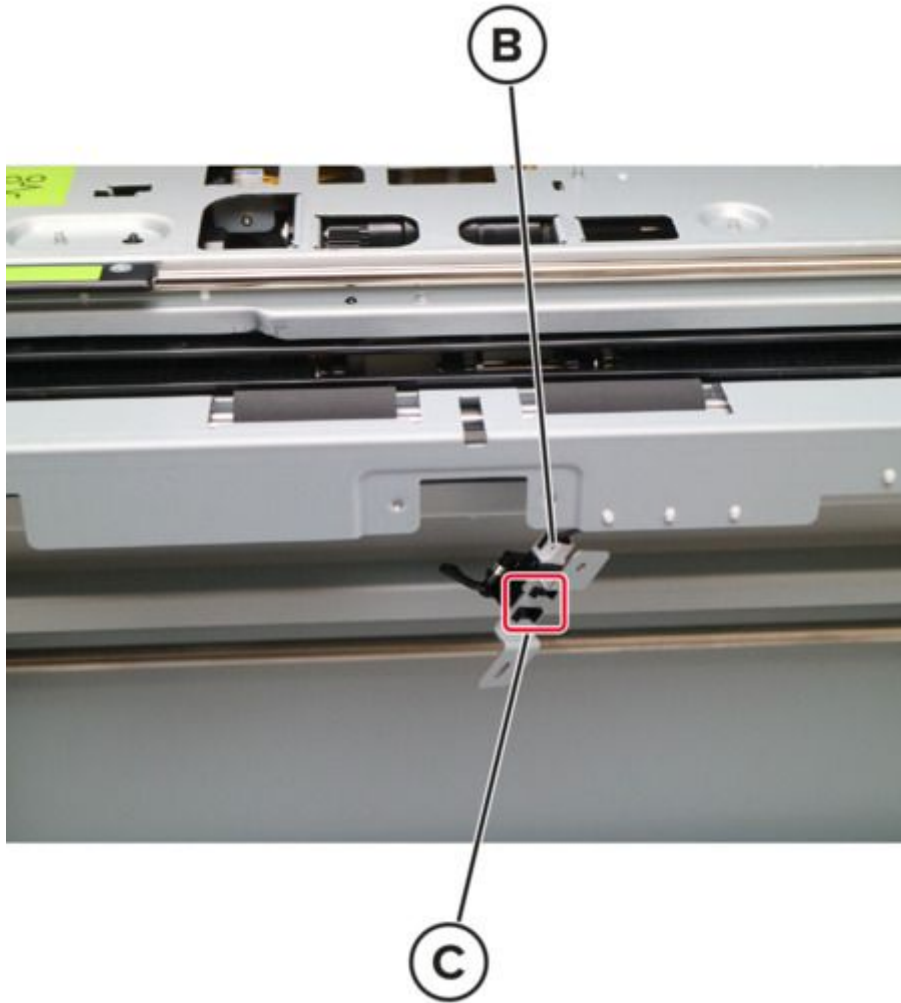
3. Remove the sensors.

Sensor (2000-sheet tray transport) removal

1. Remove the right cover. See [See "2000-sheet tray right cover removal" on page 1328.](#)
2. Open the top door.
3. Remove the two screws (A).

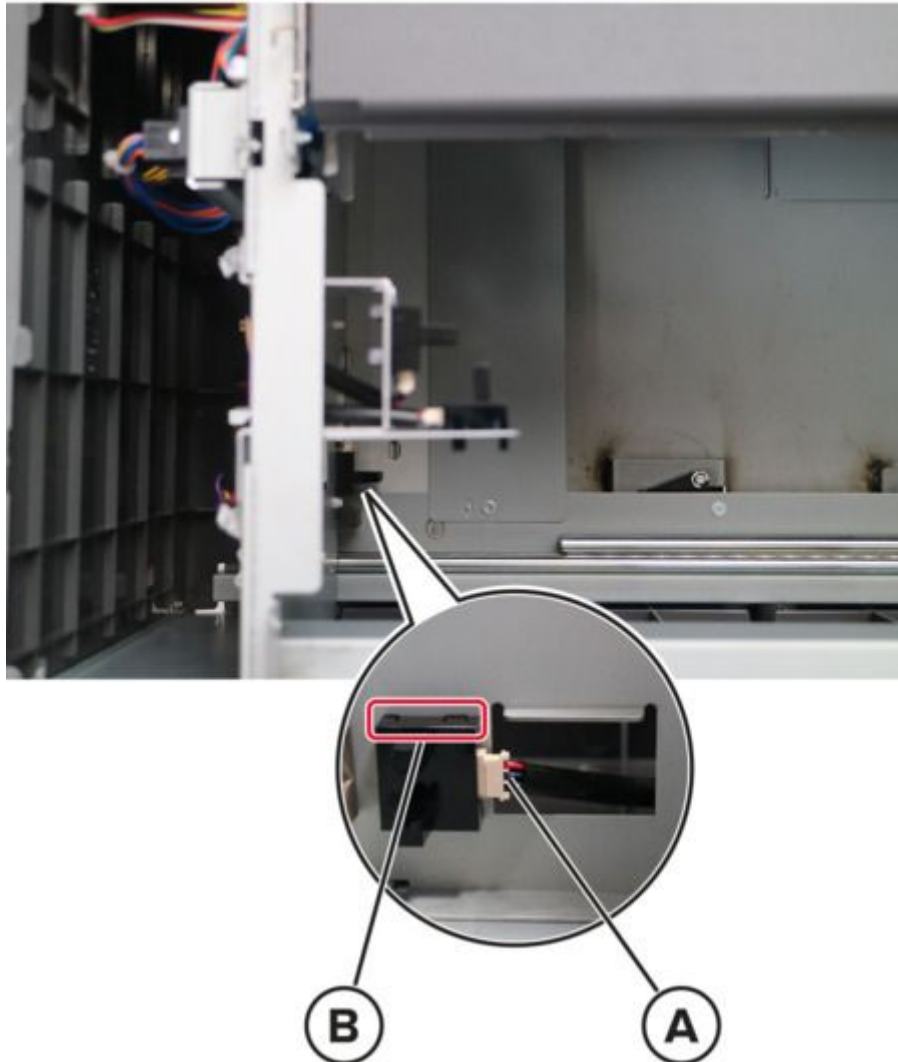


4. Remove the connector (B).
5. Remove the latch (C), and then remove the sensor.



Sensor (2000-sheet tray insert) removal

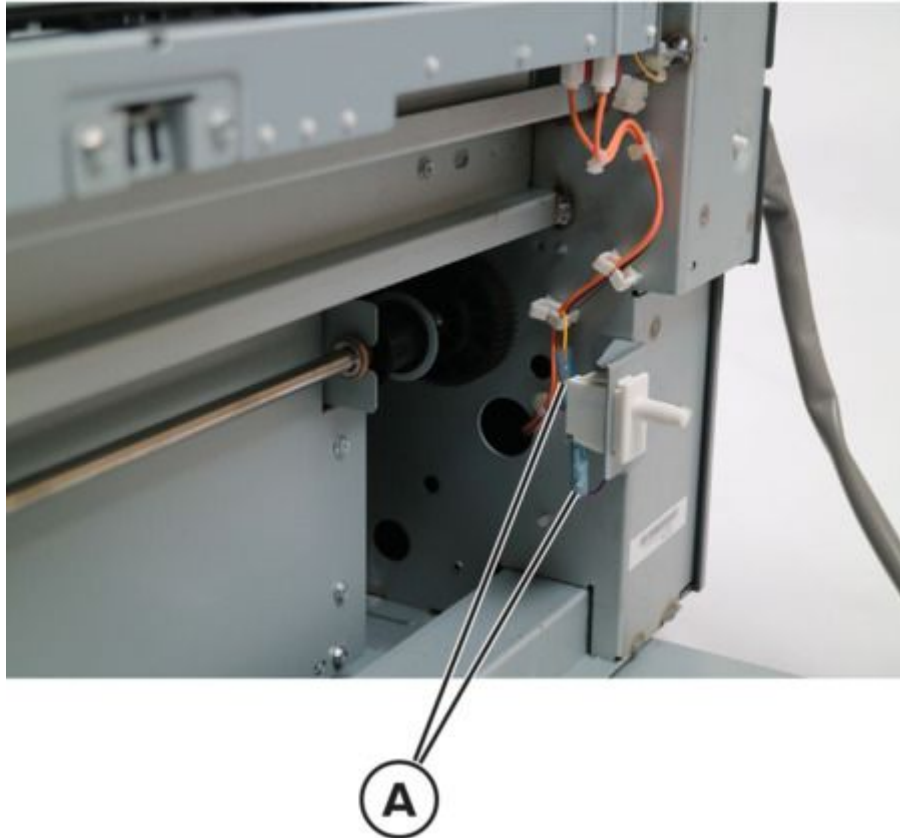
1. Remove the top cover. See [See "2000-sheet tray top cover removal" on page 1322.](#)
2. Remove the connector (A), and then release the latch (B).



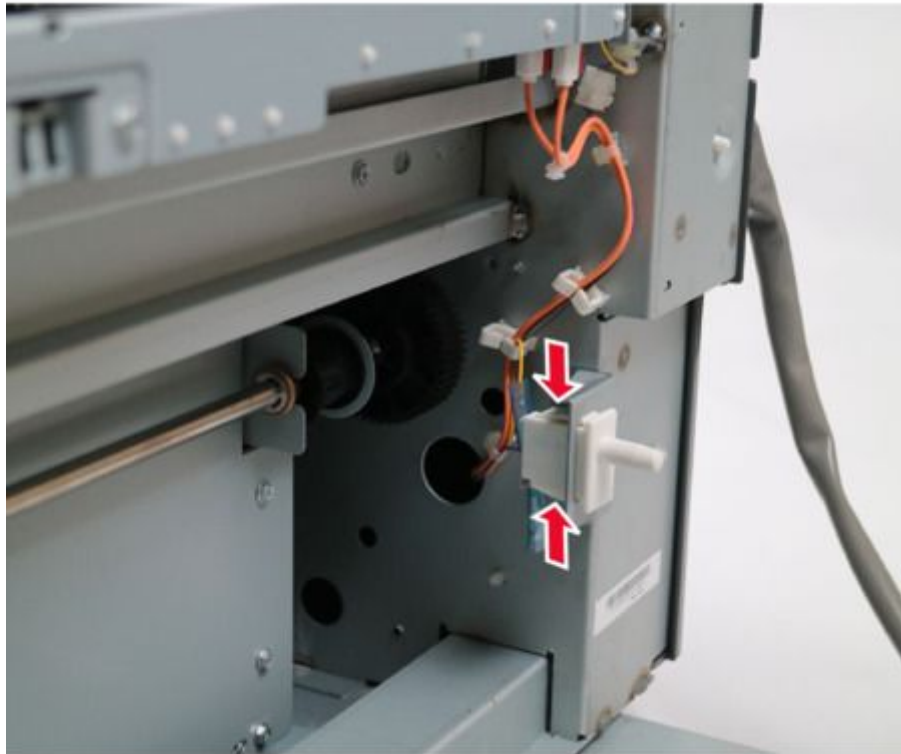
3. Remove the sensor.

2000-sheet tray set switch removal

1. Remove the right cover. See [See "2000-sheet tray right cover removal" on page 1328.](#)
2. Remove the two connectors (A).



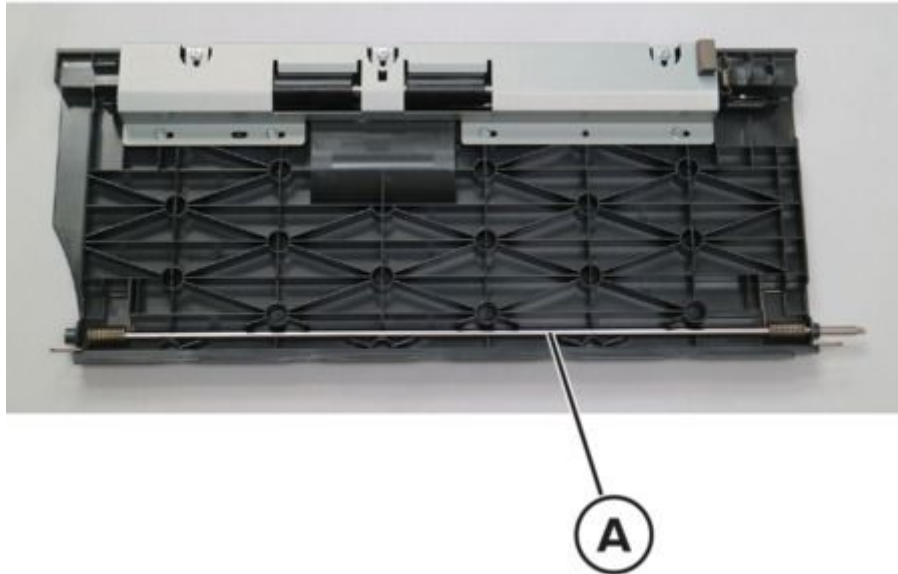
3. Pinch to release the latch.



4. Remove the switch.

2000-sheet tray spring removal

1. Remove the top door. See [See "2000-sheet tray top door removal" on page 1324.](#)
2. Slide out the shaft (A), and then remove the spring.



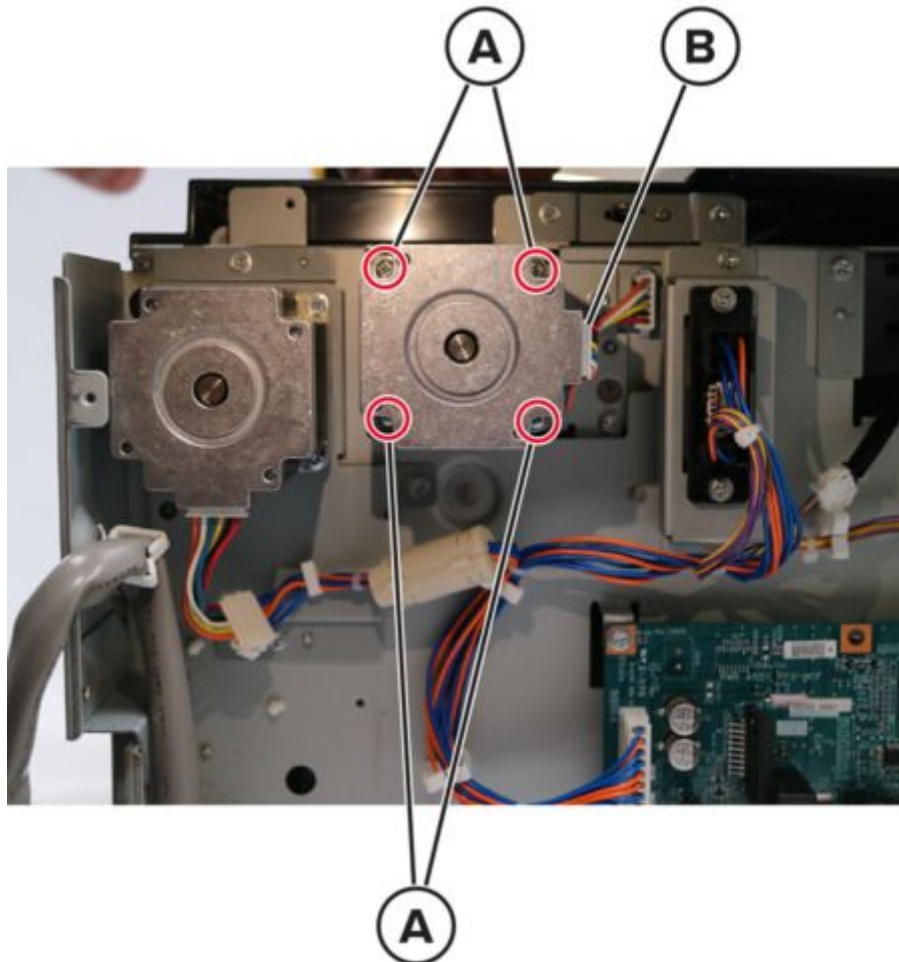
INSTALLATION NOTE

Take note of the original position of the spring and shaft.



Motor (2000-sheet tray pick/lift) removal

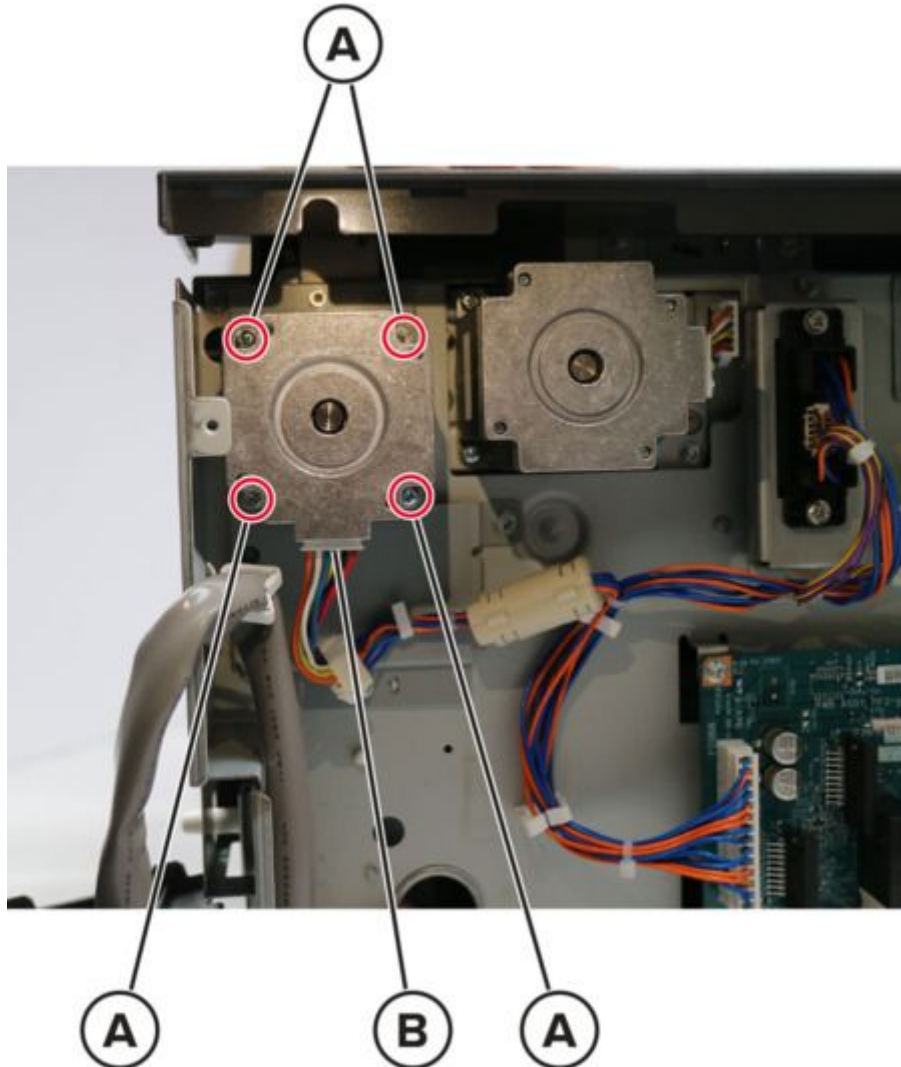
1. Remove the left cover. See [See "2000-sheet tray left cover removal" on page 1327.](#)
2. Remove the four screws (A), and then remove the connector (B).



3. Remove the motor.

Motor (2000-sheet tray transport) removal

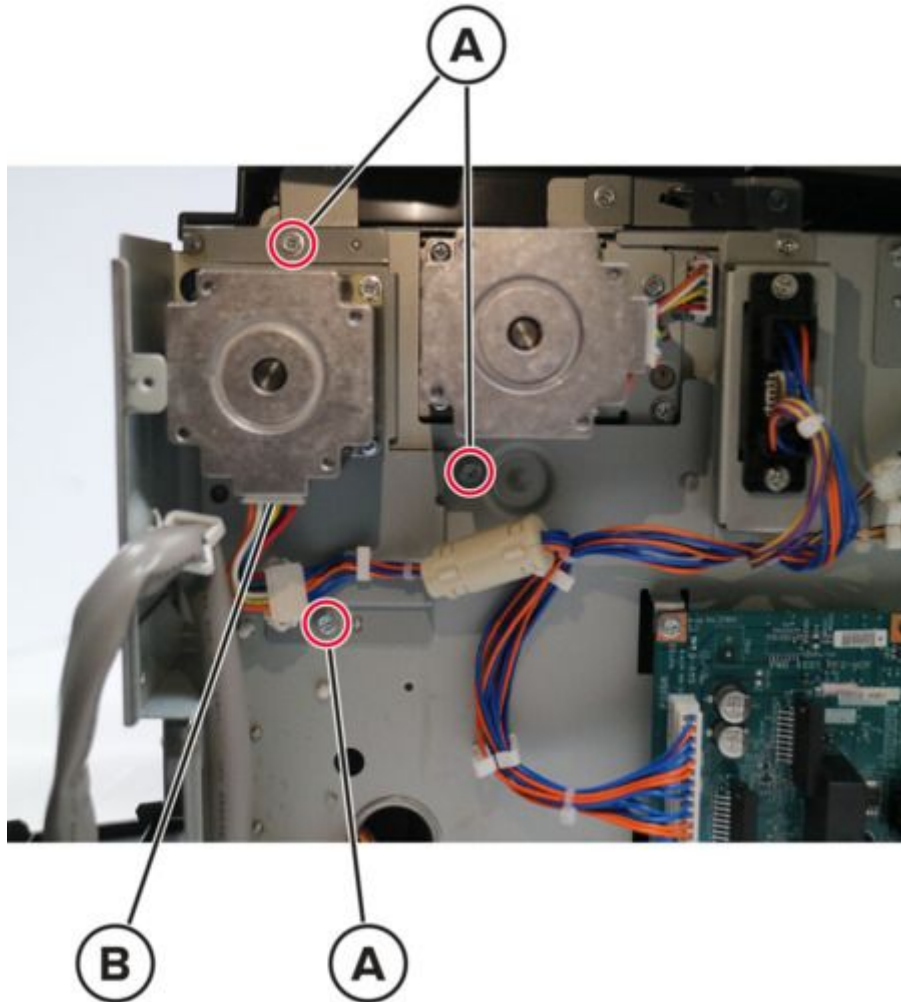
1. Remove the left cover. See [See "2000-sheet tray left cover removal" on page 1327.](#)
2. Remove the four screws (A), and then remove the connector (B).



3. Remove the motor.

2000-sheet tray gearbox removal

1. Remove the left cover. See [See "2000-sheet tray left cover removal" on page 1327.](#)
2. Remove the three screws (A), and then remove the connector (B).

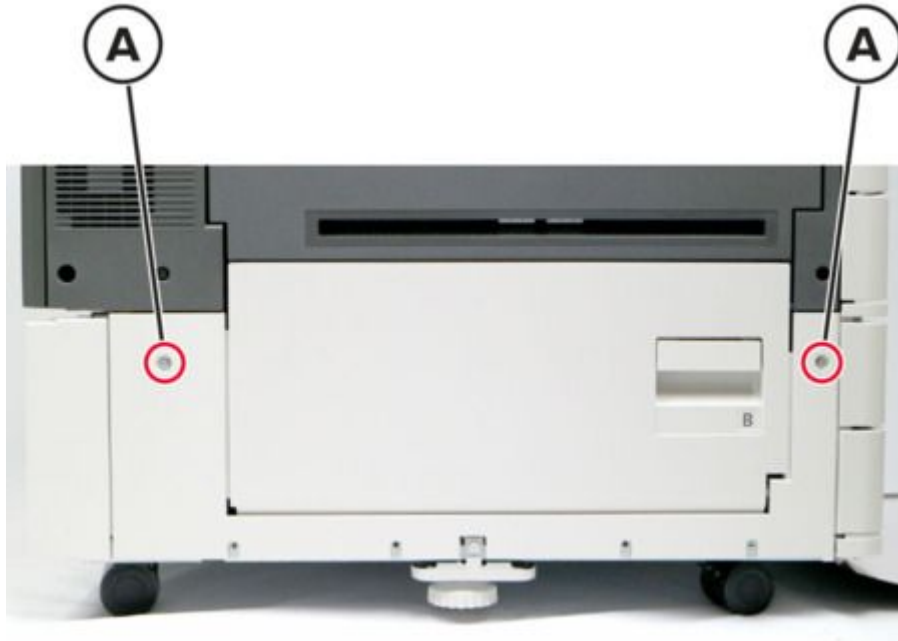


3. Remove the gearbox.

2 x 520-sheet optional tray removals

2 x 520-sheet tray left cover removal

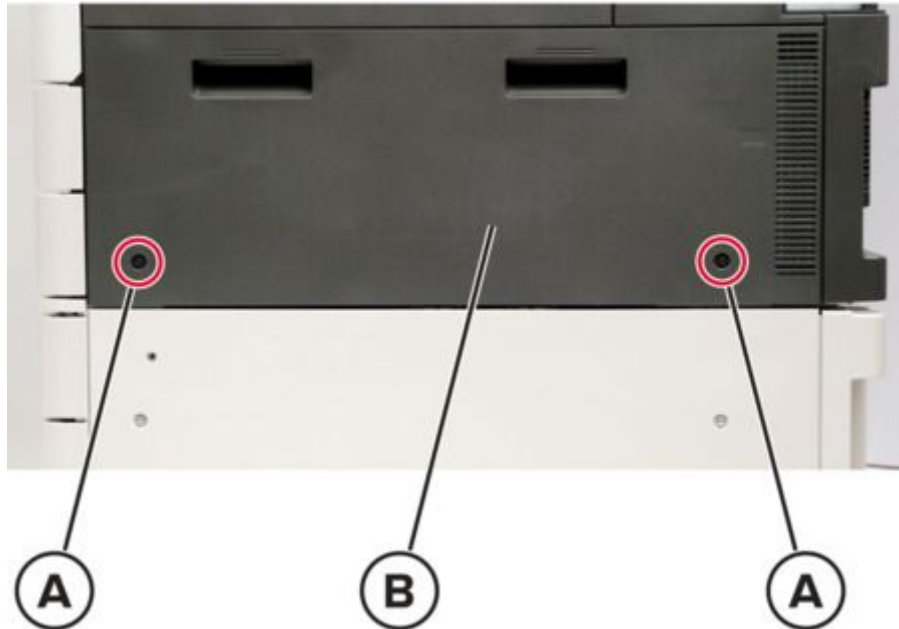
1. Remove the two screws (A).



2. Remove the 2 x 520-sheet tray left cover (B).

2 x 520-sheet tray right cover removal

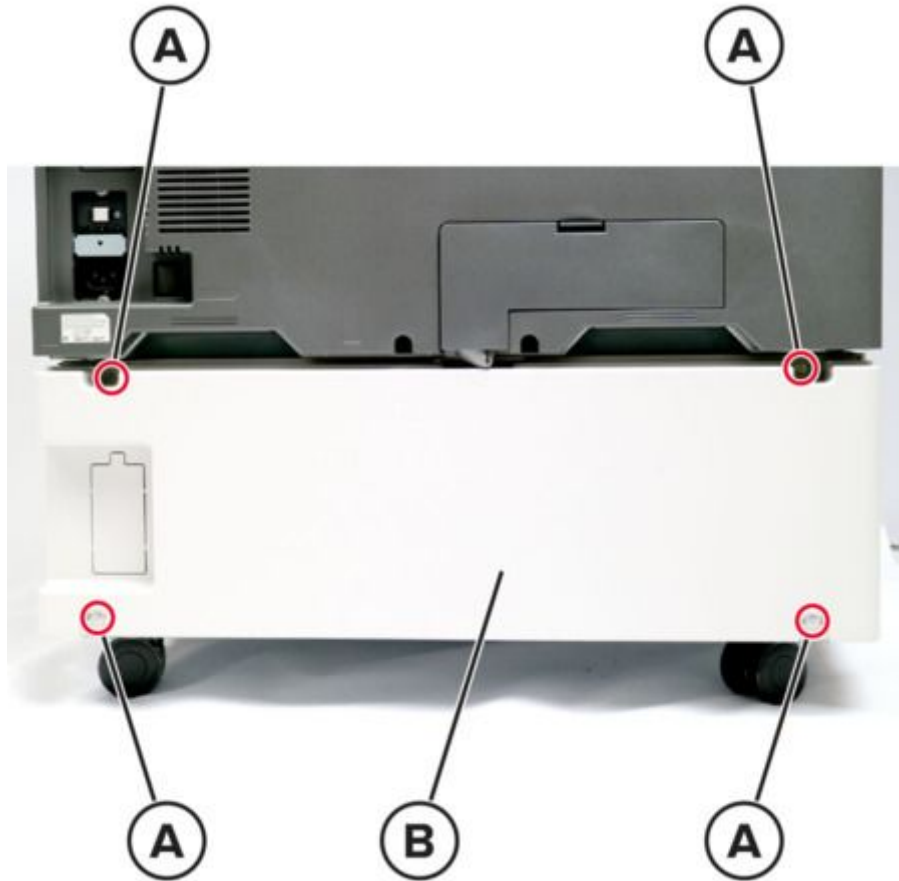
1. Remove the two screws (A).



2. Remove the cover (B).

2 x 520-sheet tray rear cover removal

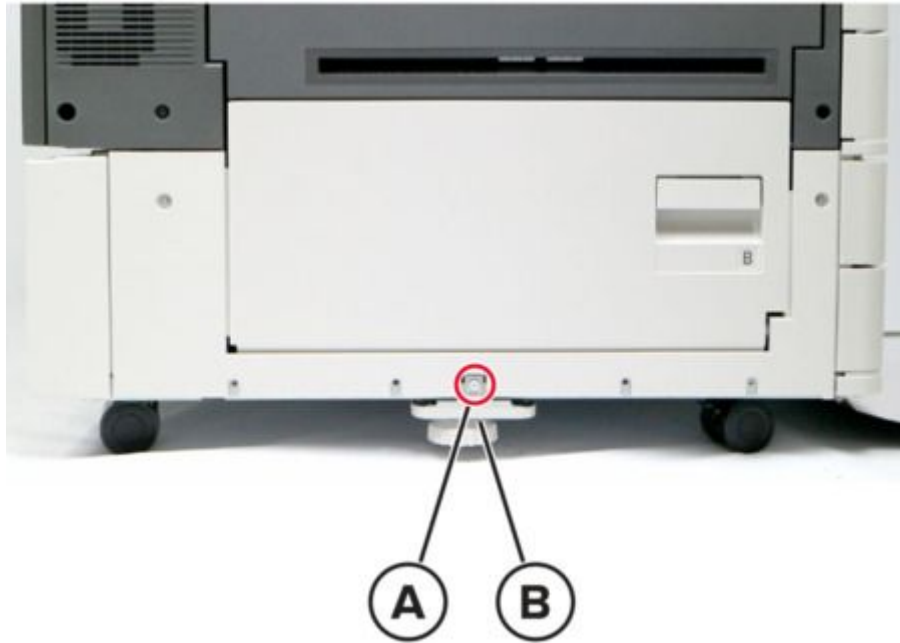
1. Remove the four screws (A).



2. Remove the rear cover (B).

2 x 520-sheet tray anti-tip lock removal

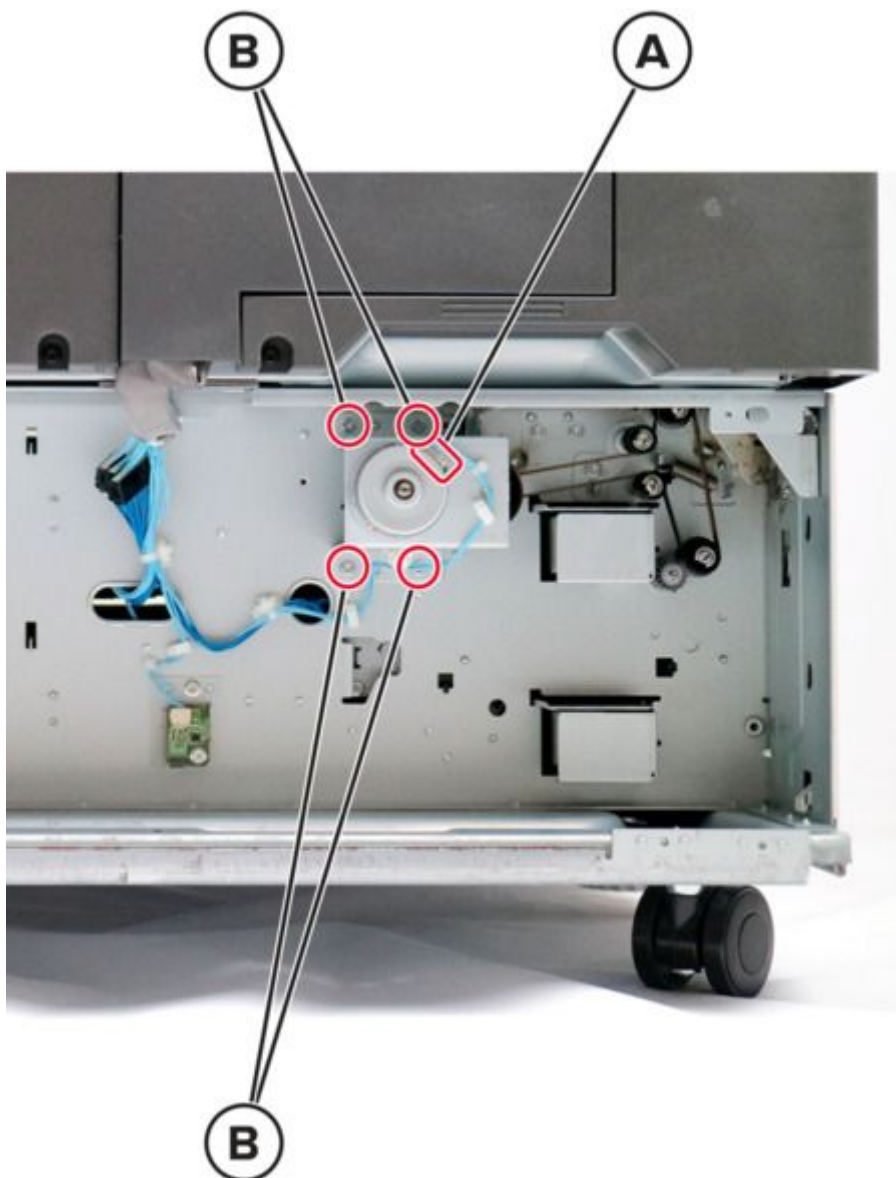
1. Remove the screw (A).



2. Remove the lock (B).

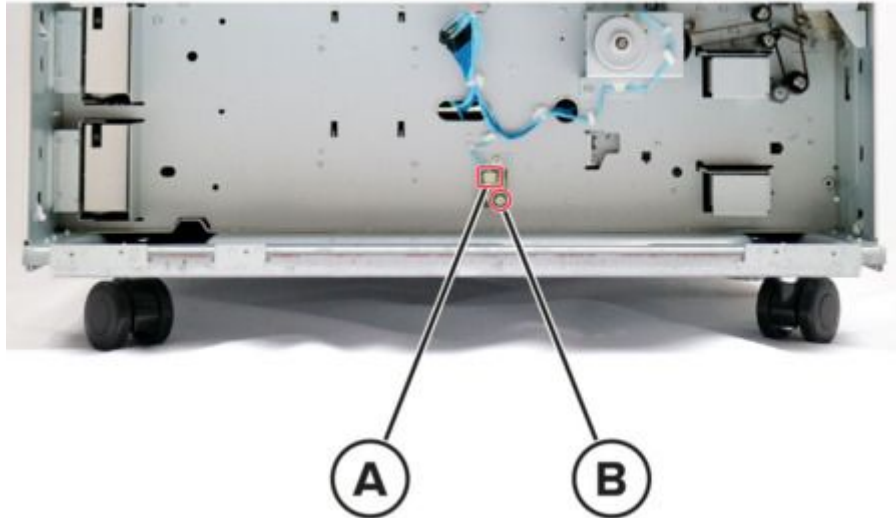
Motor (2 x 520-sheet tray transport) removal

1. Remove the 2 x 520-sheet tray rear cover. See [See "2 x 520-sheet tray rear cover removal" on page 1352.](#)
2. Disconnect the cable (A), remove the four screws (B), and then remove the motor.



2 x 520-sheet tray NV card removal

1. Remove the 2 x 520-sheet tray rear cover. See [See "2 x 520-sheet tray rear cover removal" on page 1352.](#)
2. Disconnect the cable (A), and then remove the screw (B).



INSTALLATION NOTE

1. Find the input option factory NVM settings that came with the input option.

NOTES

If the NVM settings that came with the input option is not found, then contact the next level of support.

2. Set the type of input option to 2 x 520-sheet tray:

Enter the Diagnostics menus, and then navigate to:

Printer Setup > NV data information > Write NV data

NV description	Chain number	Link number	NVM value
Setting the input option type	743	147	4

Continued on page 1356

Continued from page 1355

NV description	Chain number	Link number	NVM value
----------------	--------------	-------------	-----------

Setting the input option ID	743	269	Refer to the NVM sheet
-----------------------------	-----	-----	------------------------

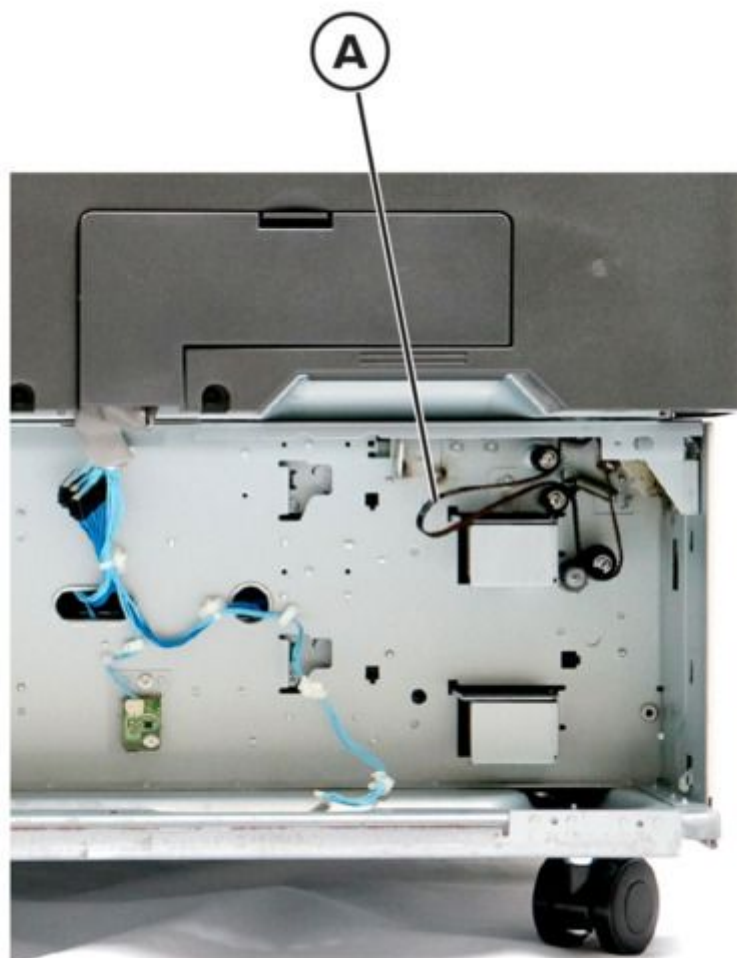
3. Perform tray 3 and 4 tray registration:

Enter the Diagnostics menus, and then navigate to:

Printer Setup > Printer diagnostics and adjustments > Registration adjust > Tray 3/Tray 4

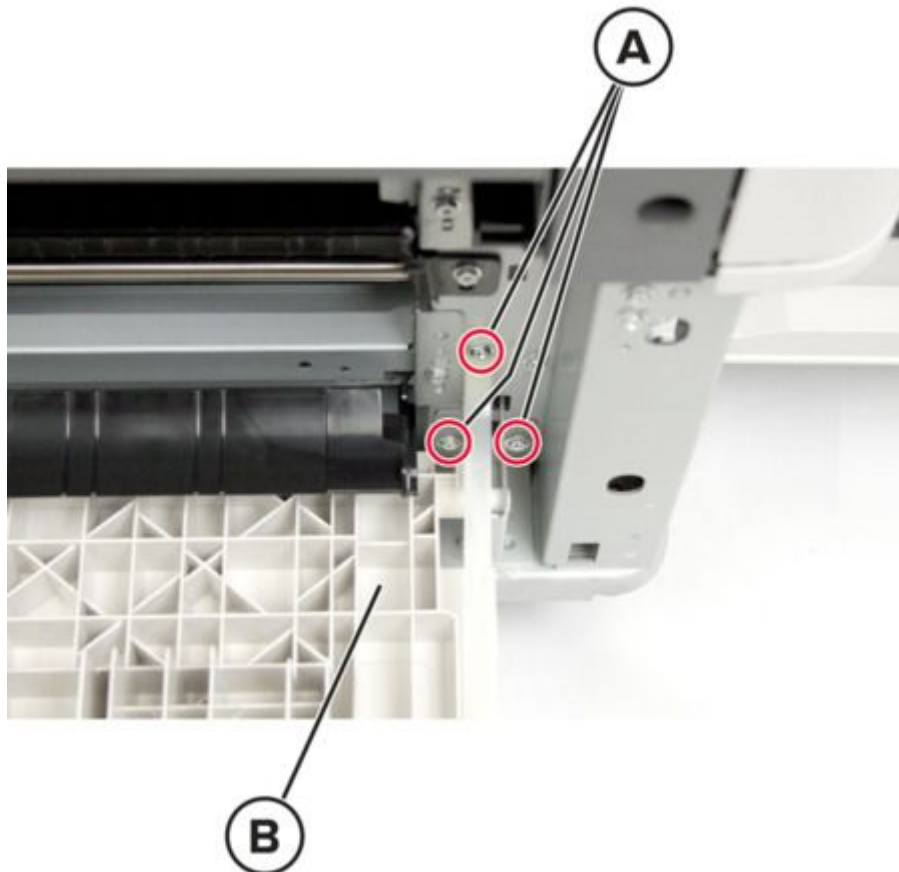
2 x 520-sheet tray transport belt removal

1. Remove the 2 x 520-sheet tray rear cover. See ["2 x 520-sheet tray rear cover removal" on page 1352.](#)
2. Remove the motor (2 x 520-sheet tray transport). See ["Motor \(2 x 520-sheet tray transport\) removal" on page 1354.](#)
3. Remove the belt (A).



2 x 520-sheet tray door removal

1. Remove the 2 x 520-sheet tray left cover. See ["2 x 520-sheet tray left cover removal" on page 1350](#).
2. Open the 2 x 520-sheet tray door, remove the three screws (A), and then remove the door (B).



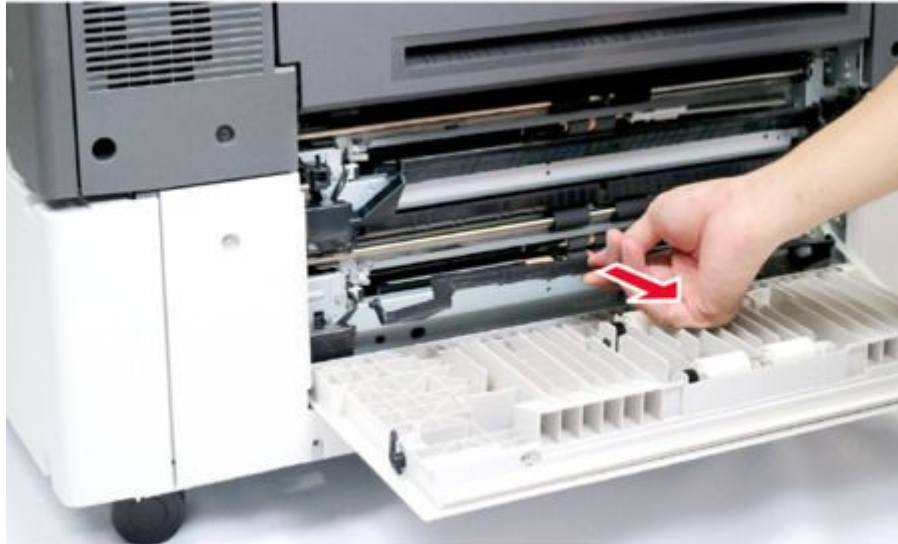
2 x 520-sheet tray feed guide (tray 3) removal

1. Open the 2 x 520-sheet tray door.
2. Remove the 2 x 520-sheet tray feed guide (tray 3).



2 x 520-sheet tray feed guide (tray 4) removal

1. Open the 2 x 520-sheet tray door.
2. Remove the 2 x 520-sheet tray feed guide (tray 4).

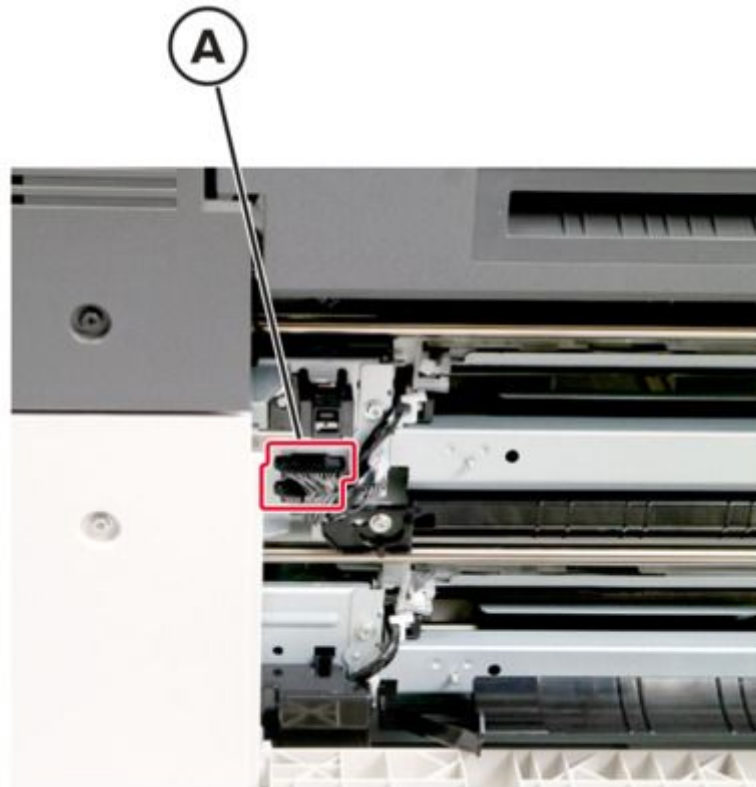


2 x 520-sheet tray paper feeder (tray 3) removal

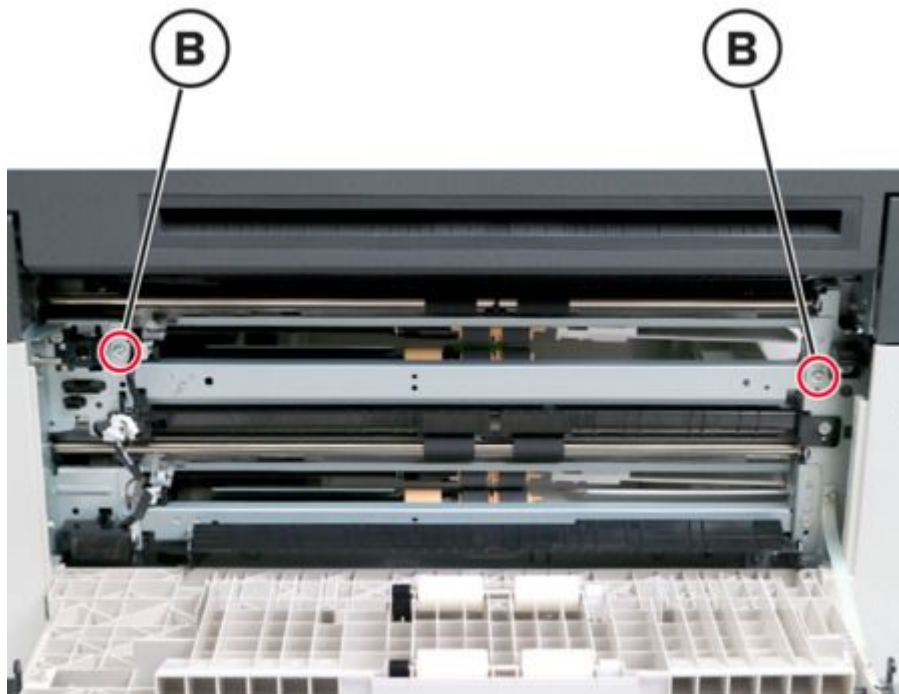
1. Remove the 2 x 520-sheet tray insert (tray 3).
2. Open the 2 x 520-sheet tray door.
3. Remove the 2 x 520-sheet tray feed guide (tray 3). See [See "2 x 520-sheet tray feed guide \(tray 3\) removal" on page 1359.](#)
4. Remove the cable cover.



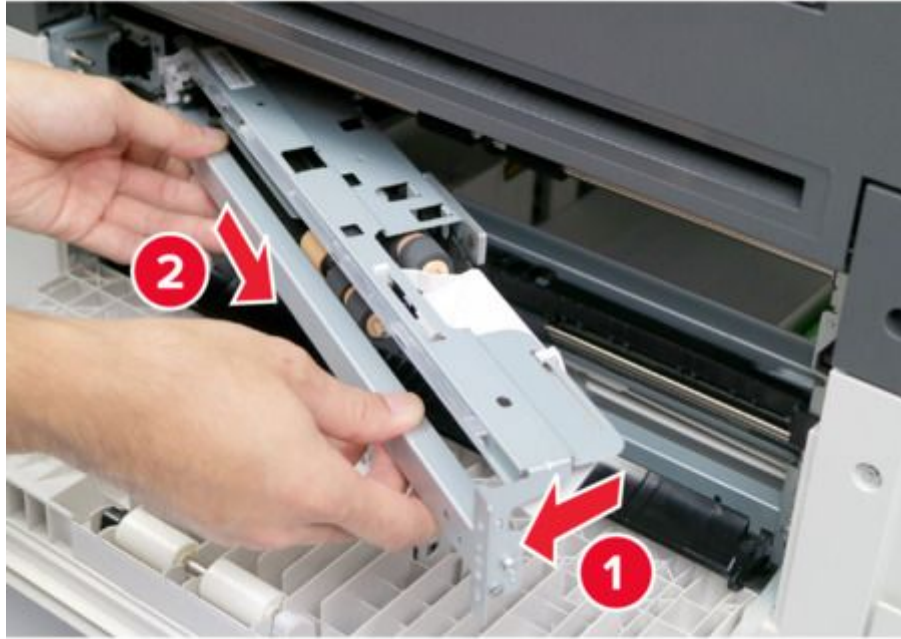
5. Disconnect the two cables (A), and then release the cables from their guides.



6. Remove the two screws (B).

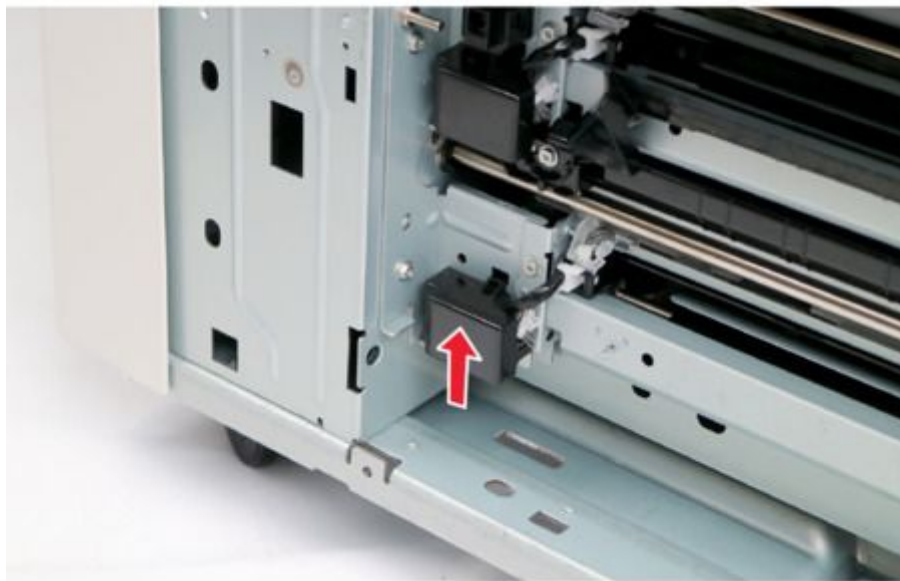


7. Remove the 2 x 520-sheet tray paper feeder (tray 3).

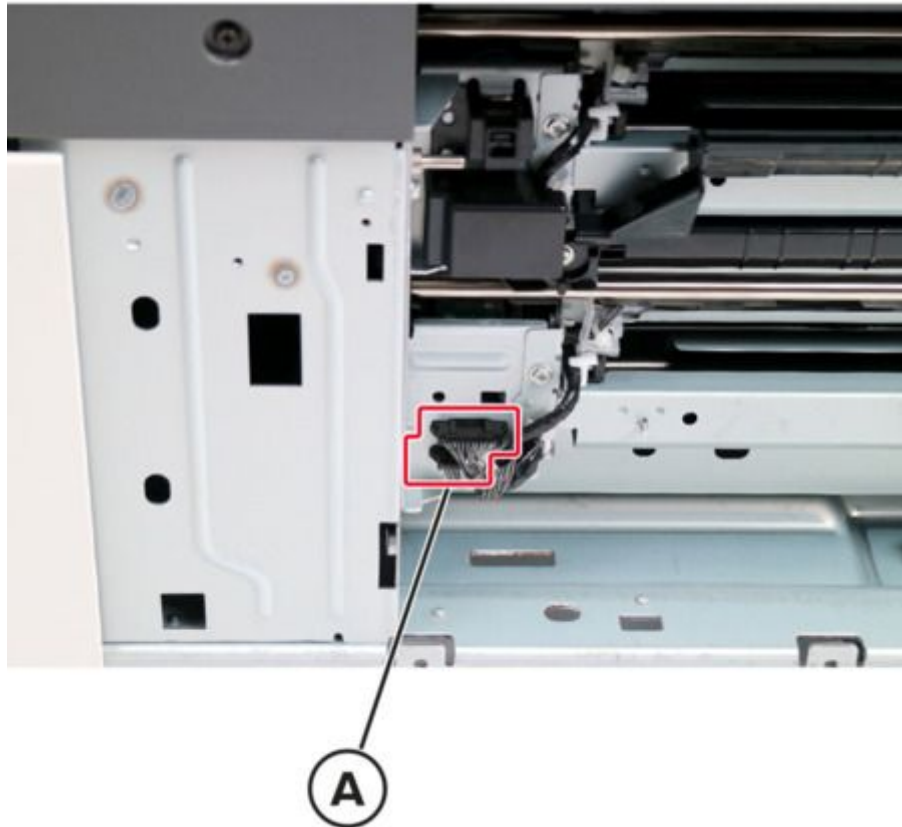


2 x 520-sheet tray paper feeder (tray 4) removal

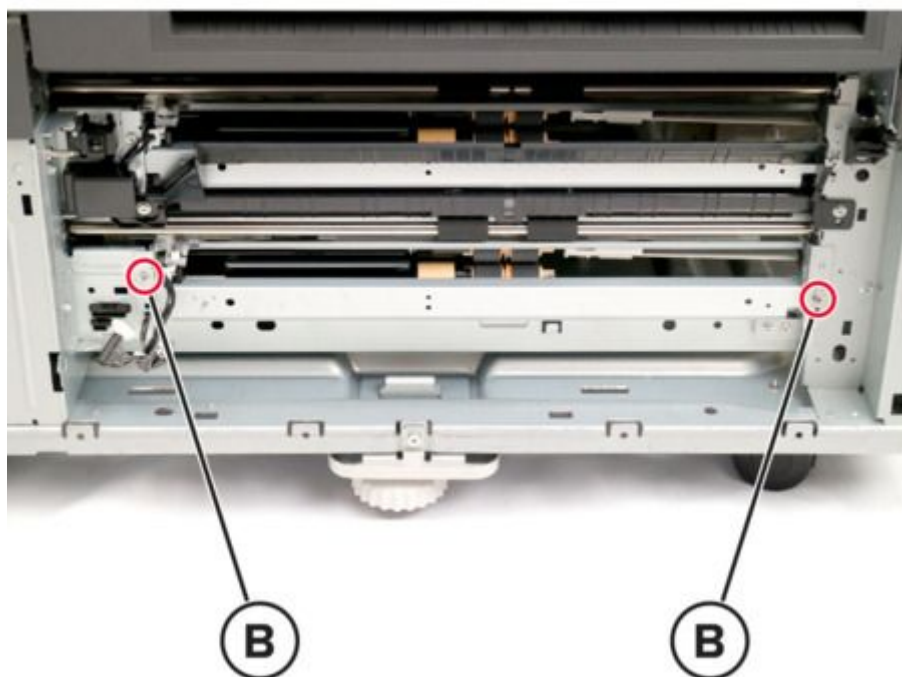
1. Remove the 2 x 520-sheet tray insert (tray 43).
2. Remove the 2 x 520-sheet tray left cover. See ["2 x 520-sheet tray left cover removal" on page 1350.](#)
3. Remove the 2 x 520-sheet tray door. See ["2 x 520-sheet tray door removal" on page 1358.](#)
4. Remove the 2 x 520-sheet tray feed guide (tray 4). See ["2 x 520-sheet tray feed guide \(tray 4\) removal" on page 1360.](#)
5. Remove the cable cover.



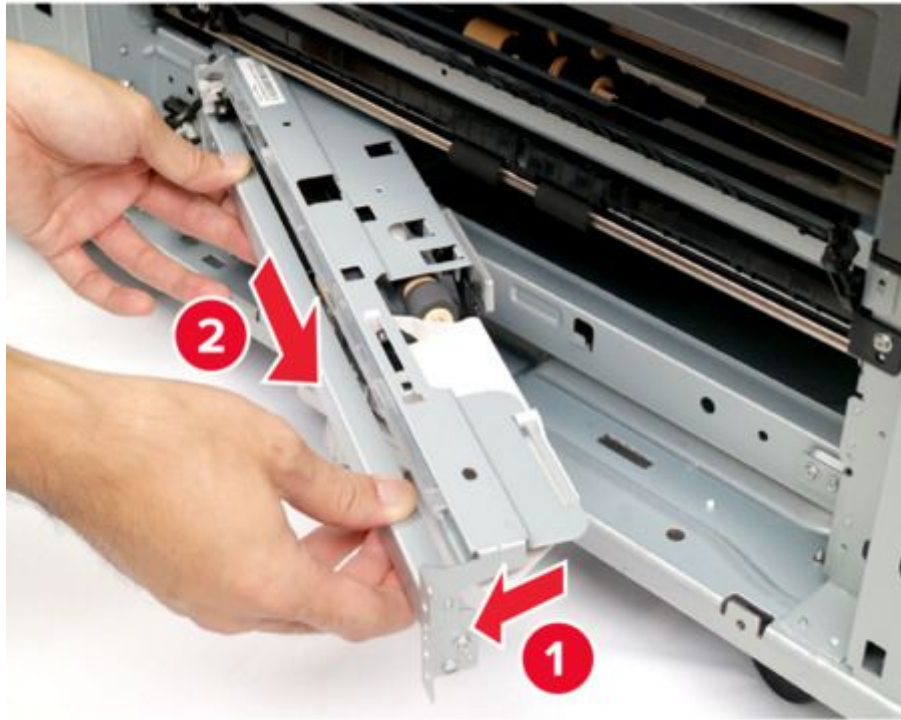
6. Disconnect the two cables (A), and then release the cables from their guides.



7. Remove the two screws (B).



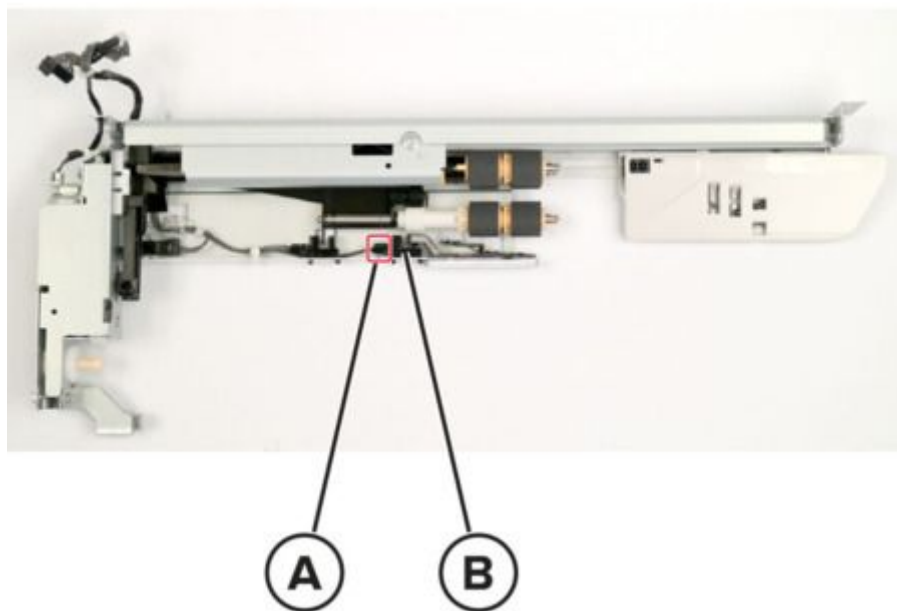
8. Remove the 2 x 520-sheet tray paper feeder (tray 4).



Sensor (2 x 520-sheet tray 3 paper present or 2 x 520-sheet tray 4 paper present) removal

- Remove the sensor (2 x 520-sheet tray 3 paper present) from the 2 x 520-sheet tray paper feeder (tray 3).
- Remove the sensor (2 x 520-sheet tray 4 paper present) from the 2 x 520-sheet tray paper feeder (tray 4).

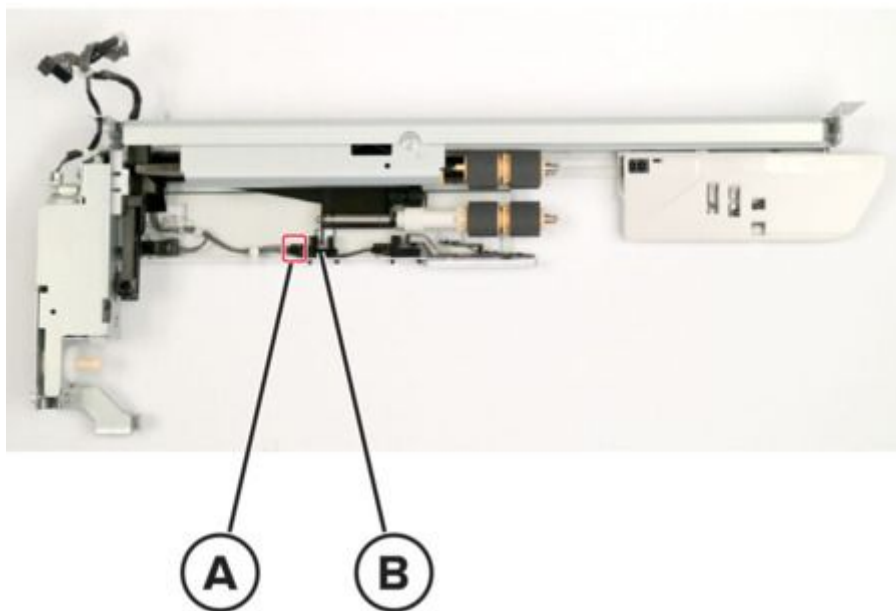
1. Remove the 2 x 520-sheet tray insert (tray 3) or the 2 x 520-sheet tray insert (tray 4).
2. Open the 2 x 520-sheet tray door.
3. Remove the 2 x 520-sheet tray feed guide (tray 3) or 2 x 520-sheet tray feed guide (tray 4).
See ["2 x 520-sheet tray feed guide \(tray 3\) removal" on page 1359](#) or ["2 x 520-sheet tray feed guide \(tray 4\) removal" on page 1360](#).
4. Remove the 2 x 520-sheet tray paper feeder (tray 3) or 2 x 520-sheet tray paper feeder (tray 4). See ["2 x 520-sheet tray paper feeder \(tray 3\) removal" on page 1361](#) or ["2 x 520-sheet tray paper feeder \(tray 4\) removal" on page 1364](#).
5. Disconnect the cable (A), and then remove the sensor (B).



Sensor (2 x 520-sheet tray 3 pick position or 2 x 520-sheet tray 4 pick position) removal

- Remove the sensor (2 x 520-sheet tray 3 pick position) from the 2 x 520-sheet tray paper feeder (tray 3).
- Remove the sensor (2 x 520-sheet tray 4 pick position) from the 2 x 520-sheet tray paper feeder (tray 4).

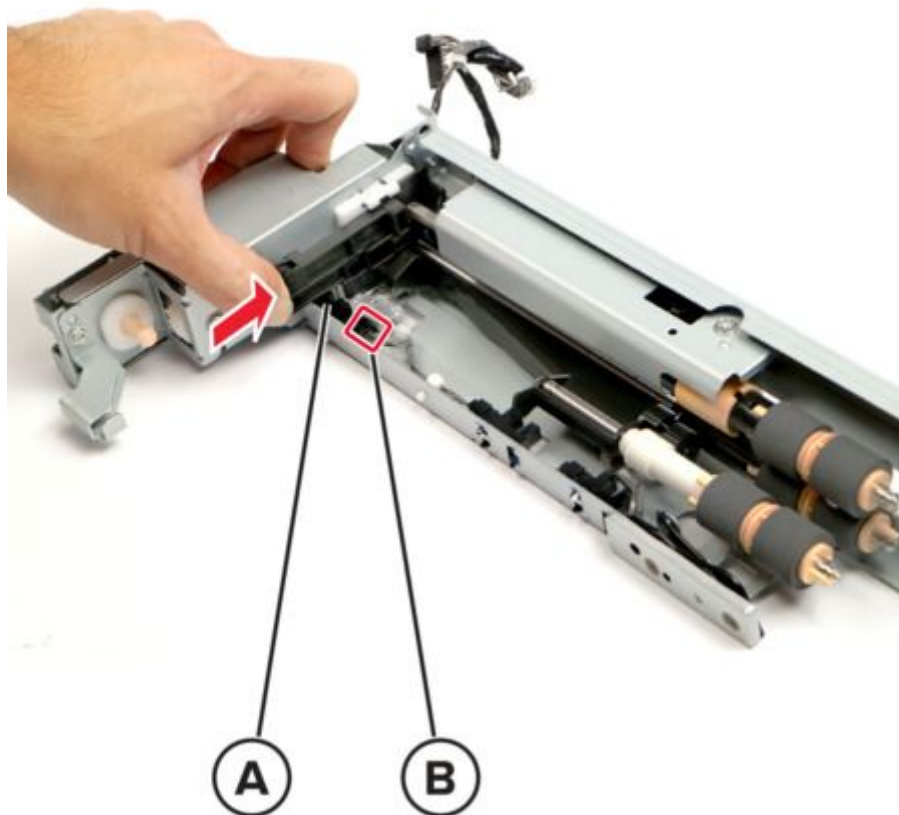
1. Remove the 2 x 520-sheet tray insert (tray 3) or the 2 x 520-sheet tray insert (tray 4).
2. Open the 2 x 520-sheet tray door.
3. Remove the 2 x 520-sheet tray feed guide (tray 3) or 2 x 520-sheet tray feed guide (tray 4).
See ["2 x 520-sheet tray feed guide \(tray 3\) removal" on page 1359](#) or ["2 x 520-sheet tray feed guide \(tray 4\) removal" on page 1360](#).
4. Remove the 2 x 520-sheet tray paper feeder (tray 3) or 2 x 520-sheet tray paper feeder (tray 4). See ["2 x 520-sheet tray paper feeder \(tray 3\) removal" on page 1361](#) or ["2 x 520-sheet tray paper feeder \(tray 4\) removal" on page 1364](#).
5. Disconnect the cable (A), and then remove the sensor (B).



Sensor (2 x 520-sheet tray 3 lift plate level or 2 x 520-sheet tray 4 lift plate level) removal

- Remove the sensor (2 x 520-sheet tray 3 lift plate level) from the 2 x 520-sheet tray paper feeder (tray 3).
- Remove the sensor (2 x 520-sheet tray 4 lift plate level) from the 2 x 520-sheet tray paper feeder (tray 4).

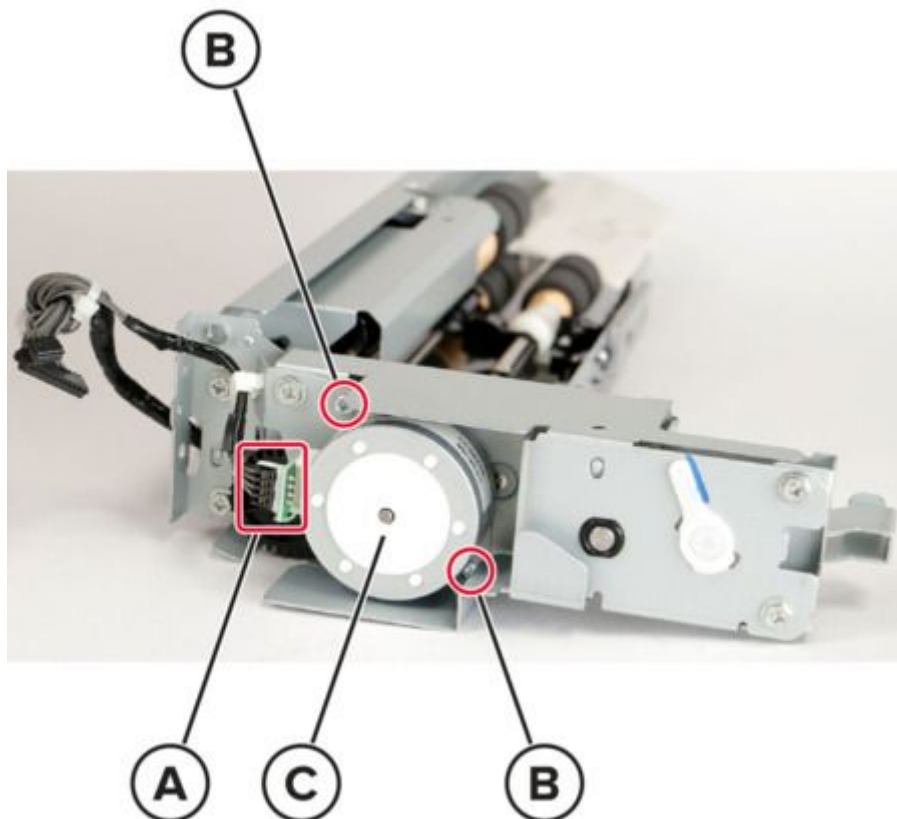
1. Remove the 2 x 520-sheet tray insert (tray 3) or the 2 x 520-sheet tray insert (tray 4).
2. Open the 2 x 520-sheet tray door.
3. Remove the 2 x 520-sheet tray feed guide (tray 3) or 2 x 520-sheet tray feed guide (tray 4).
See ["2 x 520-sheet tray feed guide \(tray 3\) removal" on page 1359](#) or ["2 x 520-sheet tray feed guide \(tray 4\) removal" on page 1360](#).
4. Remove the 2 x 520-sheet tray paper feeder (tray 3) or 2 x 520-sheet tray paper feeder (tray 4). See ["2 x 520-sheet tray paper feeder \(tray 3\) removal" on page 1361](#) or ["2 x 520-sheet tray paper feeder \(tray 4\) removal" on page 1364](#).
5. Push the sensor actuator, disconnect the cable (A), and then remove the sensor (B).



Motor (2 x 520-sheet tray pick/lift 3 or 2 x 520-sheet tray 4 pick/lift) removal

- Remove the motor (2 x 520-sheet tray 3 pick/lift) from the 2 x 520-sheet tray paper feeder (tray 3).
- Remove the motor (2 x 520-sheet tray 4 pick/lift) from the 2 x 520-sheet tray paper feeder (tray 4).

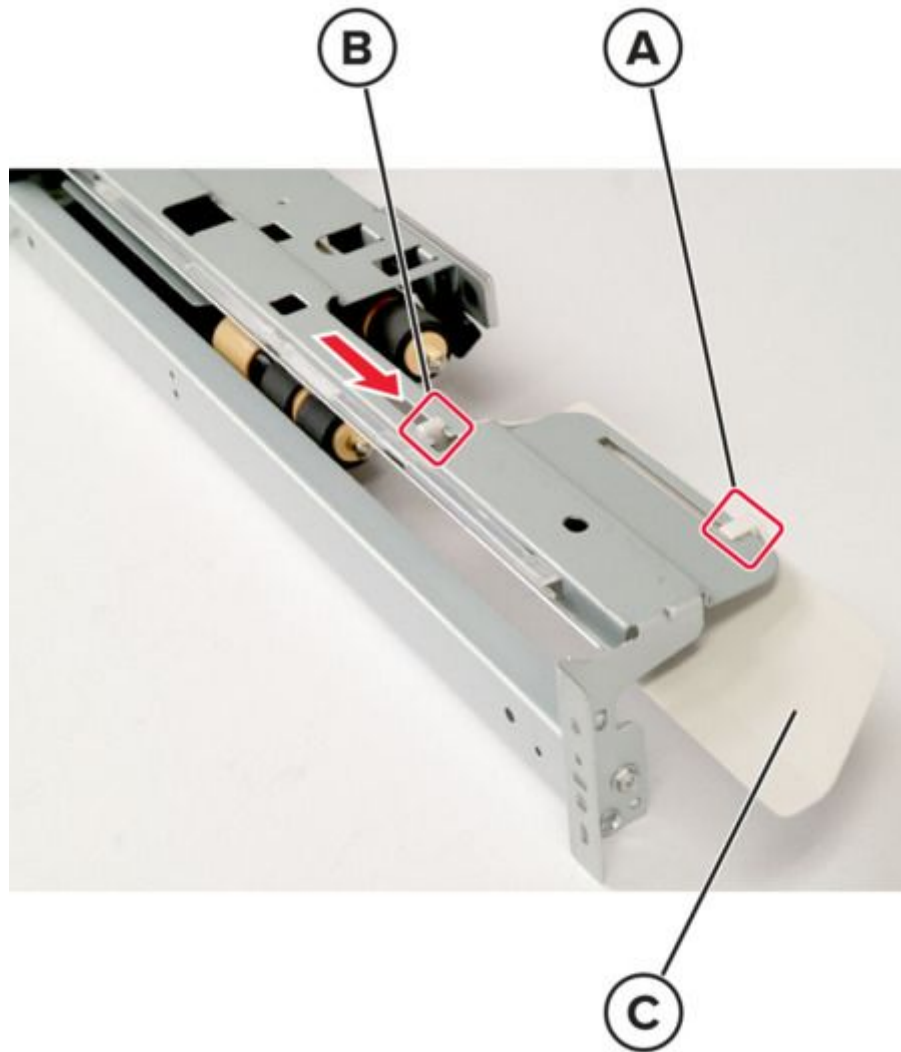
1. Remove the 2 x 520-sheet tray insert (tray 3) or the 2 x 520-sheet tray insert (tray 4).
2. Open the 2 x 520-sheet tray door.
3. Remove the 2 x 520-sheet tray feed guide (tray 3) or 2 x 520-sheet tray feed guide (tray 4).
See ["2 x 520-sheet tray feed guide \(tray 3\) removal" on page 1359](#) or ["2 x 520-sheet tray feed guide \(tray 4\) removal" on page 1360](#).
4. Remove the 2 x 520-sheet tray paper feeder (tray 3) or 2 x 520-sheet tray paper feeder (tray 4). See ["2 x 520-sheet tray paper feeder \(tray 3\) removal" on page 1361](#) or ["2 x 520-sheet tray paper feeder \(tray 4\) removal" on page 1364](#).
5. Disconnect the cable (A), remove the two screws (B), and then remove the motor (C).



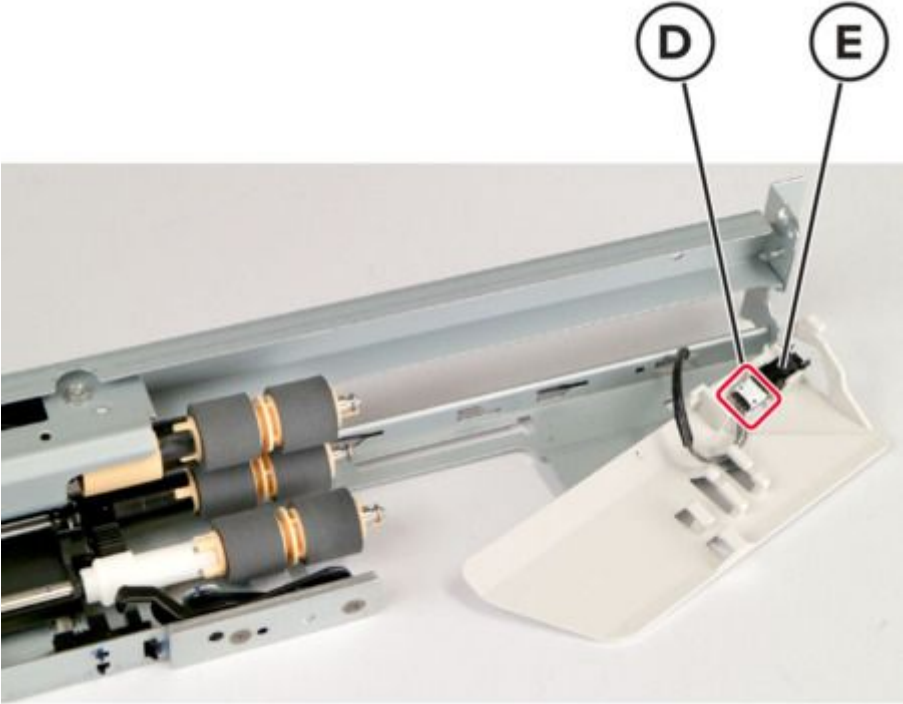
Sensor (2 x 520-sheet tray 3 feed or 2 x 520-sheet tray 4 feed) removal

- Remove the sensor (2 x 520-sheet tray 3 feed) from the 2 x 520-sheet tray paper feeder (tray 3).
- Remove the sensor (2 x 520-sheet tray 4 feed) from the 2 x 520-sheet tray paper feeder (tray 4).

1. Remove the 2 x 520-sheet tray insert (tray 3) or the 2 x 520-sheet tray insert (tray 4).
2. Open the 2 x 520-sheet tray door.
3. Remove the 2 x 520-sheet tray feed guide (tray 3) or 2 x 520-sheet tray feed guide (tray 4).
See [See "2 x 520-sheet tray feed guide \(tray 3\) removal" on page 1359](#) or [See "2 x 520-sheet tray feed guide \(tray 4\) removal" on page 1360](#).
4. Remove the 2 x 520-sheet tray paper feeder (tray 3) or 2 x 520-sheet tray paper feeder (tray 4). See [See "2 x 520-sheet tray paper feeder \(tray 3\) removal" on page 1361](#) or [See "2 x 520-sheet tray paper feeder \(tray 4\) removal" on page 1364](#).
5. Release the latch (A), move the pin (B) to the unlock position, and then remove the feed guide (C).



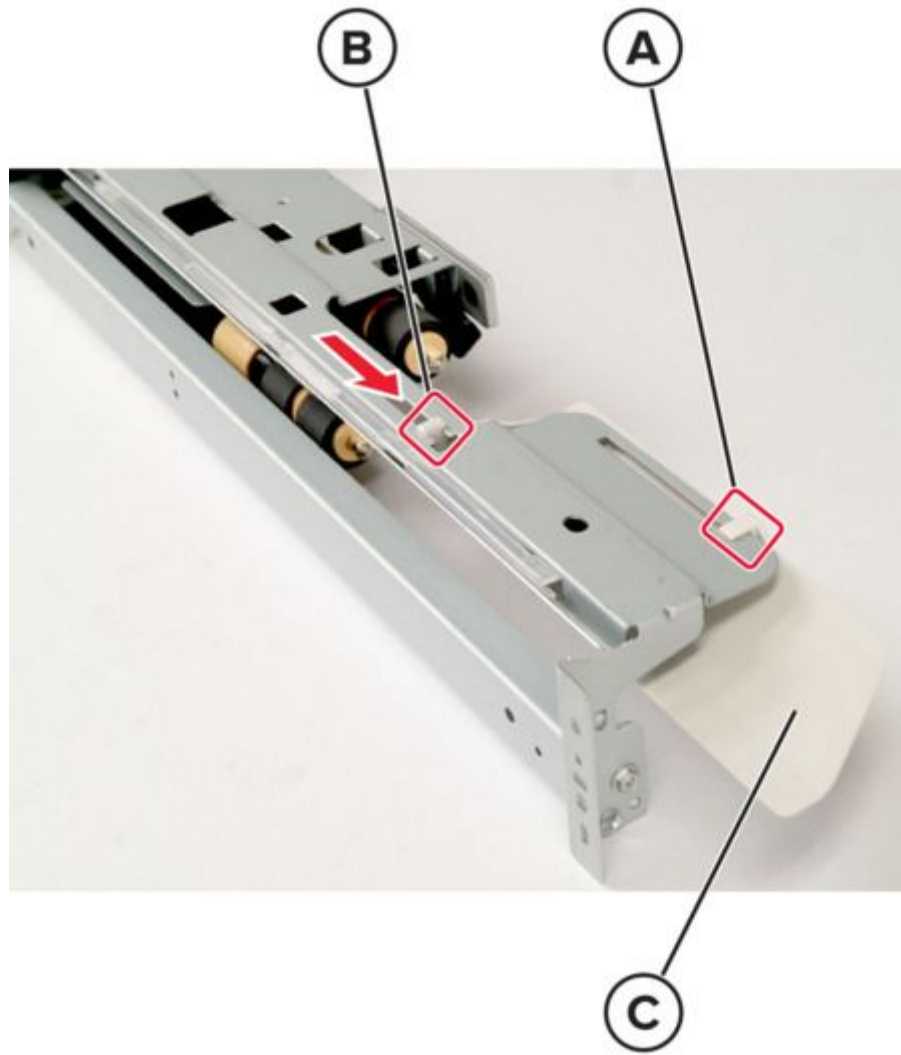
6. Disconnect the cable (D), and then remove the sensor (E).



2 x 520-sheet tray feed guide (tray 3) or 2 x 520-sheet tray feed guide (tray 4) removal

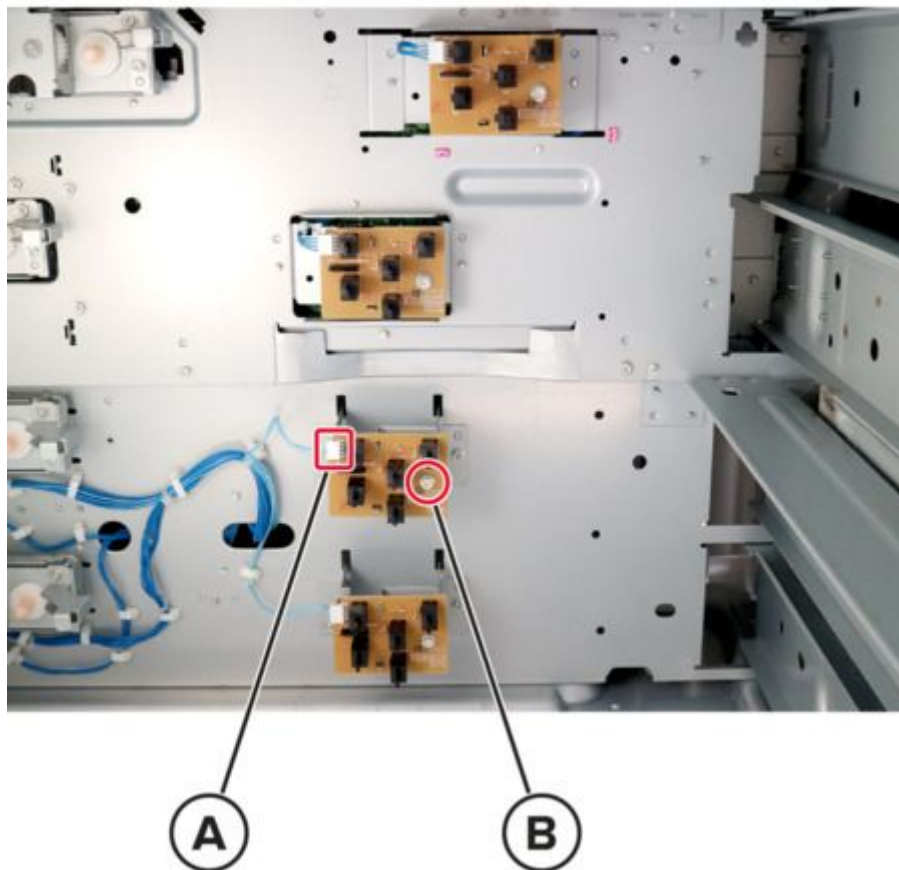
- Remove the 2 x 520-sheet tray feed guide (tray 3) from the 2 x 520-sheet tray paper feeder (tray 3).
- Remove the 2 x 520-sheet tray feed guide (tray 4) from the 2 x 520-sheet tray paper feeder (tray 4).

1. Remove the 2 x 520-sheet tray insert (tray 3) or the 2 x 520-sheet tray insert (tray 4).
2. Open the 2 x 520-sheet tray door.
3. Remove the 2 x 520-sheet tray feed guide (tray 3) or 2 x 520-sheet tray feed guide (tray 4). See [See "2 x 520-sheet tray feed guide \(tray 3\) removal" on page 1359](#) or [See "2 x 520-sheet tray feed guide \(tray 4\) removal" on page 1360](#).
4. Remove the 2 x 520-sheet tray paper feeder (tray 3) or 2 x 520-sheet tray paper feeder (tray 4). See [See "2 x 520-sheet tray paper feeder \(tray 3\) removal" on page 1361](#) or [See "2 x 520-sheet tray paper feeder \(tray 4\) removal" on page 1364](#).
5. Release the latch (A), move the pin (B) to the unlock position, and then remove the feed guide (C).



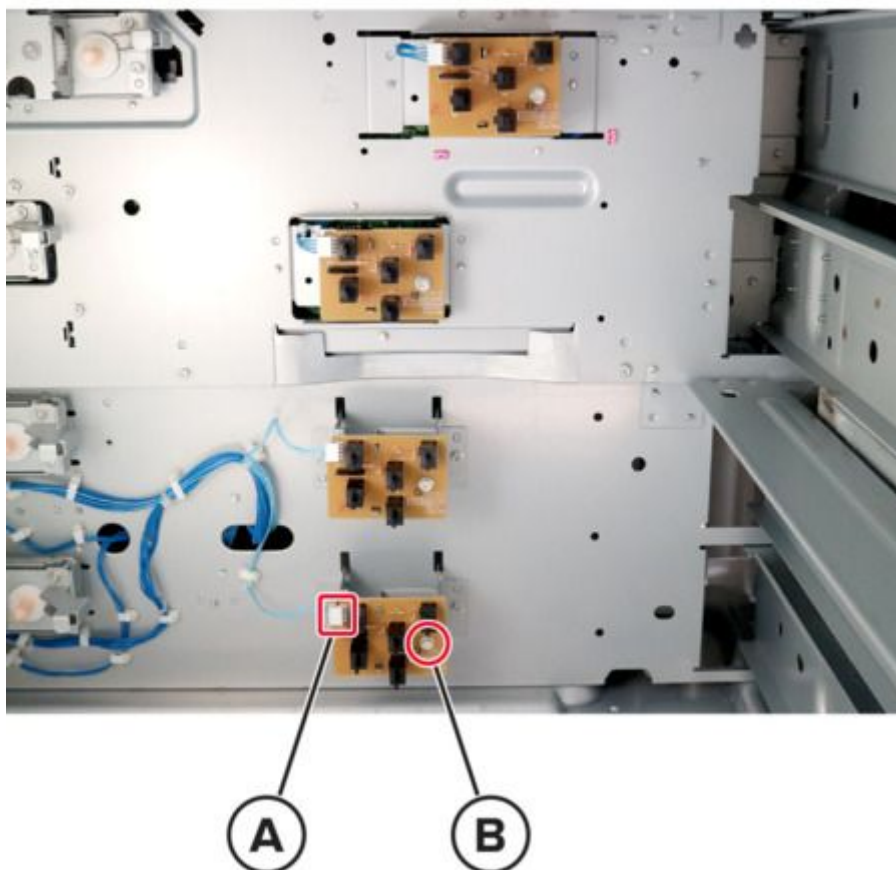
Sensor (2 x 520-sheet tray 3 paper size) removal

1. Remove the tray 1 insert.
2. Remove the tray 2 insert.
3. Remove the 2 x 520-sheet tray insert (tray 3).
4. Disconnect the cable (A), remove the screw (B), and then remove the sensor.



Sensor (2 x 520-sheet tray 4 paper size) removal

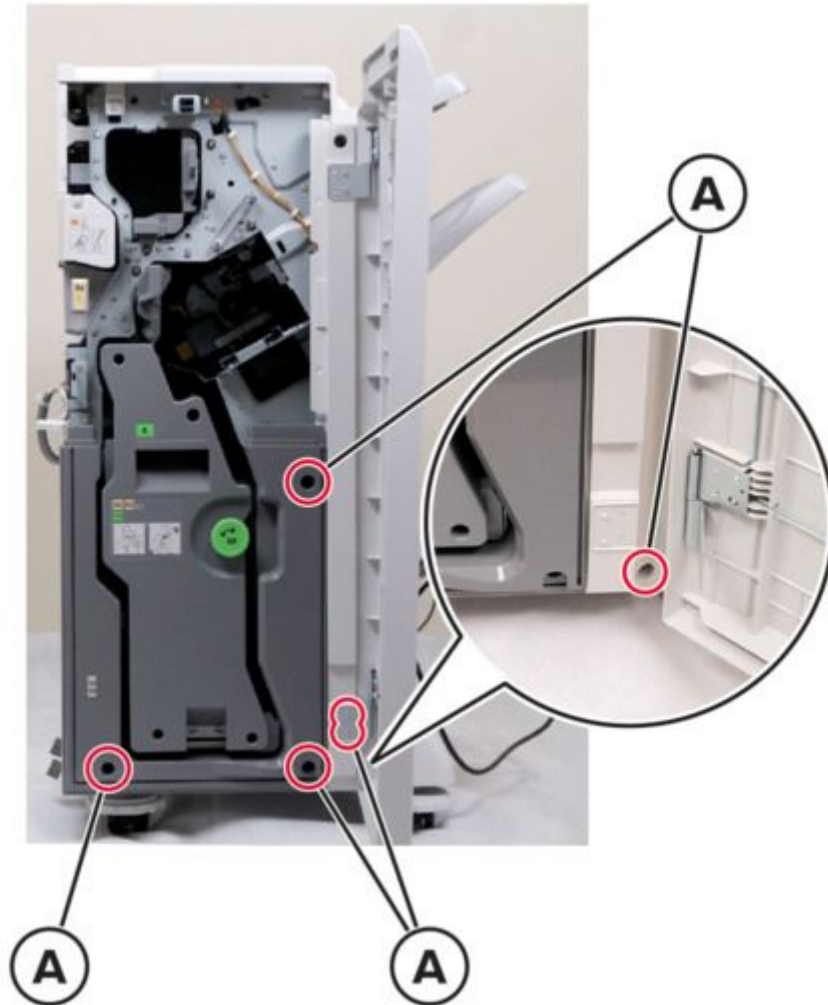
1. Remove the tray 1 insert.
2. Remove the tray 2 insert.
3. Remove the 2 x 520-sheet tray insert (tray 3).
4. Disconnect the cable (A), remove the screw (B), and then remove the sensor.



Booklet finisher removals

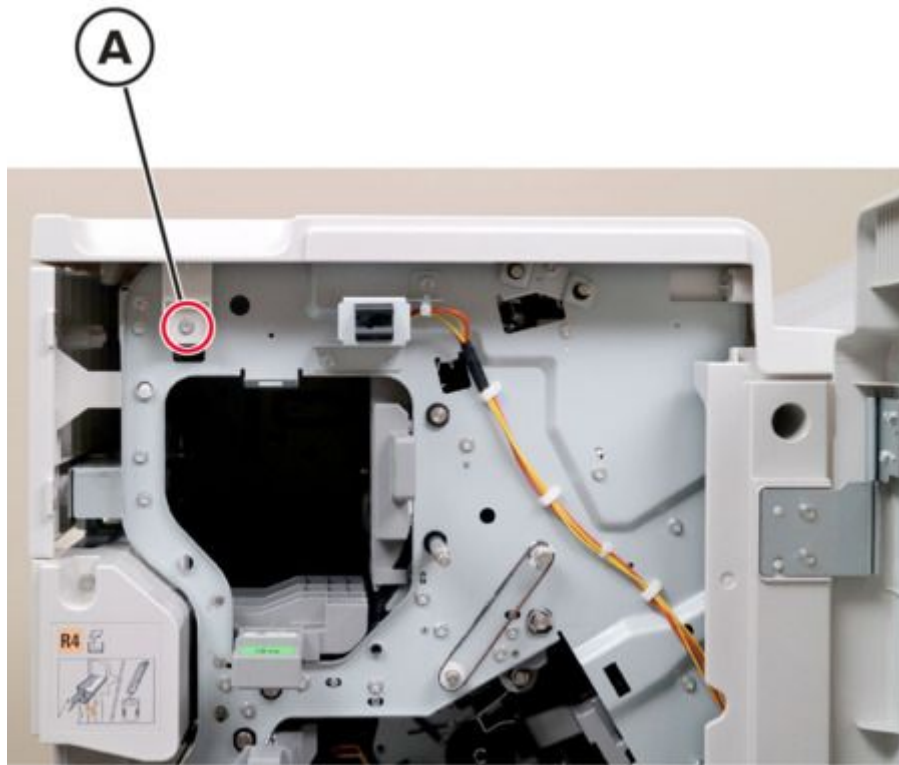
Booklet finisher front cover removal

1. Remove the inner front cover. See [See "Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the six screws (A), and then remove the front cover.

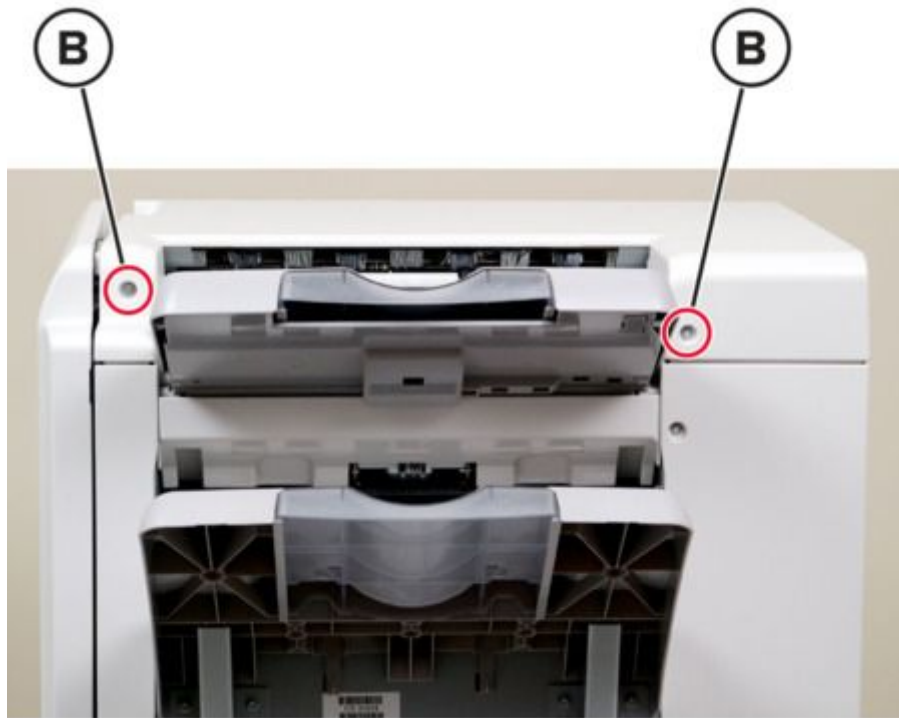


Booklet finisher top cover removal

1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382](#).
2. Remove the screw (A).



3. Remove the two screws (B).



4. Gently pull, and then raise the top cover to release it.

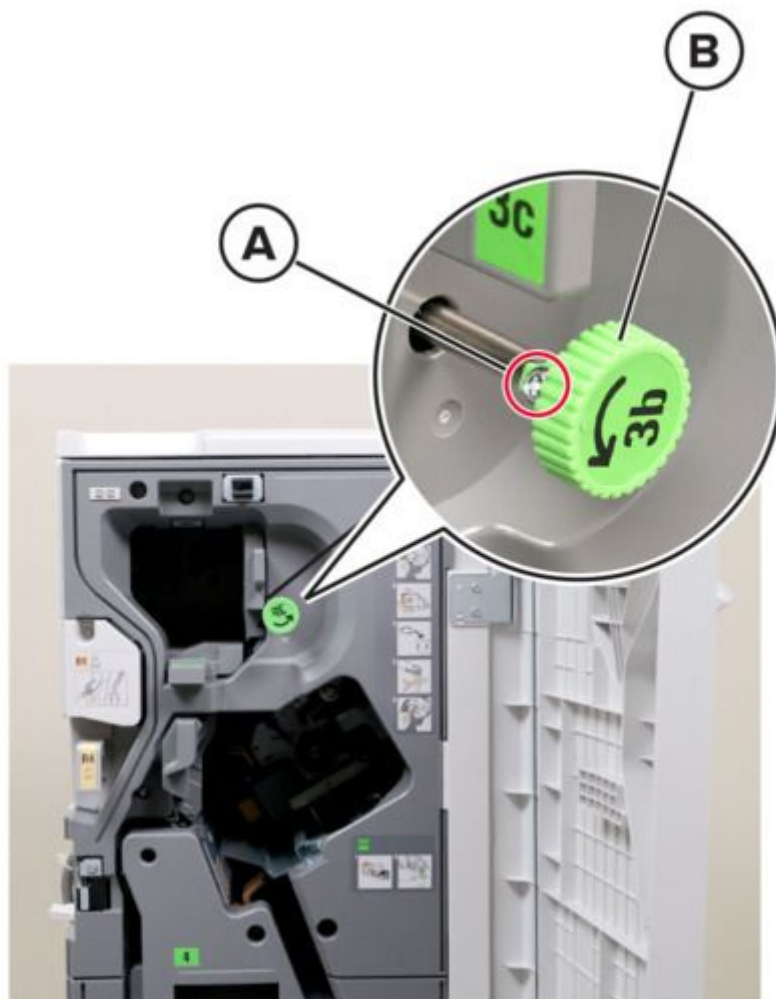


5. Remove the top cover.



Booklet finisher inner front cover removal

1. Remove the booklet finisher left cover. See ["Booklet finisher left cover removal"](#) on page 1385.
2. Open the front cover, loosen the screw (A), and then remove the knob (B).

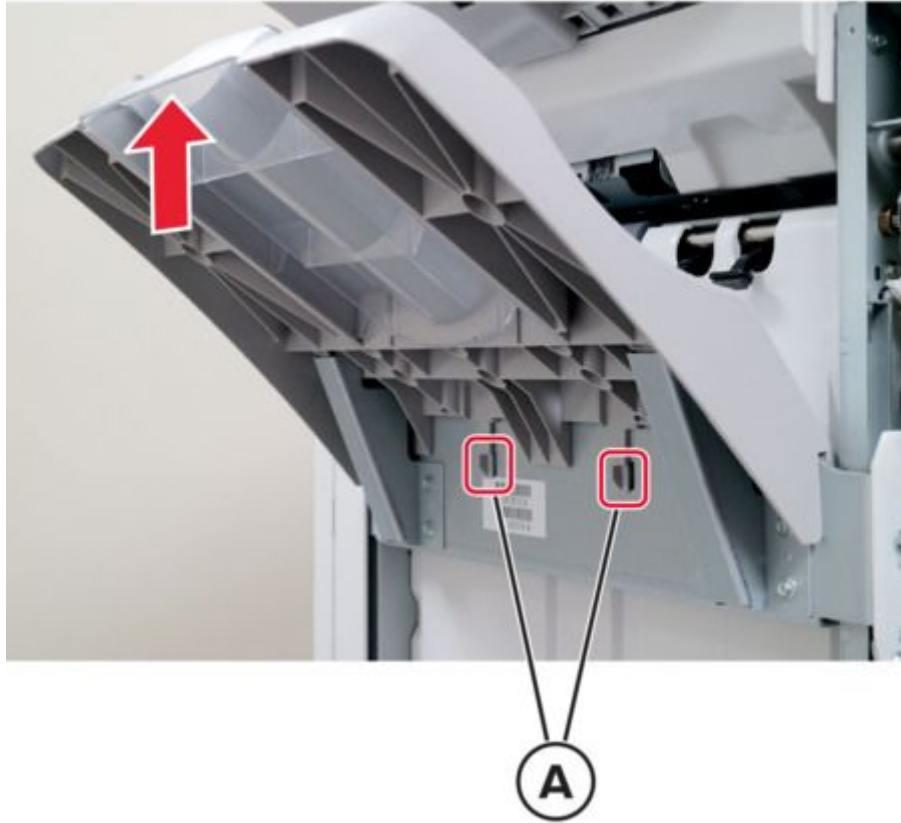


3. Remove the four screws (C), and then remove the inner front cover.



Booklet finisher stacker tray removal

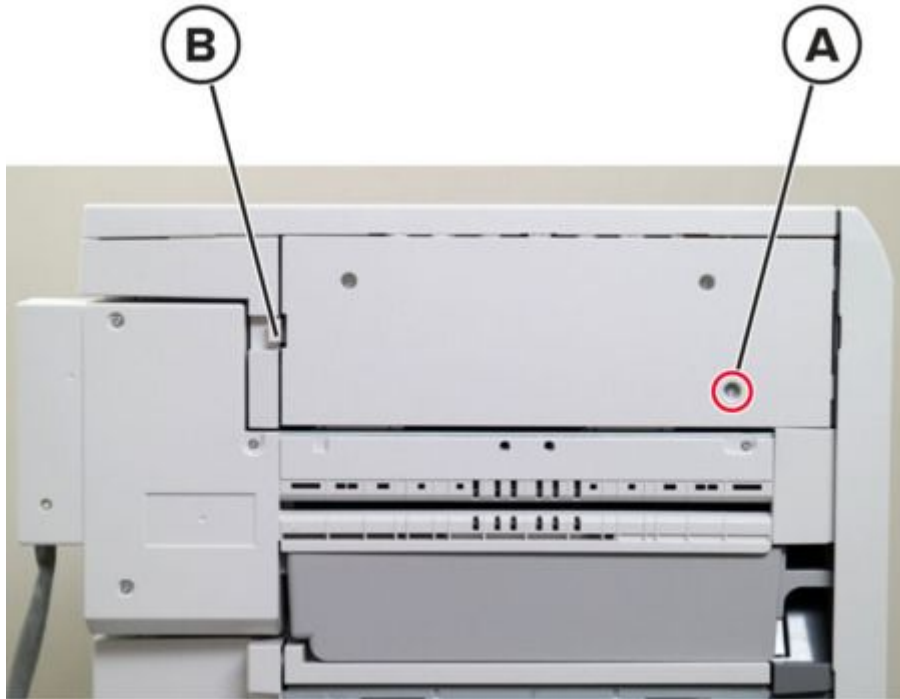
1. Release the two tabs (A).



2. Pull the tray upward to remove it.

Booklet finisher left cover removal

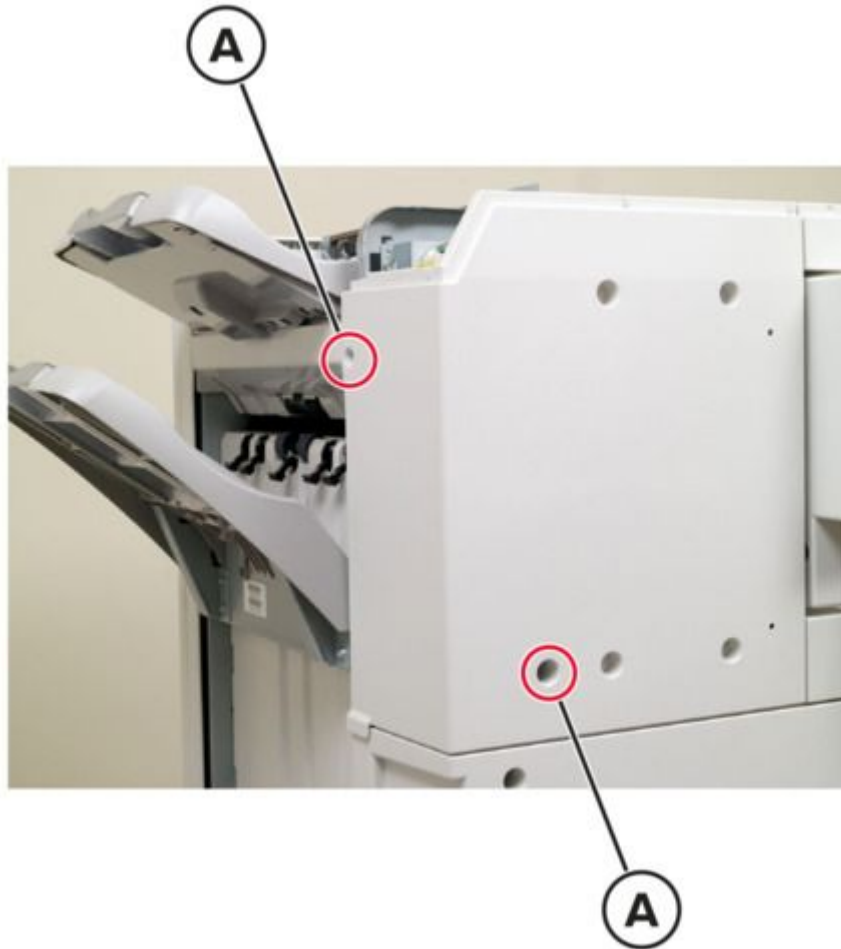
1. Remove the screw (A).



2. Release the tab (B) to remove the cover.

Booklet finisher rear upper cover removal

1. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
2. Remove the two screws (A), and then remove the cover.

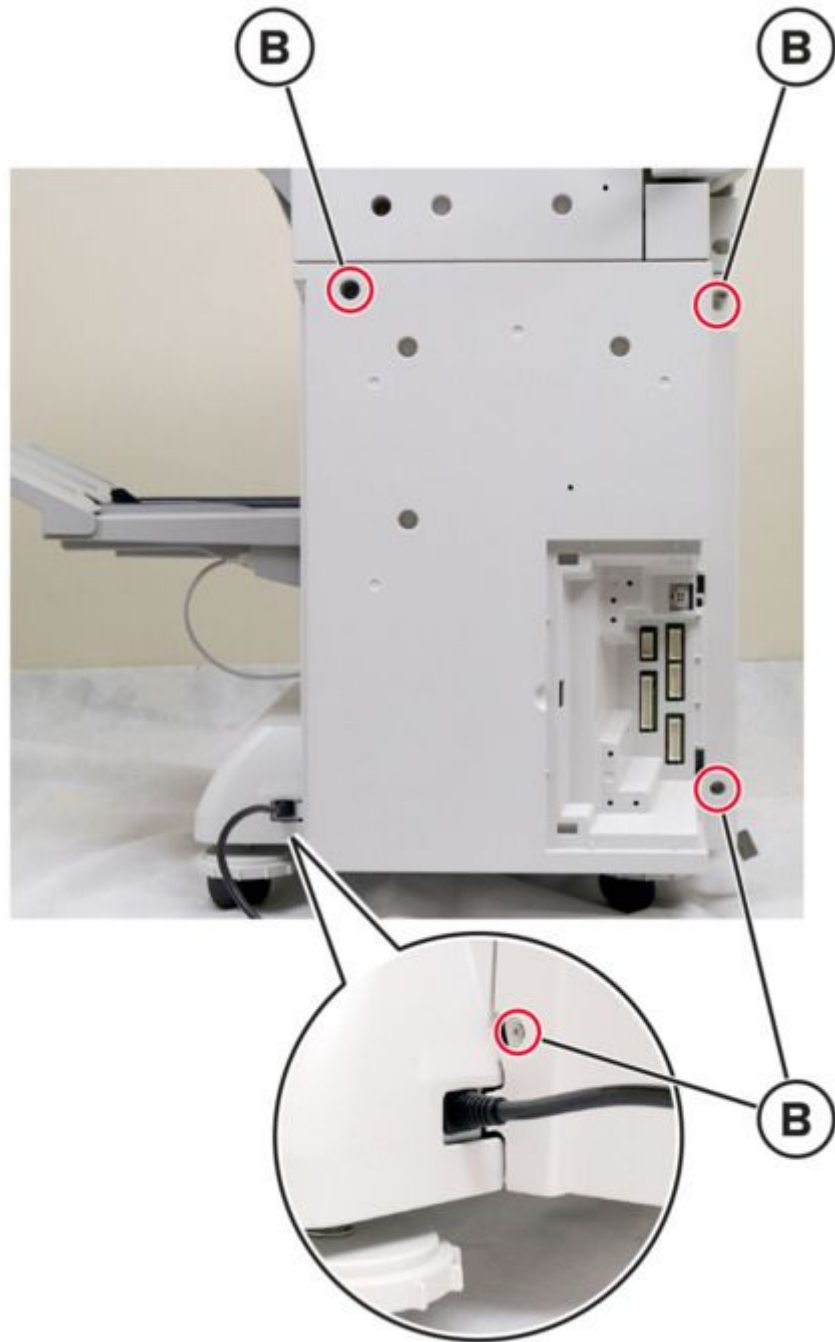


Booklet finisher rear lower cover removal

1. Remove the connector cover (A), and then detach the cables.



2. Remove the four screws (B), and then remove the cover.

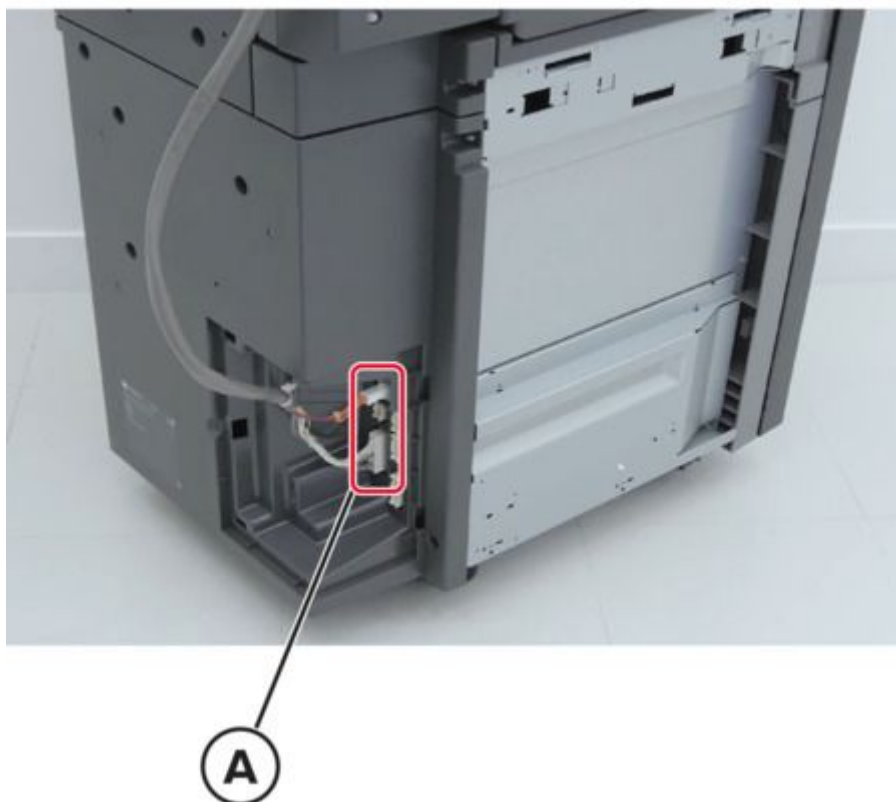


Booklet finisher puncher removal

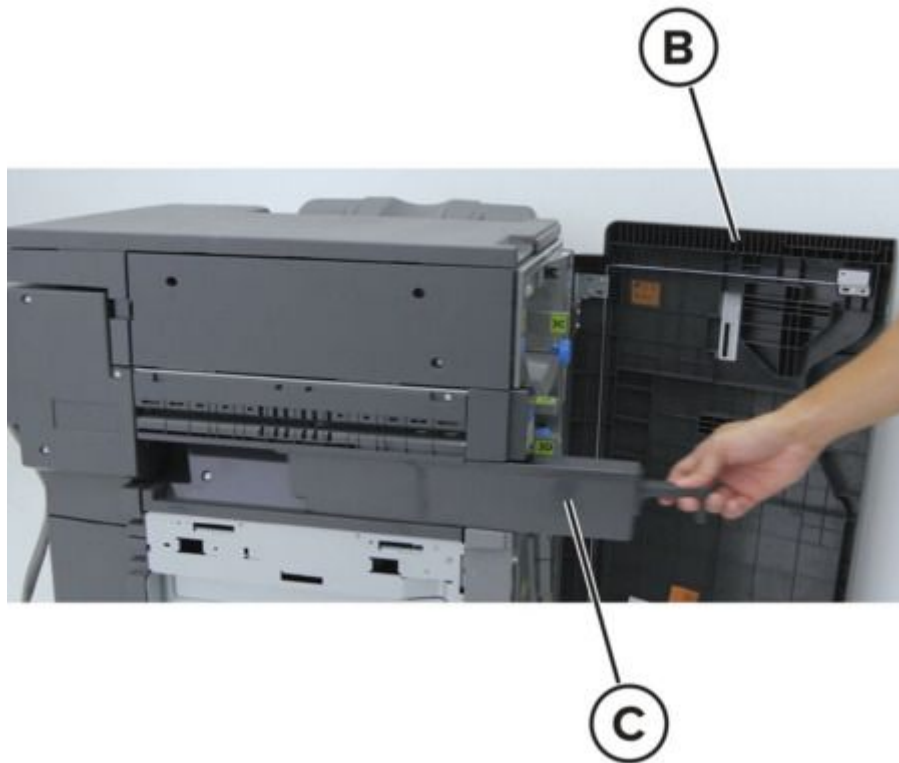
NOTES

For a video demonstration, see [Removing the booklet finisher puncher](#).

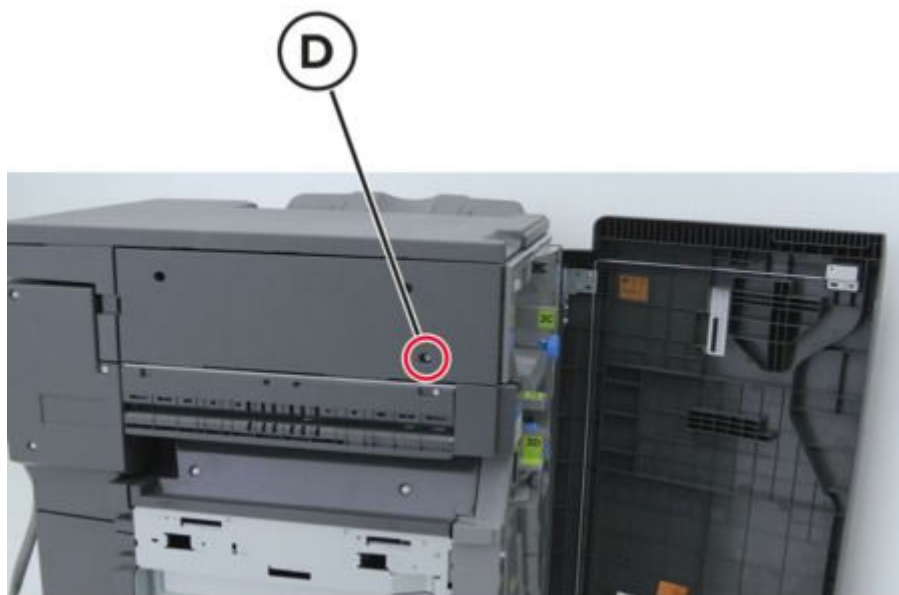
1. Remove the booklet finisher cable cover, and then disconnect all the cables and connectors (A).



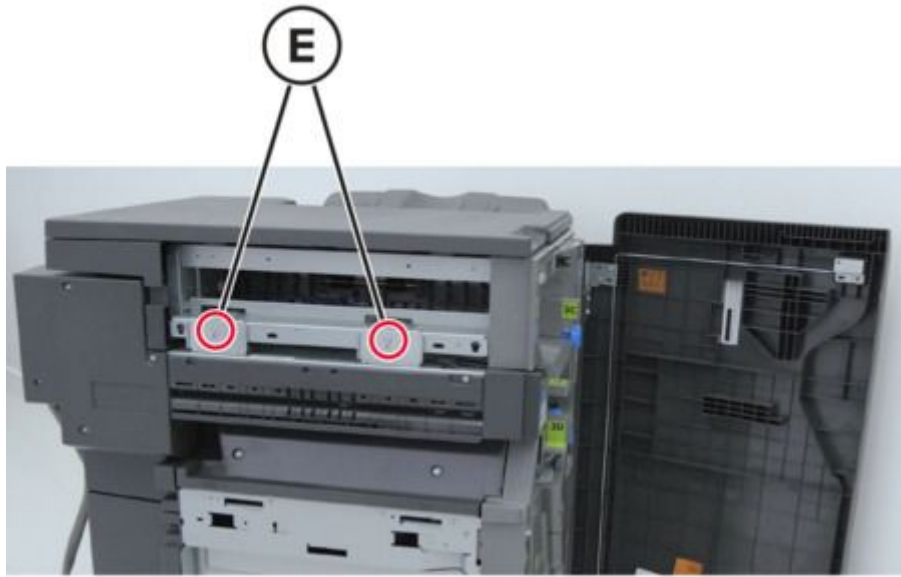
2. Open the front cover (B), and then remove the hole punch box (C).



3. Remove the screw (D), and then remove the left cover.

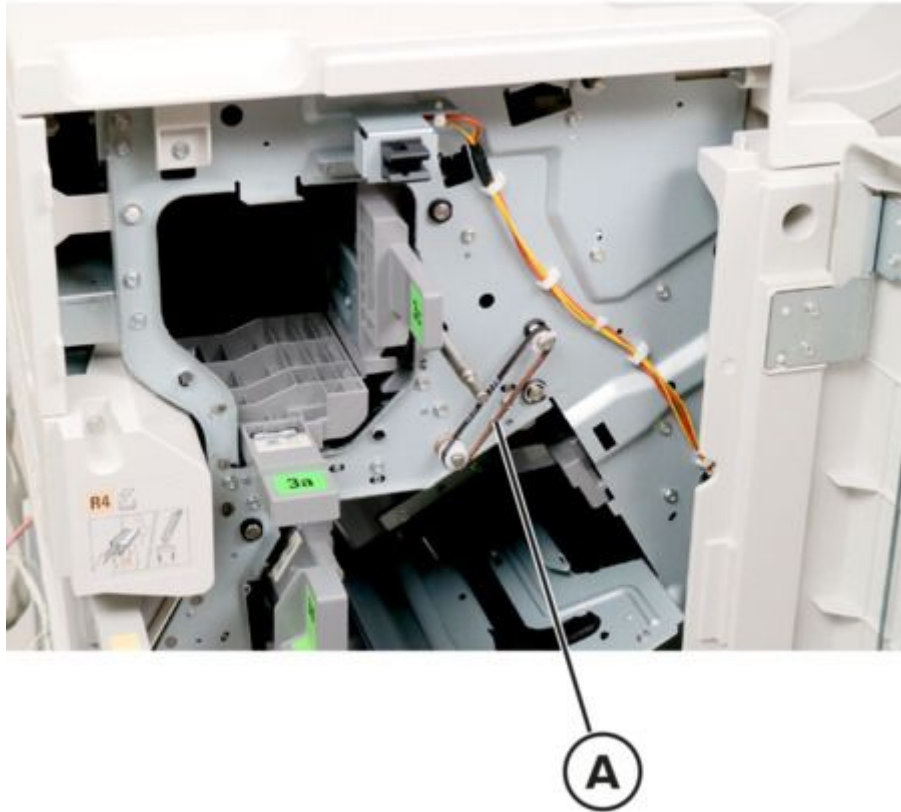


4. Remove the two screws (E), and then remove the booklet finisher puncher.



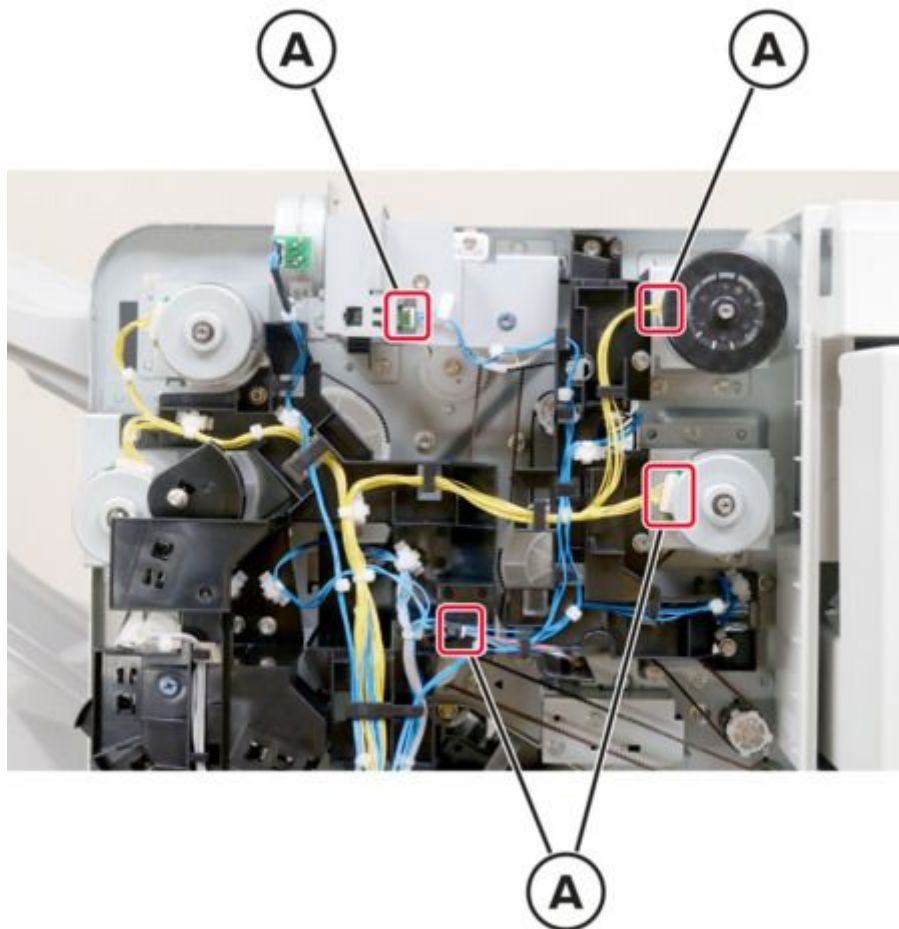
Booklet finisher front belt removal

1. Remove the booklet finisher inner front cover. See [See "Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the belt (A).

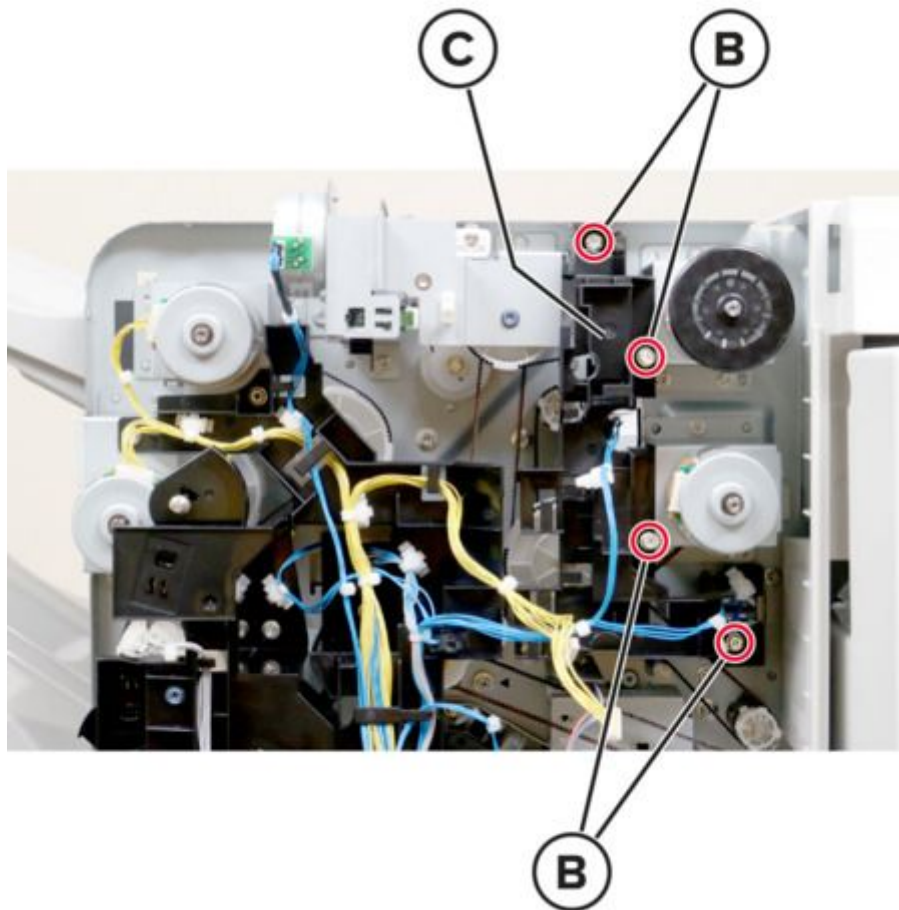


Motor (booklet finisher exit) removal

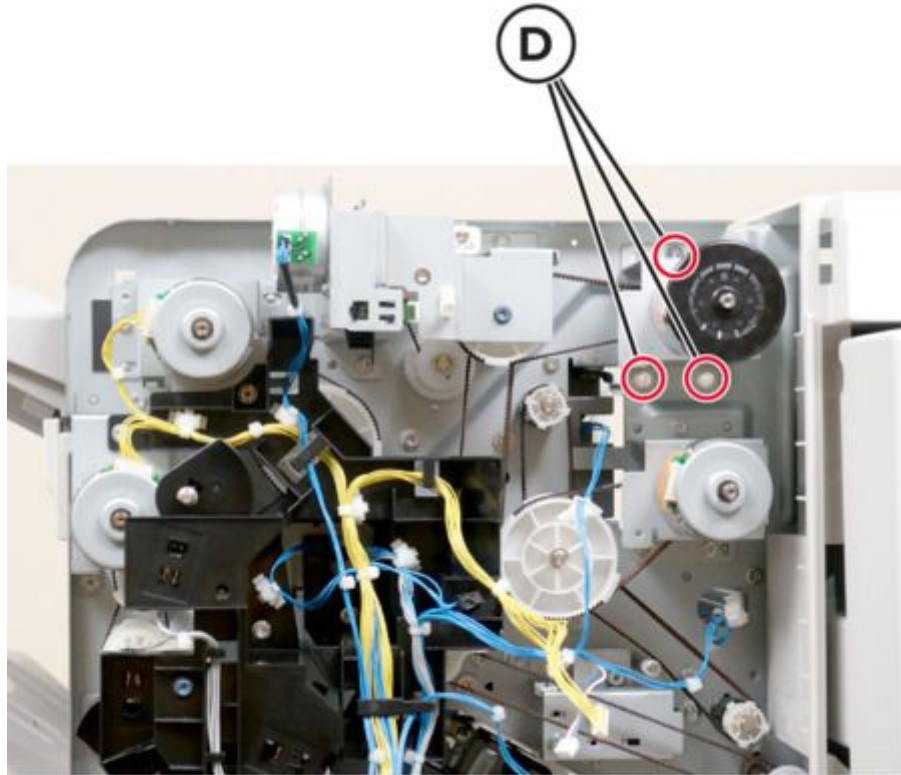
1. Remove the top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
2. Remove the rear upper cover. See [See "Booklet finisher rear upper cover removal" on page 1386.](#)
3. Disconnect the four cables (A), and then remove the cables from their guides.



4. Remove the four screws (B), and then remove the cable guide (C).



5. Remove the three screws (D), and then remove the motor.



6. Detach the belt from the motor.

INSTALLATION NOTE

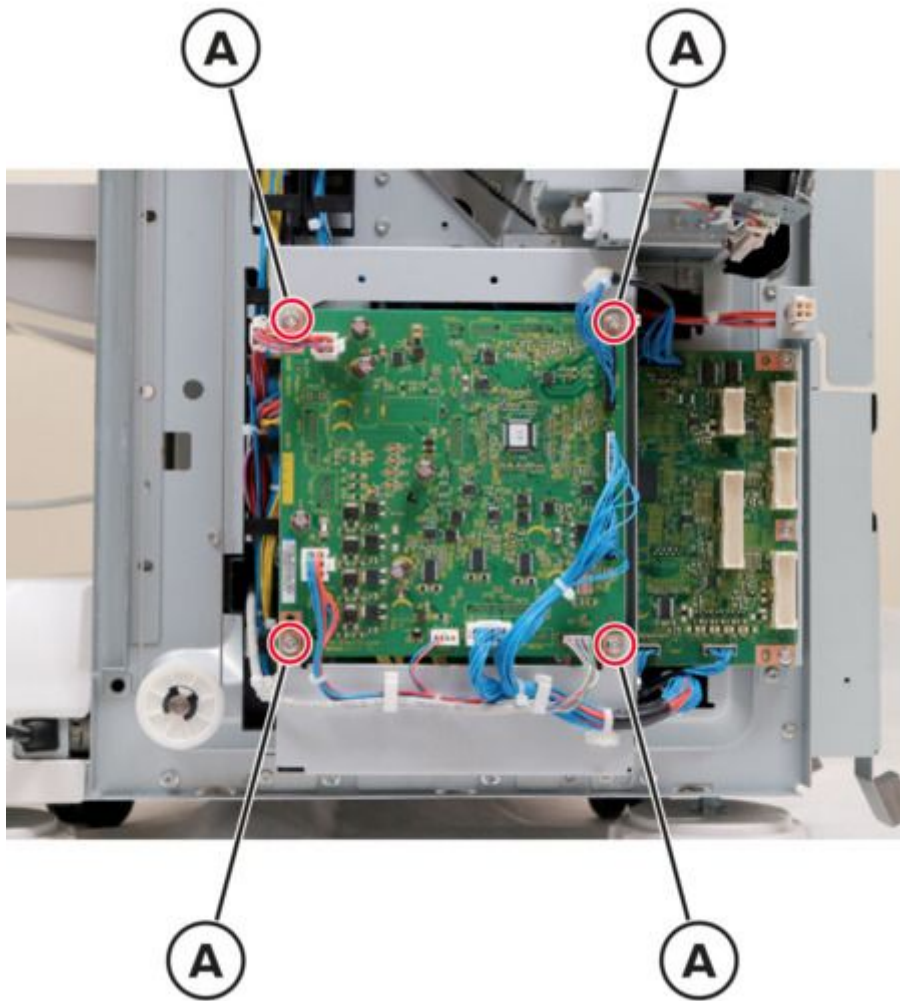
Pay attention to the position of the belt.

Booklet finisher booklet maker controller board removal

NOTES

For a video demonstration, see [Booklet finisher booklet maker controller board removal](#).

1. Remove the rear lower cover. See [See "Booklet finisher rear lower cover removal" on page 1387](#).
2. Disconnect all the connectors, and then remove the four screws (A).



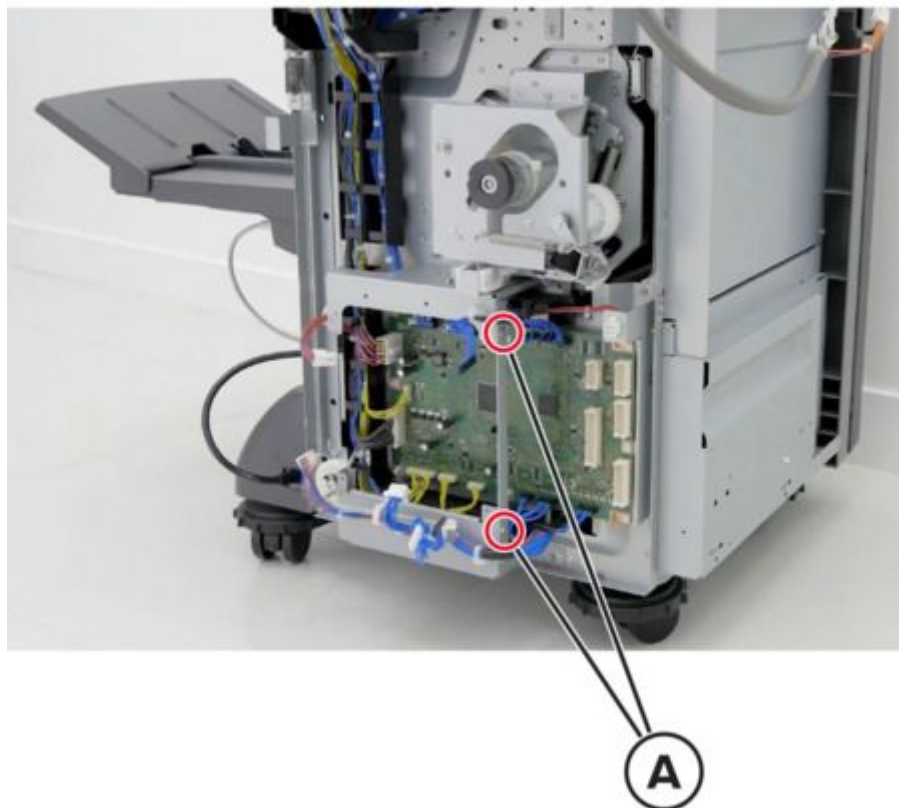
3. Remove the booklet finisher booklet maker controller board.

Booklet finisher controller board removal

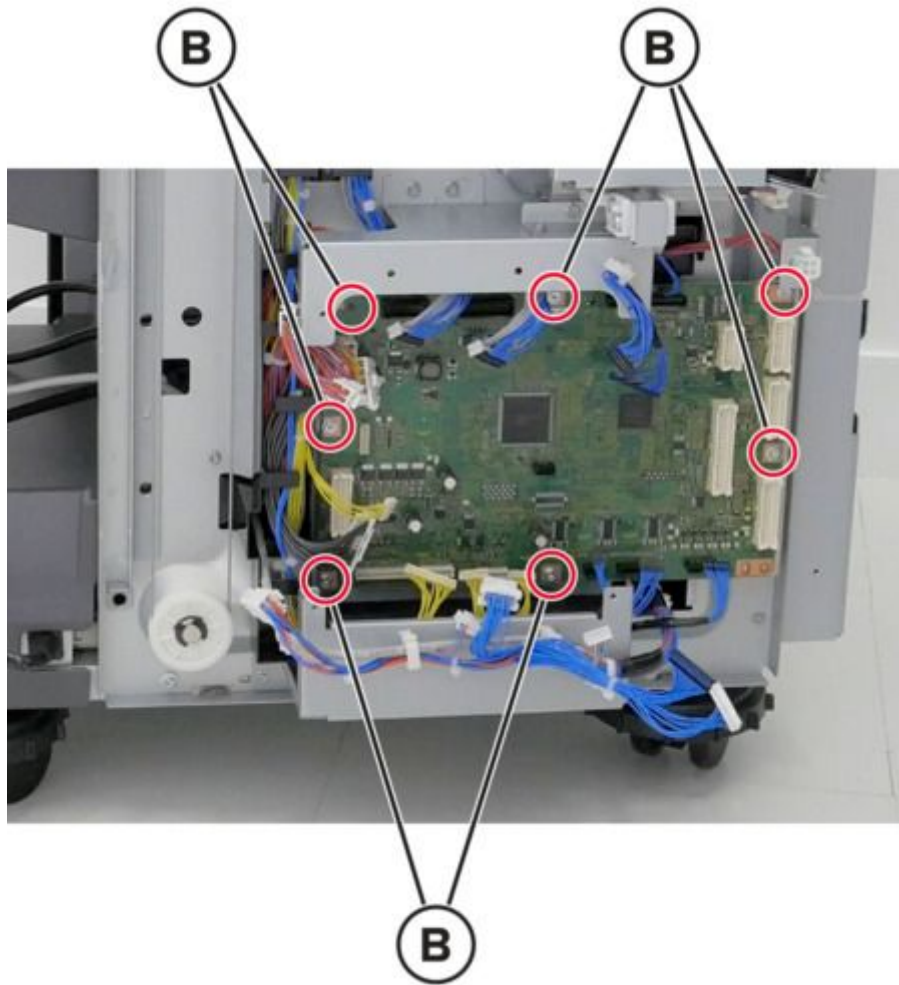
NOTES

For a video demonstration, see [Booklet finisher controller board removal](#).

1. Remove the booklet finisher booklet maker controller board. See [See "Booklet finisher booklet maker controller board removal" on page 1396](#).
2. Remove the two screws (A).



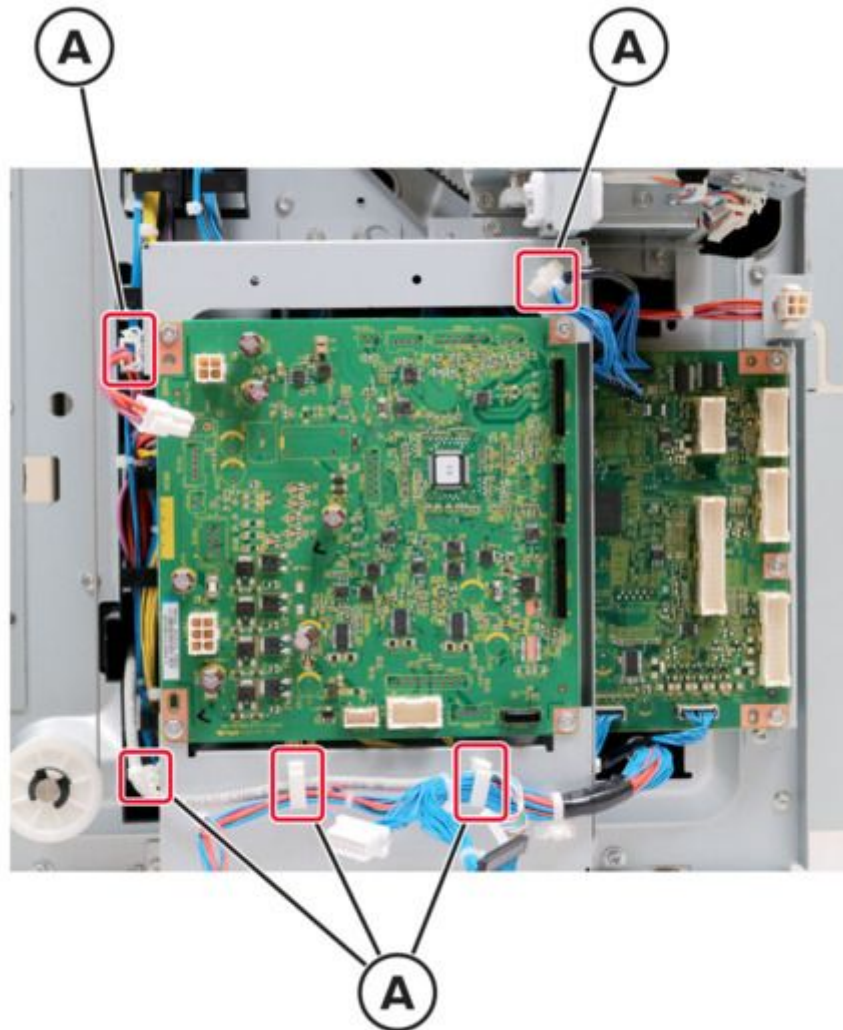
3. Disconnect all the connectors, and then remove the seven screws (B).



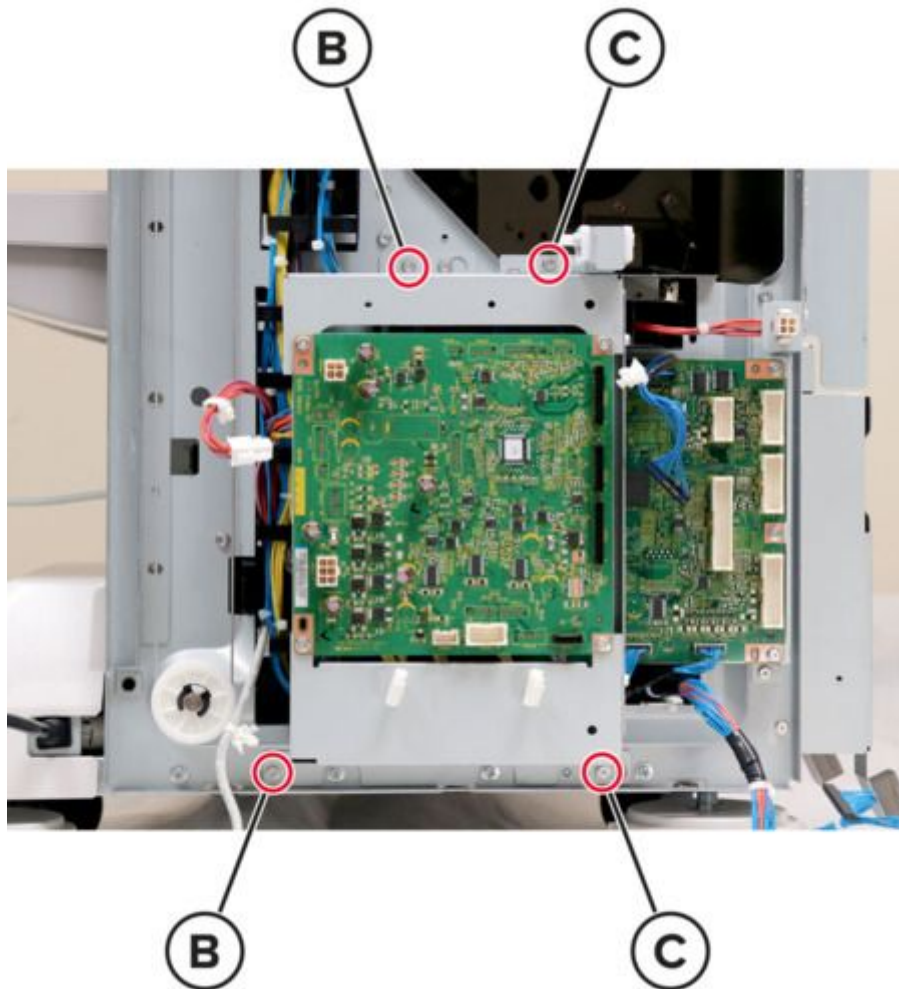
4. Remove the booklet finisher controller board.

Booklet finisher booklet maker controller board tray removal

1. Remove the rear lower cover. See ["Booklet finisher rear lower cover removal"](#) on page 1387.
2. Disconnect all the cables on the booklet finisher booklet maker controller board, and then remove the cables from the cable holders (A).

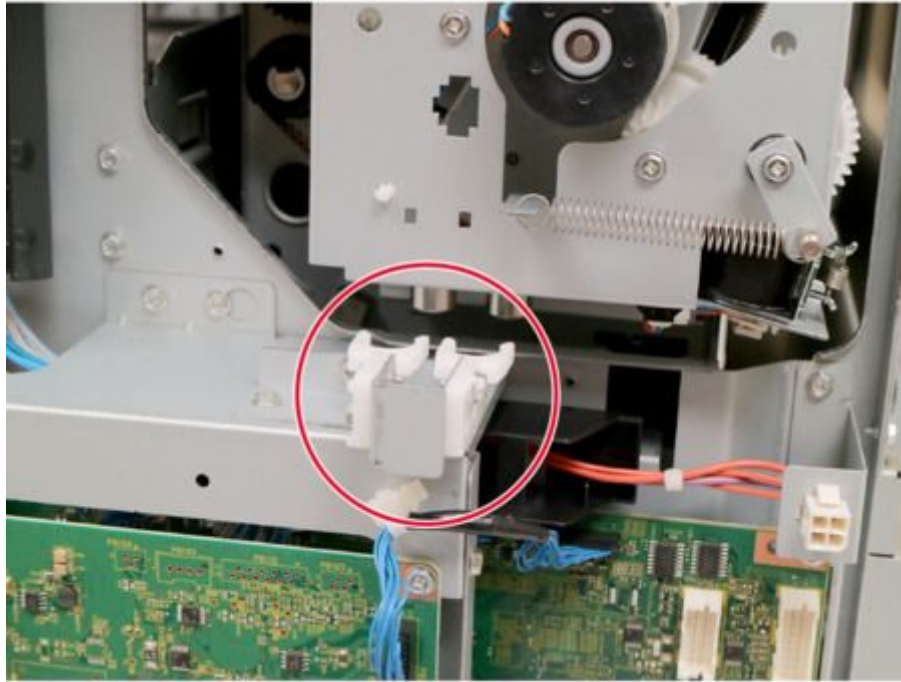


3. Remove the two screws (B), loosen the two screws (C), and then remove the tray.



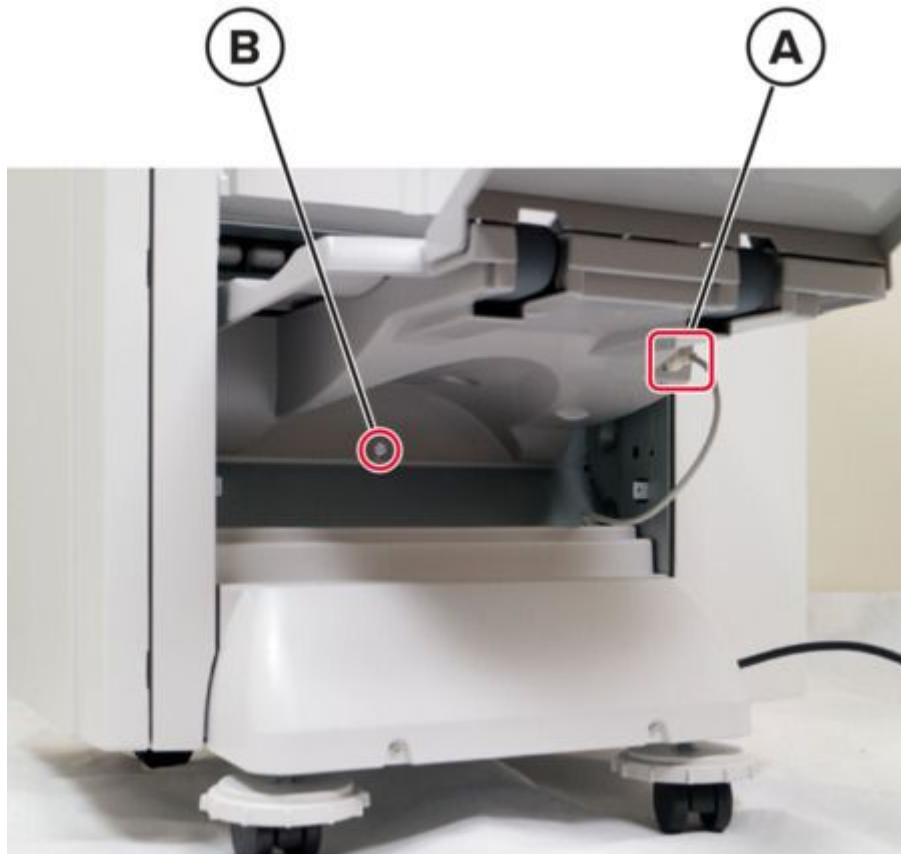
INSTALLATION NOTE

Make sure that the tray is properly aligned with the rear aligner.



Booklet finisher booklet maker tray removal

1. Disconnect the cable (A), and then remove the screw (B).



2. Slightly raise the booklet maker tray, and then pull to remove.

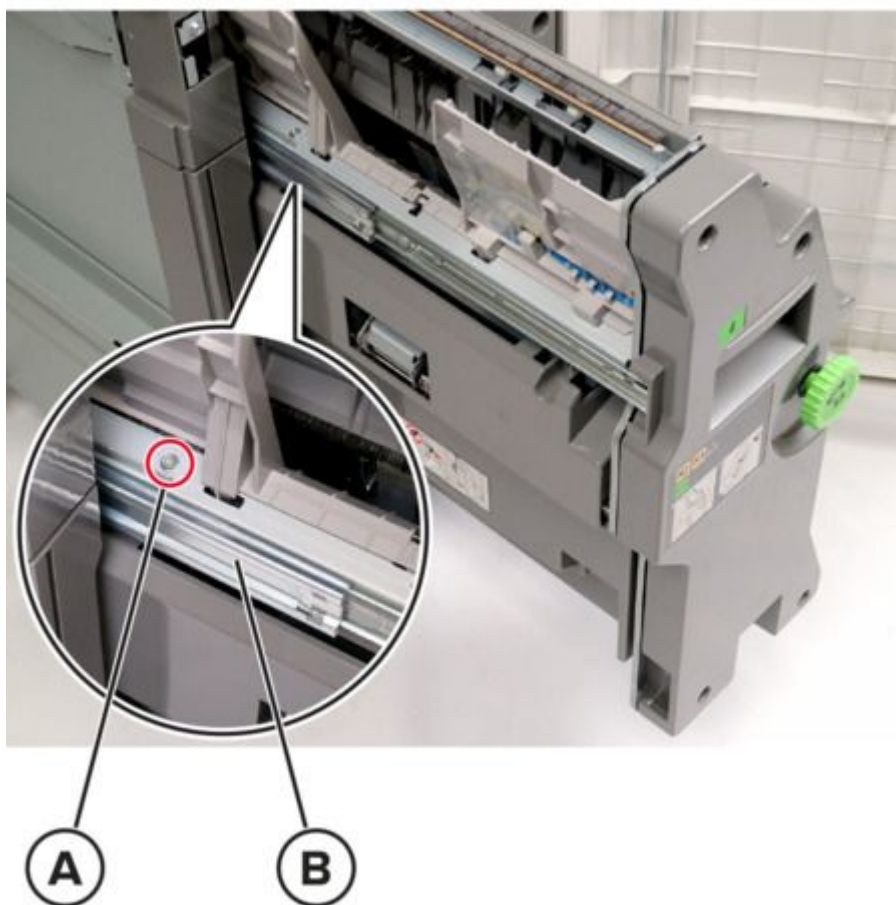


Booklet finisher booklet maker removal

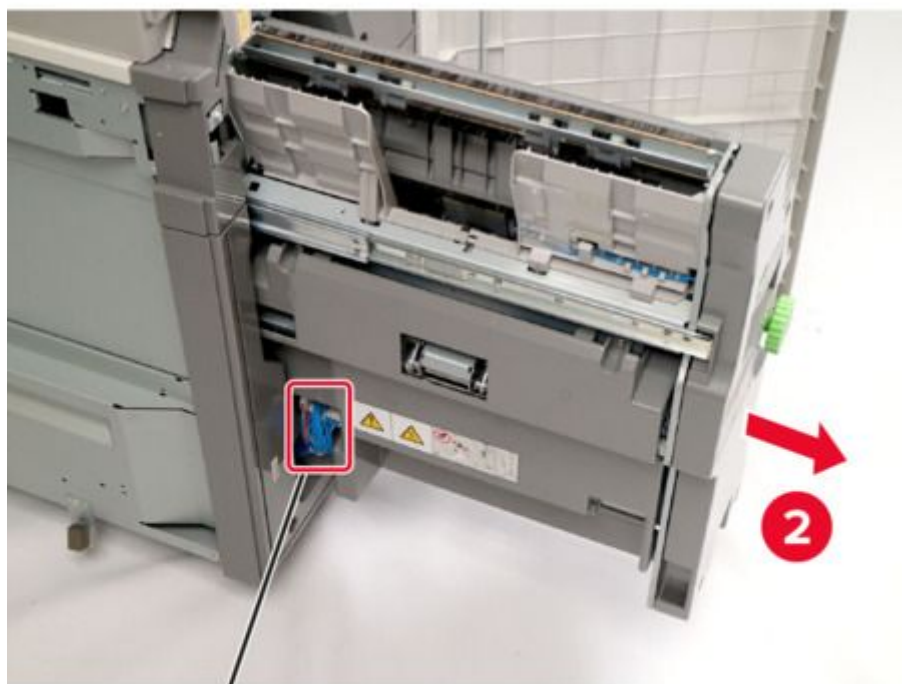
NOTES

For a video demonstration, see [Booklet finisher booklet maker removal](#).

1. Open the front cover, and then pull out the booklet maker.
2. Remove the screw (A), and then remove the stopper (B).

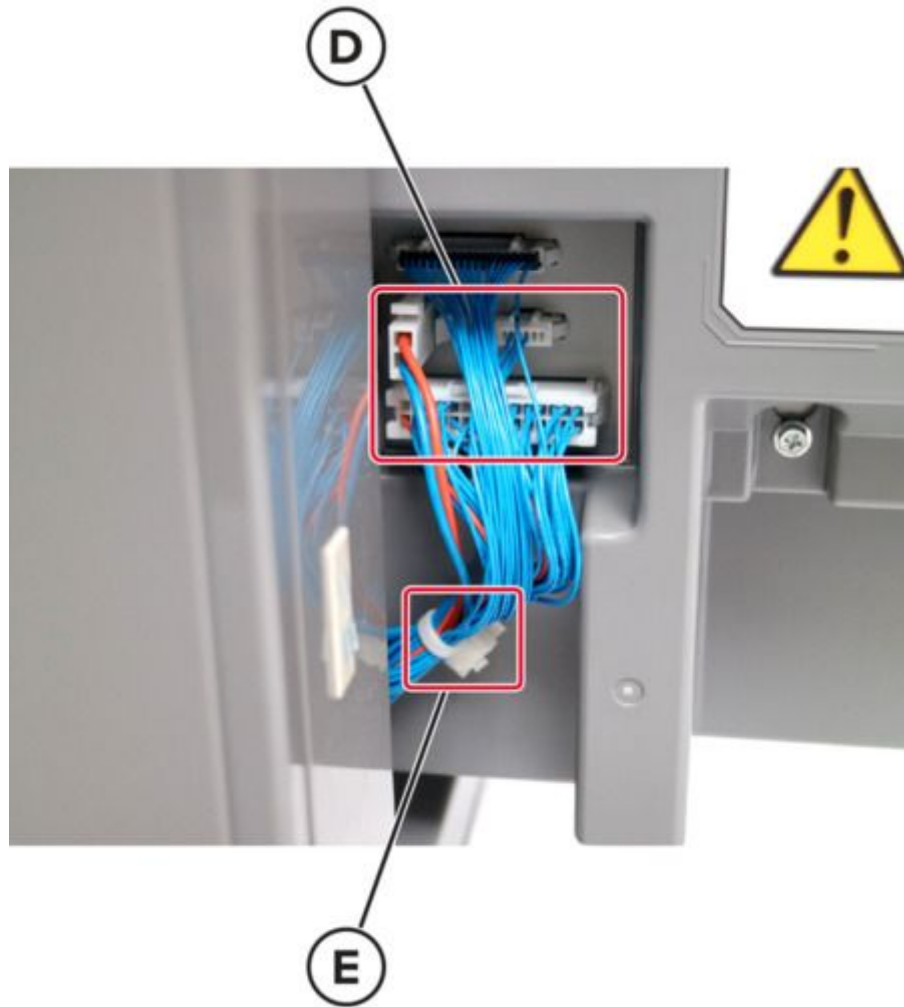


3. Press the stopper on the rail, and then pull out the booklet maker until the cables (C) are accessible.

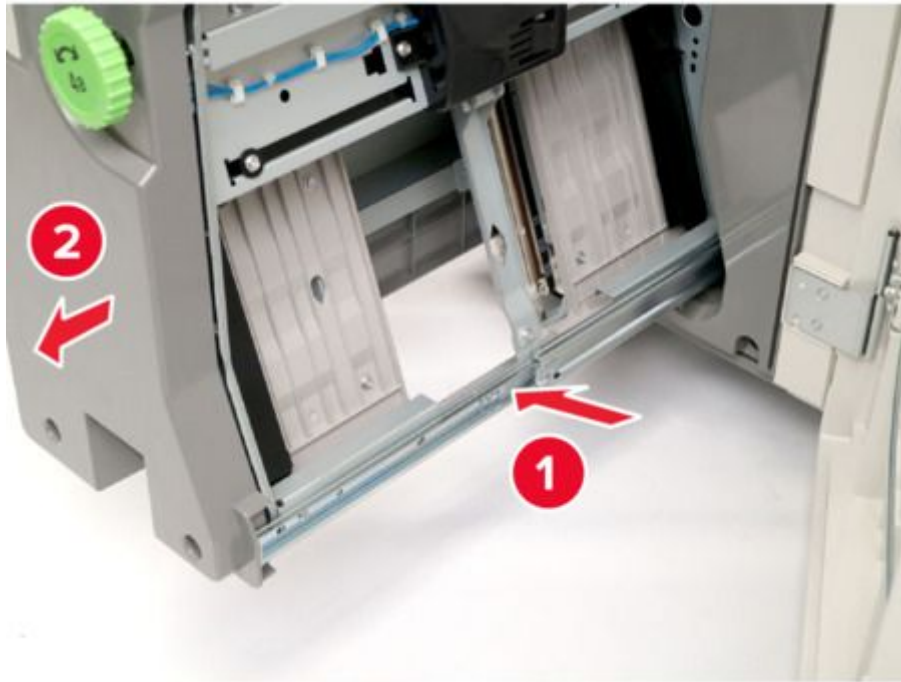


C

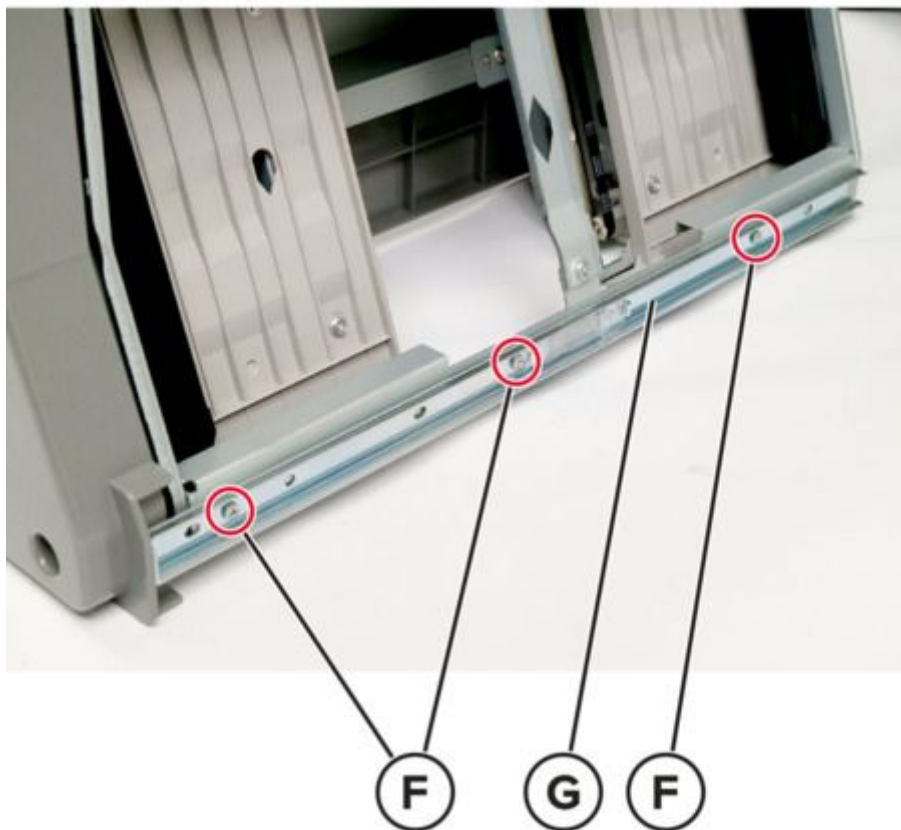
4. Disconnect the four cables (D), and then remove the cables from the cable holder (E).



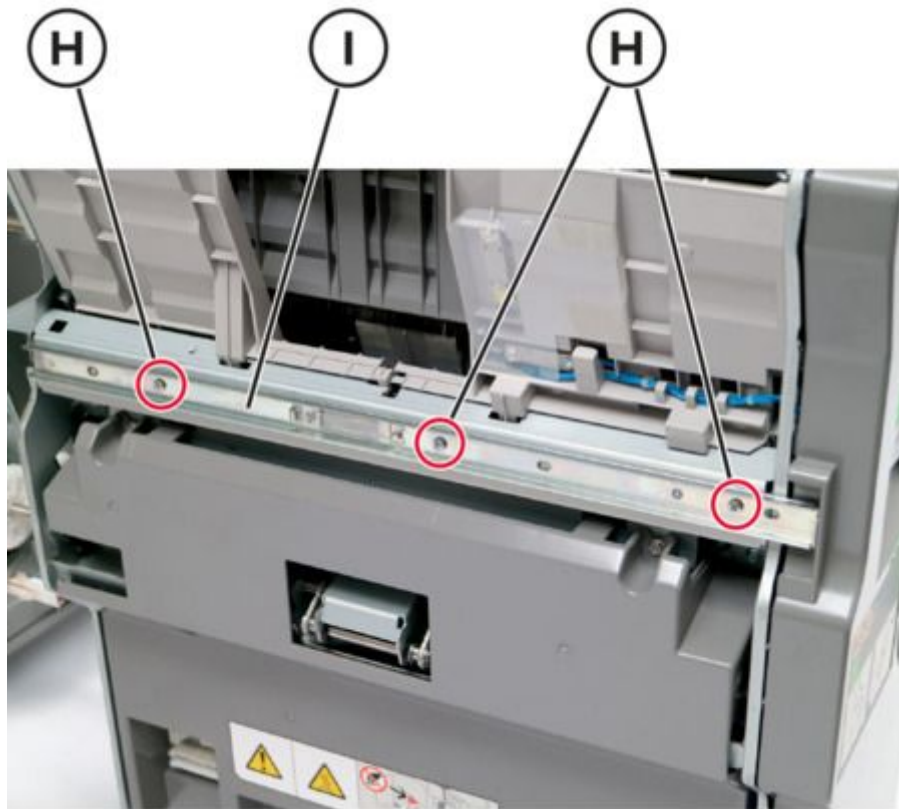
5. Press the stopper at the right side of the booklet maker, and then pull out the booklet maker.



6. Remove the three screws (F) from the left rail, and then remove the rail (G).



7. Remove the three screws (H) from the right rail, and then remove the rail (I).

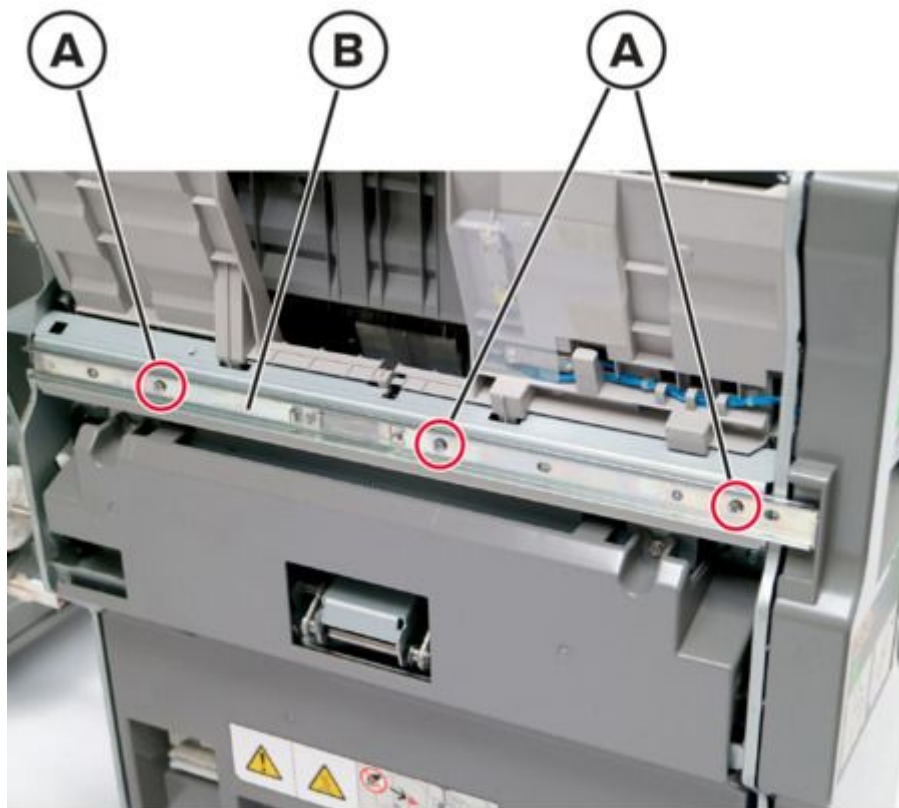


INSTALLATION NOTE

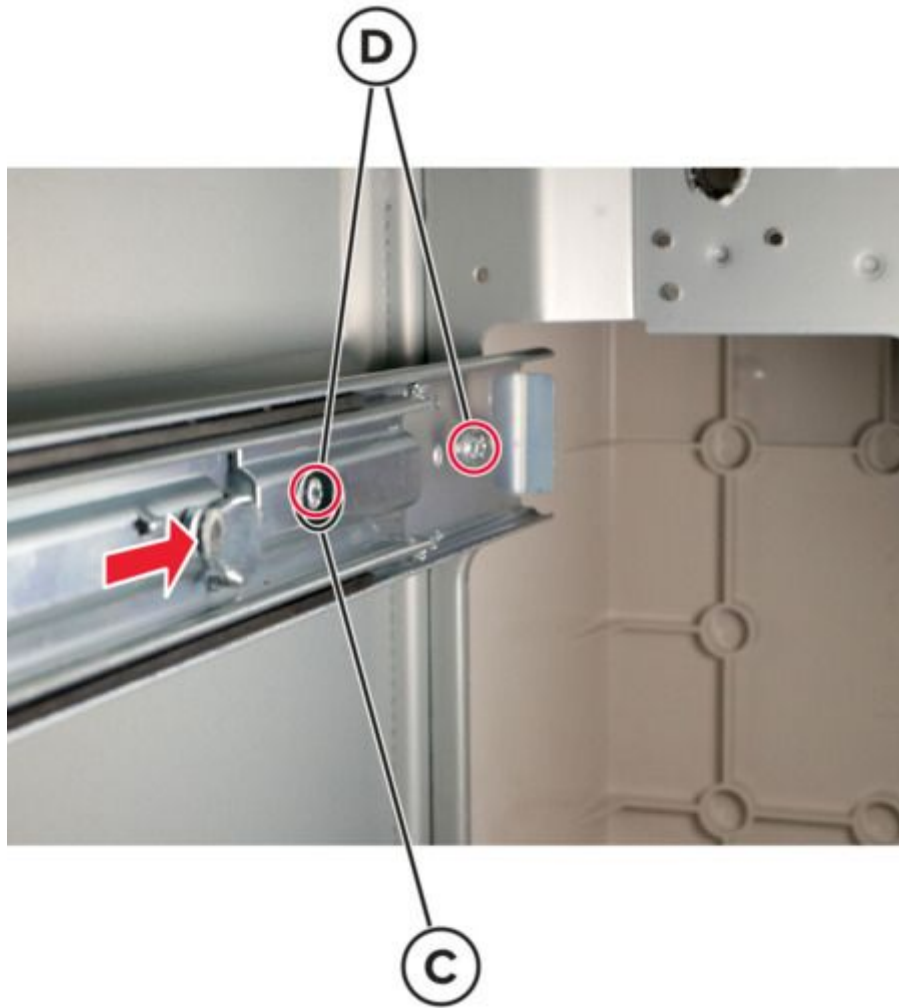
Pull out the right rail, and then make sure to install the rail first on the right side of the booklet maker when installing the booklet maker.

Booklet finisher left rail removal

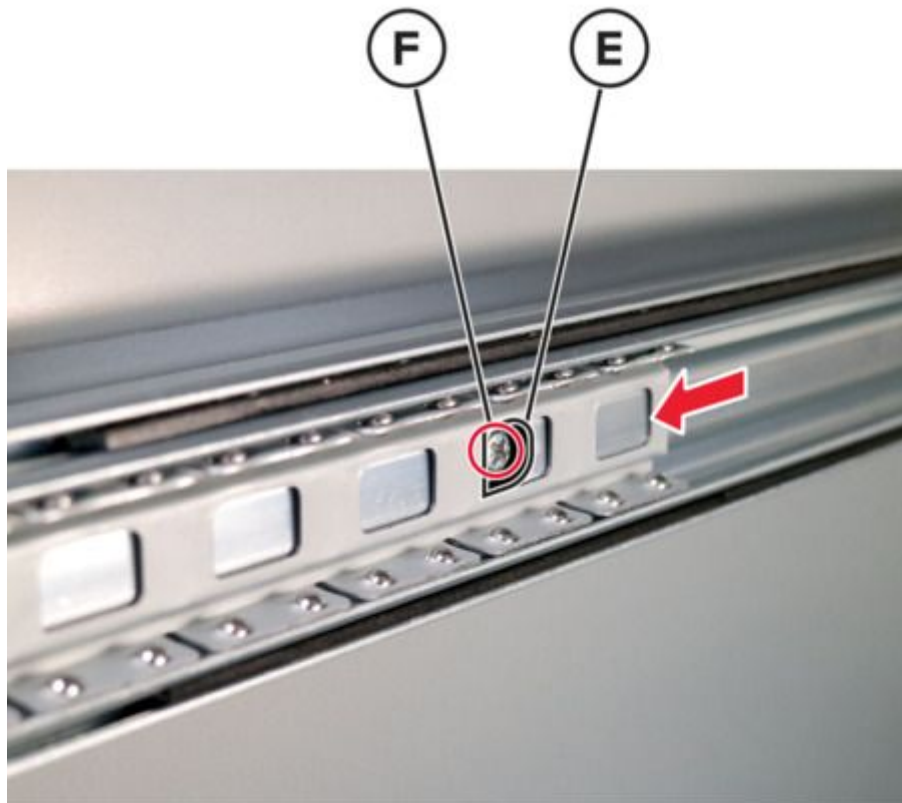
1. Remove the booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. Remove the three screws (A) from the left rail, and then remove the rail (B) from the booklet maker.



3. From inside the booklet finisher, move the rail to align the screw with the hole (C) on the rail at the middle, and then remove the two screws (D).

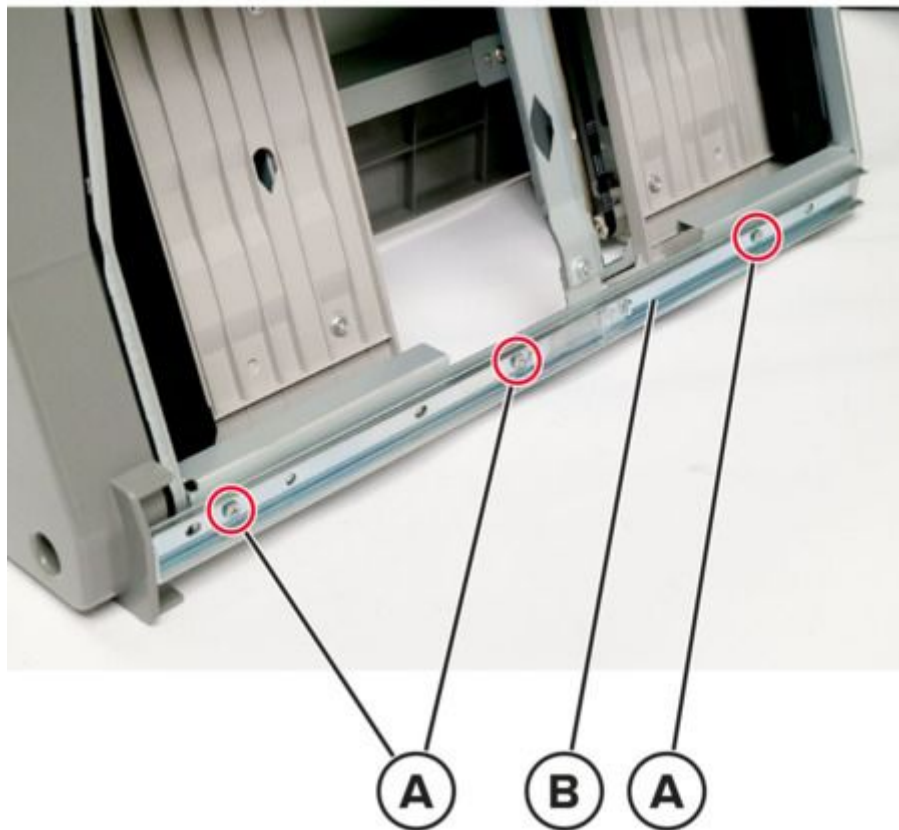


4. From inside booklet finisher, move the rail to align the screw with the hole (E) on the rail at the front, remove the screw (F), and then remove the rail from the booklet maker.

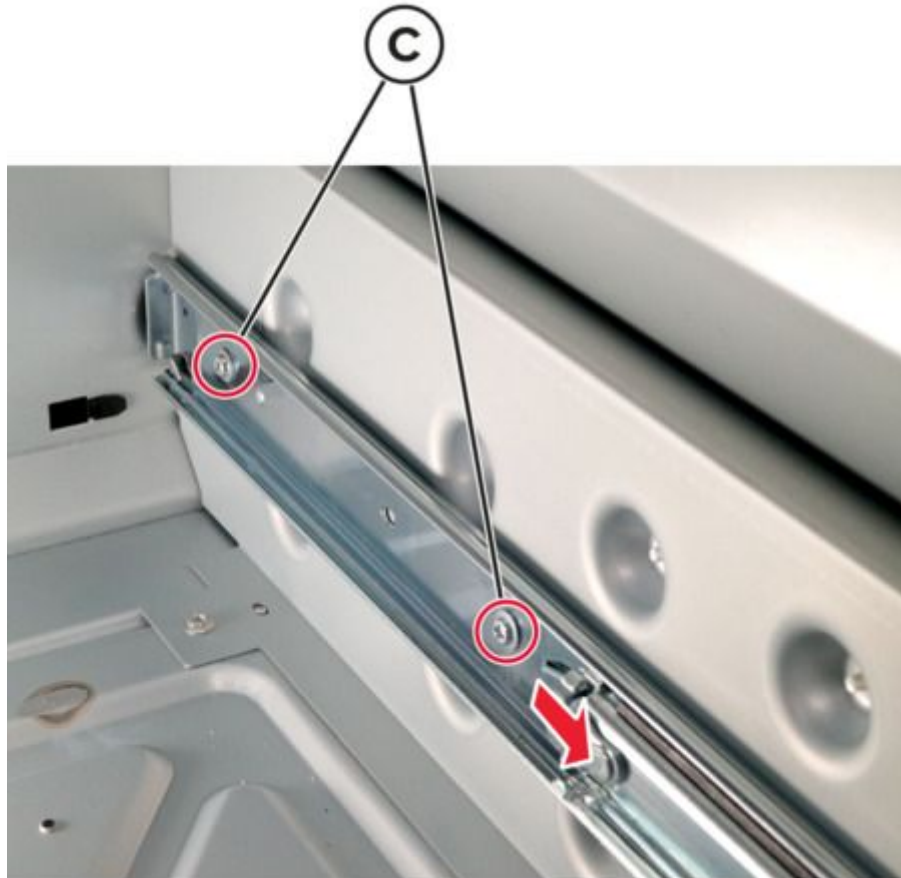


Booklet finisher right rail removal

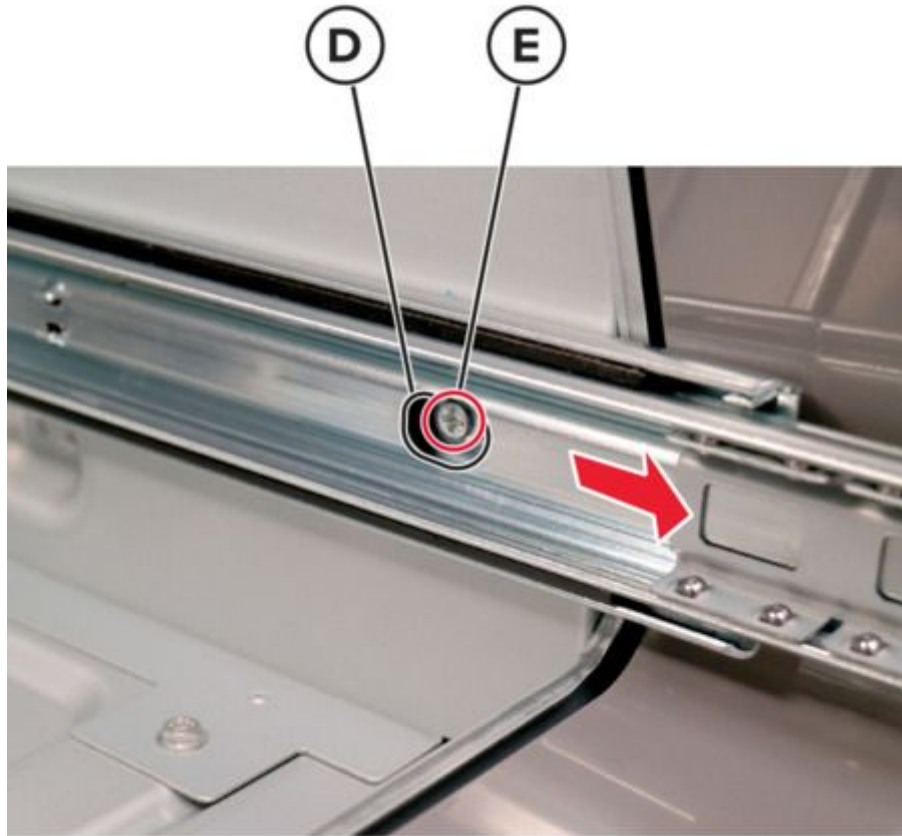
1. Remove the booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. Remove the three screws (A) from the right rail, and then remove the rail (B) from the booklet maker.



3. From inside the booklet finisher, move the rail, and then remove the two screws (C).

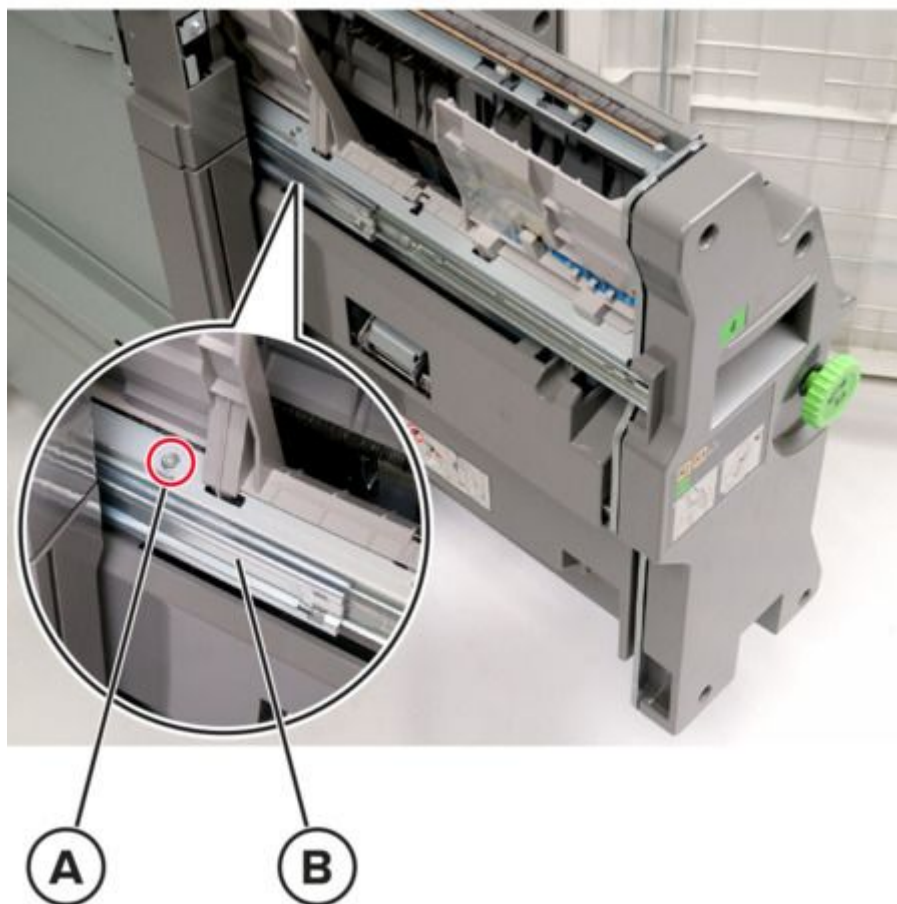


4. From inside the booklet finisher, move the rail to align the screw with the hole (D) on the rail at the front, remove the screw (E), and then remove the rail from the booklet maker.



Booklet finisher booklet maker stapler unit removal

1. Open the front cover, and then pull out the booklet maker.
2. Remove the screw (A), and then remove the stopper (B).



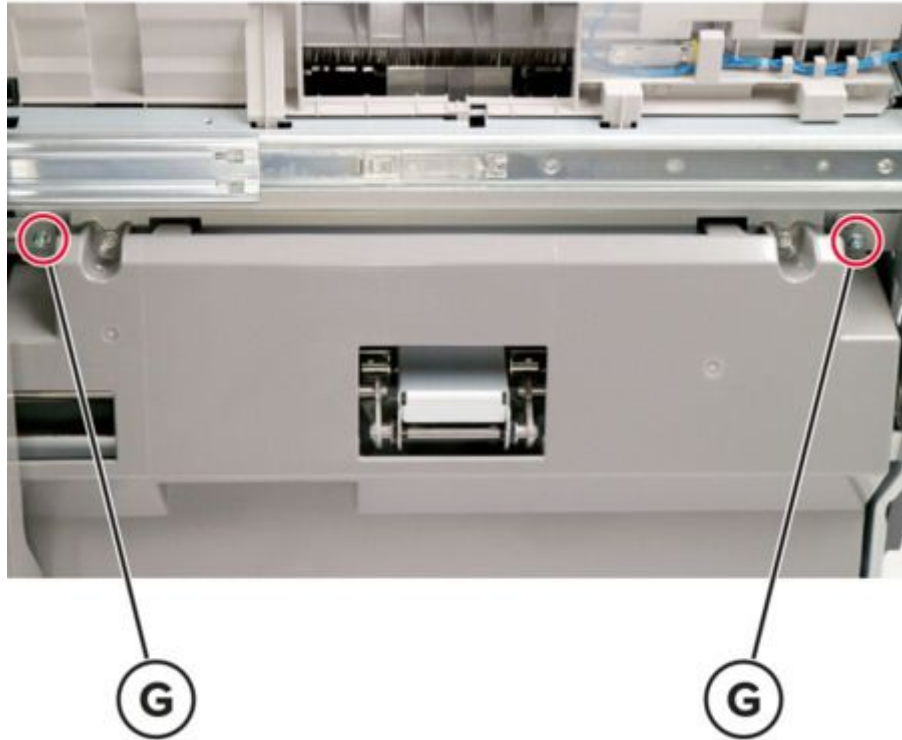
3. Press the stopper on the rail, and then pull out the booklet maker until the cables (C) are accessible.



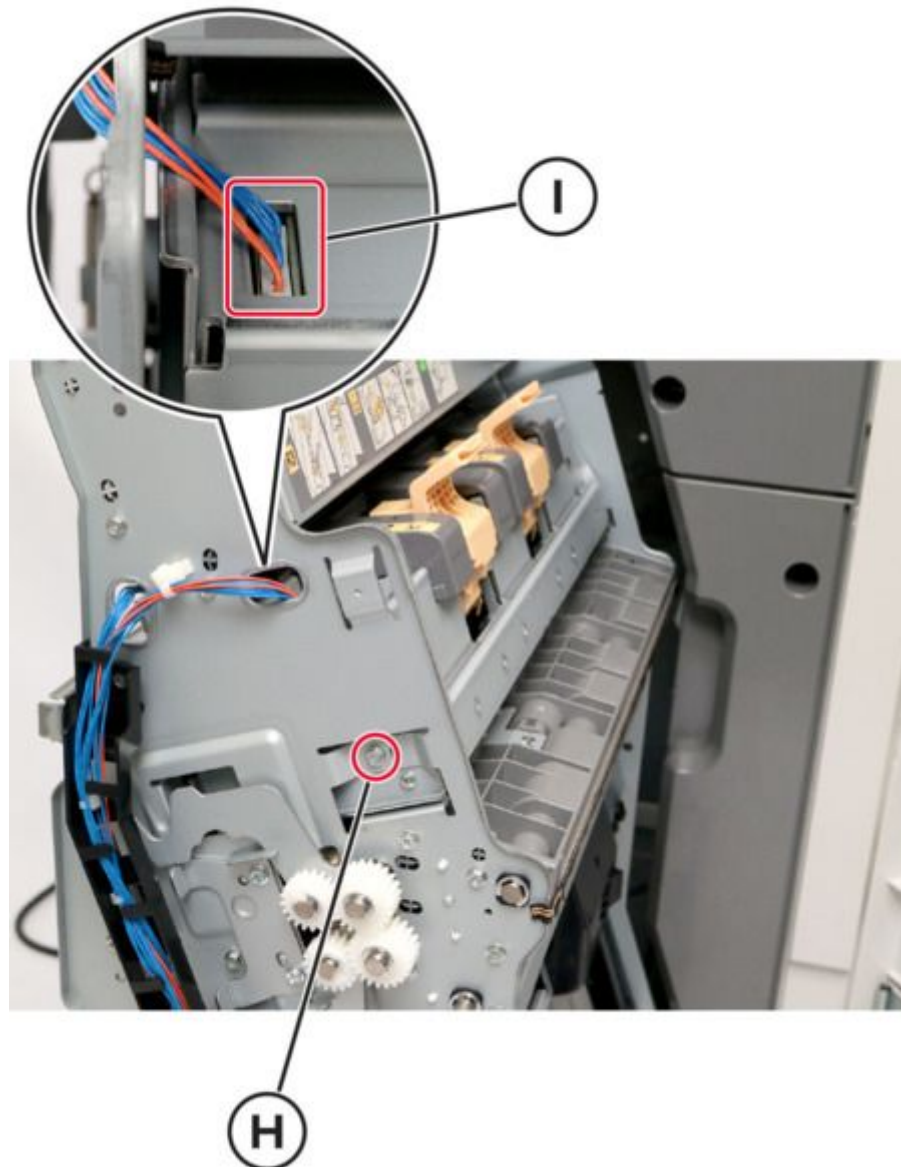
4. Remove the five screws (D), remove the knob (E), and then remove the booklet maker front cover (F).



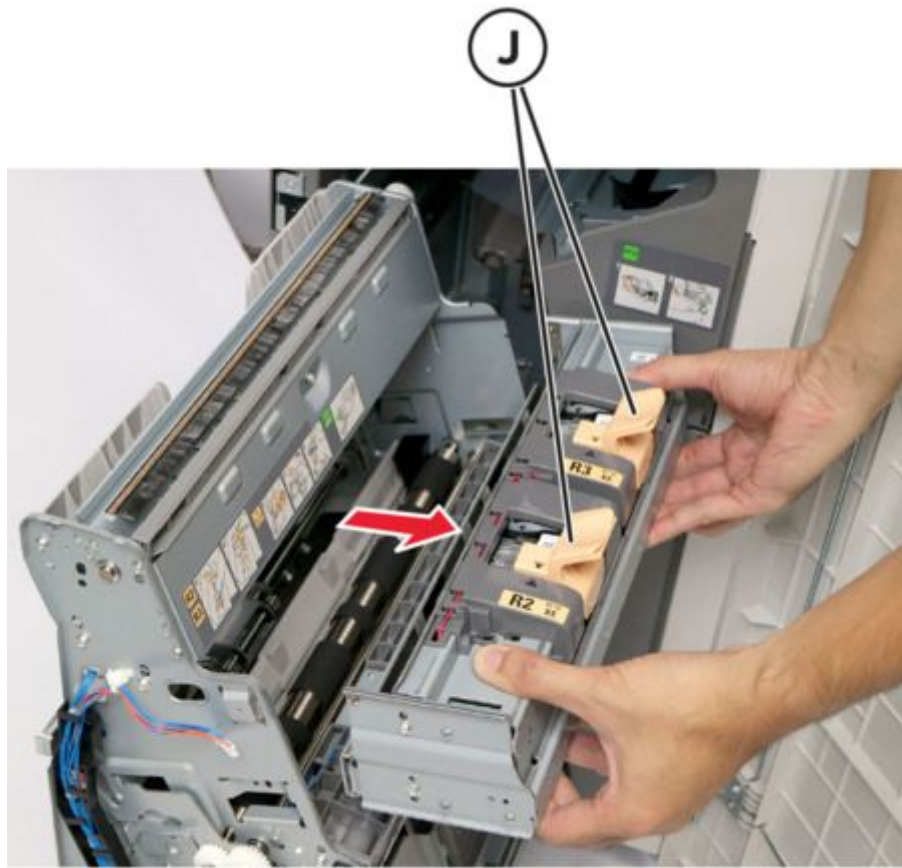
5. Remove the two screws (G).



6. Disconnect the cable (H), and then remove the screw (I).



7. Remove the booklet maker stapler unit, and then remove the two staple cartridges (J).

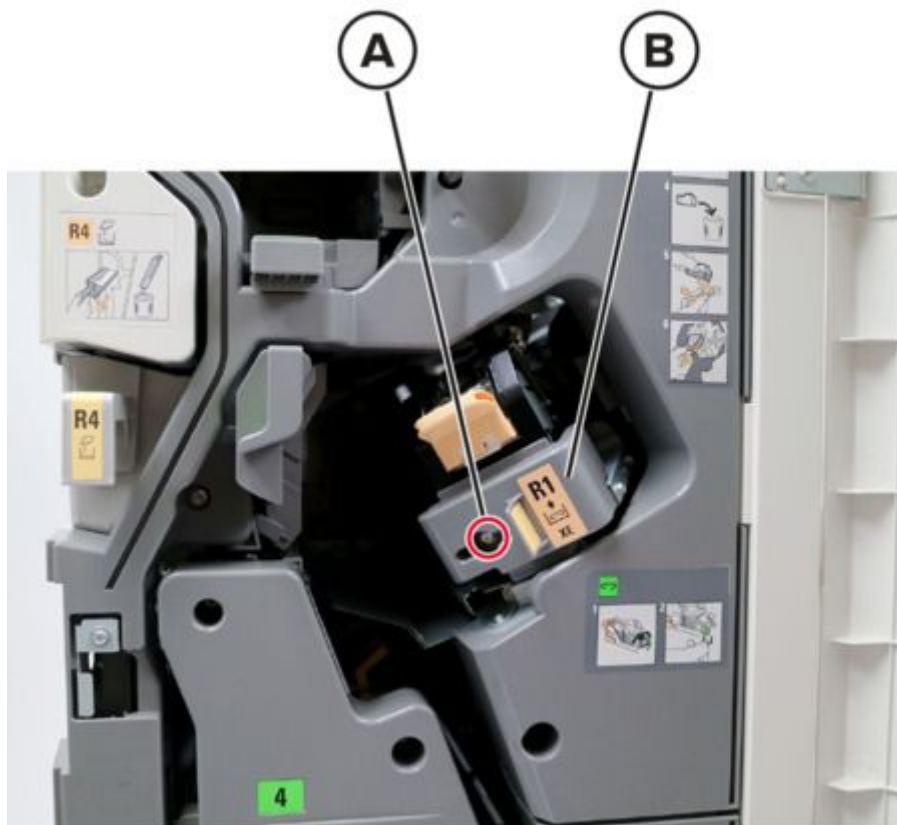


Booklet finisher stapler head removal

NOTES

For a video demonstration, see [Booklet finisher stapler head removal](#).

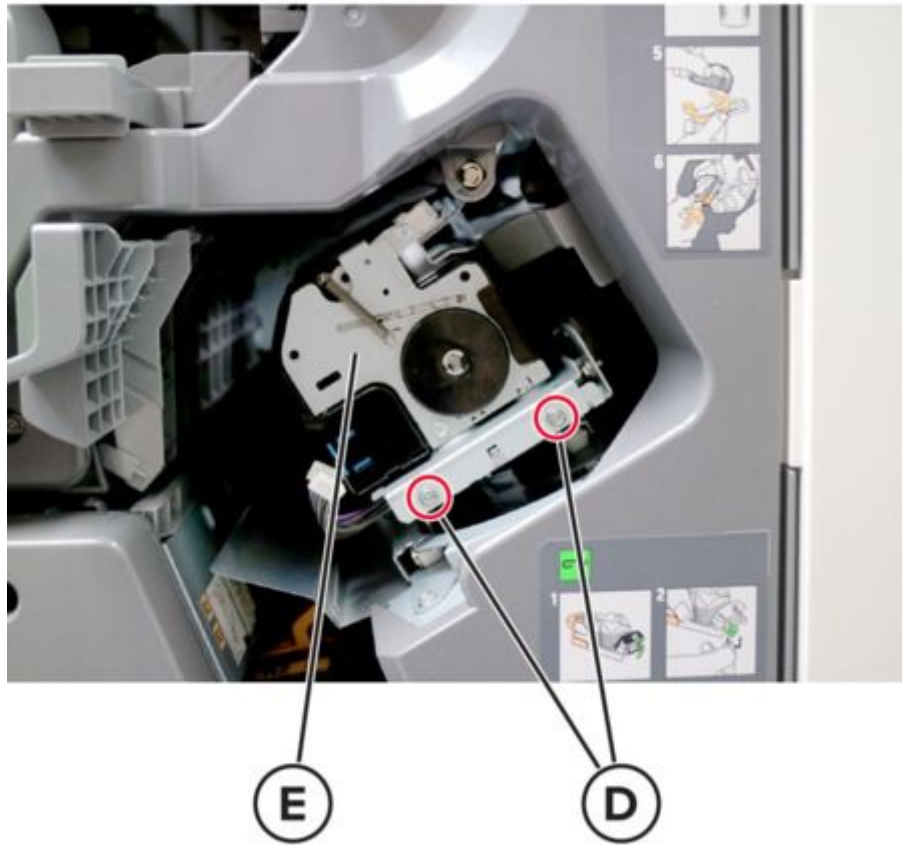
1. Open the front door, and then remove the staple cartridge.
2. Remove the screw (A), and then remove the cover (B).



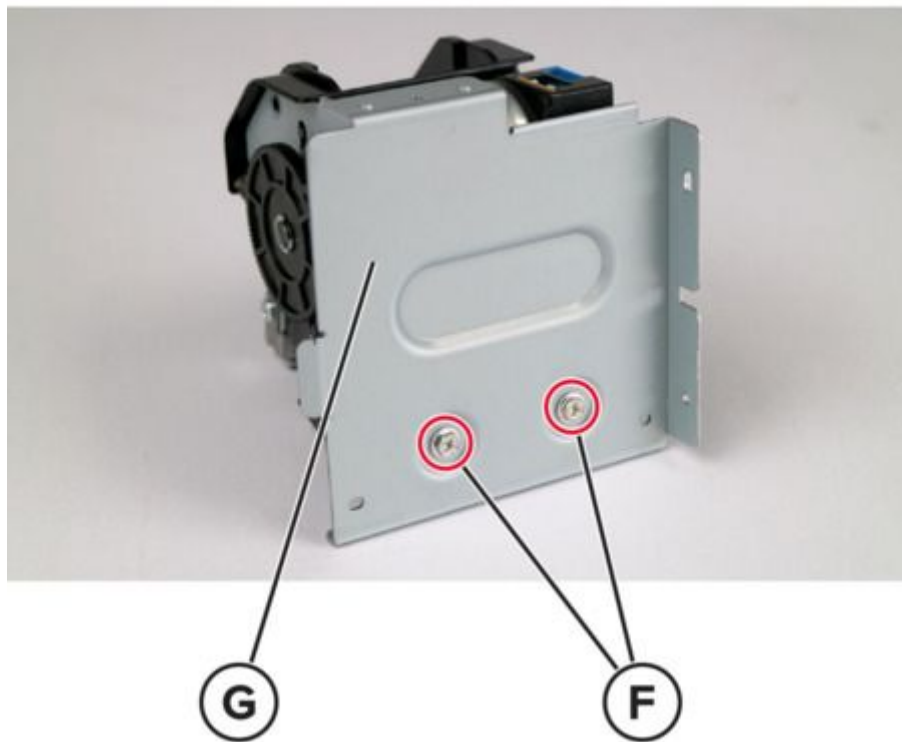
3. Disconnect the two cables (C), and then turn the staple head to the left.



4. Remove the two screws (D), and then remove the staple head (E).

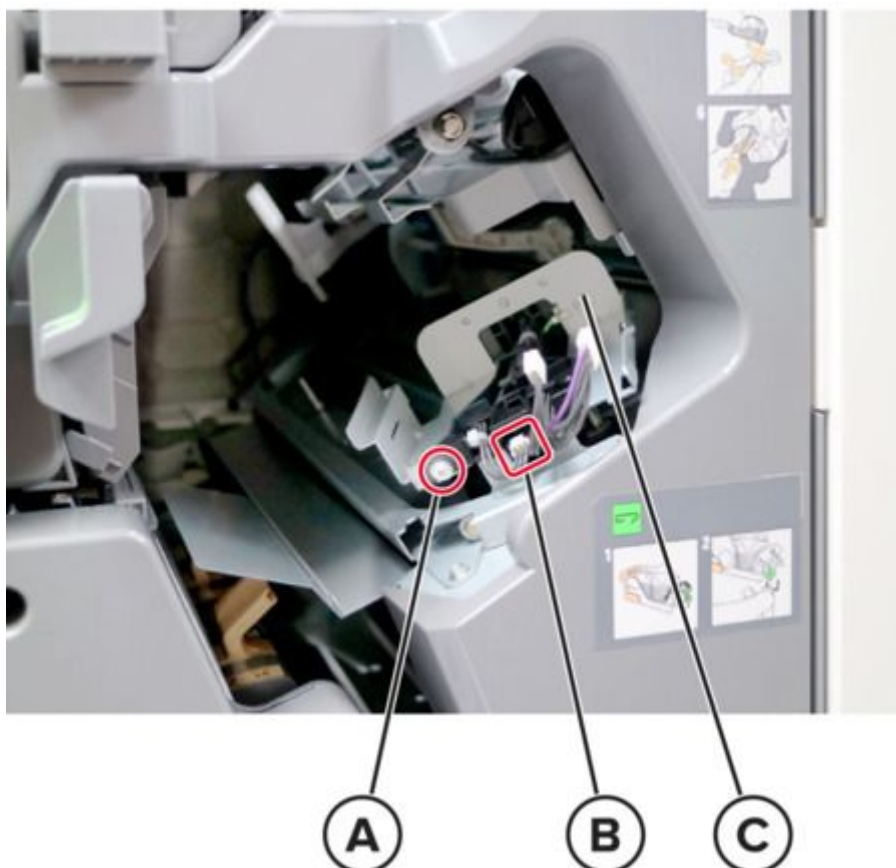


5. Remove the two screws (F), and then remove the bracket (G).



Sensor (booklet finisher stapler position) removal

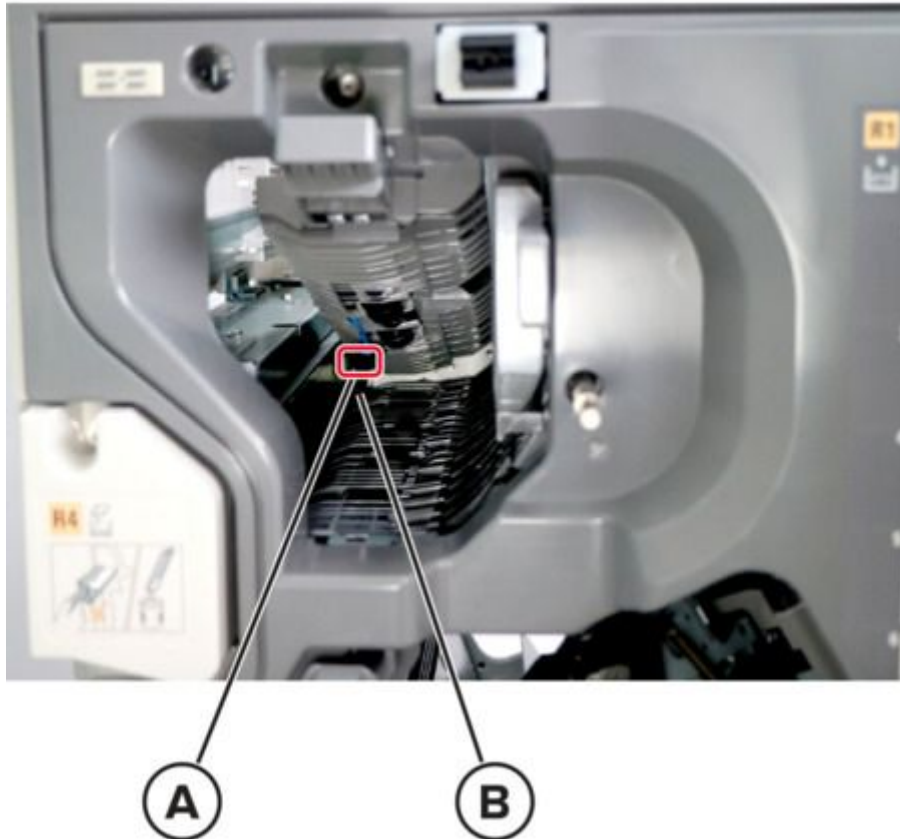
1. Remove the staple cartridge.
2. Remove the booklet finisher stapler head. See ["Booklet finisher stapler head removal" on page 1421.](#)
3. Remove the screw (A), disconnect the cable (B), and then lift the bracket (C).



4. Remove the sensor from the bracket.

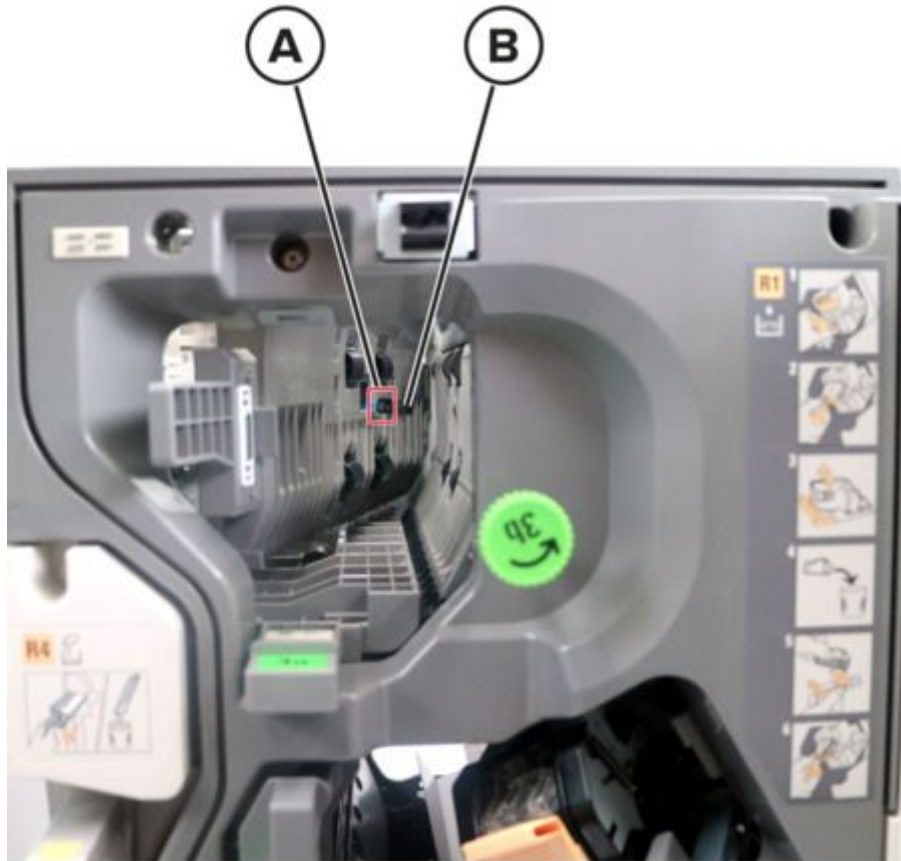
Sensor (booklet finisher entrance) removal

1. Open the booklet finisher front cover.
2. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
3. Open the booklet finisher upper entrance guide.
4. Disconnect the cable (A), and then remove the sensor (B).



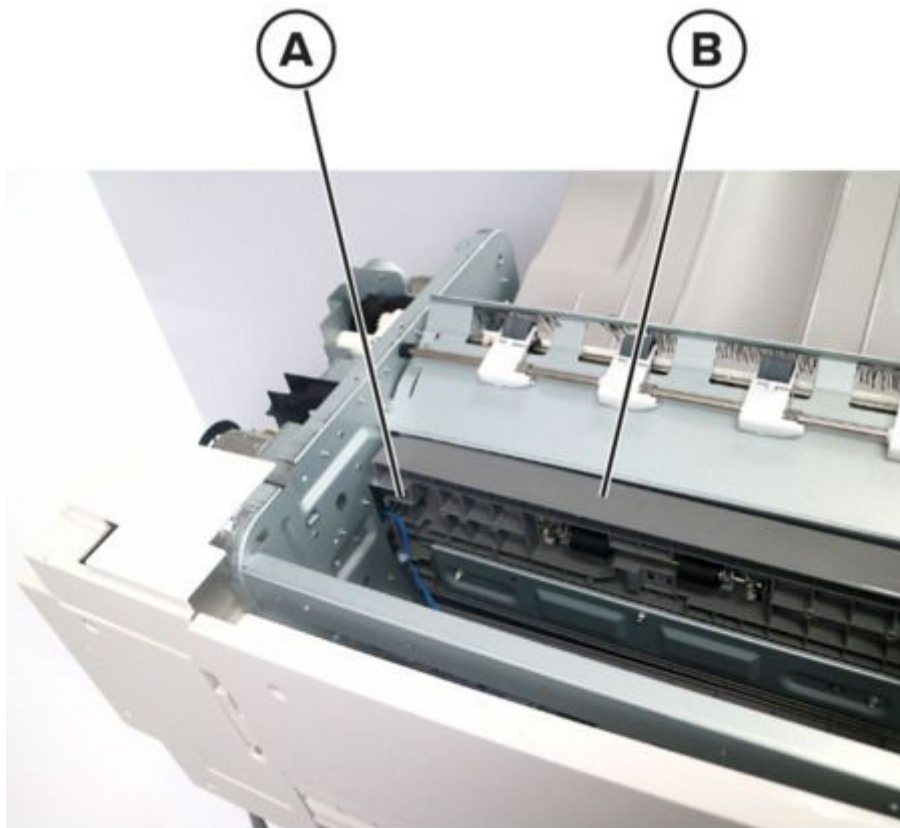
Sensor (booklet finisher booklet upper exit) removal

1. Open the booklet finisher front cover.
2. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
3. Open the booklet upper entrance guide.
4. Disconnect the cable (A), and then remove the sensor (B).



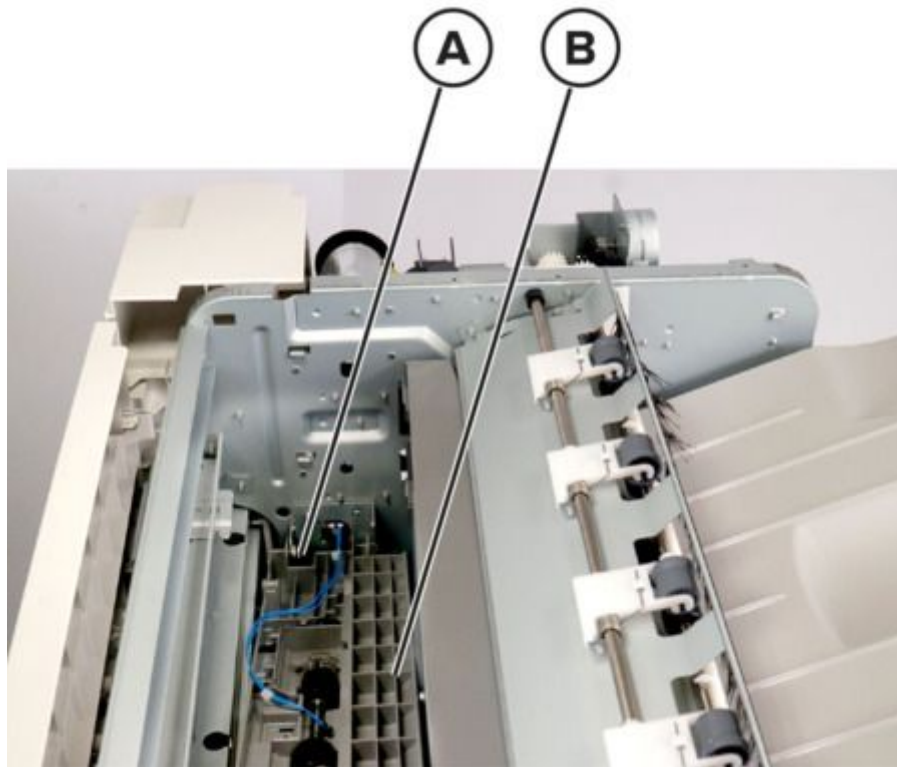
Booklet finisher upper guide removal

1. Open the booklet finisher front cover
2. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
3. Remove sensor (booklet finisher upper exit). See [See "Sensor \(booklet finisher booklet upper exit\) removal" on page 1426.](#)
4. Release the booklet finisher upper exit sensor cable from the cable guides.
5. Remove the E-clip (A), and then remove the booklet finisher upper guide (B).



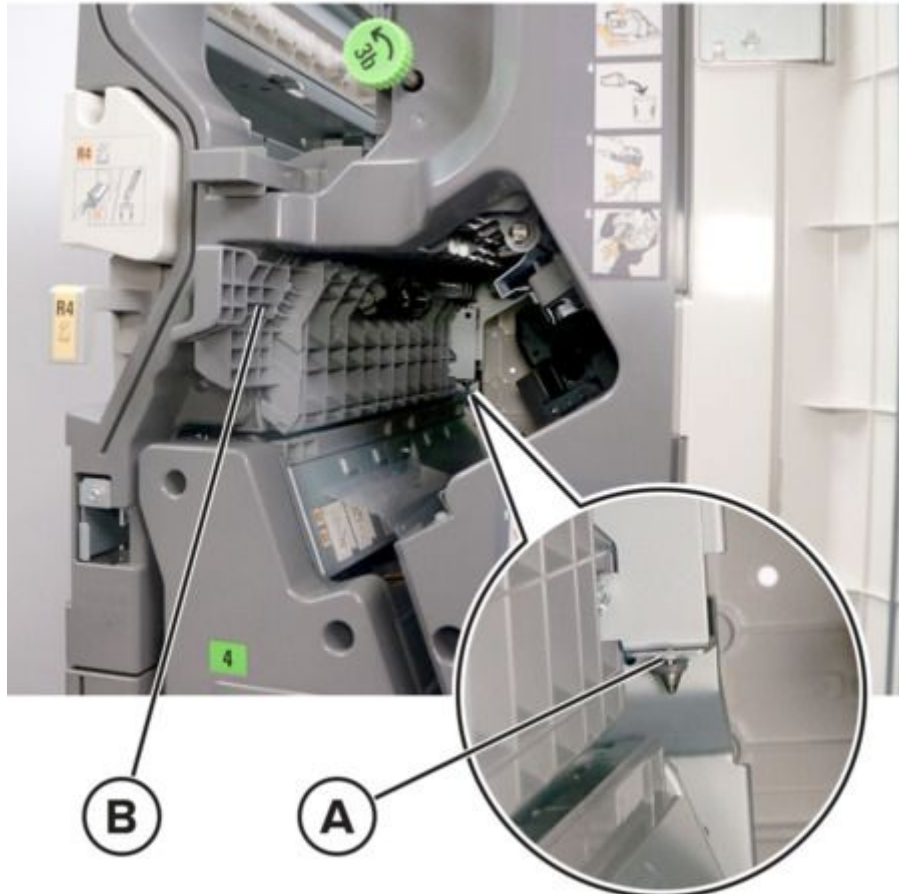
Booklet finisher upper entrance guide removal

1. Open the booklet finisher front cover.
2. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
3. Open the booklet finisher upper entrance guide.
4. Remove the sensor (booklet entrance). See [See "Sensor \(booklet finisher entrance\) removal" on page 1425.](#)
5. Remove the E-clip (A), and then remove the booklet finisher upper entrance guide (B).



Booklet finisher right buffer guide removal

1. Open the booklet finisher front cover.
2. Push the booklet finisher stapler head towards the rear.
3. Remove the E-clip (A), and then remove the right buffer guide (B).

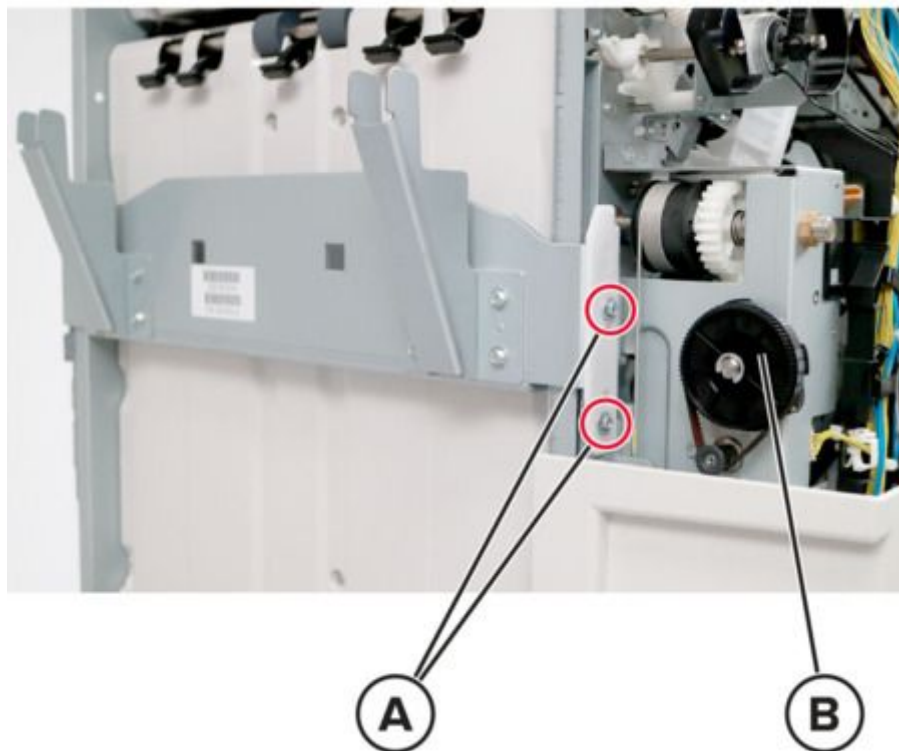


Booklet finisher elevator tray guide removal

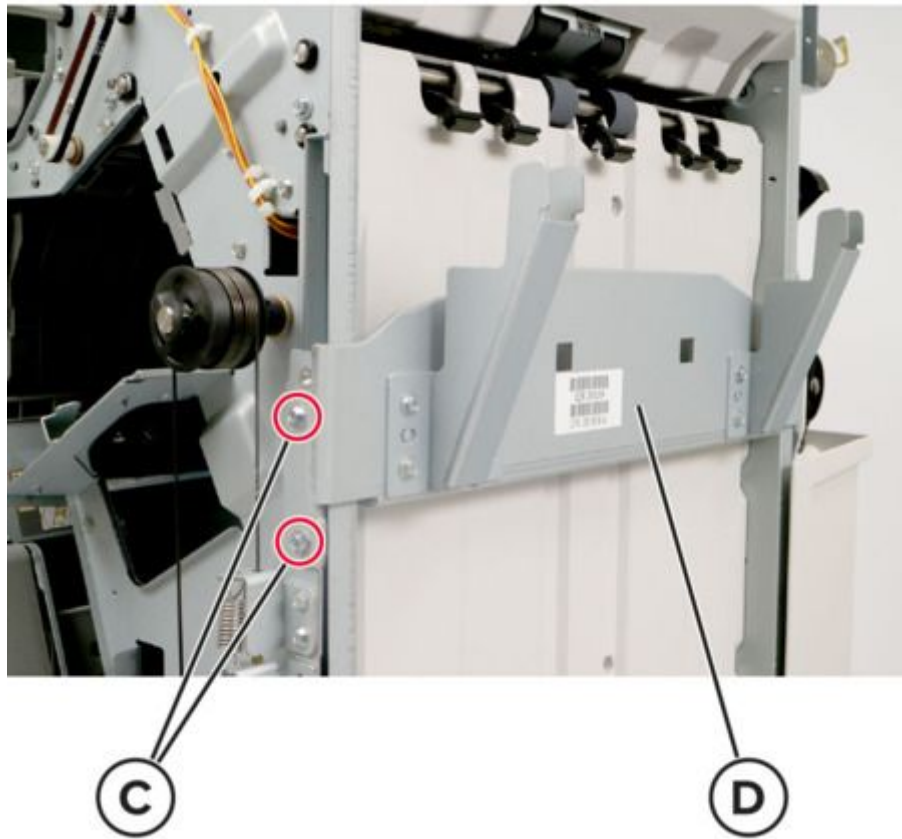
1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the booklet finisher stacker tray. See ["Booklet finisher stacker tray removal" on page 1384.](#)
6. Remove the two screws (A).

NOTES

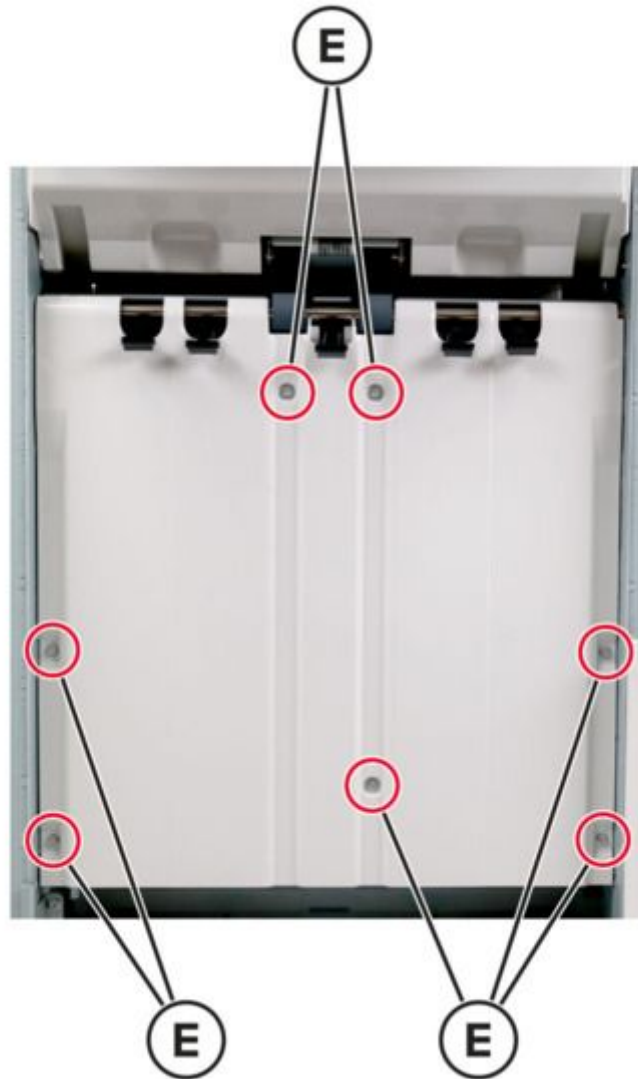
Manually turn the gear (B) to adjust the height of the stacker tray.



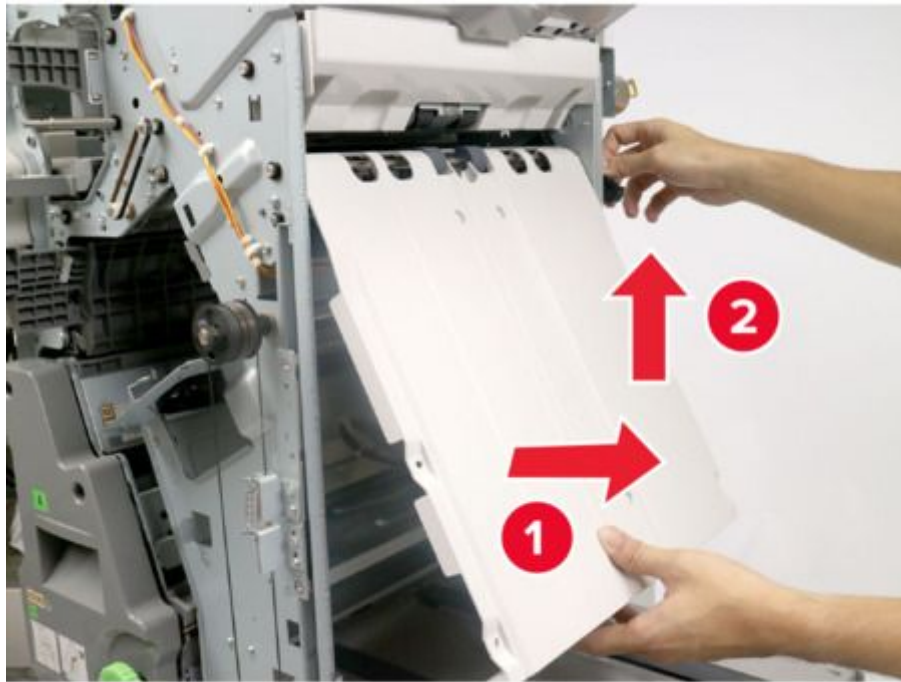
7. Remove the two screws (C), and then remove the stacker tray bracket (D).



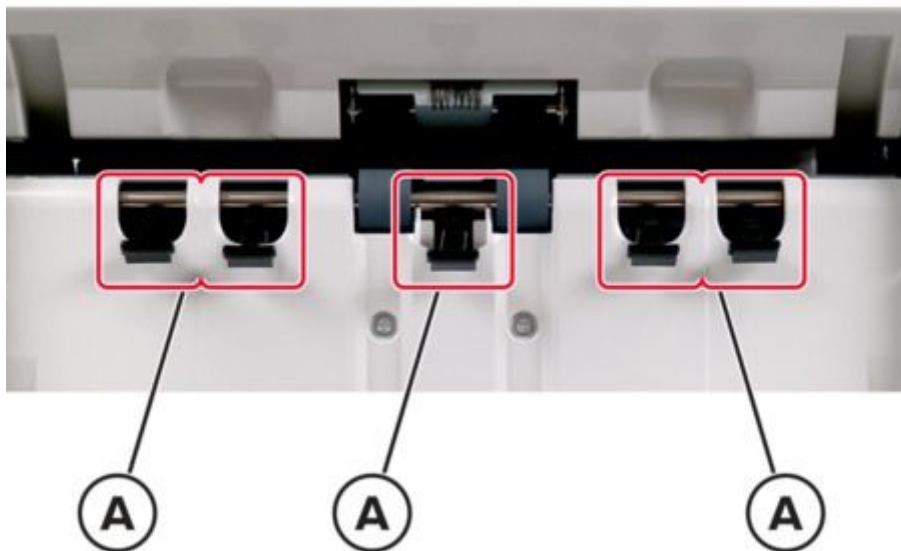
8. Remove the seven screws (E).



9. Remove the booklet finisher elevator tray guide.

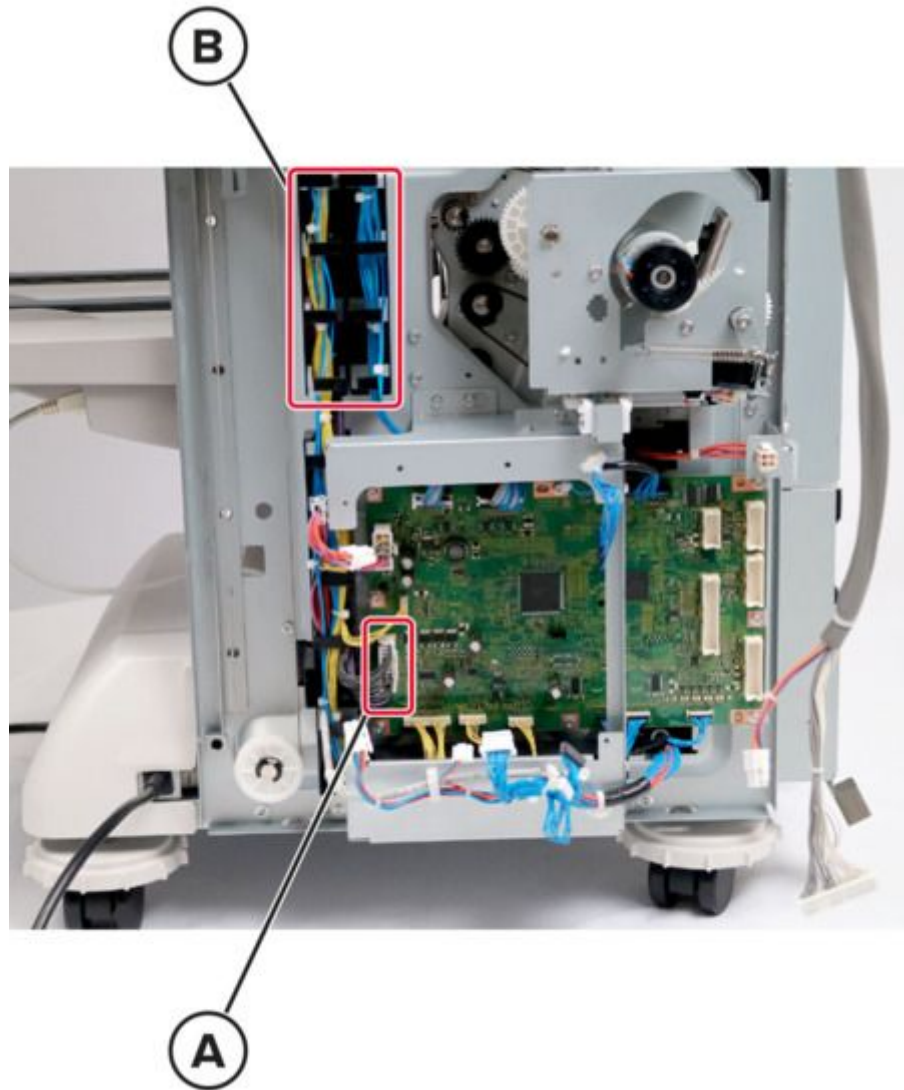


WARNING—POTENTIAL DAMAGE
Be careful not to damage the five clamps (A).

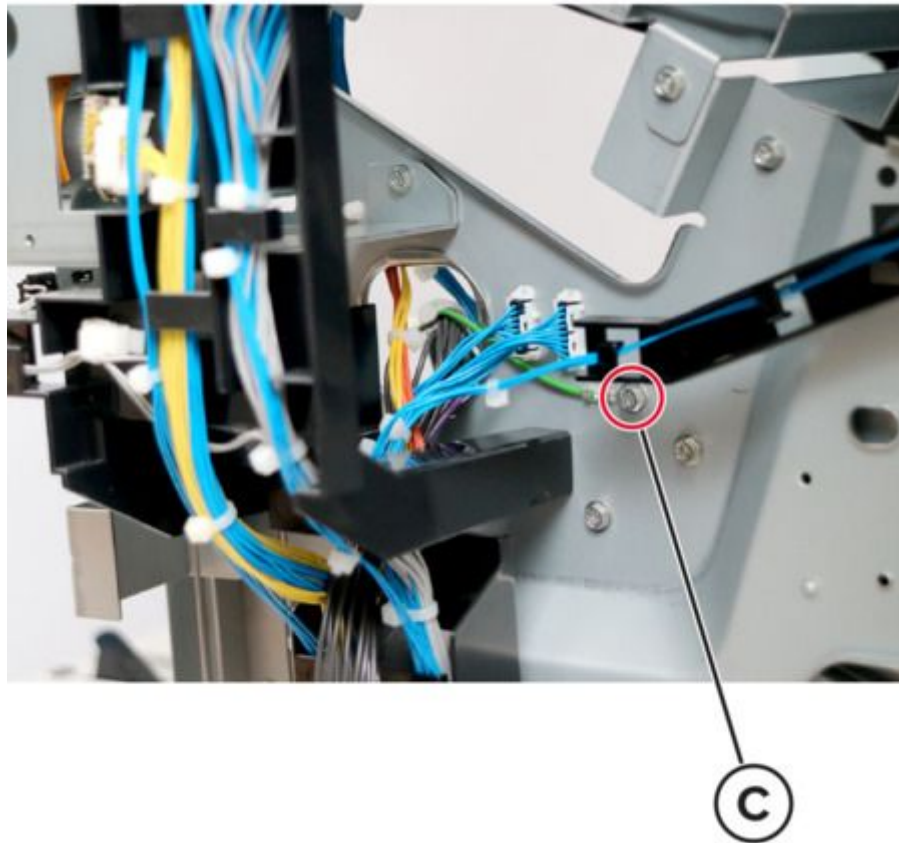


Booklet finisher stapler unit removal

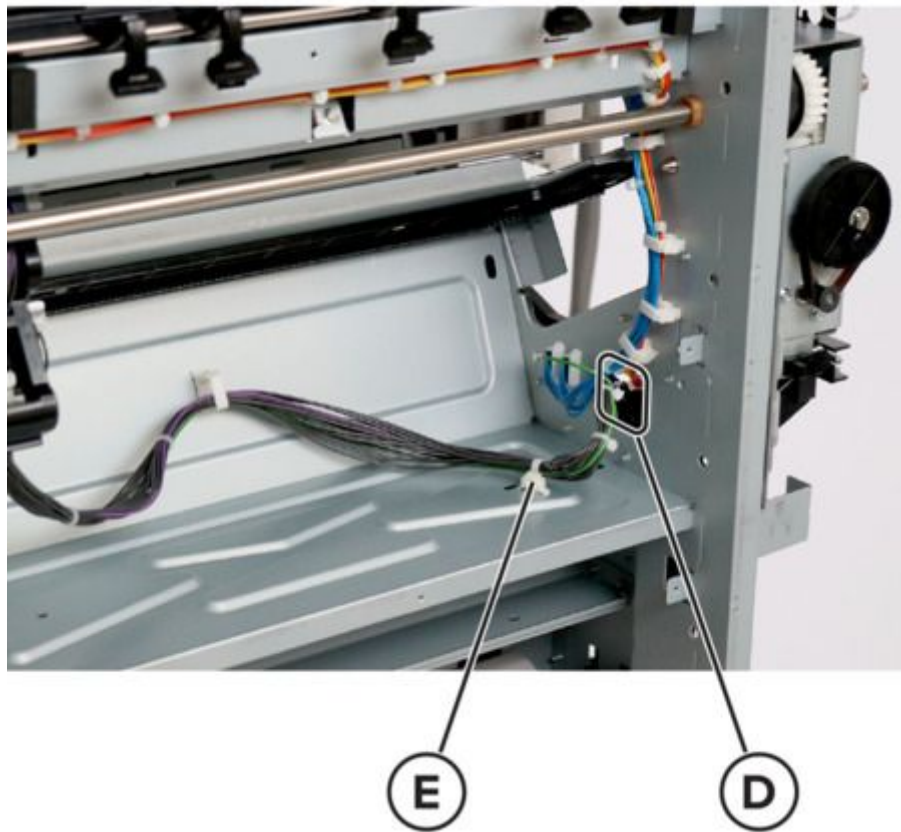
1. Remove the booklet finisher stapler head. See ["Booklet finisher stapler head removal" on page 1421.](#)
2. Remove the booklet finisher rear lower cover. See ["Booklet finisher rear lower cover removal" on page 1387.](#)
3. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
4. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
5. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
6. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
7. Remove the booklet finisher stacker tray. See ["Booklet finisher stacker tray removal" on page 1384.](#)
8. Remove the booklet finisher elevator tray guide. See ["Booklet finisher elevator tray guide removal" on page 1430.](#)
9. Remove the booklet maker controller board. See ["Booklet finisher booklet maker controller board removal" on page 1396.](#)
10. Disconnect the cable (A), and then release the cables from their guides (B).



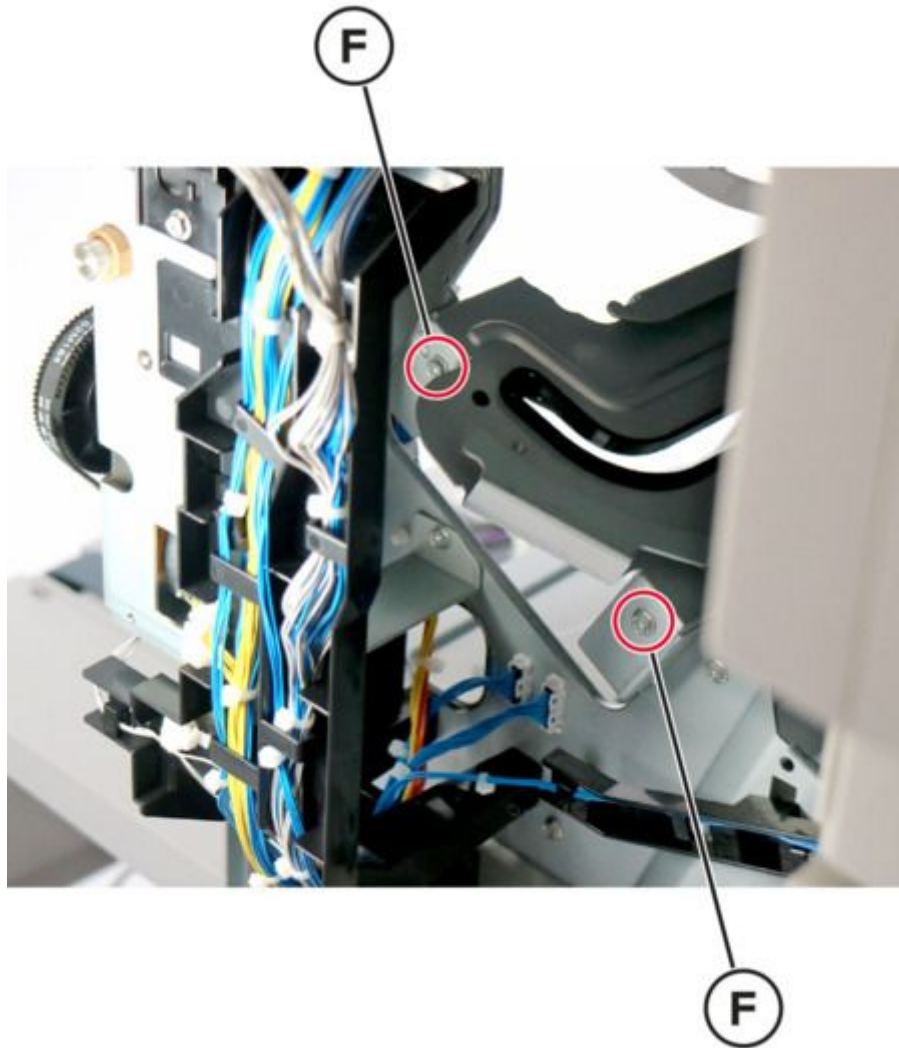
11. Remove the screw (C).



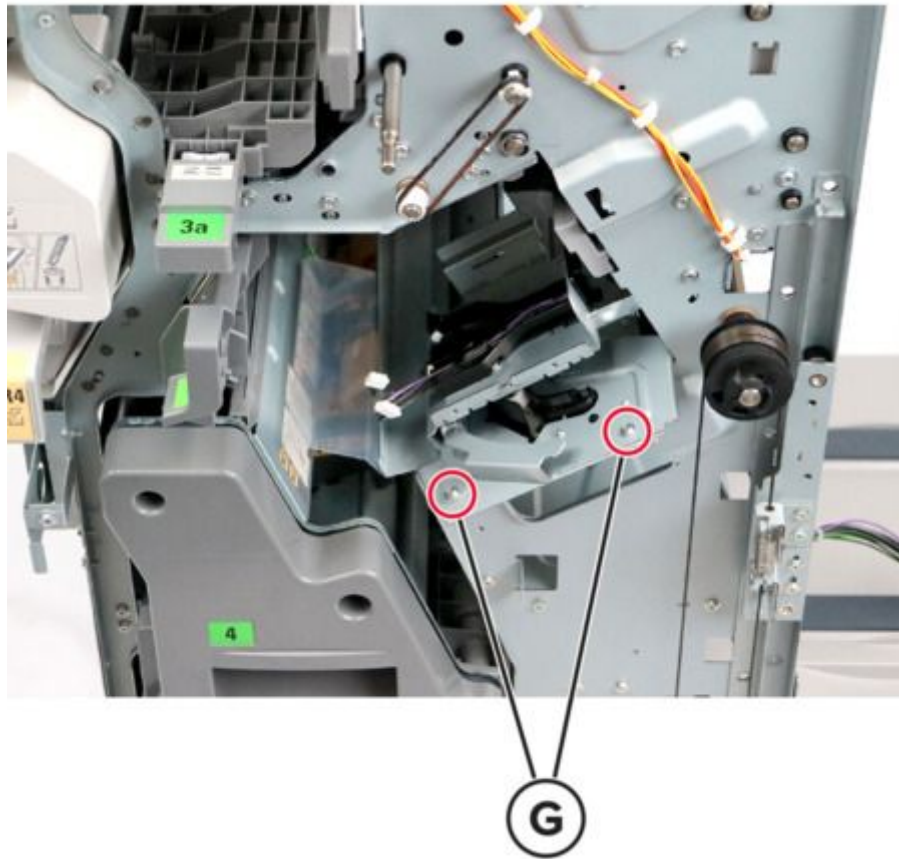
12. Pull the cable through the hole (D) in the frame, and then release the cable (E) from their guides.



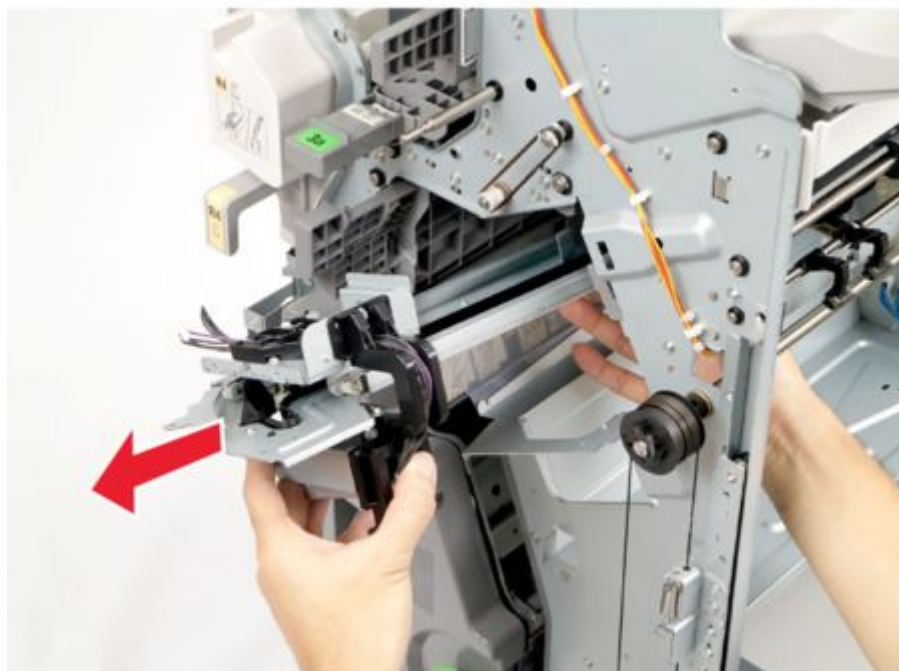
13. Remove the two screws (F) at the rear.



14. Remove the two screws (G) at the front.



15. Remove the booklet finisher stapler unit.

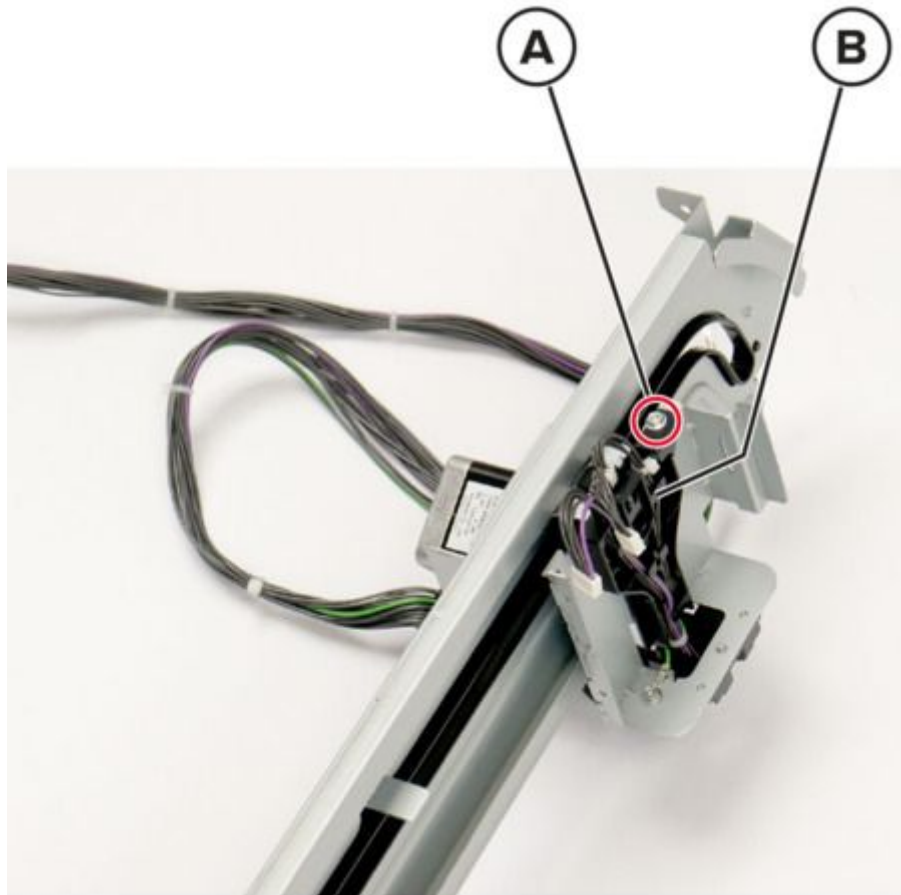


INSTALLATION NOTE

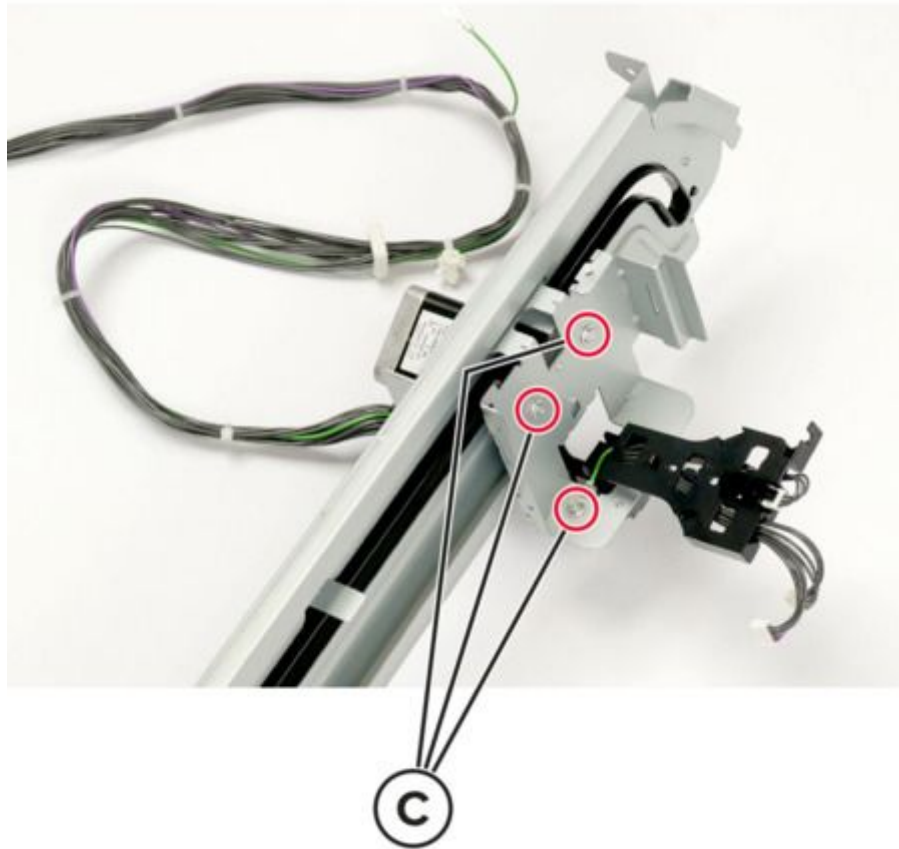
1. Make sure not to damage the staple unit cable.
2. To check for proper cable slack, after connecting and routing the cables, move the staple head to the front and then to the rear.

Motor (booklet finisher stapler unit carriage) removal

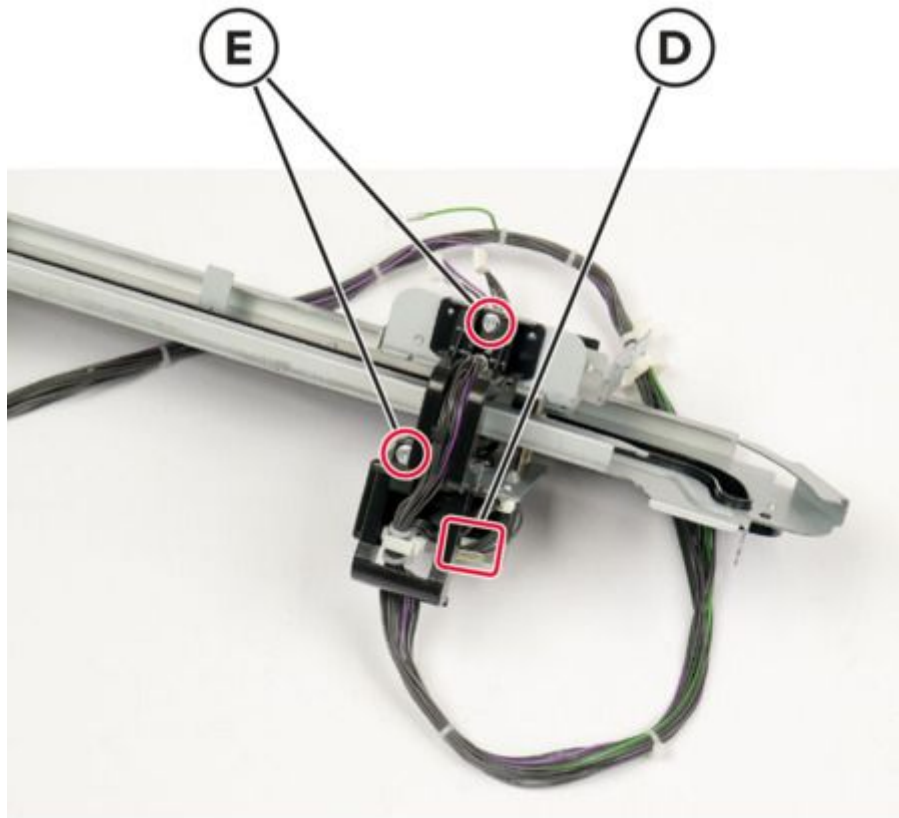
1. Remove the booklet finisher stapler head. See ["Booklet finisher stapler head removal" on page 1421.](#)
2. Remove the booklet finisher rear lower cover. See ["Booklet finisher rear lower cover removal" on page 1387.](#)
3. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
4. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
5. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
6. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
7. Remove the booklet finisher stacker tray. See ["Booklet finisher stacker tray removal" on page 1384.](#)
8. Remove the booklet finisher elevator tray guide. See ["Booklet finisher elevator tray guide removal" on page 1430.](#)
9. Remove the booklet maker controller board. See ["Booklet finisher booklet maker controller board removal" on page 1396.](#)
10. Remove the booklet finisher stapler unit. See ["Booklet finisher stapler unit removal" on page 1434.](#)
11. Remove the screw (A), and then release the bracket (B).



12. Remove the three screws (C).



13. Disconnect the cable (D), and then remove the two screws (E).

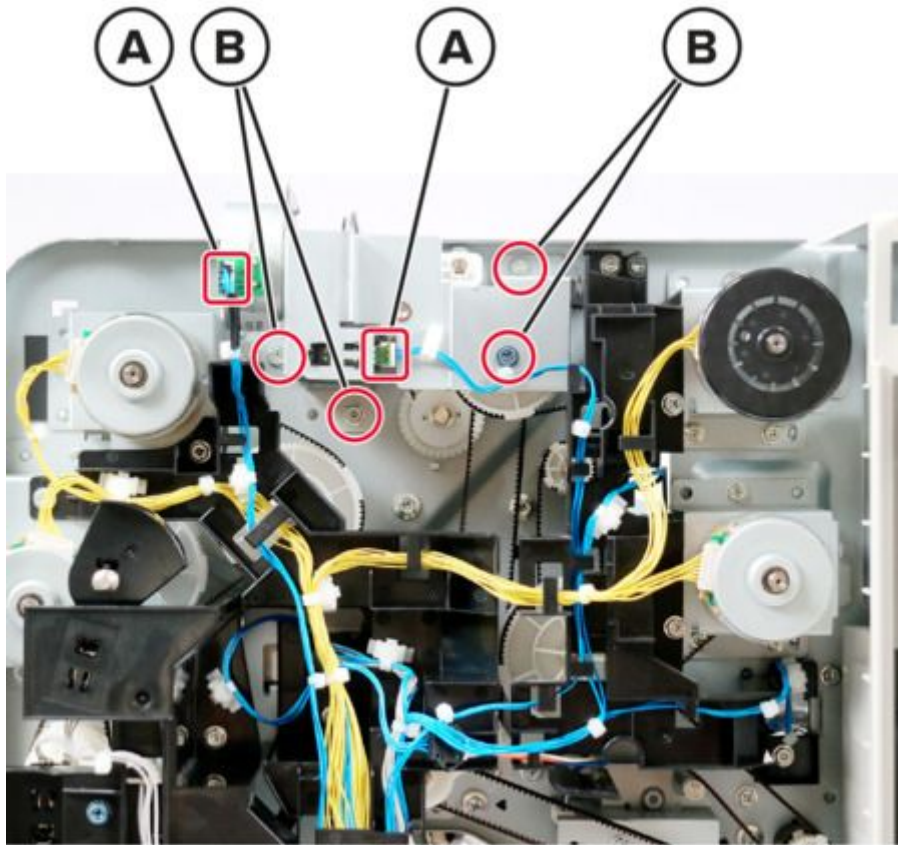


14. Remove the motor.

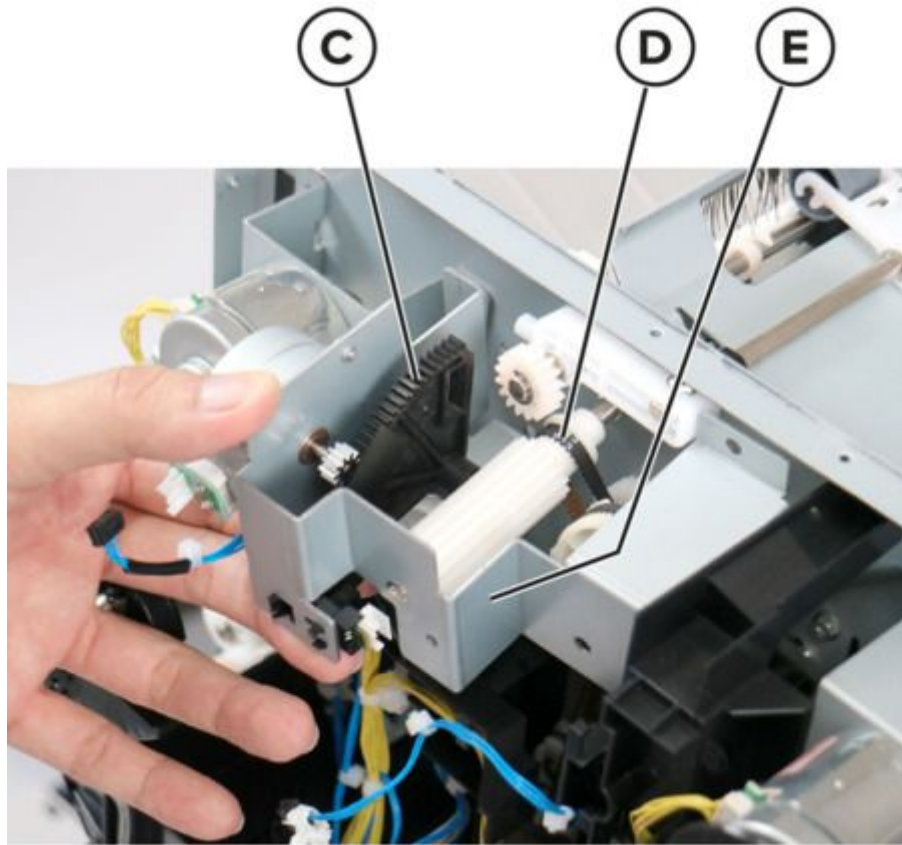


Motor (booklet finisher booklet offset with offset sensor) assembly removal

1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Disconnect the two cables (A), and remove the four screws (B).

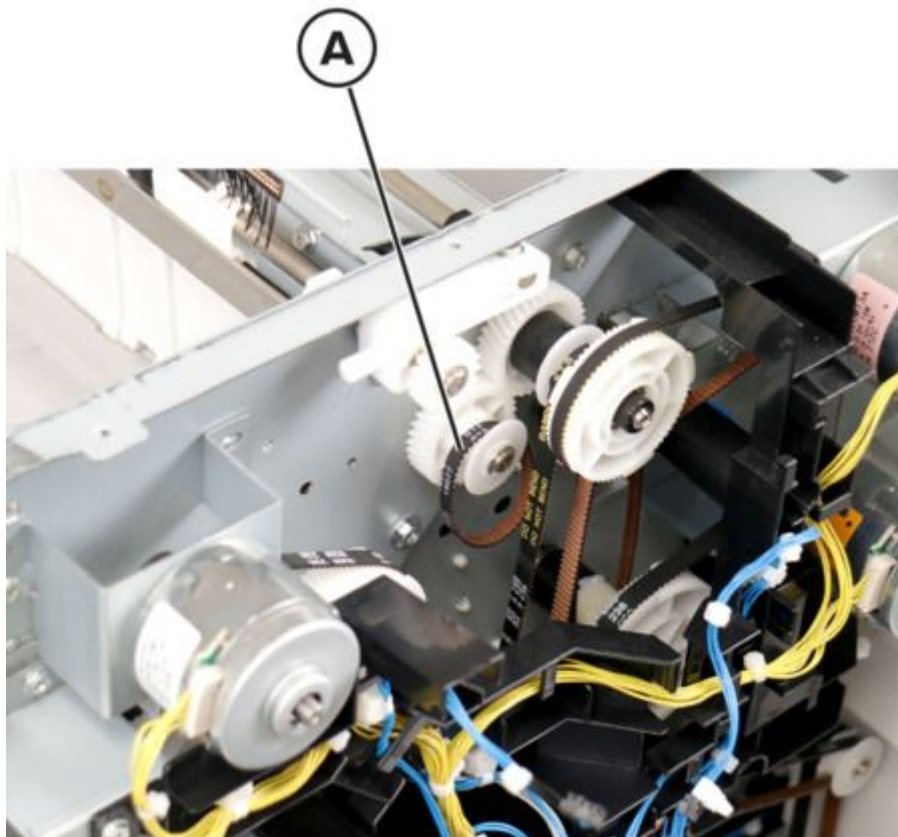


6. Release the gear (C), release the cable (D), and then remove the motor assembly (E).



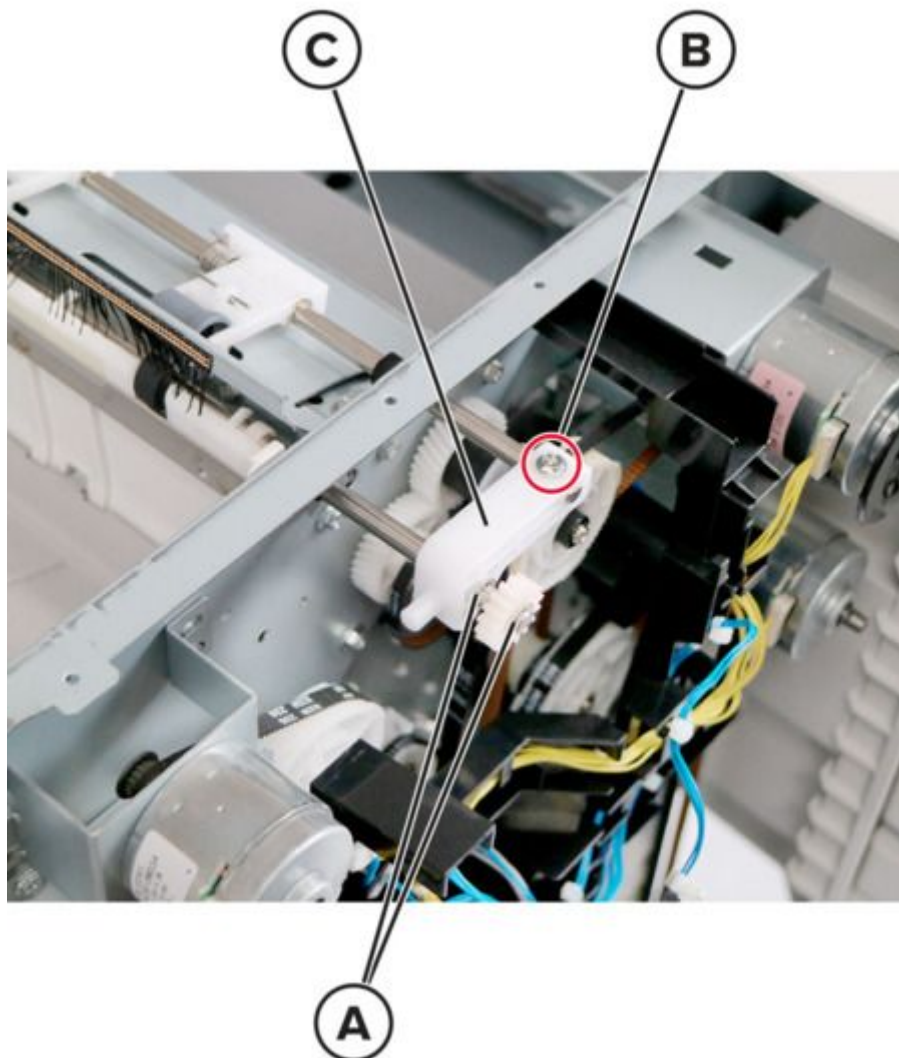
Booklet finisher offset drive belt removal

1. Remove the booklet finisher inner front cover. See [See "Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See [See "Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See [See "Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the motor (booklet offset with offset sensor) assembly. See [See "Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
6. Remove the belt (A).



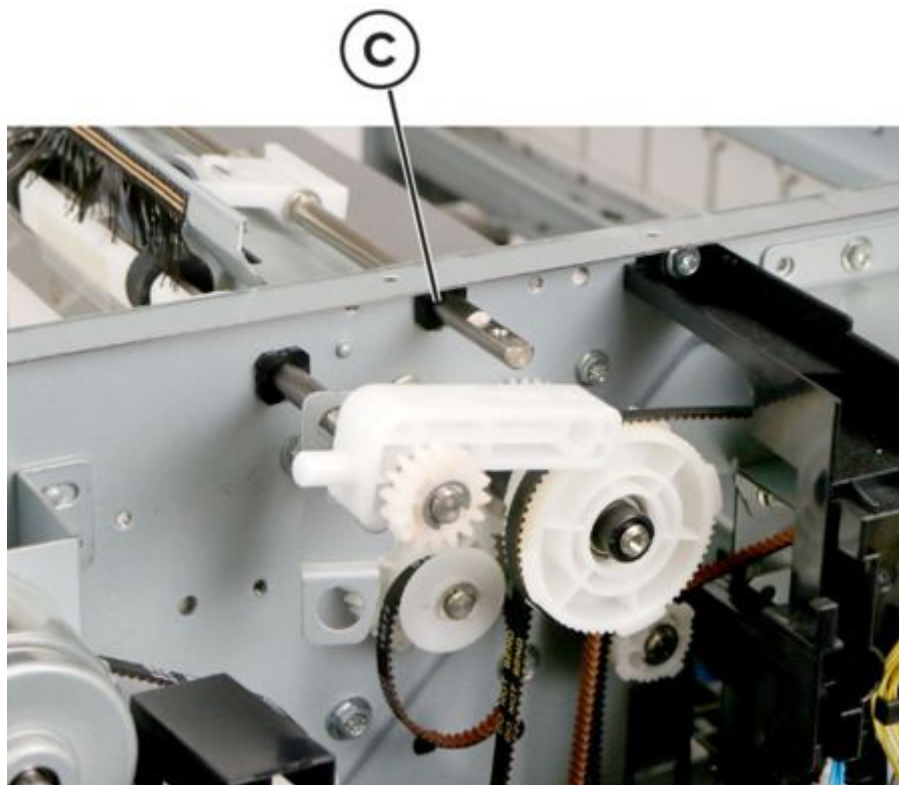
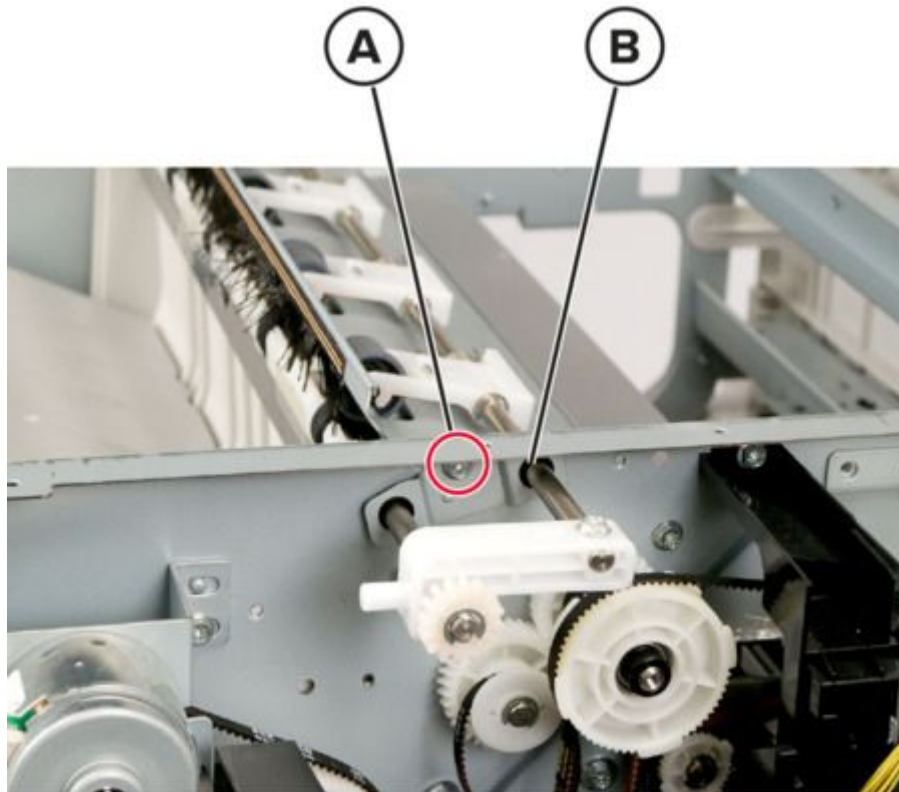
Booklet finisher joint arm removal

1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the motor (booklet offset with offset sensor) assembly. See ["Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
6. Remove the two E-clips (A), remove the screw (B), and then remove the joint arm (C).

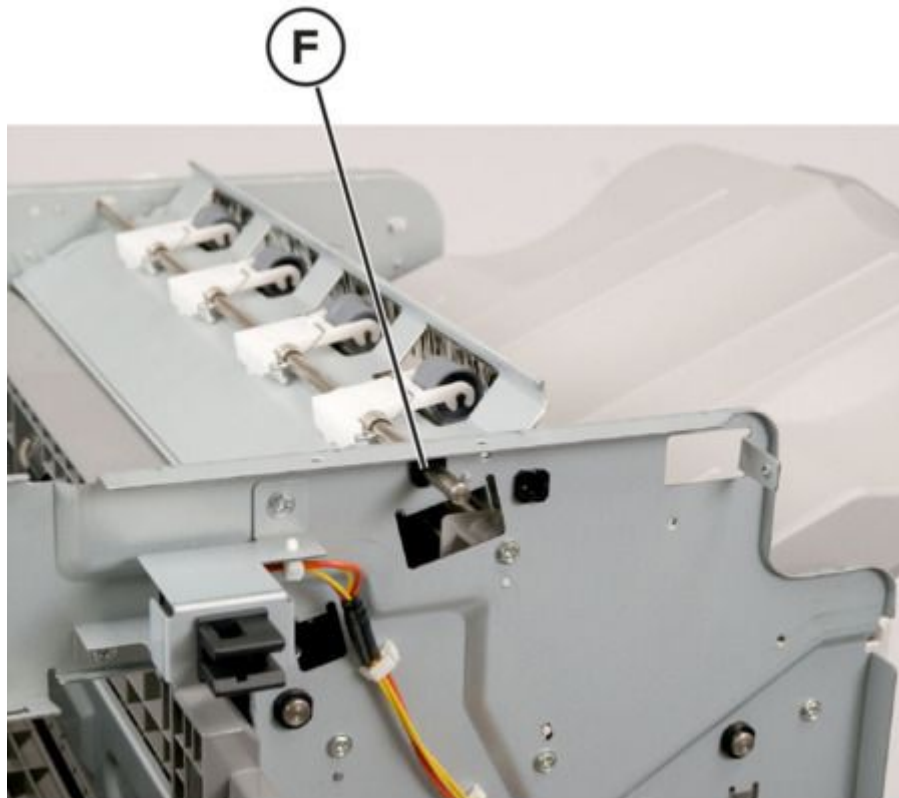
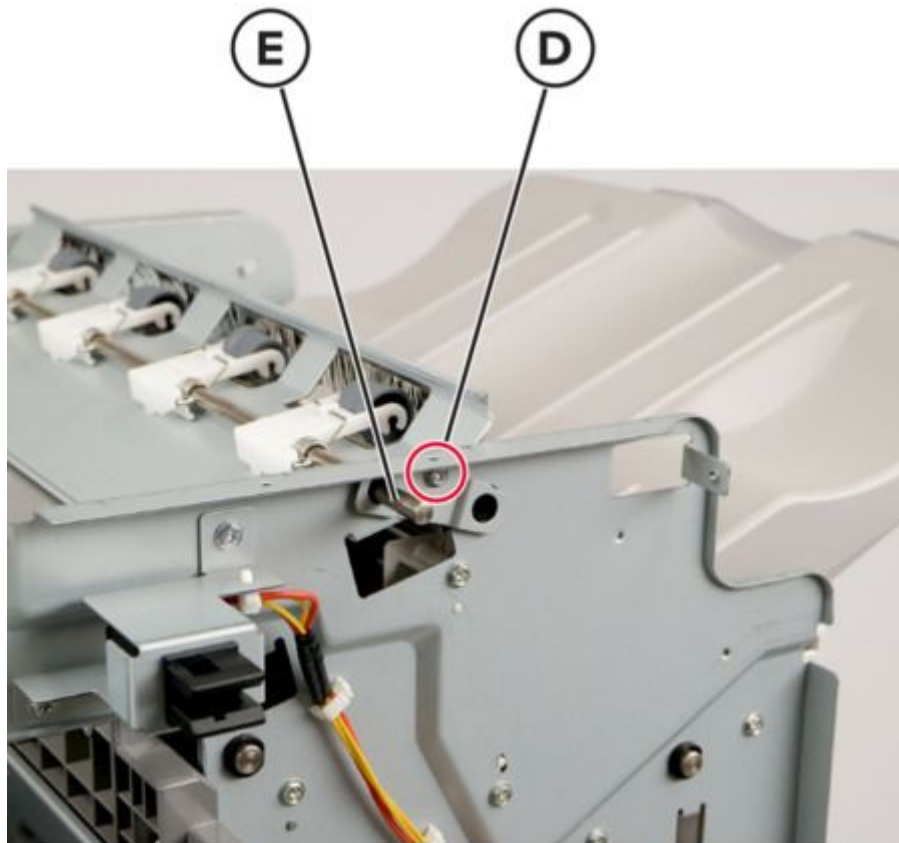


Booklet finisher top exit offset pinch shaft removal

1. Remove the booklet finisher inner front cover. See [See "Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See [See "Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See [See "Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the motor (booklet offset with offset sensor) assembly. See [See "Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
6. Remove the screw (A), release the bracket (B), and then remove the bushing (C).



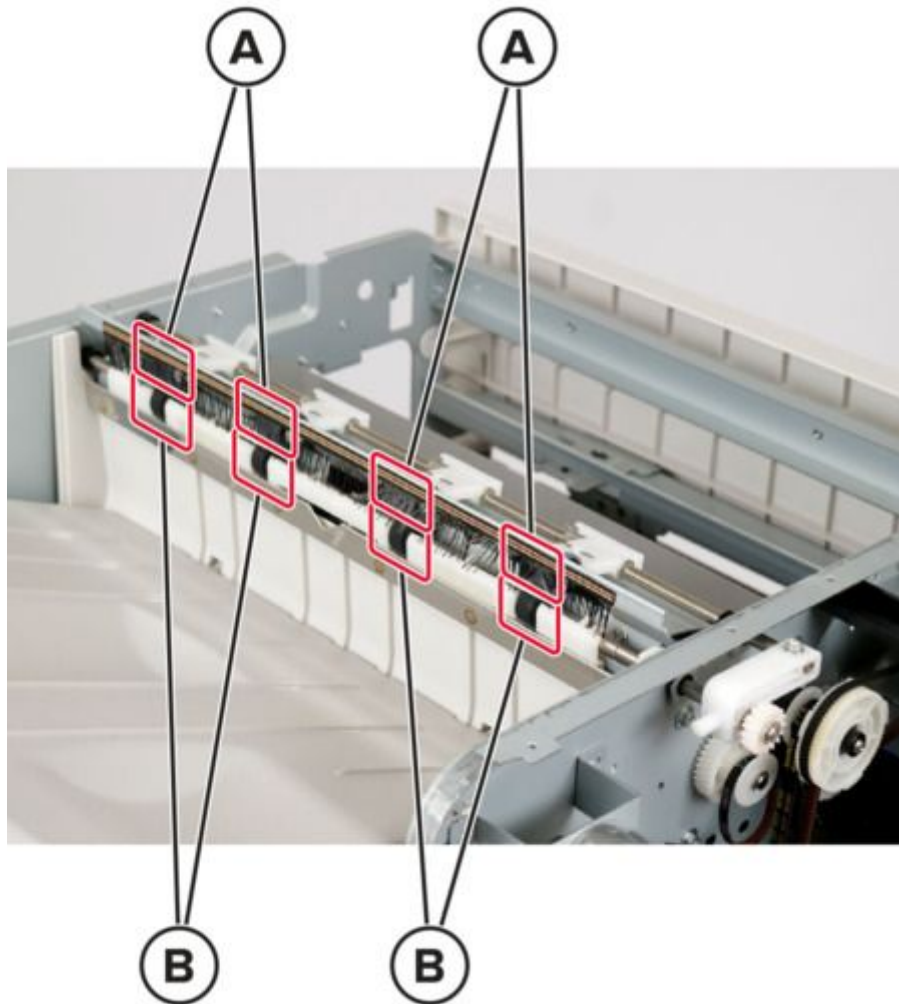
7. Remove the screw (D), release the bracket (E), and then remove the bushing (F).



8. Remove the top exit offset pinch shaft.

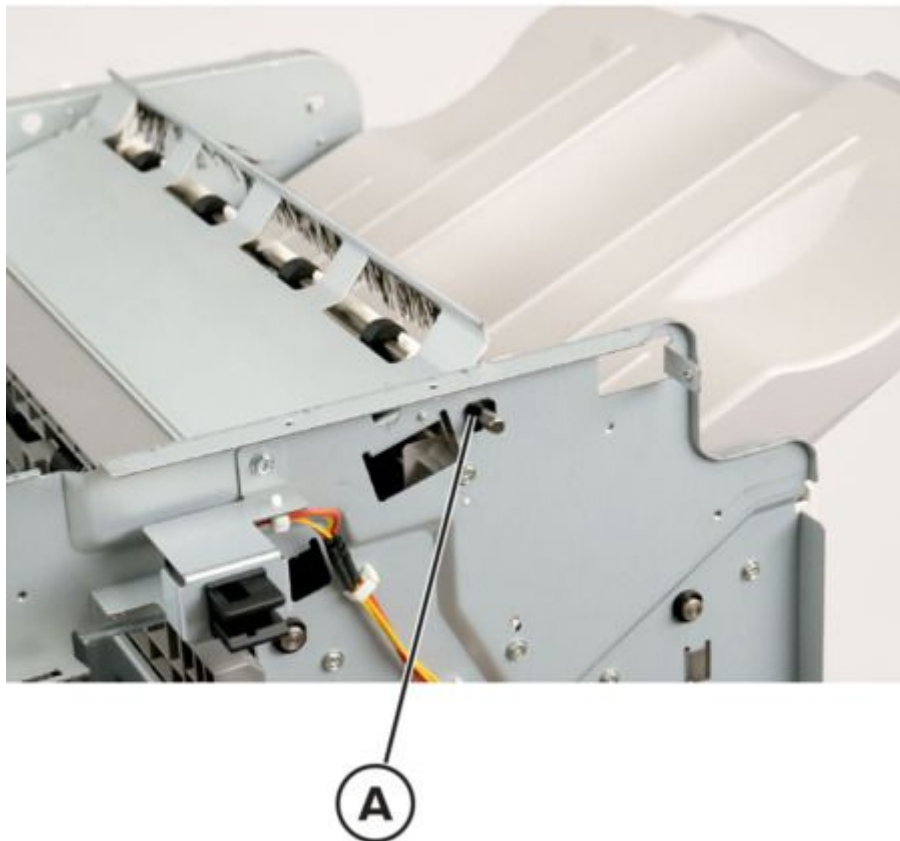
INSTALLATION NOTE

Make sure that the top four rollers (A) are properly aligned with the bottom four rollers (B).

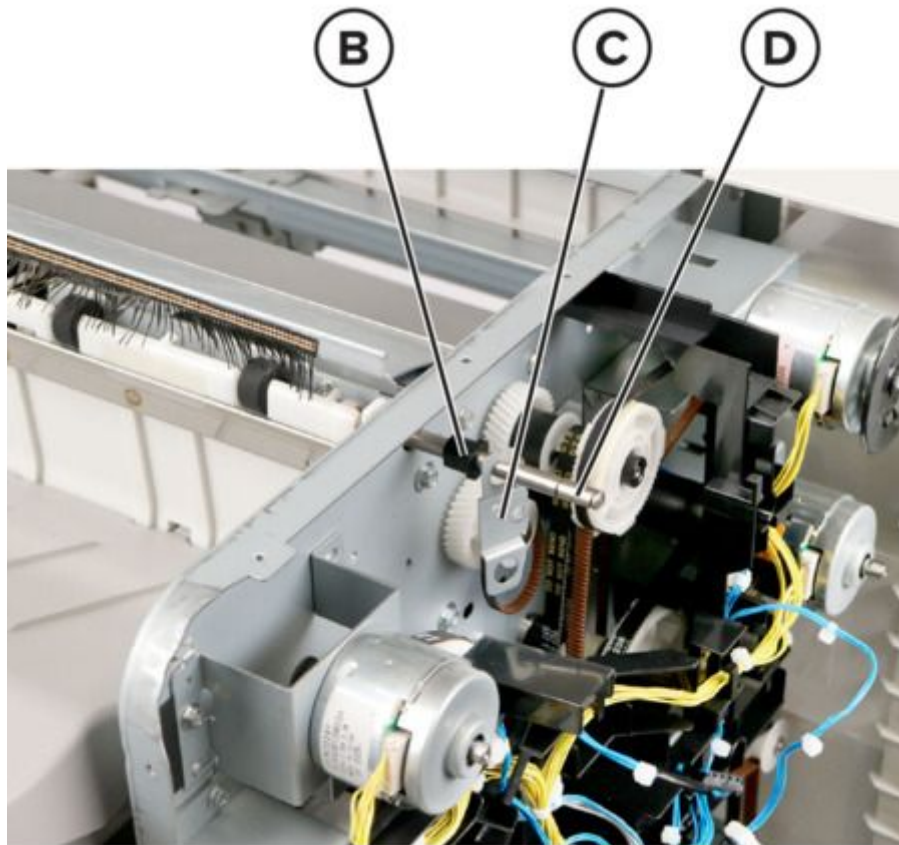


Booklet finisher top exit guide roller removal

1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the motor (booklet offset with offset sensor) assembly. See ["Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
6. Remove the joint arm. See ["Booklet finisher joint arm removal" on page 1448.](#)
7. Remove the booklet finisher top exit offset pinch shaft. See ["Booklet finisher top exit offset pinch shaft removal" on page 1449.](#)
8. Remove the bushing (A).



9. Remove the bushing (B), remove the bracket (C), and then remove the booklet finisher top exit guide roller (D).



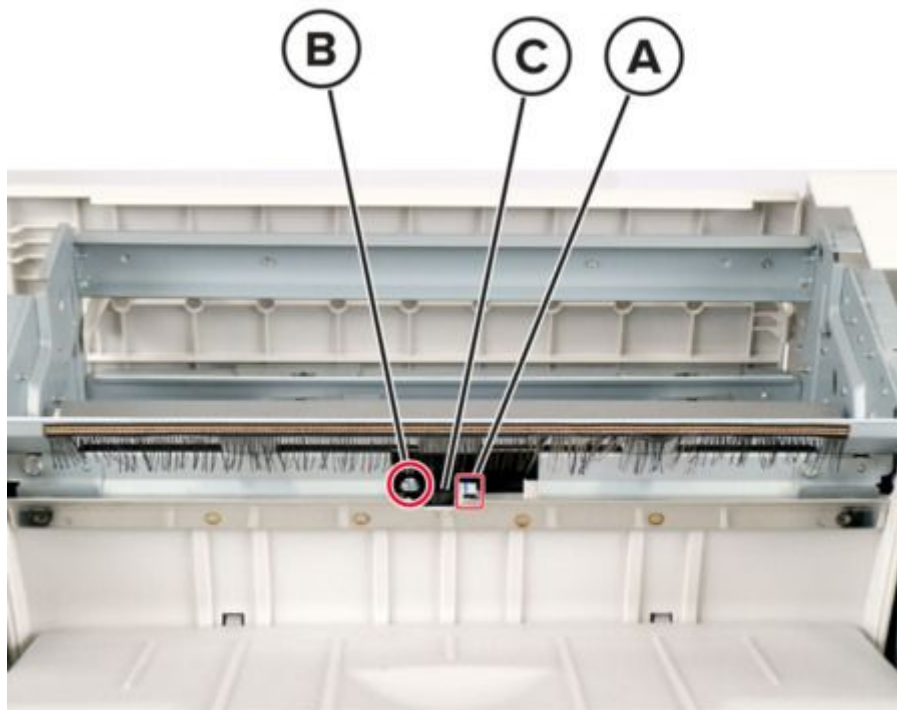
INSTALLATION NOTE

Pay attention to the proper position of the booklet finisher top exit guide roller.



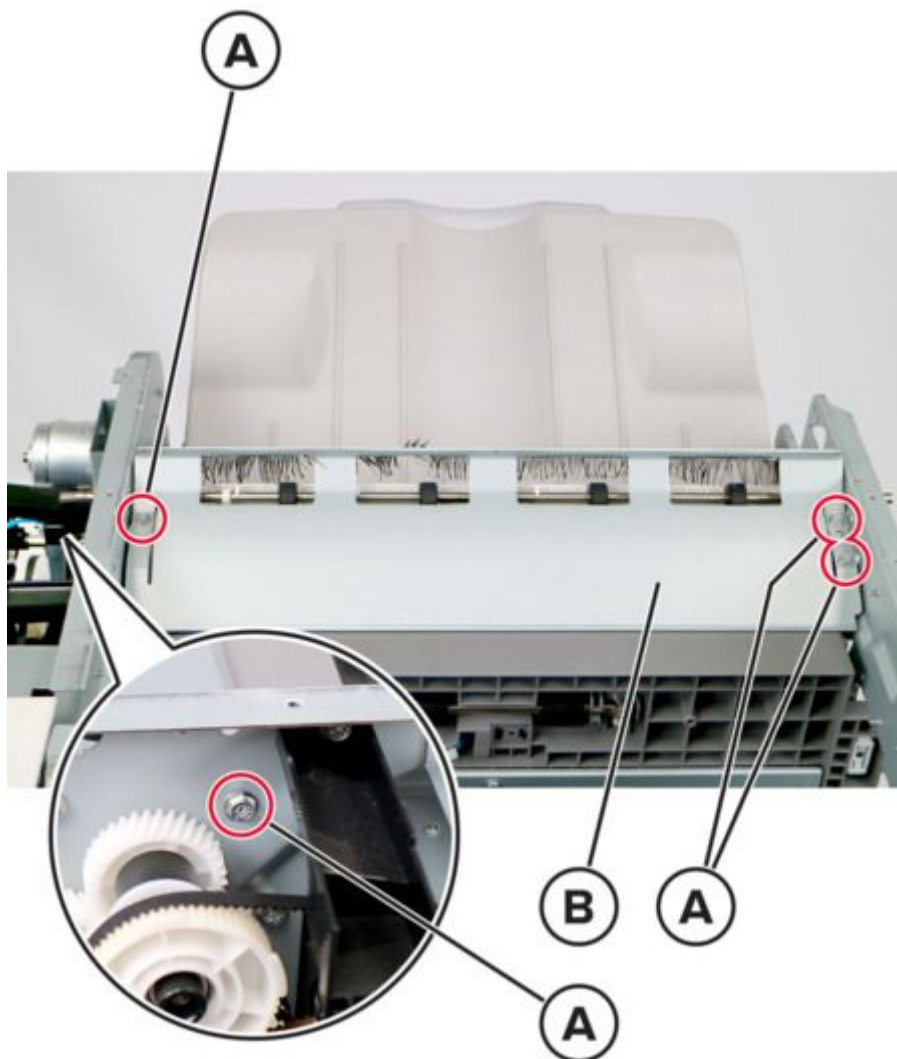
Sensor (booklet finisher top tray full) removal

1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the motor (booklet offset with offset sensor) assembly. See ["Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
6. Remove the joint arm. See ["Booklet finisher joint arm removal" on page 1448.](#)
7. Remove the booklet finisher top exit offset pinch shaft. See ["Booklet finisher top exit offset pinch shaft removal" on page 1449.](#)
8. Remove the booklet finisher top exit guide roller. See ["Booklet finisher top exit guide roller removal" on page 1453.](#)
9. Disconnect the cable (A), remove the screw (B), and then remove the sensor (C).



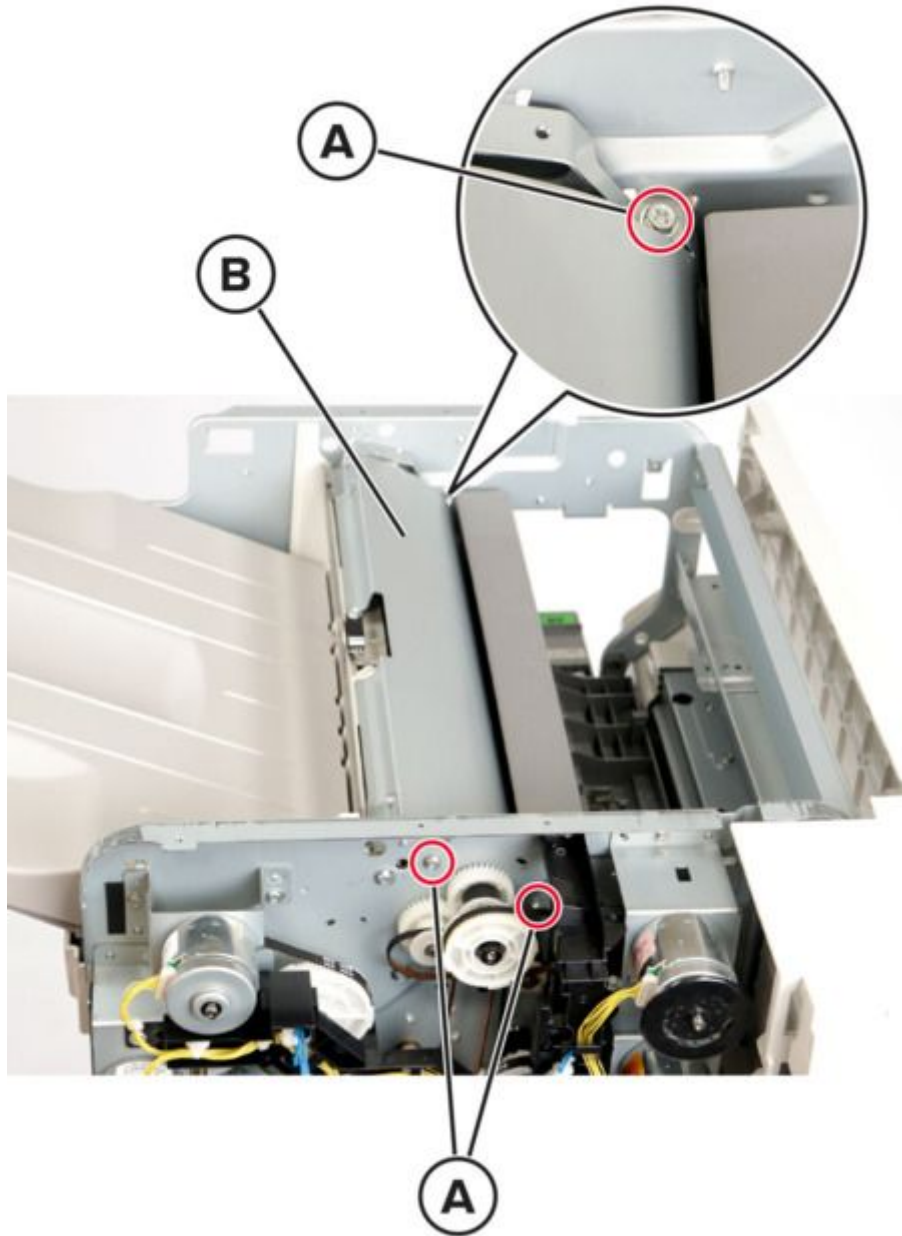
Booklet finisher upper exit guide removal

1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the motor (booklet offset with offset sensor) assembly. See ["Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
6. Remove the joint arm. See ["Booklet finisher joint arm removal" on page 1448.](#)
7. Remove the booklet finisher top exit offset pinch shaft. See ["Booklet finisher top exit offset pinch shaft removal" on page 1449.](#)
8. Remove the four screws (A), and then remove the upper exit guide (B).



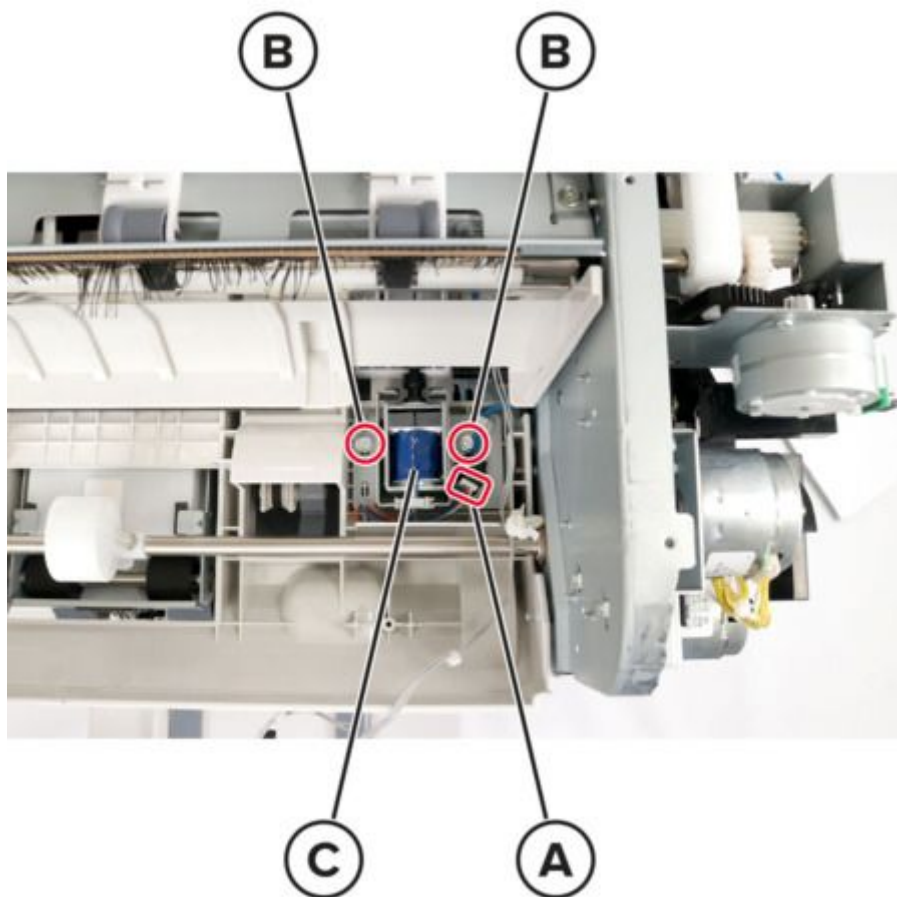
Booklet finisher lower exit guide removal

1. Remove the booklet finisher inner front cover. See [See "Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See [See "Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See [See "Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the motor (booklet offset with offset sensor) assembly. See [See "Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
6. Remove the joint arm. See [See "Booklet finisher joint arm removal" on page 1448.](#)
7. Remove the booklet finisher top exit offset pinch shaft. See [See "Booklet finisher top exit offset pinch shaft removal" on page 1449.](#)
8. Remove the booklet finisher upper exit guide. See [See "Booklet finisher upper exit guide removal" on page 1457.](#)
9. Remove the booklet finisher top exit guide roller. See [See "Booklet finisher top exit guide roller removal" on page 1453.](#)
10. Remove the three screws (A), and then remove the booklet finisher lower exit guide (B).



Booklet finisher subpaddle solenoid removal

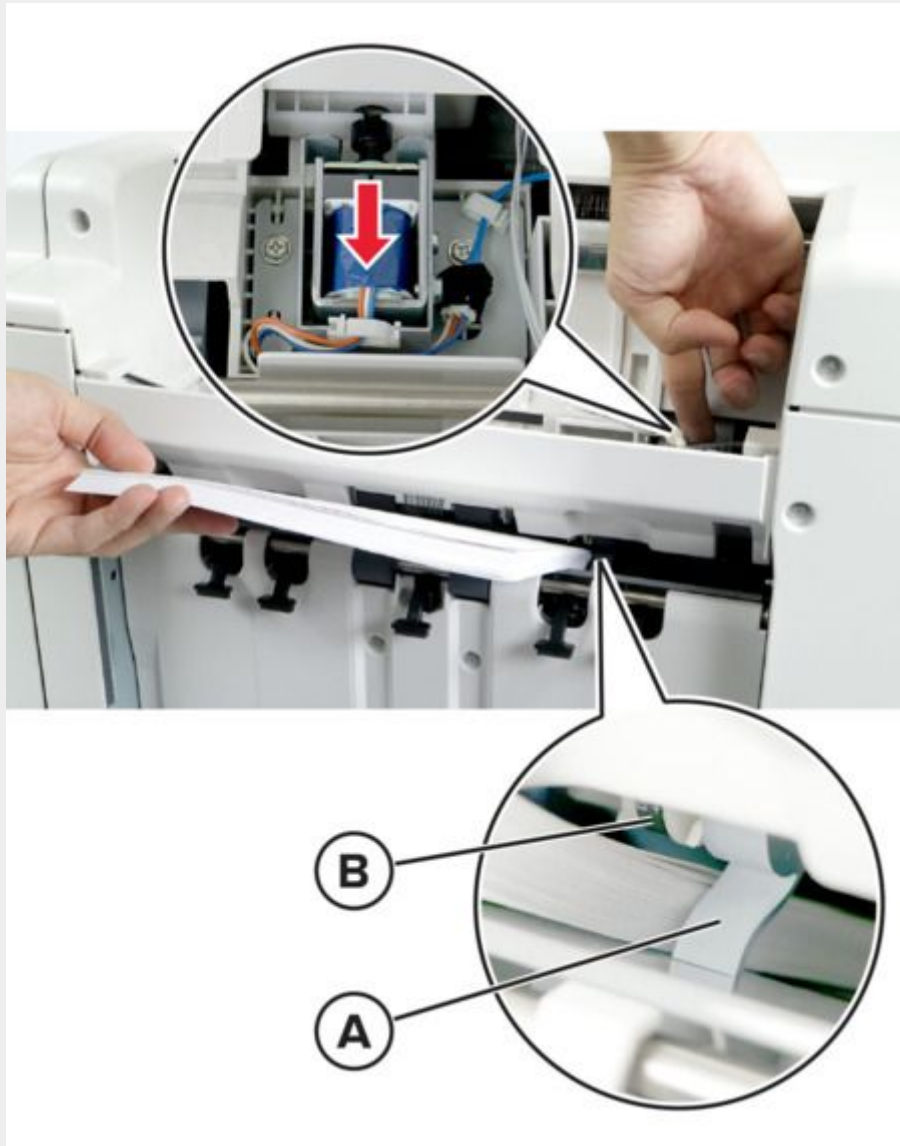
1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the booklet finisher spring tray.
6. Disconnect the cable (A), remove the two screws (B), and then remove the subpaddle solenoid (C).



INSTALLATION NOTE

1. Place 100 sheets in the compiler tray, and then make sure to position the stack so that it does not hit the paddle (A).

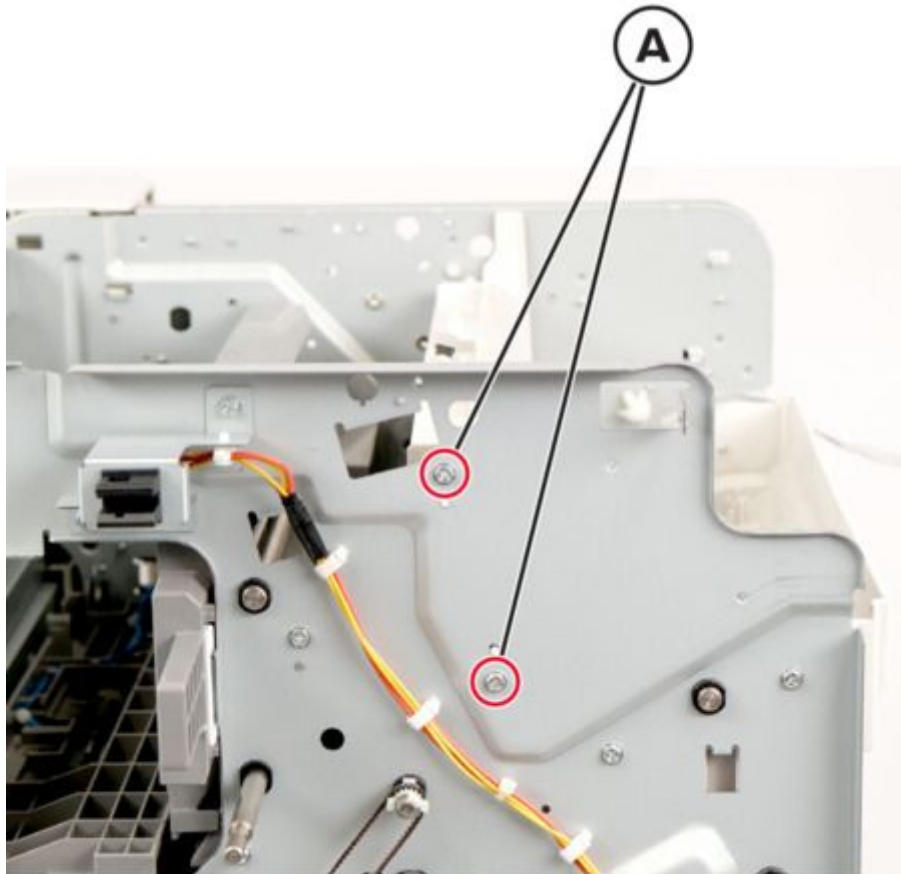
2. Press down the solenoid to check if the paddle can touch the compiler tray, and then make sure that the gear (B) does not hit the sheets. If the paddle does not touch the compiler tray, then adjust the position of the solenoid.



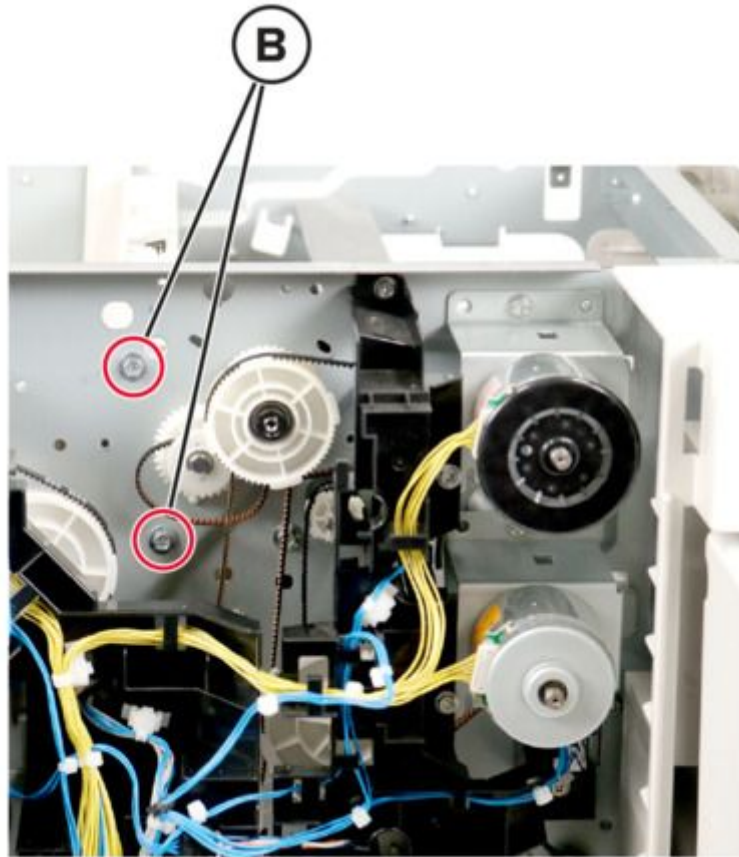
3. Tighten the screws on the solenoid once all the requirements are met.

Booklet finisher upper bin tray guide removal

1. Remove the booklet finisher inner front cover. See [See "Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See [See "Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See [See "Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the booklet finisher spring tray.
6. Remove the motor (booklet offset with offset sensor) assembly. See [See "Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
7. Remove the joint arm. See [See "Booklet finisher joint arm removal" on page 1448.](#)
8. Remove the booklet finisher top exit offset pinch shaft. See [See "Booklet finisher top exit offset pinch shaft removal" on page 1449.](#)
9. Remove the booklet finisher top exit guide roller. See [See "Booklet finisher top exit guide roller removal" on page 1453.](#)
10. Remove the booklet upper exit guide. See [See "Booklet finisher upper exit guide removal" on page 1457.](#)
11. Remove the booklet lower exit guide. See [See "Booklet finisher lower exit guide removal" on page 1458.](#)
12. Remove the sensor (booklet top tray full). See [See "Sensor \(booklet finisher top tray full\) removal" on page 1456.](#)
13. Remove the two screws (A) from the front.

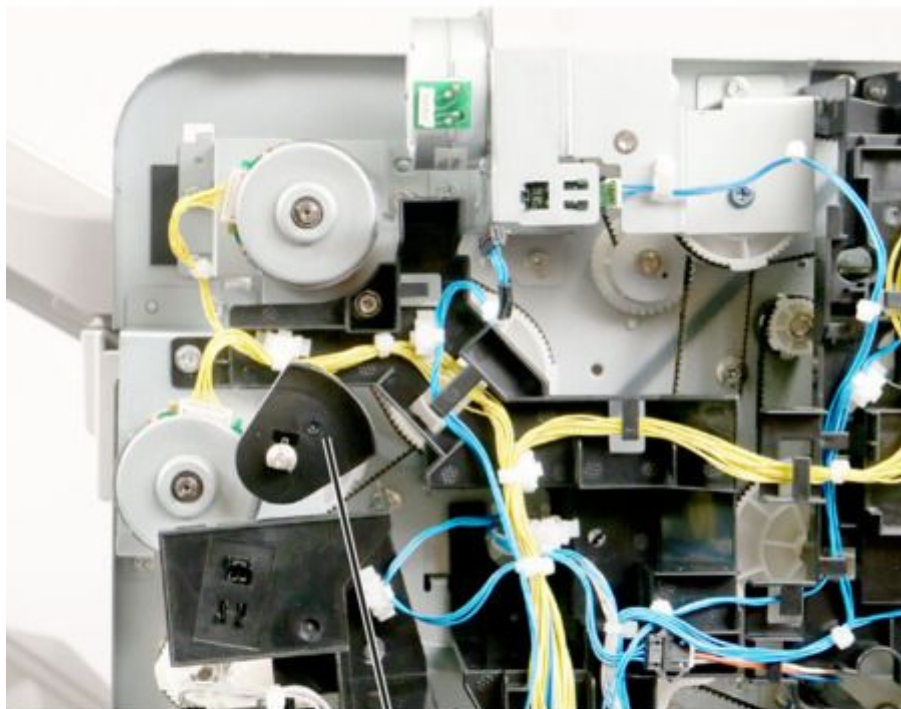


14. Remove the two screws (B) from the rear, and then remove the booklet upper bin tray guide.



Eject clamp actuator removal

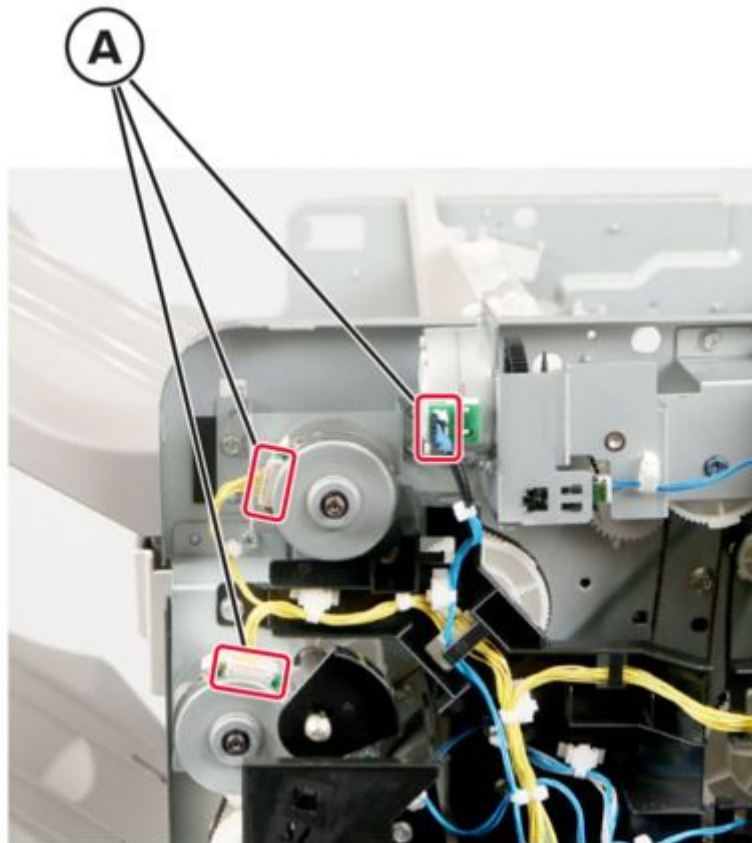
1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the eject clamp actuator (A).



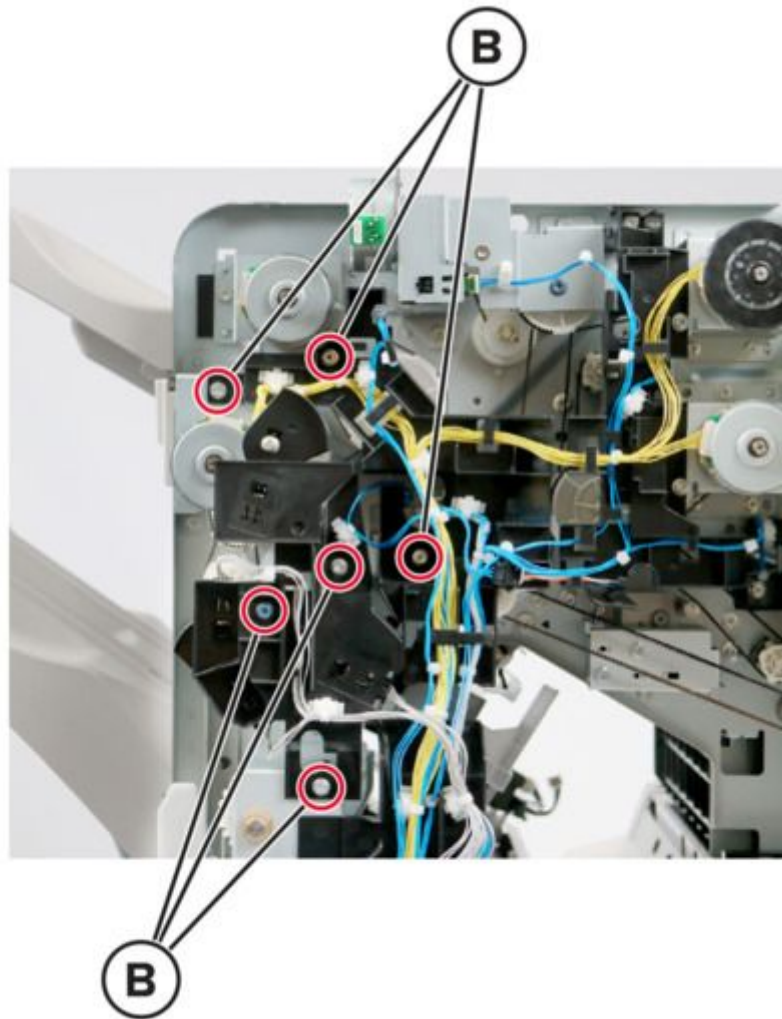
A

Motor (booklet finisher eject) removal

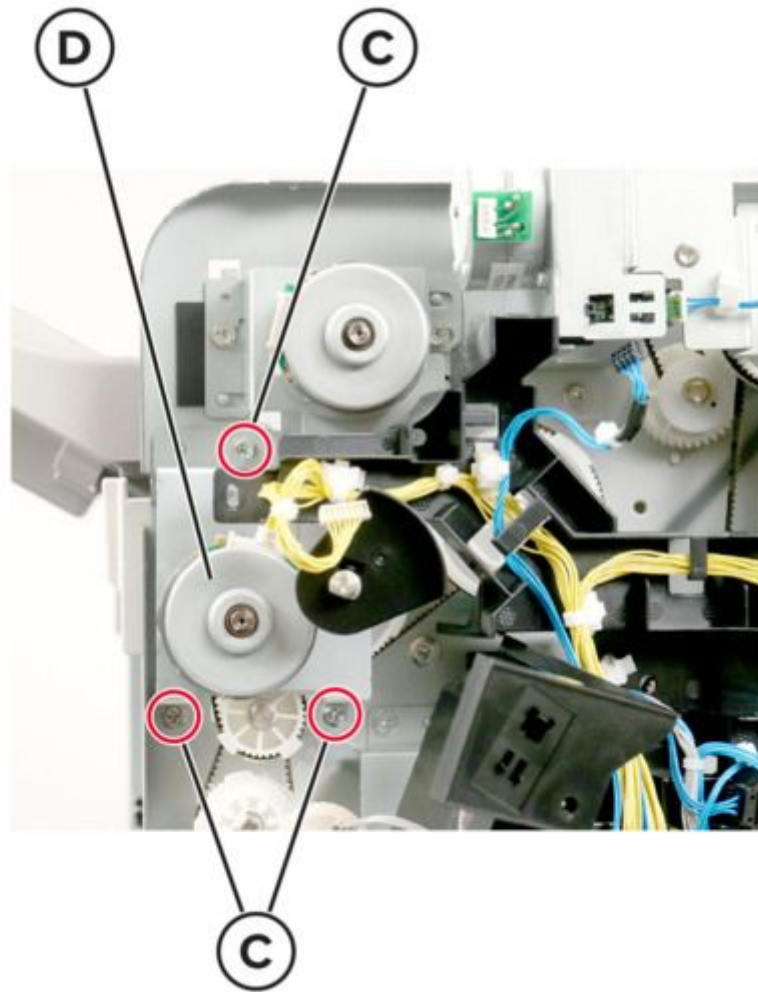
1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the eject clamp actuator. See ["Eject clamp actuator removal" on page 1465.](#)
6. Disconnect the three cables (A).



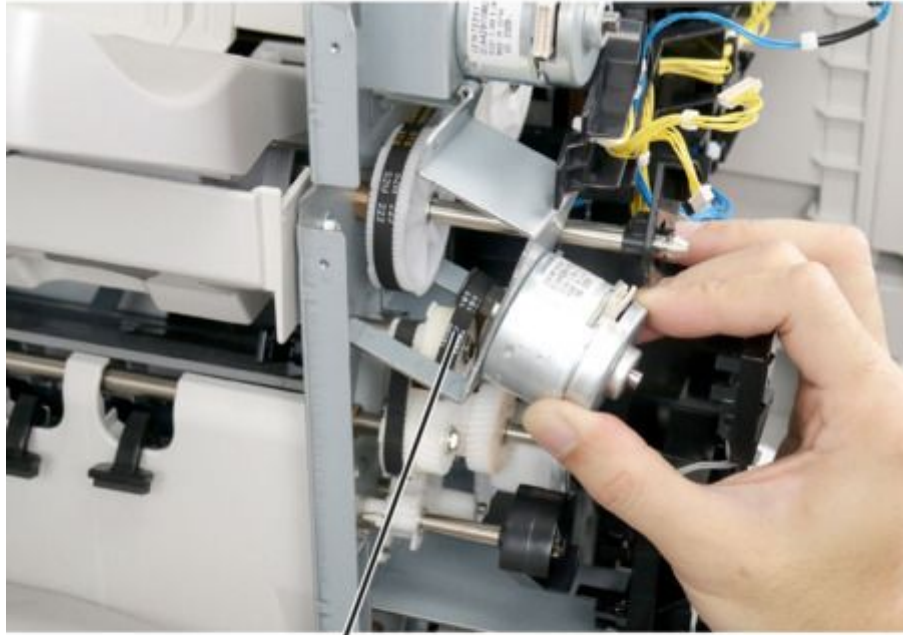
7. Remove the six screws (B) to release the cable holder.



8. Remove the three screws (C), and then remove the motor (D).



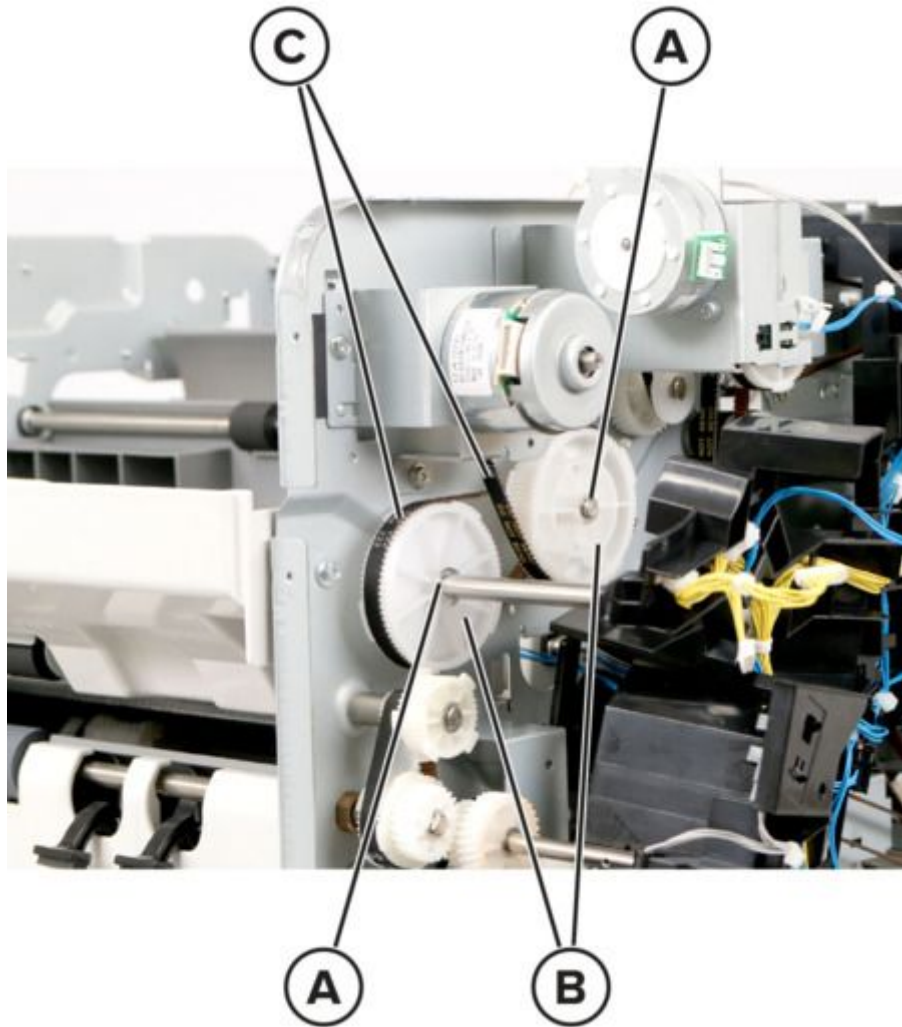
9. Remove the belt (E) from the motor.



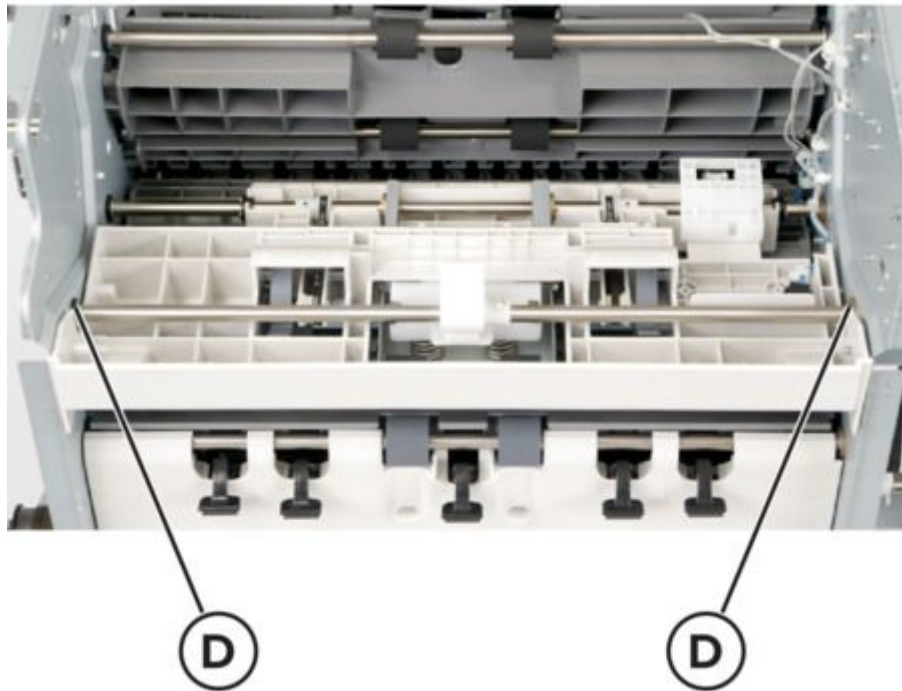
E

Booklet finisher cam eject cover removal

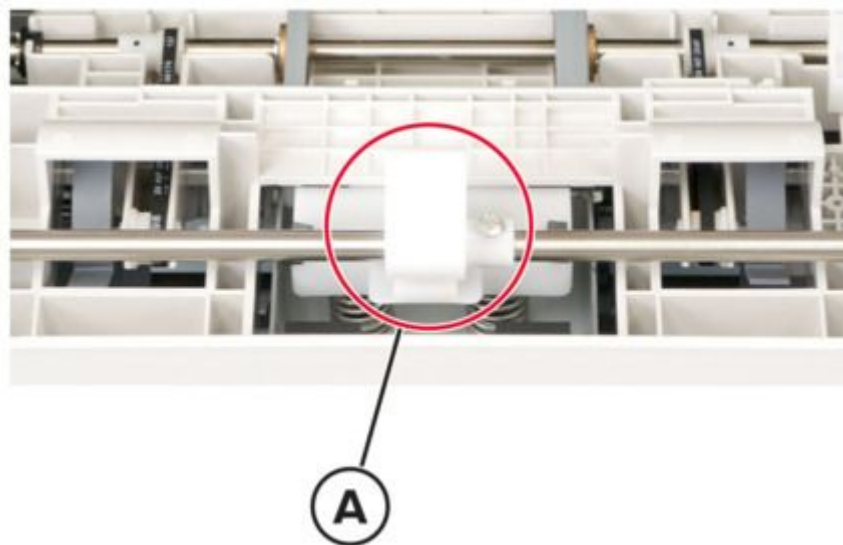
1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the booklet finisher spring tray.
6. Remove the booklet finisher subpaddle solenoid. See ["Booklet finisher subpaddle solenoid removal" on page 1460.](#)
7. Remove the motor (booklet offset with offset sensor) assembly. See ["Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
8. Remove the joint arm. See ["Booklet finisher joint arm removal" on page 1448.](#)
9. Remove the booklet finisher top exit offset pinch shaft. See ["Booklet finisher top exit offset pinch shaft removal" on page 1449.](#)
10. Remove the booklet finisher top exit guide roller. See ["Booklet finisher top exit guide roller removal" on page 1453.](#)
11. Remove the booklet finisher upper exit guide. See ["Booklet finisher upper exit guide removal" on page 1457.](#)
12. Remove the booklet finisher lower exit guide. See ["Booklet finisher lower exit guide removal" on page 1458.](#)
13. Remove the sensor (booklet finisher top tray full). See ["Sensor \(booklet finisher top tray full\) removal" on page 1456.](#)
14. Remove the booklet finisher upper bin tray guide. See ["Booklet finisher upper bin tray guide removal" on page 1462.](#)
15. Remove the eject clamp actuator. See ["Eject clamp actuator removal" on page 1465.](#)
16. Remove the motor (booklet finisher eject). See ["Motor \(booklet finisher eject\) removal" on page 1466.](#)
17. Remove the two E-clips (A), remove the two gears (B), and then remove the two belts (C).



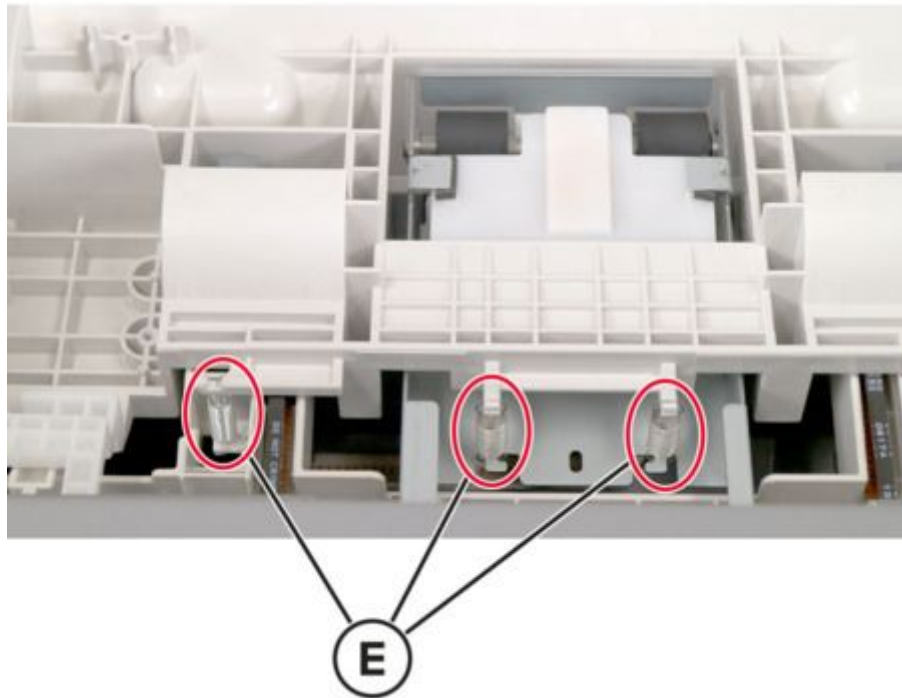
18. Remove the two E-clips (D), and then remove the two bushings.



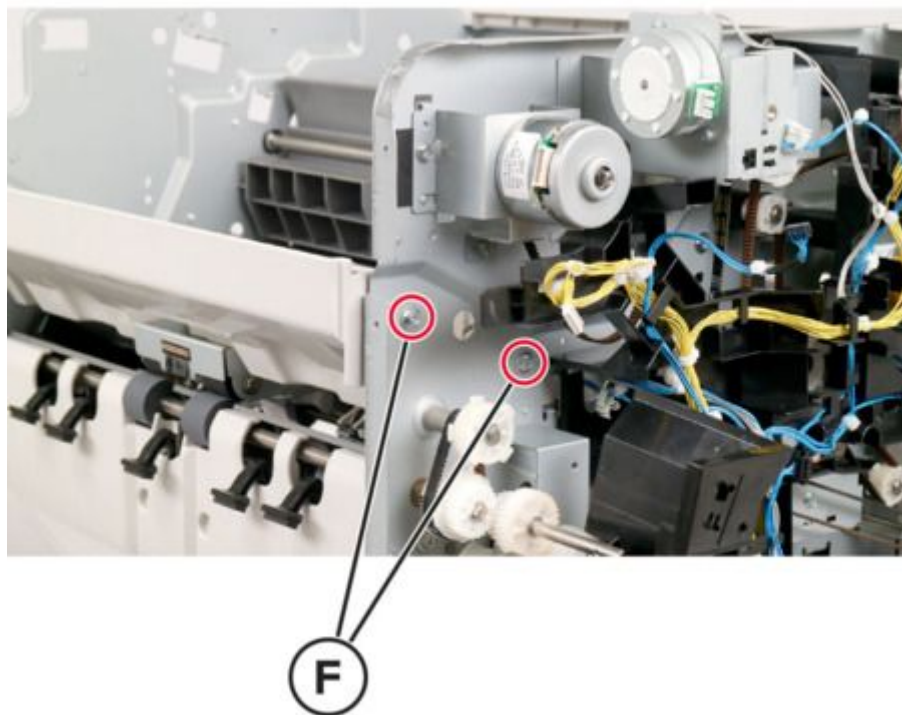
19. Take note of the position of the roller (A).



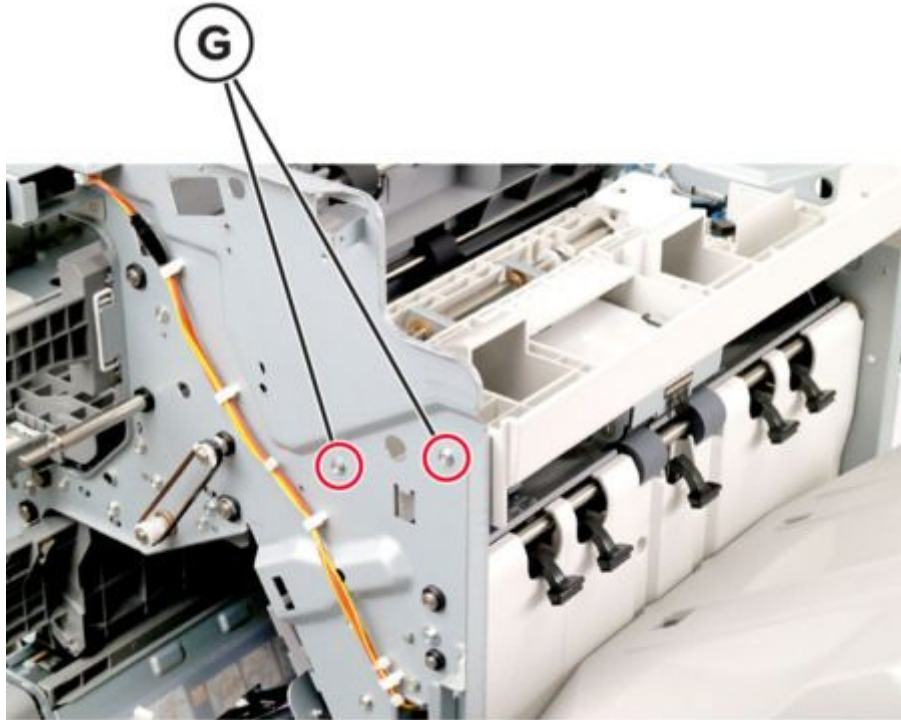
20. Remove the three springs (E).



21. Remove the two screws (F) from the rear.

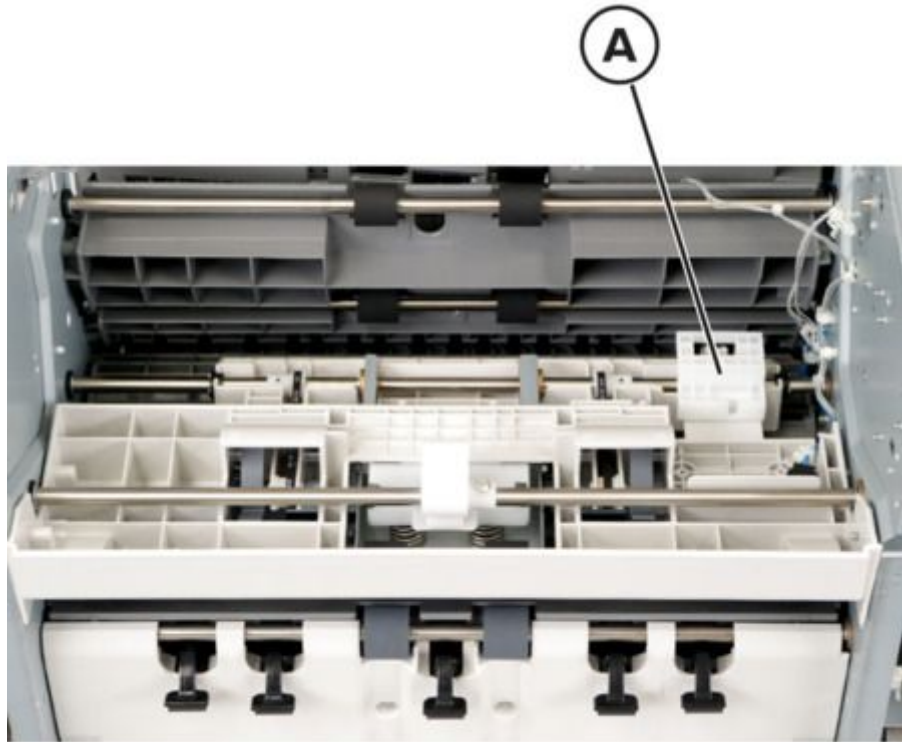


22. Remove the two screws (G) from the front, and then remove the cam eject cover.



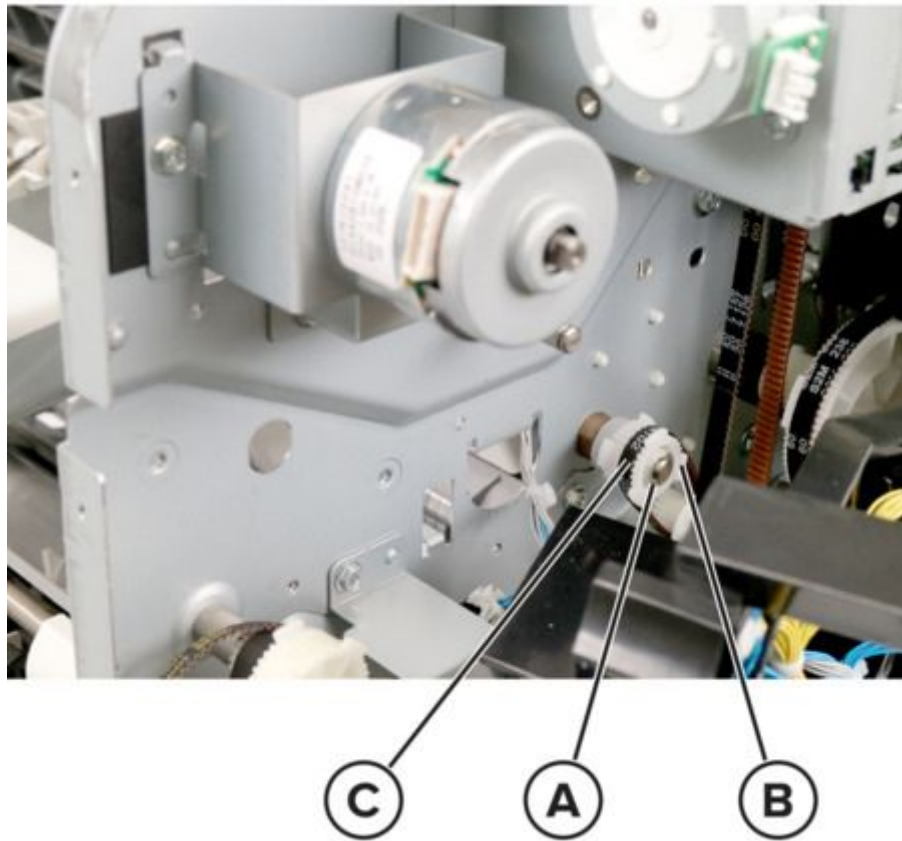
Booklet finisher solenoid link removal

1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the booklet finisher spring tray.
6. Remove the booklet finisher subpaddle solenoid. See ["Booklet finisher subpaddle solenoid removal" on page 1460.](#)
7. Remove the motor (booklet offset with offset sensor) assembly. See ["Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
8. Remove the joint arm. See ["Booklet finisher joint arm removal" on page 1448.](#)
9. Remove the booklet finisher top exit offset pinch shaft. See ["Booklet finisher top exit offset pinch shaft removal" on page 1449.](#)
10. Remove the booklet finisher top exit guide roller. See ["Booklet finisher top exit guide roller removal" on page 1453.](#)
11. Remove the booklet finisher upper exit guide. See ["Booklet finisher upper exit guide removal" on page 1457.](#)
12. Remove the booklet finisher lower exit guide. See ["Booklet finisher lower exit guide removal" on page 1458.](#)
13. Remove the sensor (booklet finisher top tray full). See ["Sensor \(booklet finisher top tray full\) removal" on page 1456.](#)
14. Remove the booklet finisher upper bin tray guide. See ["Booklet finisher upper bin tray guide removal" on page 1462.](#)
15. Remove the eject clamp actuator. See ["Eject clamp actuator removal" on page 1465.](#)
16. Remove the motor (booklet finisher eject). See ["Motor \(booklet finisher eject\) removal" on page 1466.](#)
17. Remove the sub paddle solenoid link (A).

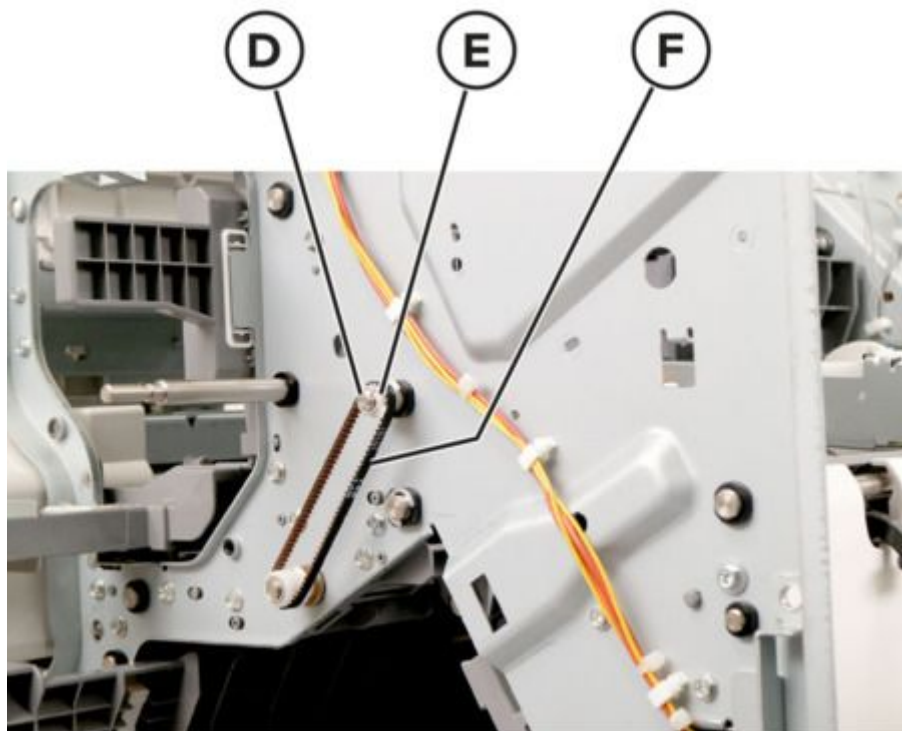


Booklet finisher eject roll assembly removal

1. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
2. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
3. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
4. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
5. Remove the booklet finisher spring tray.
6. Remove the booklet finisher subpaddle solenoid. See ["Booklet finisher subpaddle solenoid removal" on page 1460.](#)
7. Remove the motor (booklet offset with offset sensor) assembly. See ["Motor \(booklet finisher booklet offset with offset sensor\) assembly removal" on page 1445.](#)
8. Remove the joint arm. See ["Booklet finisher joint arm removal" on page 1448.](#)
9. Remove the booklet finisher top exit offset pinch shaft. See ["Booklet finisher top exit offset pinch shaft removal" on page 1449.](#)
10. Remove the booklet finisher top exit guide roller. See ["Booklet finisher top exit guide roller removal" on page 1453.](#)
11. Remove the booklet finisher upper exit guide. See ["Booklet finisher upper exit guide removal" on page 1457.](#)
12. Remove the booklet finisher lower exit guide. See ["Booklet finisher lower exit guide removal" on page 1458.](#)
13. Remove the sensor (booklet finisher top tray full). See ["Sensor \(booklet finisher top tray full\) removal" on page 1456.](#)
14. Remove the booklet finisher upper bin tray guide. See ["Booklet finisher upper bin tray guide removal" on page 1462.](#)
15. Remove the eject clamp actuator. See ["Eject clamp actuator removal" on page 1465.](#)
16. Remove the motor (booklet finisher eject). See ["Motor \(booklet finisher eject\) removal" on page 1466.](#)
17. Remove the booklet finisher cam eject cover. See ["Booklet finisher cam eject cover removal" on page 1470.](#)
18. Remove the E-clip (A), remove the gear (B), and then remove the belt (C) at the rear.

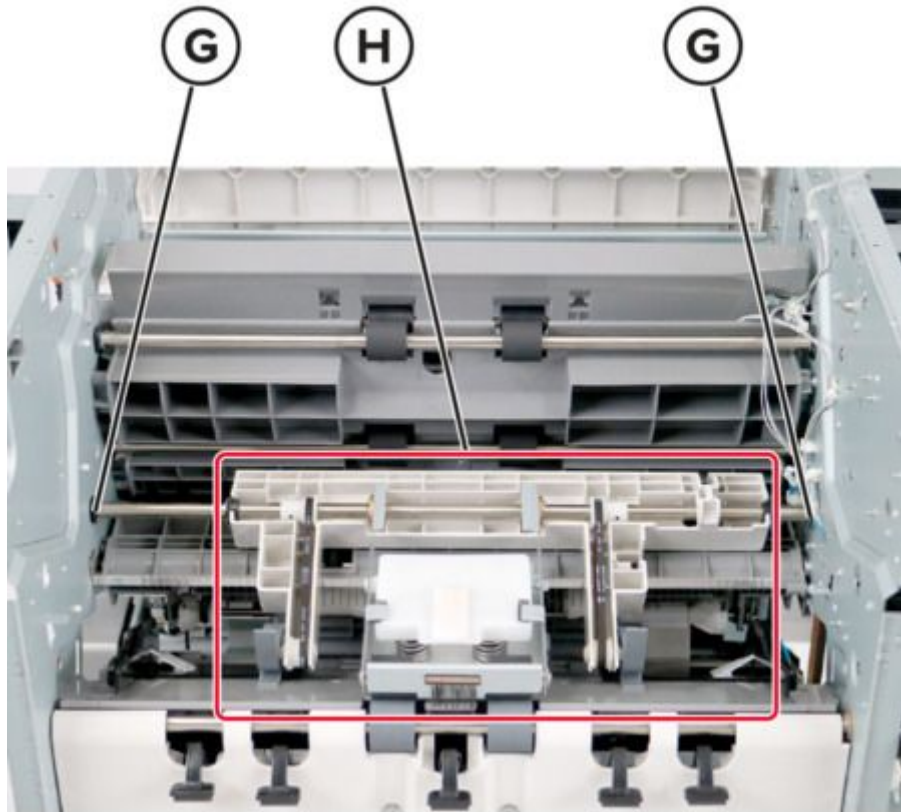


19. Remove the E-clip (D), remove the gear (E), and then remove the belt (F) at the front.



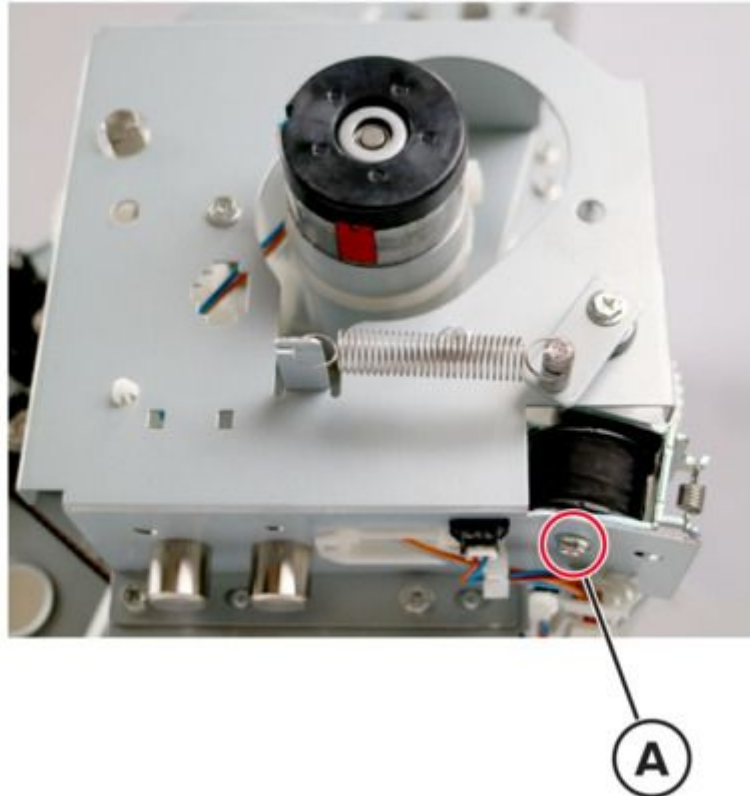
Parts removal

20. Remove the two E-clips (G), slide out their bushing, and then remove the eject roll assembly (H).

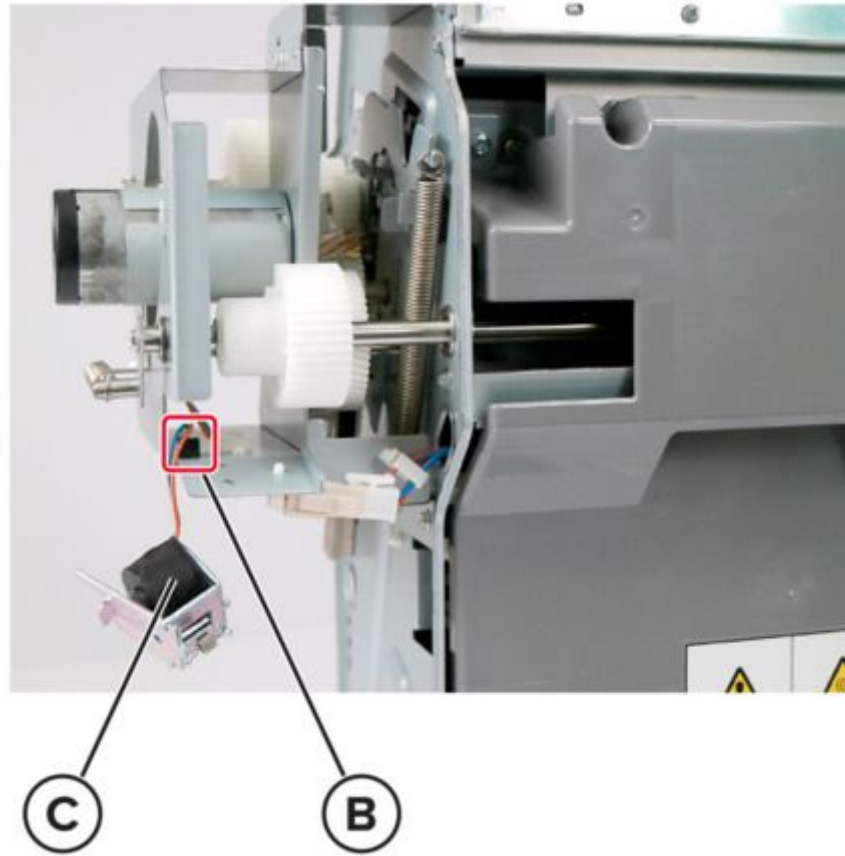


Booklet finisher fold solenoid removal

1. Remove the booklet finisher booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. Remove the screw (A).

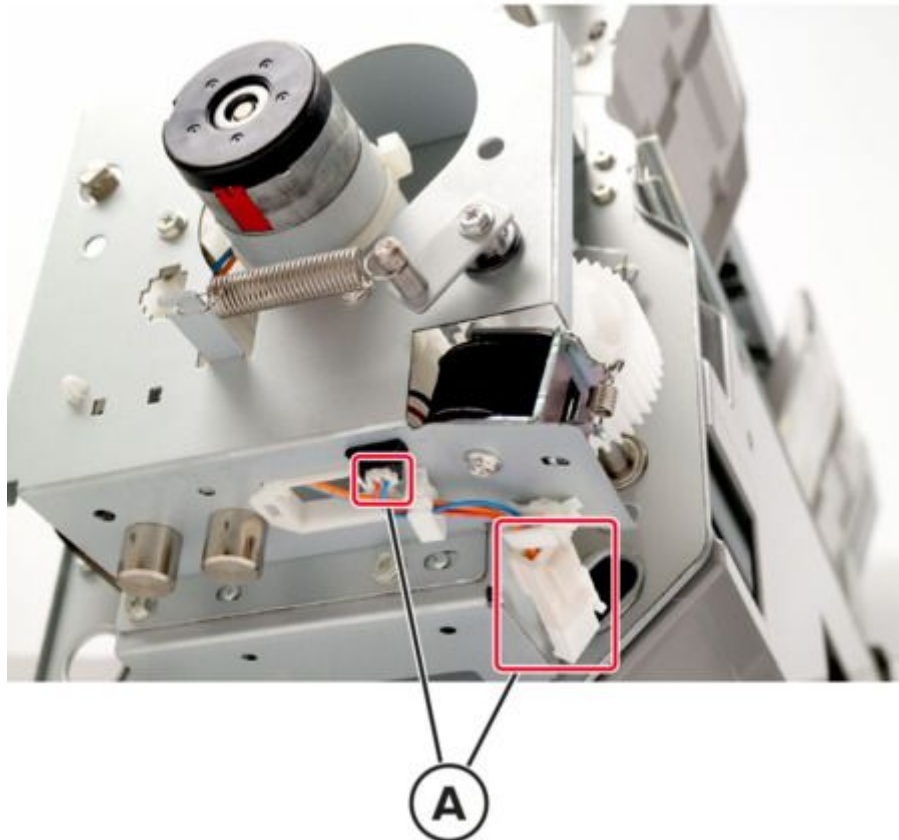


3. Disconnect the cable (B), and then remove the booklet finisher fold solenoid (C).

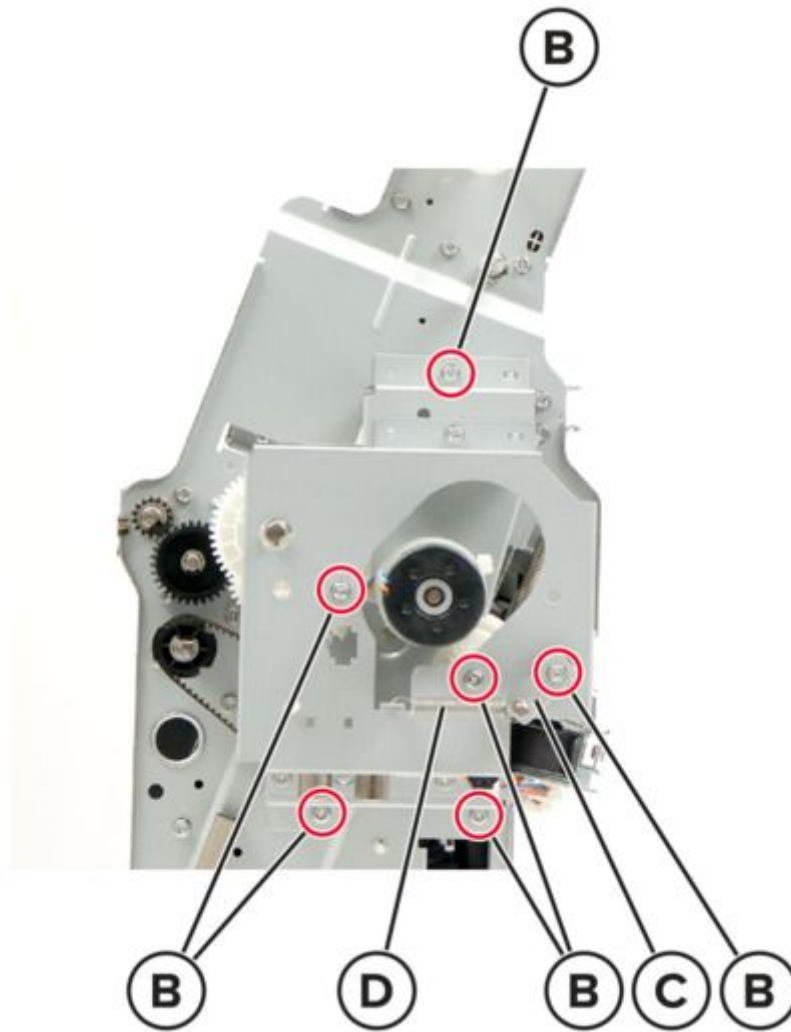


Motor (booklet finisher fold) removal

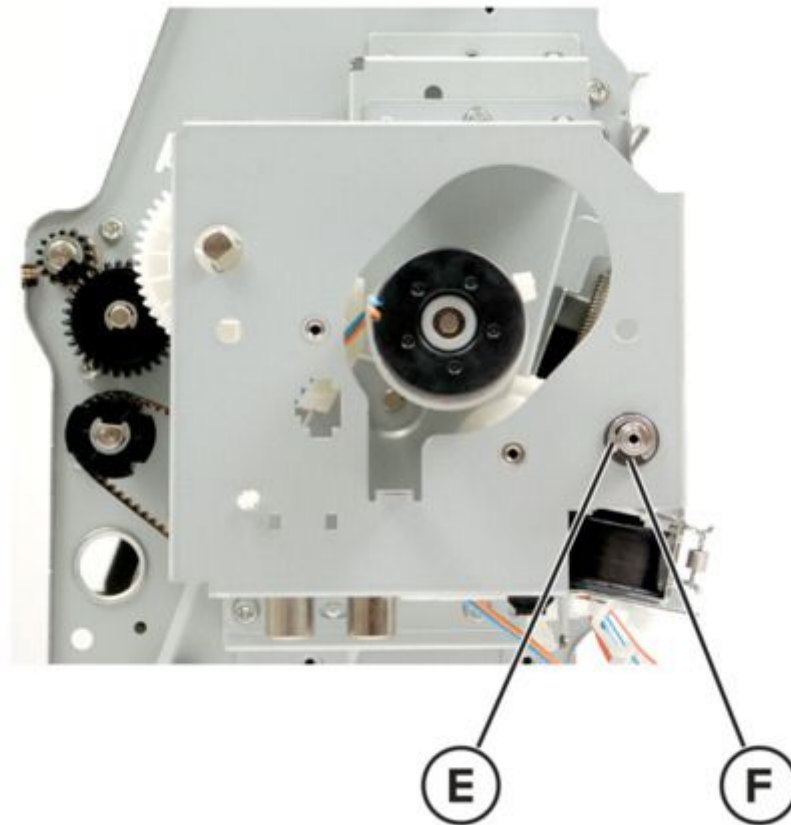
1. Remove the booklet finisher booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. Disconnect the two cables (A).



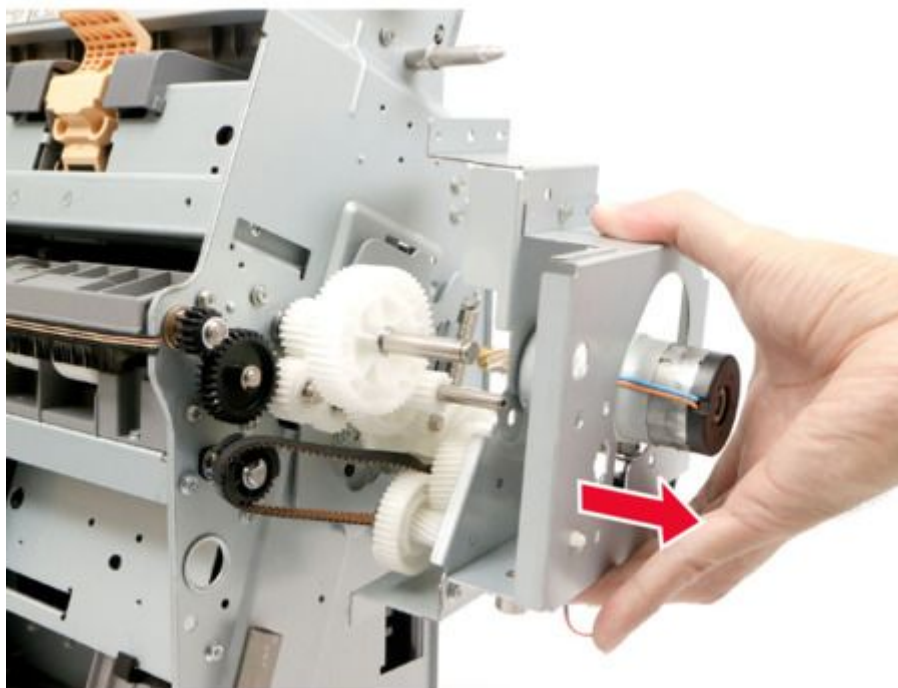
3. Remove the six screws (B), remove the bracket (C), and then remove the spring (D).



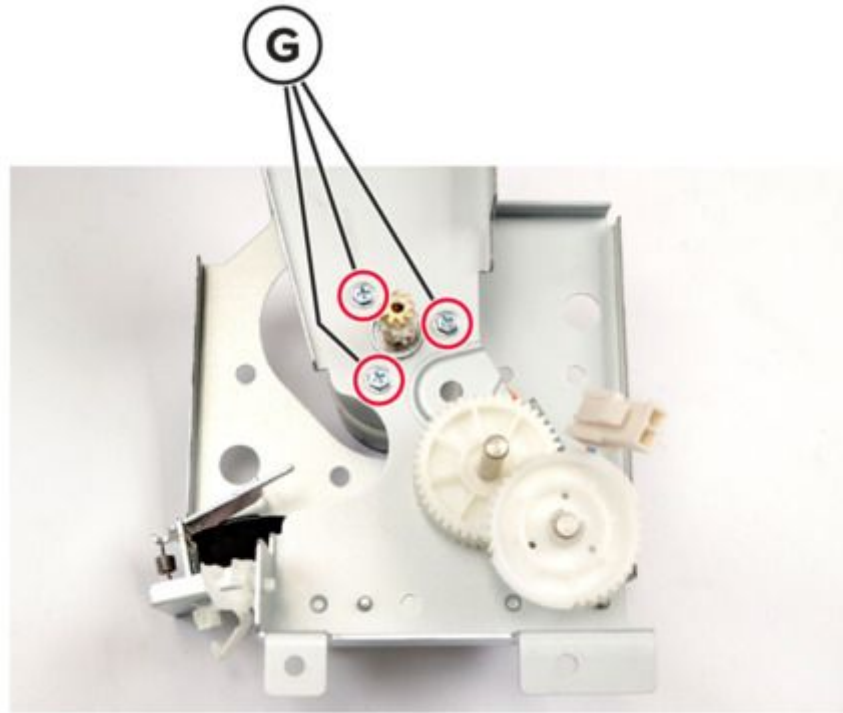
4. Remove the E-clip (E), and then remove the washer with bearing (F).



5. Remove the motor assembly.



6. Remove the three screws (G), and then remove the motor.

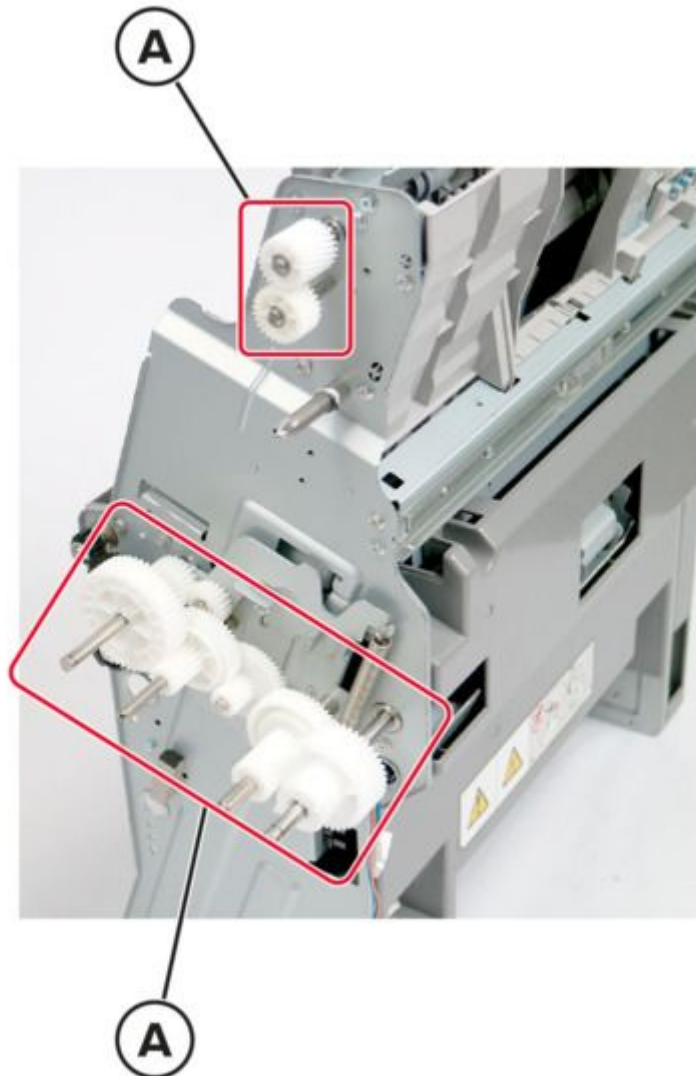


Rear booklet unit gears removal

1. Remove the booklet finisher booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. Remove the motor (booklet finisher fold). See [See "Motor \(booklet finisher fold\) removal" on page 1482.](#)
3. Remove the 12 gears (A).

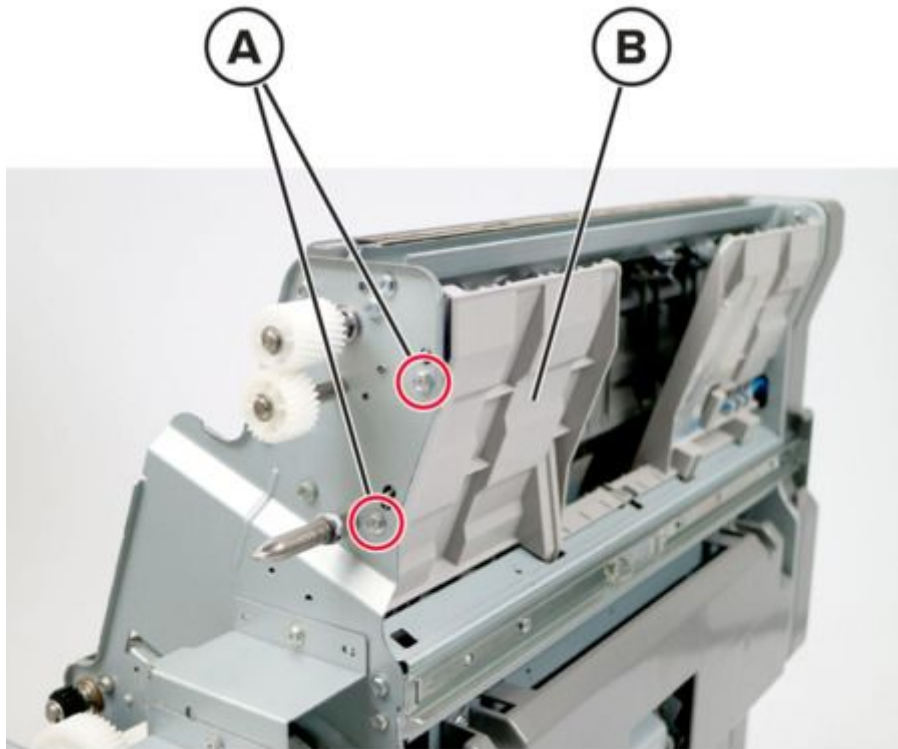
INSTALLATION NOTE

Replace only the damaged gear.



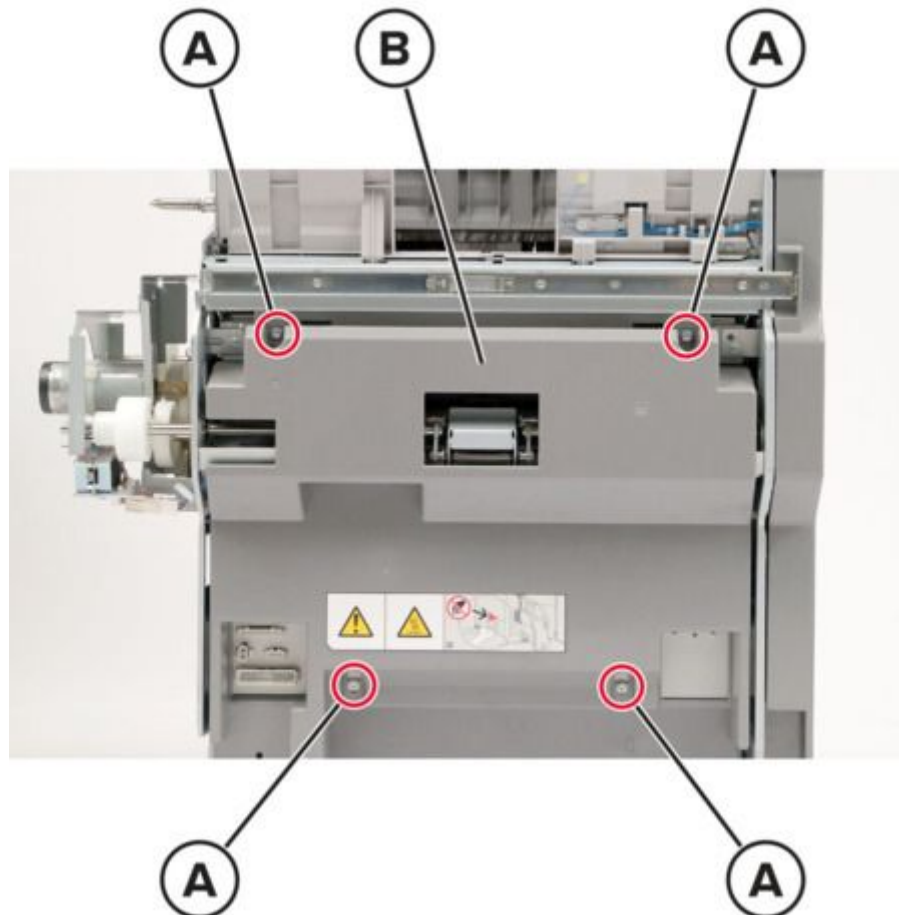
Booklet finisher booklet maker upper right guide removal

1. Remove the booklet finisher booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. Remove the two screws (A), and then remove the upper right guide (B).

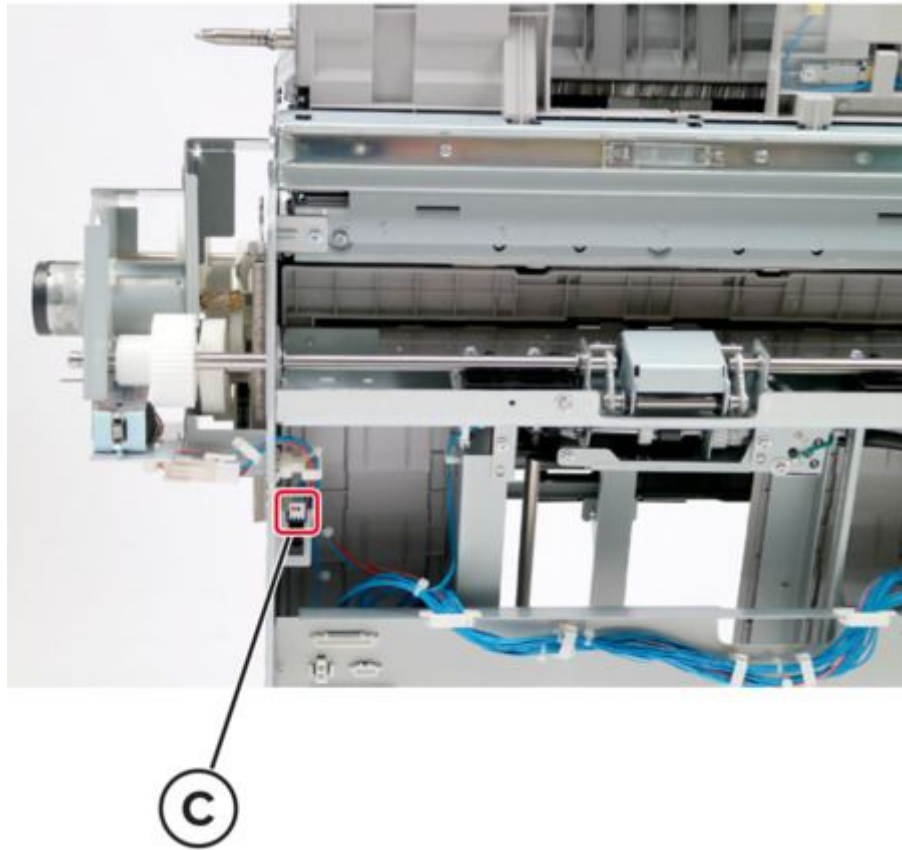


Sensor (booklet maker set) removal

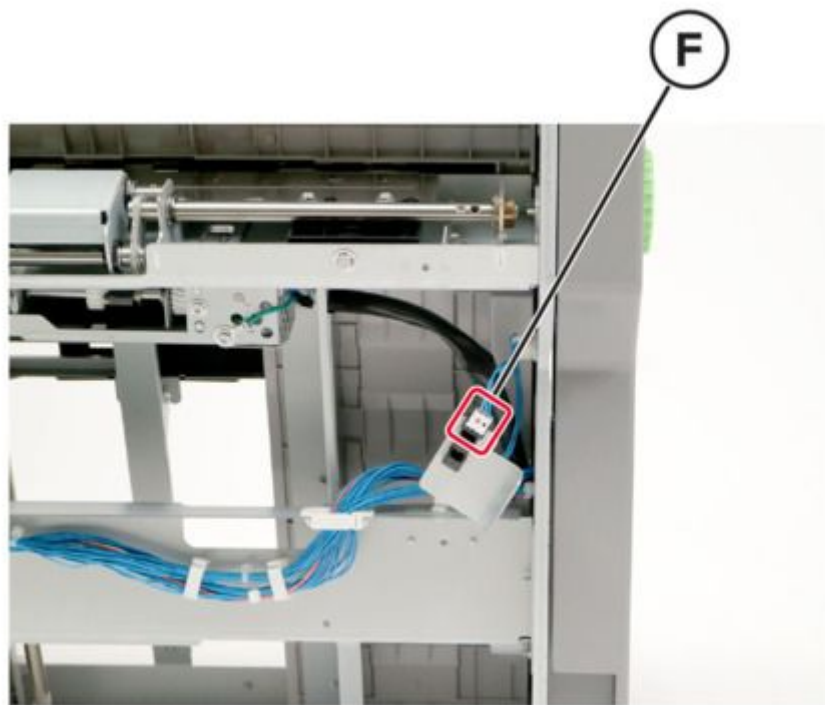
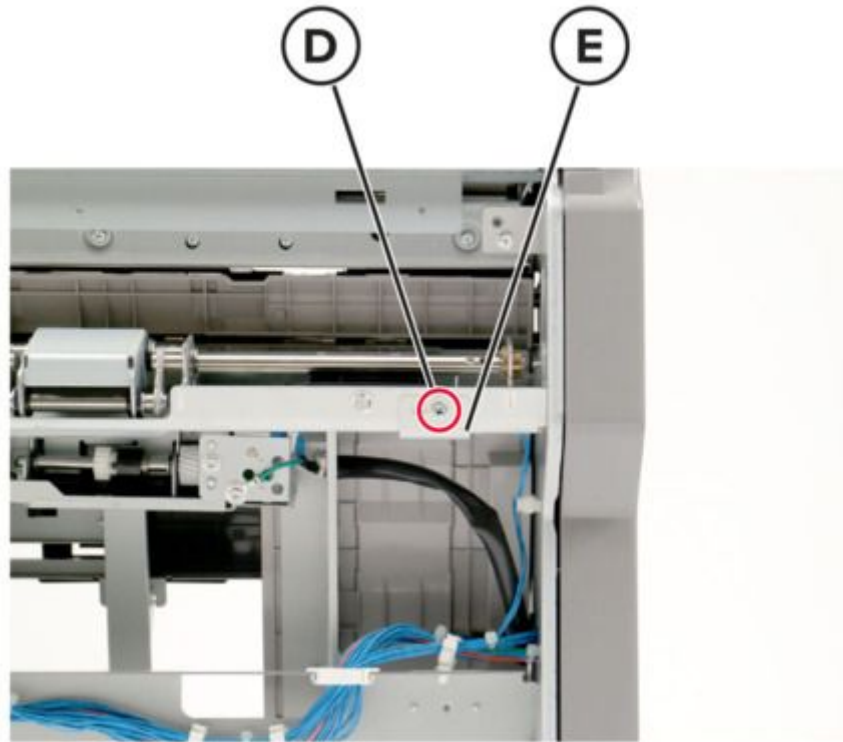
1. Remove the booklet finisher booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. Remove the four screws (A), and then remove the cover (B).



3. Disconnect the cable (C).

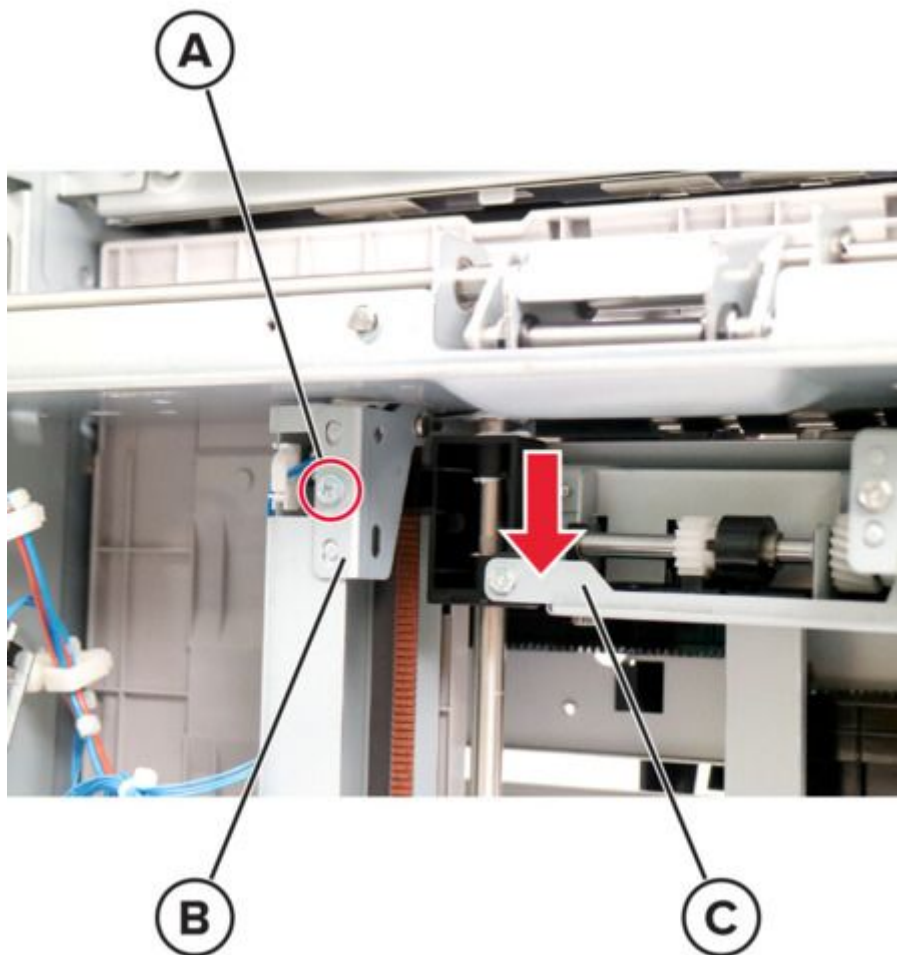


4. Remove the screw (D), remove the bracket (E), and then disconnect the cable (F).

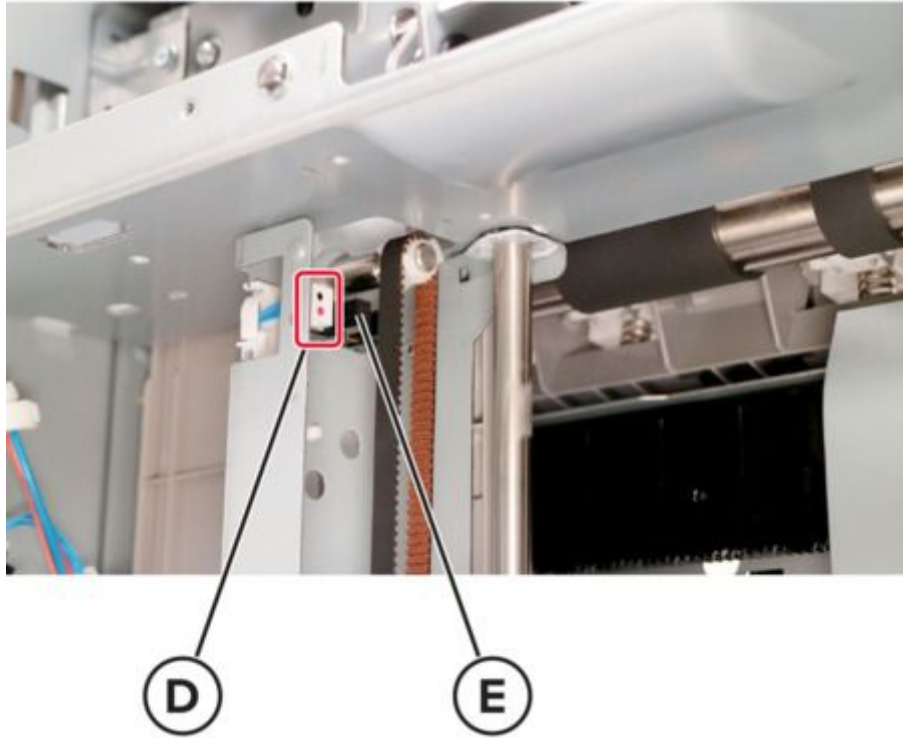


Sensor (booklet finisher compiler catch) removal

1. Remove the booklet finisher booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. Remove the screw (A), remove the bracket (B), and then lower down the end guide (C).

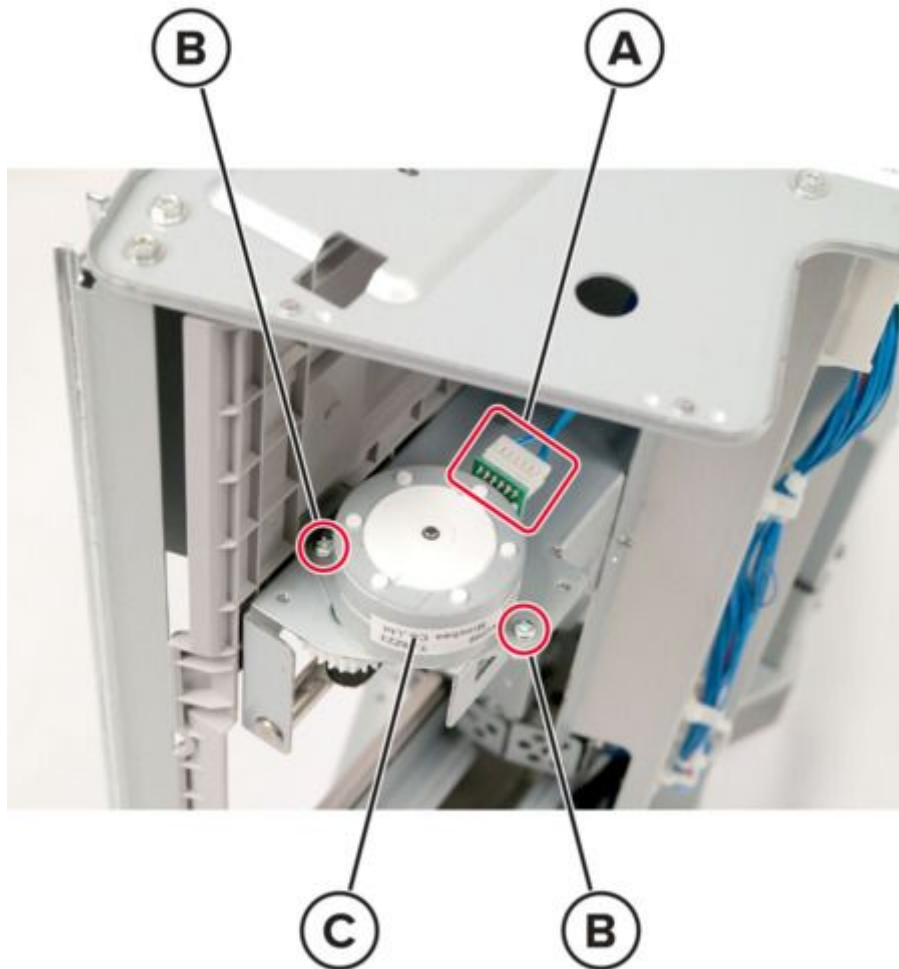


3. Disconnect the cable (D), and then remove the sensor (E).



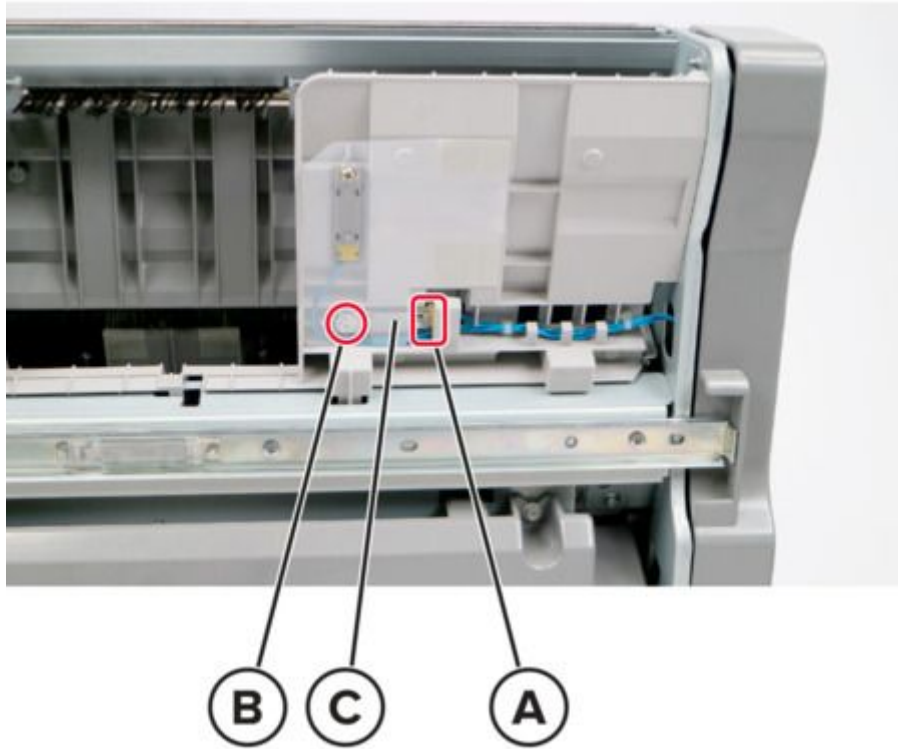
Motor (booklet finisher compiler catch) removal

1. Remove the booklet finisher booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. At the bottom of the booklet maker, disconnect the cable (A), remove the two screws (B), and then remove the motor (C).



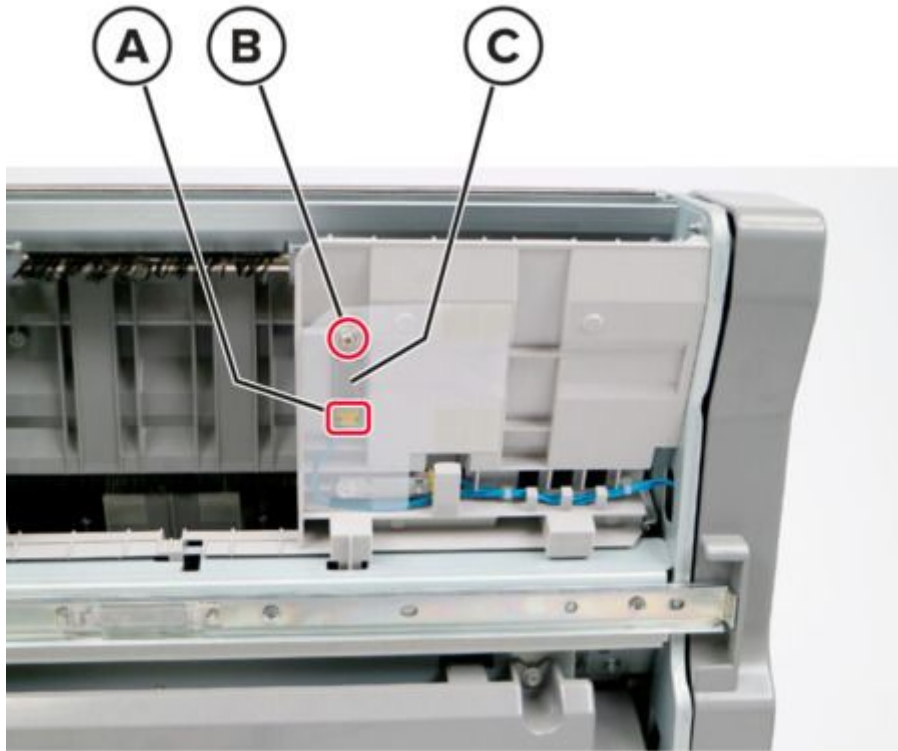
Sensor (booklet finisher compile paper presence 1) removal

1. Pull out the booklet finisher booklet maker.
2. Disconnect the cable (A), remove screw (B), and then remove the sensor (C).



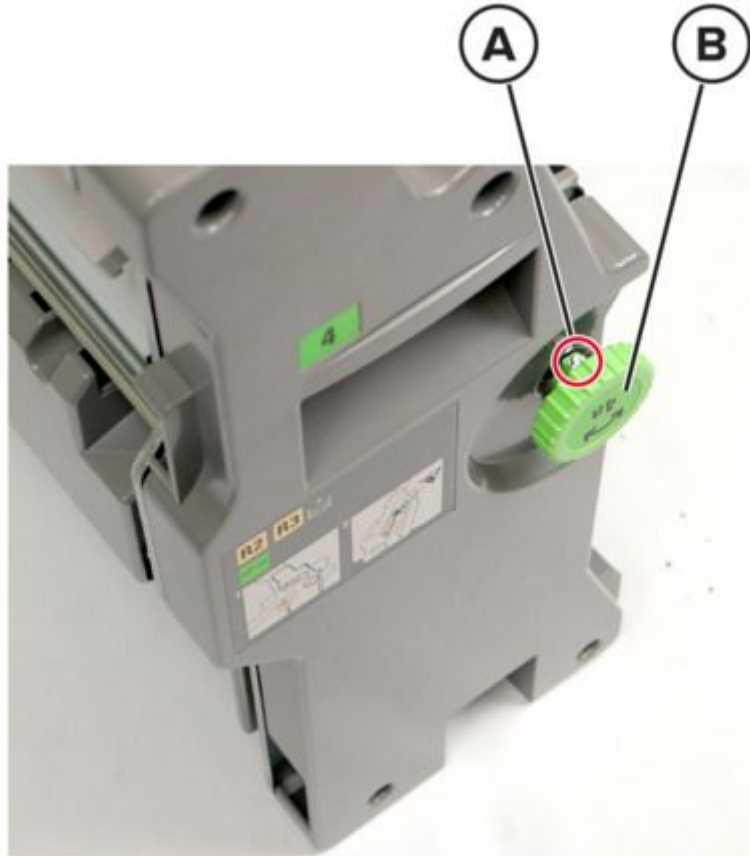
Sensor (booklet finisher compile paper presence 2) removal

1. Pull out the booklet finisher booklet maker.
2. Disconnect the cable (A), remove the screw (B), and then remove the sensor (C).



Booklet finisher booklet maker front cover removal

1. Pull out the booklet unit.
2. Remove the screw (A), and then remove the knob (B).

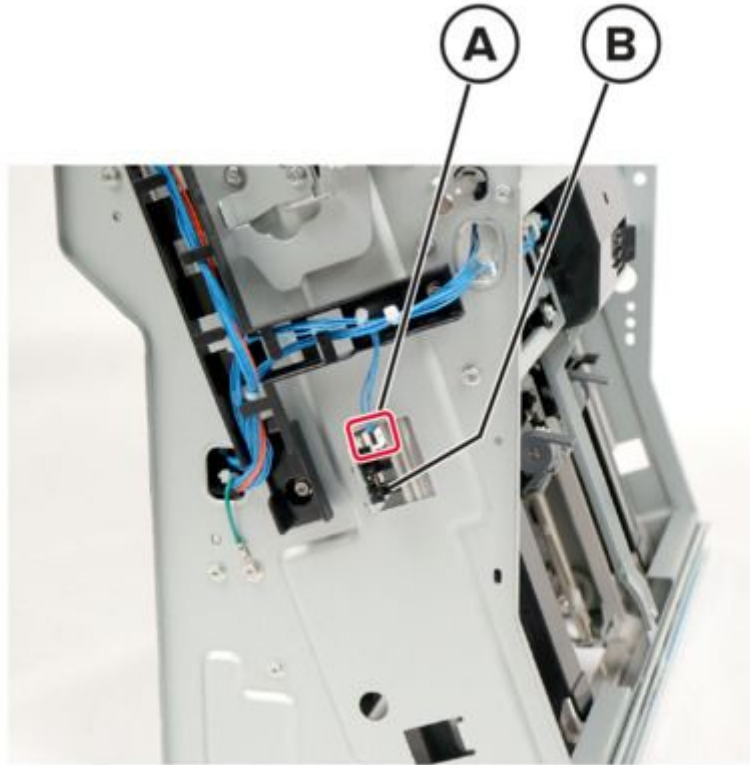


3. Remove the four screws (C), and then remove the cover (D).



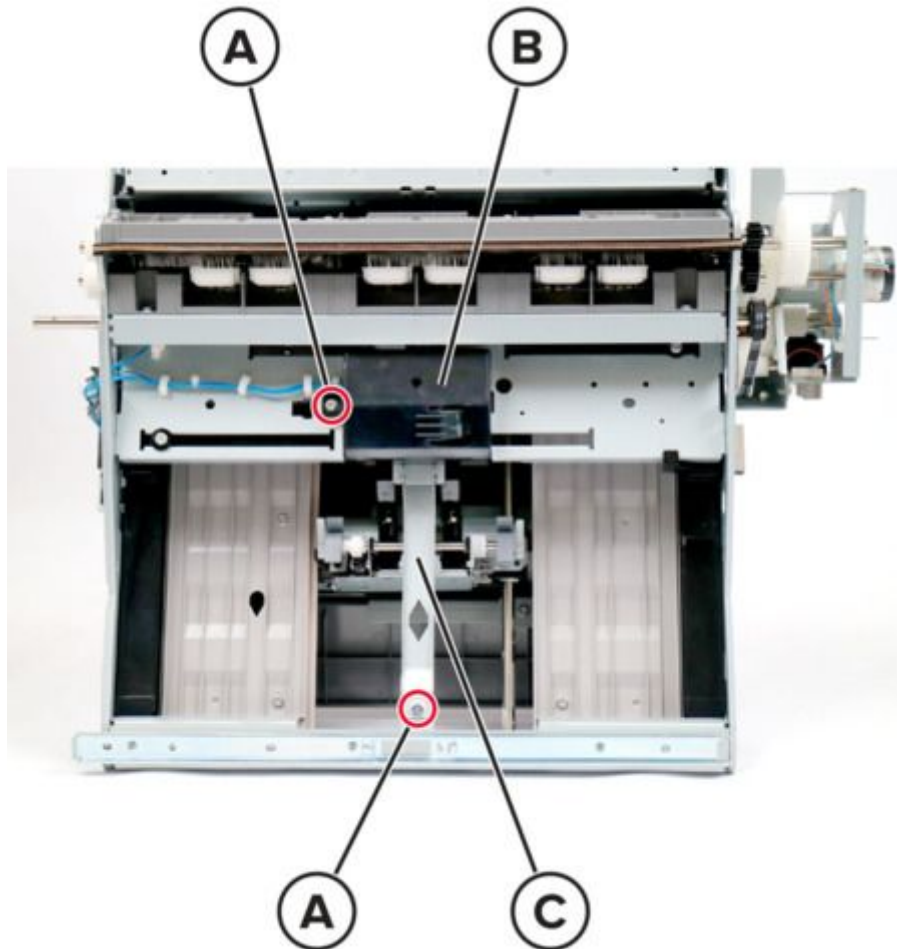
Sensor (booklet finisher tamper home position) removal

1. Remove the booklet finisher booklet maker front cover. See [See "Booklet finisher booklet maker front cover removal" on page 1496.](#)
2. Disconnect the cable (A), and then remove the sensor (B).

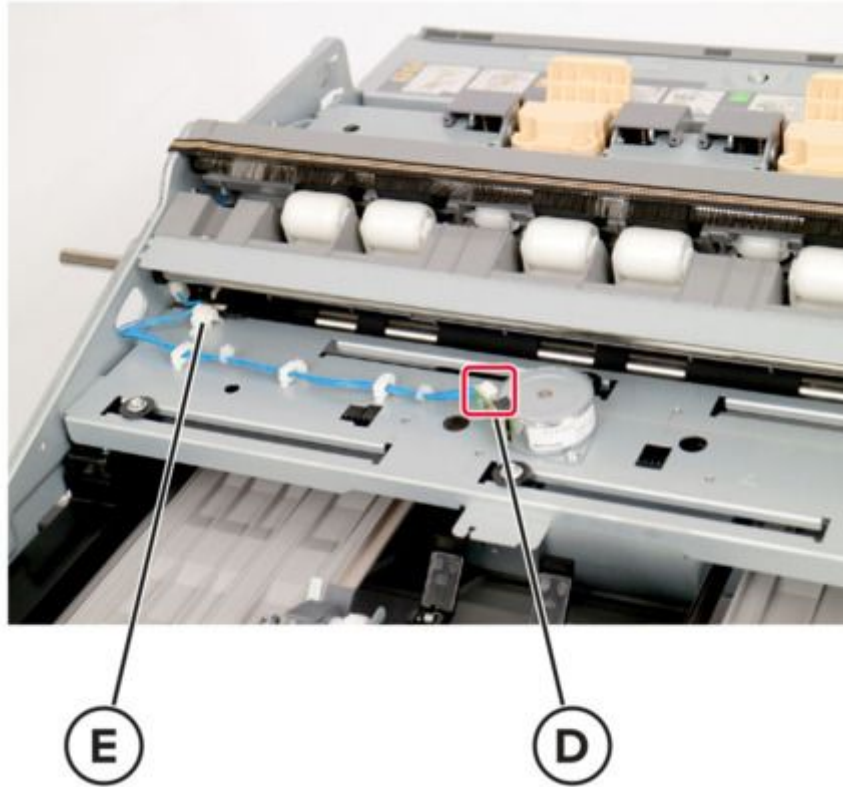


Booklet finisher booklet maker compiler plate removal

1. Remove the booklet maker. See [See "Booklet finisher booklet maker removal" on page 1404.](#)
2. Remove the booklet maker front cover. See [See "Booklet finisher booklet maker front cover removal" on page 1496.](#)
3. Remove the two screws (A), remove the cover (B), and then remove the bracket (C).



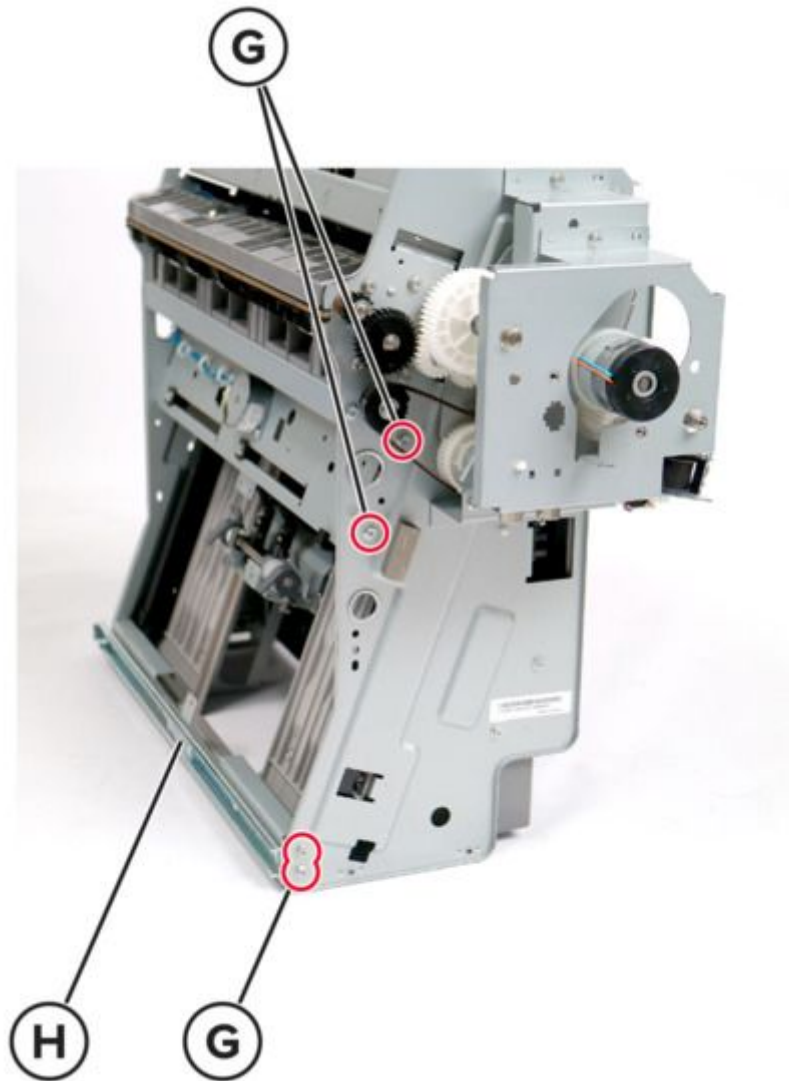
4. Disconnect the cable (D), and then detach the cable holder (E).



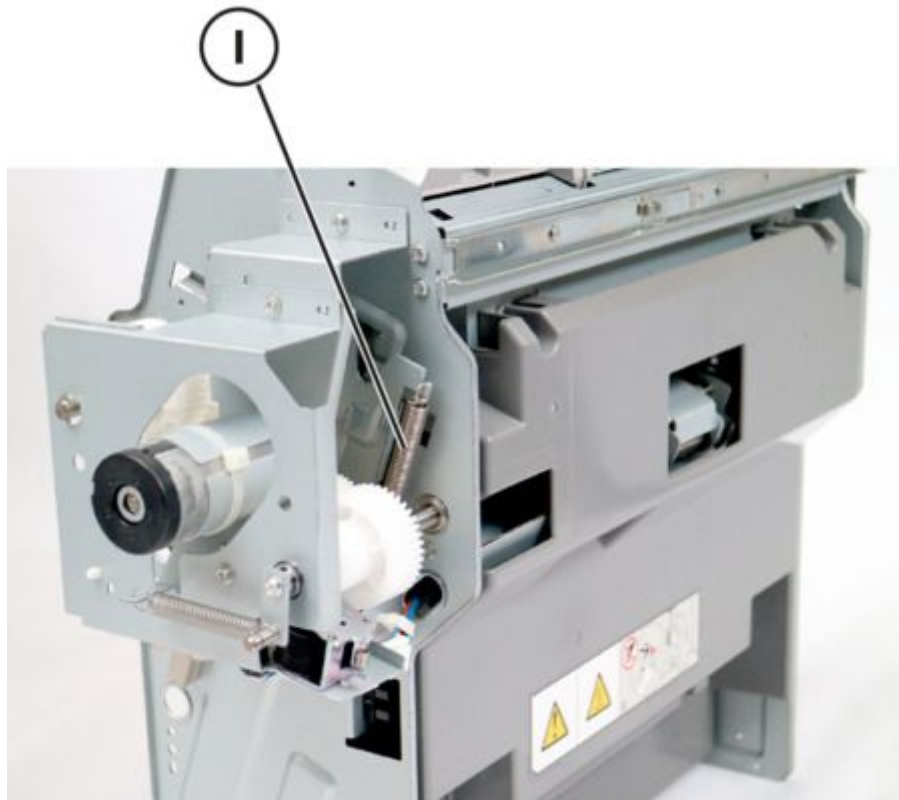
5. Remove the three screws (F).



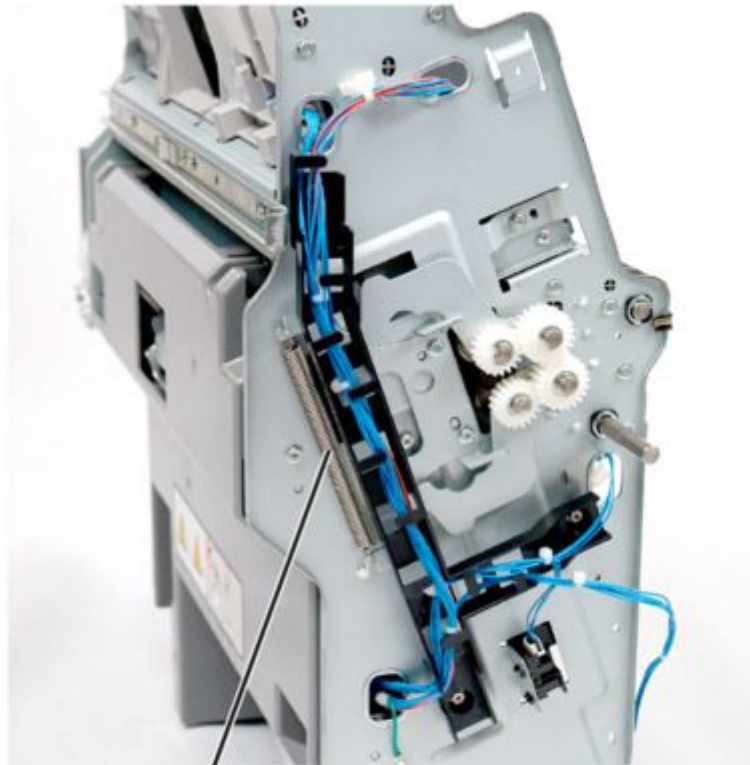
6. Remove the four screws (G), and then remove the bracket (H).



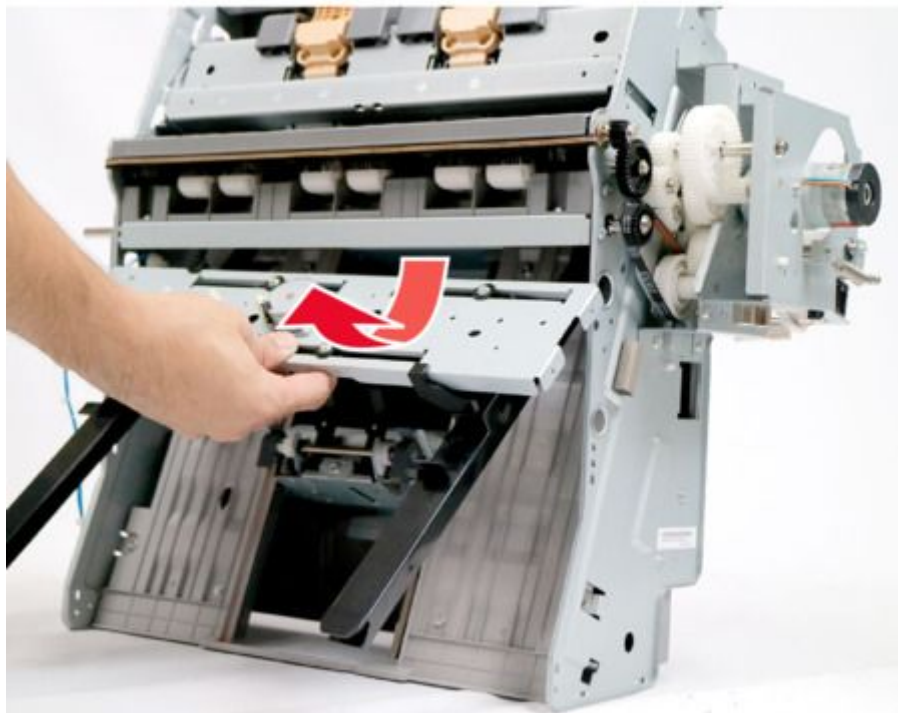
7. Remove the spring (I) at the rear.



8. Remove the spring (J) at the front.

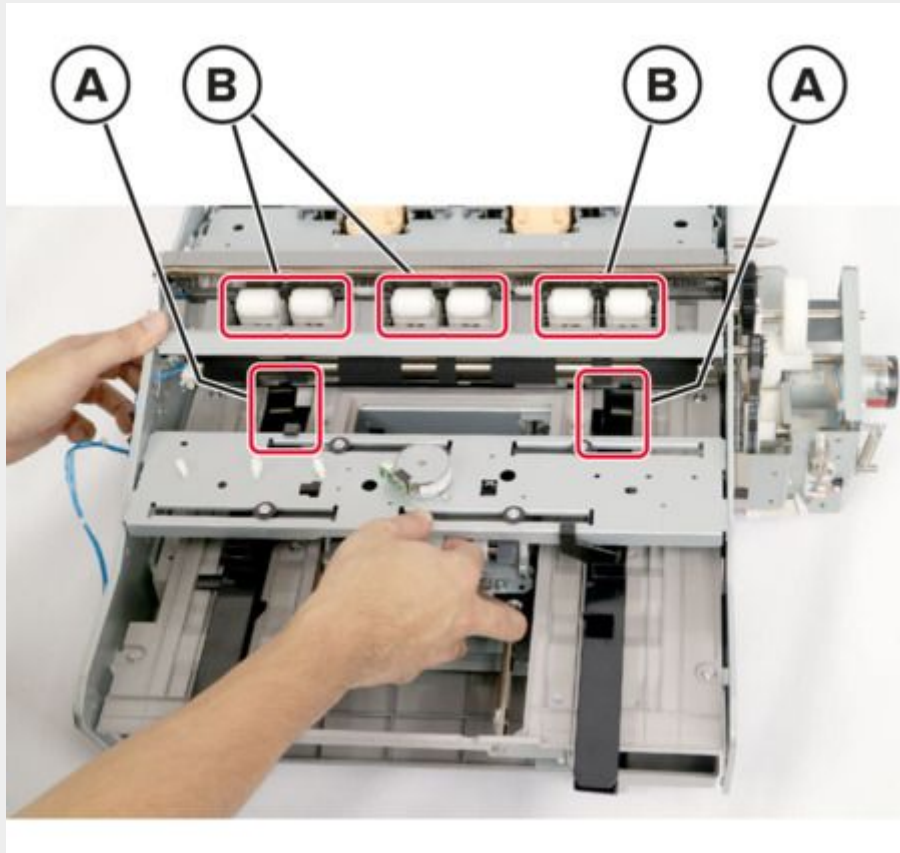


9. Remove the compiler plate.



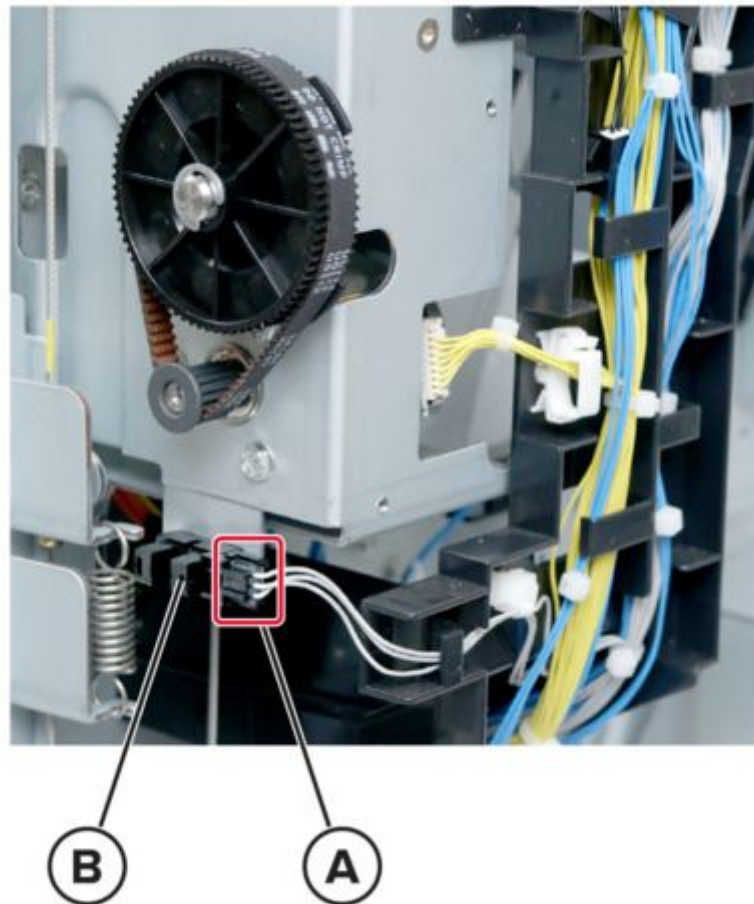
INSTALLATION NOTE

1. Make sure to lift the roller assembly before installing the compiler plate.
2. Make sure that the two aligners (A) are under the six rollers (B).



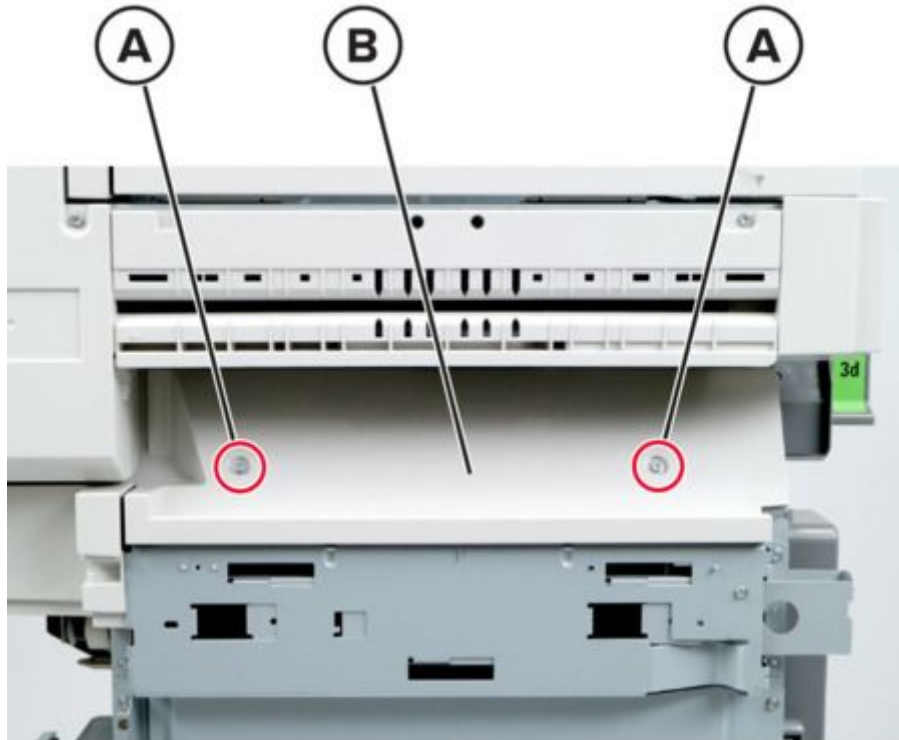
Sensor (booklet finisher stacker tray paper position) removal

1. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
2. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
3. Disconnect the cable (A), and then remove the sensor (B).

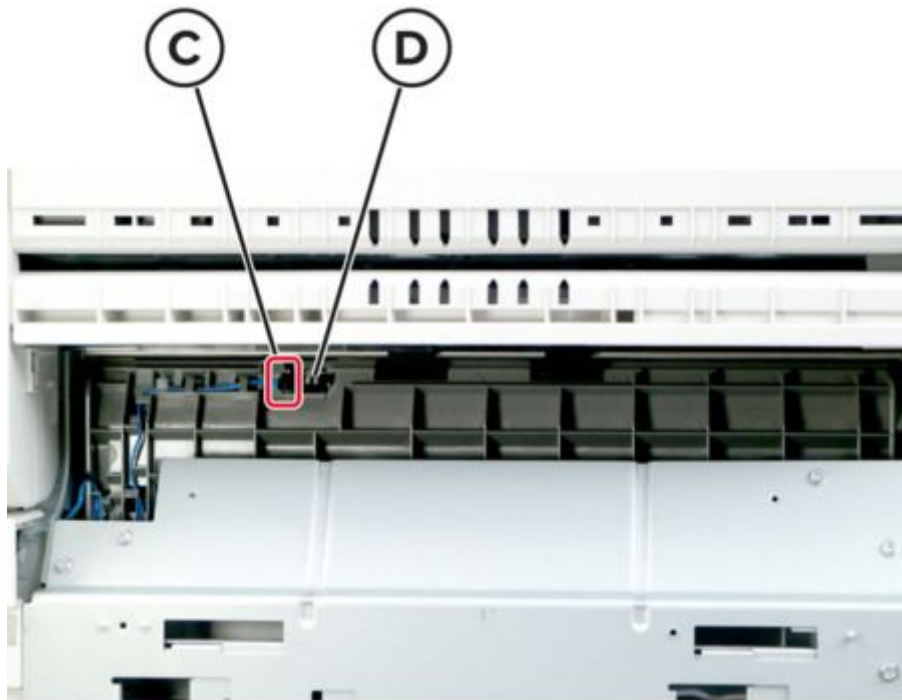


Sensor (booklet finisher in) removal

1. Remove the hole punch bin.
2. Remove the two screws (A), and then remove the cover (B).

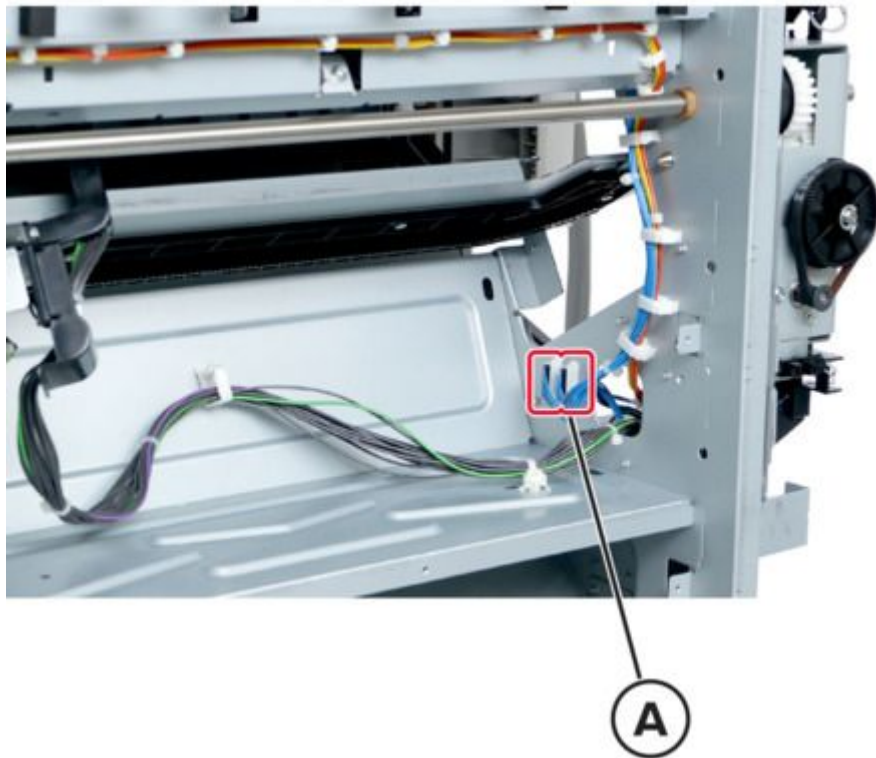


3. Disconnect the cable (C), and then remove the sensor (D).

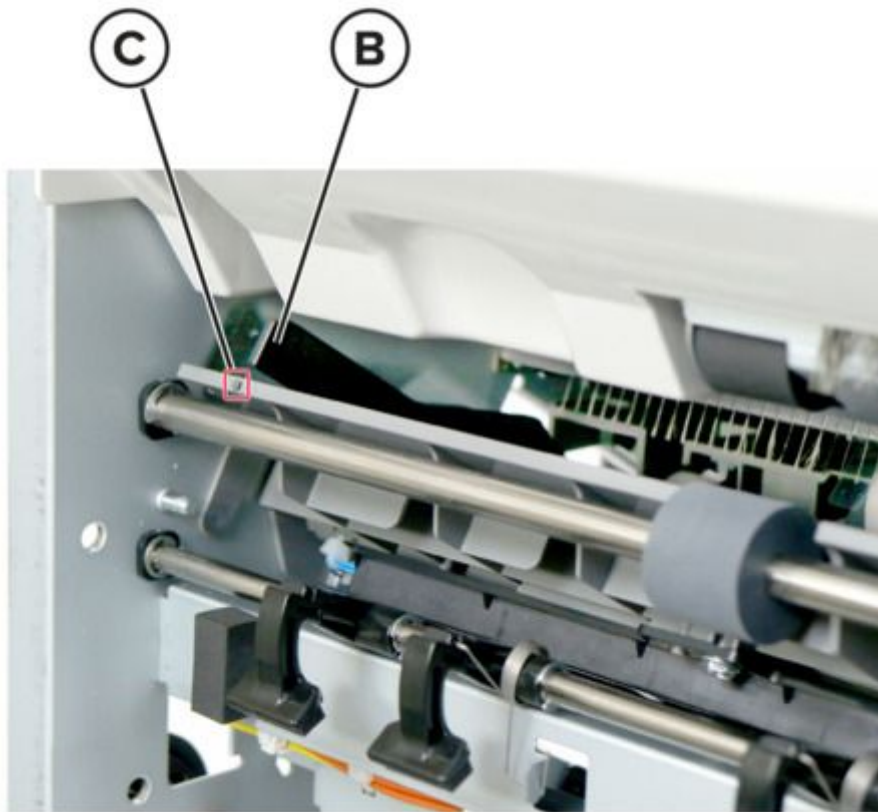


Booklet finisher compile tray removal

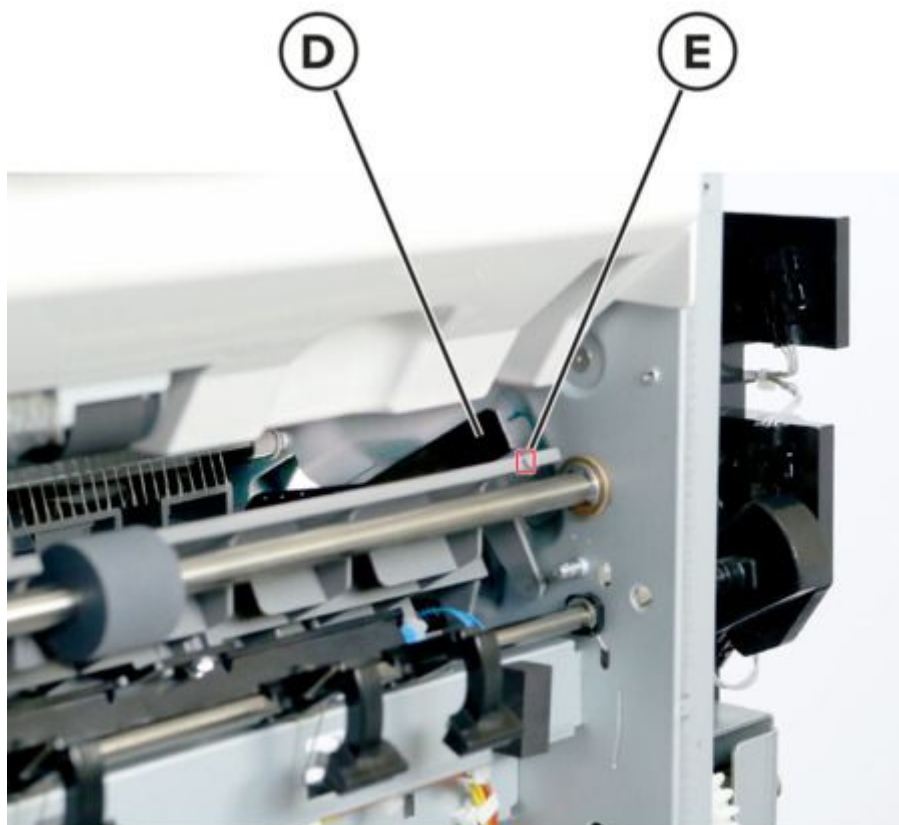
1. Remove the Booklet finisher stapler head. See ["Booklet finisher stapler head removal" on page 1421.](#)
2. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
3. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
4. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
5. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
6. Remove the booklet finisher stacker tray. See ["Booklet finisher stacker tray removal" on page 1384.](#)
7. Remove the booklet finisher elevator tray guide. See ["Booklet finisher elevator tray guide removal" on page 1430.](#)
8. Disconnect the two cables (A), and then release the cables from the cable holders.



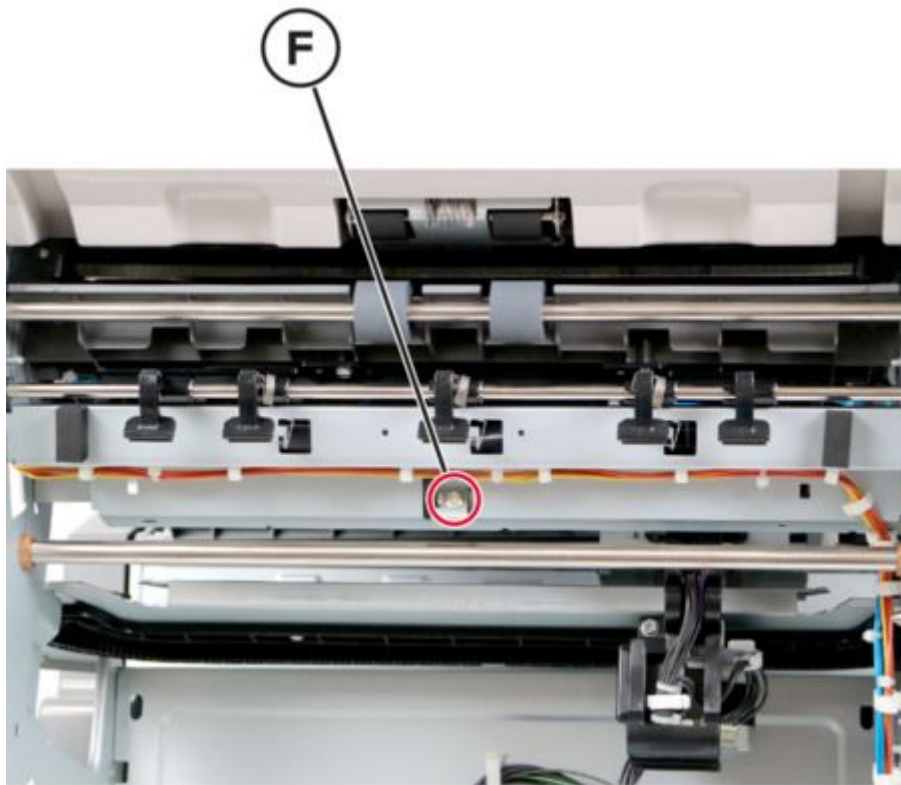
9. Move the front tamper (B) to the marker (C) on the frame.



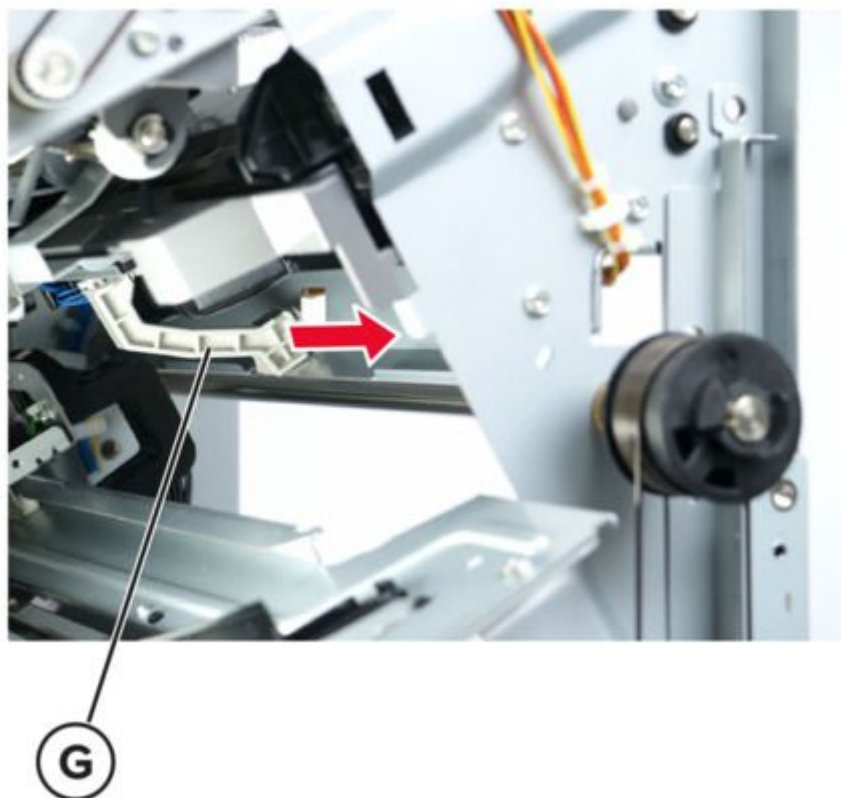
10. Move the rear tamper (D) to the marker (E) on the frame.



11. Remove the screw (F).

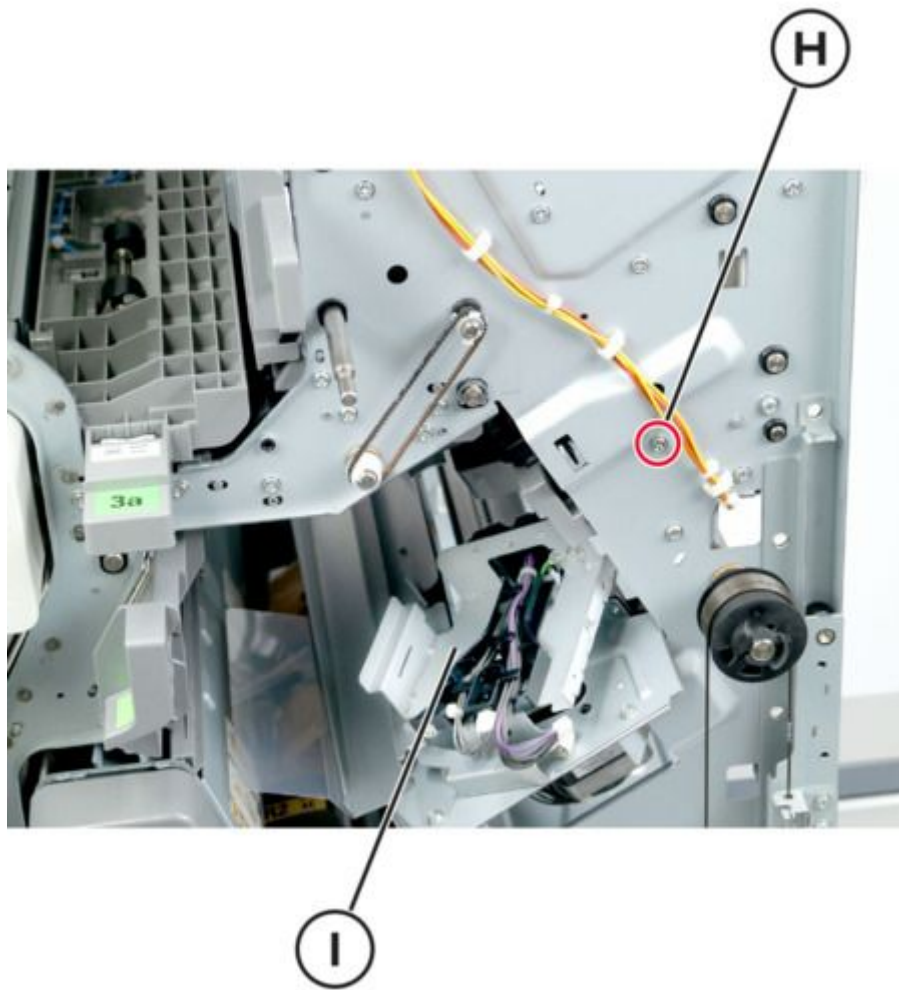


12. Remove the stopper (G).

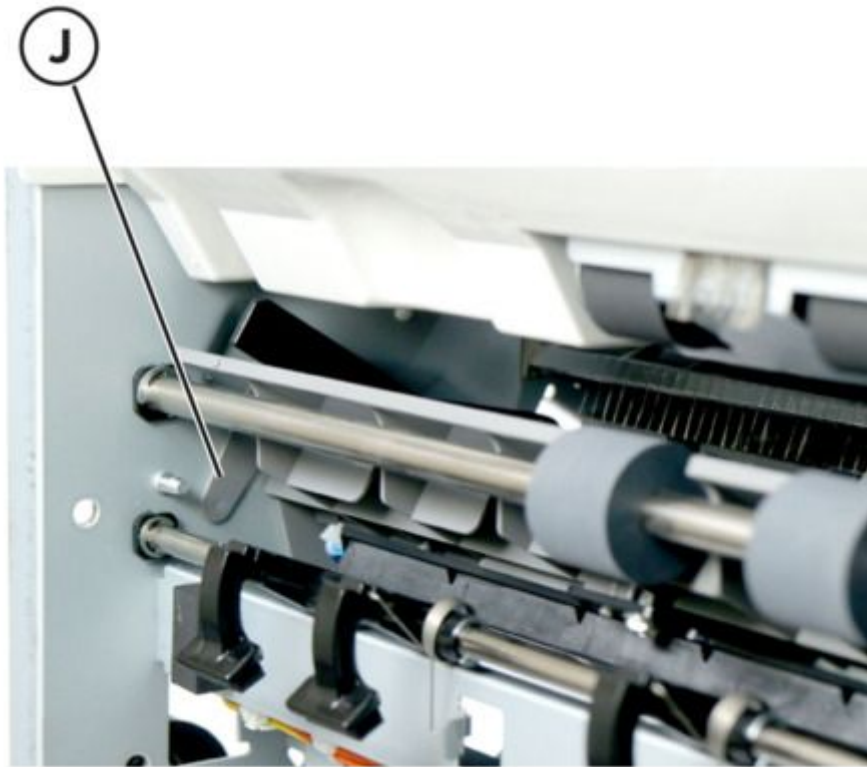


Parts removal

13. Remove the screw (H), and then move the staple carriage (I) to the front.



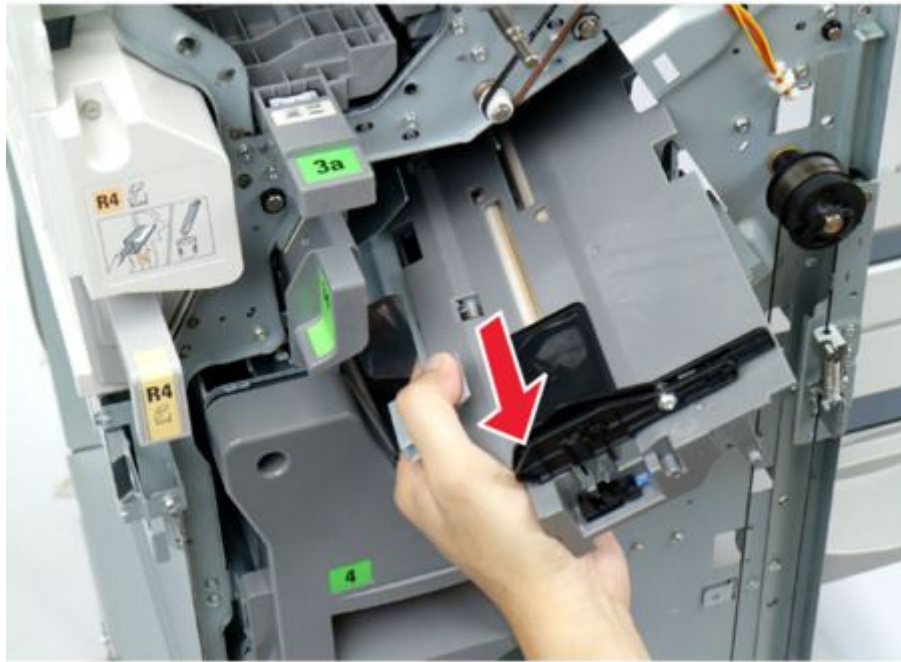
14. Remove the plate (J) at the front.



15. Remove the plate (K) at the rear.

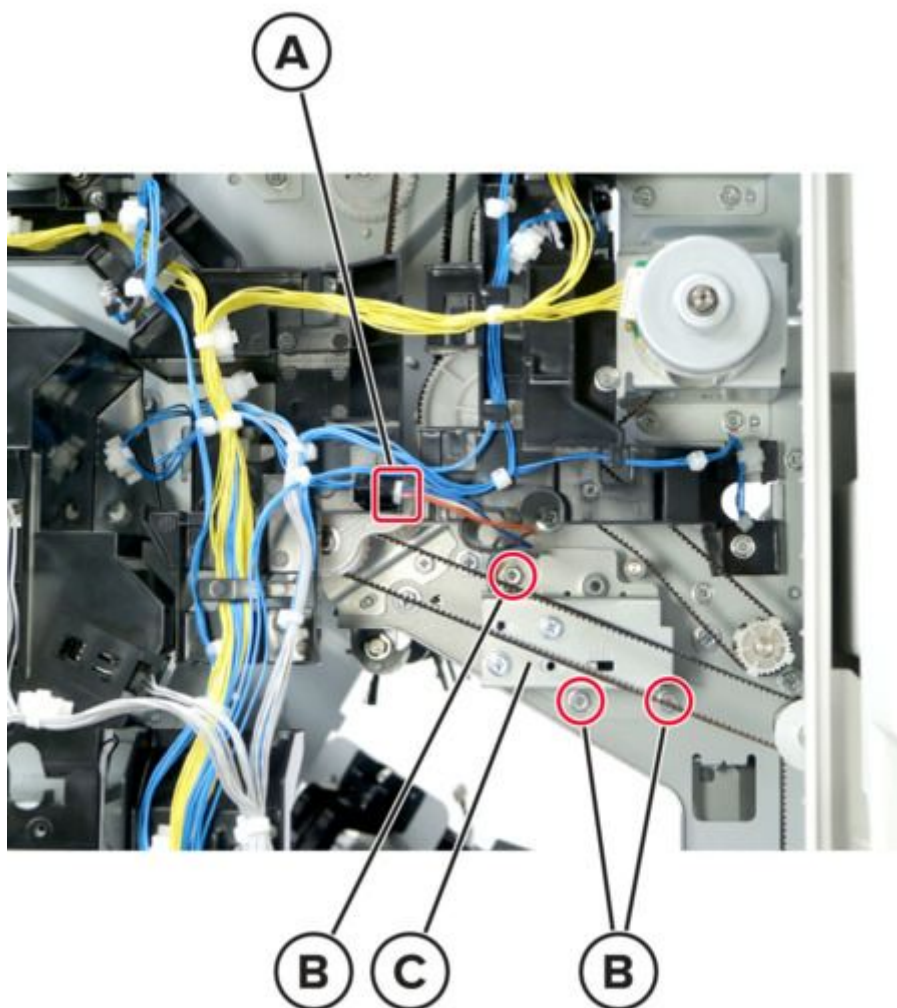


16. Remove the compile tray.



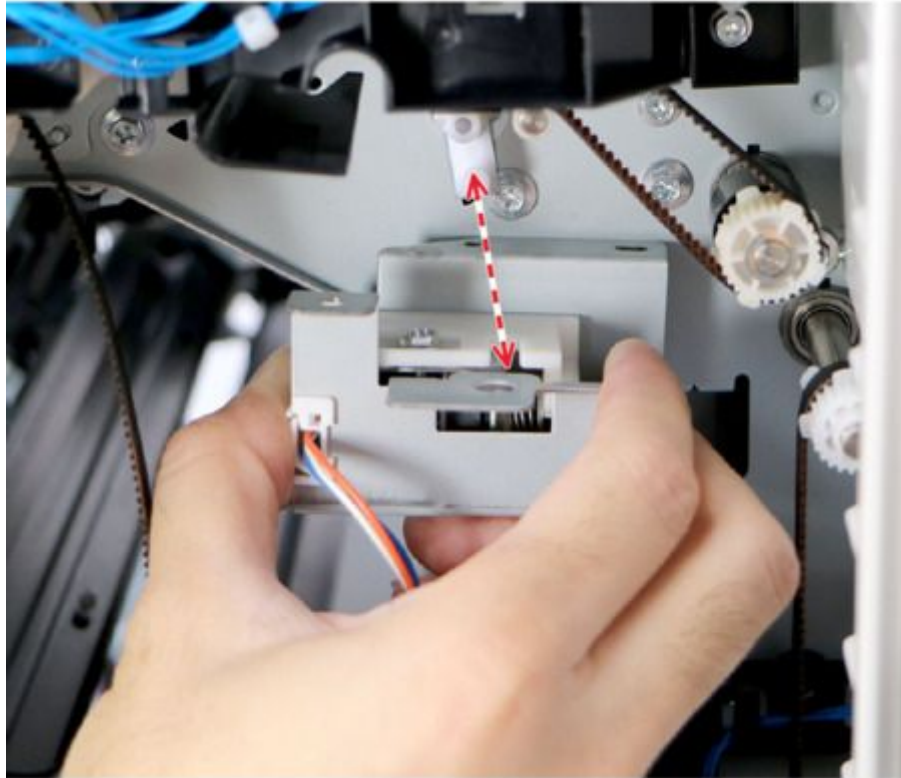
Booklet finisher transport gate solenoid removal

1. Remove the booklet finisher rear upper cover. See [See "Booklet finisher rear upper cover removal" on page 1386.](#)
2. Disconnect the cable (A), remove the three screws (B), and then remove the transport gate solenoid (C).



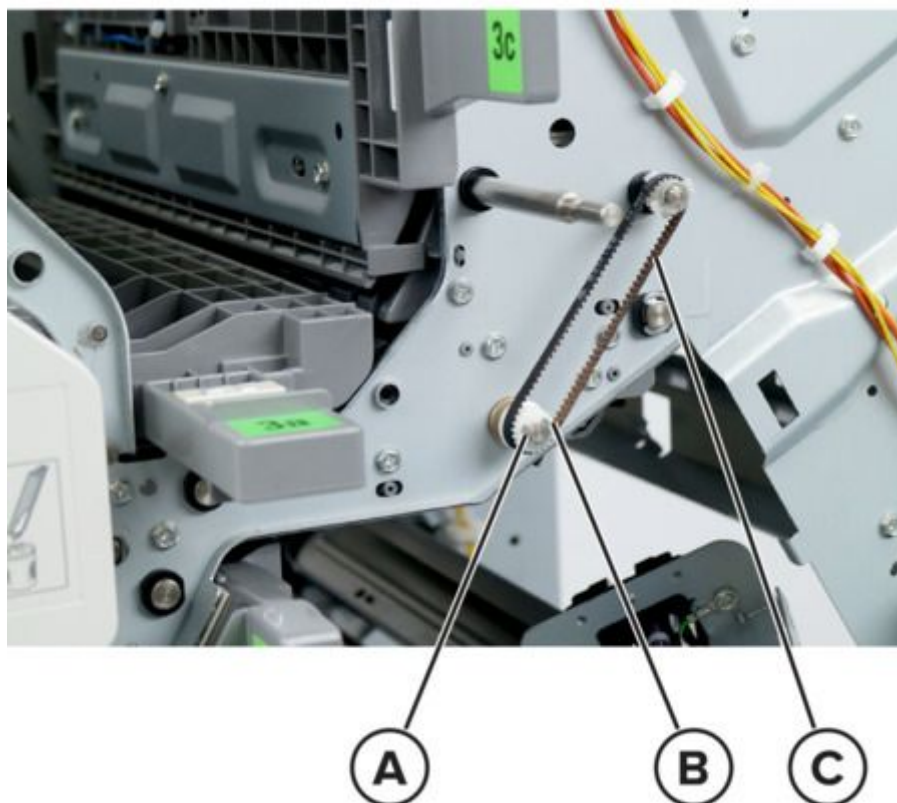
INSTALLATION NOTE

Make sure to properly align the pin with the slot in the transport gate solenoid.

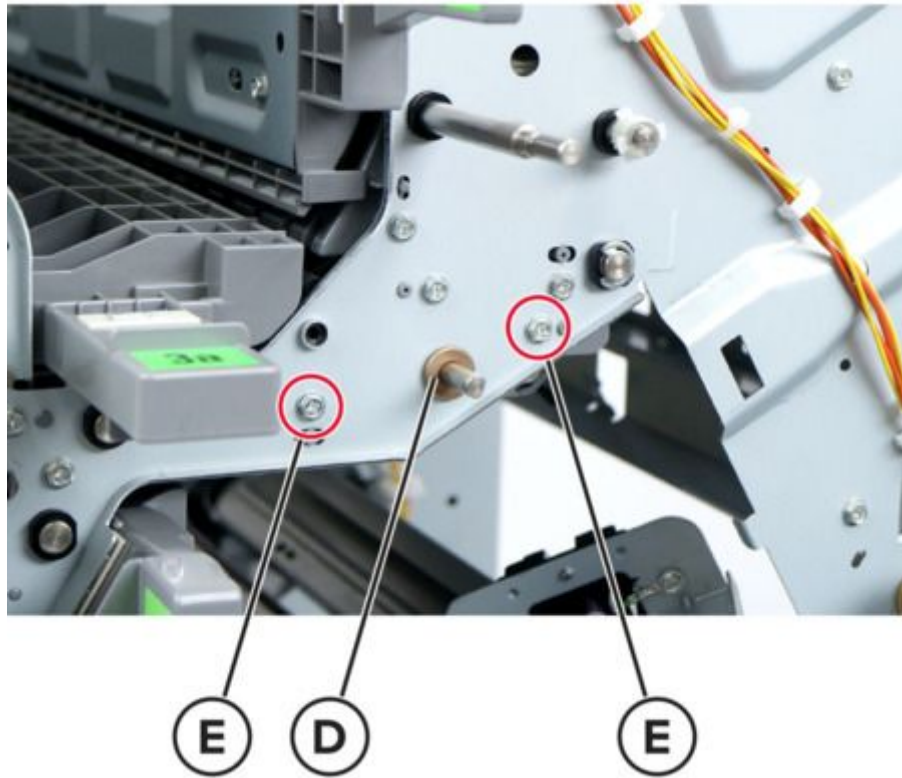


Booklet finisher exit compiler lower guide removal

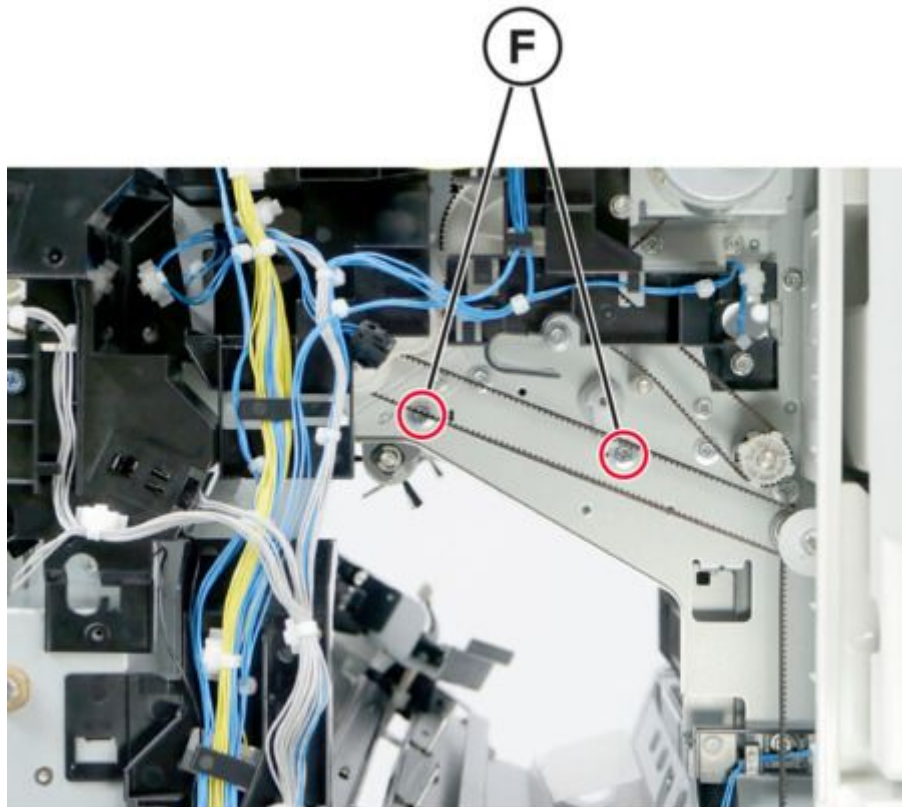
1. Remove the booklet finisher stapler head. See ["Booklet finisher stapler head removal" on page 1421.](#)
2. Remove the booklet finisher inner front cover. See ["Booklet finisher inner front cover removal" on page 1382.](#)
3. Remove the booklet finisher top cover. See ["Booklet finisher top cover removal" on page 1379.](#)
4. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
5. Remove the booklet finisher rear upper cover. See ["Booklet finisher rear upper cover removal" on page 1386.](#)
6. Remove the booklet finisher stacker tray. See ["Booklet finisher stacker tray removal" on page 1384.](#)
7. Remove the booklet finisher elevator tray guide. See ["Booklet finisher elevator tray guide removal" on page 1430.](#)
8. Remove the booklet finisher transport gate solenoid. See ["Booklet finisher transport gate solenoid removal" on page 1515.](#)
9. Remove the booklet compiler tray. See ["Booklet finisher compile tray removal" on page 1509.](#)
10. Remove the E-clip (A), remove the gear (B), and then remove the belt (C) at the front.



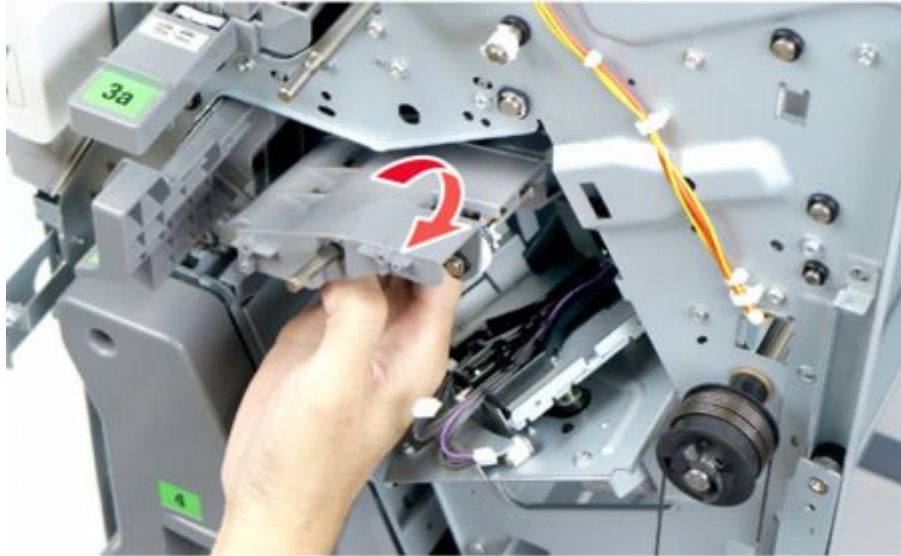
11. Remove the bearing (D), and then remove the two screws (E) at the front.



12. Remove the two screws (F) at the rear.

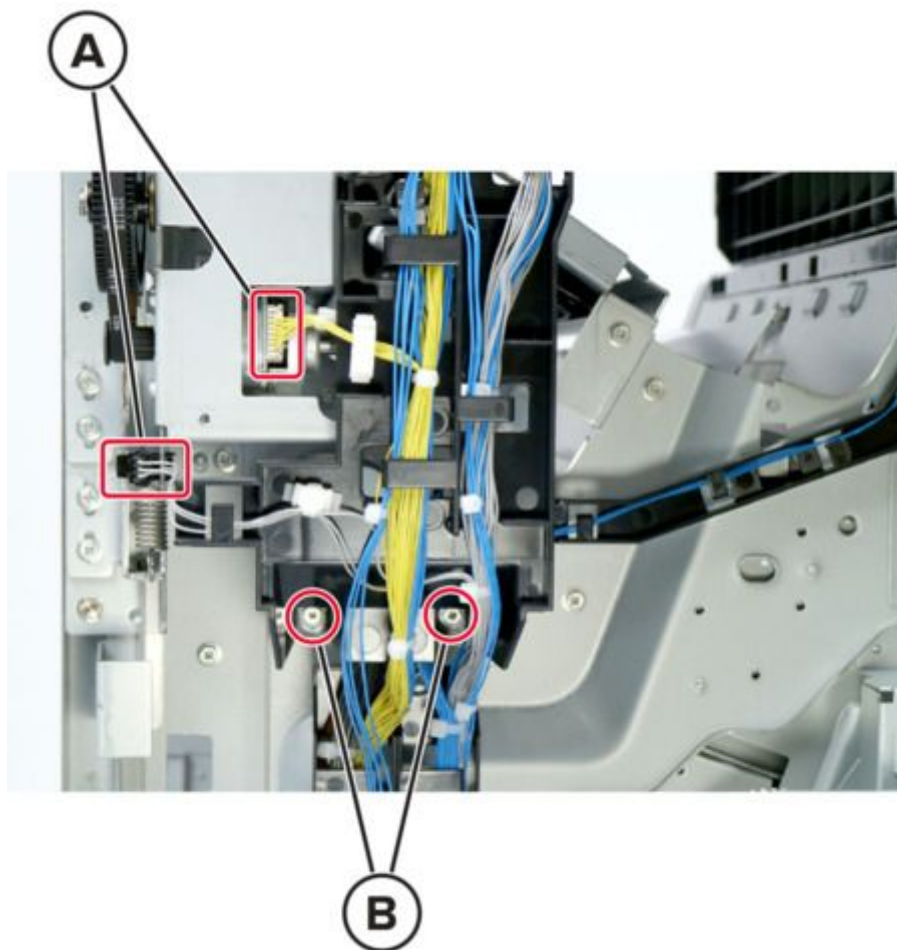


13. Remove the exit compiler lower guide.

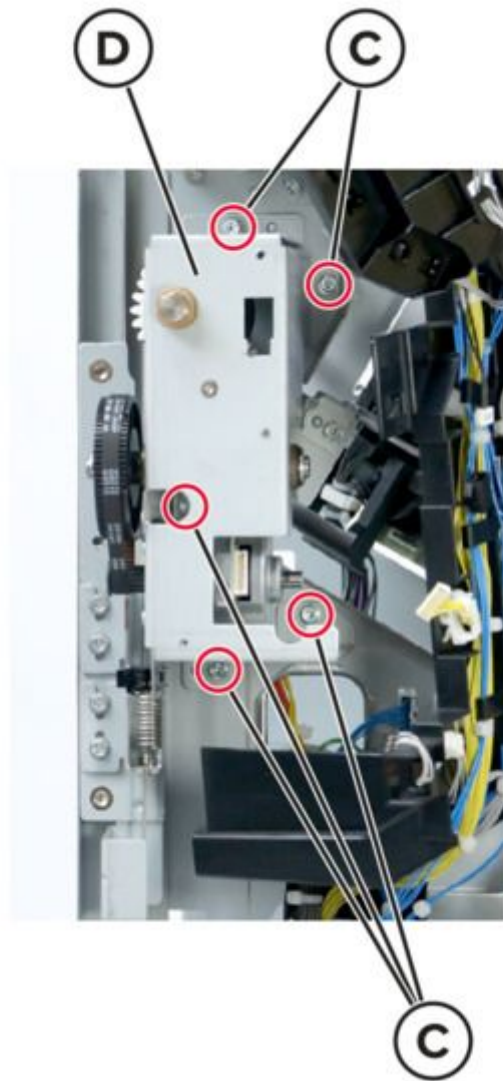


Booklet finisher stacker bracket removal

1. Remove the booklet finisher top cover. See [See "Booklet finisher top cover removal" on page 1379.](#)
2. Remove the booklet finisher rear upper cover. See [See "Booklet finisher rear upper cover removal" on page 1386.](#)
3. Remove the booklet finisher rear lower cover. See [See "Booklet finisher rear lower cover removal" on page 1387.](#)
4. Disconnect the two cables (A), and then remove the two screws (B).

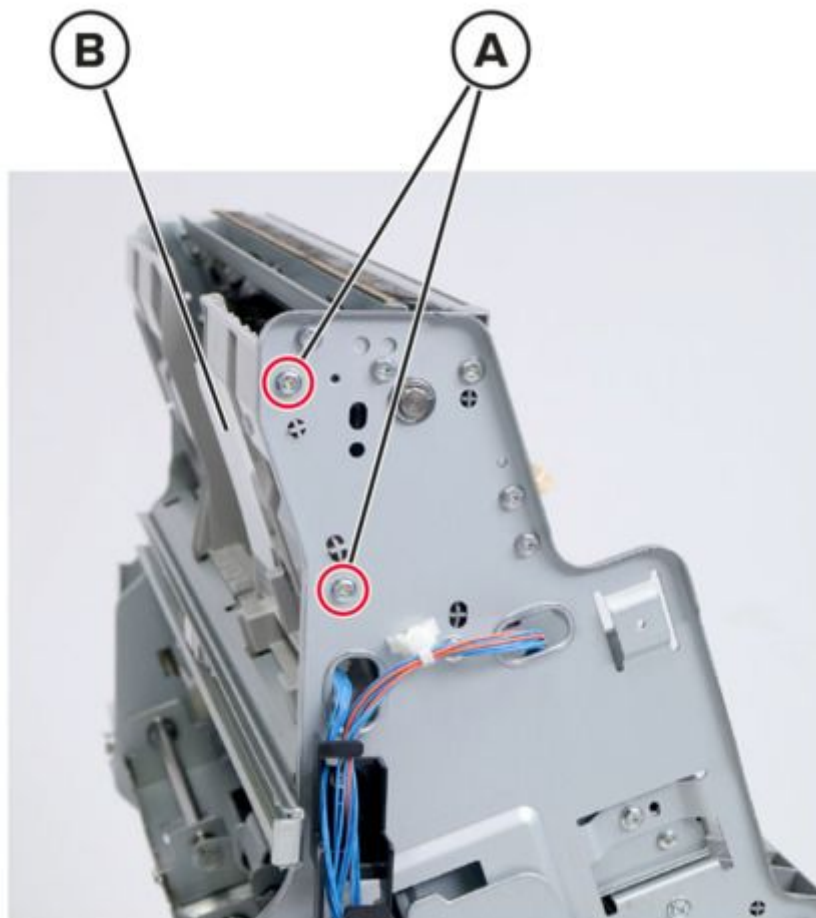


5. Remove the five screws (C), and then remove the stacker bracket (D).



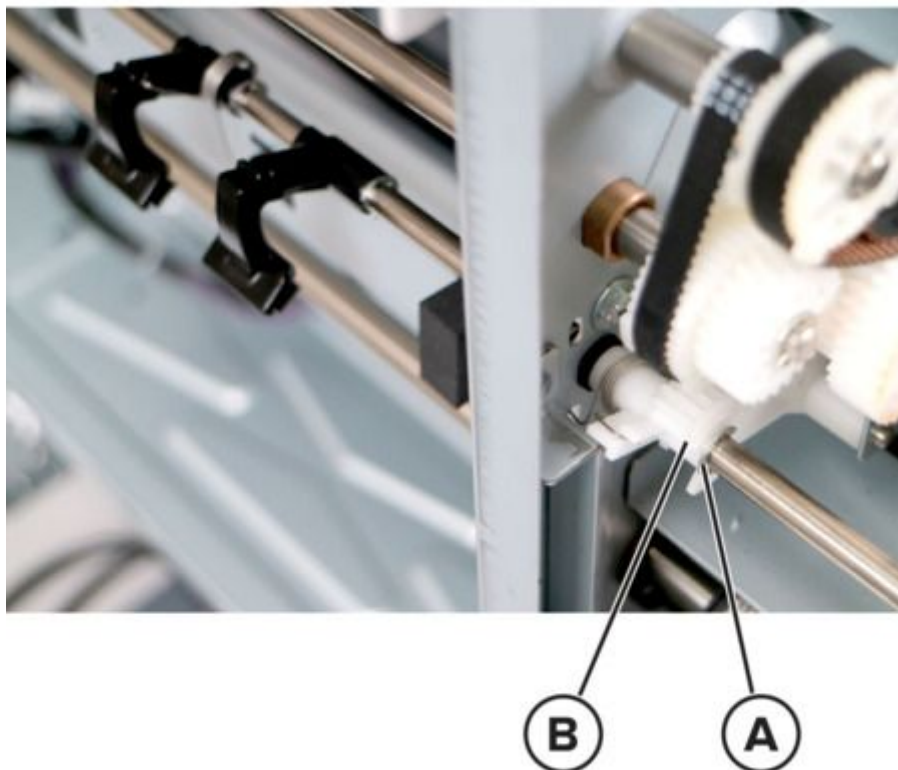
Booklet finisher booklet maker upper front guide removal

1. Remove the booklet finisher front cover. See ["Booklet finisher front cover removal" on page 1378.](#)
2. Remove the sensor (booklet finisher compile paper presence 1). See ["Sensor \(booklet finisher compile paper presence 1\) removal" on page 1494.](#)
3. Remove the sensor (booklet finisher compile paper presence 2). See ["Sensor \(booklet finisher compile paper presence 2\) removal" on page 1495.](#)
4. Remove the two screws (A), and then remove the booklet maker upper front guide (B).



Booklet finisher set clamp shaft removal

1. Remove the booklet finisher rear upper cover. See [See "Booklet finisher rear upper cover removal" on page 1386.](#)
2. Remove the motor (booklet finisher eject). See [See "Motor \(booklet finisher eject\) removal" on page 1466.](#)
3. Remove the stack height actuator.
4. Remove the booklet finisher elevator tray guide. See [See "Booklet finisher elevator tray guide removal" on page 1430.](#)
5. Remove the E-clip (A), and then remove the gear (B).



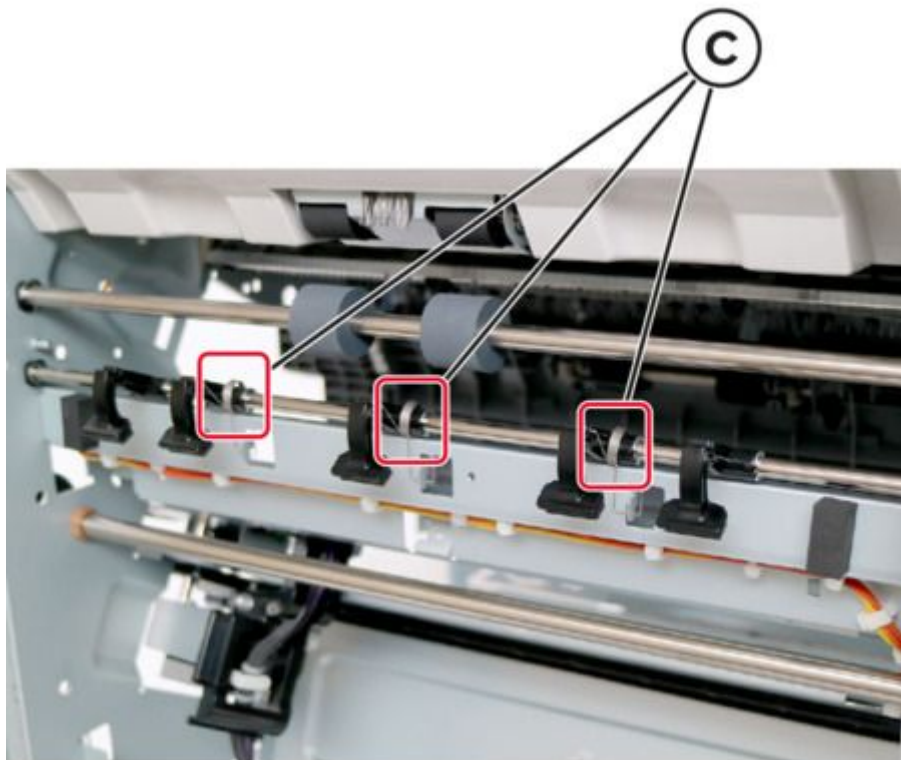
INSTALLATION NOTE

Pay attention to the position of the spring (A).

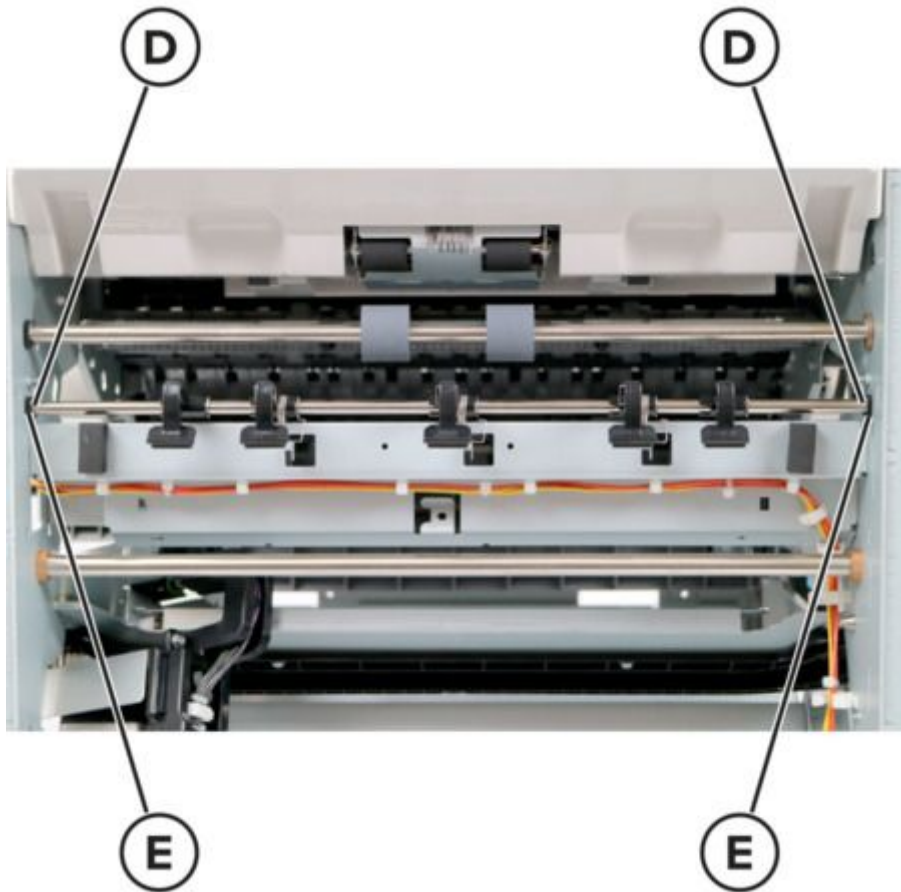


A

6. Remove the three springs (C).

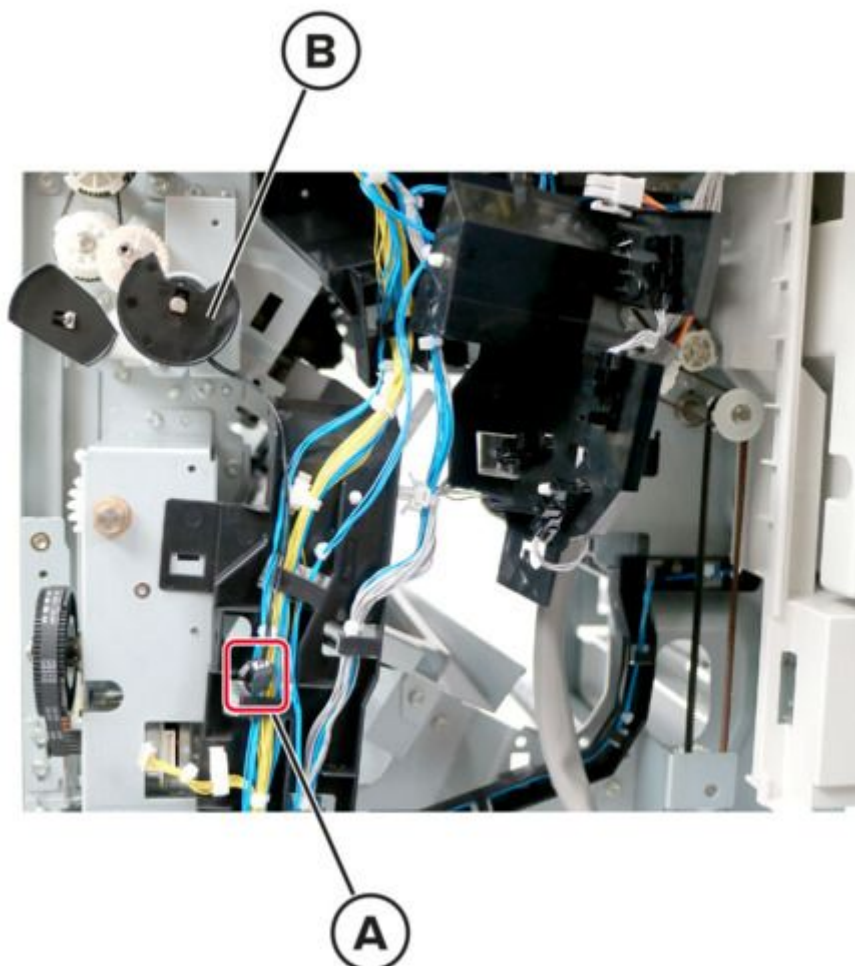


7. Remove the two E-clips (D), remove the two bushings (E), and then remove the set clamp shaft.



Booklet finisher stack clamp clutch removal

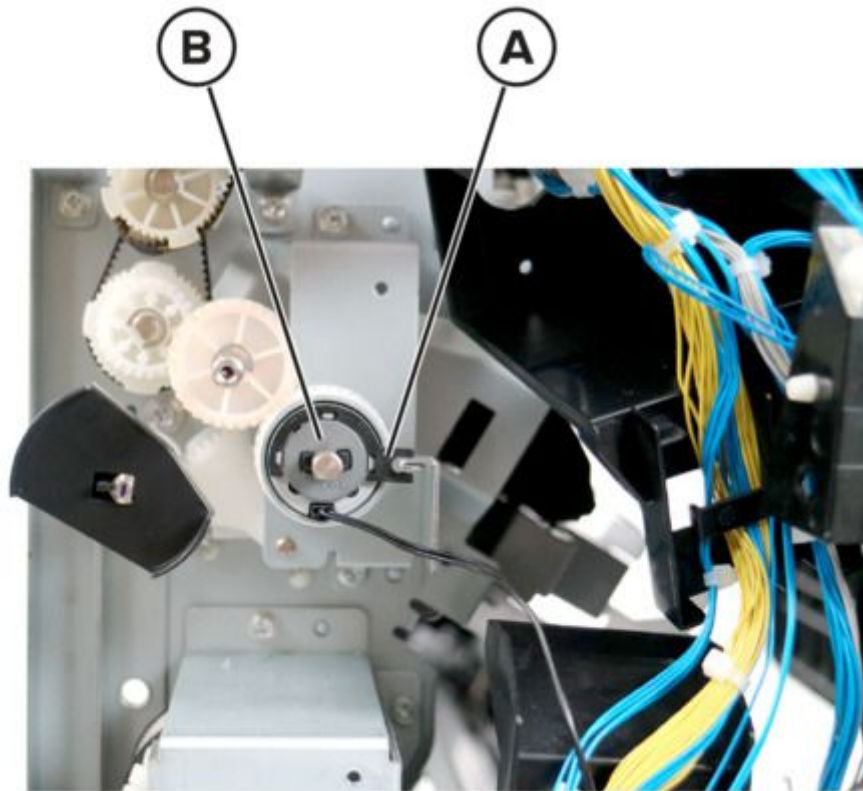
1. Remove the booklet finisher rear upper cover. See [See "Booklet finisher rear upper cover removal" on page 1386.](#)
2. Remove the cable holder.
3. Disconnect the cable (A), and then remove the actuator (B).



4. Remove the clutch.

INSTALLATION NOTE

Make sure that the locator pin (A) on the clutch (B) is properly positioned.

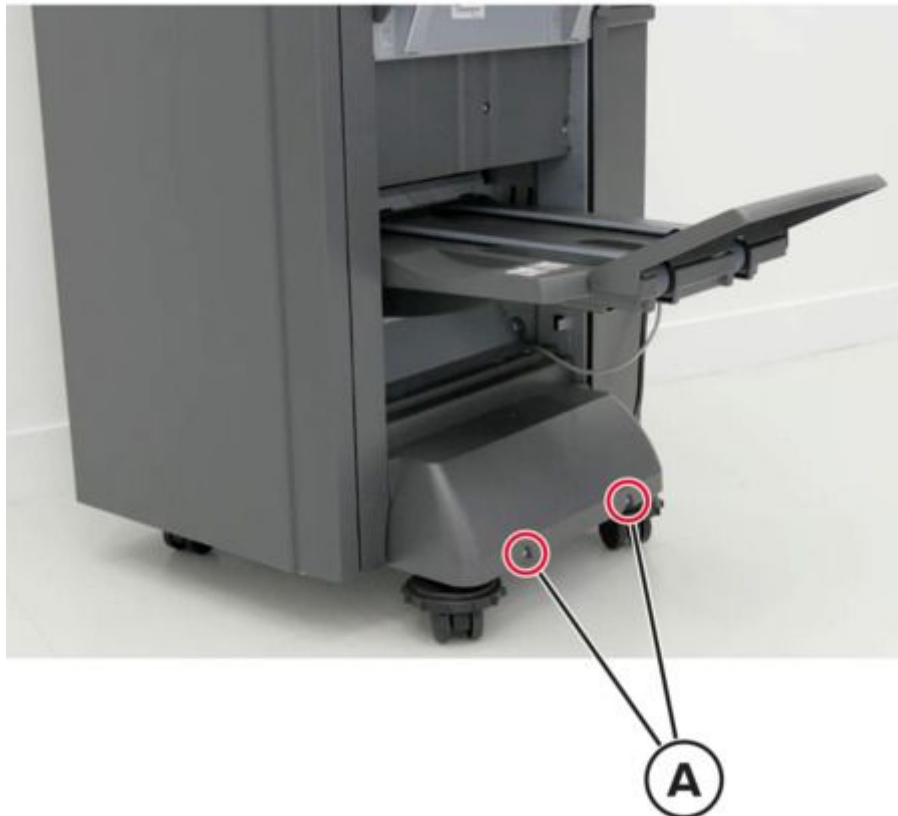


Booklet finisher LVPS removal

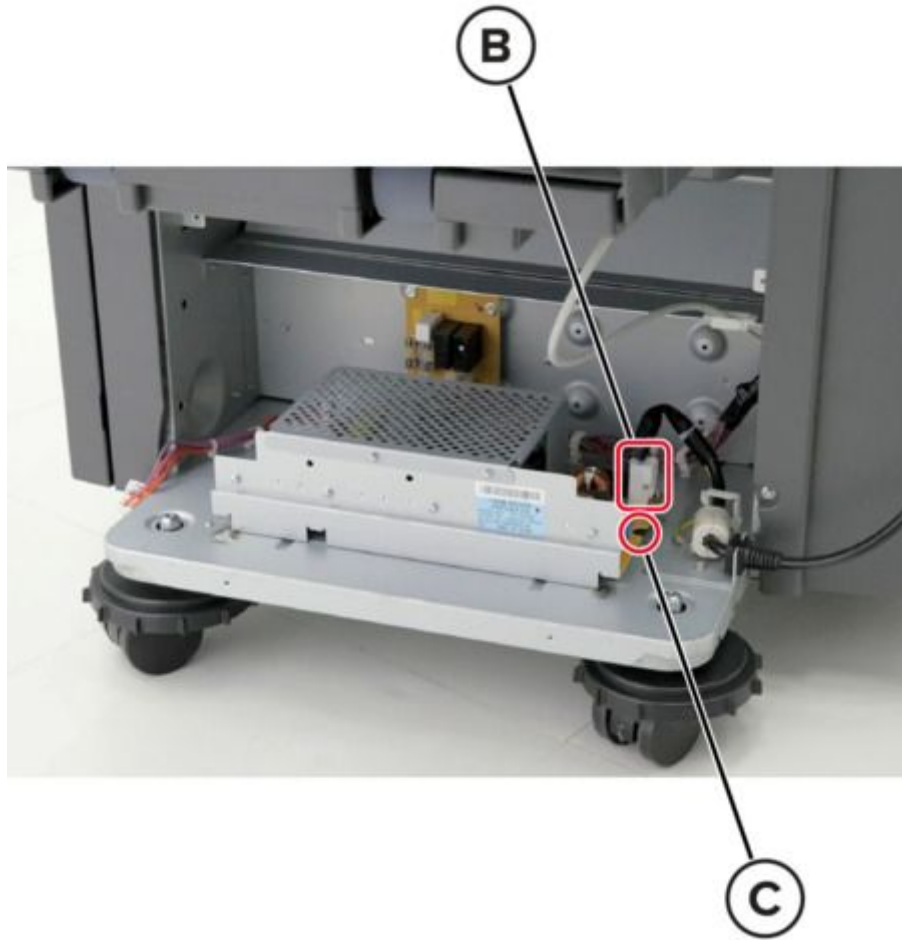
NOTES

For a video demonstration, see [Booklet finisher LVPS and relay board removal](#)

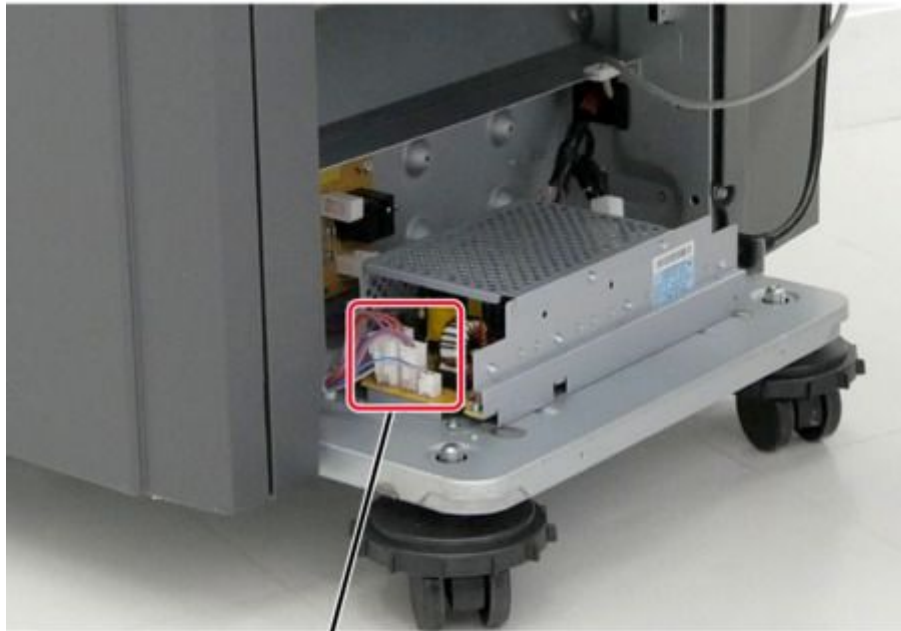
1. Remove the two screws (A) on the booklet finisher bottom cover.



2. Remove the connector (B) and the screw (C).

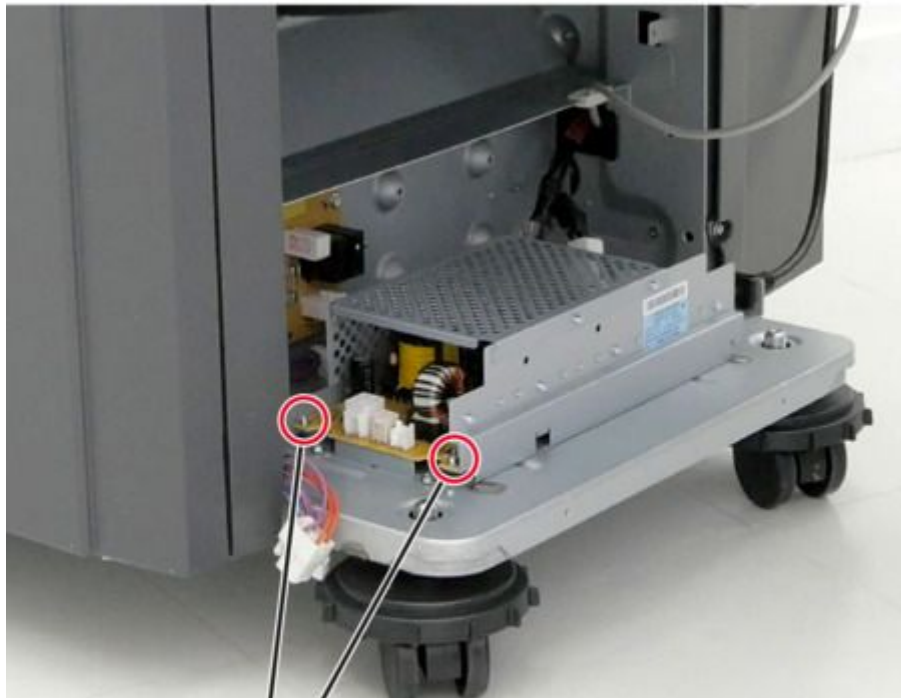


3. Remove the connectors (D).



D

4. Remove the two screws (E).



E

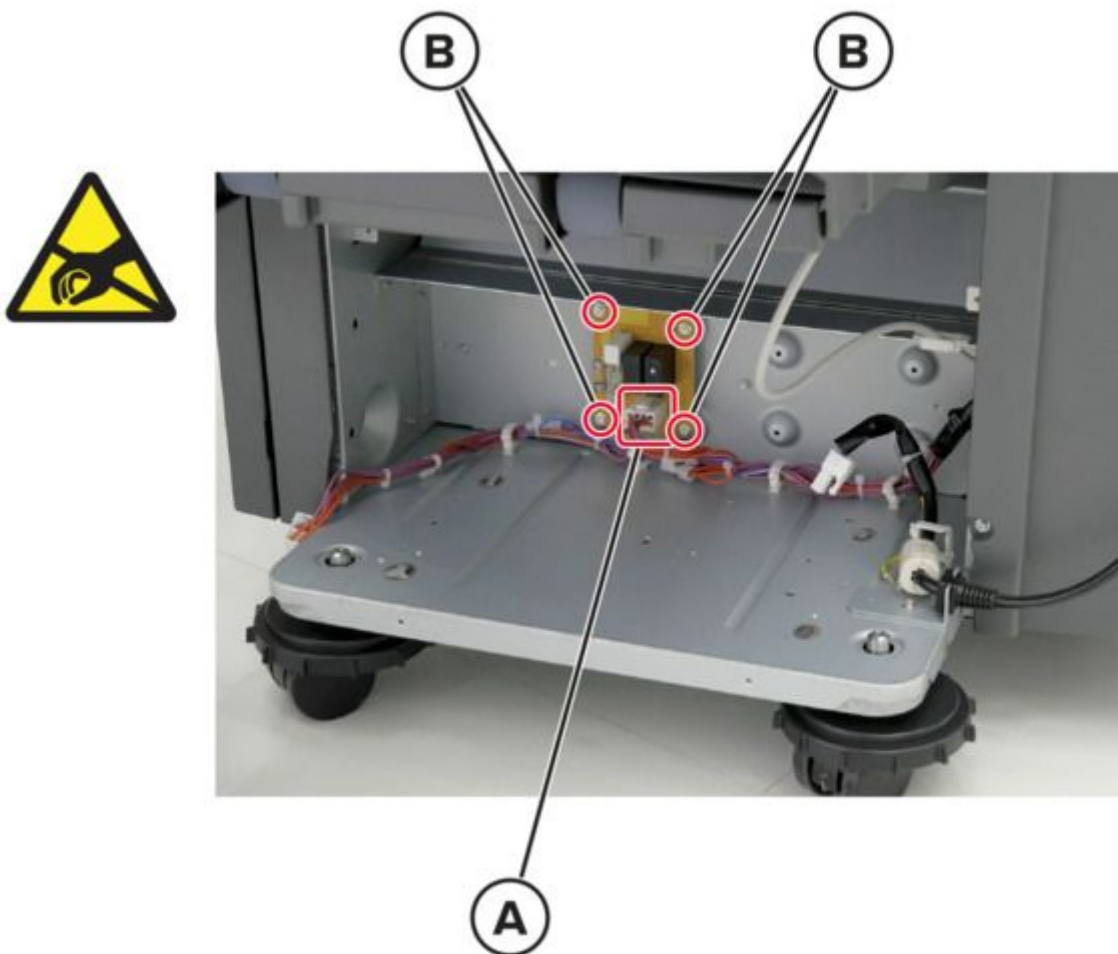
5. Remove the booklet finisher LVPS.

Booklet finisher relay board removal

NOTES

For a video demonstration, see [Booklet finisher LVPS and relay board removal](#).

1. Remove the booklet finisher LVPS. See ["Booklet finisher LVPS removal"](#) on page 1528.
2. Remove the connector (A) and the four screws (B).

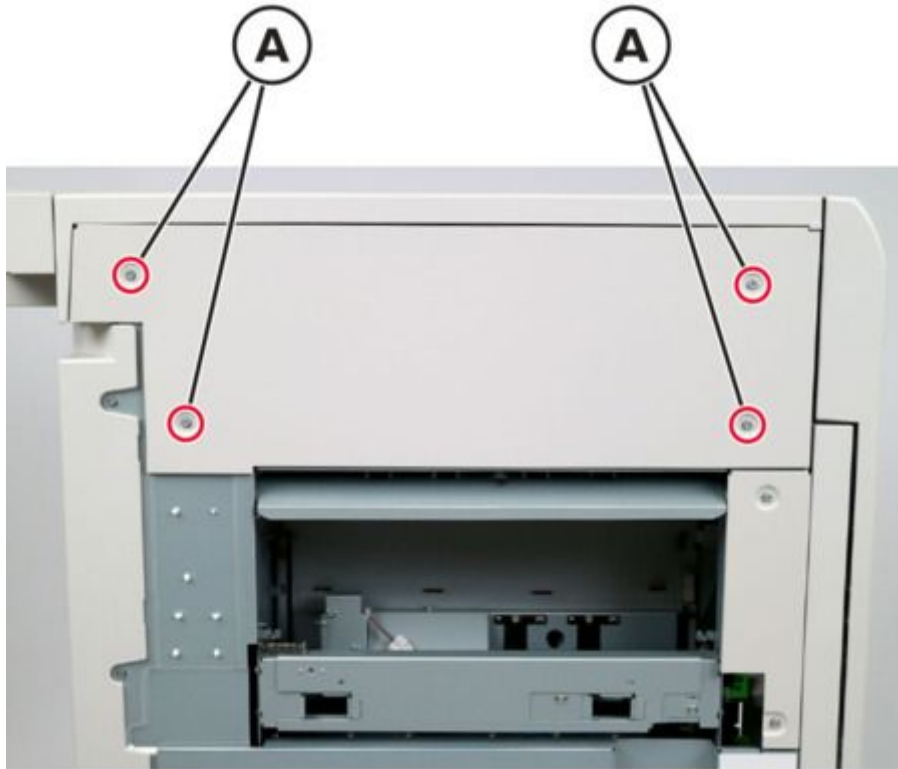


3. Remove the booklet finisher relay board.

Trifold/Z-fold finisher removals

Trifold/Z-fold upper left cover 1 removal

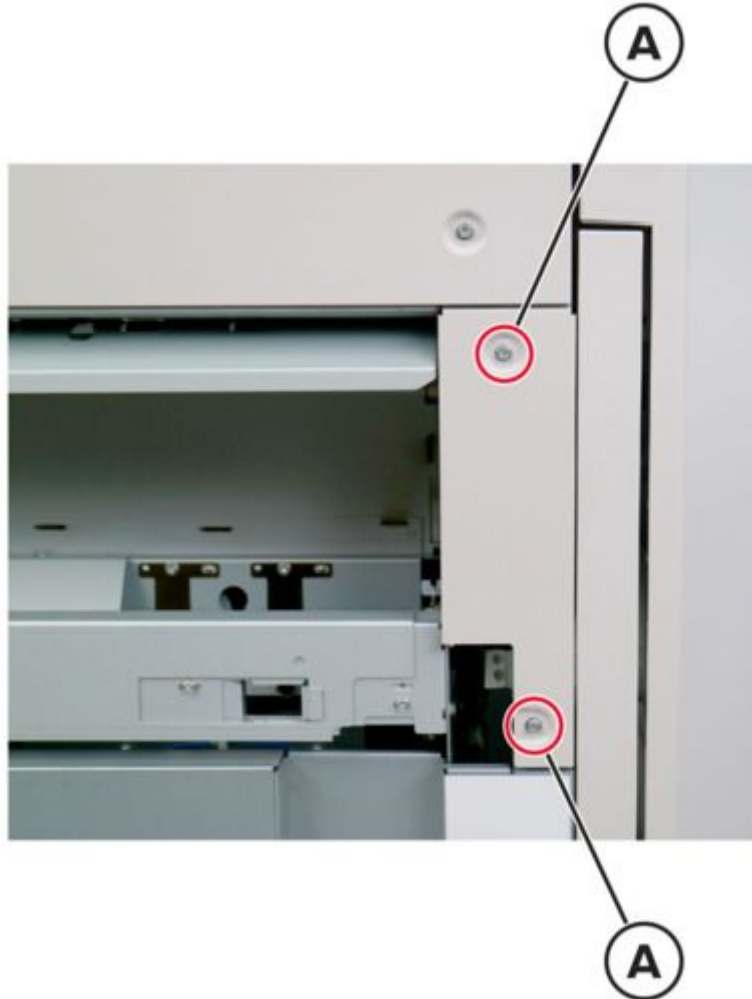
1. Remove the four screws (A).



2. Remove the cover.

Trifold/Z-fold upper left cover 2 removal

1. Remove the two screws (A).



2. Remove the cover.

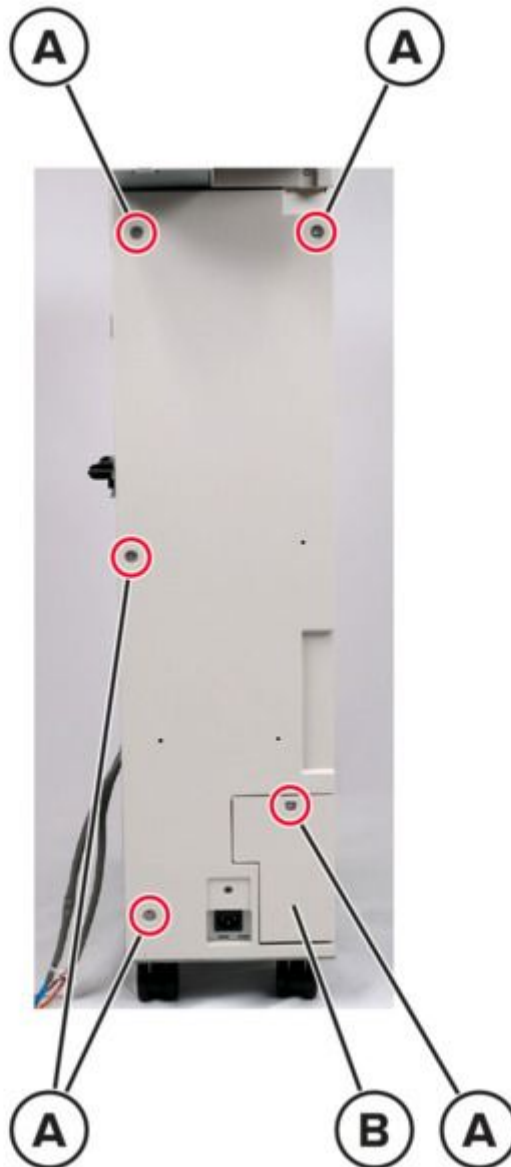
Trifold/Z-fold lower left cover removal

1. Remove the trifold/Z-fold lower installation bracket. See [See "Trifold/Z-fold lower installation bracket removal" on page 1547.](#)
2. Remove the four screws (A), and then remove the cover (B).

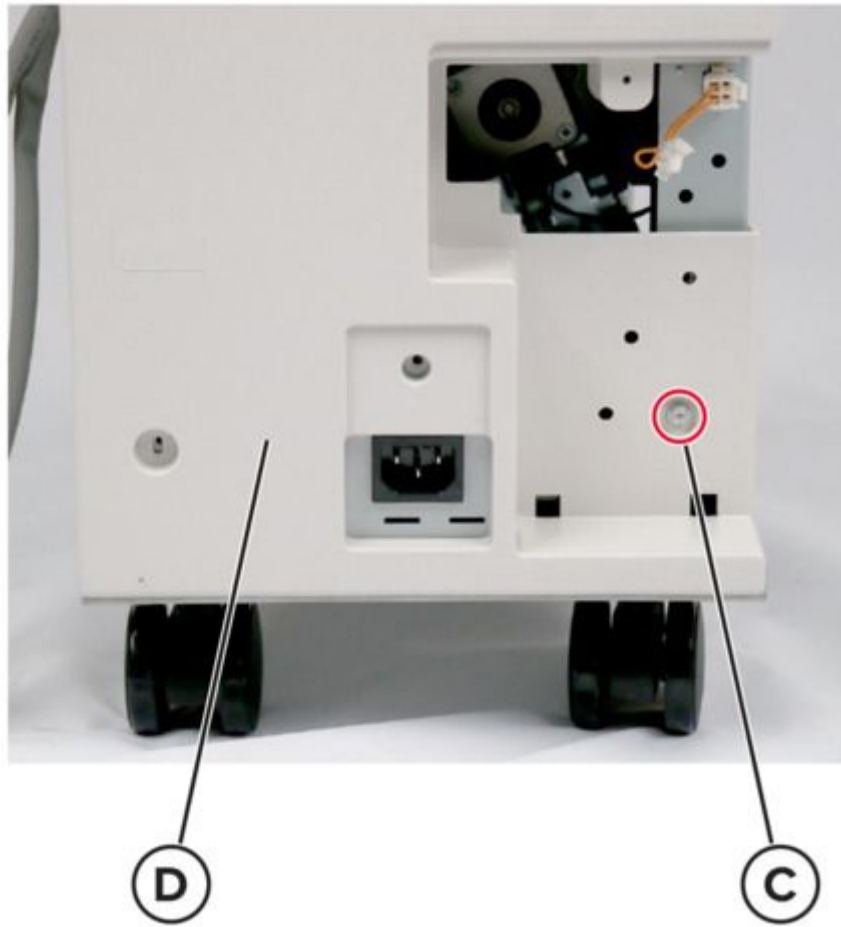


Trifold/Z-fold rear cover removal

1. Remove the five screws (A), and then remove the cover (B).



2. Remove the screw (C), and then remove the cover (D).



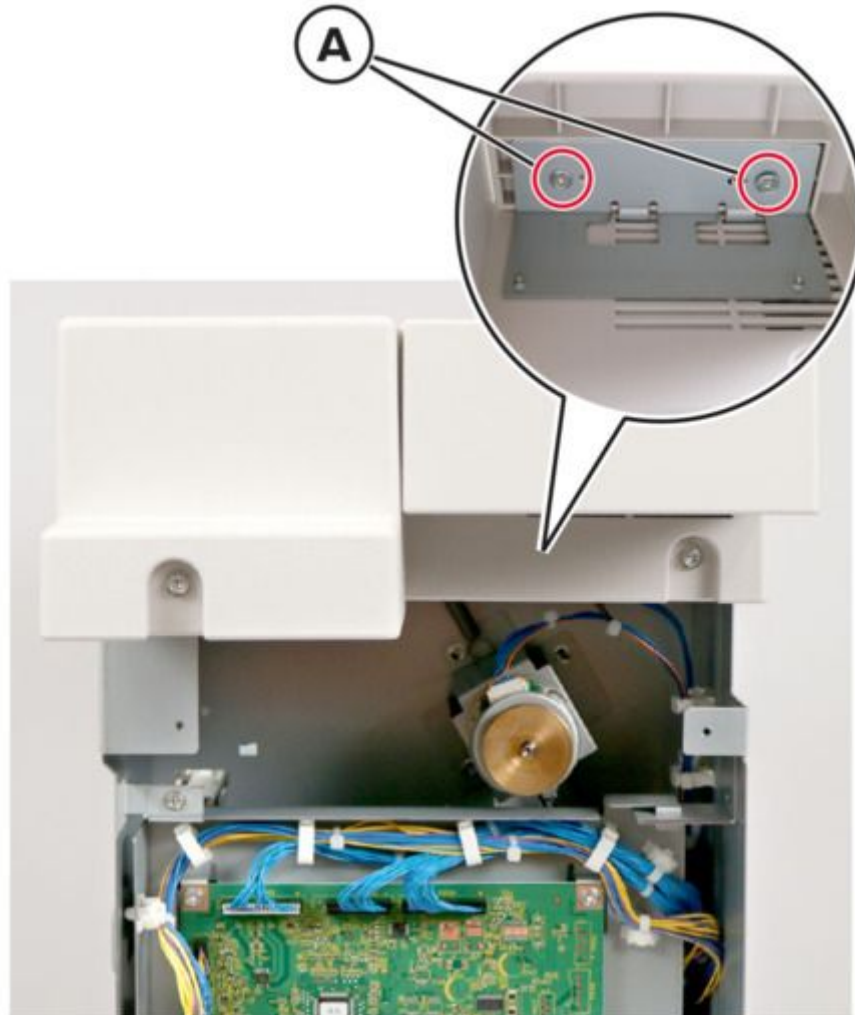
Trifold/Z-fold door removal

1. Open the trifold/Z-fold door.
2. Remove the two screws (A), and then remove the door.

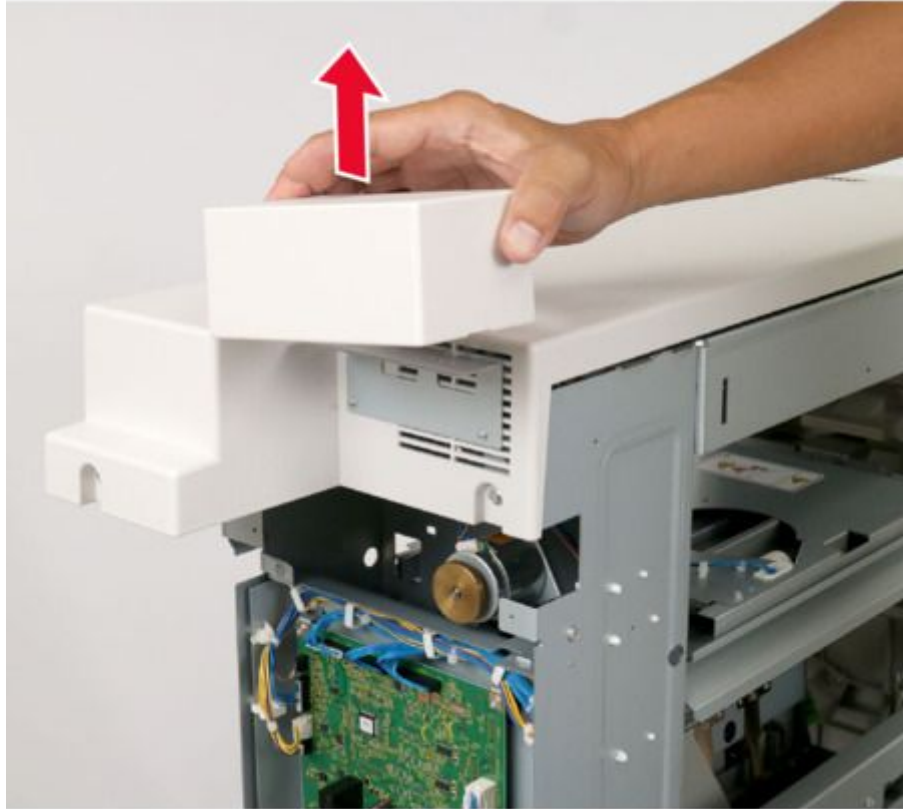


Trifold/Z-fold rear top cover removal

1. Remove the two screws (A) from under the rear top cover.

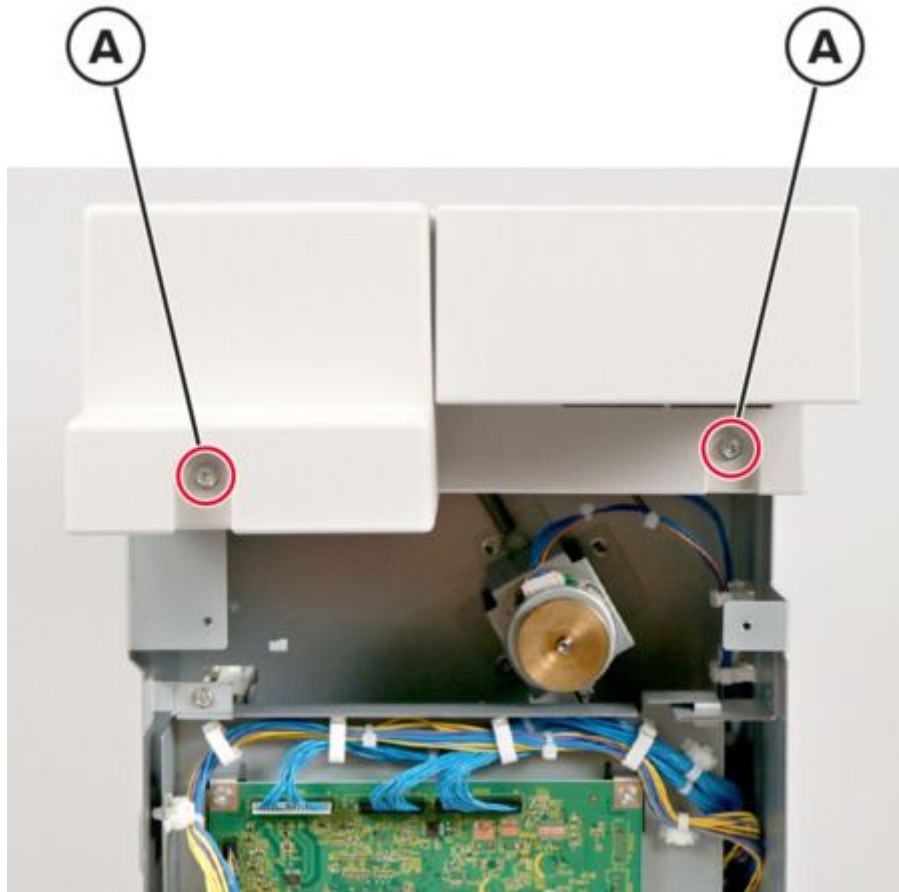


2. Remove the rear top cover.

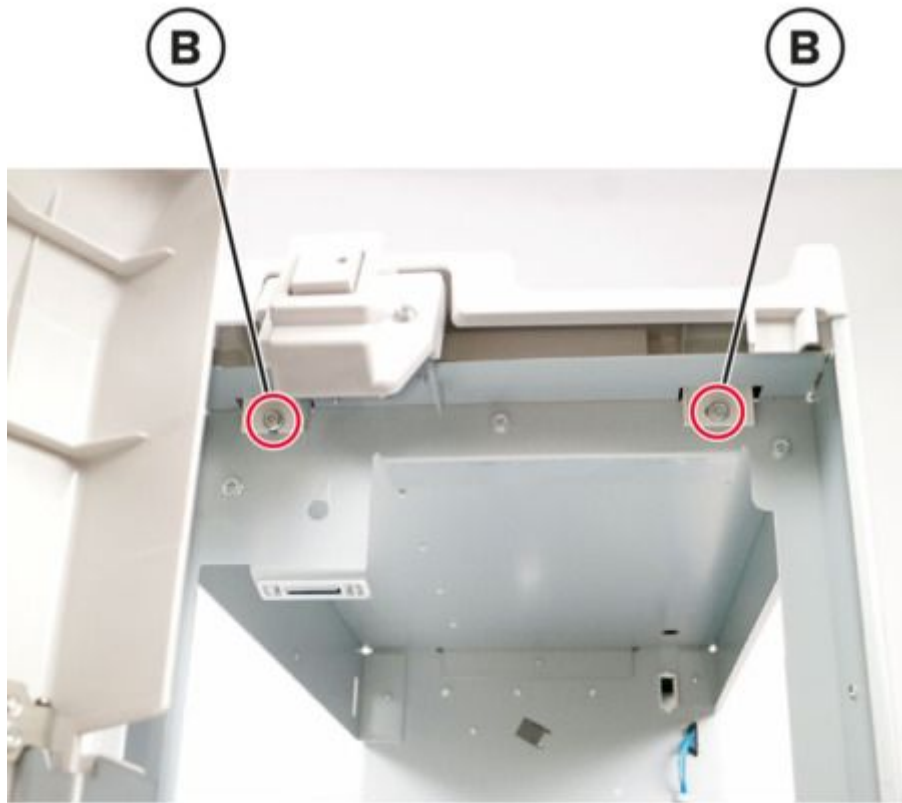


Trifold/Z-fold top cover removal

1. Remove the trifold/Z-fold rear top cover. See ["Trifold/Z-fold rear top cover removal" on page 1539](#).
2. Remove the two screws (A) at the rear.

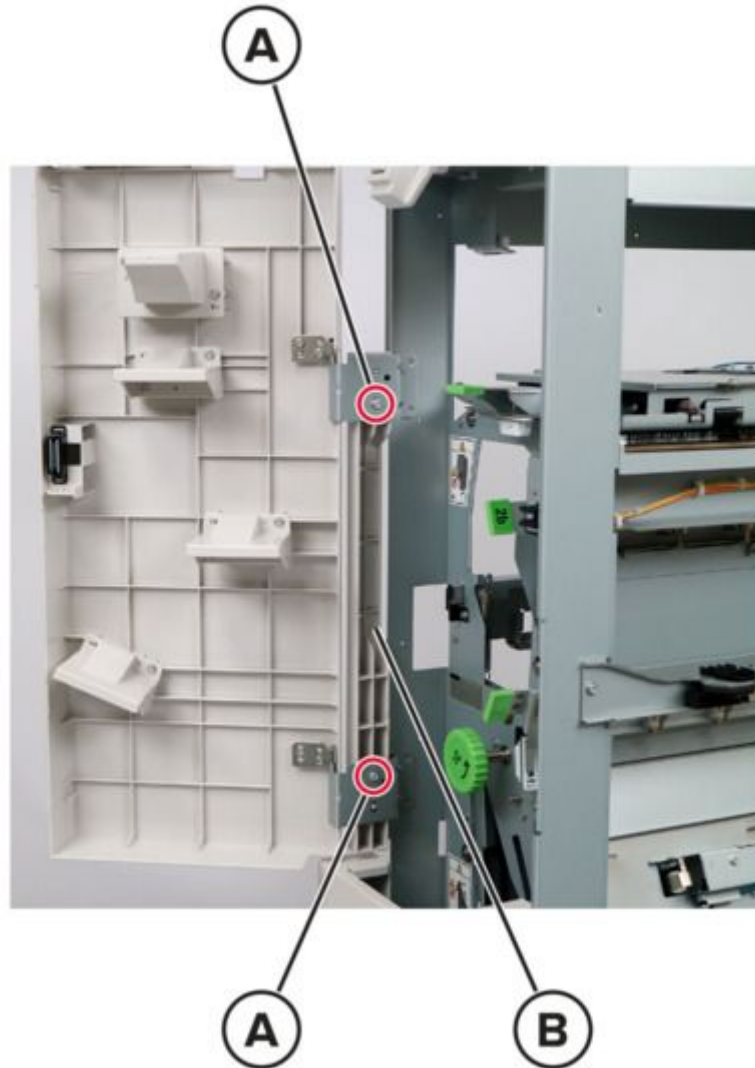


3. Remove the two screws (B) at the front, and then remove the cover.



Trifold/Z-fold upper left post cover removal

1. Open the trifold/Z-fold door.
2. Remove the two screws (A), and then remove the upper left post cover (B).



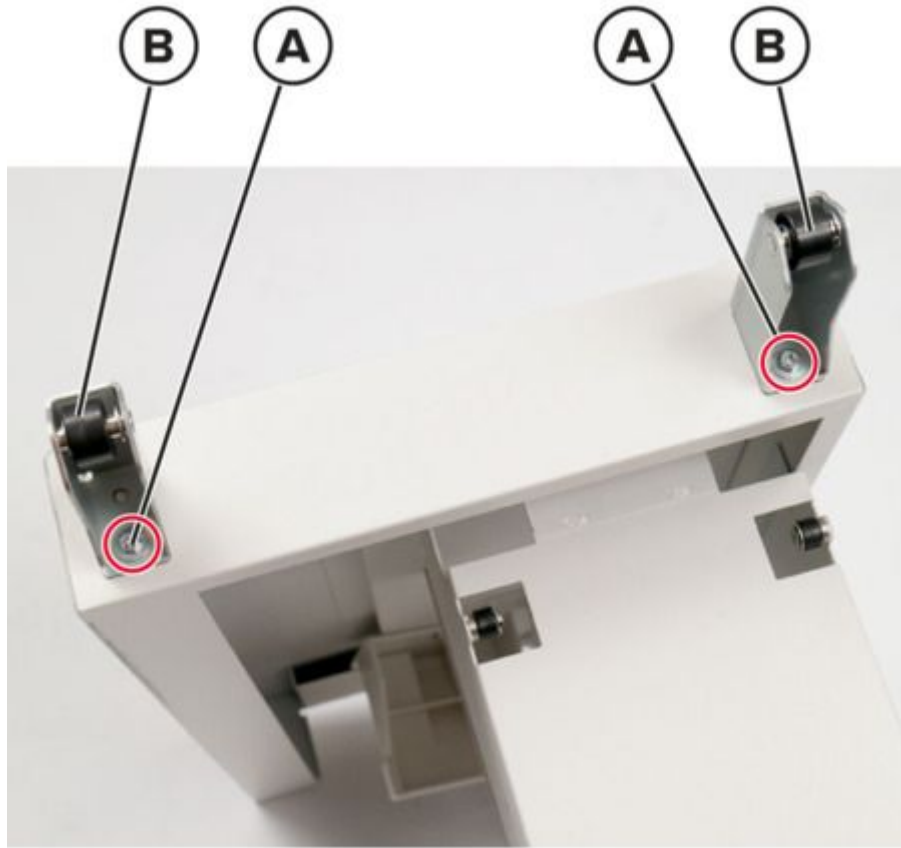
Trifold/Z-fold bin removal

1. Find the trifold/Z-fold bin.
2. Remove the trifold/Z-fold bin.



Trifold/Z-fold bin wheel with bracket removal

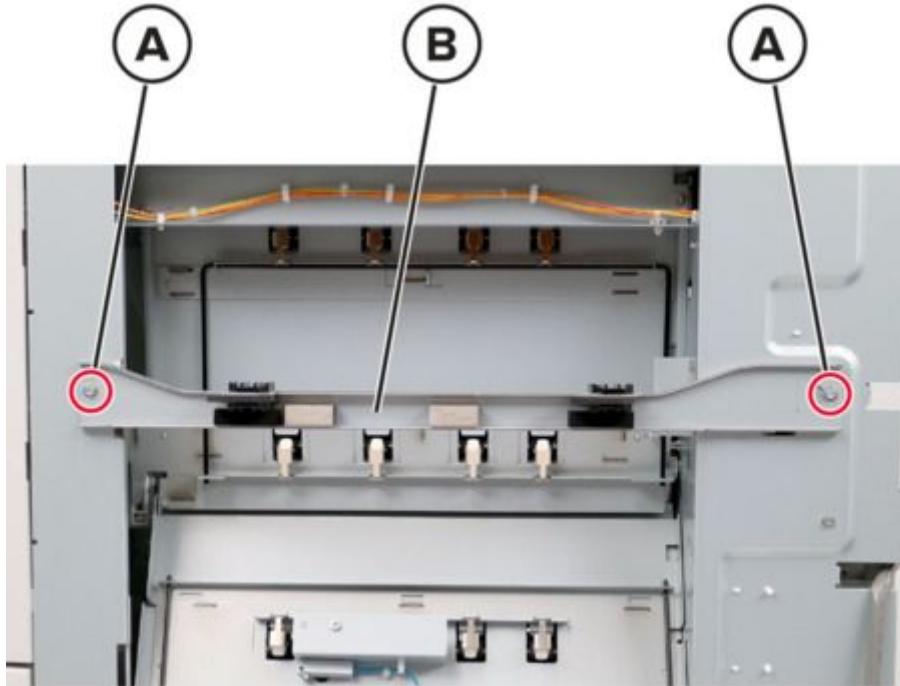
1. Remove the two screws (A).



2. Remove the bin wheel with bracket (B).

Trifold/Z-fold installation bracket removal

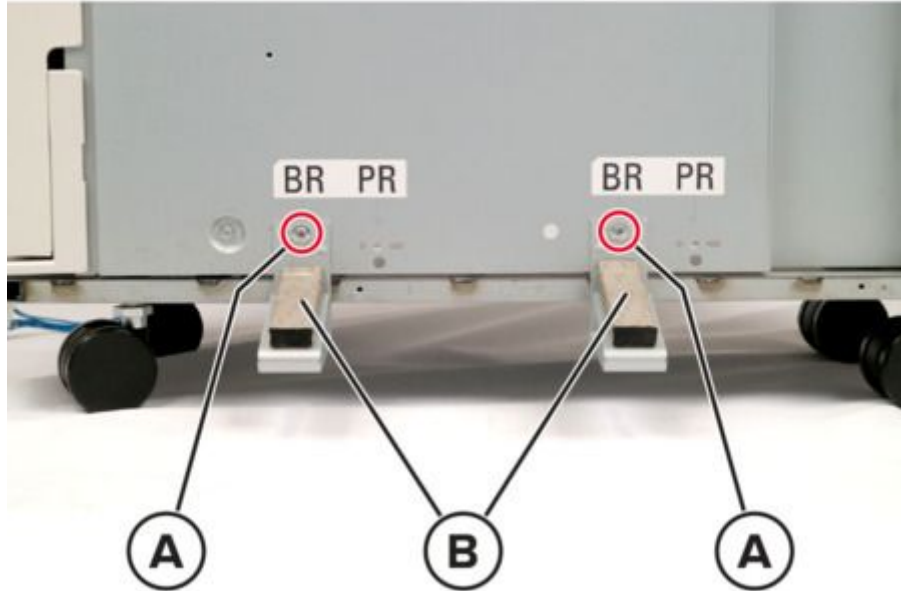
1. Remove the two screws (A).



2. Remove the installation bracket (B).

Trifold/Z-fold lower installation bracket removal

1. Remove the two screws (A).



2. Remove the two brackets (B).

Trifold/Z-fold controller board removal

NOTES

For a video demonstration, see [Trifold/Z-fold controller board removal](#).

1. Remove the trifold/Z-fold rear cover. See ["Trifold/Z-fold rear cover removal"](#) on page 1536.
2. Disconnect all the cables, remove the four screws (A), and then remove the controller board.

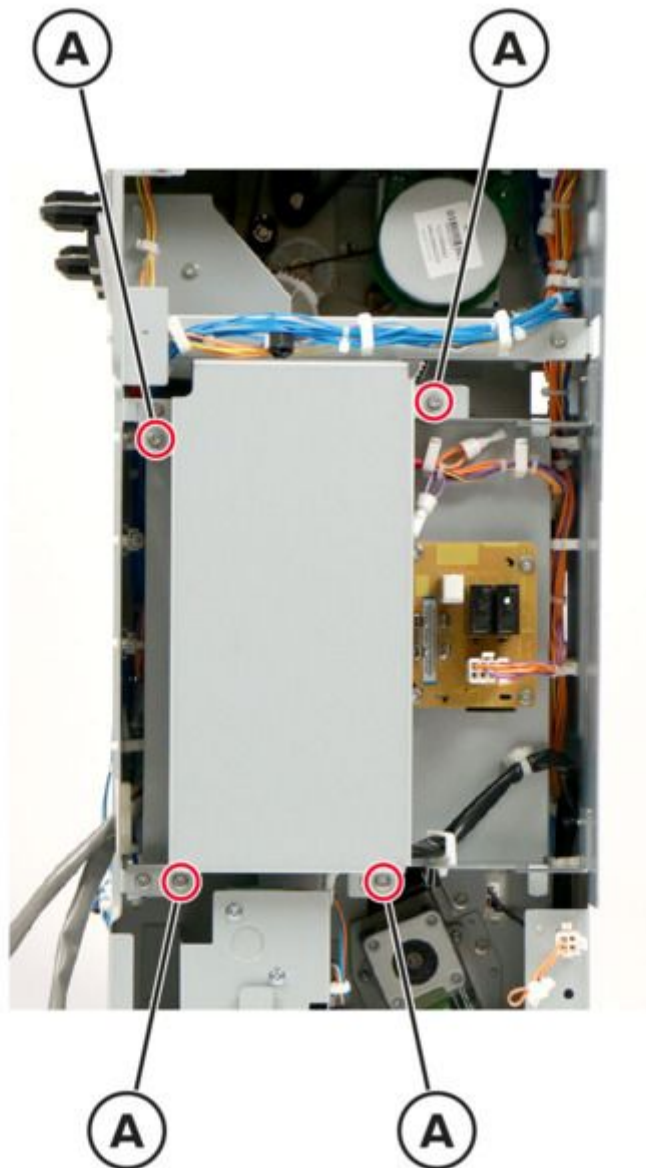


Trifold/Z-fold LVPS removal

NOTES

For a video demonstration, see [Trifold/Z-fold LVPS removal](#).

1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536](#).
2. Remove the four screws (A), and then remove the LVPS cover.

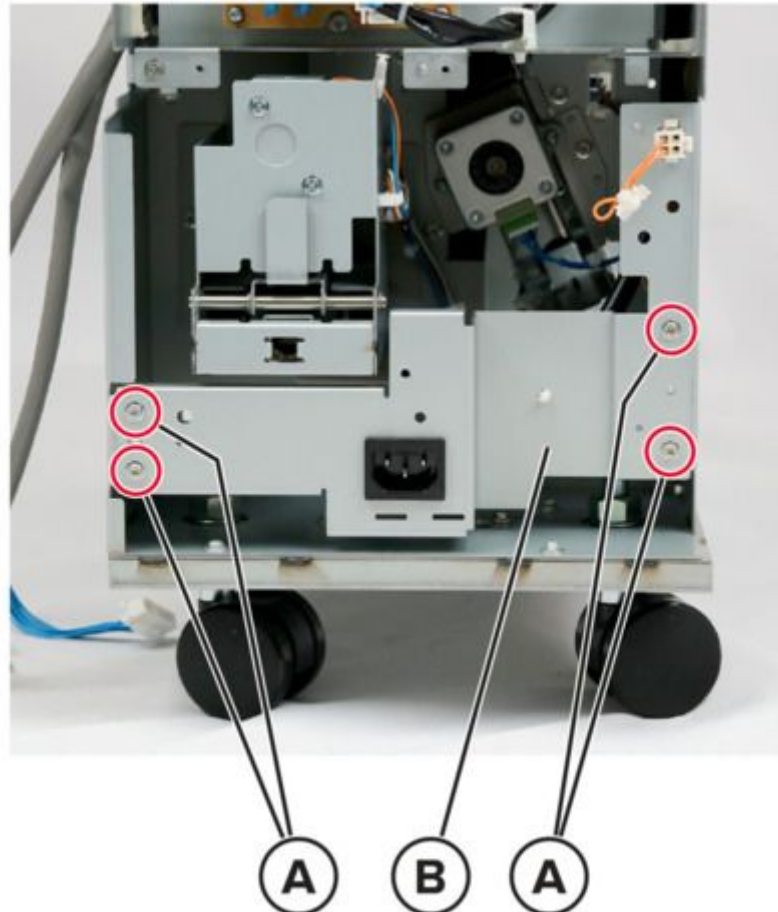


3. Disconnect the two cables (C), remove the two screws (D), and then remove the LVPS (E).

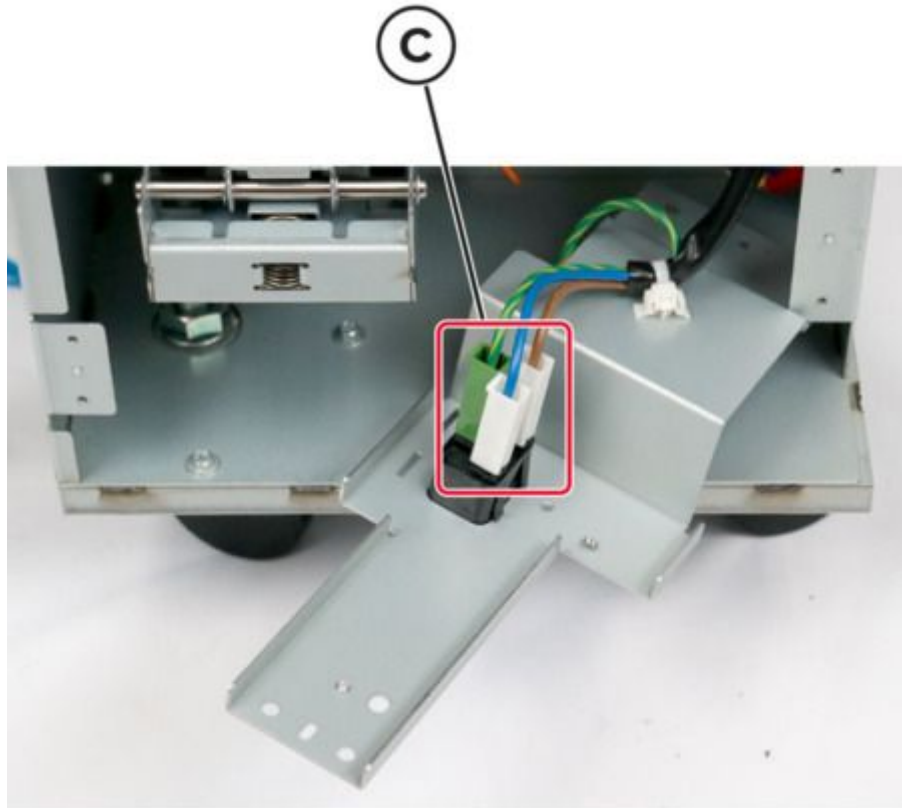


Trifold/Z-fold power inlet bracket removal

1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Remove the four screws (A), and then remove the power inlet bracket (B).

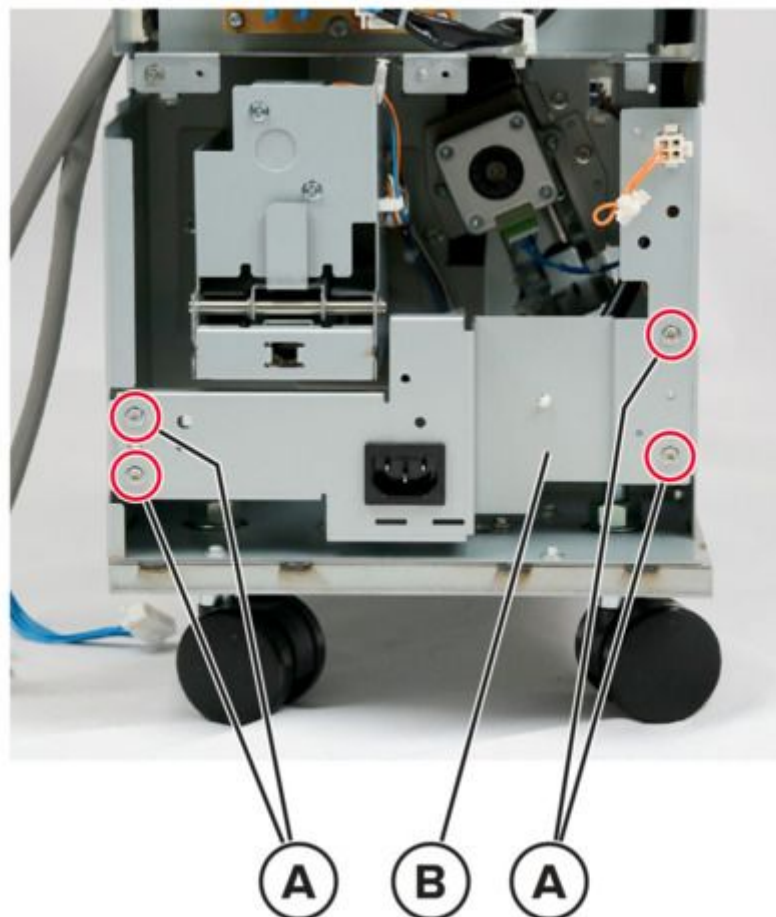


3. Disconnect the three cables (C).

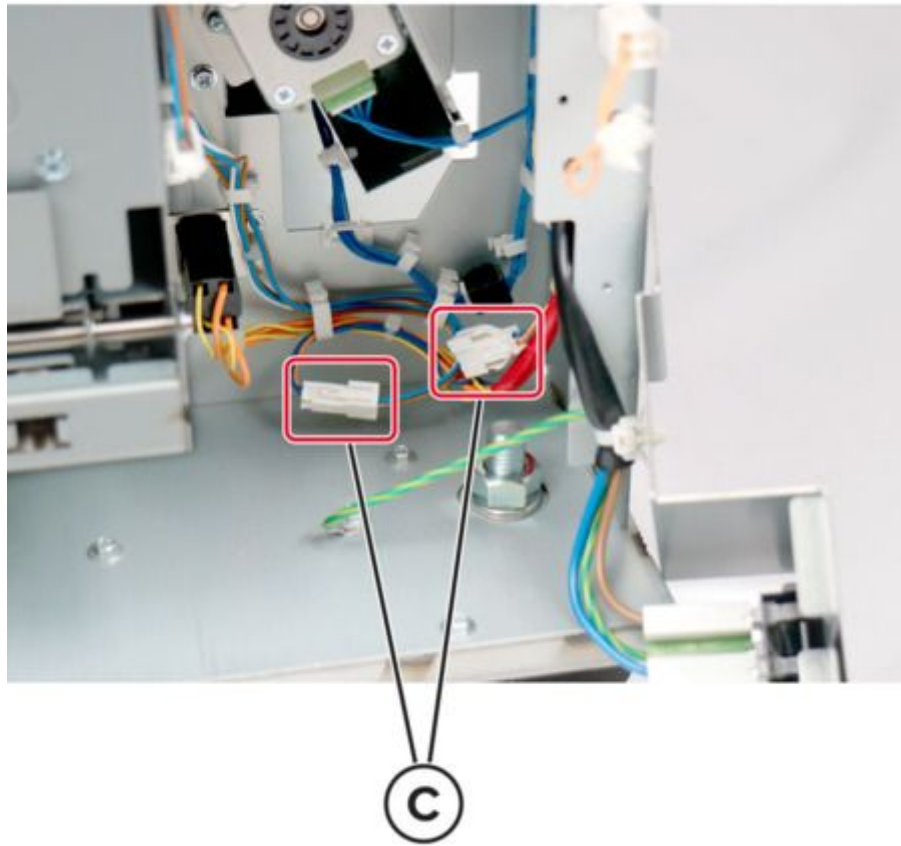


Trifold/Z-fold bin release bracket 1 removal

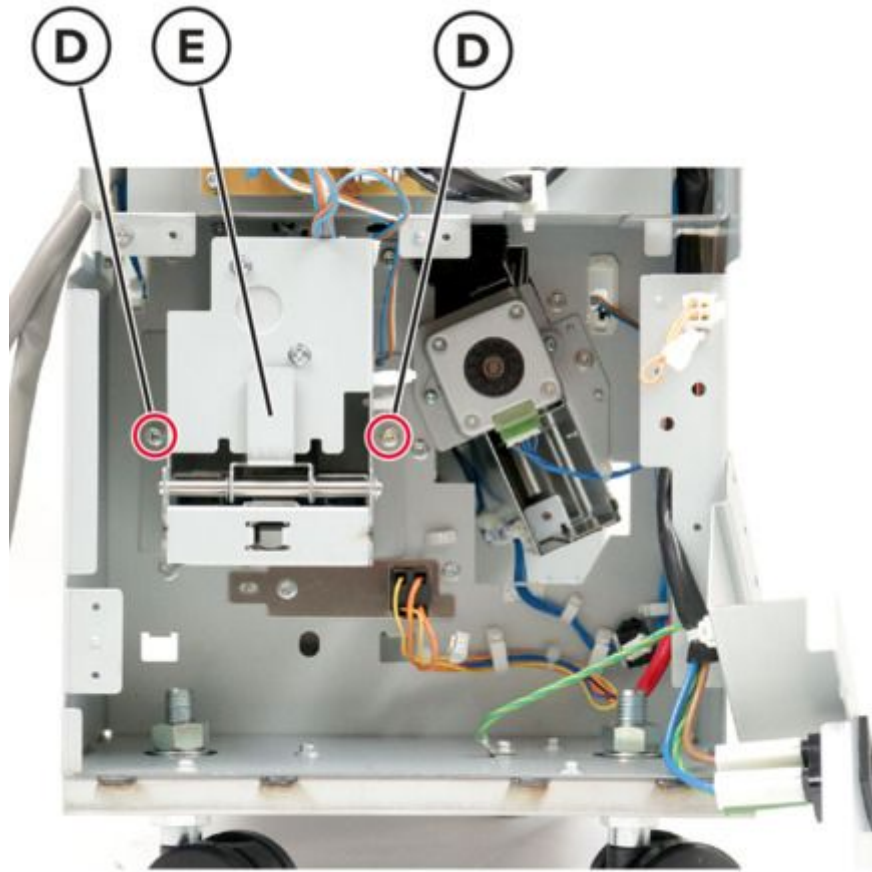
1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Remove the four screws (A), and then remove the power inlet bracket (B).



3. Disconnect the two cables (C).

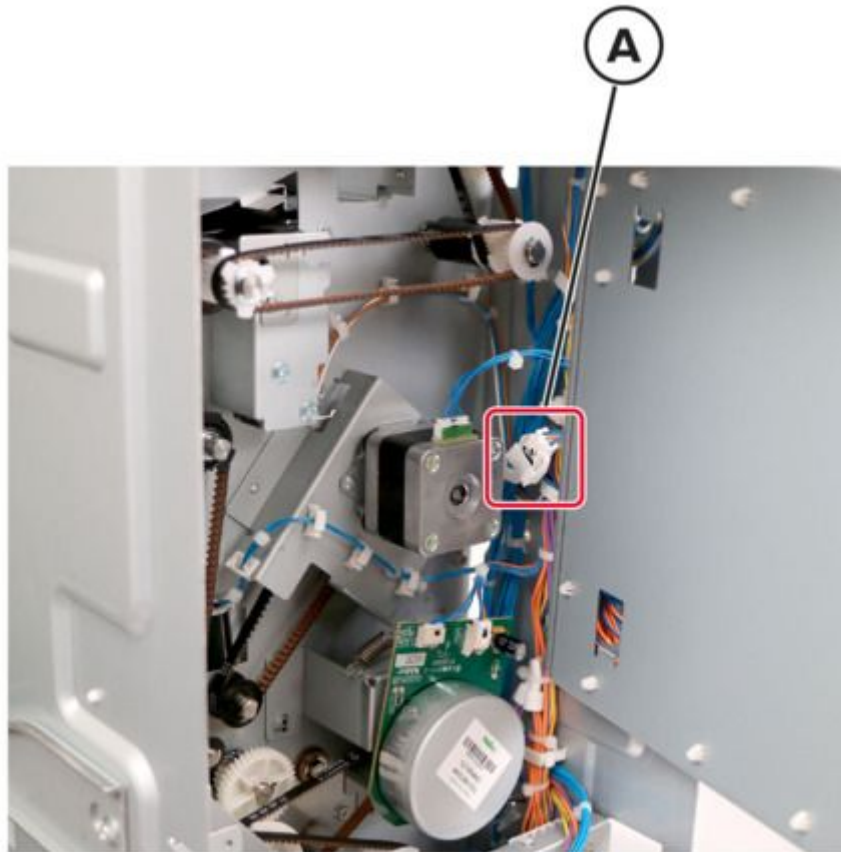


4. Remove the two screws (D), and then remove the bin release bracket 1 (E).

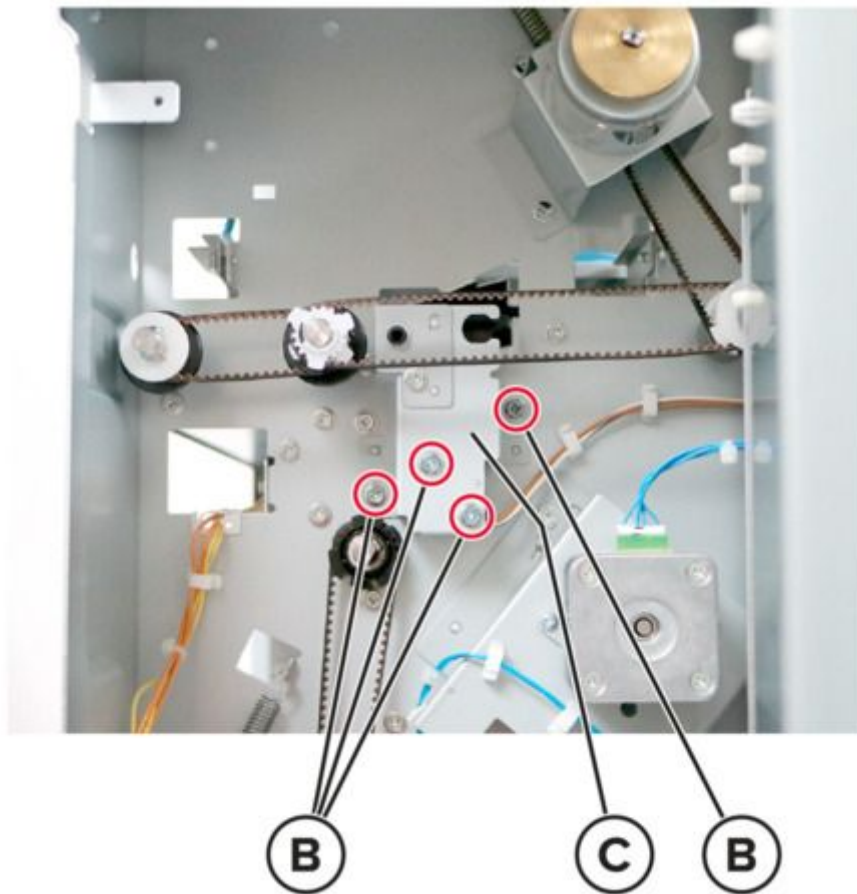


Trifold/Z-fold feed solenoid removal

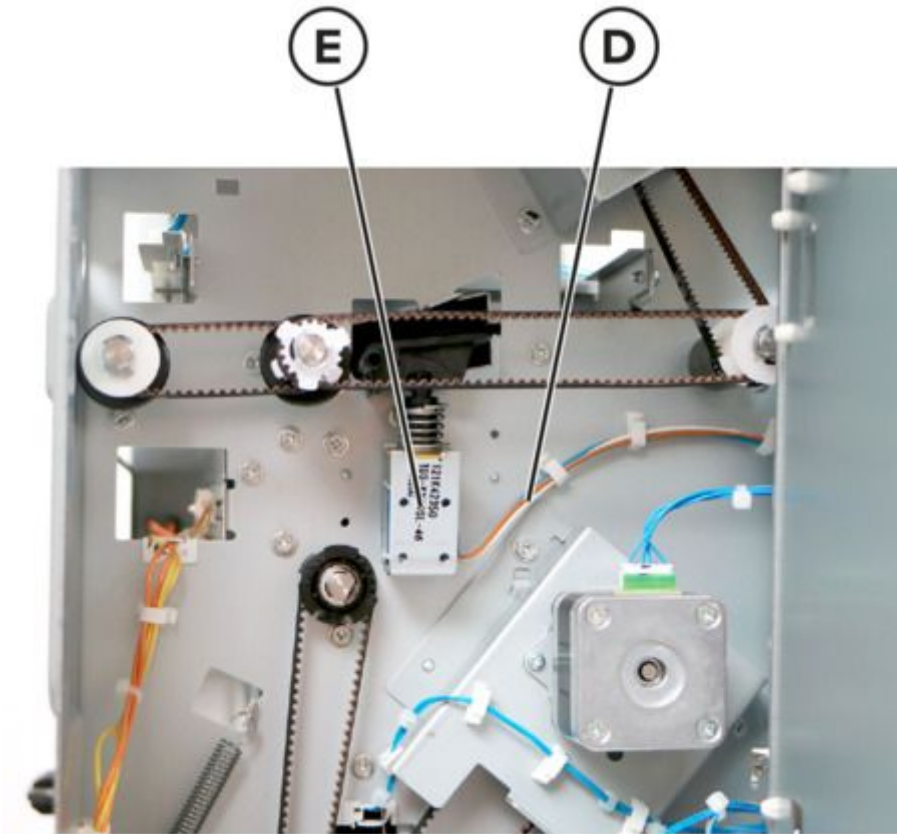
1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Open the trifold/Z-fold controller board tray. See [See "Opening the trifold/Z-fold controller board tray" on page 1561.](#)
3. Disconnect the cable (A).



4. Remove the four screws (B), and then remove the bracket (C).

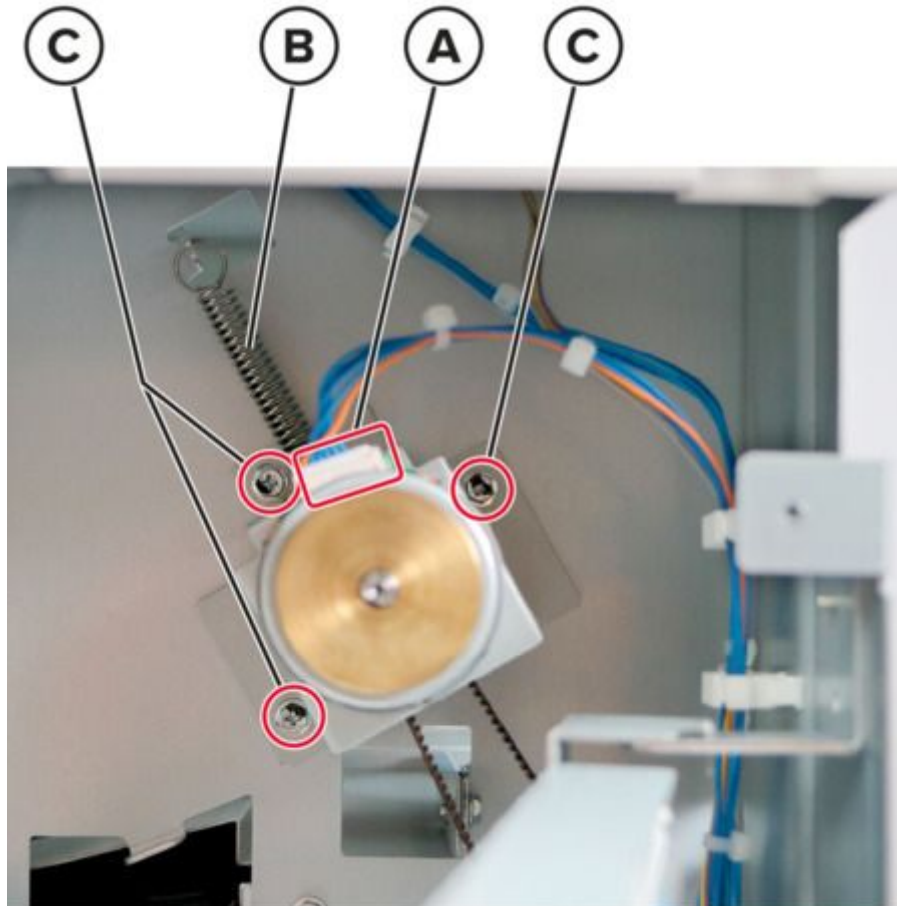


5. Release the cable (D) from their guides, and then remove the feed solenoid (E).

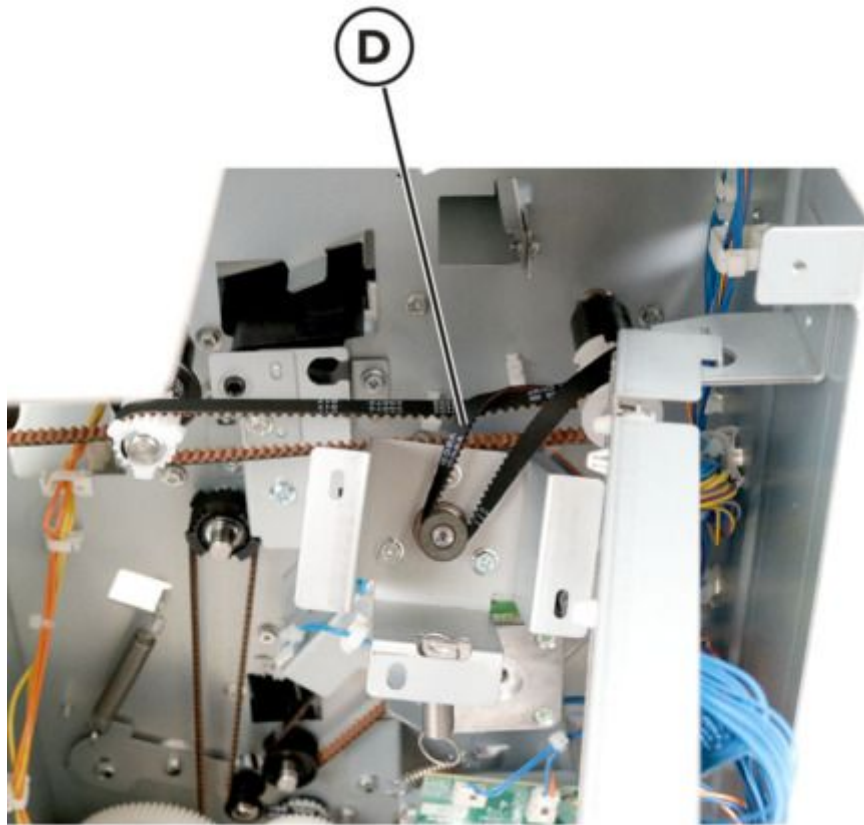


Motor (trifold/Z-fold feed) removal

1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Open the trifold/Z-fold controller board tray. See [See "Opening the trifold/Z-fold controller board tray" on page 1561.](#)
3. Disconnect the cable (A), release the spring (B), and then remove the three screws (C).



4. Release the belt (D) from the motor.



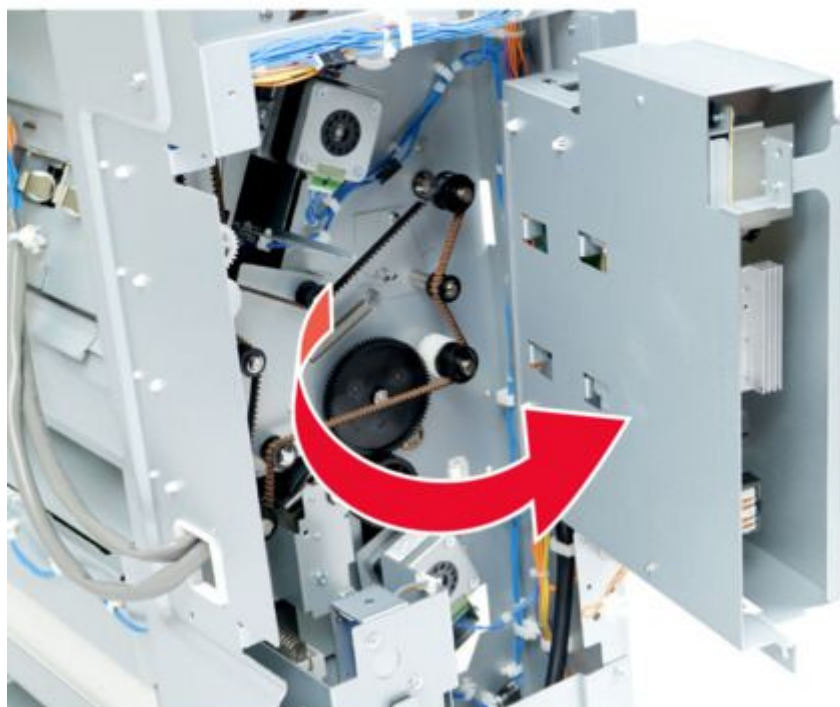
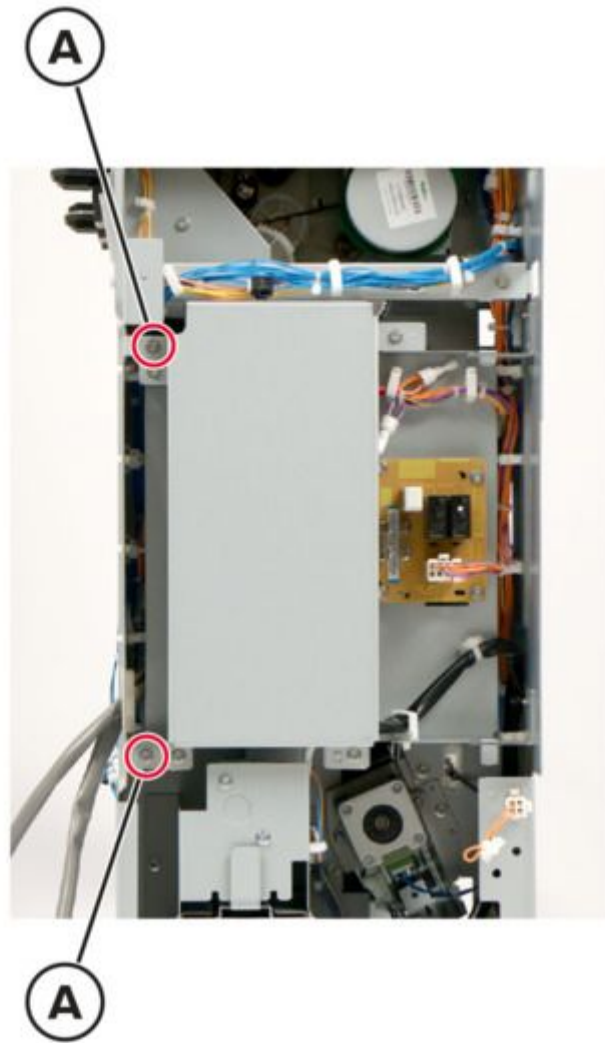
Opening the trifold/Z-fold controller board tray

1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Remove the two screws (A), and then pull out the controller board tray.



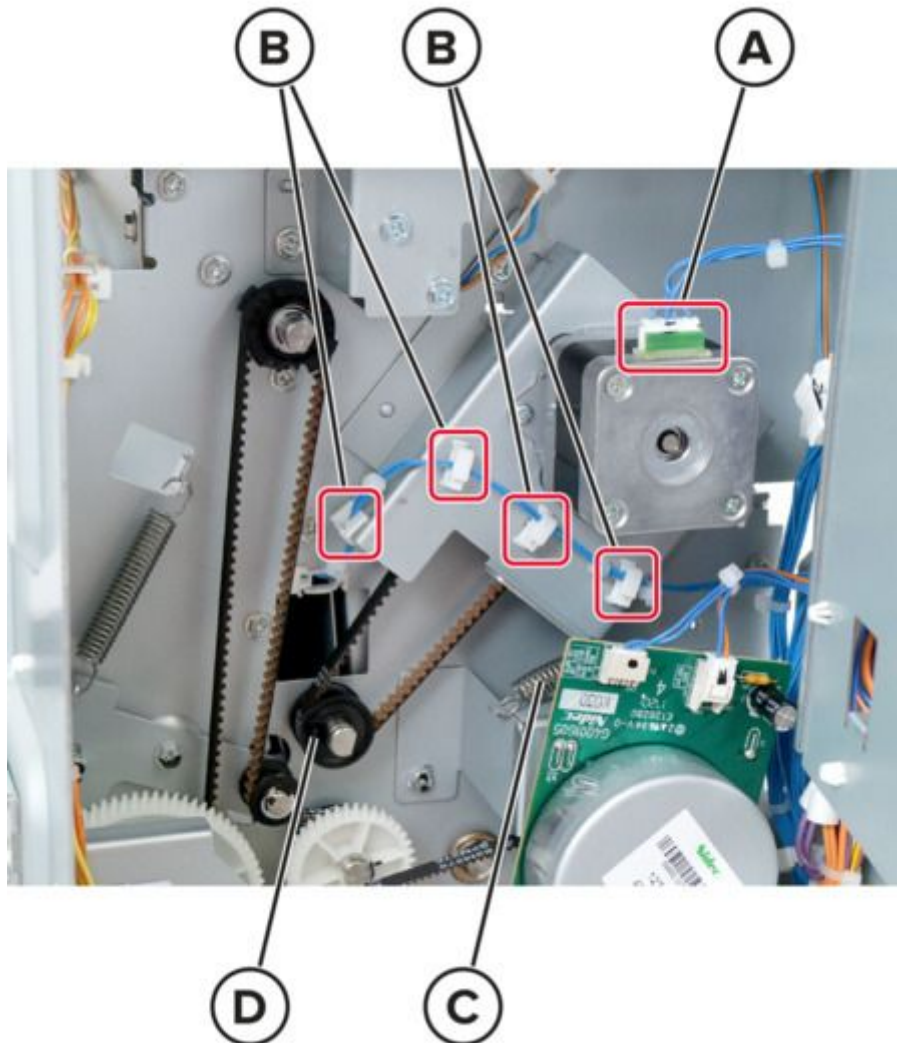
Opening the trifold/Z-fold LVPS tray

1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Remove the two screws (A), and then pull out the LVPS tray.

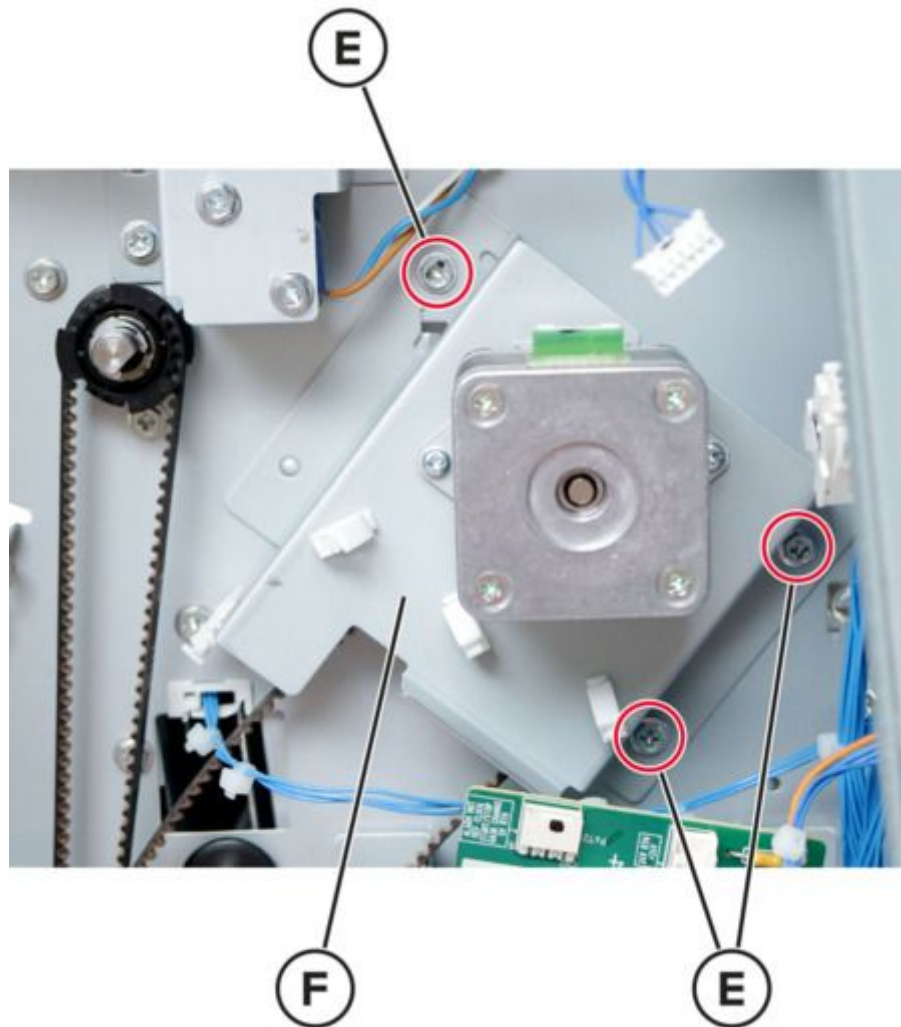


Motor (trifold/Z-fold transport 1) removal

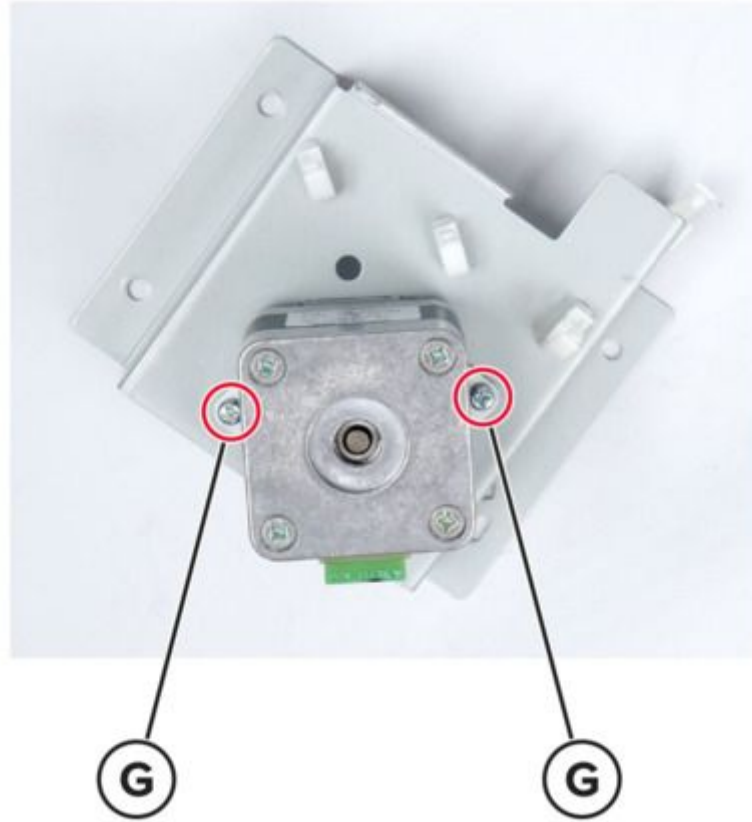
1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Open the trifold/Z-fold controller board tray. See [See "Opening the trifold/Z-fold controller board tray" on page 1561.](#)
3. Disconnect the cable (A), release the cable from their guides (B), release the spring (C), and then remove the pulley (D).



4. Remove the three screws (E), and then remove the motor bracket (F).

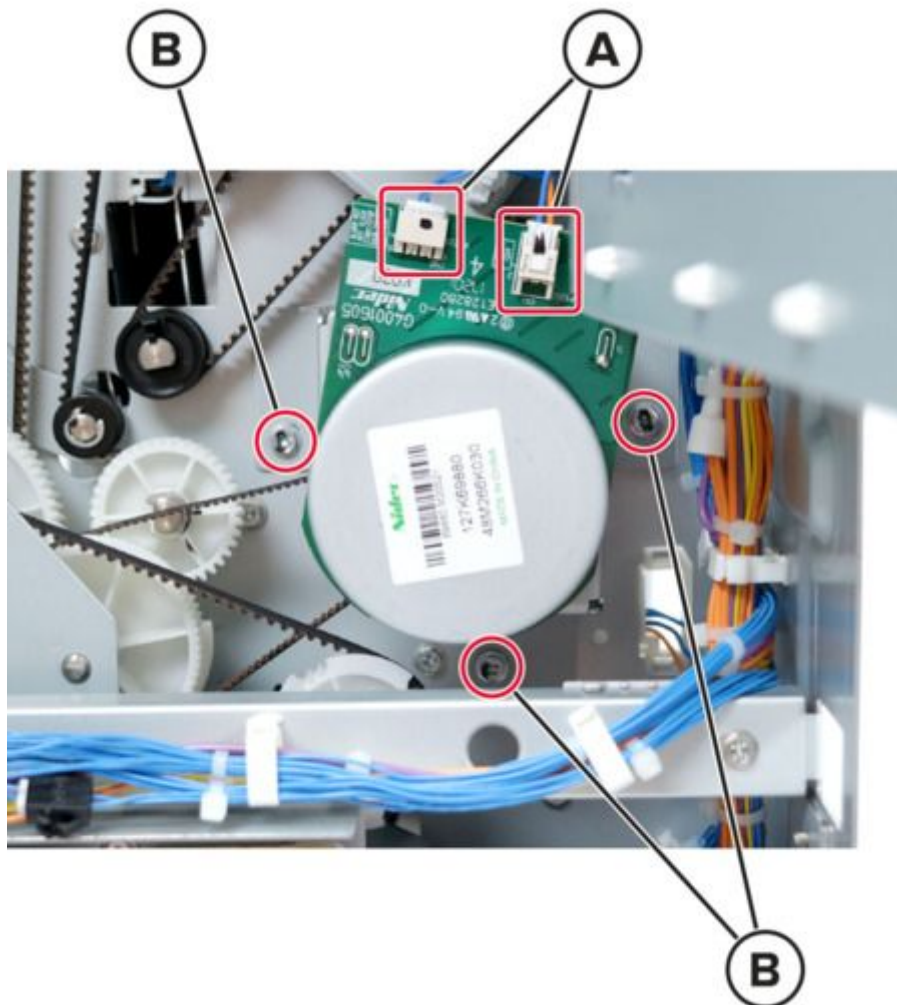


5. Remove the two screws (G), and then remove the motor from the bracket.



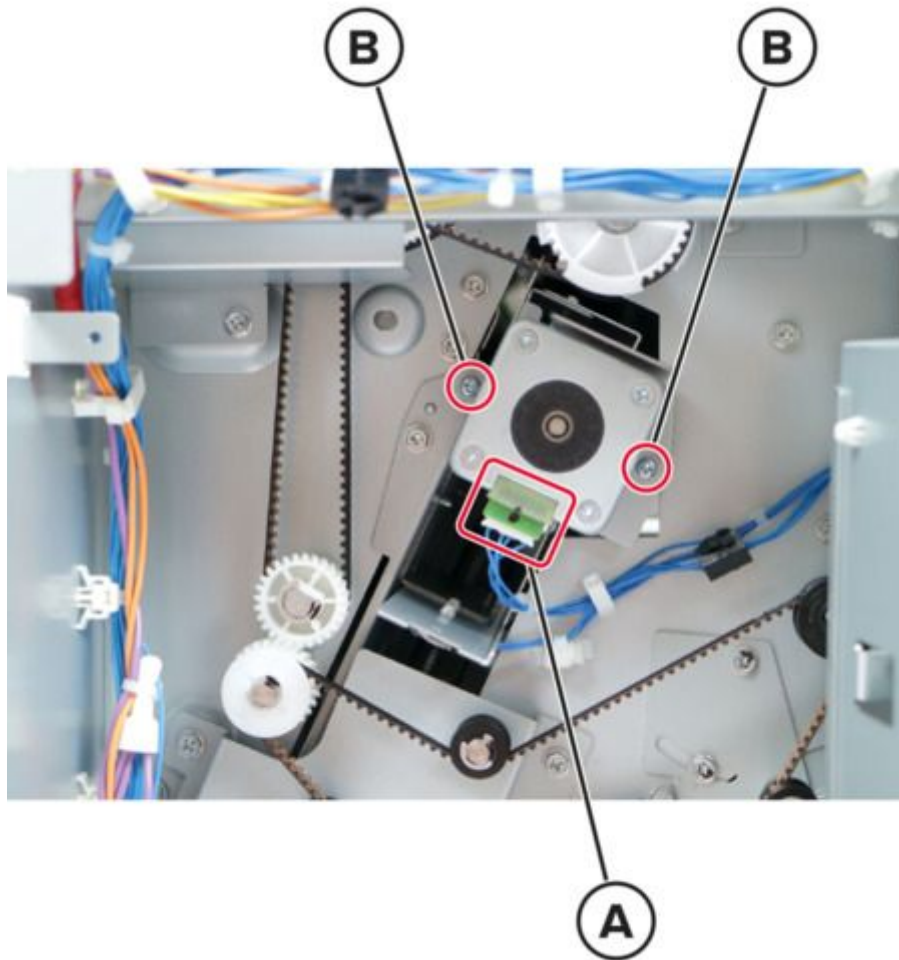
Motor (trifold/Z-fold transport 2) removal

1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Open the trifold/Z-fold controller board tray. See [See "Opening the trifold/Z-fold controller board tray" on page 1561.](#)
3. Disconnect the two cables (A), remove the three screws (B), and then remove the motor.



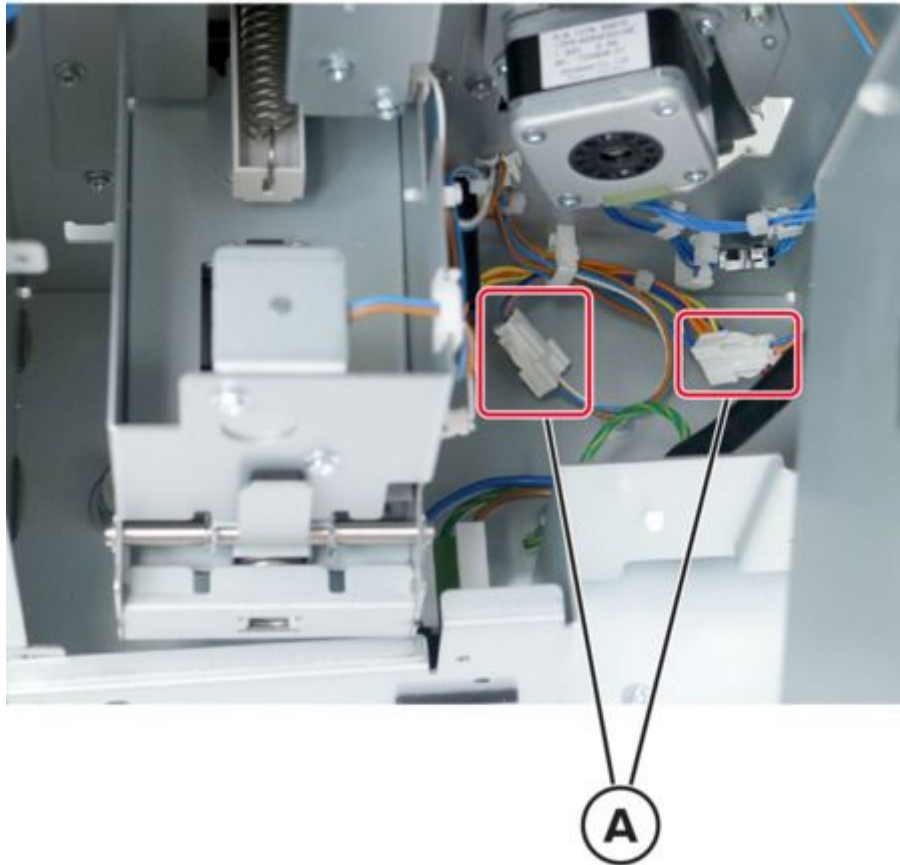
Motor (first fold catch) removal

1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Open the trifold/Z-fold LVPS tray. See [See "Opening the trifold/Z-fold LVPS tray" on page 1563.](#)
3. Disconnect the cable (A), remove the two screws (B), and then remove the motor.

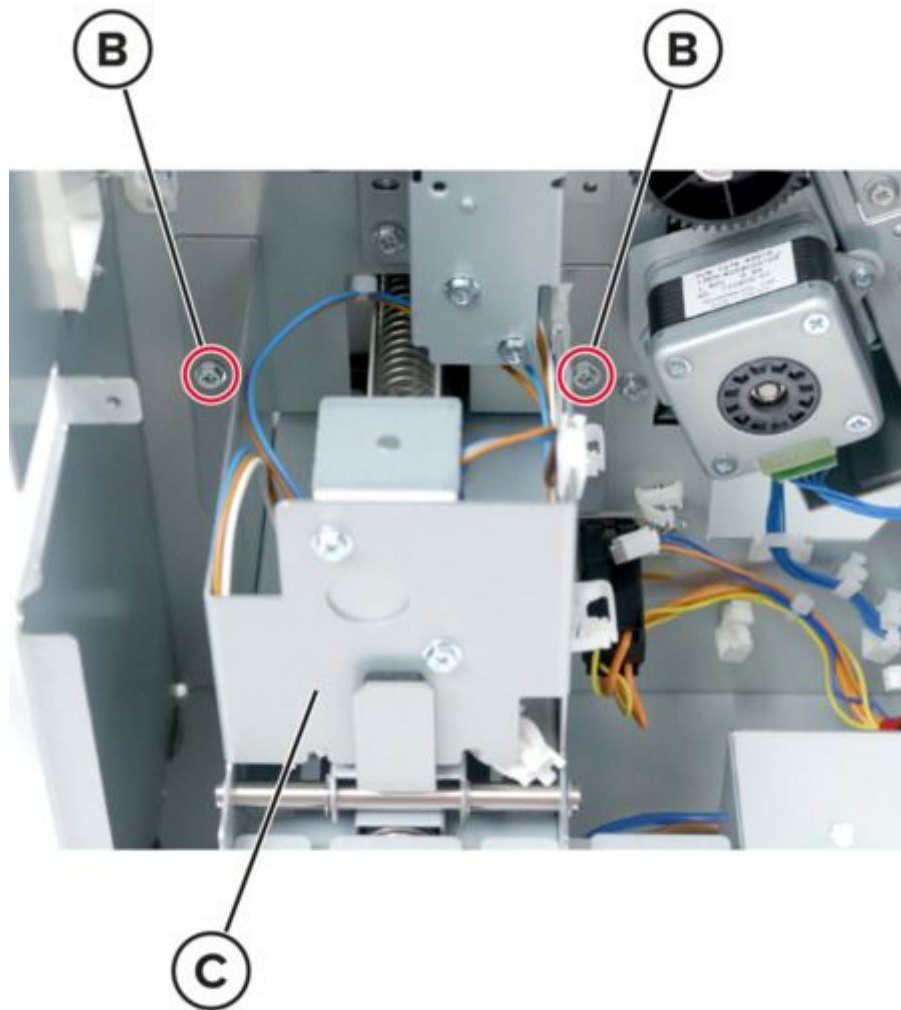


Trifold/Z-fold bin diverter solenoid removal

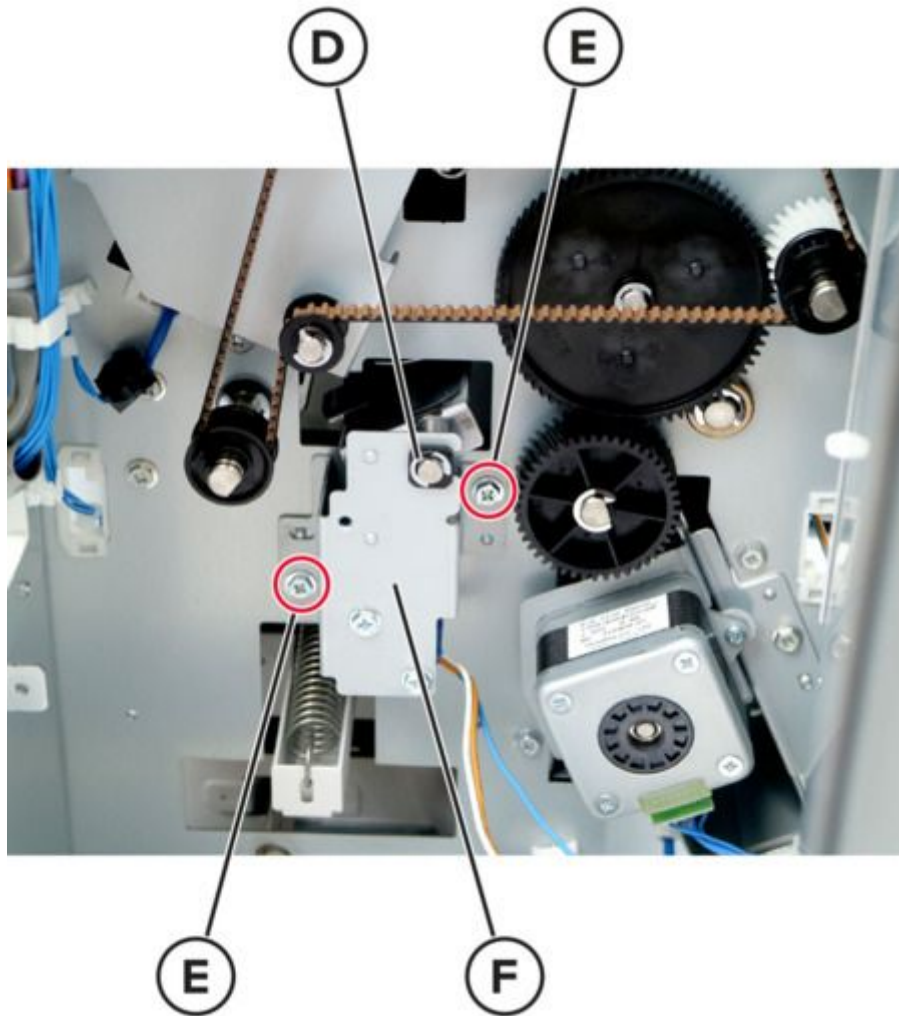
1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Open the trifold/Z-fold LVPS tray. See [See "Opening the trifold/Z-fold LVPS tray" on page 1563.](#)
3. Disconnect the two cables (A), and then release the cables from their guides.



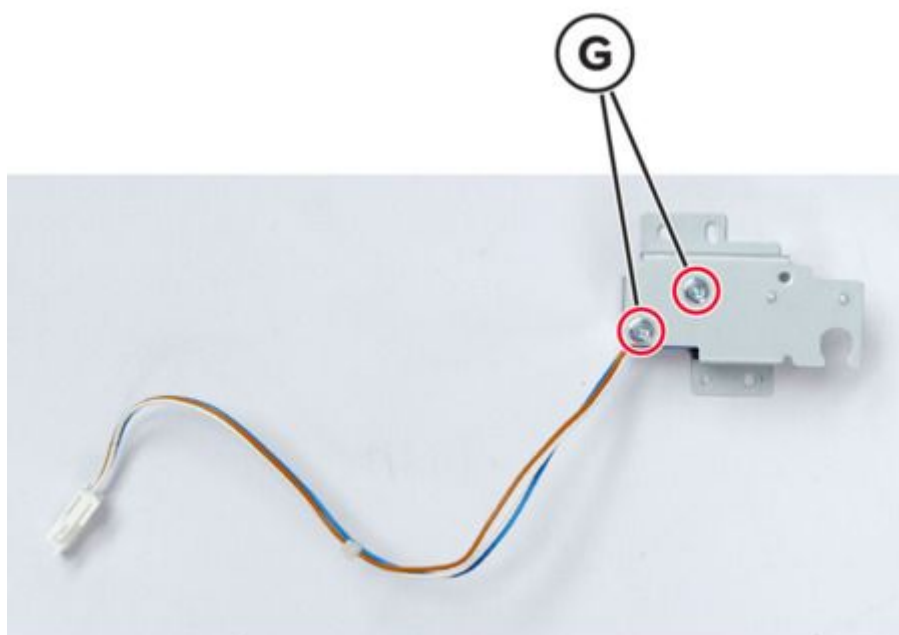
4. Remove the two screws (B), and then remove the bracket (C).



5. Remove the E-clip (D), remove the two screws (E), and then remove the bracket (F).

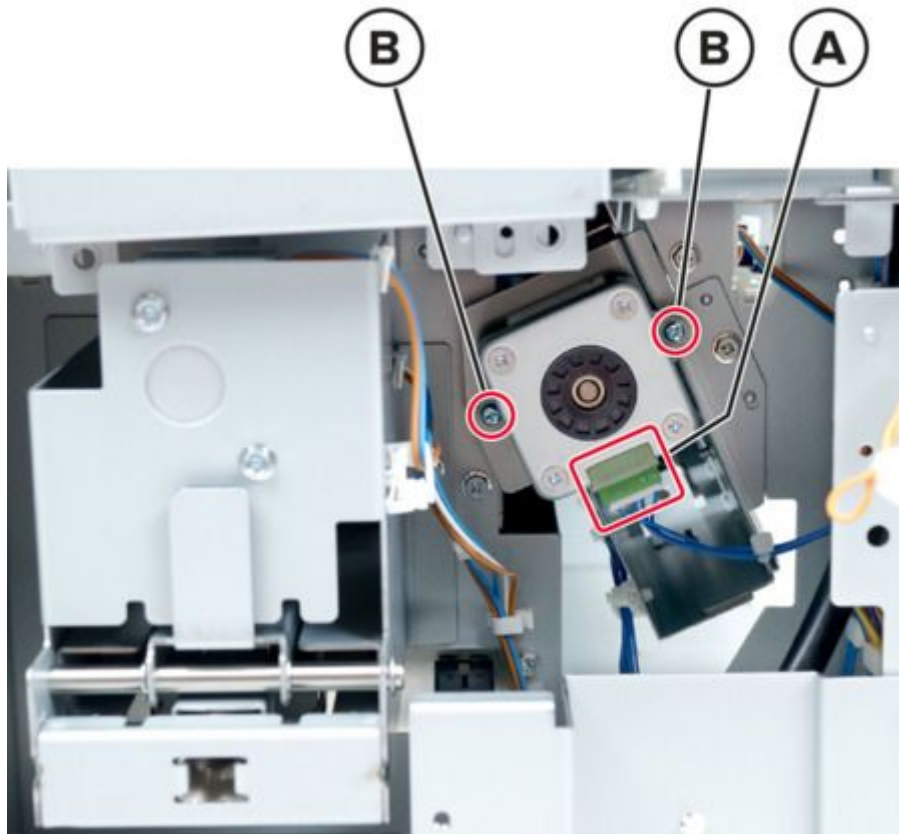


6. Remove the two screws (G), and then remove the bin diverter solenoid from the bracket.



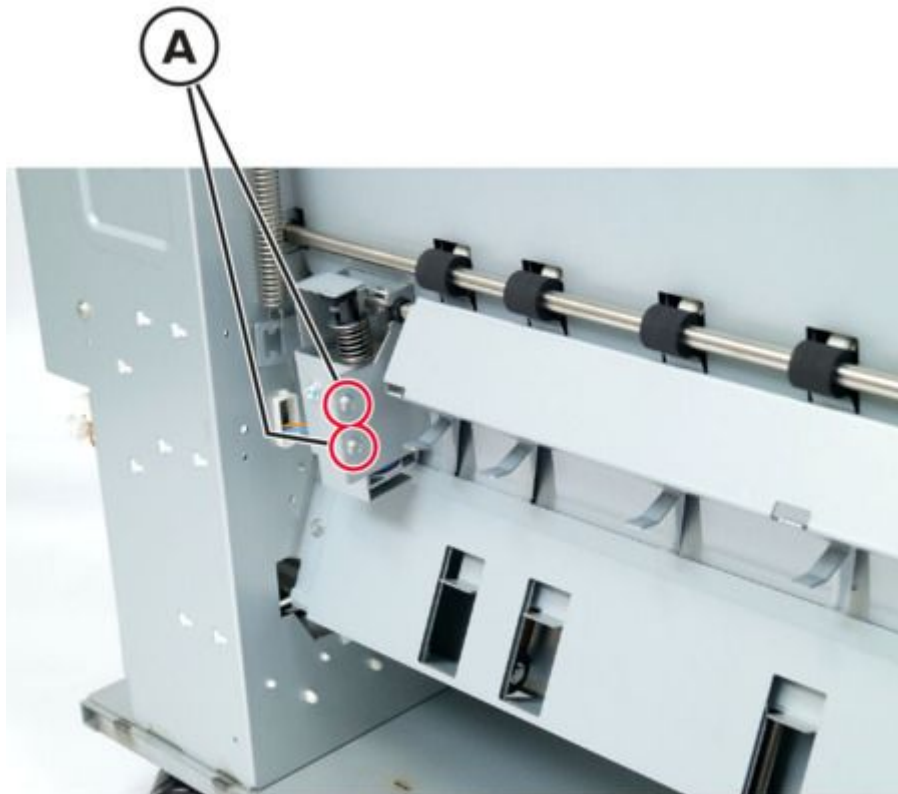
Motor (second fold catch) removal

1. Remove the trifold/Z-fold rear cover. See [See "Trifold/Z-fold rear cover removal" on page 1536.](#)
2. Disconnect the cable (A), remove two screws (B), and then remove the motor.

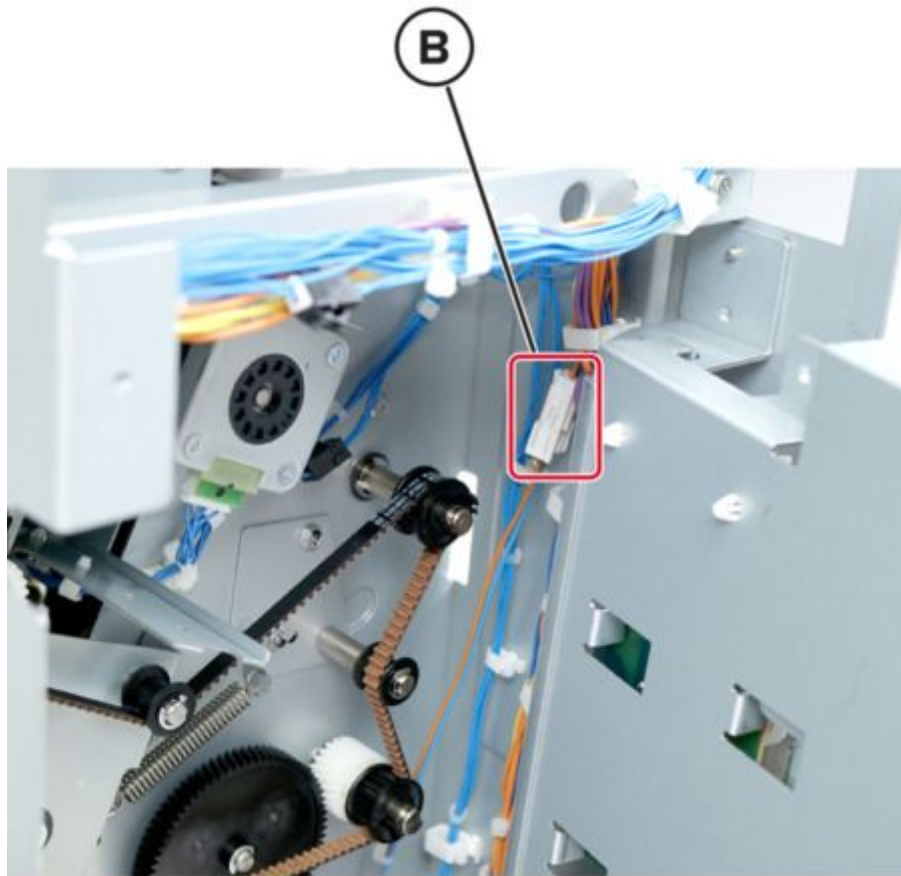


Trifold/Z-fold bin lock solenoid removal

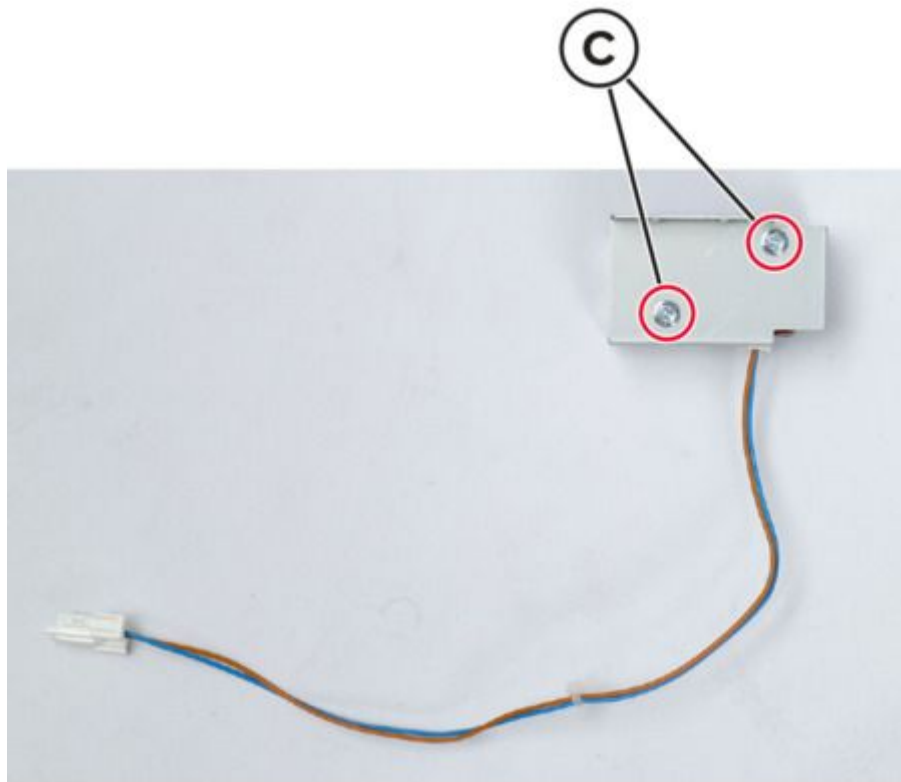
1. Remove the trifold/Z-fold lower installation bracket. See [See "Trifold/Z-fold lower installation bracket removal" on page 1547.](#)
2. Remove the trifold/Z-fold lower left cover. See [See "Trifold/Z-fold lower left cover removal" on page 1535.](#)
3. Remove the two screws (A).



4. Open the trifold/Z-fold LVPS tray. See [See "Opening the trifold/Z-fold LVPS tray" on page 1563.](#)
5. Disconnect the cable (B), and then remove the bin lock solenoid bracket.

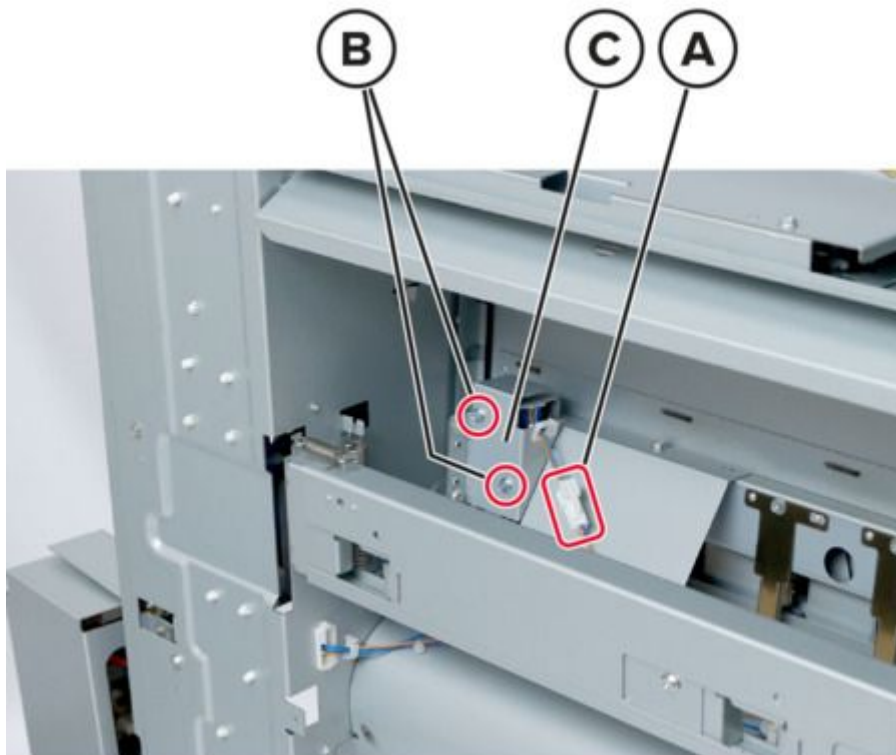


6. Remove the two screws (C), and then remove the bin lock solenoid from the bracket.

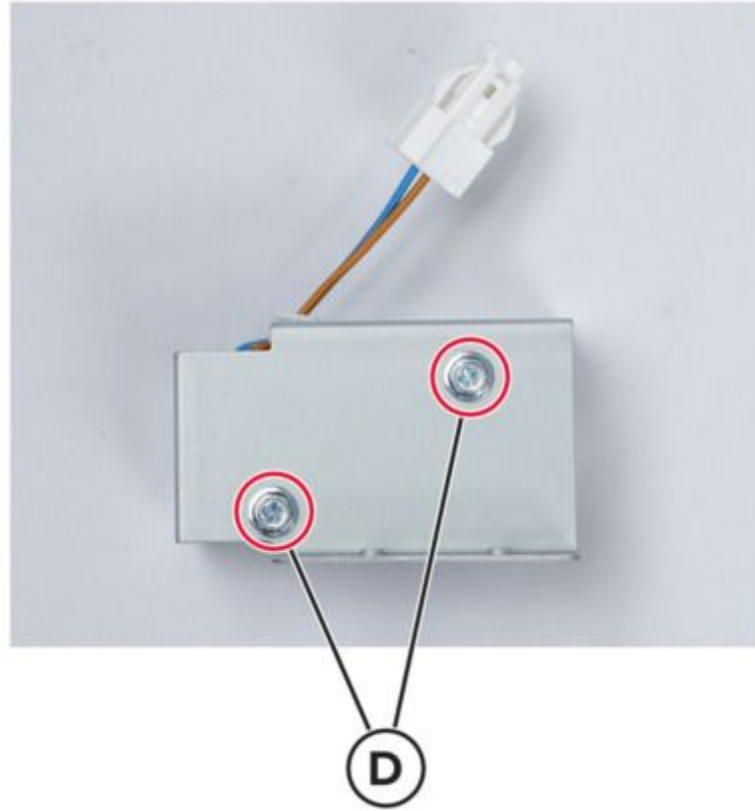


Trifold/Z-fold fold guide solenoid removal

1. Disconnect the cable (A), remove the two screws (B), and then remove the fold guide solenoid bracket (C).

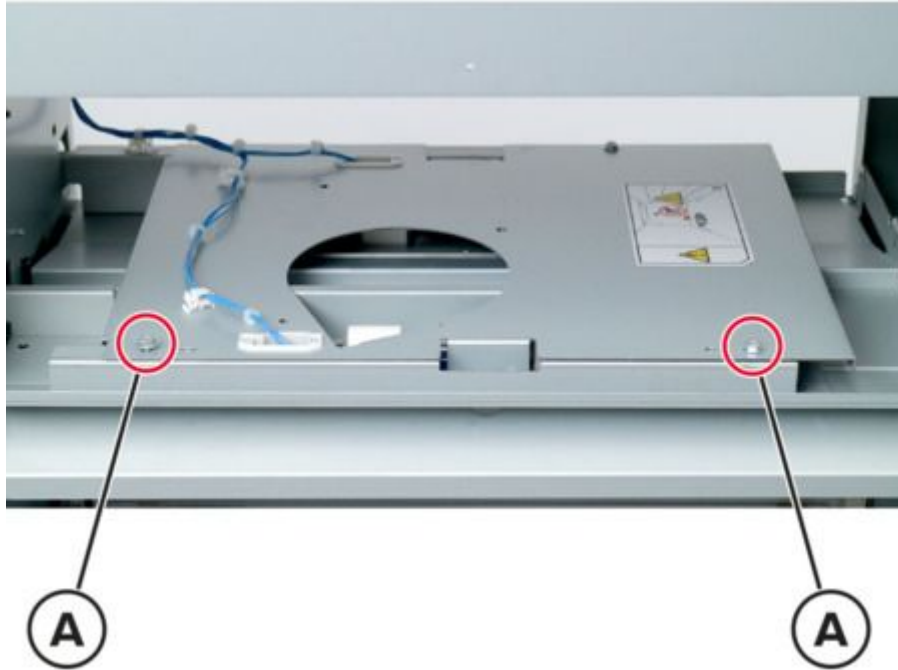


2. Remove the two screws (D), and then remove the fold guide solenoid from the bracket.

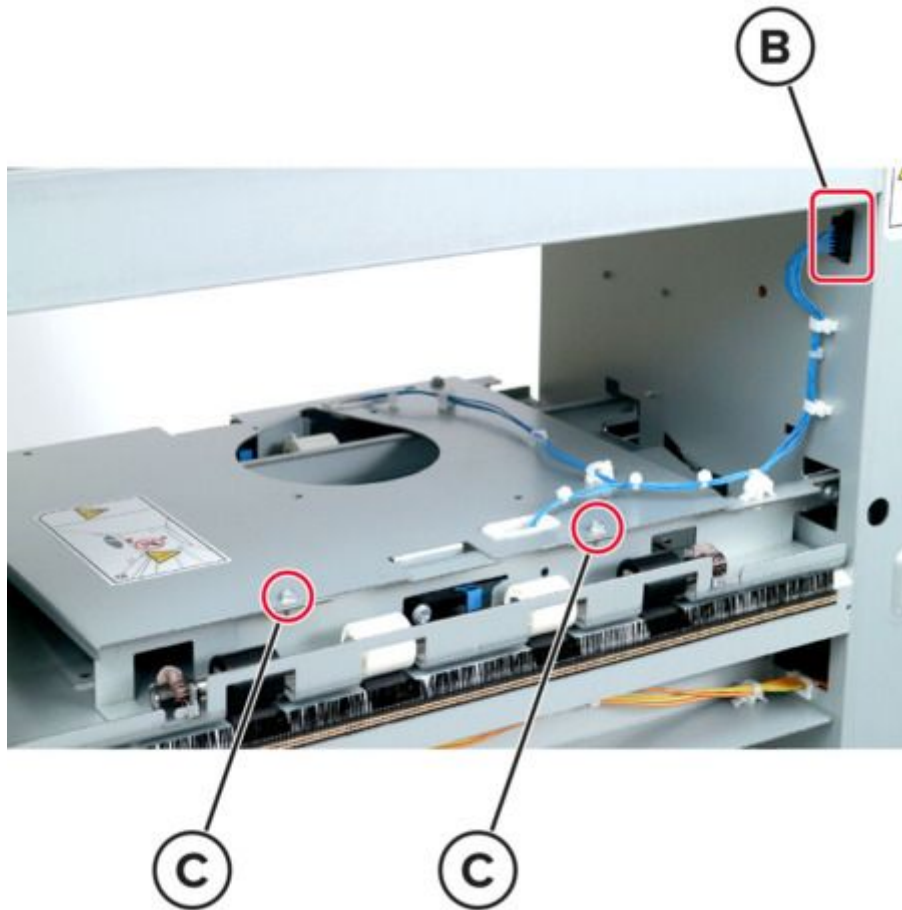


Sensor (trifold/Z-fold exit) removal

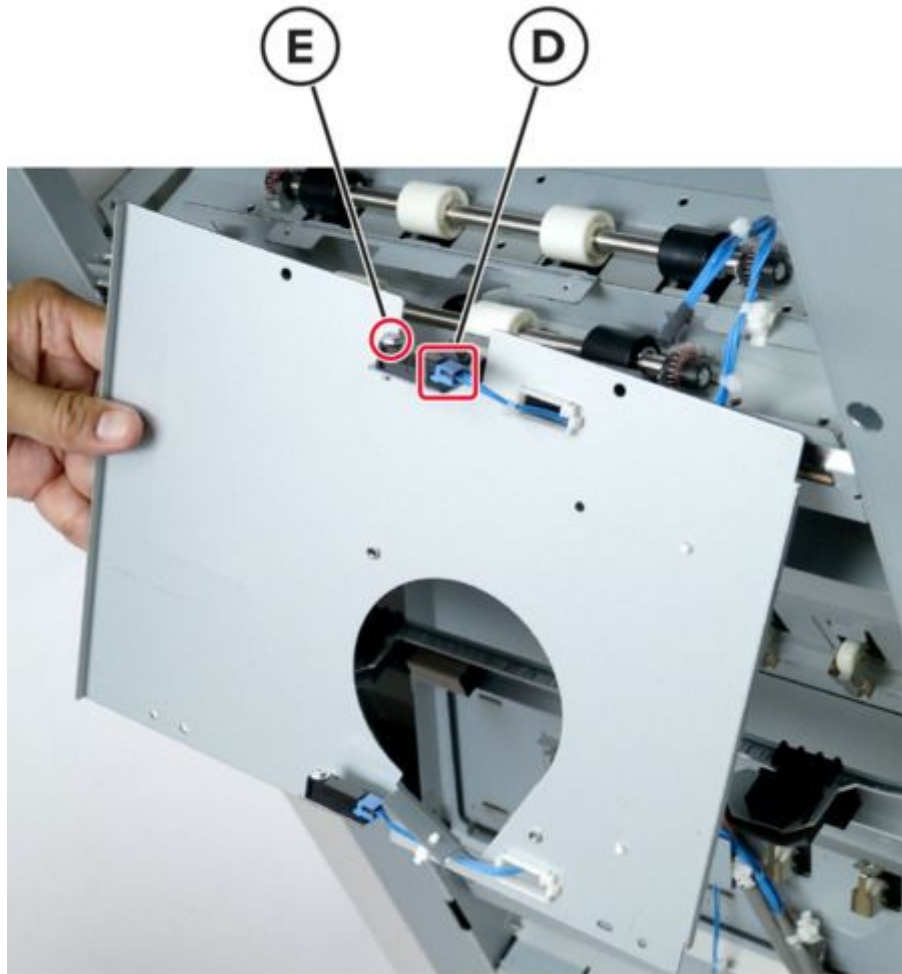
1. Remove the trifold/Z-fold upper left cover 1. See [See "Trifold/Z-fold upper left cover 1 removal" on page 1533.](#)
2. Remove the two screws (A) on the left side.



3. Disconnect the cable (B), and then remove the two screws (C) on the right side.

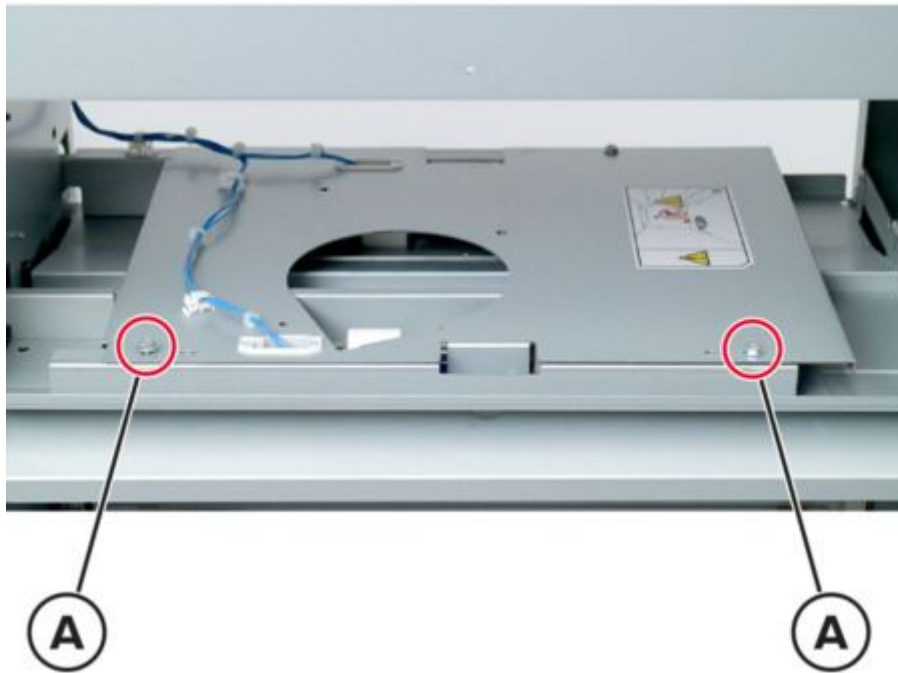


4. Disconnect the cable (D), and then remove the screw (E).

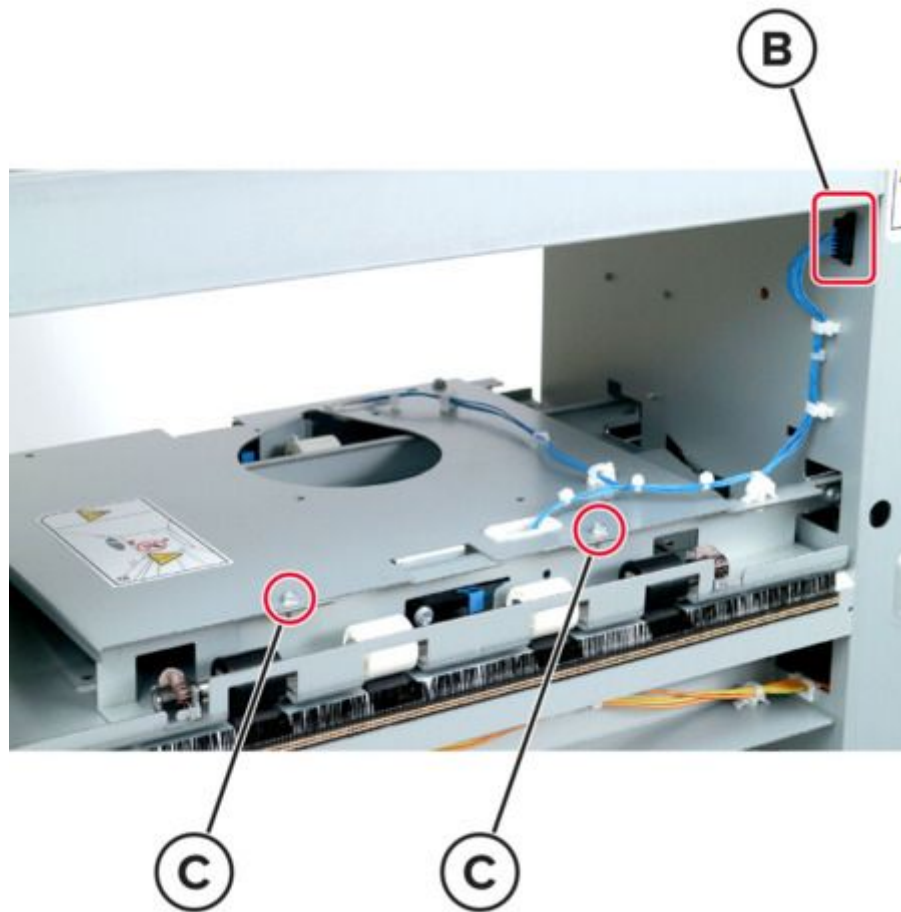


Sensor (trifold/Z-fold feed) removal

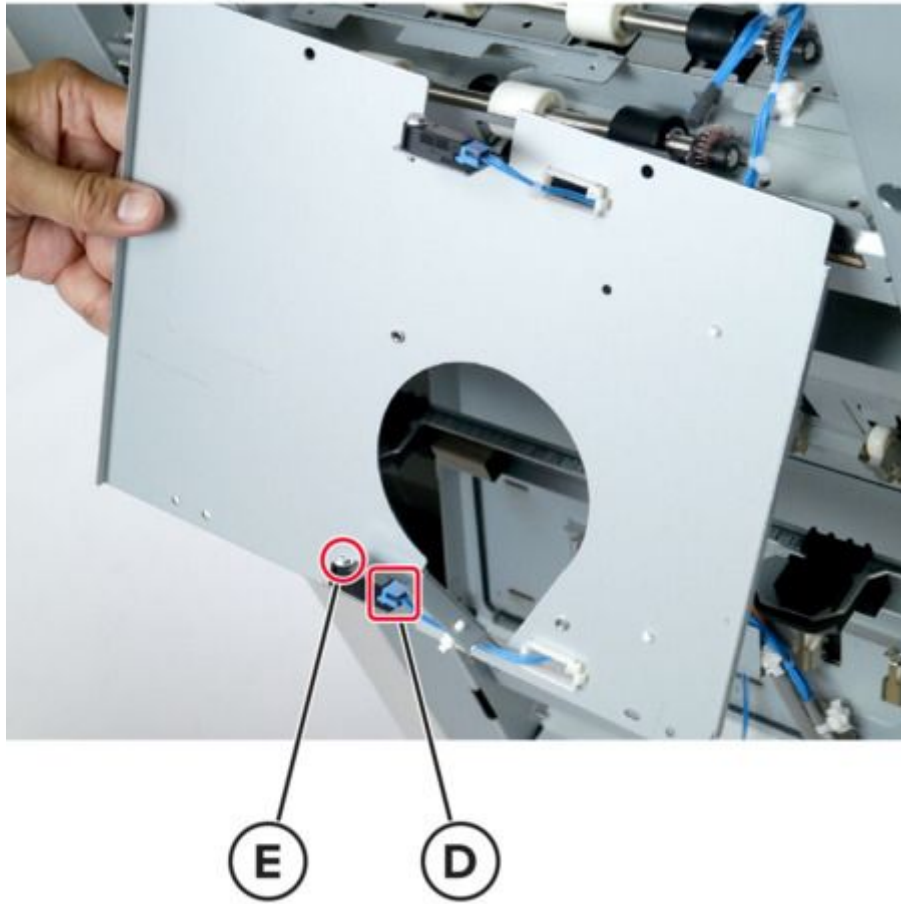
1. Remove the trifold/Z-fold upper left cover 1. See [See "Trifold/Z-fold upper left cover 1 removal" on page 1533.](#)
2. Remove the two screws (A) on the left side.



3. Disconnect the cable (B), and then remove the two screws (C) on the right side.

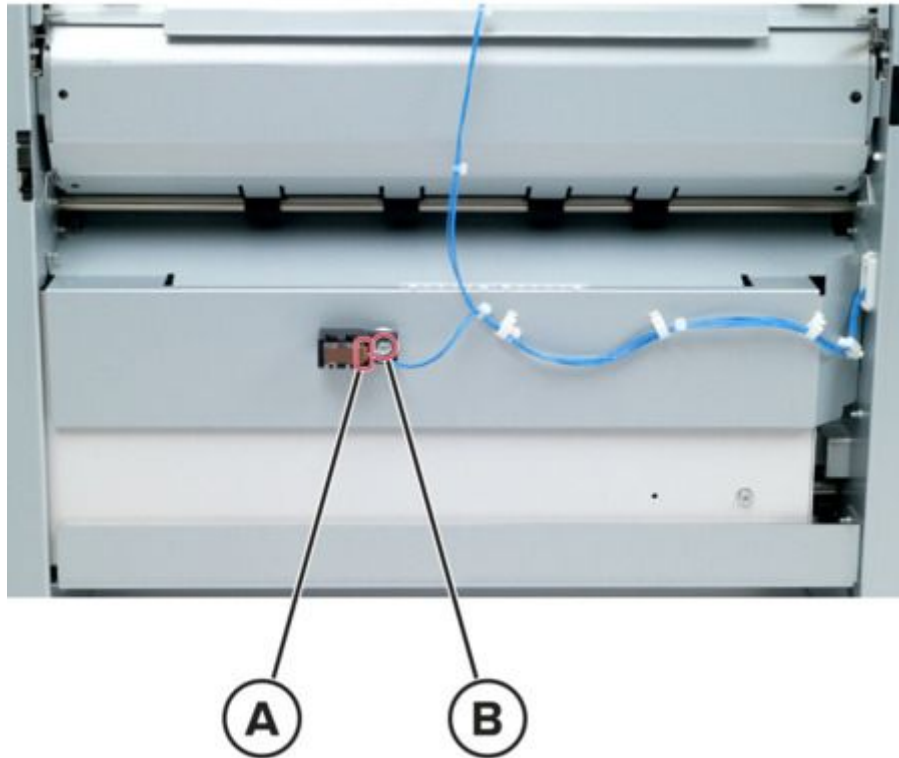


4. Disconnect the cable (D), and then remove the screw (E).



Sensor (trifold/Z-fold bin full transmit) removal

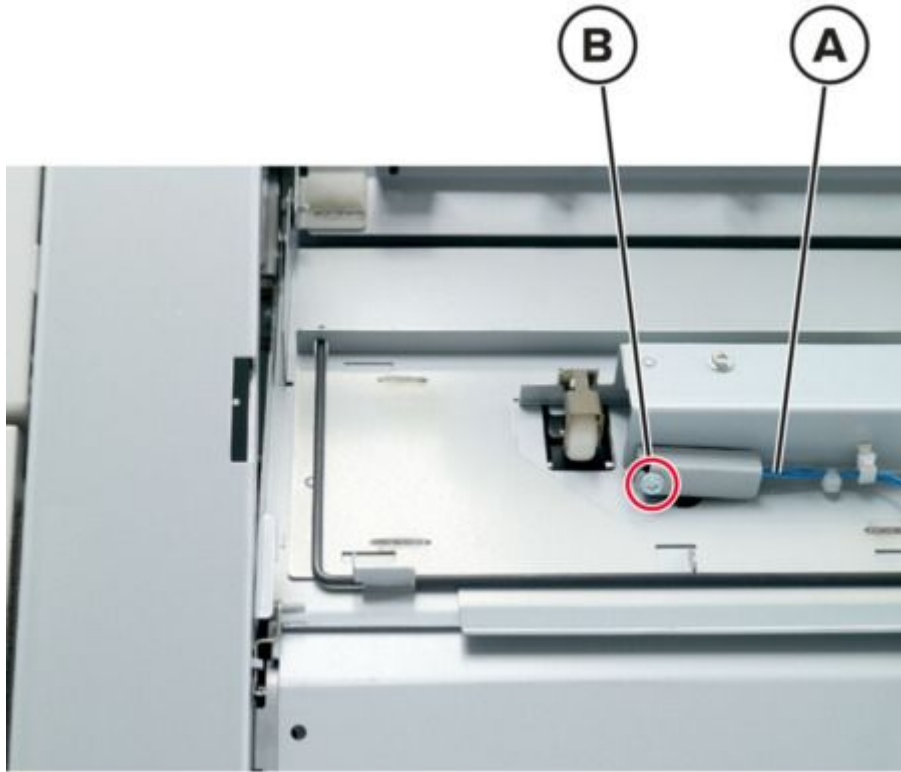
1. Disconnect the cable (A), remove the screw (B).



2. Remove the sensor.

Sensor (trifold/Z-fold transport 2) removal

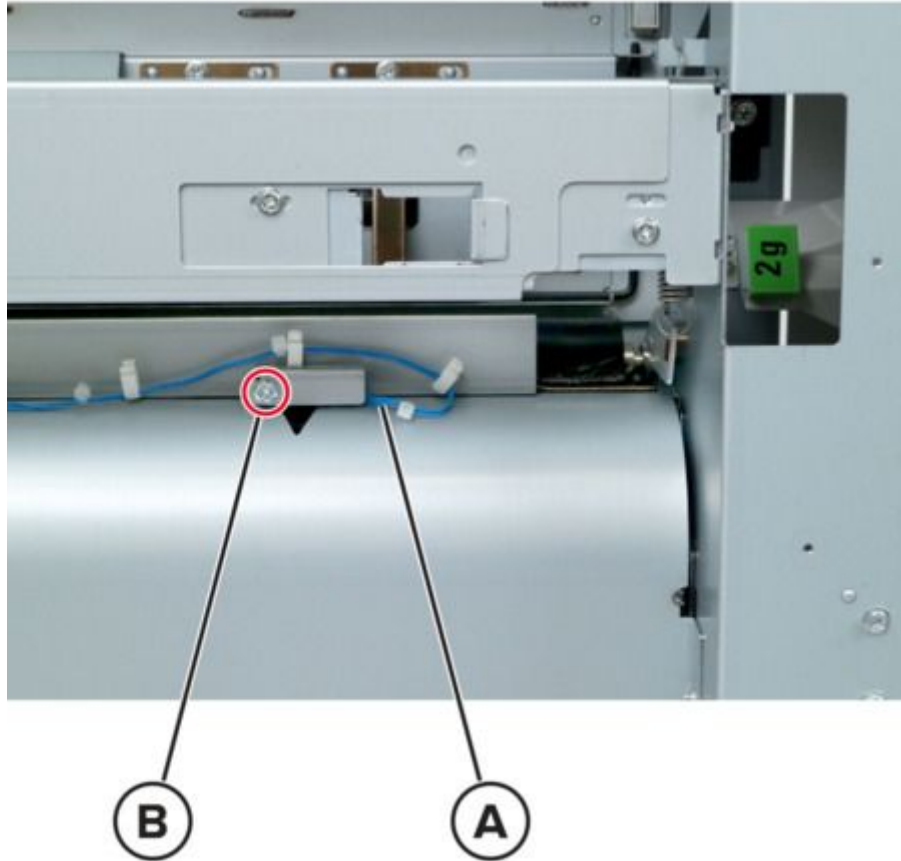
1. Disconnect the cable (A), and then remove the screw (B).



2. Remove the sensor.

Sensor (trifold/Z-fold first fold) removal

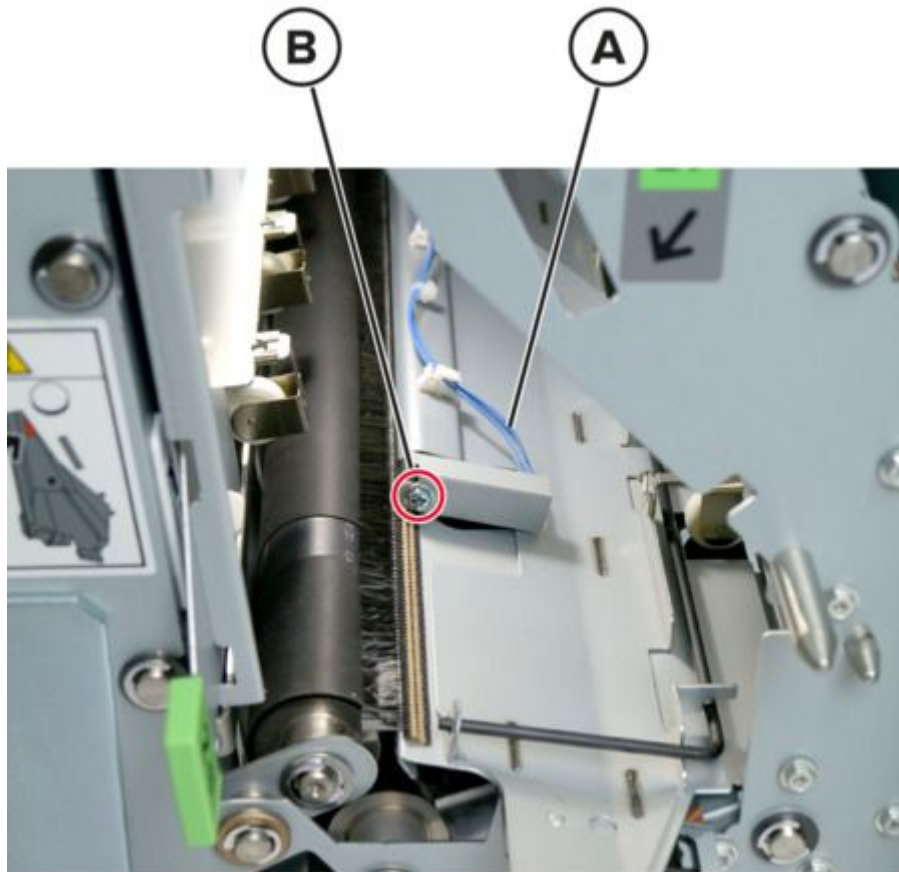
1. Disconnect the cable (A), and then remove the screw (B).



2. Remove the sensor.

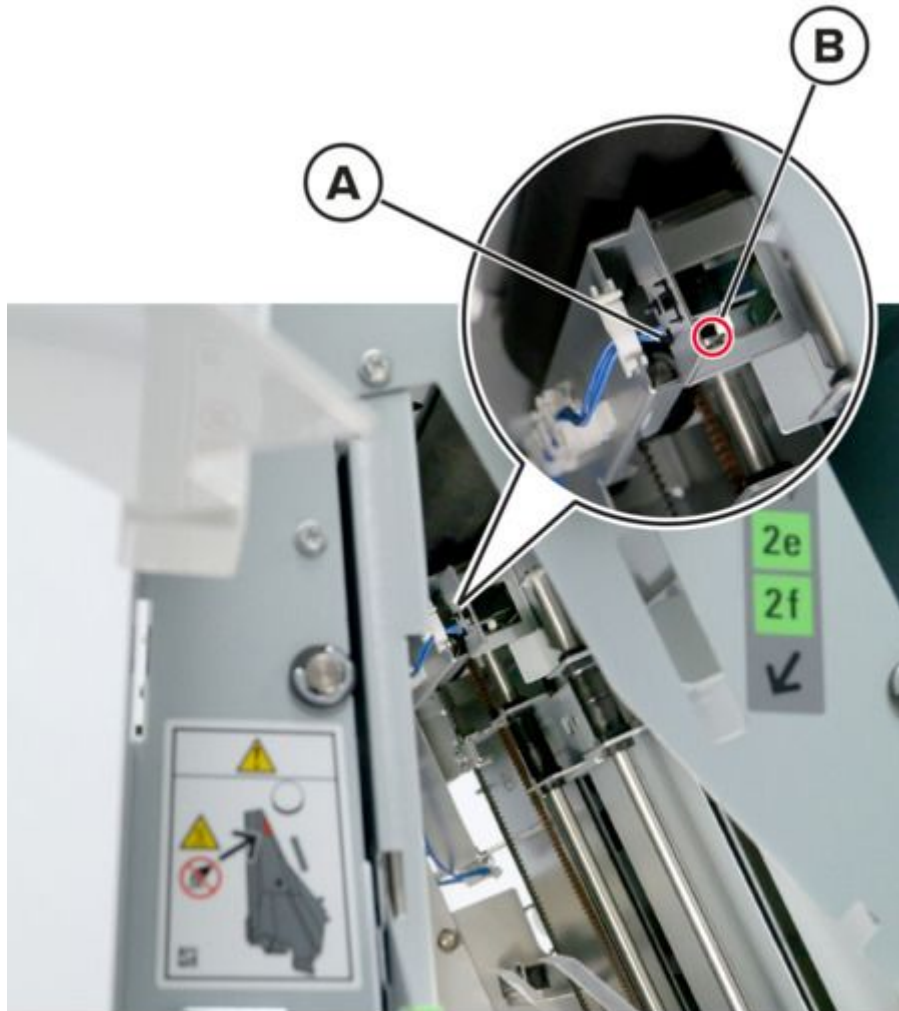
Sensor (trifold/Z-fold second fold) removal

1. Open the trifold/Z-fold door.
2. Remove the trifold/Z-fold bin. See [See "Trifold/Z-fold bin removal" on page 1544.](#)
3. Disconnect the cable (A), remove the screw (B), and then remove the sensor.



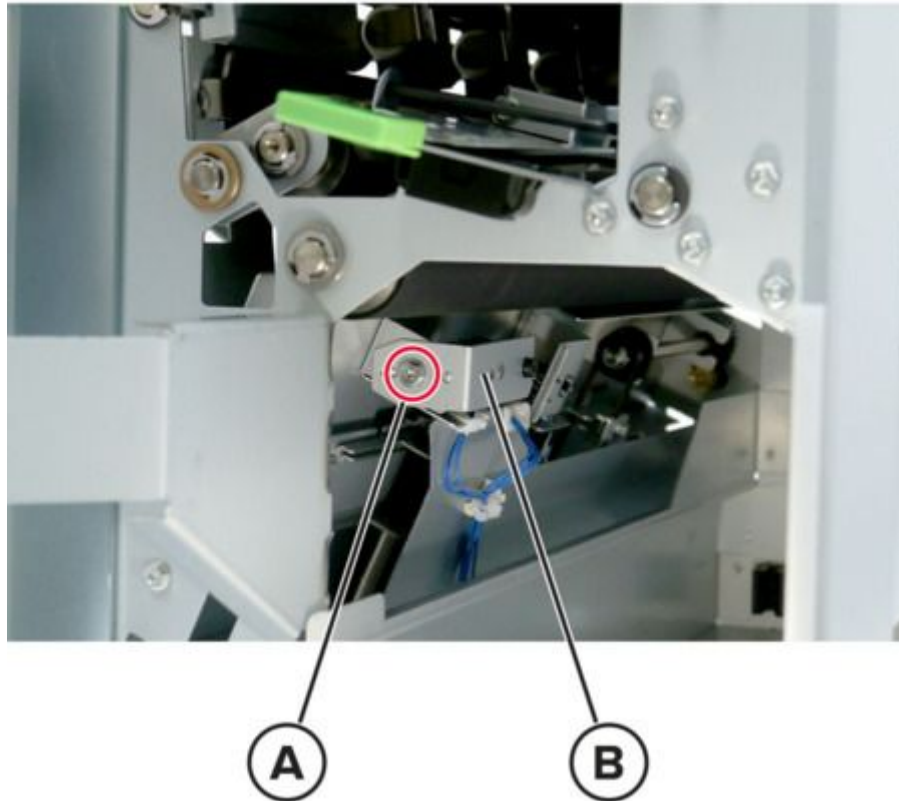
Sensor (trifold/Z-fold first fold catch) removal

1. Open the trifold/Z-fold door.
2. Remove the trifold/Z-fold bin. See [See "Trifold/Z-fold bin removal" on page 1544.](#)
3. Disconnect the cable (A), remove the screw (B), and then remove the sensor.

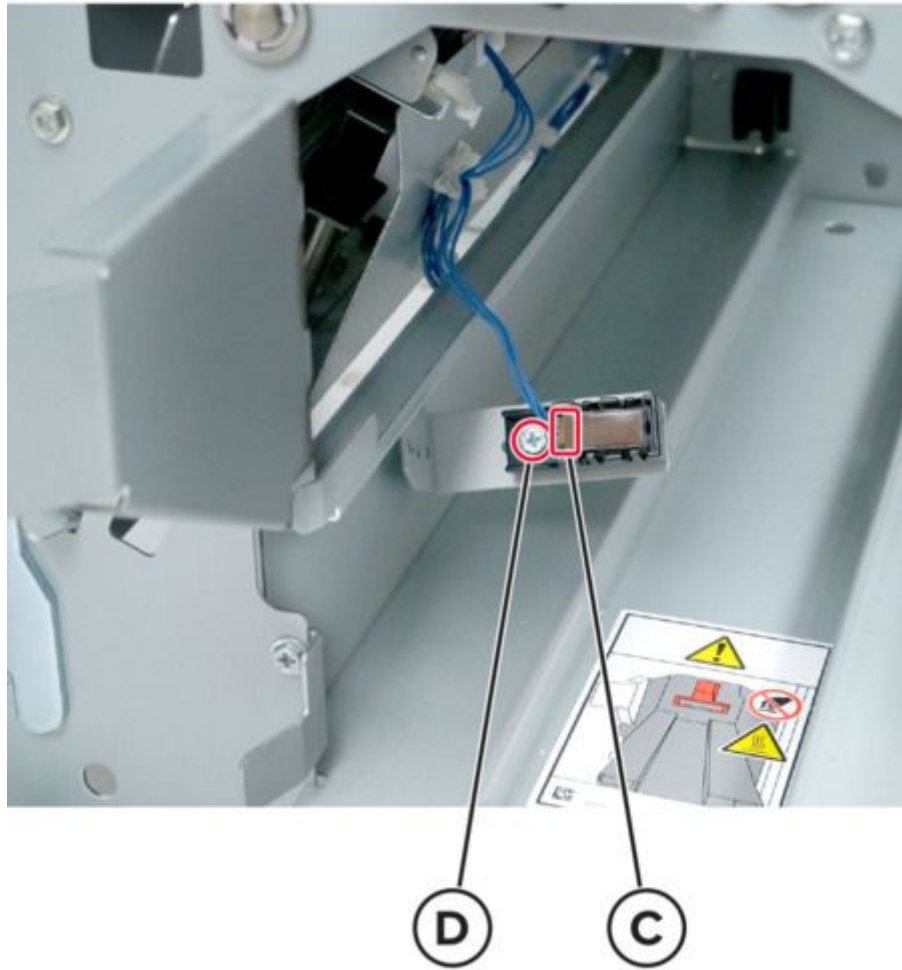


Sensor (trifold/Z-fold bin full receive) removal

1. Open the trifold/Z-fold finisher door.
2. Remove the trifold/Z-fold bin. See [See "Trifold/Z-fold bin removal" on page 1544.](#)
3. Remove the screw (A), and then remove the sensor bracket (B).

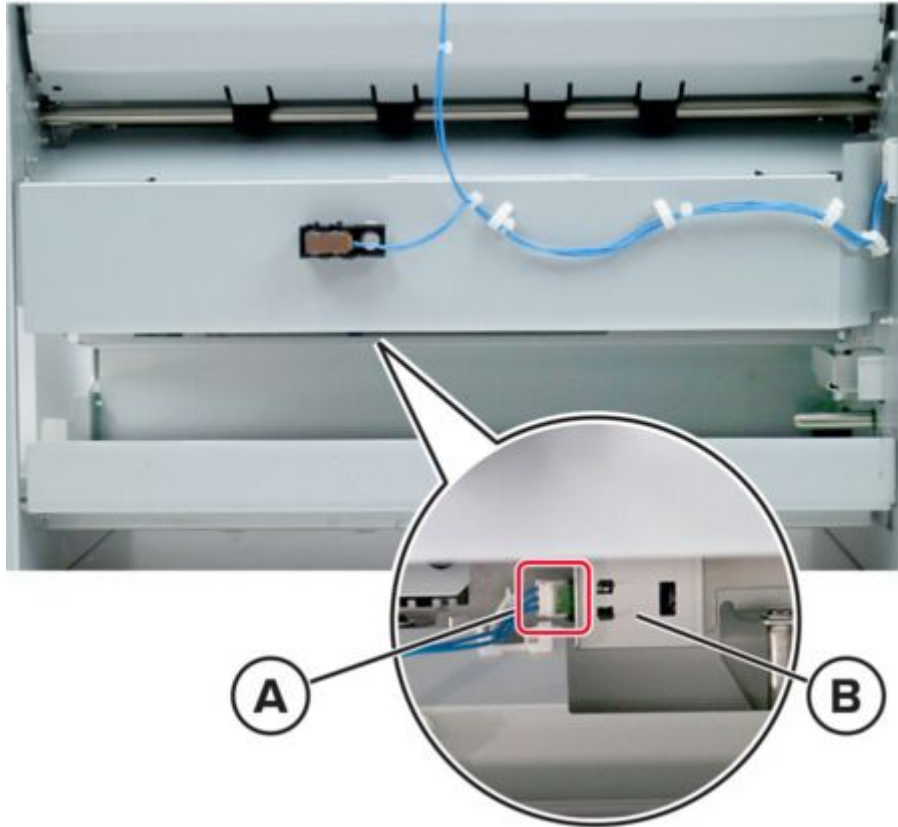


4. Disconnect the cable (C), remove the screw (D), and then remove the sensor.



Sensor (trifold/Z-fold second fold catch) removal

1. Open the trifold/Z-fold finisher door.
2. Remove the trifold/Z-fold bin. See [See "Trifold/Z-fold bin removal" on page 1544.](#)
3. Disconnect the cable (A), and then remove the sensor from the bracket (B).



Staple finisher removals

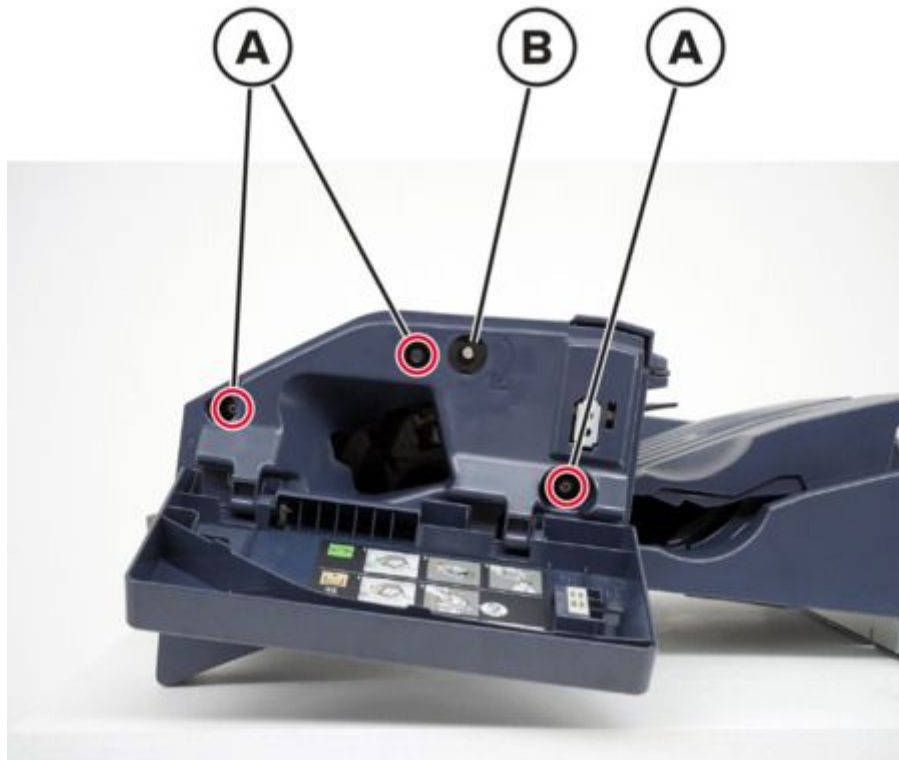
Staple finisher stapler roll knob removal

1. Open the staple finisher front cover.
2. Remove the roll knob (A).



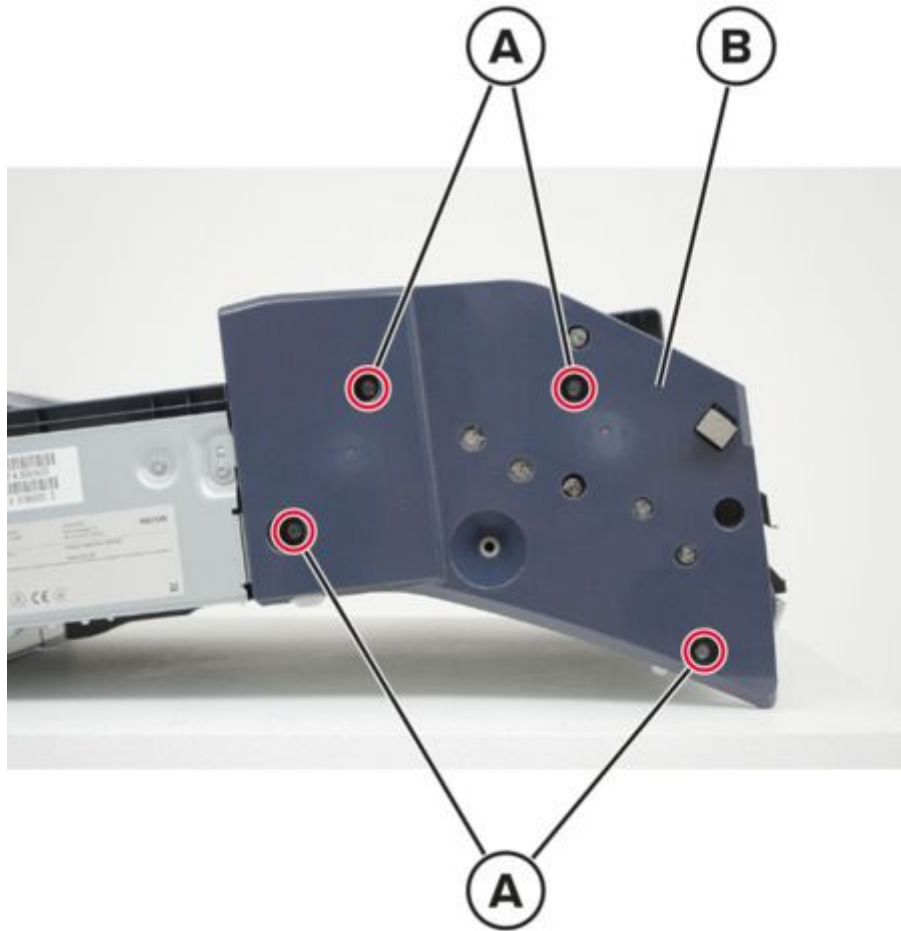
Staple finisher front cover removal

1. Remove the stapler roll knob. See [See "Staple finisher stapler roll knob removal" on page 1592.](#)
2. Remove the three screws (A), and then remove the cover (B).



Staple finisher rear cover removal

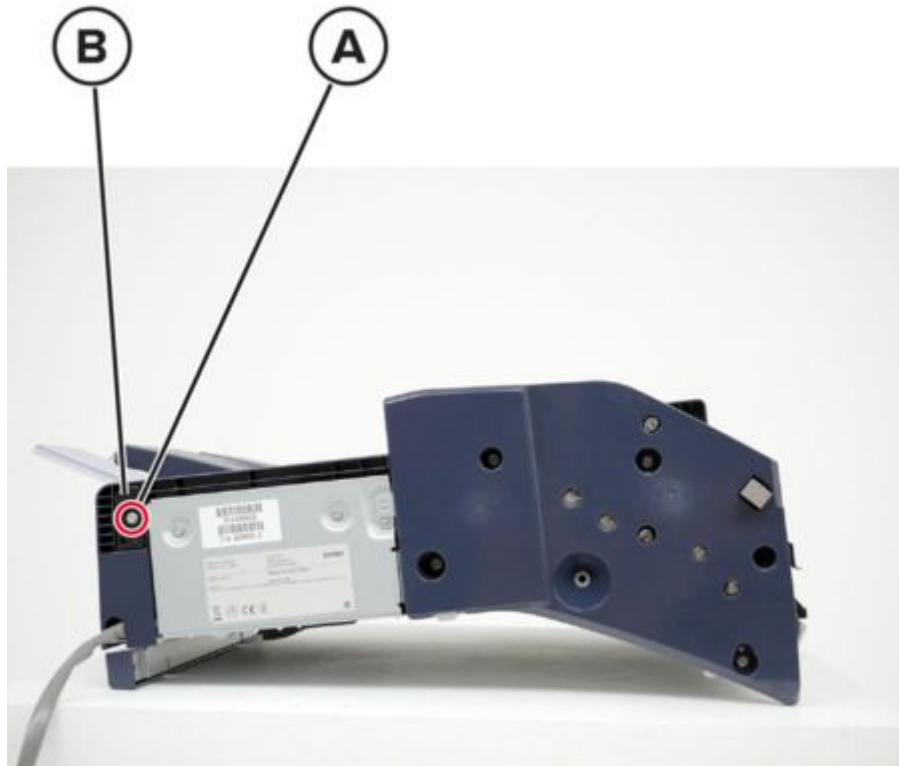
1. Remove the four screws (A).



2. Remove the cover (B).

Staple finisher base tray removal

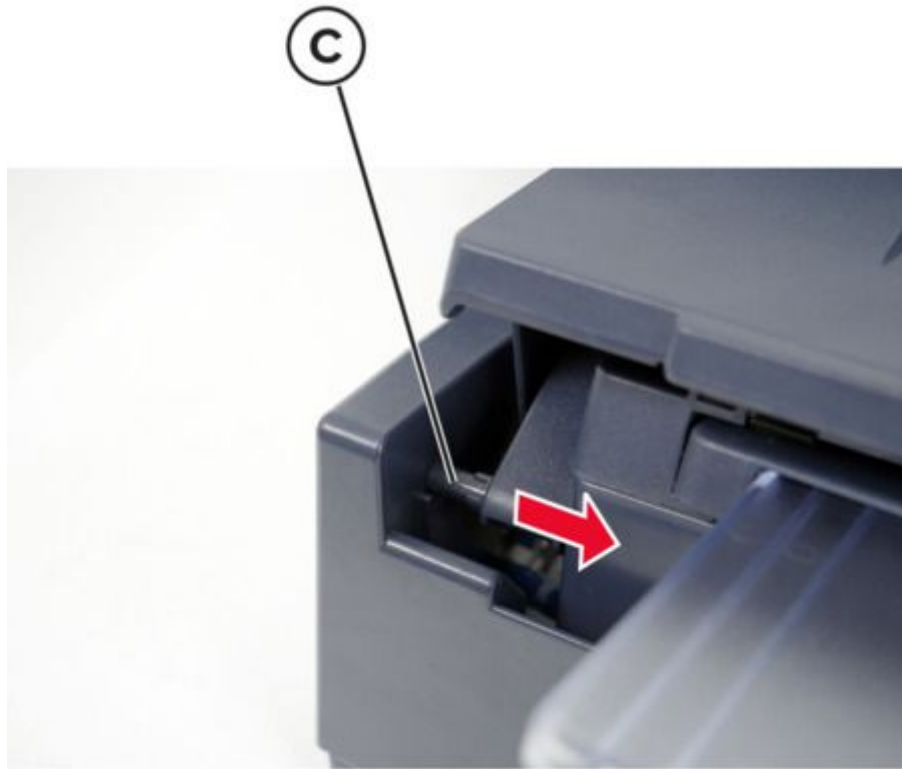
1. Remove the screw (A), and then remove the hinge (B).



2. Push the tray upward.



3. Push the tray to the right to loosen the hinge (C), and then remove the base tray.

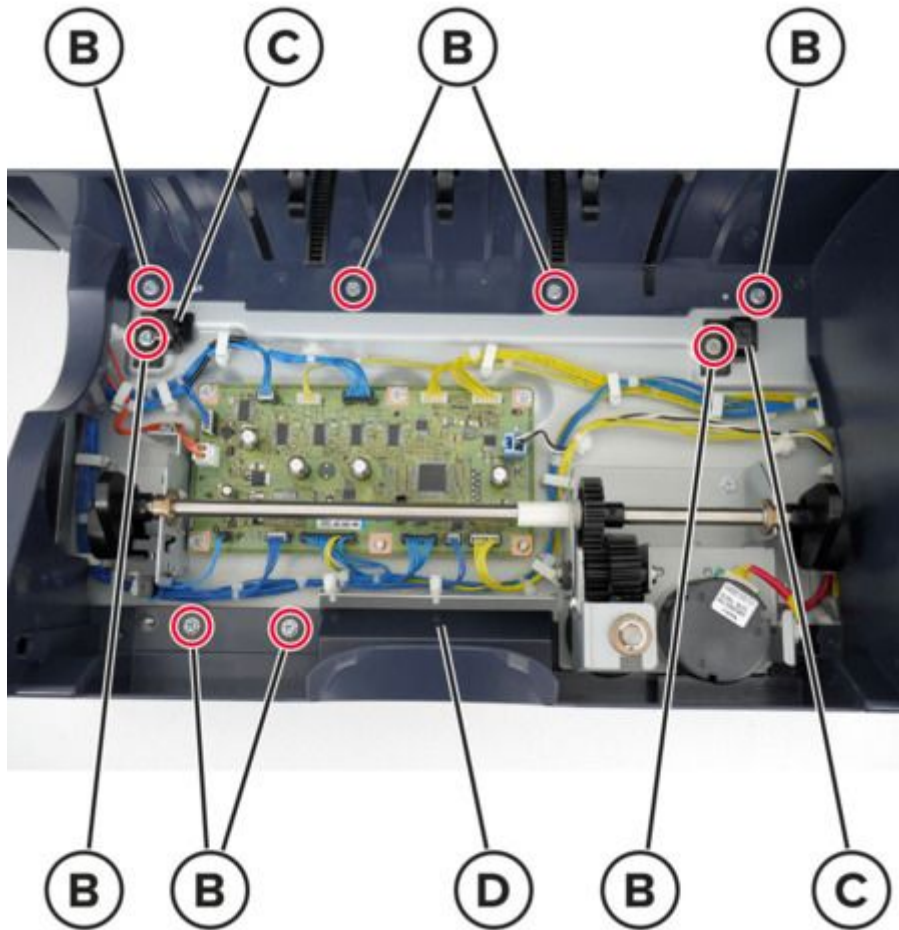


Staple finisher stacker base tray removal

1. Remove the staple finisher base tray. See [See "Staple finisher base tray removal" on page 1595.](#)
2. Remove the two screws (A).

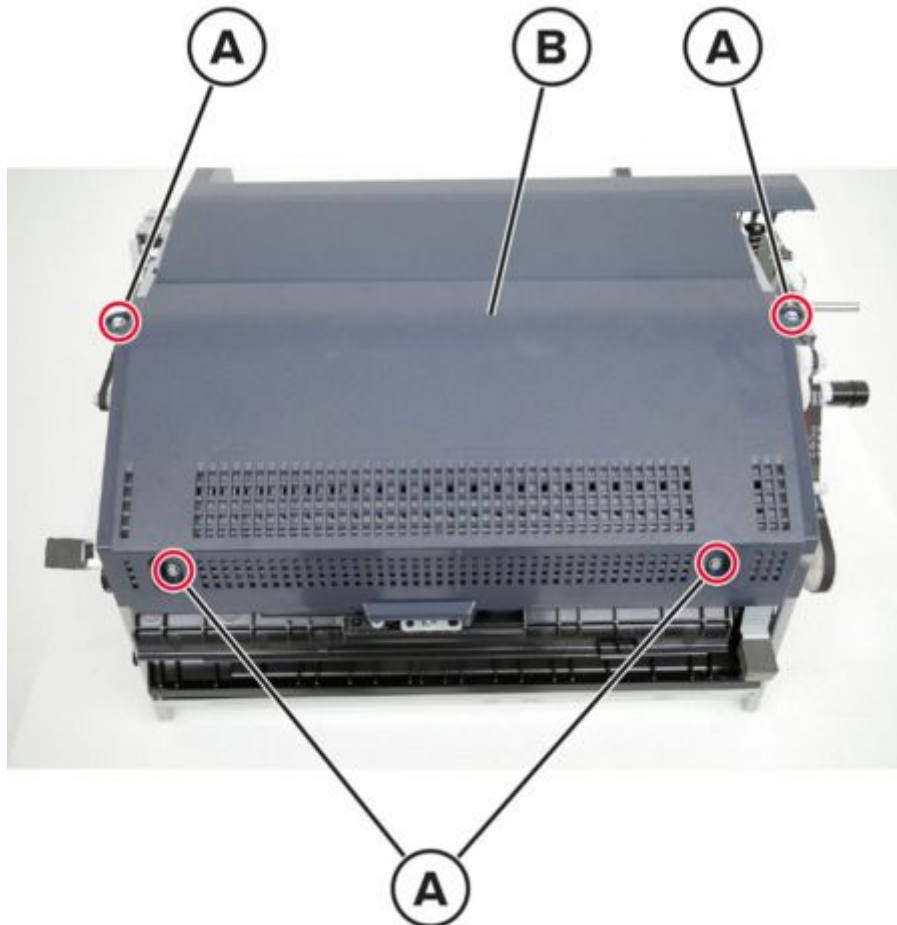


3. Remove the eight screws (B), remove the two hinges (C), and then remove the stacker base tray (D).



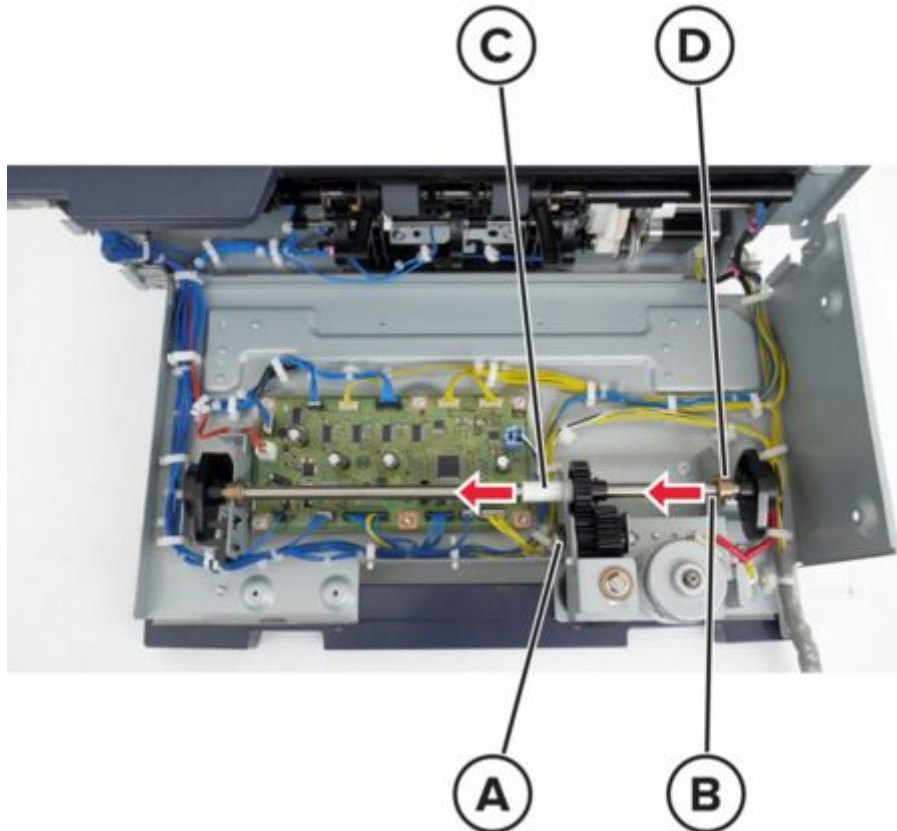
Staple finisher top LH cover removal

1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the four screws (A), and then remove the cover (B).

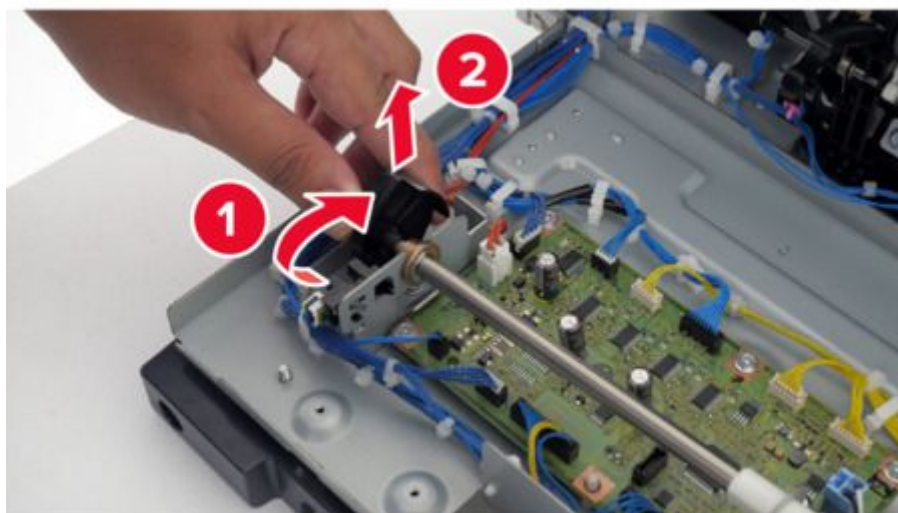


Staple finisher lift shaft removal

1. Remove the staple finisher stacker base tray. See ["Staple finisher stacker base tray removal" on page 1597](#).
2. Remove KL-clip (A), remove the E-clip (B), and then move the shaft bracket (C) and bushing (D) to the left.

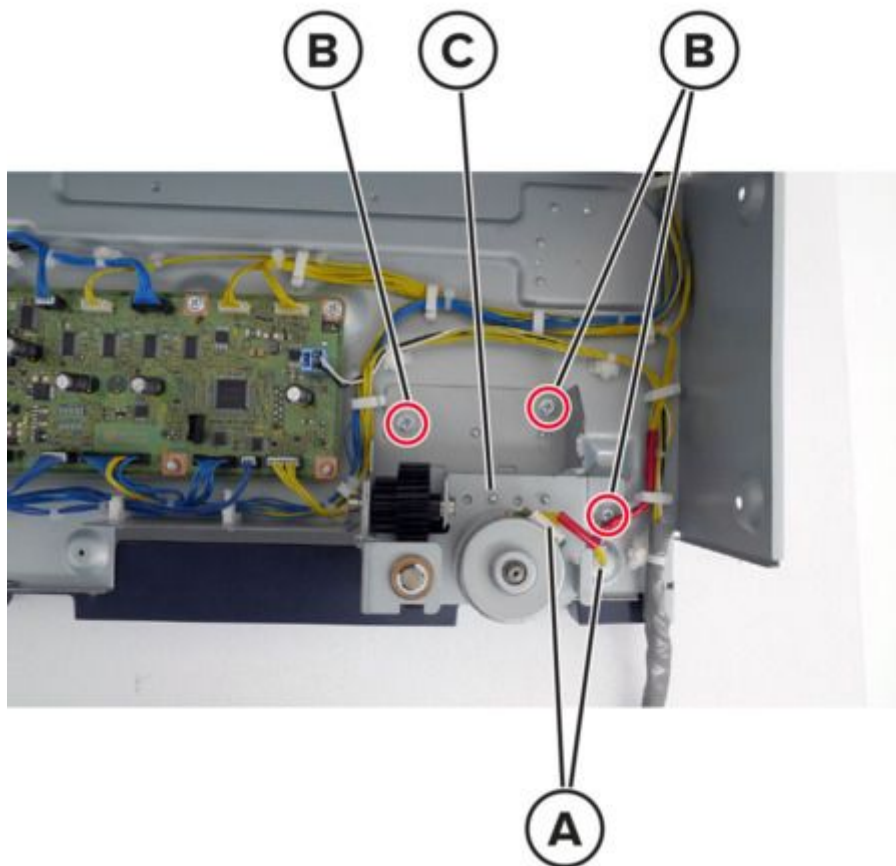


3. Turn the lift shaft assembly to the release position, and then lift to remove it.



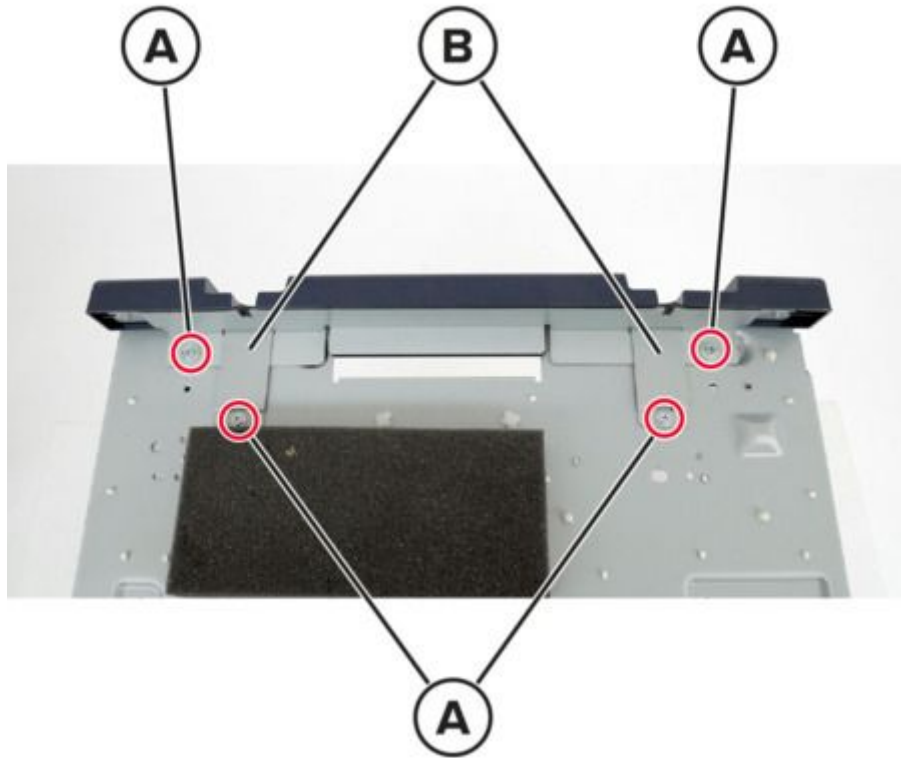
Staple finisher lift motor bracket removal

1. Remove the staple finisher stacker base tray. See [See "Staple finisher stacker base tray removal" on page 1597.](#)
2. Remove the staple finisher lift shaft. See [See "Staple finisher lift shaft removal" on page 1600.](#)
3. Disconnect the two cables (A), remove the three screws (B), and then remove the lift motor bracket (C).



Staple finisher docking bracket removal

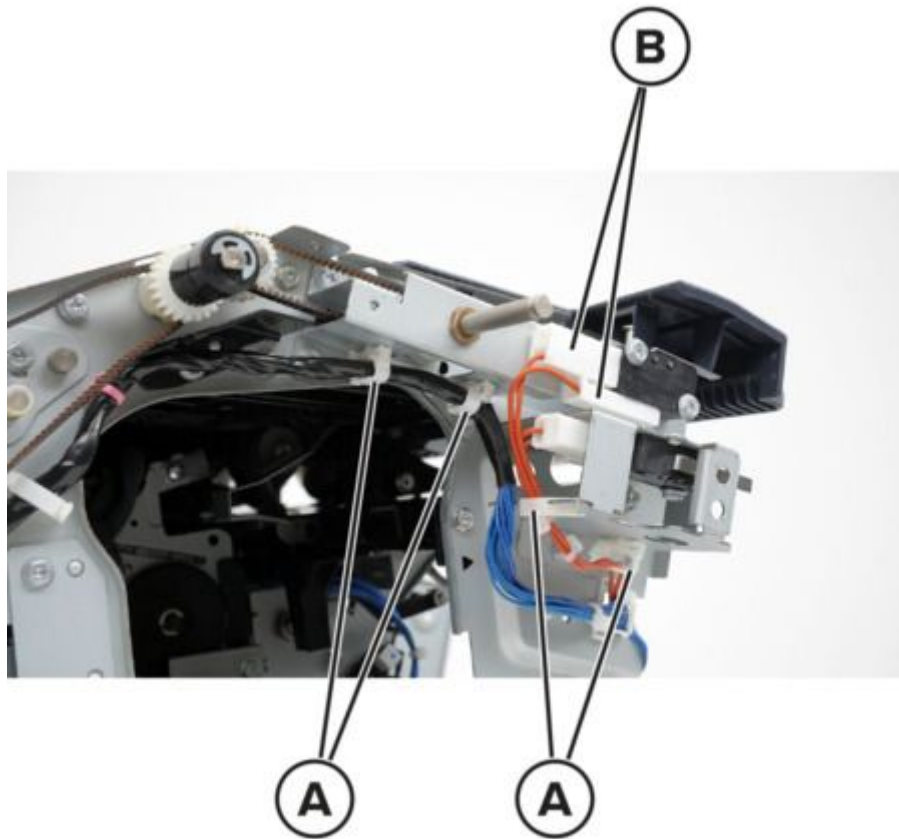
1. Remove the four screws (A).



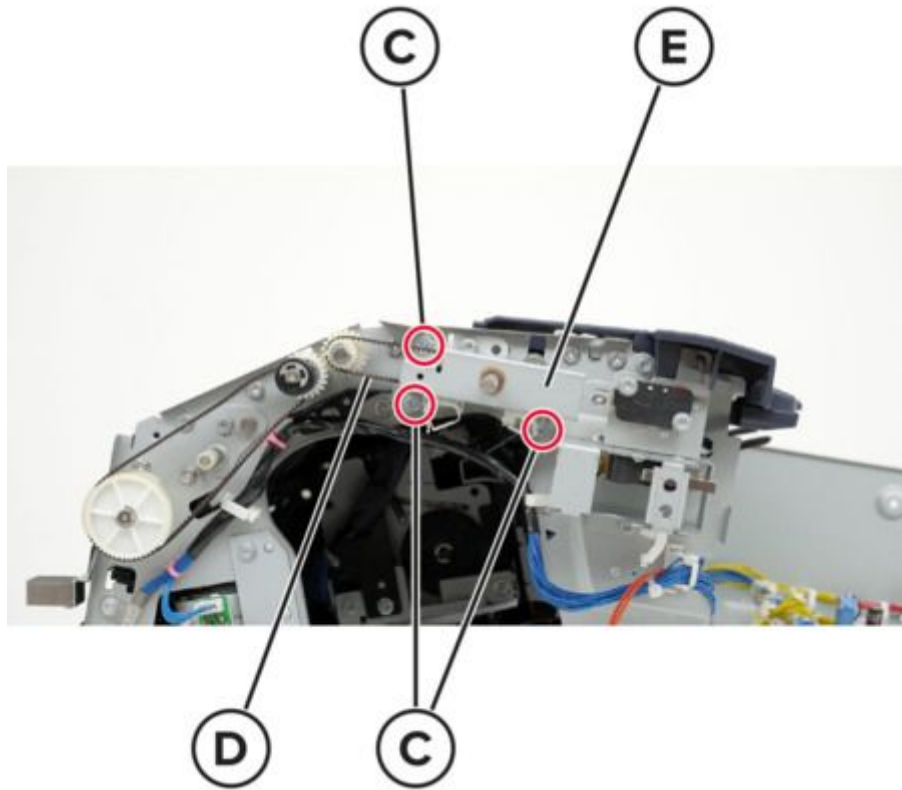
2. Remove the docking bracket (B).

Staple finisher top eject cover subassembly removal

1. Remove the staple finisher top LH cover assembly. See [See "Staple finisher top LH cover removal" on page 1599.](#)
2. Release the cables from the four cable clamps (A), and then disconnect the two cables (B).



3. Remove the three screws (C), remove the belt (D), and then remove the jam shaft bracket (E).



4. Remove the screw (F), and then remove the front hinge bracket (G).

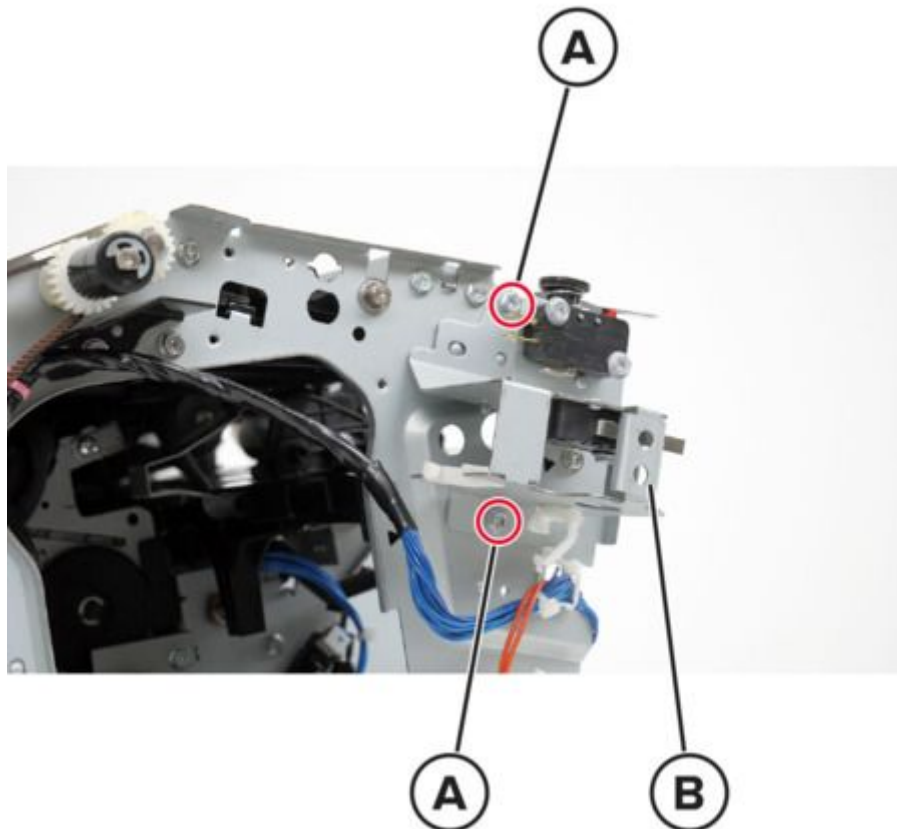


5. Remove the cover.



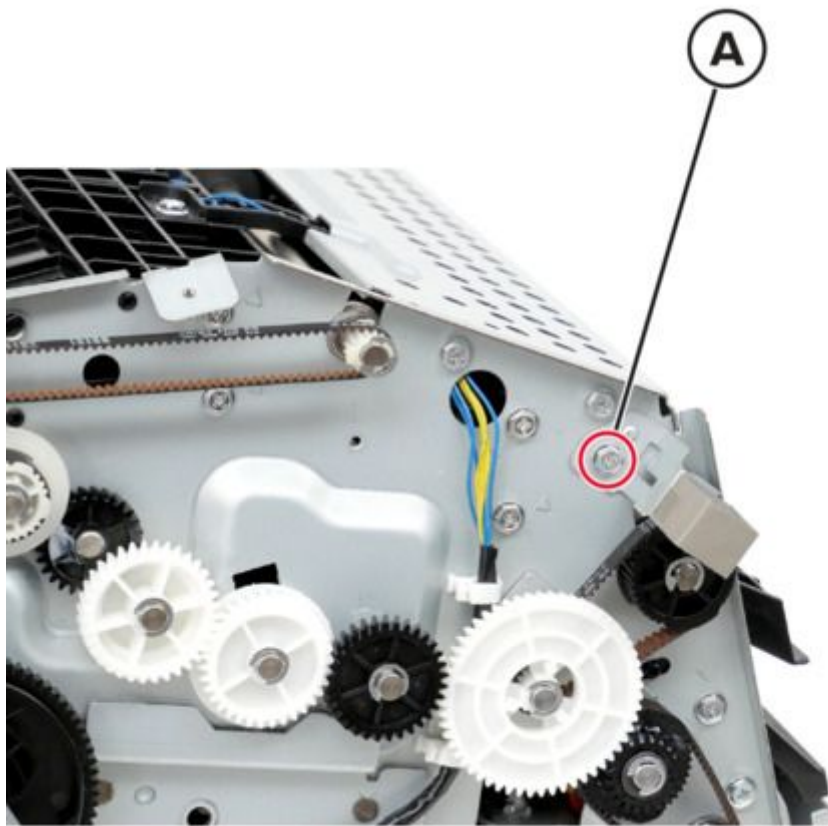
Staple finisher front interlock bracket assembly removal

1. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
2. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
3. Remove the two screws (A), and then remove the front interlock bracket assembly (B).

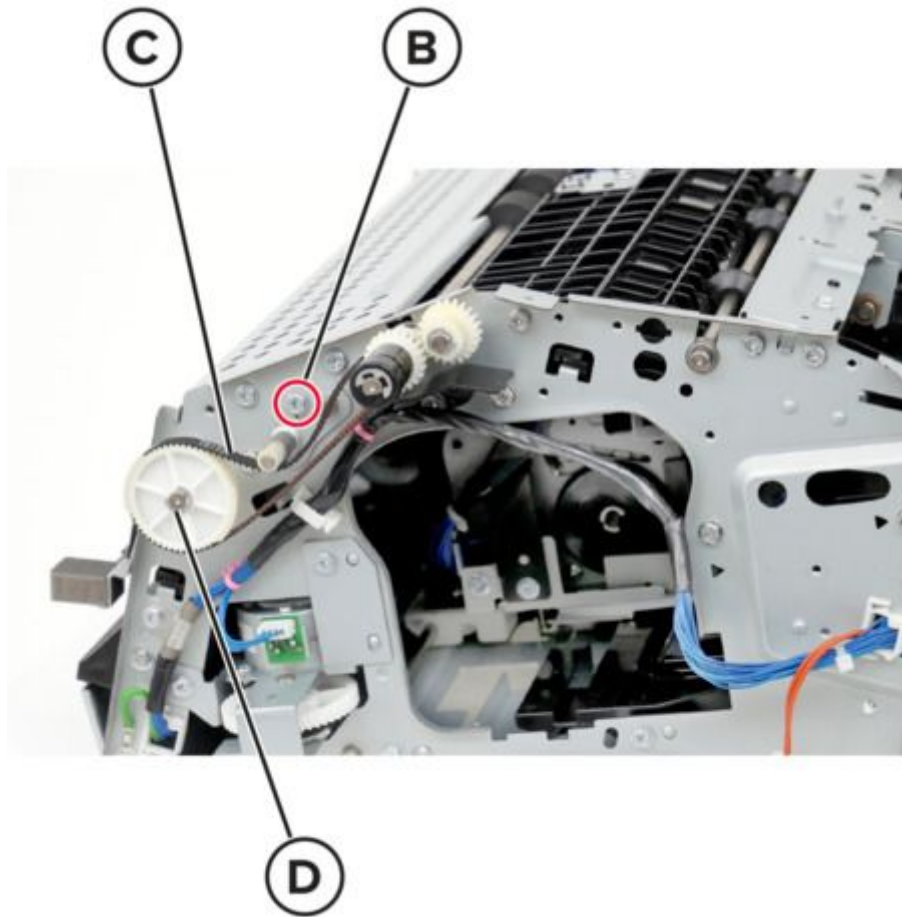


Staple finisher upper transport guide removal

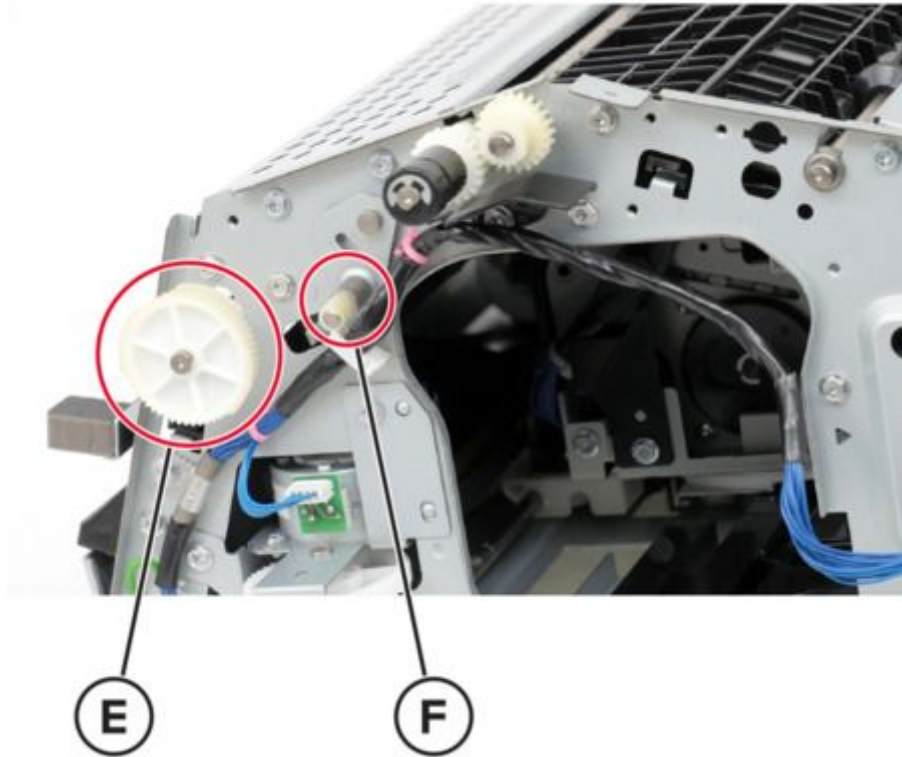
1. Remove the staple finisher front cover. See ["Staple finisher front cover removal"](#) on page 1593.
2. Remove the staple finisher rear cover. See ["Staple finisher rear cover removal"](#) on page 1594.
3. Remove the staple finisher top LH cover. See ["Staple finisher top LH cover removal"](#) on page 1599.
4. Remove the staple finisher top eject cover subassembly. See ["Staple finisher top eject cover subassembly removal"](#) on page 1603.
5. Remove the screw (A) on the right side.



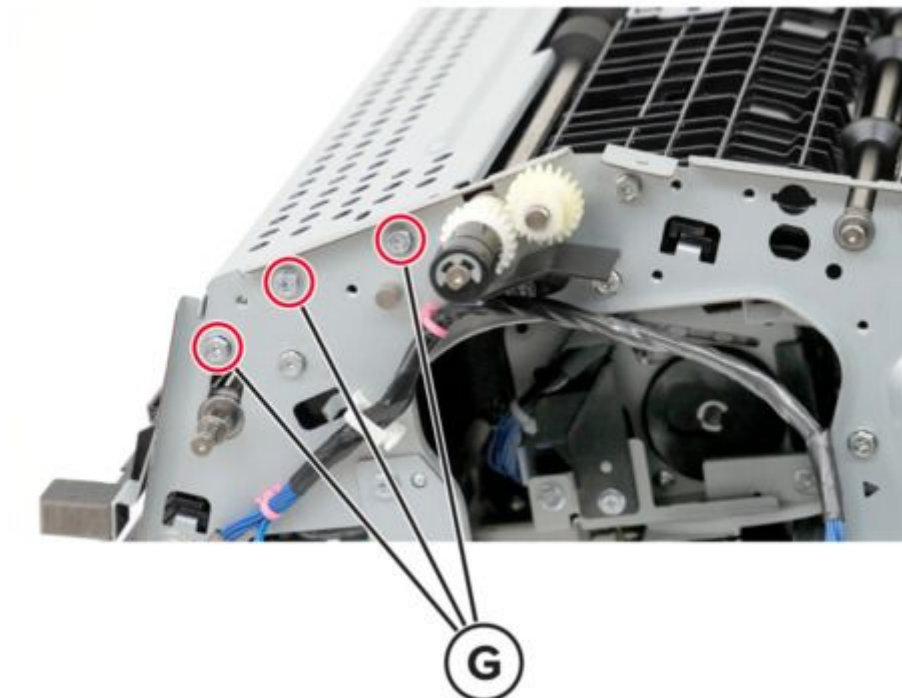
6. Remove the screw (B), remove the belt (C), and then remove the E-clip (D) on the left side.



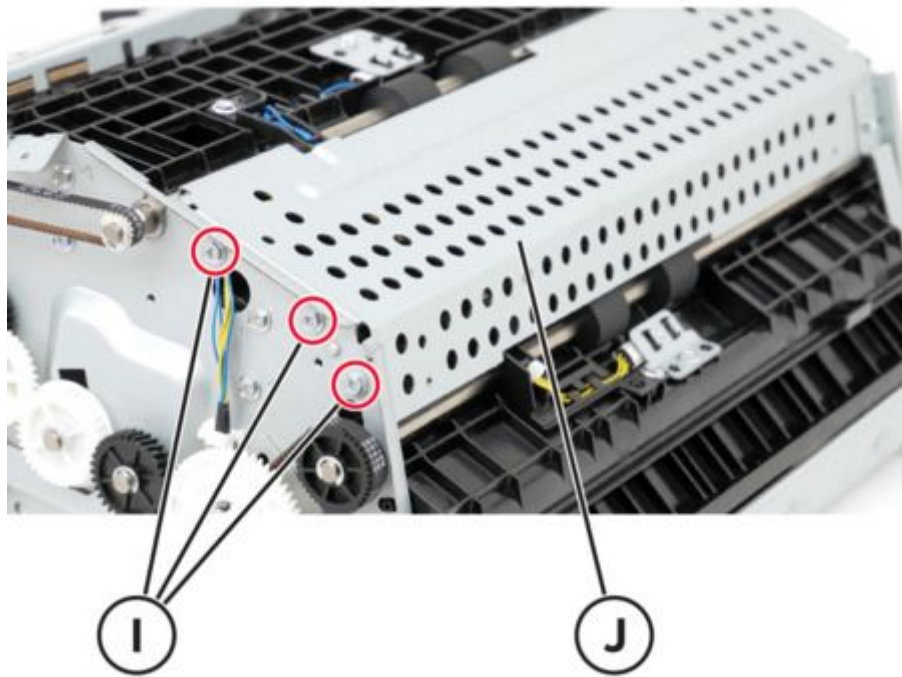
7. Remove the gear (E), and then remove the roller (F).



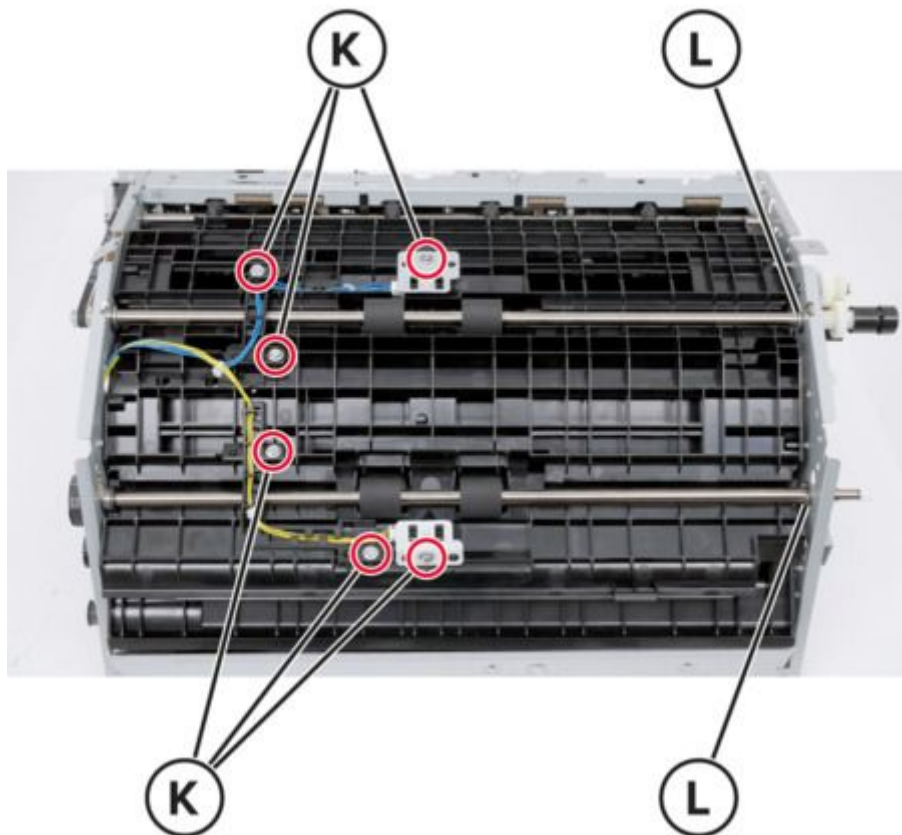
8. Remove the three screws (G) on the left side.



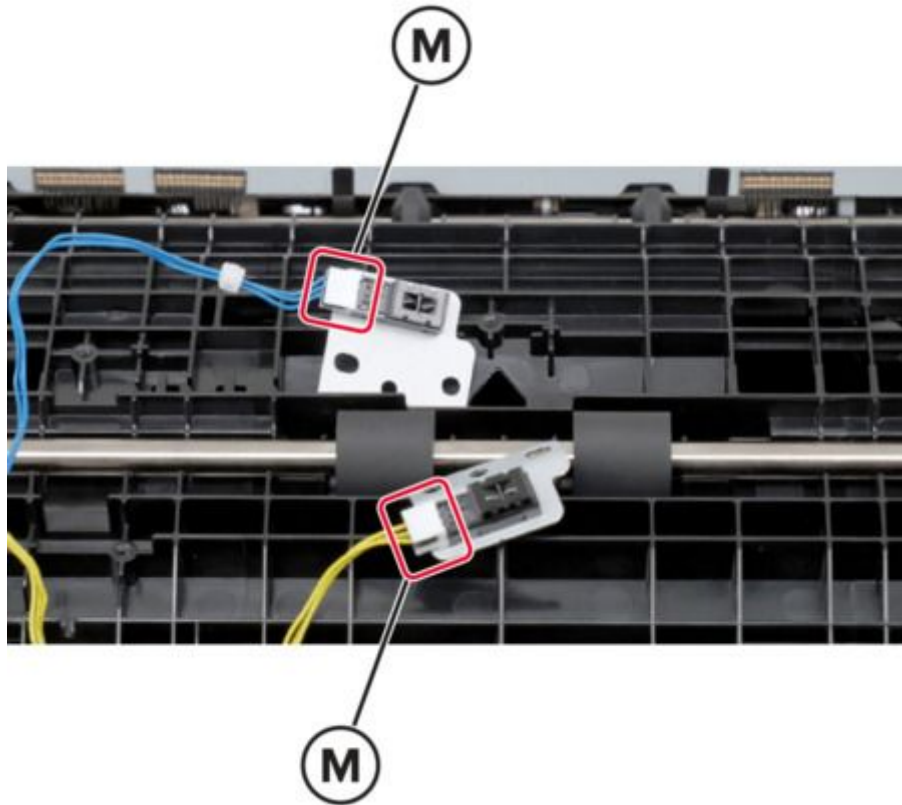
9. Remove the three screws (I) on the right side, and then remove upper tie plate (J).



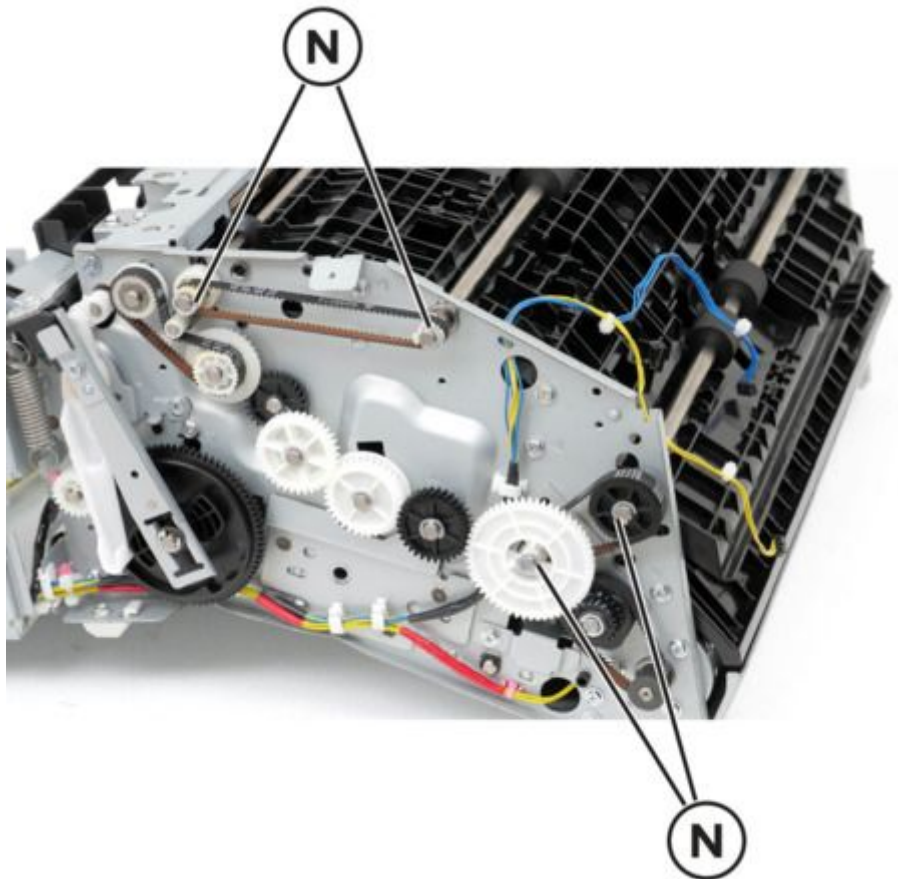
10. Remove the six screws (K), remove the two E-clips (L), and then remove the cable from the cable holders.



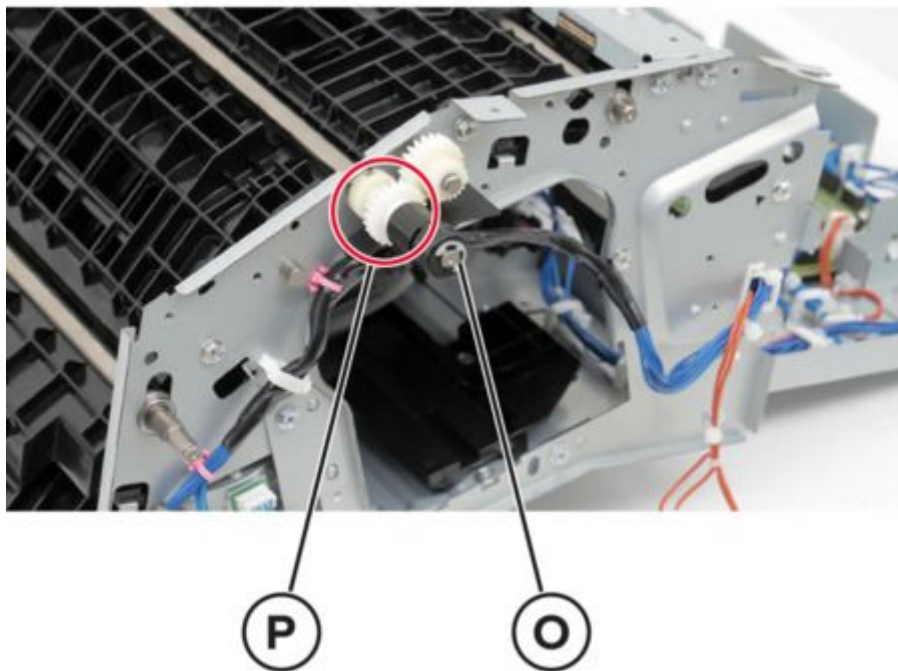
11. Disconnect the two cables (M) from the sensors.



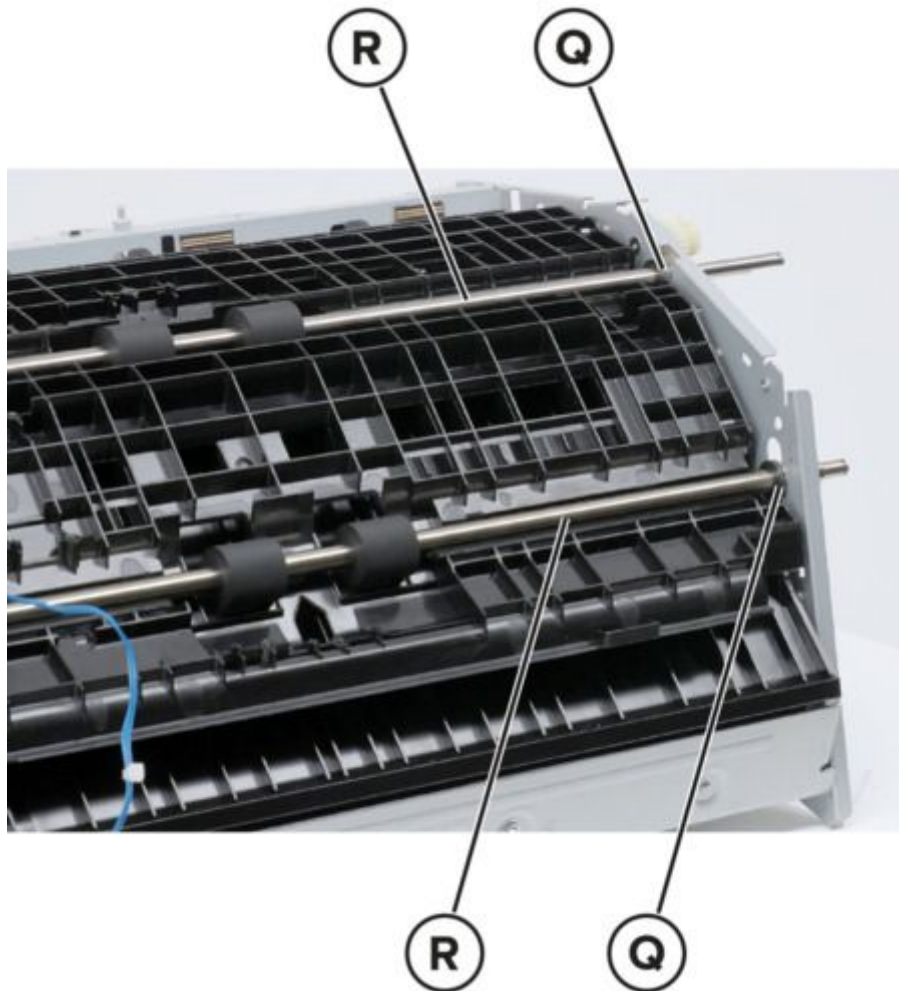
12. Remove the four E-clips (N), and then remove the gears.



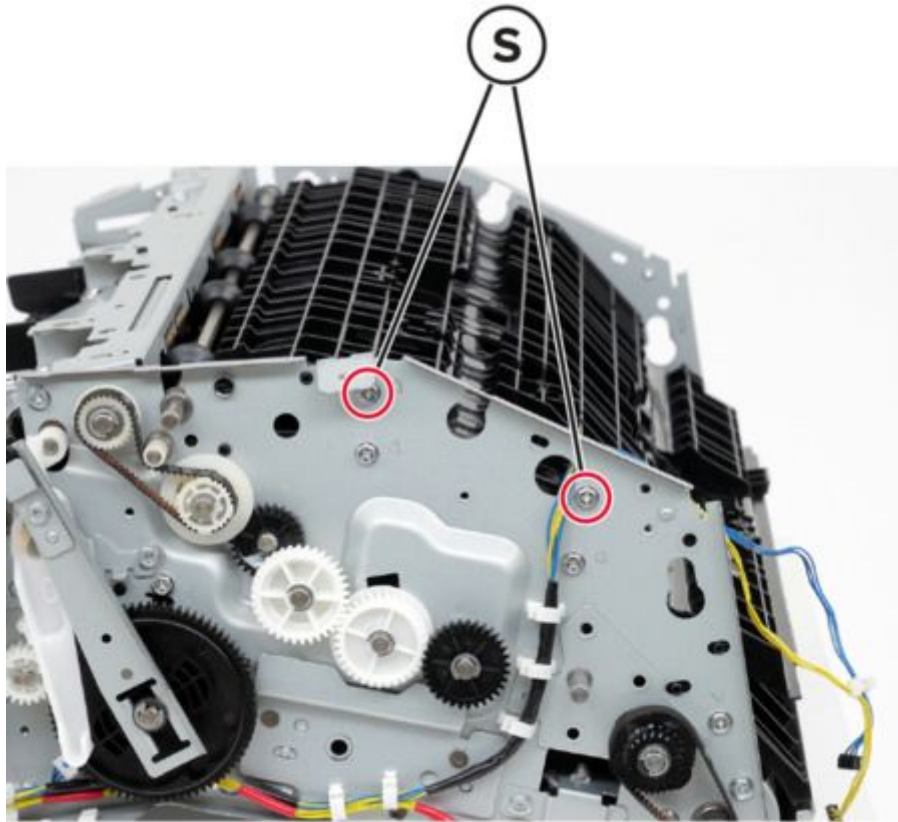
13. Remove the E-clip (O), and then remove gears (P).



14. Release the two bushings (Q), then remove the two rollers (R).



15. Remove the two screws (S) on the right side.

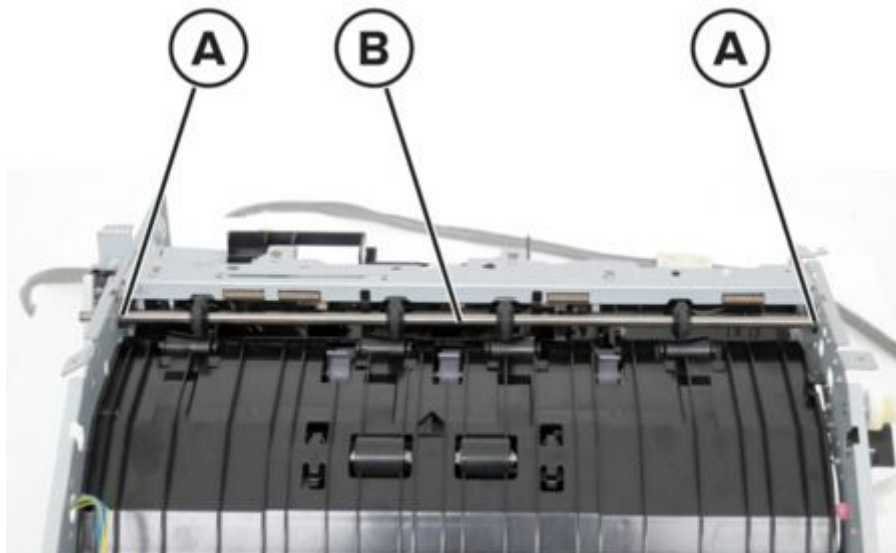


16. Remove the two screws (T) on the left side.

17. Remove the upper transport guide (U).

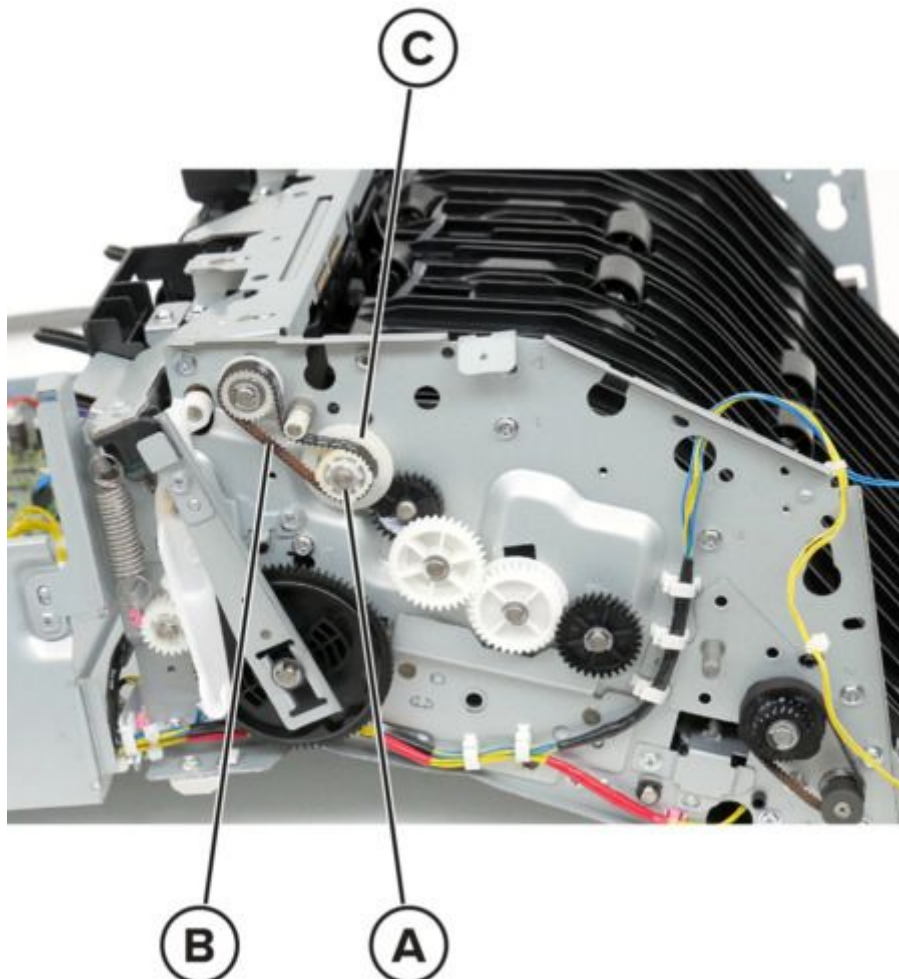
Staple finisher compiler exit roller removal

1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
4. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
5. Remove the staple finisher upper transport guide. See [See "Staple finisher upper transport guide removal" on page 1606.](#)
6. Remove the two E-clips (A), and then remove the roller (B).

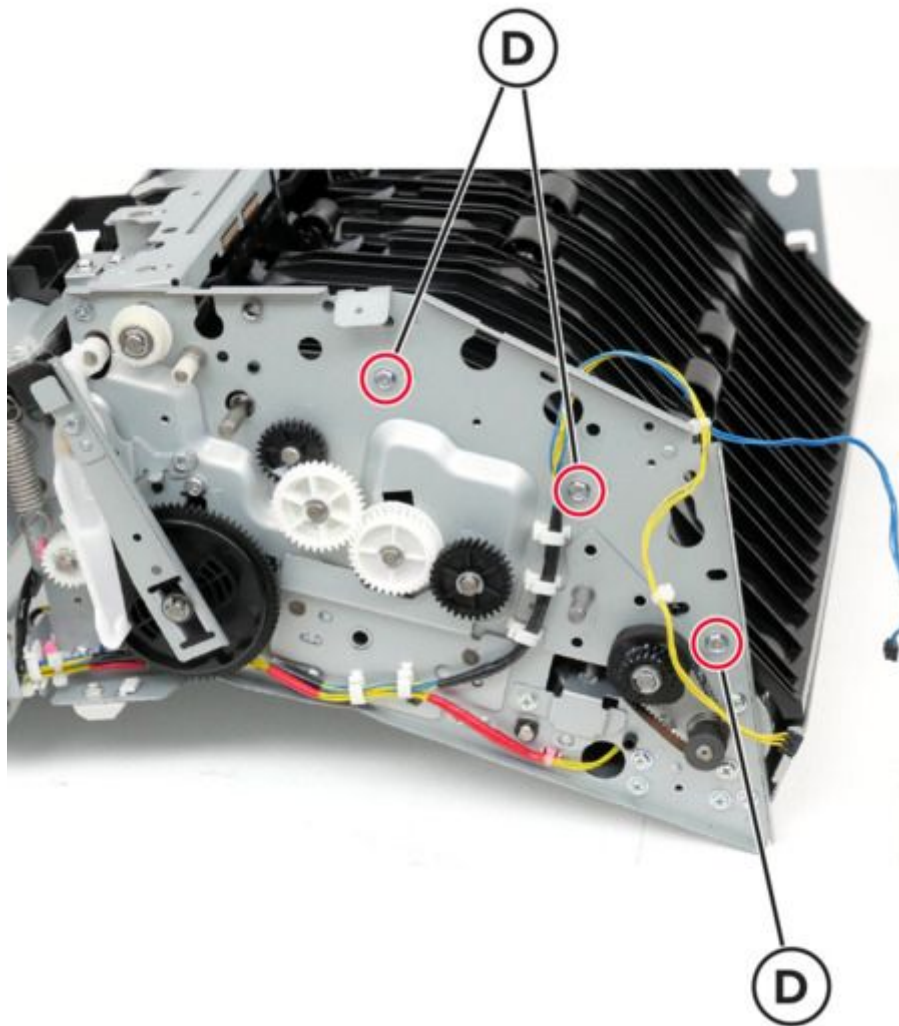


Staple finisher lower chute removal

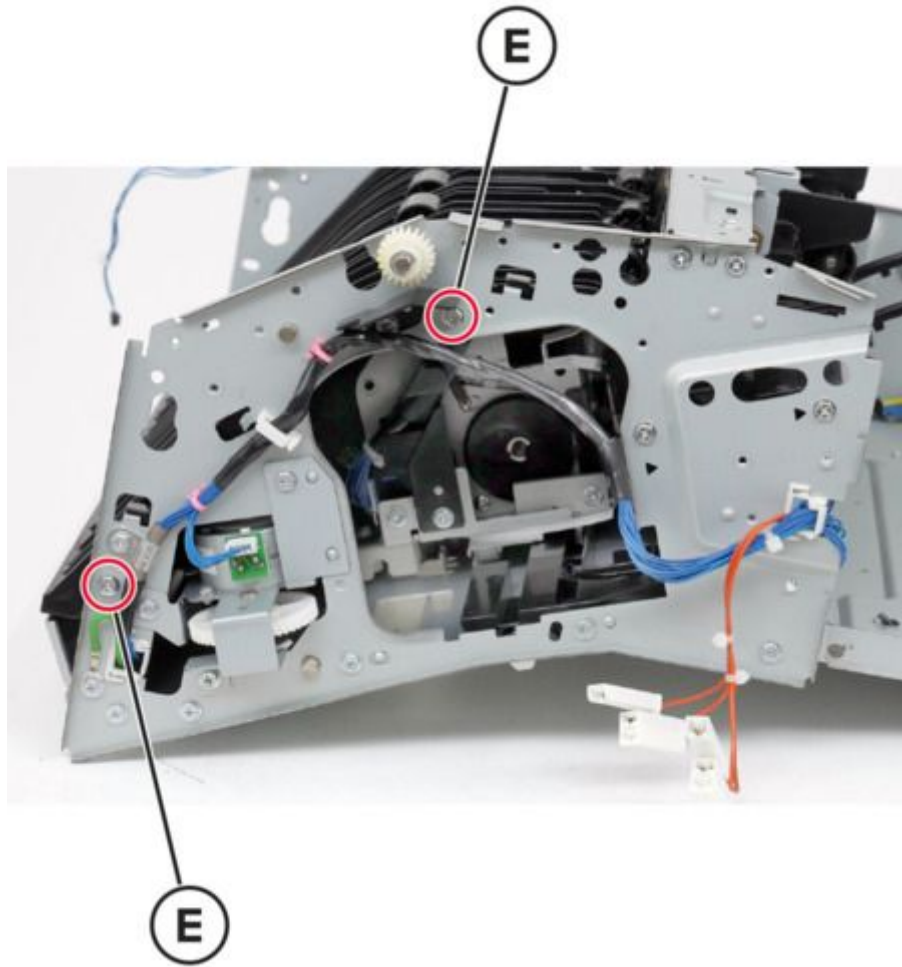
1. Remove the staple finisher front cover. See ["Staple finisher front cover removal"](#) on [page 1593](#).
2. Remove the staple finisher rear cover. See ["Staple finisher rear cover removal"](#) on [page 1594](#).
3. Remove the staple finisher top LH cover. See ["Staple finisher top LH cover removal"](#) on [page 1599](#).
4. Remove the staple finisher top eject cover subassembly. See ["Staple finisher top eject cover subassembly removal"](#) on [page 1603](#).
5. Remove the staple finisher upper transport guide. See ["Staple finisher upper transport guide removal"](#) on [page 1606](#).
6. Remove the staple finisher compiler exit roller. See ["Staple finisher compiler exit roller removal"](#) on [page 1614](#).
7. Remove the E-clip (A), remove the belt (B), and then remove the gear (C) on the right side.



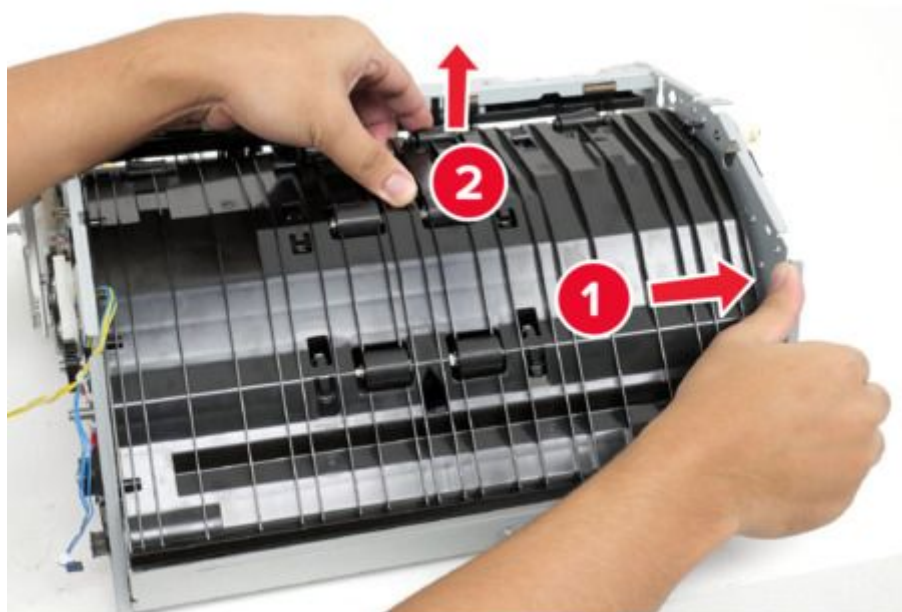
8. Remove the three screws (D).



9. Remove the two screws (E) on the left side.

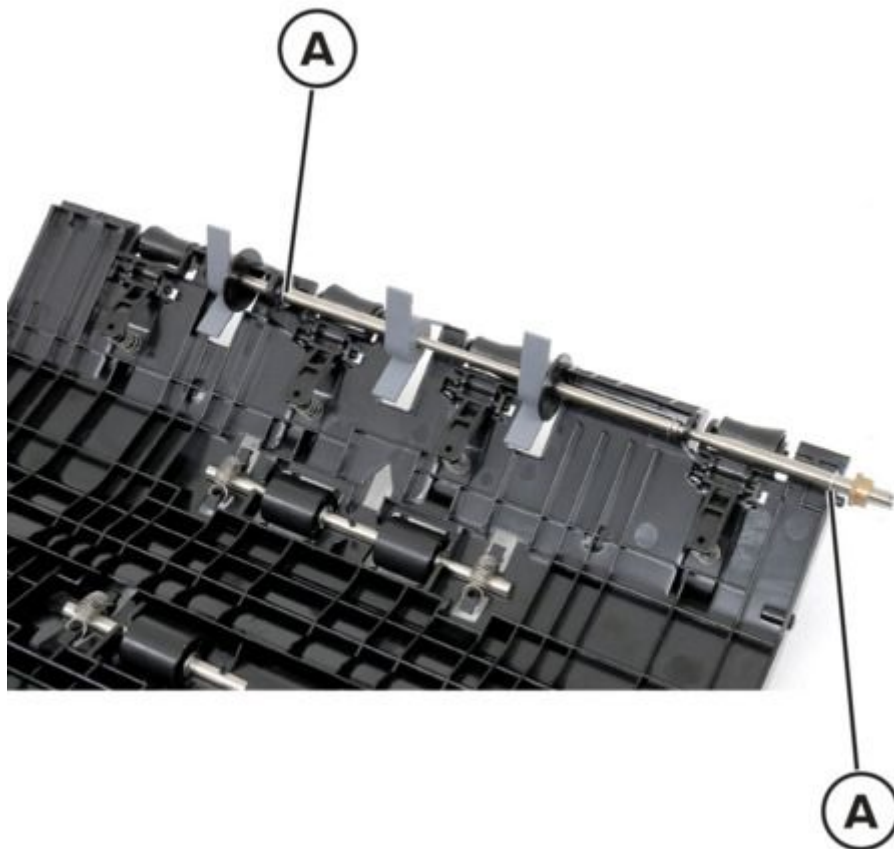


10. Push the frame to release the latch, and then raise the lower chute to remove it.

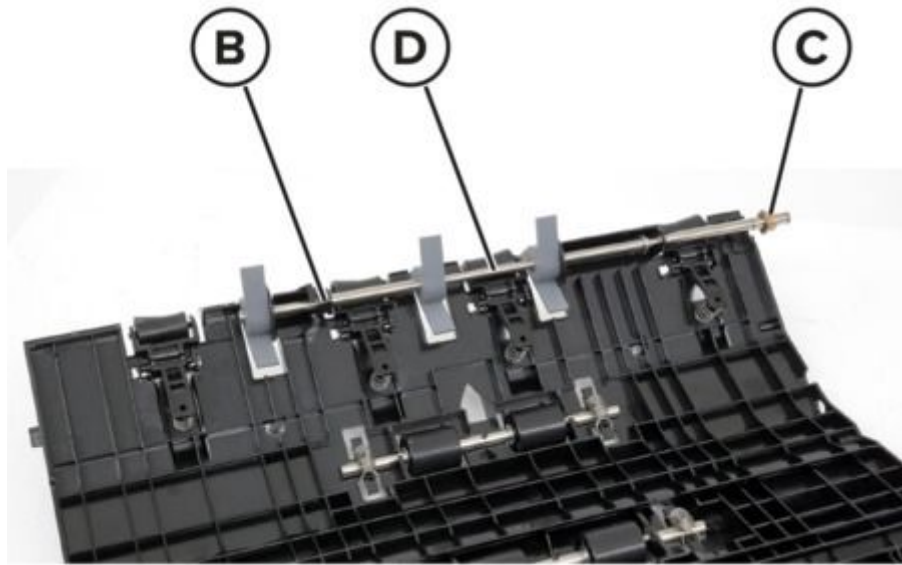


Staple finisher subpaddle assembly removal

1. Remove the staple finisher front cover. See ["Staple finisher front cover removal"](#) on page 1593.
2. Remove the staple finisher rear cover. See ["Staple finisher rear cover removal"](#) on page 1594.
3. Remove the staple finisher top LH cover. See ["Staple finisher top LH cover removal"](#) on page 1599.
4. Remove the staple finisher top eject cover subassembly. See ["Staple finisher top eject cover subassembly removal"](#) on page 1603.
5. Remove the staple finisher upper transport guide. See ["Staple finisher upper transport guide removal"](#) on page 1606.
6. Remove the staple finisher compiler exit roller. See ["Staple finisher compiler exit roller removal"](#) on page 1614.
7. Remove the staple finisher lower chute. See ["Staple finisher lower chute removal"](#) on page 1615.
8. Remove the two E-clips (A).

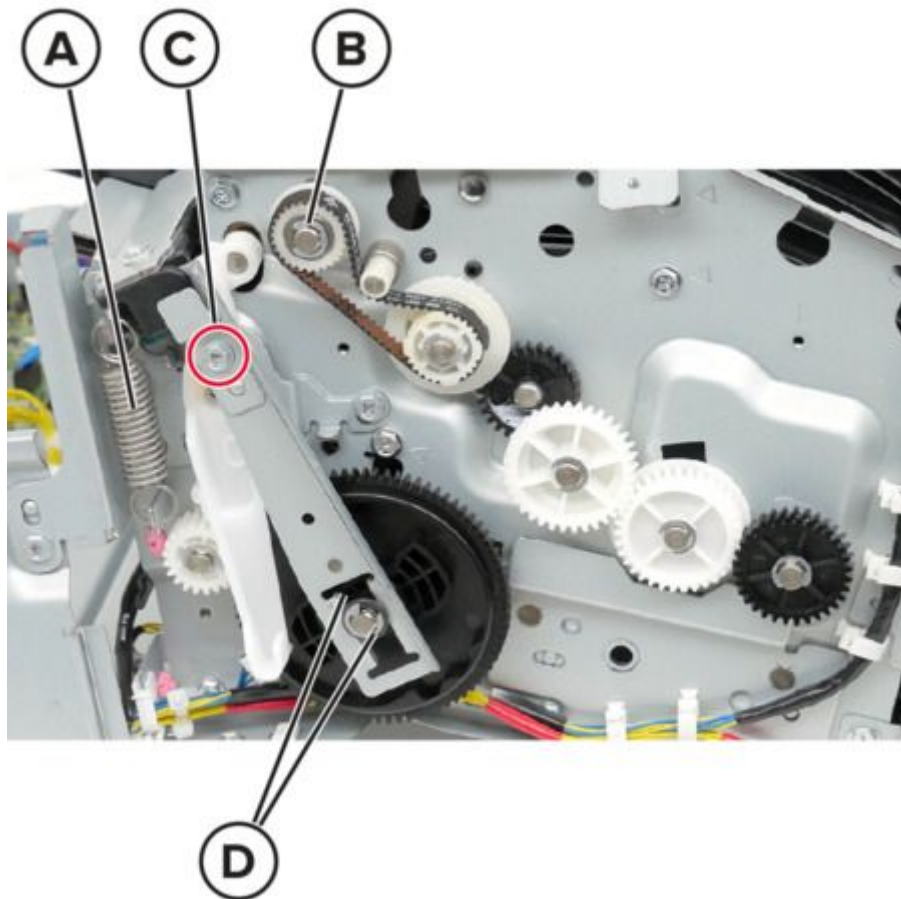


9. Release the bushing (B), remove the bushing (C), and then remove the subpaddle assembly (D).

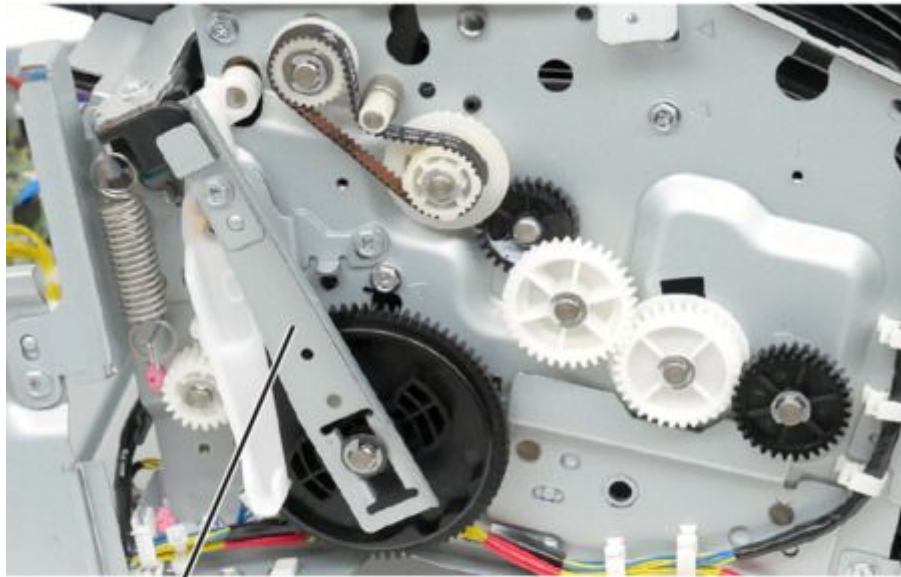


Staple finisher upper eject plate removal

1. Remove the staple finisher front cover. See ["Staple finisher front cover removal"](#) on page 1593.
2. Remove the staple finisher rear cover. See ["Staple finisher rear cover removal"](#) on page 1594.
3. Remove the staple finisher top LH cover. See ["Staple finisher top LH cover removal"](#) on page 1599.
4. Remove the staple finisher top eject cover subassembly. See ["Staple finisher top eject cover subassembly removal"](#) on page 1603.
5. Remove the spring (A), remove the E-clip (B), remove the screw (C), and then remove the E-clip with washer (D) on the right side.

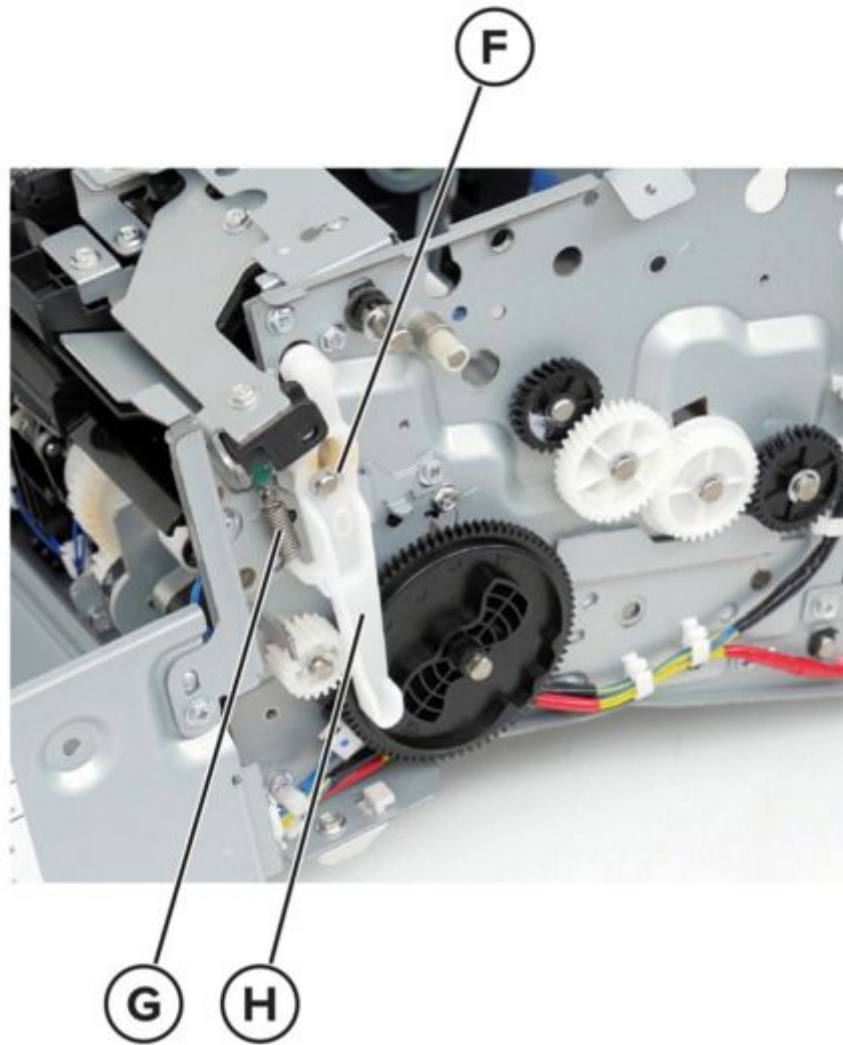


6. Remove the cam link (E).

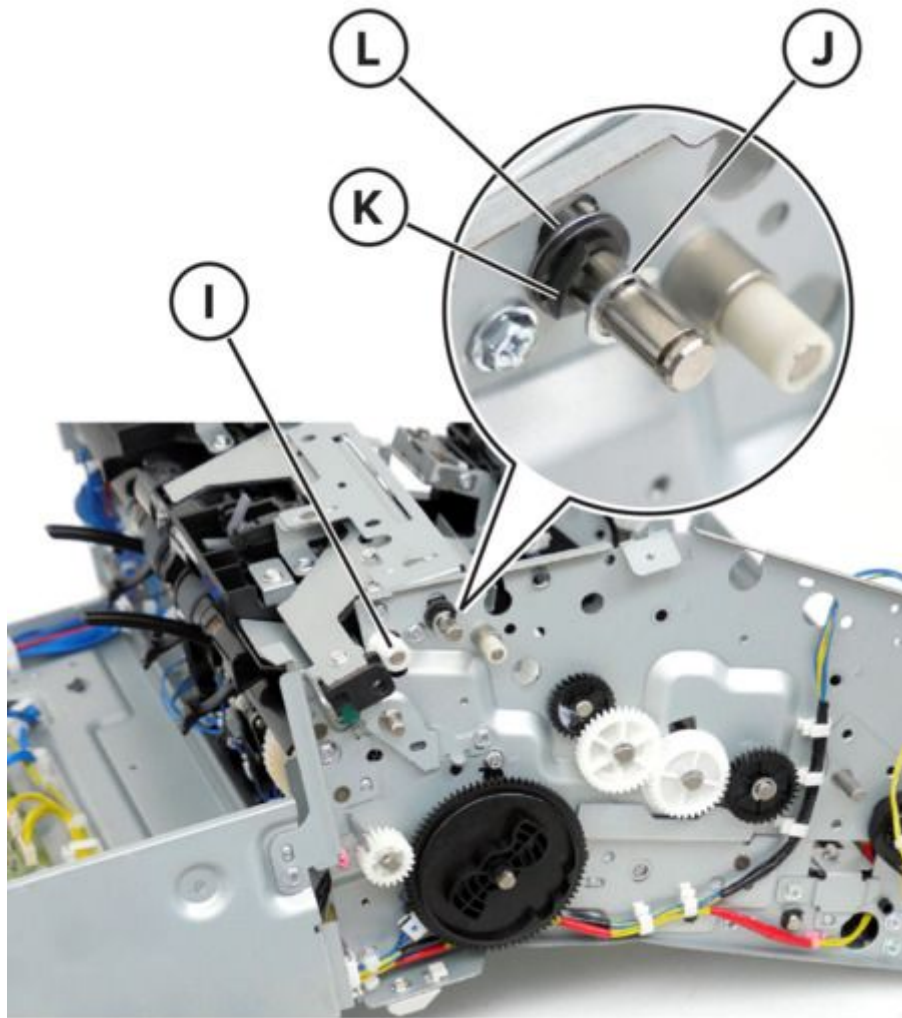


E

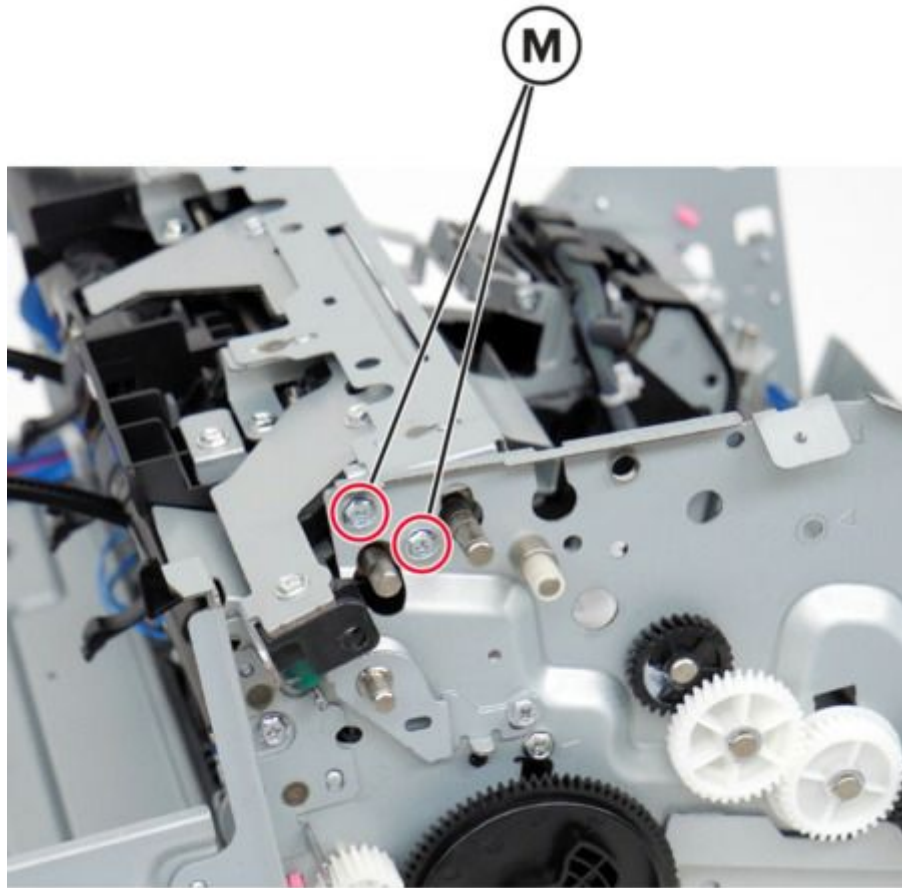
7. Remove the E-clip (F), remove the spring (G), and then remove the subpaddle link (H).



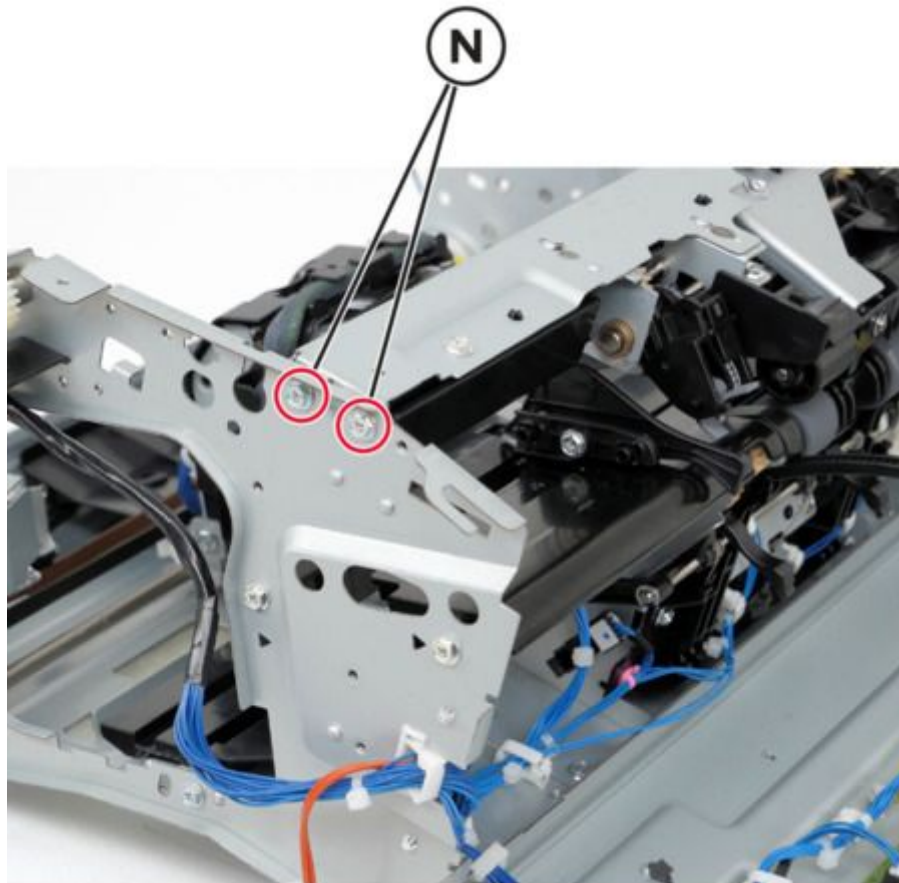
8. Remove the subshaft link (I), remove the E-clip (J), remove the KL-clip (K), and then remove the bushing (L).



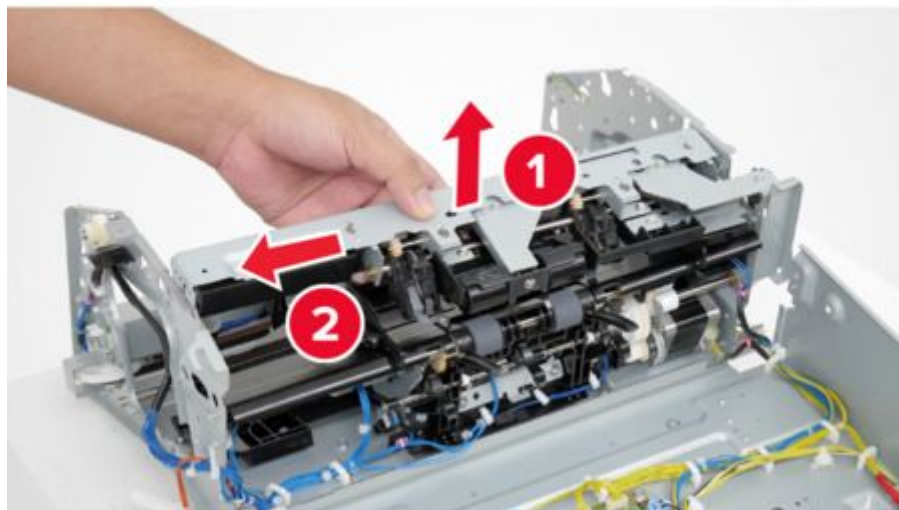
9. Remove the two screws (M) on the right side.



10. Remove the two screws (N) on the left side.



11. Remove the upper eject plate.

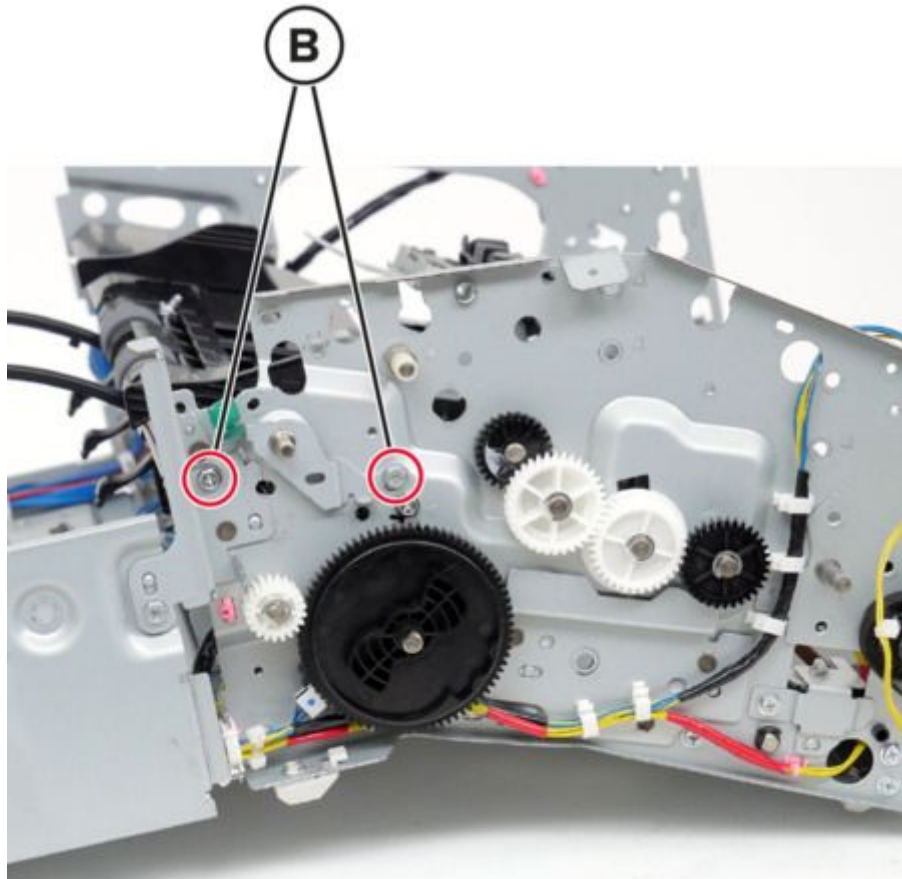


Staple finisher compiler tray removal

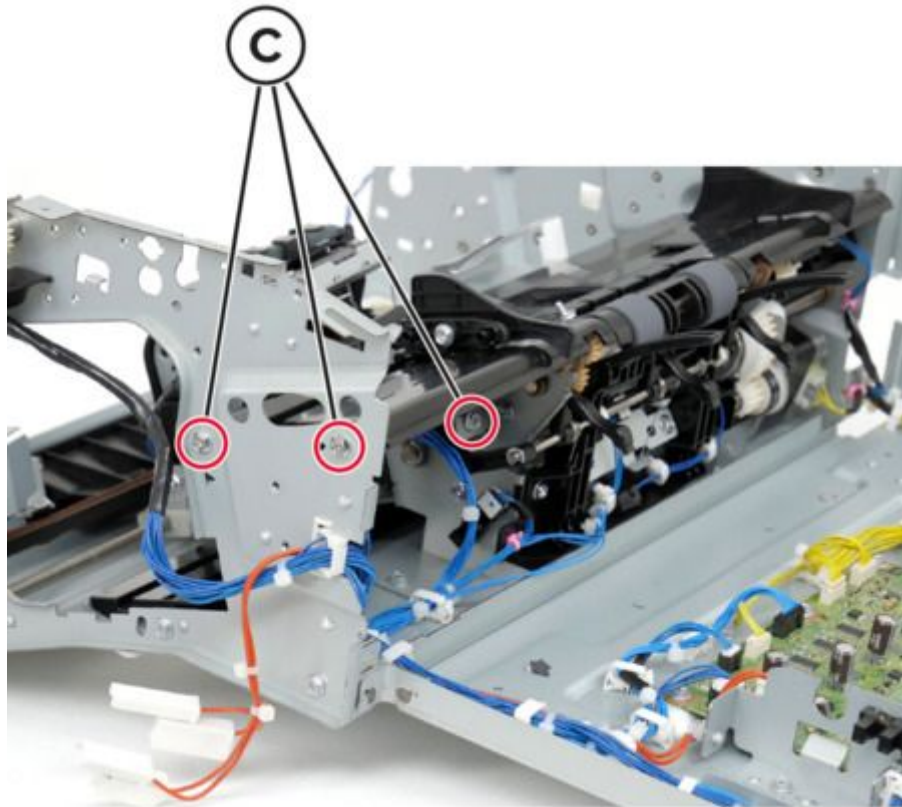
1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
4. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
5. Remove the staple finisher upper eject plate. See [See "Staple finisher upper eject plate removal" on page 1620.](#)
6. Disconnect the two cables (A).



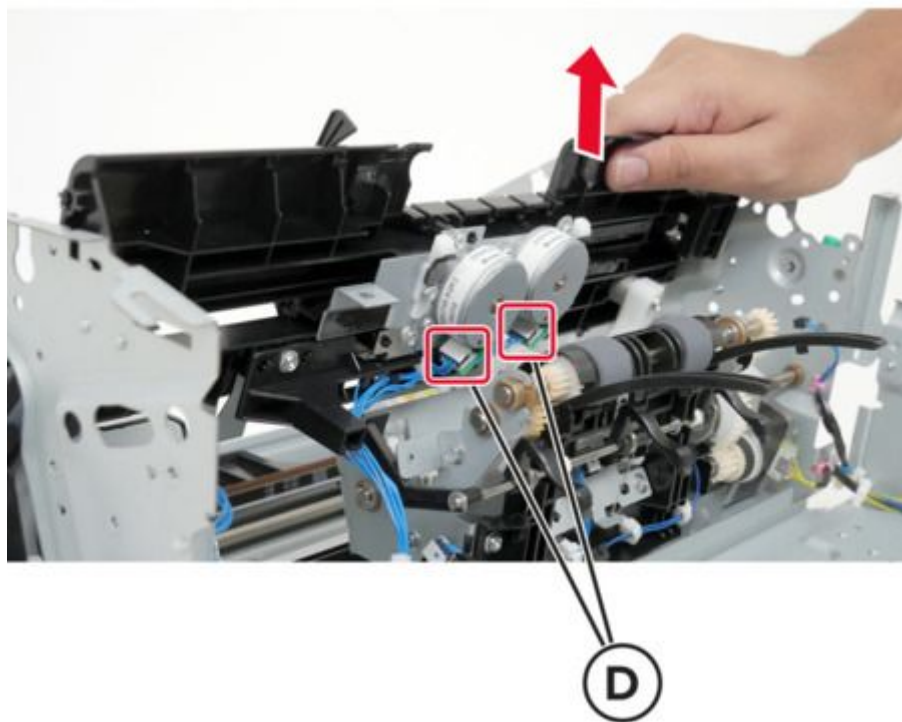
7. Remove the two screws (B) on the right side.



8. Remove the three screws (C) on the left side.

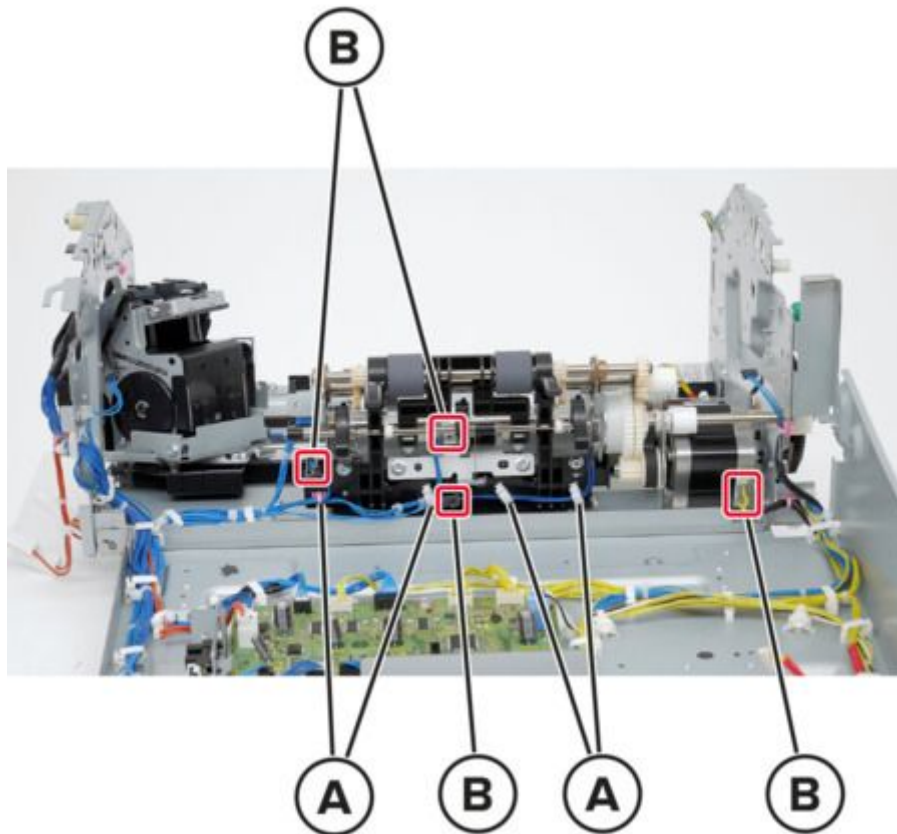


9. Raise the compile tray, disconnect the two cables (D), and then remove the compile tray.

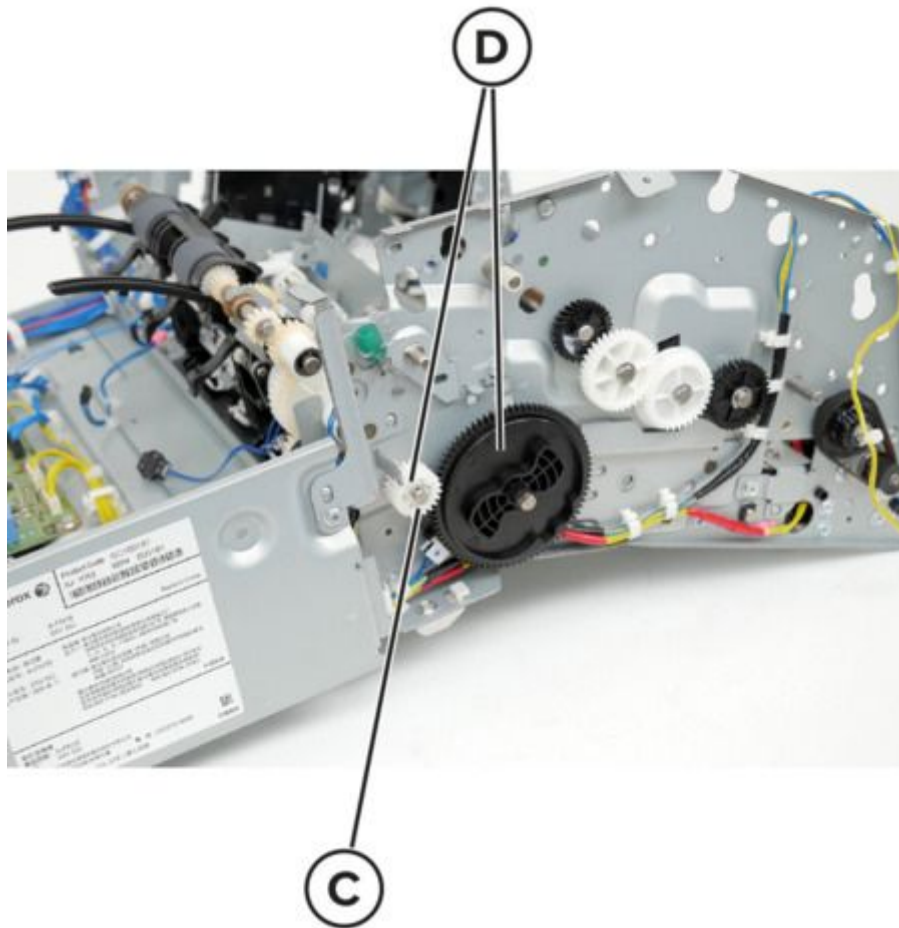


Staple finisher low eject clamp removal

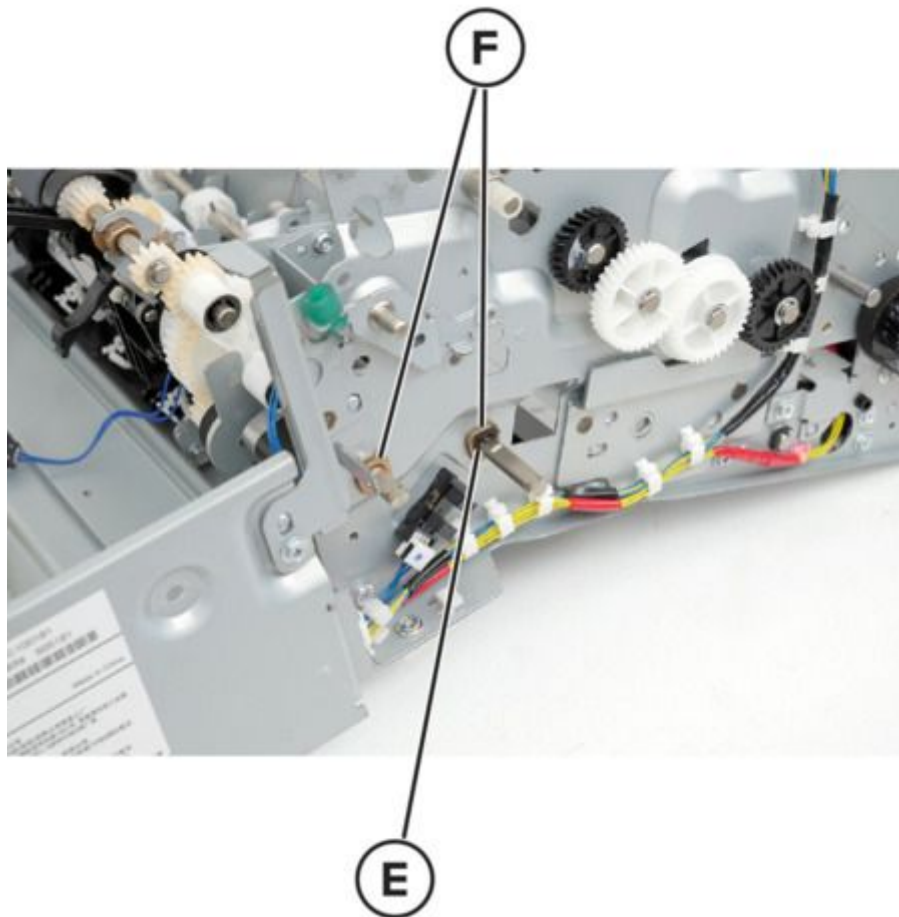
1. Remove the staple finisher front cover. See ["Staple finisher front cover removal"](#) on page 1593.
2. Remove the staple finisher rear cover. See ["Staple finisher rear cover removal"](#) on page 1594.
3. Remove the staple finisher top LH cover. See ["Staple finisher top LH cover removal"](#) on page 1599.
4. Remove the staple finisher top eject cover subassembly. See ["Staple finisher top eject cover subassembly removal"](#) on page 1603.
5. Remove the staple finisher upper eject plate. See ["Staple finisher upper eject plate removal"](#) on page 1620.
6. Remove the staple finisher compiler tray. See ["Staple finisher compiler tray removal"](#) on page 1626.
7. Release the four cable clamps (A), and then disconnect the four cables (B).



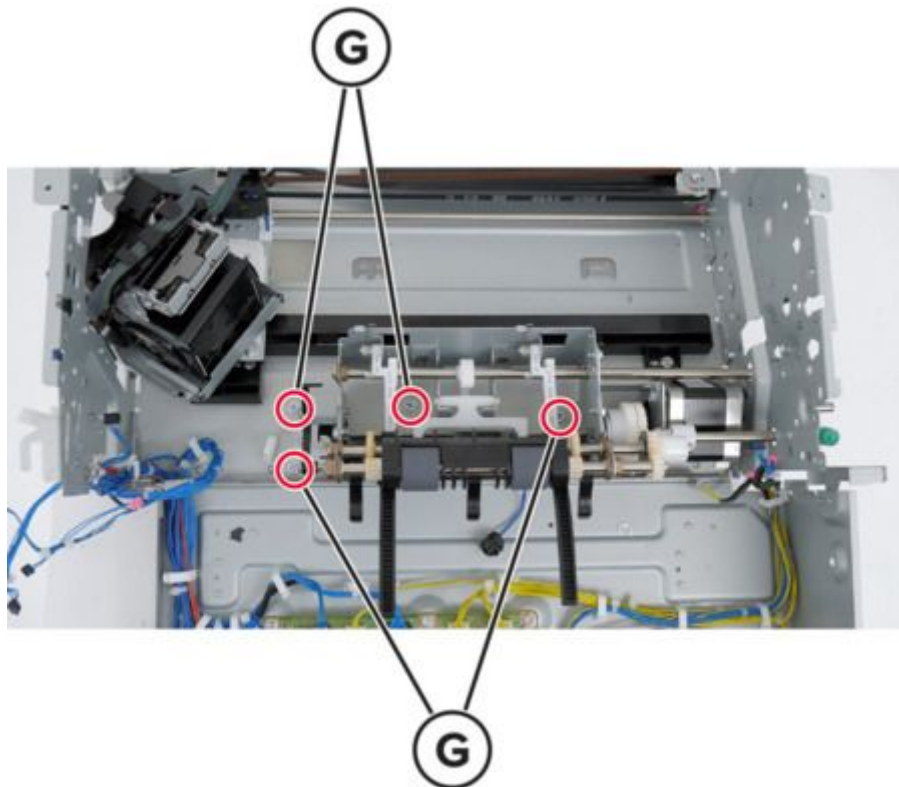
8. Remove the E-clip (C), and then remove the two gears (D) on the right side.



9. Remove the KL-clip (E), and then remove the two bushings (F).

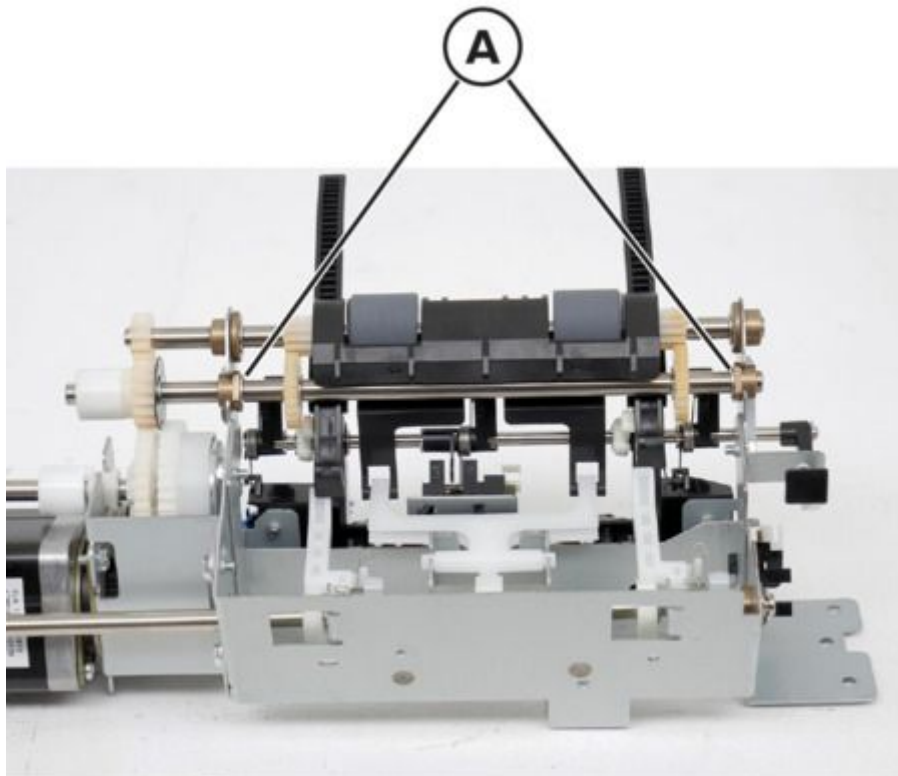


10. Remove the four screws (G), and then remove the low eject clamp.

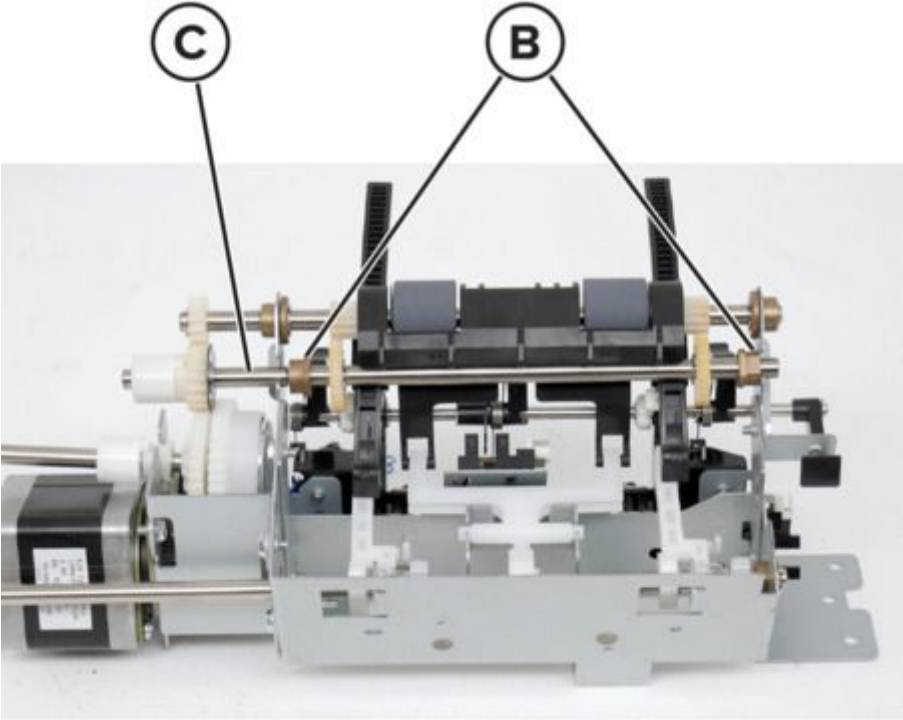


Staple finisher set clamp shaft removal

1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
4. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
5. Remove the staple finisher upper eject plate. See [See "Staple finisher upper eject plate removal" on page 1620.](#)
6. Remove the staple finisher compiler tray. See [See "Staple finisher compiler tray removal" on page 1626.](#)
7. Remove the staple finisher low eject clamp. See [See "Staple finisher low eject clamp removal" on page 1629.](#)
8. Remove the two E-clips (A).

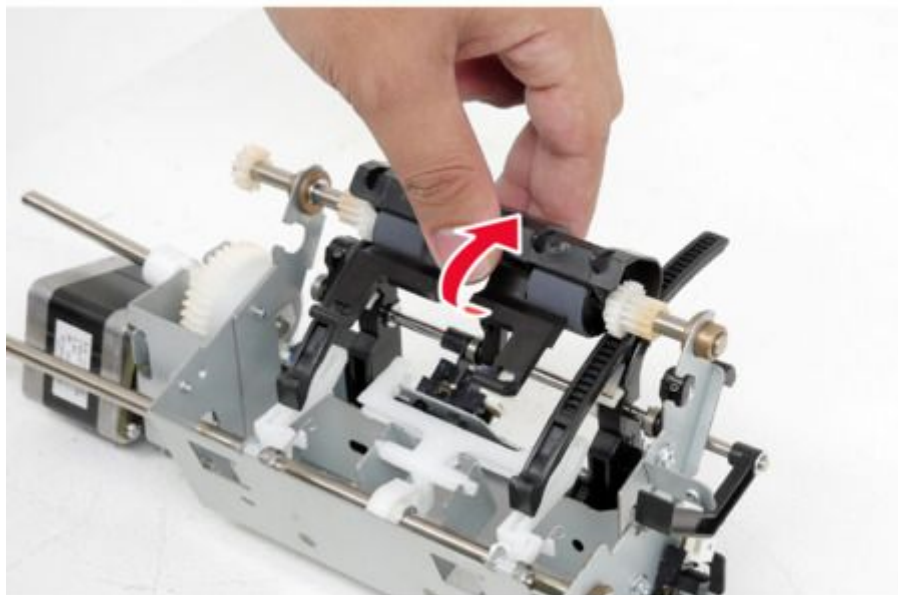


9. Release the two bushings (B), and then remove the set clamp shaft (C).

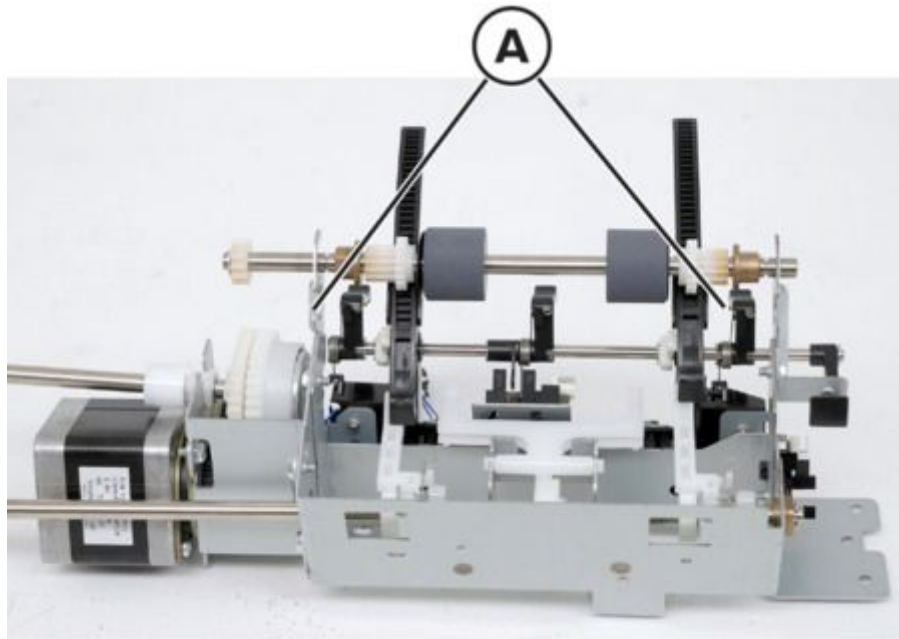


Staple finisher roller assembly removal

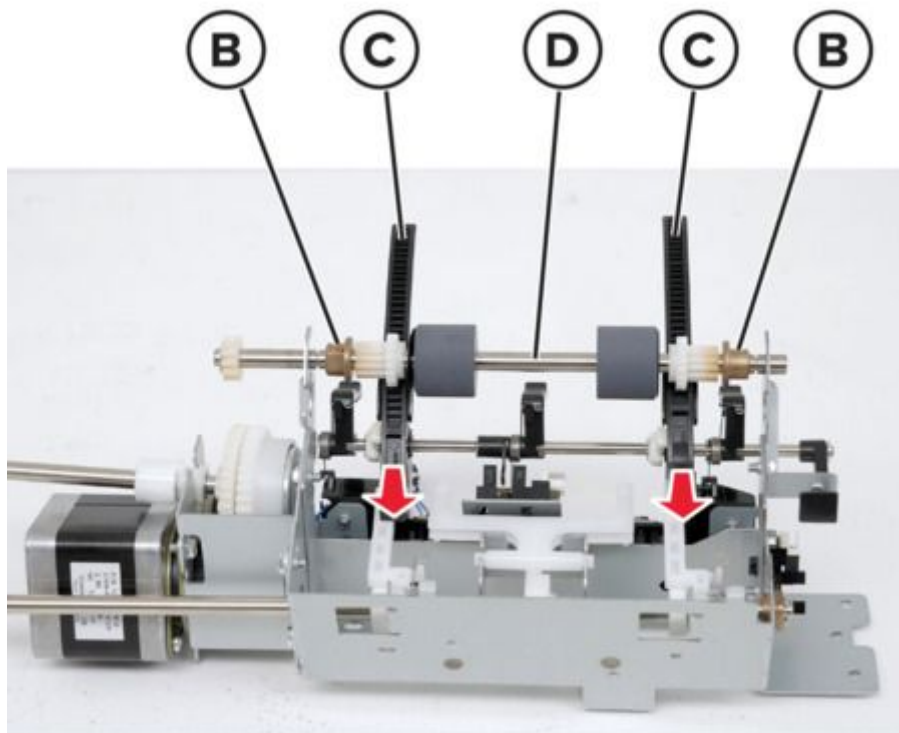
1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
4. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
5. Remove the staple finisher upper eject plate. See [See "Staple finisher upper eject plate removal" on page 1620.](#)
6. Remove the staple finisher compiler tray. See [See "Staple finisher compiler tray removal" on page 1626.](#)
7. Remove the staple finisher low eject clamp. See [See "Staple finisher low eject clamp removal" on page 1629.](#)
8. Remove the staple finisher set clamp shaft. See [See "Staple finisher set clamp shaft removal" on page 1632.](#)
9. Remove the paper eject guide arm.



10. Remove the two E-clips (A).

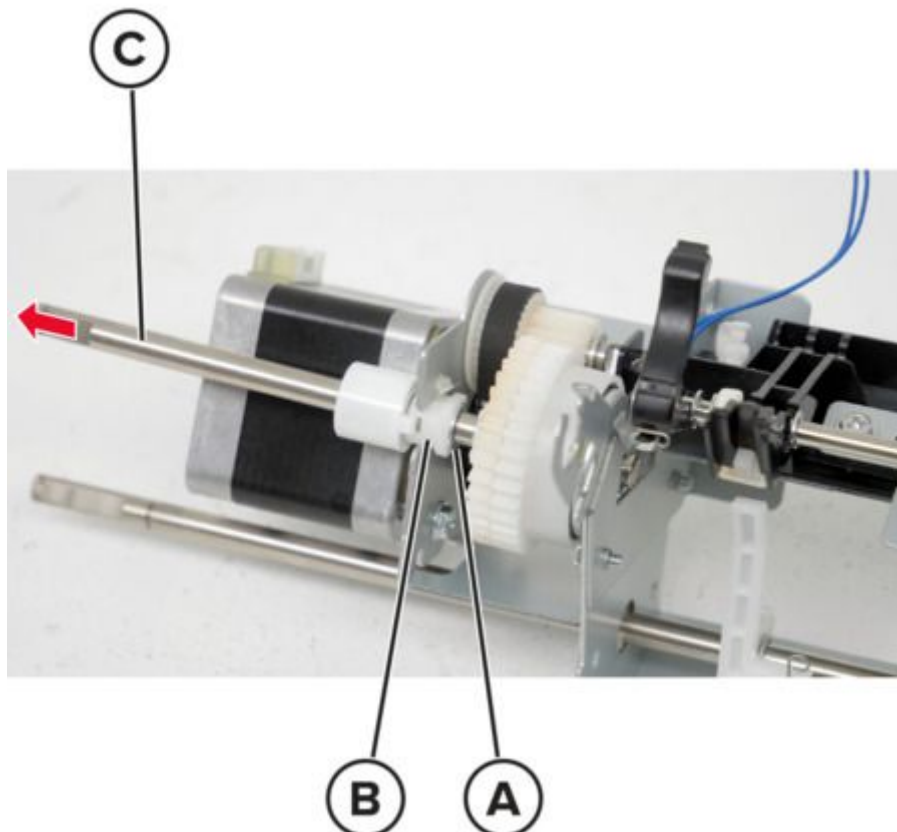


11. Release the two bushings (B), remove the two shaft guides (C), and then remove the roller assembly (D).



Staple finisher eject cam clutch removal

1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
4. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
5. Remove the staple finisher upper eject plate. See [See "Staple finisher upper eject plate removal" on page 1620.](#)
6. Remove the staple finisher compiler tray. See [See "Staple finisher compiler tray removal" on page 1626.](#)
7. Remove the staple finisher low eject clamp. See [See "Staple finisher low eject clamp removal" on page 1629.](#)
8. Remove the staple finisher set clamp shaft. See [See "Staple finisher set clamp shaft removal" on page 1632.](#)
9. Remove the E-clip (A), release the bushing (B), and then remove the eject cam clutch (C).



Motor (staple finisher eject) removal

1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
4. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
5. Remove the staple finisher upper eject plate. See [See "Staple finisher upper eject plate removal" on page 1620.](#)
6. Remove the staple finisher compiler tray. See [See "Staple finisher compiler tray removal" on page 1626.](#)
7. Remove the staple finisher low eject clamp. See [See "Staple finisher low eject clamp removal" on page 1629.](#)
8. Remove the staple finisher set clamp shaft. See [See "Staple finisher set clamp shaft removal" on page 1632.](#)
9. Remove the staple finisher eject cam clutch. See [See "Staple finisher eject cam clutch removal" on page 1636.](#)
10. Remove the three screws (A), and then remove the motor (B).

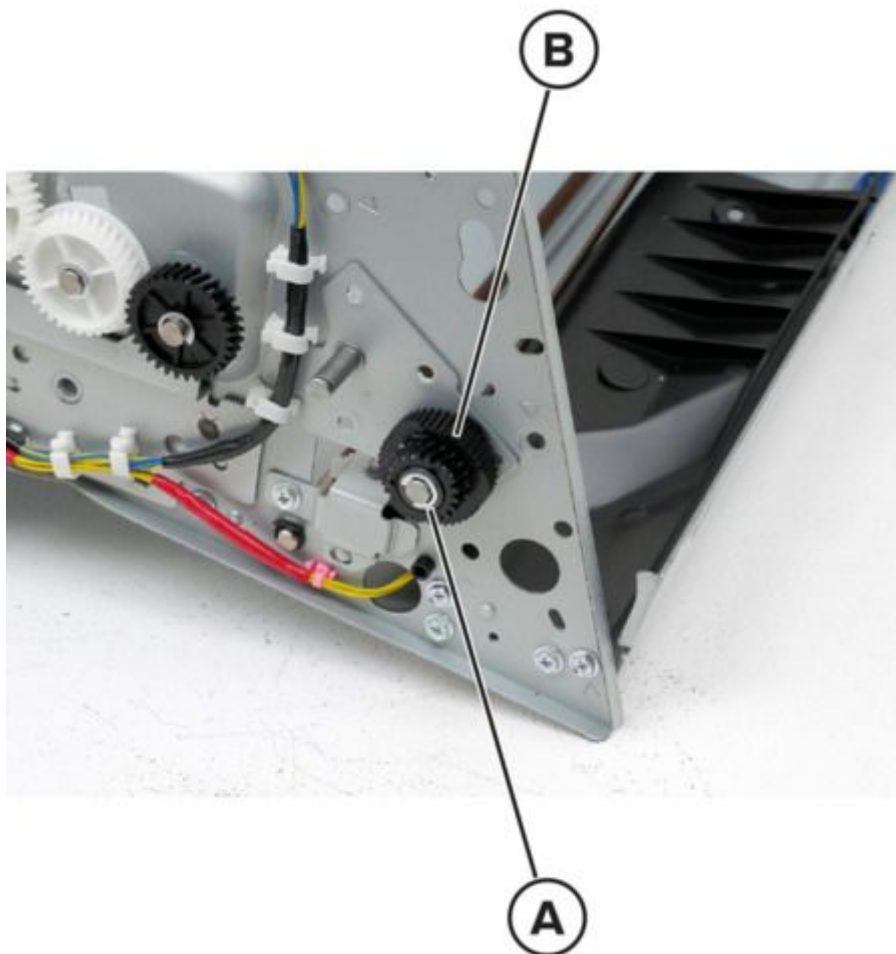


Motor (staple finisher transport) removal

1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
4. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
5. Remove the staple finisher upper transport guide. See [See "Staple finisher upper transport guide removal" on page 1606.](#)
6. Remove the staple finisher compiler exit roller. See [See "Staple finisher compiler exit roller removal" on page 1614.](#)
7. Remove the staple finisher lower chute. See [See "Staple finisher lower chute removal" on page 1615.](#)
8. Disconnect the cable (A).
9. Remove the three screws (B), and then release the belt (C) on the right side.
10. Remove the motor.

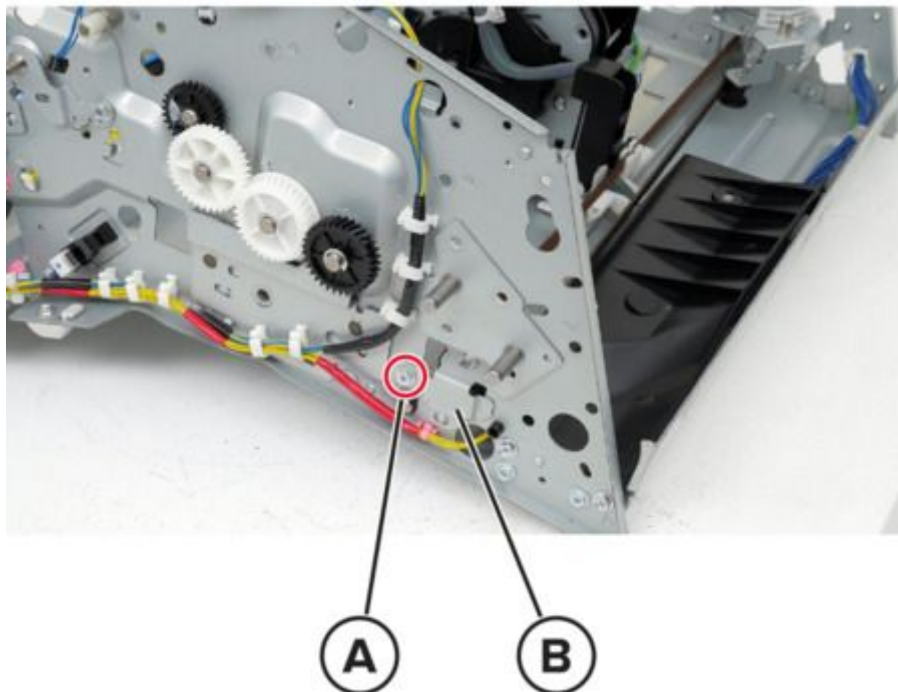
Staple finisher motor idler gear 1 removal

1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
4. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
5. Remove the staple finisher upper transport guide. See [See "Staple finisher upper transport guide removal" on page 1606.](#)
6. Remove the staple finisher compiler exit roller. See [See "Staple finisher compiler exit roller removal" on page 1614.](#)
7. Remove the staple finisher lower chute. See [See "Staple finisher lower chute removal" on page 1615.](#)
8. Remove the motor (staple finisher transport). See [See "Motor \(staple finisher transport\) removal" on page 1638.](#)
9. Remove the E-clip (A), and then remove the gear (B) on the right side.

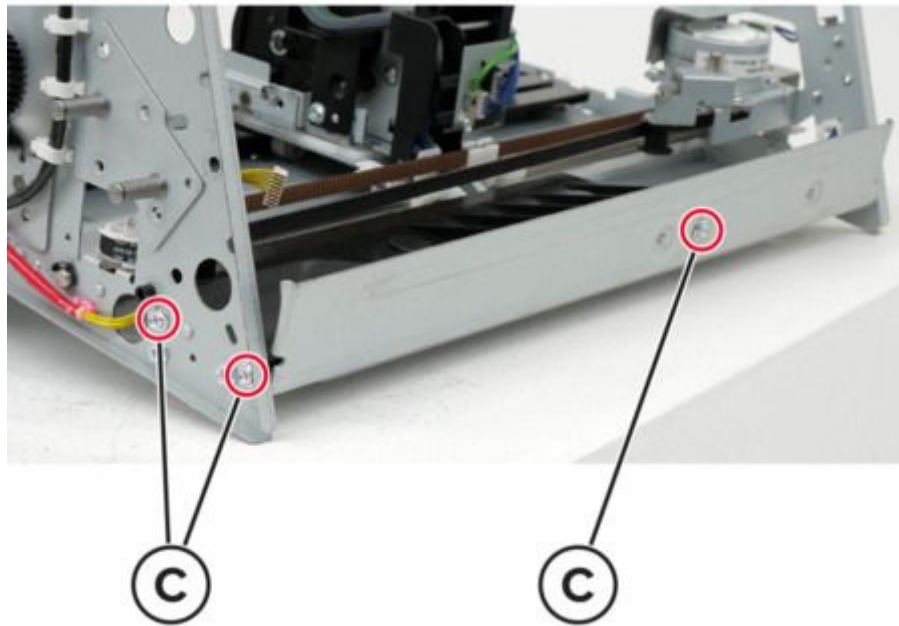


Staple finisher staple drive bracket assembly

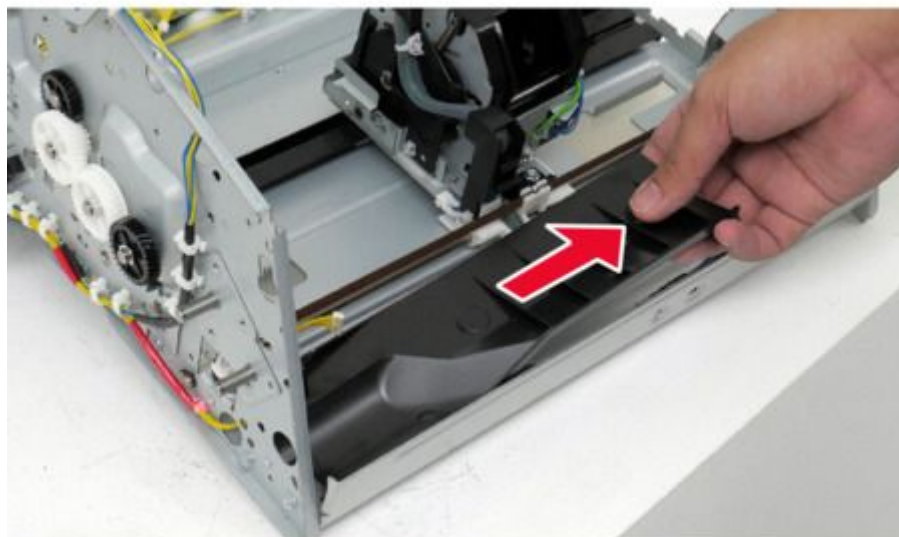
1. Remove the staple finisher front cover. See ["Staple finisher front cover removal"](#) on page 1593.
2. Remove the staple finisher rear cover. See ["Staple finisher rear cover removal"](#) on page 1594.
3. Remove the staple finisher top LH cover. See ["Staple finisher top LH cover removal"](#) on page 1599.
4. Remove the staple finisher top eject cover subassembly. See ["Staple finisher top eject cover subassembly removal"](#) on page 1603.
5. Remove the staple finisher upper transport guide. See ["Staple finisher upper transport guide removal"](#) on page 1606.
6. Remove the staple finisher compiler exit roller. See ["Staple finisher compiler exit roller removal"](#) on page 1614.
7. Remove the staple finisher lower chute. See ["Staple finisher lower chute removal"](#) on page 1615.
8. Remove the motor (staple finisher transport). See ["Motor \(staple finisher transport\) removal"](#) on page 1638.
9. Remove the staple finisher motor idler gear 1. See ["Staple finisher motor idler gear 1 removal"](#) on page 1639.
10. Remove the screw (A), and then remove the tension bracket (B) on the right side.



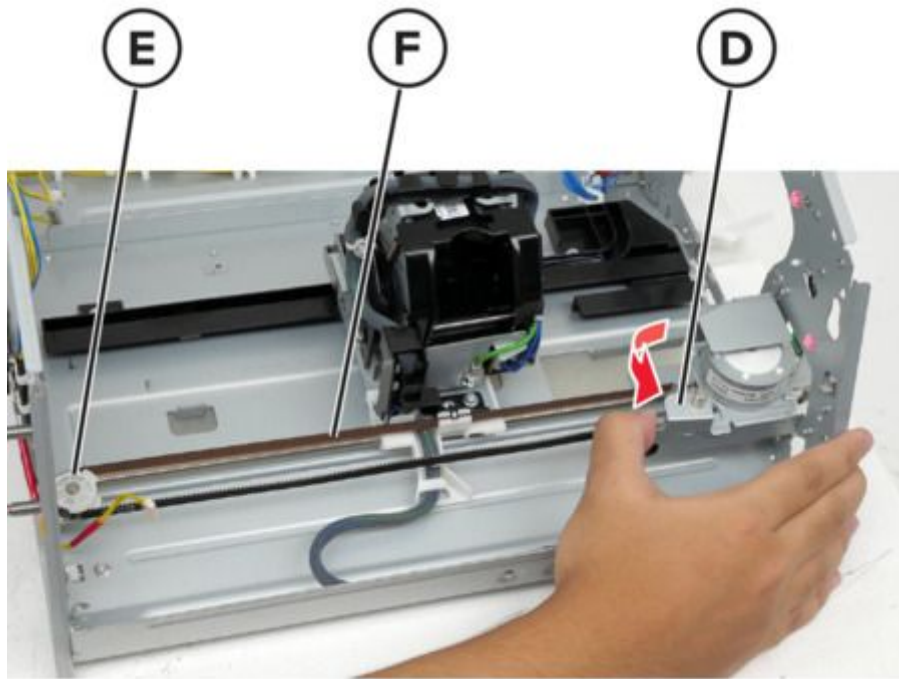
11. Remove the three screws (C).



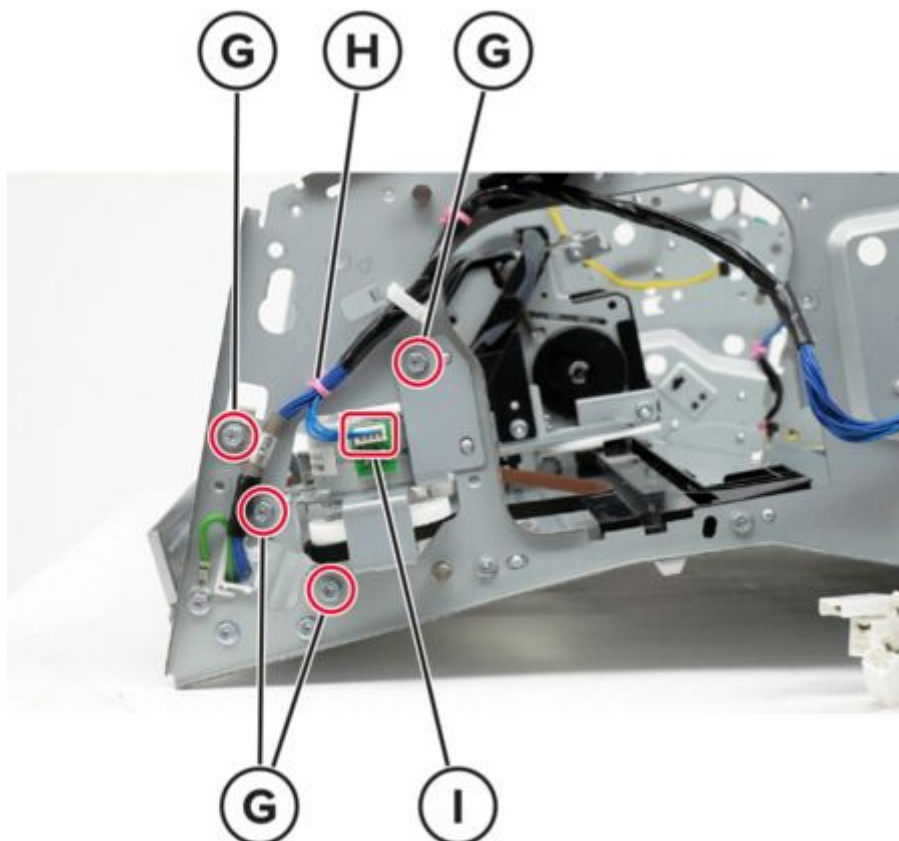
12. Remove the staple harness.



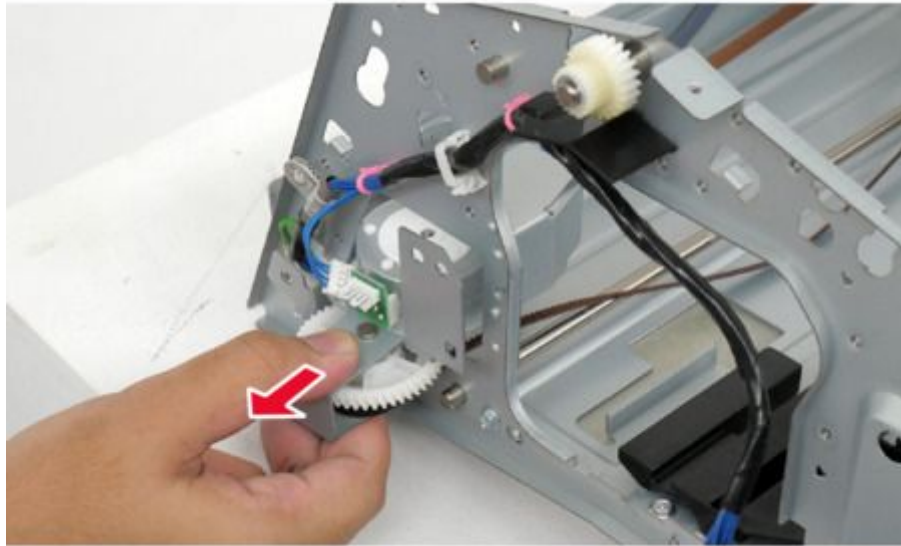
13. Rotate tension belt bracket (D), remove the gear (E), and then remove the belt (F).



14. Remove the four screws (G), release the cable tie (H), and then disconnect the cable (I).

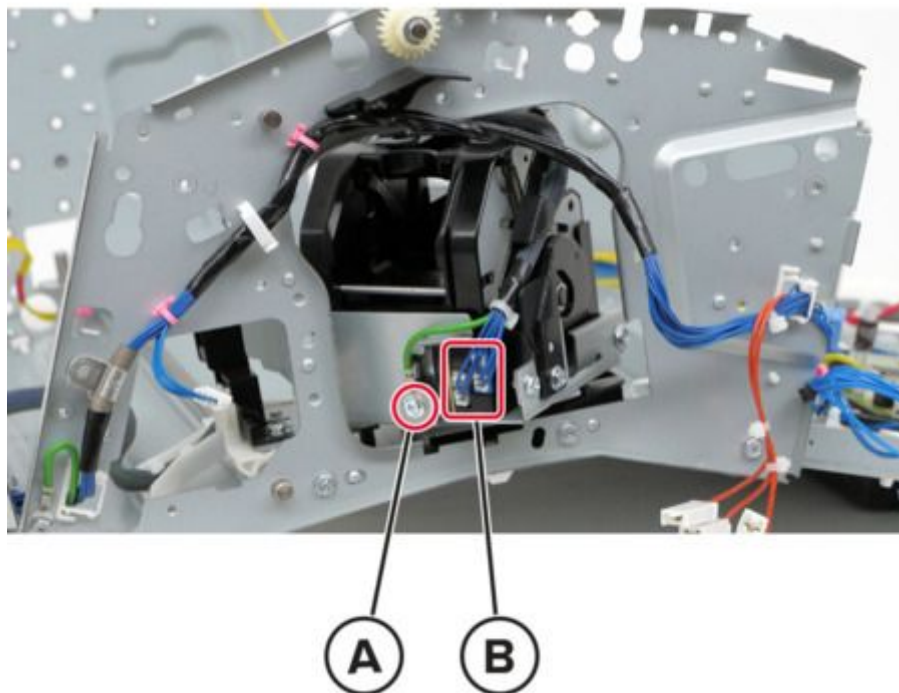


15. Remove the staple drive bracket assembly.

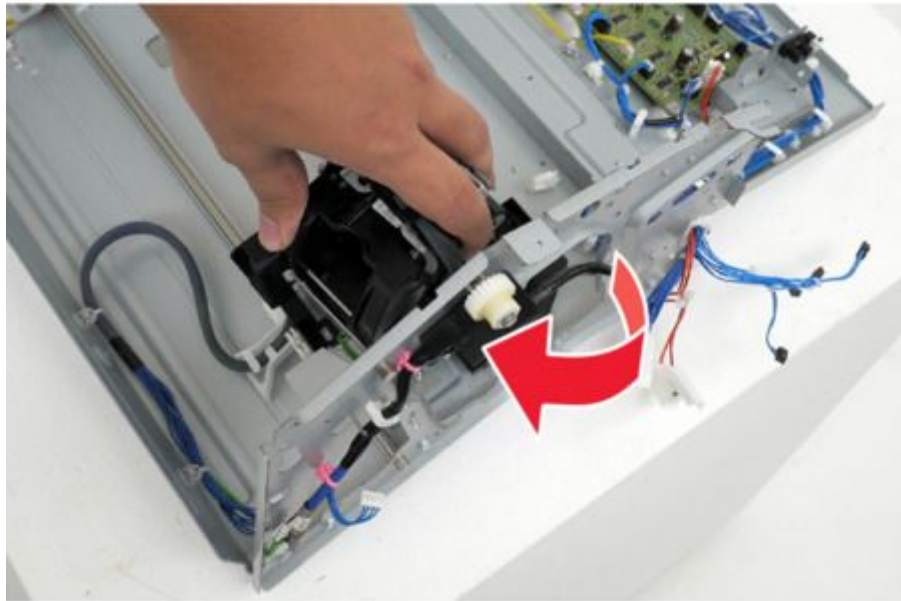


Staple finisher staple assembly

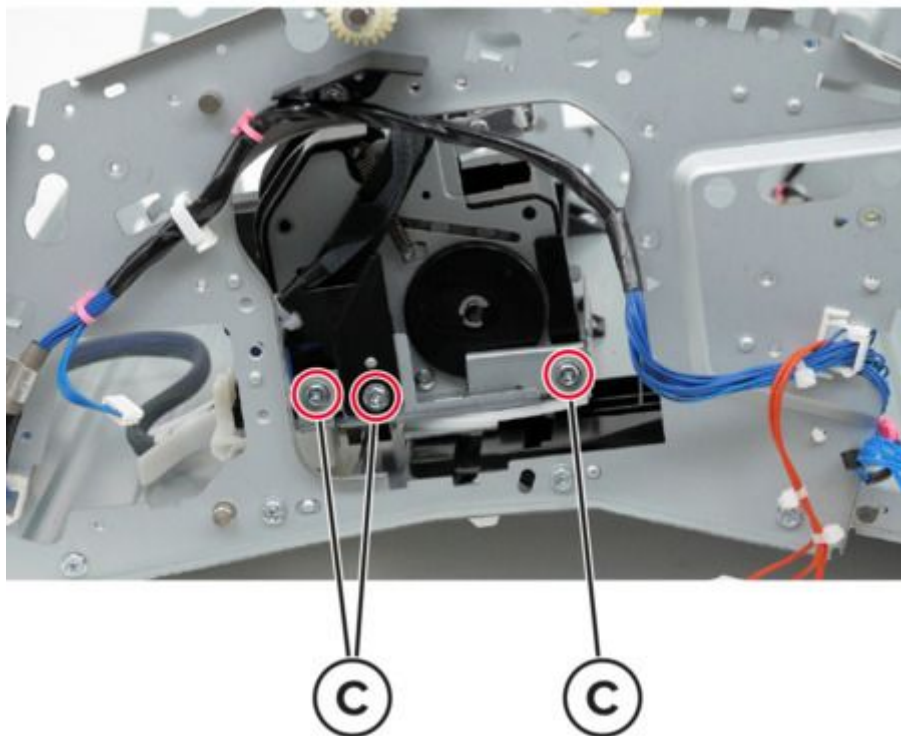
1. Remove the staple finisher front cover. See ["Staple finisher front cover removal"](#) on page 1593.
2. Remove the staple finisher rear cover. See ["Staple finisher rear cover removal"](#) on page 1594.
3. Remove the staple finisher top LH cover. See ["Staple finisher top LH cover removal"](#) on page 1599.
4. Remove the staple finisher top eject cover subassembly. See ["Staple finisher top eject cover subassembly removal"](#) on page 1603.
5. Remove the staple finisher upper transport guide. See ["Staple finisher upper transport guide removal"](#) on page 1606.
6. Remove the staple finisher compiler exit roller. See ["Staple finisher compiler exit roller removal"](#) on page 1614.
7. Remove the staple finisher lower chute. See ["Staple finisher lower chute removal"](#) on page 1615.
8. Remove the motor (staple finisher transport). See ["Motor \(staple finisher transport\) removal"](#) on page 1638.
9. Remove the staple finisher motor idler gear 1. See ["Staple finisher motor idler gear 1 removal"](#) on page 1639.
10. Remove the staple finisher staple drive bracket assembly. See ["Staple finisher staple drive bracket assembly"](#) on page 1640.
11. Remove the screw (A), and then disconnect the two cables (B).



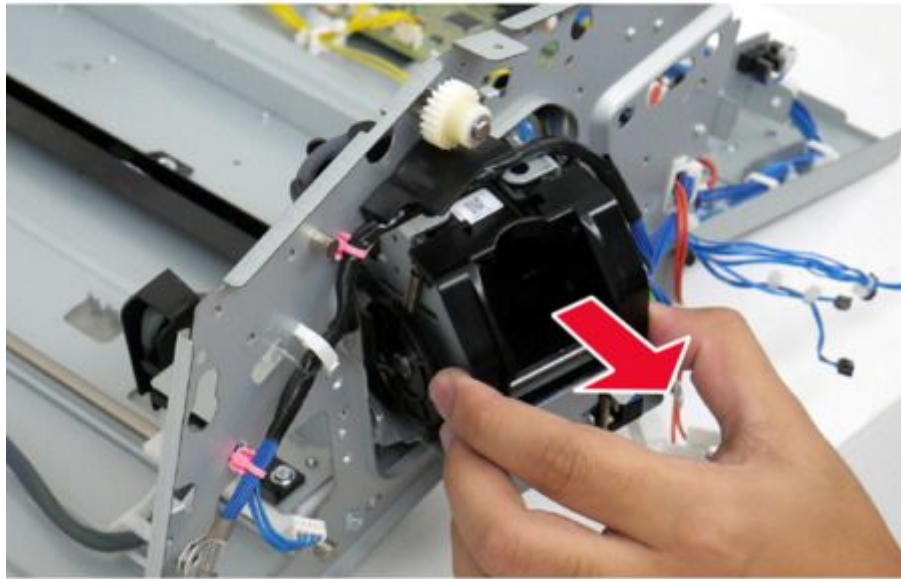
12. Move the staple assembly from its home position.



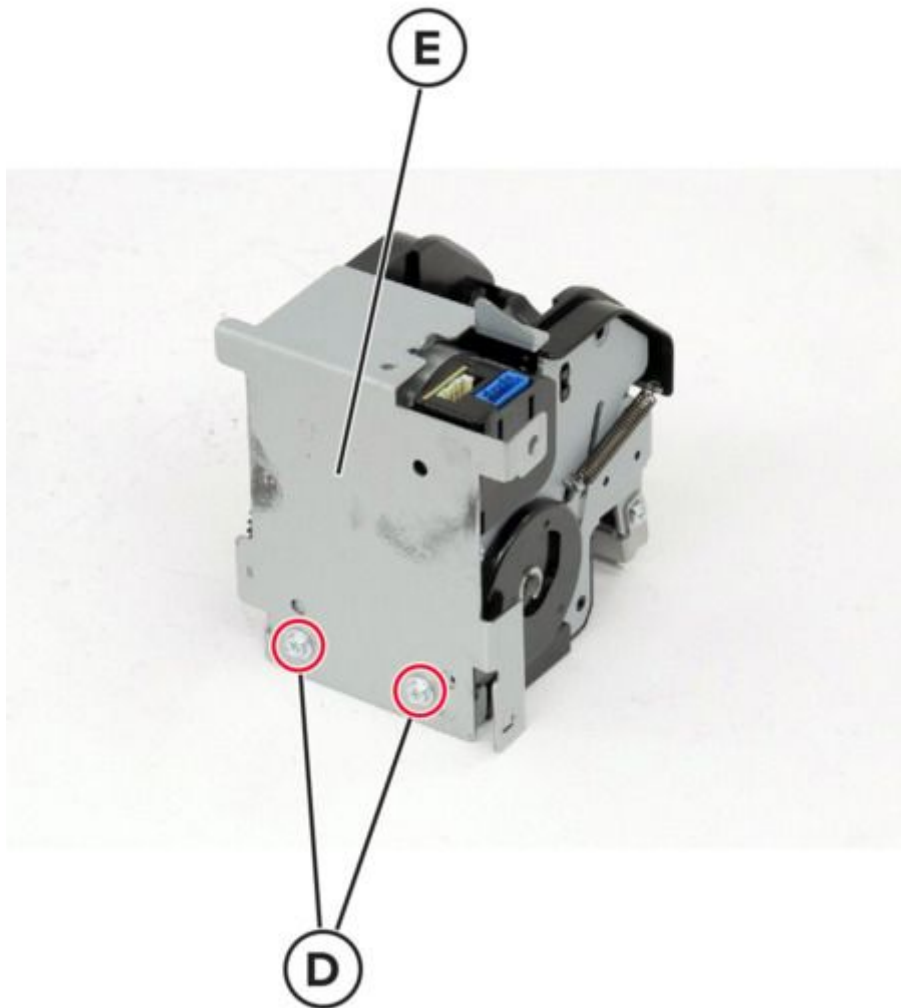
13. Remove the three screws (C).



14. Move the staple assembly back to its home position, and then remove the staple assembly.

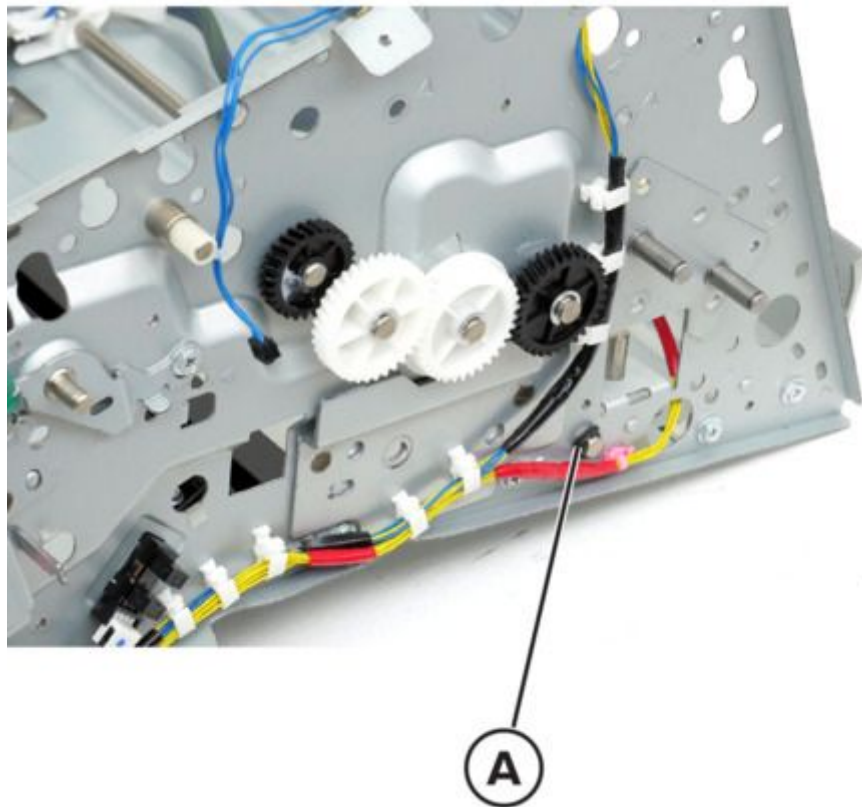


15. Remove the two screws (D), and then remove bracket (E).

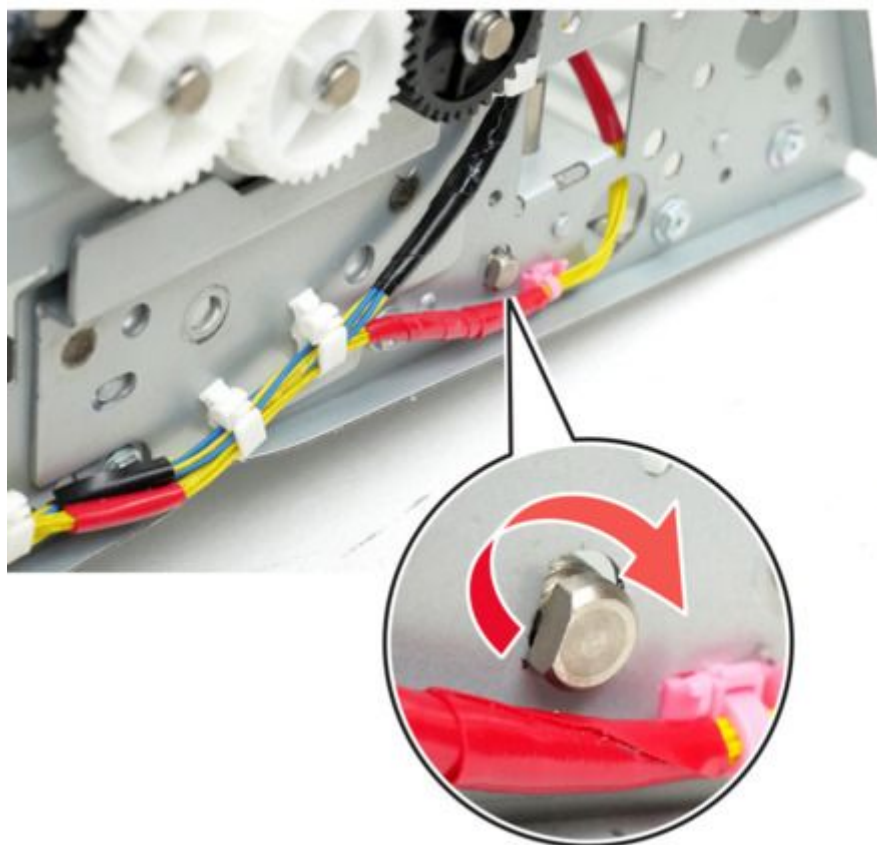


Staple finisher staple rail assembly removal

1. Remove the staple finisher front cover. See [See "Staple finisher front cover removal" on page 1593.](#)
2. Remove the staple finisher rear cover. See [See "Staple finisher rear cover removal" on page 1594.](#)
3. Remove the staple finisher top LH cover. See [See "Staple finisher top LH cover removal" on page 1599.](#)
4. Remove the staple finisher top eject cover subassembly. See [See "Staple finisher top eject cover subassembly removal" on page 1603.](#)
5. Remove the staple finisher upper transport guide. See [See "Staple finisher upper transport guide removal" on page 1606.](#)
6. Remove the staple finisher compiler exit roller. See [See "Staple finisher compiler exit roller removal" on page 1614.](#)
7. Remove the staple finisher lower chute. See [See "Staple finisher lower chute removal" on page 1615.](#)
8. Remove the motor (staple finisher transport). See [See "Motor \(staple finisher transport\) removal" on page 1638.](#)
9. Remove the motor idler gear 1. See [See "Staple finisher motor idler gear 1 removal" on page 1639.](#)
10. Remove the staple finisher staple drive bracket assembly. See [See "Staple finisher staple drive bracket assembly" on page 1640.](#)
11. Remove the staple finisher staple assembly. See [See "Staple finisher staple assembly" on page 1644.](#)
12. Remove the KL-clip (A).

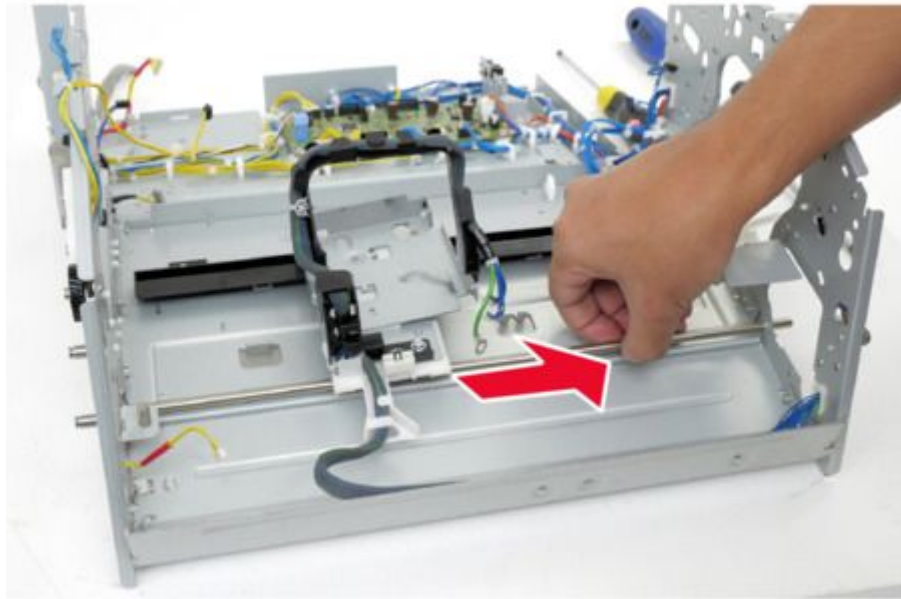


13. Rotate the rail to the correct position to release the rail from the frame.

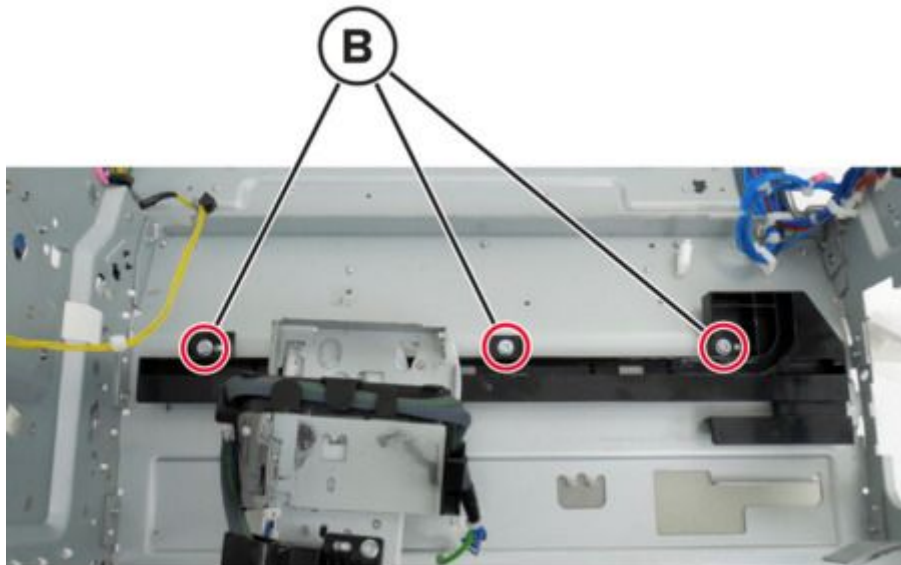


Parts removal

14. Remove the rail from the frame.



15. Remove the three screws (B).



16. Release the staple carriage rail from the tabs.

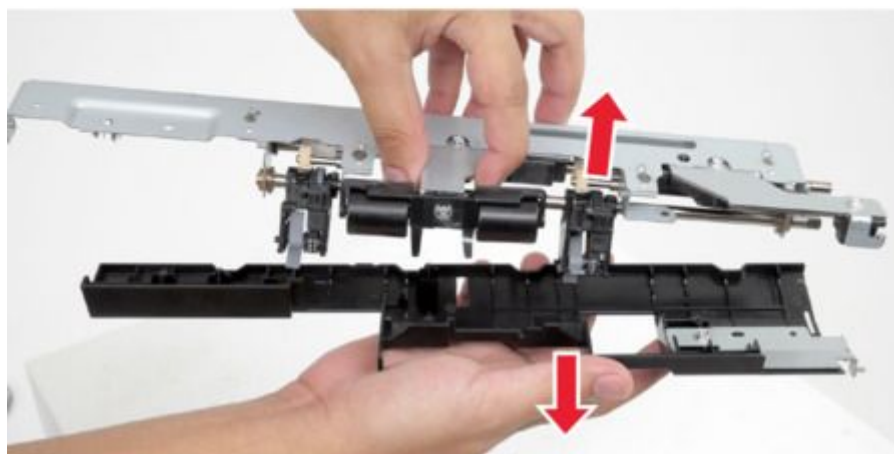
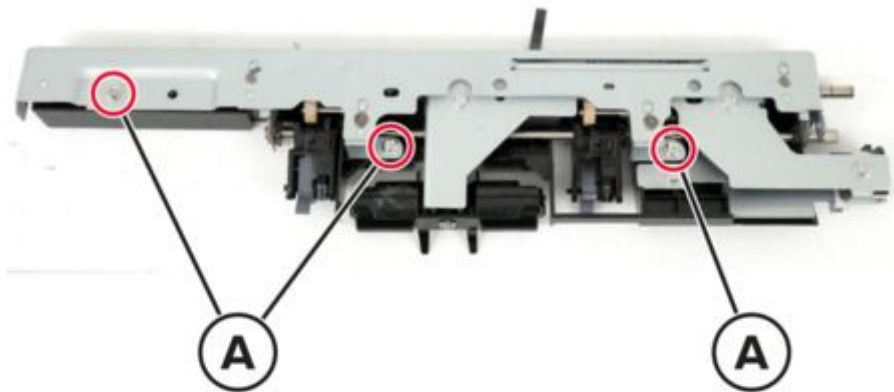


17. Rotate the staple carriage to remove the rail.



Staple finisher subpaddle removal

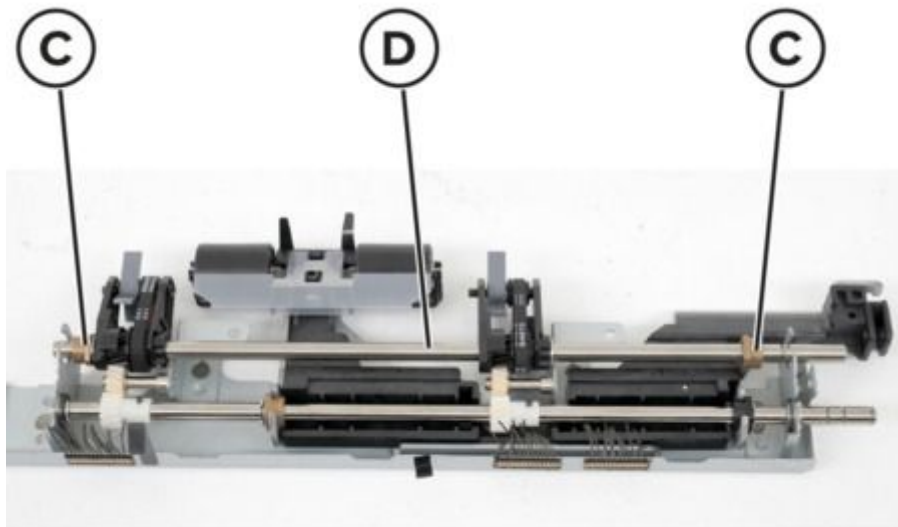
1. Remove the staple finisher front cover. See ["Staple finisher front cover removal"](#) on page 1593.
2. Remove the staple finisher rear cover. See ["Staple finisher rear cover removal"](#) on page 1594.
3. Remove the staple finisher top LH cover. See ["Staple finisher top LH cover removal"](#) on page 1599.
4. Remove the staple finisher top eject cover subassembly. See ["Staple finisher top eject cover subassembly removal"](#) on page 1603.
5. Remove the staple finisher upper eject plate. See ["Staple finisher upper eject plate removal"](#) on page 1620.
6. Remove the three screws (A), and then remove the subpaddle from the cover.



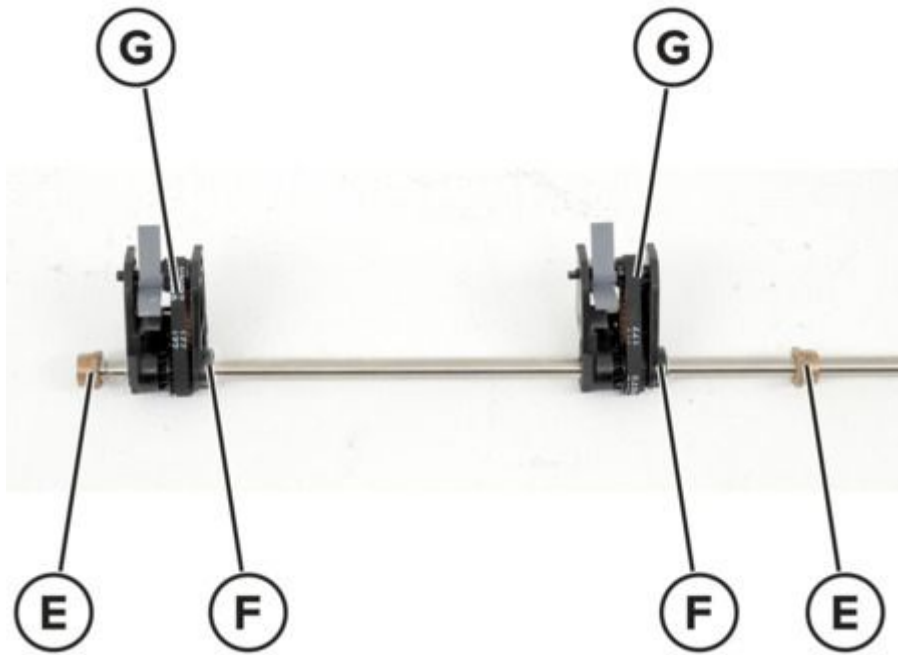
7. Remove the two E-clips (B).



8. Release the two bushings (C), and then remove the subpaddle (D).



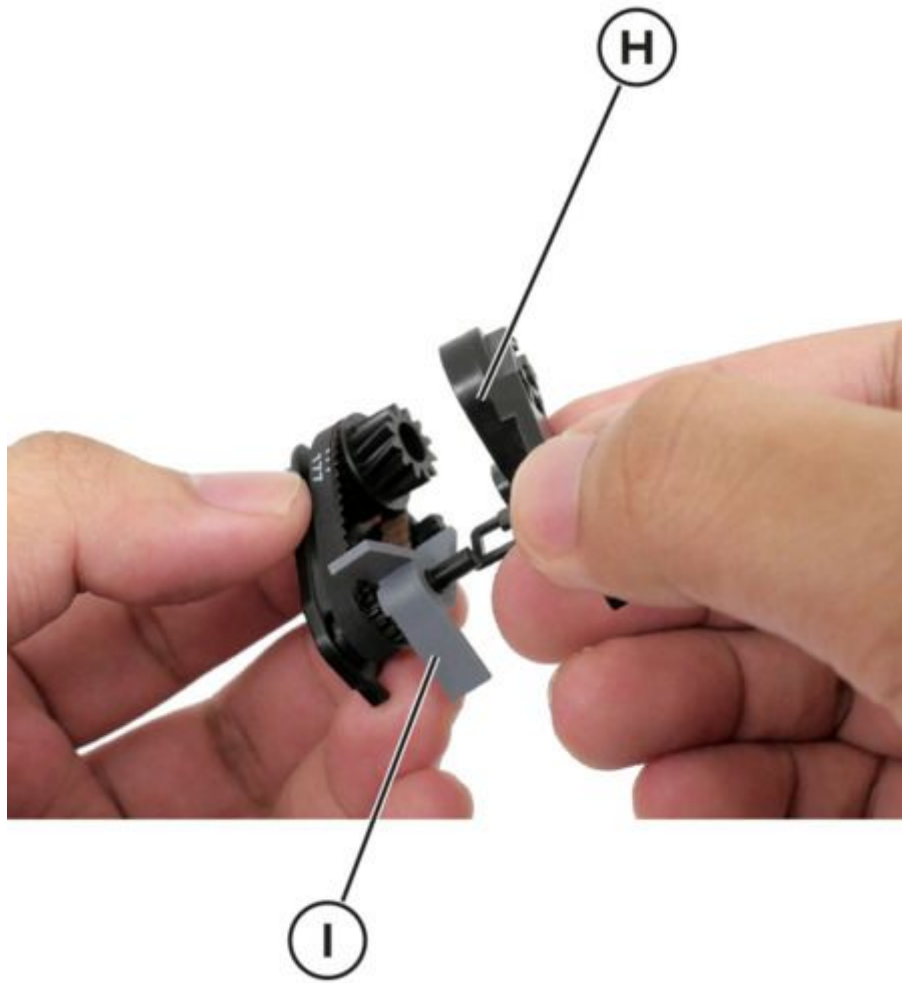
9. Remove the two bushings (E), remove the two E-clips (F), and then remove the two subpaddles (G).



10. Remove the bracket (H) holding the subpaddle, and then remove the subpaddle (I).

NOTES

Do this step on the two subpaddles.



Staple, hole punch finisher (SHPF) removals

Foot cover removal

1. Remove the two screws (A).



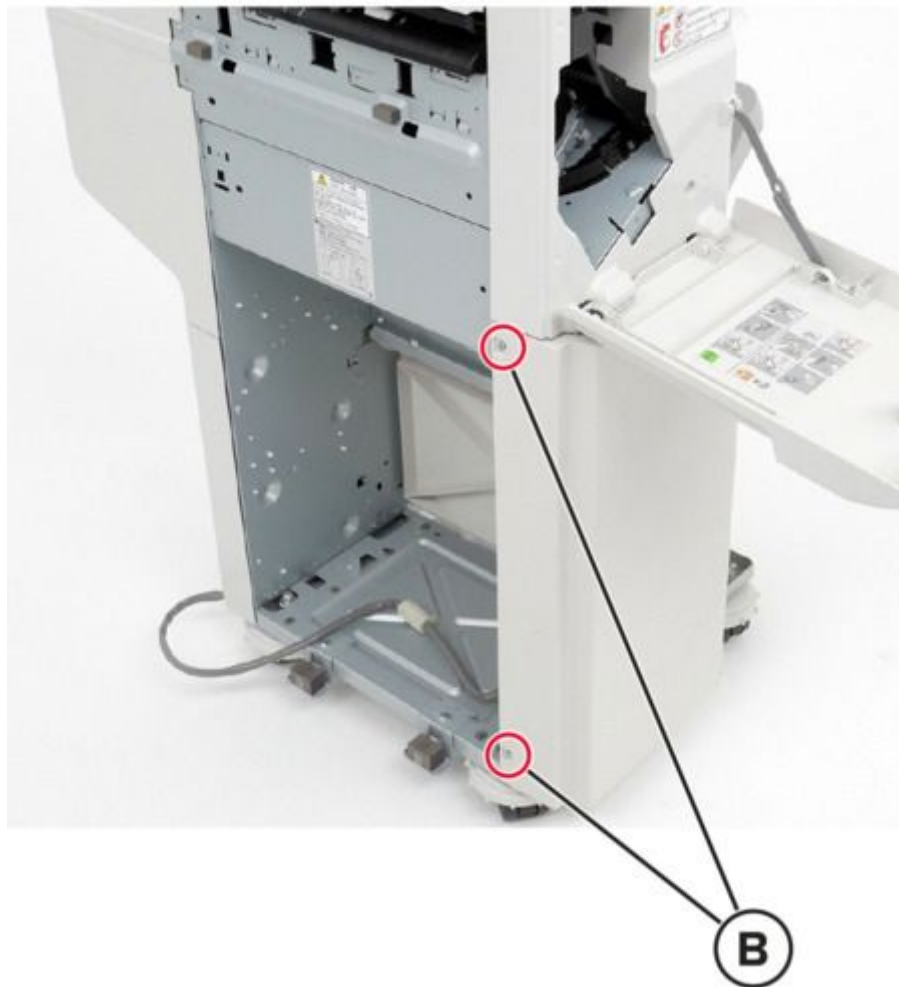
2. Remove the foot cover.

Finisher front cover removal

1. Remove the foot cover. See [See "Foot cover removal" on page 1655](#).
2. Remove the screw (A).



3. Remove the two screws (B).



4. Remove the three screws (C).

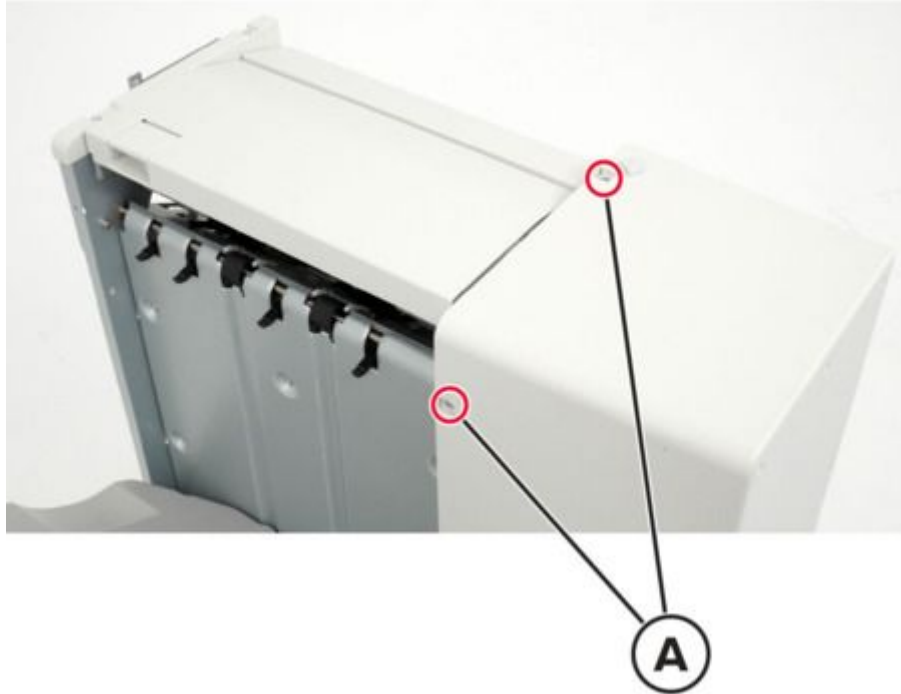




5. Remove the finisher front cover.

Finisher upper rear cover removal

1. Remove the two screws (A).



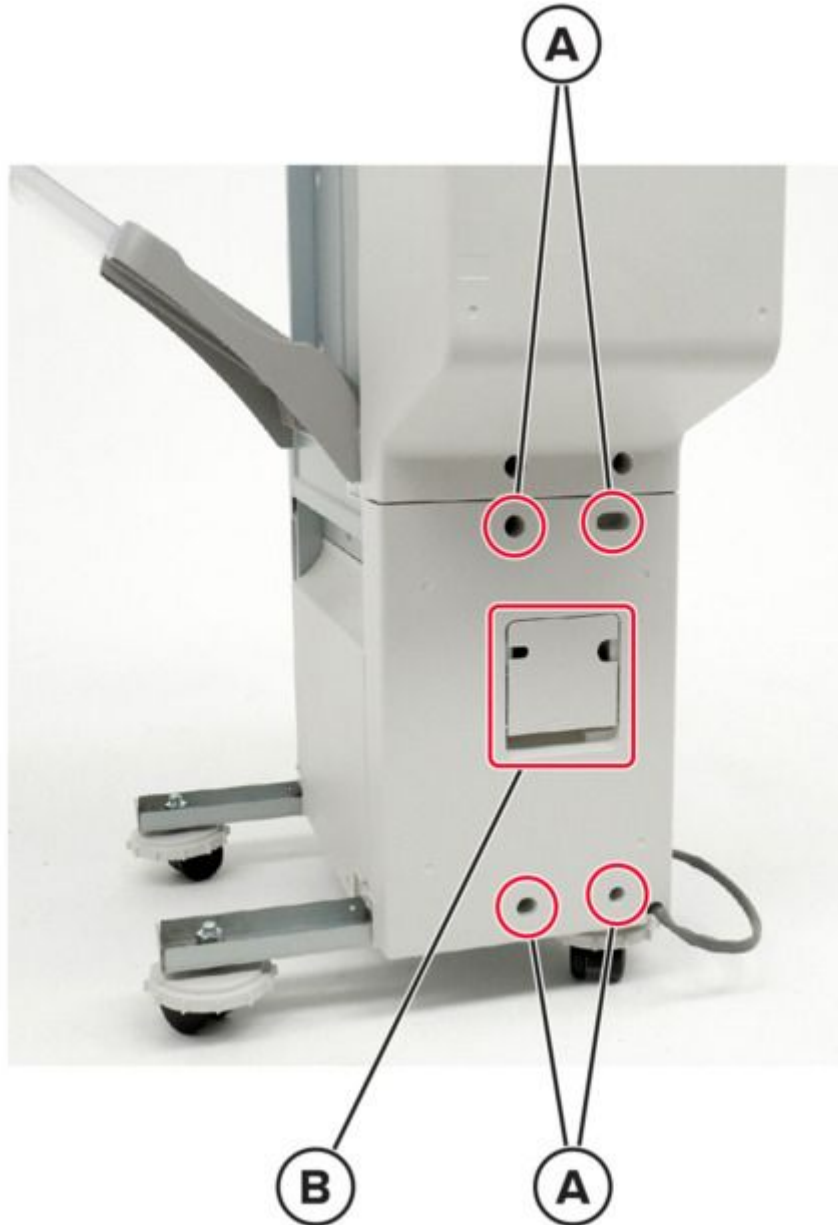
2. Remove the two screws (B).



3. Remove the finisher upper rear cover.

Finisher lower rear cover removal

1. Remove the foot cover. See [See "Foot cover removal" on page 1655](#).
2. Remove the four screws (A).
3. Remove the plate (B).



4. Release the snap (C).

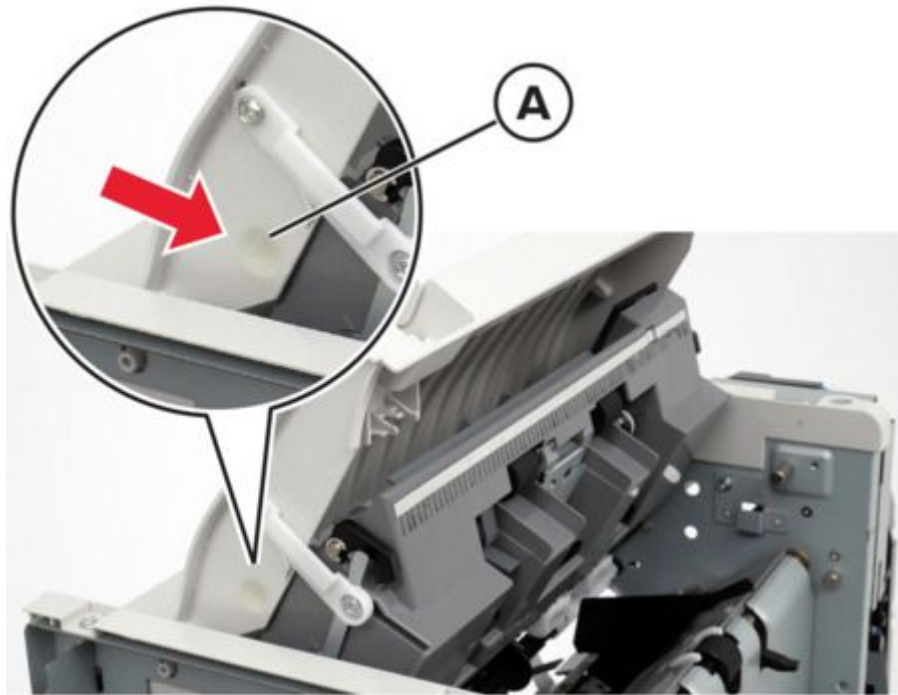


C

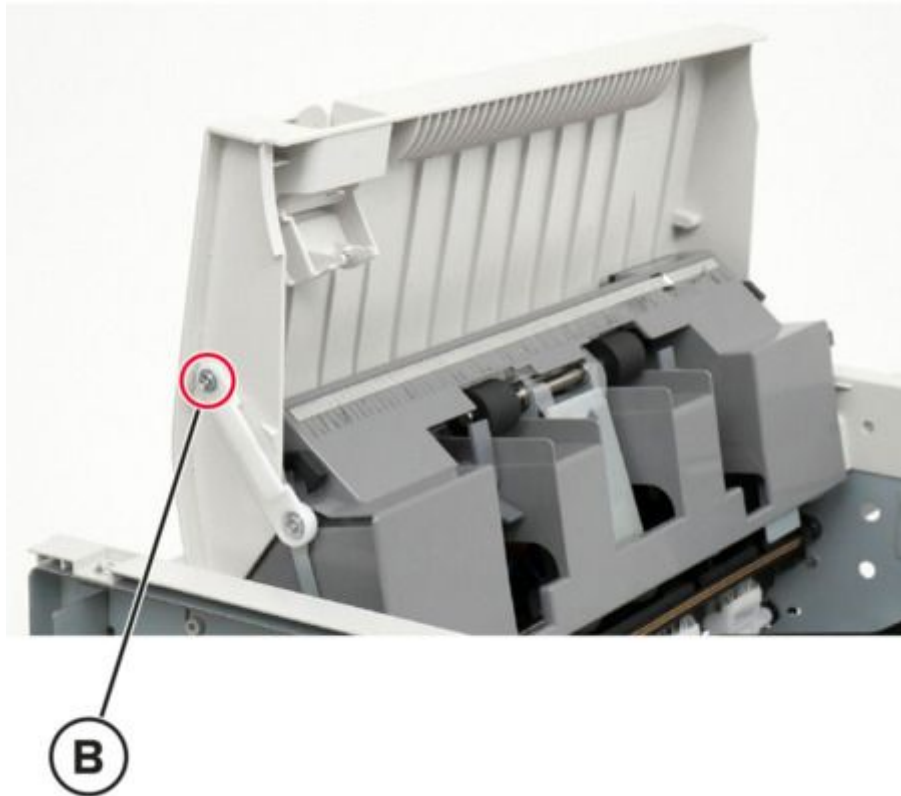
5. Remove the finisher lower rear cover.

Finisher top cover assembly removal

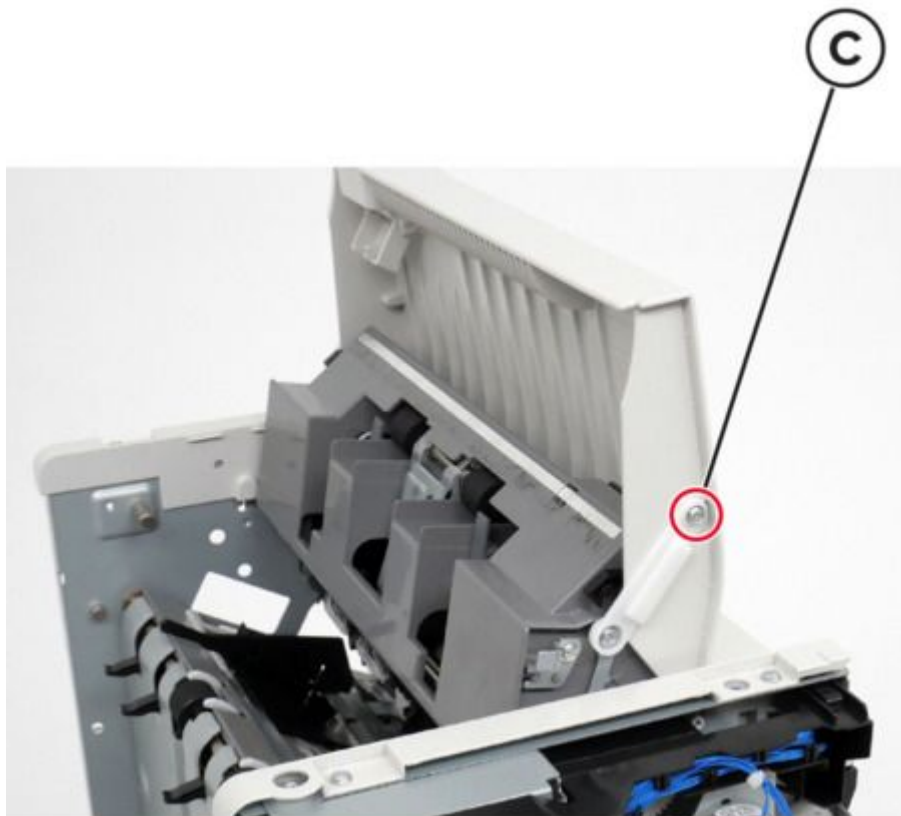
1. Remove the finisher front cover. See [See "Finisher front cover removal" on page 1656.](#)
2. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
3. Open the top assembly.
4. Press the recess (A) to let the cover move upright.



5. Remove the screw (B).



6. Remove the screw (C).



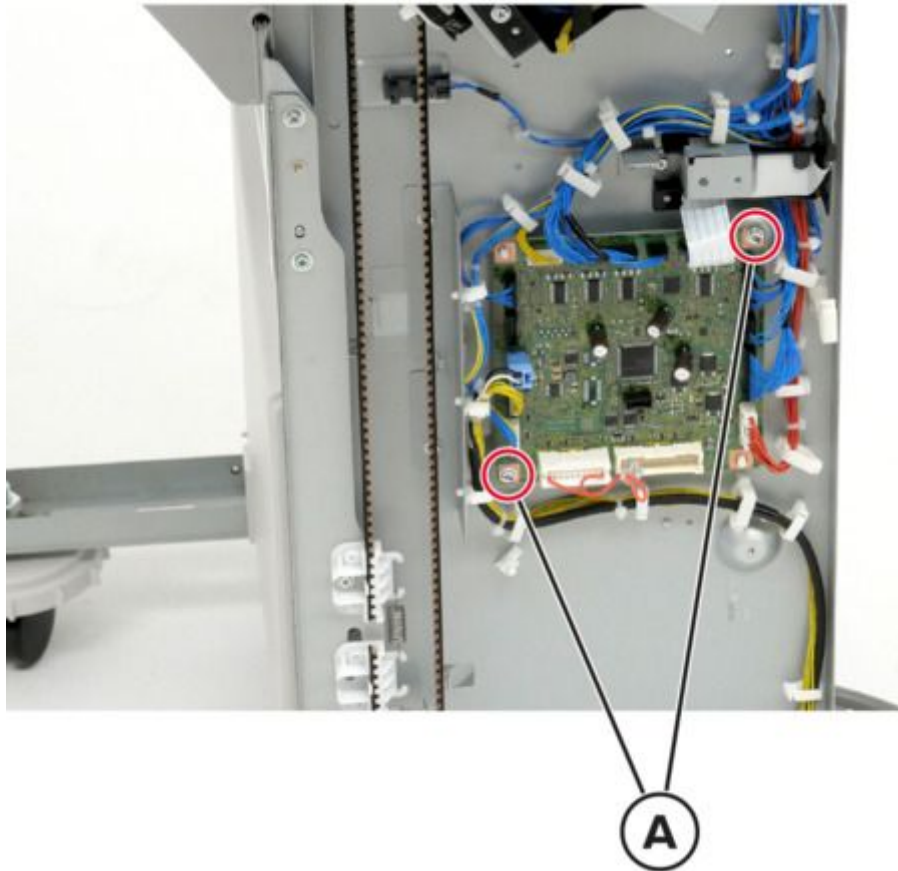
7. Remove the four screws (D).



8. Remove the finisher top cover assembly.

Finisher controller board removal

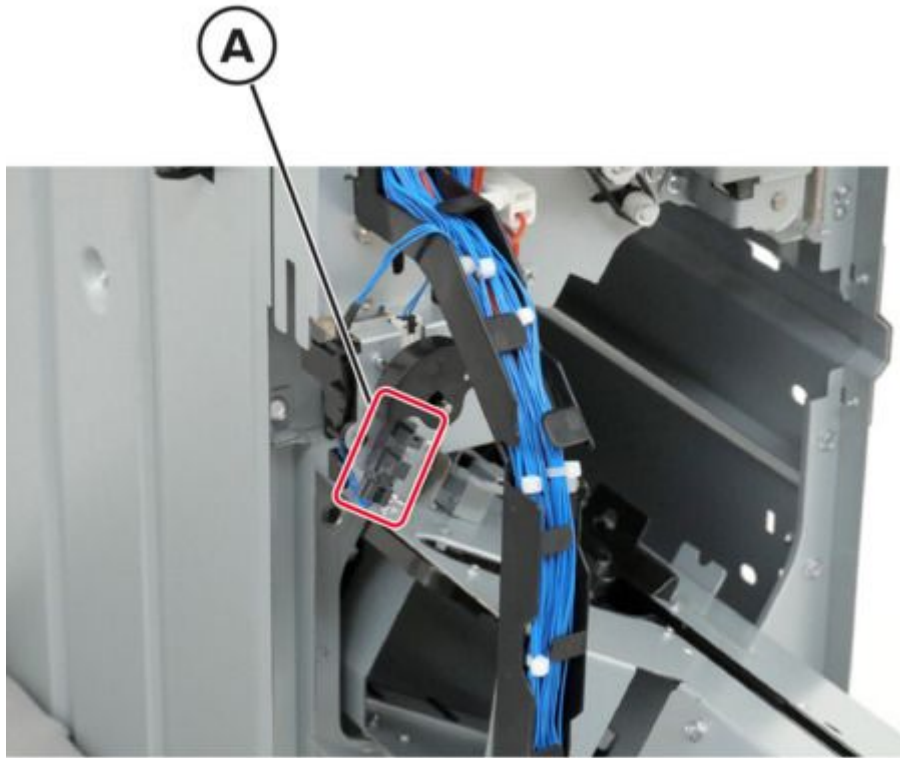
1. Remove the foot cover. See [See "Foot cover removal" on page 1655.](#)
2. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
3. Remove the finisher lower rear cover. See [See "Finisher lower rear cover removal" on page 1662.](#)
4. Remove all cables and connectors from the controller board.
5. Remove the two screws (A).



6. Remove the finisher controller board.

Set clamp home sensor removal

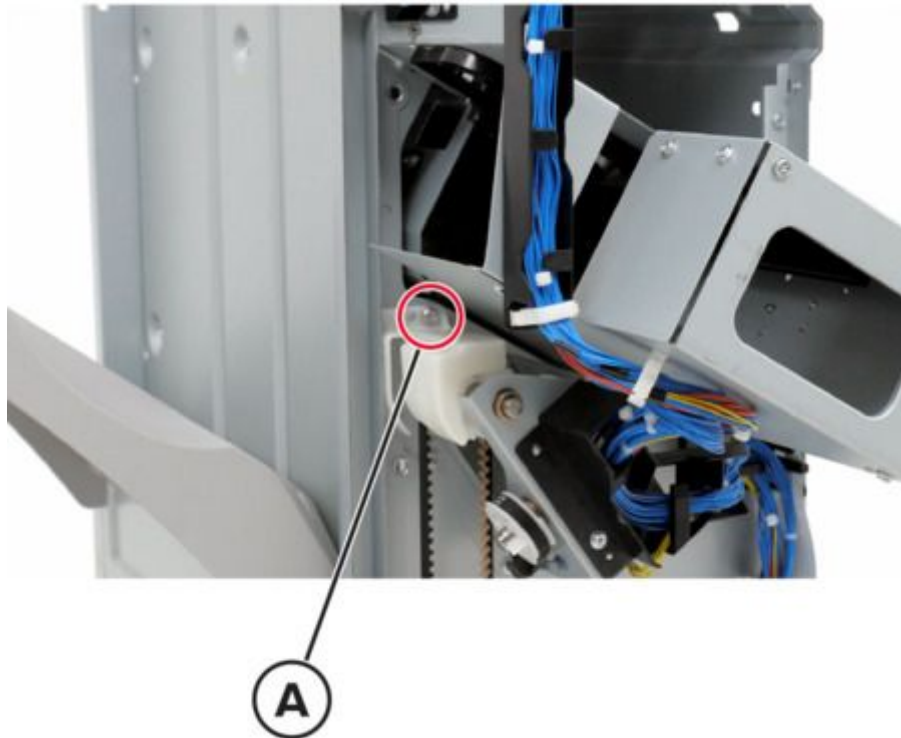
1. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
2. Remove the connector (A).



3. Remove the set clamp home sensor.

Rear pulley cover removal

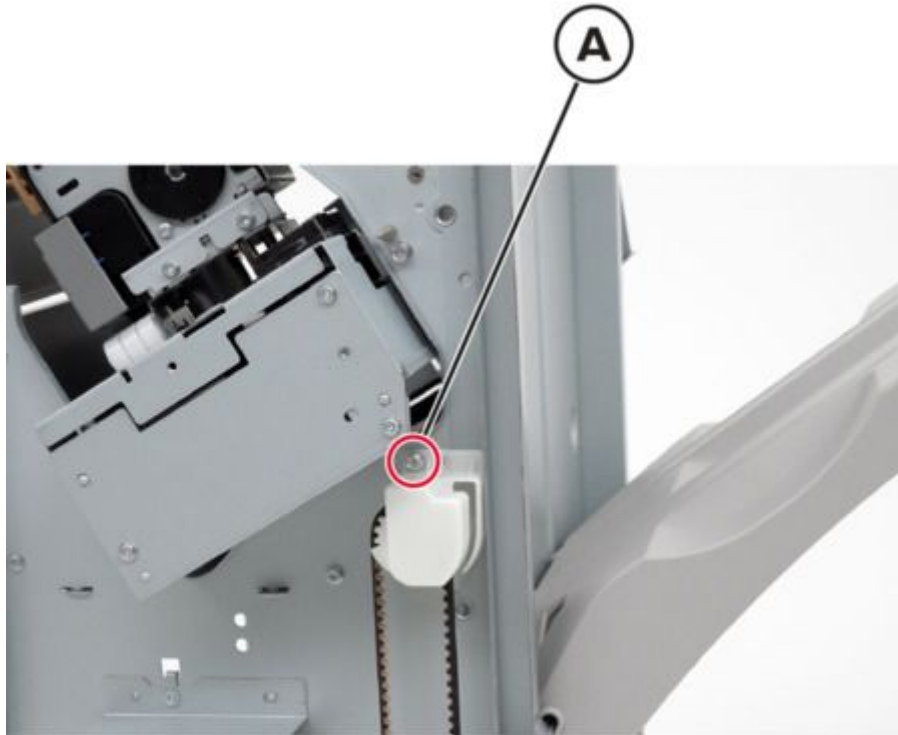
1. Remove the foot cover. See [See "Foot cover removal" on page 1655.](#)
2. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
3. Remove the finisher lower rear cover. See [See "Finisher lower rear cover removal" on page 1662.](#)
4. Remove the screw (A).



5. Remove the rear pulley cover.

Front pulley cover removal

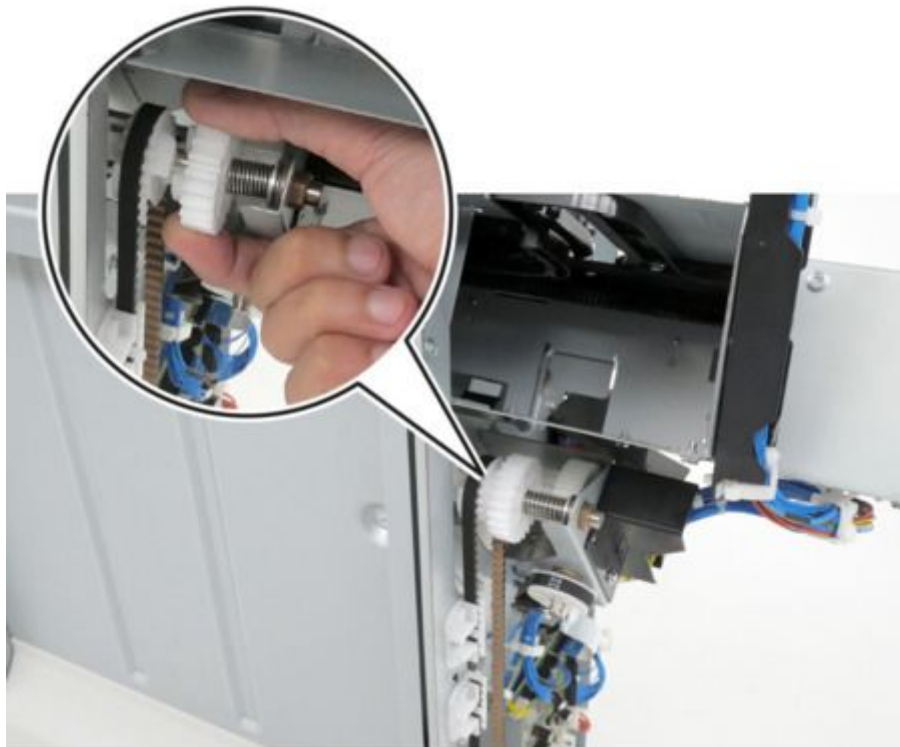
1. Remove the foot cover. See [See "Foot cover removal" on page 1655.](#)
2. Remove the finisher front cover. See [See "Finisher front cover removal" on page 1656.](#)
3. Remove the screw (A).



4. Remove the front pulley cover.

Carriage tray assembly removal

1. Remove the foot cover. See [See "Foot cover removal" on page 1655.](#)
2. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
3. Remove the finisher lower rear cover. See [See "Finisher lower rear cover removal" on page 1662.](#)
4. Remove the rear pulley cover. See [See "Rear pulley cover removal" on page 1669.](#)
5. Pull the rear pulley, and then lower the stacker tray.



6. Remove the two screws (A).



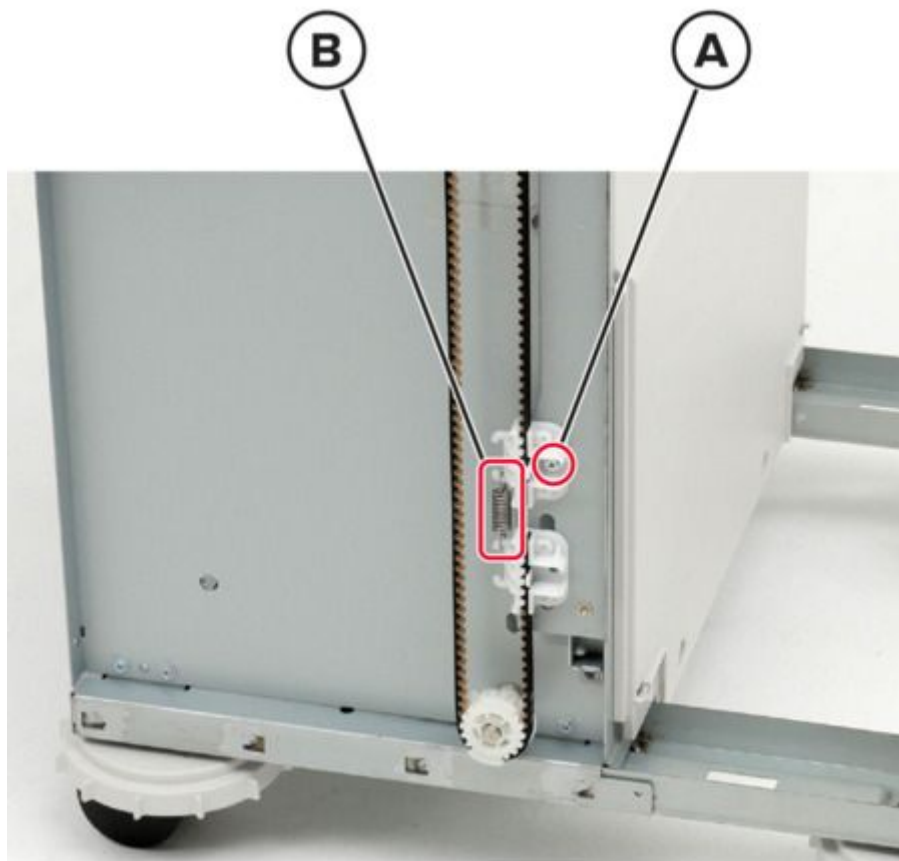
7. Remove the two screws (B).



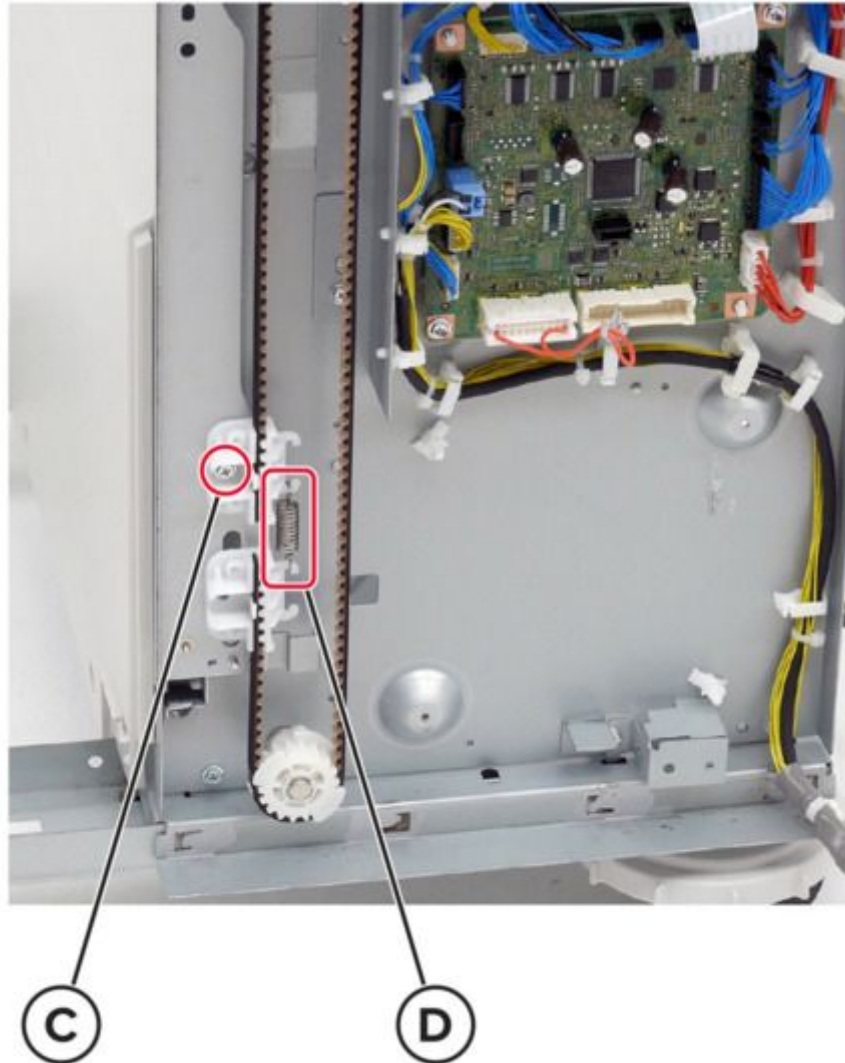
8. Remove the carriage tray assembly.

Stacker belt removal

1. Remove the foot cover. See [See "Foot cover removal" on page 1655.](#)
2. Remove the finisher front cover. See [See "Finisher front cover removal" on page 1656.](#)
3. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
4. Remove the finisher lower rear cover. See [See "Finisher lower rear cover removal" on page 1662.](#)
5. Remove the rear pulley cover. See [See "Rear pulley cover removal" on page 1669.](#)
6. Remove the front pulley cover. See [See "Front pulley cover removal" on page 1670.](#)
7. Remove the carriage tray assembly. See [See "Carriage tray assembly removal" on page 1671.](#)
8. Remove the screw (A), remove the spring (B), and then remove the front stacker belt.



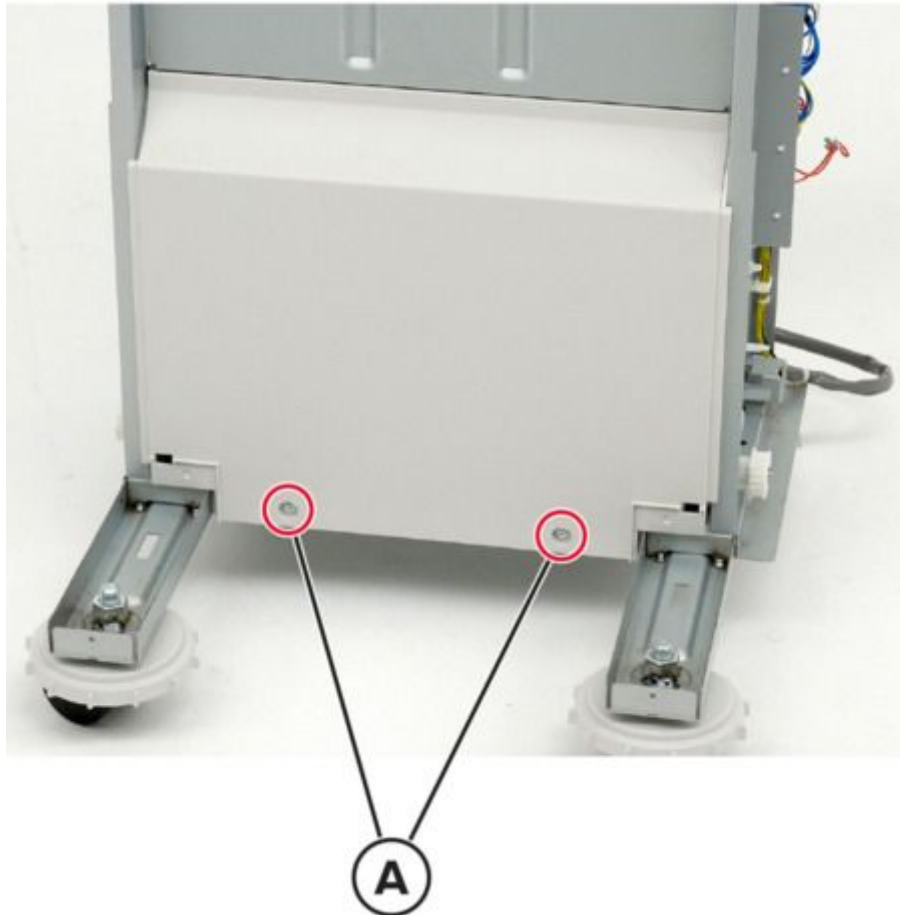
9. Remove the screw (C) and spring (D), and then remove the rear stacker belt.



10. Remove the stacker belt.

RH cover removal

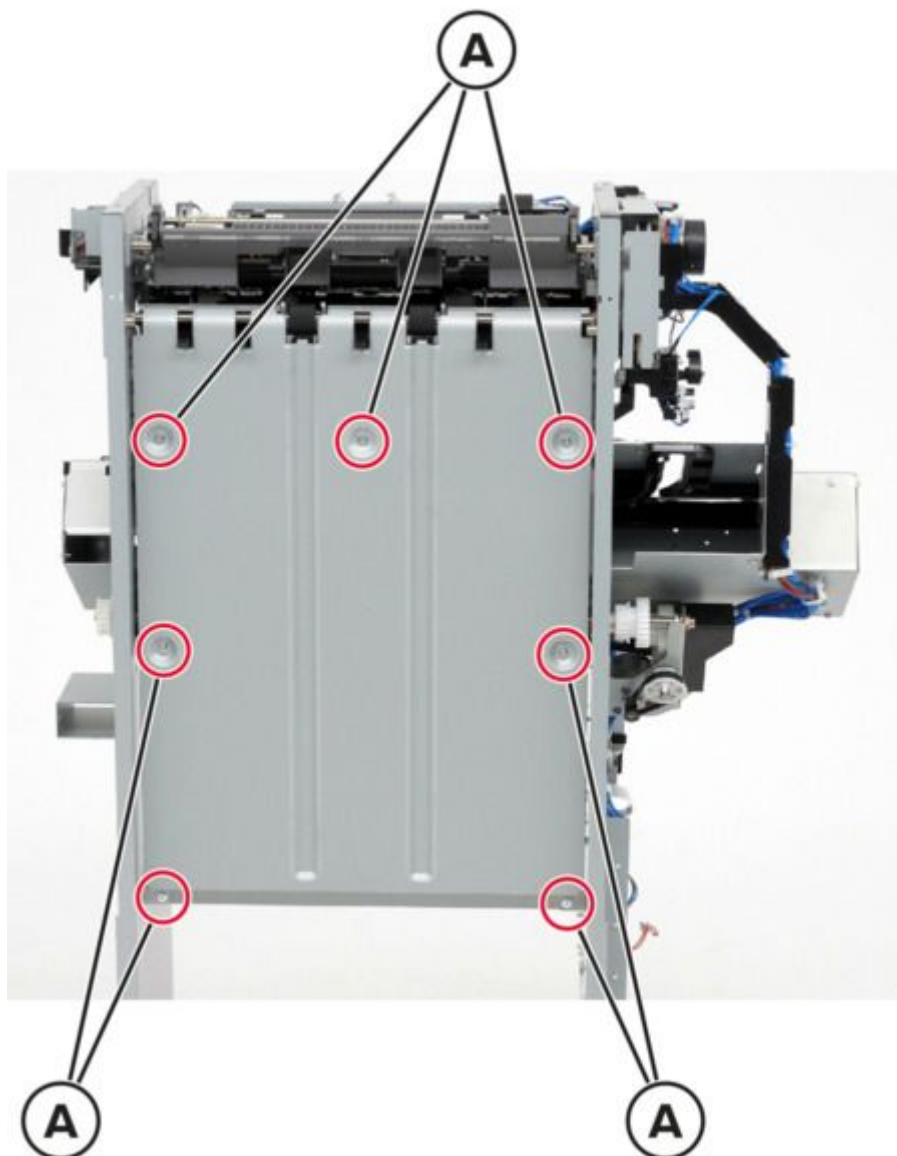
1. Remove the foot cover. See [See "Foot cover removal" on page 1655.](#)
2. Remove the finisher front cover. See [See "Finisher front cover removal" on page 1656.](#)
3. Remove the finisher lower rear cover. See [See "Finisher lower rear cover removal" on page 1662.](#)
4. Remove the two screws (A).



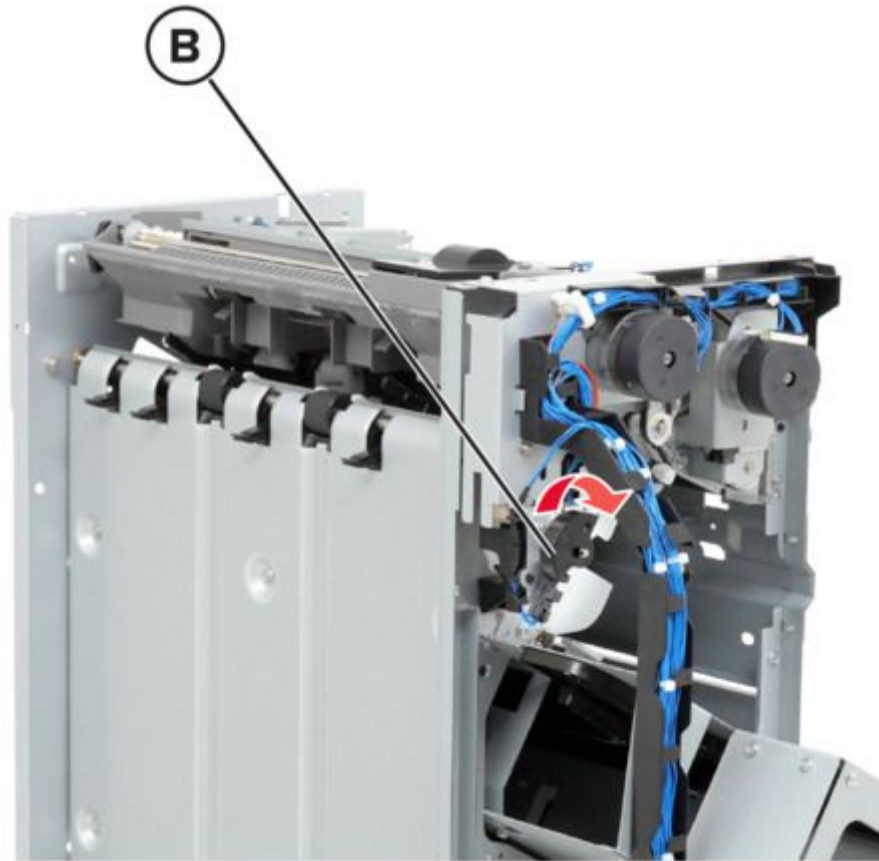
5. Remove the RH cover.

Tray guide removal

1. Remove the foot cover. See ["Foot cover removal"](#) on page 1655.
2. Remove the finisher front cover. See ["Finisher front cover removal"](#) on page 1656.
3. Remove the finisher upper rear cover. See ["Finisher upper rear cover removal"](#) on page 1660.
4. Remove the finisher lower rear cover. See ["Finisher lower rear cover removal"](#) on page 1662.
5. Remove the rear pulley cover. See ["Rear pulley cover removal"](#) on page 1669.
6. Remove the carriage tray assembly. See ["Carriage tray assembly removal"](#) on page 1671.
7. Remove the RH cover. See ["RH cover removal"](#) on page 1676.
8. Remove the seven screws (A).



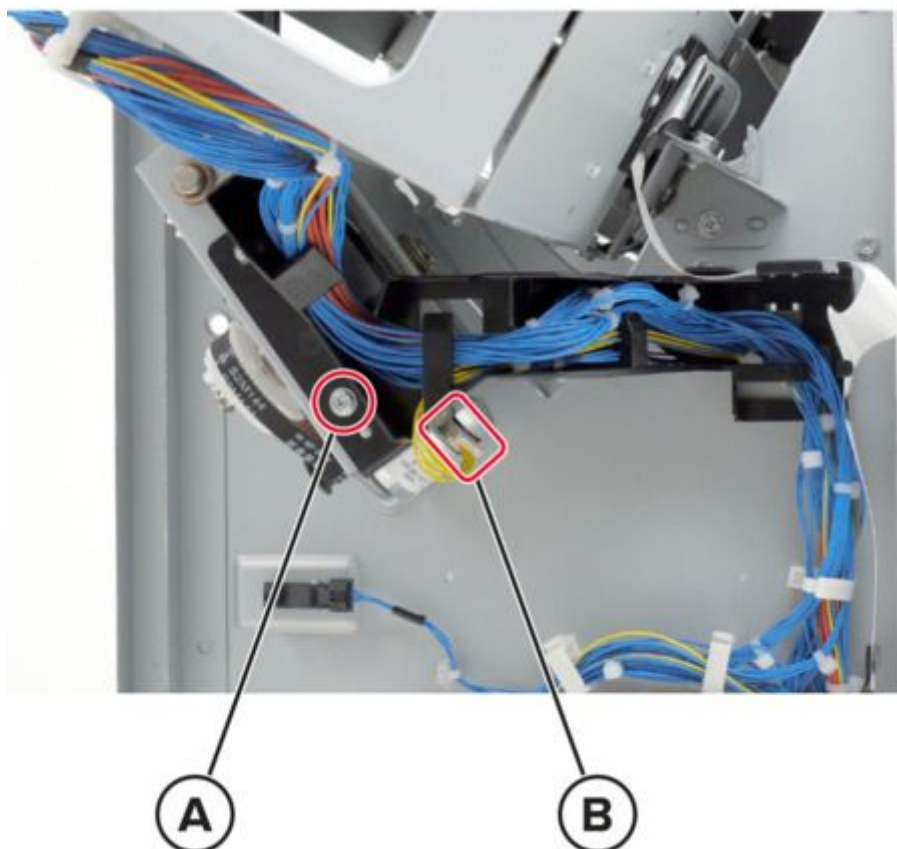
9. Rotate the latch (B) downward.



10. Remove the tray guide.

Harness guide removal

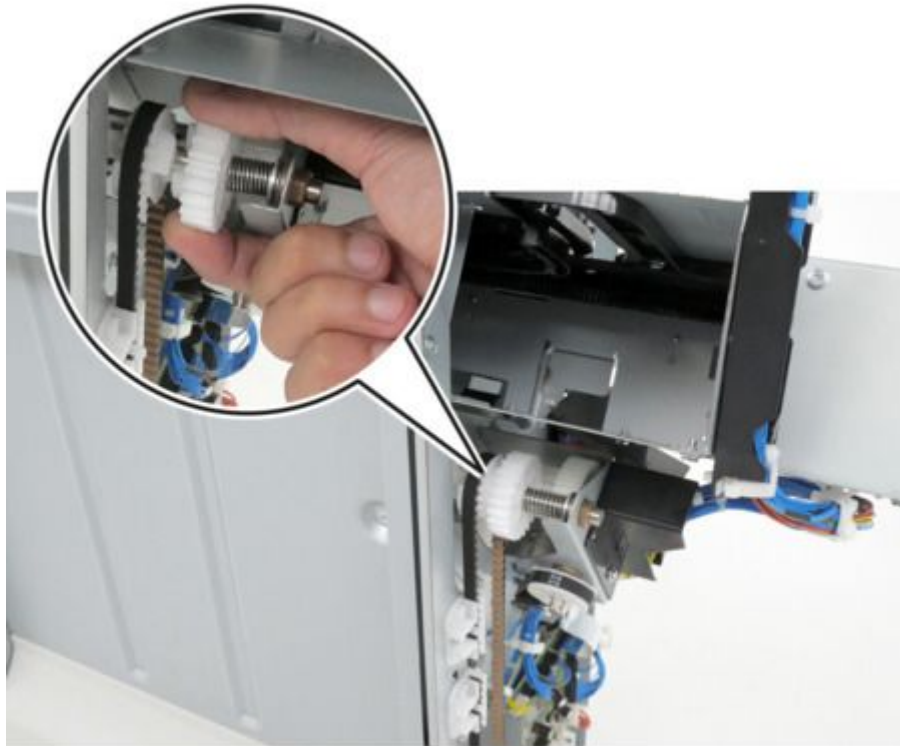
1. Remove the foot cover. See ["Foot cover removal" on page 1655](#).
2. Remove the finisher upper rear cover. See ["Finisher upper rear cover removal" on page 1660](#).
3. Remove the finisher lower rear cover. See ["Finisher lower rear cover removal" on page 1662](#).
4. Remove the screw (A), and then the connector (B).



5. Remove the harness guide.

Stacker motor assembly removal

1. Remove the foot cover. See [See "Foot cover removal" on page 1655.](#)
2. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
3. Remove the rear pulley cover. See [See "Rear pulley cover removal" on page 1669.](#)
4. Pull the rear pulley, and then lower the stacker tray.



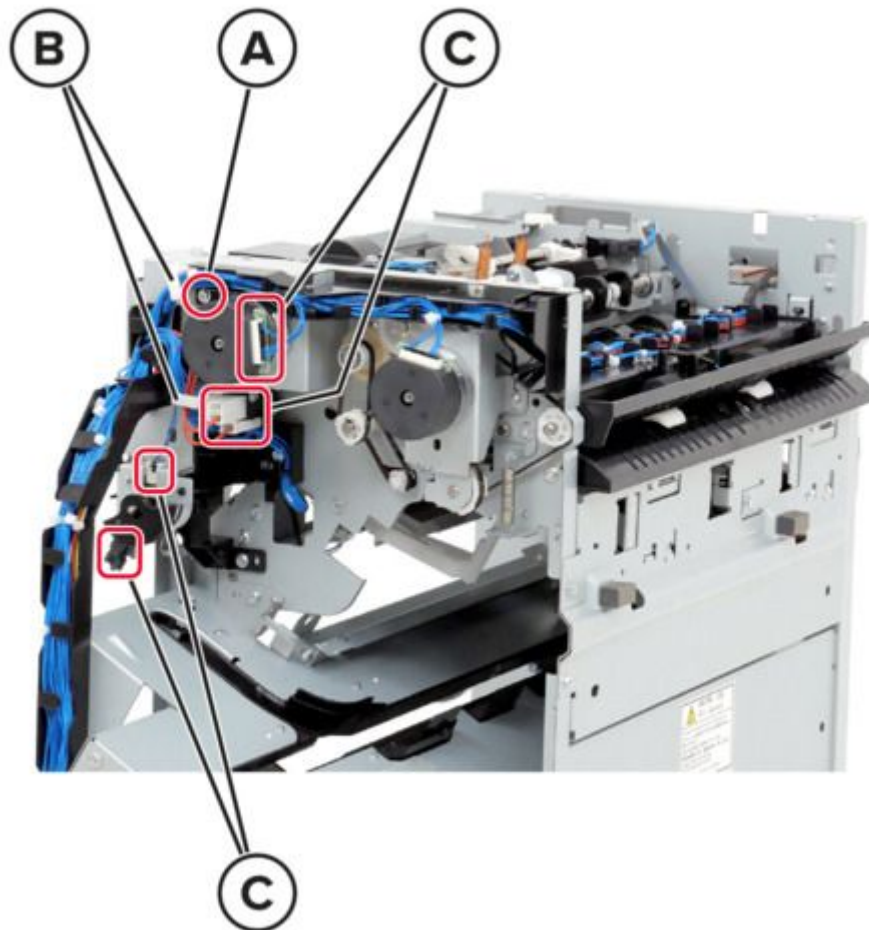
5. Remove the harness guide. See [See "Harness guide removal" on page 1679.](#)
6. Remove the four screws (A).



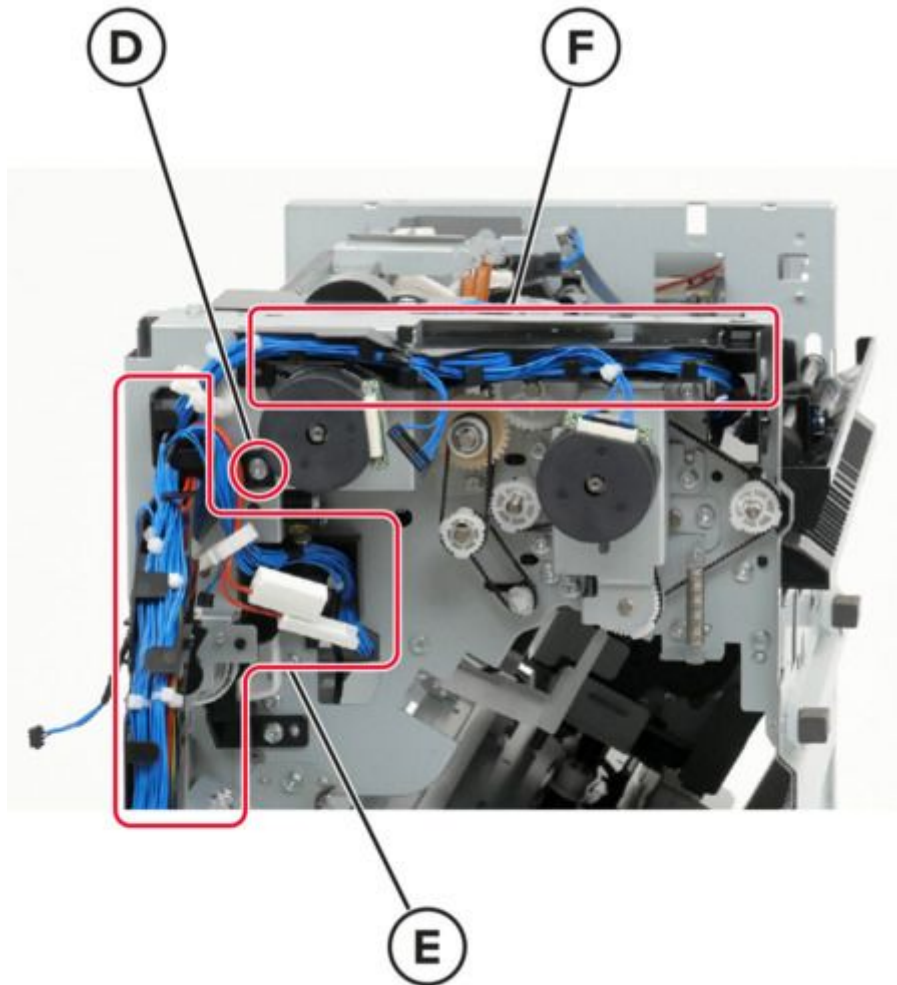
7. Remove the stacker motor assembly.

Eject motor drive bracket assembly removal

1. Remove the foot cover. See ["Foot cover removal" on page 1655](#).
2. Remove the finisher front cover. See ["Finisher front cover removal" on page 1656](#).
3. Remove the finisher upper rear cover. See ["Finisher upper rear cover removal" on page 1660](#).
4. Remove the finisher lower rear cover. See ["Finisher lower rear cover removal" on page 1662](#).
5. Remove the rear pulley cover. See ["Rear pulley cover removal" on page 1669](#).
6. Remove the front pulley cover. See ["Front pulley cover removal" on page 1670](#).
7. Remove the tray guide. See ["Tray guide removal" on page 1677](#).
8. Remove the harness guide. See ["Harness guide removal" on page 1679](#).
9. Remove the screw (A), remove the two clamps (B), and then remove the four connectors (C).



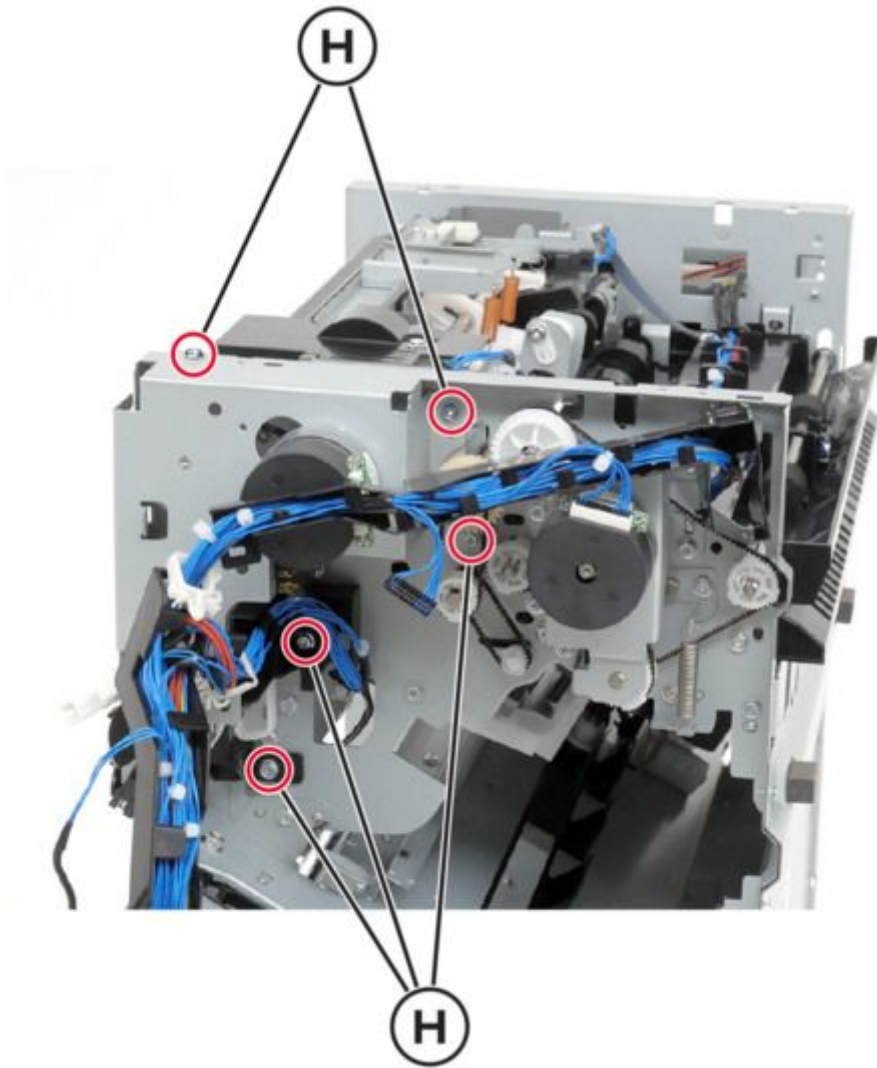
10. Remove the screw (D).
11. Remove the interlock harness guide (E), and then remove the upper harness guide (F).



12. Rotate the harness guide, and then release the tab (G).
13. Remove the harness guide.



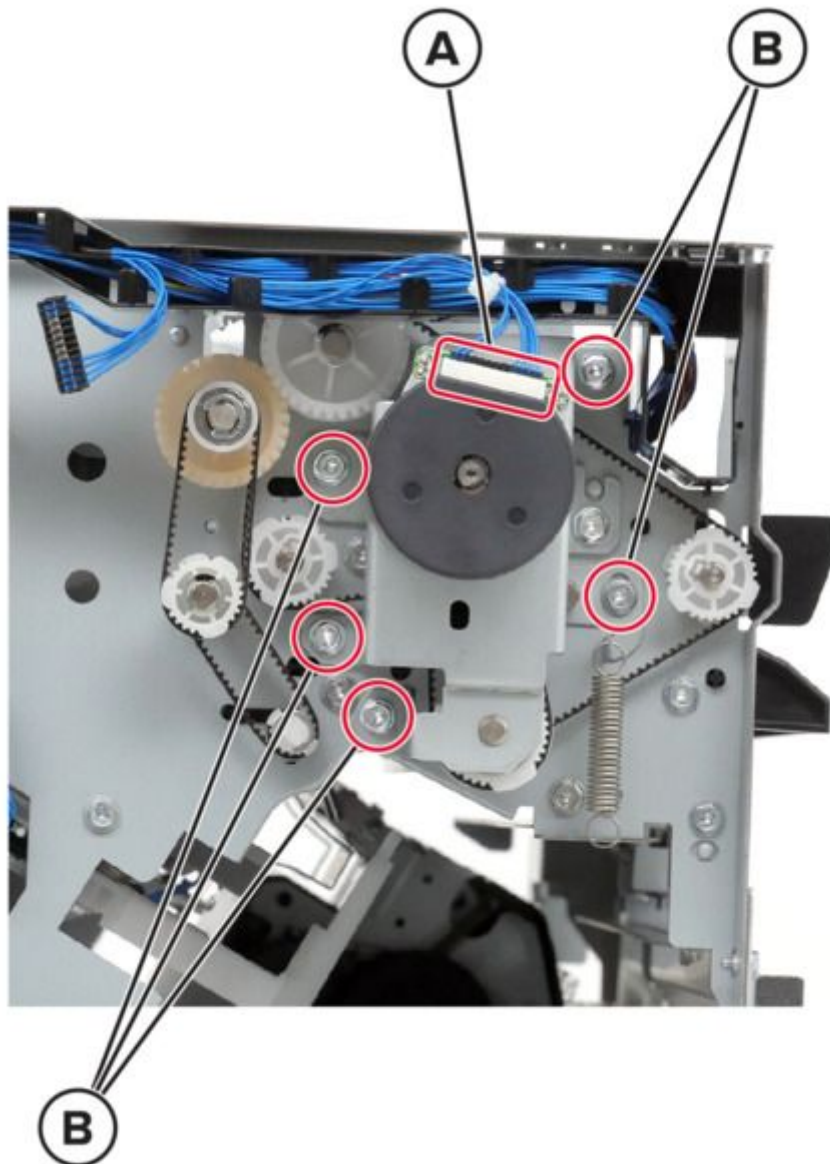
14. Remove the cables along the interlock harness guide and upper harness guide.
15. Remove the five screws (H).



16. Remove the eject motor drive bracket assembly.

Finisher transport motor removal

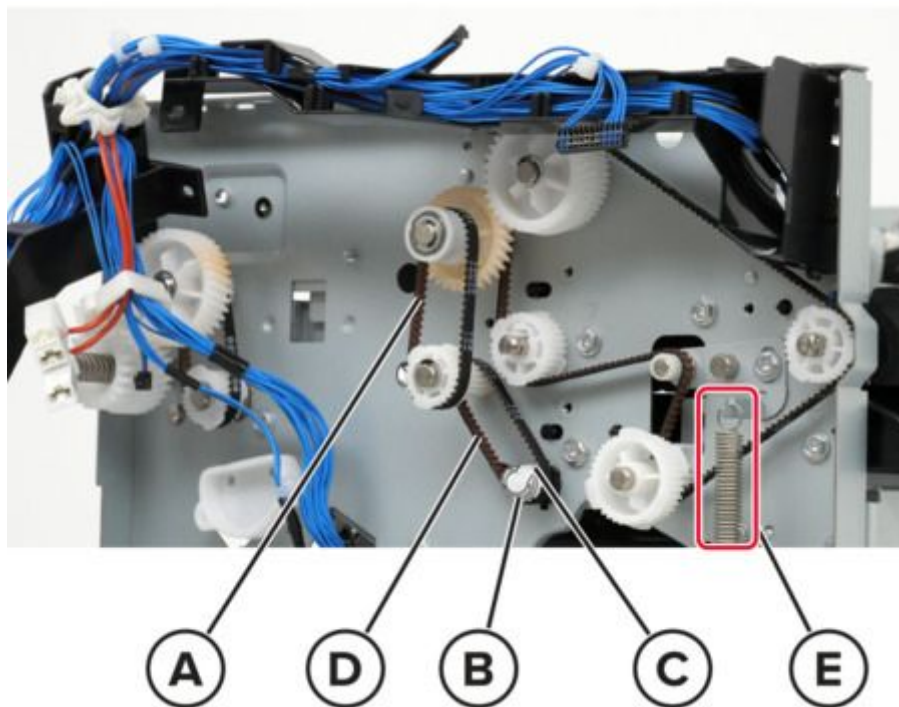
1. Remove the foot cover. See [See "Foot cover removal" on page 1655.](#)
2. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
3. Remove the finisher lower rear cover. See [See "Finisher lower rear cover removal" on page 1662.](#)
4. Remove the connector (A) and then remove the four screws (B).



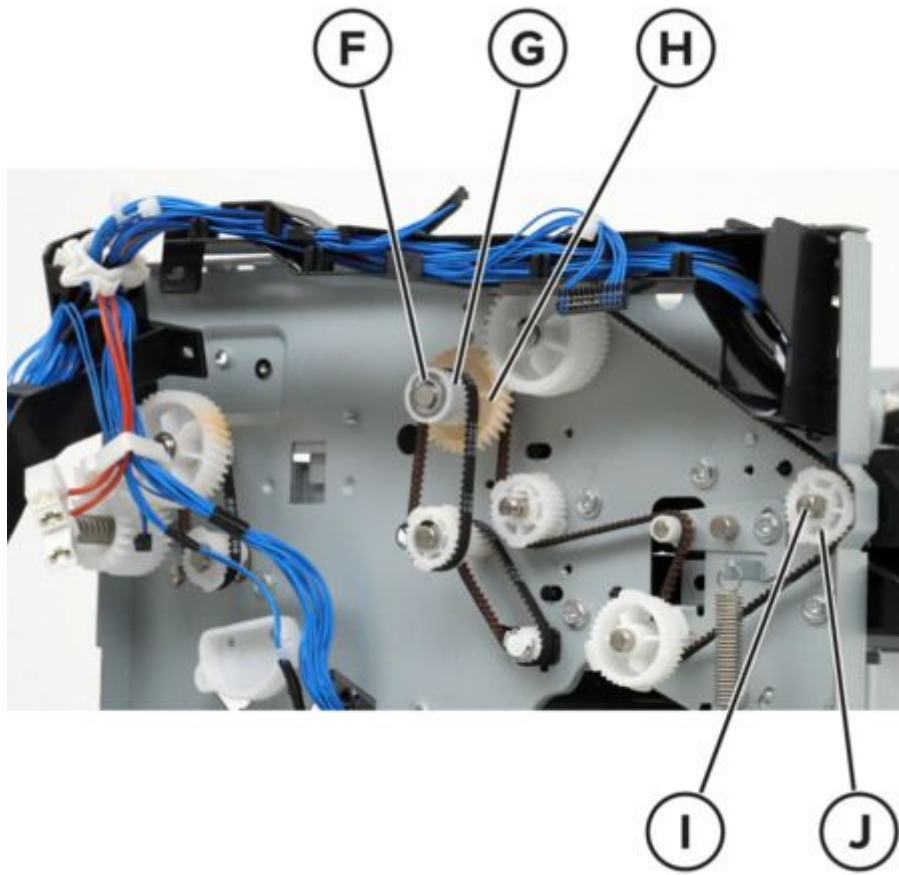
5. Remove the finisher transport motor.

Finisher transport belt removal

1. Remove the upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
2. Remove the finisher transport motor. See [See "Finisher transport motor removal" on page 1686.](#)
3. Remove the outer belt (A).
4. Remove the E-clip (B) from the pulley, and then remove the pulley (C).
5. Remove the inner belt (D).
6. Remove the tension spring (E).

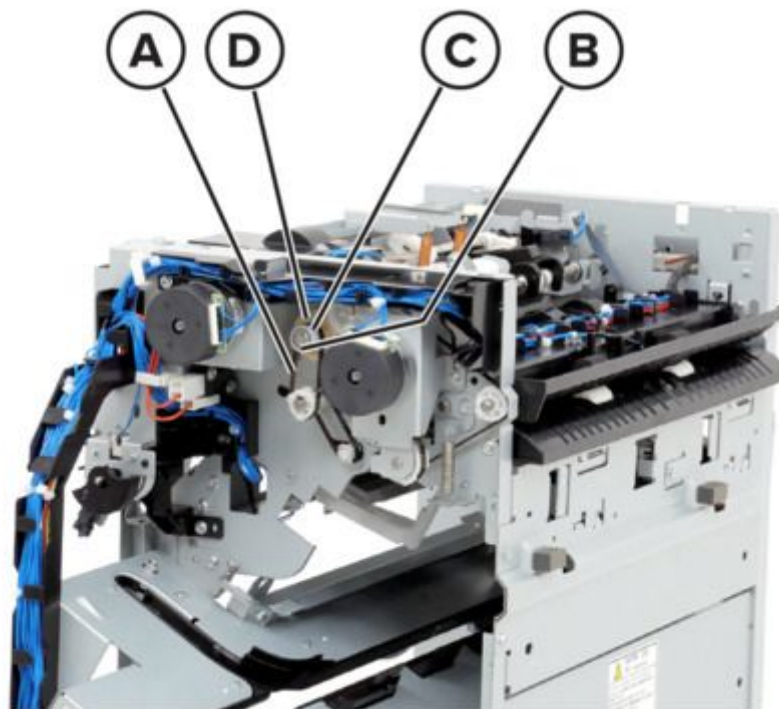


7. Remove the E-clip (F) from the one-way pulley (G), and then remove the pulley.
8. Remove the inner gear (H).
9. Remove the tab (I) on the gear (J), and then remove the gear.
10. Remove the finisher transport belt.

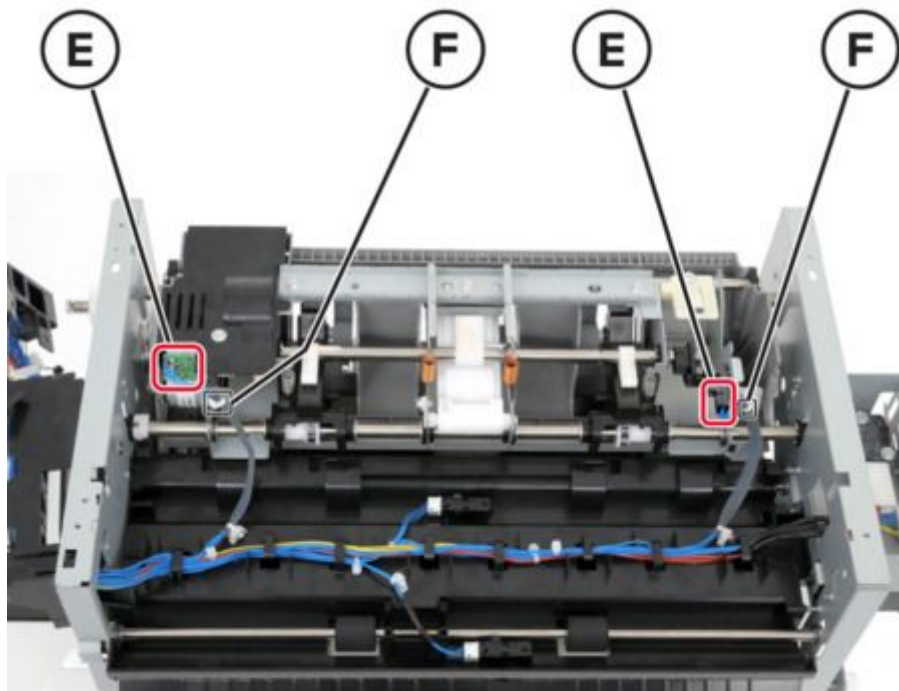


Eject chute assembly removal

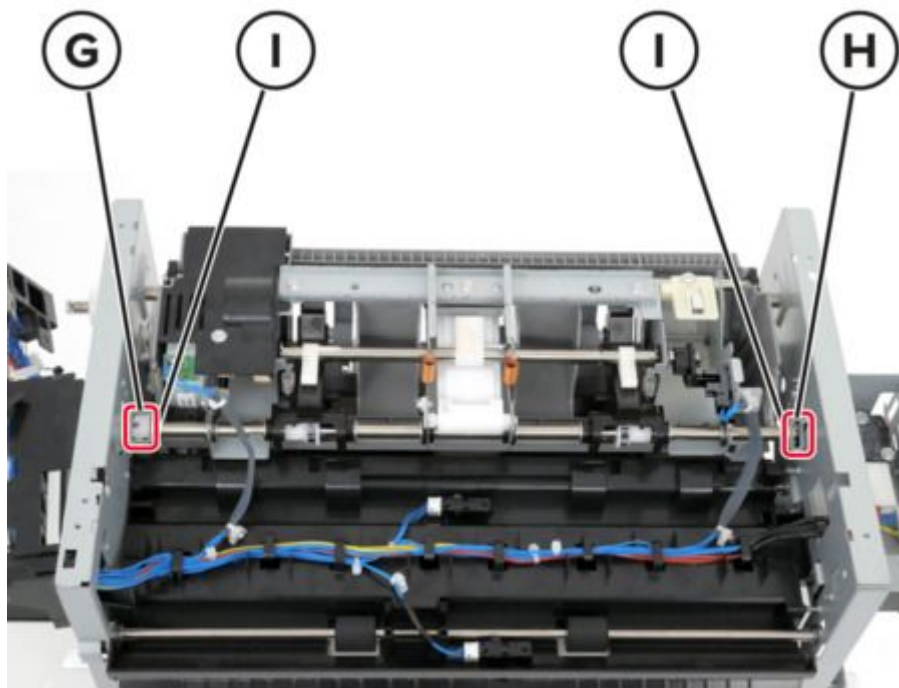
1. Remove the finisher front cover. See [See "Finisher front cover removal" on page 1656.](#)
2. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
3. Remove the finisher top cover assembly. See [See "Finisher top cover assembly removal" on page 1664.](#)
4. Remove the outer belt (A).
5. Remove the E-clip (B) from the pulley (C), and then remove the pulley.
6. Remove the inner belt, and then remove the gear (D).



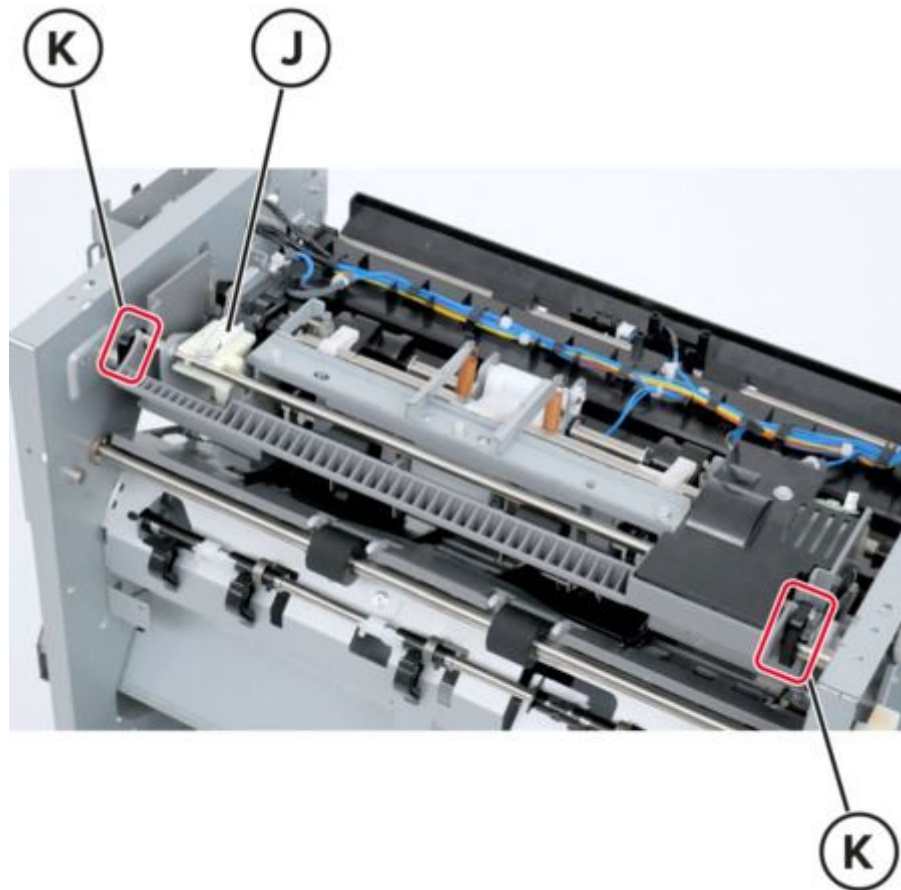
7. Remove the two connectors (E), and then remove the two clamps (F).



8. Remove the plastic clip (G) and then remove the E-clip (H).
9. Move the two bearings (I) to the center of the shaft.



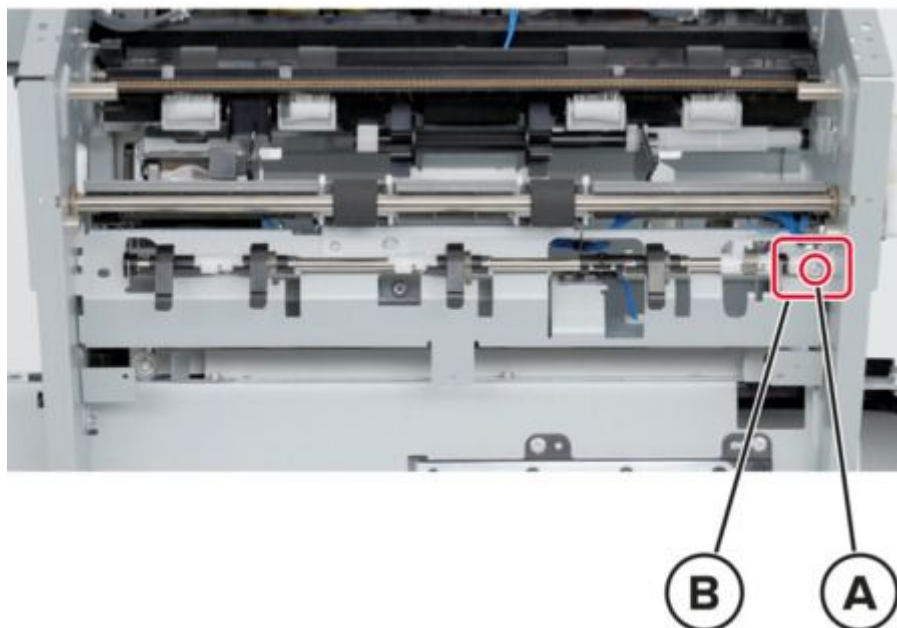
10. Press the lever (J), and then release the latches (K).



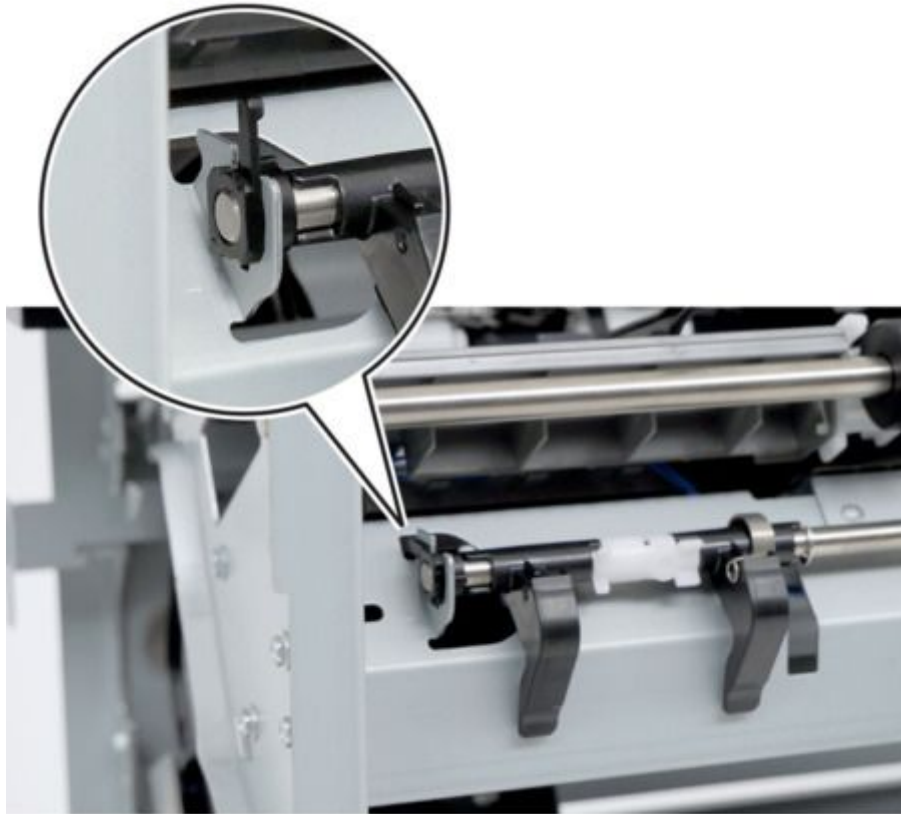
11. Remove the eject chute assembly.

Set clamp main shaft assembly removal

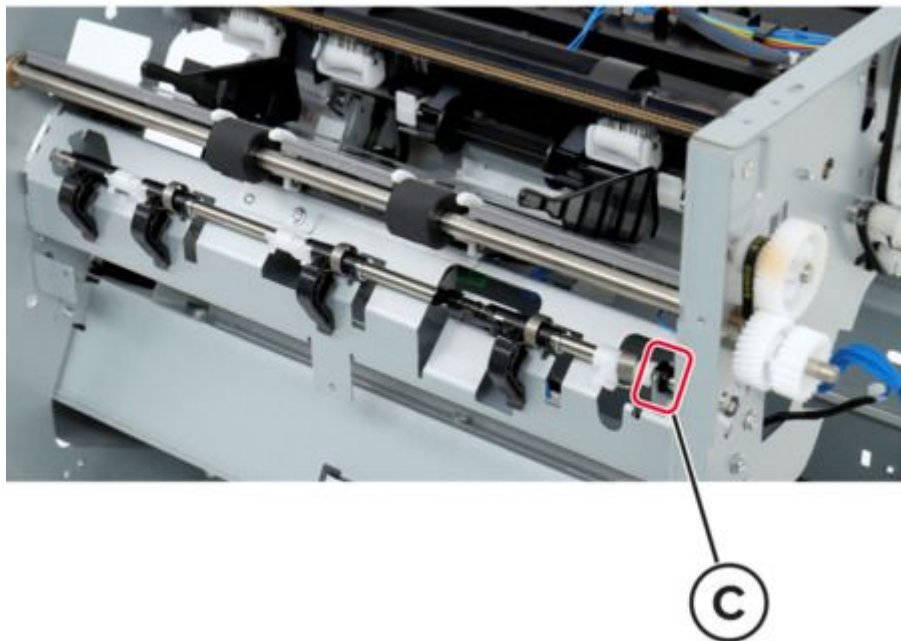
1. Remove the foot cover. See ["Foot cover removal"](#) on page 1655.
2. Remove the finisher front cover. See ["Finisher front cover removal"](#) on page 1656.
3. Remove the finisher upper rear cover. See ["Finisher upper rear cover removal"](#) on page 1660.
4. Remove the finisher lower rear cover. See ["Finisher lower rear cover removal"](#) on page 1662.
5. Remove the rear pulley cover. See ["Rear pulley cover removal"](#) on page 1669.
6. Remove the front pulley cover. See ["Front pulley cover removal"](#) on page 1670.
7. Remove the harness guide. See ["Harness guide removal"](#) on page 1679.
8. Remove the stacker motor assembly. See ["Stacker motor assembly removal"](#) on page 1680.
9. Remove the eject motor drive bracket assembly. See ["Eject motor drive bracket assembly removal"](#) on page 1682.
10. Remove the screw (A).
11. Move the shaft holder (B) to the end of the right side.



12. Release the tab, and then rotate it upright.

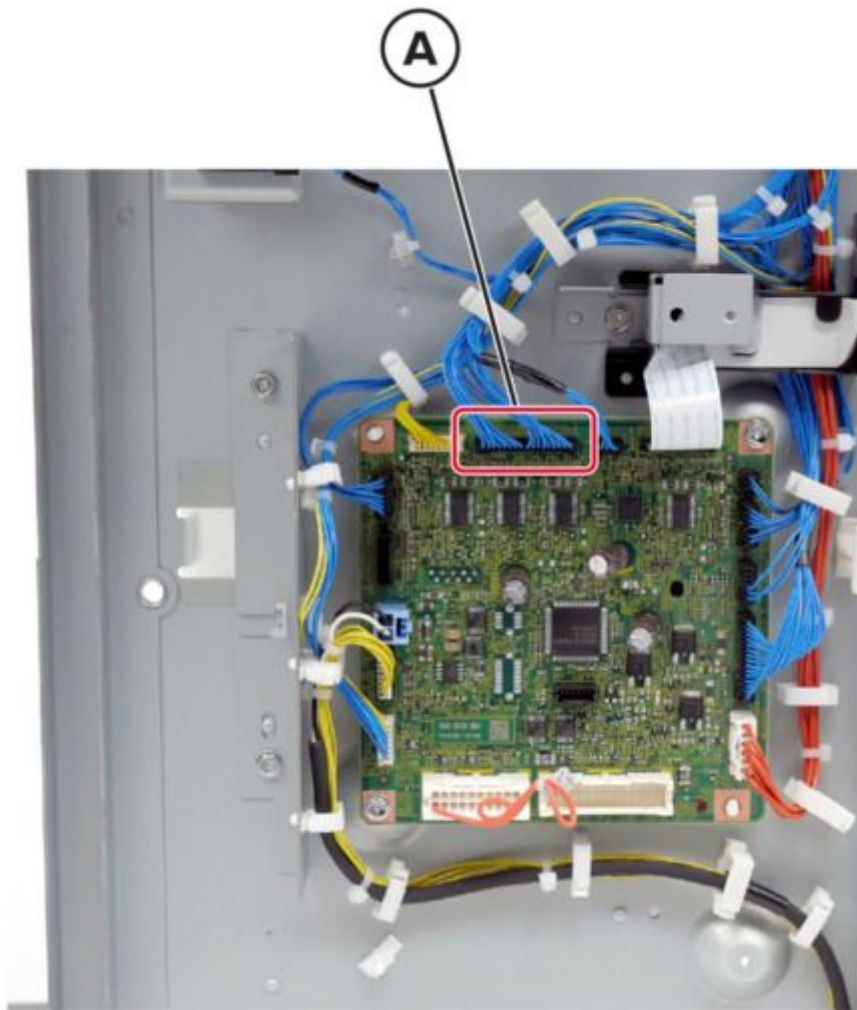


13. Move the bearing (C) to the end of the left side, and then lift the set clamp main shaft assembly to remove it.

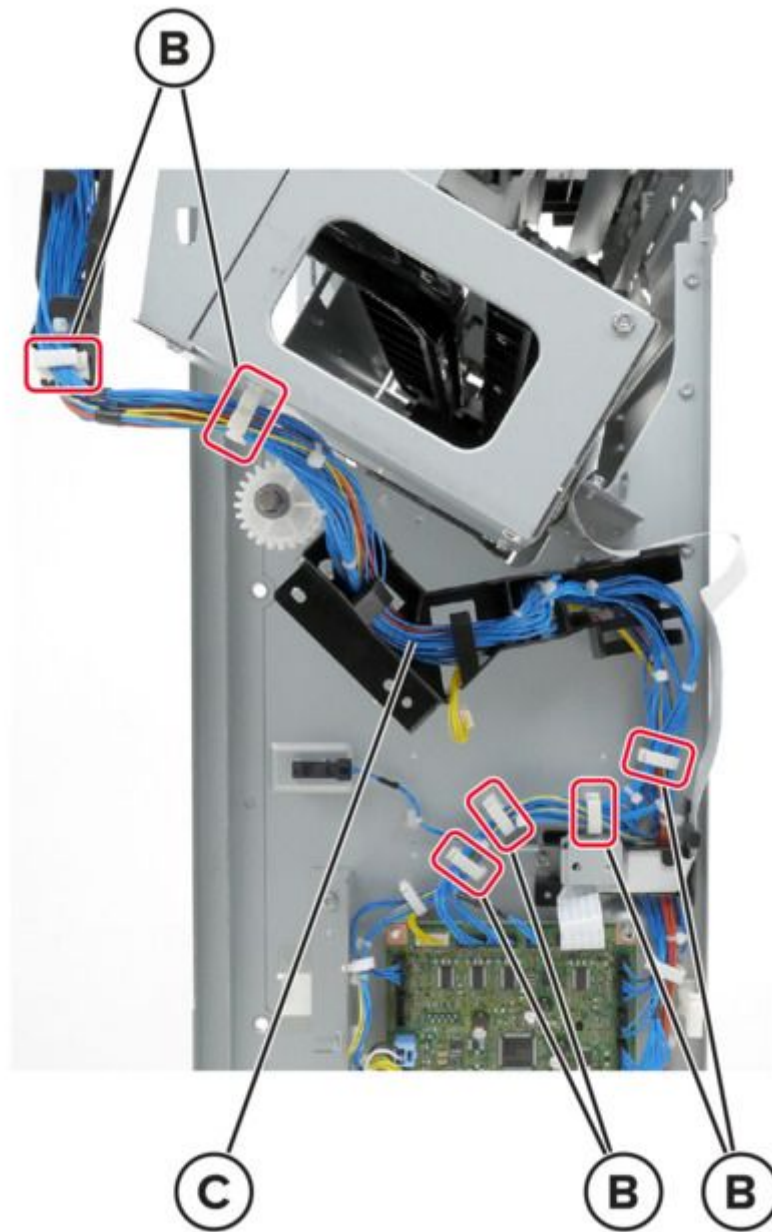


Compile tray assembly removal

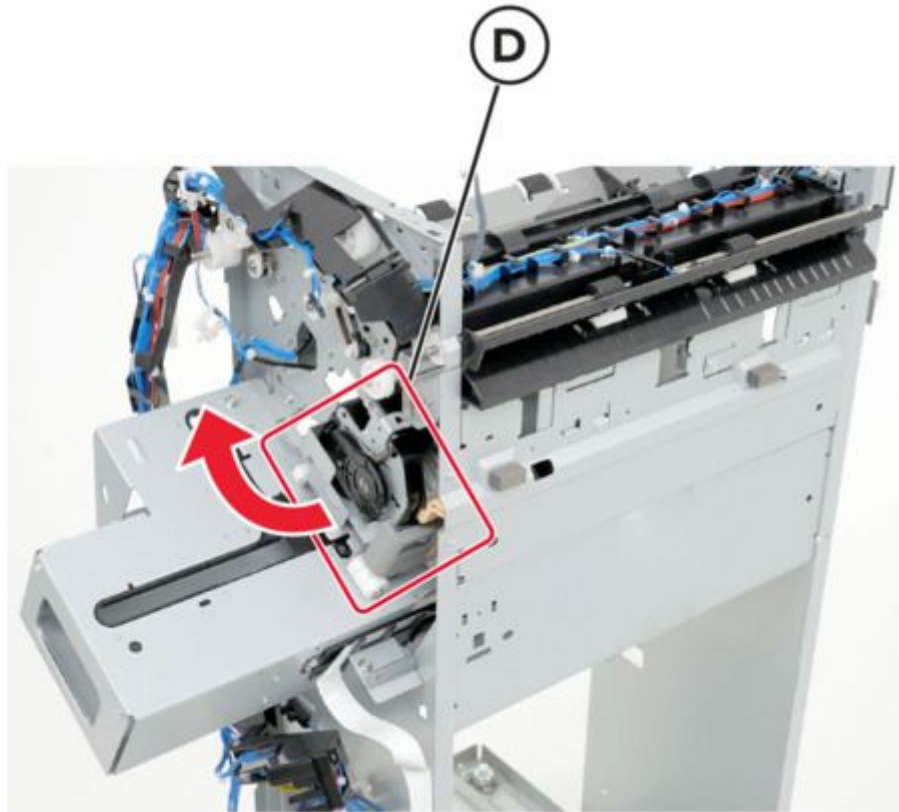
1. Remove the foot cover. See [See "Foot cover removal" on page 1655.](#)
2. Remove the finisher front cover. See [See "Finisher front cover removal" on page 1656.](#)
3. Remove the finisher upper rear cover. See [See "Finisher upper rear cover removal" on page 1660.](#)
4. Remove the finisher lower rear cover. See [See "Finisher lower rear cover removal" on page 1662.](#)
5. Remove the rear pulley cover. See [See "Rear pulley cover removal" on page 1669.](#)
6. Remove the front pulley cover. See [See "Front pulley cover removal" on page 1670.](#)
7. Remove the tray guide. See [See "Tray guide removal" on page 1677.](#)
8. Remove the harness guide. See [See "Harness guide removal" on page 1679.](#)
9. Remove the stacker motor assembly. See [See "Stacker motor assembly removal" on page 1680.](#)
10. Remove the eject motor drive bracket assembly. See [See "Eject motor drive bracket assembly removal" on page 1682.](#)
11. Remove the finisher transport motor. See [See "Finisher transport motor removal" on page 1686.](#)
12. Remove the eject chute assembly. See [See "Eject chute assembly removal" on page 1689.](#)
13. Remove the set clamp main shaft assembly. See [See "Set clamp main shaft assembly removal" on page 1692.](#)
14. Remove the connector (A).



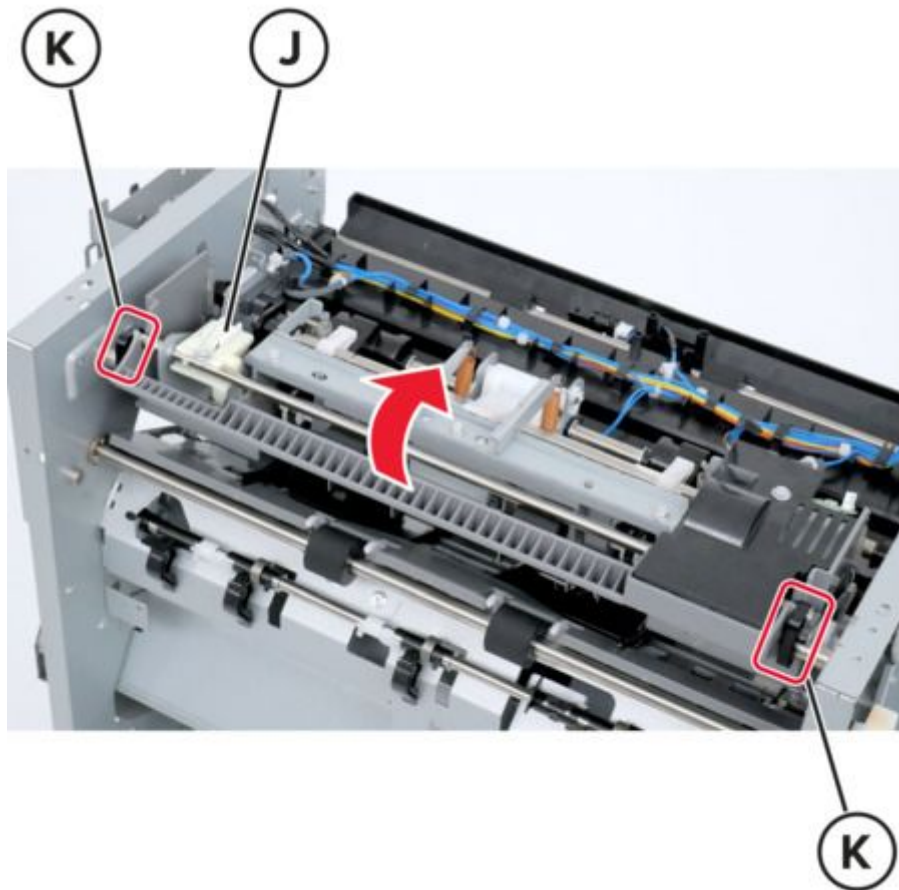
15. Remove the six clamps (B), and then remove the cable (C) from the harness guide.



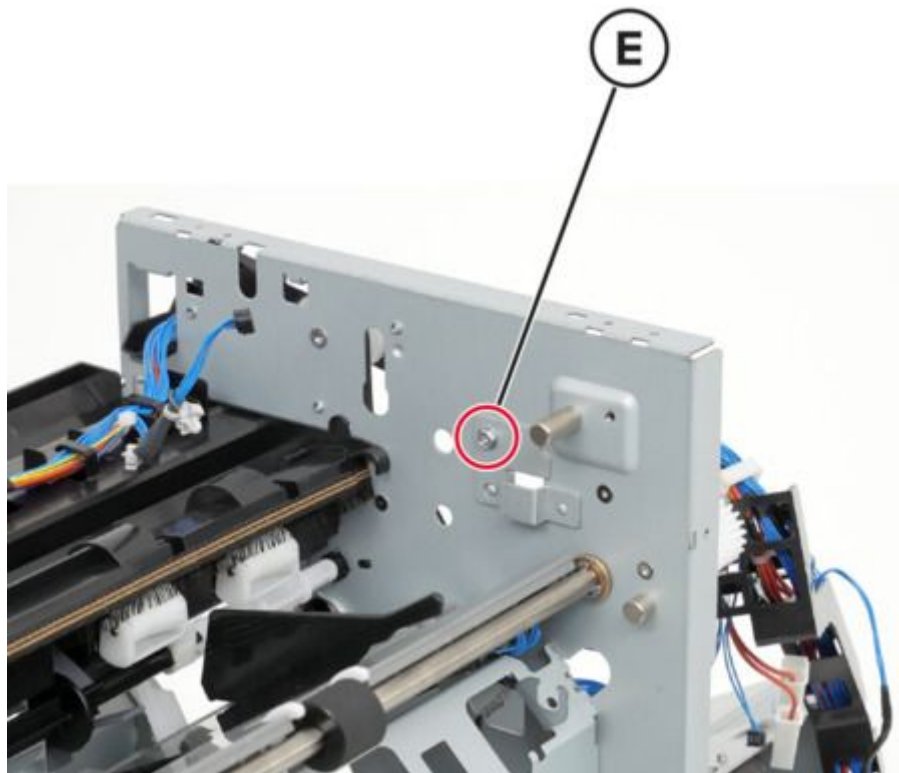
16. Move the stapler (D) to the rear end of the rail.



17. Press the lever (J), release the latches (K), and then lift the eject chute assembly.

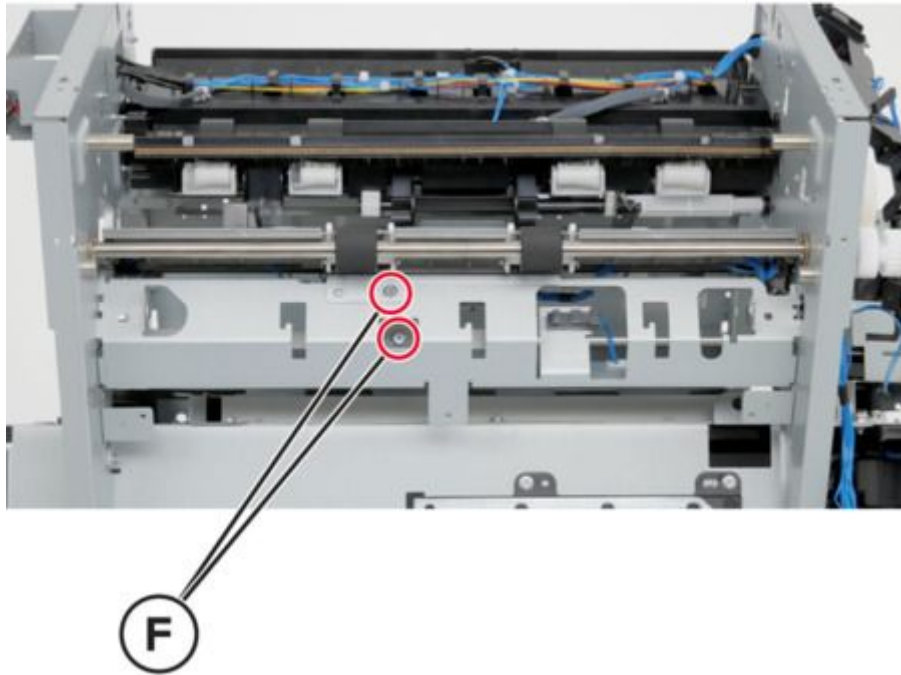


18. Remove the screw (E) of the interlock guide, and then remove the interlock guide.

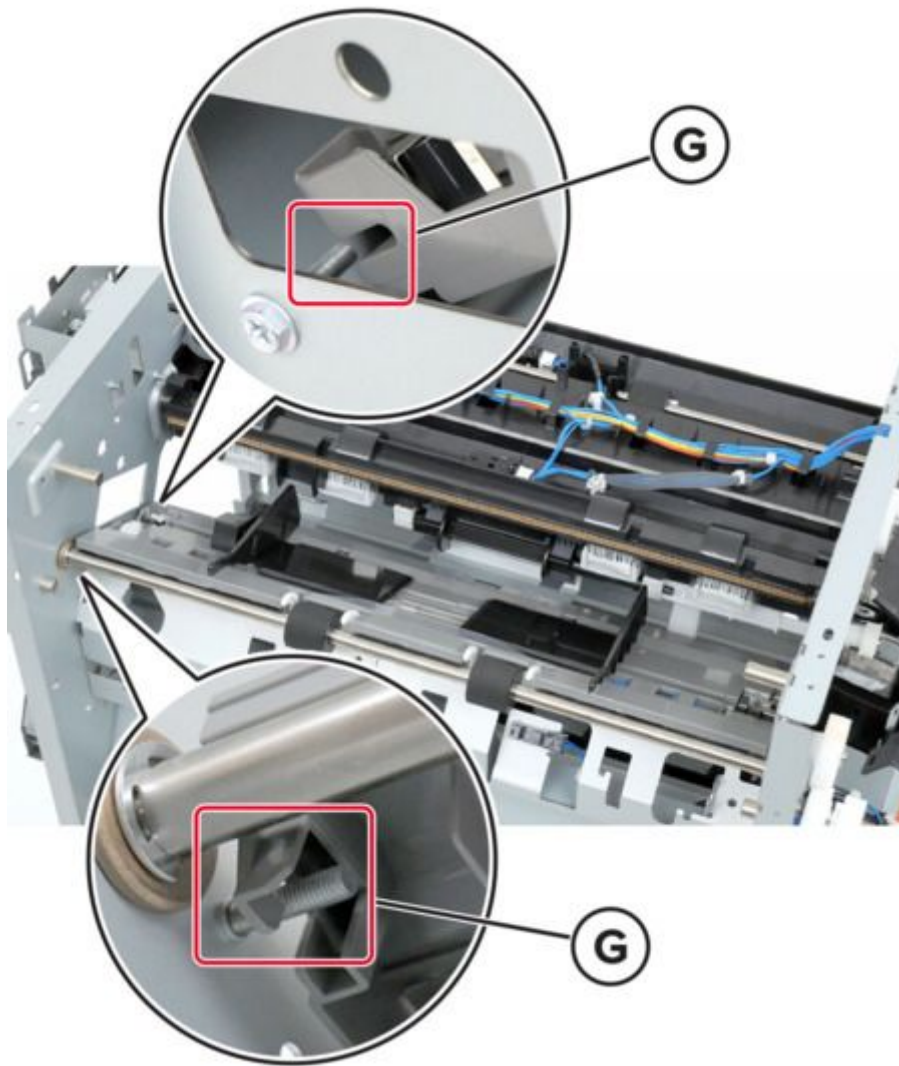


Parts removal

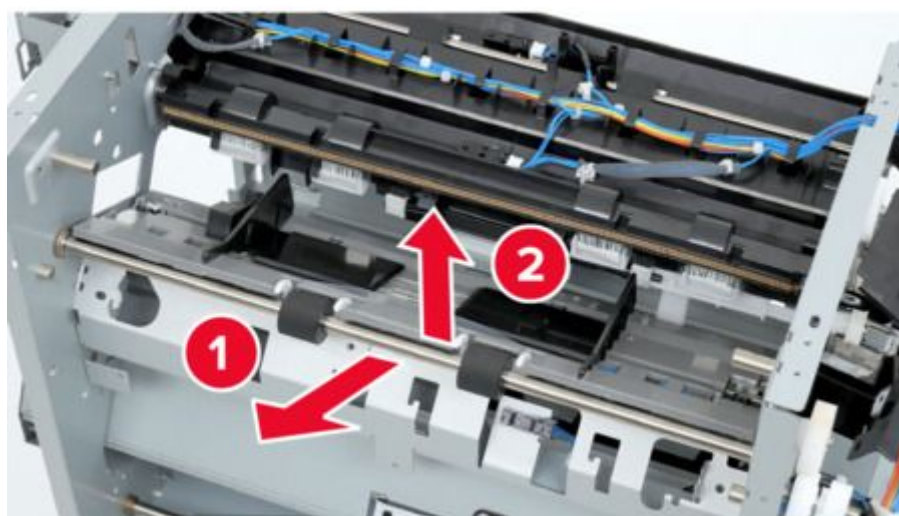
19. Remove the two screws (F).



20. Release the two latches (G).

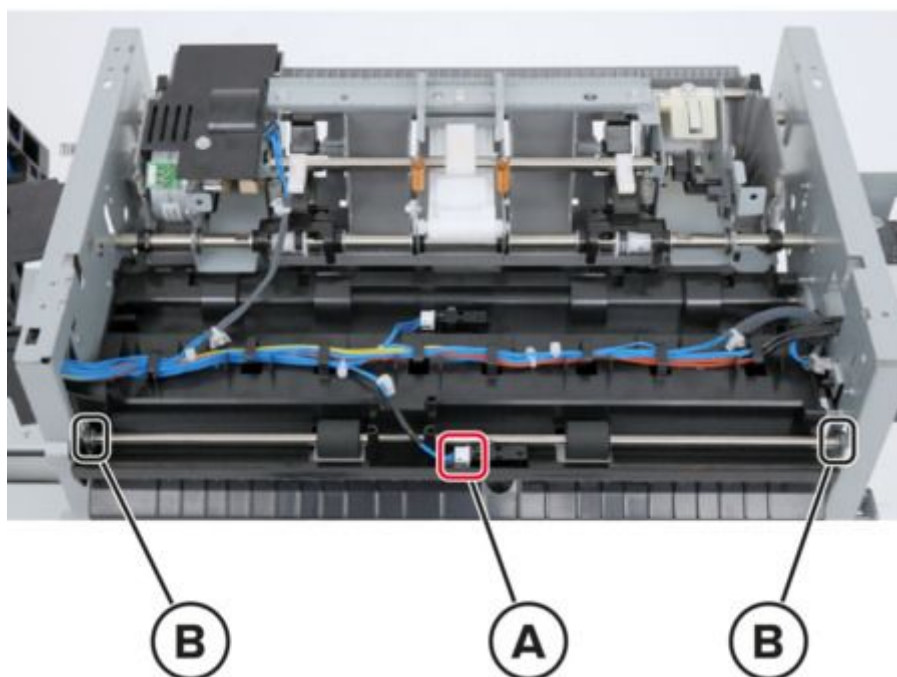


21. Pull the compile tray assembly forward, and then lift to remove it.



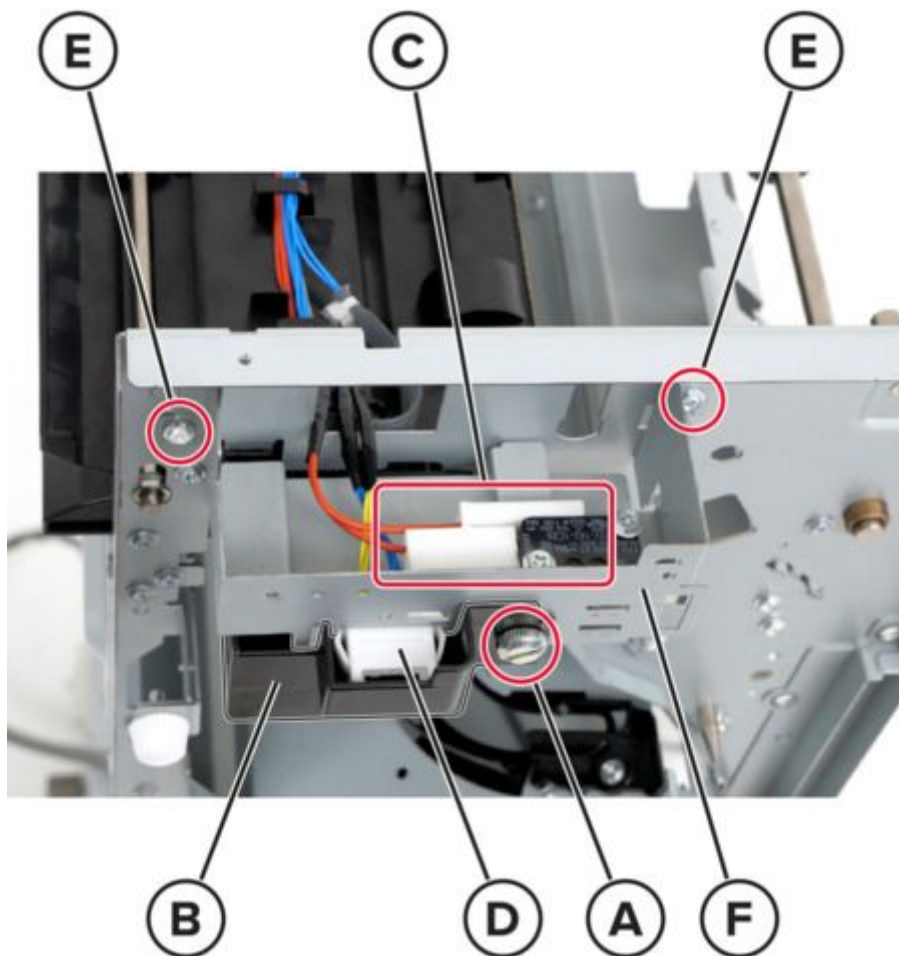
Entrance roller assembly removal

1. Remove the foot cover. See ["Foot cover removal" on page 1655](#).
2. Remove the finisher front cover. See ["Finisher front cover removal" on page 1656](#).
3. Remove the finisher top cover assembly. See ["Finisher top cover assembly removal" on page 1664](#).
4. Remove the finisher transport motor. See ["Finisher transport motor removal" on page 1686](#).
5. Remove the finisher transport belt. See ["Finisher transport belt removal" on page 1687](#).
6. Remove the three connectors (A).
7. Remove the two E-clips (B), and then remove the entrance roller assembly.

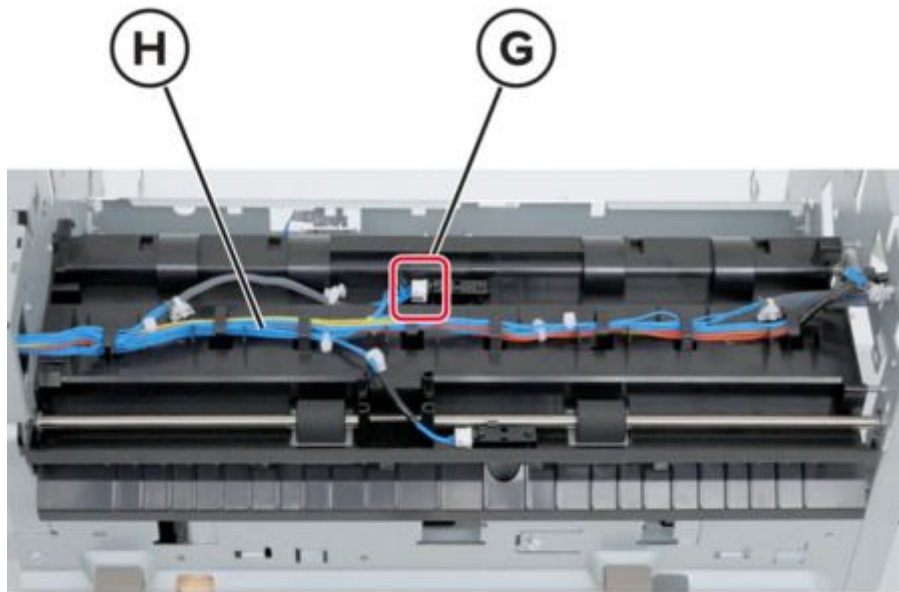


Upper chute assembly removal

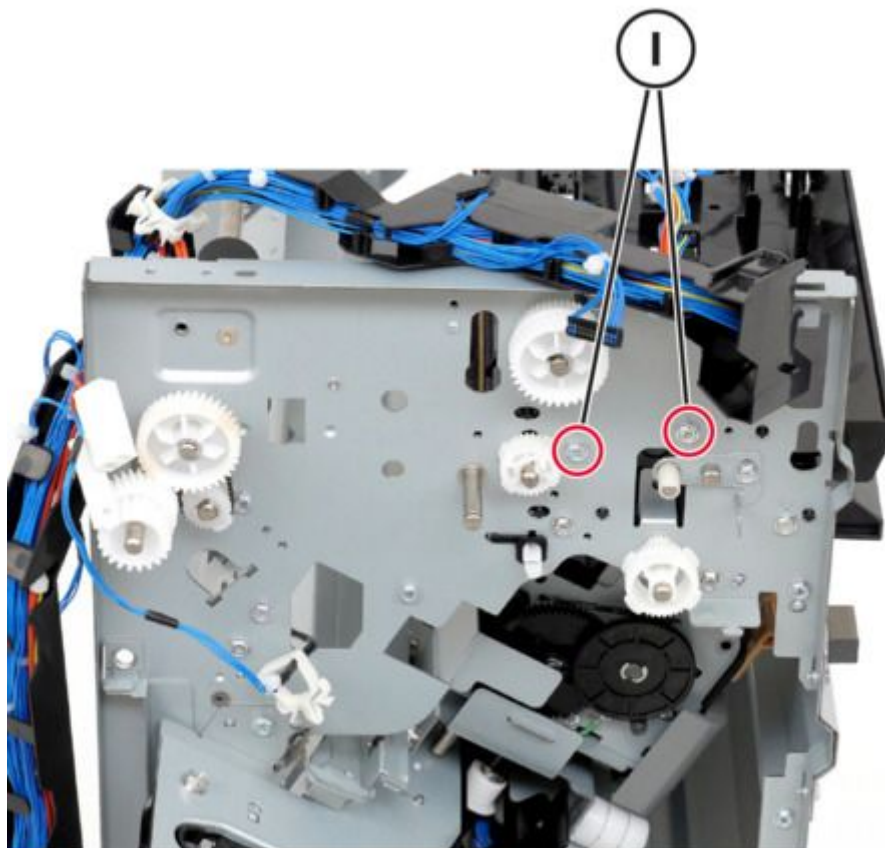
1. Remove the entrance roller assembly. See ["Entrance roller assembly removal"](#) on page 1701.
2. Remove the screw (A).
3. Pull forward the dummy chute (B) to remove it.
4. Disconnect the connectors (C).
5. Release the clamp (D).
6. Remove the two screws (E).
7. Remove the interlock bracket (F).



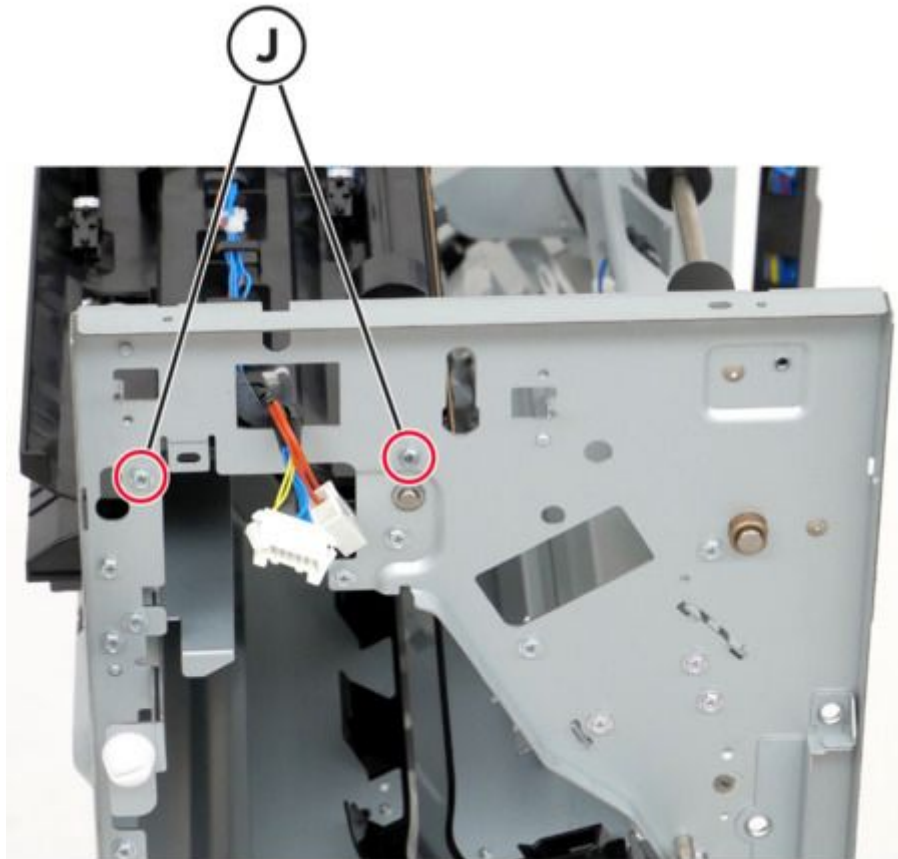
8. Remove the connector (G) and then remove the cable (H) from the harness.



9. Remove the two screws (I).



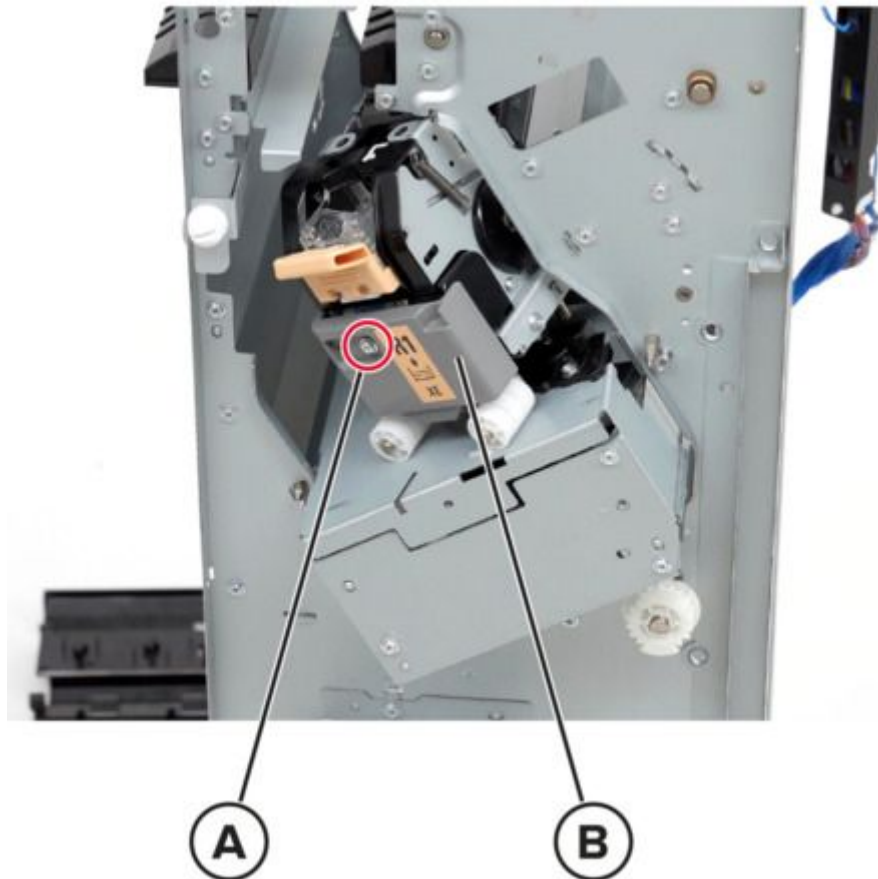
10. Loosen the two screws (J).



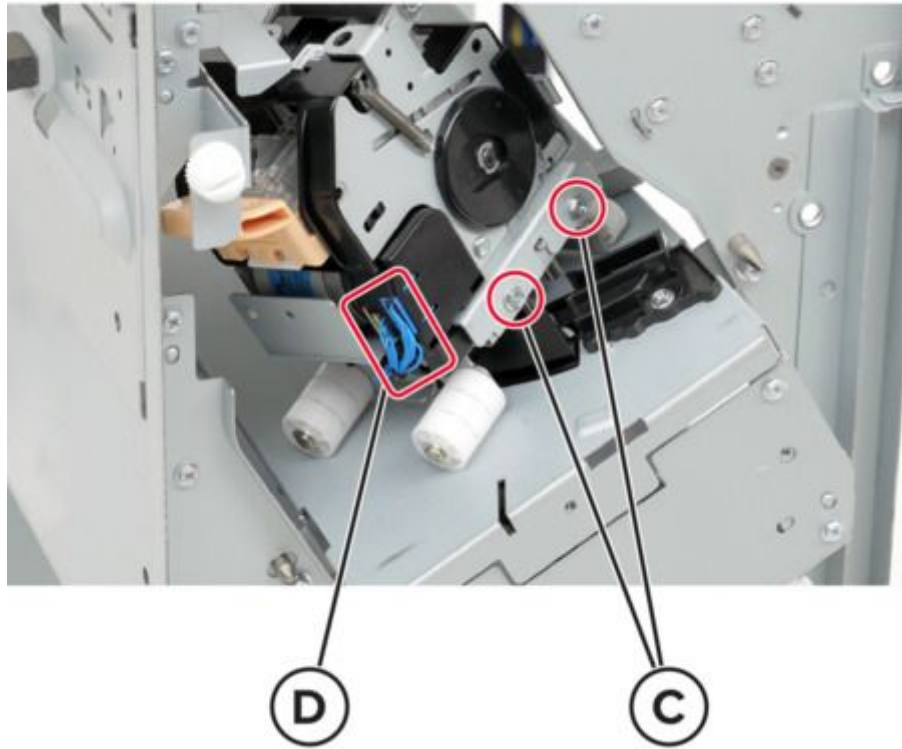
11. Remove the upper chute assembly.

Stapler assembly removal

1. Open the front access door.
2. Move the stapler assembly to the front.
3. Remove the screw (A).
4. Remove the cover (B).



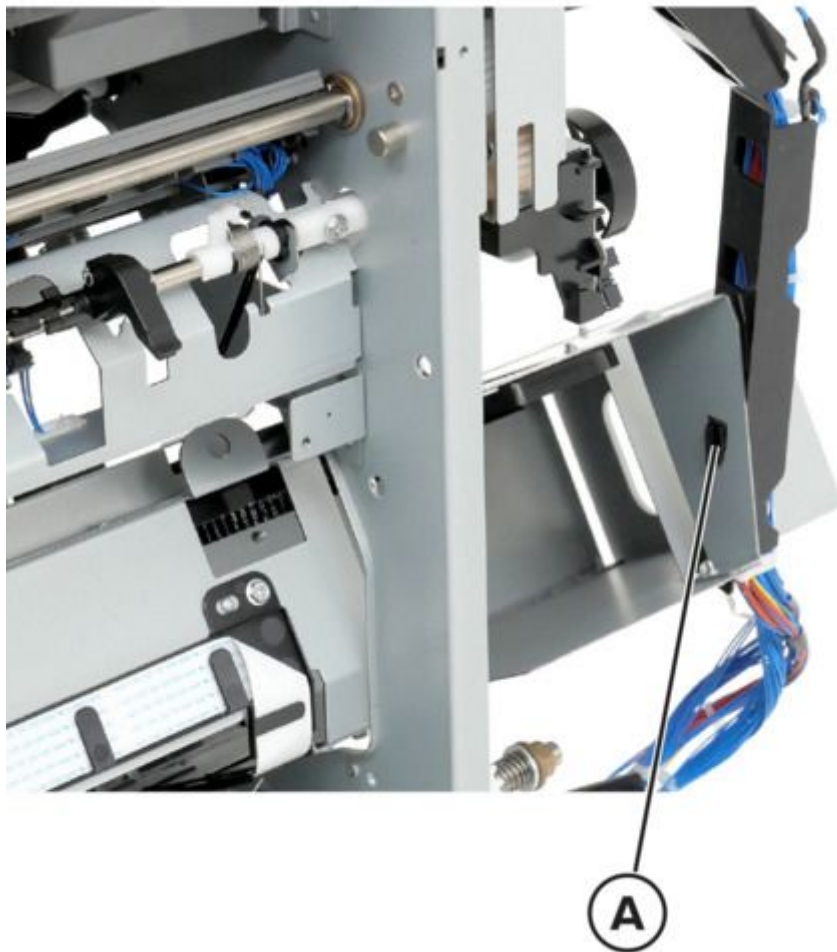
5. Remove the two screws (C).
6. Remove the connector (D).



7. Remove the stapler assembly.

Rail assembly removal

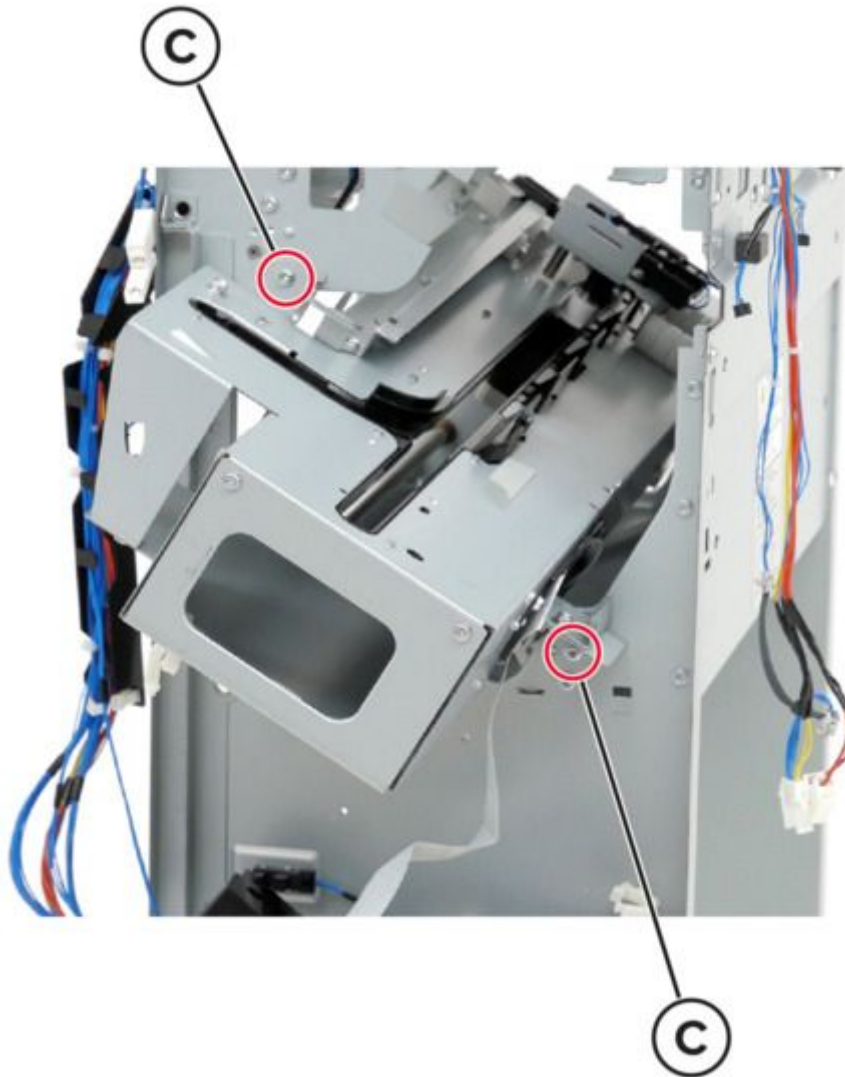
1. Remove the foot cover. See ["Foot cover removal" on page 1655](#).
2. Remove the finisher front cover. See ["Finisher front cover removal" on page 1656](#).
3. Remove the finisher upper rear cover. See ["Finisher upper rear cover removal" on page 1660](#).
4. Remove the finisher lower rear cover. See ["Finisher lower rear cover removal" on page 1662](#).
5. Remove the stapler assembly. See ["Stapler assembly removal" on page 1705](#).
6. Rotate the harness guide, and then release the tab (A).



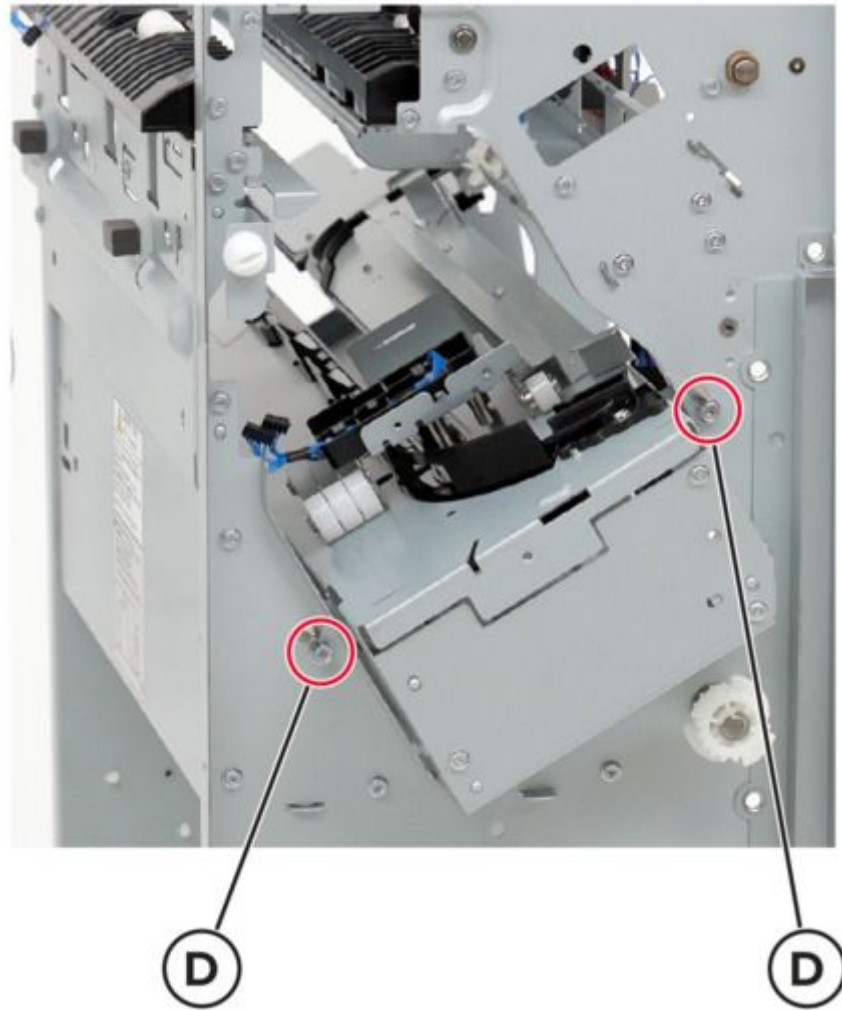
7. Release the FFC (B), and then remove it from the harness.



8. Remove the two screws (C).



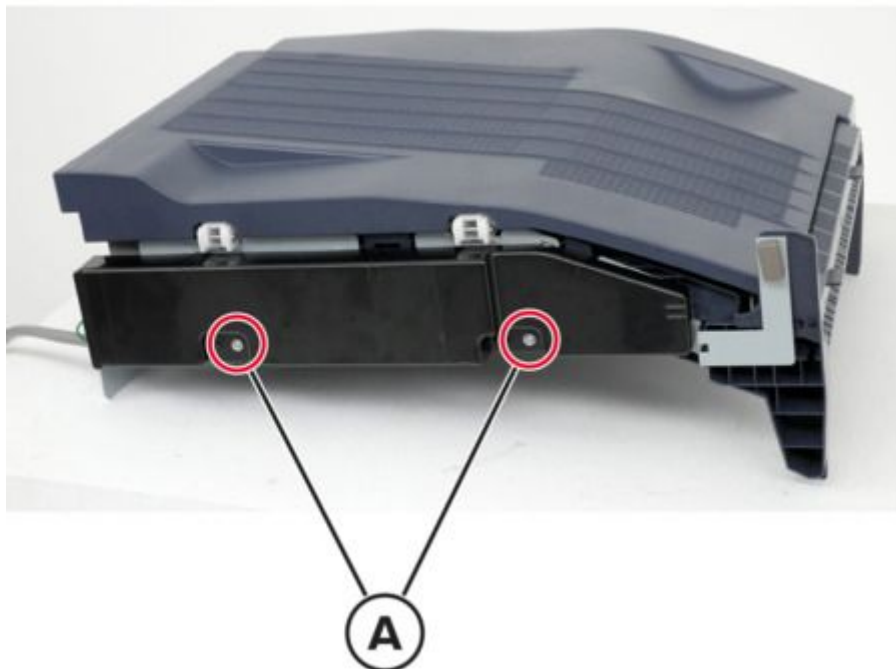
9. Remove the two screws (D).



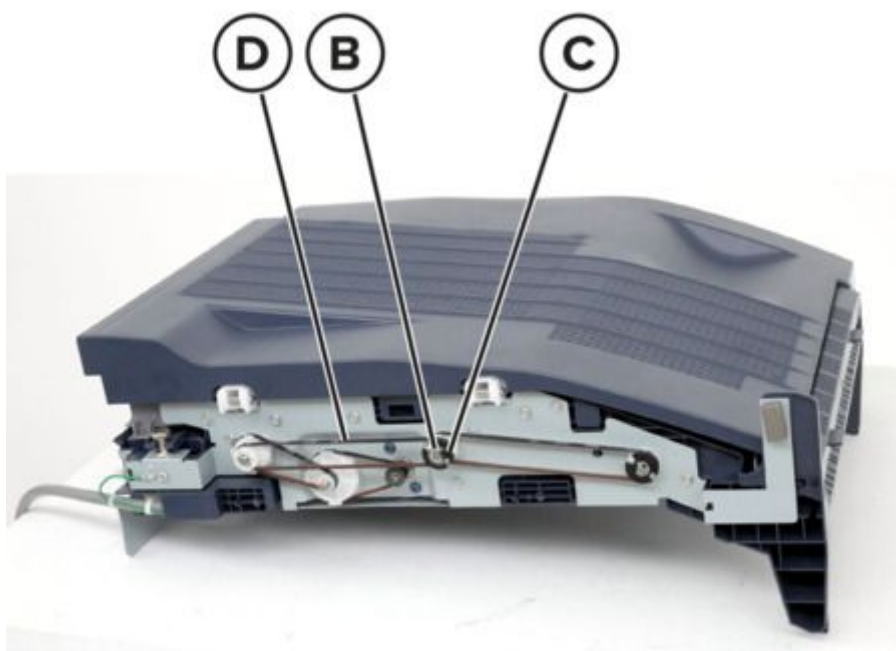
10. Remove the rail assembly.

Horizontal transport belt removal

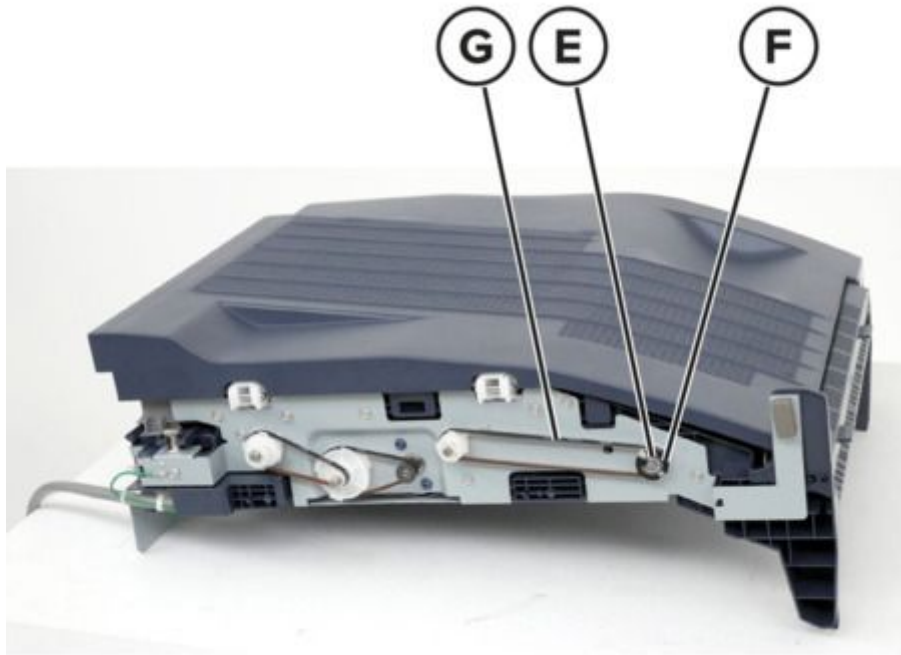
1. Remove the two screws (A), and then remove the front cover.



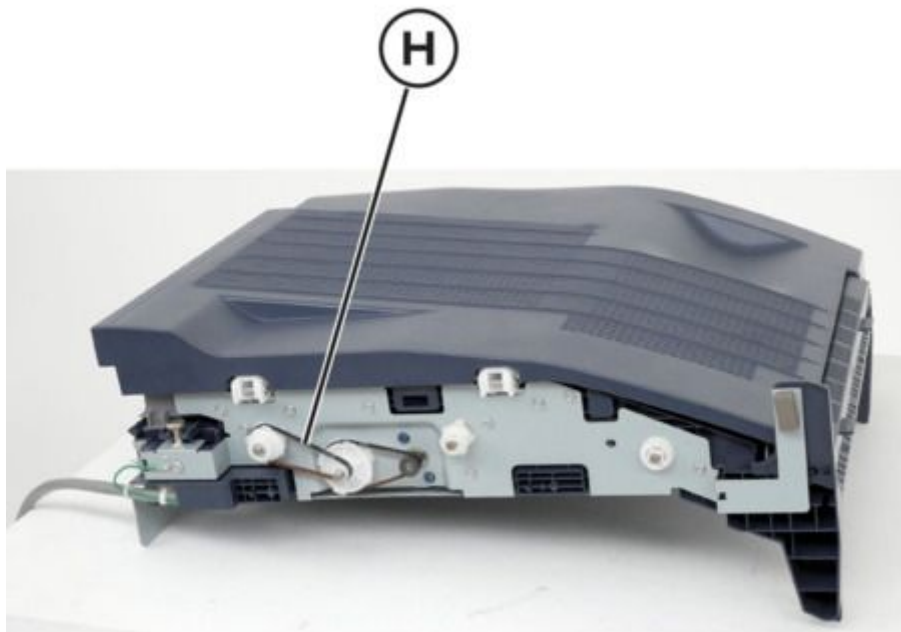
2. Remove the E-clip (B), and then remove the collar (C).
3. Remove the first belt (D).



4. Remove the E-clip (E), and then remove the collar (F) from the second belt (G).
5. Remove the second belt.

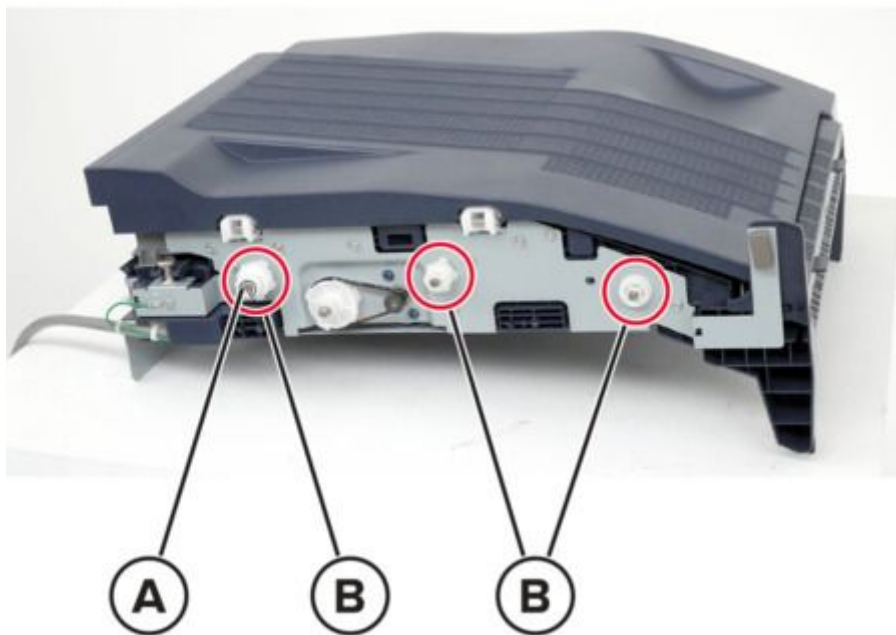


6. Remove the third belt (H).

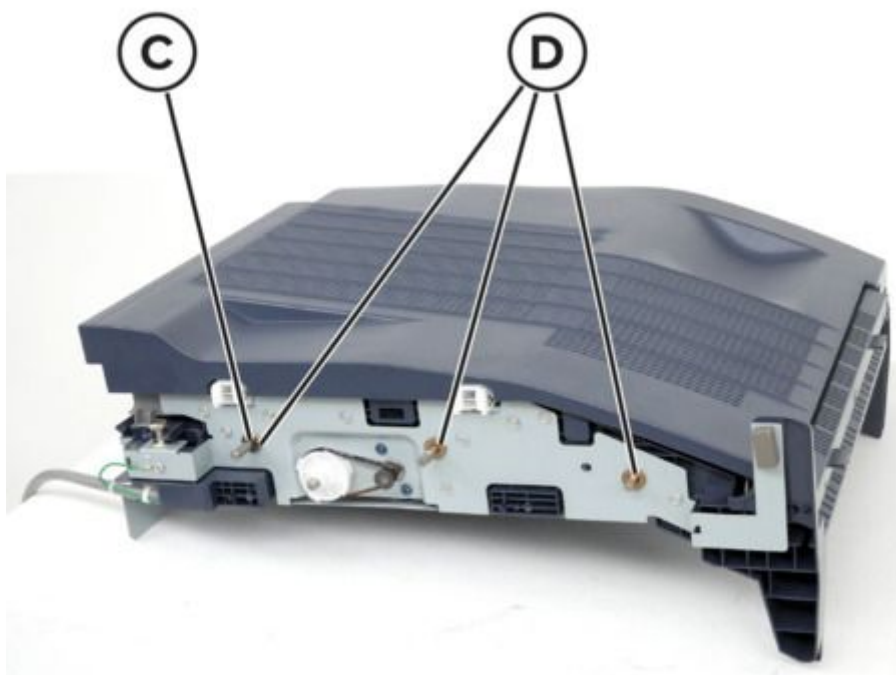


Horizontal transport motor assembly removal

1. Remove the horizontal transport belt. See ["Horizontal transport belt removal"](#) on page 1711.
2. Remove the E-clip (A).
3. Remove the gears (B).



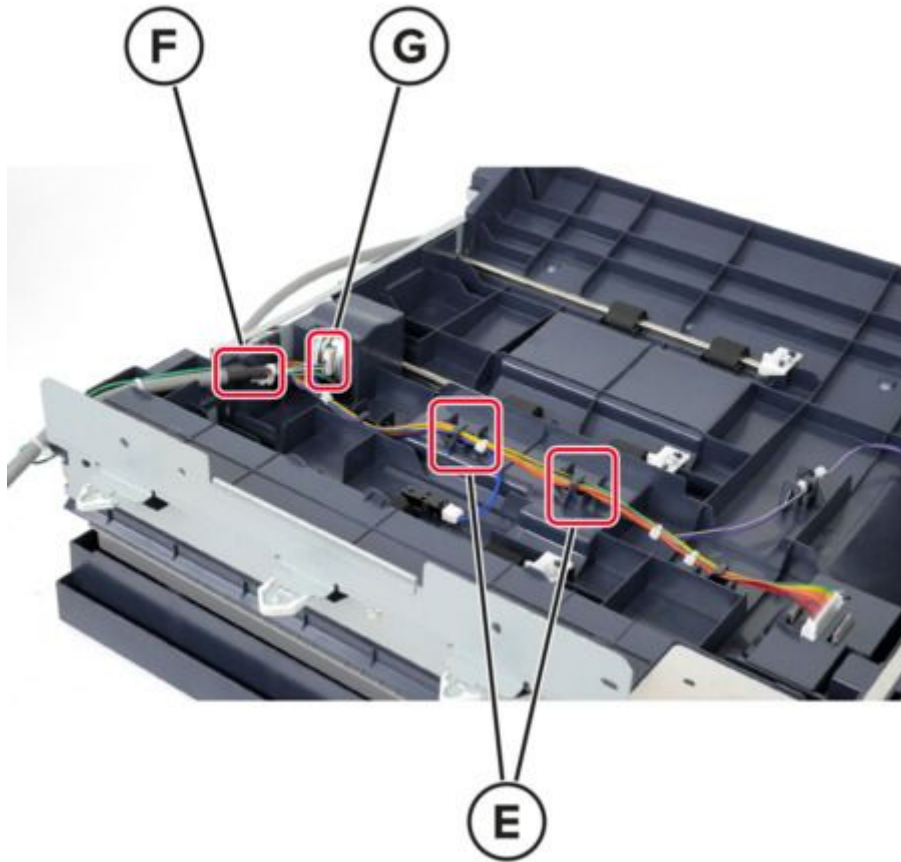
4. Remove the washer (C), and then remove the bearings (D).



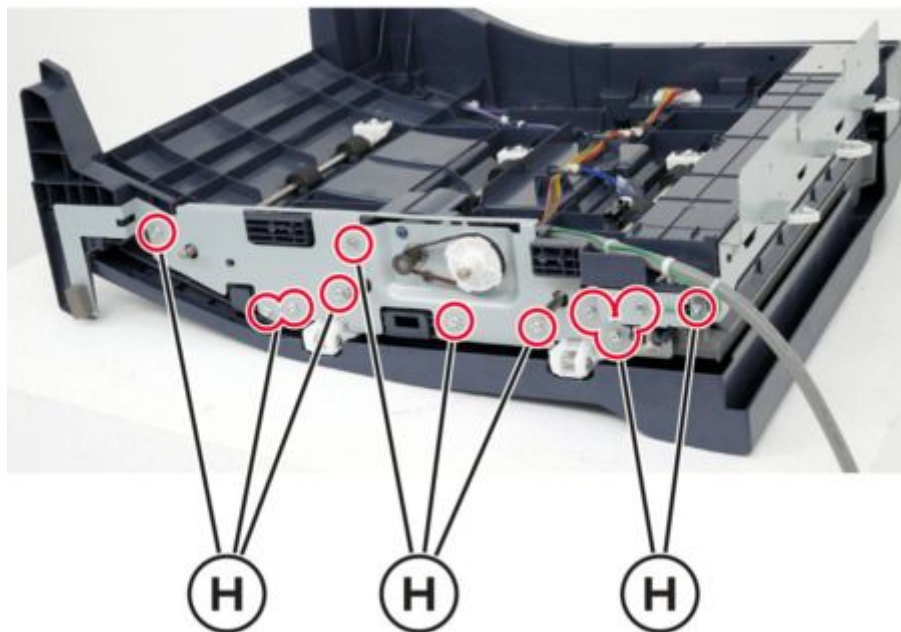
5. Place the horizontal transport unit on its top side.

Parts removal

6. Remove the two harnesses (E).
7. Release the tie-out (F).
8. Remove the connector (G).



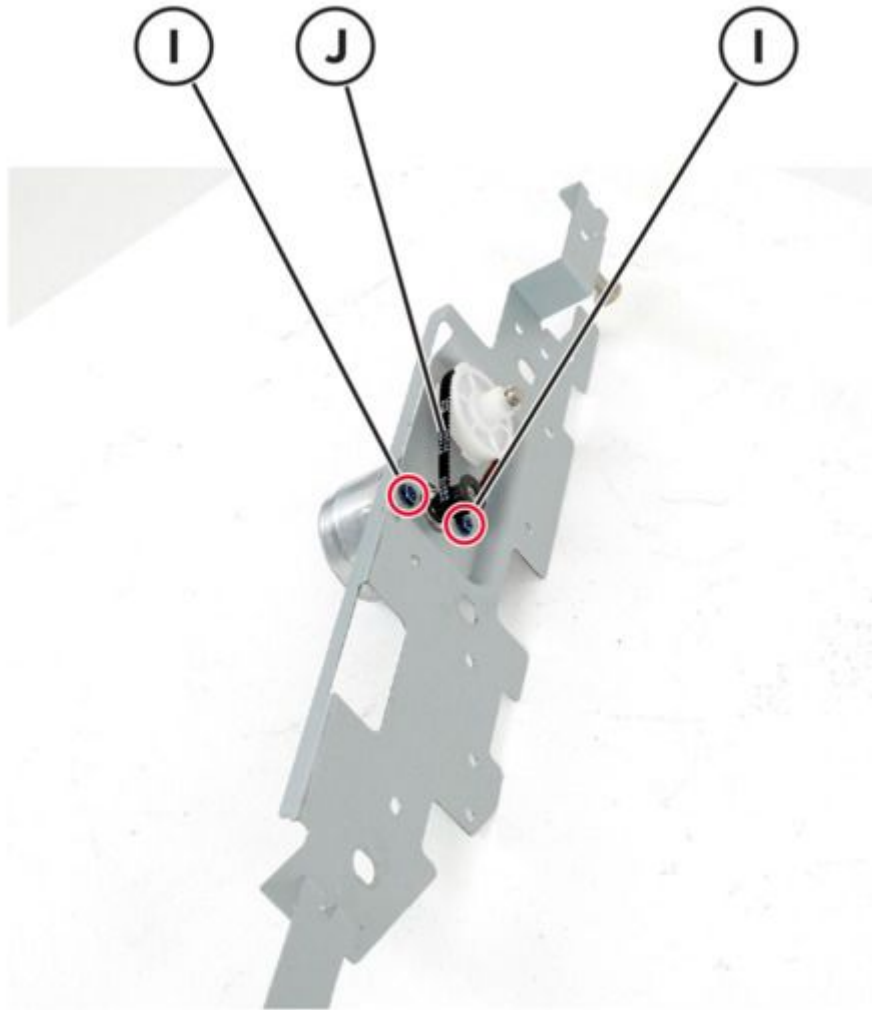
9. Remove the eleven screws (H).



10. Remove the frame.

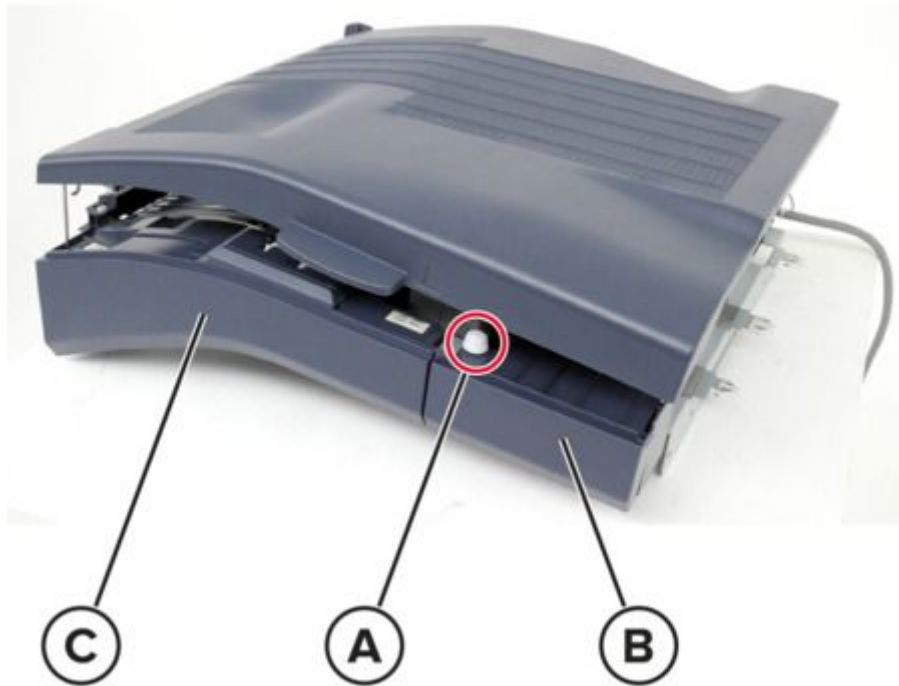
Parts removal

11. Remove the screws (I), and then remove the belt (J).
12. Remove the horizontal transport motor.

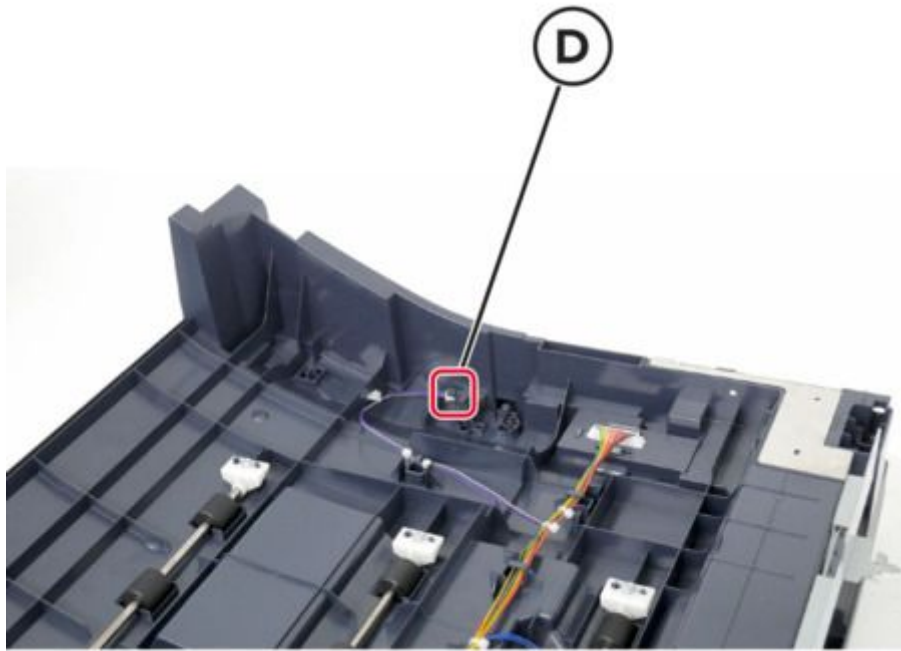


Horizontal transport open sensor removal

1. Open the top cover.
2. Remove the screw (A).
3. Remove the chute (B), and then remove the front cover (C).

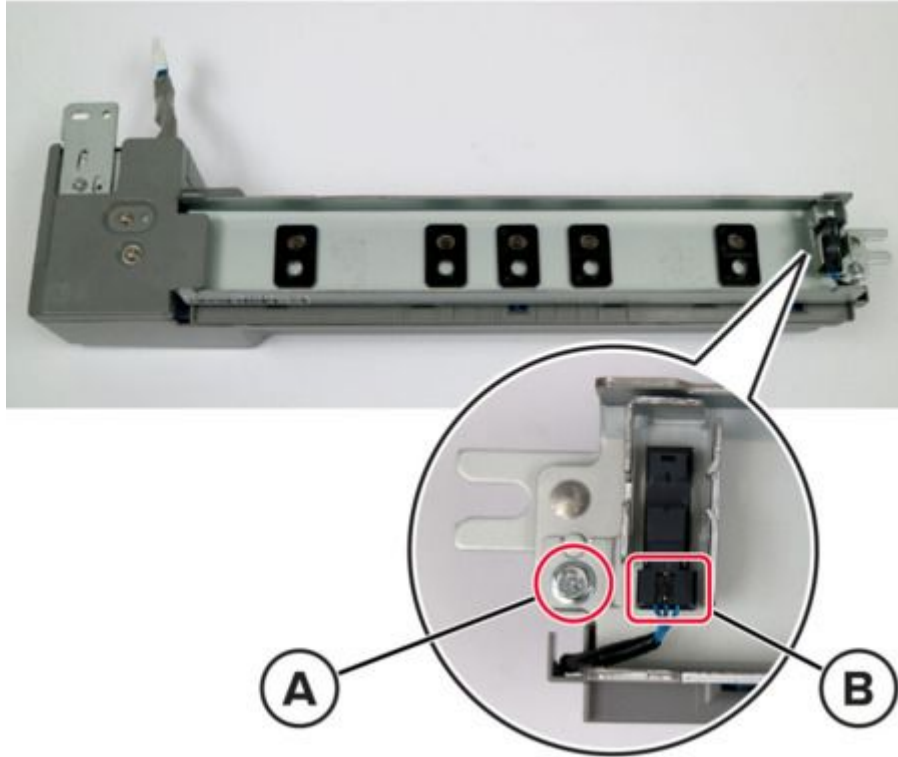


4. Place the horizontal transport unit on its top side.
5. Remove the connector (D).
6. Remove the horizontal transport open sensor.

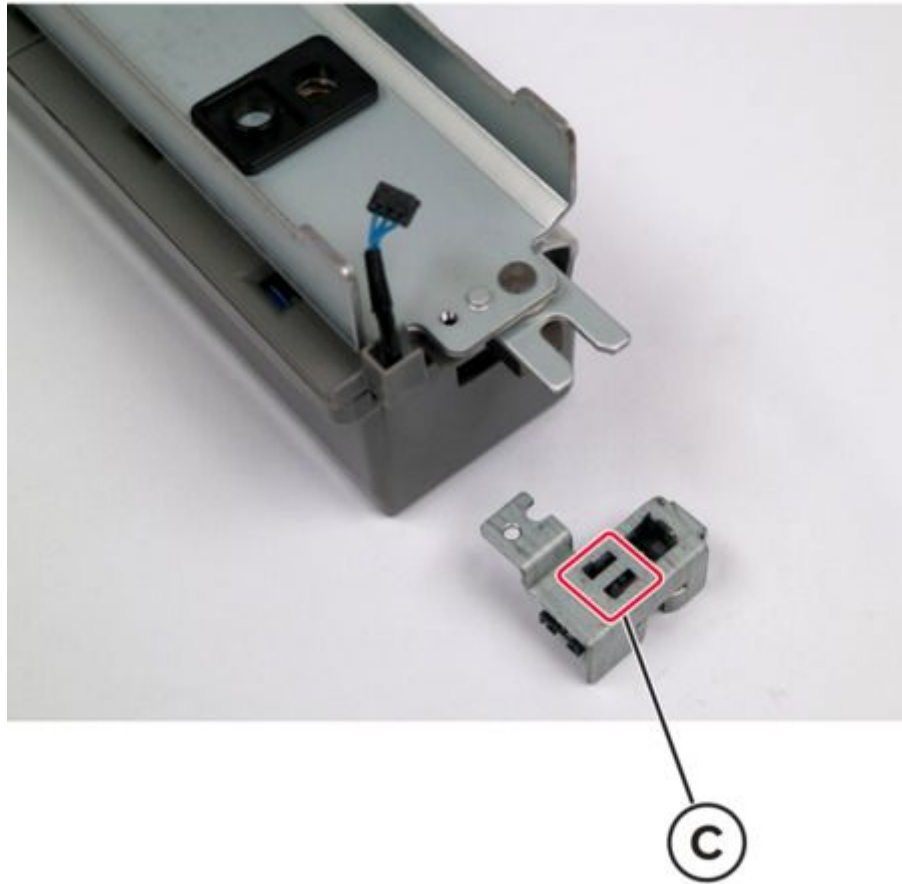


Sensor (hole punch box) removal

1. Remove the hole punch unit..
2. Remove the screw (A) and then disconnect the connector (B).



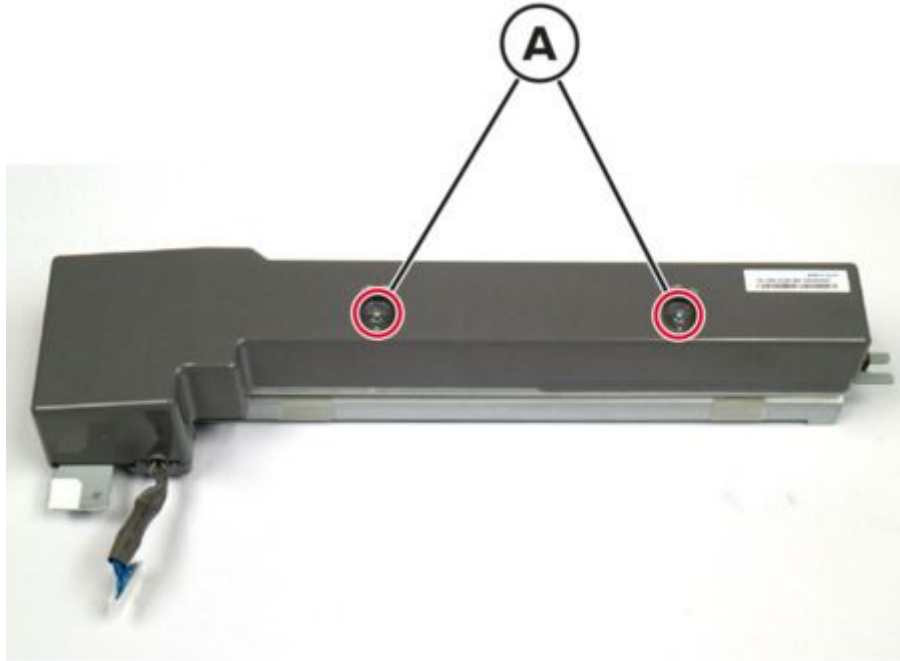
3. Release the latch (C).



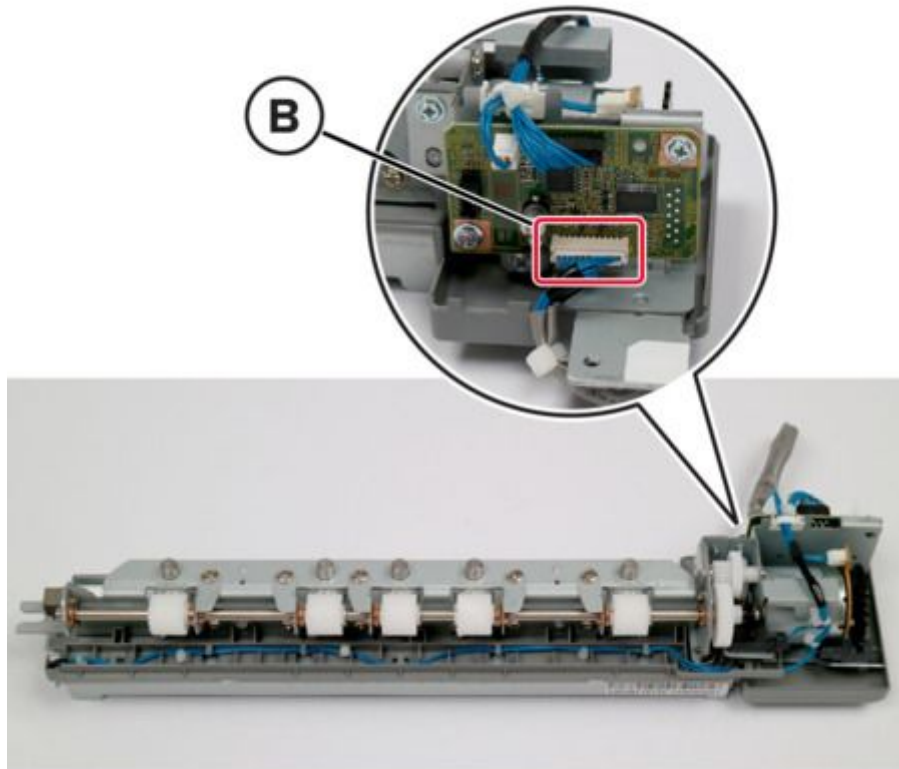
4. Remove the sensor from the bracket.

HPU interface cable removal

1. Remove the hole punch unit.
2. Remove the two screws (A) and then remove the cover.

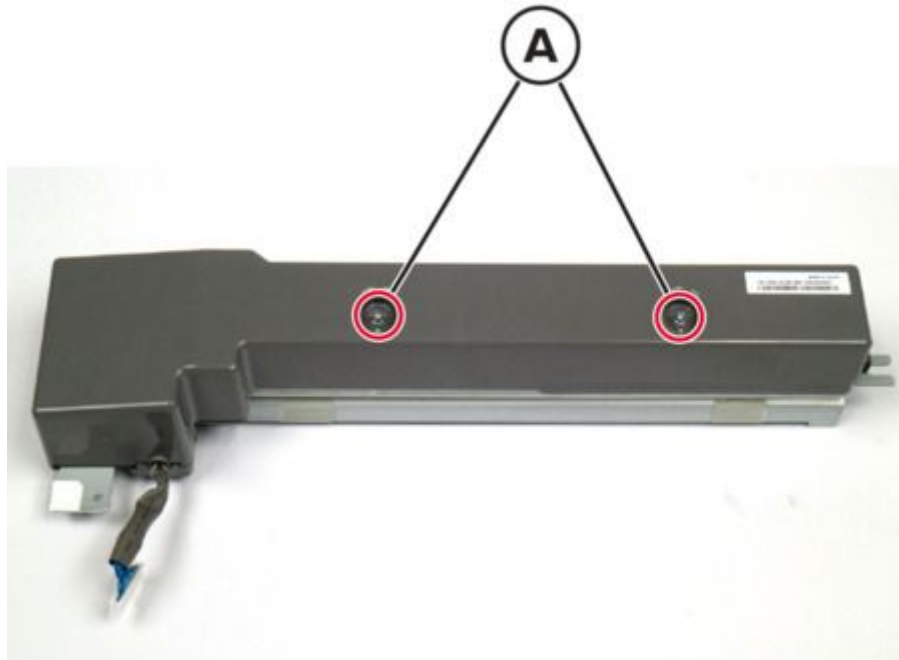


3. Remove the interface cable (B).

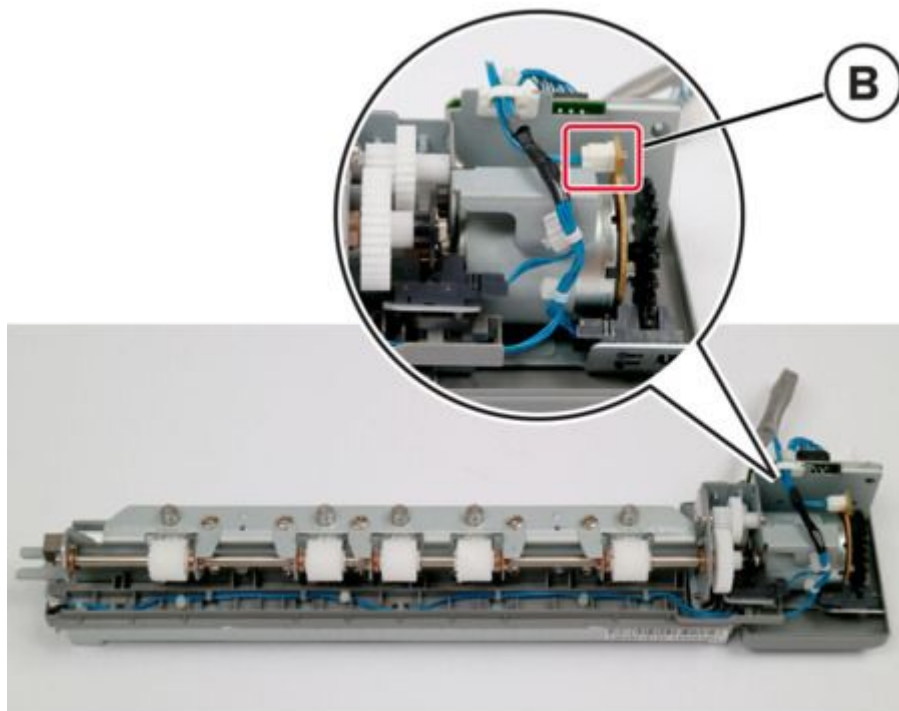


HPU motor cable removal

1. Remove the hole punch unit.
2. Remove the two screws (A) and then remove the cover.

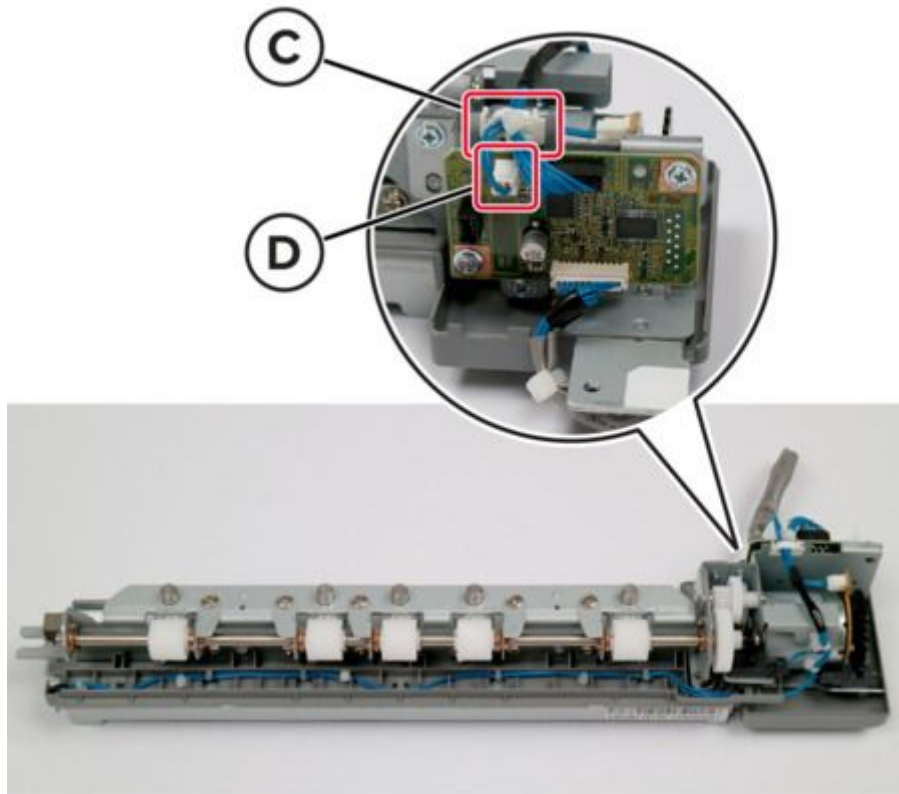


3. Disconnect the connector (B).



Parts removal

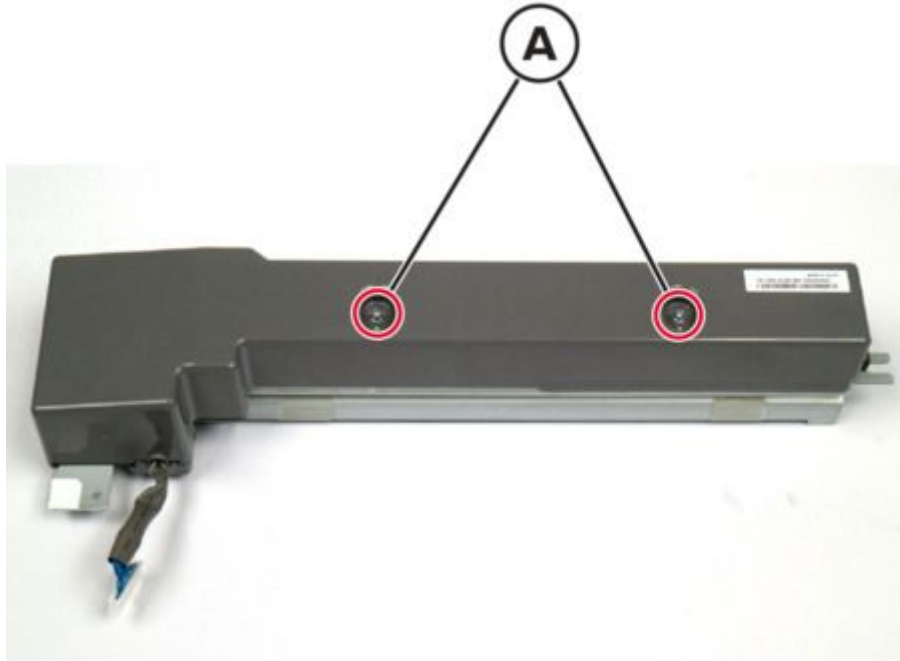
4. Release the clamp (C) and then disconnect the connector (D).



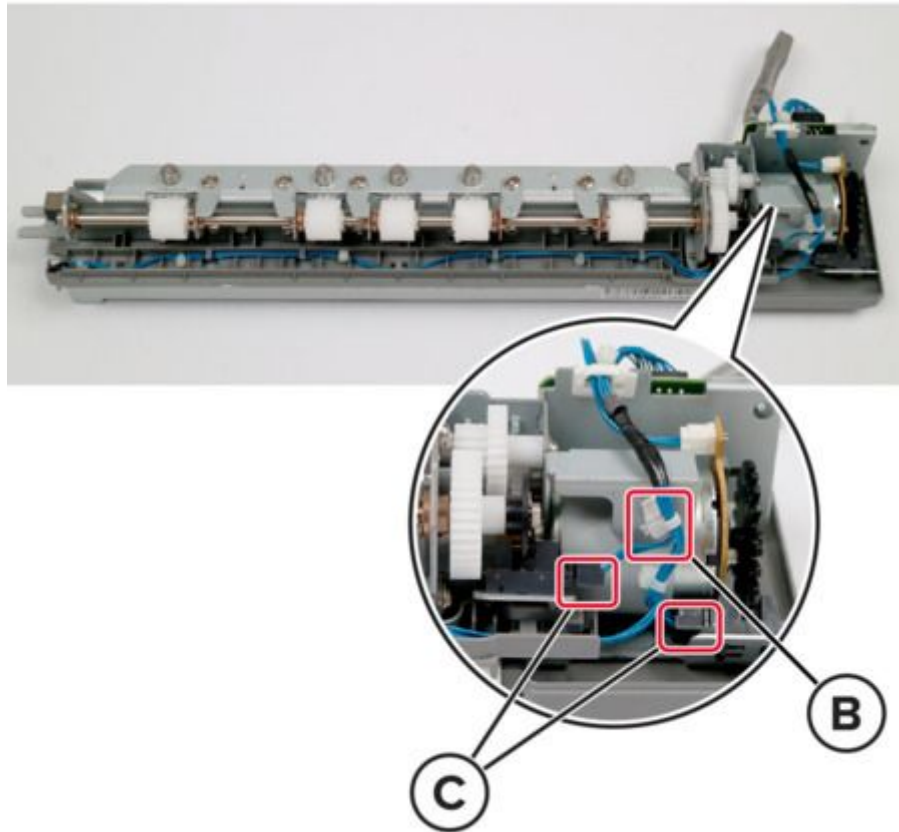
5. Remove the cable.

HPU sensor cable removal

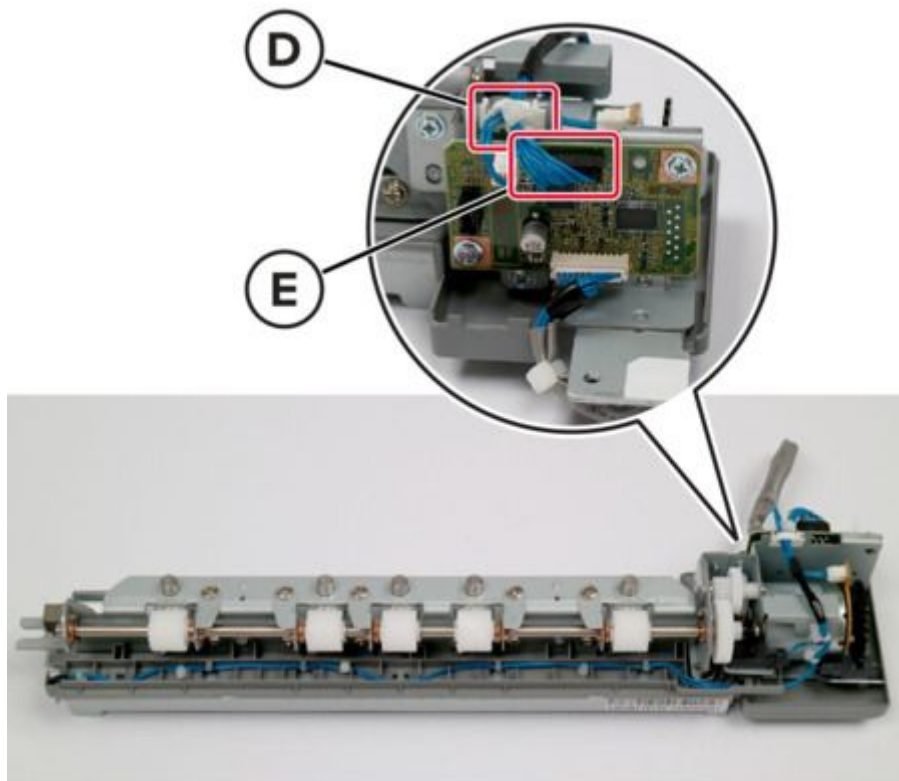
1. Remove the hole punch unit.
2. Remove the two screws (A) and then remove the cover.



3. Release the push-tie (B) and then disconnect the two connectors (C).

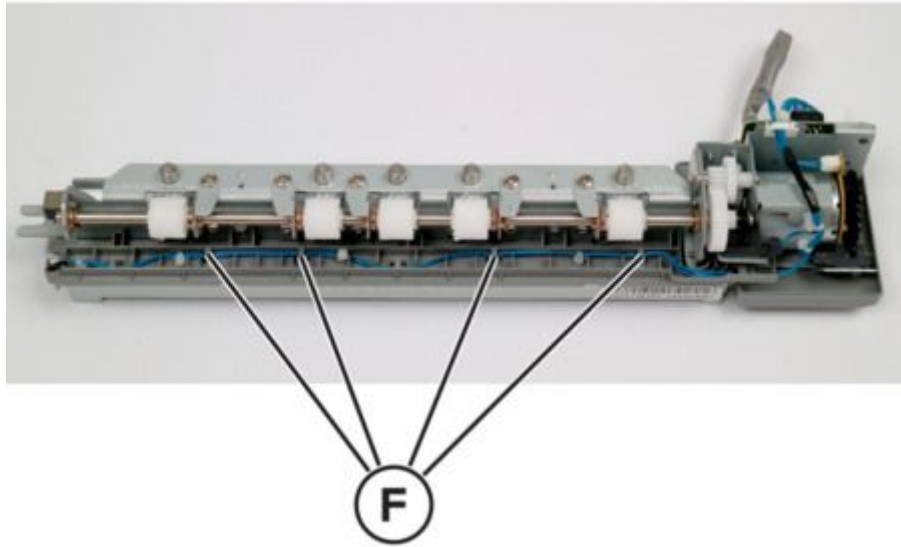


4. Release the clamp (D) and then disconnect the connector (E).



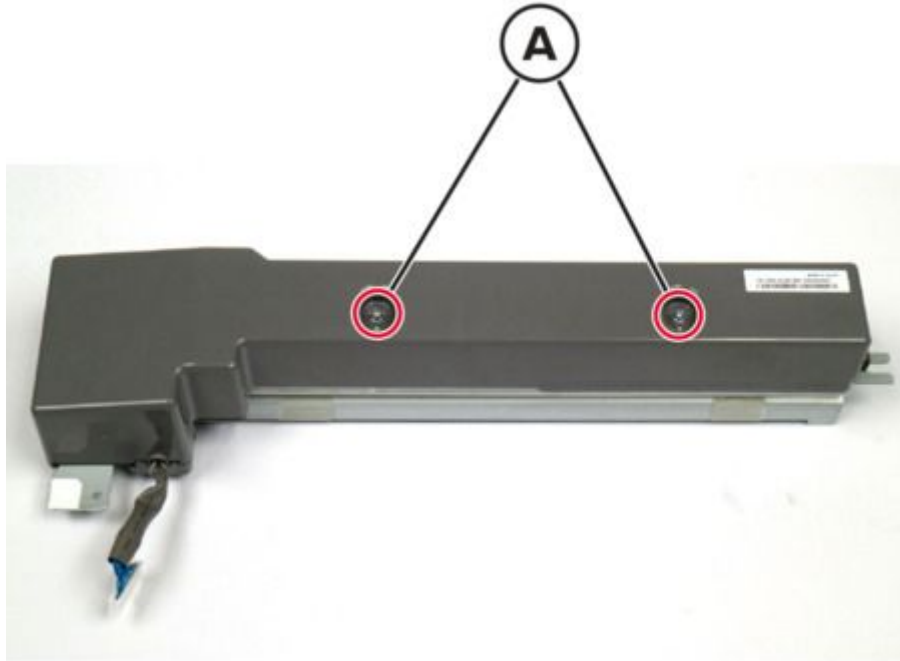
Parts removal

5. Release the cable from the harness guide (F) and then remove the cable.

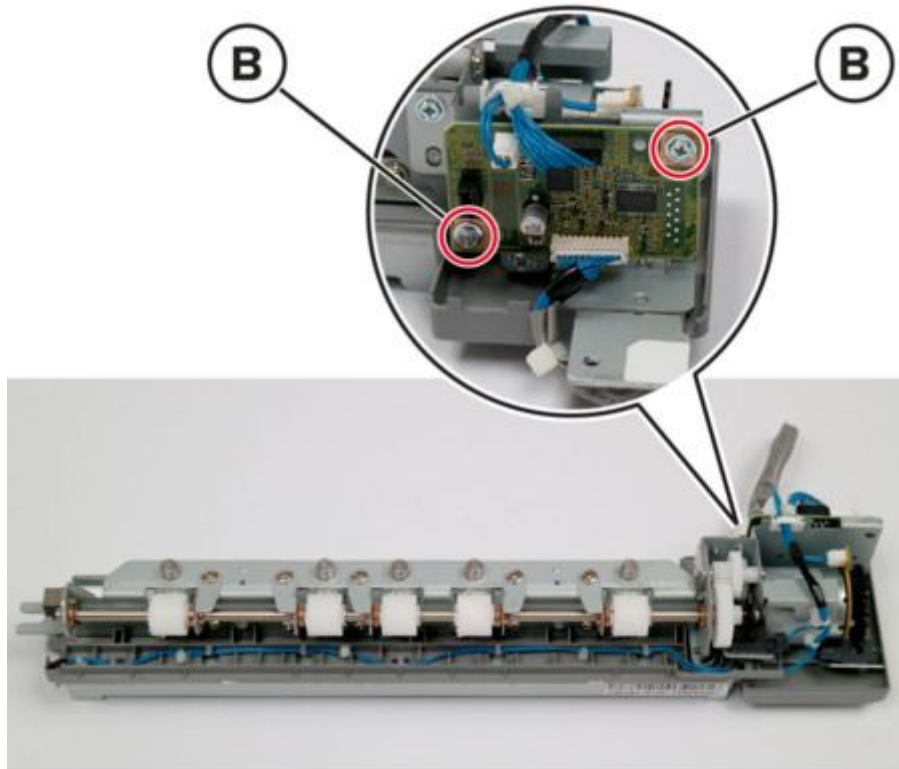


HPU controller board removal

1. Remove the hole punch unit.
2. Remove the two screws (A) and then remove the cover.



3. Disconnect all the connectors on the controller board.
4. Remove the two screws (B).



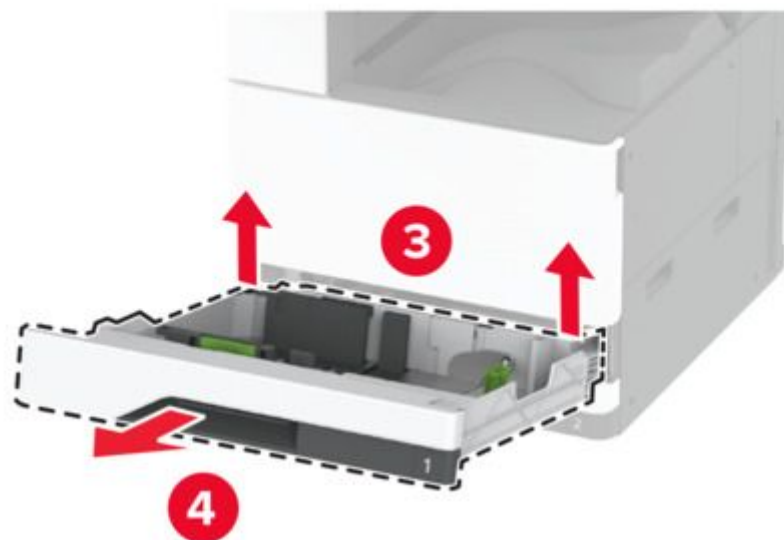
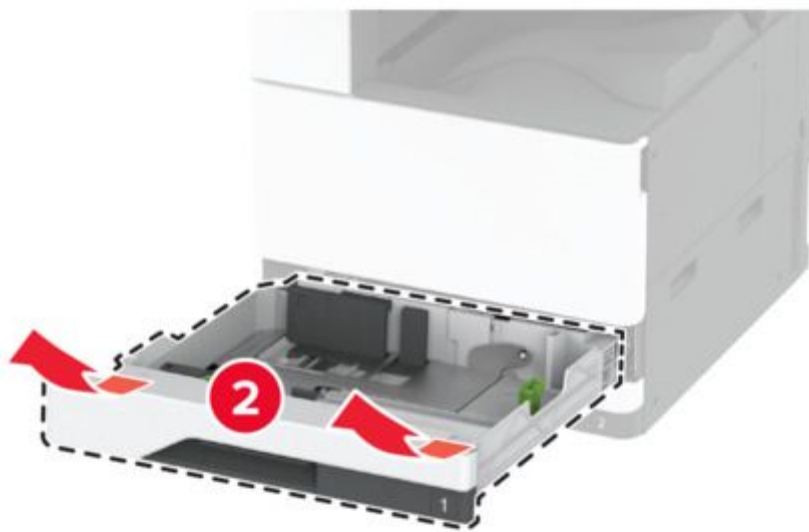
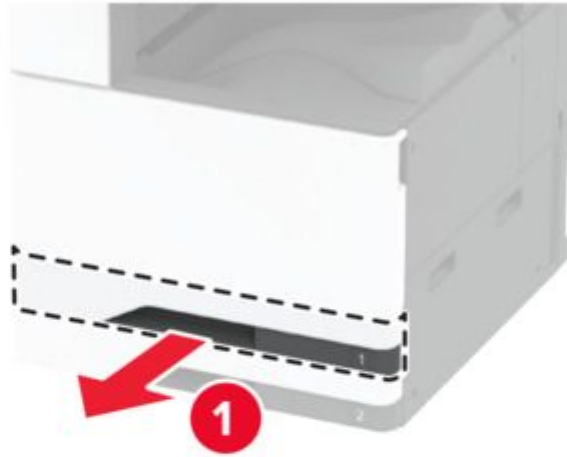
5. Remove the controller board.

Replacing parts

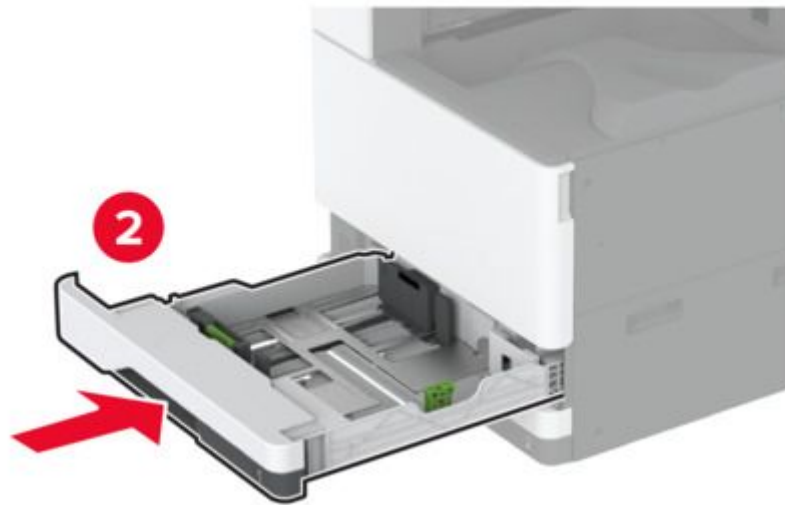
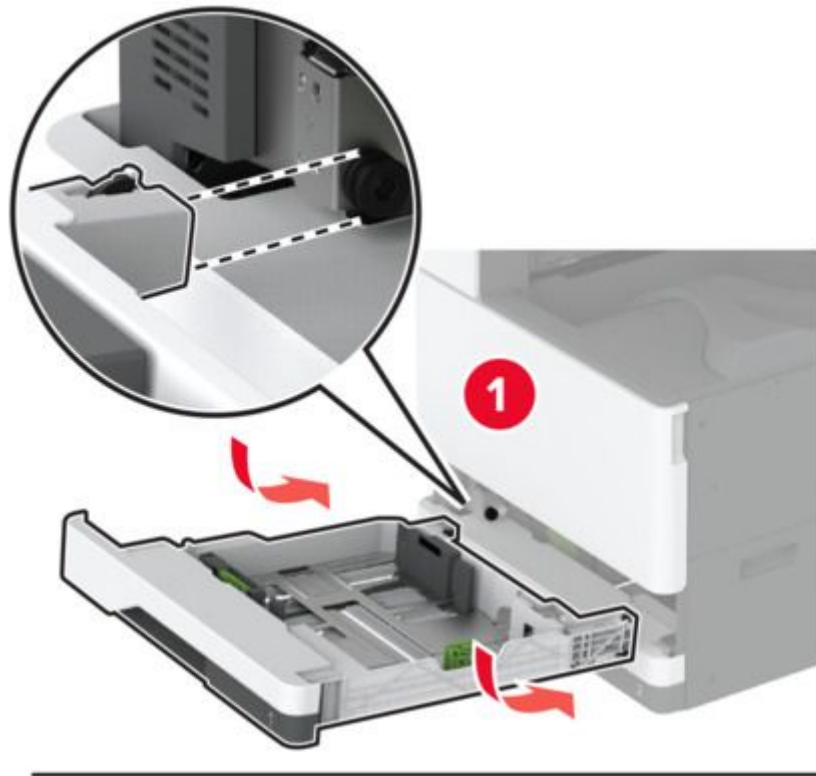
Replacing the 520-sheet tray insert

Prevent jams and paper feed problems. Change the defective tray insert to maintain proper printing performance.

1. Remove the used tray insert.



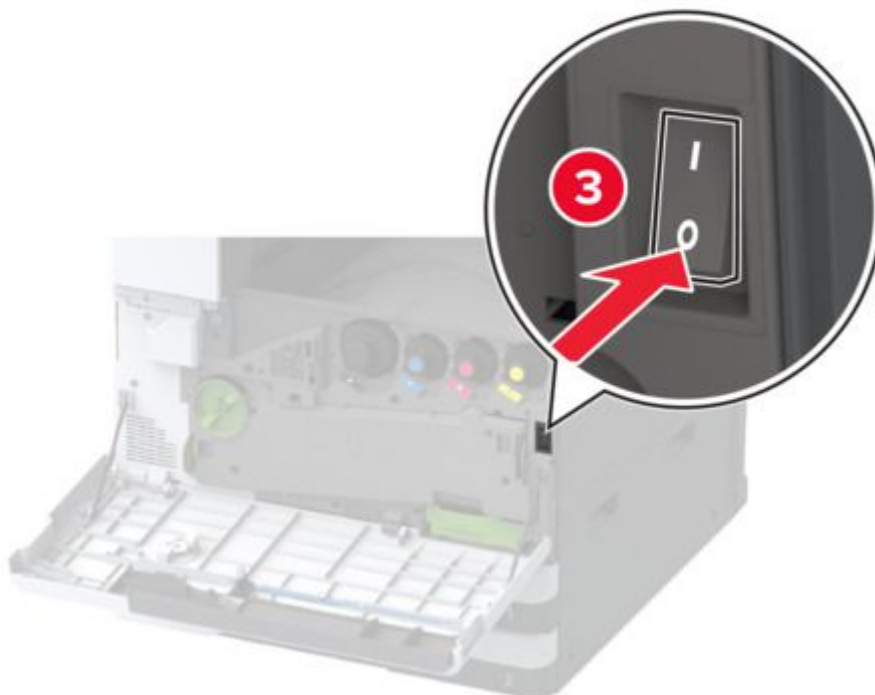
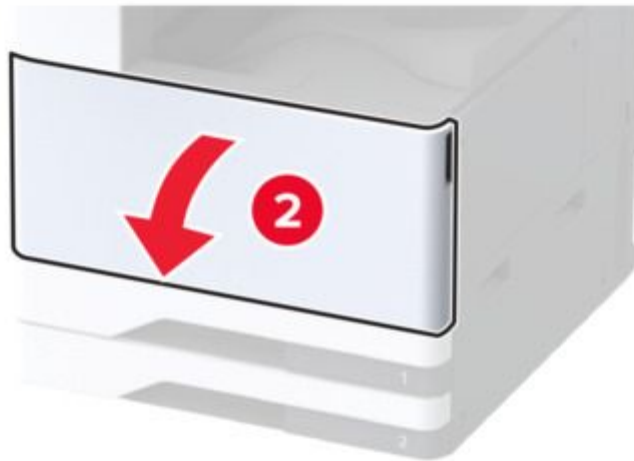
2. Unpack the new tray insert, and then remove all the packing material.
3. Insert the new tray insert.



Replacing the fuser

Learn how to remove the fuser when you are installing a new one.

1. Turn off the printer.

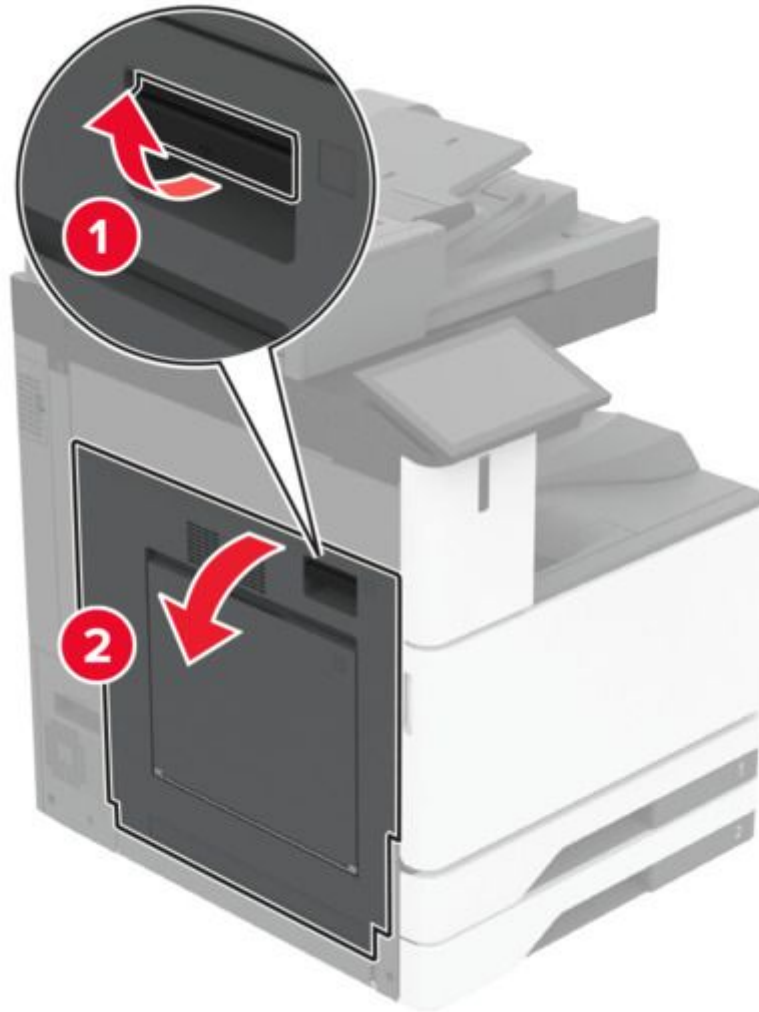


2. Open door A.

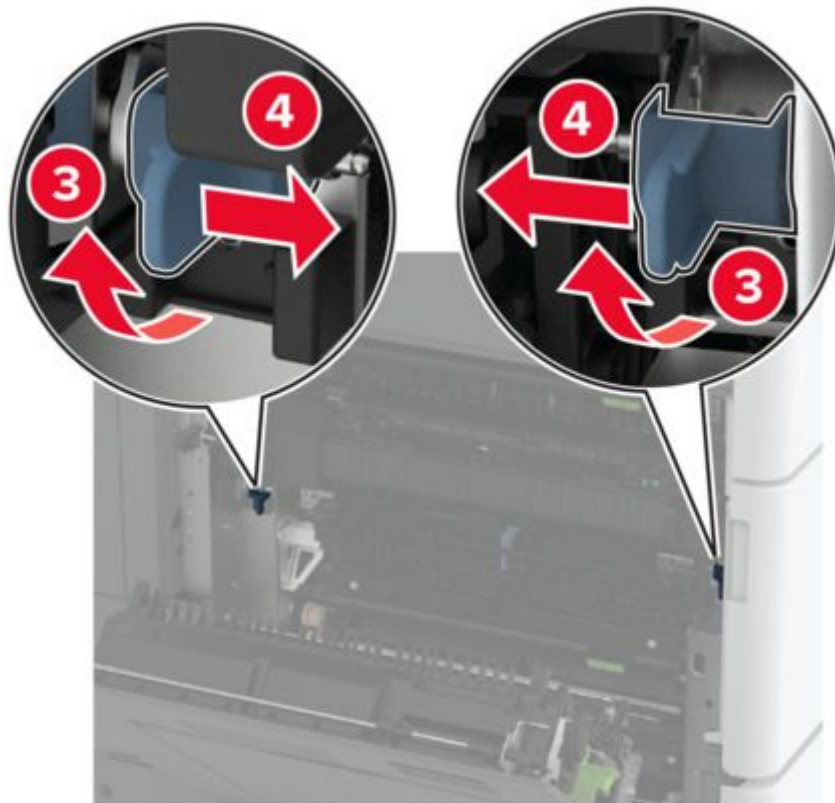
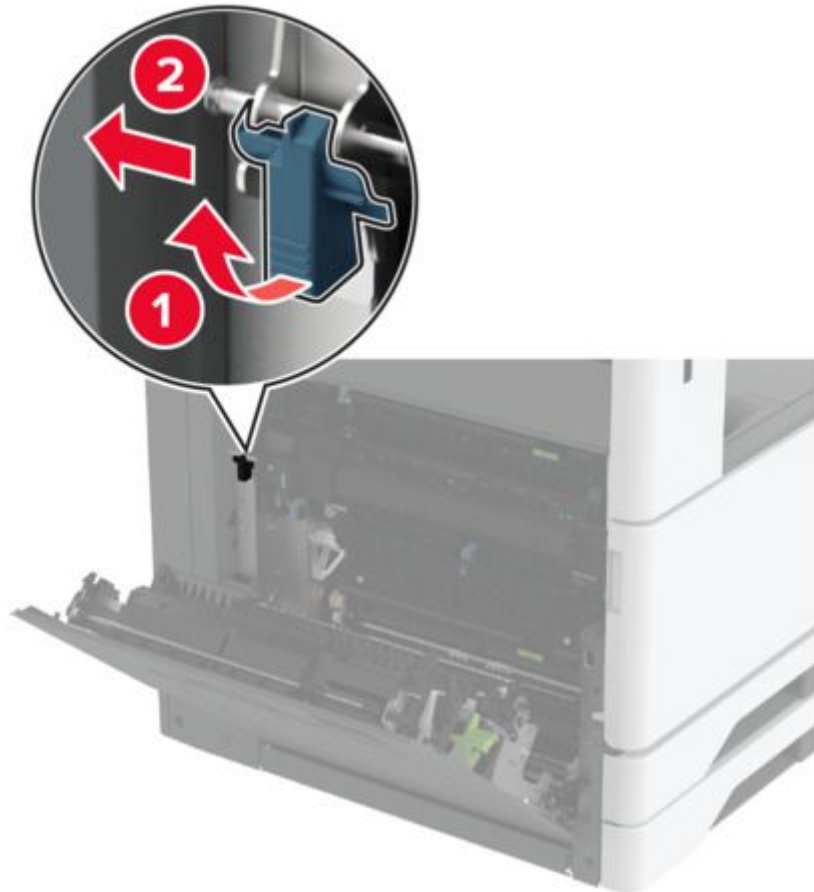


CAUTION—HOT SURFACE

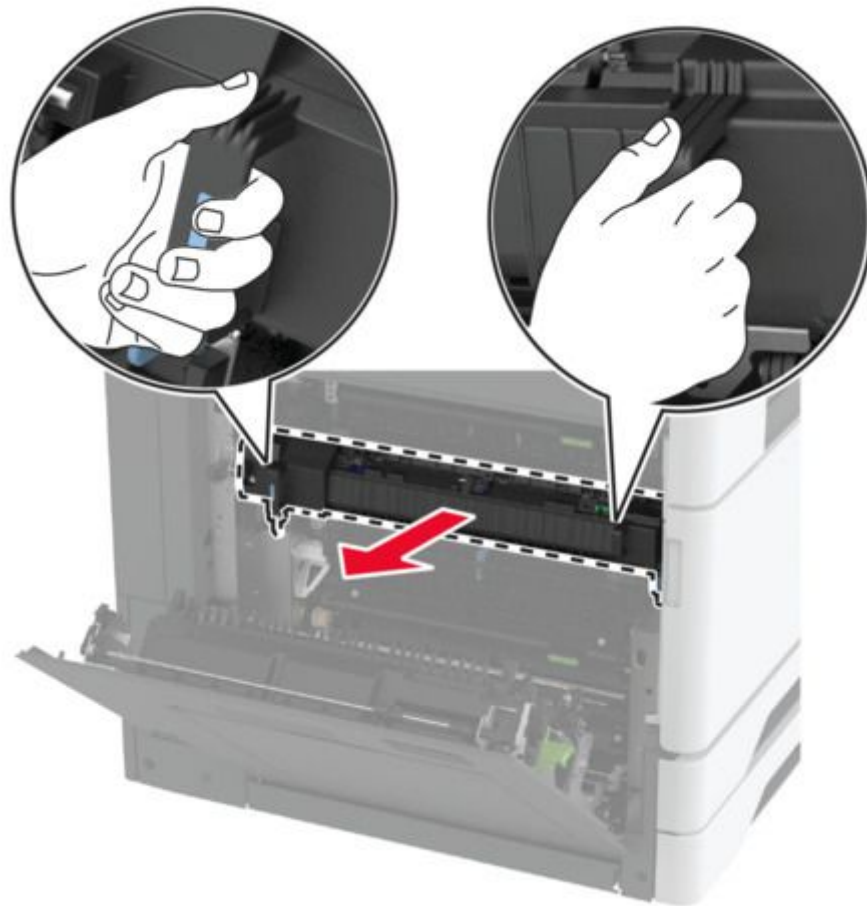
The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.



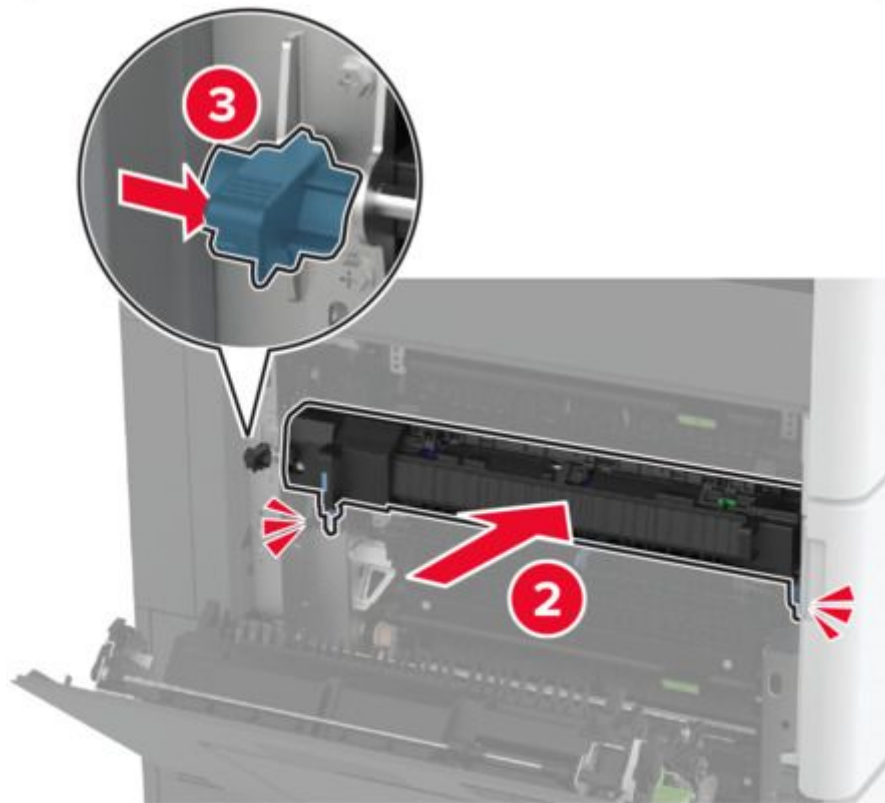
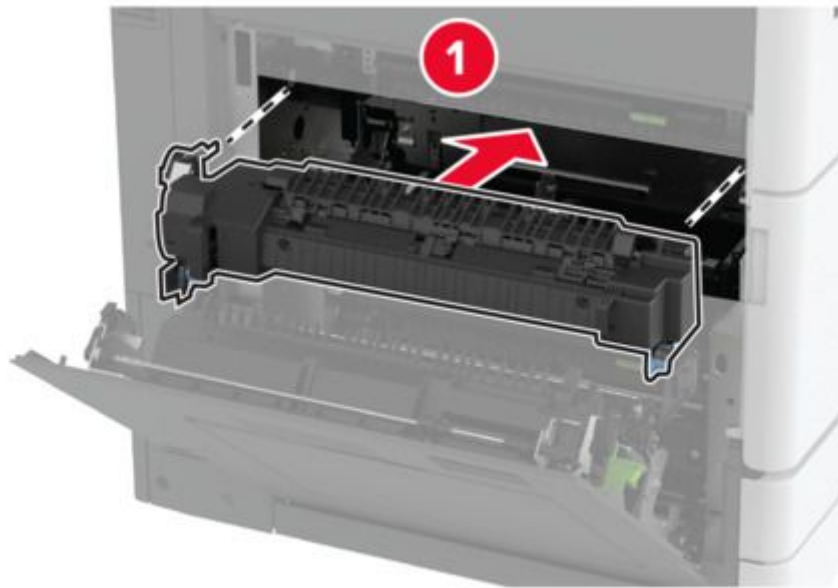
3. Unlock the fuser.



4. Remove the used fuser.



5. Unpack the new fuser.
6. Insert the new fuser until it clicks into place, and then lock it.

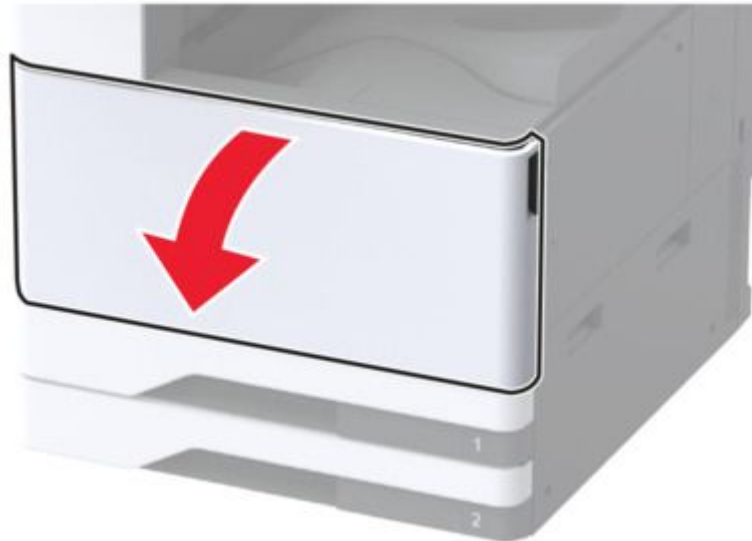


- 7. Close door A.
- 8. Turn on the printer.

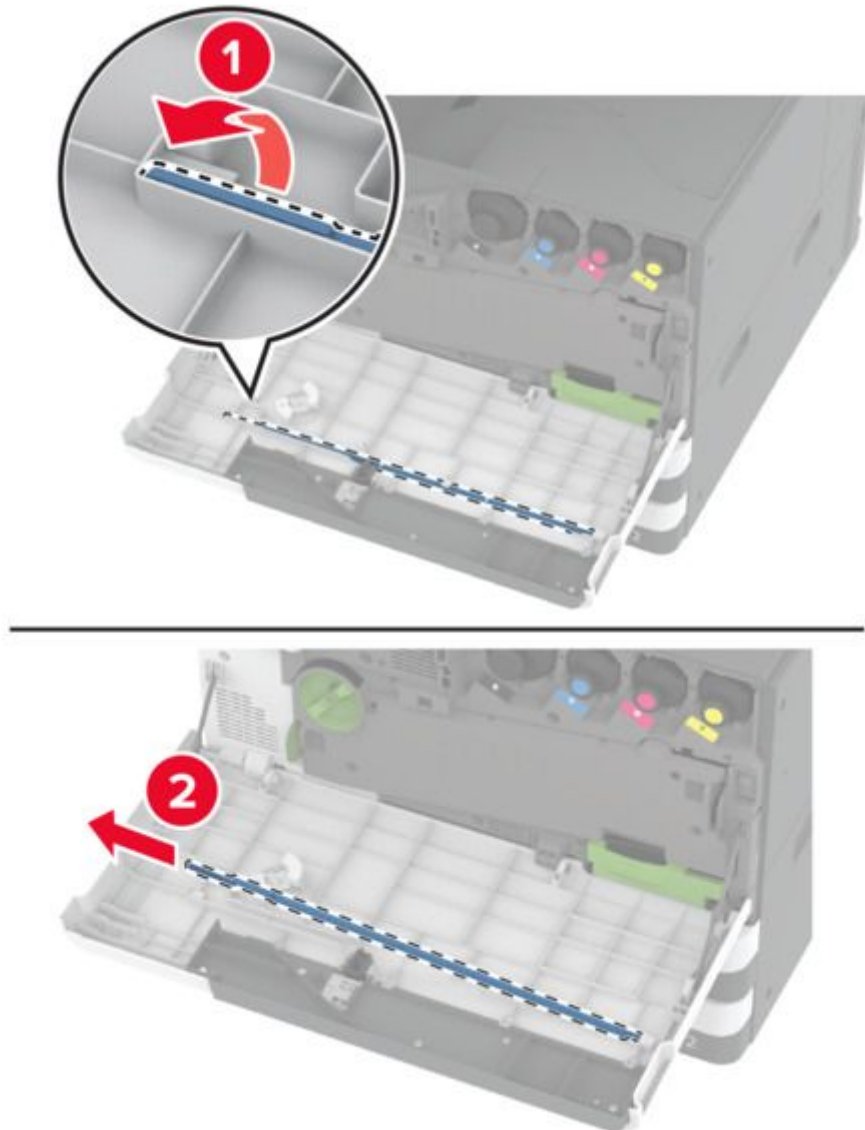
Replacing the printhead wiper

Here are the steps to replace the printhead wiper, the small device that keeps the printhead lens clean.

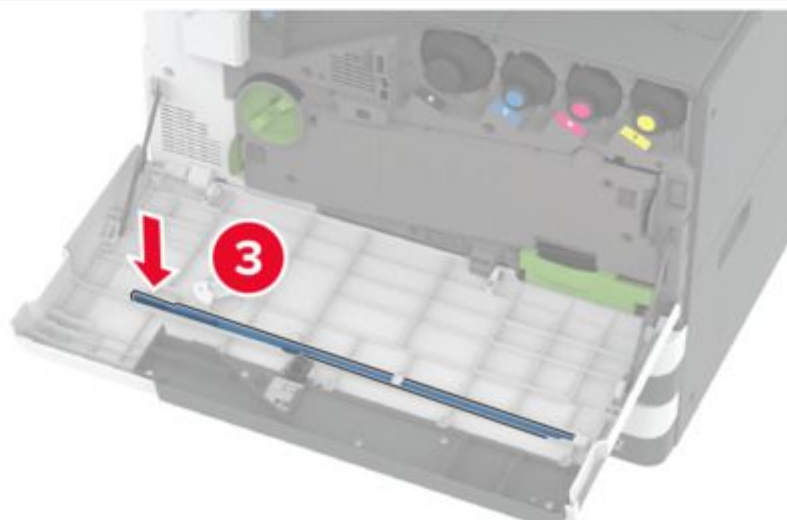
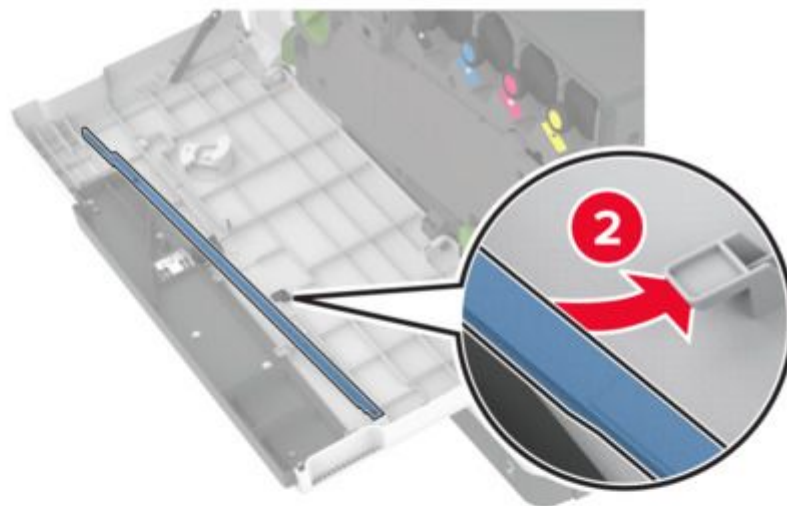
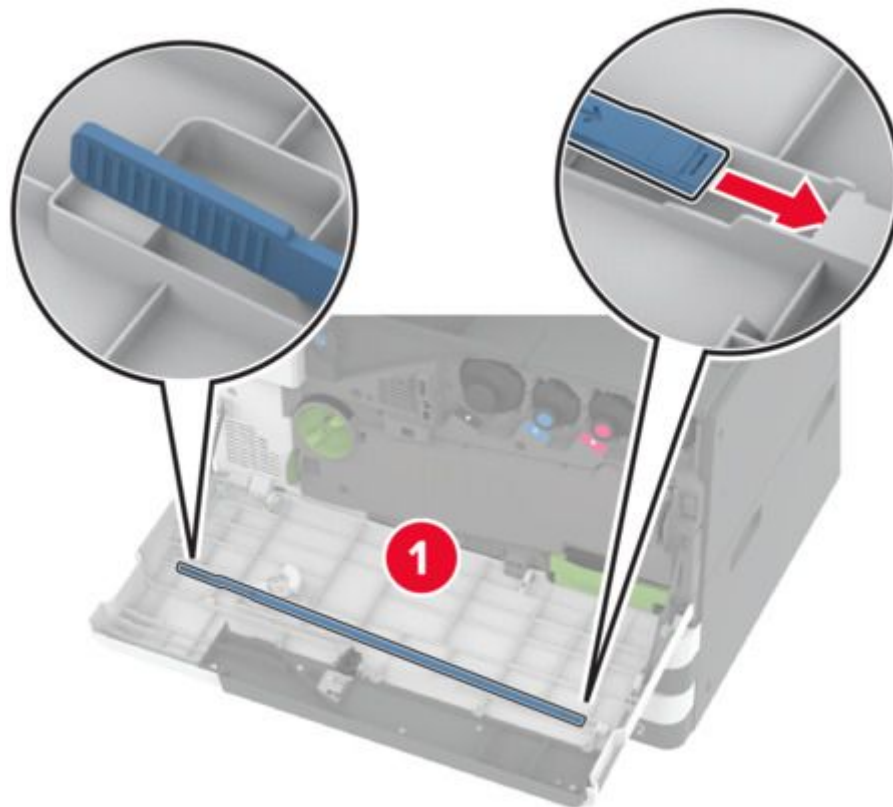
1. Open the front door.



2. Remove the used printhead wiper.



3. Unpack the new printhead wiper.
4. Insert the new printhead wiper.

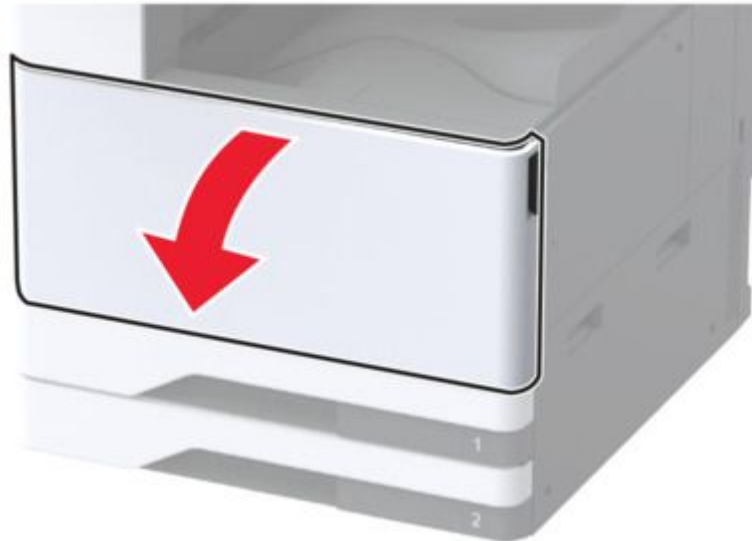


5. Close the front door.

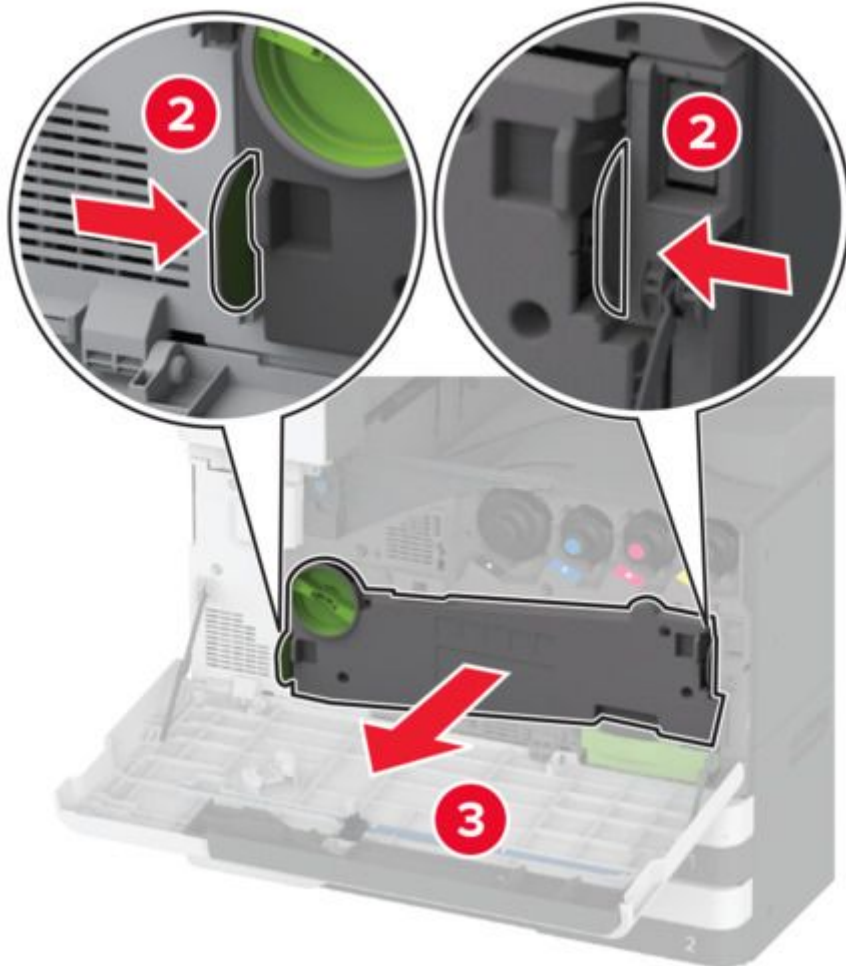
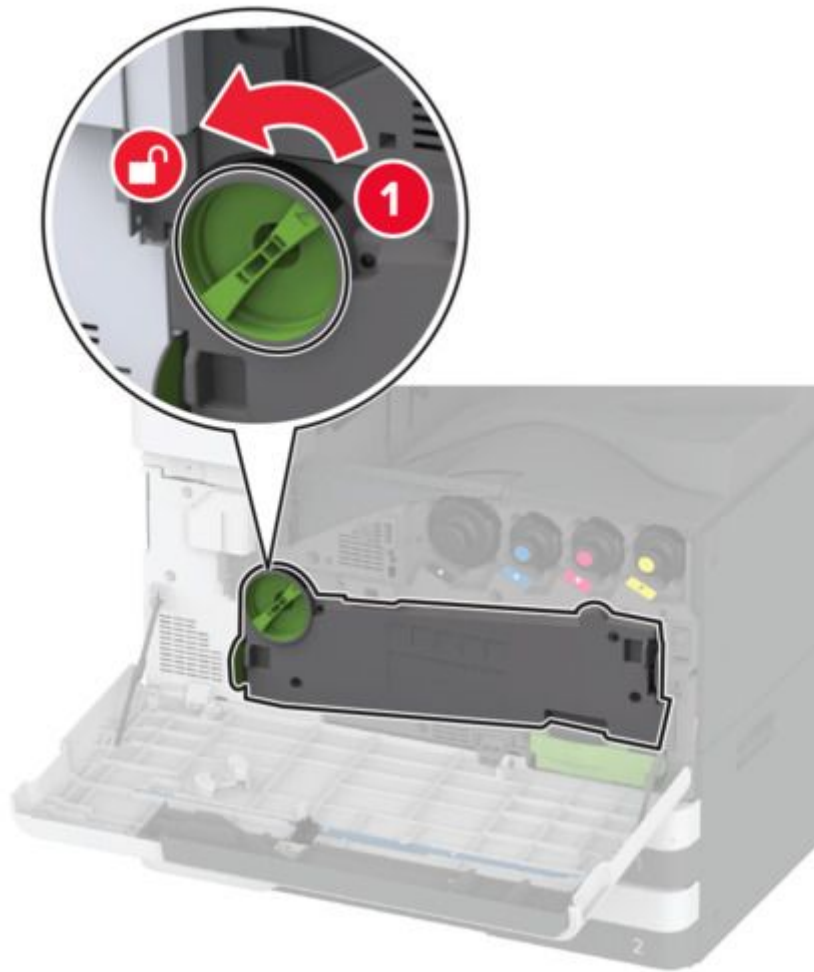
Replacing the transfer module cleaner

Here are the steps to replace the transfer module cleaner, the device that keeps the transfer module clean.

1. Open the front door.



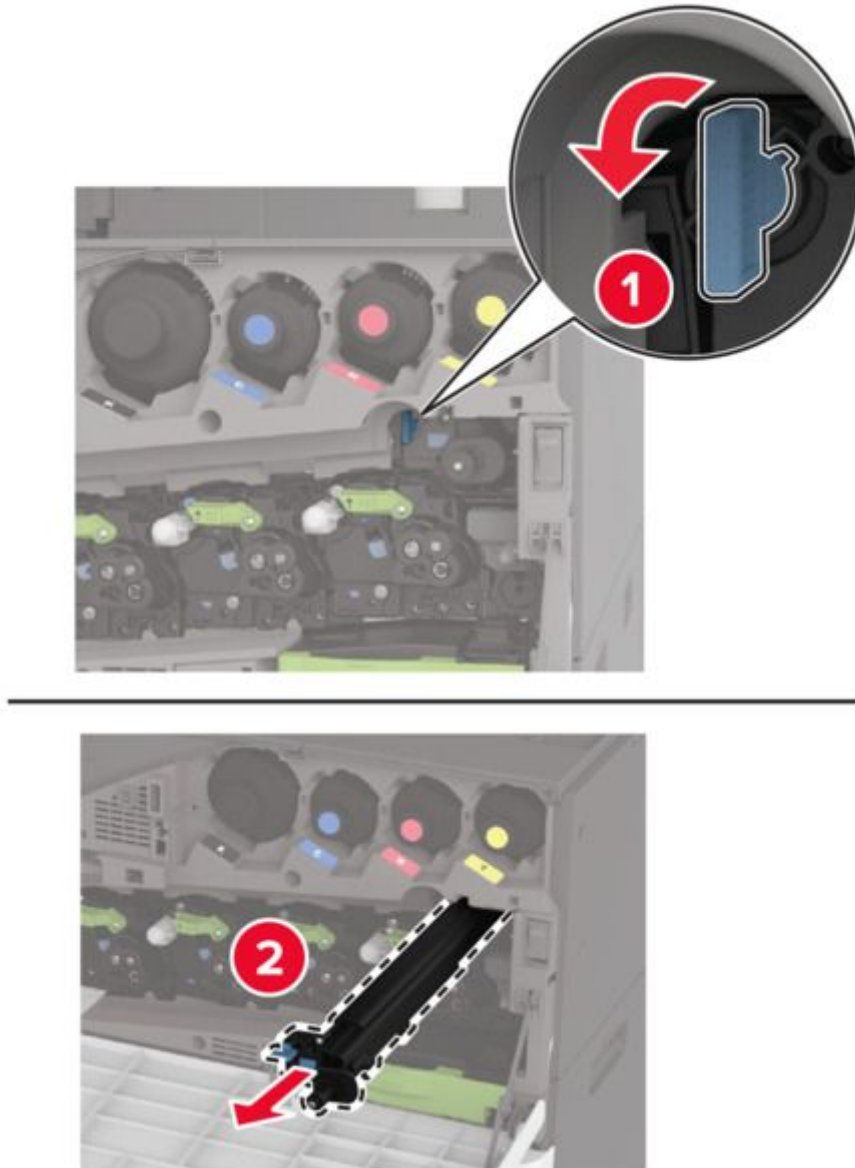
2. Remove the waste toner transfer unit.



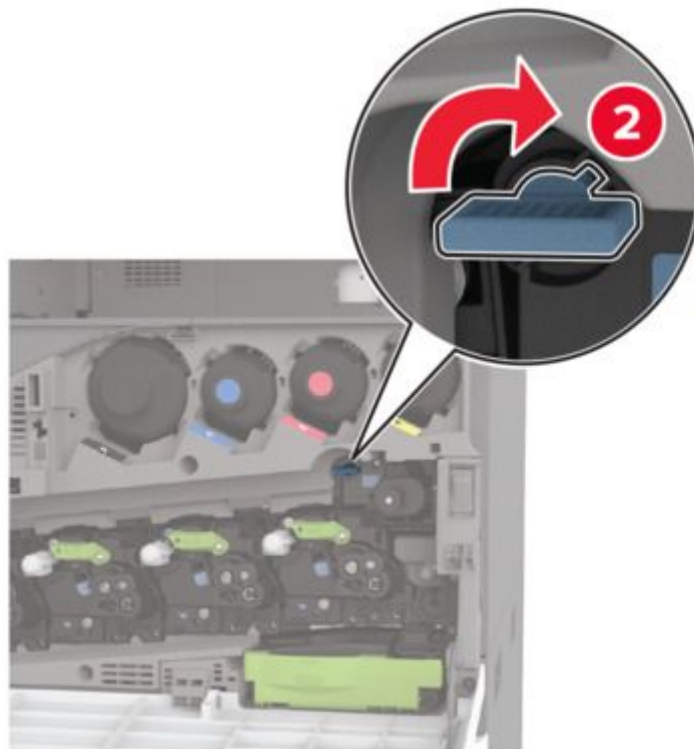
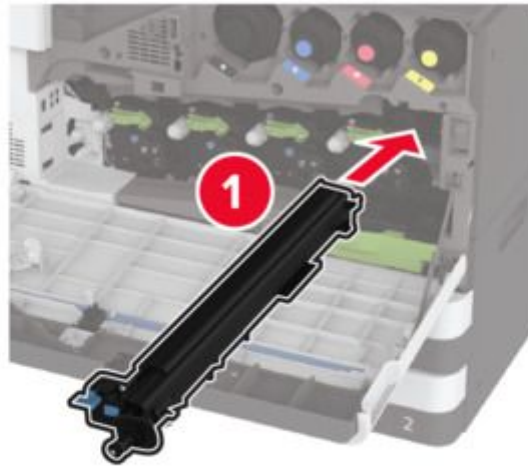
NOTES

To avoid spilling the toner, place the unit in an upright position.

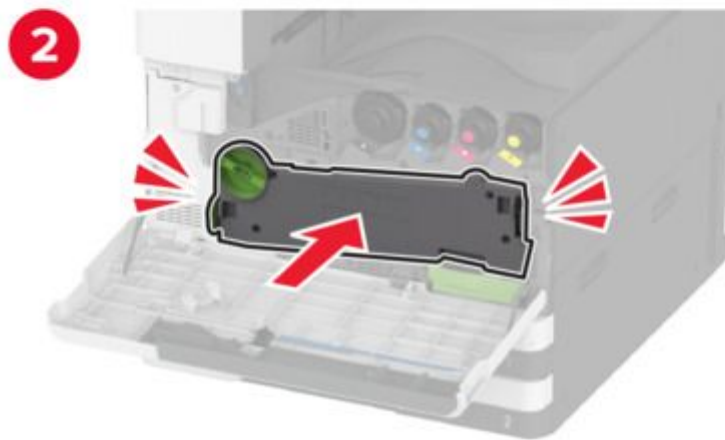
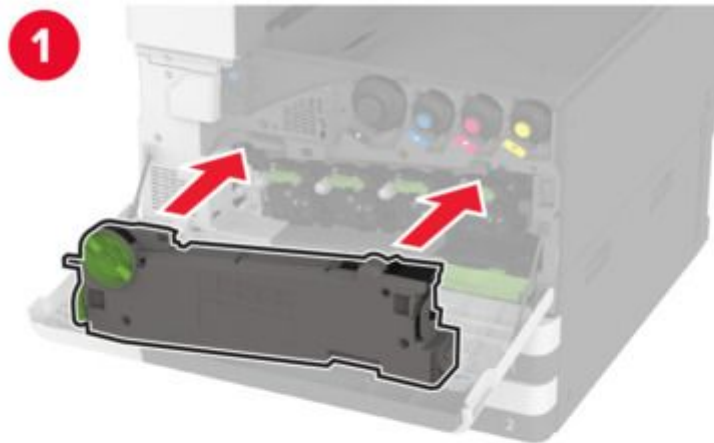
3. Remove the used transfer module cleaner.



4. Unpack the new transfer module cleaner.
5. Insert the new transfer module cleaner.



6. Insert the waste toner transfer unit until it clicks into place, and then lock it.

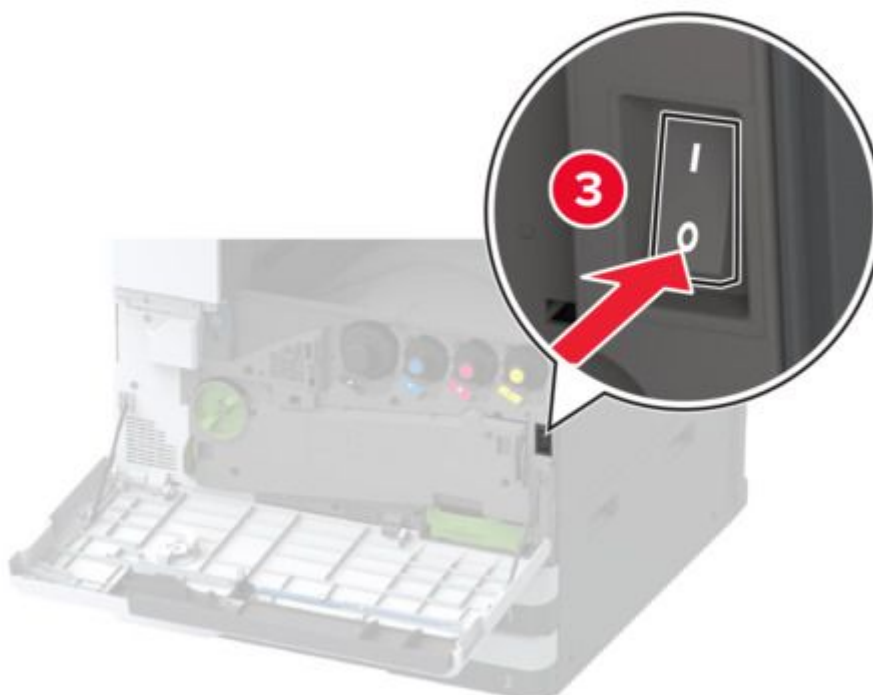
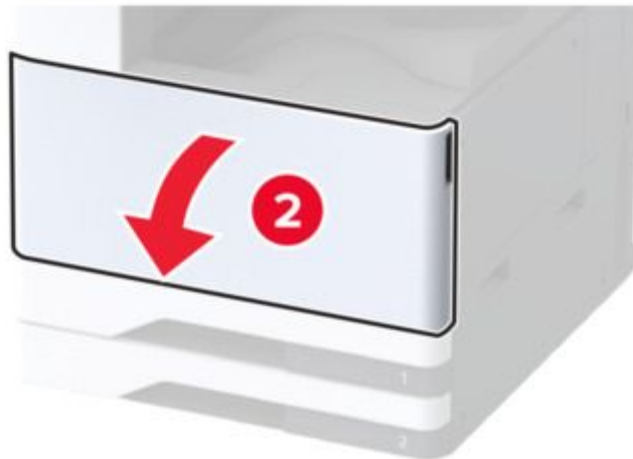


7. Close the front door.

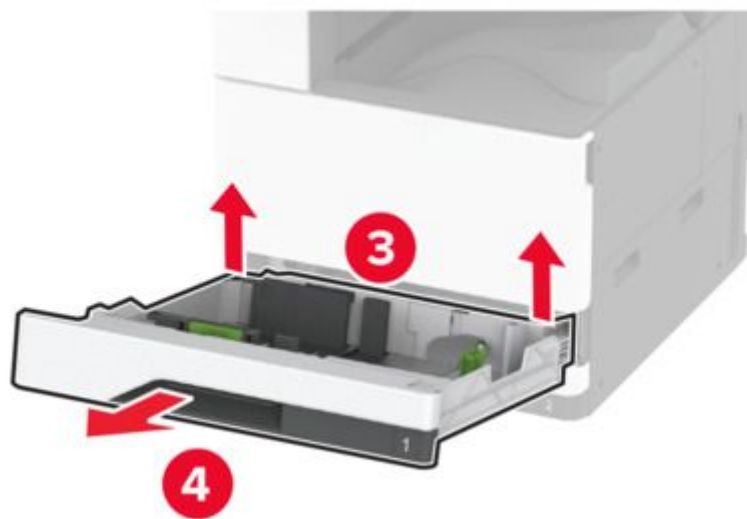
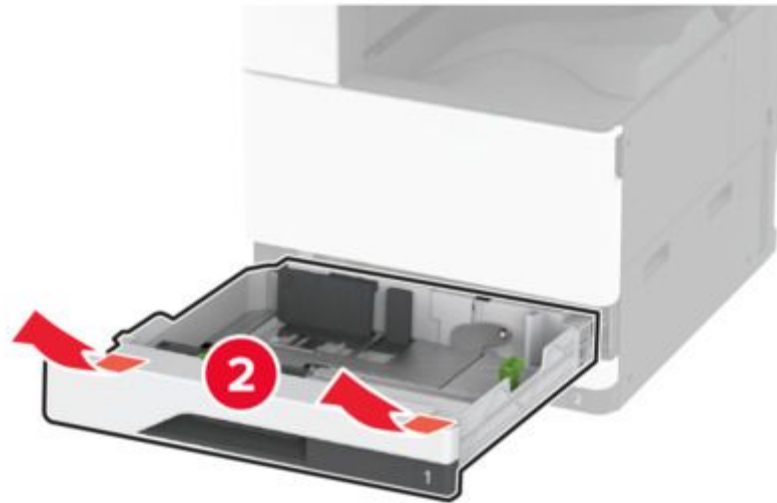
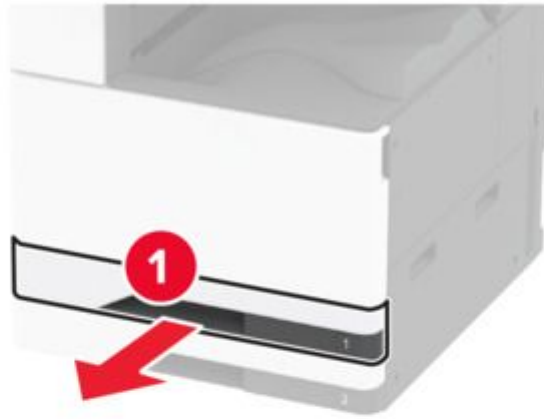
Replacing the tray roller kit

Changing the tray roller kit can help prevent paper feed problems from happening again.

1. Turn off the printer.



2. Remove the standard tray.

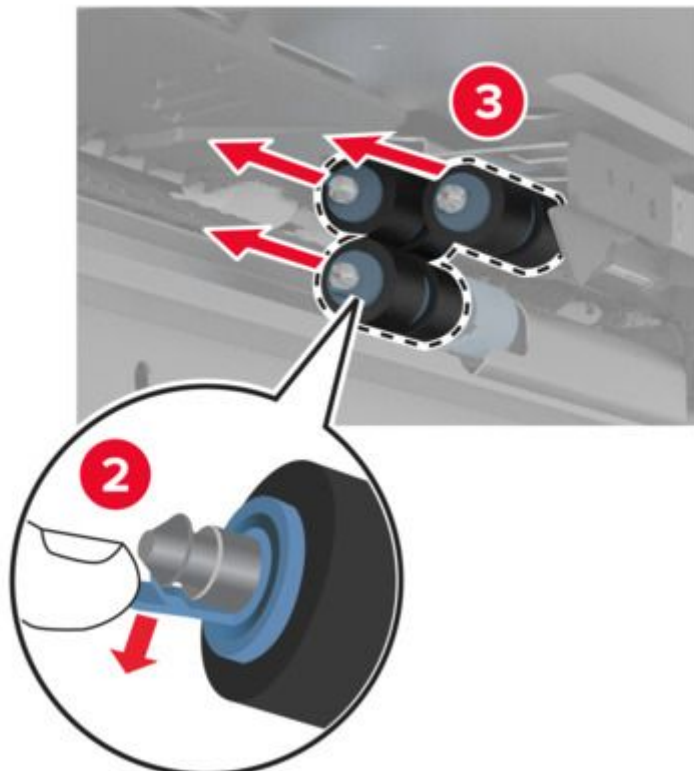
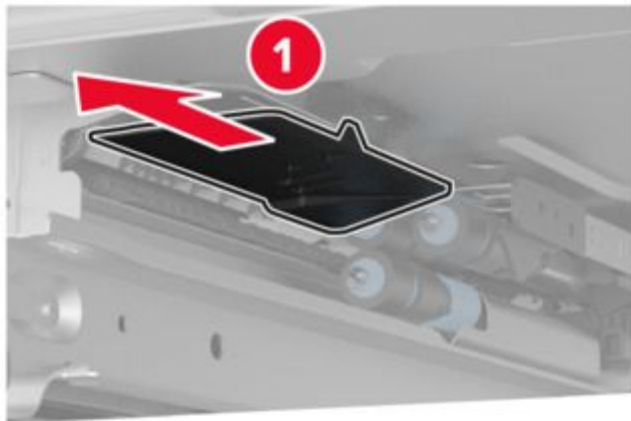
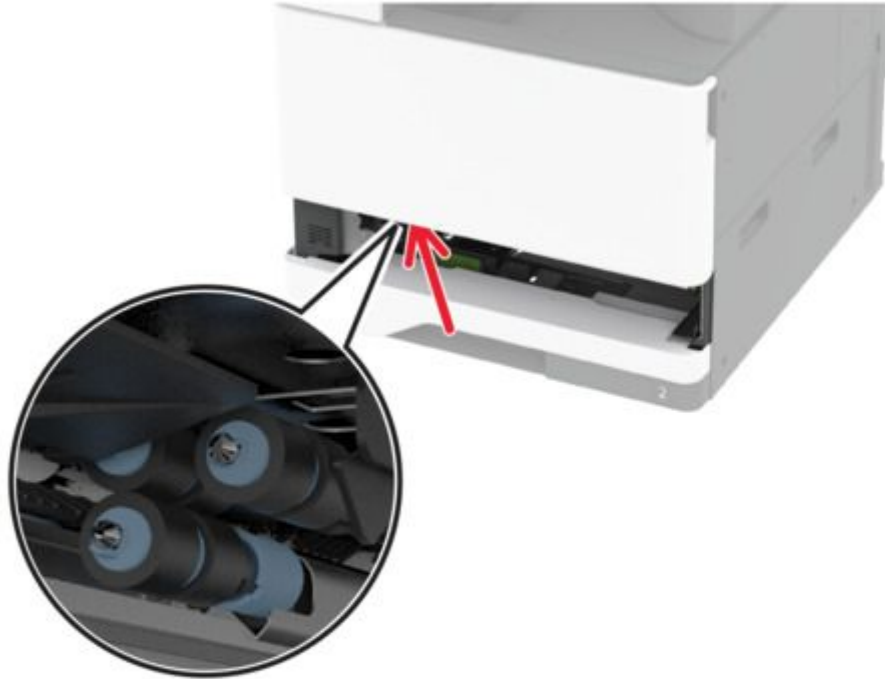


3. Remove the used tray roller kit.

WARNING—POTENTIAL DAMAGE

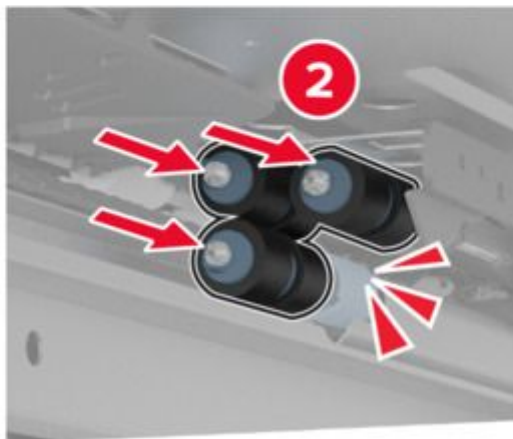
To prevent damage from electrostatic discharge, touch any exposed metal frame of the printer before accessing or touching interior areas of the printer.

Parts removal



Parts removal

4. Unpack the new tray roller kit.
5. Insert the new tray roller kit until it clicks into place.

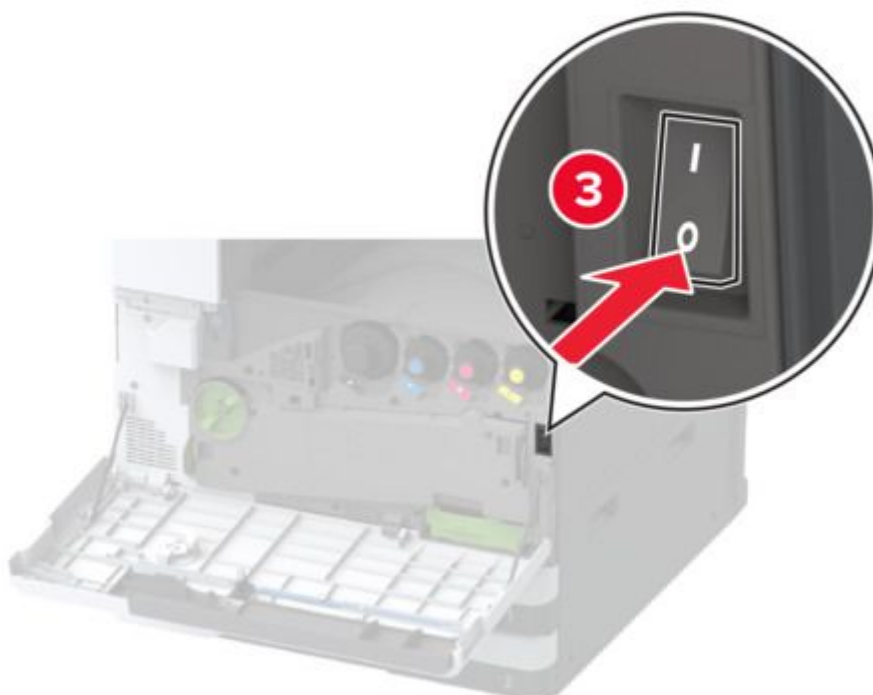
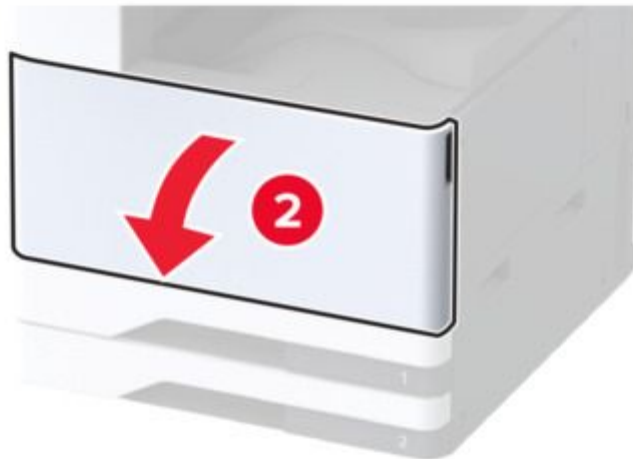


6. Insert the tray.
7. Turn on the printer.

Replacing the 2000-sheet tray roller kit

Change the roller kit for the 2000-sheet tray regularly to prevent jams and other paper feed problems.

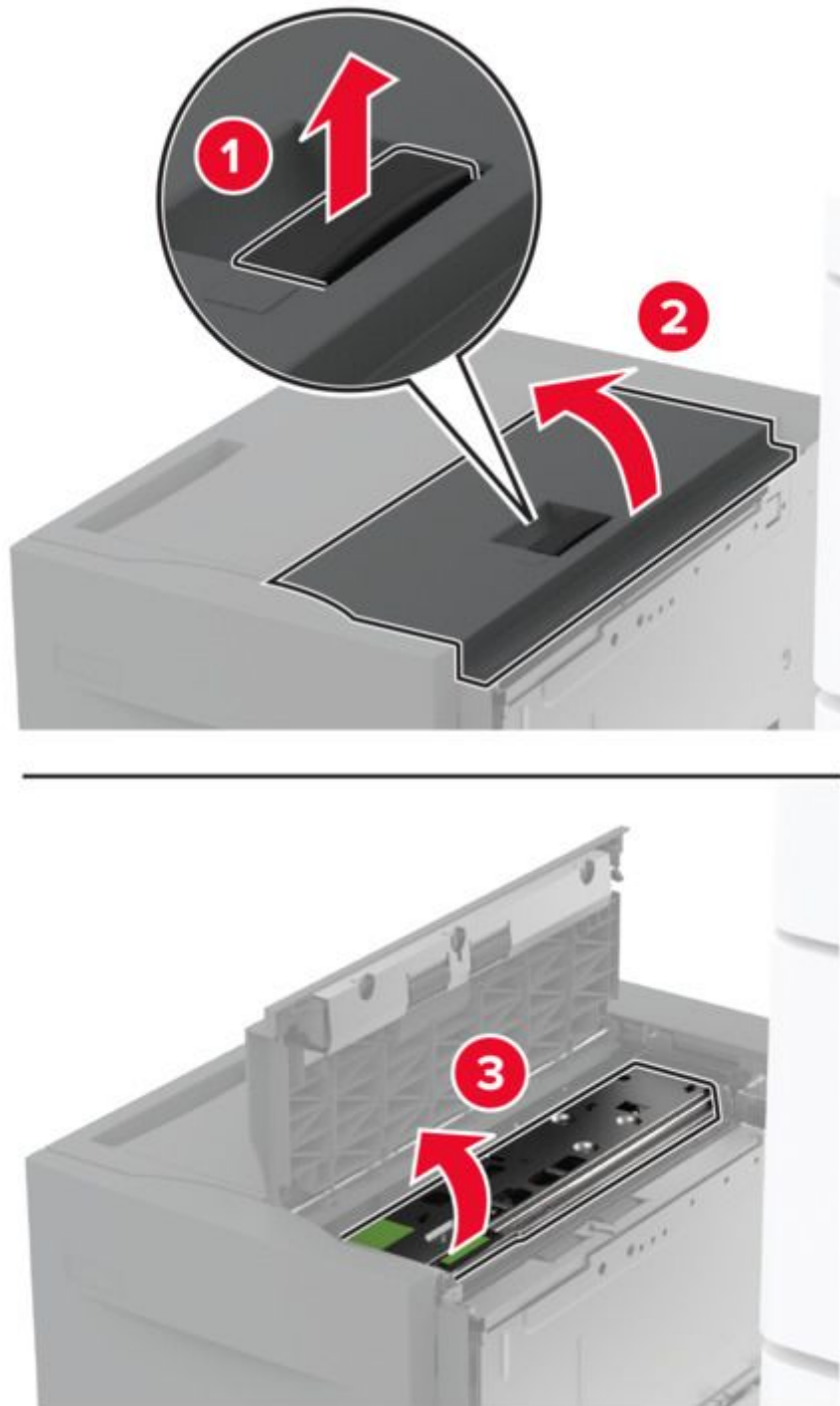
1. Turn off the printer.



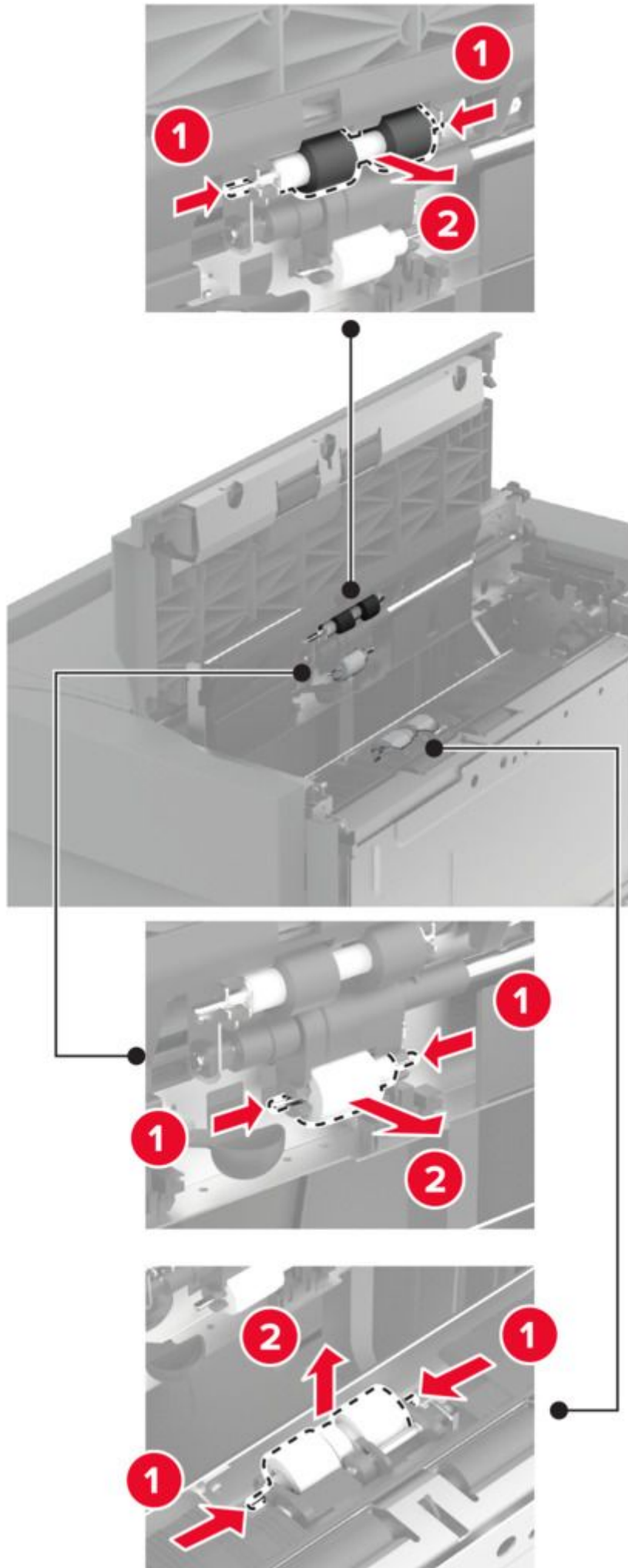
2. Slide the tray to the left.



3. Open door J, and then open the roller kit cover.



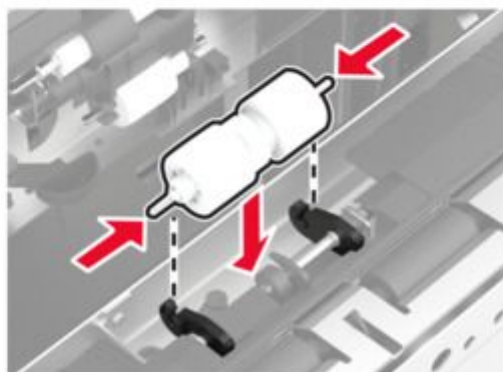
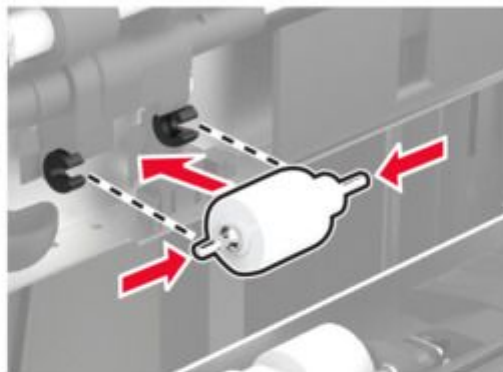
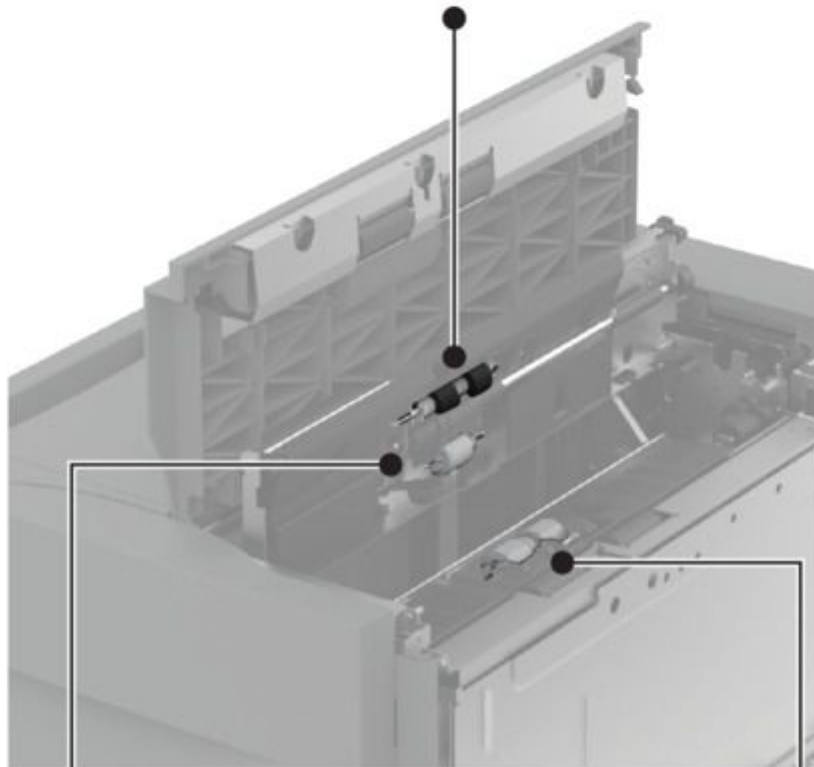
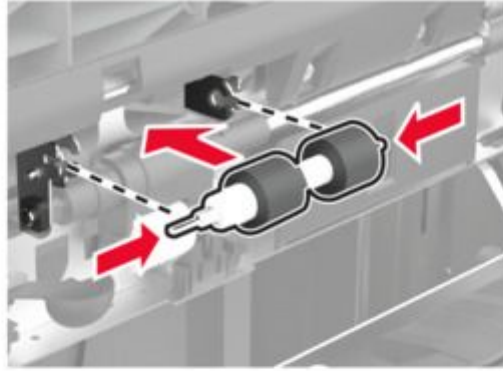
4. Locate and remove the used roller kit.



Parts removal

5. Unpack the new roller kit.
6. Insert the new roller kit.

Parts removal



Parts removal

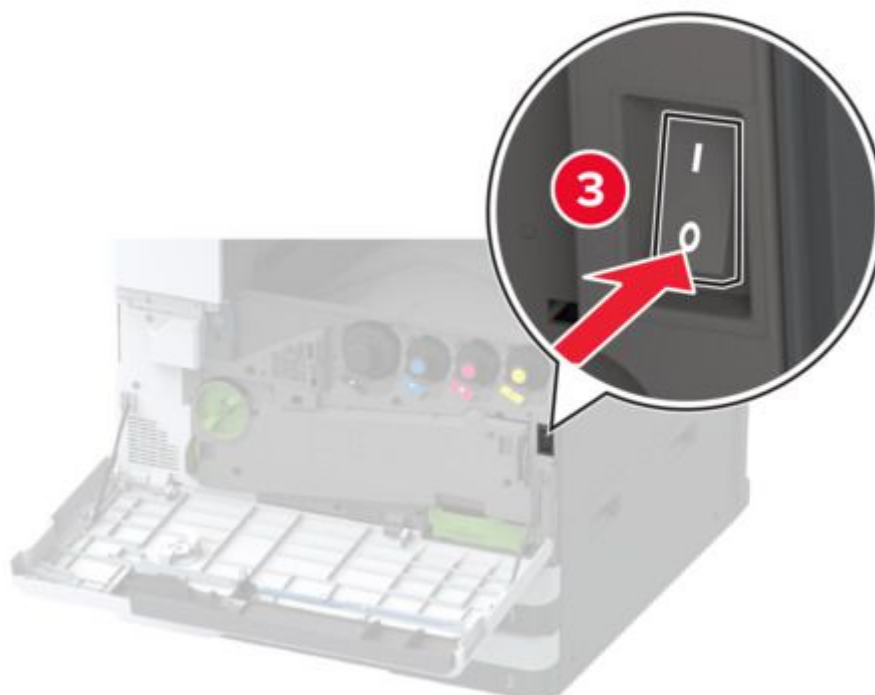
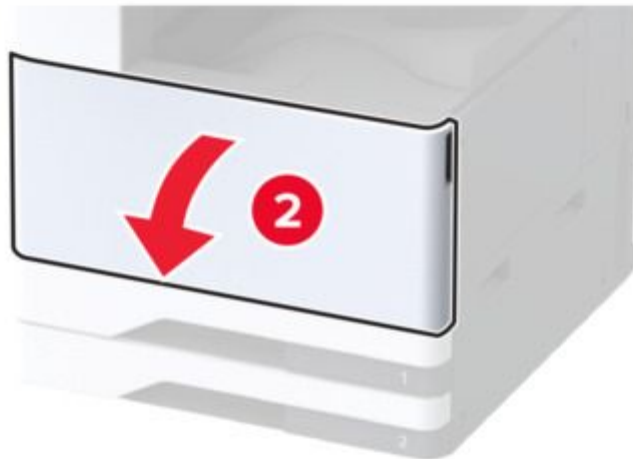
7. Close the roller kit cover, and then close door J.
8. Slide the tray back into place.
9. Turn on the printer.

Replacing the 2000-sheet tandem tray roller kit

Changing the 2000-sheet tandem tray roller kit can help prevent paper feed problems from happening again.

In handle C

1. Turn off the printer.

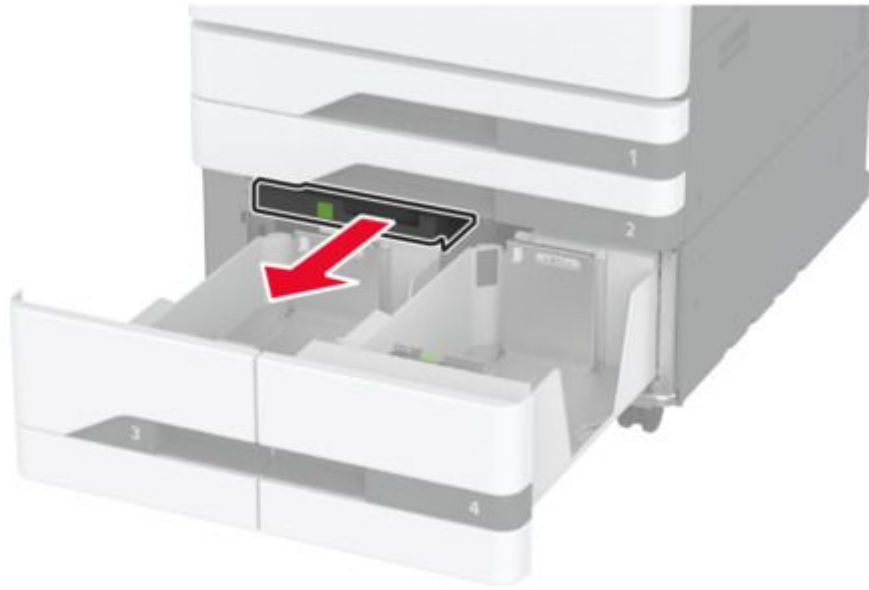


Parts removal

2. Pull out tray 4, and then pull out tray 3.



3. Pull out handle C, and then open the inner cover.



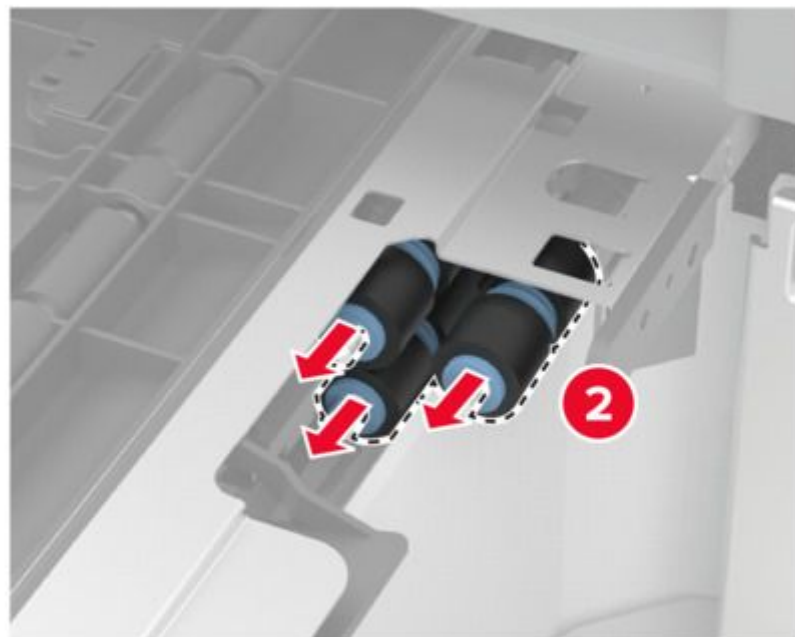
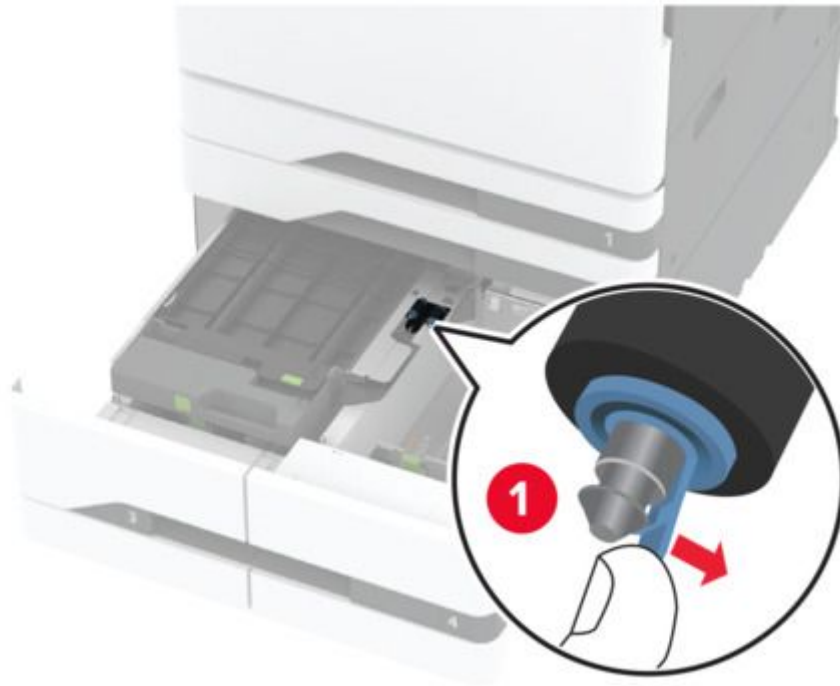
4. Open the roller kit cover.



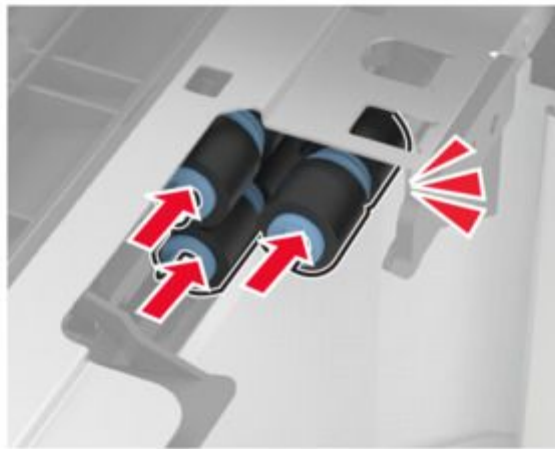
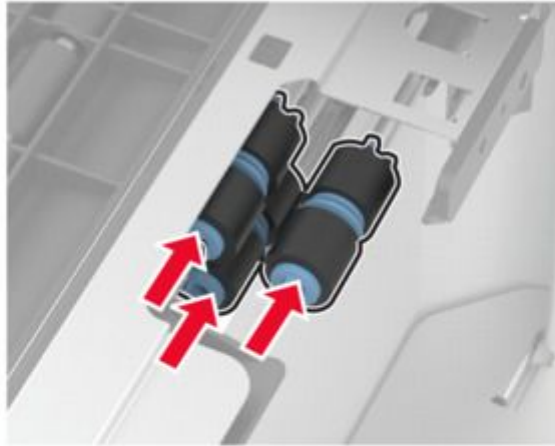
5. Remove the used tray roller kit.

WARNING—POTENTIAL DAMAGE

To prevent damage from electrostatic discharge, touch any exposed metal frame of the printer before accessing or touching interior areas of the printer.



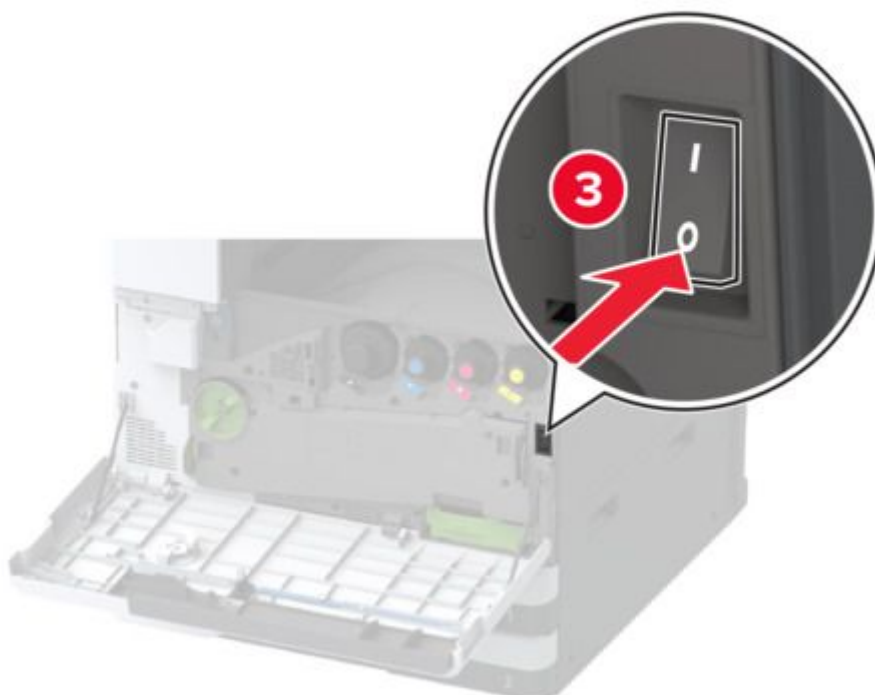
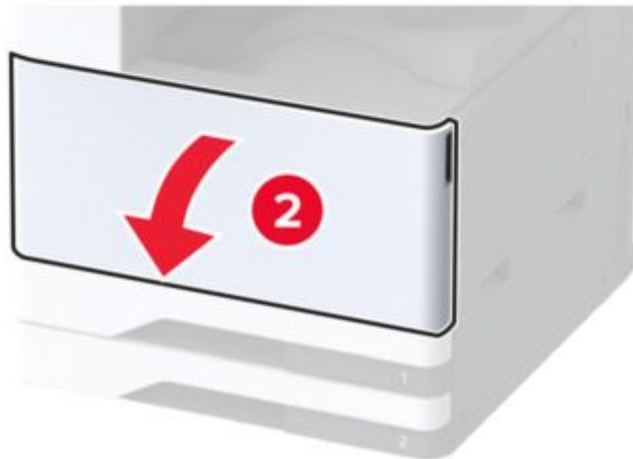
6. Unpack the new tray roller kit.
7. Insert the new tray roller kit until it clicks into place.



8. Close the roller kit cover.
9. Close the inner cover, and then insert handle C.
10. Insert trays 3 and 4.
11. Turn on the printer.

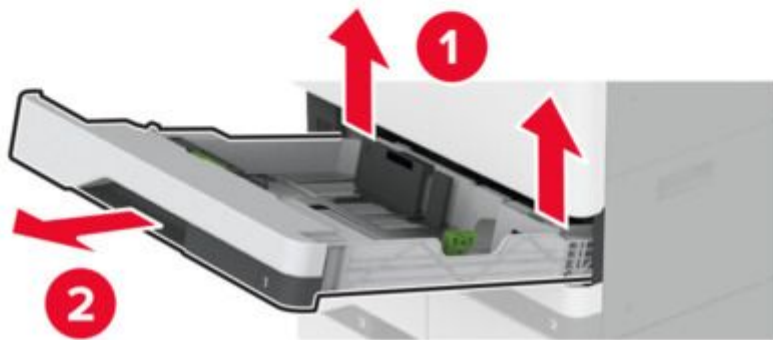
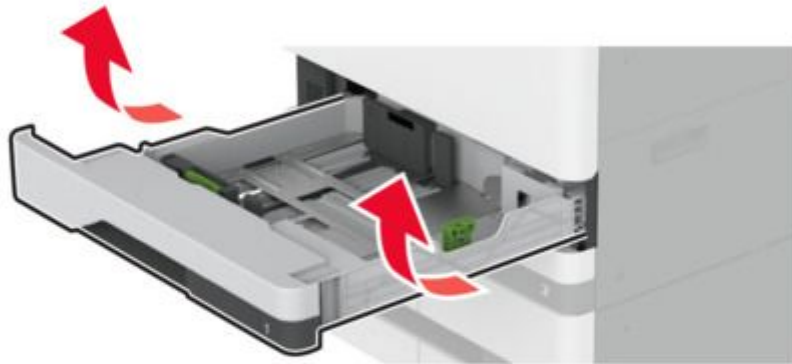
In tray 3

1. Turn off the printer.

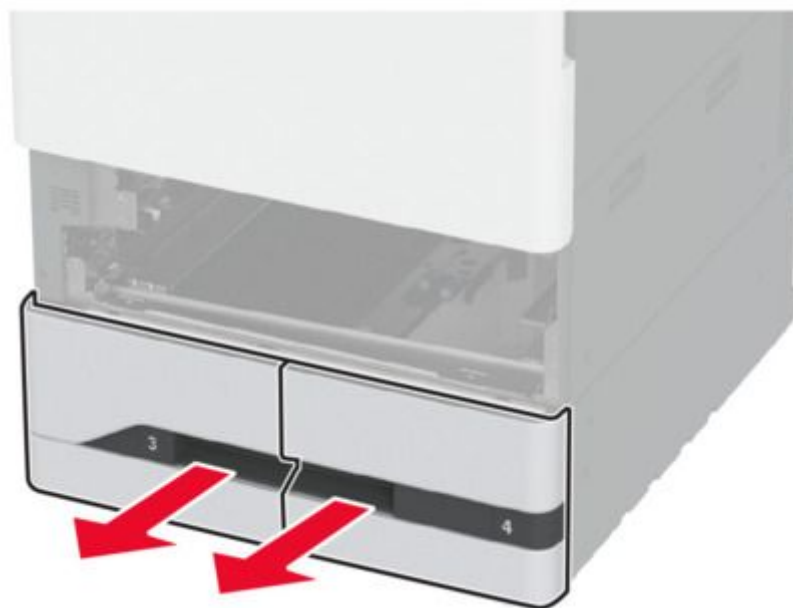


Parts removal

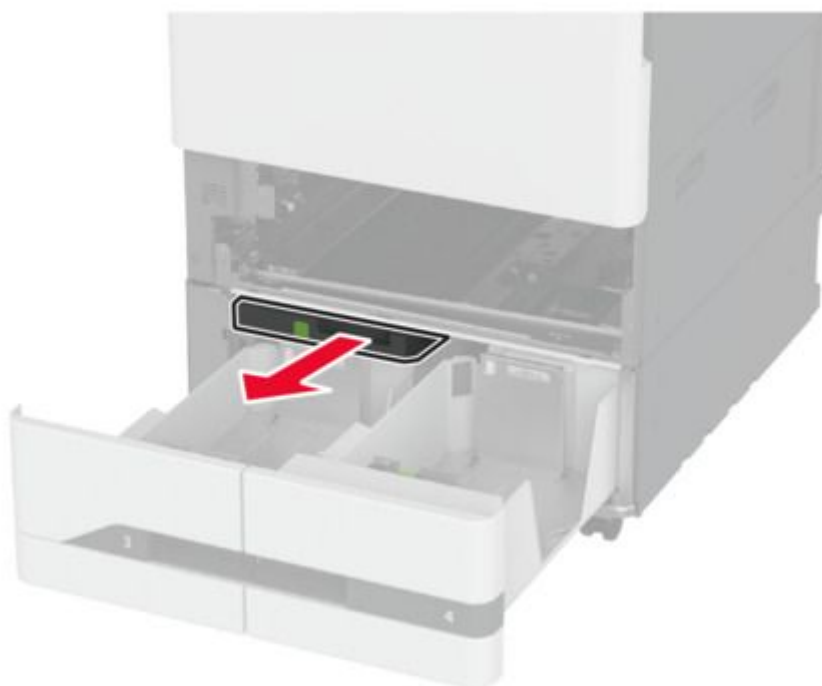
2. Remove tray 1, and then remove tray 2.



3. Pull out trays 3 and 4.



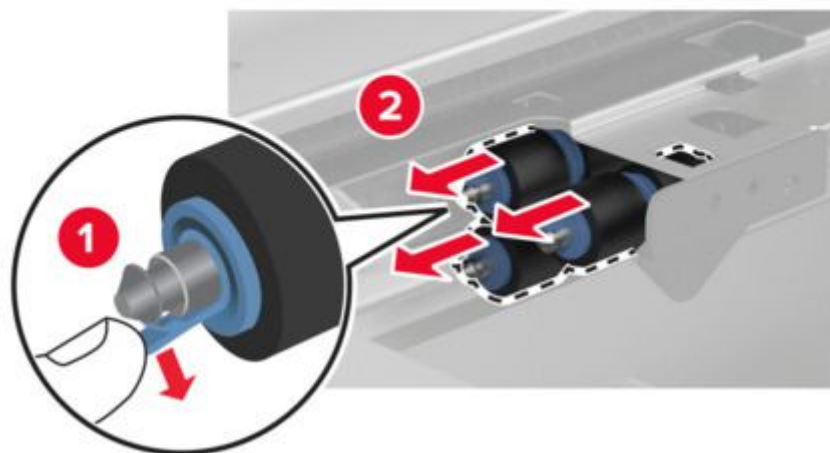
4. Pull out handle C.



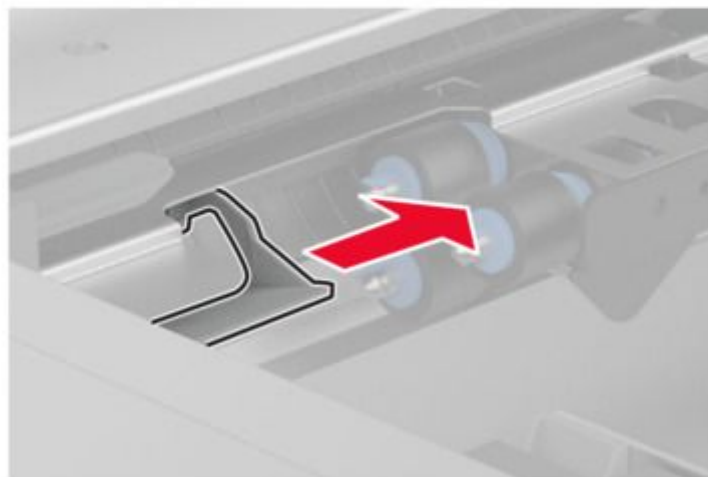
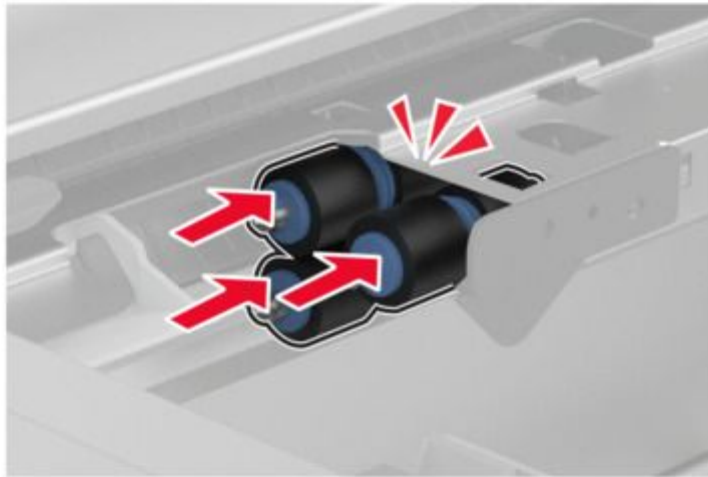
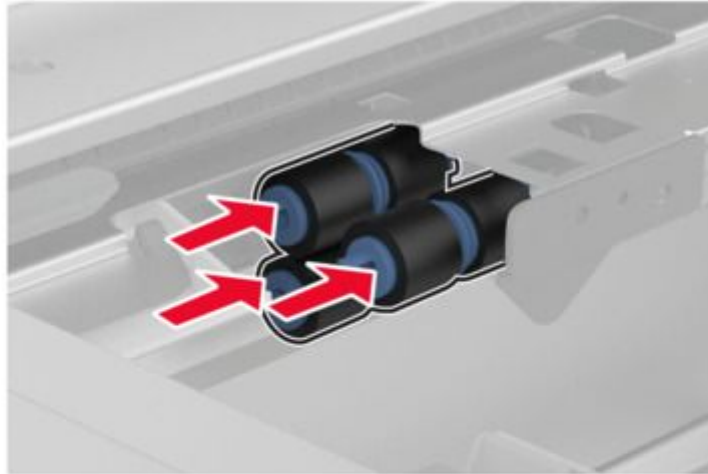
5. Remove the used tray roller kit.

WARNING—POTENTIAL DAMAGE

To prevent damage from electrostatic discharge, touch any exposed metal frame of the printer before accessing or touching interior areas of the printer.



6. Insert the new tray roller kit until it clicks into place.

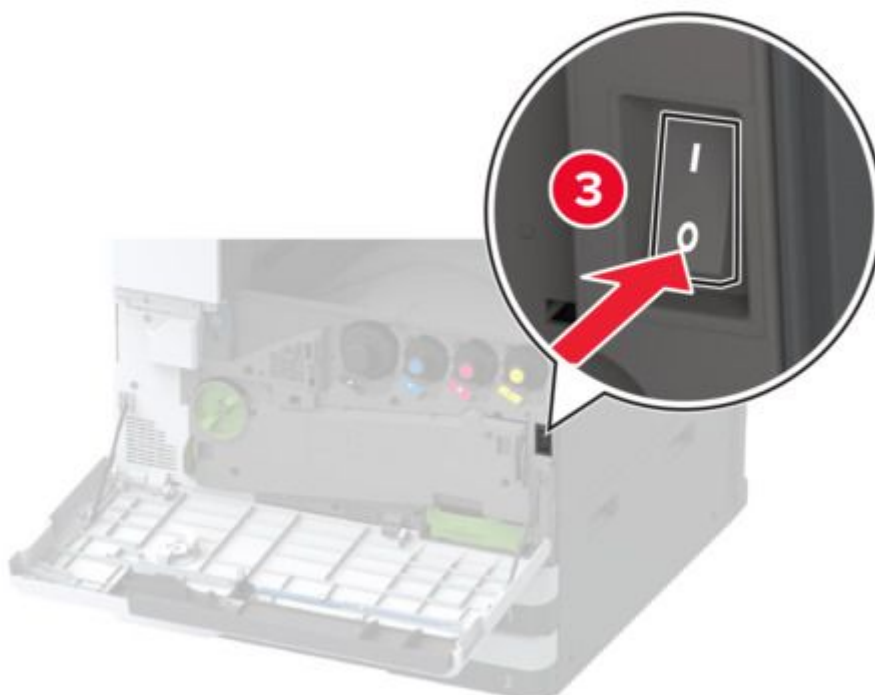
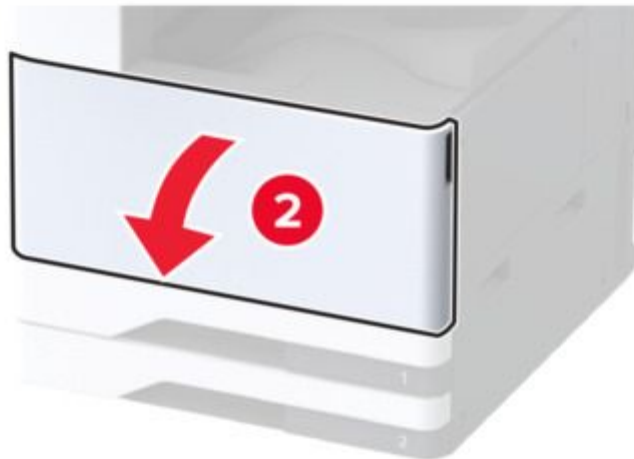


7. Insert handle C.
8. Insert trays 3 and 4.
9. Insert trays 1 and 2.
10. Turn on the printer.

Replacing the second transfer roller

Learn how to remove the fuser when you are installing a new one.

1. Turn off the printer.

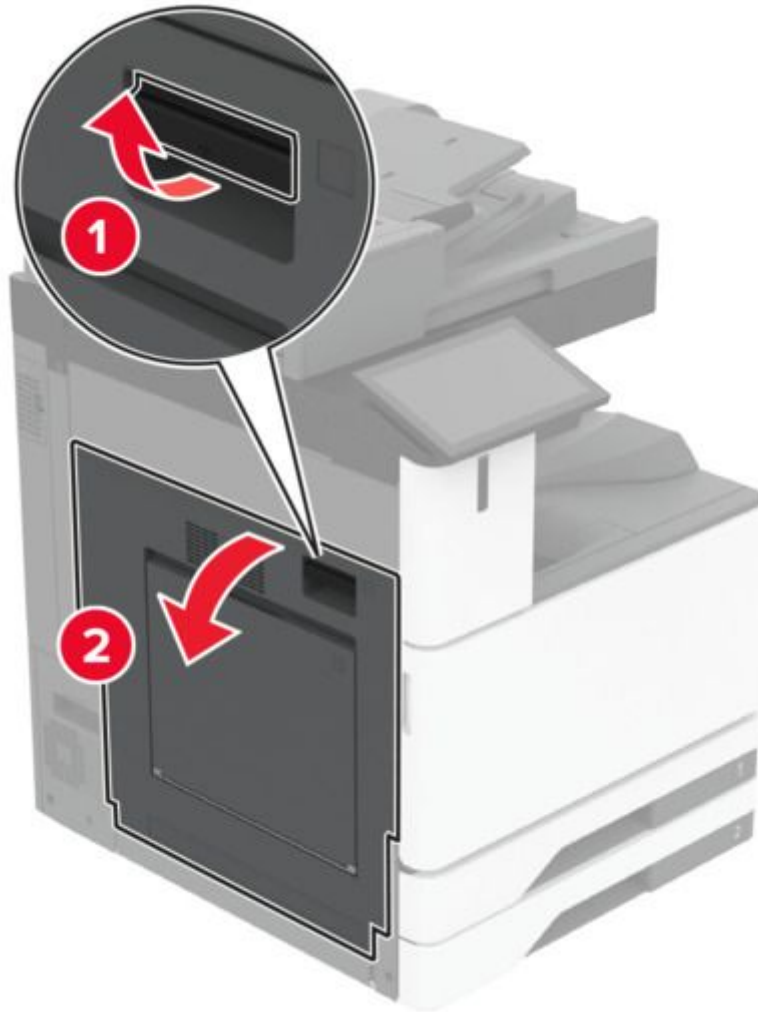


2. Open door A.

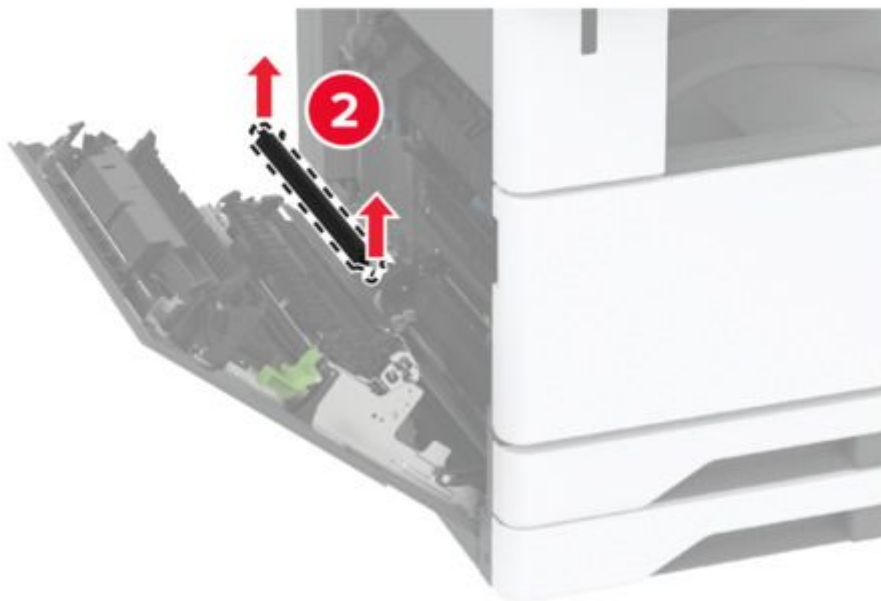
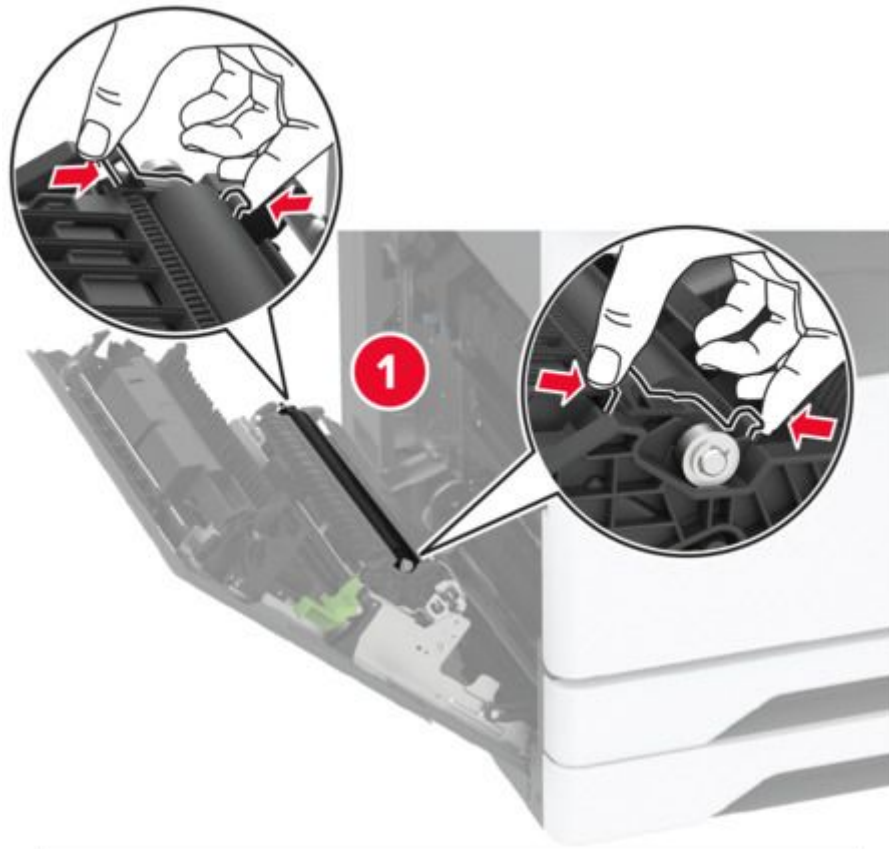


CAUTION—HOT SURFACE

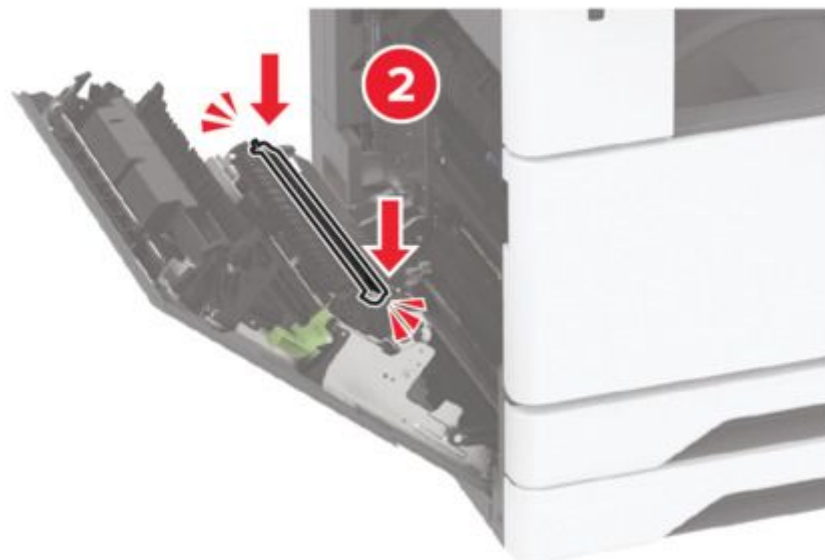
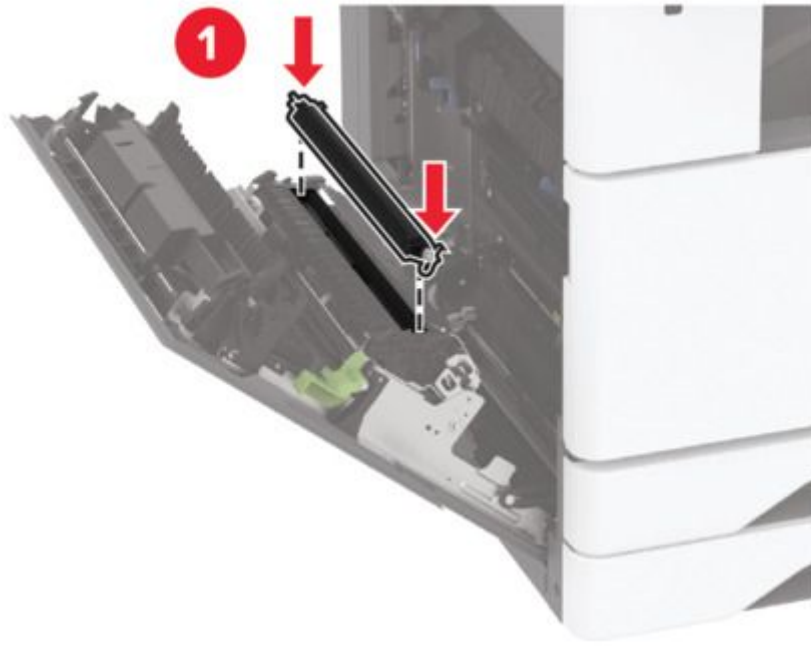
The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.



3. Remove the used second transfer roller.



4. Unpack the new second transfer roller.
5. Insert the new second transfer roller.

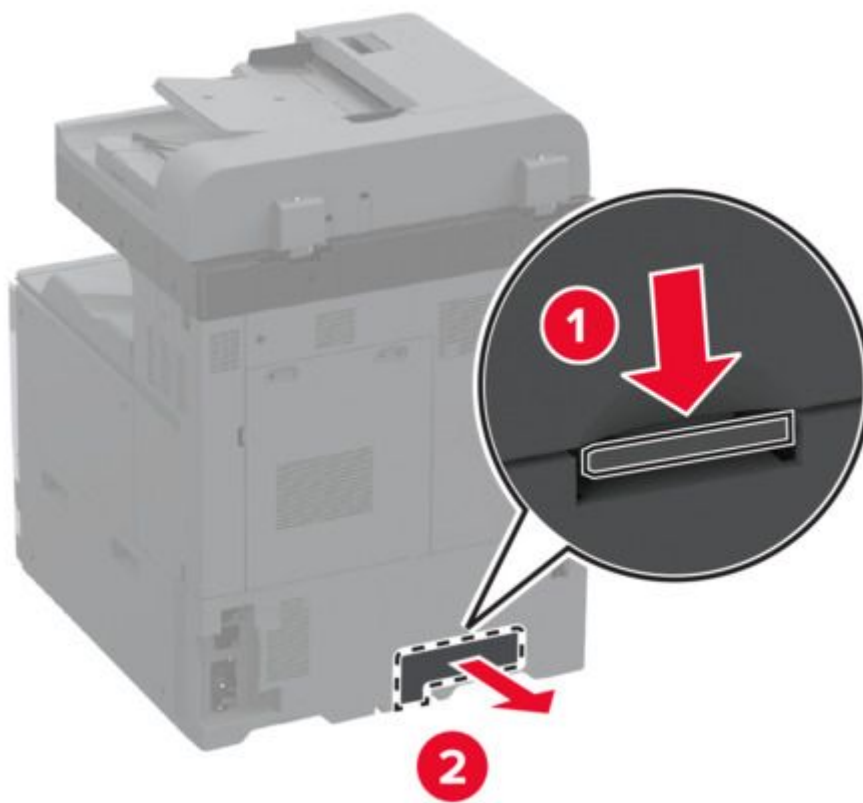


- 6. Close the door.
- 7. Turn on the printer.

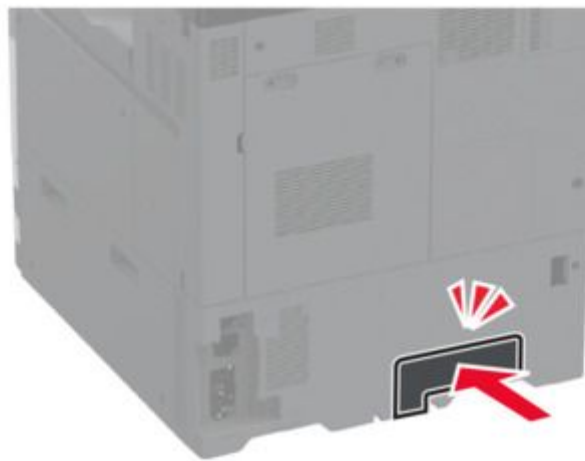
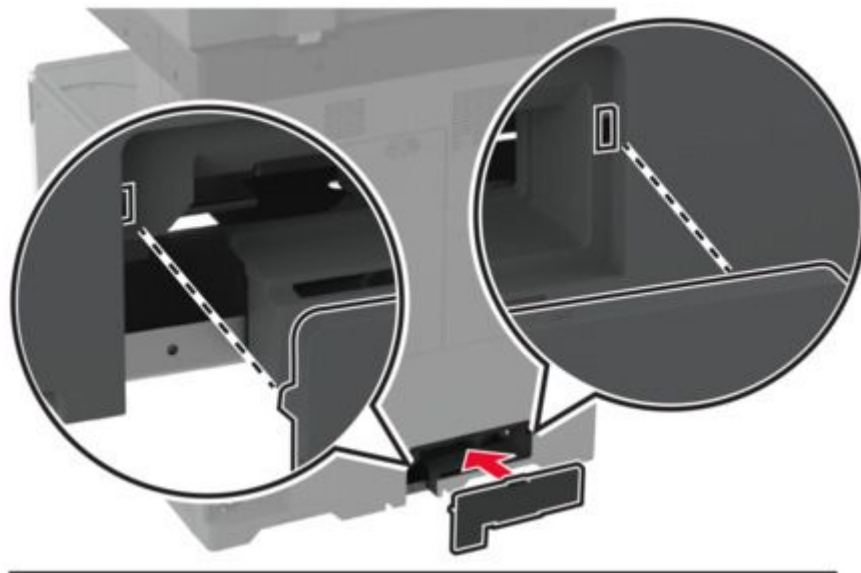
Replacing the lower rear connector cover

Here are the steps to replace the connector cover located in the lower rear of the printer.

1. Remove the used lower rear connector cover.



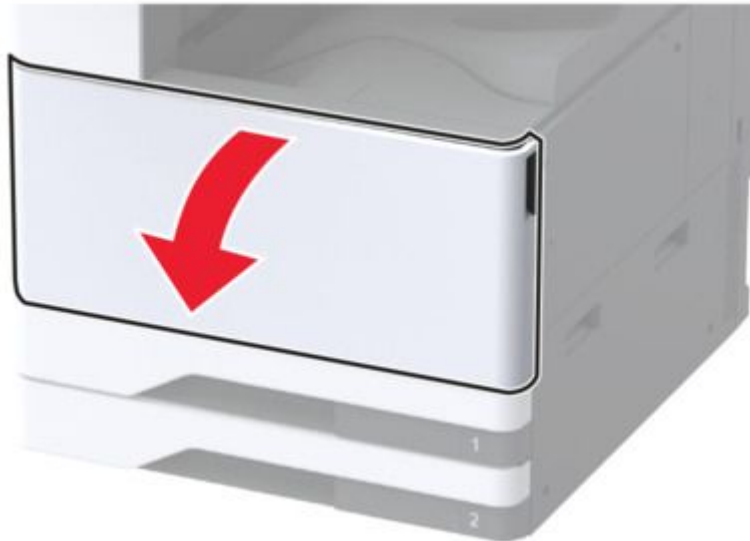
2. Unpack the new lower rear connector cover.
3. Insert the new lower rear connector cover until it clicks into place.



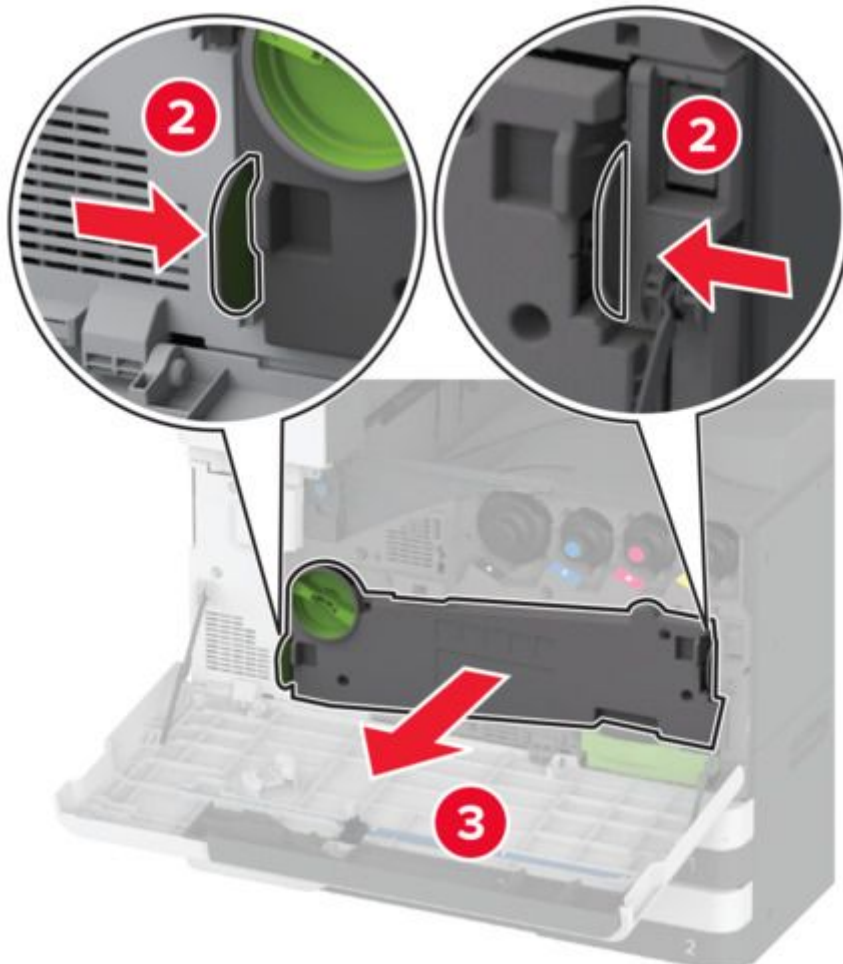
Replacing the waste toner bottle

Learn how to replace the waste toner bottle of your printer. Changing the waste toner bottle regularly prevents toner spillage.

1. Open the front door.



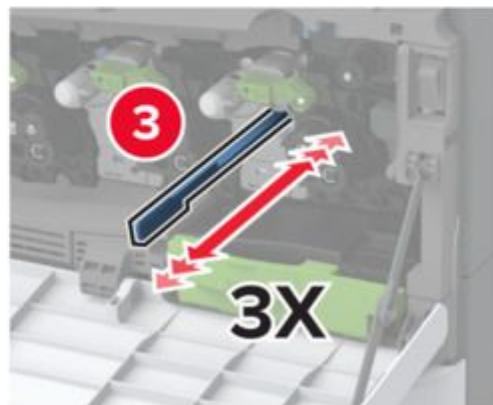
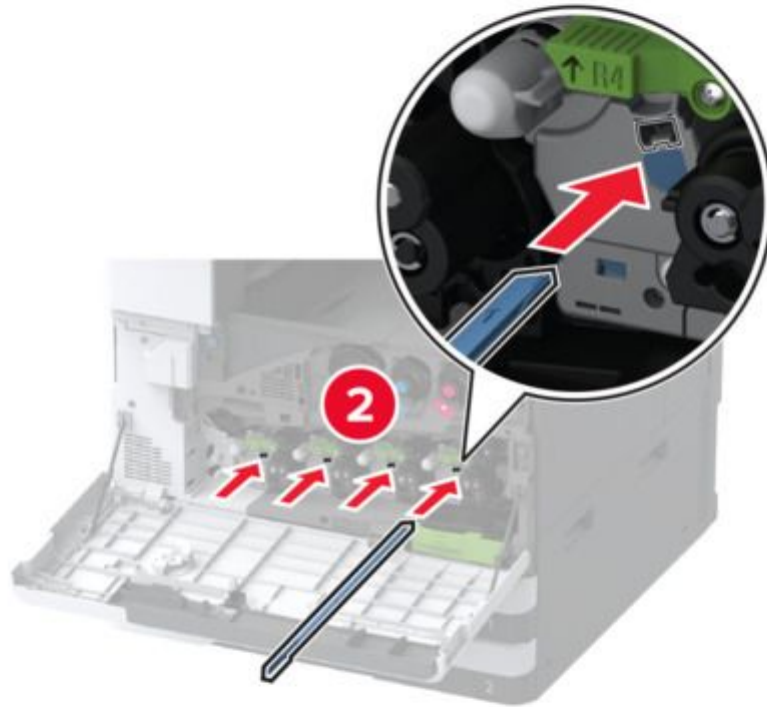
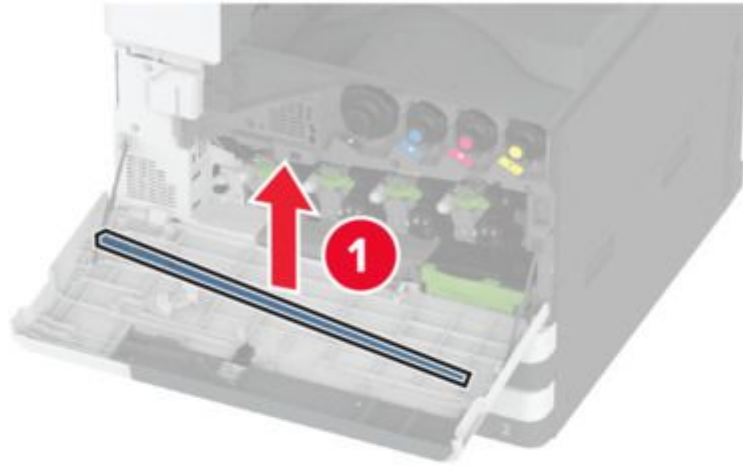
2. Remove the waste toner transfer unit.



NOTES

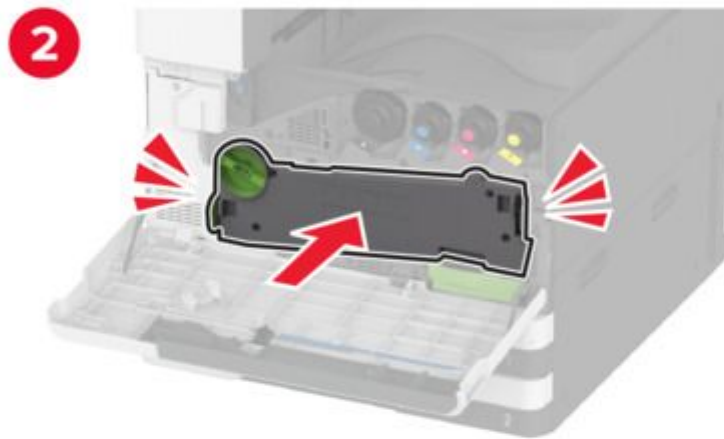
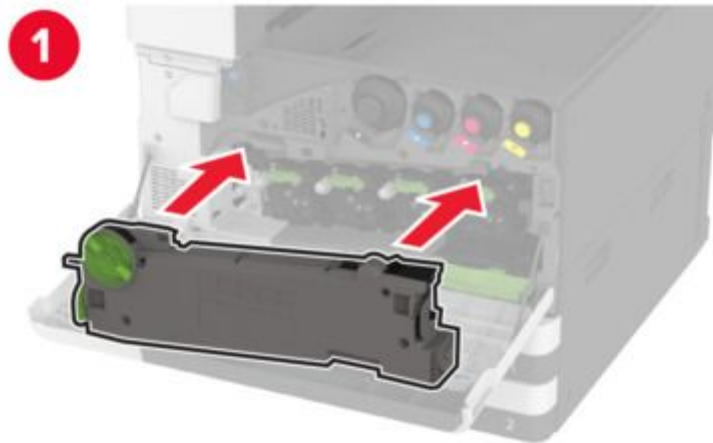
To avoid spilling the toner, place the unit in an upright position.

3. Remove the printhead wiper, and then clean the printhead lenses.



Parts removal

4. Put the printhead wiper back into place.
5. Insert the waste toner transfer unit until it clicks into place, and then lock it.

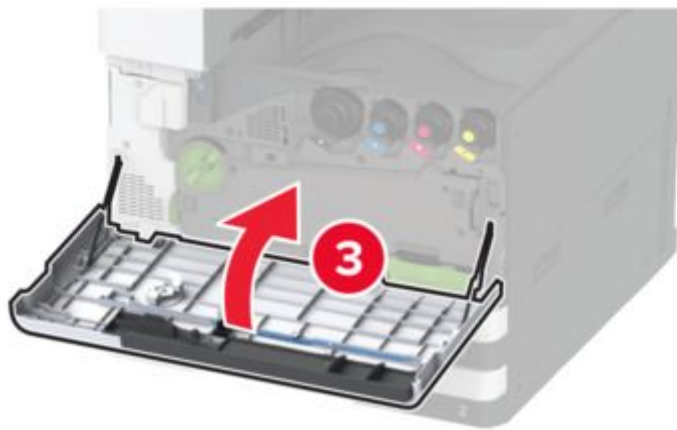
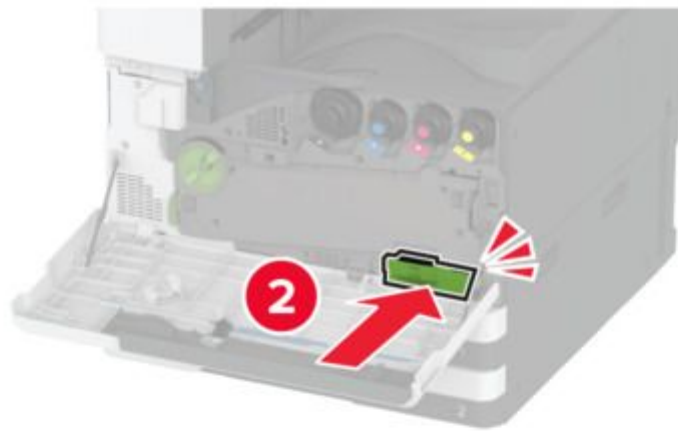


Parts removal

6. Remove the used waste toner bottle.



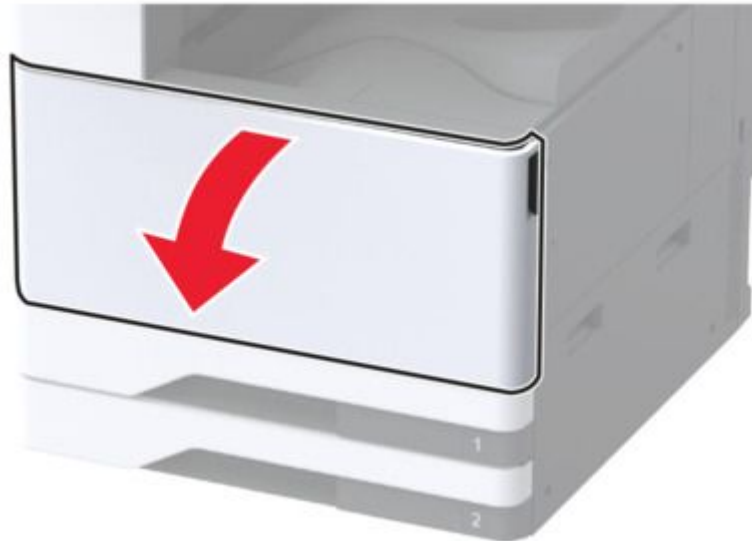
7. Unpack the new waste toner bottle.
8. Insert the new waste toner bottle until it clicks into place, and then close the door.



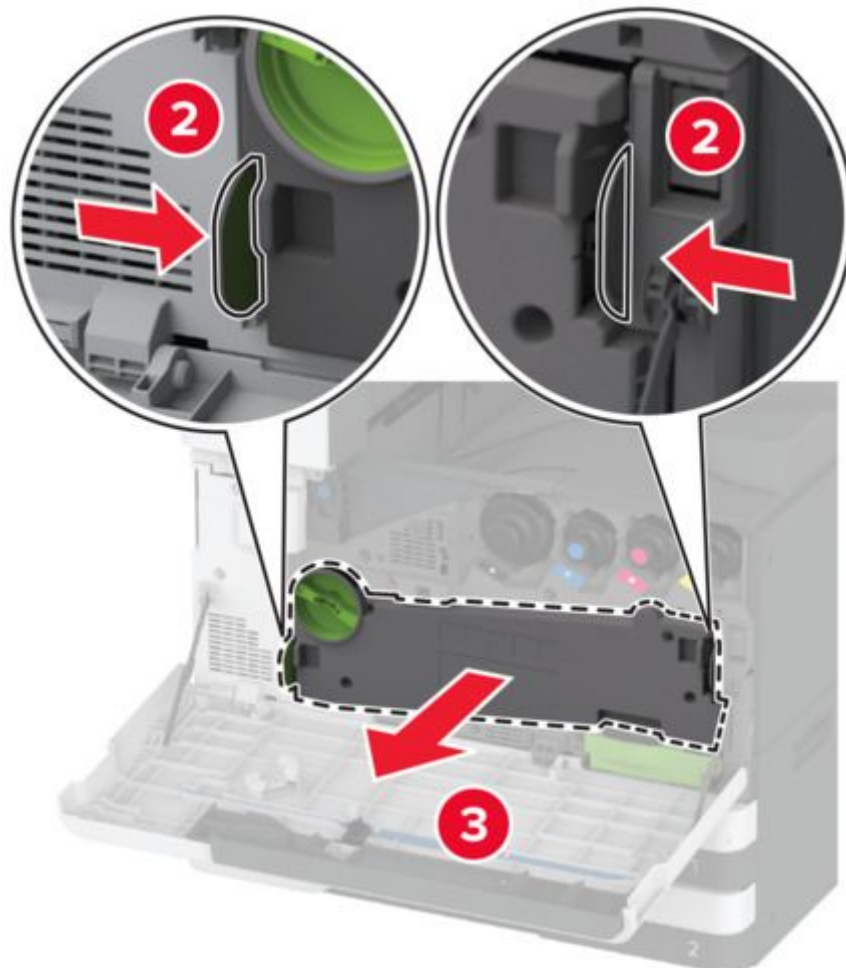
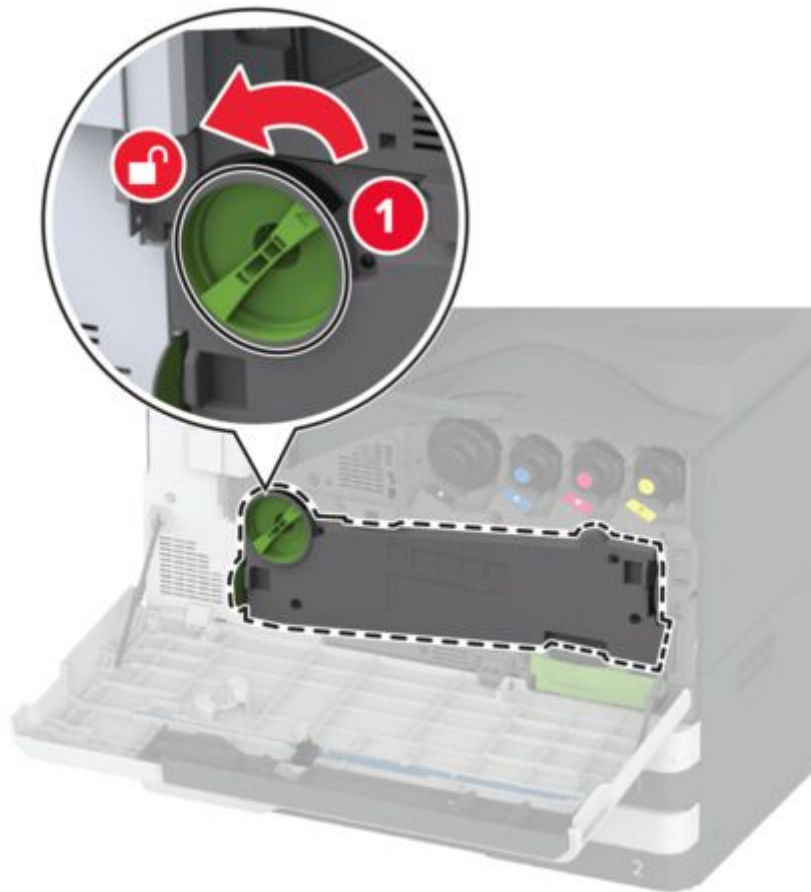
Replacing the waste toner transfer unit

Install a new waste toner transfer unit to make sure that the excess toner is properly transported to the waste toner bottle.

1. Open the front door.



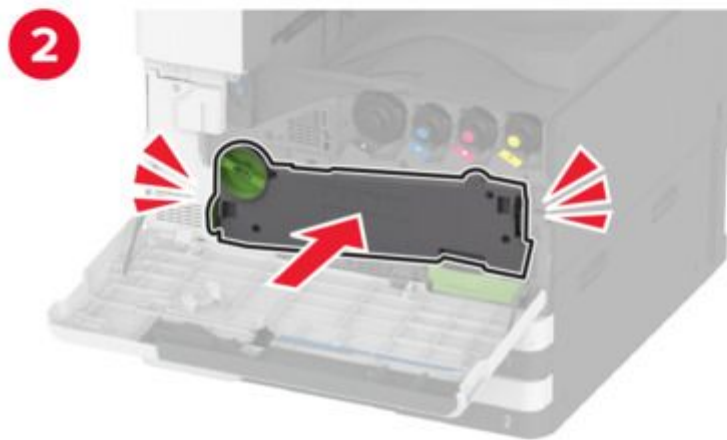
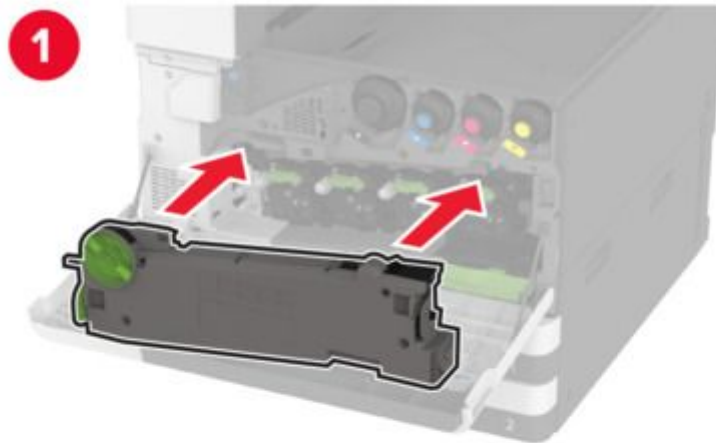
2. Remove the used waste toner transfer unit.



NOTES

To avoid spilling the toner, place the unit in an upright position.

3. Unpack the new waste toner transfer unit.
4. Insert the new waste toner transfer unit until it clicks into place, and then lock it.

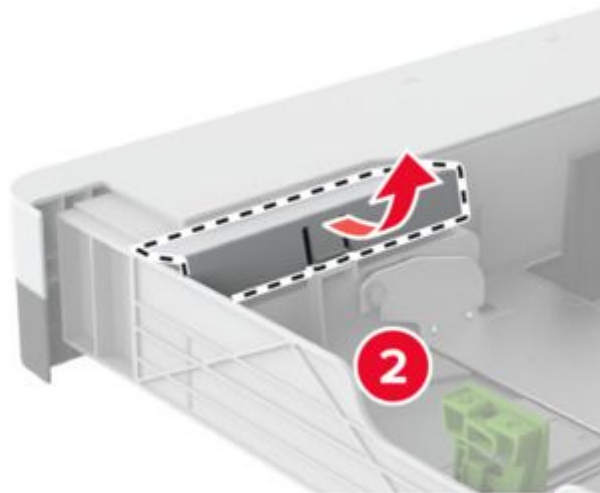
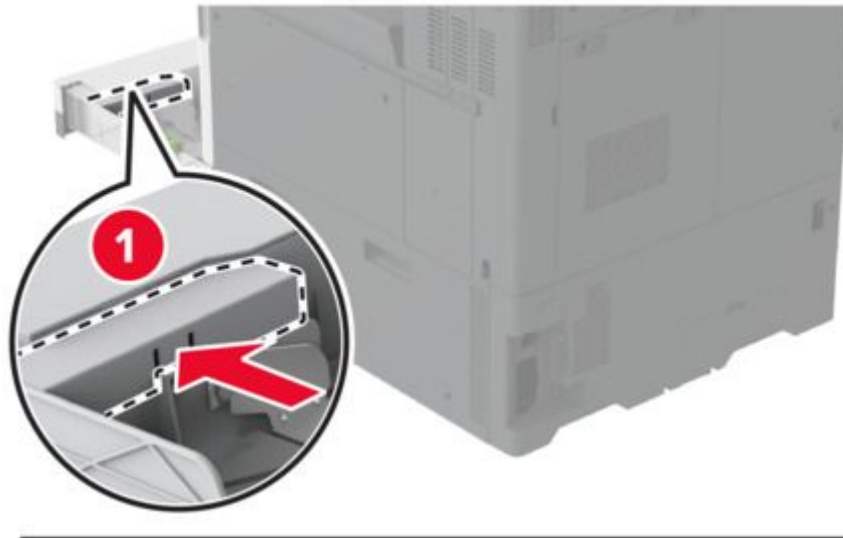


5. Close the front door.

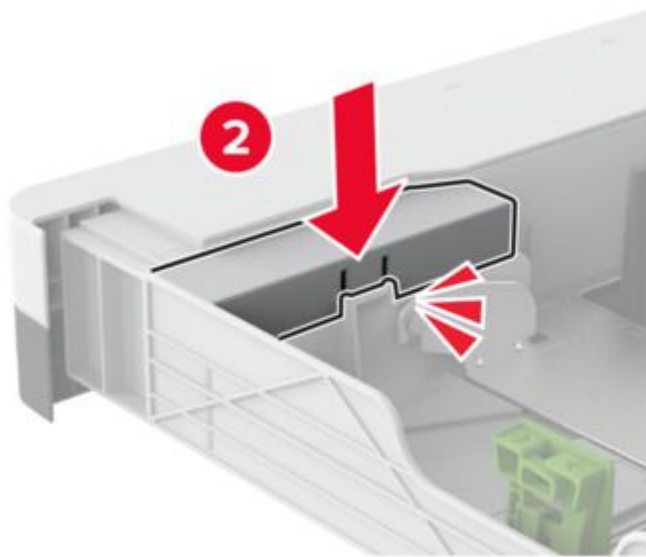
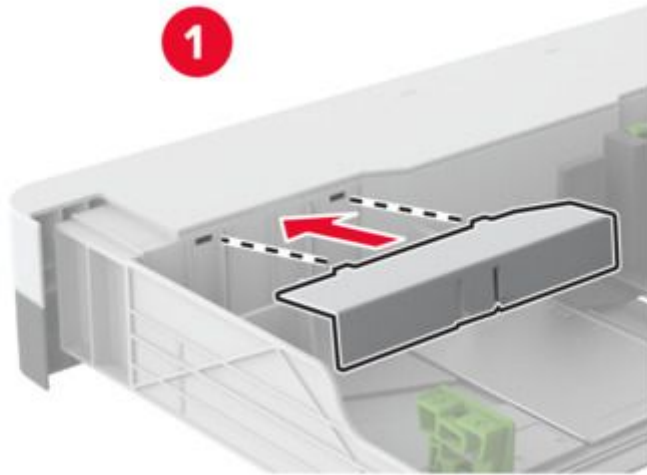
Replacing the small cover in the tray insert

Learn how to replace the used small cover in the tray.

1. Pull out the tray.
2. Remove the used small cover.



3. Unpack the new small cover.
4. Insert the new small cover.

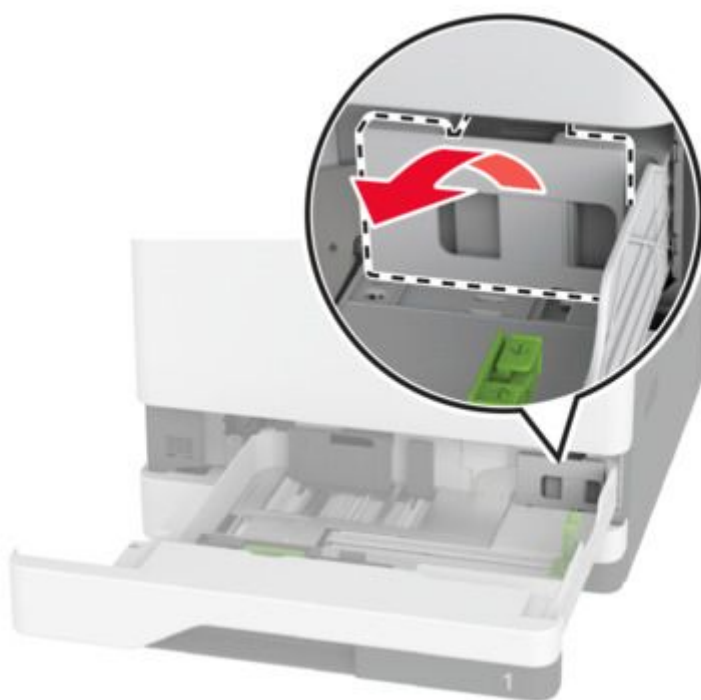
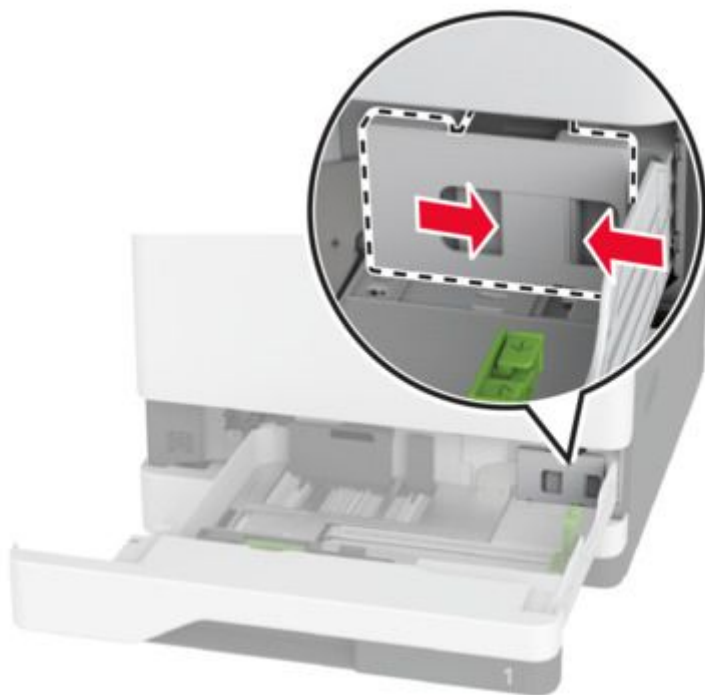


5. Insert the tray.

Replacing the B4 paper guide in the tray insert

Replace the B4 paper guide in the tray insert to continue printing.

1. Pull out the tray.
2. Remove the used B4 paper guide.



3. Unpack the new B4 paper guide.

Parts removal

4. Insert the new B4 paper guide.

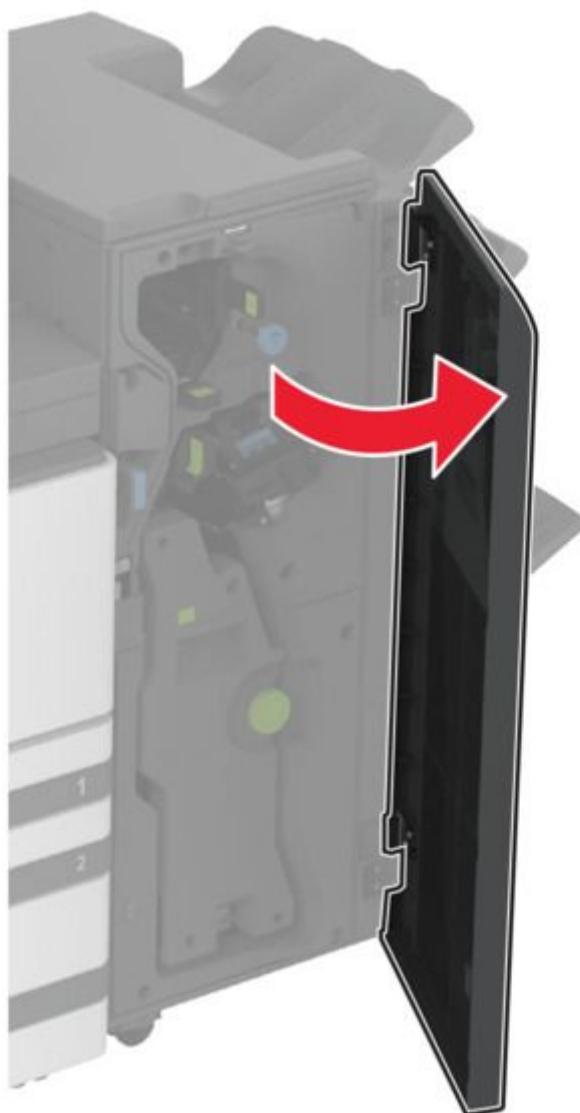


5. Insert the tray.

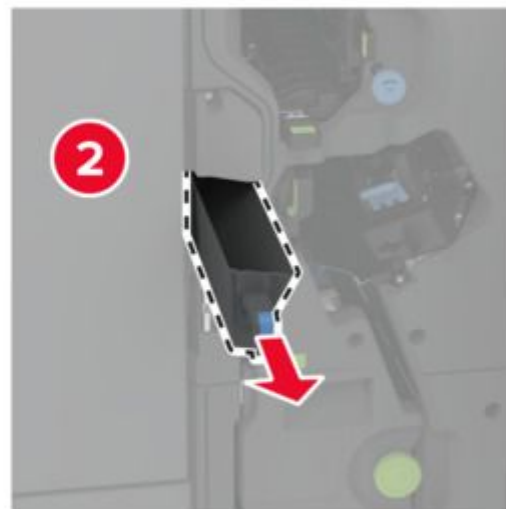
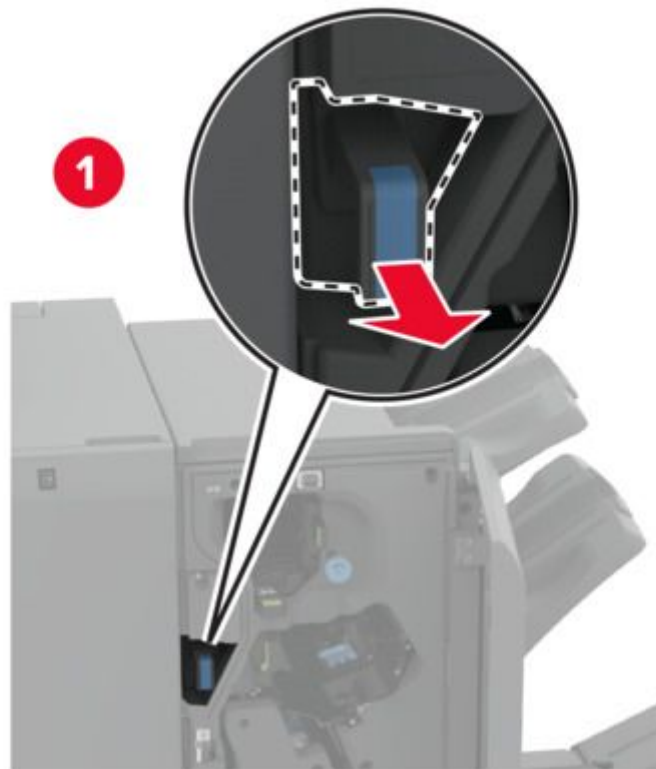
Replacing the hole punch box in the booklet finisher

Replace the used hole punch box in the booklet finisher to continue the automatic hole punching of your documents.

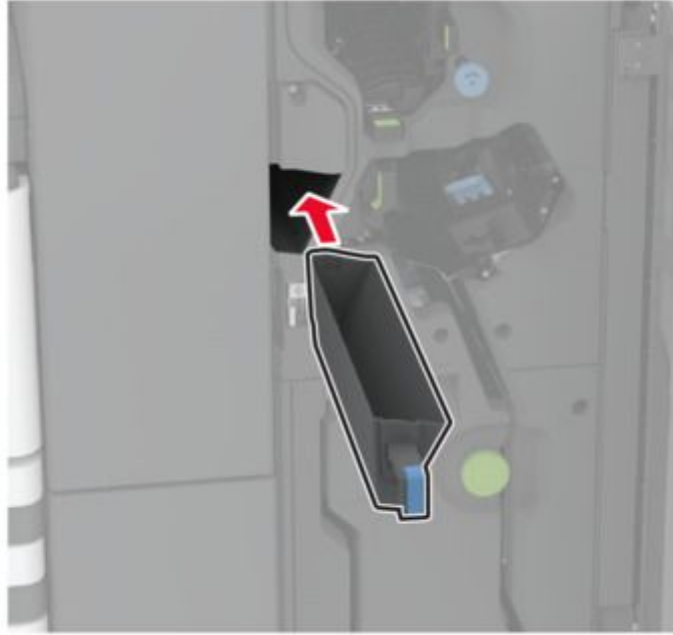
1. Open the booklet finisher door.



2. Remove the used hole punch box.



3. Unpack the new hole punch box.
4. Insert the new hole punch box.

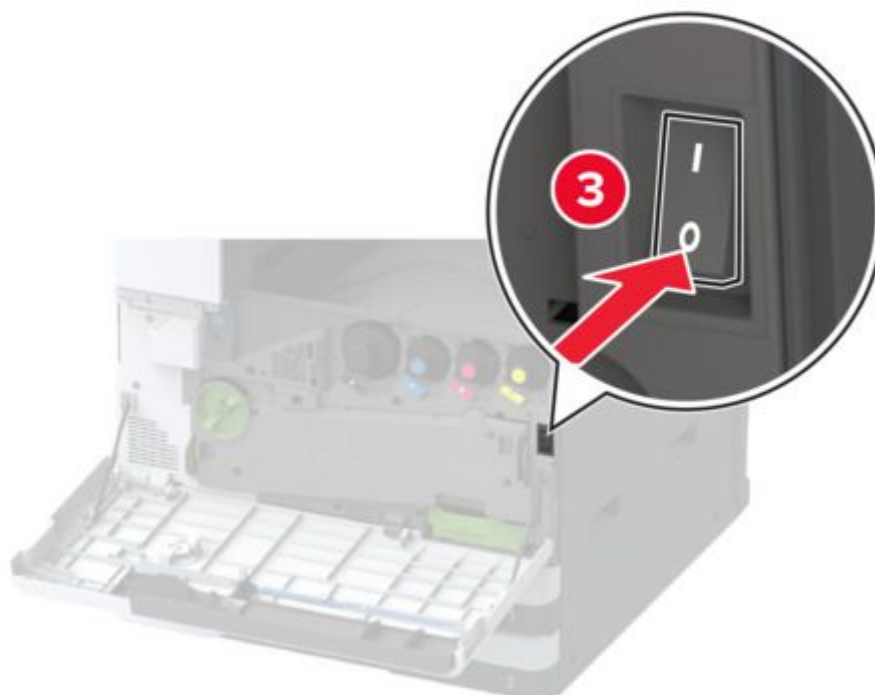
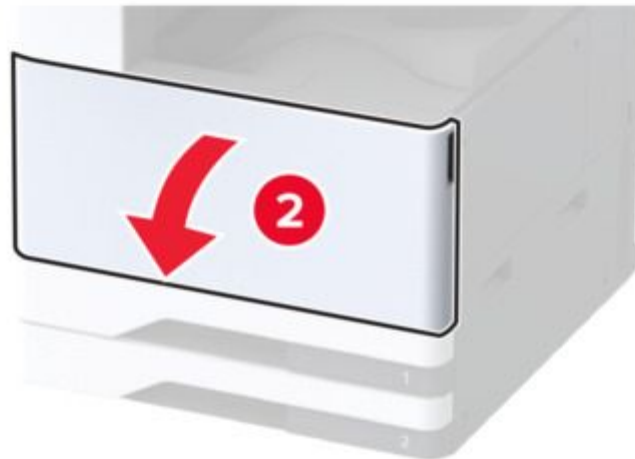


5. Close the booklet finisher door.

Replacing the trifold/Z-fold finisher bin

Replace the trifold/Z-fold finisher bin to continue the automatic folding of your documents.

1. Turn off the printer.

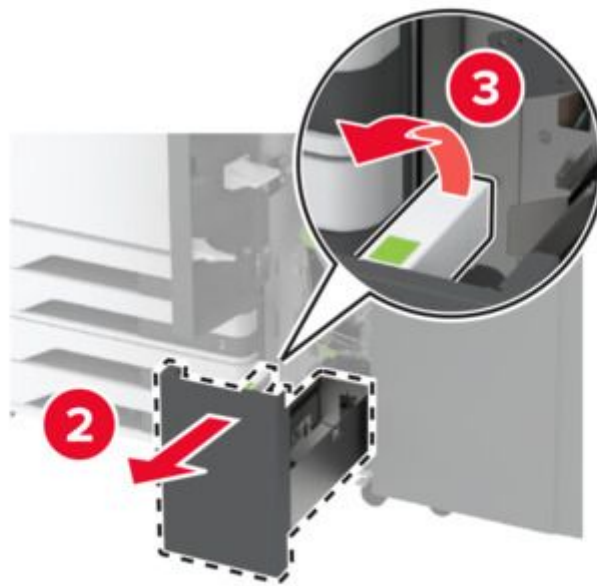
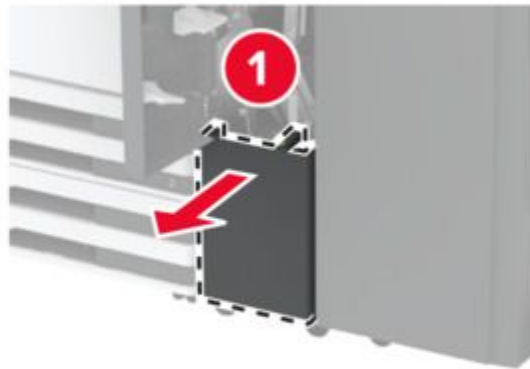


Parts removal

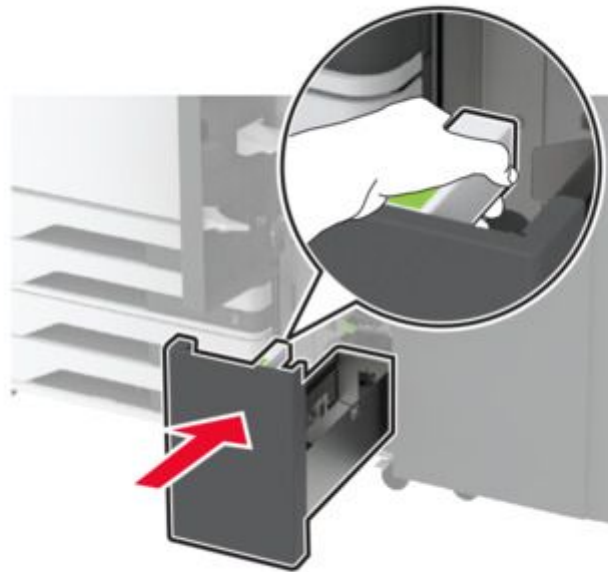
2. Open the trifold/Z-fold finisher door.



3. Remove the used finisher bin.



4. Unpack the new finisher bin.
5. Insert the new finisher bin.

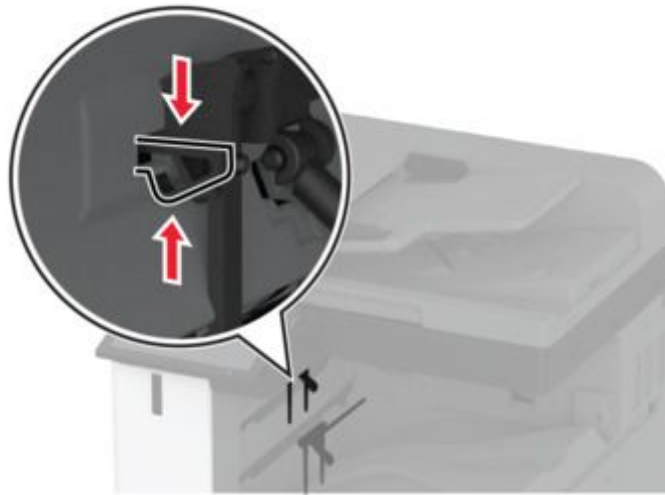


6. Close the finisher door.
7. Turn on the printer.

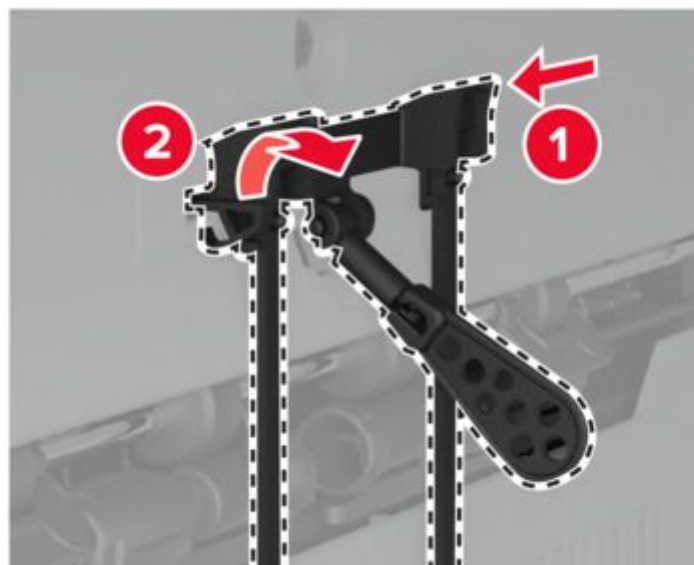
Replacing the paper bail

Replace the used paper bail to hold printed paper in place in the output bin.

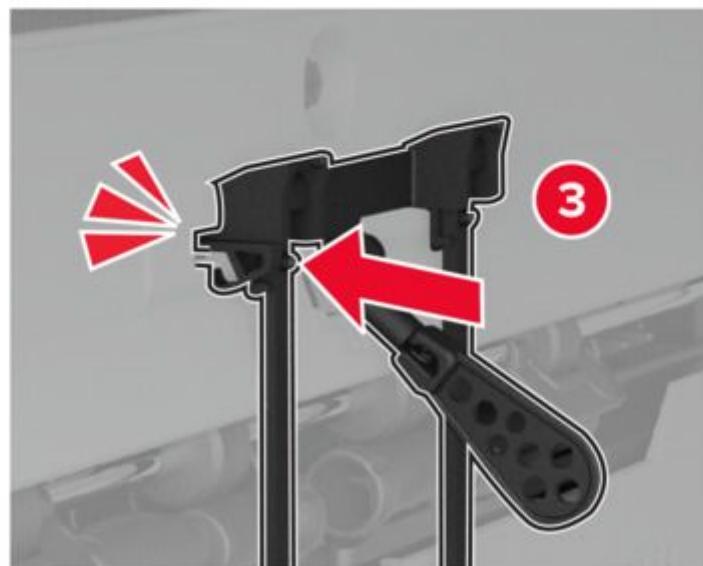
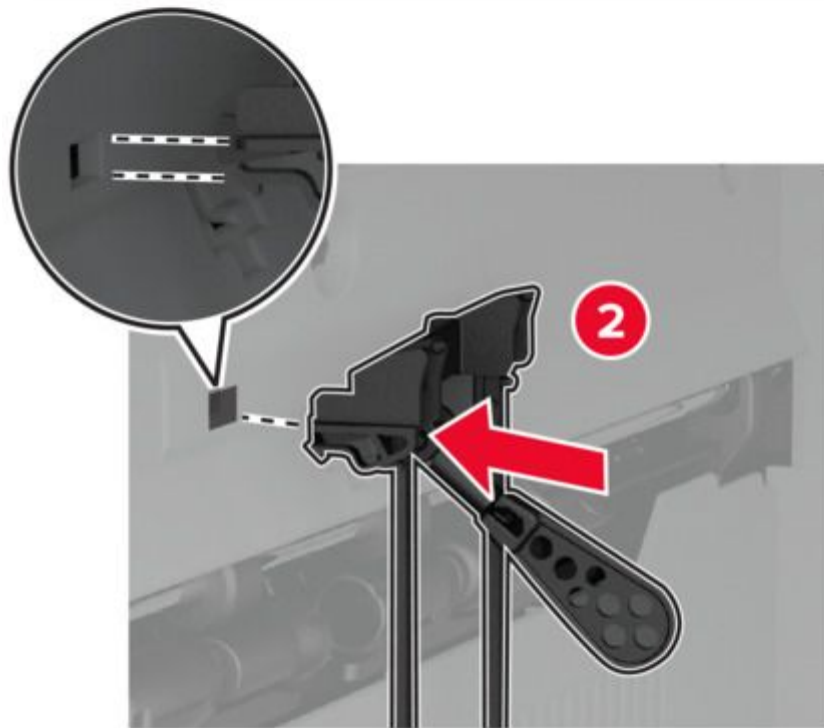
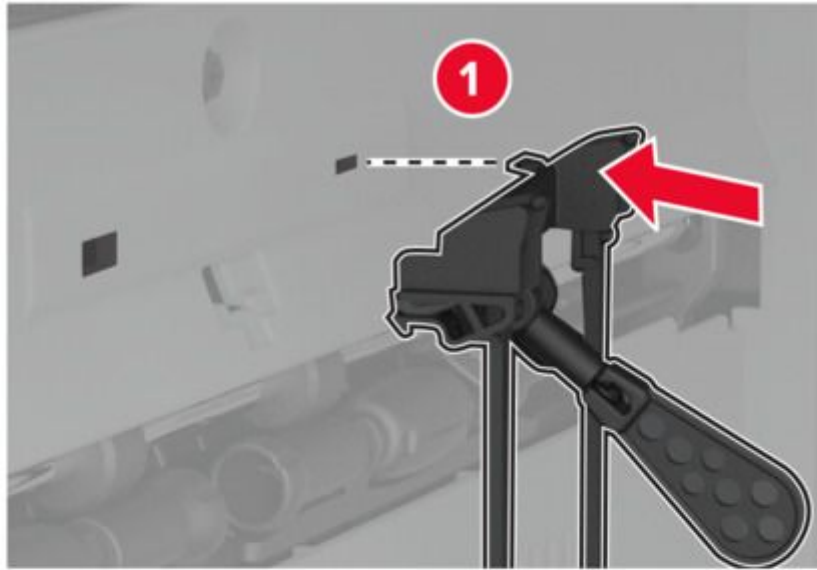
1. Pinch the left side of the paper bail to unlock it.



2. Remove the used paper bail.



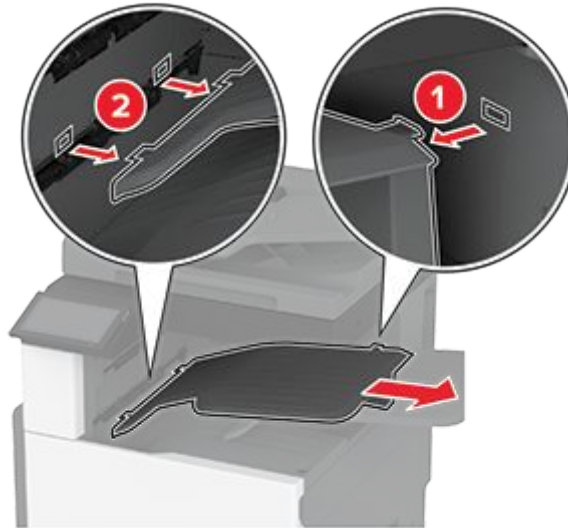
3. Unpack the new paper bail.
4. Insert the new paper bail until it clicks into place.



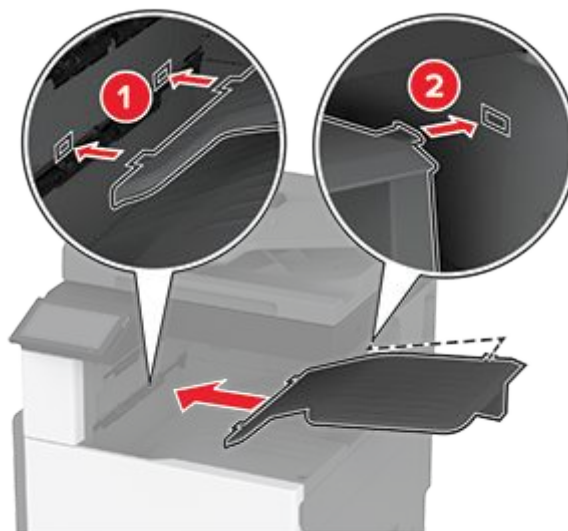
Replacing the dual catch bin

Follow these steps to replace the used dual catch bin of your printer.

1. Remove the used dual catch bin.



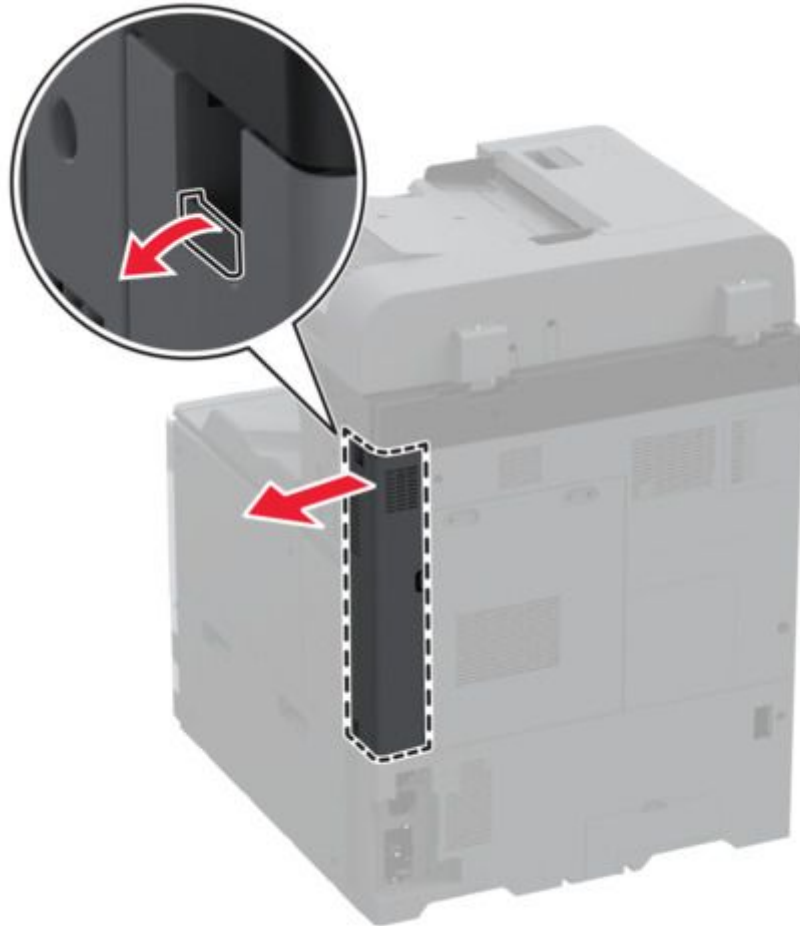
2. Unpack the new dual catch bin.
3. Attach the new dual catch bin to the printer.



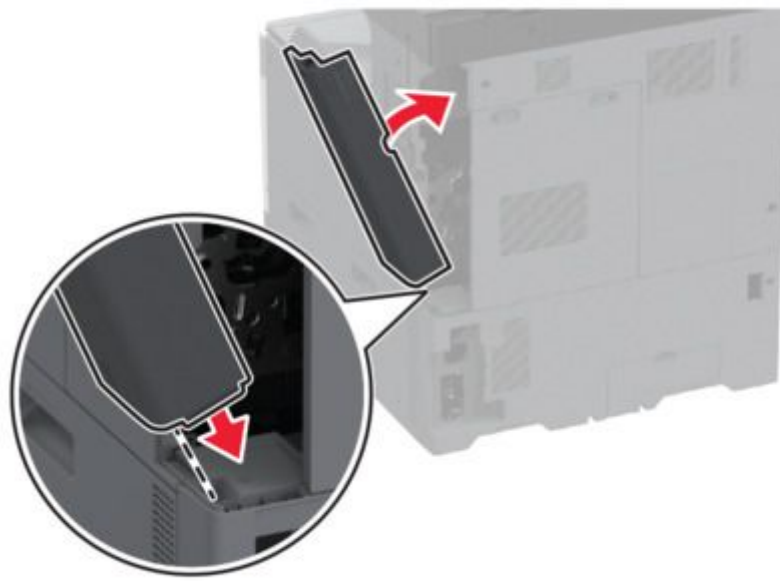
Replacing the rear ports cover

Replace the rear ports cover to protect the ports.

1. Remove the used rear ports cover.



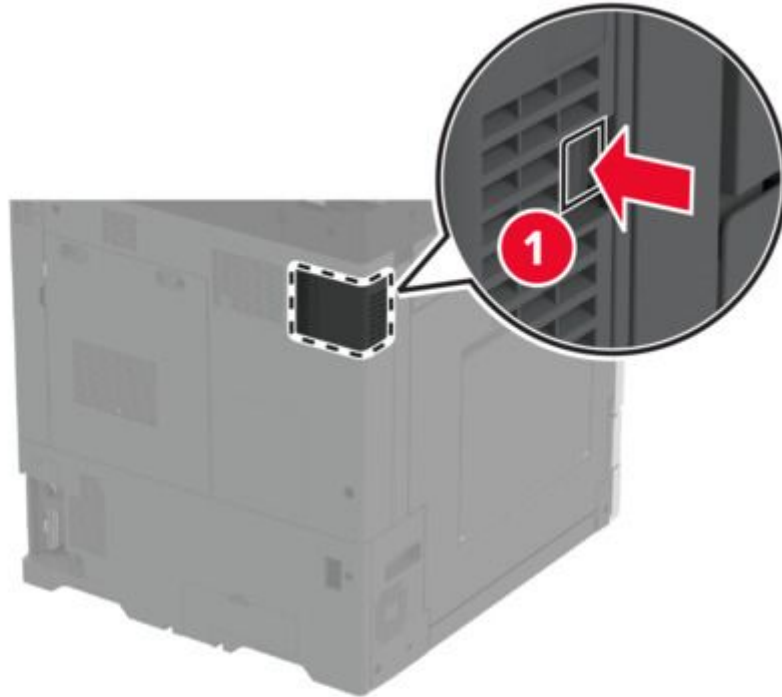
2. Unpack the new rear ports cover.
3. Attach the new rear ports cover.



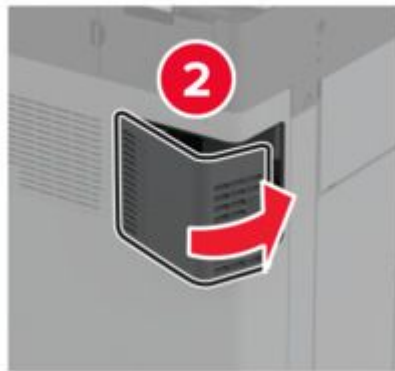
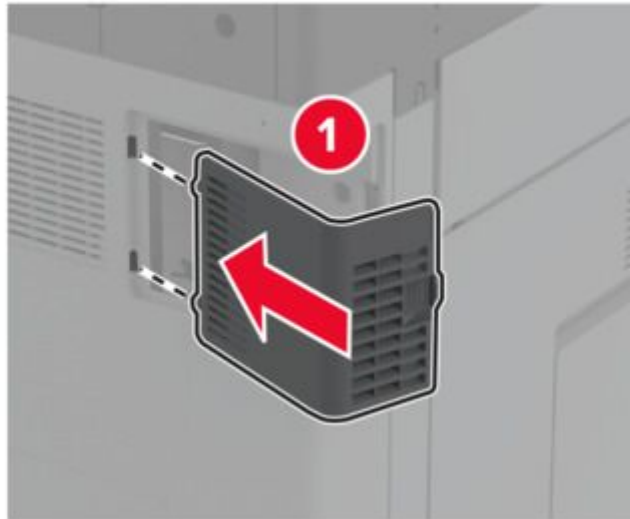
Replacing the R9 rear cover

Learn how to replace the R9 rear cover.

1. Remove the used R9 rear cover.



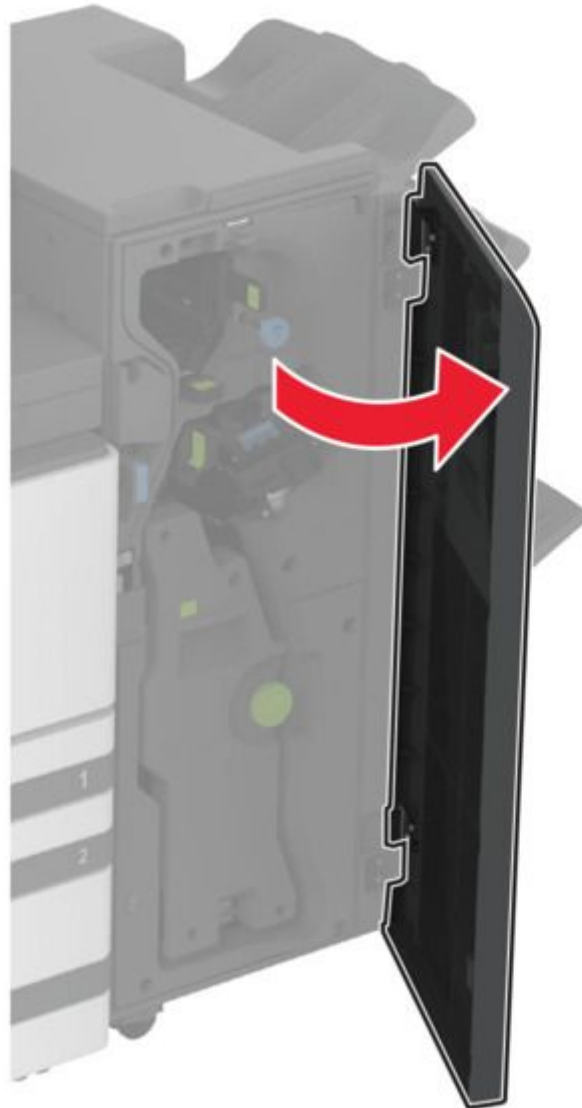
2. Unpack the new R9 rear cover.
3. Attach the new R9 rear cover until it clicks into place.



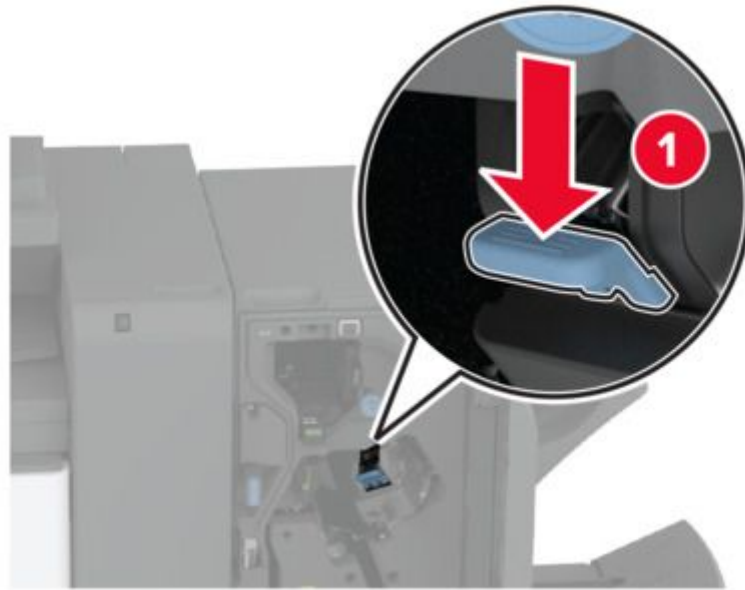
Replacing the standard staple cartridge holder

Replace the used staple cartridge holder in the finisher to continue the automatic stapling of your documents.

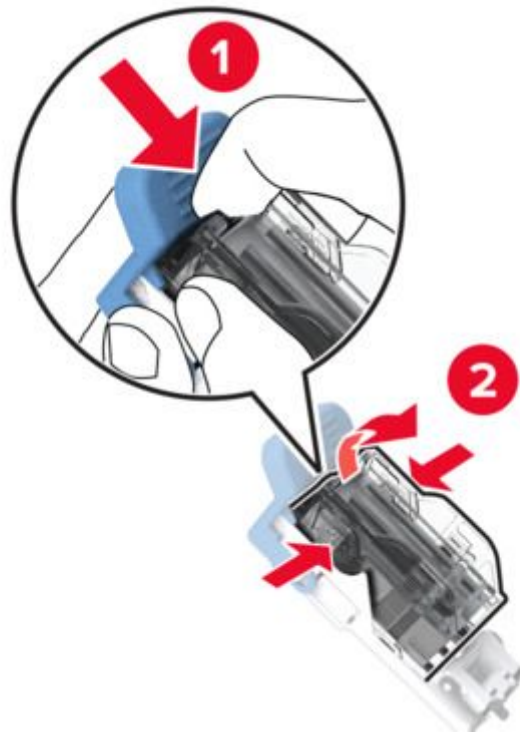
1. Open the finisher door.



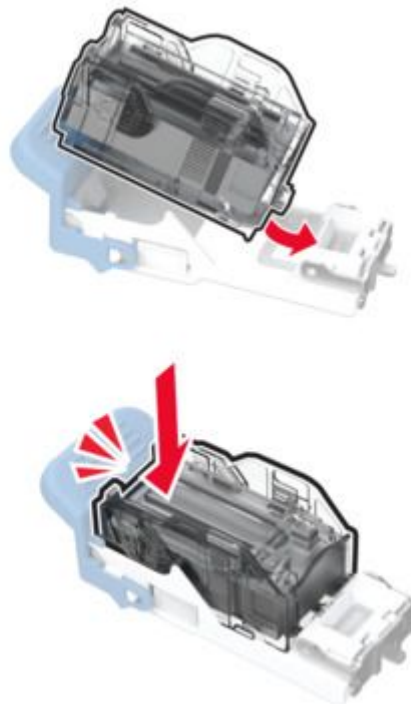
2. Remove the used staple cartridge holder.



3. Remove the staple cartridge.



4. Unpack the new staple cartridge holder.
5. Insert the staple cartridge into the new staple cartridge holder until it clicks into place.



6. Insert the new staple cartridge holder until it clicks into place.

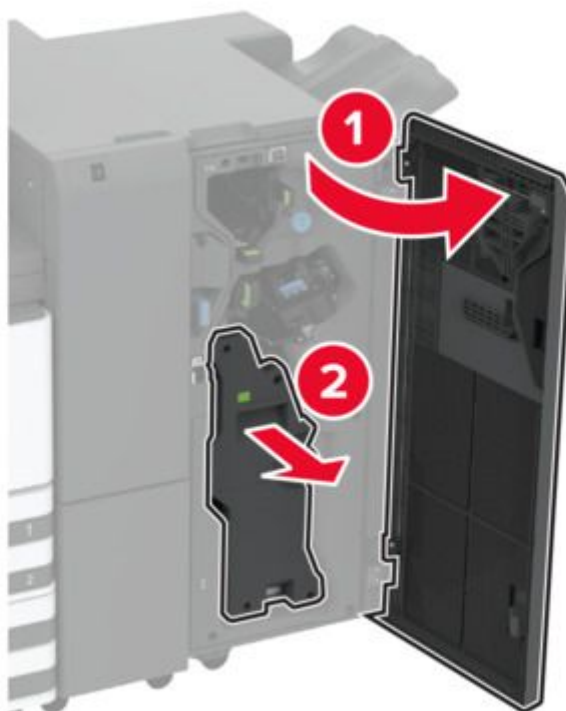


7. Close the finisher door.

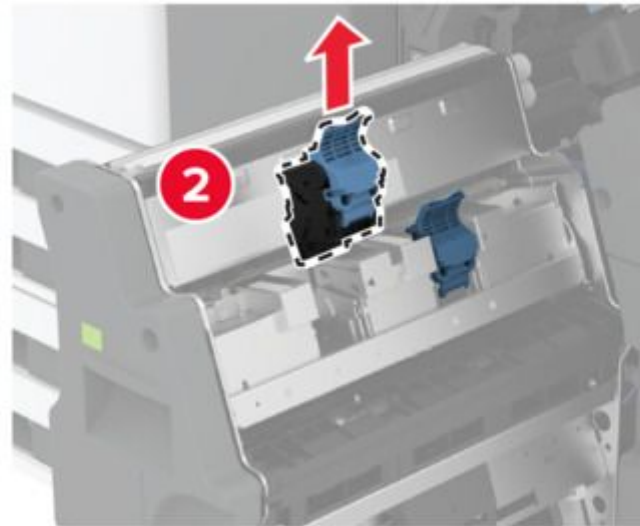
Replacing the staple cartridge holder in the booklet finisher

Replace the used staple cartridge holder in the booklet finisher to continue the automatic stapling of your documents.

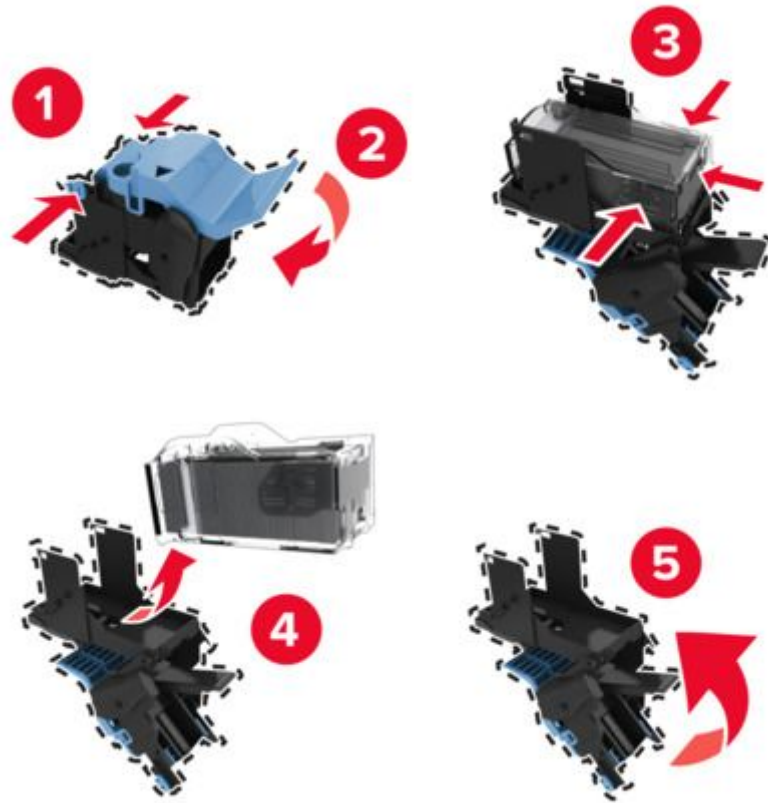
1. Open the finisher door, and then pull out the booklet maker.



2. Remove the used staple cartridge holder.



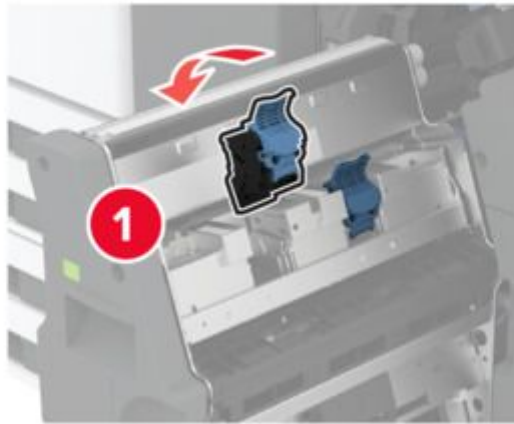
3. Remove the staple cartridge.



4. Unpack the new staple cartridge holder.
5. Insert the staple cartridge into the new staple cartridge holder.



6. Insert the new staple cartridge holder.



7. Insert the booklet maker, and then close the finisher door.

Component locations

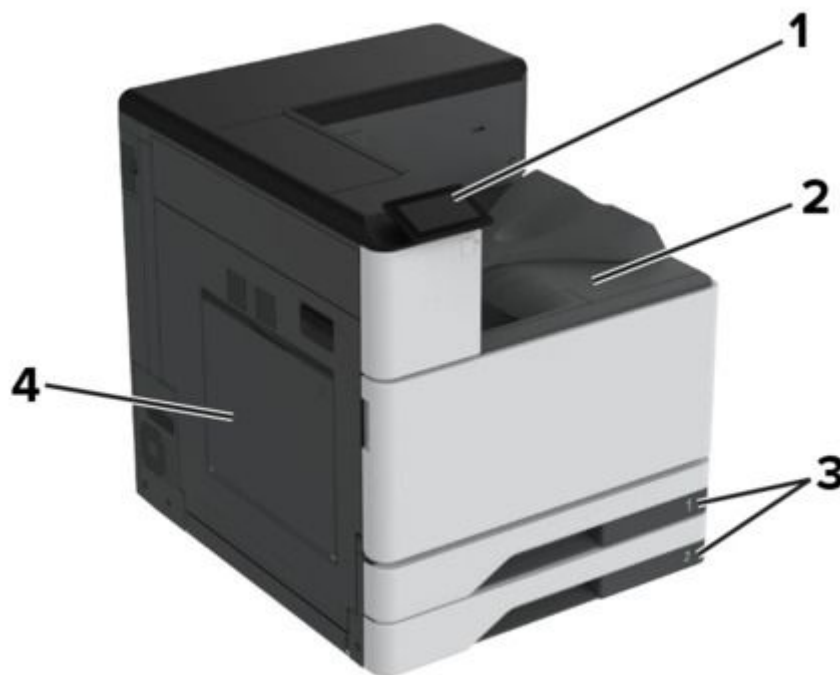
Printer configurations

Learn about the parts of the printer.

NOTES

Make sure to configure the printer on a flat, sturdy, and stable surface.

Basic model



Parts of a basic printer model

1	Control panel
2	Standard bin
3	Standard 2 x 520-sheet tray
4	Multipurpose feeder

Configured model



CAUTION—TIPPING HAZARD

Installing one or more options on your printer or MFP may require a caster base, furniture, or other feature to prevent instability causing possible injury. For more information on supported configurations, see www.lexmark.com/multifunctionprinters.



CAUTION—TIPPING HAZARD

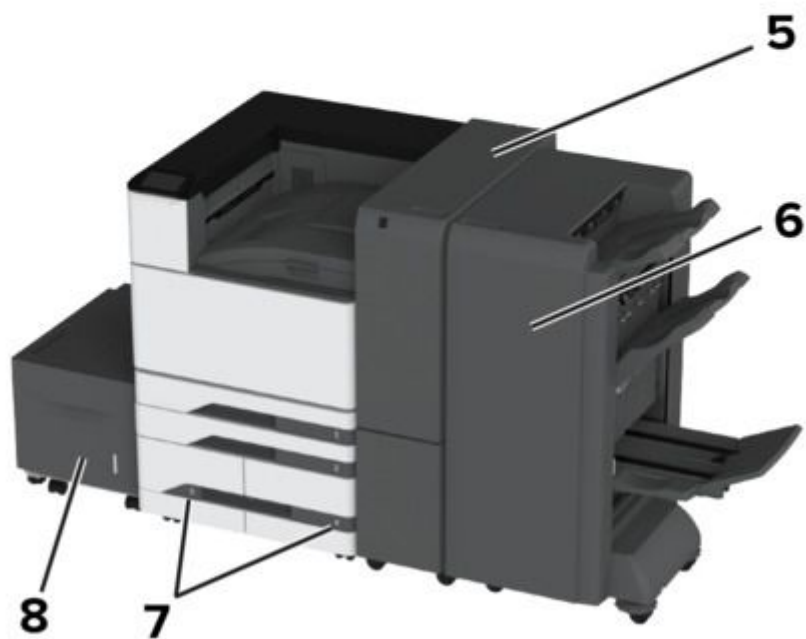
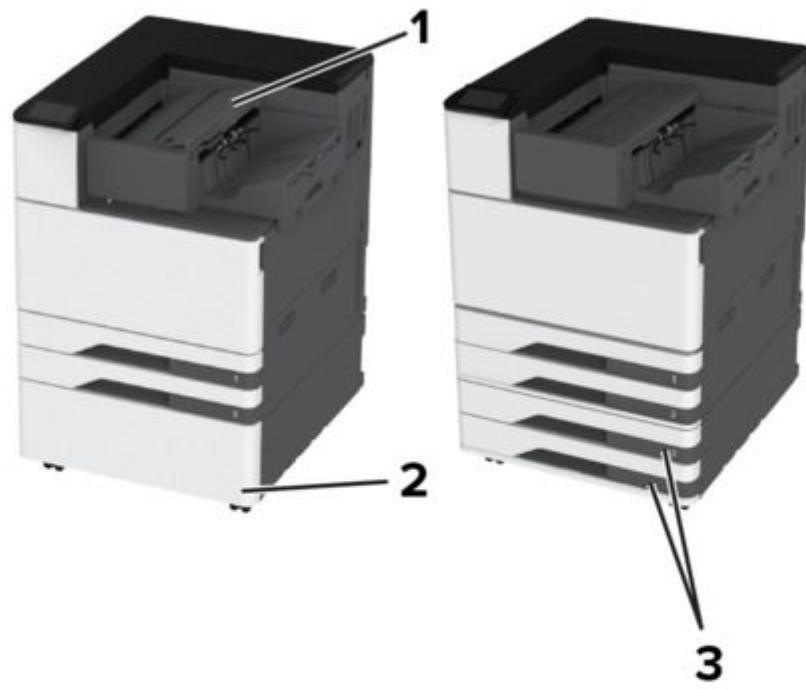
Installing one or more options on your printer or MFP may require a caster base, furniture, or other feature to prevent instability causing possible injury. For more information on supported configurations, contact the place where you purchased the printer.



CAUTION—TIPPING HAZARD

To reduce the risk of equipment instability, load each tray separately. Keep all other trays closed until needed.

Component locations



Parts of a configured printer model

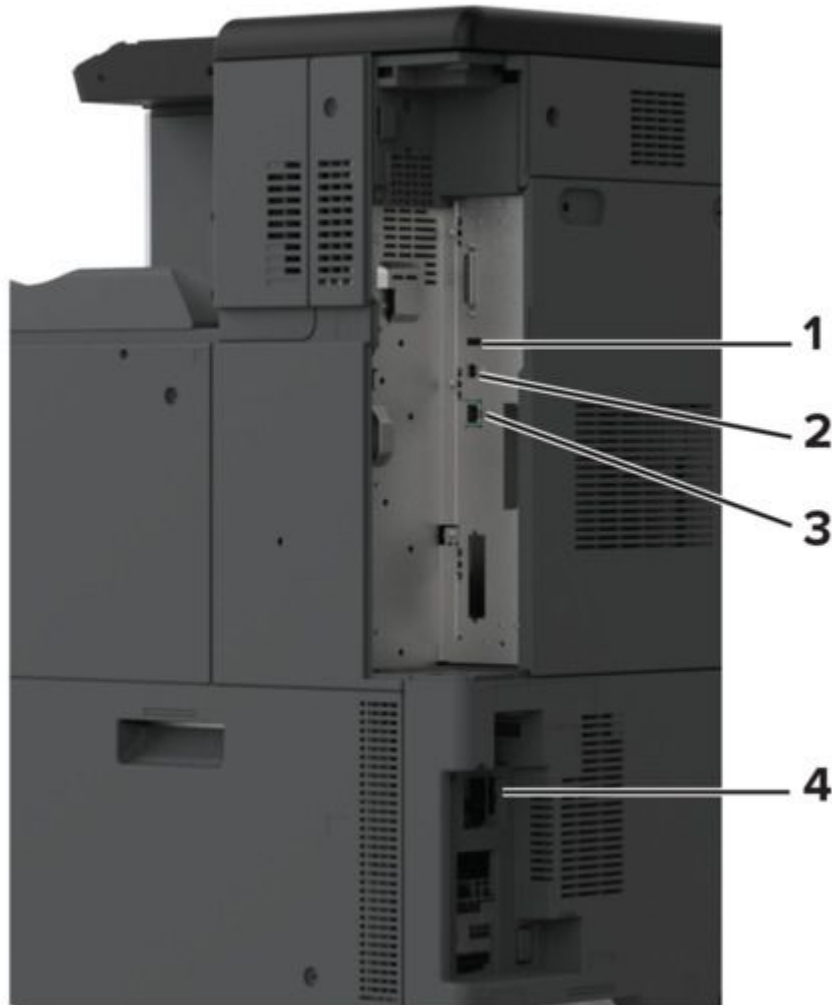
1	<p>Staple finisher</p> <p>NOTES Not supported if another finisher is installed.</p>
2	Optional spacer
3	Optional 2 x 520-sheet tray
4	<p>Staple, hole punch finisher</p> <p>NOTES Supported only if an optional tray or spacer is installed.</p>
5	<p>Trifold/Z-fold finisher</p> <p>NOTES Supported only if an optional tray or spacer is installed.</p>
6	<p>Booklet finisher</p> <p>NOTES Supported only if an optional tray or spacer is installed.</p>
7	Optional 2000-sheet tandem tray
8	Optional 2000-sheet tray
9	<p>Paper transport</p> <p>NOTES Comes with the booklet finisher or staple, hole punch finisher.</p>

NOTES

Some options may not be available. For more information, contact the place where you purchased the printer.

Port locations

Start configuring your printer by connecting the cables to the correct ports and socket.



Printer ports and socket and their functions

	Printer port	Function
1	USB port	Attach a keyboard or any compatible option.
2	USB printer port	Connect the printer to a computer.

Continued on page 1826

Continued from page 1825

	Printer port	Function
3	Ethernet port	Connect the printer to a network.
4	Power cord socket	Connect the printer to a properly grounded electrical outlet.

Maintenance

Cleaning the printer

Regular printer maintenance extends the life of the printer and ensures quality prints. The process is simple and only takes a few minutes.



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

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

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

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.

- 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.

- 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.



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.

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.

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.

- 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.



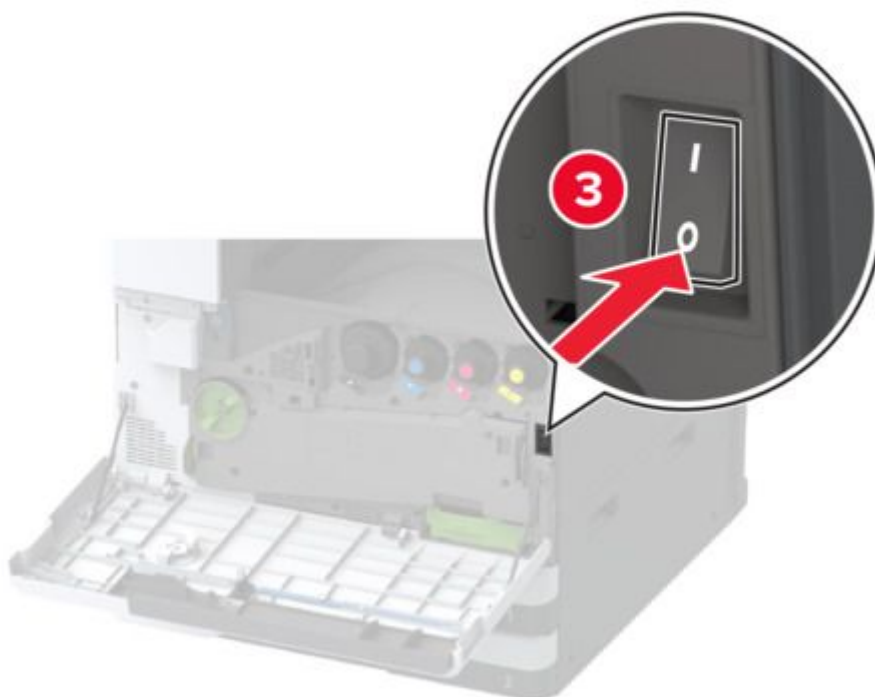
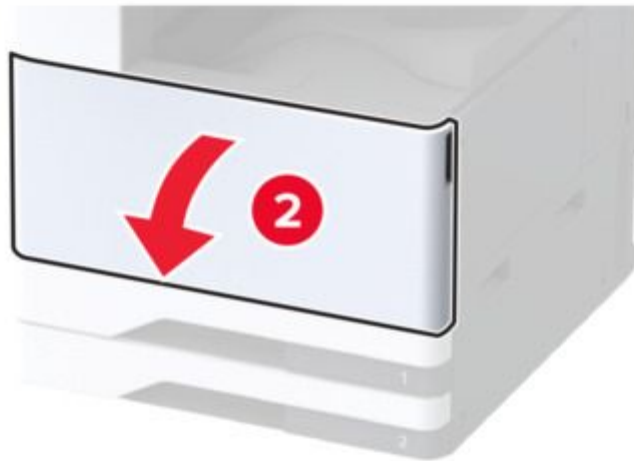
CAUTION—POTENTIAL INJURY

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.

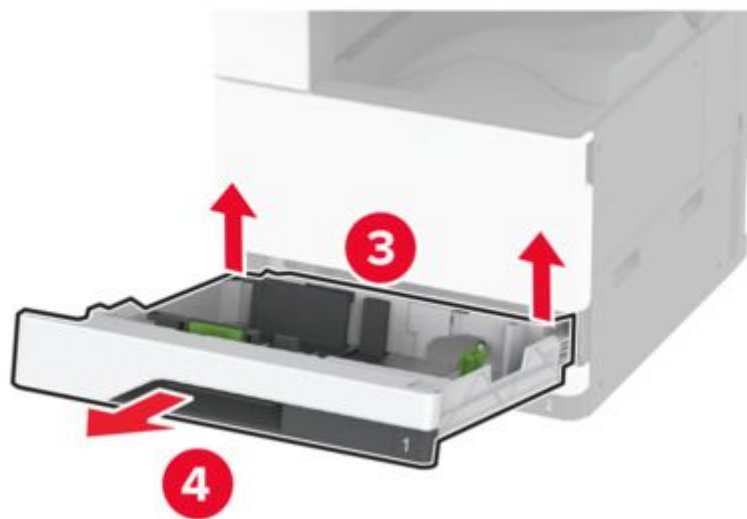
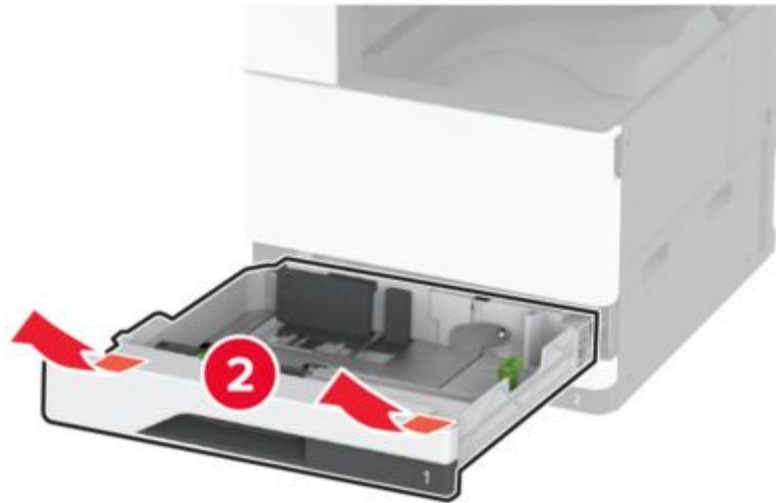
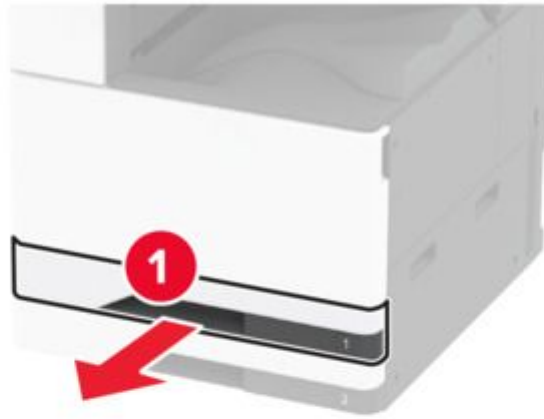
Cleaning the tray roller kit

Clean the tray roller kit regularly to prevent paper feed problems from happening.

1. Turn off the printer.



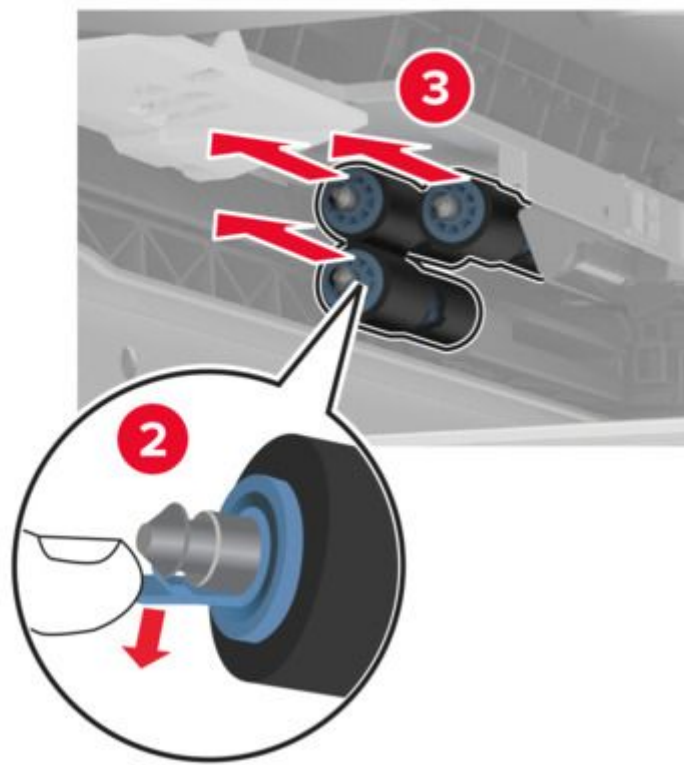
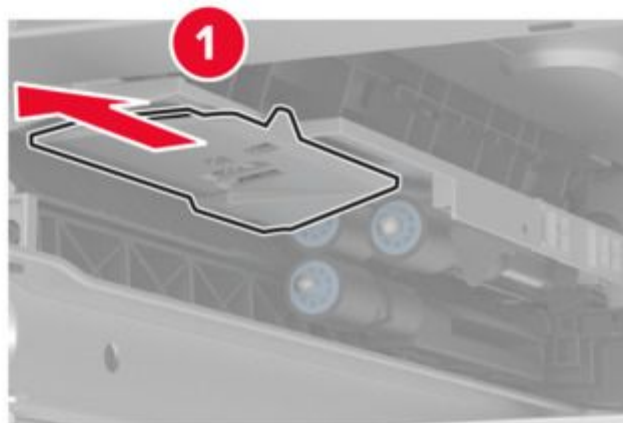
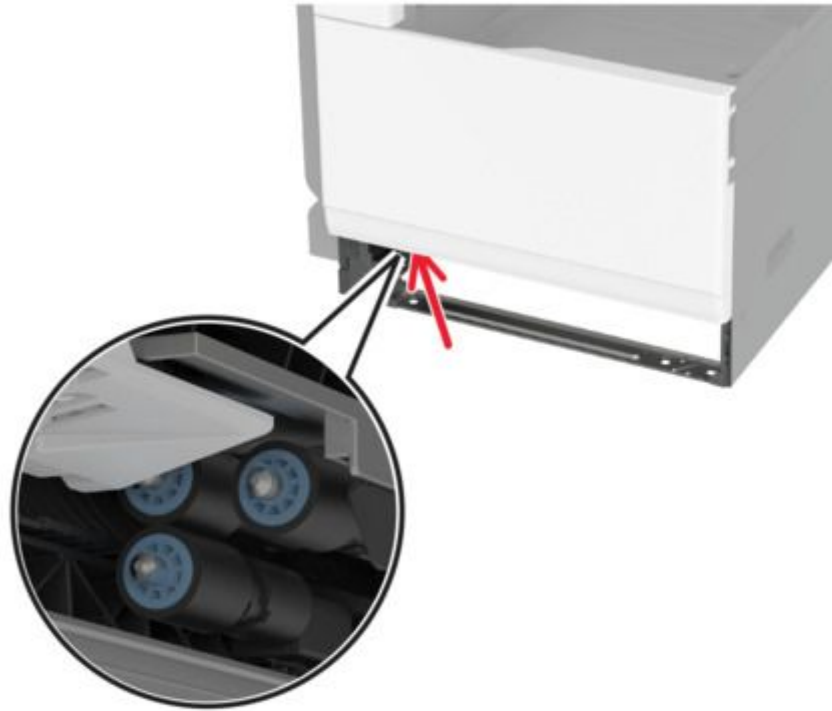
2. Remove the standard tray.



3. Remove the tray roller kit.

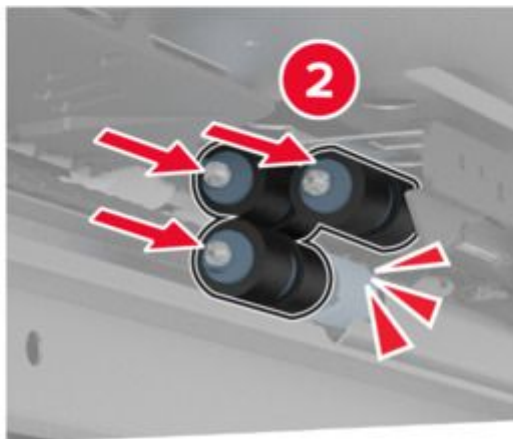
WARNING—POTENTIAL DAMAGE

To prevent damage from electrostatic discharge, touch any exposed metal frame of the printer before accessing or touching interior areas of the printer.



Maintenance

4. Apply water to a soft, lint-free cloth, and then wipe the feed rollers.
5. Insert the roller kit until it clicks into place.

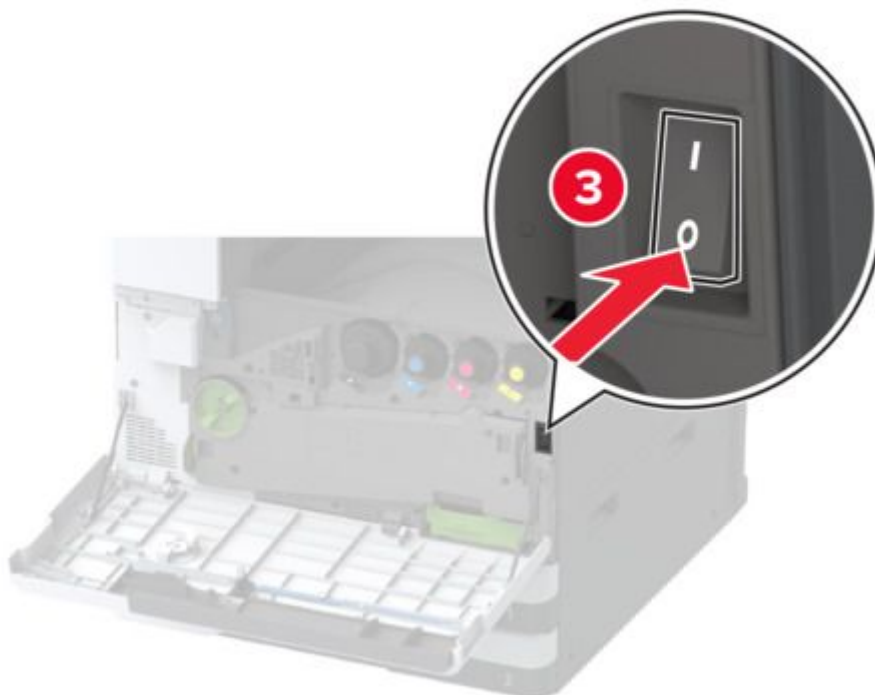
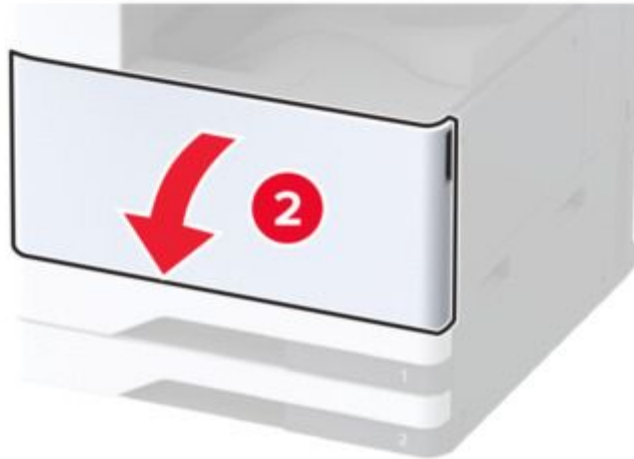
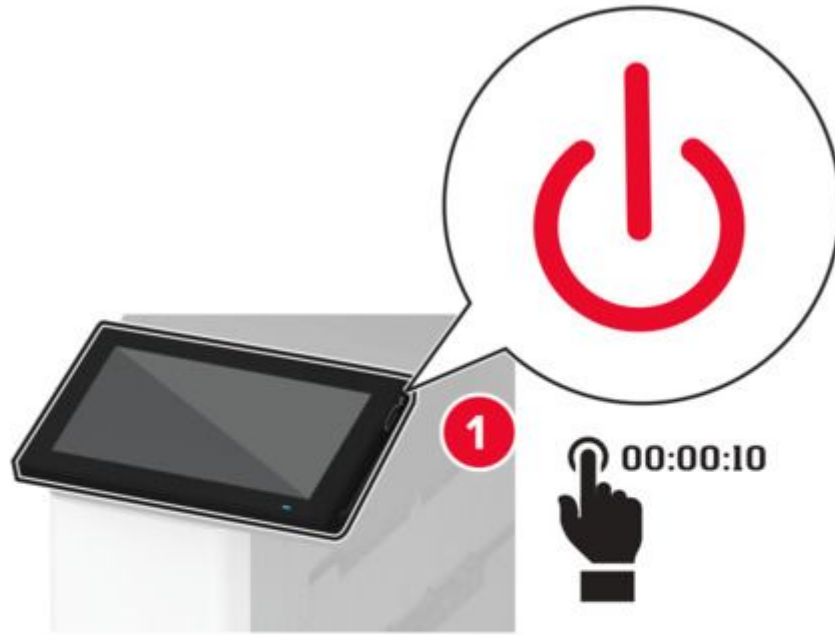


6. Insert the tray.
7. Turn on the printer.

Cleaning the 2000-sheet tray roller kit

Clean the roller kit of the 2000-sheet tray regularly to prevent paper feed problems.

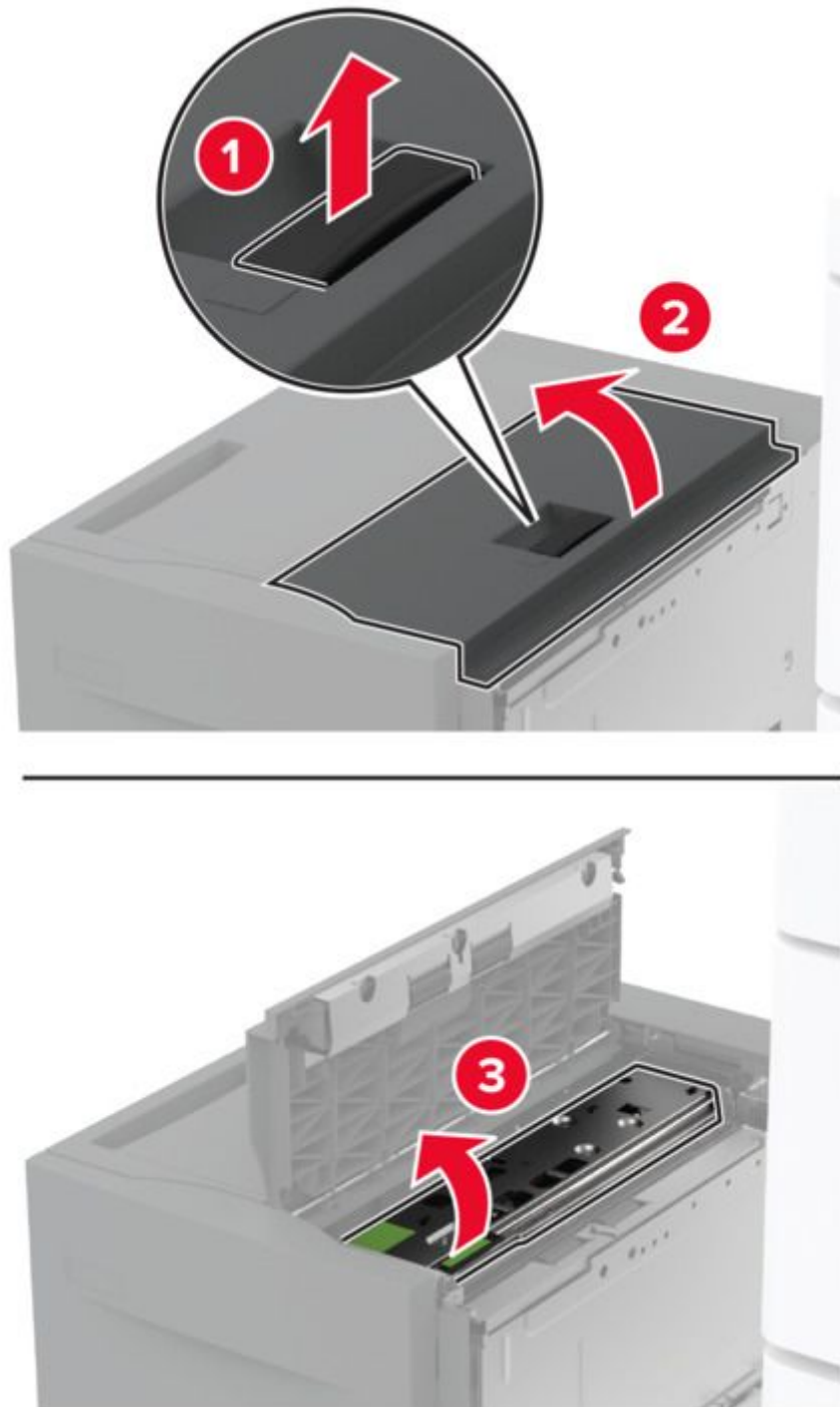
1. Turn off the printer.



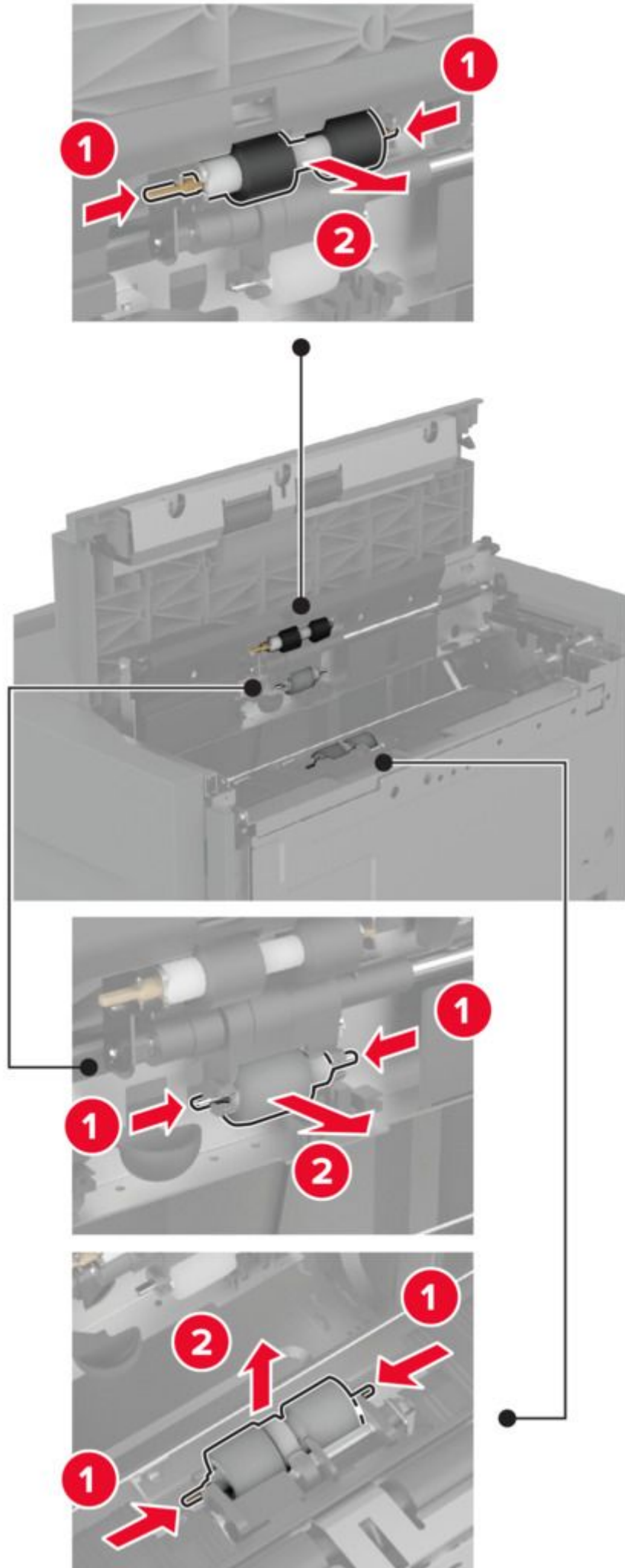
2. Slide the tray to the left.



3. Open door J, and then open the roller kit cover.

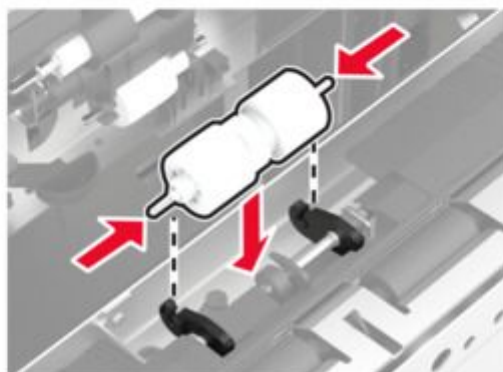
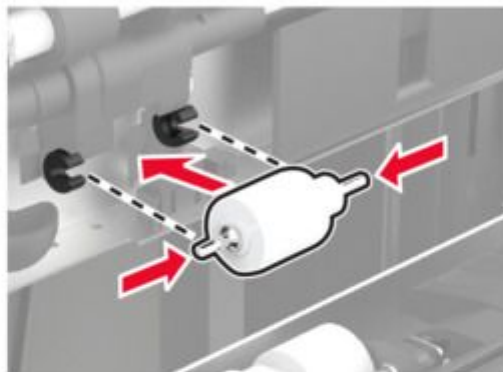
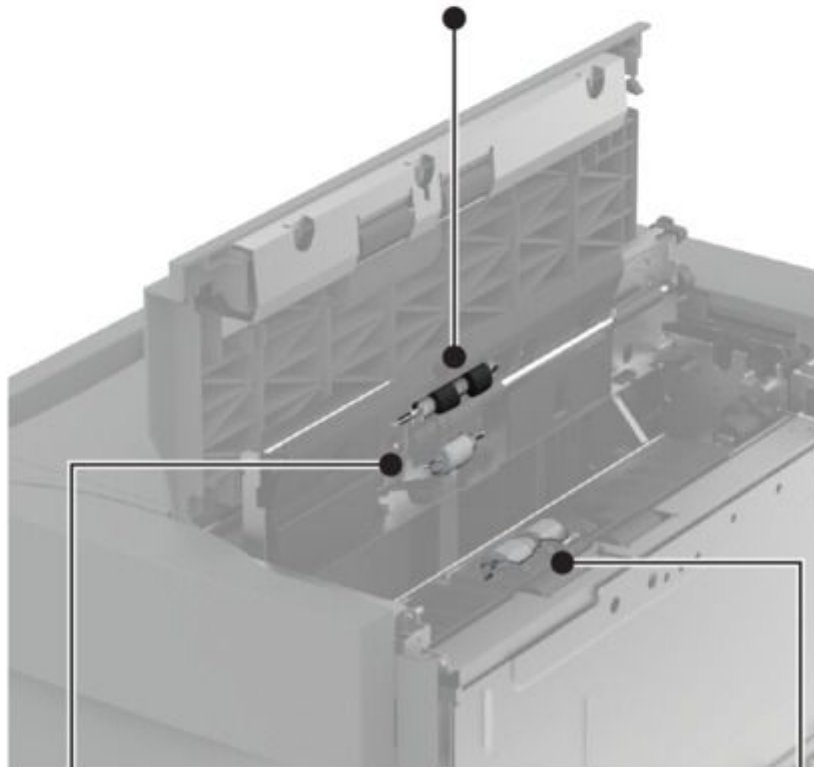
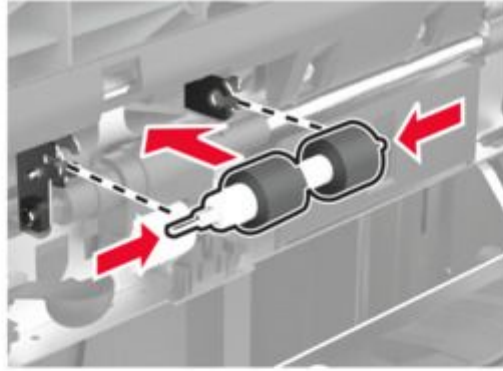


4. Locate, and then remove the tray roller kit.



Maintenance

5. Apply water to a soft, lint-free cloth, and then wipe the roller kit.
6. Insert the roller kit.



Maintenance

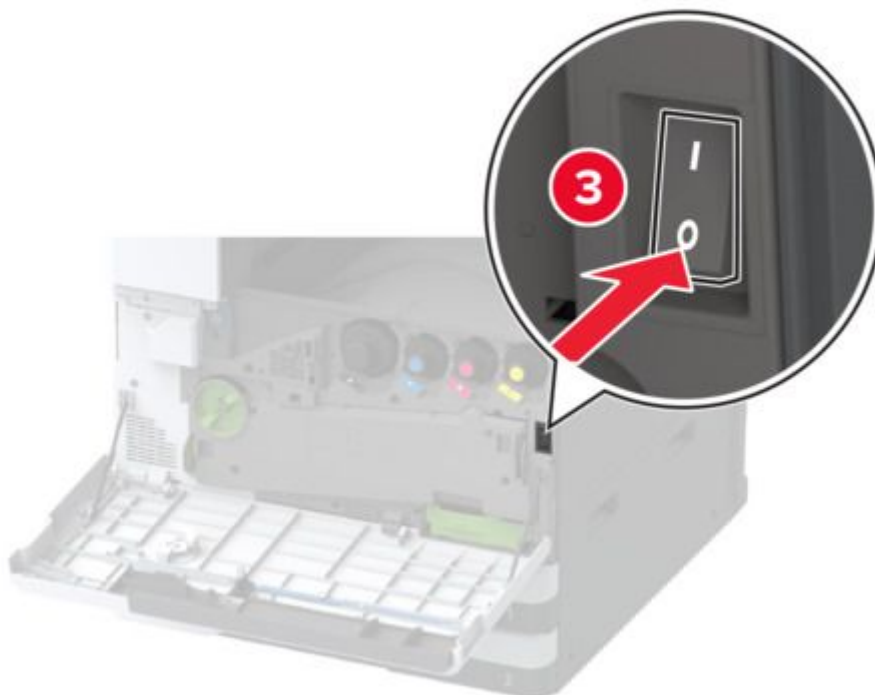
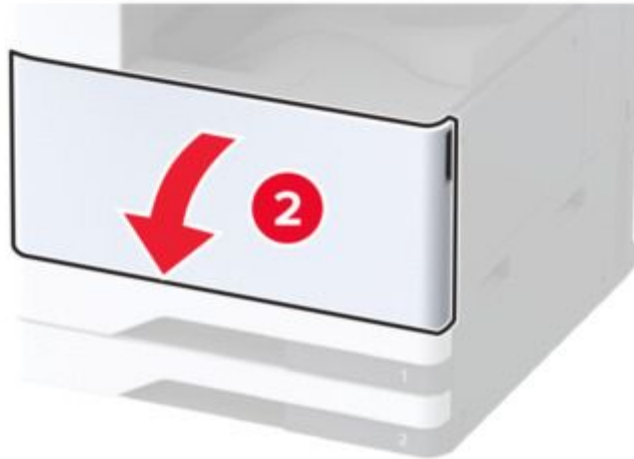
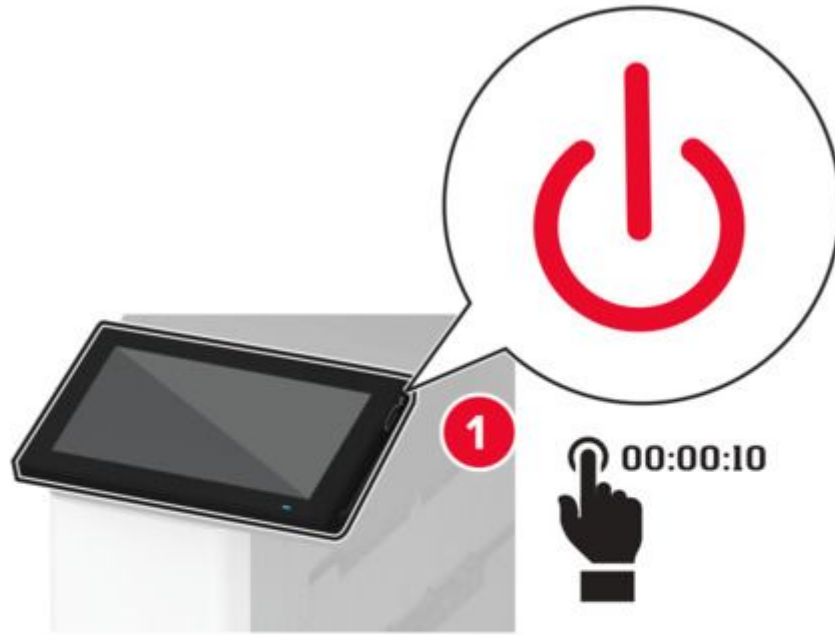
7. Close the roller kit cover, and then close door J.
8. Slide the tray back into place.
9. Turn on the printer.

Cleaning the 2000-sheet tandem tray roller kit

A clean pick roller in your tandem tray helps prevent paper feed problems.

In handle C

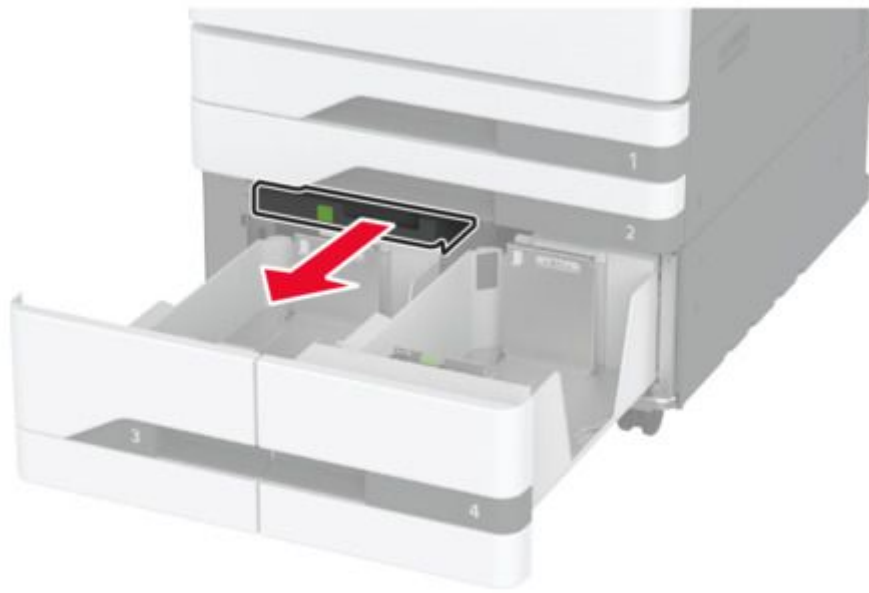
1. Turn off the printer.



2. Pull out tray 4, and then pull out tray 3.



3. Pull out handle C, and then open the inner cover.



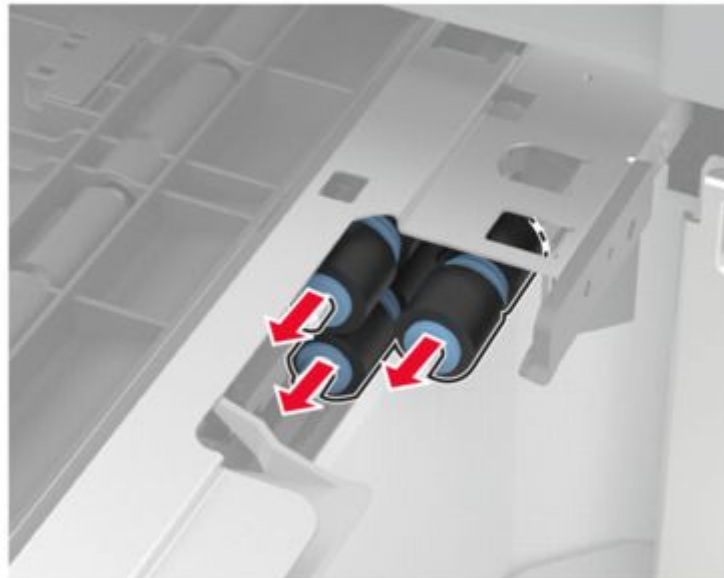
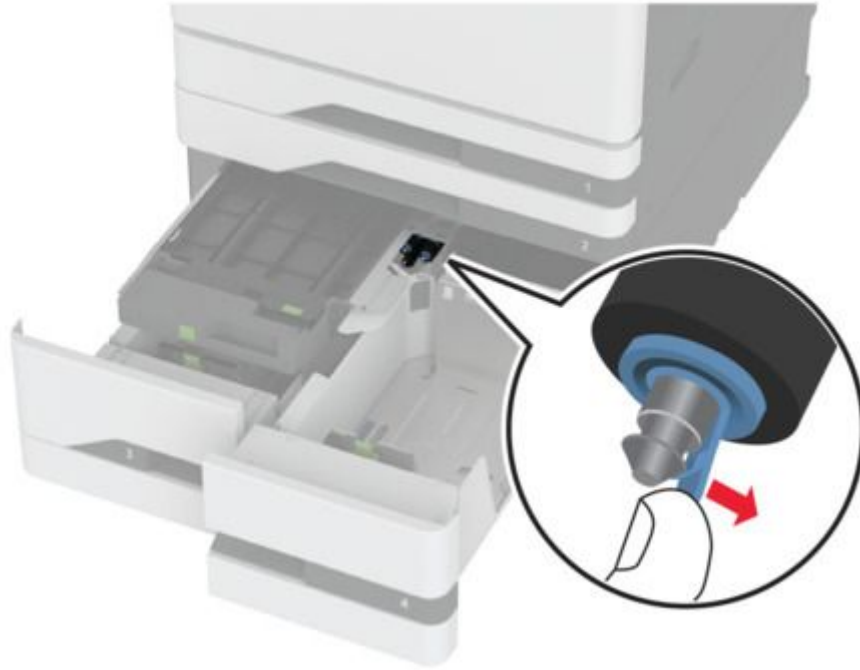
4. Open the roller kit cover.



5. Remove the tray roller kit.

WARNING—POTENTIAL DAMAGE

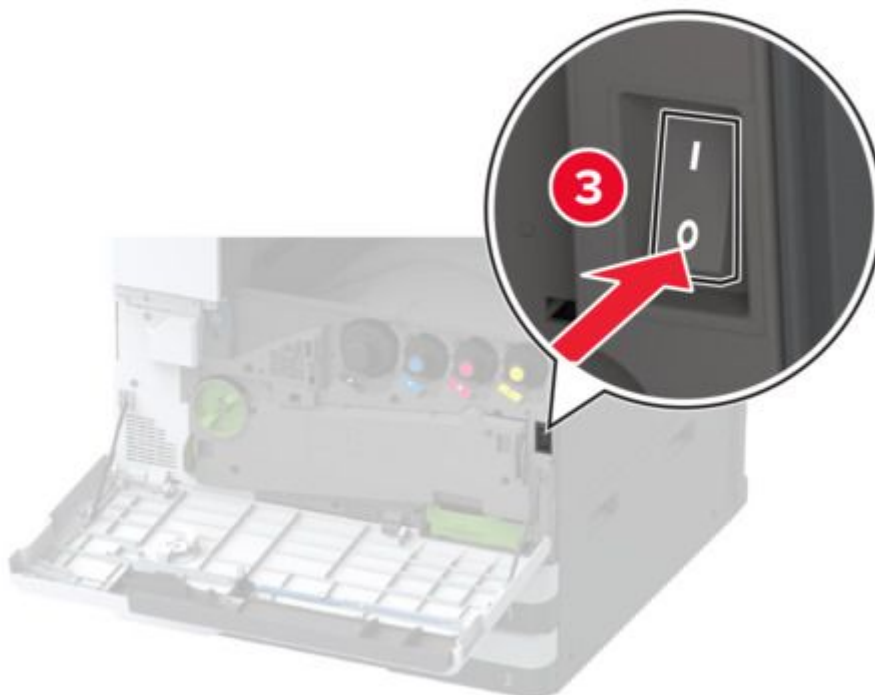
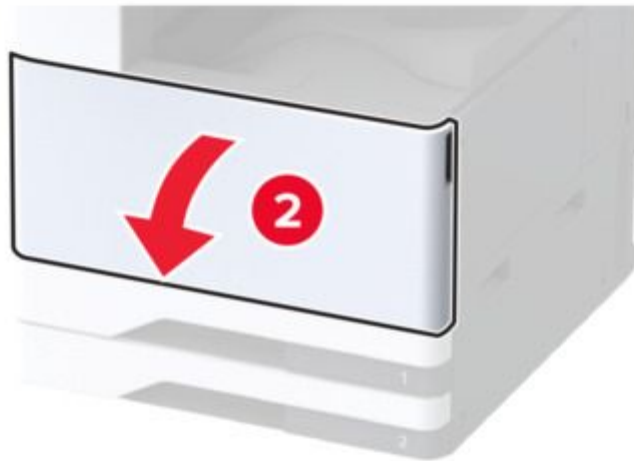
To prevent damage from electrostatic discharge, touch any exposed metal frame of the printer before accessing or touching interior areas of the printer.



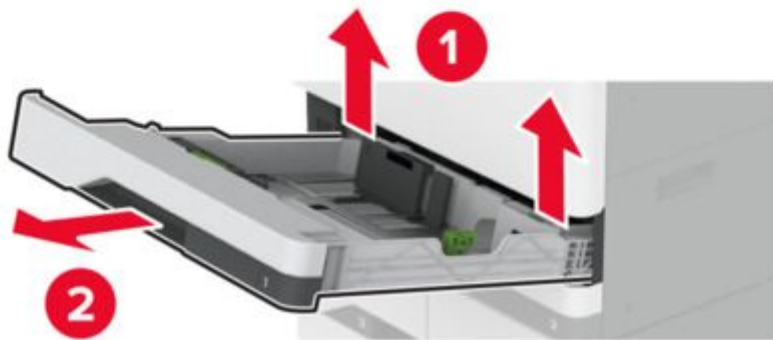
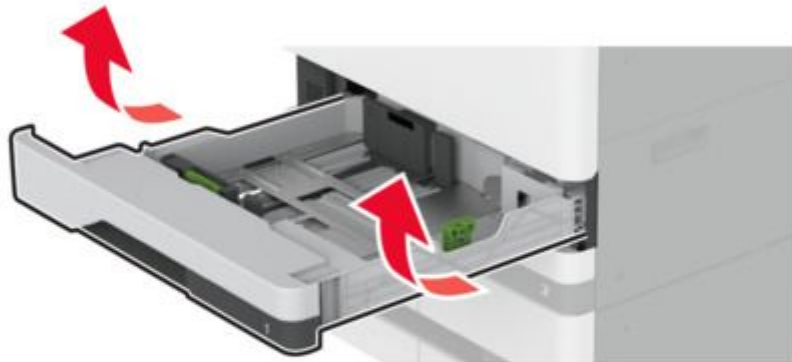
6. Apply water to a soft, lint-free cloth, and then wipe the pick rollers.
7. Insert the roller kit until it clicks into place.
8. Close the roller kit cover.
9. Close the inner cover, and then insert handle C.
10. Insert trays 3 and 4.
11. Turn on the printer.

In tray 3

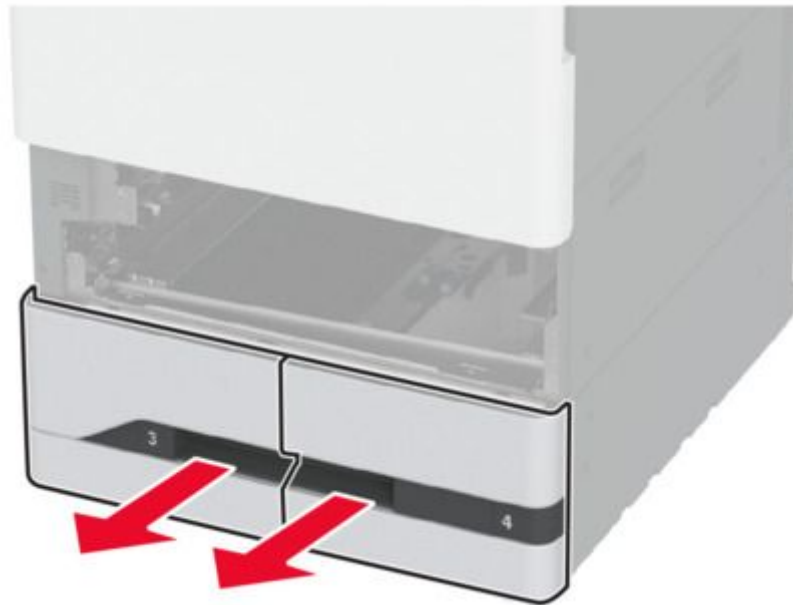
1. Turn off the printer.



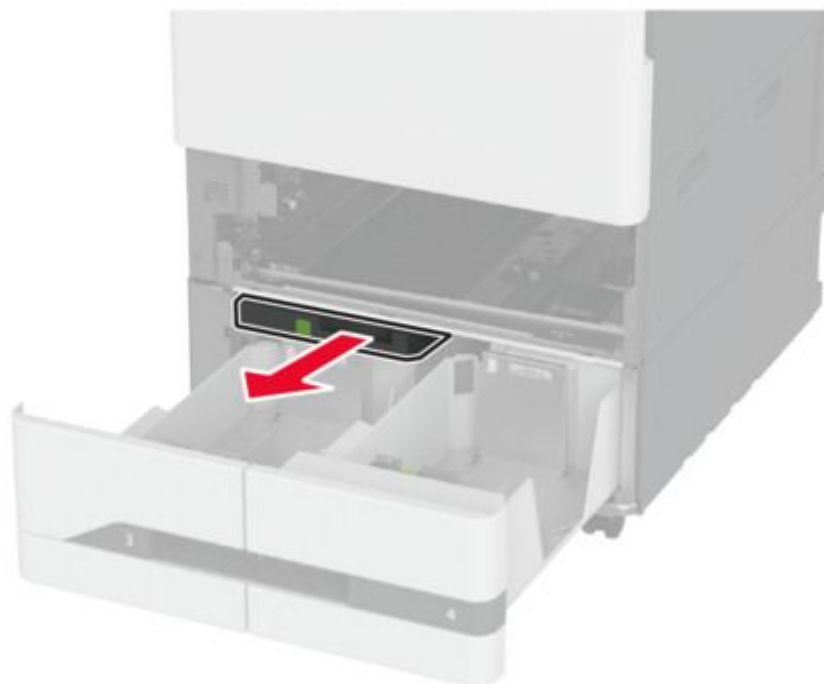
2. Remove tray 1, and then remove tray 2.



3. Pull out trays 3 and 4.



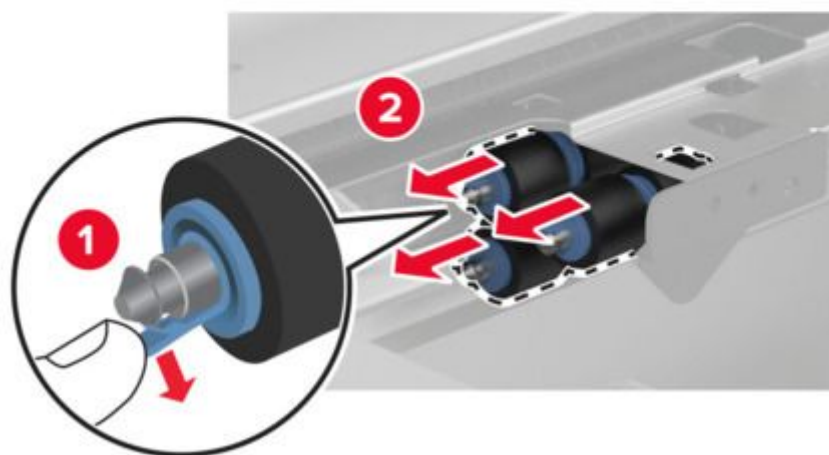
4. Pull out handle C.



5. Remove the tray roller kit.

WARNING—POTENTIAL DAMAGE

To prevent damage from electrostatic discharge, touch any exposed metal frame of the printer before accessing or touching interior areas of the printer.



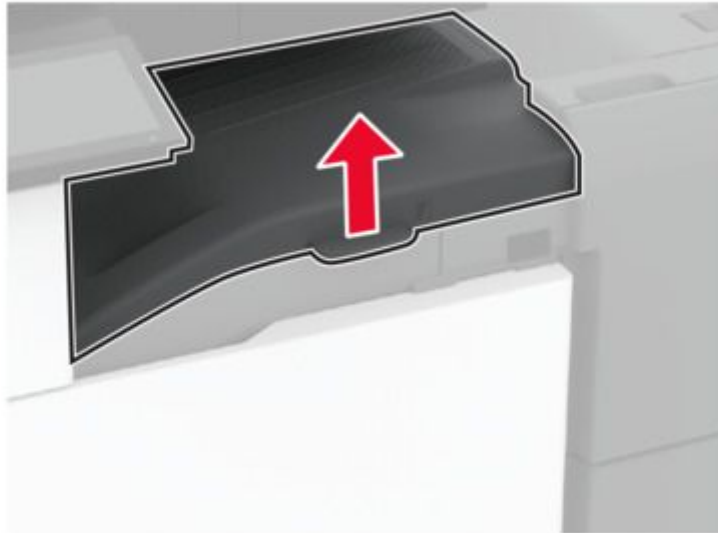
6. Apply water to a soft, lint-free cloth, and then wipe the pick rollers.
7. Insert the roller kit until it clicks into place.
8. Insert handle C.
9. Insert trays 3 and 4.
10. Insert trays 1 and 2.

11. Turn on the printer.

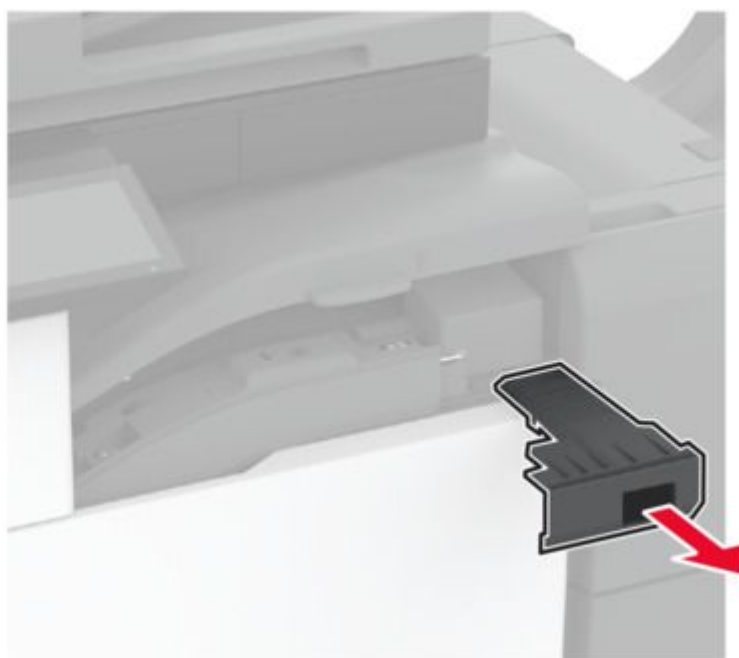
Emptying the hole punch box

Remove paper chad when the hole punch box is full to continue punching paper.

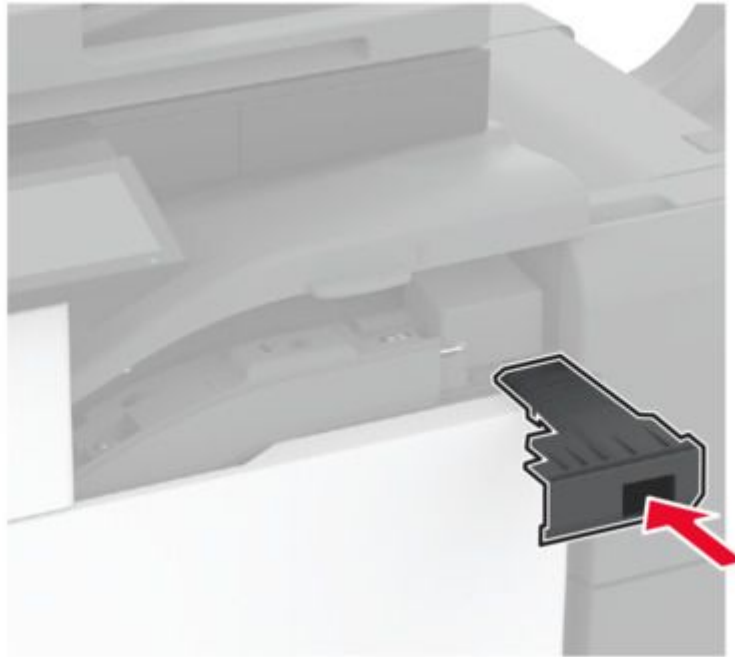
1. Lift paper transport cover F.



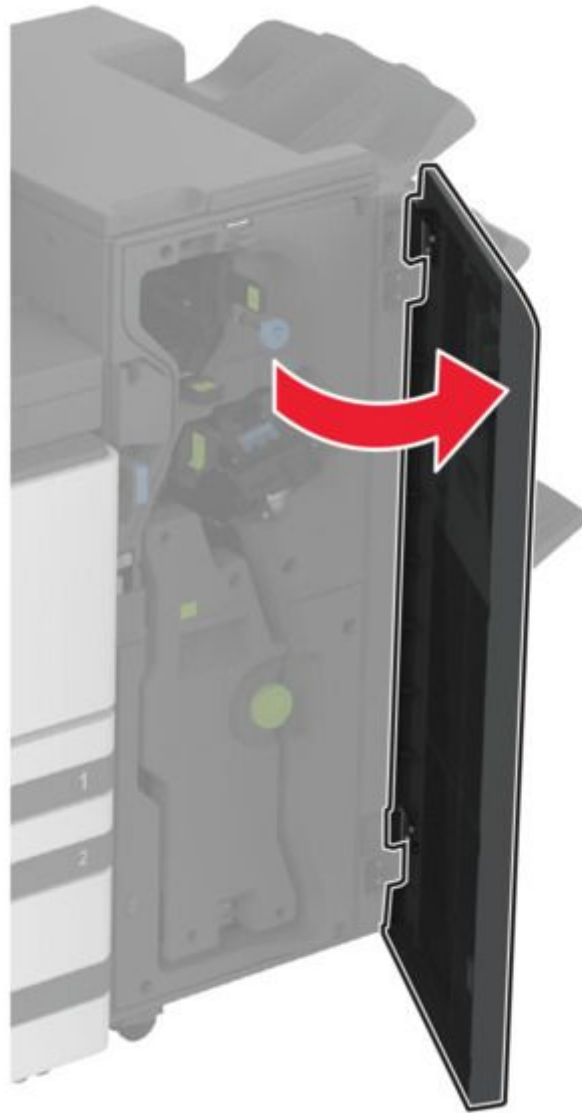
2. Remove, and then empty the hole punch box.



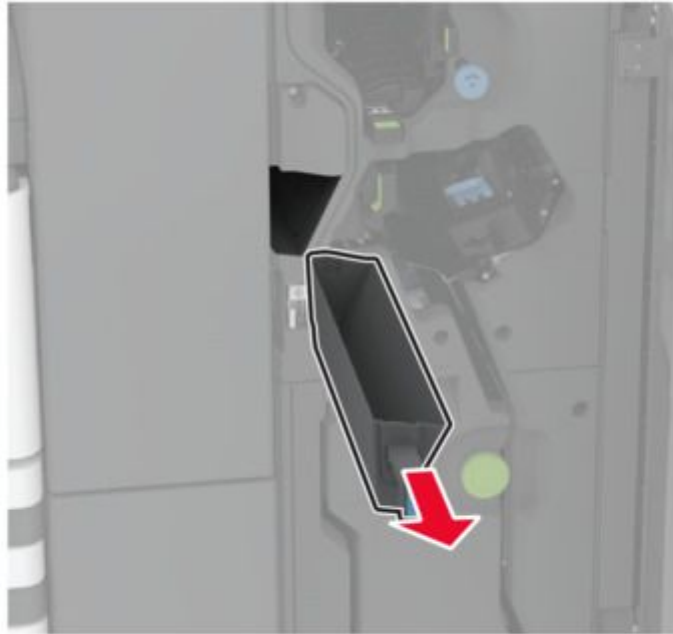
3. Insert the hole punch box.



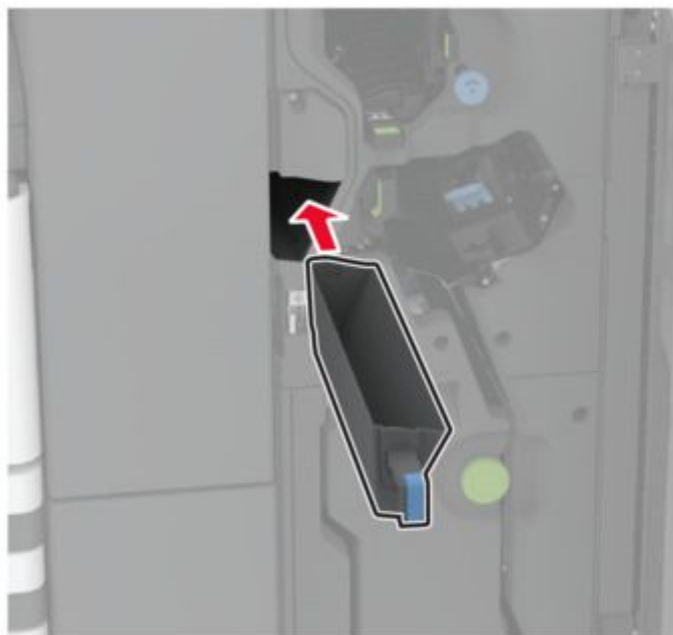
4. Close paper transport cover F.
5. Open the booklet finisher door.



6. Remove, and then empty the hole punch box.



7. Insert the hole punch box.



8. Close the finisher door.

Inspection guide

Use this guide in identifying the parts that must be inspected, cleaned, or replaced based on the page count.

If any unsafe condition exists, find out how serious the hazard is and if you can continue before you correct the hazard.

As you service the printer, check for the following:

- Damaged, missing, or altered parts, especially in the area of the power switch and the power supply
- Damaged, missing, or altered covers, especially in the area of the top and power supply covers
- Possible safety exposure from any non-Lexmark attachments

Use the following tables to determine when to inspect the following parts:

NOTES

After replacing parts, reset the maintenance counter. See [.See "Resetting the maintenance counter" on page 1870](#)

EP parts inspection guide table

EP	Frequency	Printhead	Fuser	Fuser induction heater	Developer unit	Transfer belt	Second transfer roller	Transfer belt cleaner
Every service call	Clean during the following:	Inspect during the following:	Inspect when fixing a print quality issue.					
	<ul style="list-style-type: none"> • fixing a print quality issue • removing an EP component • removing an EP supply 	<ul style="list-style-type: none"> • fixing a paper jam issue • fixing a print quality issue 						
100K	Clean	N/A	N/A	N/A	N/A	N/A	N/A	N/A
200K	Clean	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Continued on page 1861

Continued from page 1860

EP	Frequency	Printhead	Fuser	Fuser induction heater	Developer unit	Transfer belt	Second transfer roller	Transfer belt cleaner
240K	Clean		N/A	N/A	N/A	N/A	N/A	Replace the part and then reset the maintenance counter.
300K	Clean		N/A	N/A	N/A	N/A	N/A	N/A
360K	Clean		N/A	N/A	N/A	N/A	Replace the part and then reset the maintenance counter.	N/A
480K	Clean		Replace the part and then reset the maintenance counter.	Clean	Inspect Clean	Replace the part and then reset the maintenance counter.	N/A	N/A
1.5M	Clean		N/A	N/A	Replace the part and then reset the maintenance counter.	N/A	N/A	N/A
Notes	--	--		<ul style="list-style-type: none"> Wipe with cloth. Make sure the Fuser induction heater temperature 	--	--	--	Use a toner vacuum and cloth to remove all toner spillage from

Continued on page 1862

Continued from page 1861

EP	Frequency	Printhead	Fuser	Fuser induction heater	Developer unit	Transfer belt	Second transfer roller	Transfer belt cleaner
				is cool.				the printer.

Paper input inspection guide table

Paper input	Tray insert guides
Frequency	
Every service call	Inspect when fixing a repetitive paper jam.
100K	N/A
200K	N/A
240K	N/A
300K	N/A
360K	N/A
480K	N/A
1.5M	N/A
Notes	--

ADF scanner assembly parts inspection guide table

ADF scanner assembly	ADF rollers	Flatbed scanner glass	ADF scanner glass	ADF paper path
Frequency				
Every service call	Clean when fixing a paper jam issue.	Clean when fixing a scan quality issue.		
10K	N/A	Clean	Clean	Clean
200K	Replace the part and then reset the maintenance counter.	Clean	Clean	Inspect Clean

Continued on page 1863

Continued from page 1862

ADF scanner assembly				
Frequency	ADF rollers	Flatbed scanner glass	ADF scanner glass	ADF paper path
Notes	--	--	--	--

Paper path parts inspection guide table

Paper path				
Frequency	Pick rollers	MPF pick rollers	Duplex paper path	2000-sheet tray pick rollers
Every service call	Inspect and then clean when fixing a paper jam.			
100K	N/A	Replace the part and then reset the maintenance counter.	N/A	N/A
240K	Replace the part and then reset the maintenance counter.	N/A	Inspect Clean	Inspect Clean
300K	N/A	N/A	N/A	Replace the part and then reset the maintenance counter.
Notes	--	--	--	--

Finisher parts inspection guide table

Finisher		
Frequency	Paper path	Paper path rollers and paddles
Every service call	Inspect and then clean when fixing a paper jam.	
300K	Clean	Clean
Notes	--	--

Toner parts inspection guide table

Others	
Frequency	Toner spill
Every service call	Clean
100K	Clean
200K	Clean
240K	Clean
300K	Clean
360K	Clean
480K	Clean
1.5M	Clean
Notes	Use a toner vacuum and cloth to remove all toner spillage from the printer.

Scheduled maintenance

The control panel displays an 8x.yy error when it reaches certain page counts. It is necessary to replace the appropriate maintenance kit to maintain print quality and printer reliability.

NOTES

When replacing the maintenance kit, install all the parts that are included in the box, and then reset the maintenance counter.

Maintenance kits

The printer may stop printing when the rated life of a supply is reached.

To see which error codes indicate that a supply is nearing its end of life, see [See "8y user attendance messages" on page 701](#).

The parts are available as a maintenance kit with the following part numbers:

NOTES

After replacing the part or maintenance kit, reset the maintenance counter.

See [.See "Resetting the maintenance counter" on page 1870](#)

Maintenance kits

Part number and kit	Contents	Maintenance interval
41X3871—Transfer module cleaner and roller kit ¹	<ul style="list-style-type: none"> • 41X3337—Transfer module cleaner • 41X3376—Roller kit <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p>NOTES For a video demonstration, see Transfer module cleaner and roller maintenance kit.</p> </div>	240K
41X3389—Second transfer roller ¹	<ul style="list-style-type: none"> • 41X3389—Second transfer roller ¹ <div style="background-color: #f0f0f0; padding: 5px; margin-top: 10px;"> <p>NOTES For a video demonstration, see Second transfer roller kit.</p> </div>	360K
41X3872—Fuser and transfer module kit ¹	<ul style="list-style-type: none"> • 41X3336—Transfer module • 41X3345—Fuser 	480K

Continued on page 1867

Continued from page 1866

Part number and kit	Contents	Maintenance interval
	<p>NOTES For a video demonstration, see Fuser and transfer module kit.</p>	
41X3873—Developer kit ¹	<ul style="list-style-type: none"> • 41X3322—Developer unit • 41X3332—Developer carrier (Y) • 41X3335—Developer carrier (K) • 41X3334—Developer carrier (C) • 41X3333—Developer carrier (M) <p>NOTES For a video demonstration, see Developer kit.</p>	1.5M
41X3381—MPF roller kit ¹	<ul style="list-style-type: none"> • 41X4111—MPF rollers <p>NOTES For a video demonstration, see MPF roller kit.</p>	100K
41X4168—2000-sheet tray roller kit ¹	<ul style="list-style-type: none"> • 41X4168—2000-sheet tray pick rollers 	300K

¹ This part has a FRU sheet.

When performing the scheduled maintenance procedure, the following areas should be cleaned of media dust and toner contamination:

- Trays
- Toner cartridge area
- Developer unit area
- Transfer roll area
- Duplex area

Maintenance

- Standard bin
- Horizontal transport unit area (if equipped)
- Finisher bins (if equipped)

Identifying the type of fuser used in the printer

1. Open the left cover.
2. Locate the identification number on the fuser.

Resetting the maintenance counter

Transfer module cleaner and roller reset

Diagnostics menu > Printer setup > Reset Maintenance Counter > Transfer module cleaner and roller kit

Second transfer roller reset

Diagnostics menu > Printer setup > Reset Maintenance Counter > Second transfer roller reset

Fuser and transfer module reset

Diagnostics menu > Printer setup > Reset Maintenance Counter > Fuser maintenance kit reset

Developer reset

Diagnostics menu > Printer setup > Reset Maintenance Counter > Developer kit

MPF roller reset

Diagnostics menu > Printer setup > Reset Maintenance Counter > MPF roller maintenance kit reset

ADF roller reset

Settings menu > Device > Maintenance > Configuration Menu > Scanner configuration > Resetting ADF Maintenance Counter

2000-sheet tray roller reset

Diagnostics menu > Printer setup > Reset Maintenance Counter > HCF roller maintenance kit reset

Parts catalog

Legend

The following column headings are used in the parts catalog:

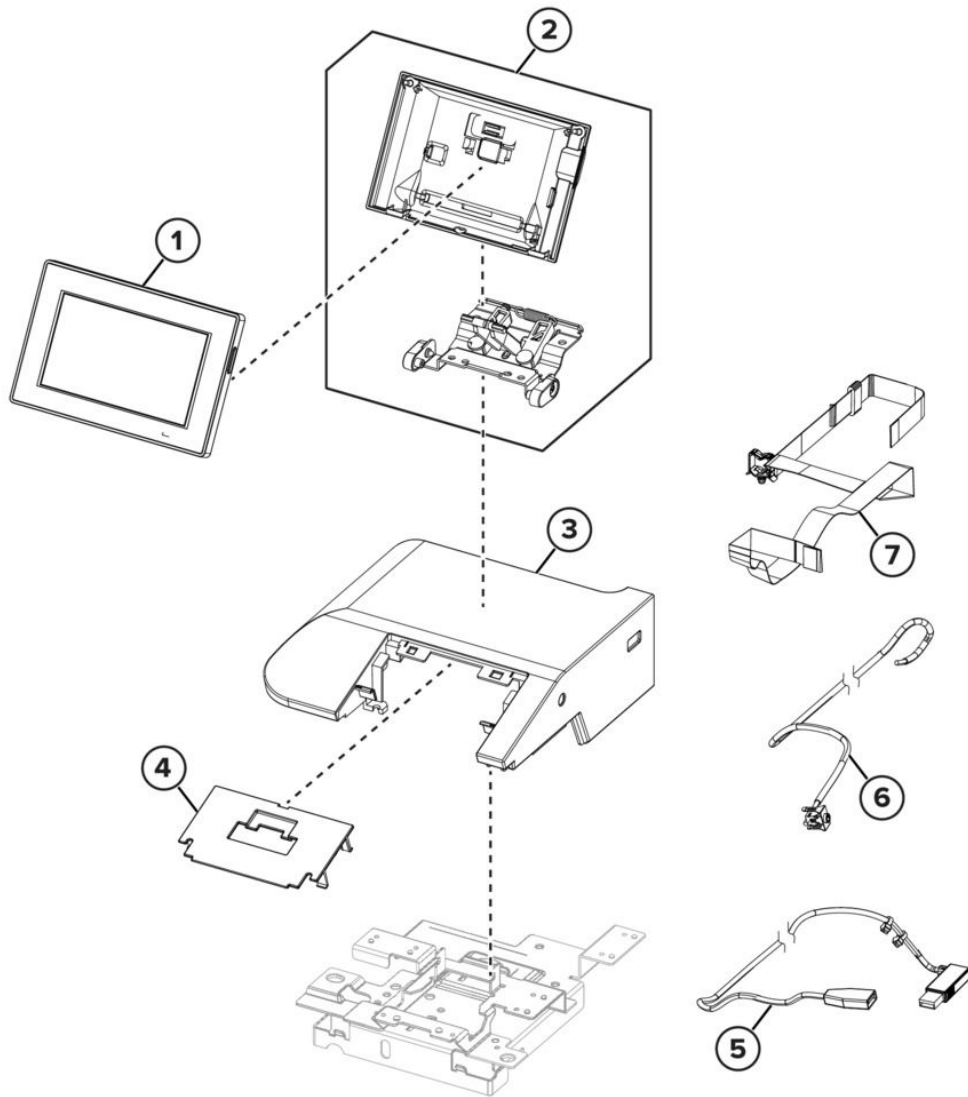
- **Asm-index**—Identifies the item in the illustration
- **P/N**—Identifies the part number of a FRU
- **Units/mach**—Refers to the number of units in a printer
- **Units/opt**—Refers to the number of units in an option
- **Units/FRU**—Refers to the number of units in a FRU
- **Description**—A brief description of 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 shown in the illustration.
- **PP** (parts packet) in the Description column indicates that the part is contained in a parts packet.

Printer

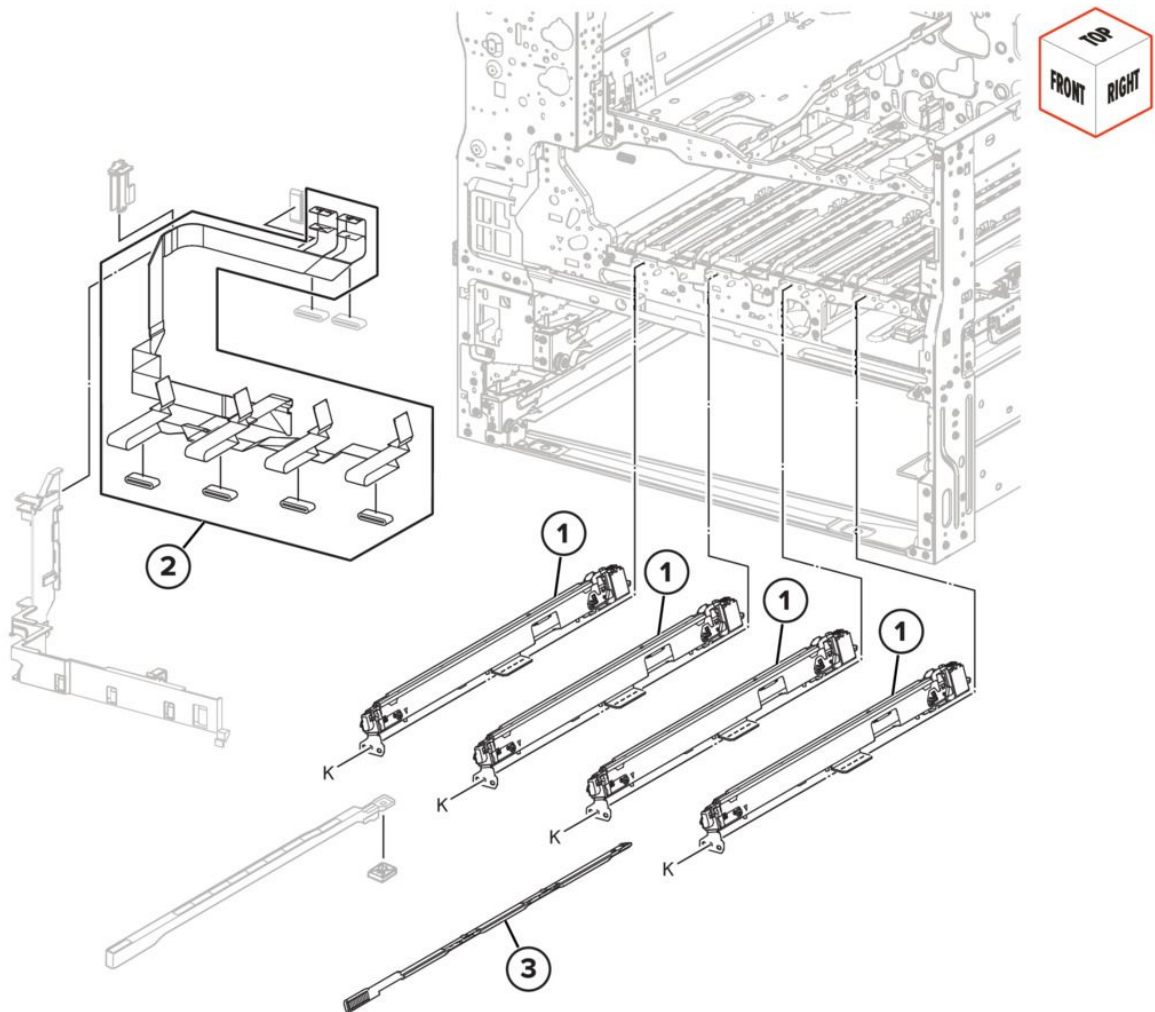
Control panel



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4351	1	1	Control panel	See "Control panel removal" on page 1165
2	41X3707	1	1	Control panel hinge bracket	--
3	41X4234	1	1	Control panel base cover	See "Control panel base cover removal" on page 1171
4	41X4457	1	1	Control panel hinge cover	See "Control panel hinge cover removal" on page 1169
5	41X4501	1	1	Control panel USB	See "Control panel USB removal" on page 1177
6	41X4503	1	1	Control panel headphone jack	See "Control panel headphone jack removal" on page 1176
7	41X4502	1	1	Control panel FFC	--

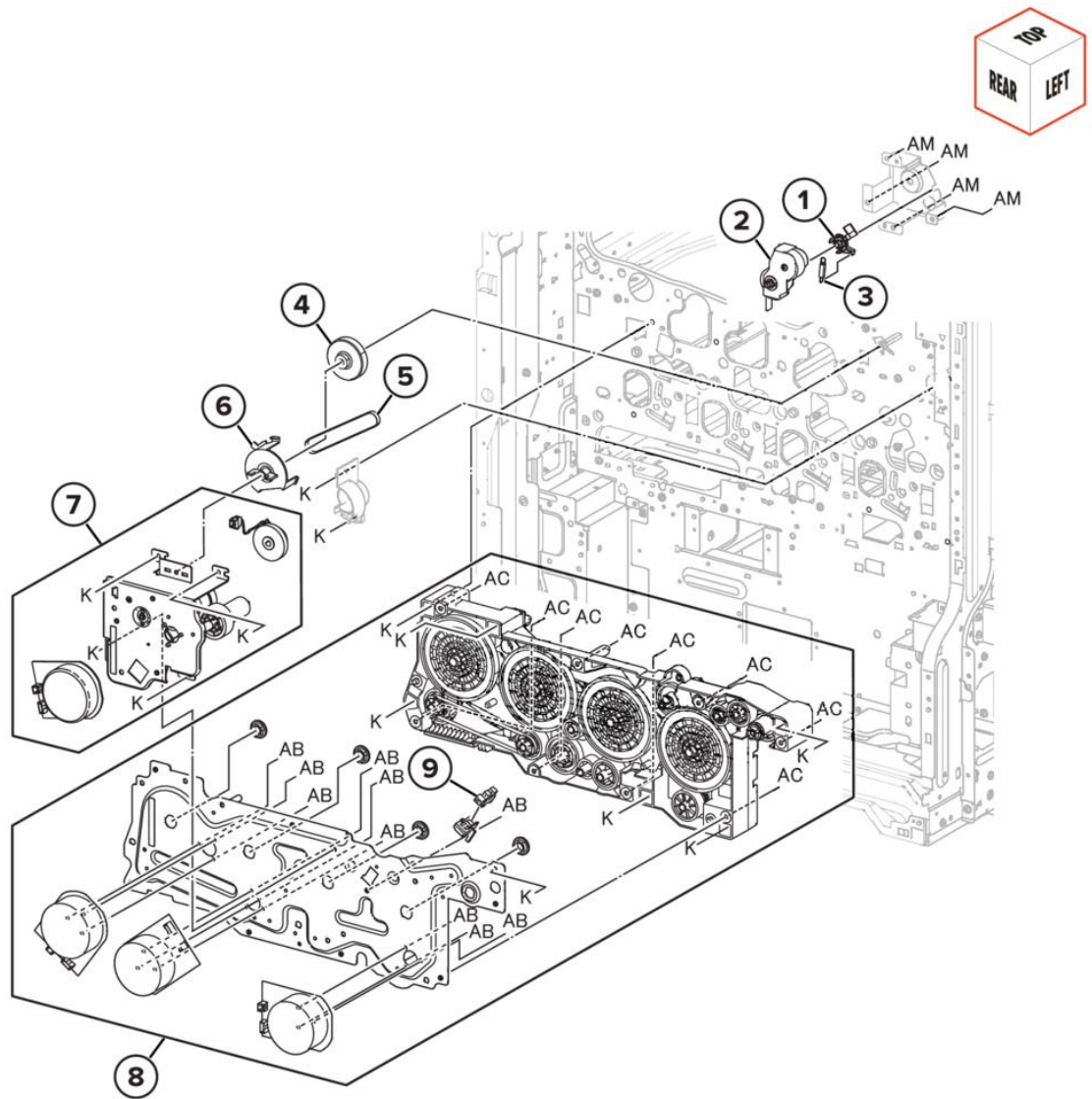
Printhead



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3292	4	1	Printhead (CMYK)	See "Printhead (CMYK) removal" on page 1190
2	41X4213	1	1	Printhead cable	--
3	41X3295	1	1	Printhead cleaner	--

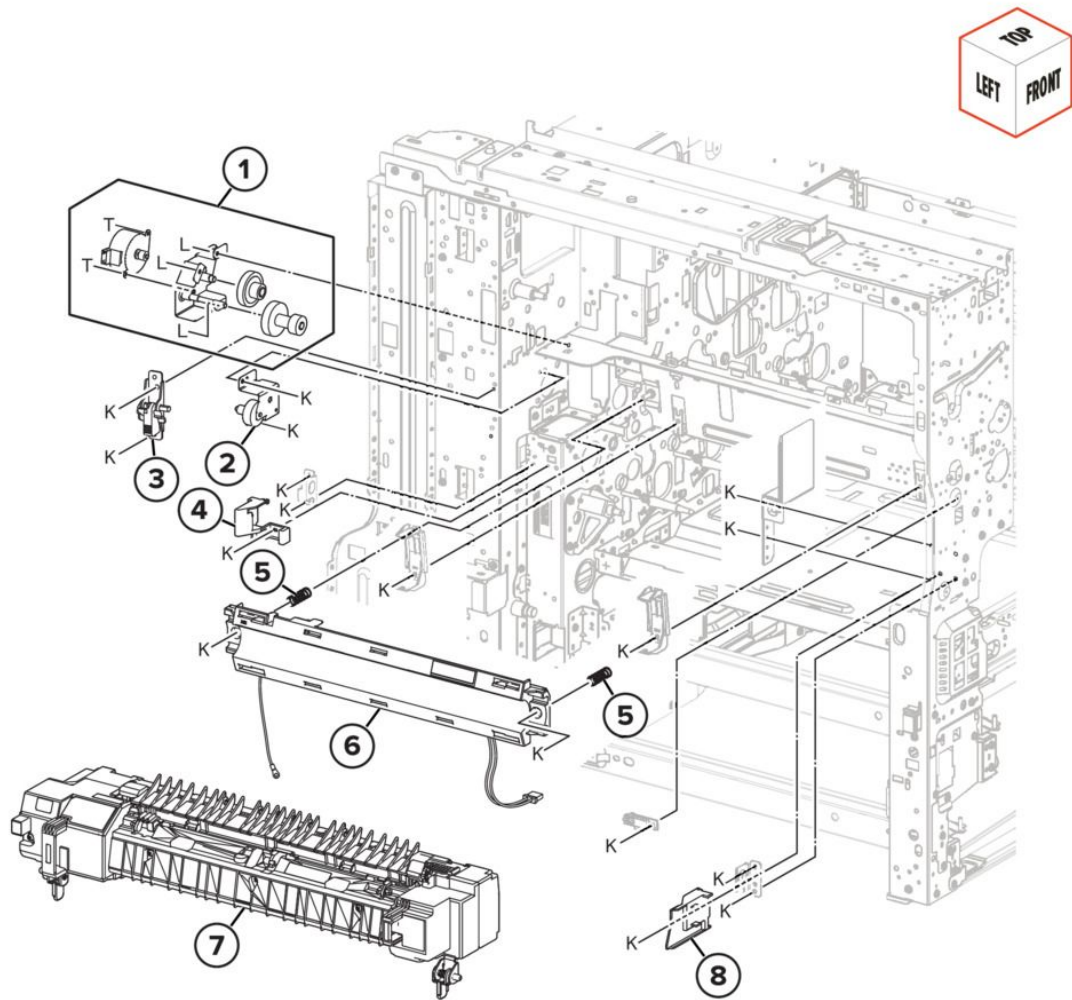
Main drive



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3297	4	1	Fuser feed bracket spacer	--
2	41X3296	1	1	Fuser feed bracket	--
3	41X3298	1	1	Fuser feed bracket spring	--
4	41X3299	1	1	Fuser drive gear	--
5	41X3301	1	1	Exit 1 drive belt	See "Exit 1 drive belt removal" on page 1263
6	41X3300	1	1	Flange	--
7	41X3304	1	1	Motor (fusing drive)	See "Motor (fusing drive) removal" on page 1243
8	41X3302	1	1	Main drive	See "Main drive removal" on page 1257
9	40X7403	1	1	Sensor (first transfer roll retract)	--

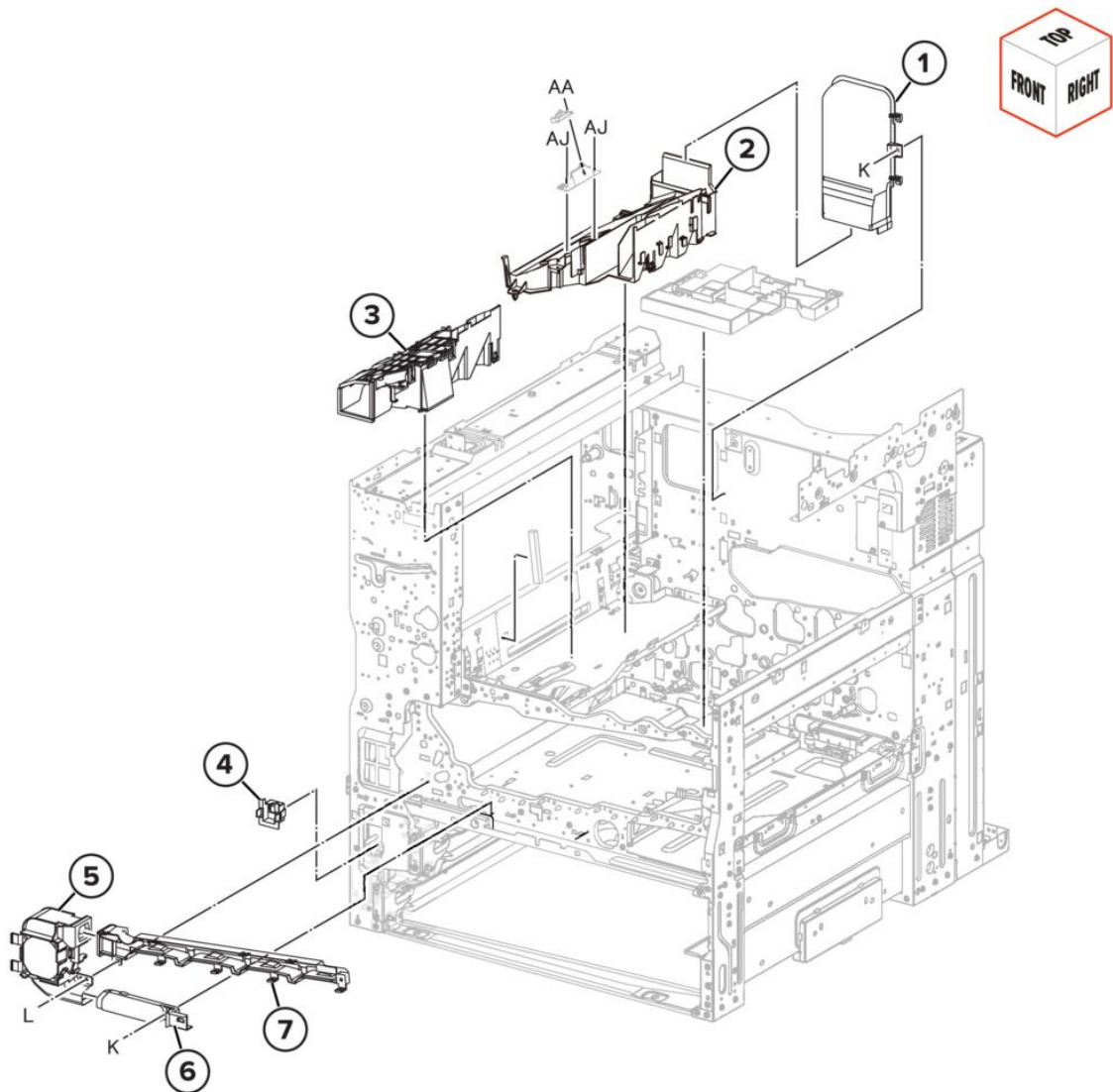
Fuser



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3340	1	1	Motor (fuser pressure roller)	--
2	41X3341	1	1	Retract gear assembly	--
3	41X3350	1	1	Fuser lock	--
4	41X3344	1	1	Fuser rear stopper	--
5	41X3342	1	1	Induction heater spring	--
6	41X3347	1	1	Fuser induction heater (100 V)	--
6	41X3346	1	1	Fuser induction heater (200 V)	--
7	41X3345	1	1	Fuser	See "Fuser removal" on page 1052
8	41X3343	1	1	Fuser front stopper	--

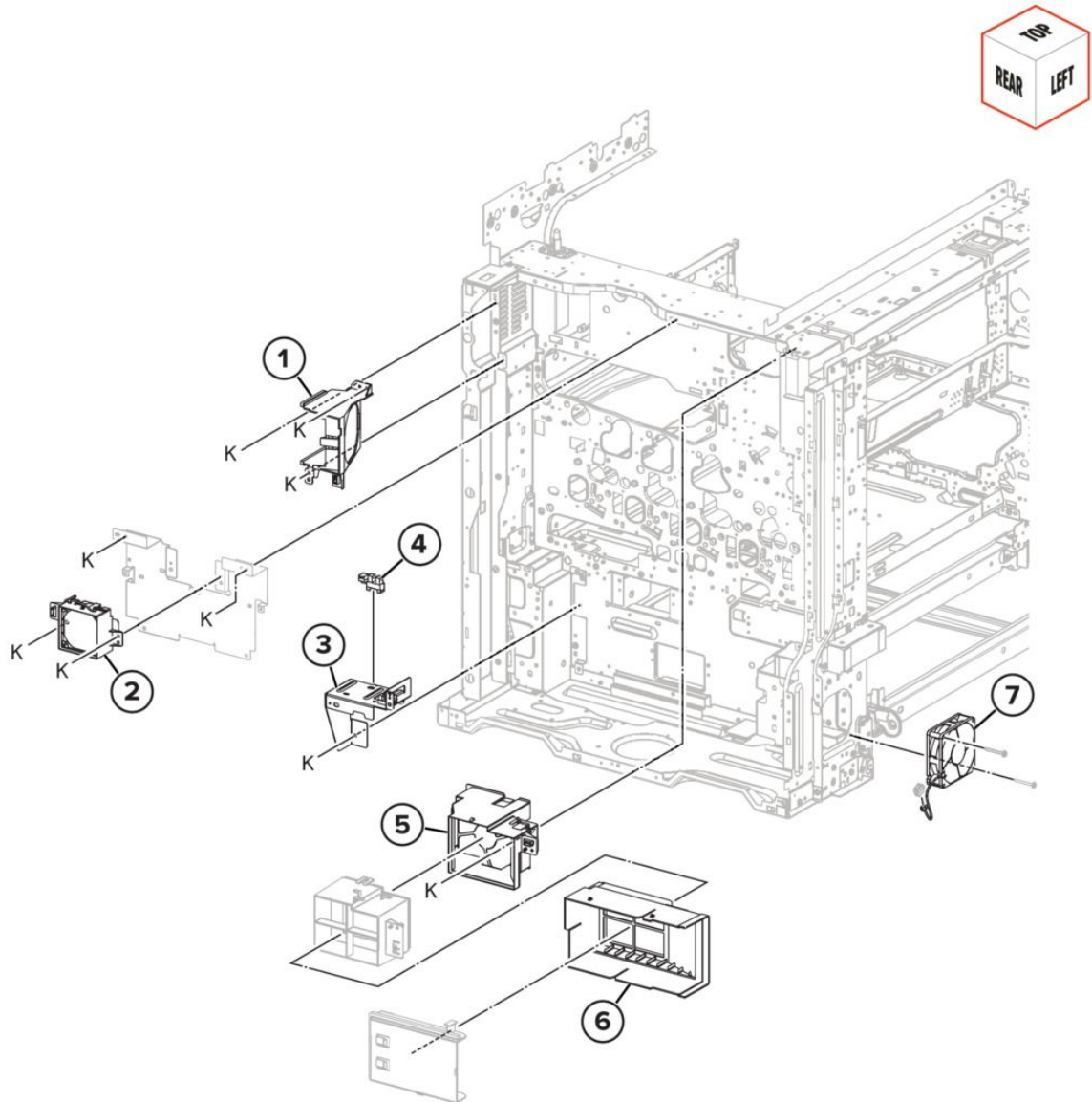
Fuser 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3307	1	1	Fuser exhaust duct 4	--
2	41X3306	1	1	Fuser exhaust duct 1	--
3	41X3311	1	1	Toner cartridge fan	--
4	41X3308	1	1	Sensor (temperature and humidity)	--
5	41X3312	1	1	Front left cooling fan	--
6	41X3305	1	1	Front left cooling fan duct 1	--
7	41X3313	1	1	Front left cooling fan duct 2	--

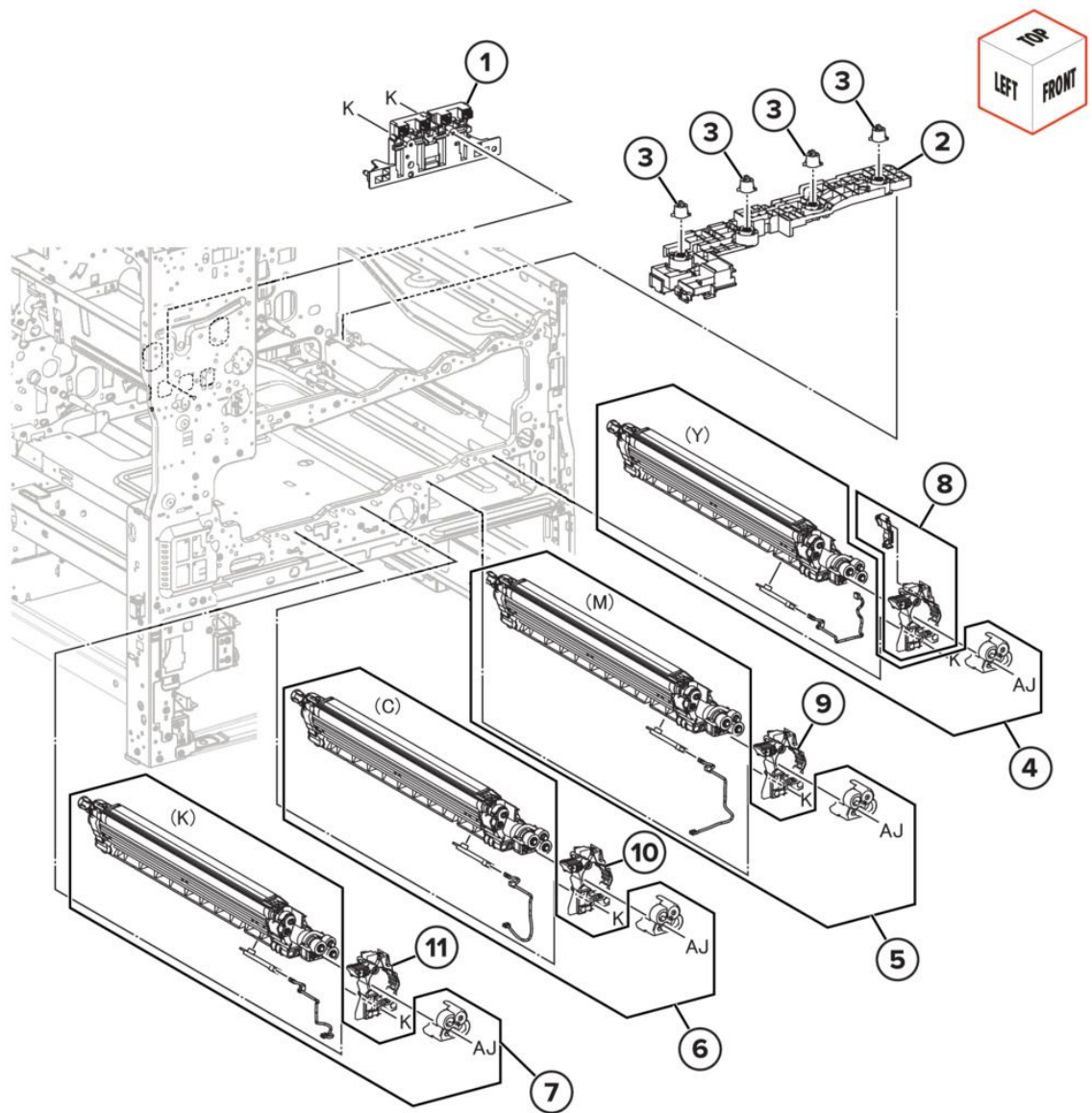
Fuser 3



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3318	1	1	Toner cartridge exhaust fan	--
2	41X3317	1	1	Fuser power supply cooling fan	--
3	41X4519	1	1	Waste toner bottle guide with sensor	--
4	41X3082	1	1	Sensor (waste toner bottle position)	See "Sensor (waste toner bottle position) removal" on page 1247
5	41X3315	1	1	Fuser fan	--
6	41X3314	1	1	Fuser exhaust duct 2	--
7	41X3316	1	1	LVPS fan	--

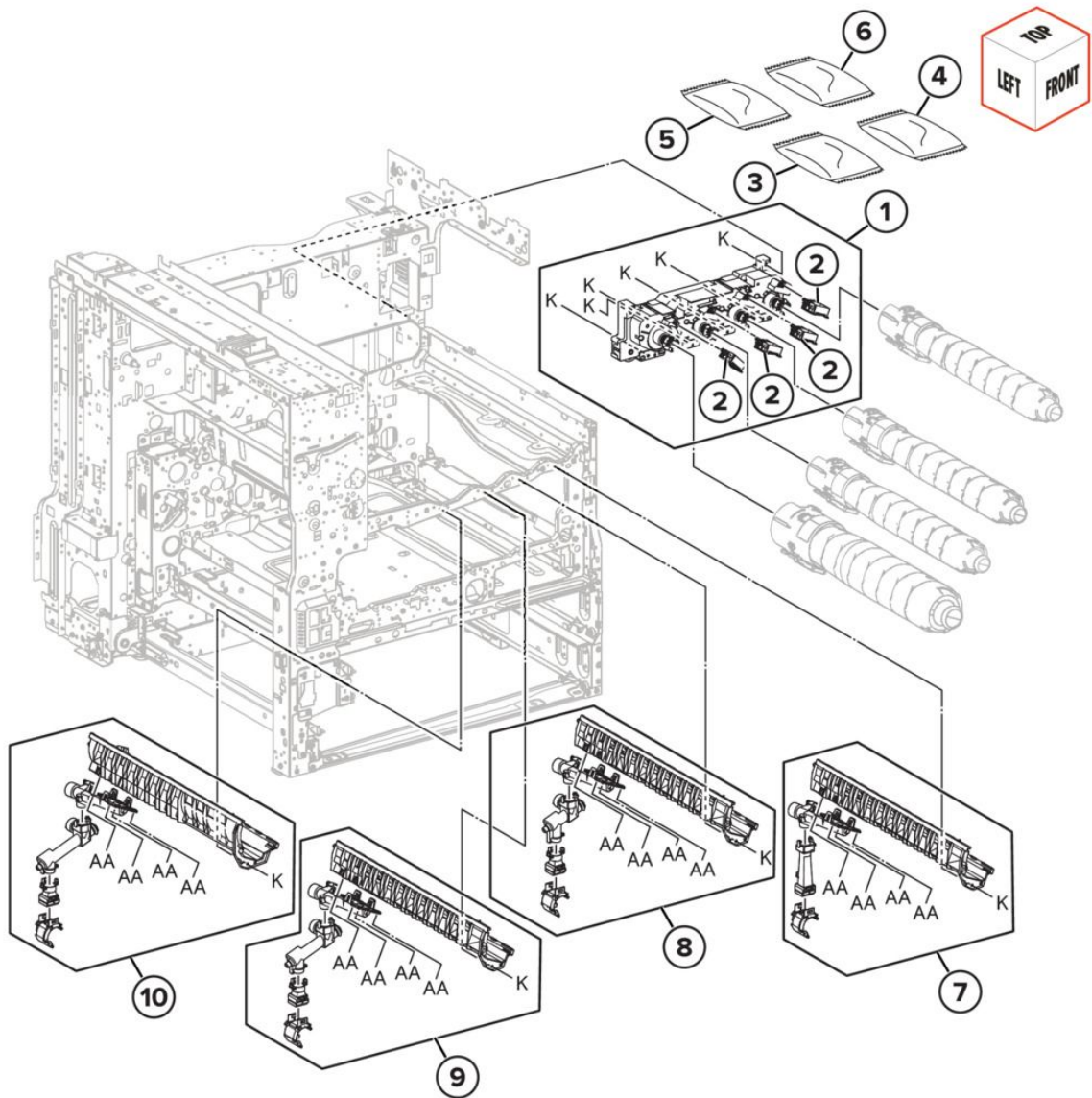
Developer 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3319	1	1	Developer high voltage contact	See "Developer high voltage contact removal" on page 1270
2	41X3321	1	1	Plunger (CMYK)	See "Plunger (CMYK) removal" on page 1196
3	41X3320	4	1	Developer contact	--
4	41X3322	1	1	Developer unit Y	See "Developer unit (CMYK) removal" on page 1179
5	41X3322	1	1	Developer unit M	See "Developer unit (CMYK) removal" on page 1179
6	41X3322	1	1	Developer unit C	See "Developer unit (CMYK) removal" on page 1179
7	41X3322	1	1	Developer unit K	See "Developer unit (CMYK) removal" on page 1179
8	41X4266	1	1	Developer Y front cover	--
9	41X4267	1	1	Developer M front cover	--
10	41X4268	1	1	Developer C front cover	--
11	41X4269	1	1	Developer K front cover	--

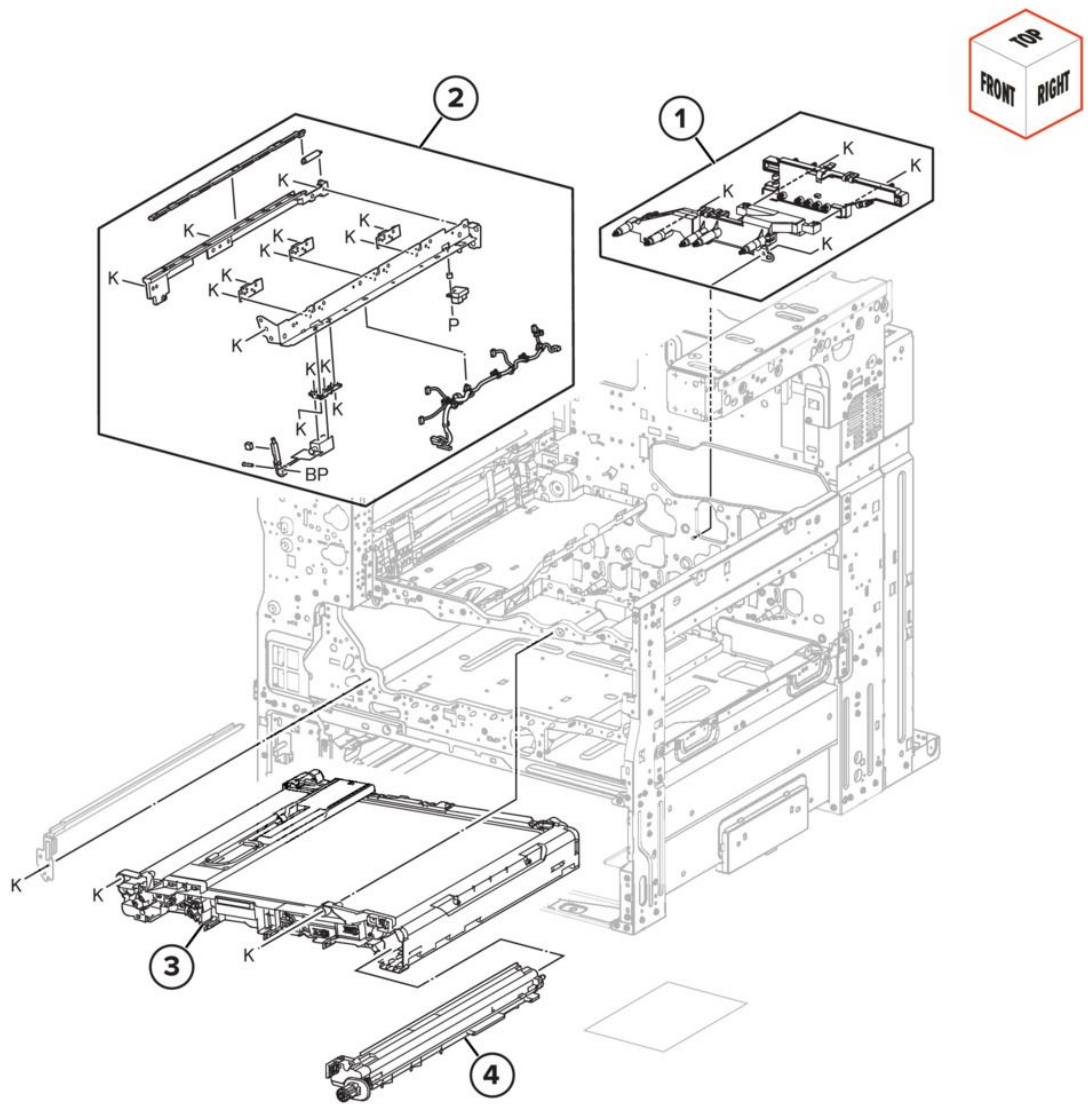
Developer 2



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3326	1	1	Toner dispenser drive assembly	--
2	41X3327	4	1	Toner contact chip	See "Toner contact chip (CMYK) removal" on page 1192
3	41X3332	1	1	Developer carrier Y	--
4	41X3333	1	1	Developer carrier M	--
5	41X3334	1	1	Developer carrier C	--
6	41X3335	1	1	Developer carrier K	--
7	41X3328	1	1	Toner dispenser Y	See "Toner dispenser assembly (CMYK) removal" on page 1193
8	41X3329	1	1	Toner dispenser M	See "Toner dispenser assembly (CMYK) removal" on page 1193
9	41X3330	1	1	Toner dispenser C	See "Toner dispenser assembly (CMYK) removal" on page 1193
10	41X3331	1	1	Toner dispenser K	See "Toner dispenser assembly (CMYK) removal" on page 1193

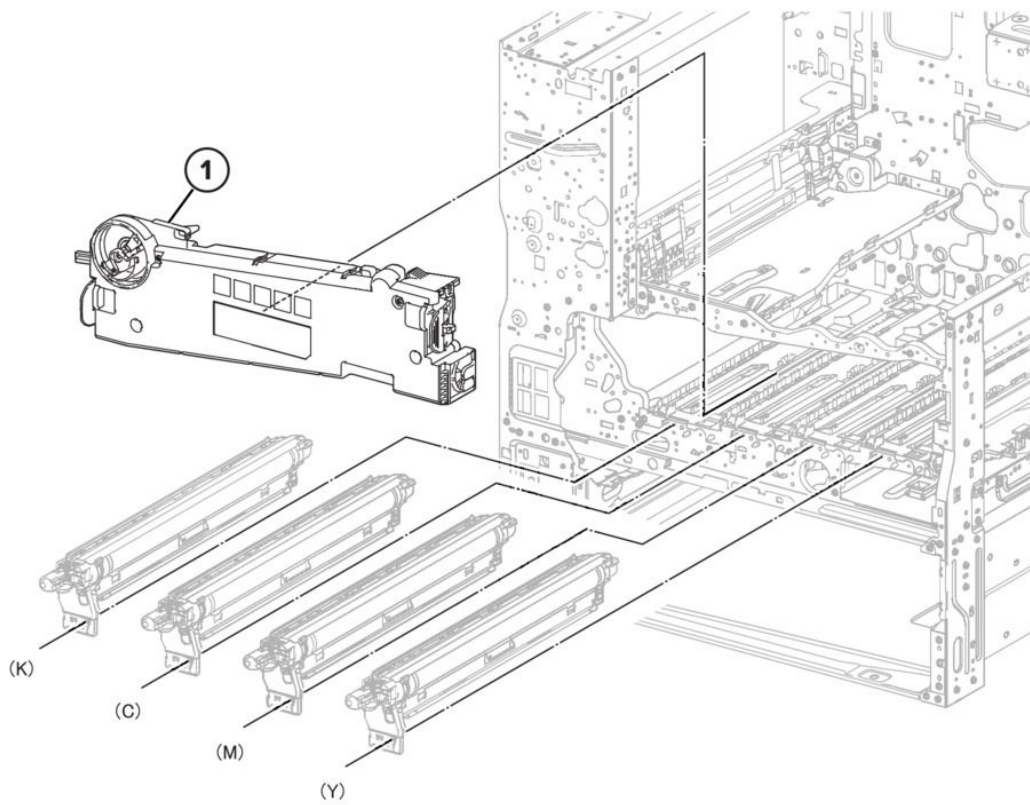
Transfer



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3339	1	1	Transfer module high voltage contact	See "Transfer module high voltage contact removal" on page 1269
2	41X3338	1	1	Image density sensor assembly	--
3	41X3336	1	1	Transfer belt	See "Transfer belt removal" on page 1187
4	41X3337	1	1	Transfer belt cleaner	--

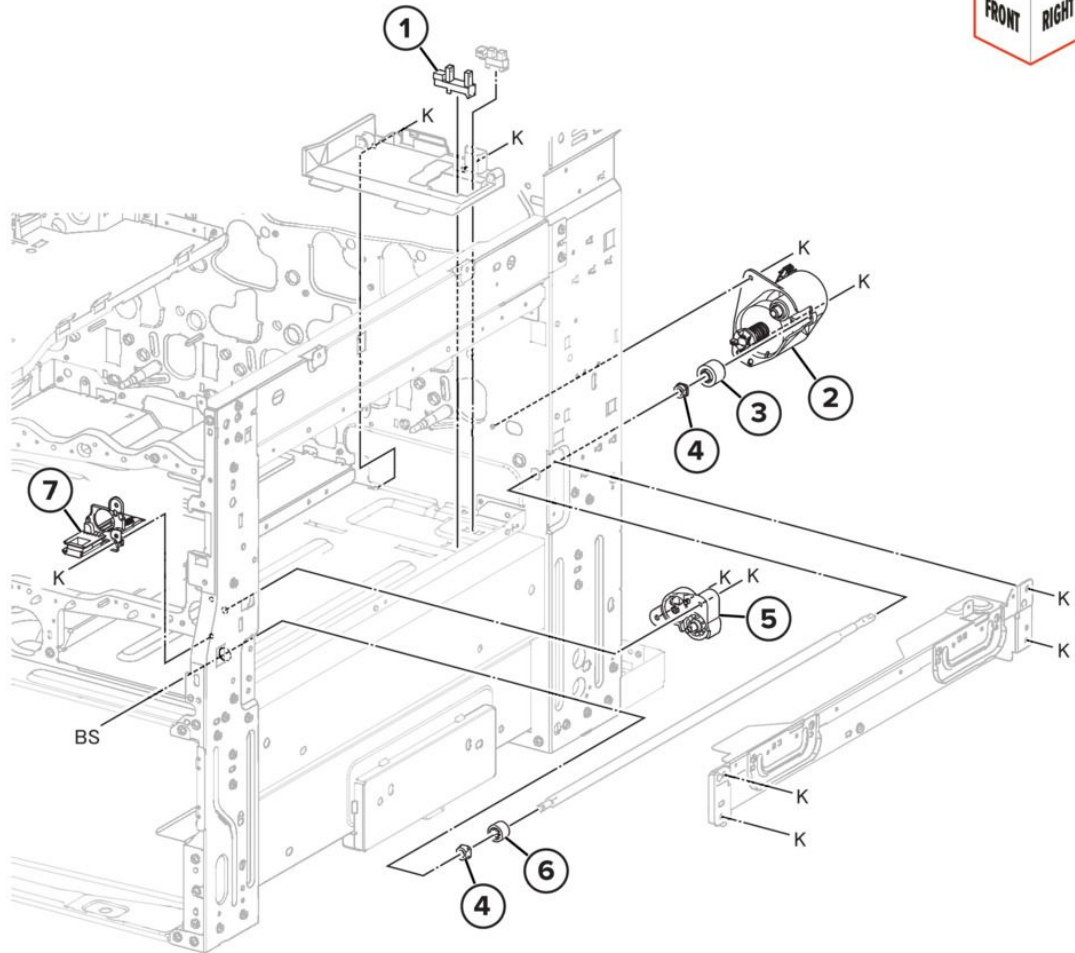
Waste toner 1



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3351	1	1	Waste toner transfer unit	See "Waste toner transfer unit removal" on page 1154

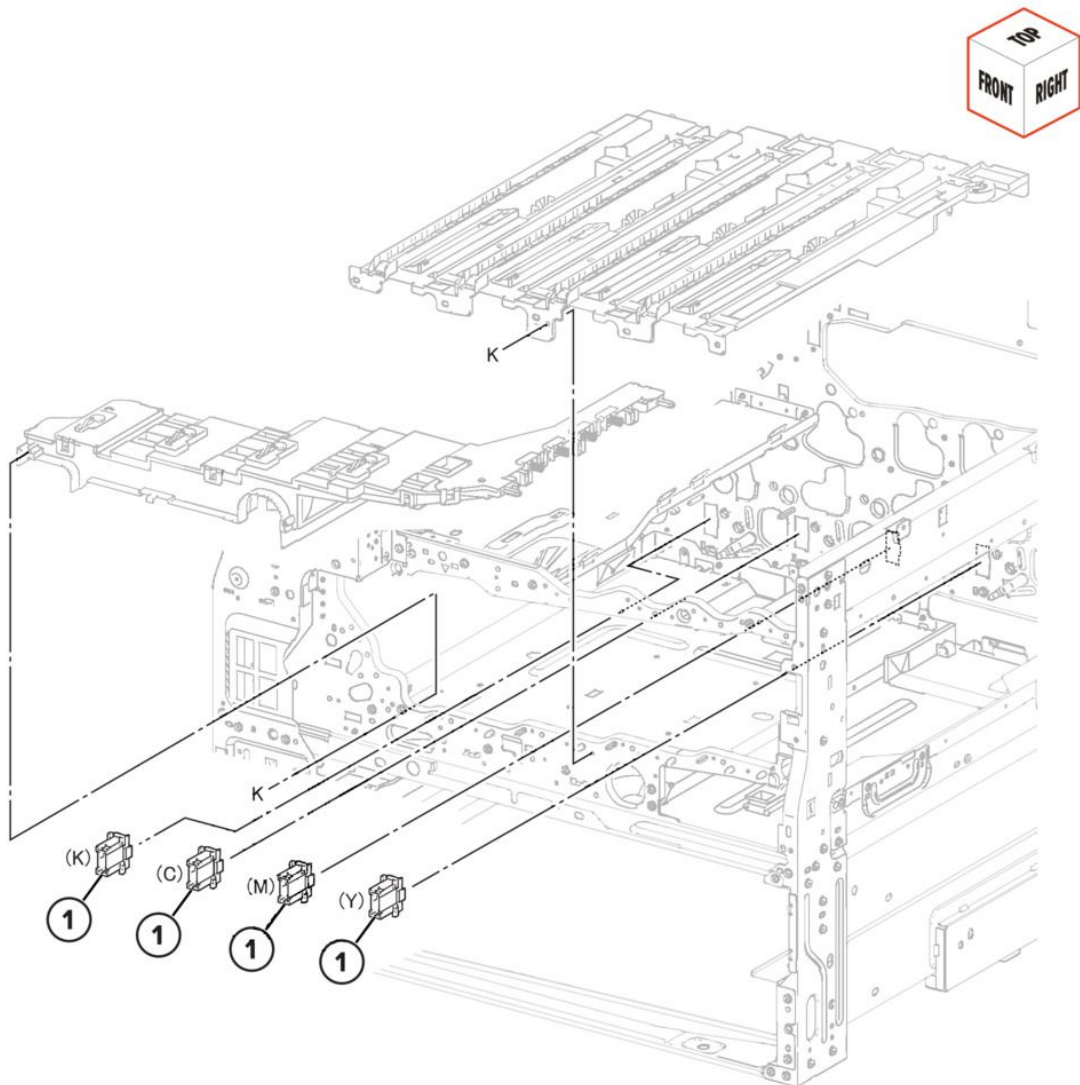
Waste toner 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3355	1	1	Sensor (waste toner bottle full)	--
2	41X3357	1	1	Motor (waste toner bottle agitator)	See "Motor (waste toner bottle agitator) removal" on page 1245
3	41X3354	1	1	Agitator gear	See "Agitator gear removal" on page 1246
4	40X0880	1	1	Agitator shaft bearing	--
5	41X3352	1	1	Waste toner drive gear assembly	--
6	41X3353	1	1	Agitator shaft gear	--
7	41X3358	1	1	Pipe connector	--

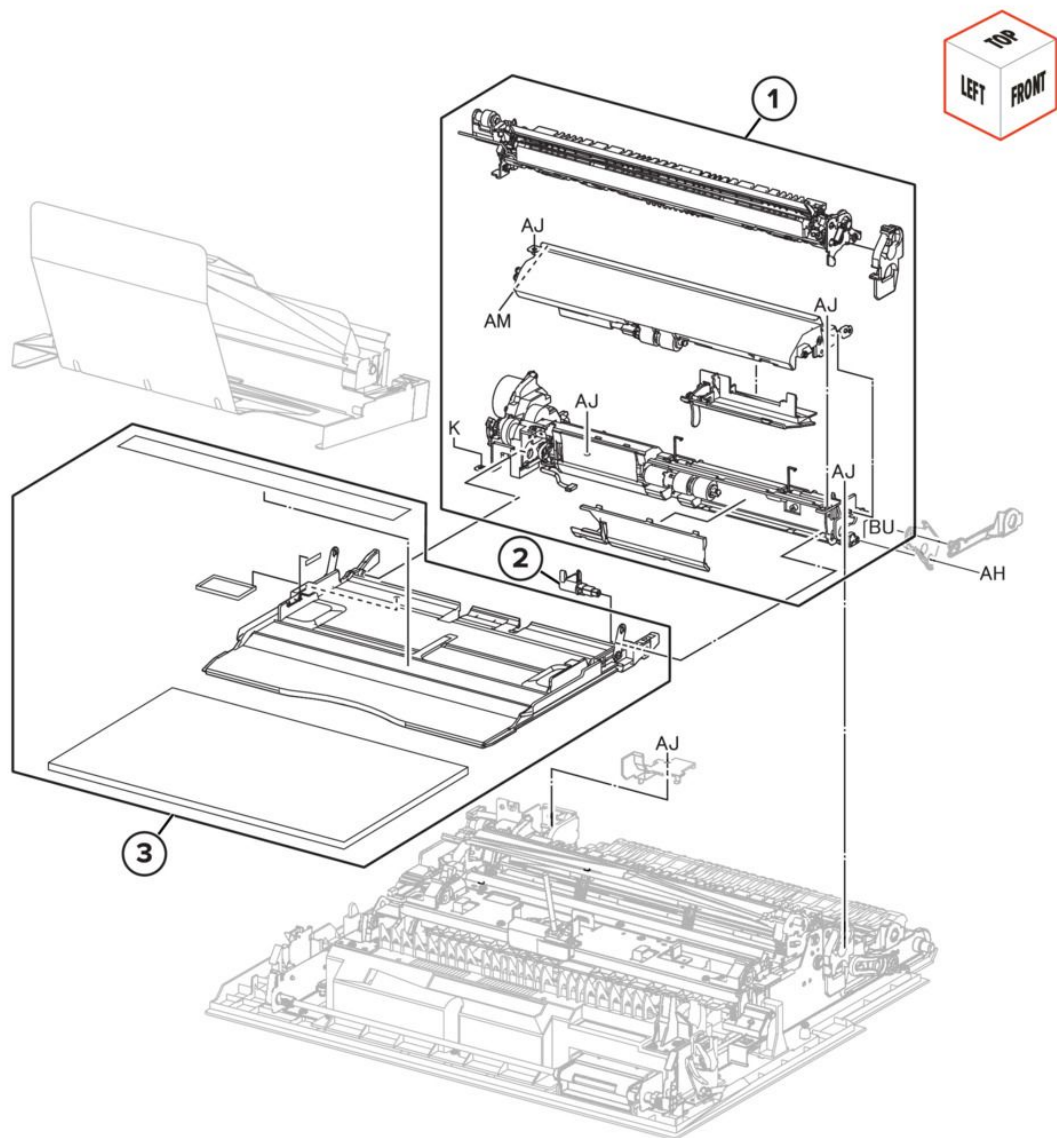
YMCK panel connector



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3635	4	1	YMCK panel connector	See "YMCK panel connector removal" on page 1268

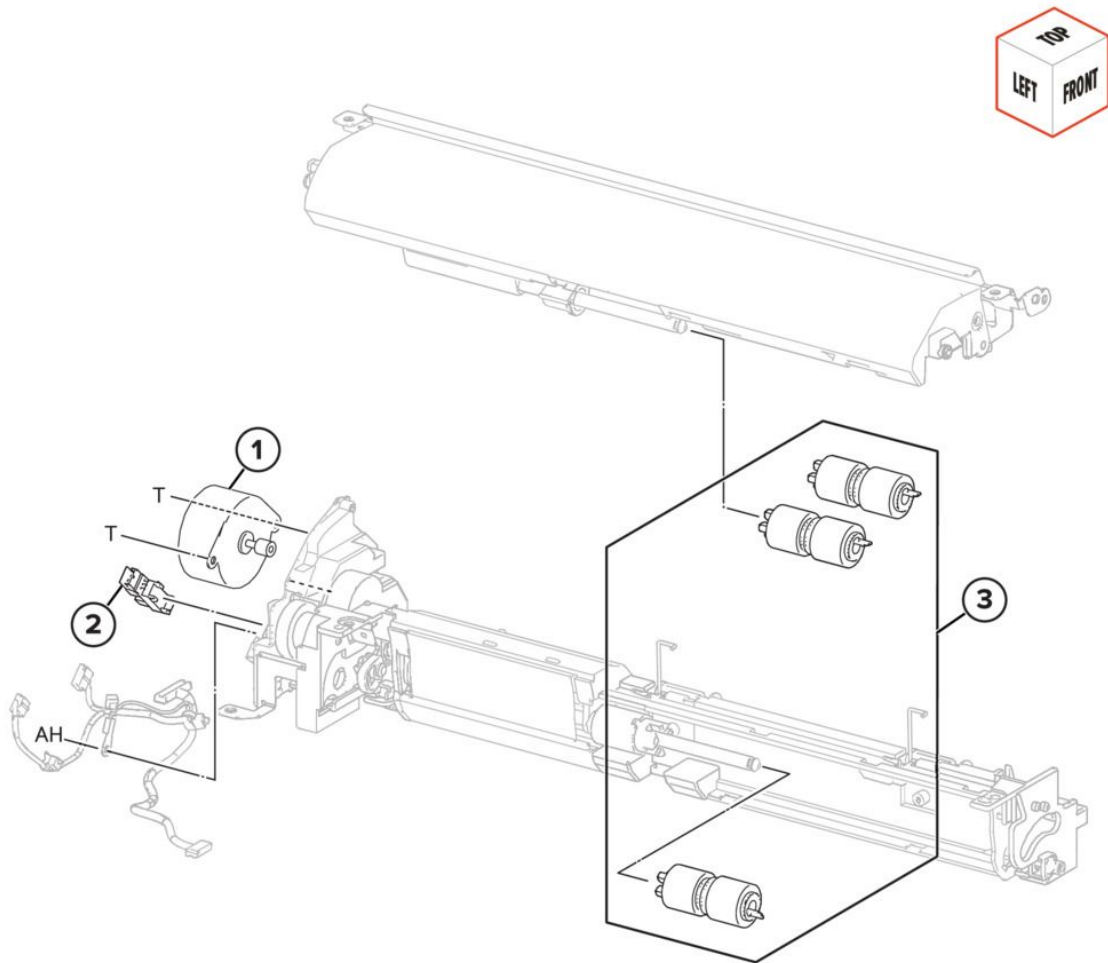
MPF



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3380	1	1	MPF	--
2	41X3378	1	1	MPF tray hinge	See "MPF tray hinge removal" on page 1134
3	41X3379	1	1	MPF tray	See "MPF tray removal" on page 1138

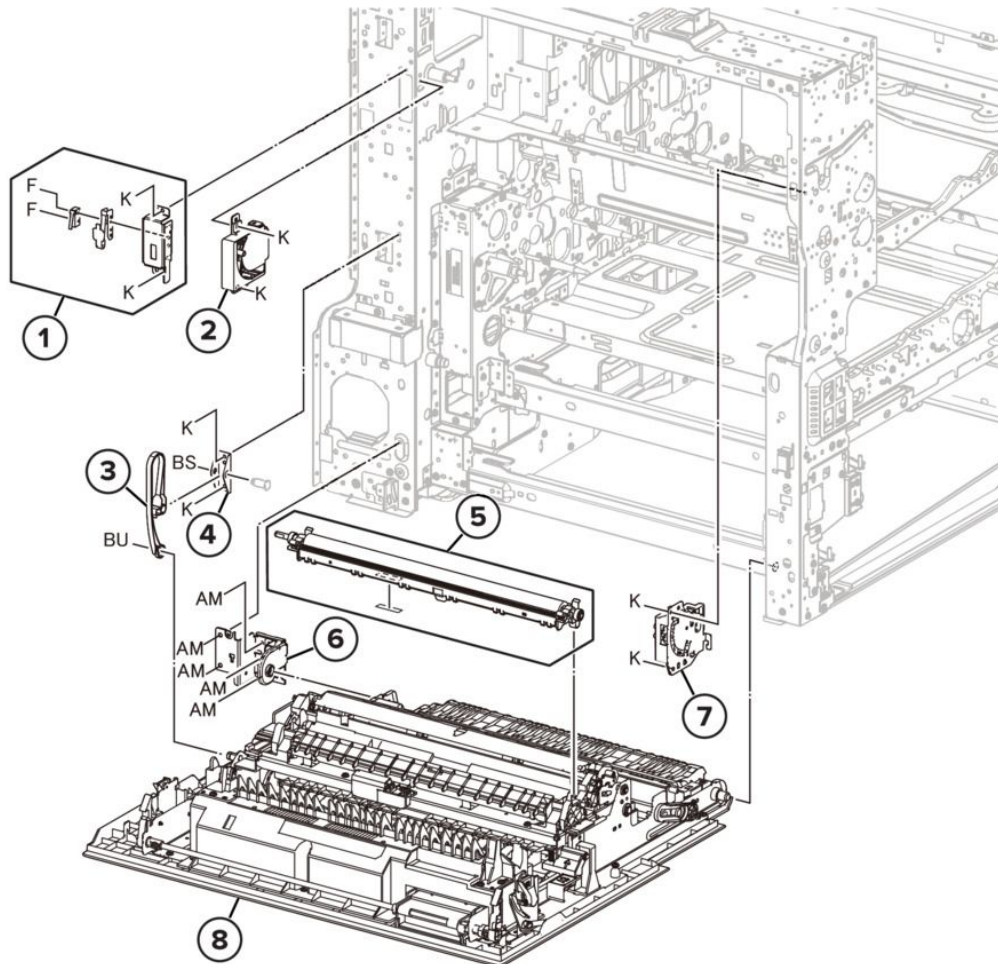
MPF 2



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	40X6658	1	1	Motor (MPF)	--
2	41X3377	1	1	Sensor (pick position)	--
3	41X4111	1	1	MPF rollers <div style="border: 1px solid gray; background-color: #f0f0f0; padding: 5px; margin-top: 10px;">This part has a FRU sheet.</div>	See "MPF rollers removal" on page 1137

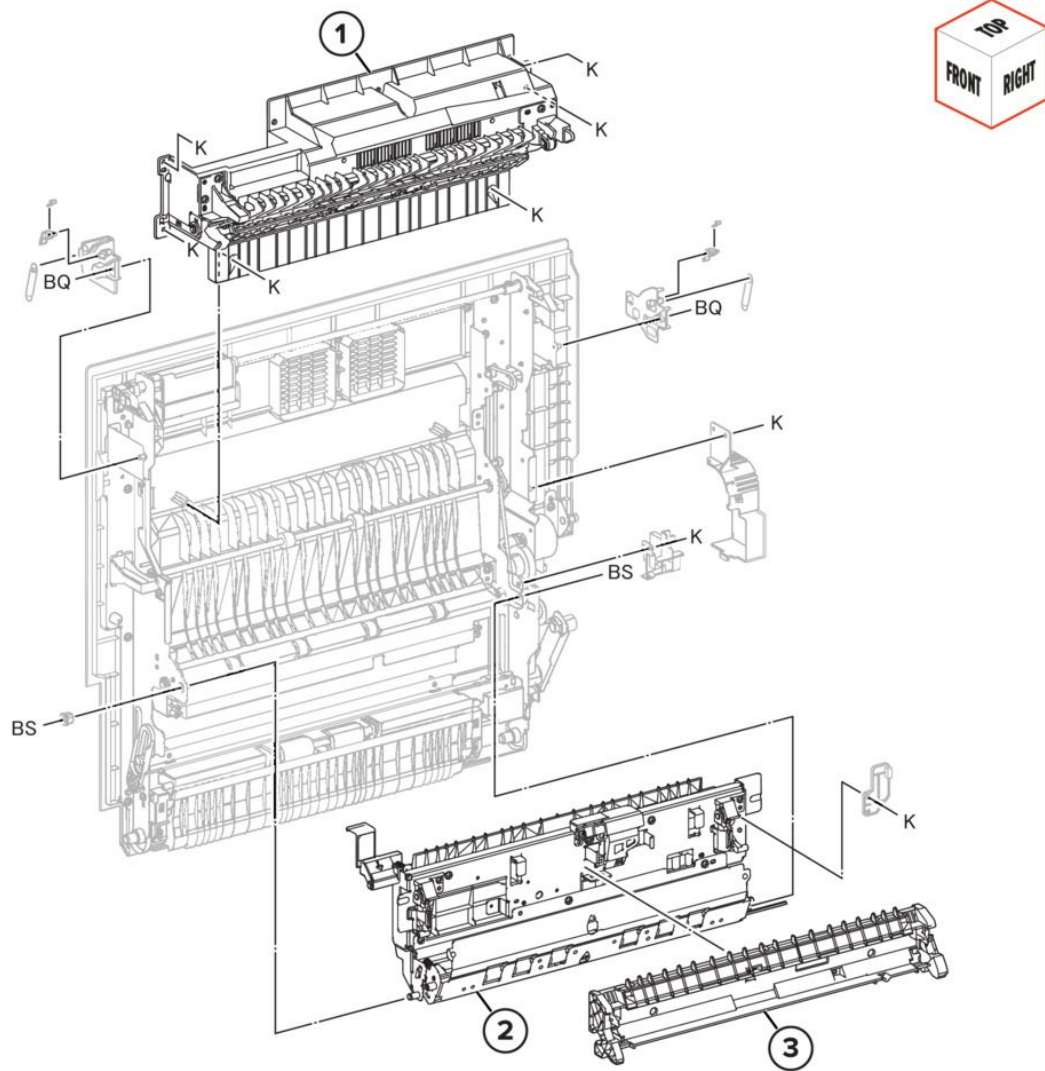
Left jam door components



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3387	1	1	Left door switch	See "Left door switch removal" on page 1132
2	41X3386	1	1	Jam door rear lever	--
3	41X3383	1	1	Jam door support	--
4	41X3384	1	1	Jam door support bracket	--
5	41X4045	1	1	Second transfer roller <div style="border: 1px solid gray; background-color: #f0f0f0; padding: 5px; margin: 5px 0;">This part has a FRU sheet.</div>	See "Second transfer roller housing assembly removal" on page 1069
6	41X3388	1	1	Jam door rear bracket	--
7	41X3385	1	1	Jam door front lever	--
8	41X4233	1	1	Left jam door	See "Left jam door removal" on page 1075

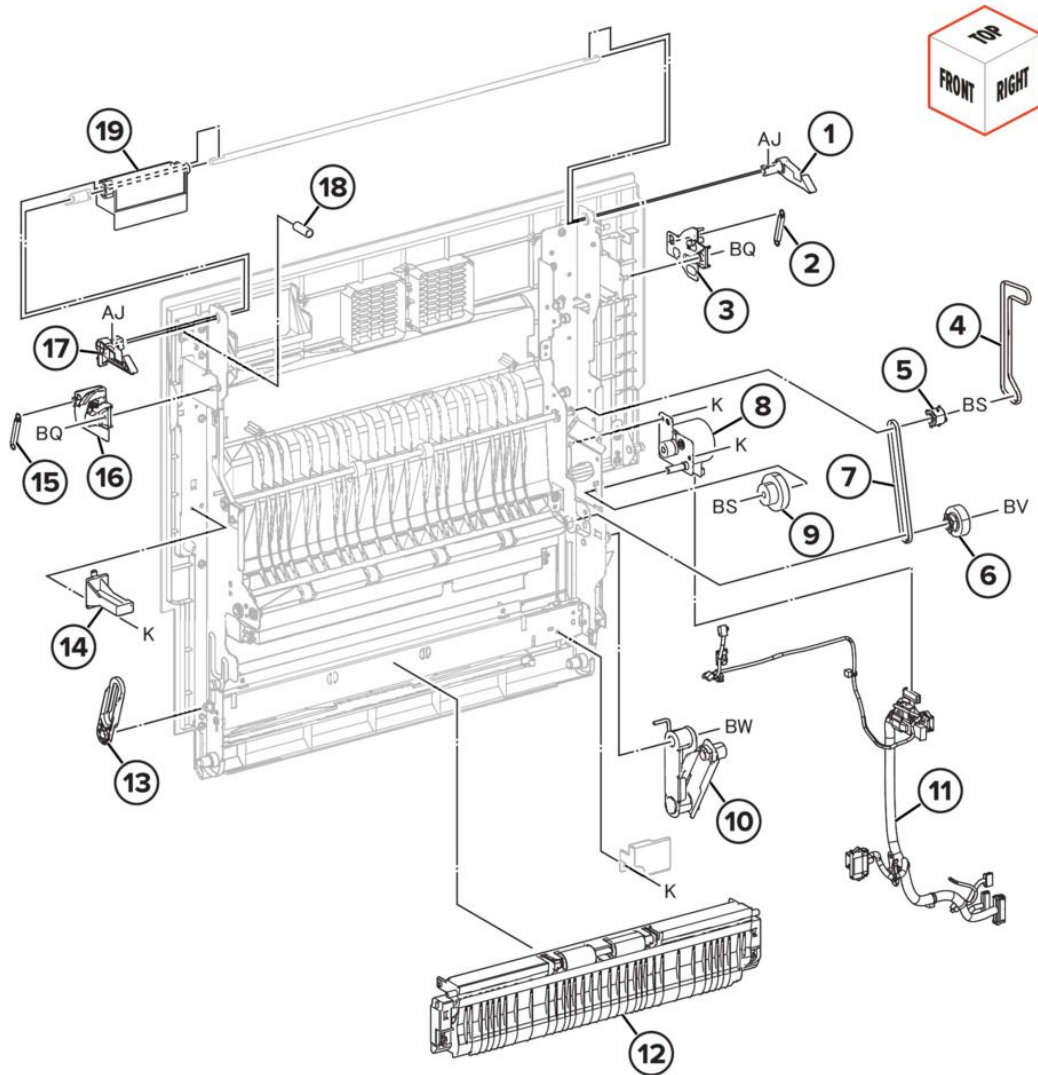
Transport 1



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X4174	1	1	Duplex entrance guide	See "Duplex entrance guide removal" on page 1061
2	41X3391	1	1	Duplex inner guide	See "Duplex inner guide removal" on page 1065
3	41X3390	1	1	Second transfer bracket	--

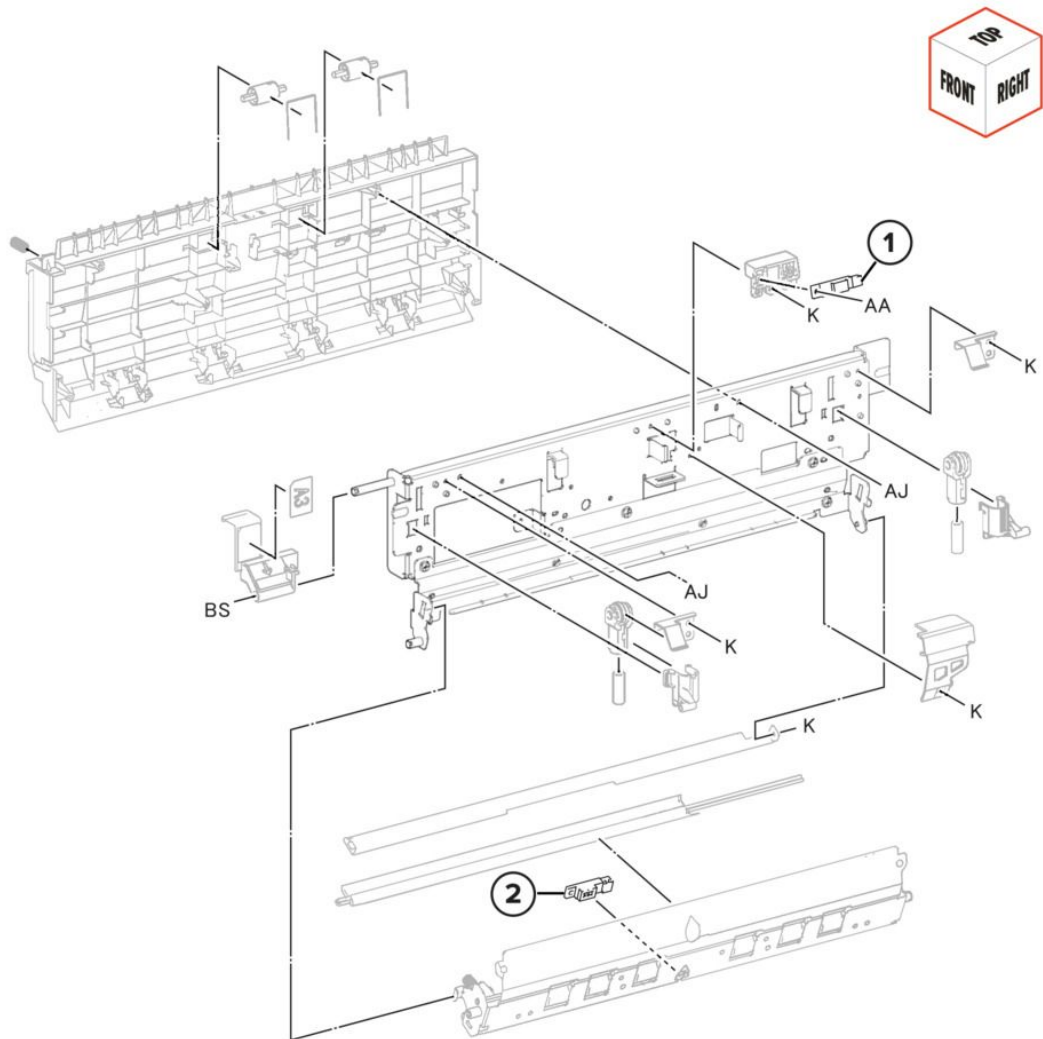
Transport 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3397	1	1	Left door rear latch	--
2	41X3406	1	1	Left door toggle guide spring	--
3	41X3407	1	1	Left door rear toggle guide	See "Rear toggle guide removal" on page 1057
4	41X3403	1	1	Left door belt 2	--
5	41X3398	1	1	Left door pulley 1	--
6	41X3400	1	1	Left door pulley 2	--
7	41X3402	1	1	Left door belt 1	--
8	41X3401	1	1	Motor (duplex)	See "Motor (duplex) removal" on page 1064
9	41X3399	1	1	Left door gear	--
10	41X3409	1	1	Left door link	--
11	41X4238	1	1	Left door cable	--
12	41X3394	1	1	Left door lower guide	--
13	41X3404	1	1	Left door front support	--
14	41X3408	1	1	Left door stopper	--
15	41X3406	1	1	Left door toggle guide spring	--
16	41X3405	1	1	Left door front toggle guide	See "Front toggle guide removal" on page 1056
17	41X3396	1	1	Left door front latch	--
18	41X3411	1	1	Front latch spring	--
19	41X3395	1	1	Left door lock handle	--

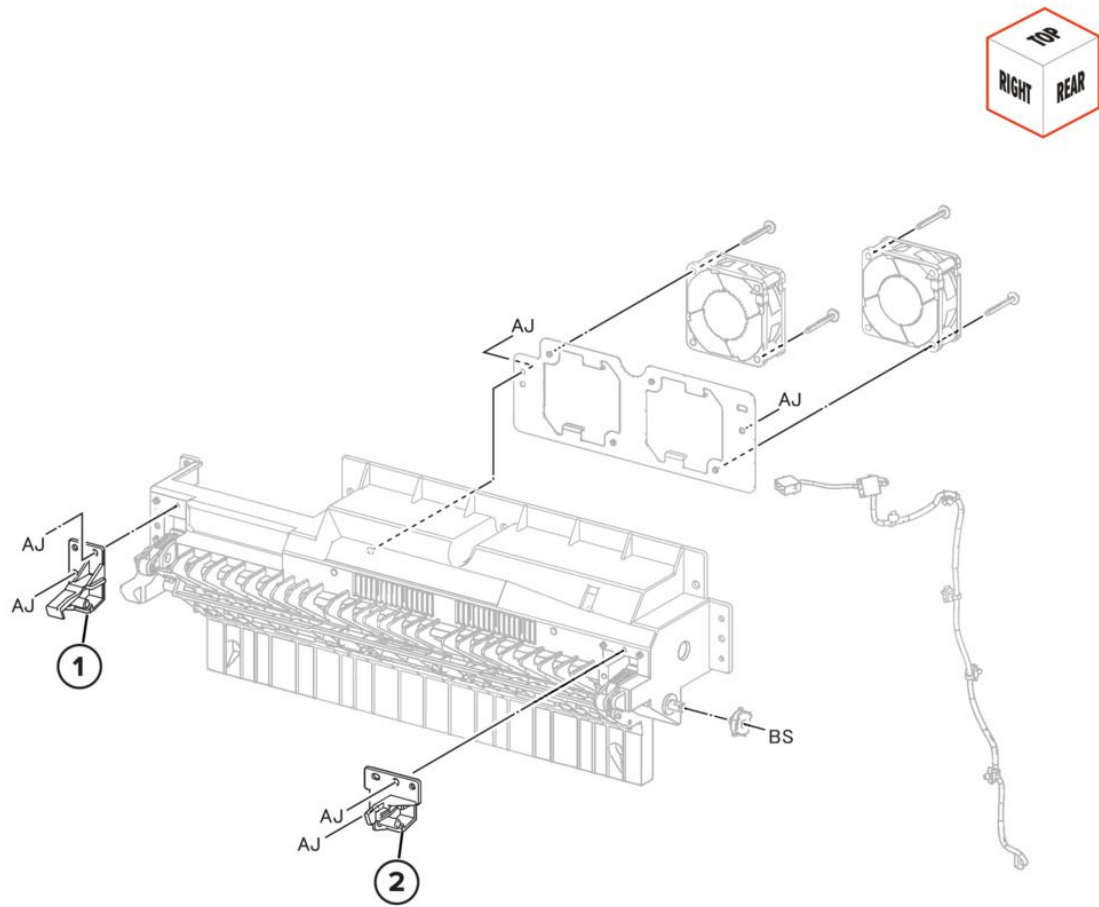
Duplex inner guide



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0921	1	1	Sensor (transfer jam)	See "Sensor (transfer jam) removal" on page 1070
2	40X0589	1	1	Sensor (registration)	--

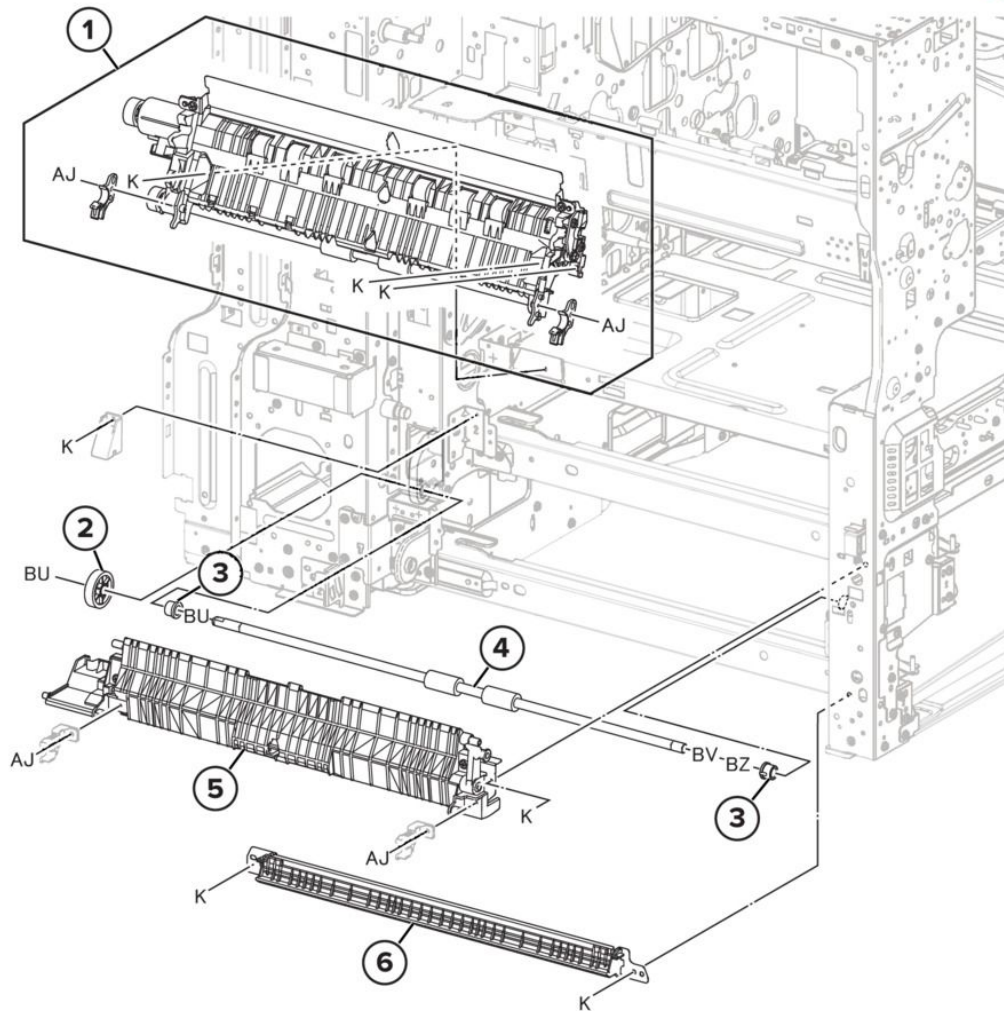
Duplex entrance guide components



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3413	1	1	Jam door rear holder	--
2	41X3412	1	1	Jam door front holder	--

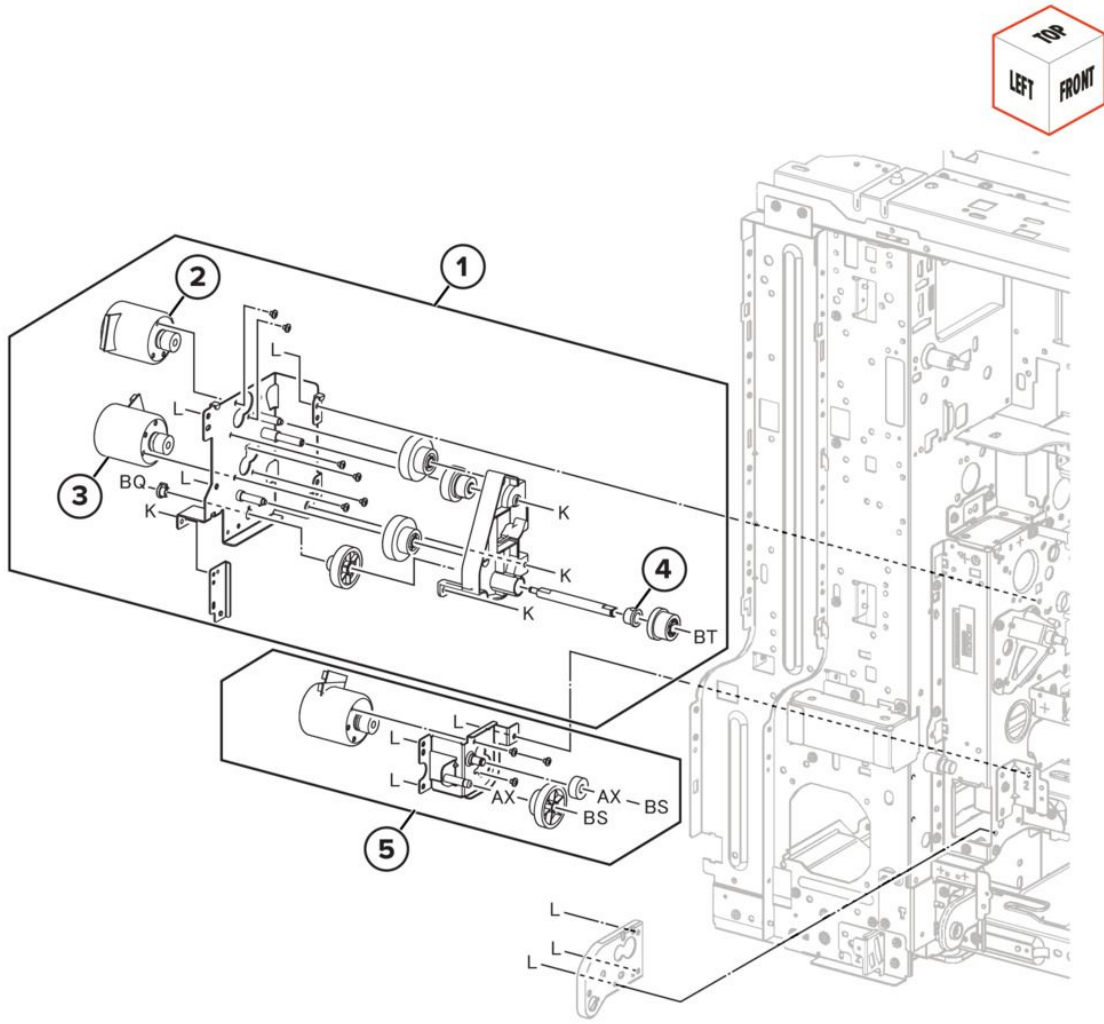
Registration transport



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3416	1	1	Registration transport assembly	See "Registration transport assembly removal" on page 1088
2	41X3419	1	1	Transport roller gear	--
3	41X3420	2	1	Transport roller bearing	--
4	41X3418	1	1	Registration roller	See "Registration roller removal" on page 1092
5	41X3417	1	1	Transport guide	See "Transport guide removal" on page 1087
6	41X3421	1	1	Upper transport guide	--

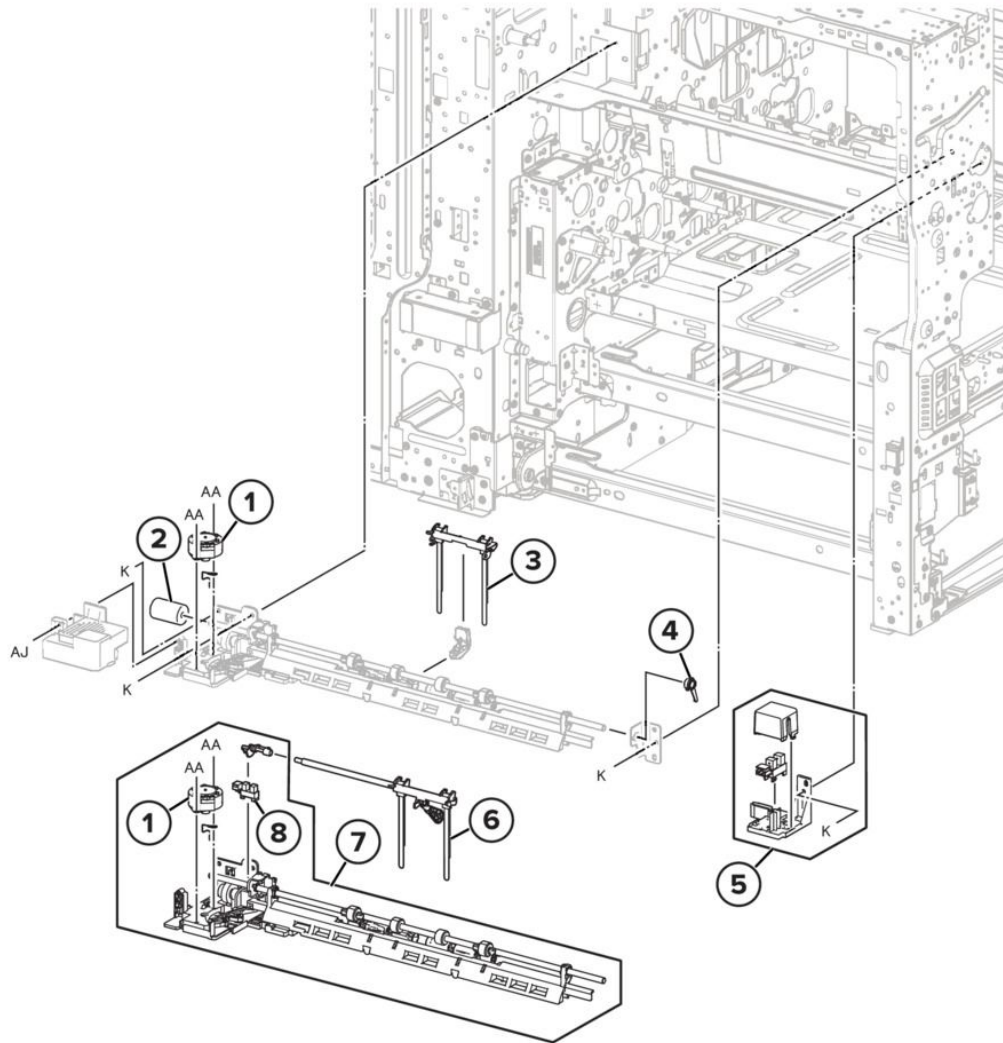
Registration drive



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3422	1	1	Registration drive unit	See "Registration drive unit removal" on page 1248
2	41X3423	1	1	Motor (registration)	--
3	41X3424	1	1	Motor (transport)	--
4	41X3420	1	1	Registration drive bearing	--
5	41X3425	1	1	Transport drive	See "Transport drive removal" on page 1262

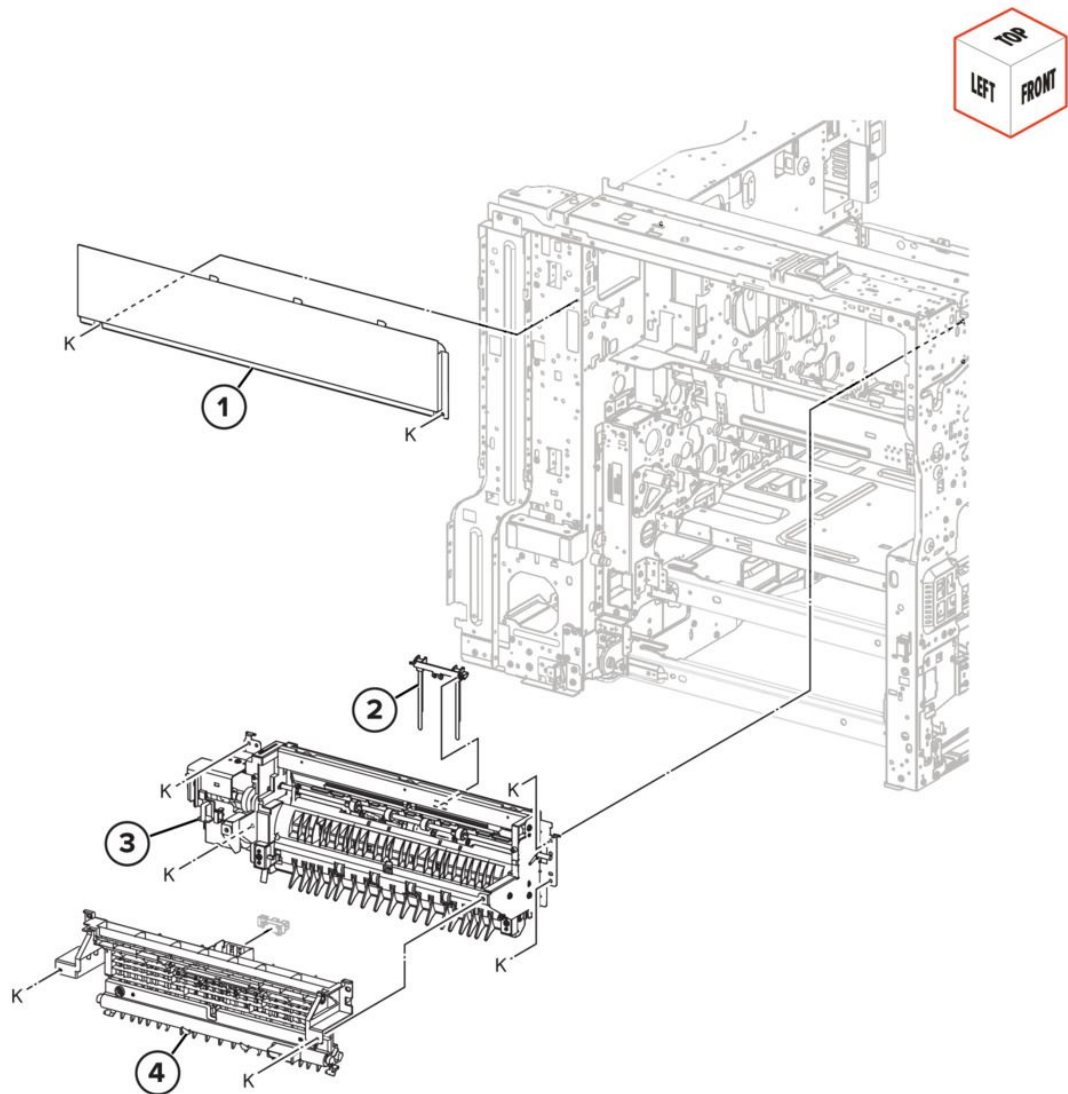
Exit 1 transport components



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3427	1	1	Motor (bin 1 offset 1)	--
2	40X6720	1	1	Lower redrive gear	--
3	41X3430	1	1	Exit 1 paper bail 1	--
4	41X3428	1	1	Exit 1 assembly transport bearing	--
5	41X3433	1	1	Sensor (bin 1 offset home)	See "Sensor (bin 1 offset home) removal" on page 1112
6	41X3432	1	1	Exit 1 paper bail 2	--
7	41X3431	1	1	Exit 1 transport unit	See "Exit 1 transport unit removal" on page 1124
8	41X3377	1	1	Sensor (bin 1 full)	See "Sensor (bin 1 full) removal" on page 1131

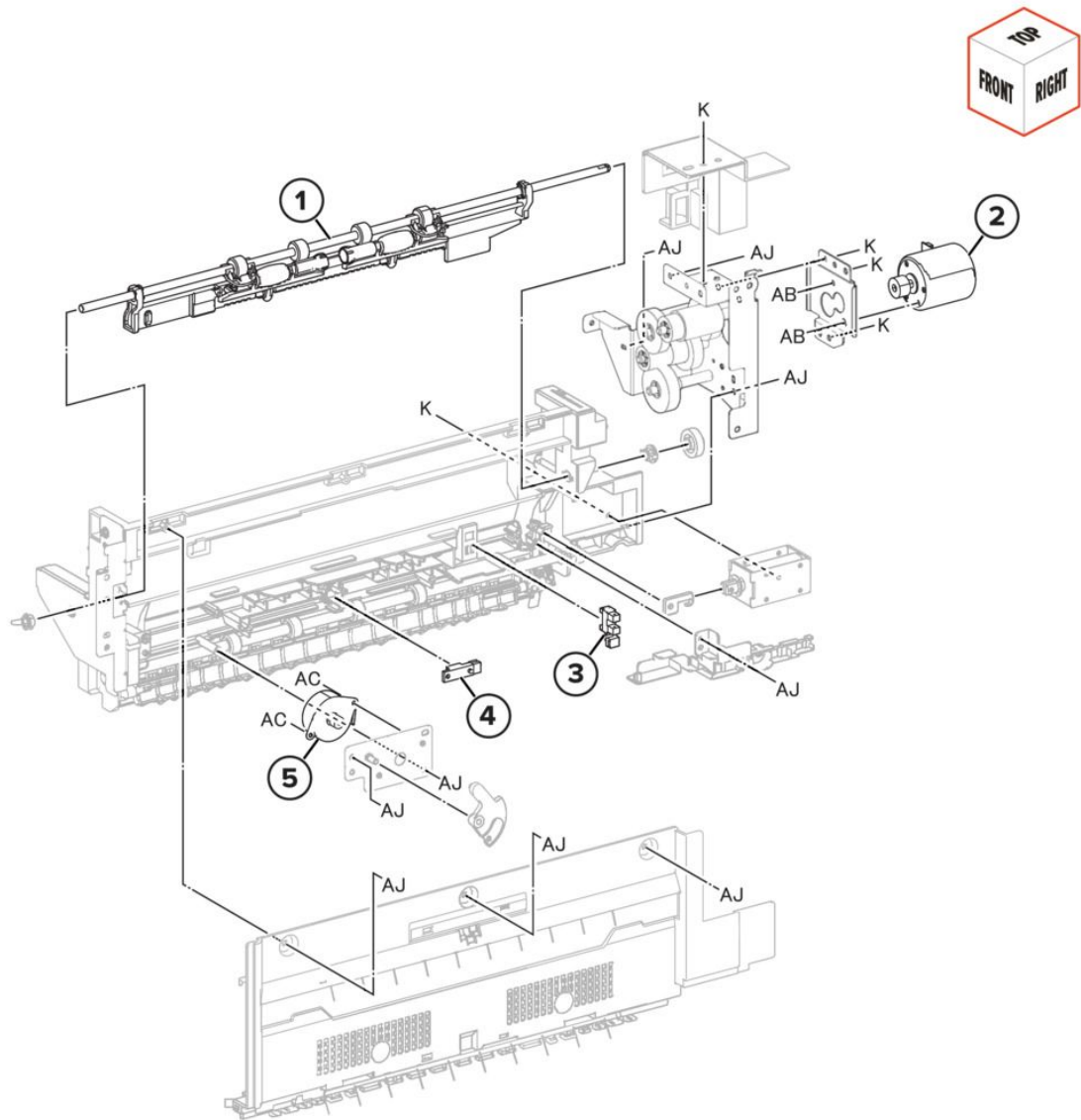
Exit 2 transport components 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3434	1	1	Upper left cover	See "Upper left cover removal" on page 1055
2	41X3437	1	1	Exit 2 paper bail	--
3	41X3435	1	1	Exit 2 transport unit	--
4	41X3436	1	1	Exit 2 transport guide	See "Exit 2 transport guide removal" on page 1099

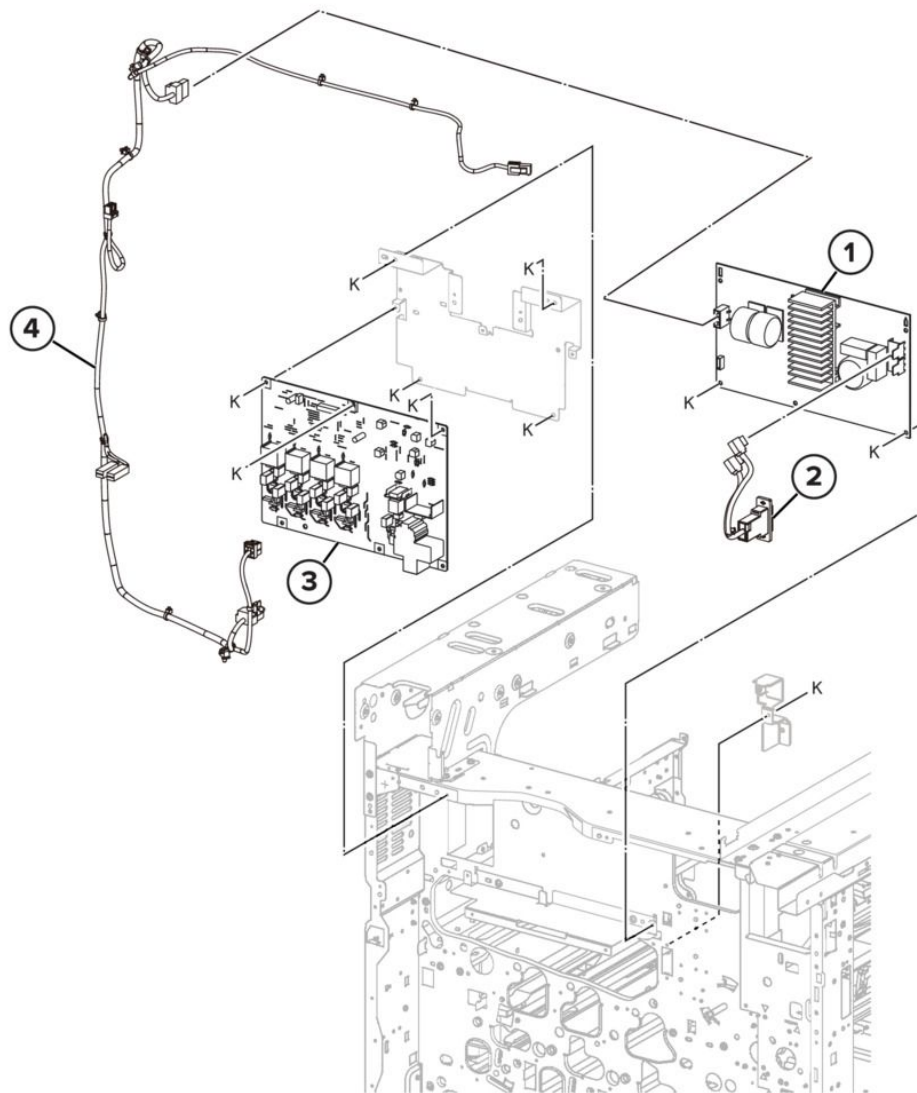
Exit 2 transport components 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3438	1	1	Exit 2 guide	--
2	41X4165	1	1	Motor (bin 2 drive)	See "Motor (bin 2 drive) removal" on page 1102
3	41X3377	1	1	Sensor (bin 2 offset home)	See "Sensor (bin 2 offset home) removal" on page 1114
4	40X0589	1	1	Sensor (bin 2 exit)	See "Sensor (bin 2 exit) removal" on page 1109
5	41X3427	1	1	Motor (bin 2 offset)	See "Motor (bin 2 offset) removal" on page 1105

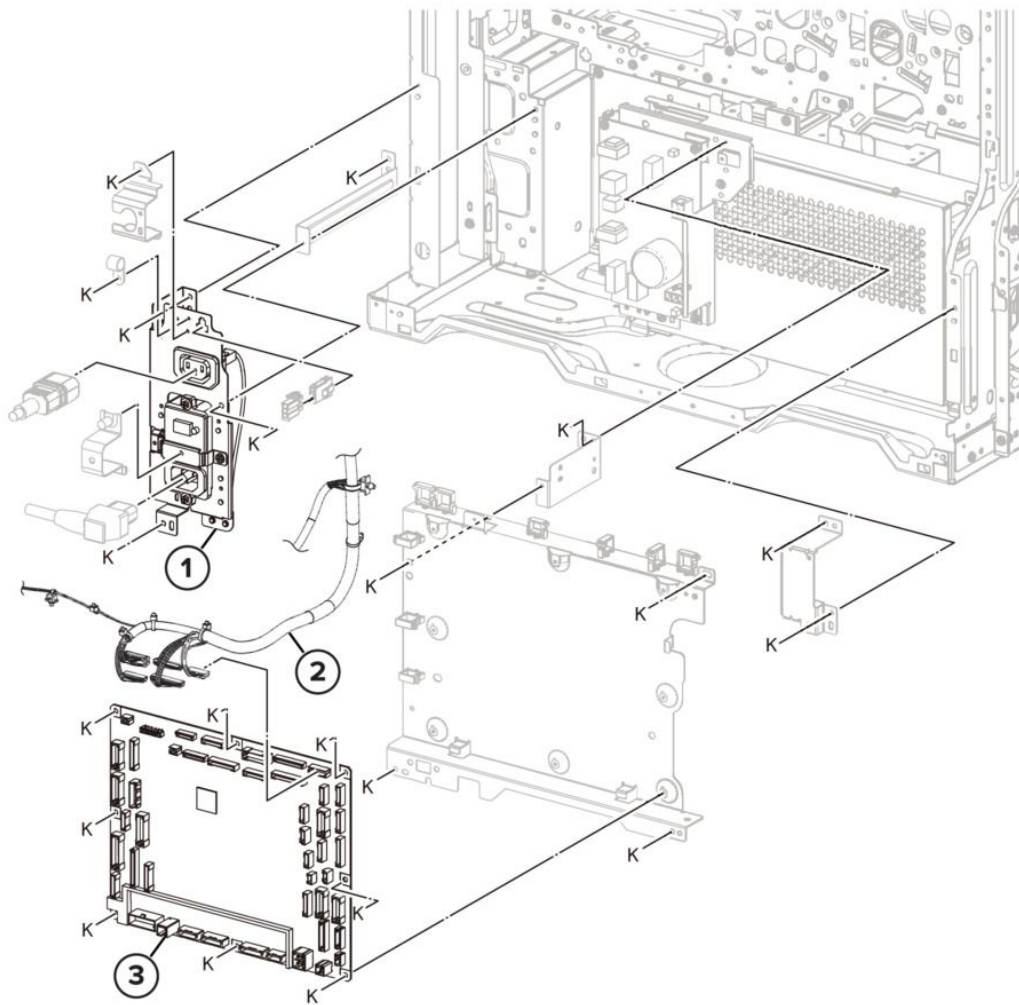
Electronics (rear 1)



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3442	1	1	Induction heater power supply (100V)	See "Induction heater power supply removal" on page 1239
1	41X3443	1	1	Induction heater power supply (220V)	See "Induction heater power supply removal" on page 1239
2	41X3444	1	1	Induction heater power supply cable	--
3	41X3441	1	1	Transfer roller HVPS	See "Transfer roller HVPS removal" on page 1238
4	41X4169	1	1	Wire harness	--

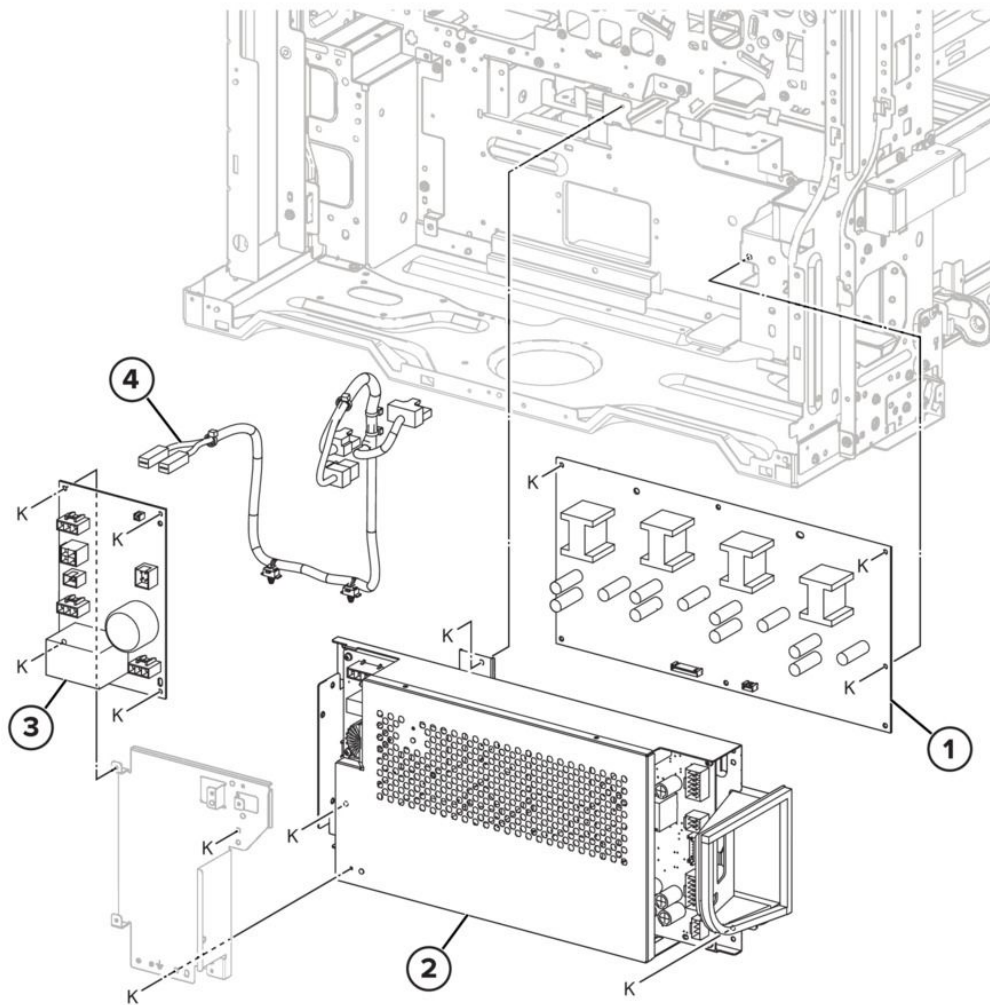
Electronics (rear 2)



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3445	1	1	Power socket	See "Power socket removal" on page 1229
2	41X3447	1	1	Engine board cable 1	--
3	41X3446	1	1	Engine board	See "Engine board removal" on page 1231

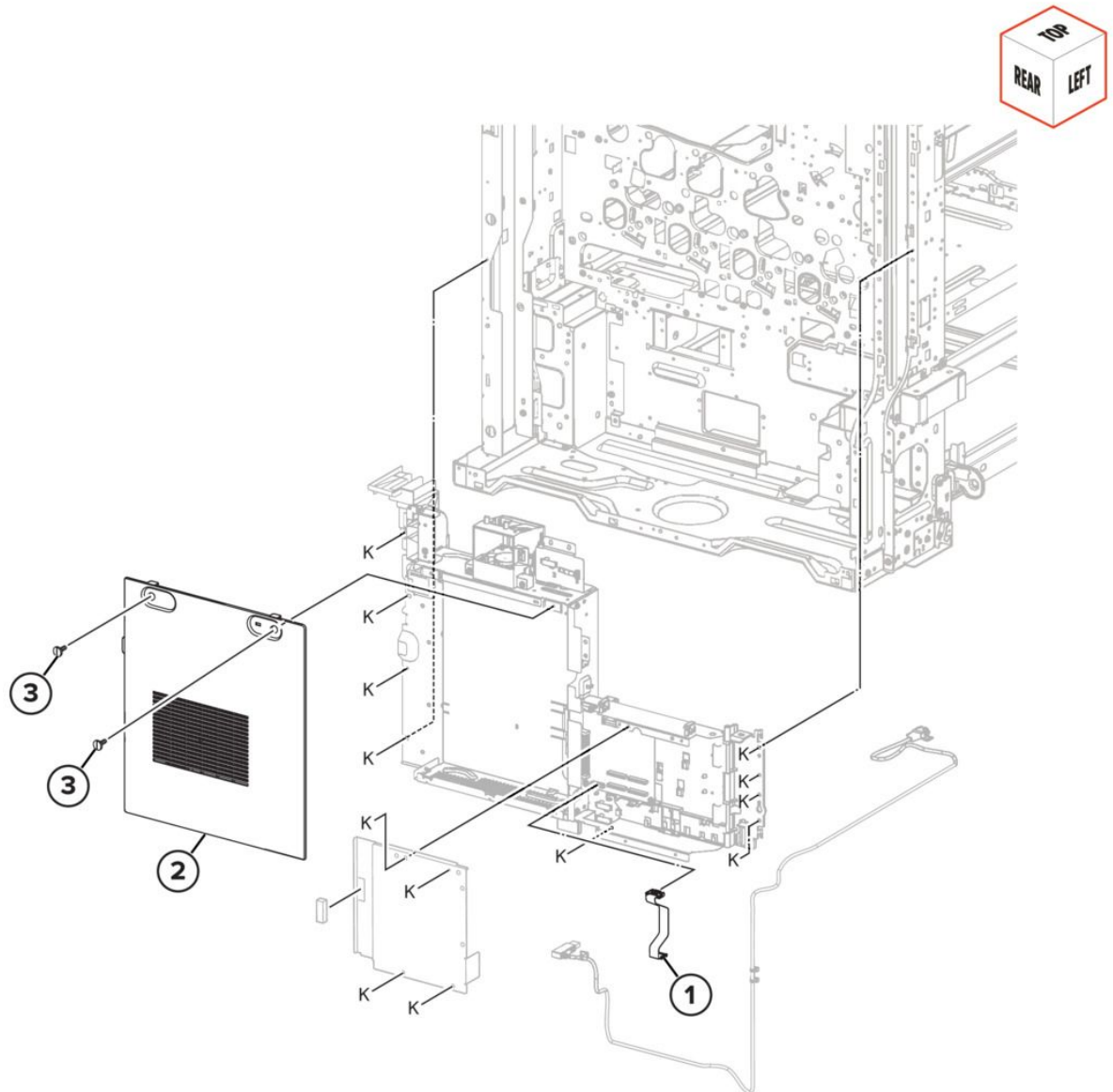
Electronics (rear 3)



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3451	1	1	Developer HVPS	--
2	41X3450	1	1	LVPS	--
3	41X3448	1	1	AC drive board 100V	--
3	41X3449	1	1	AC drive board 220V	--
4	41X4170	1	1	AC cable harness	--

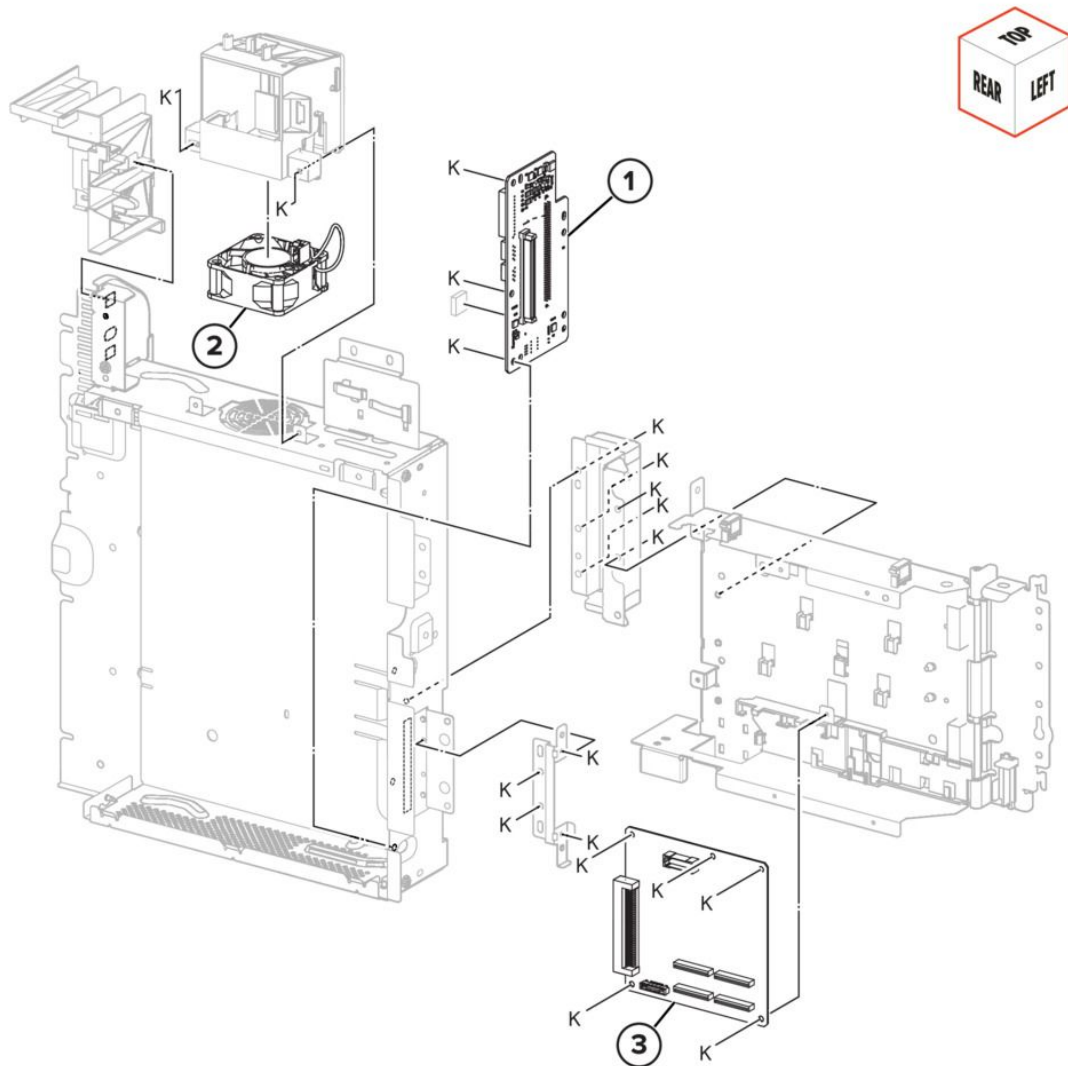
Controller board chassis 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3453	1	1	Half tone and motor drive FFC cable	--
2	41X3452	1	1	Controller board access cover	See "Controller board access cover removal" on page 1198
3	41X4482	1	1	Controller board access cover screw	--

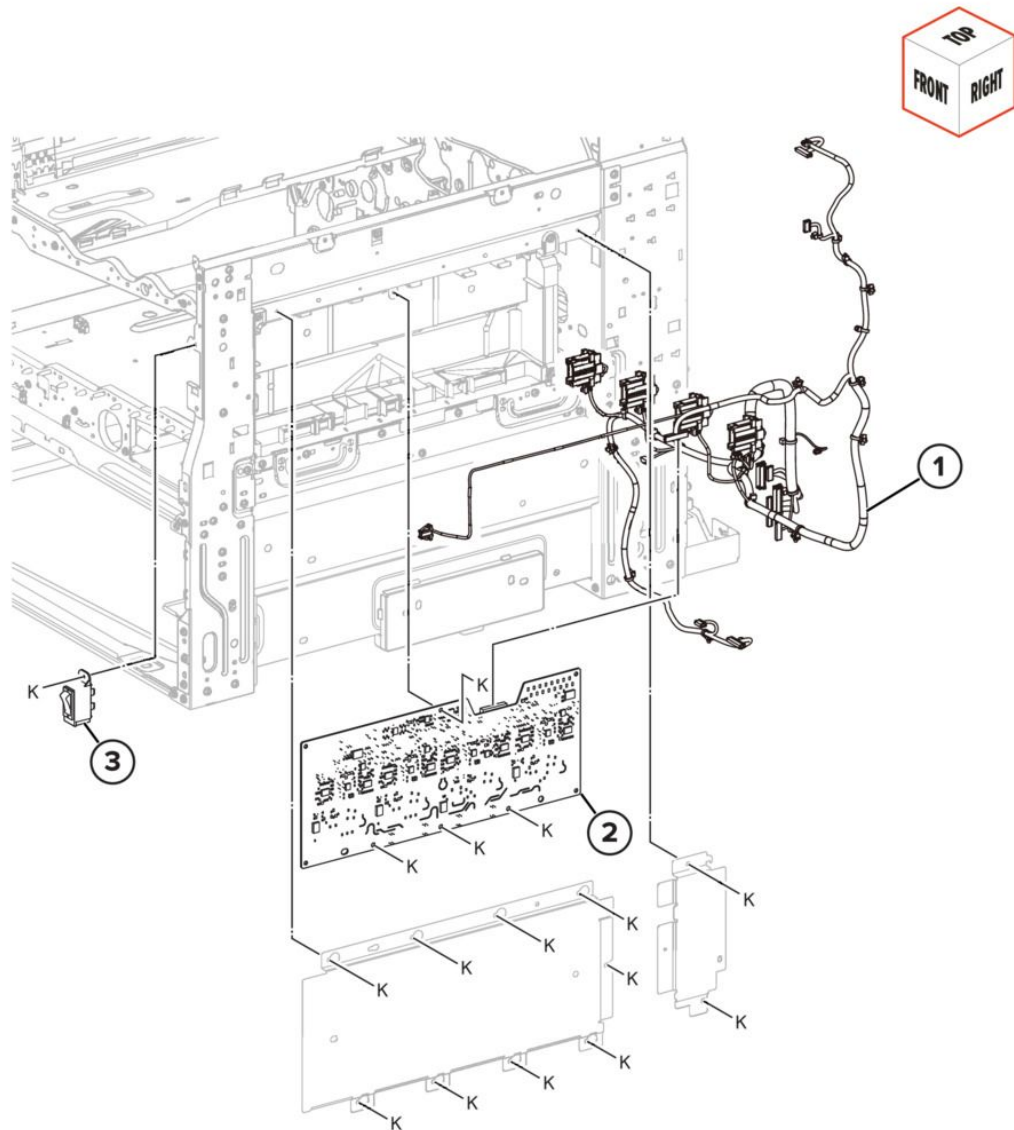
Controller board chassis 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3455	1	1	Black plane card	--
2	41X3457	1	1	Controller board fan	--
3	41X3456	1	1	Half-tone controller board	See "Half-tone controller board removal" on page 1216
NS	41X3458	1	1	MCU relay board	--
NS	41X3459	1	1	MCU board	--

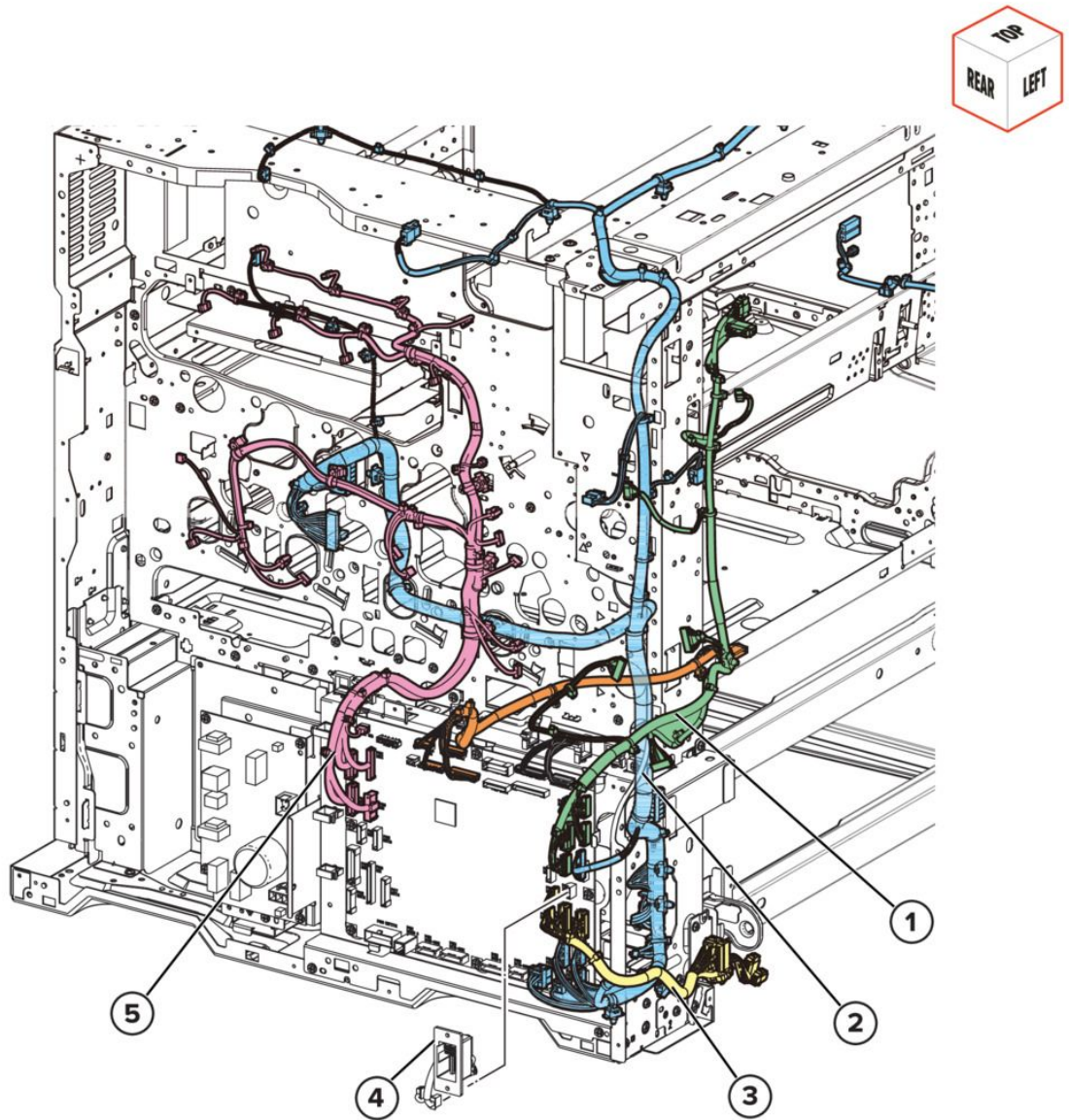
Electronics (front-right)



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3462	1	1	Charge roller HVPS cable	--
2	41X3461	1	1	Charge roller HVPS	See "Charge roller HVPS removal" on page 1140
3	41X3460	1	1	Power switch	--

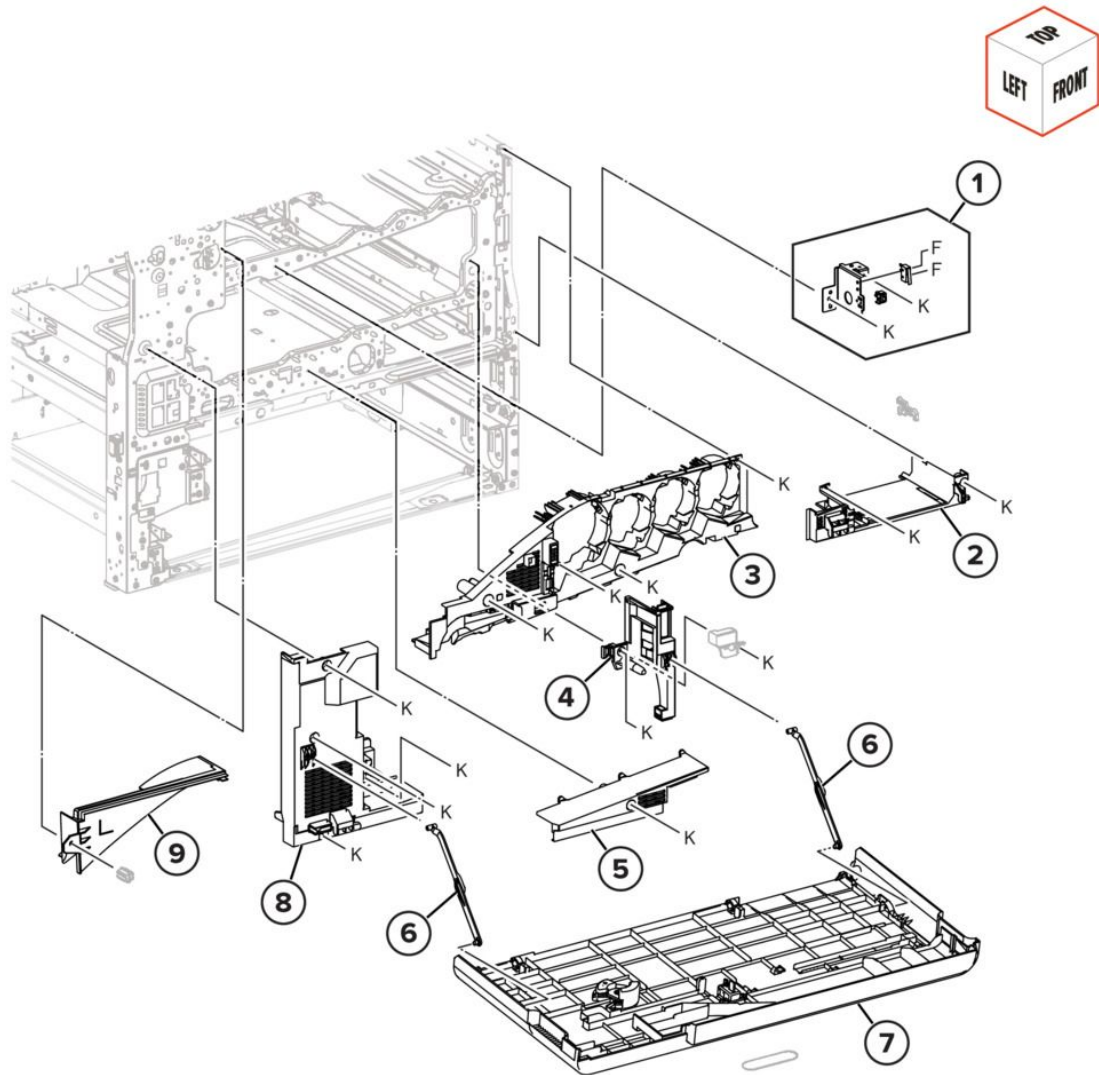
Wire harness



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3464	1	1	Printhead drive cable	--
2	41X4171	1	1	DC power supply cable	--
3	41X3465	1	1	Left door cable	--
4	41X3467	1	1	2000-sheet feeder connector cable	--
5	41X3463	1	1	Drive cable	--

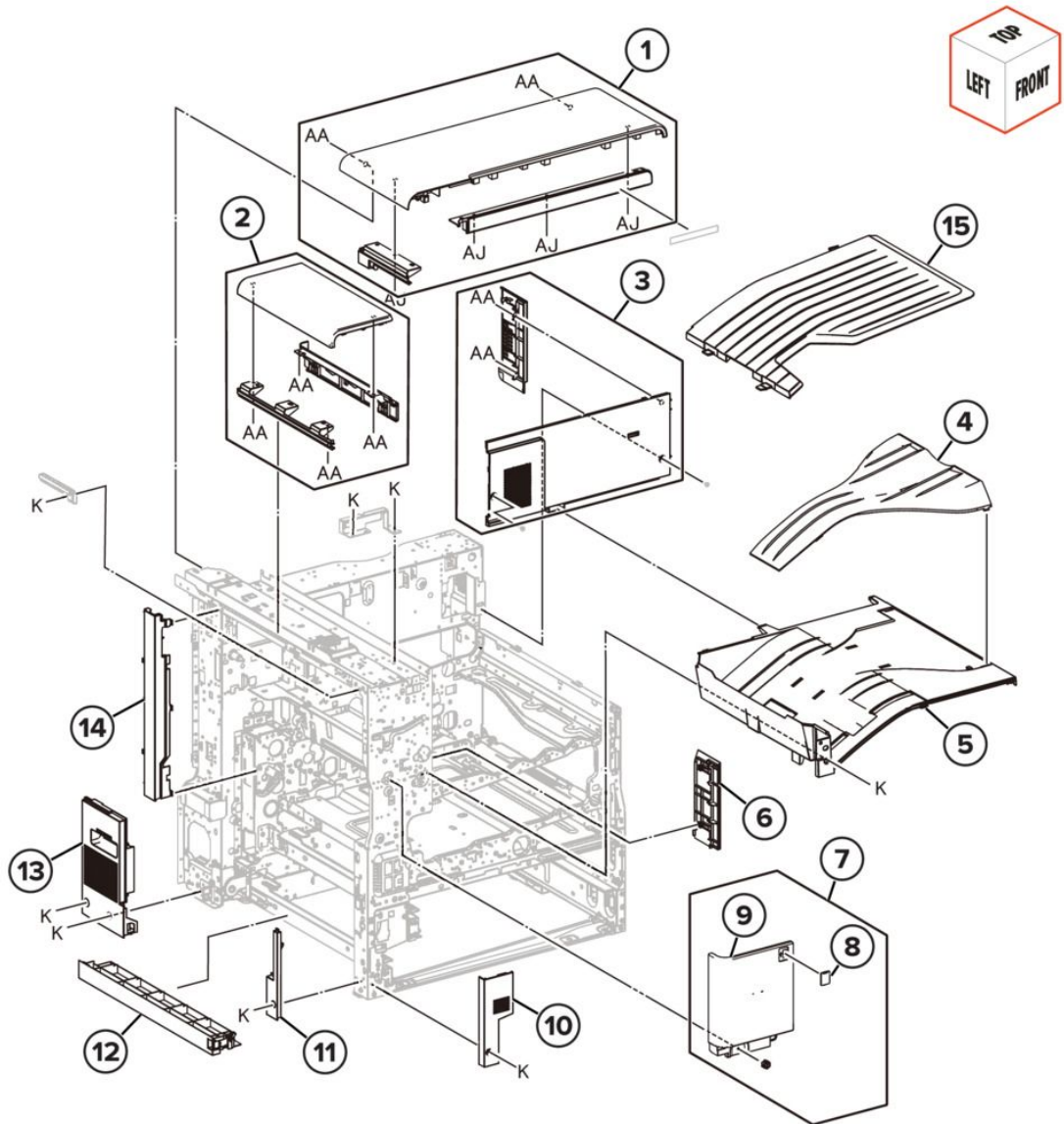
Printer covers 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3474	1	1	Front door switch	--
2	41X3470	1	1	Front hinge cover	--
3	41X3468	1	1	Front inner cover	--
4	41X3634	1	1	Front inner right cover	--
5	41X3469	1	1	Front inner lower cover	--
6	41X3472	1	1	Front cover support	--
7	41X3473	1	1	Front cover	--
8	41X4510	1	1	Front inner left cover	--
9	41X3475	1	1	Front inner top cover	--

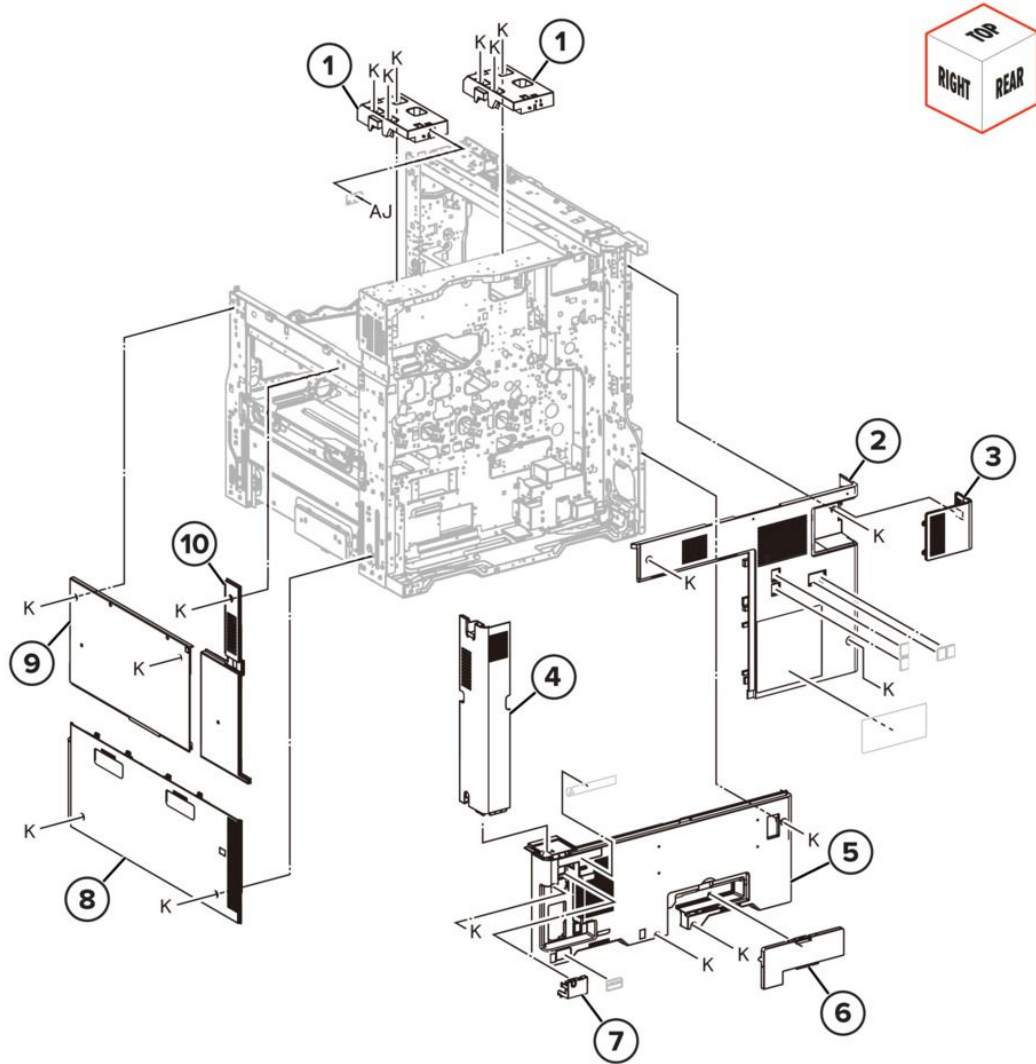
Printer covers 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4184	1	1	Top cover assembly	See "Top cover removal" on page 1280
2	41X4183	1	1	Top left cover assembly	See "Top left cover removal" on page 1281
3	41X4182	1	1	Top rear cover assembly	--
4	41X4180	1	1	Bin top cover	See "Top cover removal" on page 1280
5	41X3485	1	1	Bin cover	See "Bin cover removal" on page 1273
6	41X3476	1	1	Front post cover	--
7	41X4179	1	1	Front left cover	See "Front left cover removal" on page 1147
8	41X4227	1	1	USB cover	--
9	41X4228	1	1	Pillar cover	--
10	41X3477	1	1	Tray inner cover	--
11	41X3488	1	1	Inner cover	--
12	41X3487	1	1	Bottom cover	--
13	41X3480	1	1	Lower cover	--
14	41X3479	1	1	Rear left cover	--
15	41X3482	1	1	Bin 2	--

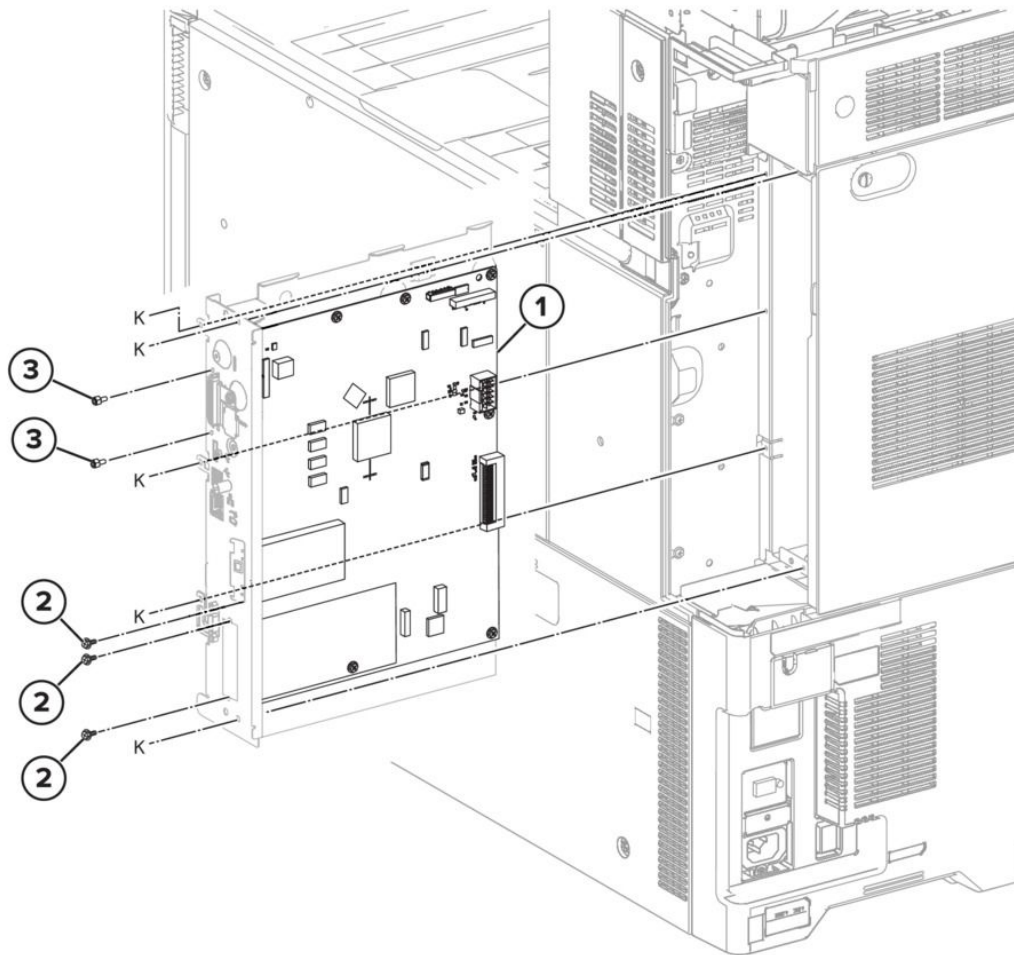
Printer covers 3



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4229	1	1	Top inner cover	--
2	41X3495	1	1	Rear cover	
3	41X3496	1	1	Fuser exhaust cover	See "Fuser exhaust cover removal" on page 1205
4	41X3494	1	1	Controller board port cover	See "Controller board port cover removal" on page 1199
5	41X3497	1	1	Lower rear cover	
6	41X3499	1	1	Input option cable cover	See "Input option cable cover removal" on page 1206
7	41X3498	1	1	Lower rear subcover	--
8	41X4109	1	1	Lower right cover	--
9	41X3492	1	1	Right cover	See "Right cover removal" on page 1143
10	41X3493	1	1	Rear right cover	See "Right cover removal" on page 1143
NS	41X2939	1	1	Gap filler cover	--

Controller board

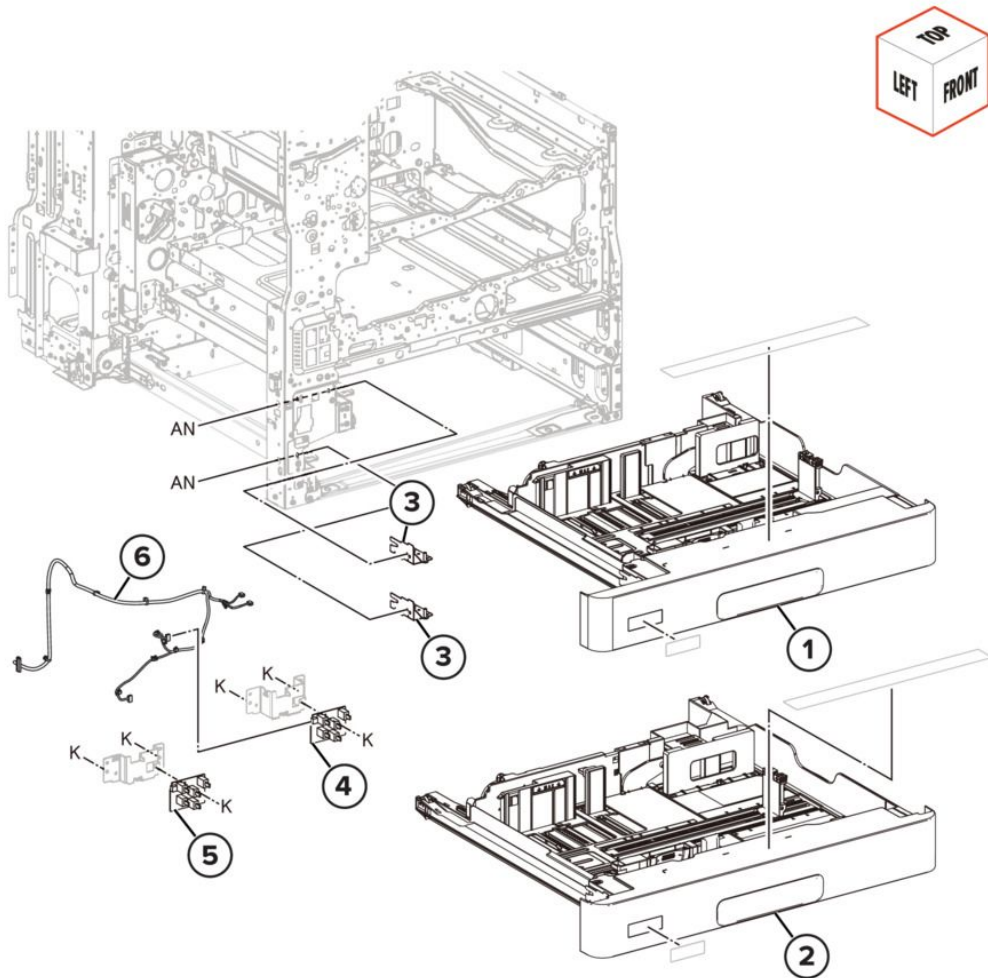


Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X2922	1	1	Controller board <div style="background-color: #e0e0e0; padding: 5px; border: 1px solid #ccc;">This part has a FRU sheet.</div>	See "Controller board removal" on page 1207
2	41X4483	3	1	Controller board port cover screw	--
3	40X2217	2	1	Screw	--

Tray 1 and tray 2

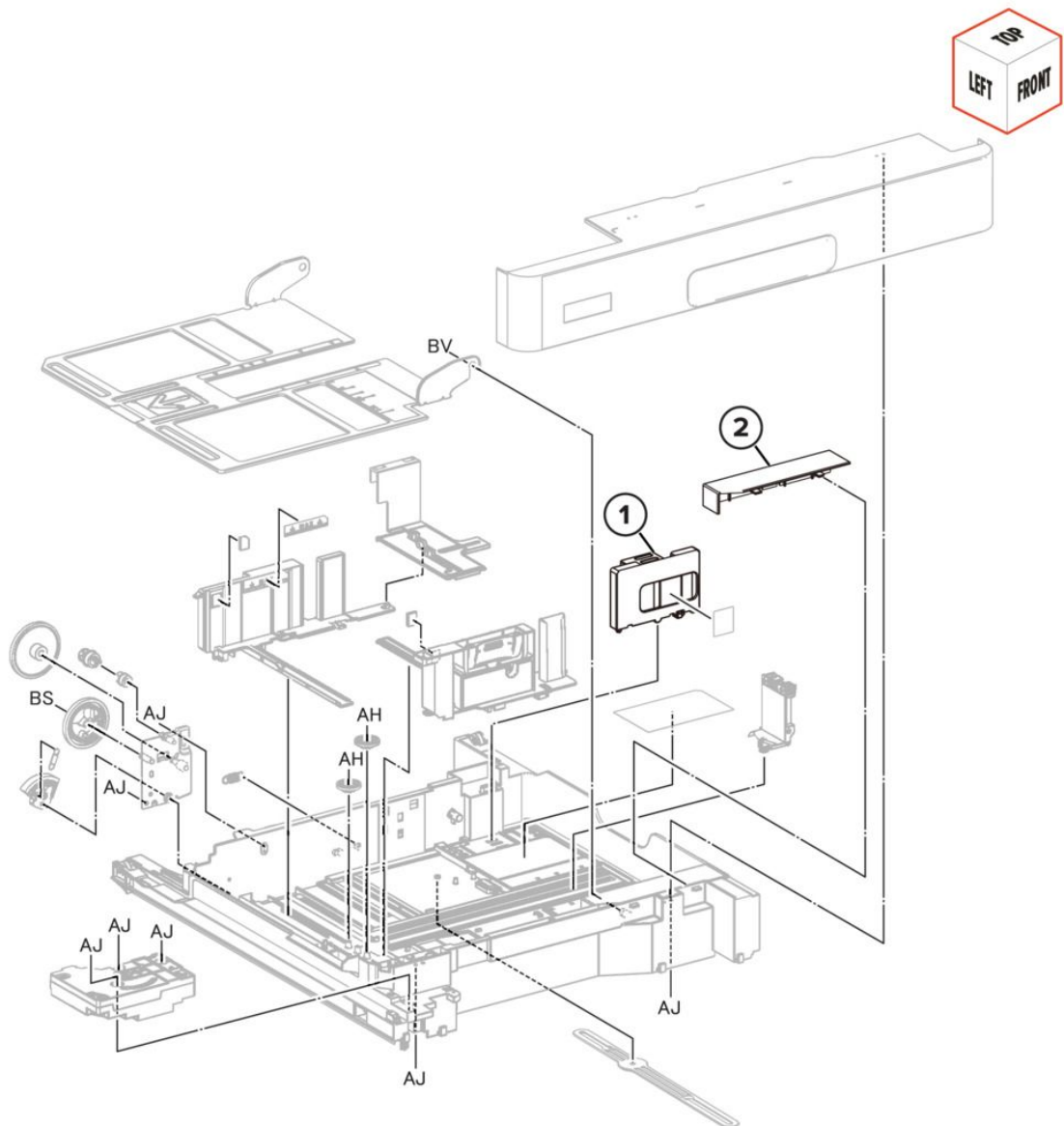
Trays



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3359	1	1	Tray 1 insert	--
2	41X3360	1	1	Tray 2 insert	--
3	41X3363	1	1	Tray lock	--
4	40X7533	1	1	Sensor (tray 1 paper size)	--
5	40X7533	1	1	Sensor (tray 2 paper size)	--
6	41X3362	1	1	Paper size sensor cable	--
NS	41X4176	1	1	Envelope tray insert	--

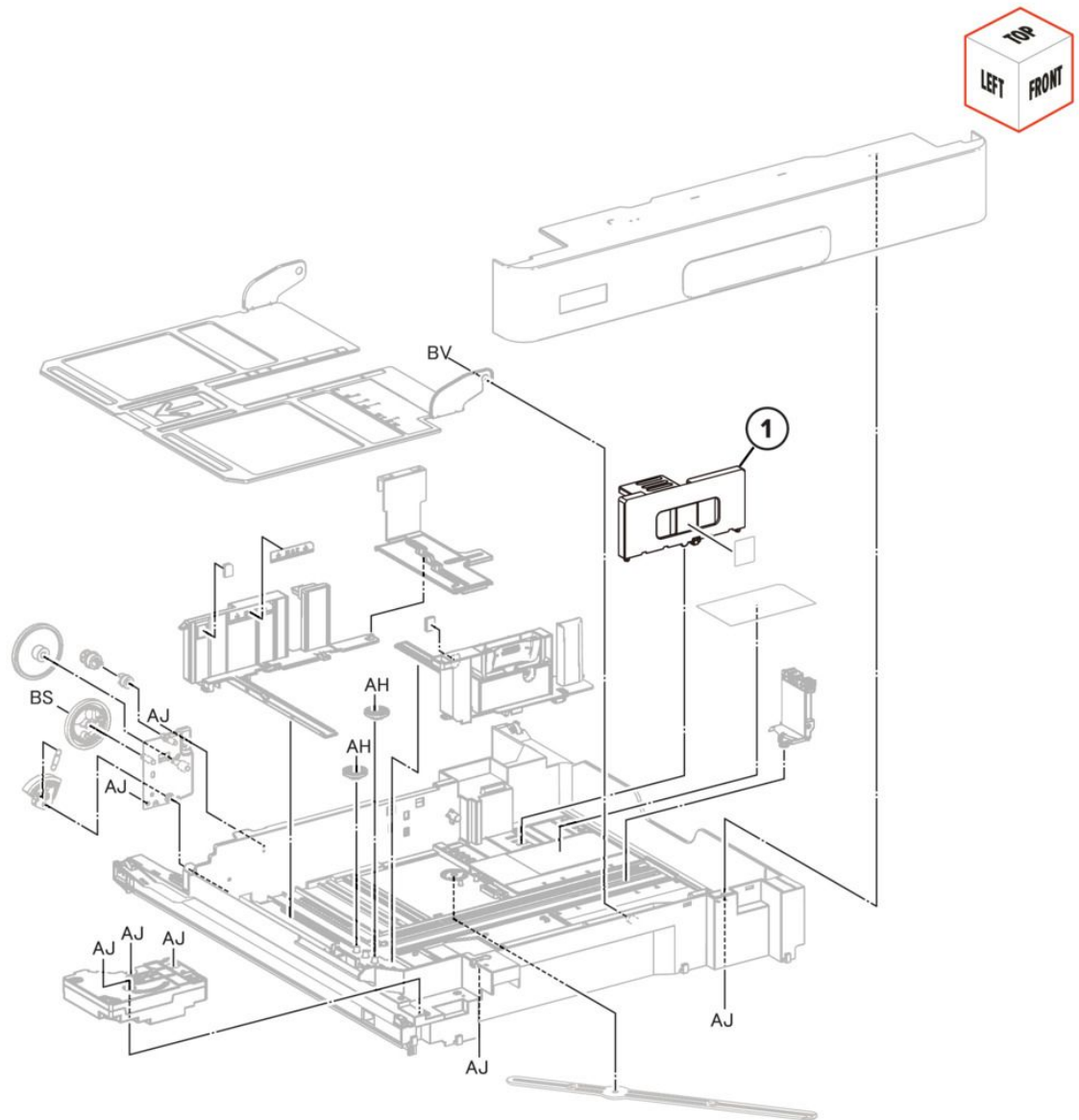
Tray 1 insert



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4140	1	1	Tray 1 insert guide	--
2	41X4082	1	1	Tray 1 compartment cover	--

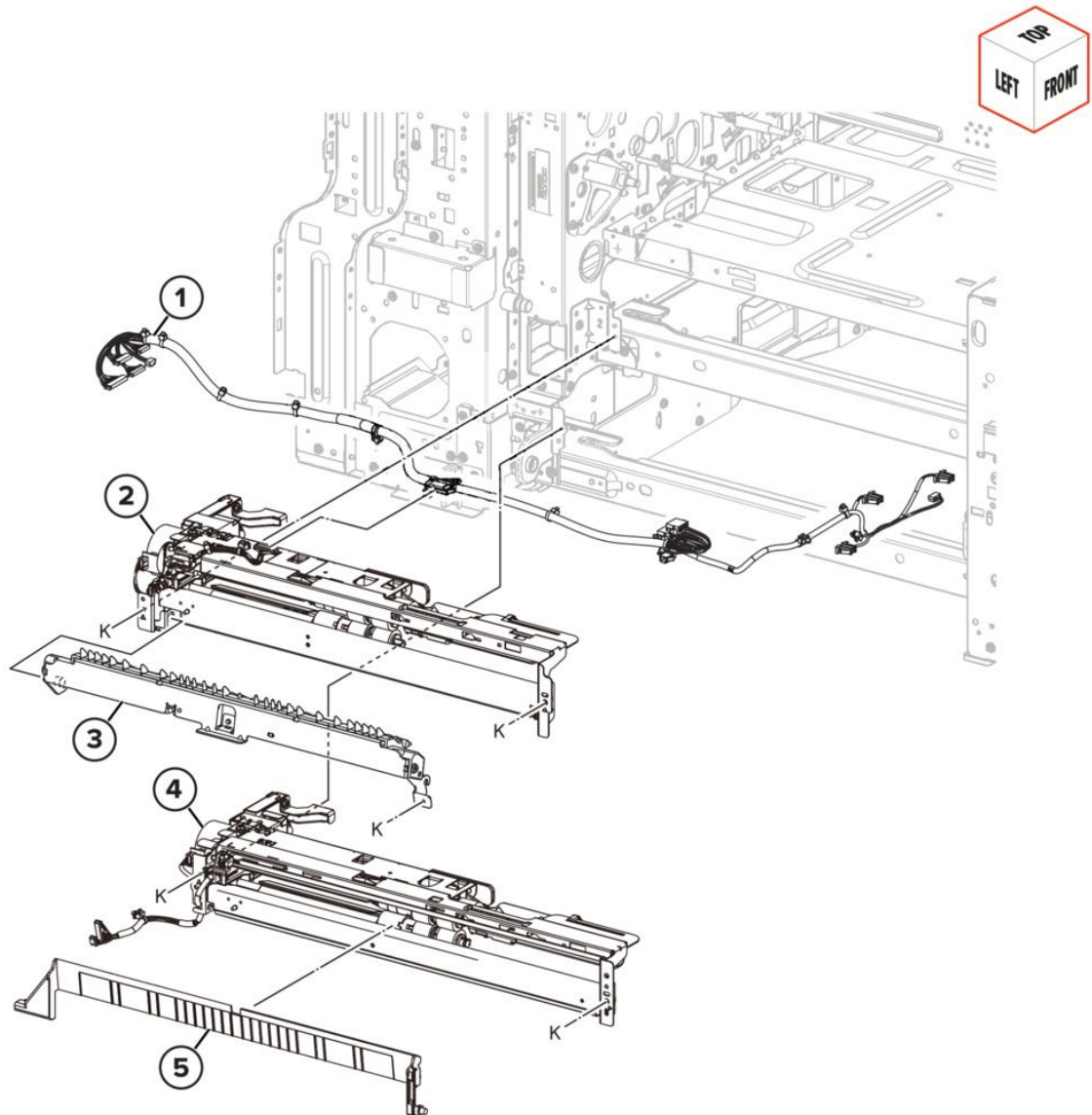
Tray 2 insert



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X4230	1	1	Tray 2 insert guide	--

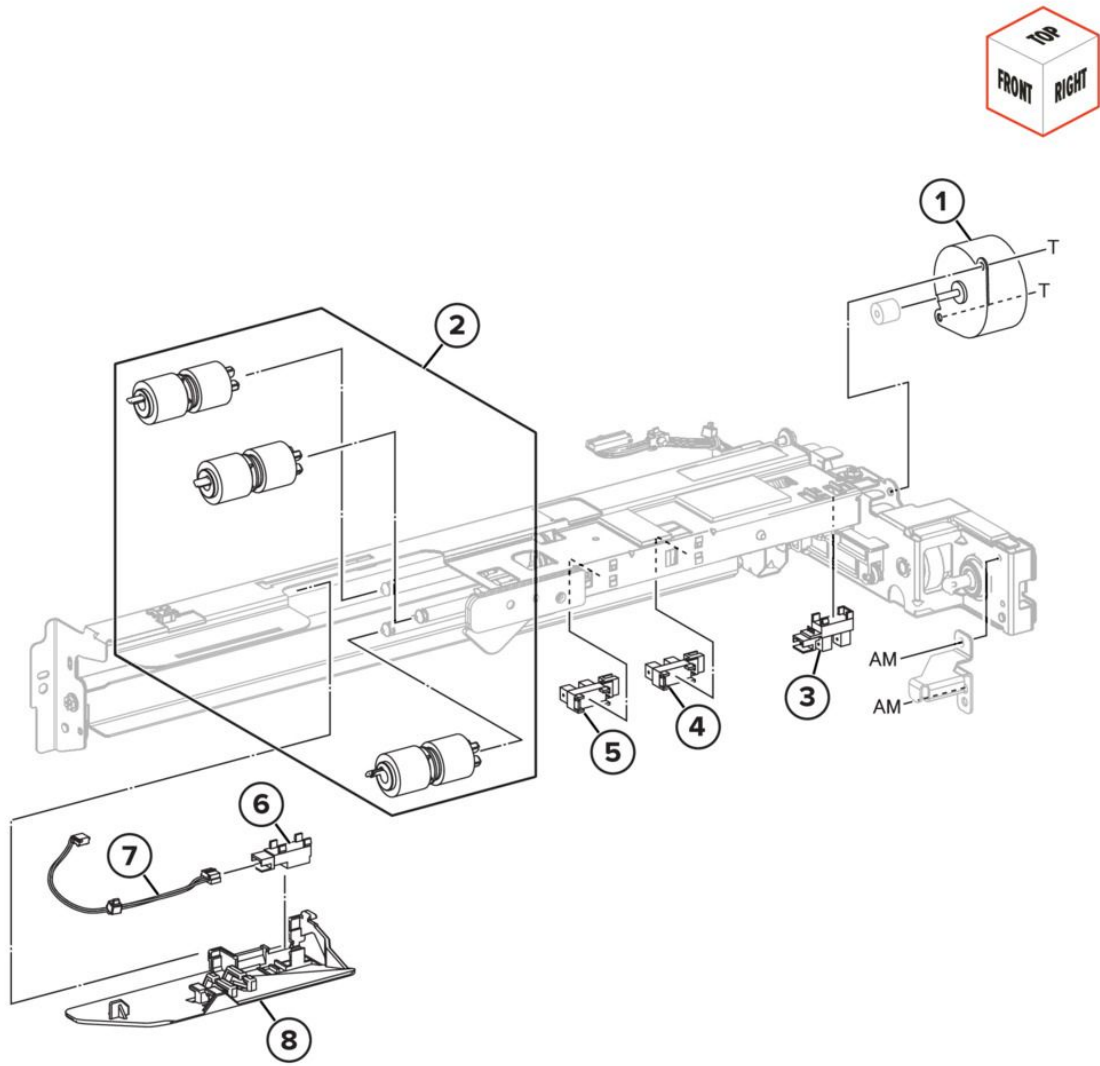
Tray paper feed



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4504	1	1	Feeder assembly cable	--
2	41X3366	1	1	Tray 1 feed assembly	See "Tray 1 feed assembly removal" on page 1094
3	41X3369	1	1	Feed guide	--
4	41X3367	1	1	Tray 2 feed assembly	See "Tray 2 feed assembly removal" on page 1097
5	41X3368	1	1	Transport guide	--

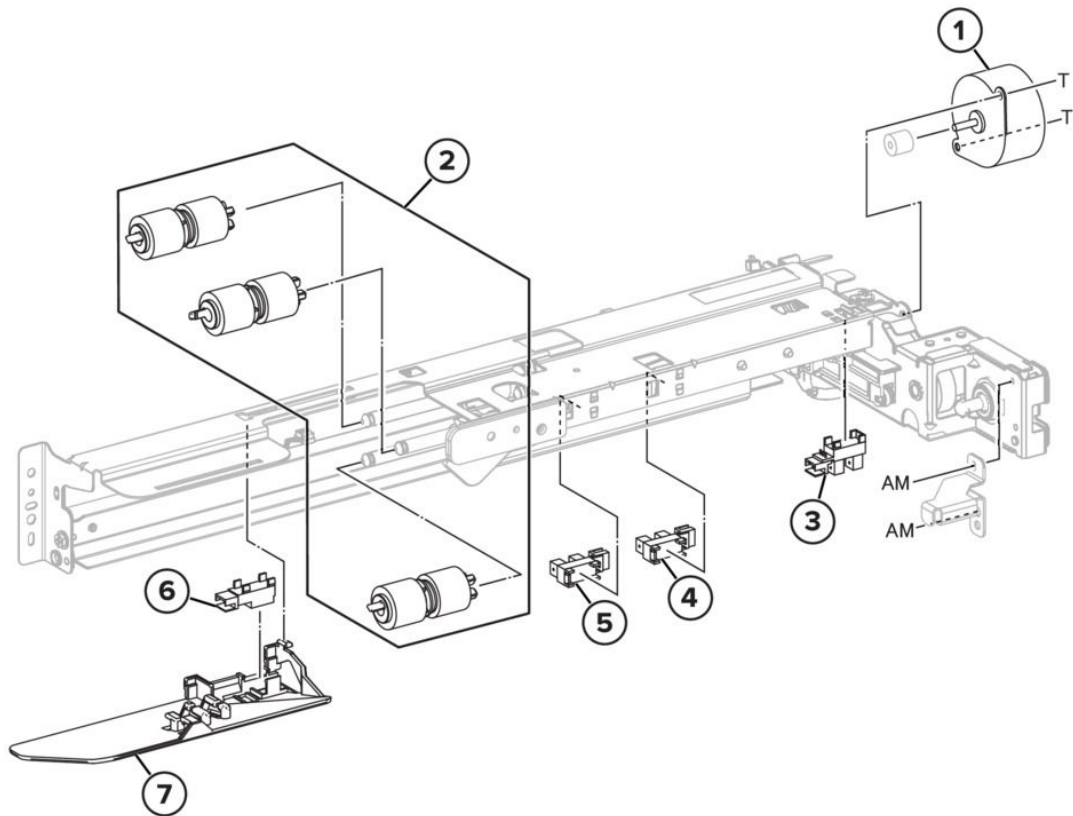
Tray 1 feeder



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X6658	1	1	Motor (tray 1 pick/lift)	--
2	41X3376	1	1	Pick roller kit	--
3	41X3377	1	1	Sensor (tray 1 lift plate level)	--
4	41X3377	1	1	Sensor (tray 1 pick position)	--
5	41X3377	1	1	Sensor (tray 1 paper present)	--
6	40X0727	1	1	Sensor (tray 1 feed)	--
7	41X3373	1	1	Tray 1 feed sensor cable	--
8	41X3372	1	1	Tray 1 feed guide	--

Tray 2 feeder

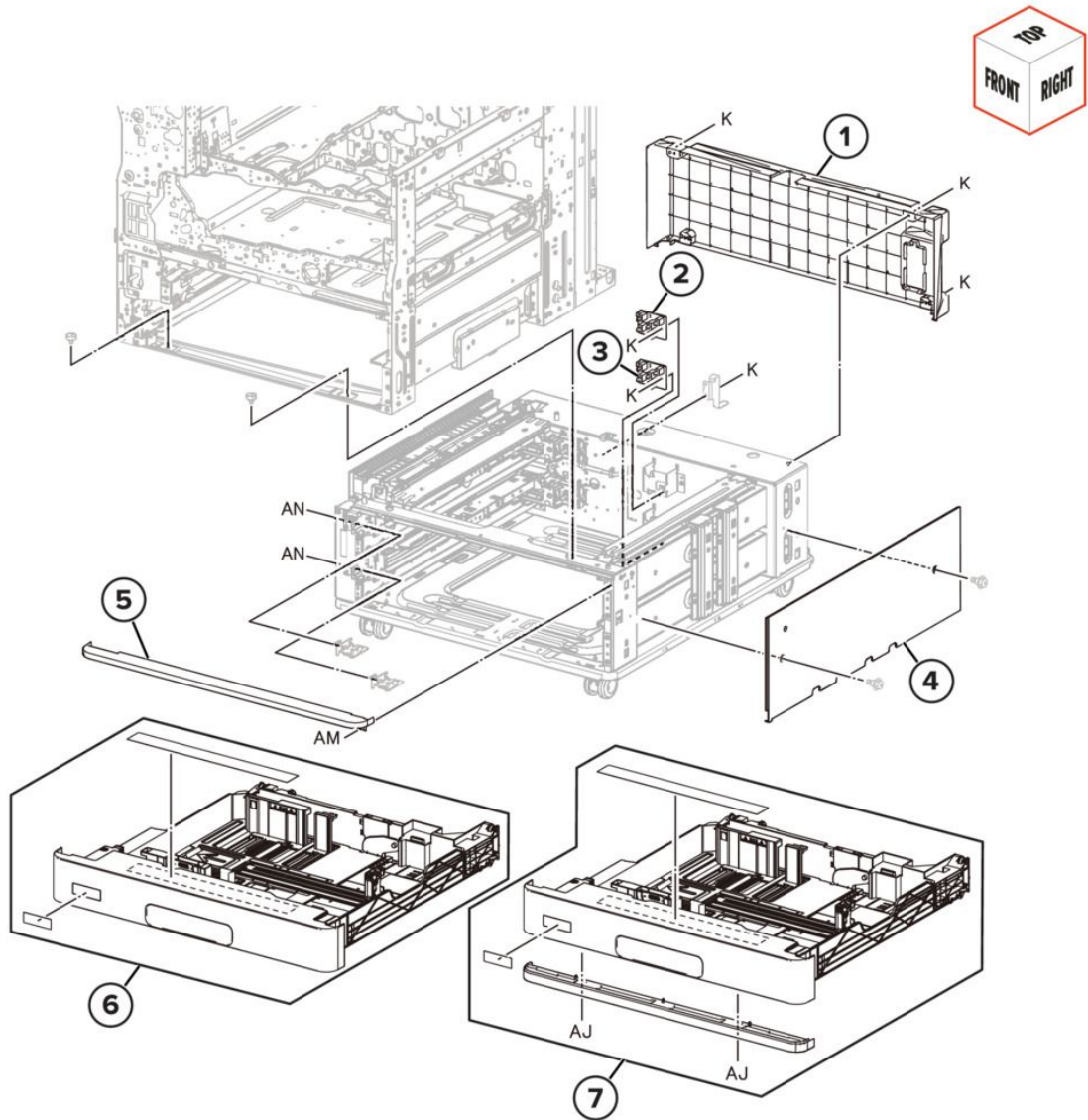


Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	40X6658	1	1	Motor (tray 2 pick/lift)	--
2	41X3376	1	1	Pick roller kit	--
3	41X3377	1	1	Sensor (tray 2 lift plate level)	--
4	41X3377	1	1	Sensor (tray 2 pick position)	--
5	41X3377	1	1	Sensor (tray 2 paper present)	--
6	40X0727	1	1	Sensor (tray 2 feed)	--
7	41X3535	1	1	Tray 2 feed guide	--

2 x 520-sheet tray

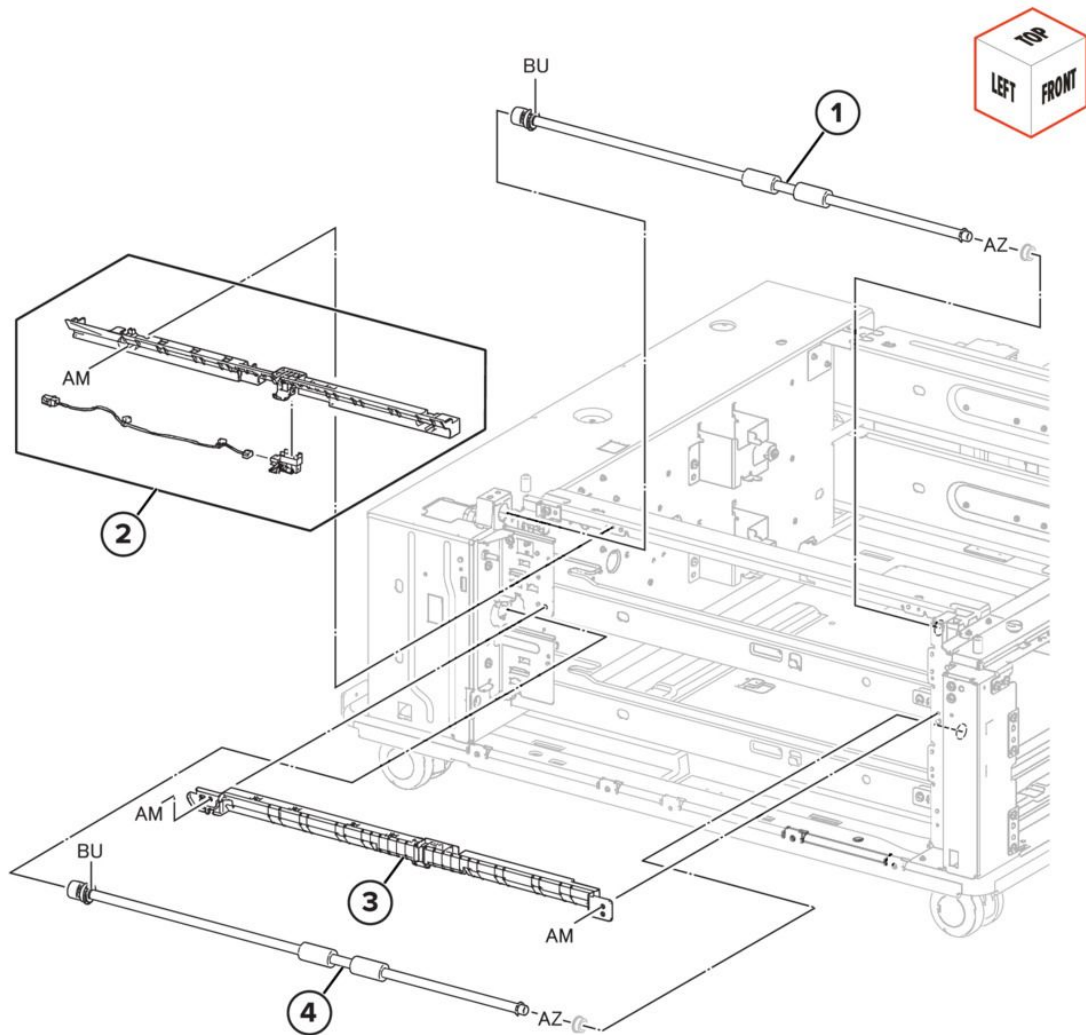
2 x 520-sheet tray insert



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3536	1	1	2 x 520-sheet tray rear cover	See "2 x 520-sheet tray rear cover removal" on page 1352
2	40X7533	1	1	Sensor (2 x 520-sheet tray 4 paper size)	See "Sensor (2 x 520-sheet tray 4 paper size) removal" on page 1377
3	40X7533	1	1	Sensor (2 x 520-sheet tray 3 paper size)	See "Sensor (2 x 520-sheet tray 3 paper size) removal" on page 1376
4	41X3542	2	1	2 x 520-sheet tray right cover	See "2 x 520-sheet tray right cover removal" on page 1351
5	41X3512	1	1	2 x 520-sheet tray front top cover	--
6	41X4270	1	1	2 x 520-sheet tray insert (tray 3)	--
7	41X4110	1	1	2 x 520-sheet tray insert (tray 4)	--
NS	41X3911	1	1	Caster wheel	--
NS	41X3950	1	1	Locking caster wheel	--

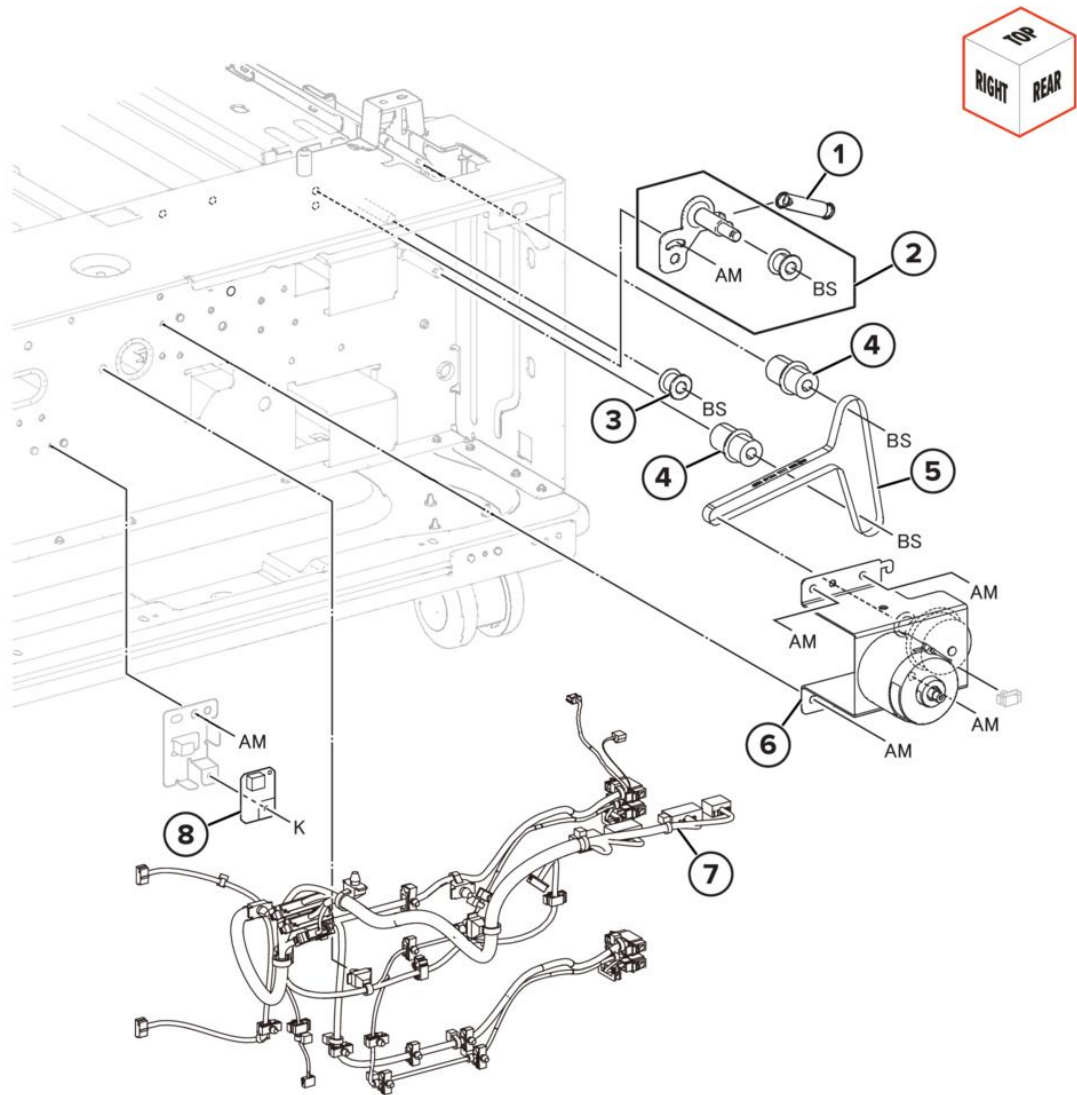
2 x 520-sheet tray paper feed



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3521	1	1	2 x 520-sheet tray transport roller (tray 3)	--
2	41X3522	1	1	2 x 520-sheet tray transport guide (tray 3)	--
3	41X3523	1	1	2 x 520-sheet tray transport guide (tray 4)	--
4	41X3521	1	1	2 x 520-sheet tray transport roller (tray 4)	--

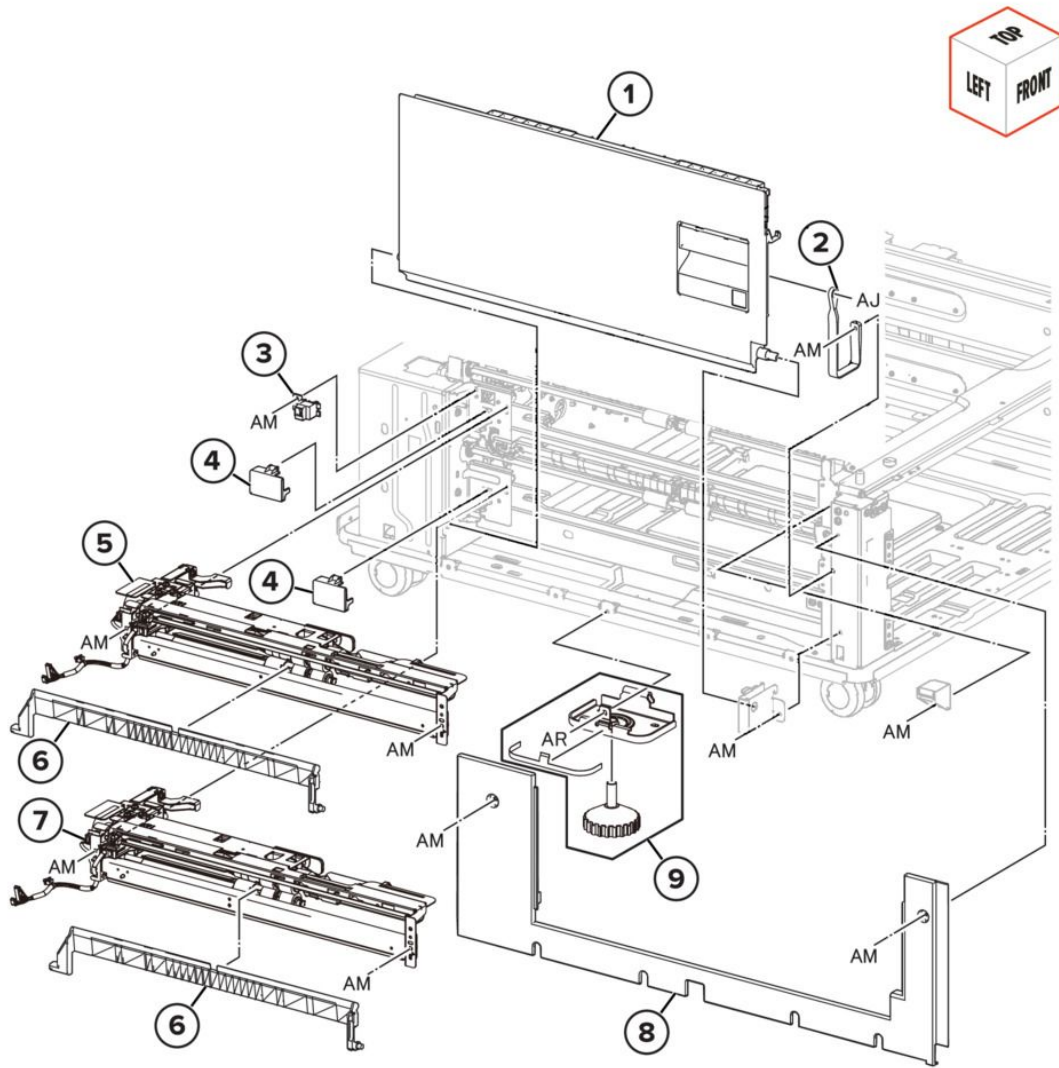
2 x 520-sheet tray drive



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3528	1	1	2 x 520-sheet tray tension spring	--
2	41X3527	1	1	2 x 520-sheet tray tension bracket	--
3	40X7358	1	1	2 x 520-sheet tray roller	--
4	41X3526	2	2	2 x 520-sheet tray pulley	--
5	41X3525	1	1	2 x 520-sheet tray transport belt	See "2 x 520-sheet tray transport belt removal" on page 1357
6	41X3524	1	1	Motor (2 x 520-sheet tray transport)	See "Motor (2 x 520-sheet tray transport) removal" on page 1354
7	41X3529	1	1	2 x 520-sheet tray cable	--
8	41X3530	1	1	2 x 520-sheet tray NV card	See "2 x 520-sheet tray NV card removal" on page 1355

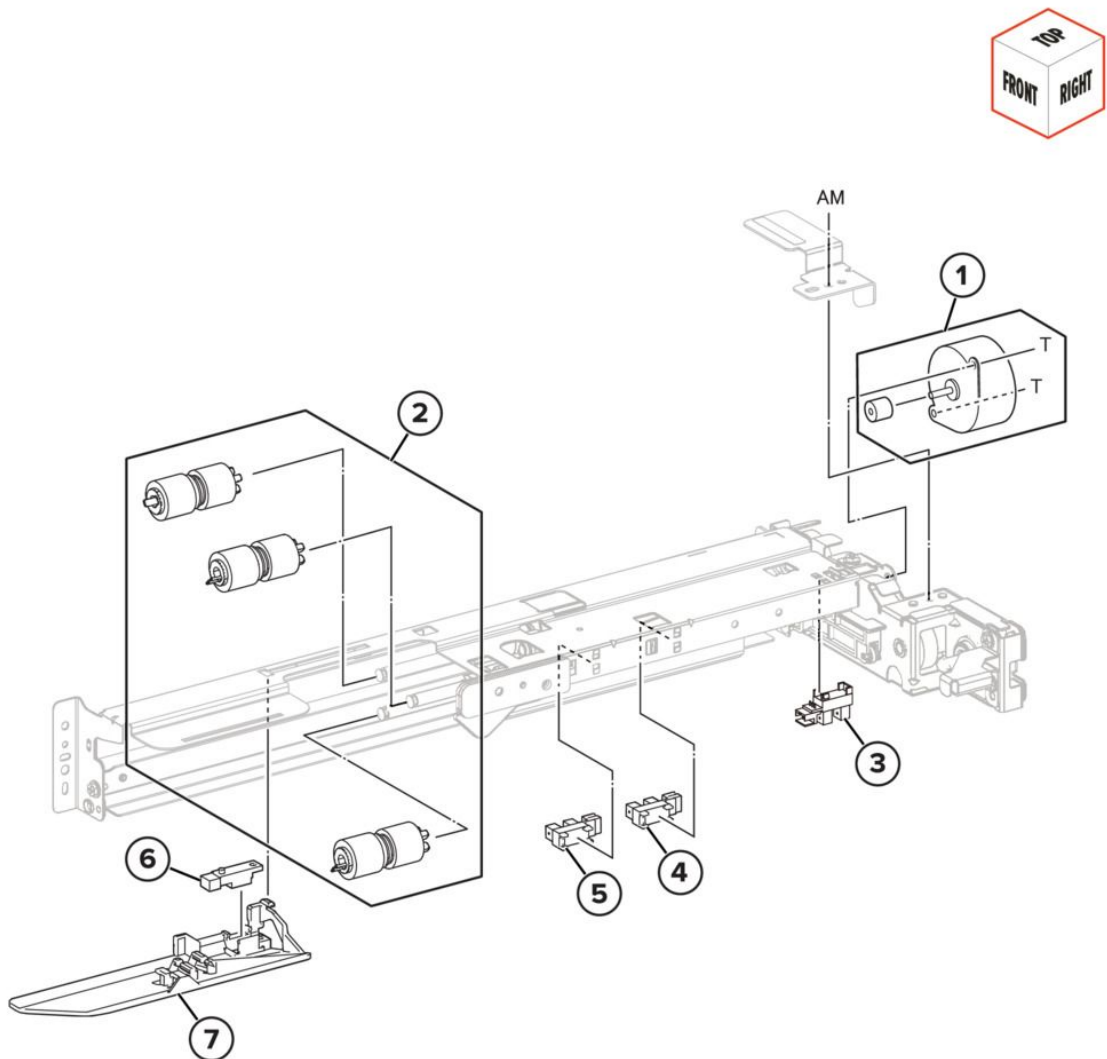
2 x 520-sheet tray 3 and tray 4 feeder 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3515	1	1	2 x 520-sheet tray door	See "2 x 520-sheet tray door removal" on page 1358
2	41X3544	1	1	2 x 520-sheet tray left cover strap	--
3	41X4559	1	1	2 x 520-sheet tray jam door switch	--
4	41X4265	2	2	2 x 520-sheet tray connector cover	--
5	41X3519	1	1	2 x 520-sheet tray paper feeder (tray 3)	See "2 x 520-sheet tray paper feeder (tray 3) removal" on page 1361
6	41X3368	2	2	2 x 520-sheet tray feed guide	--
7	41X3519	1	1	2 x 520-sheet tray paper feeder (tray 4)	See "2 x 520-sheet tray paper feeder (tray 4) removal" on page 1364
8	41X3516	1	1	2 x 520-sheet tray left cover	See "2 x 520-sheet tray left cover removal" on page 1350
9	41X4244	1	1	2 x 520-sheet tray anti-tip lock	See "2 x 520-sheet tray anti-tip lock removal" on page 1353

2 x 520-sheet tray 3 and tray 4 feeder 2

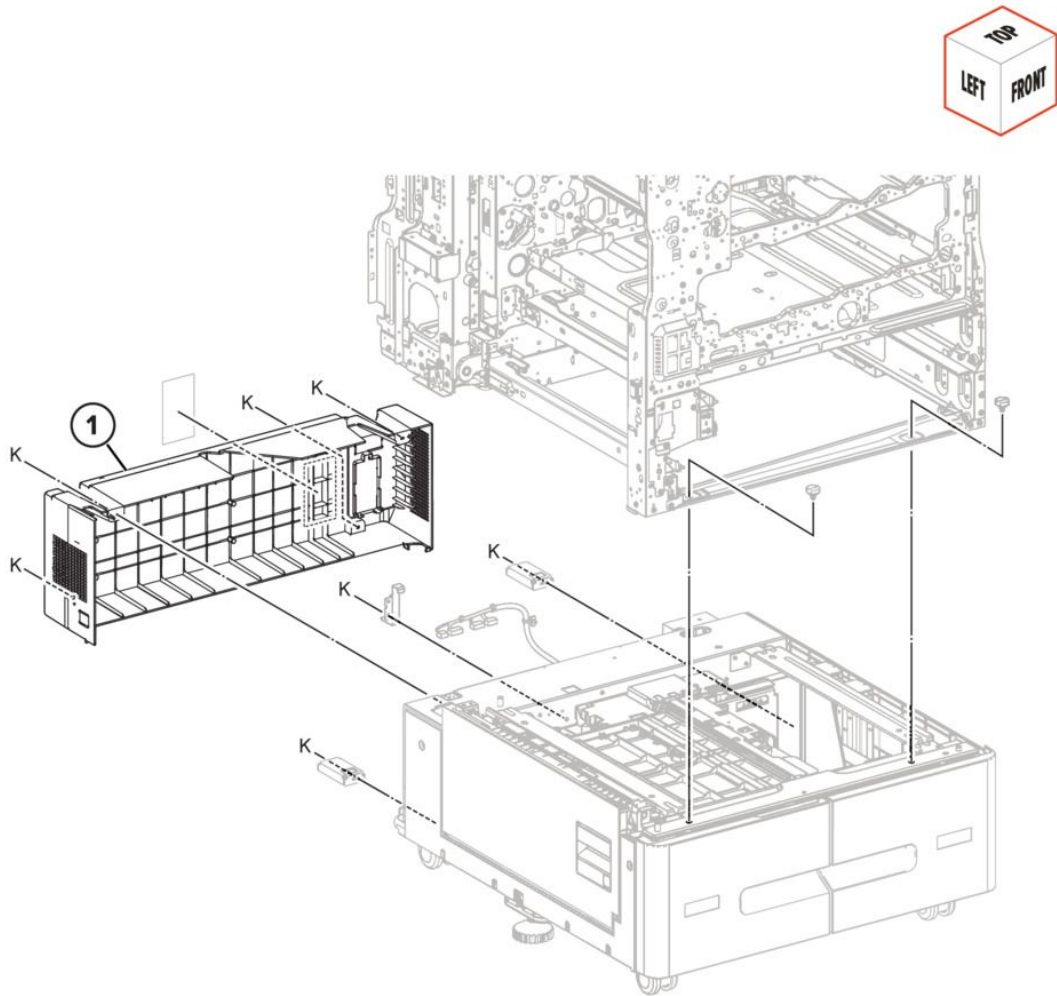


Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	40X6658	1	1	Motor (2 x 520-sheet tray 3/4 pick/lift)	See "Motor (2 x 520-sheet tray pick/lift 3 or 2 x 520-sheet tray 4 pick/lift) removal" on page 1370
2	41X3376	1	1	2 x 520-sheet tray roller kit	--
3	41X3377	1	1	Sensor (2 x 520-sheet tray 3/4 lift plate level)	See "Sensor (2 x 520-sheet tray 3 lift plate level or 2 x 520-sheet tray 4 lift plate level) removal" on page 1369
4	41X3377	1	1	Sensor (2 x 520-sheet tray 3/4 pick position)	See "Sensor (2 x 520-sheet tray 3 pick position or 2 x 520-sheet tray 4 pick position) removal" on page 1368
5	41X3377	1	1	Sensor (2 x 520-sheet tray 3/4 paper present)	See "Sensor (2 x 520-sheet tray 3 paper present or 2 x 520-sheet tray 4 paper present) removal" on page 1367
6	40X0727	1	1	Sensor (2 x 520-sheet tray 3/4 feed)	See "Sensor (2 x 520-sheet tray 3 feed or 2 x 520-sheet tray 4 feed) removal" on page 1371
7	41X3535	1	1	2 x 520-sheet tray 3/4 feed guide	See "2 x 520-sheet tray feed guide (tray 3) or 2 x 520-sheet tray feed guide (tray 4) removal" on page 1374

2000-sheet tandem tray

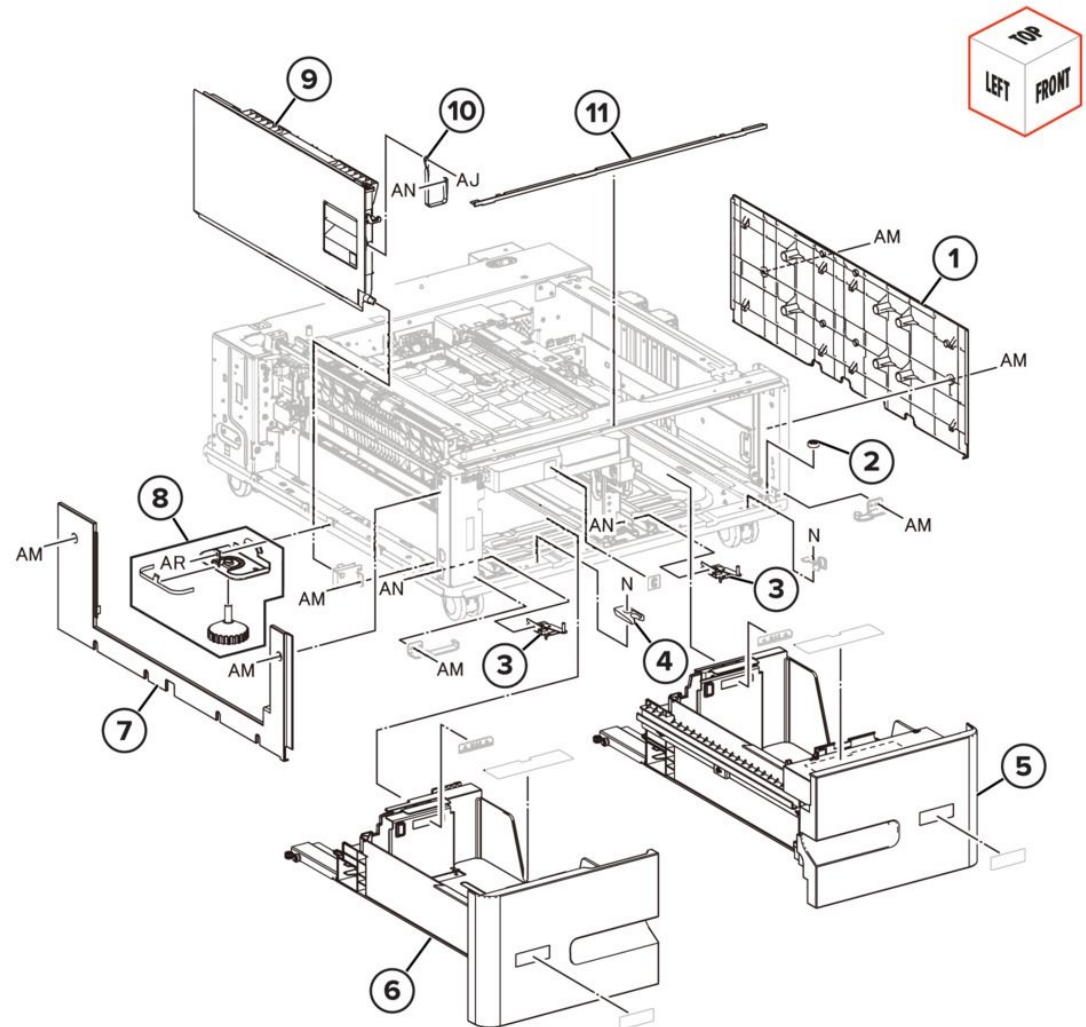
2000-sheet tandem tray covers 1



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3536	1	1	2000-sheet tandem tray rear cover	See "2000-sheet tandem tray rear cover removal" on page 1286

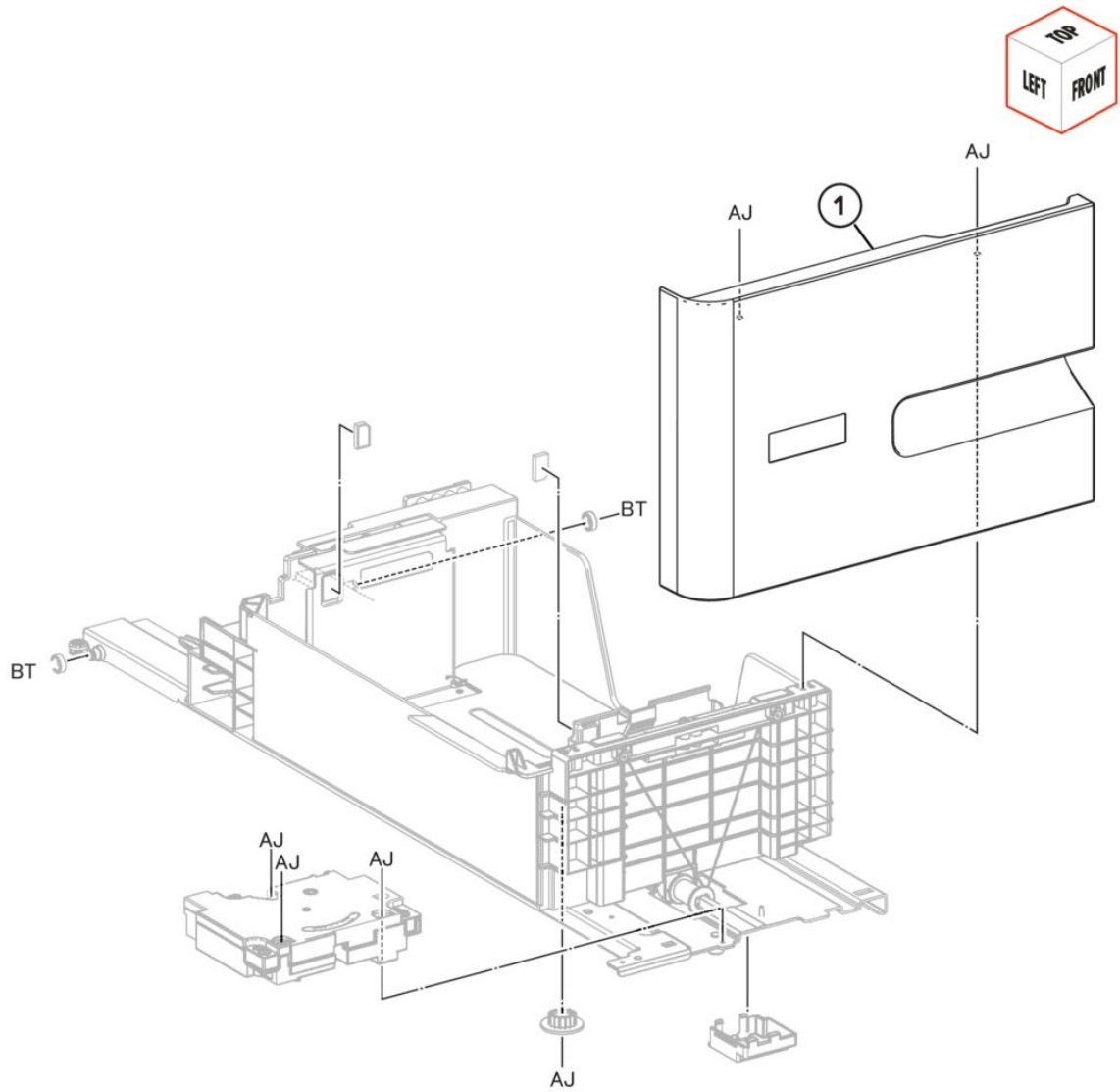
2000-sheet tandem tray covers 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3542	1	1	2000-sheet tandem tray right cover	--
2	40X7344	1	1	2000-sheet tandem tray side roller	--
3	41X3543	1	1	2000-sheet tandem tray release lever	--
4	40X7348	1	1	2000-sheet tandem tray 3/4 stop	--
5	41X3538	1	1	2000-sheet tandem tray insert (tray 4)	See "2000-sheet tandem tray insert (tray 4) removal" on page 1284
6	41X3537	1	1	2000-sheet tandem tray insert (tray 3)	See "2000-sheet tandem tray insert (tray 3) removal" on page 1282
7	41X3516	1	1	2000-sheet tandem tray left cover	See "2000-sheet tandem tray left cover removal" on page 1285
8	41X4244	1	1	2000-sheet tandem tray foot stopper	--
9	41X3541	1	1	2000-sheet tandem tray door	See "2000-sheet tandem tray door removal" on page 1287
10	41X3544	1	1	2000-sheet tandem tray door strap	--
11	41X3539	1	1	2000-sheet tandem tray top cover	--

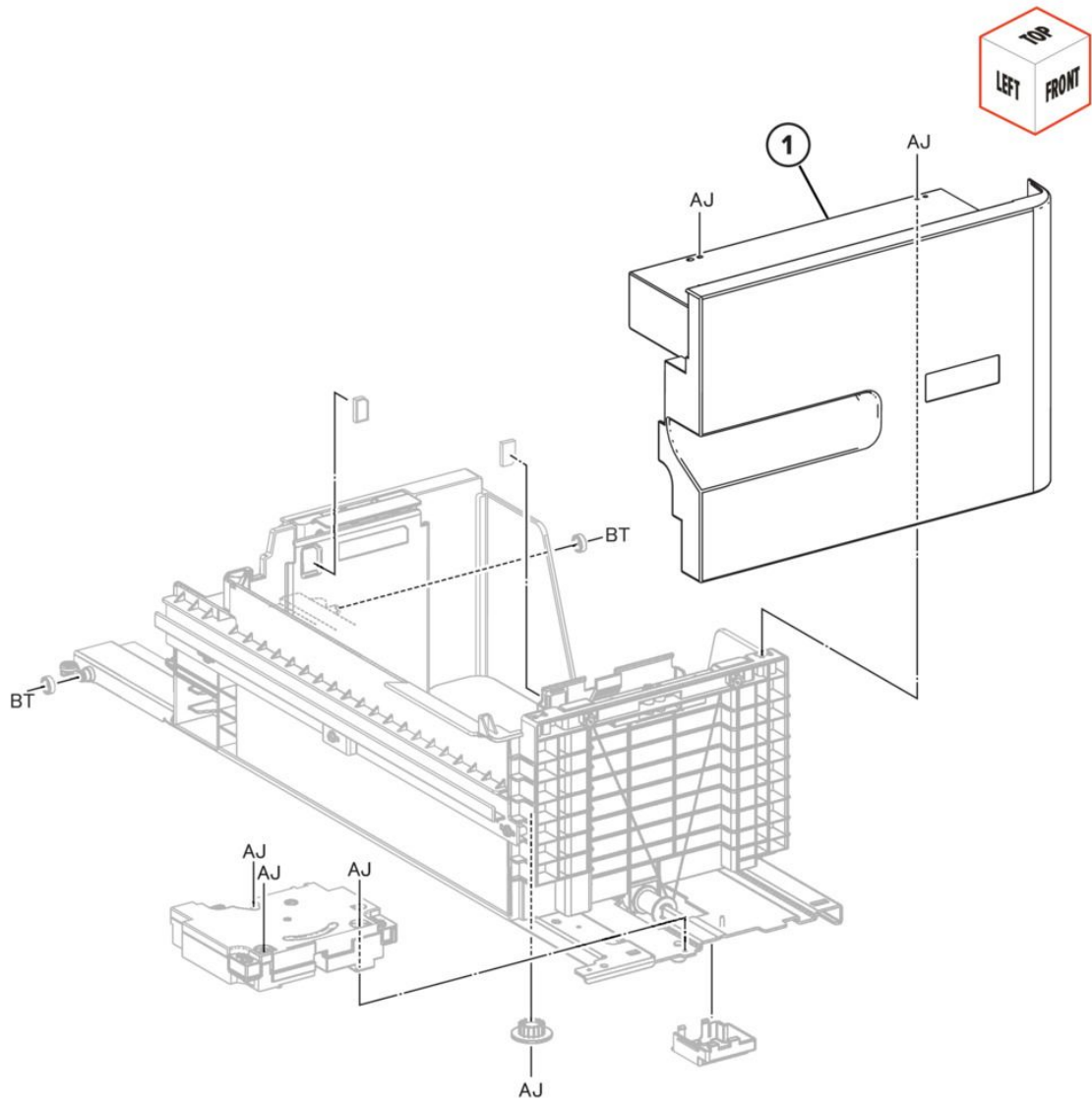
2000-sheet tandem tray covers 3



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3558	1	1	2000-sheet tandem tray front cover (tray 3)	--

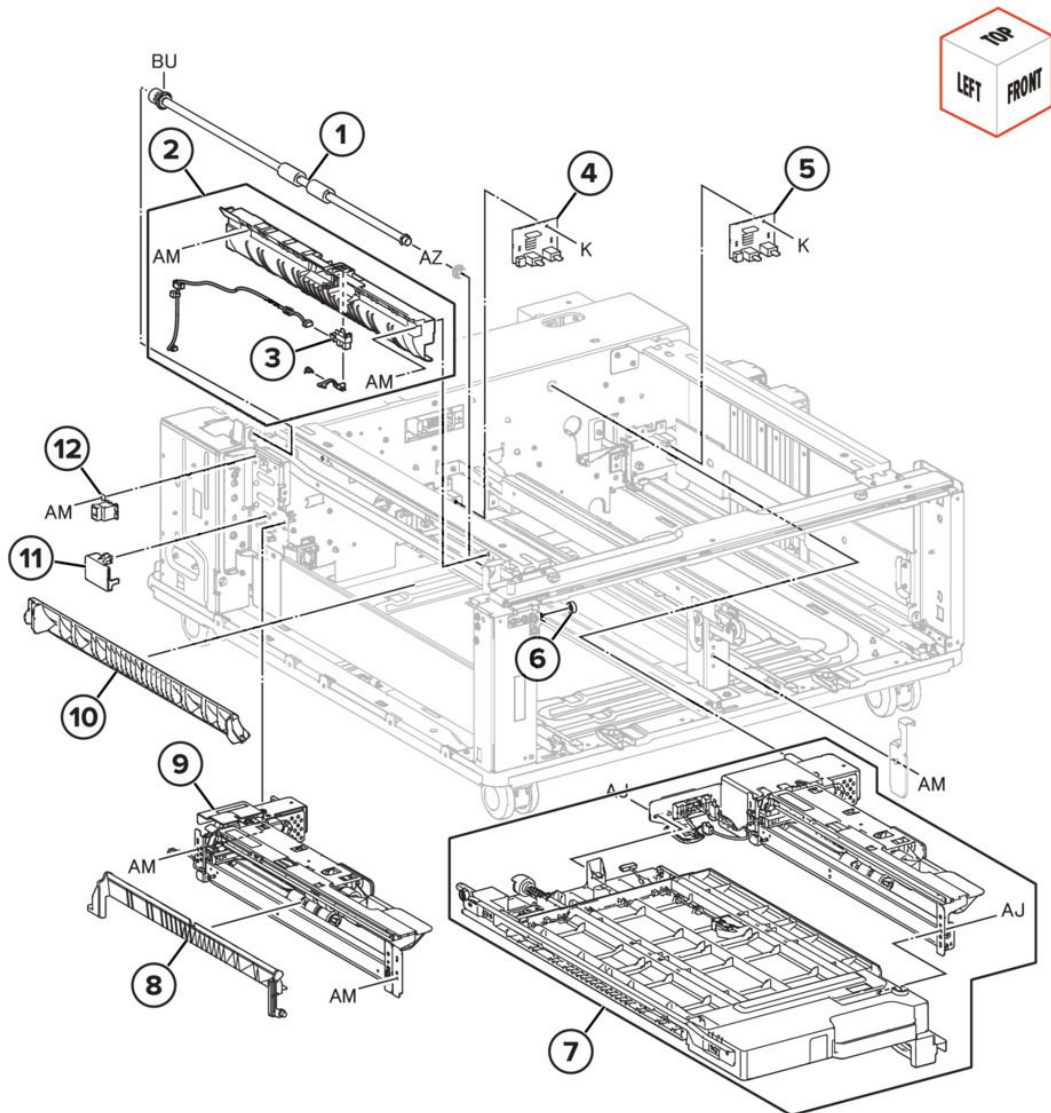
2000-sheet tandem tray covers 4



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3559	1	1	2000-sheet tandem tray front cover (tray 4)	--

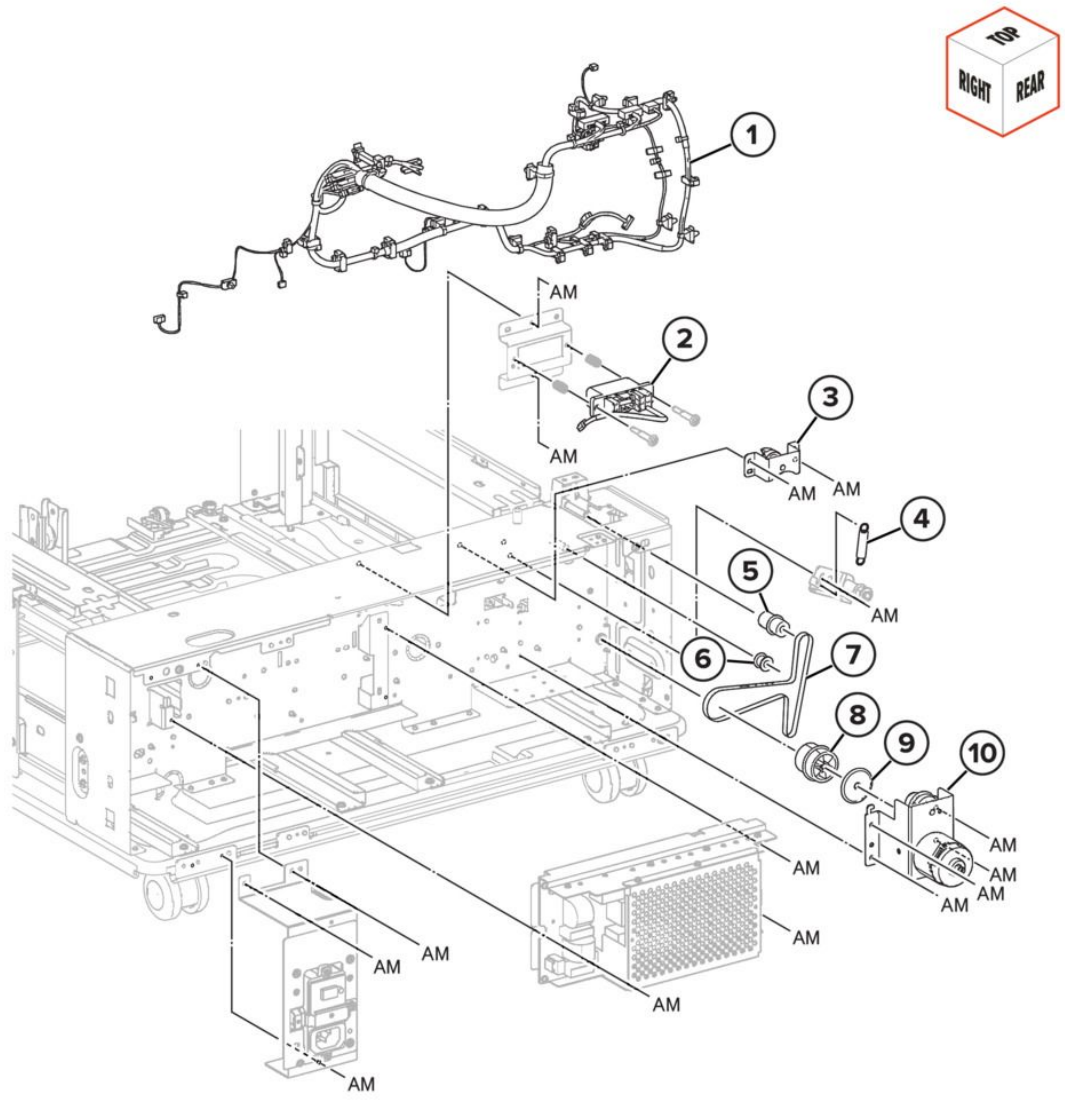
2000-sheet tandem tray transport and feed



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3521	1	1	2000-sheet tandem tray 3 transport roller	See "2000-sheet tandem tray 3 transport roller removal" on page 1312
2	41X3547	1	1	2000-sheet tandem tray transport guide assembly	See "2000-sheet tandem tray transport guide assembly removal" on page 1314
3	41X3377	1	1	Sensor (2000-sheet tandem tray transport)	See "Sensor (2000-sheet tandem tray transport) removal" on page 1316
4	40X0729	1	1	Sensor (2000-sheet tandem tray 3 paper size)	See "Sensor (2000-sheet tandem tray 3 paper size) removal" on page 1297
5	40X0729	1	1	Sensor (2000-sheet tandem tray 4 paper size)	See "Sensor (2000-sheet tandem tray 4 paper size) removal" on page 1298
6	41X3551	1	1	2000-sheet tandem tray transport roller	--
7	41X3546	1	1	2000-sheet tandem tray horizontal transport (tray 4)	See "2000-sheet tandem tray horizontal transport (tray 4) removal" on page 1292
8	40X6699	1	1	2000-sheet tandem tray transport guide (tray 3)	See "2000-sheet tandem tray transport guide (tray 3) removal" on page 1304
9	41X3545	1	1	2000-sheet tandem tray feeder (tray 3)	--
10	40X7341	1	1	2000-sheet tandem tray transport guide (tray 4)	See "2000-sheet tandem tray transport guide (tray 4) removal" on page 1311
11	41X3518	1	1	2000-sheet tandem tray connector cover	--
12	41X3517	1	1	2000-sheet tandem tray jam door switch	--

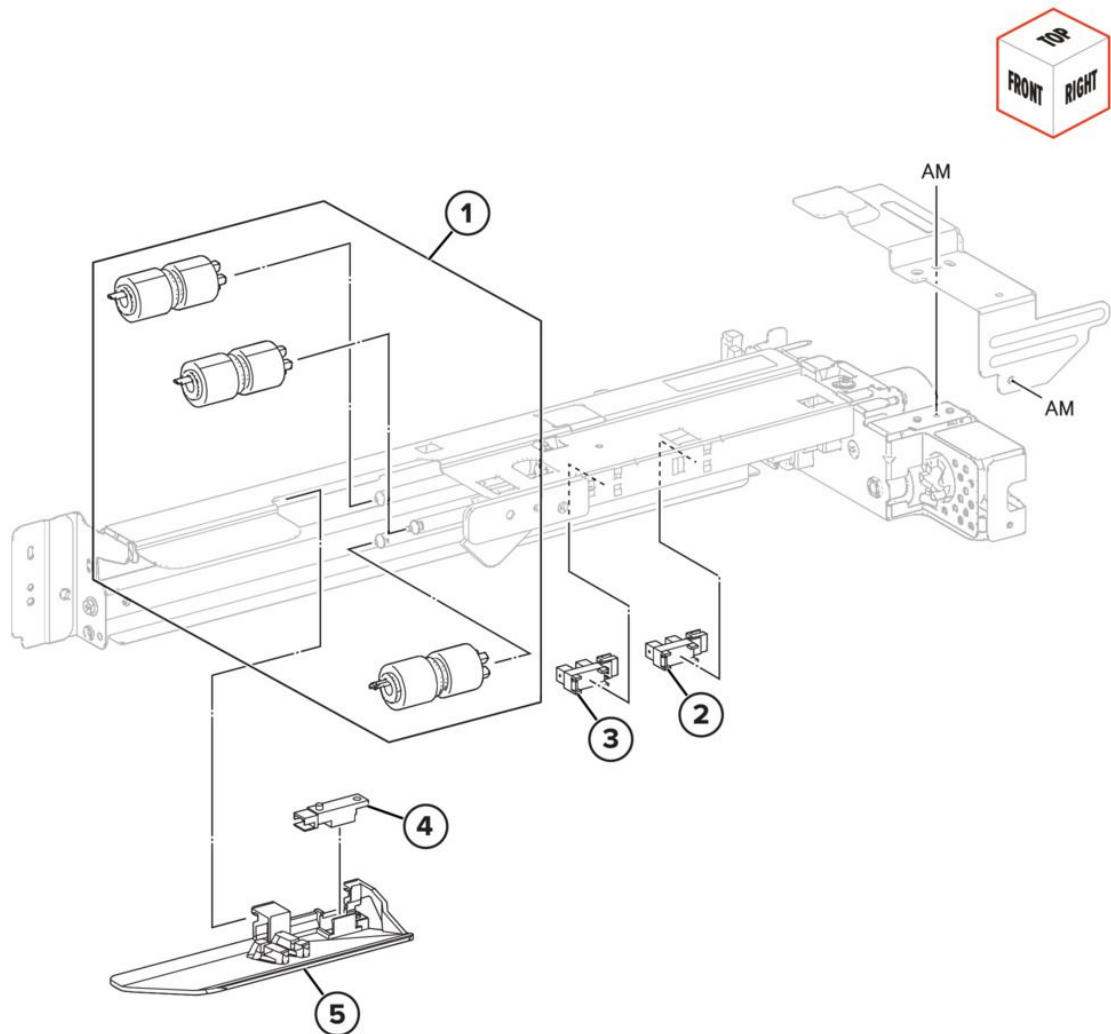
2000-sheet tandem tray drive



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3557	1	1	2000-sheet tandem tray cable 2	--
2	41X3556	1	1	2000-sheet tandem tray cable 1	See "2000-sheet tandem tray cable 1 removal" on page 1321
3	41X3555	1	1	2000-sheet tandem tray transport bracket	--
4	41X3528	1	1	2000-sheet tandem tray belt tension spring	--
5	41X3526	1	1	2000-sheet tandem tray belt pulley 2	--
6	40X7358	1	1	2000-sheet tandem tray belt roller	--
7	41X3554	1	1	2000-sheet tandem tray belt	See "2000-sheet tandem tray belt removal" on page 1320
8	41X3553	1	1	2000-sheet tandem tray pulley 1	--
9	41X3552	1	1	2000-sheet tandem tray gear collar	--
10	41X4262	1	1	Motor (2000-sheet tandem tray transport)	See "Motor (2000-sheet tandem tray transport) removal " on page 1317

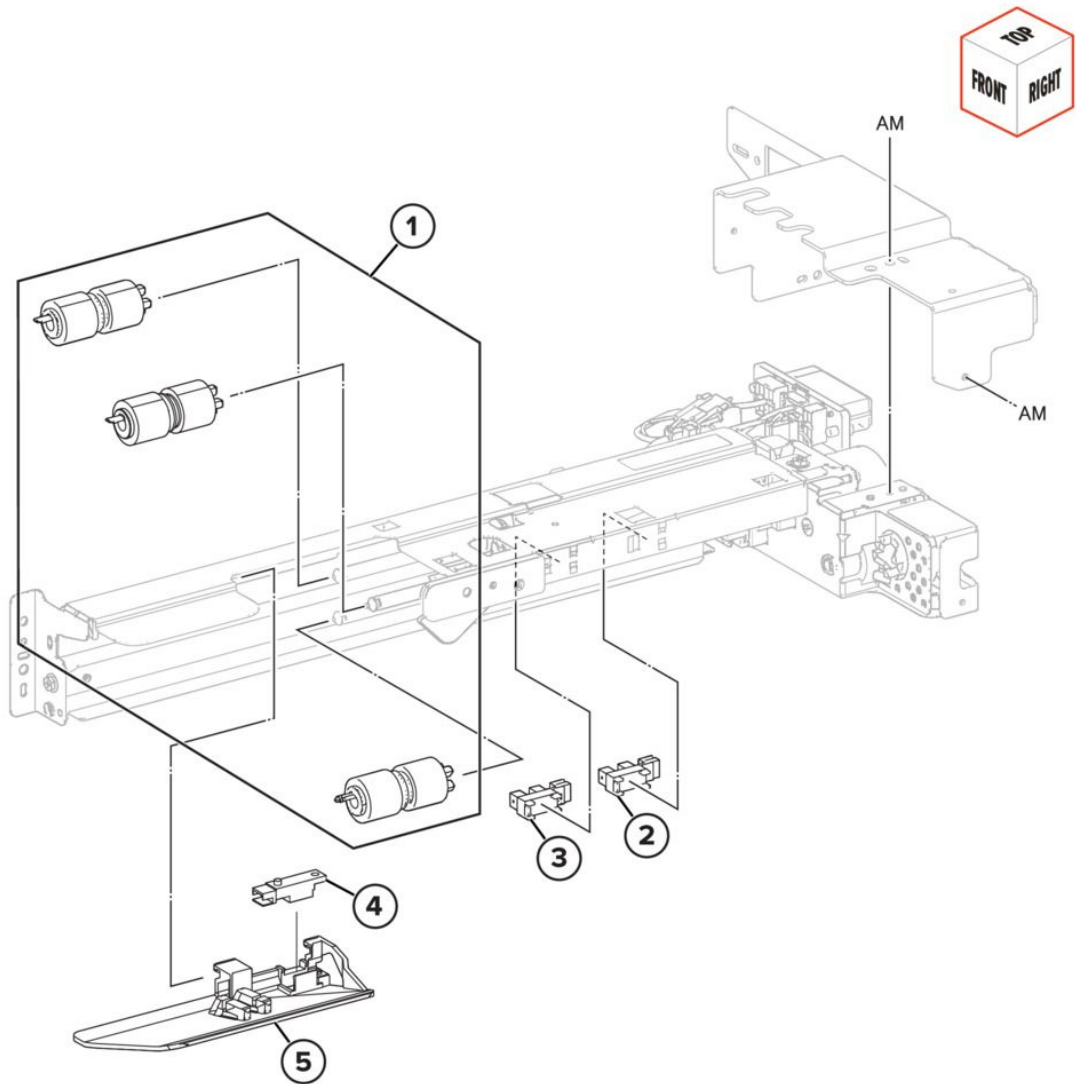
2000-sheet tandem tray feeder (tray 3)



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3376	1	1	2000-sheet tandem tray roller kit (tray 3)	See "2000-sheet tandem tray roller kit (tray 3) removal" on page 1299
2	41X3377	1	1	Sensor (2000-sheet tandem tray 3 pick position)	See "Sensor (2000-sheet tandem tray 3 pick position) removal" on page 1300
3	41X3377	1	1	Sensor (2000-sheet tandem tray 3 paper present)	See "Sensor (2000-sheet tandem tray 3 paper present) removal" on page 1301
4	40X0589	1	1	Sensor (2000-sheet tandem tray 3 feed)	See "Sensor (2000-sheet tandem tray 3 feed) removal" on page 1302
5	40X6659	1	1	2000-sheet tandem tray feed guide (tray 3)	See "2000-sheet tandem tray feed guide (tray 3) removal" on page 1305

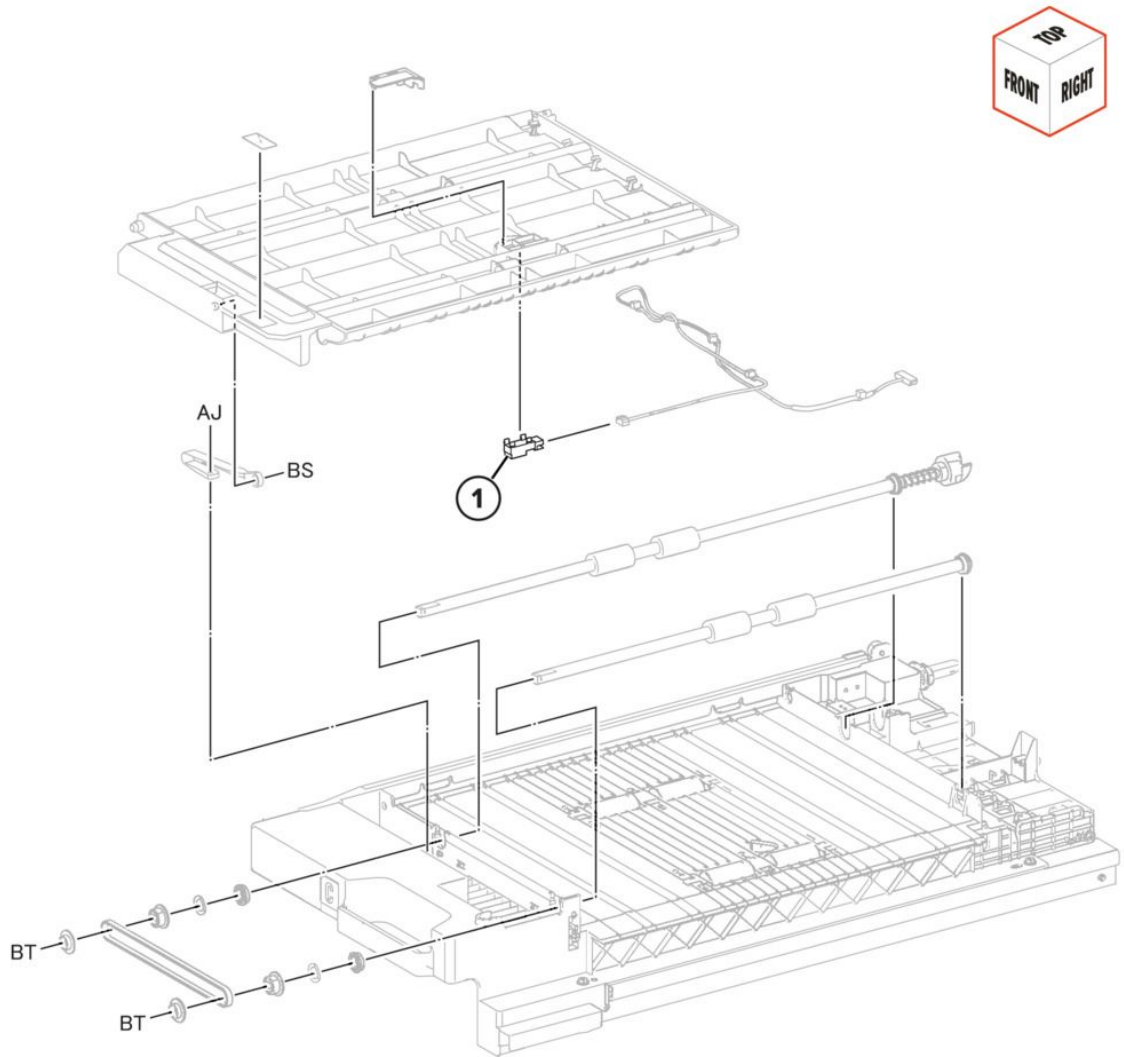
2000-sheet tandem tray feeder (tray 4)



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3376	1	1	2000-sheet tandem tray roller kit (tray 4)	--
2	41X3377	1	1	Sensor (2000-sheet tandem tray 4 pick position)	See "Sensor (2000-sheet tandem tray 4 pick position) removal" on page 1306
3	41X3377	1	1	Sensor (2000-sheet tandem tray 4 paper present)	See "Sensor (2000-sheet tandem tray 4 paper present) removal" on page 1307
4	40X0589	1	1	Sensor (2000-sheet tandem tray 4 feed)	See "Sensor (2000-sheet tandem tray 4 feed) removal" on page 1308
5	40X6659	1	1	2000-sheet tandem tray feed guide (tray 4)	See "2000-sheet tandem tray feed guide (tray 4) removal" on page 1310

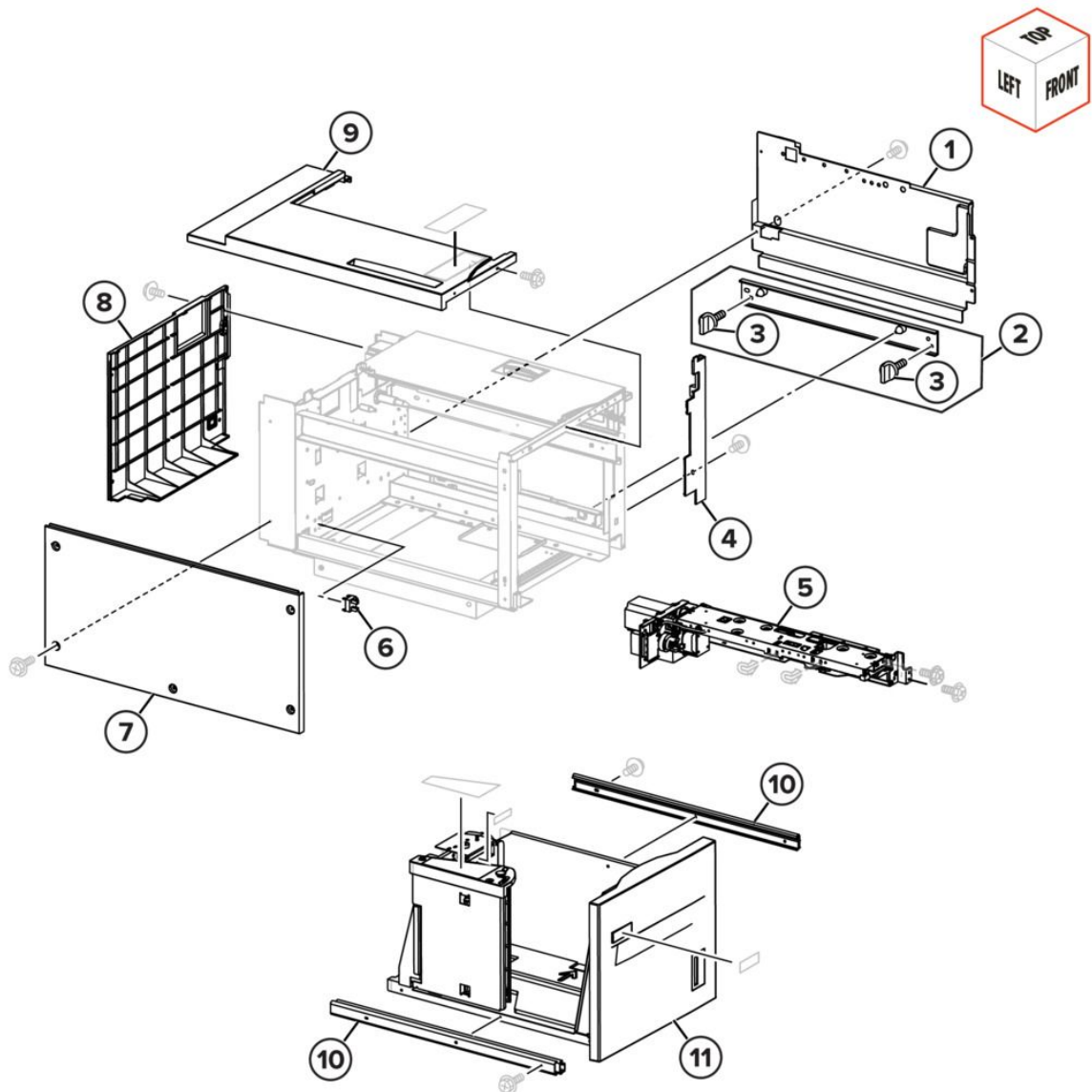
2000-sheet tandem tray transport



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
2	40X0727	1	1	Sensor (2000-sheet tandem tray 4 horizontal transport)	--

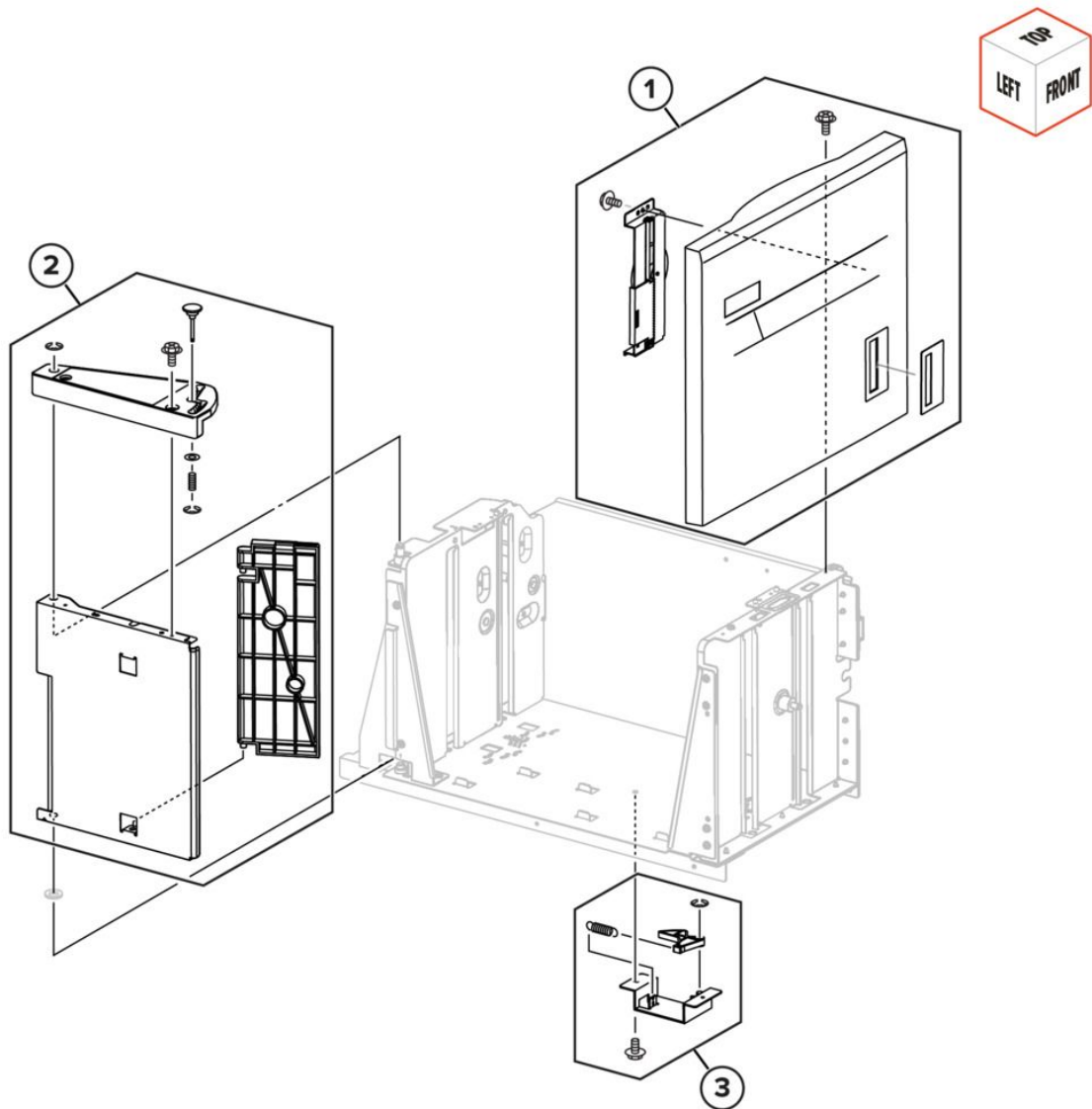
2000-sheet tray covers 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4121	1	1	2000-sheet tray right cover	See "2000-sheet tray right cover removal" on page 1328
2	41X4475	1	1	2000-sheet tray docking bracket	--
3	41X4241	1	1	2000-sheet tray docking bracket screw	--
4	41X4122	1	1	2000-sheet tray right edge cover	--
5	40X7398	1	1	2000-sheet tray paper feeder	--
6	40X0739	1	1	Sensor (2000-sheet tray paper present)	See "Sensor (2000-sheet tray paper present) removal" on page 1332
7	41X4041	1	1	2000-sheet tray left cover	See "2000-sheet tray left cover removal" on page 1327
8	41X4039	1	1	2000-sheet tray rear cover	See "2000-sheet tray rear cover removal" on page 1329
9	41X4038	1	1	2000-sheet tray top cover	See "2000-sheet tray top cover removal" on page 1322
10	41X4118	1	1	2000-sheet tray rail	--
11	41X4040	1	1	2000-sheet tray insert	--

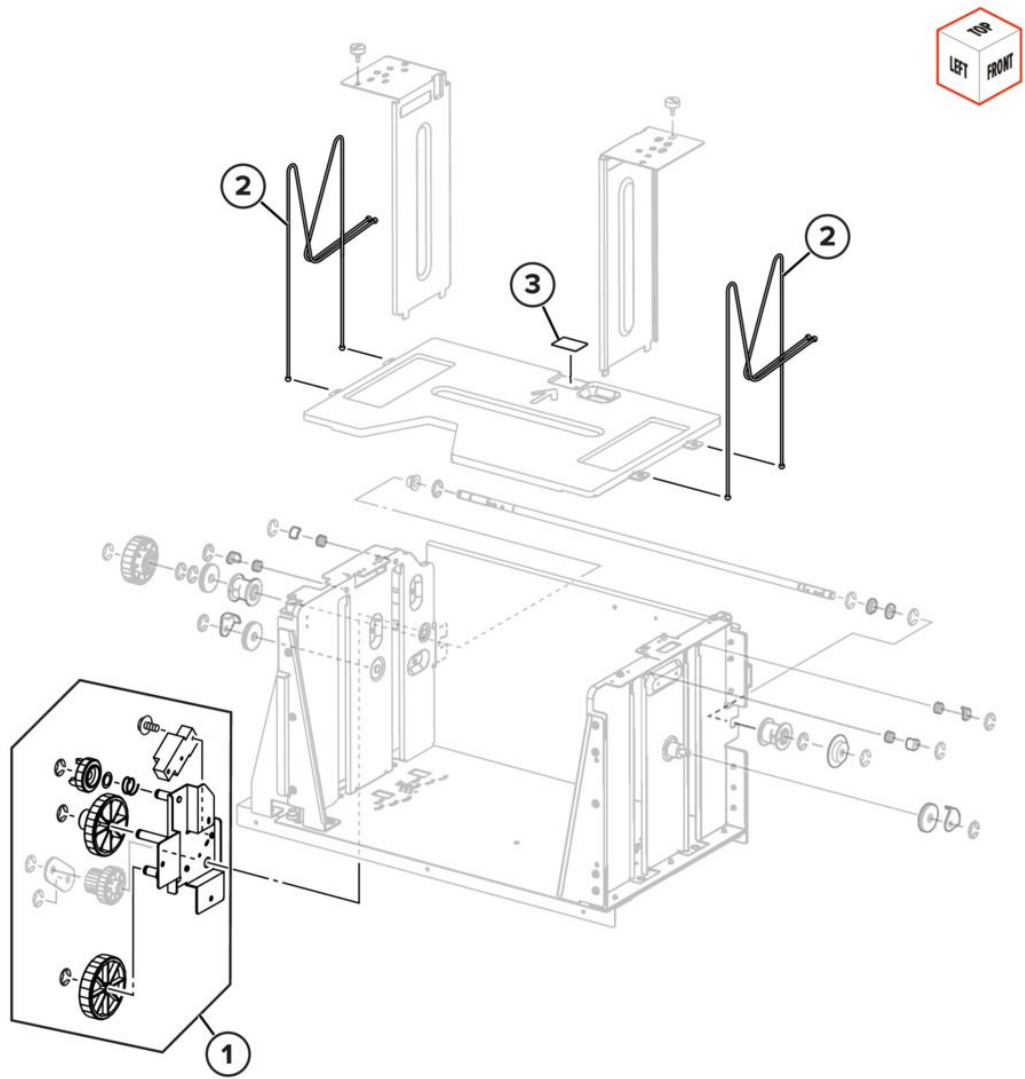
2000-sheet tray covers 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4042	1	1	2000-sheet tray insert front cover	--
2	41X4127	1	1	2000-sheet tray end guide	--
3	41X4125	1	1	2000-sheet tray latch	--

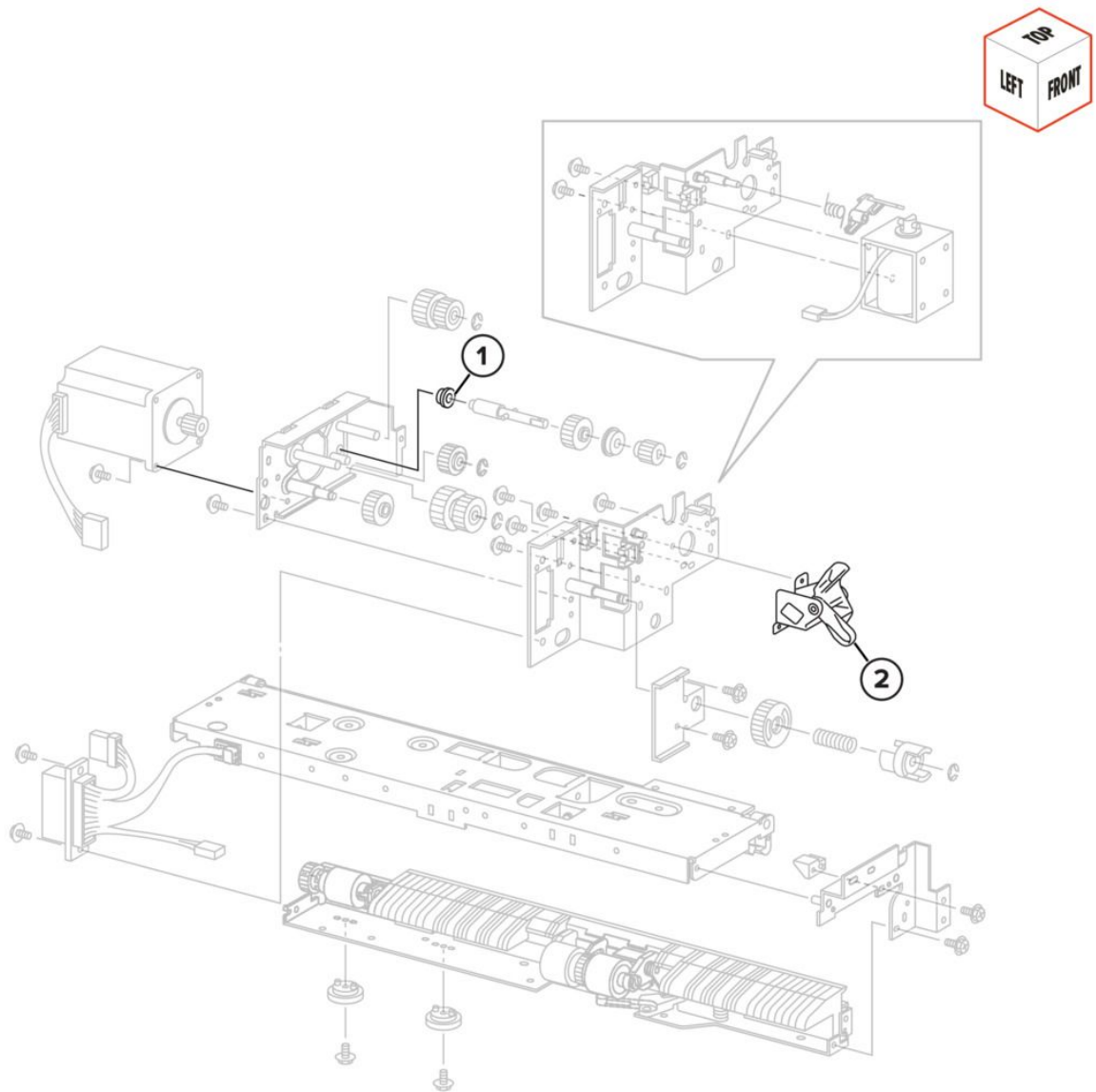
2000-sheet tray insert



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0753	1	1	2000-sheet tray insert gearbox	See "2000-sheet tray gearbox removal" on page 1349
2	41X4128	1	1	2000-sheet tray elevator lift cable	--
3	40X0752	1	1	2000-sheet tray separator pad	--

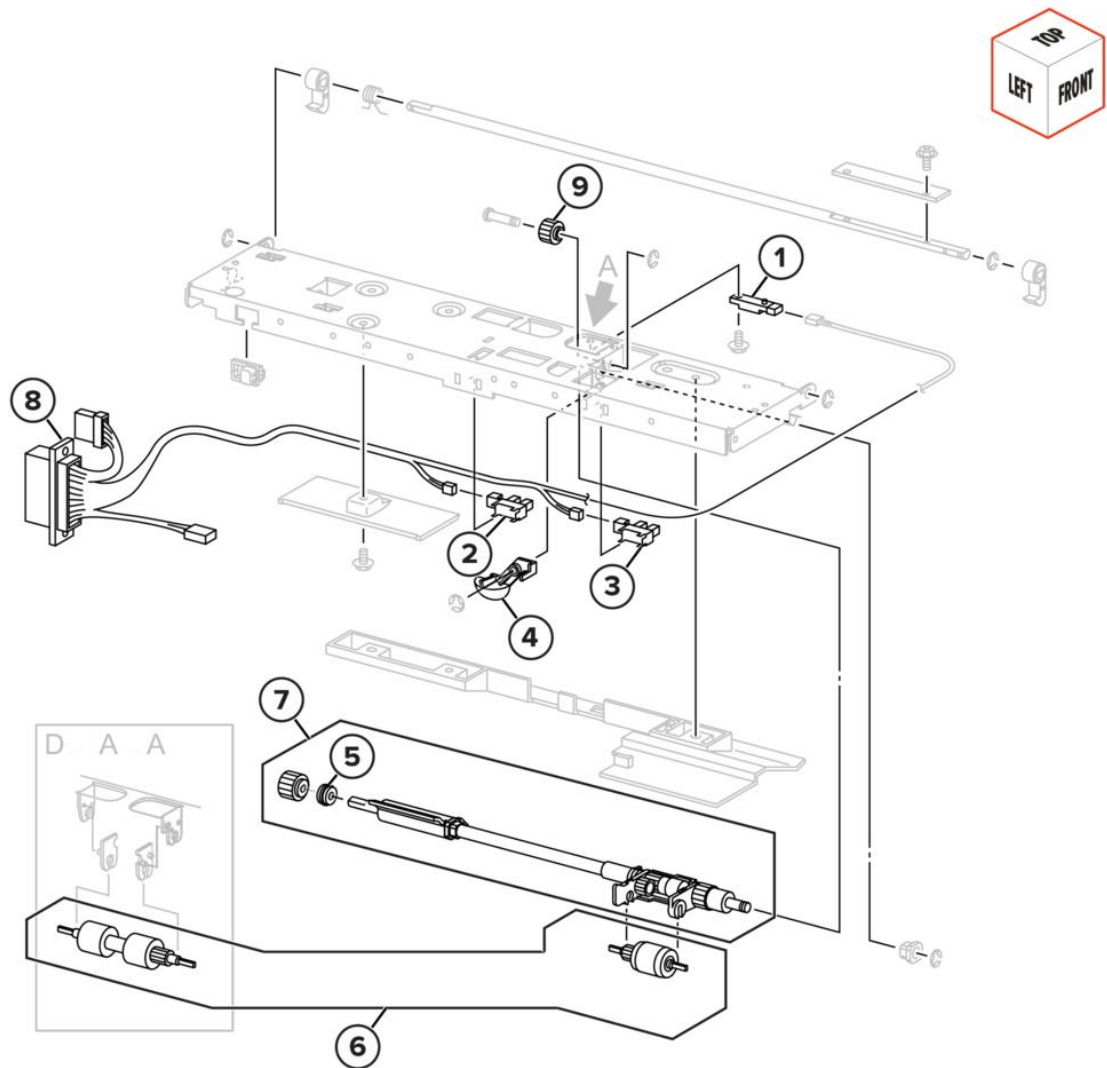
2000-sheet tray feed 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0913	1	1	Ball bearing (6mm)	--
2	40X6790	1	1	2000-sheet tray pick roller raise lever	--

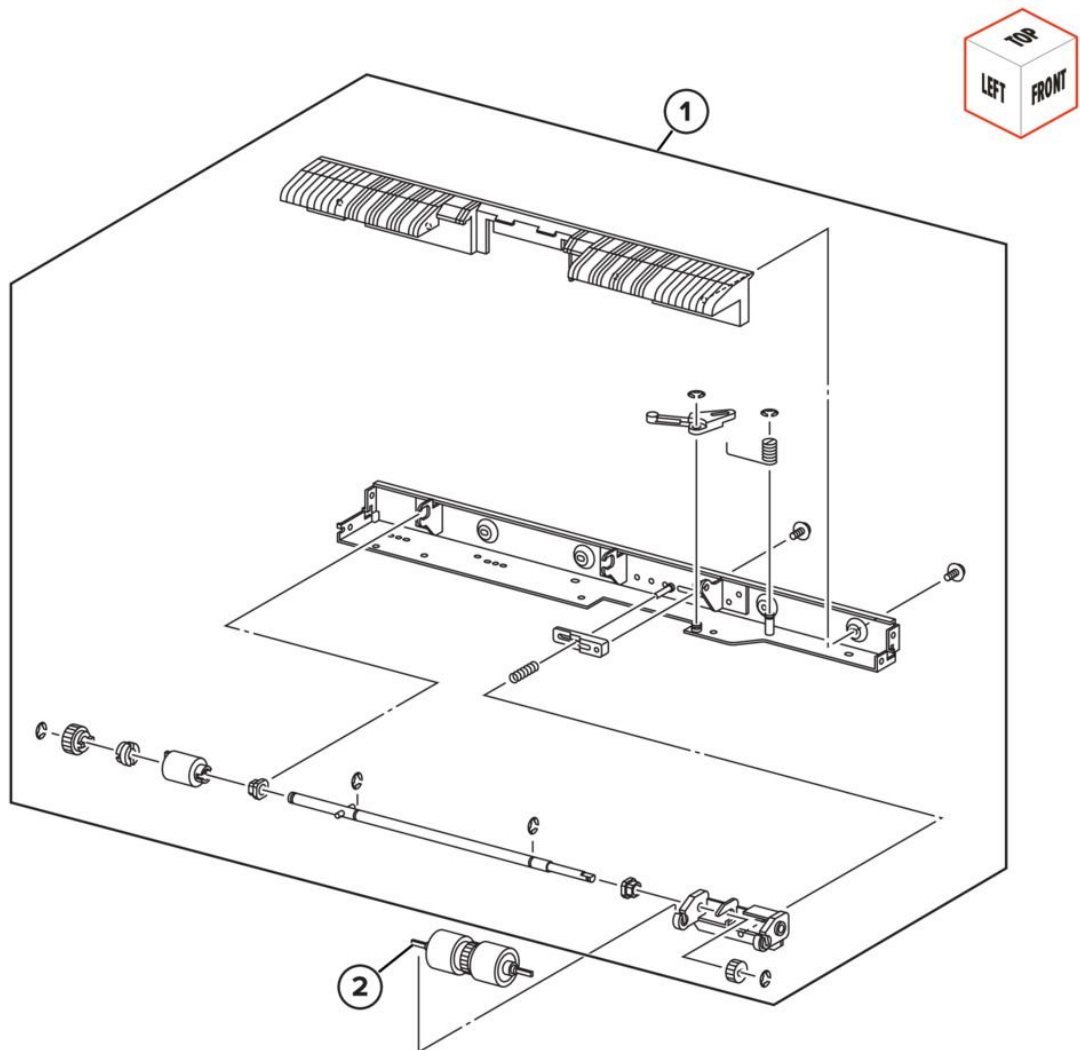
2000-sheet tray feed 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0589	1	1	Sensor (2000-sheet tray feed)	See "Sensor (2000-sheet tray feed) removal" on page 1339
2	40X0768	1	1	Sensor (2000-sheet tray paper present)	--
3	40X0768	1	1	Sensor (2000-sheet tray pick position)	See "Sensor (2000-sheet tray pick position) removal" on page 1335
4	40X0767	1	1	2000-sheet tray paper present sensor actuator	--
5	40X0913	1	1	Ball bearing (6mm)	--
6	41X4058	1	1	Roller kit (2000-sheet tray)	--
7	40X0766	1	1	Feeder unit cable	--
8	40X0765	1	1	Pick roller idler gear	--

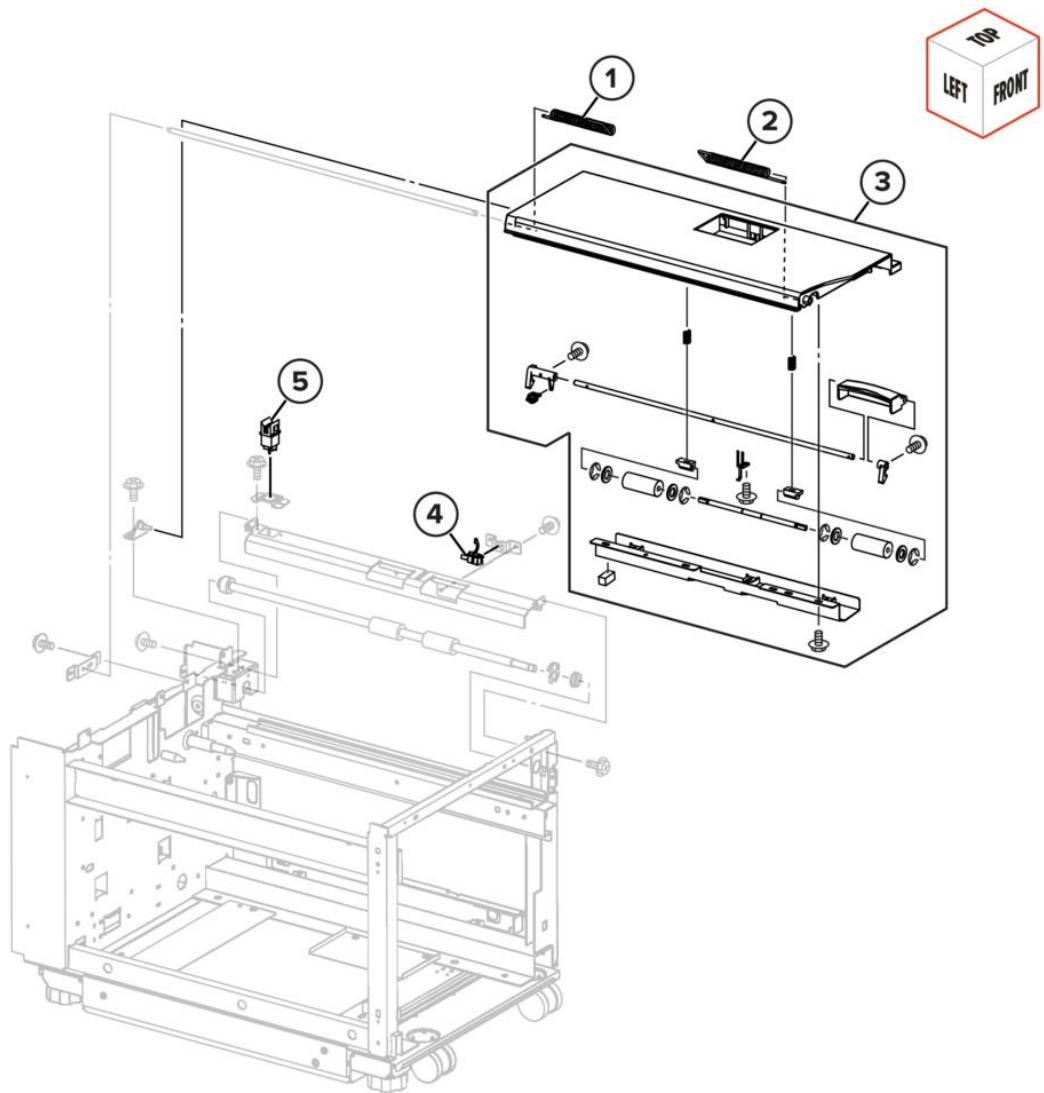
2000-sheet tray feed 3



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0771	1	1	2000-sheet tray separator guide	--
2	41X4168	1	1	Roller kit (2000-sheet tray)	--

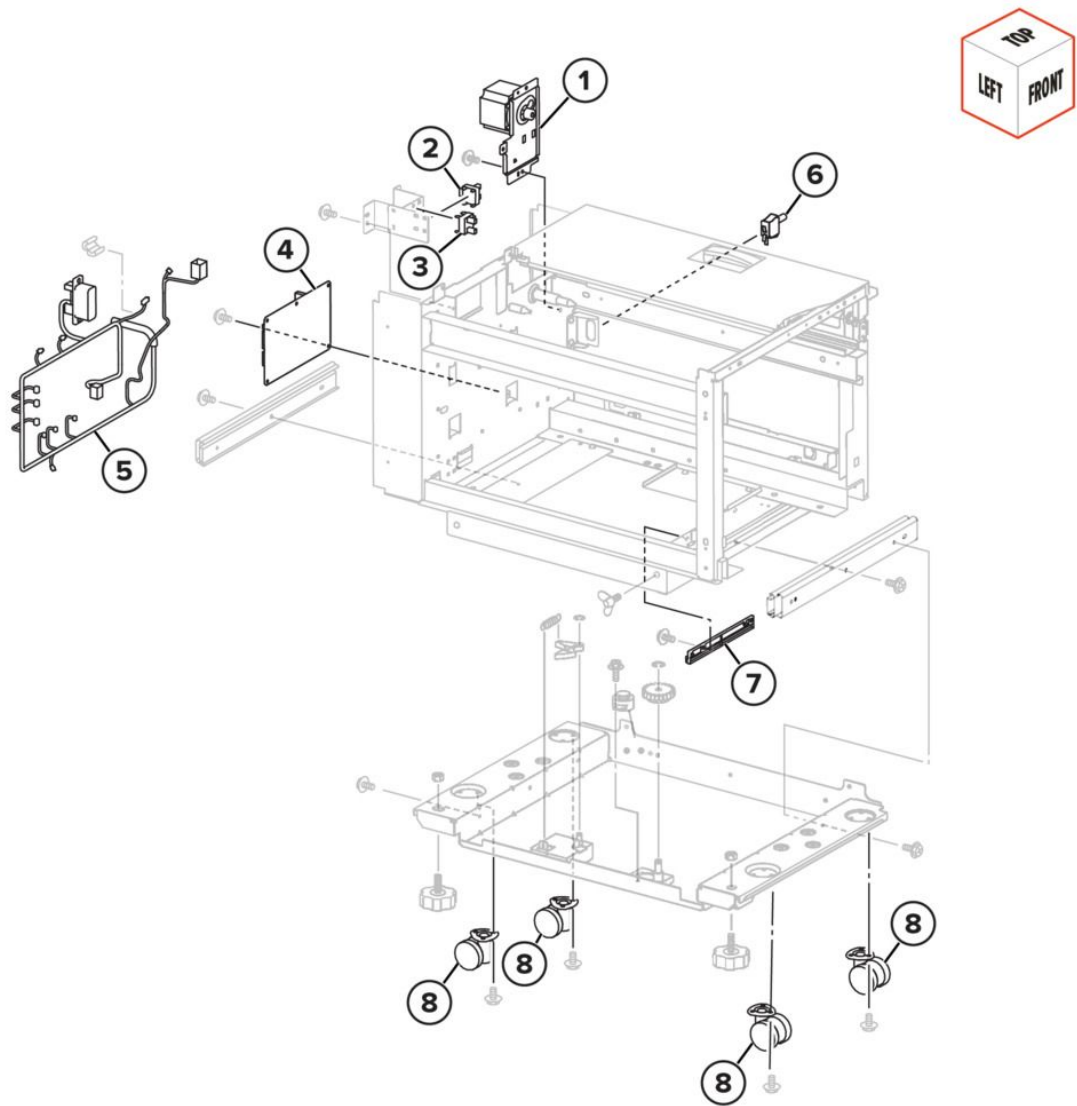
2000-sheet tray transport 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X7440	1	1	2000-sheet tray top door rear spring	--
2	40X7450	1	1	2000-sheet tray top door front spring	--
3	41X4037	1	1	2000-sheet tray top door	See "2000-sheet tray top door removal" on page 1324
4	40X0774	1	1	Sensor (2000-sheet tray transport)	See "Sensor (2000-sheet tray transport) removal" on page 1341
5	40X0553	1	1	2000-sheet tray top door interlock switch	See "2000-sheet tray top door interlock switch removal" on page 1325

2000-sheet tray transport 2

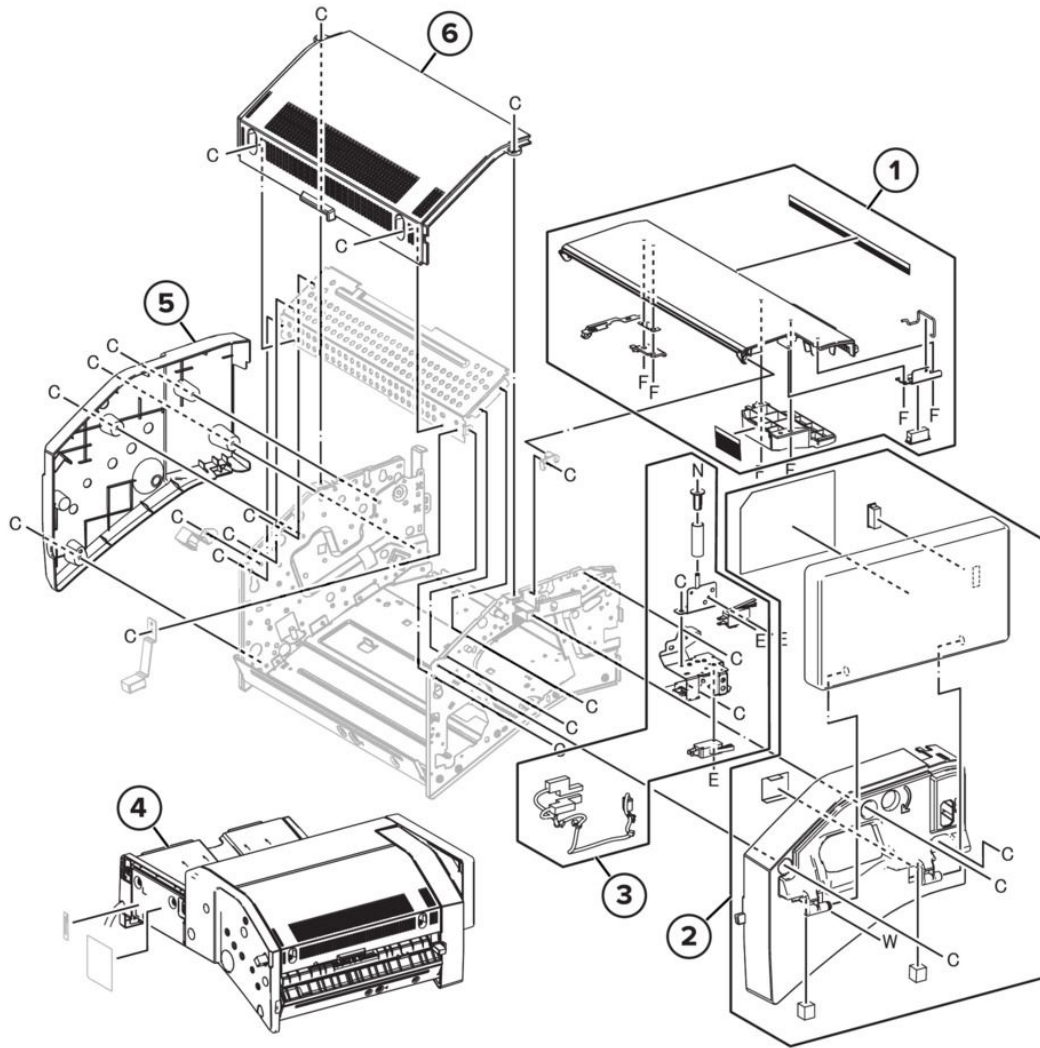


Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0776	1	1	Motor (2000-sheet tray transport)	See "Motor (2000-sheet tray transport) removal" on page 1348
2	40X0739	1	1	Sensor (2000-sheet tray paper size 1 and 2)	See "Sensor (2000-sheet tray paper size 1 and 2) removal" on page 1340
3	40X0739	1	1	Sensor (2000-sheet tray paper size 1 and 2)	See "Sensor (2000-sheet tray paper size 1 and 2) removal" on page 1340
4	41X4130	1	1	2000-sheet tray controller board	See "2000-sheet tray controller board removal" on page 1331
5	40X0779	1	1	2000-sheet tray board cable	--
6	40X0777	1	1	2000-sheet tray set switch	See "2000-sheet tray set switch removal" on page 1344
7	40X6792	1	1	2000-sheet tray sliding rack	--
8	40X0741	1	1	2000-sheet tray caster wheel	See "2000-sheet tray caster wheel removal" on page 1330

Staple finisher

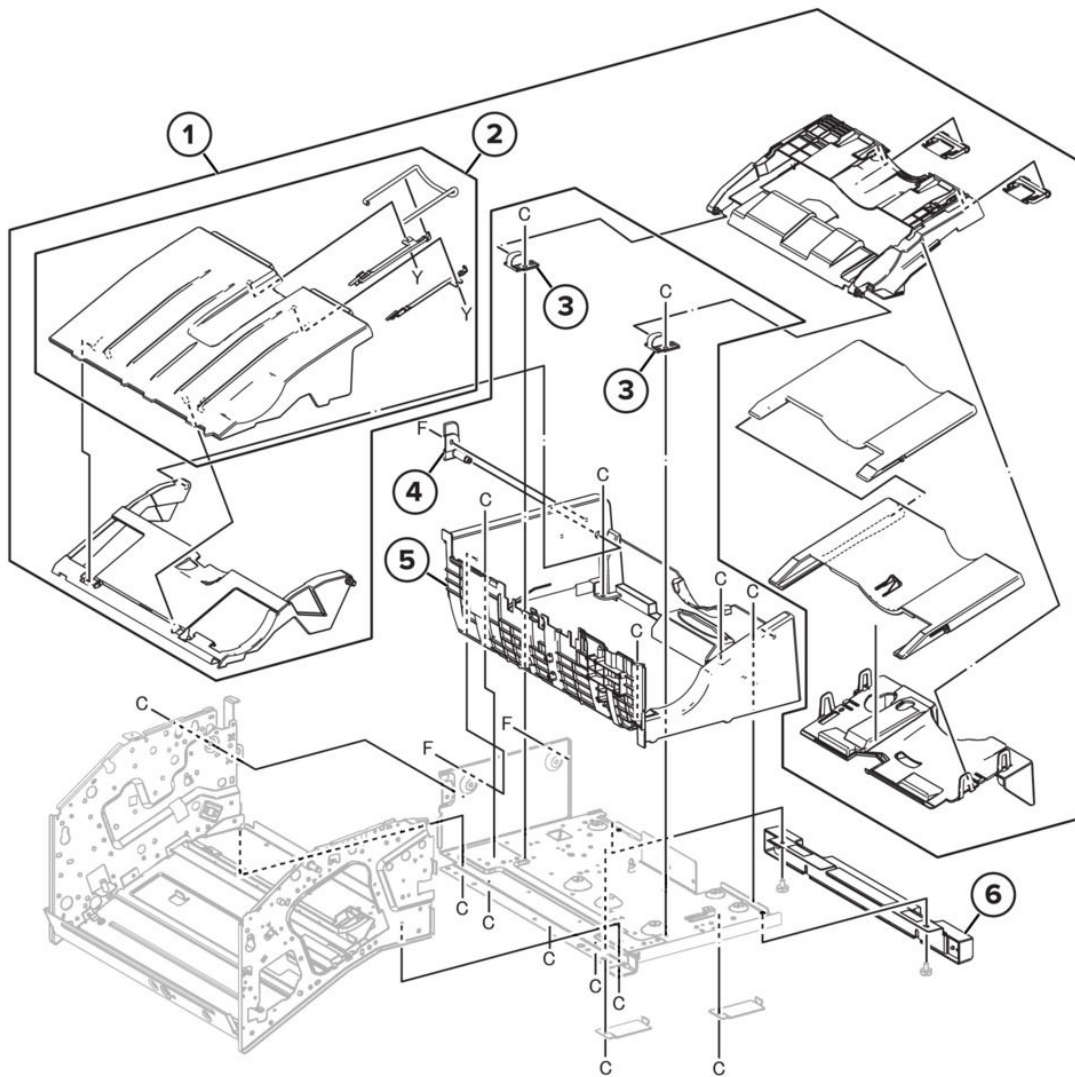
Staple finisher covers



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3638	1	1	Staple finisher top eject cover subassembly	See "Staple finisher top eject cover subassembly removal" on page 1603
2	41X3636	1	1	Staple finisher front cover assembly	See "Staple finisher front cover removal" on page 1593
3	41X3637	1	1	Staple finisher front interlock bracket assembly	See "Staple finisher front interlock bracket assembly removal" on page 1605
4	41X3641	1	1	Staple finisher transport assembly	--
5	41X3639	1	1	Staple finisher rear cover	See "Staple finisher rear cover removal" on page 1594
6	41X3640	1	1	Staple finisher top LH cover	See "Staple finisher top LH cover removal" on page 1599

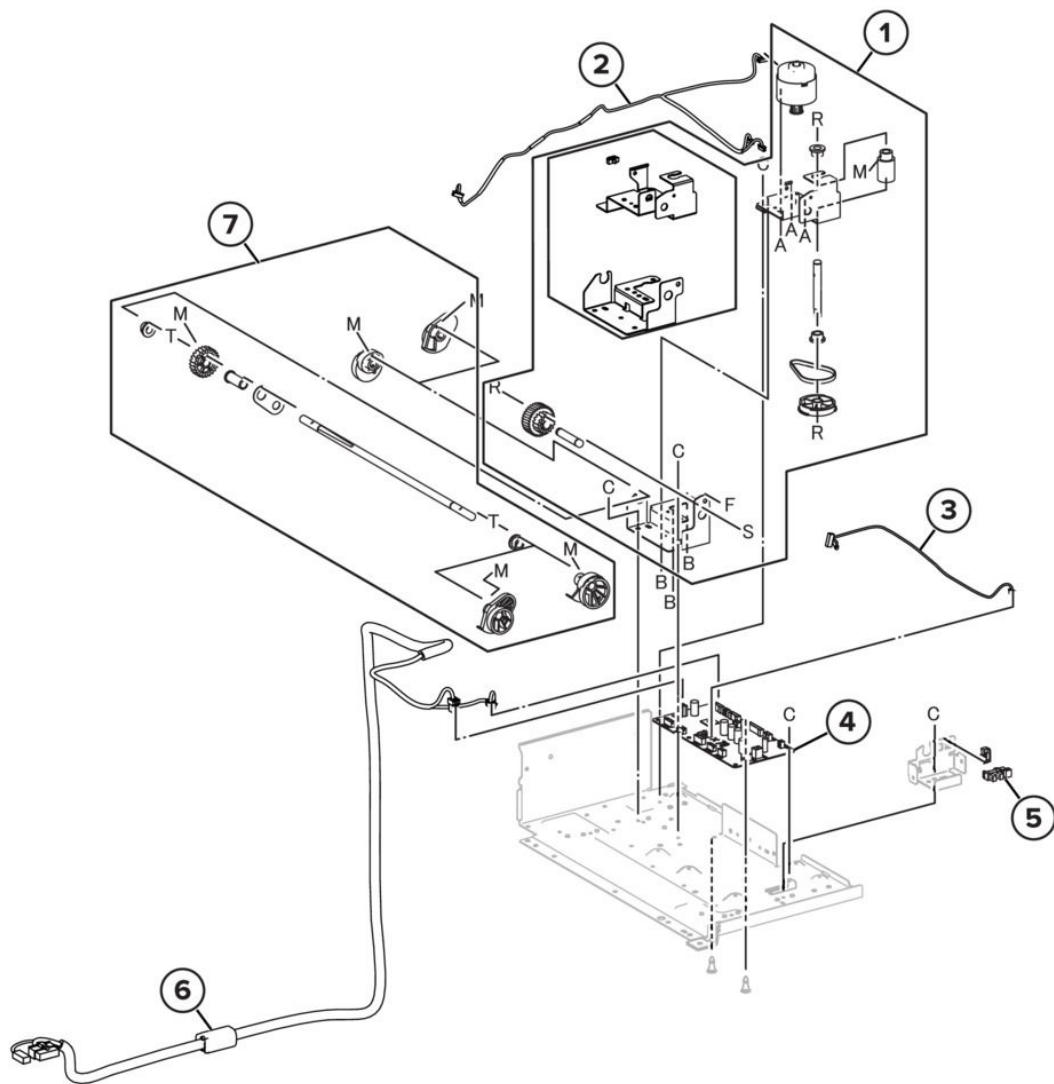
Staple finisher stapler bin



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3647	1	1	Staple finisher upper bin	--
2	41X3643	1	1	Staple finisher lower bin	--
3	41X3645	1	1	Staple finisher bin hinge 1	--
4	41X3646	1	1	Staple finisher bin hinge 2	--
5	41X3644	1	1	Staple finisher bin base	--
6	41X3642	1	1	Staple finisher docking bracket assembly	See "Staple finisher docking bracket removal" on page 1602

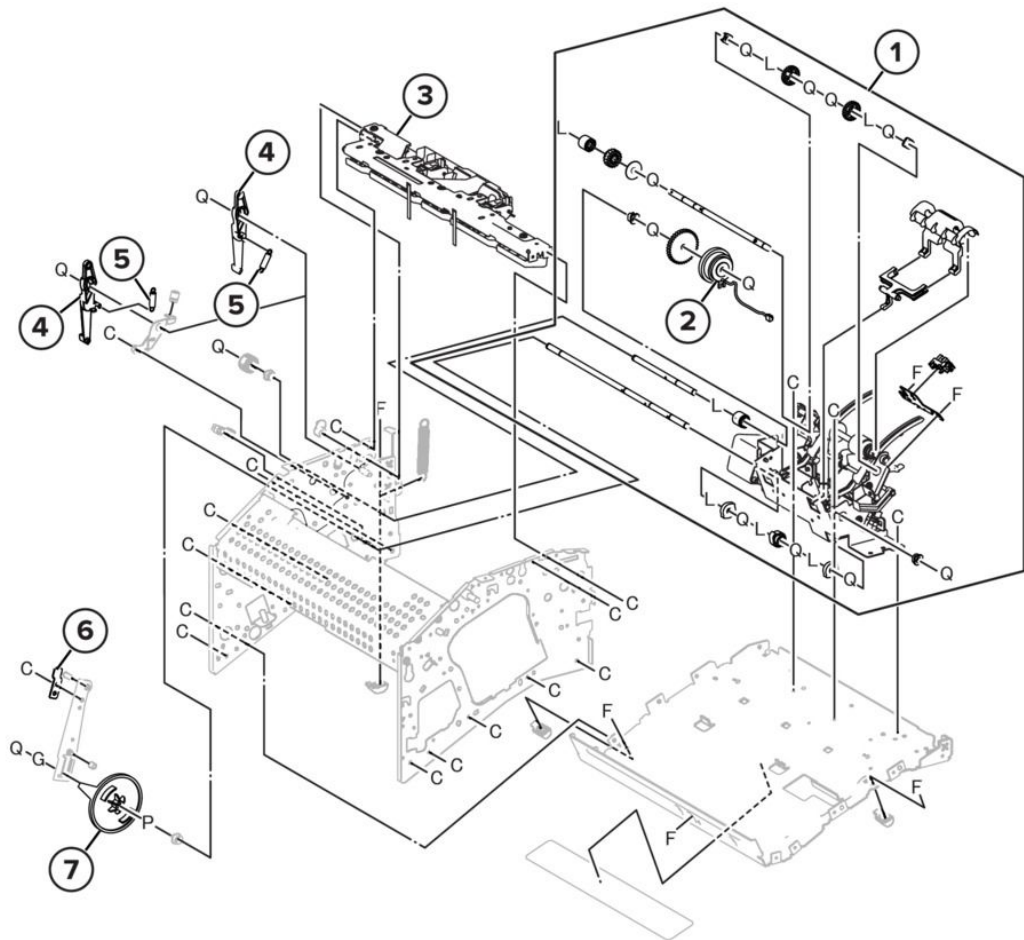
Staple finisher stacker base



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3650	1	1	Motor (staple finisher stacker lift)	--
2	41X3652	1	1	Staple finisher stacker motor cable	--
3	41X3653	1	1	Motor (staple finisher eject)	See "Motor (staple finisher eject) removal" on page 1637
4	41X3649	1	1	Staple finisher controller board	--
5	40X7403	1	1	Sensor (staple finisher paper present)	--
6	41X3651	1	1	Staple finisher cable	--
7	41X3648	1	1	Staple finisher lift shaft unit	See "Staple finisher lift shaft removal" on page 1600

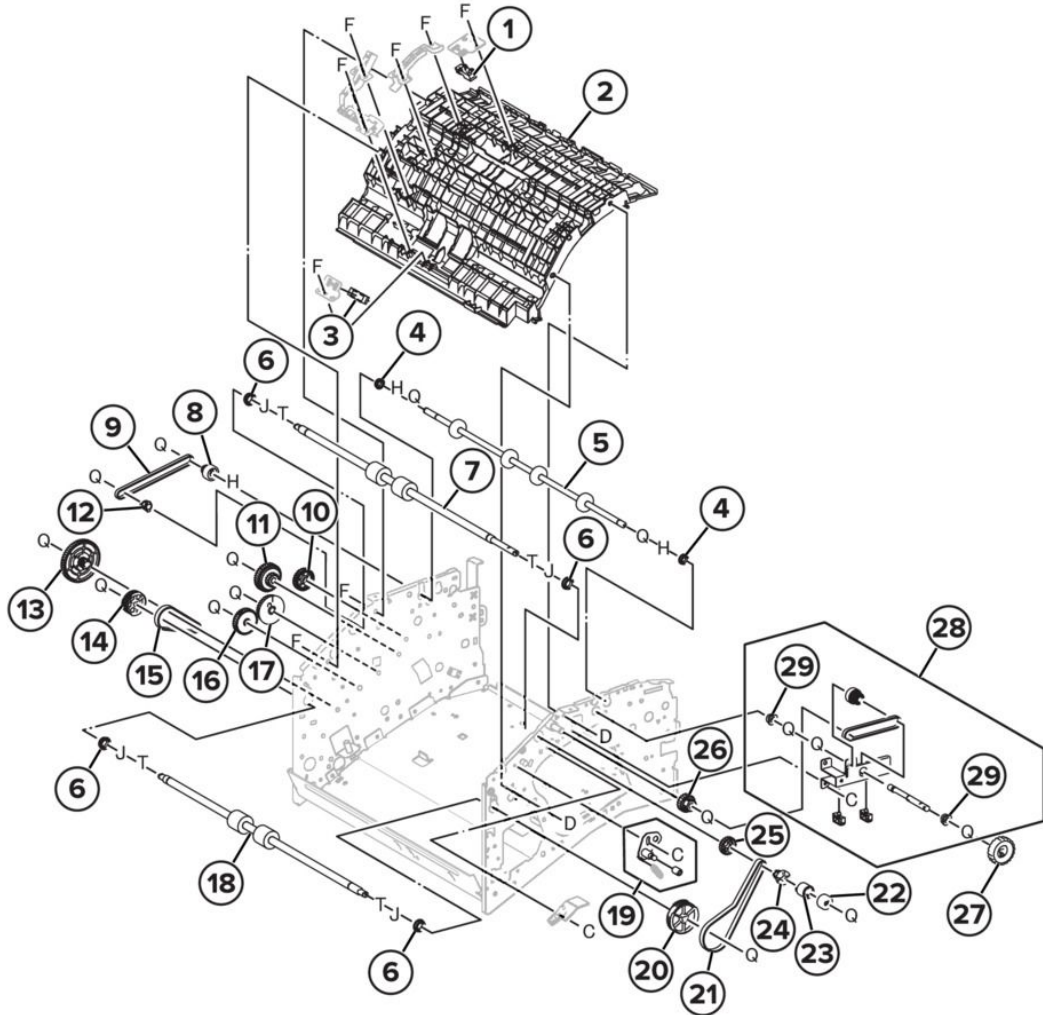
Staple finisher stapler eject



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3654	1	1	Staple finisher lower ejector unit	--
2	41X3656	1	1	Staple finisher ejector clutch	--
3	41X3655	1	1	Staple finisher upper ejector unit	--
4	41X3659	2	2	Staple finisher paddle link	--
5	41X3658	2	2	Staple finisher link spring	--
6	41X3661	1	1	Staple finisher stopper bracket	--
7	41X3660	1	1	Staple finisher eject clamp cam	--

Staple finisher stapler transport 1



Parts catalog

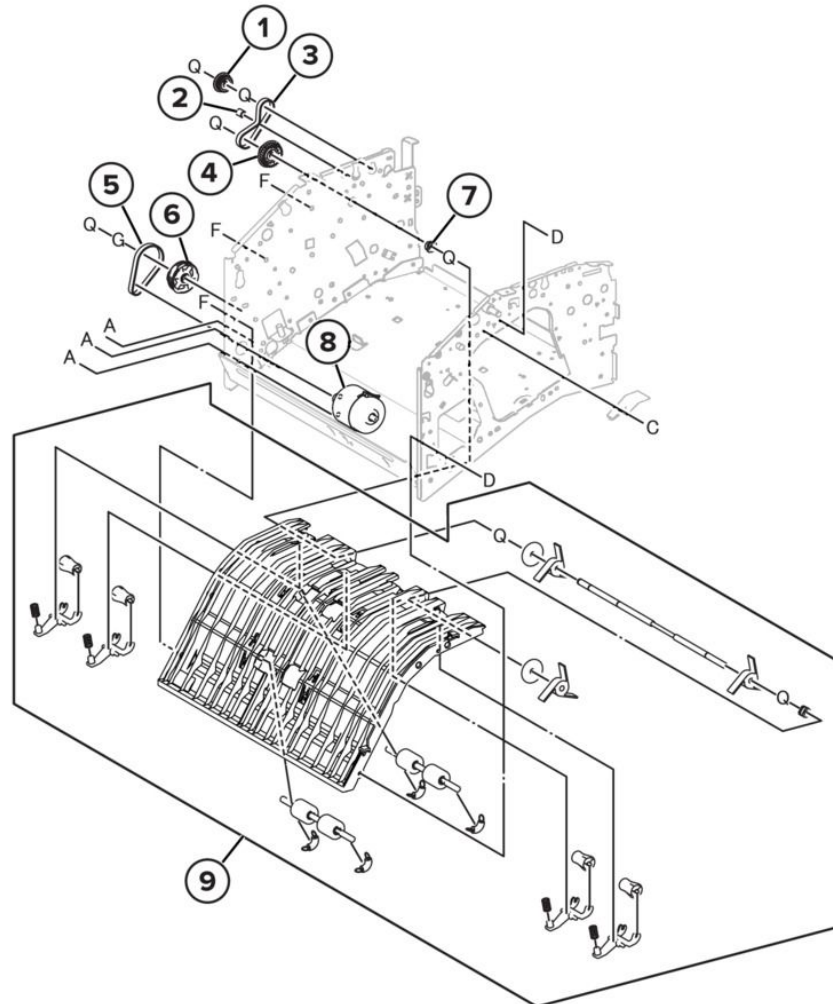
Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0727	1	1	Sensor (staple finisher compiler exit)	--
2	41X3677	1	1	Staple finisher upper transport guide	See "Staple finisher upper transport guide removal" on page 1606
3	40X0727	1	1	Sensor (staple finisher entrance)	--
4	40X0913	2	2	Staple finisher ball bearing 1	--
5	41X3670	1	1	Staple finisher compiler exit roller	See "Staple finisher compiler exit roller removal" on page 1614
6	40X3915	4	4	Staple finisher ball bearing 2	--
7	41X3671	1	1	Staple finisher transport roller 2	--
8	41X3663	1	1	Pulley (T16)	--
9	41X3664	1	1	Staple finisher timing belt 1	--
10	41X3685	1	1	Gear (Z27L)	--
11	41X3684	1	1	Paddle idler gear (Z16/Z35)	--
12	41X3672	1	1	Staple finisher idler pulley	--
13	41X3678	1	1	Staple finisher idler gear 2 (Z55L T17)	--
14	41X3674	1	1	Pulley (T40)	--
15	41X3691	1	1	Staple finisher timing belt 3	--
16	41X3682	1	1	Gear (AUG10)	--
17	41X3683	1	1	Gear (Z34)	--
18	41X3669	1	1	Staple finisher transport roller 1	--
19	41X3668	1	1	Staple finisher belt tension bracket	--
20	41X3673	1	1	Pulley (T55)	--
21	41X3665	1	1	Staple finisher timing belt 2	--
22	41X3662	1	1	Staple finisher brake assembly	--
23	41X3676	1	1	Clutch cap	--
24	41X3675	1	1	Clutch pulley (T16)	--
25	41X3679	1	1	Clutch gear (Z22)	--
26	41X3680	1	1	Gear (Z22/T20)	--
27	41X3666	1	1	Staple finisher stapler roll knob	See "Staple finisher stapler roll knob removal" on page 1592

Continued on page 2008

Continued from page 2007

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
28	41X3667	1	1	Staple finisher jam shaft bracket assembly	--
29	41X3690	2	2	Bearing	--

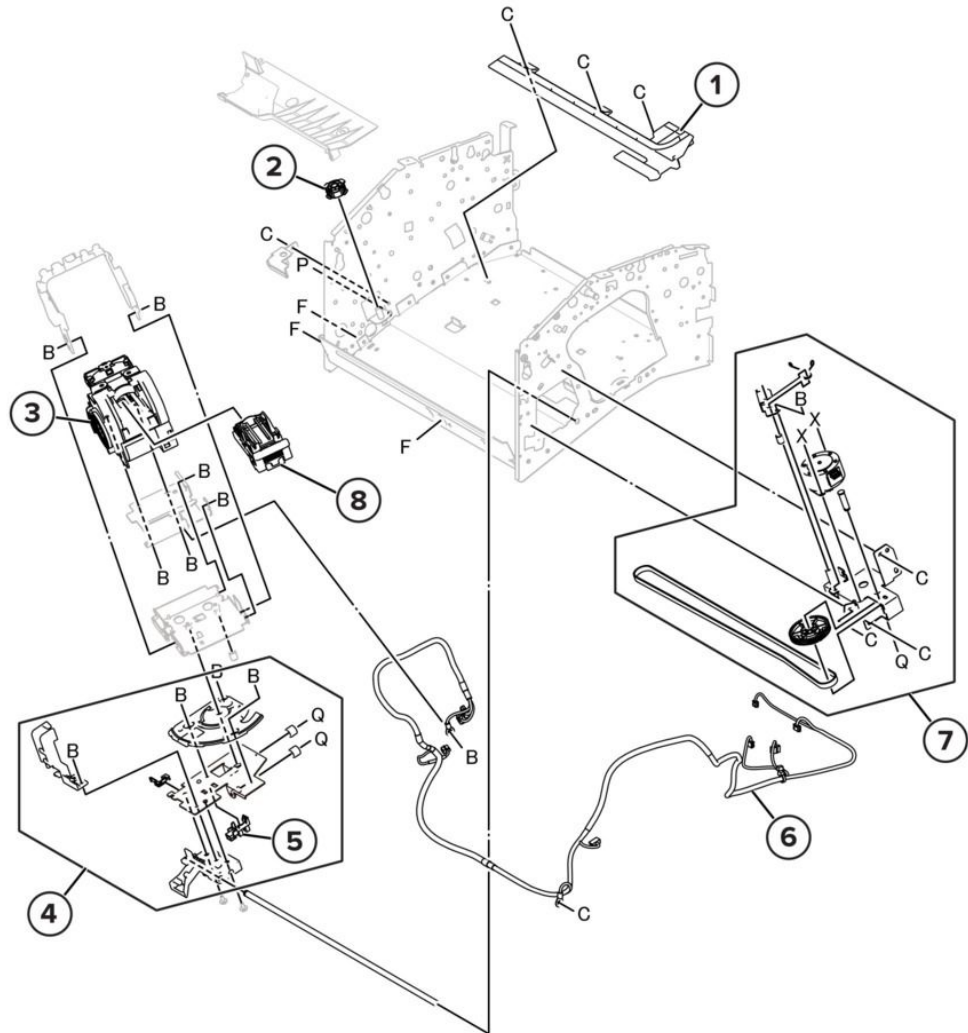
Staple finisher stapler transport 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3688	1	1	One way pulley (T28)	--
2	41X3152	1	1	Pulley	--
3	41X3691	1	1	Staple finisher timing belt 4	--
4	41X3686	1	1	Main paddle gear (Z29/T28)	--
5	41X3691	1	1	Staple finisher timing belt 4	--
6	41X3687	1	1	Staple finisher motor idler gear	--
7	41X3690	1	1	Bearing	--
8	41X3689	1	1	Motor (staple finisher transport)	See "Motor (staple finisher transport) removal" on page 1638
9	41X3692	1	1	Staple finisher lower transport guide	--

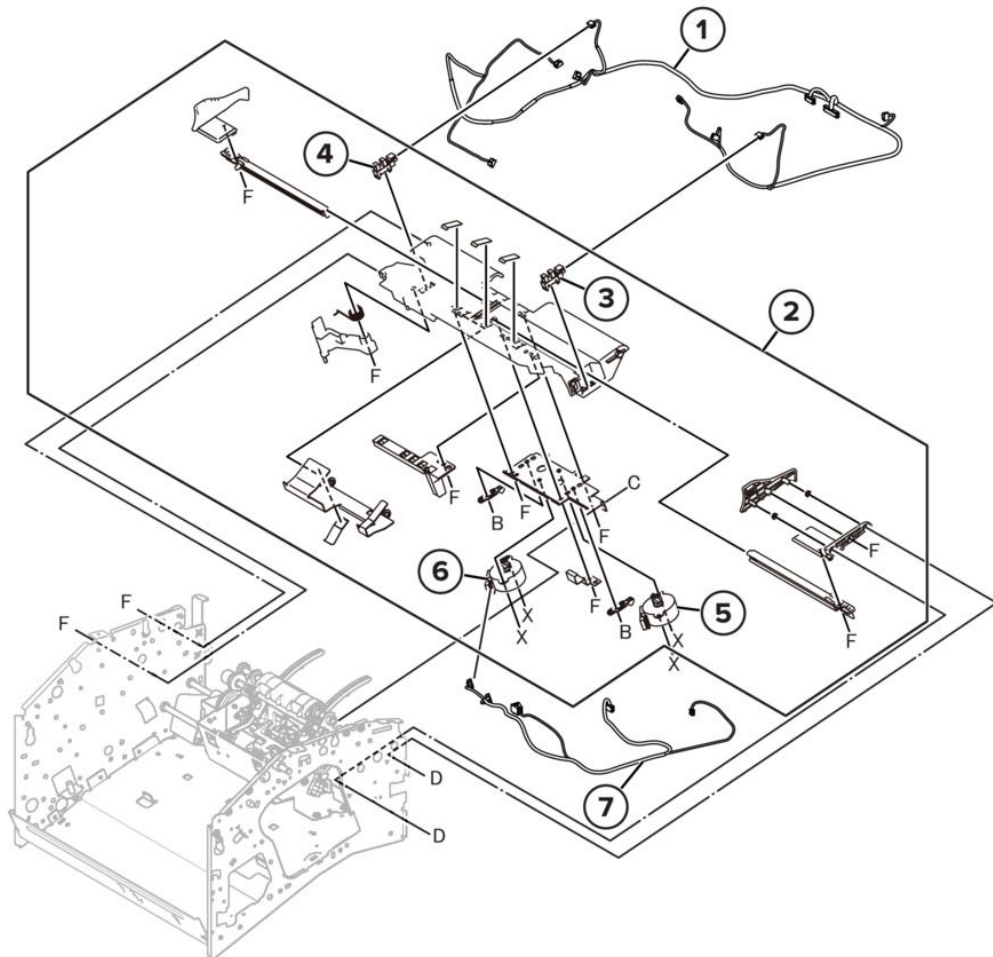
Staple finisher components



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3698	1	1	Staple finisher staple rail	See "Staple finisher staple rail assembly removal" on page 1647
2	41X3697	1	1	Pulley (T33/S2M)	--
3	41X3693	1	1	Staple finisher staple head	--
4	41X3699	1	1	Staple finisher staple position bracket	--
5	41X3694	1	1	Sensor (staple finisher staple position)	--
6	41X3695	1	1	Staple finisher stapler cable	--
7	41X3696	1	1	Staple finisher staple drive unit	--
8	41X4920	1	1	Staple cartridge holder	--
NS	41X4163	1	1	Staple finisher installation kit	--

Staple finisher compiler components

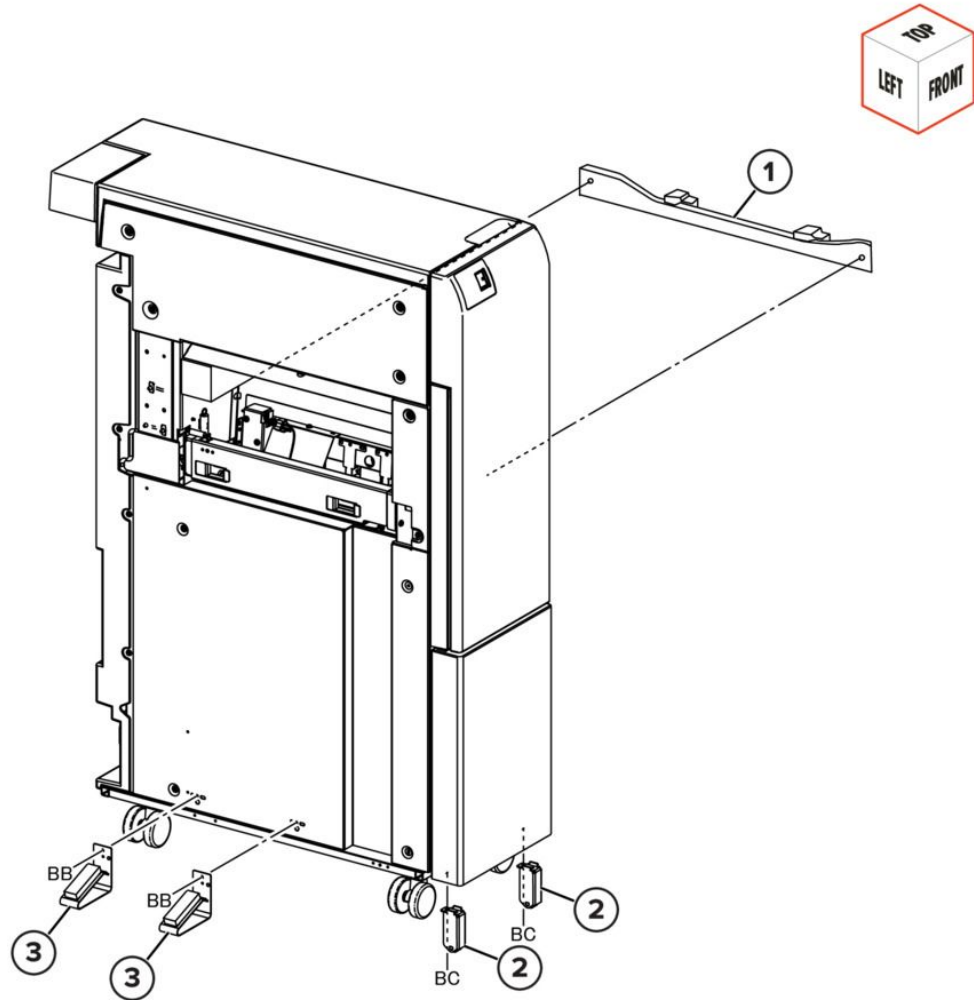


Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3703	1	1	Staple finisher tamper sensor cable	--
2	41X3700	1	1	Staple finisher compiler tray	See "Staple finisher compiler tray removal" on page 1626
3	40X7403	1	1	Sensor (staple finisher tamper front)	--
4	40X7403	1	1	Sensor (staple finisher tamper rear)	--
5	41X3701	1	1	Motor (staple finisher tamper front)	--
6	41X3701	1	1	Motor (staple finisher tamper rear)	--
7	41X3702	1	1	Staple finisher tamper cable	--

Trifold/Z-fold

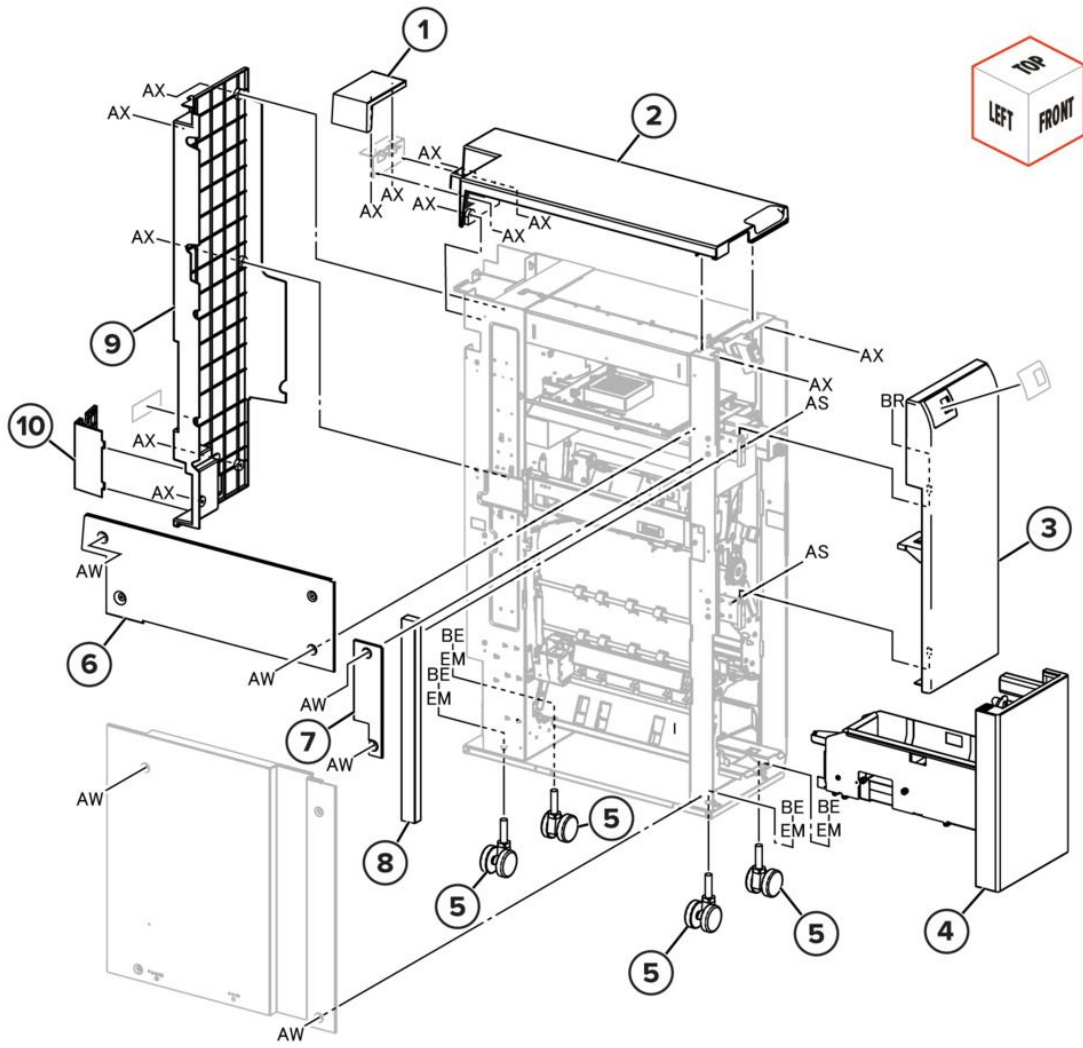
Trifold/Z-fold brackets



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X2983	1	1	Trifold/Z-fold installation bracket	See "Trifold/Z-fold installation bracket removal" on page 1546
2	41X2981	2	1	Trifold/Z-fold bin wheel with bracket	See "Trifold/Z-fold bin wheel with bracket removal" on page 1545
3	41X2982	2	1	Trifold/Z-fold lower installation bracket	See "Trifold/Z-fold lower installation bracket removal" on page 1547

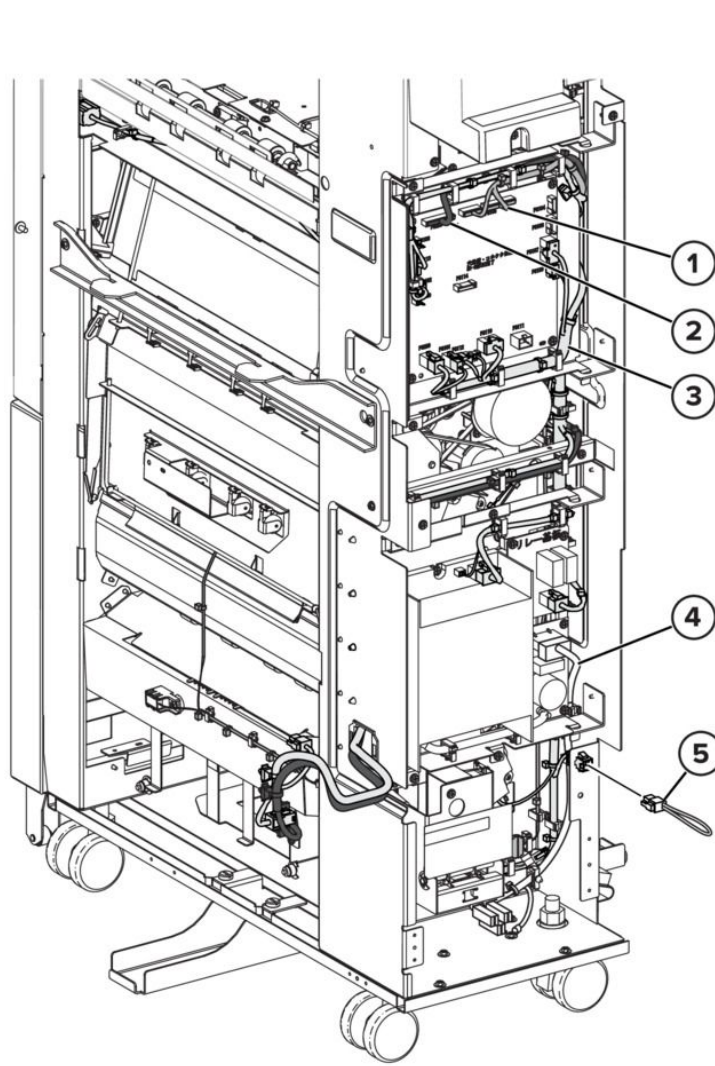
Trifold/Z-fold covers



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X2986	1	1	Trifold/Z-fold rear top cover	See "Trifold/Z-fold rear top cover removal" on page 1539
2	41X2989	1	1	Trifold/Z-fold top cover	See "Trifold/Z-fold top cover removal" on page 1541
3	41X2993	1	1	Trifold/Z-fold door	See "Trifold/Z-fold door removal" on page 1538
4	41X2985	1	1	Trifold/Z-fold bin	See "Trifold/Z-fold bin removal" on page 1544
5	41X2984	4	1	Trifold/Z-fold caster	--
6	41X2987	1	1	Trifold/Z-fold upper left cover 1	See "Trifold/Z-fold upper left cover 1 removal" on page 1533
7	41X2990	1	1	Trifold/Z-fold upper left cover 2	See "Trifold/Z-fold upper left cover 2 removal" on page 1534
8	41X2991	1	1	Trifold/Z-fold upper left post cover	See "Trifold/Z-fold upper left post cover removal" on page 1543
9	41X2988	1	1	Trifold/Z-fold rear cover	See "Trifold/Z-fold rear cover removal" on page 1536
10	41X4560	1	1	Trifold/Z-fold cable cover	--

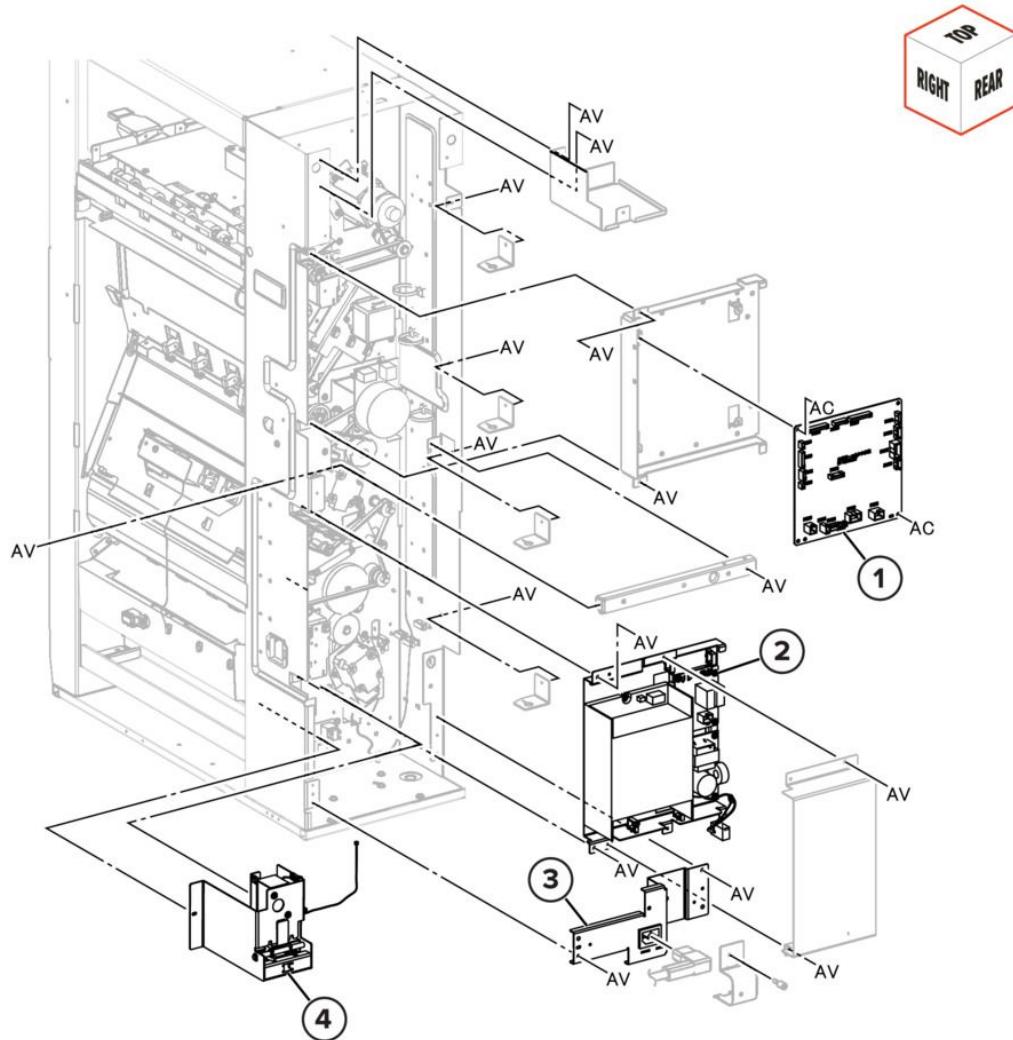
Trifold/Z-fold wire harness



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X2997	1	1	Trifold/Z-fold cable 2	--
2	41X2996	1	1	Trifold/Z-fold cable 1	--
3	41X2998	1	1	Trifold/Z-fold cable 3	--
4	41X2995	1	1	Trifold/Z-fold power cable	--
5	41X2994	4	1	Trifold/Z-fold bypass connector	--

Trifold/Z-fold electronics



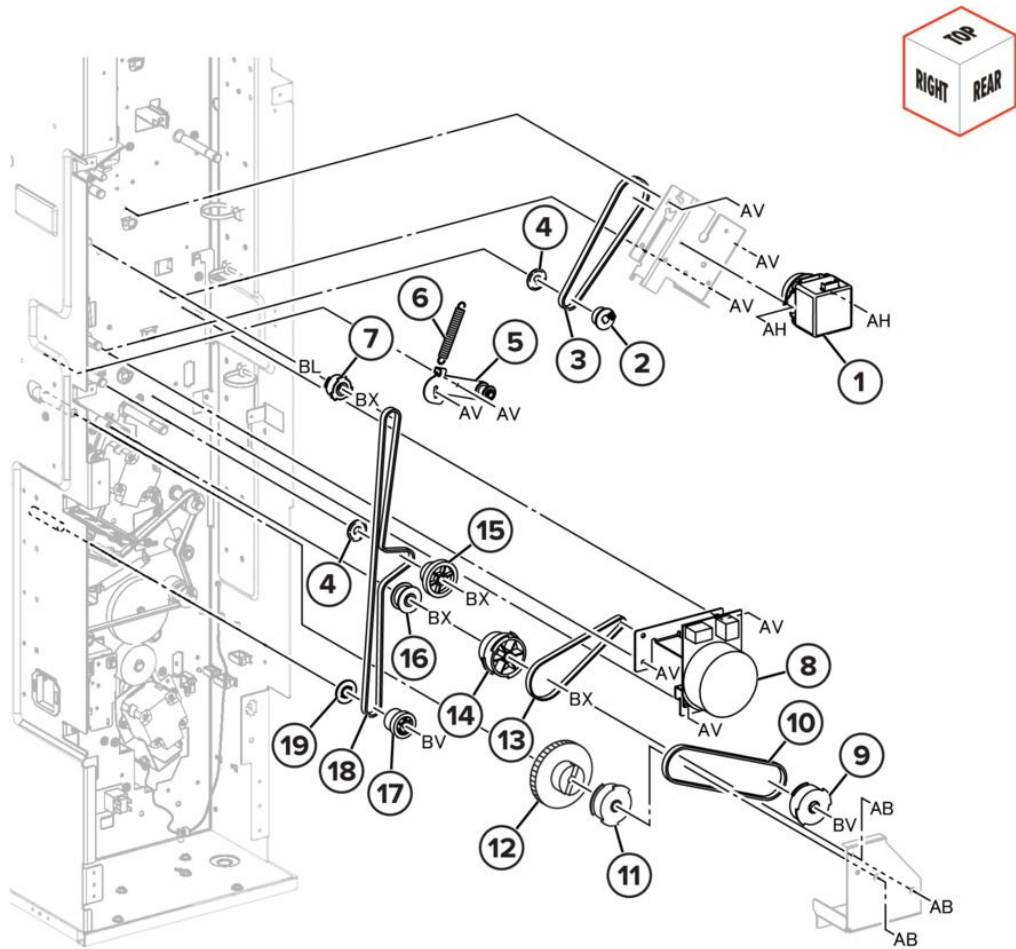
Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3001	1	1	Trifold/Z-fold controller board	See "Trifold/Z-fold controller board removal" on page 1548
2	41X3000	1	1	Trifold/Z-fold LVPS	See "Trifold/Z-fold LVPS removal" on page 1549
3	41X2999	1	1	Trifold/Z-fold power inlet bracket	See "Trifold/Z-fold power inlet bracket removal" on page 1551
4	41X3002	1	1	Trifold/Z-fold bin release bracket 1	See "Trifold/Z-fold bin release bracket 1 removal" on page 1553

Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X2959	1	1	Trifold/Z-fold feed solenoid	See "Trifold/Z-fold bin release bracket 1 removal" on page 1553
2	41X3009	1	1	Motor (trifold/Z-fold feed)	See "Motor (trifold/Z-fold feed) removal" on page 1559
3	41X2952	1	1	Flange	--
4	41X3011	1	1	Feed belt 2	--
5	41X3006	1	1	Pulley gear (T32/T18)	--
6	41X3010	1	1	Feed belt 1	--
7	41X3004	3	1	Gear clutch 1	--
8	41X3005	3	1	Gear clutch 2	--
9	41X3007	1	1	Pulley gear (T18)	--
10	41X3008	1	1	Pulley gear exit (T18)	--
11	41X3012	1	1	Trifold/Z-fold feed belt 3	--
12	41X3003	1	1	Washer	--

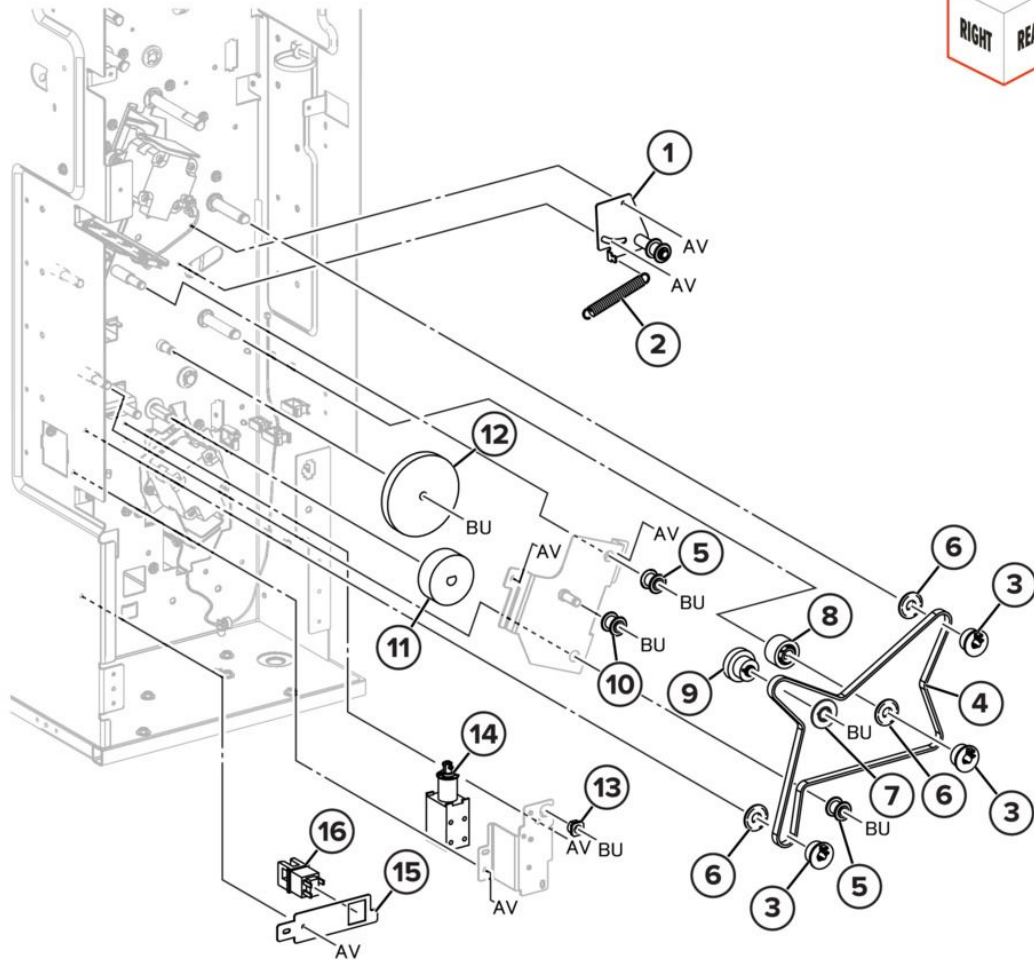
Trifold/Z-fold drive 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3018	1	1	Motor (trifold/Z-fold transport 1)	See "Motor (trifold/Z-fold transport 1) removal" on page 1565
2	41X2953	1	1	Pulley gear	--
3	41X3019	1	1	Trifold/Z-fold fold belt 1	--
4	41X2951	1	1	Gear collar	--
5	41X3017	1	1	Trifold/Z-fold transport tension bracket	--
6	41X2965	1	1	Tension spring 1	--
7	41X3015	1	1	Pulley gear T22	--
8	41X3016	1	1	Motor (trifold/Z-fold transport 2)	See "Motor (trifold/Z-fold transport 2) removal" on page 1568
9	41X3013	1	1	Pulley gear T36	--
10	41X3021	1	1	Trifold/Z-fold fold belt 3	--
11	41X3027	1	1	Pulley gear T36	--
12	41X3026	1	1	Trifold/Z-fold transport gear 4	--
13	41X3020	1	1	Trifold/Z-fold fold belt 2	--
14	41X3023	1	1	Trifold/Z-fold transport gear 1	--
15	41X3024	1	1	Trifold/Z-fold transport gear 2	--
16	41X3014	1	1	Pulley gear 1	--
17	41X3025	1	1	Trifold/Z-fold transport gear 3	--
18	41X3022	1	1	Trifold/Z-fold fold belt 4	--
19	41X2952	1	1	Flange	--

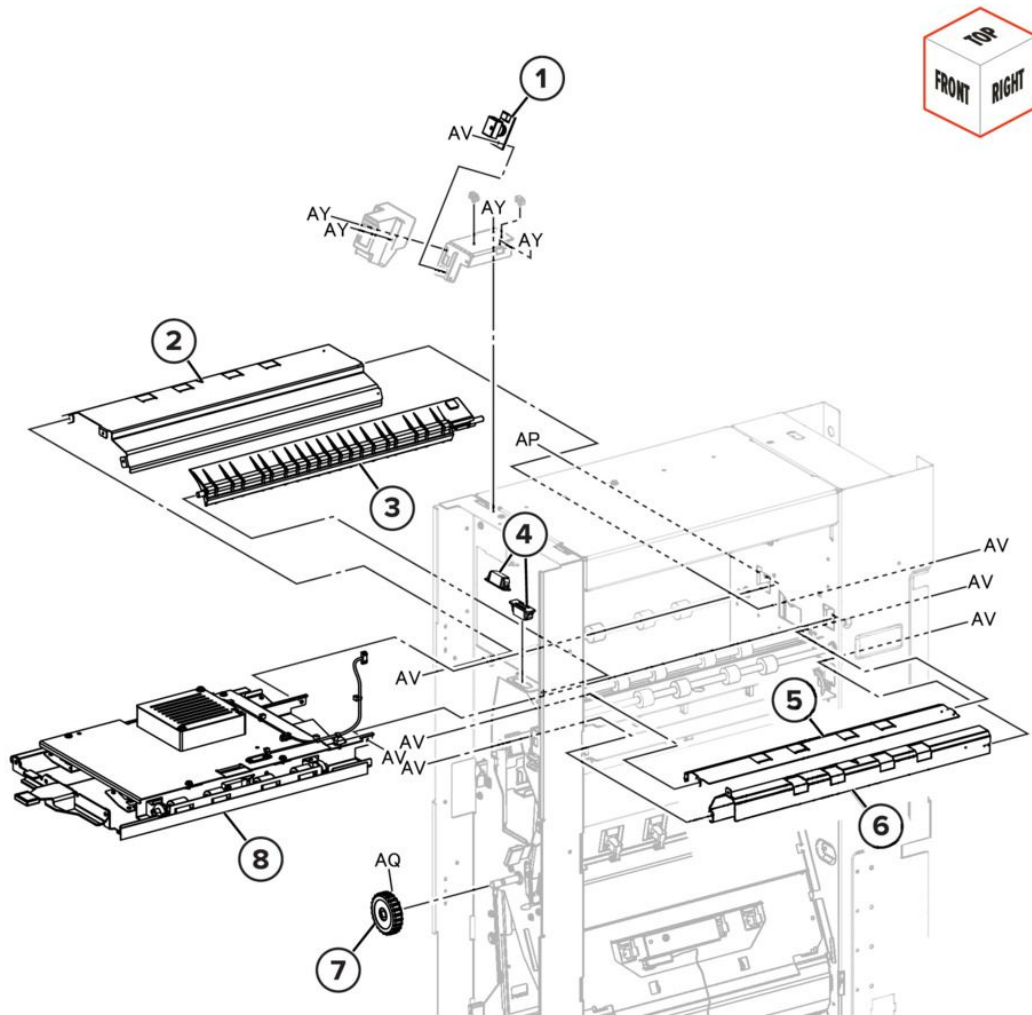
Trifold/Z-fold drive 3



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3030	1	1	Trifold/Z-fold timing belt tension bracket	--
2	41X2965	1	1	Tension bracket spring	--
3	41X2953	3	1	Pulley gear (T18)	--
4	41X3033	1	1	Trifold/Z-fold timing belt	--
5	40X7488	1	1	Pulley gear	--
6	41X2951	3	1	Gear collar	--
7	41X2952	1	1	Flange	--
8	41X3035	1	1	Gear (Z24)	--
9	41X3034	1	1	Pulley gear (Z27I/T18)	--
10	40X7488	1	1	Pulley gear	--
11	41X3028	1	1	Gear (Z45I)	--
12	41X3029	1	1	Gear (Z74r)	--
13	40X0880	1	1	Sleeve bearing	--
14	41X2959	1	1	Trifold/Z-fold bin diverter solenoid	See "Trifold/Z-fold bin diverter solenoid removal" on page 1570
15	41X3036	1	1	Spring	--
16	41X4189	1	1	Trifold/Z-fold bin switch	--

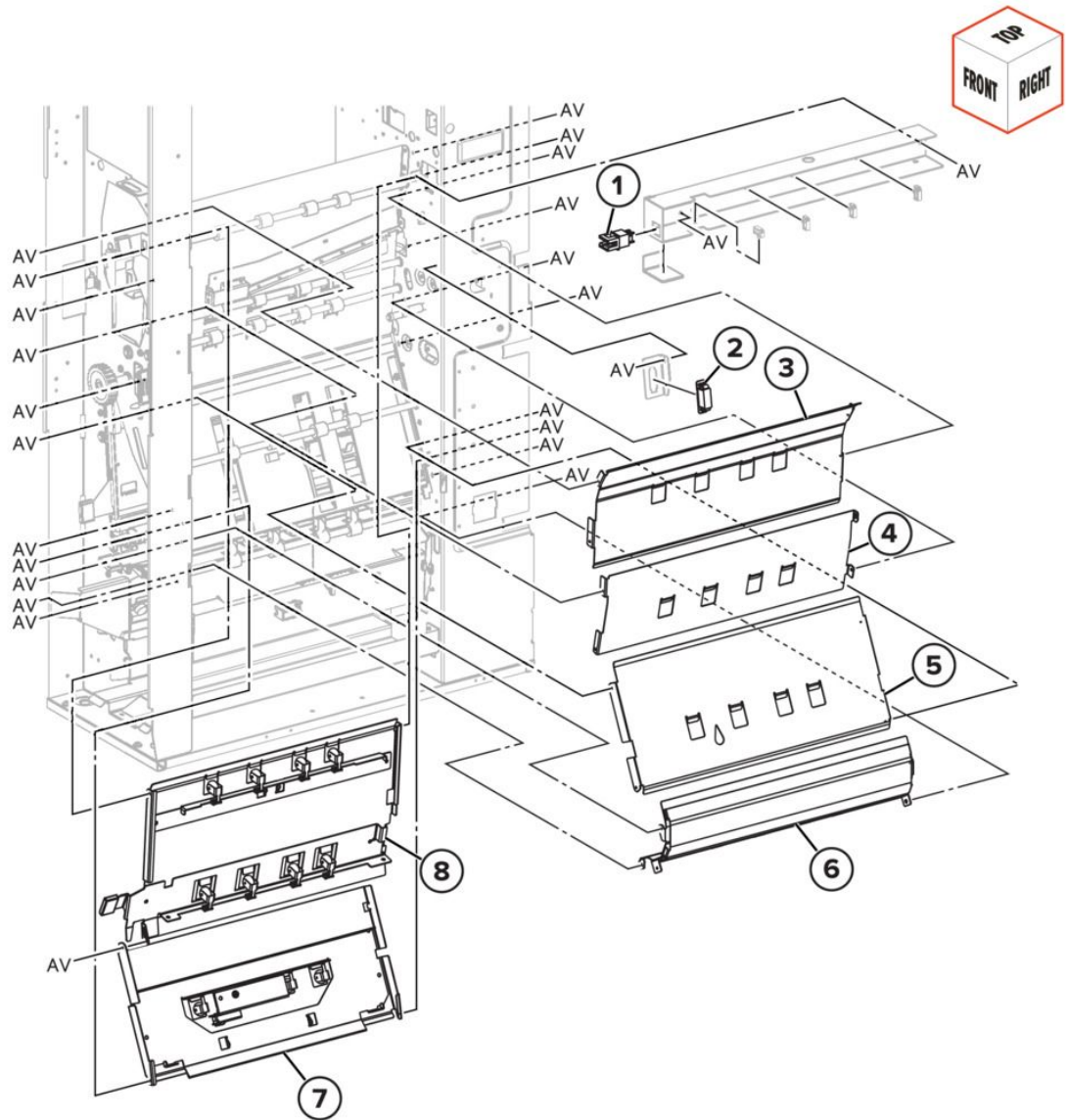
Trifold/Z-fold guide 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3043	1	1	Bin open switch	--
2	41X3039	1	1	Trifold/Z-fold entrance guide	--
3	41X3038	1	1	Trifold/Z-fold diverter feed	--
4	41X2957	2	1	Magnet	--
5	41X3040	1	1	Trifold/Z-fold exit lower guide 1	--
6	41X3041	1	1	Trifold/Z-fold exit lower guide 2	--
7	41X3037	1	1	Trifold/Z-fold knob	--
8	41X3042	1	1	Trifold/Z-fold feed assembly	--

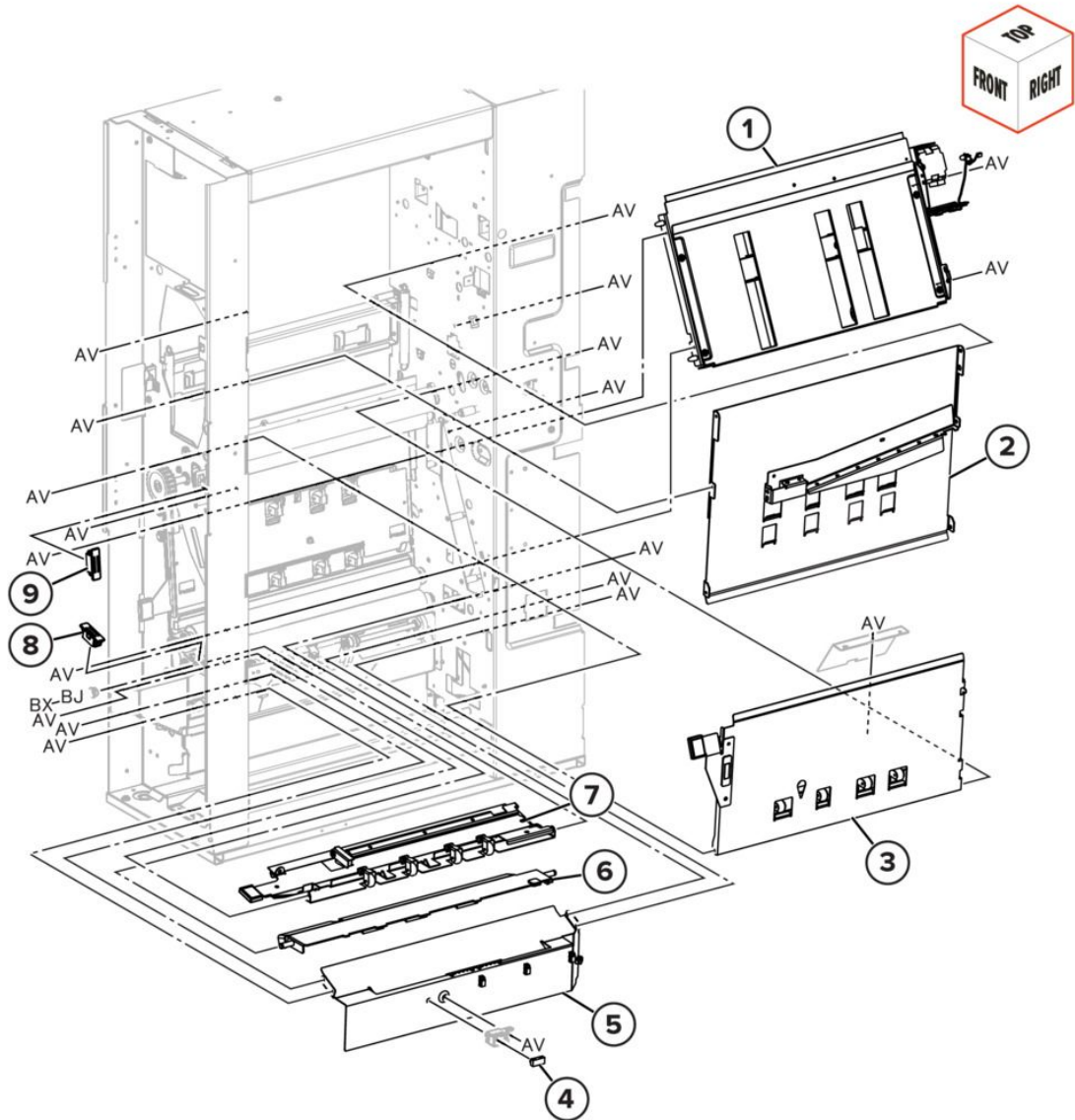
Trifold/Z-fold guide 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4193	1	1	Trifold/Z-fold door switch	--
2	41X2957	1	1	Magnet	--
3	41X3046	1	1	Trifold/Z-fold transport exit guide	--
4	41X3045	1	1	Trifold/Z-fold transport guide (T05) 3	--
5	41X3044	1	1	Trifold/Z-fold transport guide (T05) 1	--
6	41X3048	1	1	Trifold/Z-fold transport guide (T04)	--
7	41X3049	1	1	Trifold/Z-fold transport lower guide (2G)	--
8	41X3047	1	1	Trifold/Z-fold transport guide (2G/T05)	--

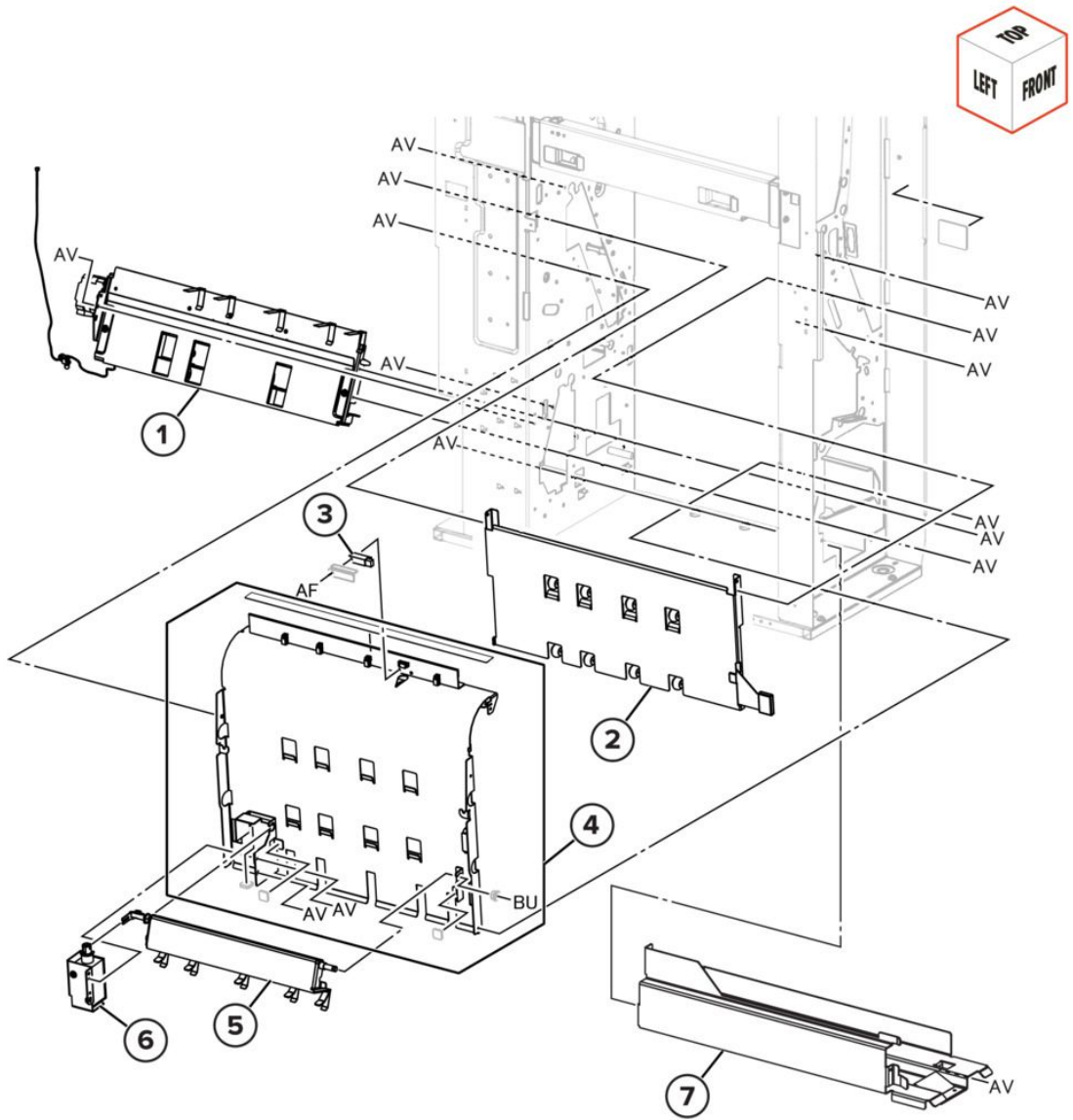
Trifold/Z-fold guide 3



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3053	1	1	Trifold/Z-fold first fold assembly	--
2	41X3056	1	1	Trifold/Z-fold paper guide (T01/2F)	--
3	41X3057	1	1	Trifold/Z-fold transport guide (2B)	--
4	41X3052	1	1	Sensor (trifold/Z-fold bin full transmit)	See "Sensor (trifold/Z-fold bin full transmit) removal" on page 1584
5	41X3051	1	1	Trifold/Z-fold bin guide	--
6	41X3054	1	1	Trifold/Z-fold bin diverter gate	--
7	41X3055	1	1	Trifold/Z-fold transport guide (T03/2F)	--
8	41X2958	1	1	Magnet 2	--
9	41X2957	1	1	Magnet 1	--

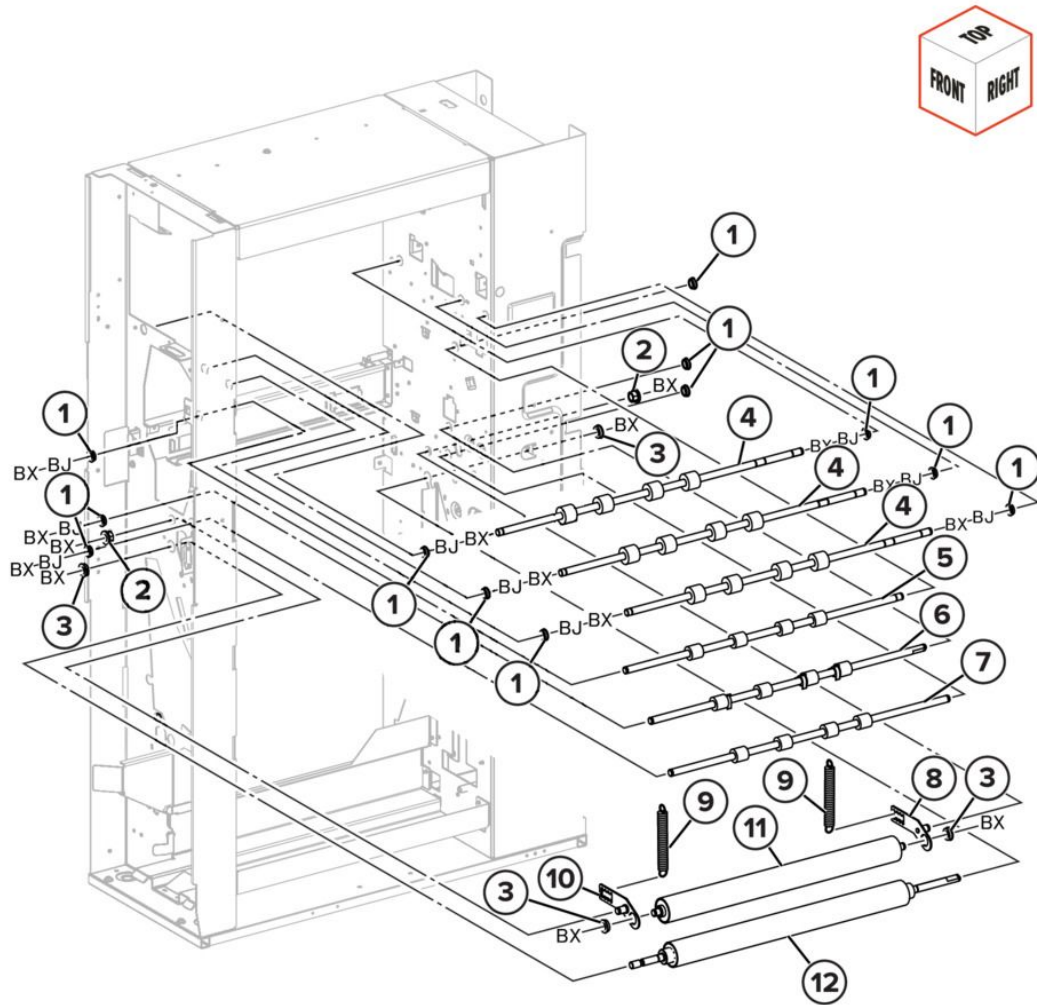
Trifold/Z-fold guide 4



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3059	1	1	Trifold/Z-fold second fold assembly	--
2	41X3061	1	1	Trifold/Z-fold transport guide 2E	--
3	40X0908	1	1	Sensor (trifold/Z-fold first fold)	See "Sensor (trifold/Z-fold first fold) removal" on page 1586
4	41X3063	1	1	Second fold transport guide	--
5	41X3058	1	1	Trifold/Z-fold fold guide	--
6	41X3060	1	1	Trifold/Z-fold fold guide solenoid	See "Trifold/Z-fold fold guide solenoid removal" on page 1576
7	41X3062	1	1	Trifold/Z-fold bin rail	--
NS	40X0880	1	1	Sleeve bearing	--

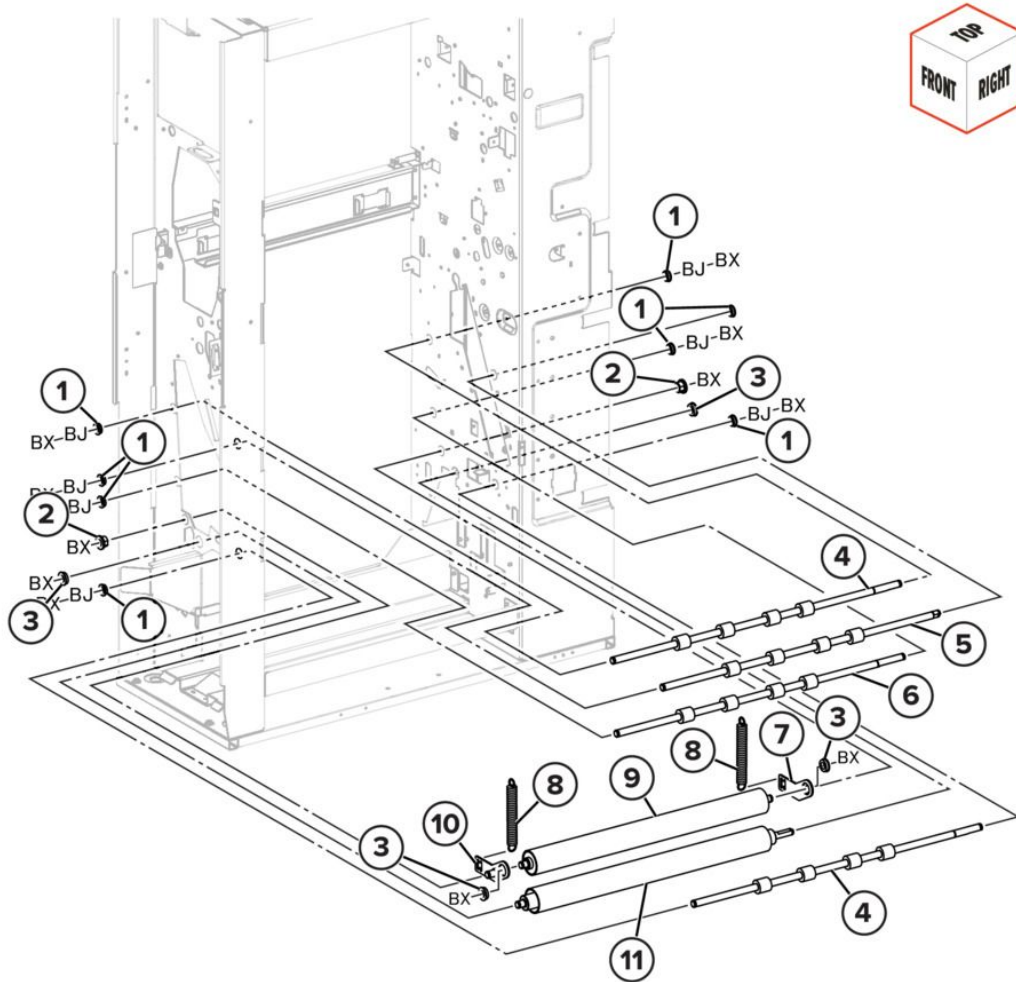
Trifold/Z-fold rollers 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X3915	11	1	Ball bearing 2	--
2	40X1388	1	1	Sleeve bearing	--
3	41X2963	4	1	Ball bearing 1	--
4	41X3067	3	1	Trifold/Z-fold top transport roller	--
5	41X2956	1	1	Trifold/Z-fold transport roller 4	--
6	41X3066	1	1	Trifold/Z-fold transport roller 1	--
7	41X3068	1	1	Trifold/Z-fold transport roller 3	--
8	41X3065	1	1	First fold roller bracket 2	--
9	41X2964	2	1	Tension spring	--
10	41X3064	1	1	First fold roller bracket 1	--
11	41X2955	1	1	First fold upper roller	--
12	41X3069	1	1	First fold lower roller	--

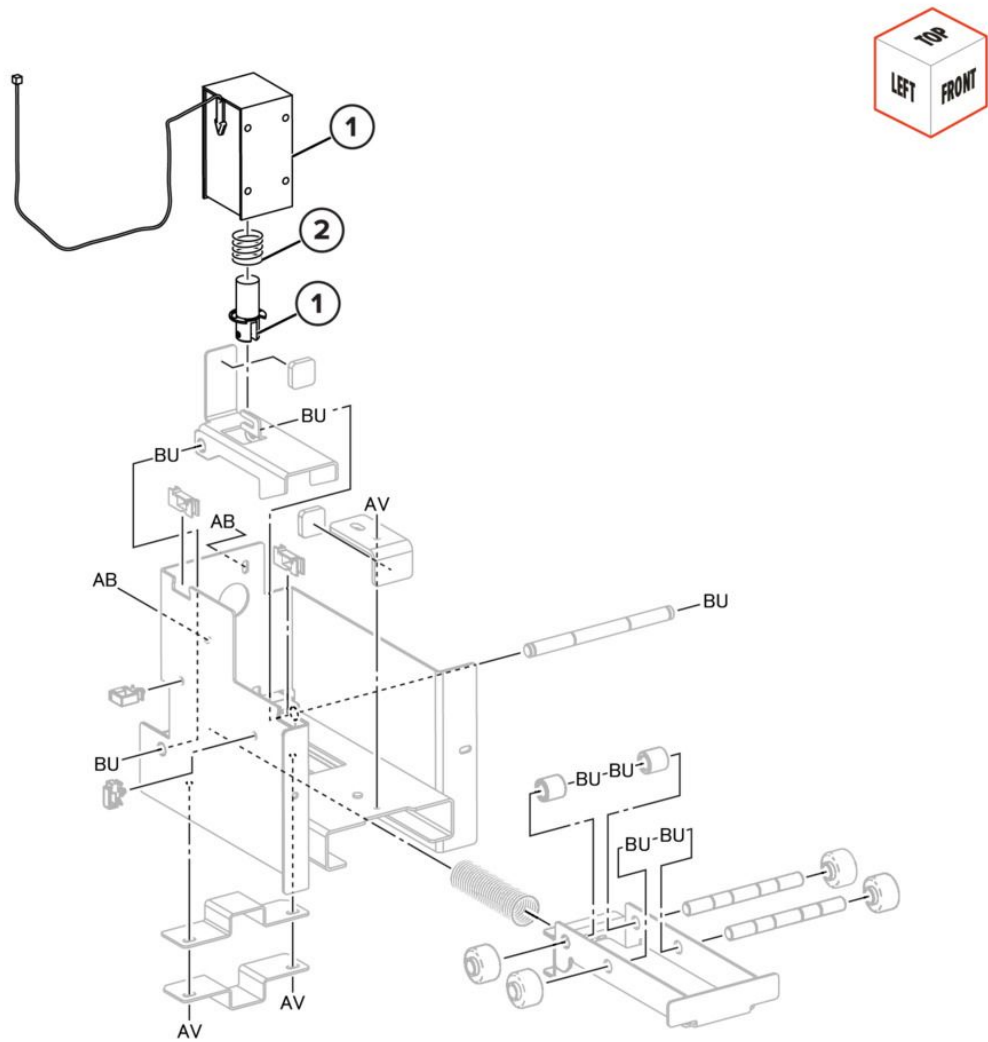
Trifold/Z-fold rollers 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X3915	1	1	Ball bearing 2	--
2	40X1388	1	1	Sleeve bearing	--
3	41X2963	1	1	Ball bearing 1	--
4	41X3071	1	1	Second fold transport roller 2	--
5	41X2956	1	1	Second fold transport roller 4	--
6	41X3072	1	1	Second fold transport roller 5	--
7	41X3074	1	1	Second fold roller bracket 2	--
8	41X2964	1	1	Tension spring	--
9	41X2955	1	1	Second fold upper roller	--
10	41X3073	1	1	Second fold roller bracket 1	--
11	41X3070	6	1	Second fold lower roller	--

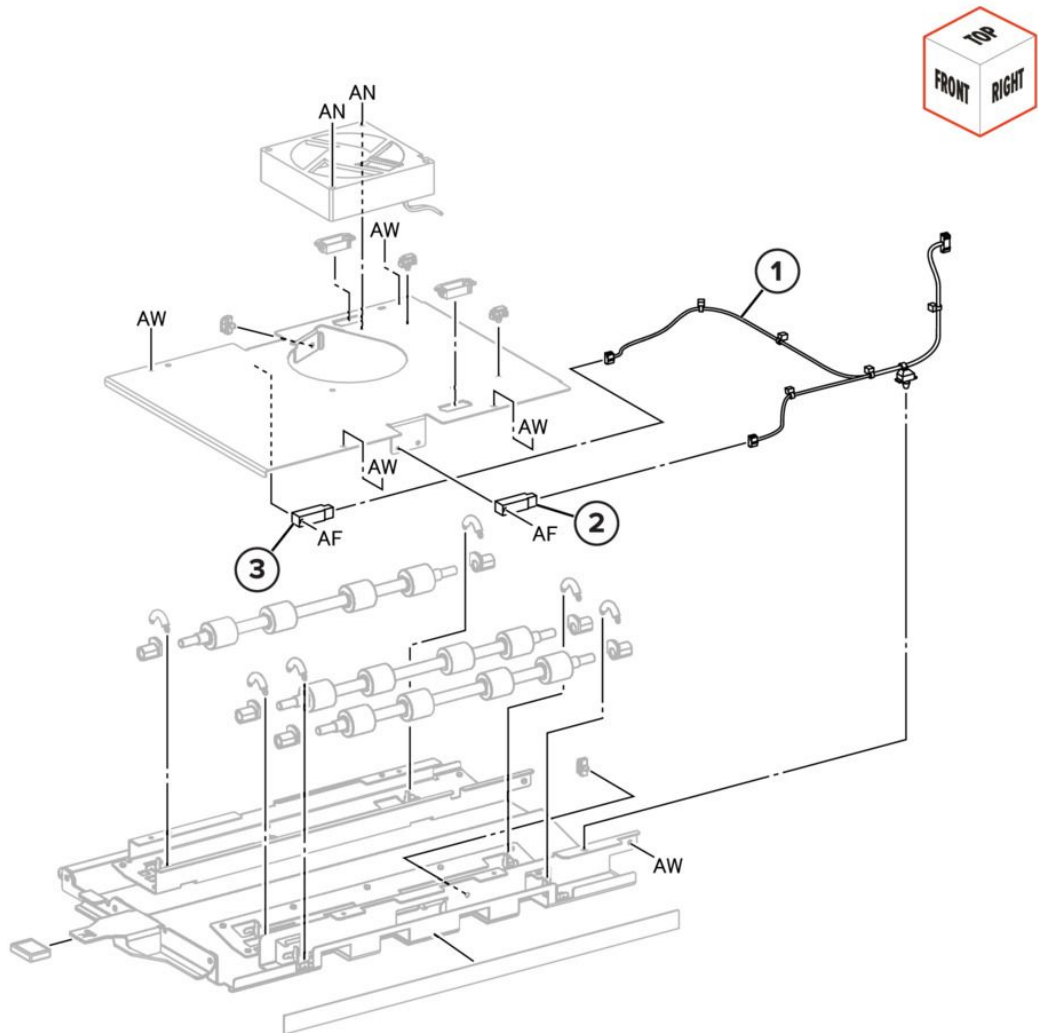
Trifold/Z-fold tray release bracket



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3075	2	1	Trifold/Z-fold bin lock solenoid	See "Trifold/Z-fold bin lock solenoid removal" on page 1574
2	41X3076	1	1	Trifold/Z-fold bin lock solenoid spring	--

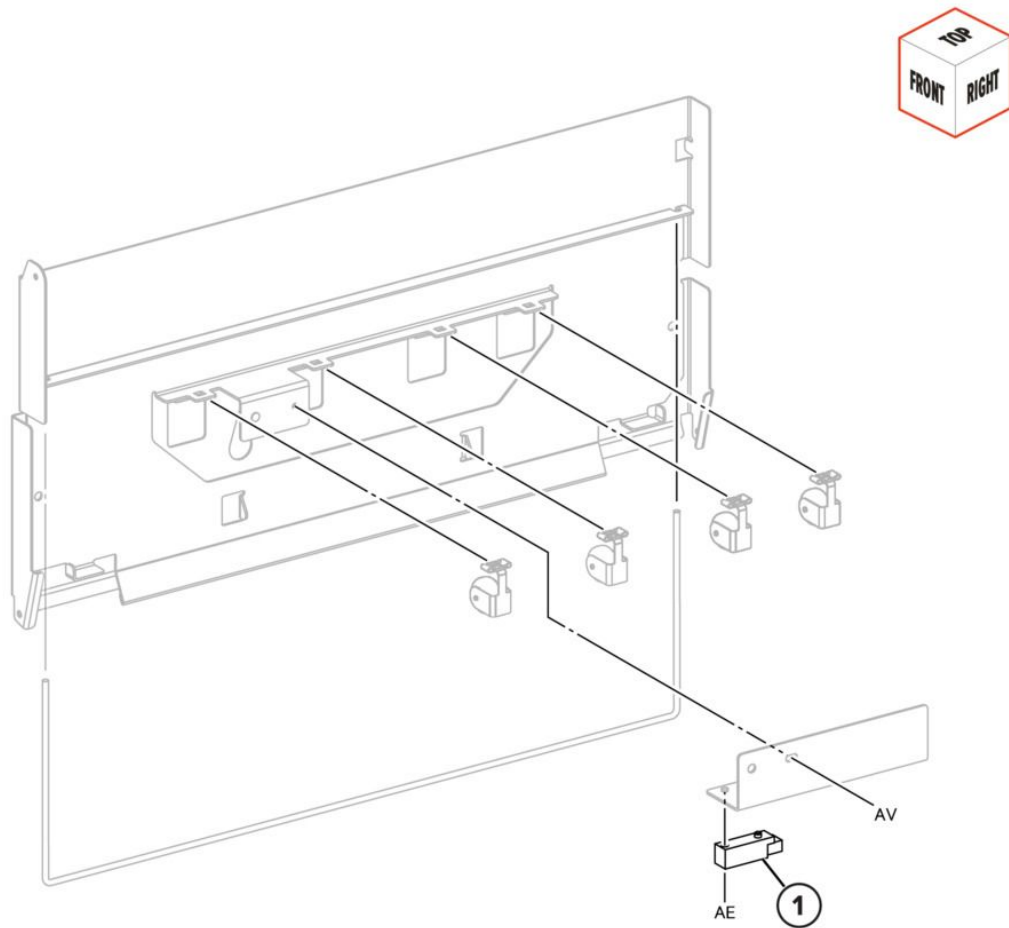
Trifold/Z-fold upper guide



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3077	1	1	Trifold/Z-fold feed sensor cable	--
2	41X3078	1	1	Sensor (trifold/Z-fold exit)	See "Sensor (trifold/Z-fold exit) removal" on page 1578
3	41X3078	1	1	Sensor (trifold/Z-fold feed)	See "Sensor (trifold/Z-fold feed) removal" on page 1581

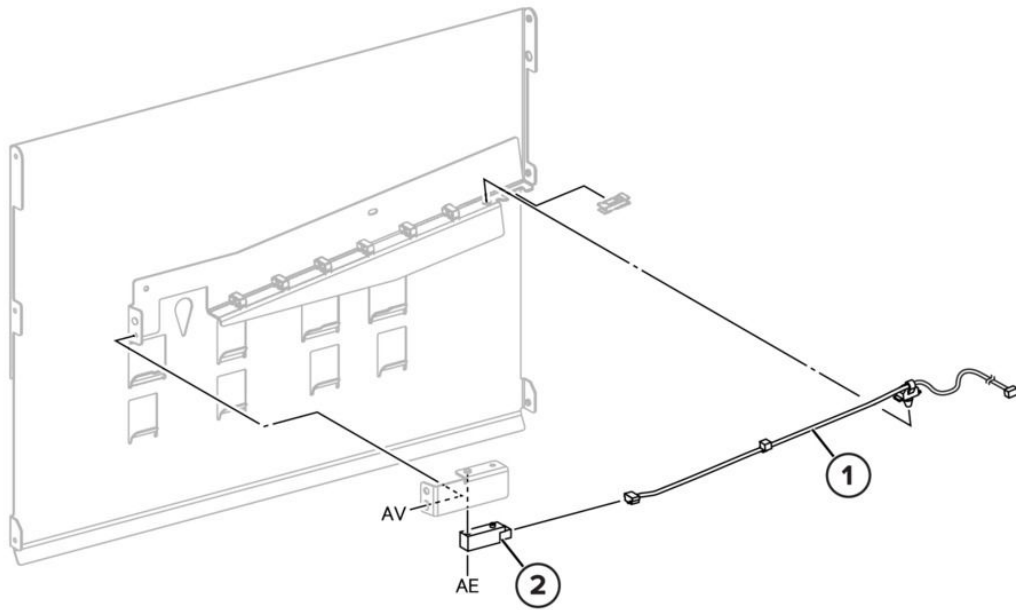
Trifold/Z-fold folder transport



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0908	1	1	Sensor (trifold/Z-fold transport 2)	See "Sensor (trifold/Z-fold transport 2) removal" on page 1585

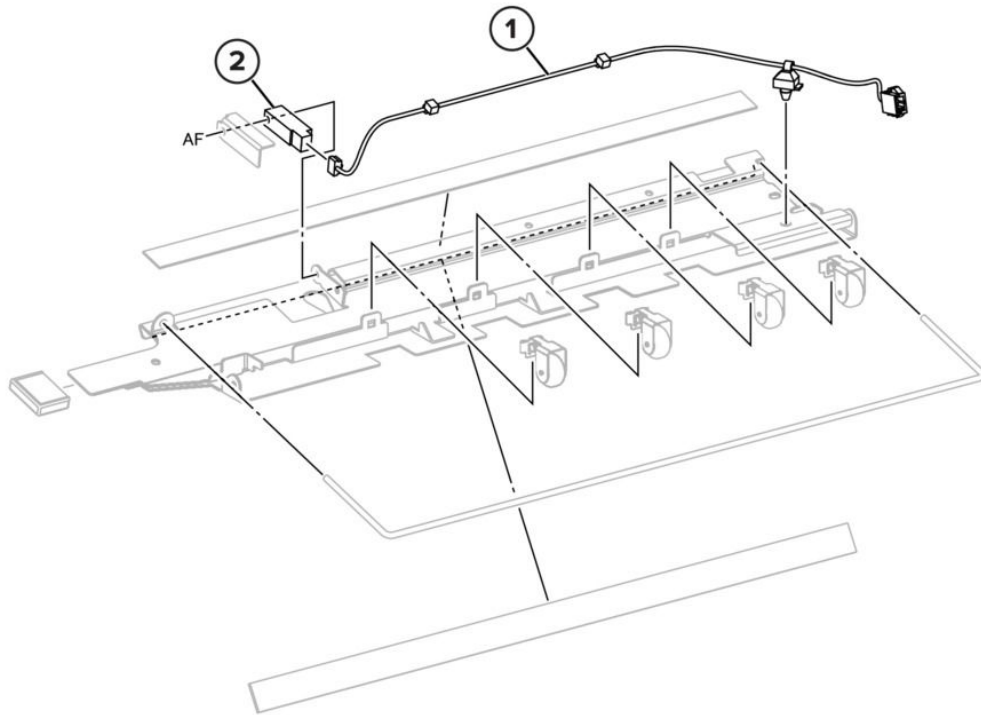
Trifold/Z-fold transport 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X2966	1	1	Trifold/Z-fold transport 1 sensor cable	--
2	40X0908	1	1	Sensor (trifold/Z-fold transport 1)	--

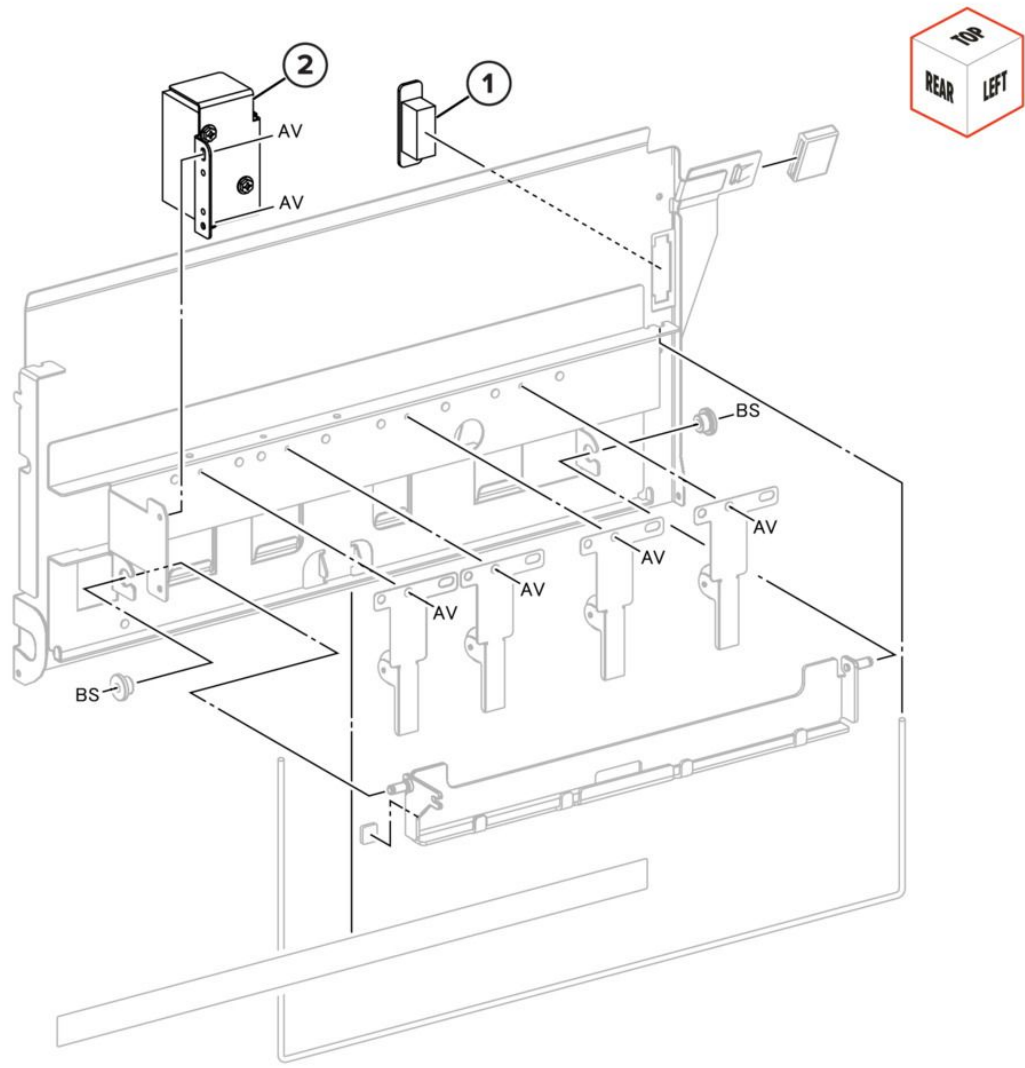
Trifold/Z-fold transport 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X2966	1	1	Trifold/Z-fold second fold sensor cable	--
2	41X3078	1	1	Sensor (trifold/Z-fold second fold)	See "Sensor (trifold/Z-fold second fold) removal" on page 1587

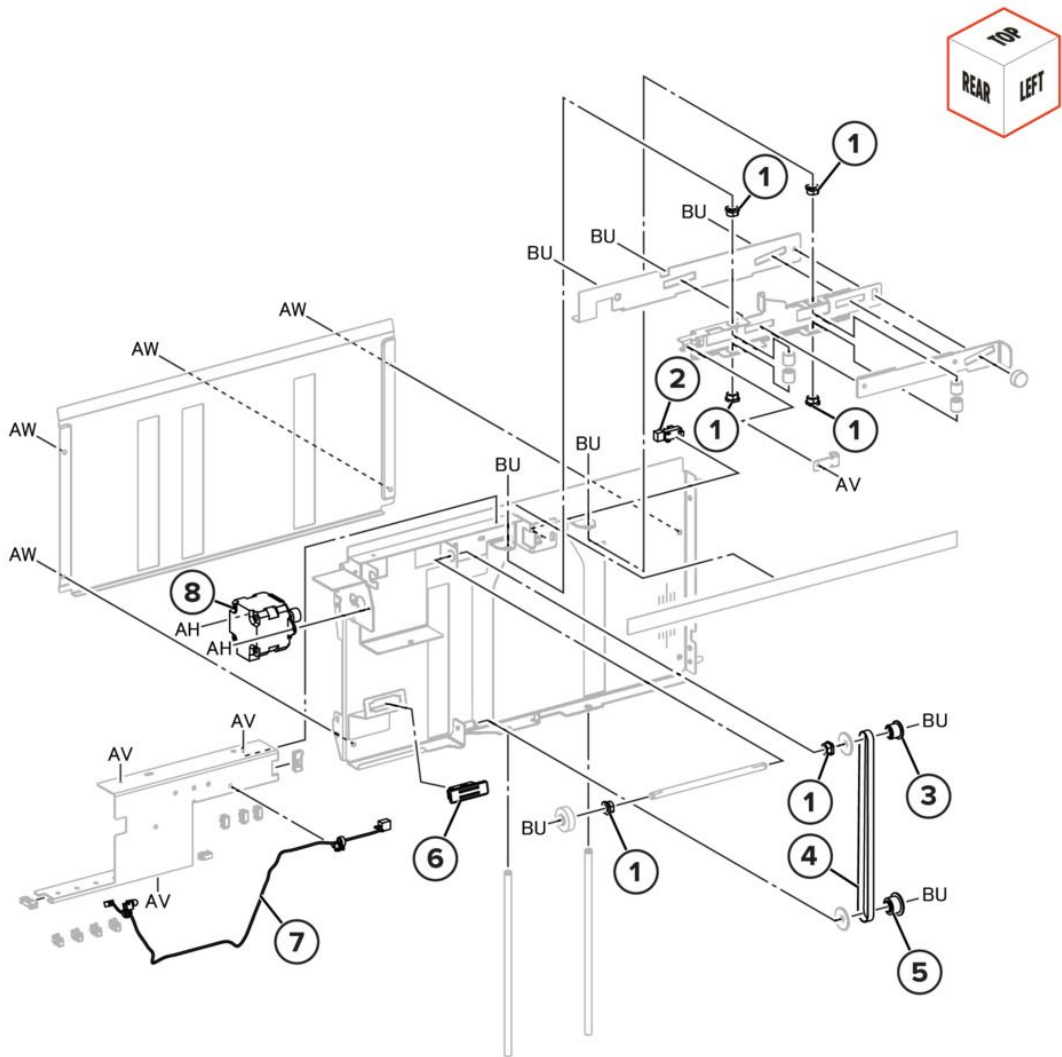
Trifold/Z-fold top guide



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X2958	1	1	Magnet	--
2	41X3084	1	1	Roller release solenoid	--

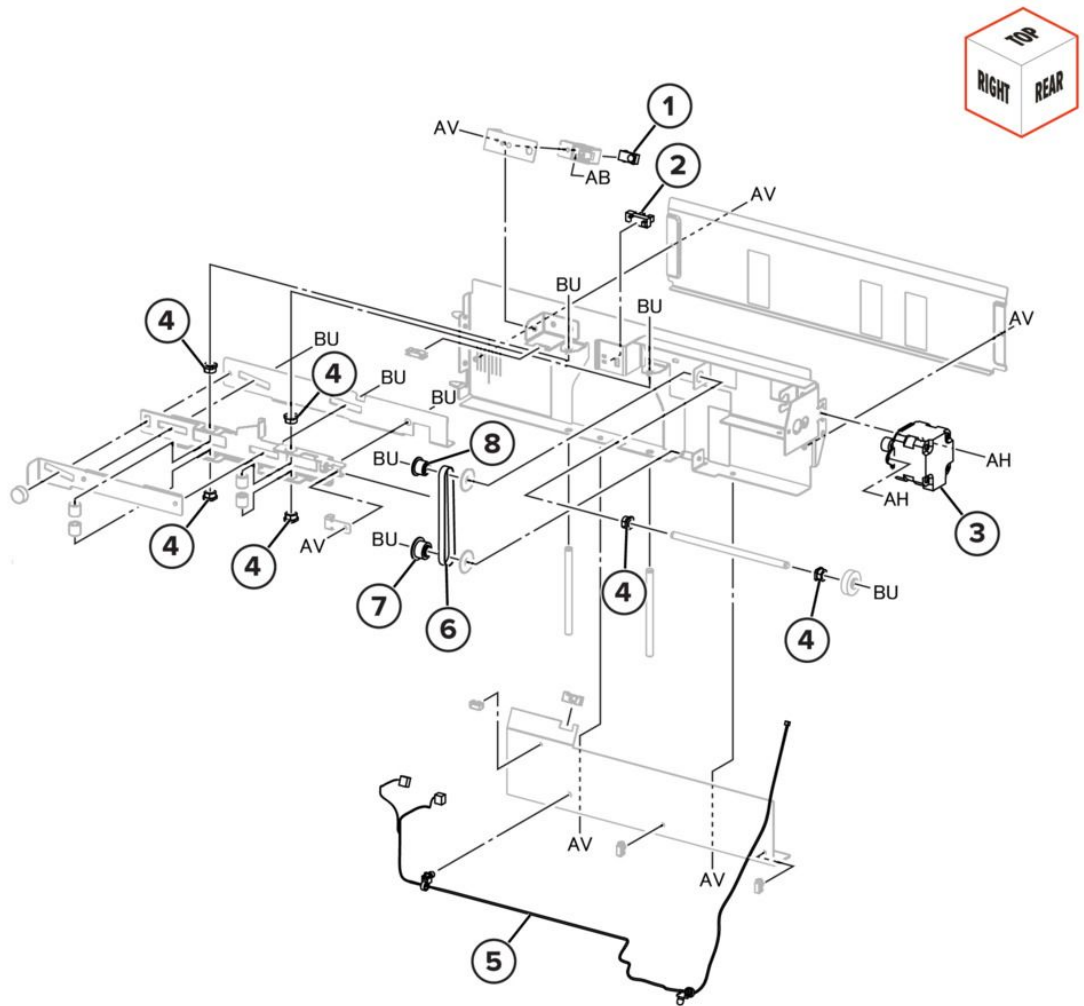
Trifold/Z-fold end guide 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0880	5	1	Sleeve bearing	--
2	41X3082	1	1	Sensor (trifold/Z-fold first fold catch)	See "Sensor (trifold/Z-fold first fold catch) removal" on page 1588
3	41X3080	1	1	Pulley	--
4	41X3081	1	1	First fold catch belt	--
5	41X3079	1	1	Pulley	--
6	41X2958	1	1	Magnet	--
7	41X3083	1	1	First fold catch cable	--
8	41X2960	1	1	Motor (first fold catch)	See "Motor (first fold catch) removal" on page 1569

Trifold/Z-fold end guide 2

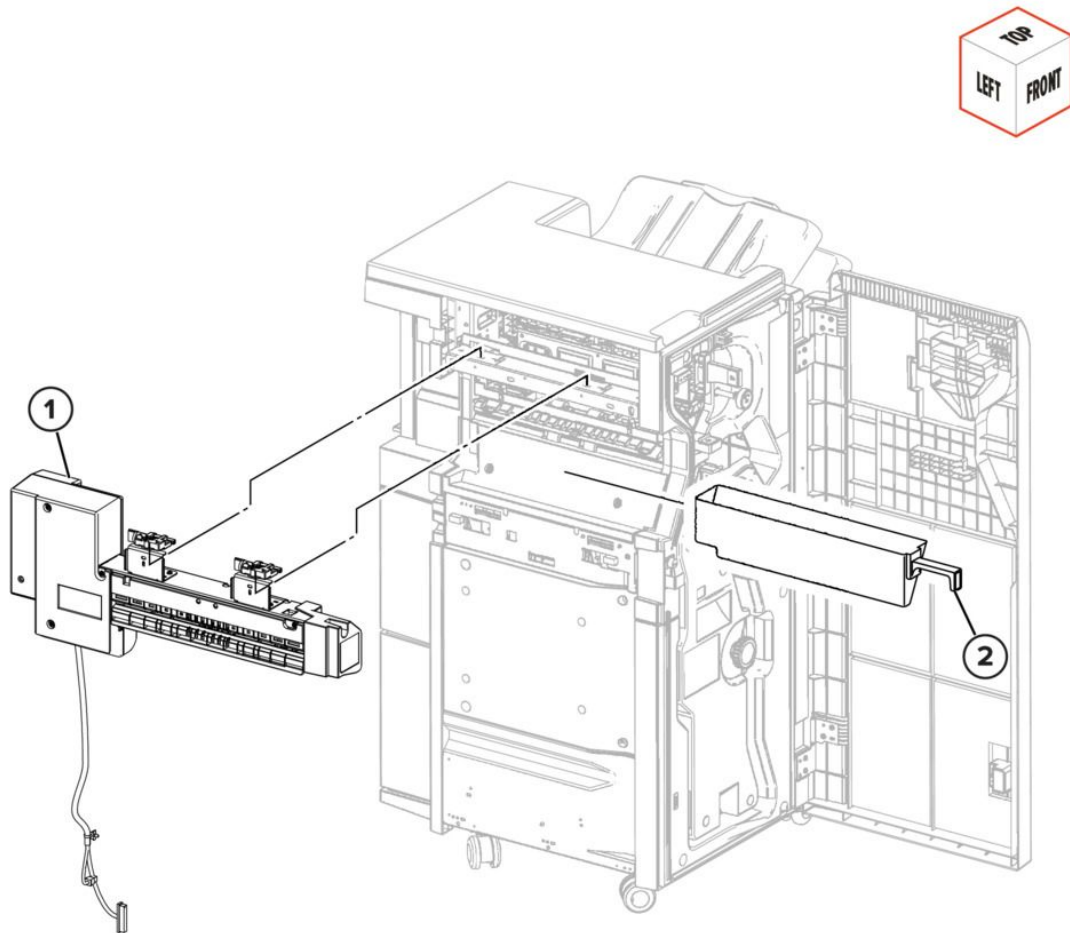


Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3085	1	1	Sensor (trifold/Z-fold bin full receive)	See "Sensor (trifold/Z-fold bin full receive) removal" on page 1589
2	41X3082	1	1	Sensor (trifold/Z-fold second fold catch)	See "Sensor (trifold/Z-fold second fold catch) removal" on page 1591
3	41X2960	1	1	Motor (second fold catch)	See "Motor (second fold catch) removal" on page 1573
4	40X0880	6	1	Sleeve bearing	--
5	41X3087	1	1	Second fold catch cable	--
6	41X3086	1	1	Second fold catch belt	--
7	41X3079	1	1	Pulley 1	--
8	41X3080	1	1	Pulley 2	--

Booklet finisher

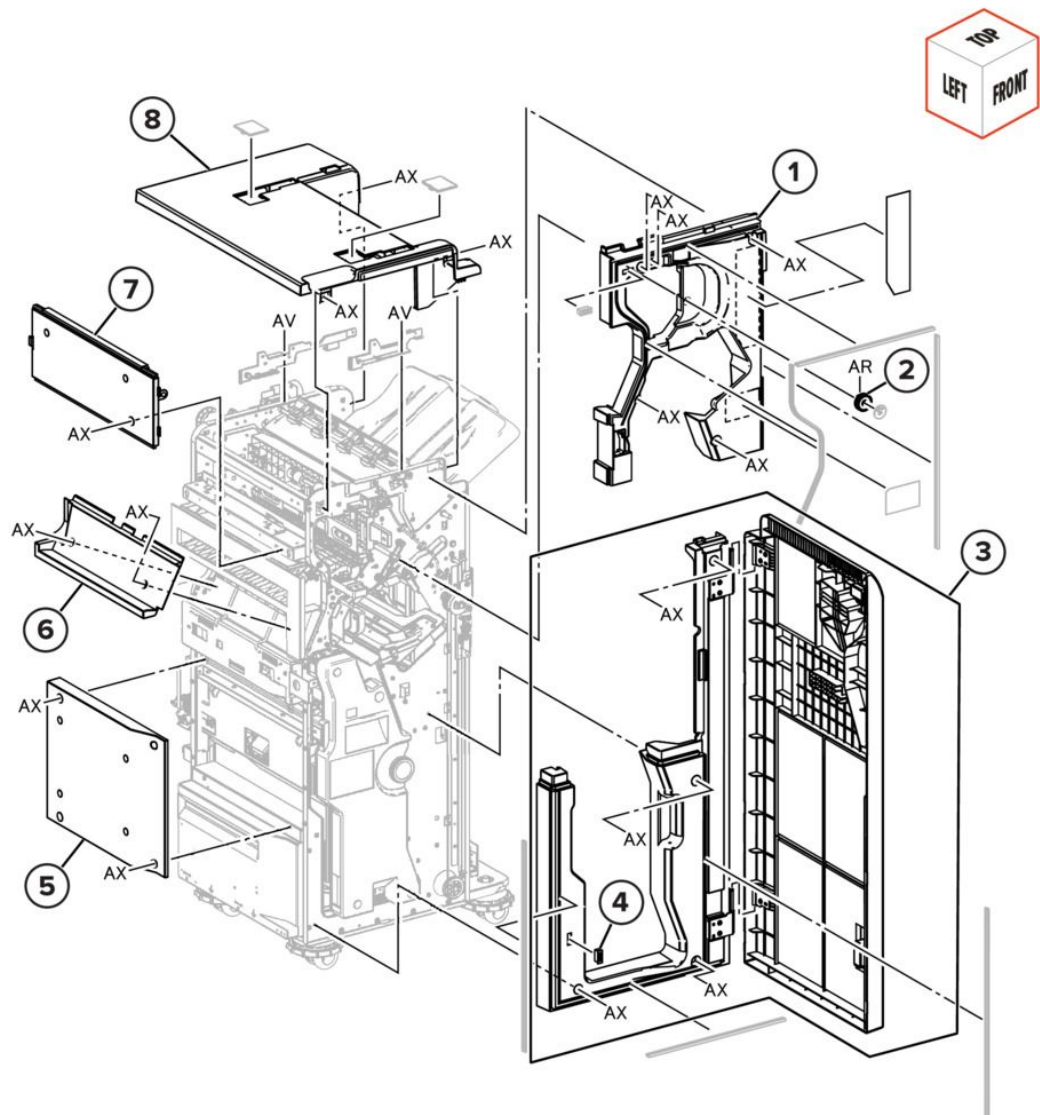
Booklet finisher puncher



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3088	1	1	Booklet finisher puncher (2-hole and 3-hole)	See "Booklet finisher puncher removal" on page 1389
1	41X3089	1	1	Booklet finisher puncher (2-hole and 4-hole)	See "Booklet finisher puncher removal" on page 1389
1	41X4060	1	1	Booklet finisher puncher (Swedish)	See "Booklet finisher puncher removal" on page 1389
2	41X3090	1	1	Hole punch box	--

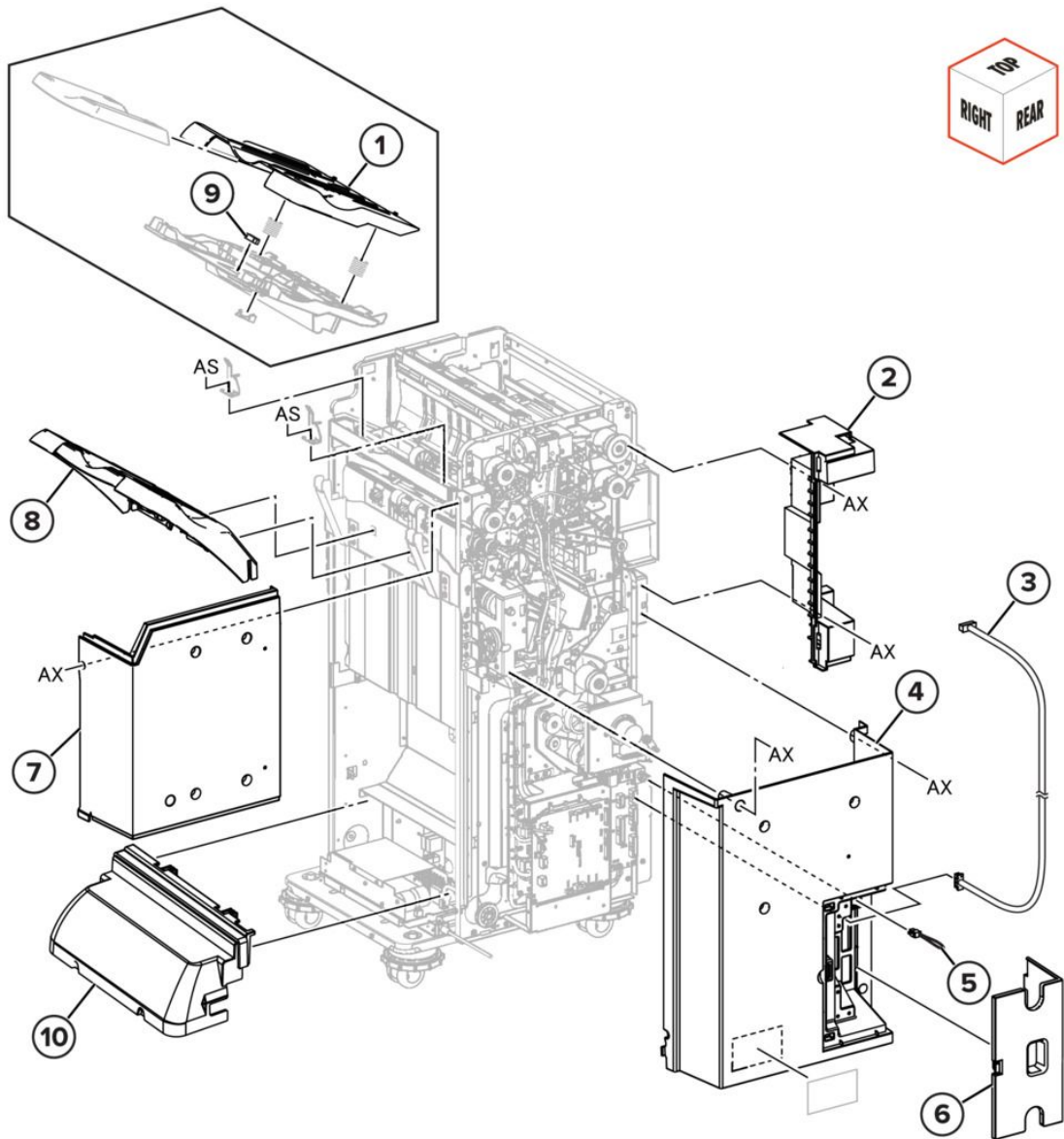
Booklet finisher covers 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3091	1	1	Booklet finisher inner front cover	See "Booklet finisher inner front cover removal" on page 1382
2	41X3096	1	1	Booklet finisher inner front cover knob	--
3	41X3092	1	1	Booklet finisher front cover	See "Booklet finisher front cover removal" on page 1378
4	40X0824	1	1	Magnet	--
5	41X3095	1	1	Booklet finisher lower left cover	--
6	41X3285	1	1	Booklet finisher center left cover	--
7	41X3094	1	1	Booklet finisher left cover	See "Booklet finisher left cover removal" on page 1385
8	41X3093	1	1	Booklet finisher top cover	See "Booklet finisher top cover removal" on page 1379

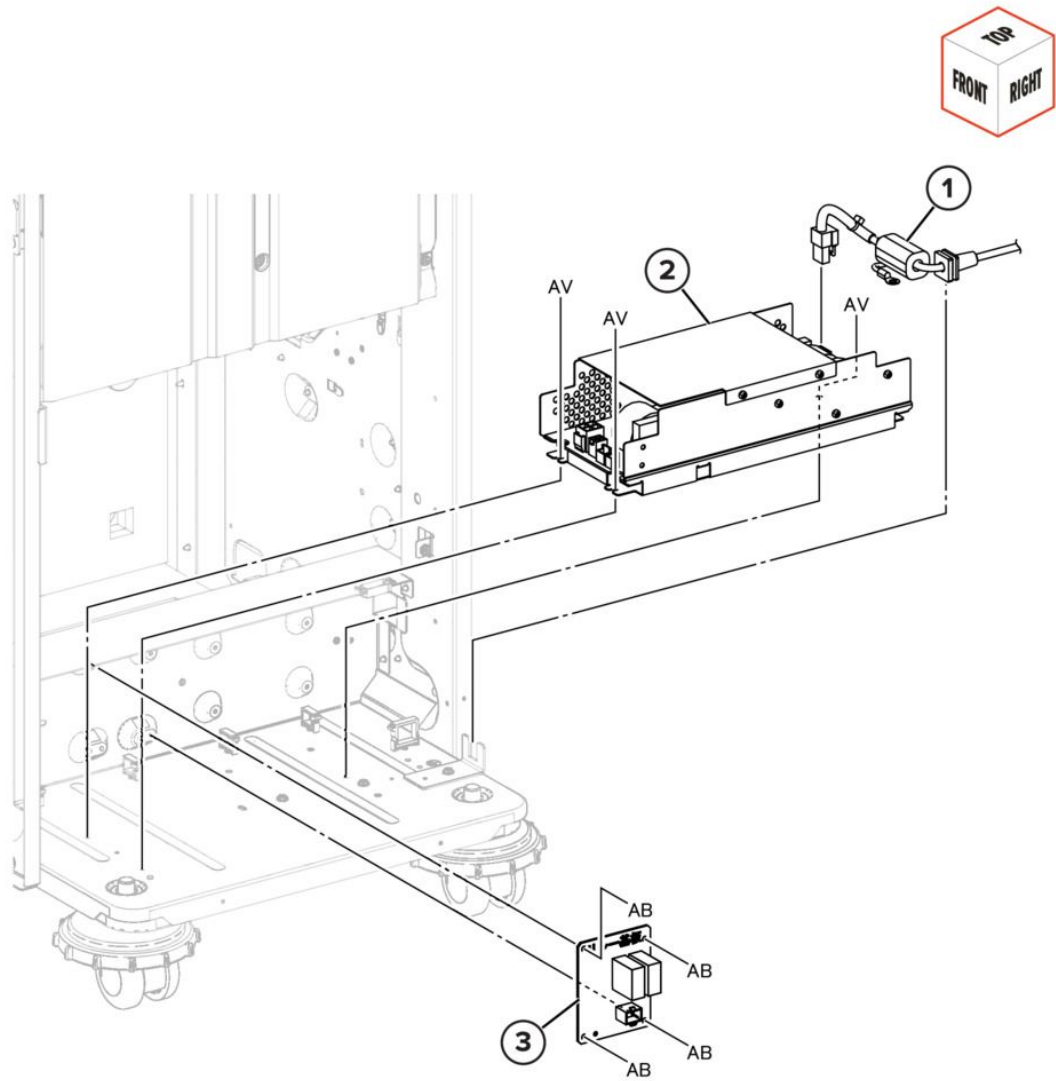
Booklet finisher covers 2



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3097	1	1	Booklet finisher spring tray	--
2	41X3098	1	1	Booklet finisher rear punch cover	--
3	41X3104	1	1	Wire harness cable	--
4	41X3100	1	1	Booklet finisher rear lower cover	See "Booklet finisher rear lower cover removal" on page 1387
5	41X2994	1	1	Jumper connector cable	--
6	41X3099	1	1	Booklet finisher connector cover	--
7	41X3101	1	1	Booklet finisher rear upper cover	See "Booklet finisher rear upper cover removal" on page 1386
8	41X3103	1	1	Booklet finisher stacker tray	See "Booklet finisher stacker tray removal" on page 1384
9	40X0908	1	1	Sensor (booklet finisher Z-fold stack)	--
10	41X4531	1	1	Booklet finisher bottom cover	--
NS	41X4921	1	1	Staple cartridge holder	See "Replacing the staple cartridge holder in the booklet finisher" on page 1815

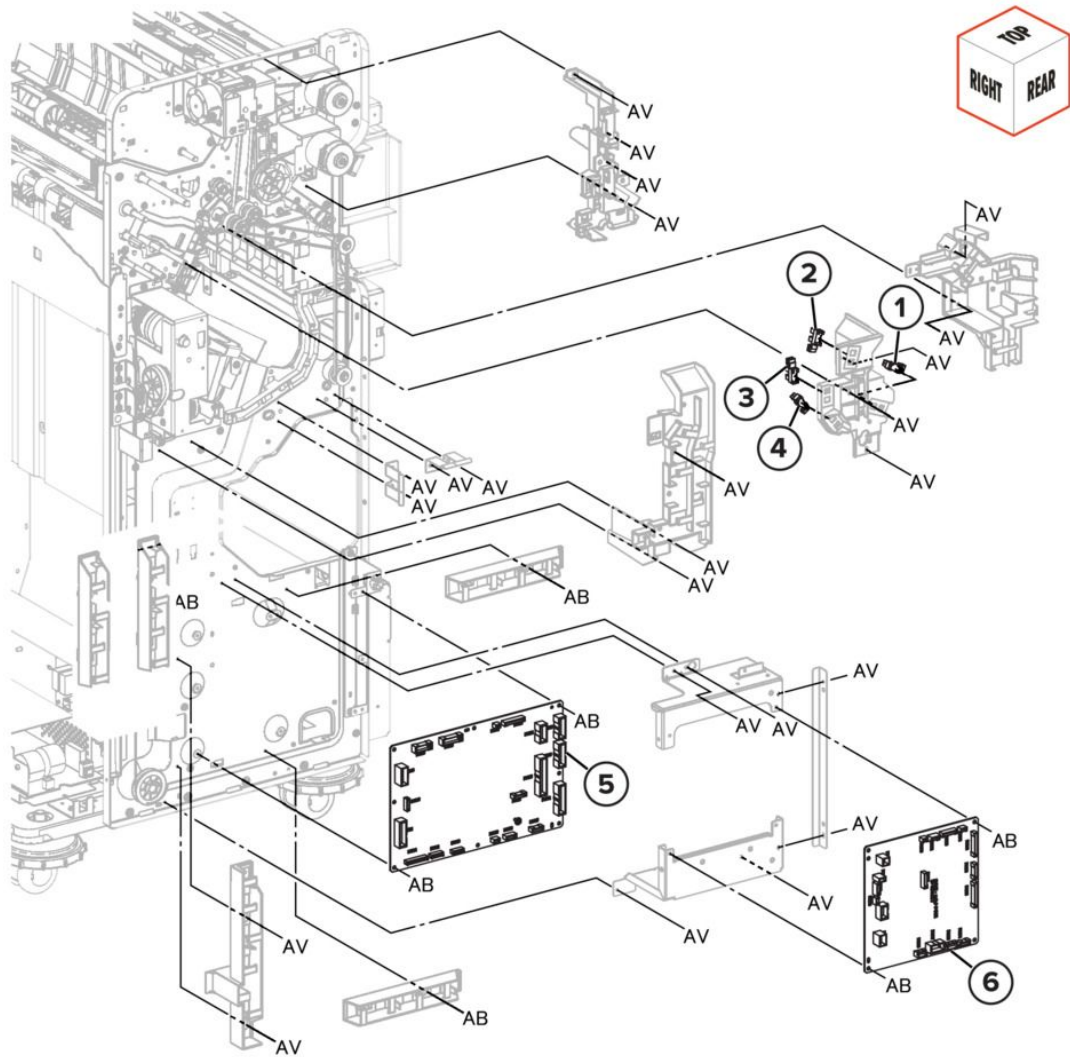
Booklet finisher electronics 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3114	1	1	Wire harness (AC inlet)	--
2	41X3113	1	1	Booklet finisher LVPS	See "Booklet finisher LVPS removal" on page 1528
3	41X3115	1	1	Booklet finisher relay board	See "Booklet finisher relay board removal" on page 1532

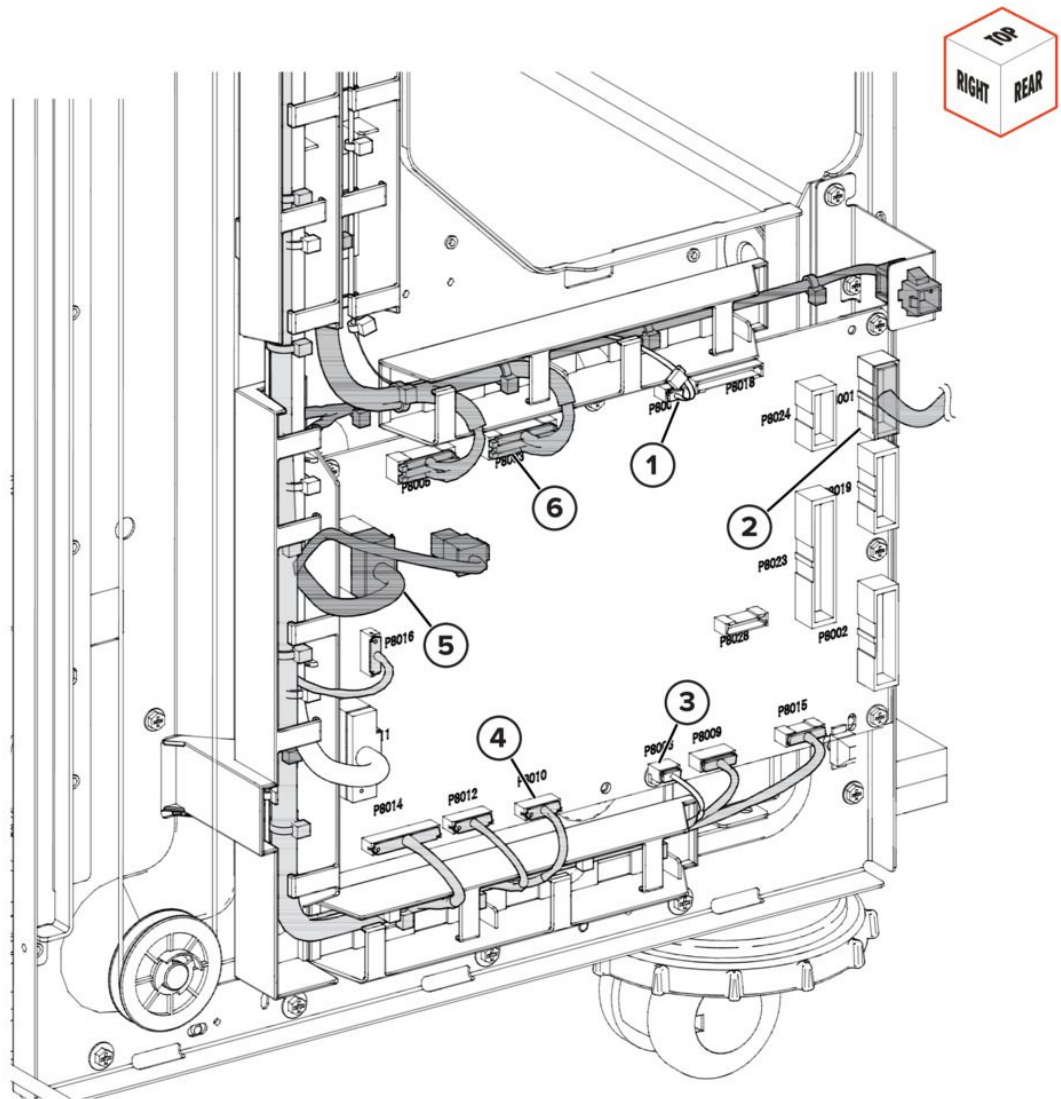
Booklet finisher electronics 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X7403	1	1	Sensor (booklet finisher set clamp home)	--
2	40X7403	1	1	Sensor (booklet finisher eject clamp home)	--
3	40X7403	1	1	Sensor (booklet finisher stack height 2)	--
4	40X7403	1	1	Sensor (booklet finisher stack height 1)	--
5	41X3116	1	1	Booklet finisher controller board	See "Booklet finisher controller board removal" on page 1397
6	41X3117	1	1	Booklet finisher booklet maker controller board	See "Booklet finisher booklet maker controller board removal" on page 1396

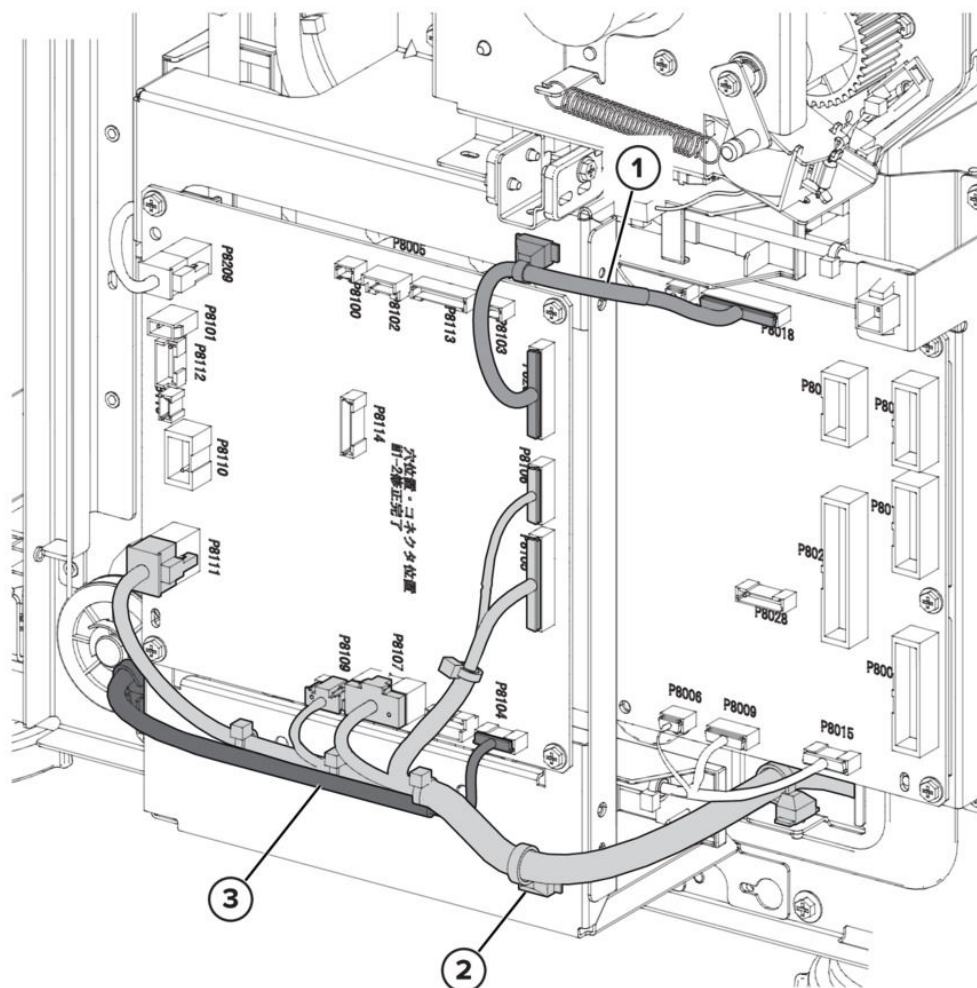
Booklet finisher wire harness 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3121	1	1	Booklet finisher OCT signal cable harness	--
2	41X3104	1	1	Wire harness cable	--
3	41X3122	1	1	Booklet finisher OCT motor cable harness	--
4	41X3119	1	1	Booklet finisher main cable harness	--
5	41X3120	1	1	Booklet finisher power cable harness	--
6	41X3118	1	1	Booklet finisher signal cable harness 1	--

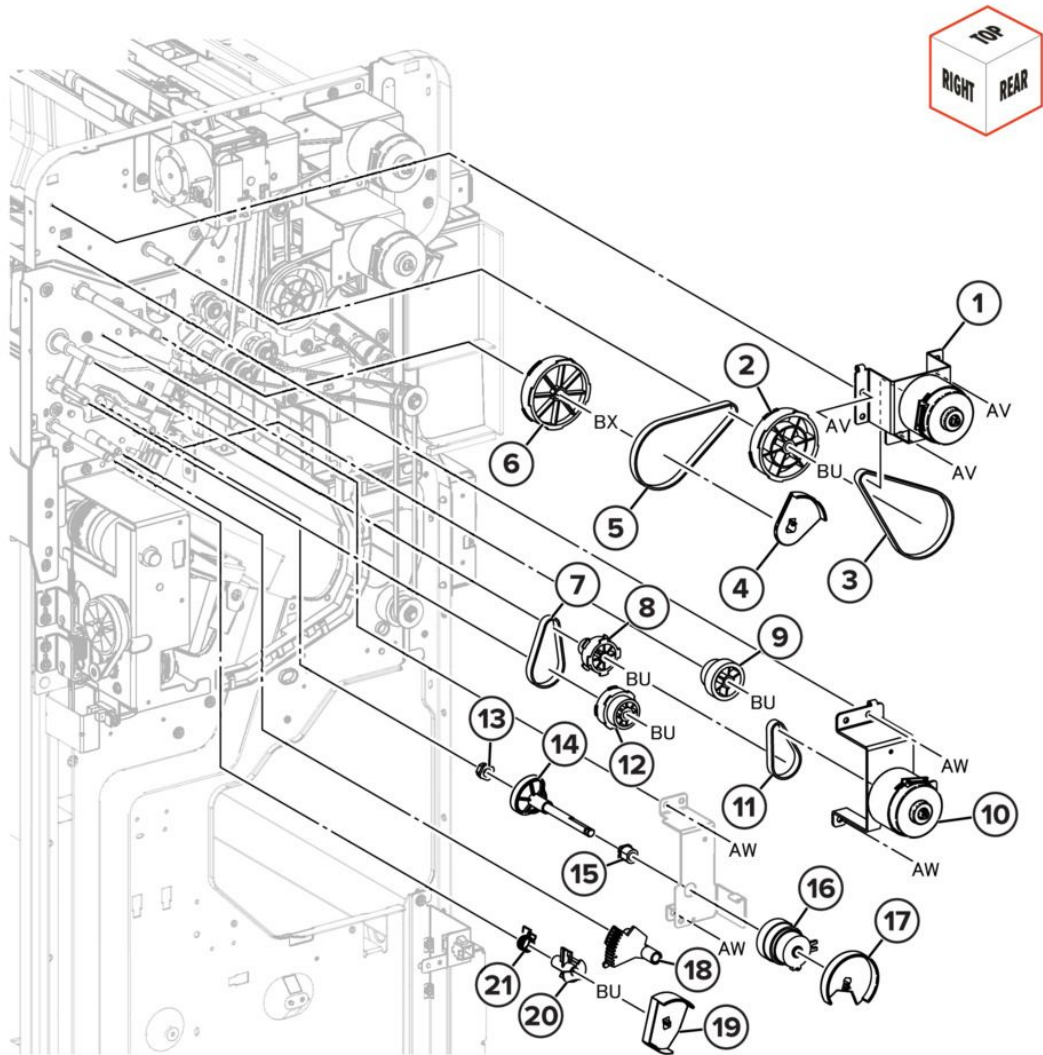
Booklet finisher wire harness 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3124	1	1	Booklet finisher IF cable harness	--
2	41X3125	1	1	Booklet finisher cable harness	--
3	41X3126	1	1	Booklet finisher tray cable harness	--

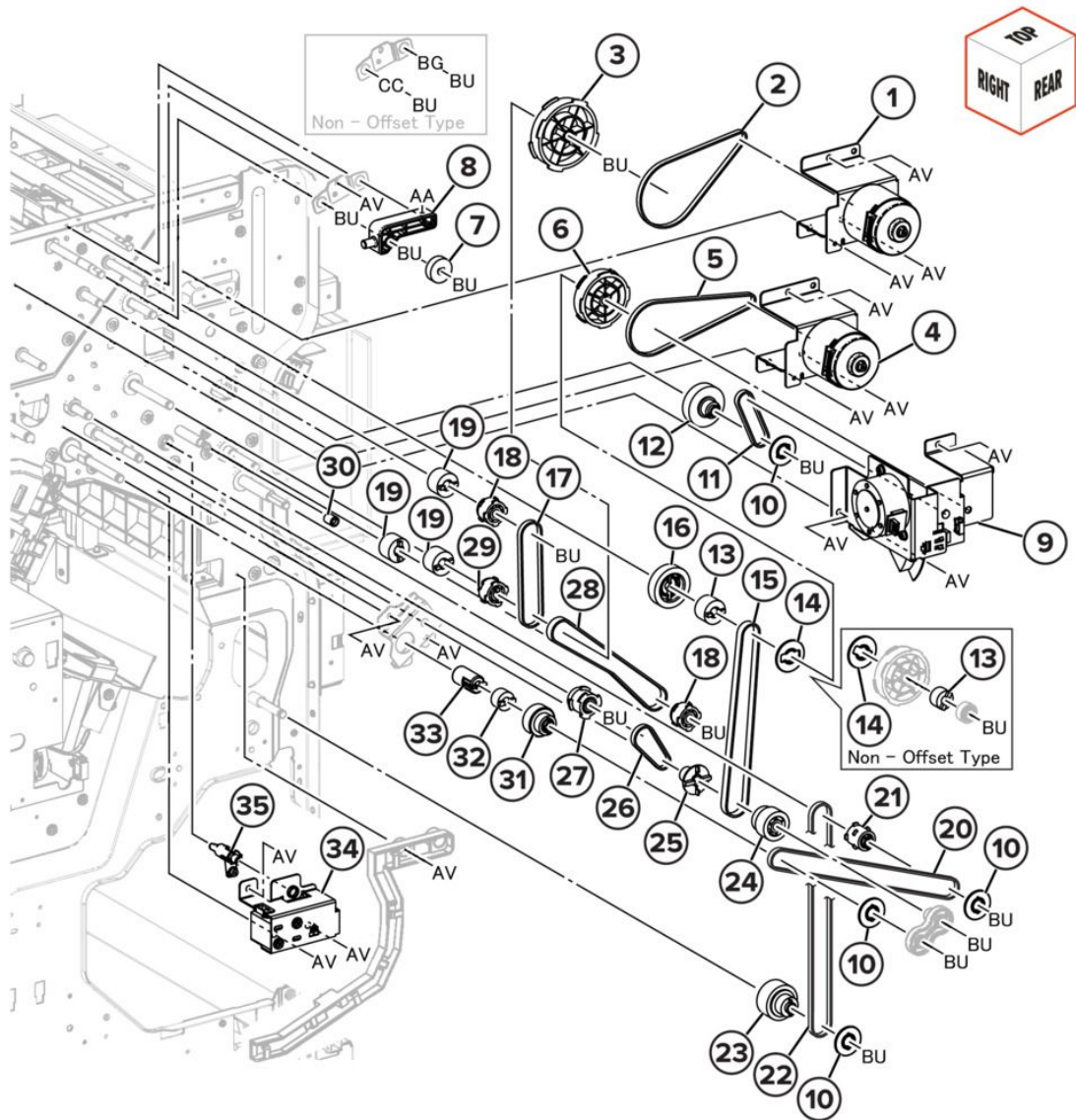
Booklet finisher drive 1



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3138	1	1	Motor (booklet finisher eject clamp)	--
2	41X3129	1	1	Pulley (T79/T20)	--
3	41X3166	1	1	Belt 4	--
4	41X3132	1	1	Eject clamp actuator	See "Eject clamp actuator removal" on page 1465
5	41X3136	1	1	Belt 3	--
6	41X3128	1	1	Pulley (T79)	--
7	41X3135	1	1	Belt 2	--
8	41X3130	1	1	Pulley (T38/20)	--
9	41X3143	1	1	Gear (Z23/Z32)	--
10	41X3139	1	1	Motor (booklet finisher eject)	See "Motor (booklet finisher eject) removal" on page 1466
11	41X3134	1	1	Belt 1	--
12	41X3141	1	1	Gear pulley (T44/Z25)	--
13	40X0880	1	1	Sleeve bearing	--
14	41X3127	1	1	Set drive 1 shaft	--
15	41X3217	1	1	Offset bearing	--
16	40X4062	1	1	Booklet finisher stack clamp clutch	See "Booklet finisher stack clamp clutch removal" on page 1526
17	41X3131	1	1	Stack clamp actuator	--
18	41X3142	1	1	Sector gear (Z72)	--
19	41X3133	1	1	Stack height actuator	--
20	41X3140	1	1	Gear (Z18)	--
21	41X3216	1	1	Set link spring	--

Booklet finisher drive 2



Parts catalog

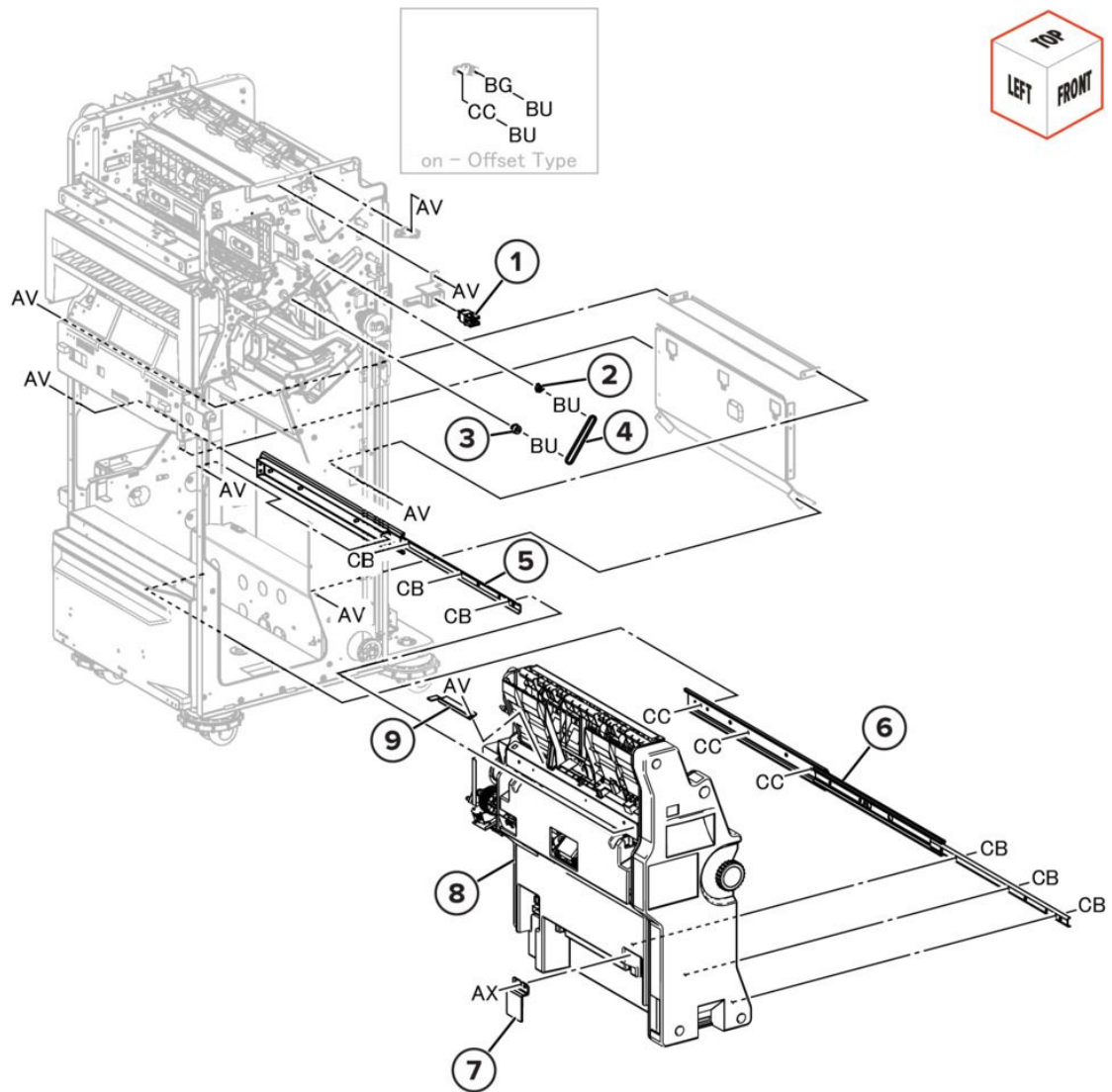
Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3160	1	1	Motor (booklet finisher exit)	See "Motor (booklet finisher exit) removal" on page 1393
2	41X3165	1	1	Belt	--
3	41X3156	1	1	Pulley (T28/T80)	--
4	41X3161	1	1	Motor (booklet finisher main transport)	--
5	41X3166	1	1	Belt	--
6	41X3174	1	1	Pulley (T24/T64)	--
7	41X3149	1	1	Gear (Z16)	--
8	41X3150	1	1	Booklet finisher joint arm	See "Booklet finisher joint arm removal" on page 1448
9	41X3159	1	1	Motor (booklet finisher offset with offset sensor) assembly	See "Motor (booklet finisher booklet offset with offset sensor) assembly removal" on page 1445
10	41X2952	4	1	Flange	--
11	41X3163	1	1	Booklet finisher offset drive belt	See "Booklet finisher offset drive belt removal" on page 1447
12	41X3173	1	1	Gear (Z34/T20)	--
13	41X3148	2	1	Clutch	--
14	41X3144	2	1	Flange	--
15	41X3169	1	1	Belt	--
16	41X3172	1	1	Gear (Z34)	--
17	41X3164	1	1	Belt	--
18	41X3155	2	1	Pulley (T28)	--
19	41X3147	3	1	Clutch	--
20	41X3167	1	1	Belt	--
21	41X3154	1	1	Pulley (T24/T24)	--
22	41X3081	1	1	Booklet finisher type belt	--
23	41X3175	1	1	Gear (Z32/Z23)	--
24	41X3171	1	1	Gear (Z24/T30)	--
25	41X3157	1	1	Pulley (T18)	--
26	41X3162	1	1	Belt	--
27	41X3146	1	1	Subpaddle pulley with one way clutch	--
28	41X3168	1	1	Belt	--
29	41X3153	1	1	Pulley (T28)	--

Continued on page 2075

Continued from page 2074

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
30	41X3152	1	1	Pulley	--
31	41X3170	1	1	Gear pulley (Z20 /24)	--
32	41X3145	1	1	Clutch	--
33	41X3151	1	1	Joint	--
34	41X3158	1	1	Booklet finisher transport gate solenoid	See "Booklet finisher transport gate solenoid removal" on page 1515
35	41X3178	1	1	Booklet finisher gate arm link	--

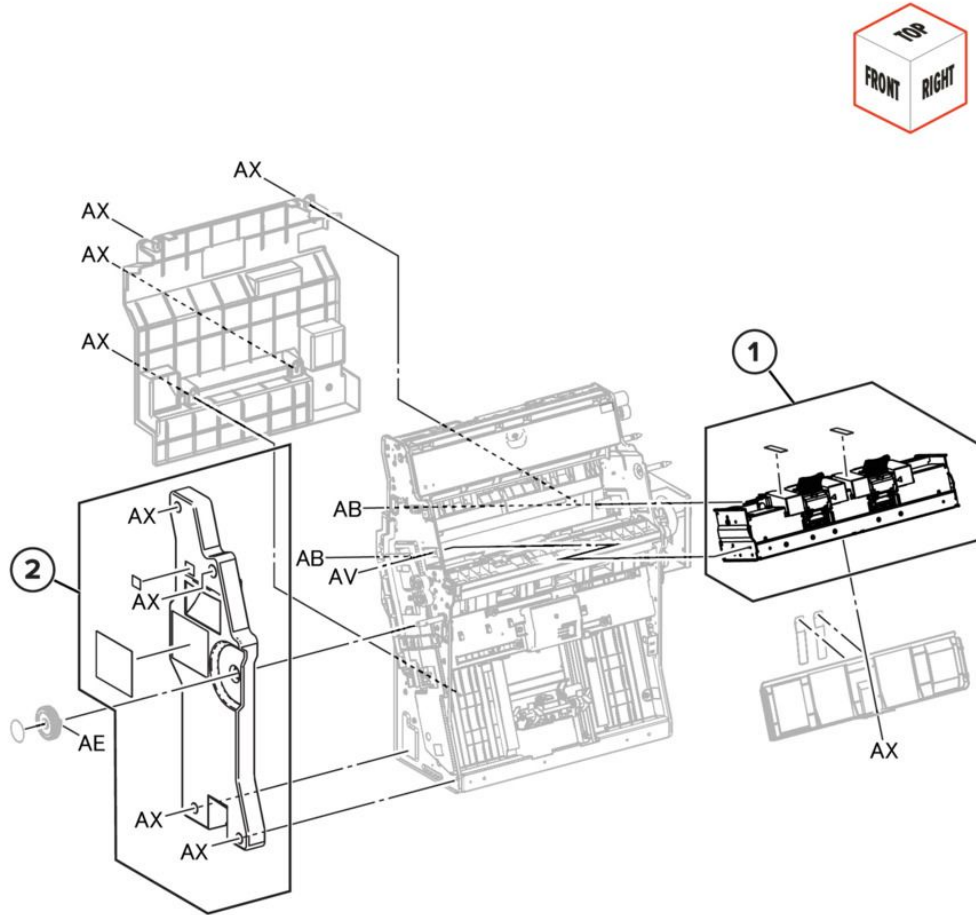
Booklet finisher booklet maker



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4193	1	1	Booklet finisher front door interlock switch	--
2	41X3105	1	1	Pulley (T18)	--
3	41X3106	1	1	Main paddle pulley	--
4	41X3107	1	1	Booklet finisher front belt	See "Booklet finisher front belt removal" on page 1392
5	41X3109	1	1	Booklet finisher left rail	See "Booklet finisher left rail removal" on page 1409
6	41X3110	1	1	Booklet finisher right rail	See "Booklet finisher right rail removal" on page 1412
7	41X3111	1	1	Stopper bracket	--
8	41X3108	1	1	Booklet finisher booklet maker	See "Booklet finisher booklet maker removal" on page 1404
9	41X3112	1	1	Stopper rail bracket	--

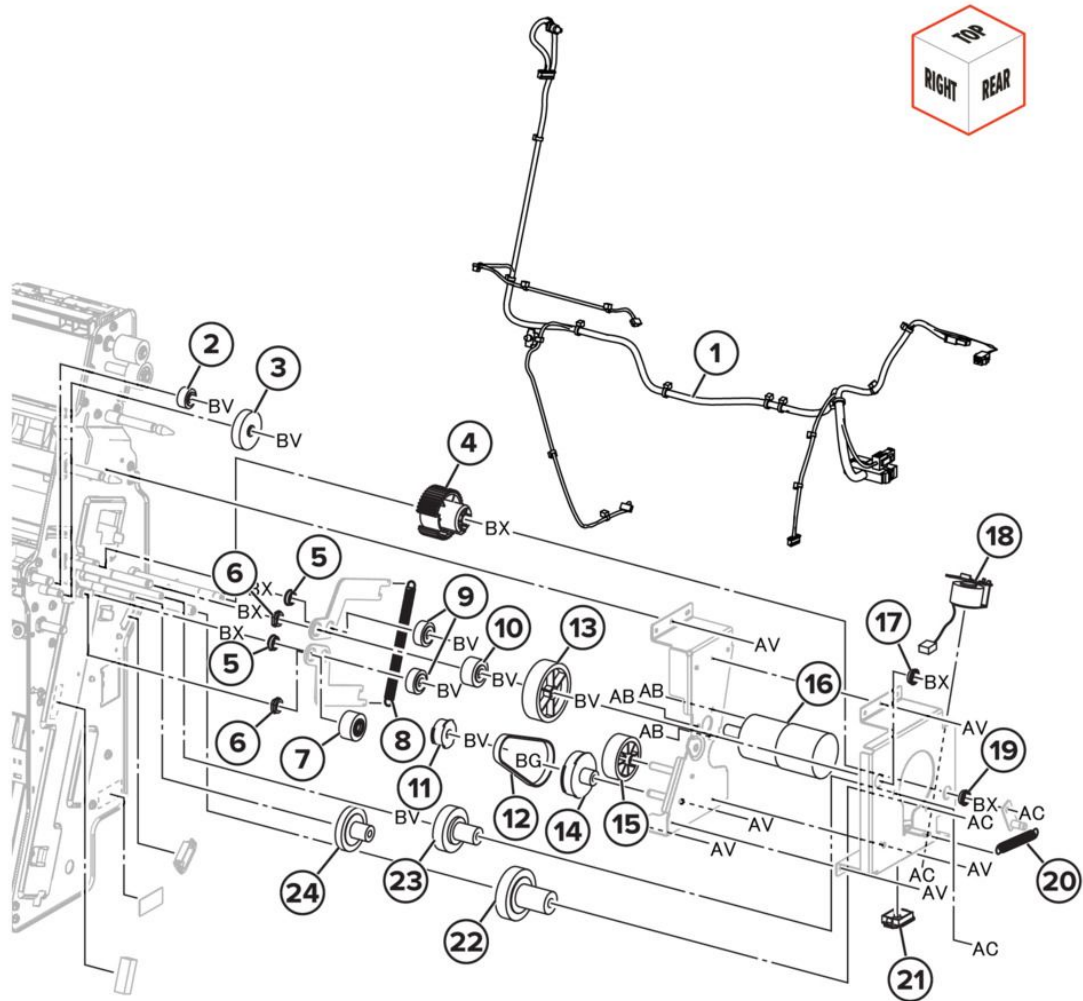
Booklet finisher booklet maker covers



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3240	1	1	Booklet finisher booklet maker stapler unit	See "Booklet finisher booklet maker stapler unit removal" on page 1415
2	41X3239	1	1	Booklet finisher booklet maker front cover	See "Booklet finisher booklet maker front cover removal" on page 1496

Booklet finisher booklet maker drive 1



Parts catalog

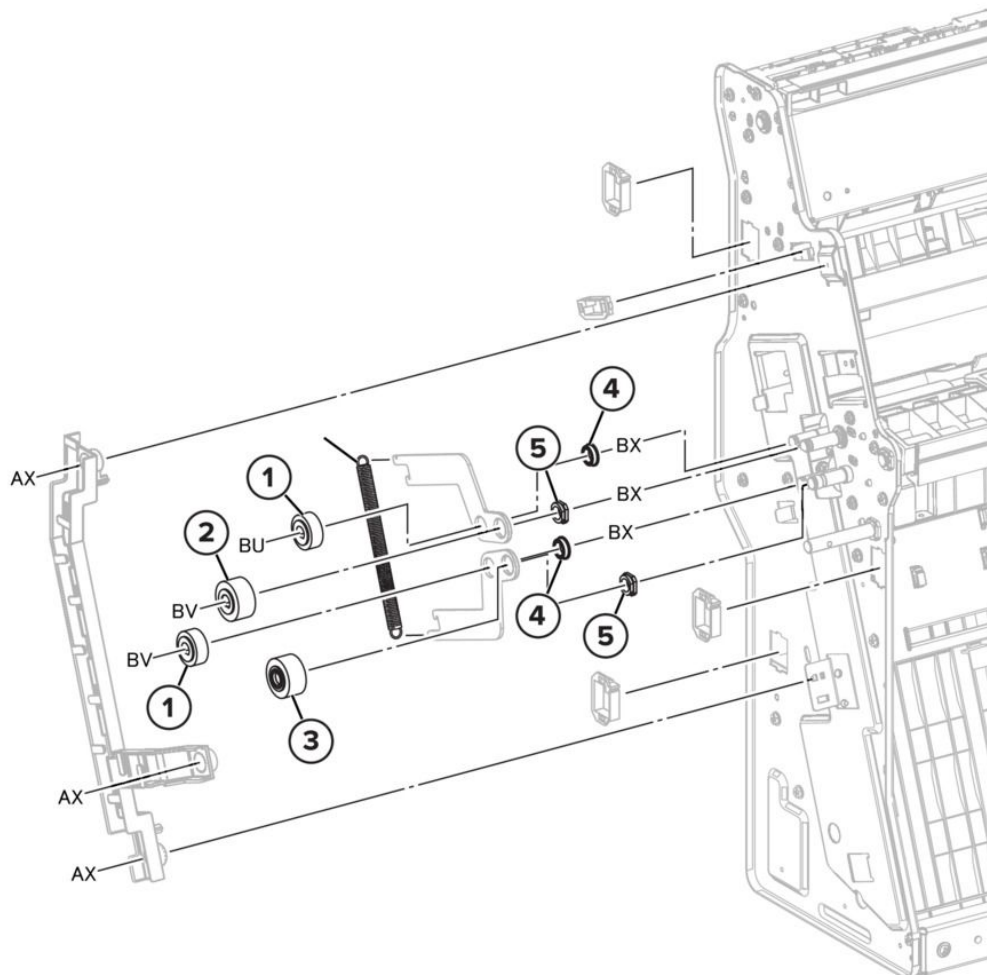
Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3254	1	1	Booklet finisher booklet maker cable harness 1	--
2	41X3242	1	1	Booklet finisher booklet maker gear 1	--
3	41X3243	1	1	Booklet finisher booklet maker gear 2	--
4	41X3247	1	1	Booklet finisher booklet maker gear (Z42)	--
5	40X3915	2	1	Ball bearing	--
6	41X3259	2	1	Booklet finisher booklet maker sleeve bearing	--
7	41X3256	1	1	Booklet finisher booklet maker gear (Z22)	--
8	41X3258	1	1	Booklet finisher booklet maker spring 1	--
9	41X3257	2	1	Booklet finisher booklet maker gear (Z19)	--
10	41X3255	1	1	Booklet finisher booklet maker gear (Z22)	--
11	40X7435	1	1	Booklet finisher booklet maker pulley (T24)	--
12	41X3246	1	1	Booklet finisher booklet maker belt	--
13	41X3241	1	1	Booklet finisher booklet maker gear (Z50/T23)	--
14	41X3251	1	1	Booklet finisher booklet maker pulley (Z14/T41)	--
15	41X3250	1	1	Bookle finisher booklet maker gear (Z45)	--
16	41X3252	1	1	Motor (booklet finisher fold)	See "Motor (booklet finisher fold) removal" on page 1482
17	40X3915	1	1	Ball bearing	--
18	40X7497	1	1	Booklet finisher fold solenoid	See "Booklet finisher fold solenoid removal" on page 1480
19	40X3915	1	1	Ball bearing	--
20	41X3253	1	1	Fold knife spring	--
21	41X3245	1	1	Booklet finisher booklet maker bushing	--
22	41X3248	1	1	Booklet finisher booklet maker gear (Z53/Z18)	--
23	40X4017	1	1	Booklet finisher booklet maker gear (Z4/ Z13)	--

Continued on page 2082

Continued from page 2081

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
24	41X3249	1	1	Booklet finisher booklet maker gear (Z45/Z15)	--

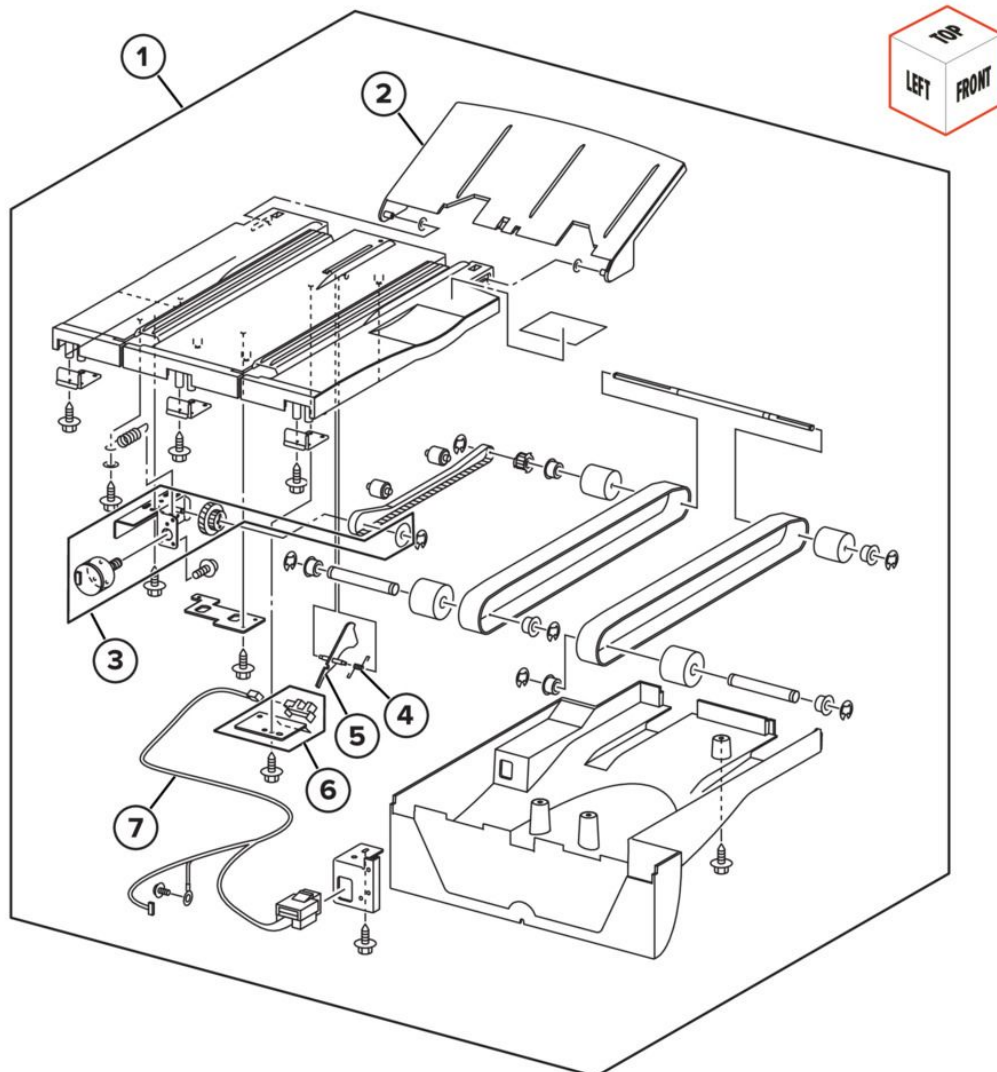
Booklet finisher booklet maker drive 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3257	2	1	Booklet finisher booklet maker gear (Z19)	--
2	41X3255	1	1	Booklet finisher booklet maker gear (Z22)	--
3	41X3256	1	1	Booklet finisher booklet maker gear (Z22)	--
4	40X3915	2	1	Ball bearing	--
5	41X3259	2	1	Booklet finisher booklet maker sleeve bearing	--

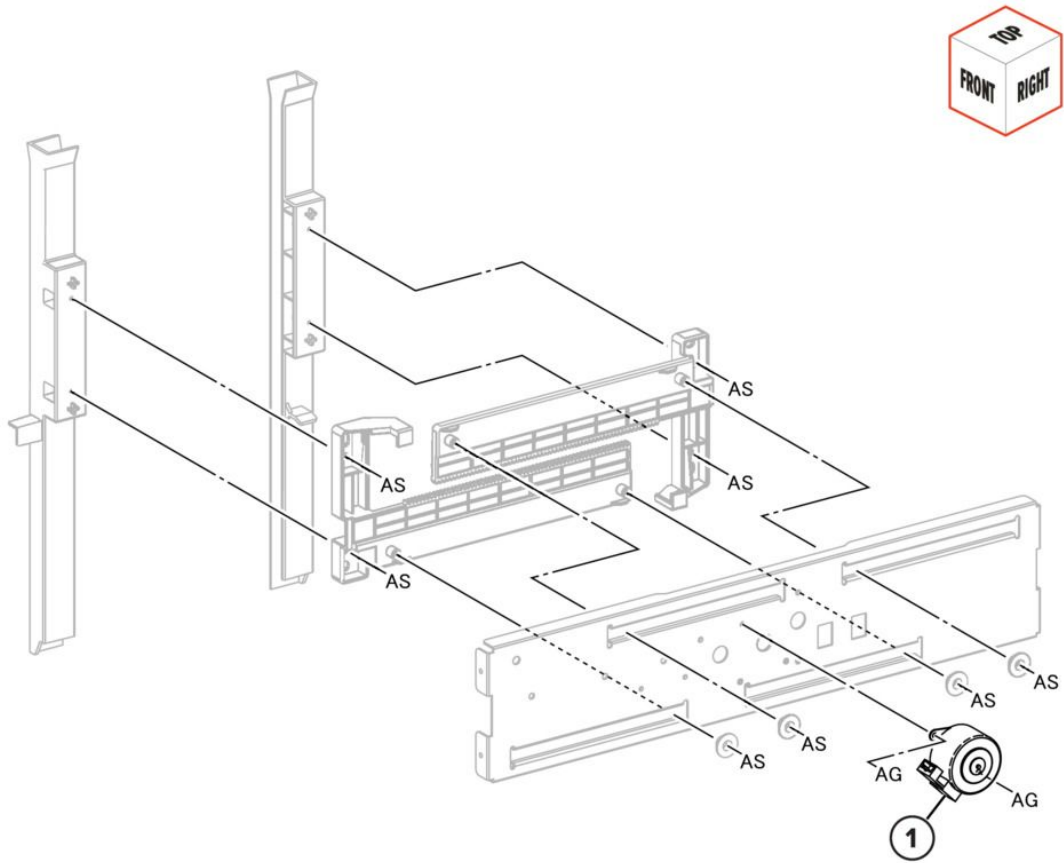
Booklet finisher booklet maker tray



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3238	1	1	Booklet finisher booklet maker tray	See "Booklet finisher booklet maker tray removal" on page 1402
2	41X3232	1	1	Booklet finisher bin extender	--
3	41X3237	1	1	Motor (booklet finisher bin)	--
4	41X3235	1	1	Booklet finisher bin actuator spring	--
5	41X3234	1	1	Booklet finisher bin actuator	--
6	41X3236	1	1	Sensor (booklet finisher bin paper present)	--
7	41X3233	1	1	Booklet finisher bin cable	--

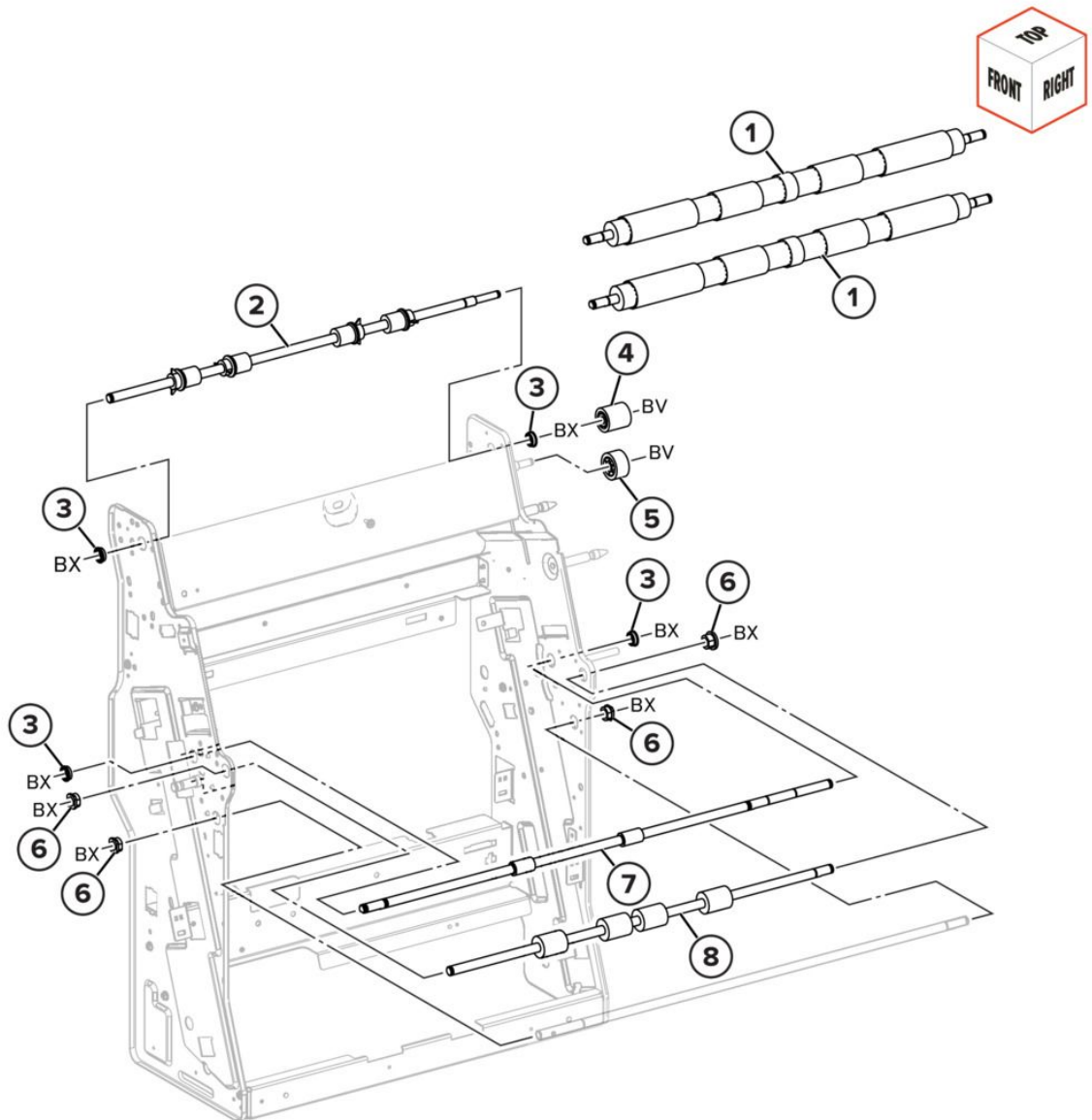
Booklet finisher booklet maker compile plate



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3284	1	1	Motor (booklet finisher tamper)	--

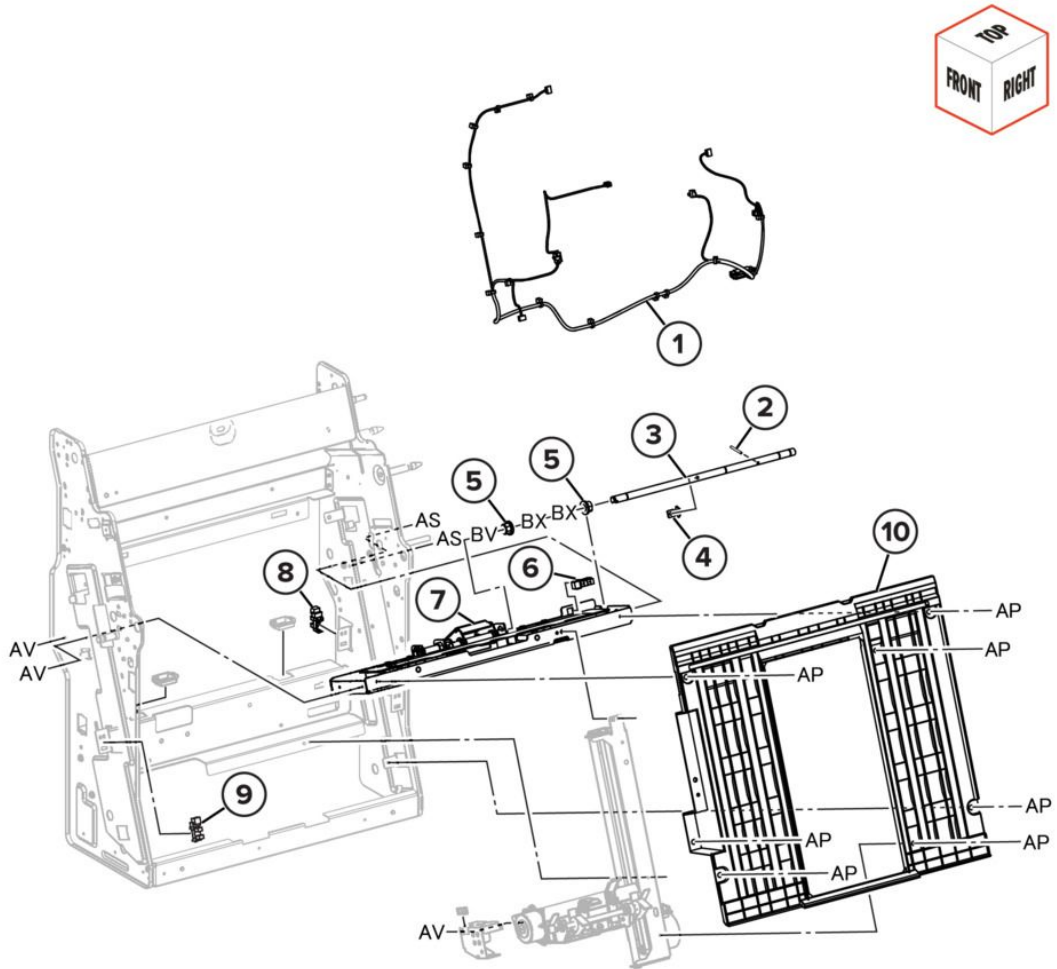
Booklet finisher booklet maker rollers



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3279	2	1	Booklet finisher fold roller	--
2	41X3277	1	1	Booklet finisher fold in roller	--
3	40X3915	4	1	Ball bearing	--
4	41X3276	1	1	Booklet finisher fold roller gear	--
5	41X3281	1	1	Booklet finisher booklet maker gear (Z28)	--
6	41X3280	4	1	Booklet finisher booklet maker roller sleeve bearing	--
7	41X3275	1	1	Booklet finisher fold shaft	--
8	41X3278	1	1	Booklet finisher booklet maker exit roller	--

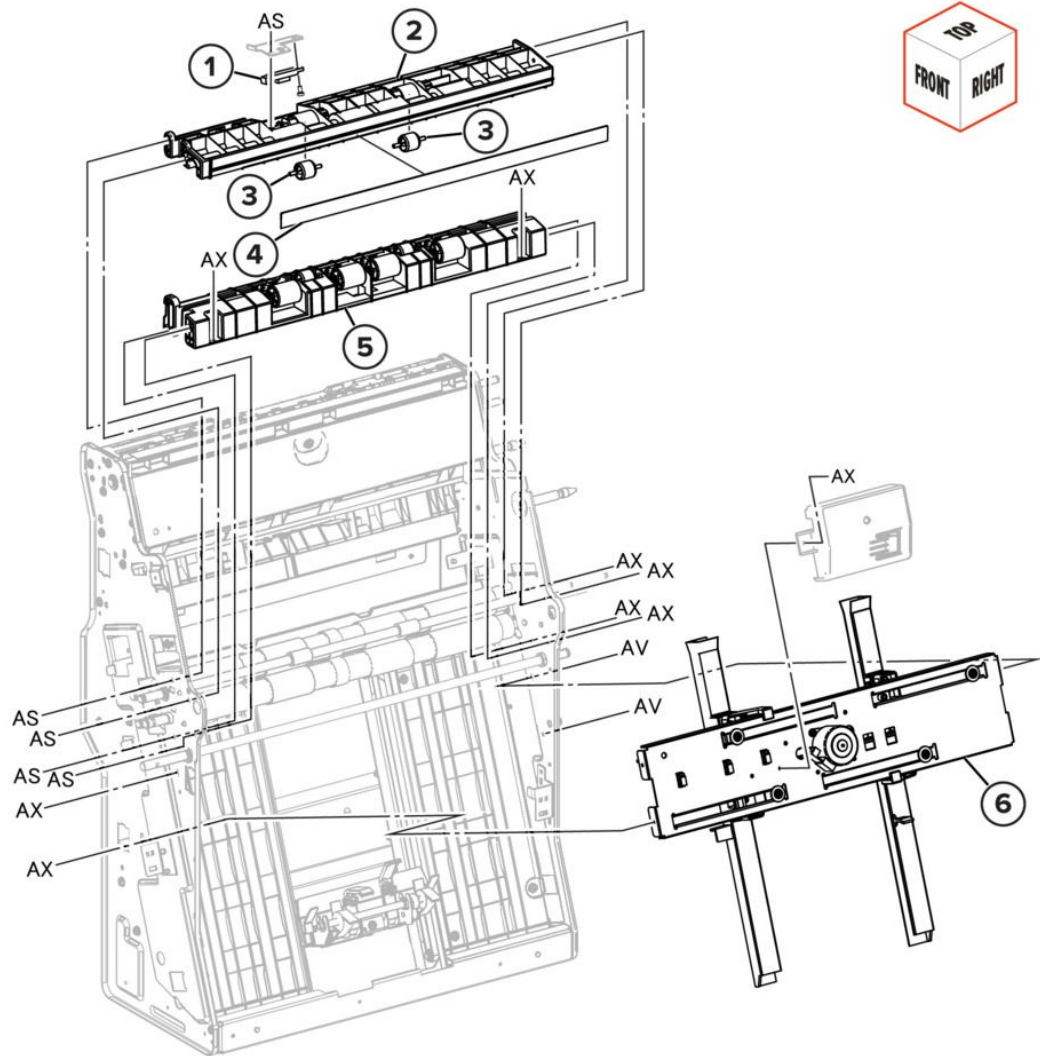
Booklet finisher booklet maker guide 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3265	1	1	Booklet finisher booklet maker cable 2	--
2	41X3262	1	1	Booklet finisher booklet maker pin	--
3	41X3261	1	1	Booklet finisher fold knife spring	--
4	41X3264	1	1	Booklet finisher fold knife actuator	--
5	40X1388	2	1	Powdered metal bearing	--
6	41X3082	1	1	Sensor (booklet finisher fold knife home position)	--
7	41X3260	1	1	Booklet finisher fold knife aligner	--
8	41X3082	1	1	Sensor (booklet maker set)	See "Sensor (booklet maker set) removal" on page 1488
9	41X3082	1	1	Sensor (booklet finisher tamper home position)	See "Sensor (booklet finisher tamper home position) removal" on page 1498
10	41X3263	1	1	Booklet finisher booklet maker compiler cover	--

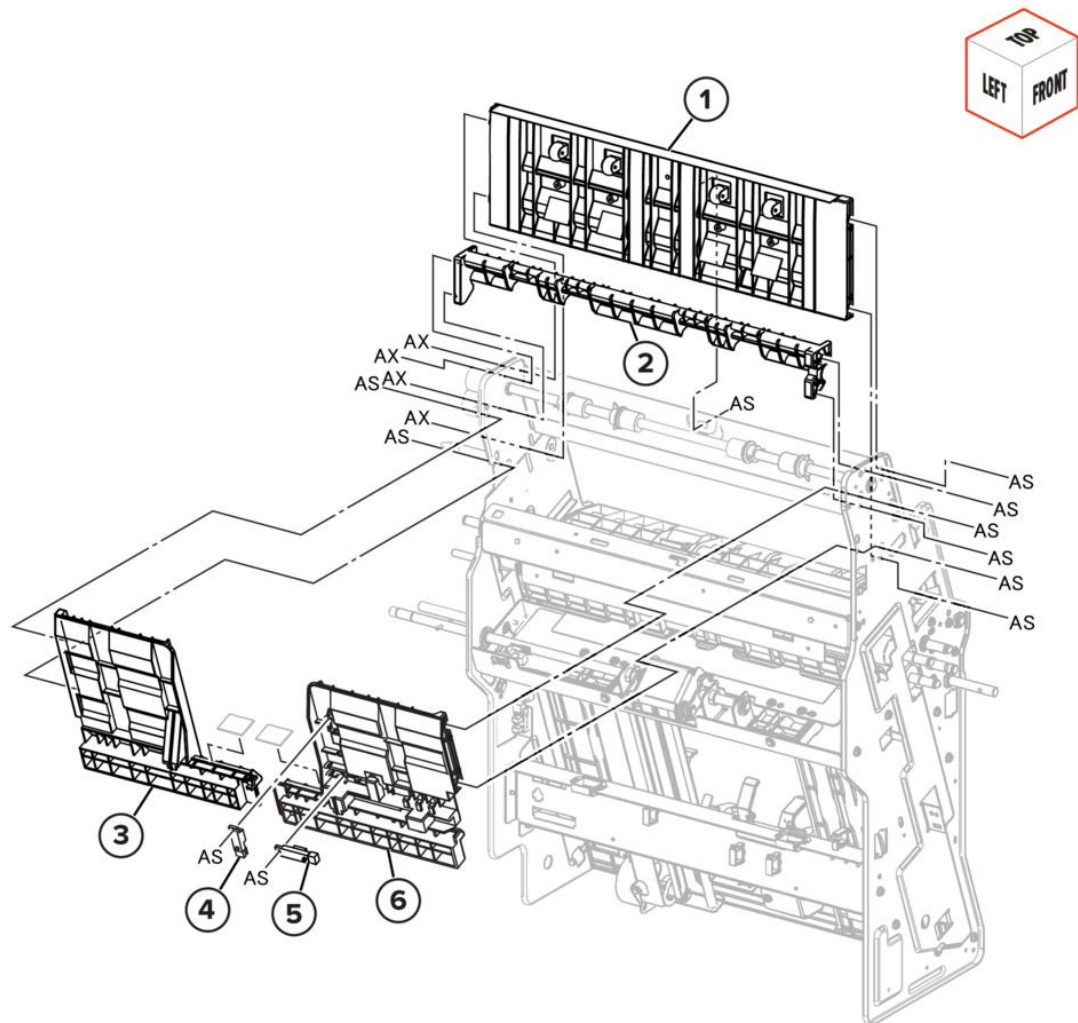
Booklet finisher booklet maker guide 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0921	1	1	Sensor (booklet finisher exit)	--
2	41X3268	1	1	Booklet finisher booklet maker upper exit guide	--
3	41X3269	2	1	Booklet finisher booklet maker exit guide roller	--
4	41X3270	1	1	Booklet finisher booklet maker exit guide static brush	--
5	41X3267	1	1	Booklet finisher booklet maker lower exit guide	--
6	41X3266	1	1	Booklet finisher booklet maker compiler plate	See "Booklet finisher booklet maker compiler plate removal" on page 1499

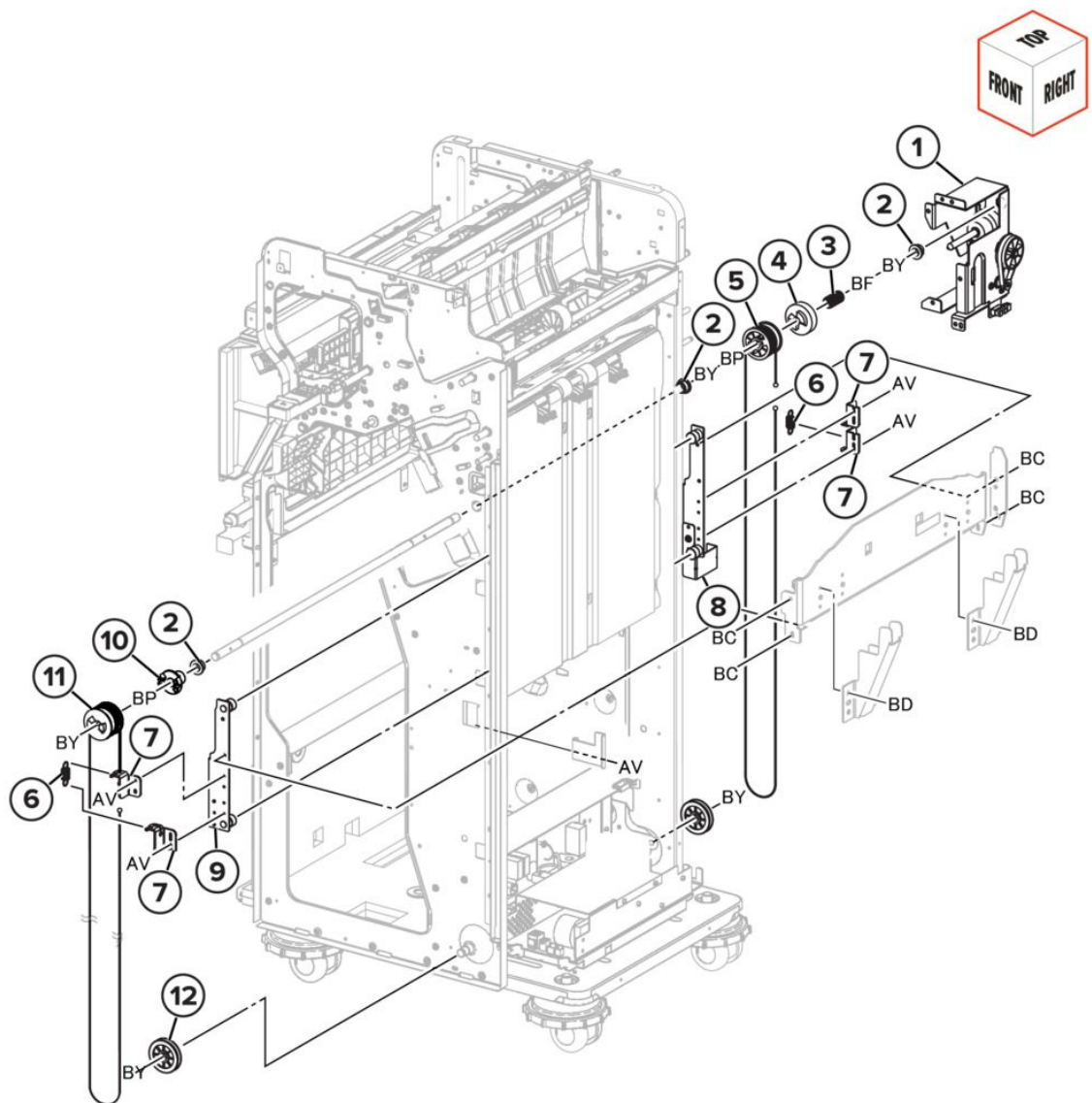
Booklet finisher booklet maker guide 3



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3274	1	1	Booklet finisher booklet maker left paper guide 2	--
2	41X3273	1	1	Booklet finisher booklet maker left paper guide 1	--
3	41X3272	1	1	Booklet finisher booklet maker upper right guide	See "Booklet finisher booklet maker upper right guide removal" on page 1487
4	40X0921	1	1	Sensor (booklet finisher compile paper presence 2)	See "Sensor (booklet finisher compile paper presence 2) removal" on page 1495
5	40X0921	1	1	Sensor (booklet finisher compile paper presence 1)	See "Sensor (booklet finisher compile paper presence 1) removal" on page 1494
6	41X3271	1	1	Booklet finisher booklet maker upper front guide	See "Booklet finisher booklet maker upper front guide removal" on page 1522

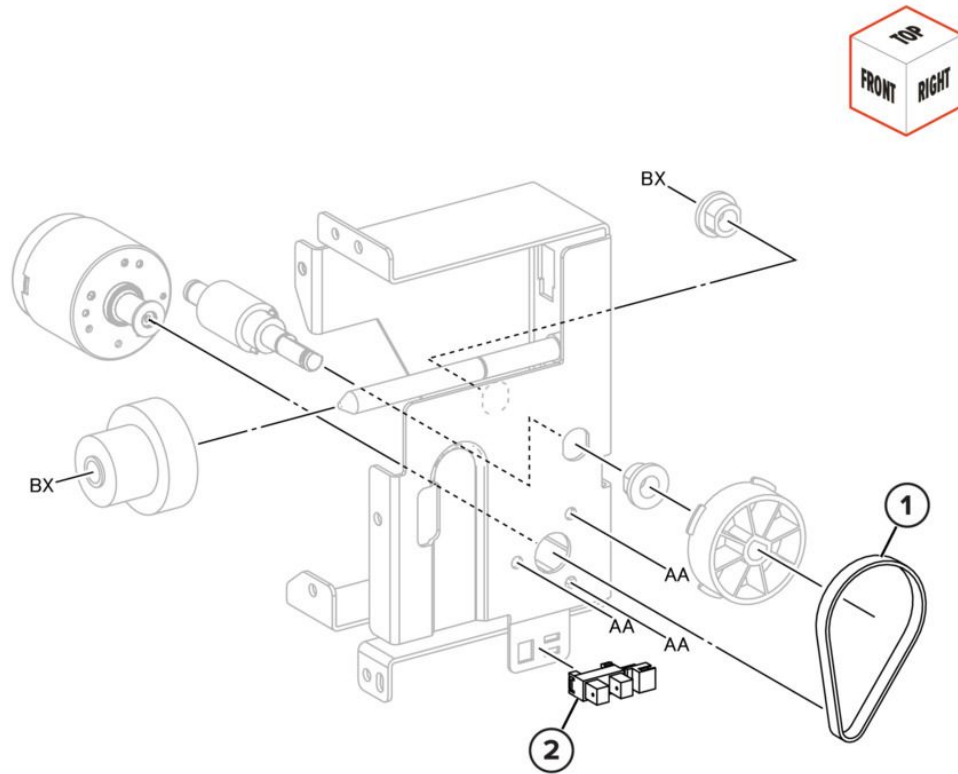
Booklet finisher stacker bracket 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3177	1	1	Booklet finisher stacker bracket	See "Booklet finisher stacker bracket removal" on page 1520
2	41X4253	1	1	Bearing	--
3	41X4255	1	1	Spring	--
4	41X4254	1	1	Gear	--
5	41X4250	1	1	Elevator rear cable pulley	--
6	41X4257	1	1	Elevator tension spring	--
7	41X4256	1	1	Elevator tension bracket	--
8	41X4252	1	1	Elevator rear carriage	--
9	41X4251	1	1	Elevator front carriage	--
10	41X4258	1	1	Elevator pulley spacer	--
11	41X4249	1	1	Elevator front cable pulley	--
12	41X4248	1	1	Elevator pulley	--

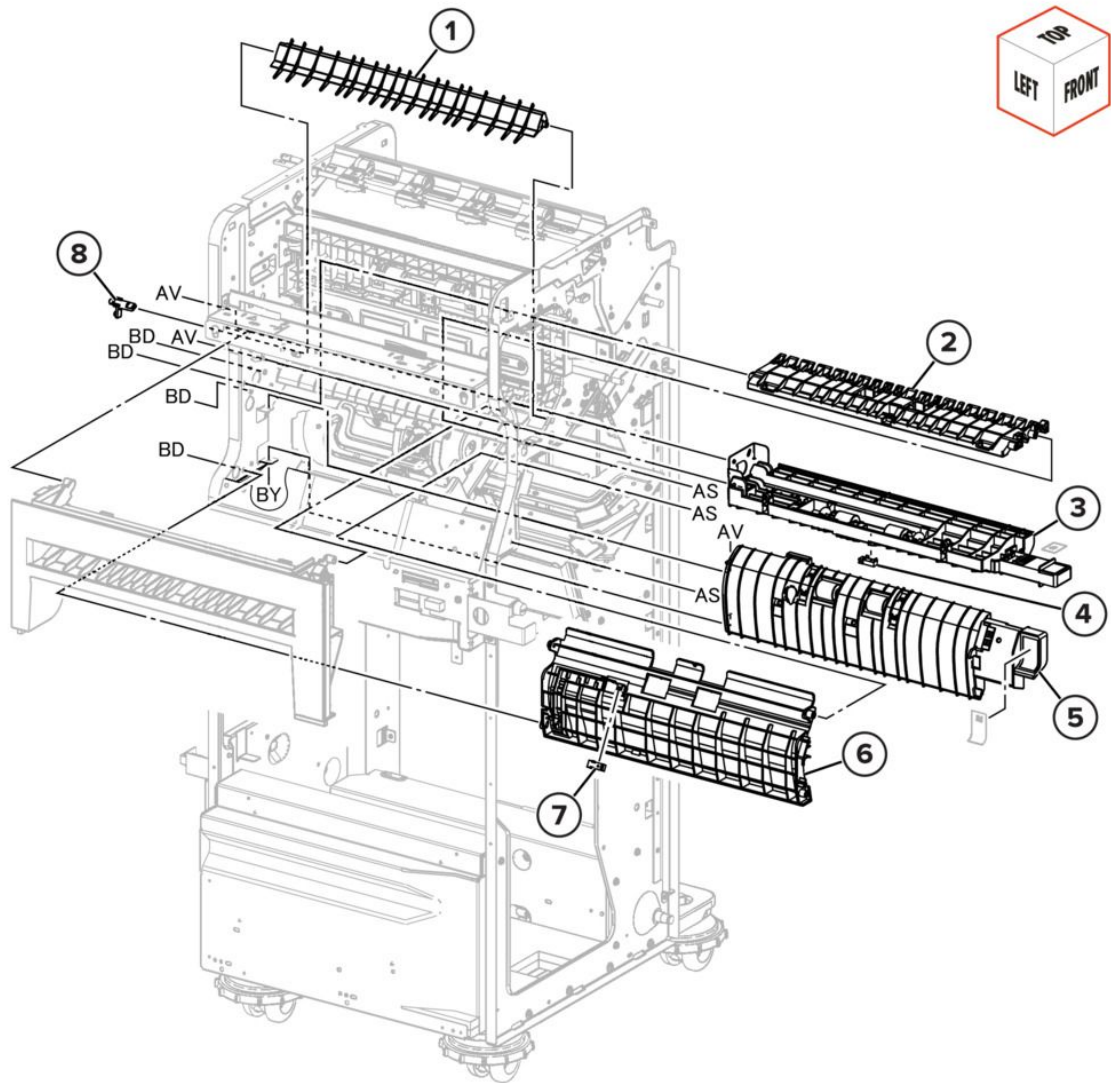
Booklet finisher stacker bracket 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X7412	1	1	Booklet finisher stacker belt	--
2	40X7403	1	1	Sensor (booklet finisher stacker tray paper position)	See "Sensor (booklet finisher stacker tray paper position) removal" on page 1506

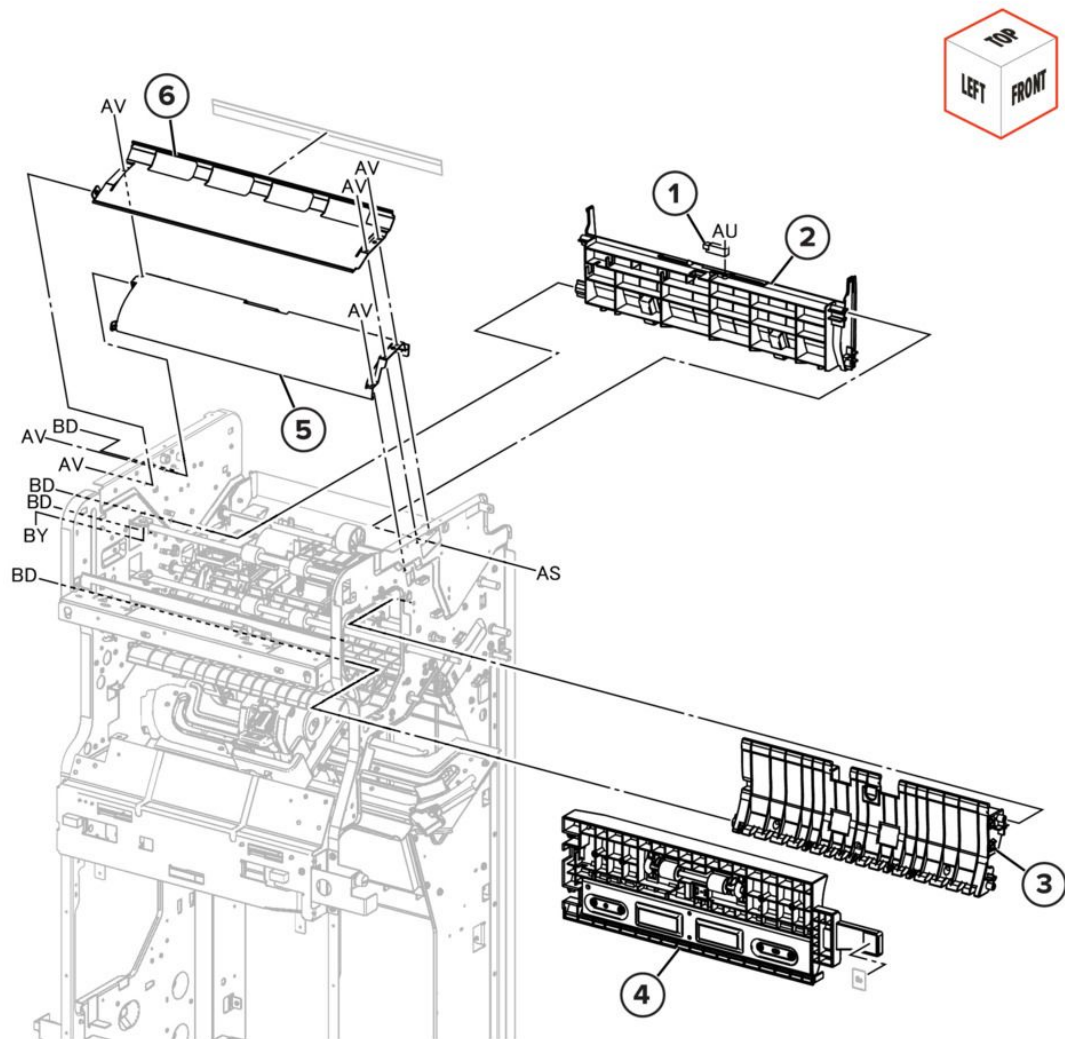
Booklet finisher guide 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3179	1	1	Booklet finisher gate	--
2	41X3184	1	1	Booklet finisher lower entrance guide	--
3	41X3183	1	1	Booklet finisher upper entrance guide	See "Booklet finisher upper entrance guide removal" on page 1428
4	41X3371	1	1	Sensor (booklet finisher entrance)	See "Sensor (booklet finisher entrance) removal" on page 1425
5	41X3181	1	1	Booklet finisher right buffer guide	See "Booklet finisher right buffer guide removal" on page 1429
6	41X3180	1	1	Booklet finisher left buffer guide	--
7	41X3371	1	1	Sensor (booklet finisher in)	See "Sensor (booklet finisher in) removal" on page 1507
8	41X3178	1	1	Booklet finisher gate arm link	--

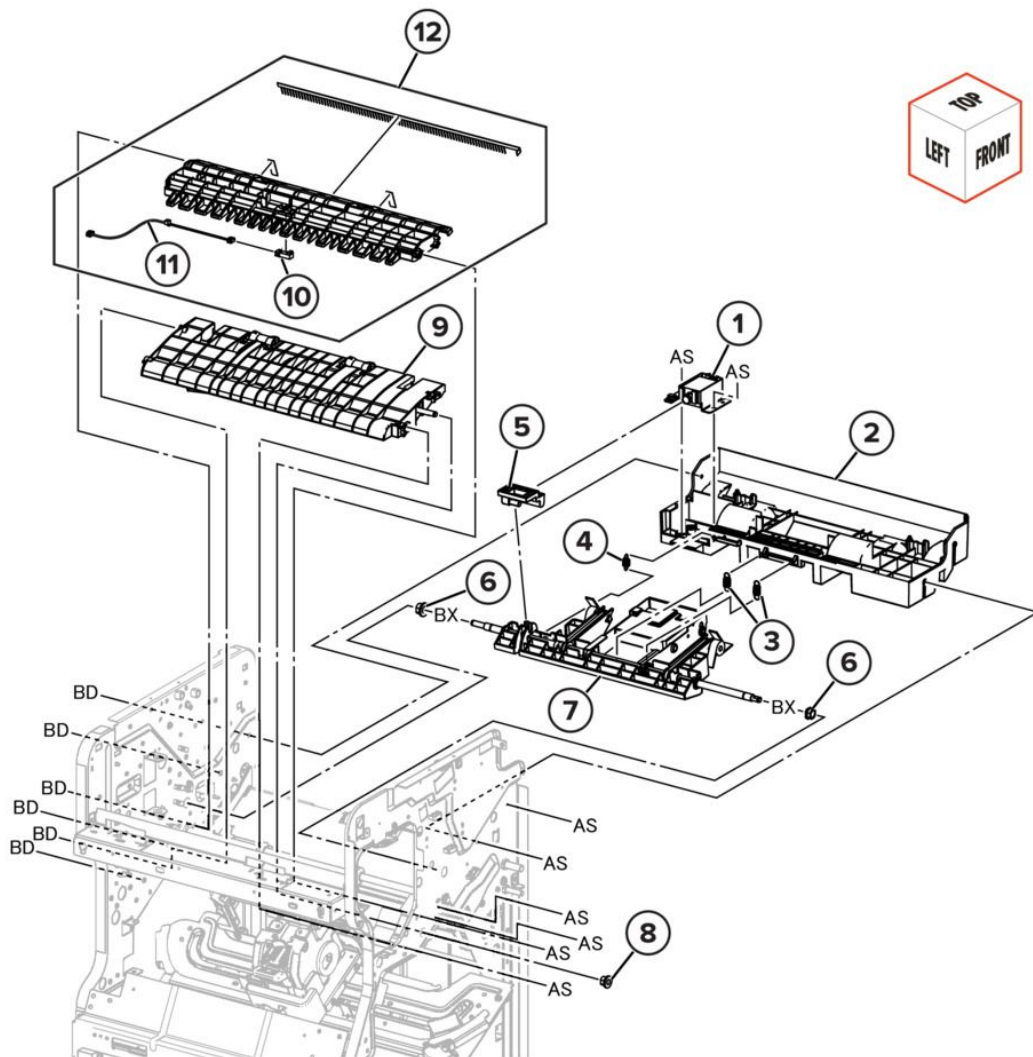
Booklet finisher guide 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	40X0908	1	1	Sensor (booklet finisher top tray full)	See "Sensor (booklet finisher top tray full) removal" on page 1456
2	41X3185	1	1	Booklet finisher upper bin tray guide	See "Booklet finisher upper bin tray guide removal" on page 1462
3	41X3186	1	1	Booklet finisher lower guide	--
4	41X3188	1	1	Booklet finisher upper guide	See "Booklet finisher upper guide removal" on page 1427
5	41X3189	1	1	Booklet finisher lower exit guide	See "Booklet finisher lower exit guide removal" on page 1458
6	41X3187	1	1	Booklet finisher upper exit guide	See "Booklet finisher upper exit guide removal" on page 1457
NS	41X3371	1	1	Sensor (booklet finisher upper exit)	See "Sensor (booklet finisher booklet upper exit) removal" on page 1426

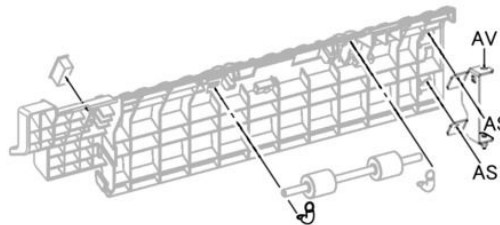
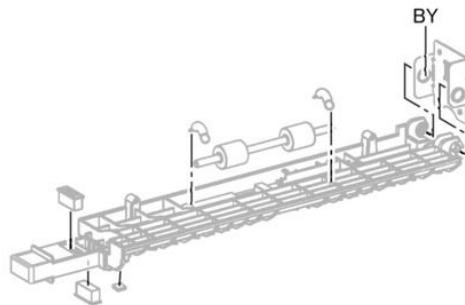
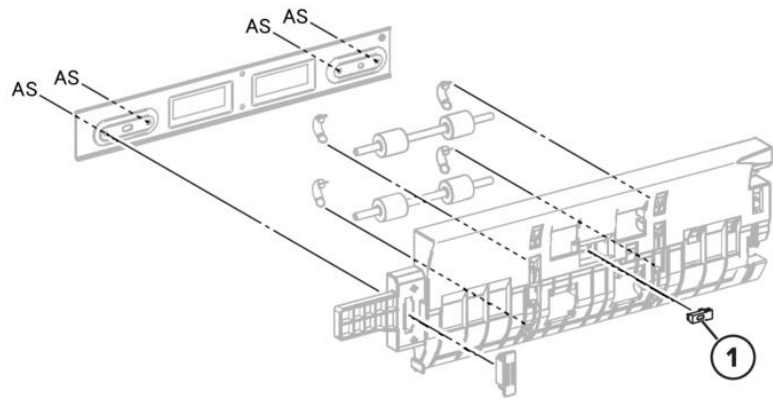
Booklet finisher guide 3



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3194	1	1	Booklet finisher subpaddle solenoid	See "Booklet finisher subpaddle solenoid removal" on page 1460
2	41X3195	1	1	Booklet finisher cam eject cover	See "Booklet finisher cam eject cover removal" on page 1470
3	41X3196	2	1	Spring	--
4	41X3197	1	1	Spring	--
5	41X3190	1	1	Booklet finisher solenoid link	See "Booklet finisher solenoid link removal" on page 1475
6	41X3280	2	1	Sleeve bearing	--
7	41X3193	1	1	Booklet finisher eject roll assembly	See "Booklet finisher eject roll assembly removal" on page 1477
8	40X0888	1	1	Powdered metal bearing	--
9	41X3192	1	1	Booklet finisher exit compiler lower guide	See "Booklet finisher exit compiler lower guide removal" on page 1517
10	41X3371	1	1	Sensor (booklet finisher compile exit)	--
11	41X3198	1	1	Wire harness	--
12	41X3191	1	1	Upper exit compiler guide	--

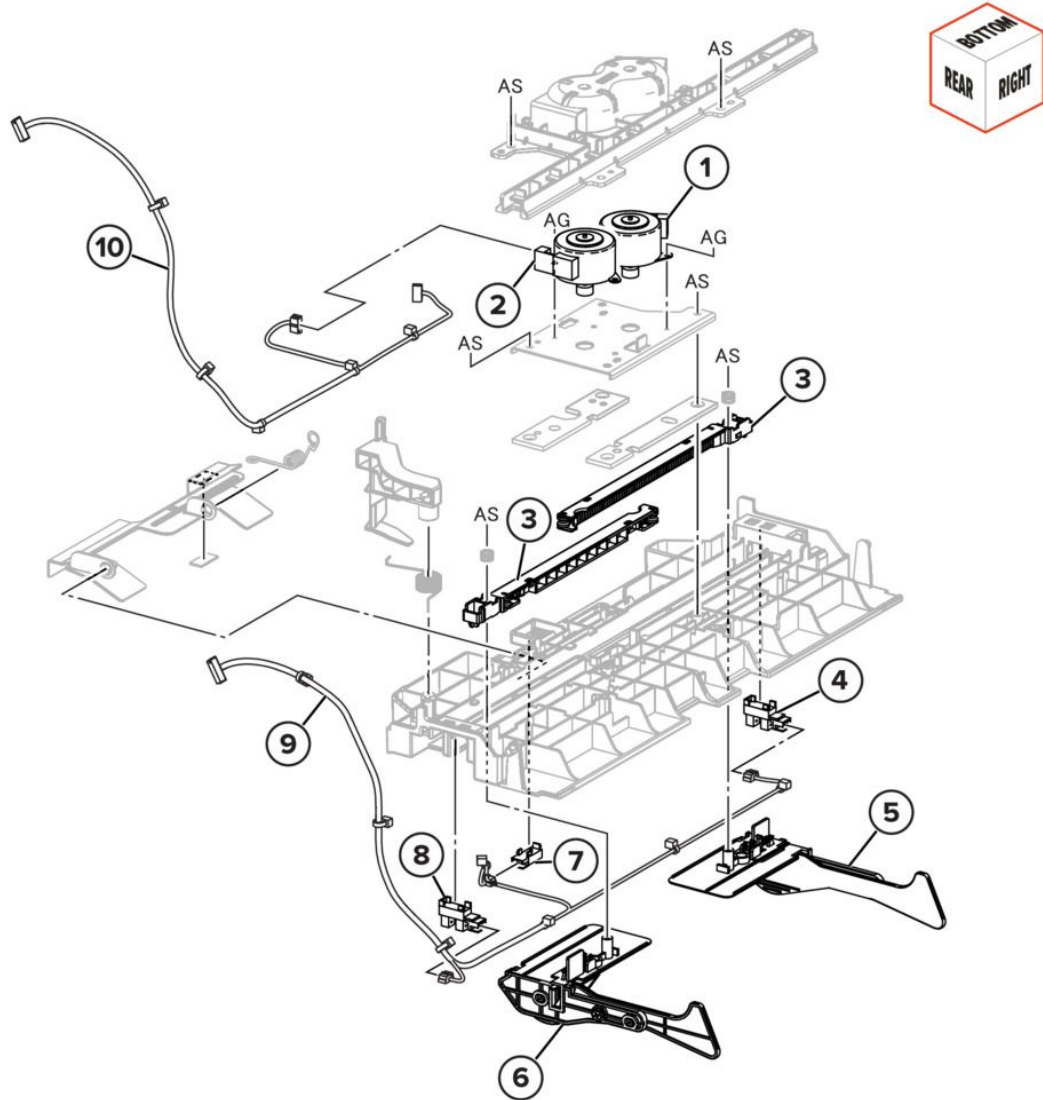
Booklet finisher upper guide assembly



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3371	1	1	Sensor (booklet finisher top tray exit)	--

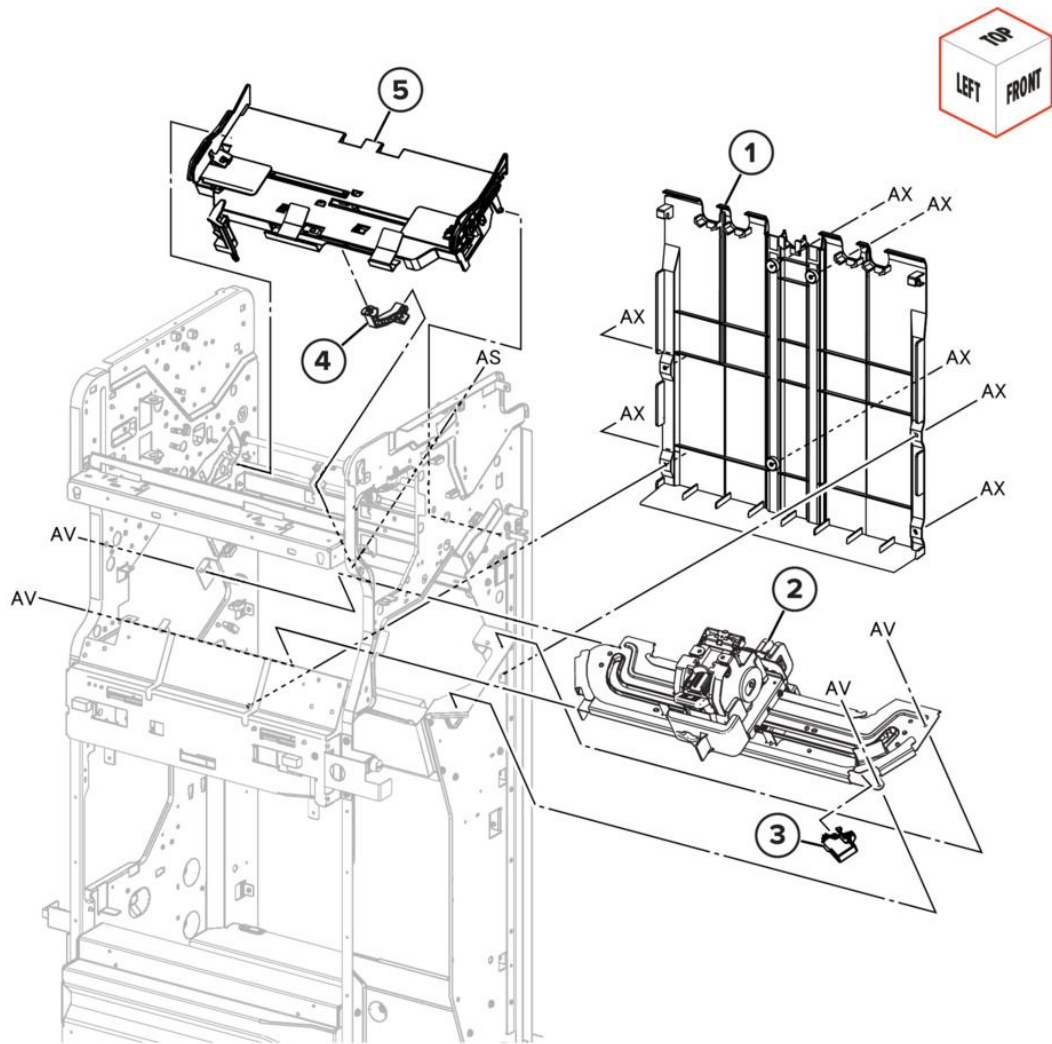
Booklet finisher compile tray



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3223	1	1	Motor (booklet finisher rear tamper)	--
2	41X3223	1	1	Motor (booklet finisher front tamper)	--
3	41X3222	2	1	Rack	--
4	40X7403	1	1	Sensor (booklet finisher front tamper home)	--
5	41X3220	1	1	Booklet finisher front tamper	--
6	41X3221	1	1	Booklet finisher rear tamper	--
7	41X3371	1	1	Sensor (booklet finisher compile tray paper presence)	--
8	40X7403	1	1	Sensor (booklet finisher rear tamper home)	--
9	41X3225	1	1	Booklet finisher tamper wire harness (S)	--
10	41X3224	1	1	Booklet finisher tamper wire harness (M)	--

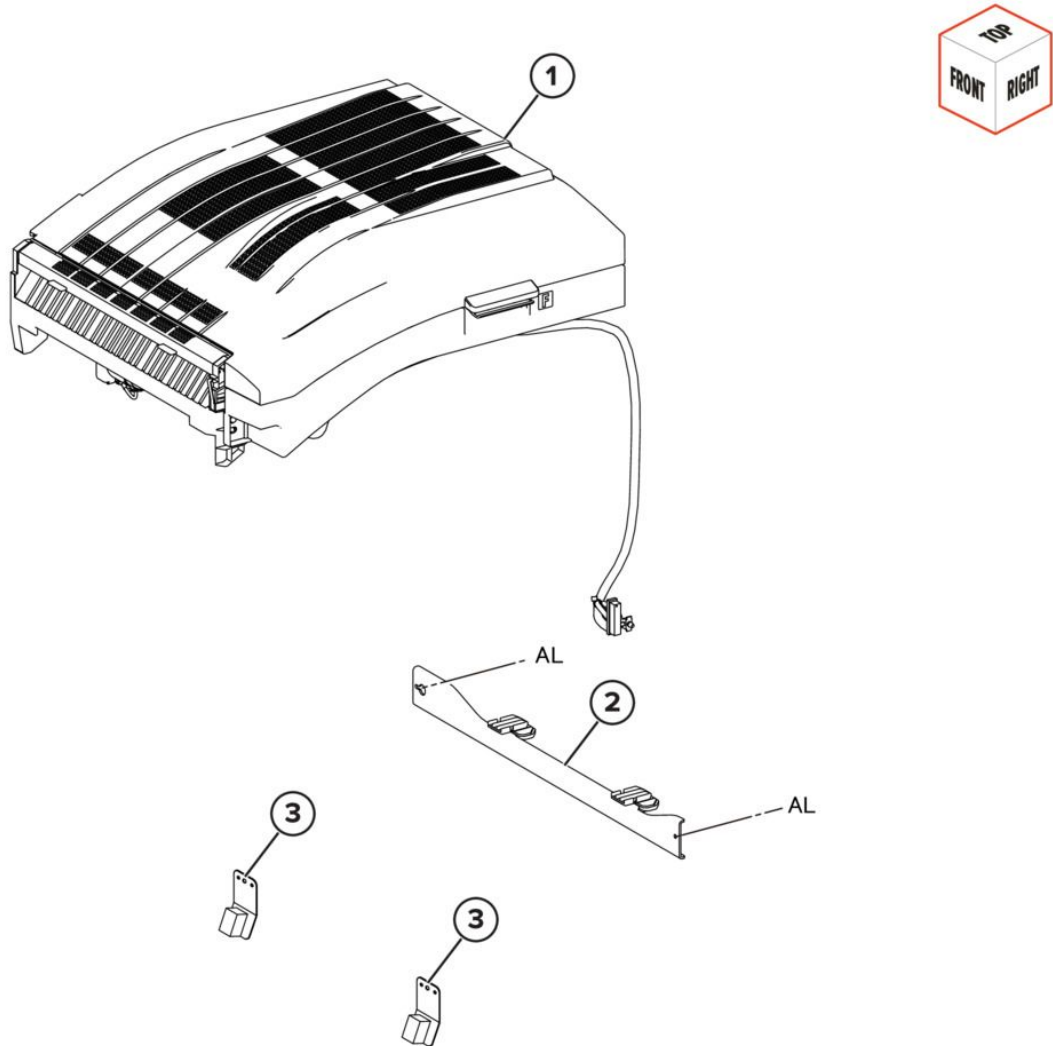
Booklet finisher compile tray stapler



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3199	1	1	Booklet finisher elevator tray guide	See "Booklet finisher elevator tray guide removal" on page 1430
2	41X3201	1	1	Booklet finisher stapler unit	See "Booklet finisher stapler unit removal" on page 1434
3	41X3202	1	1	Booklet finisher stapler stopper	--
4	41X3203	1	1	Booklet finisher tray support	--
5	41X3200	1	1	Booklet finisher compile tray	See "Booklet finisher compile tray removal" on page 1509

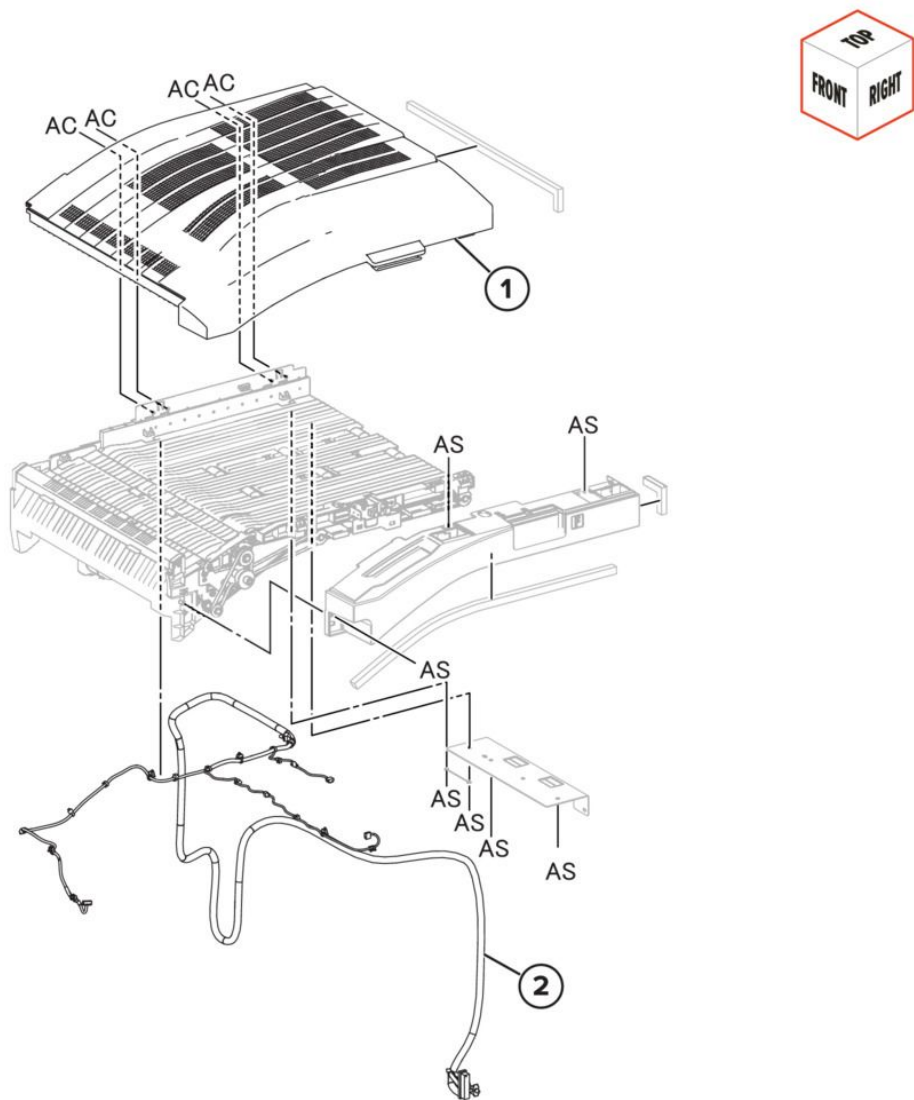
Booklet finisher horizontal paper transport assembly



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X2938	1	1	Paper transport assembly	--
2	41X2983	1	1	Paper transport installation bracket	--
3	41X4162	2	1	Gasket plate NOTES This part is included as part of the components that come with the installation kit.	--

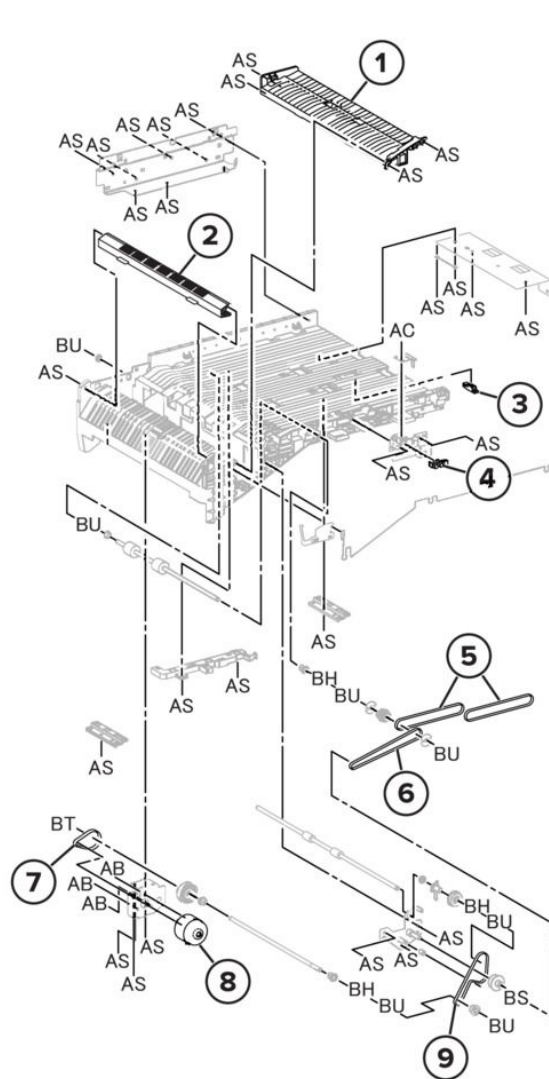
Booklet finisher horizontal paper transport covers



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X2942	1	1	Paper transport top cover	--
2	41X2944	1	1	Paper transport wire harness	--

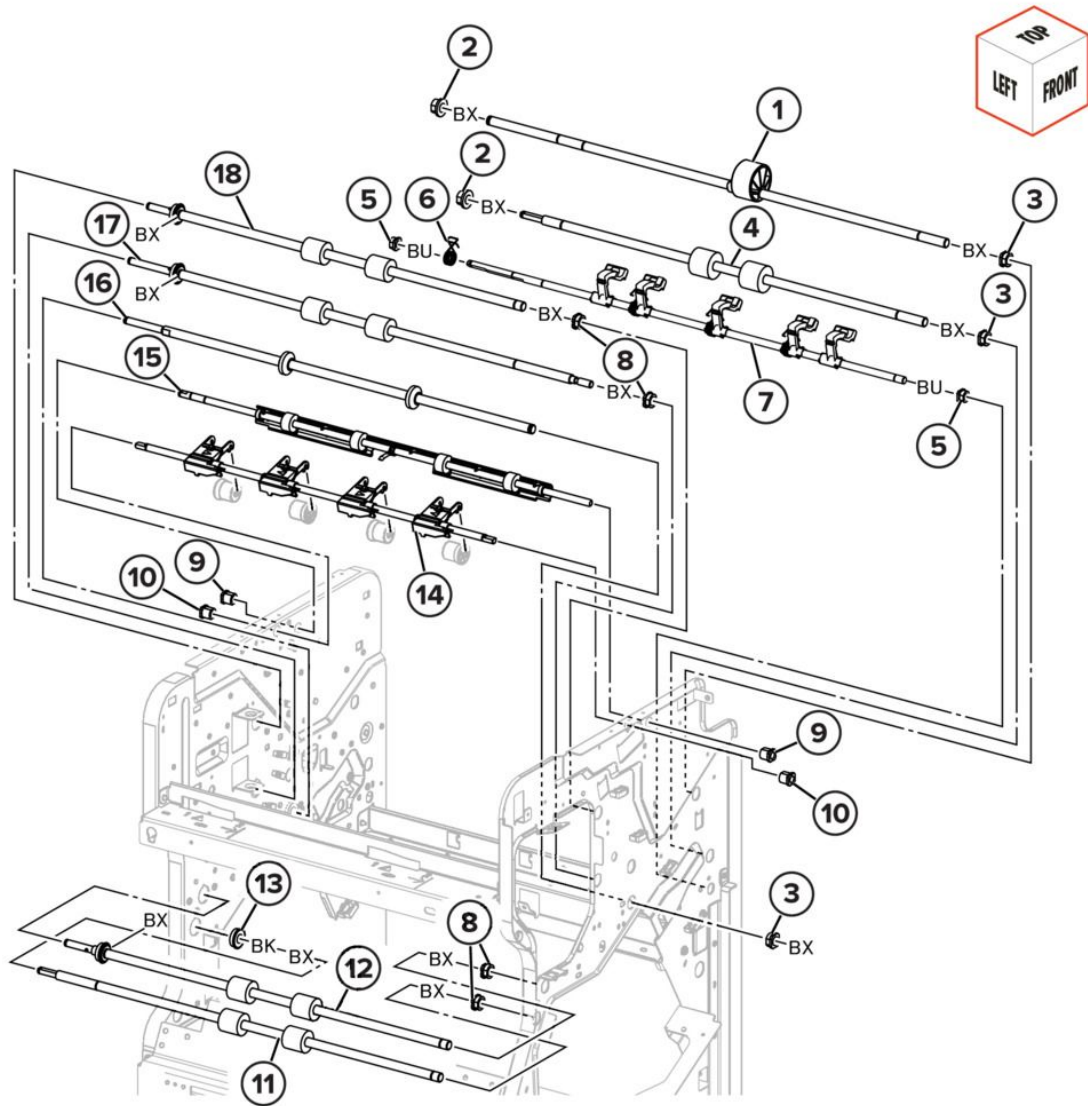
Booklet finisher horizontal paper transport lower chute



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4198	1	1	Paper transport lower chute bracket	--
2	41X2941	1	1	Paper transport left upper chute	--
3	40X0589	1	1	Sensor (paper transport exit)	--
4	40X7403	1	1	Sensor (paper transport cover open)	--
5	41X4490	2	1	Paper transport belt 3	--
6	41X4491	1	1	Paper transport belt	--
7	41X4476	1	1	Paper transport belt 2	--
8	41X4204	1	1	Motor (paper transport drive)	--
9	41X4201	1	1	Paper transport belt 1	--

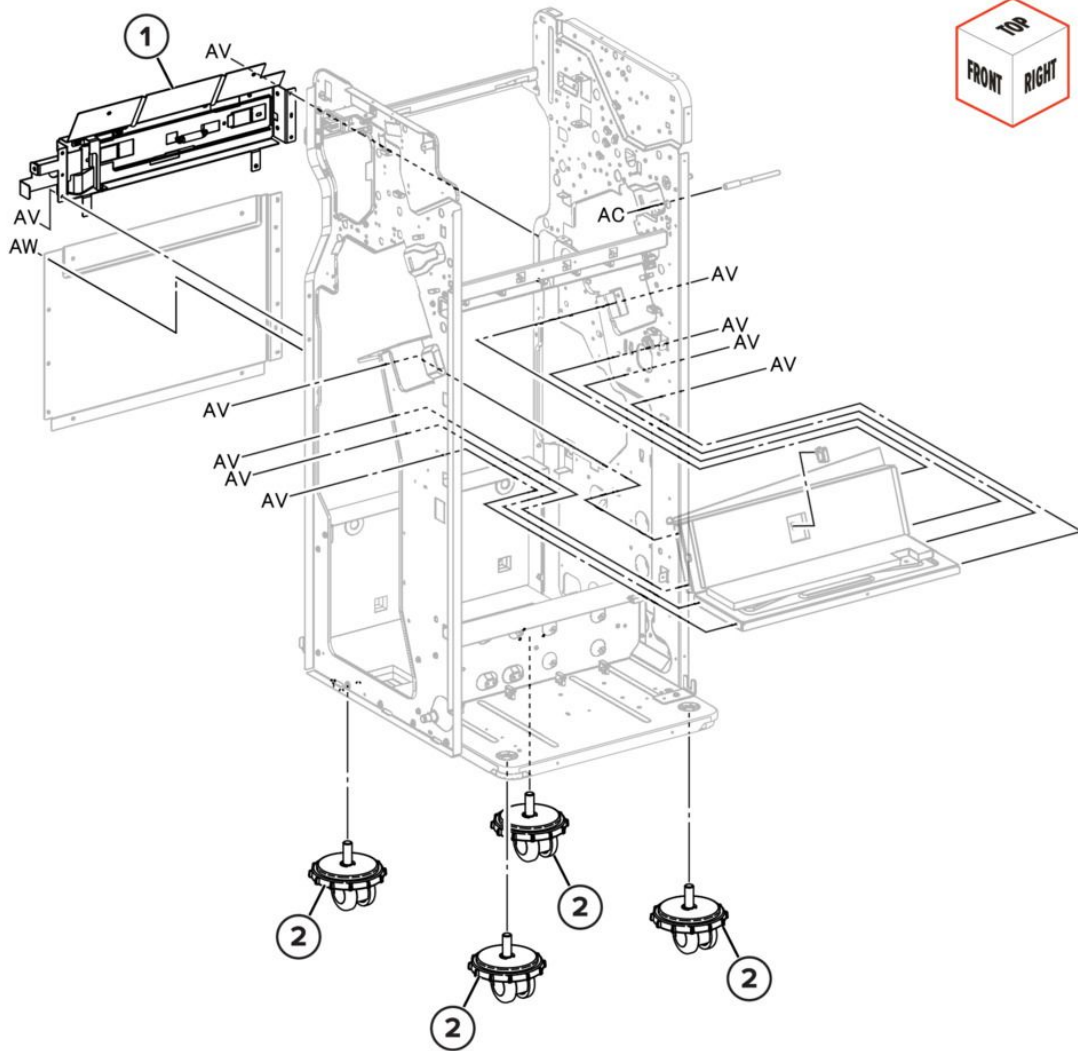
Booklet finisher rollers



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3204	1	1	Booklet finisher cam eject pinch shaft	--
2	40X1388	2	1	Powdered metal bearing	--
3	41X3280	3	1	Sleeve bearing	--
4	41X3207	1	1	Booklet finisher eject roll assembly	See "Booklet finisher eject roll assembly removal" on page 1477
5	40X0880	2	1	Sleeve bearing	--
6	41X3216	1	1	Spring	--
7	41X3205	1	1	Booklet finisher set clamp shaft	See "Booklet finisher set clamp shaft removal" on page 1523
8	41X3214	4	1	Sleeve plastic bearing	--
9	41X3217	2	1	Bearing	--
10	41X3217	2	1	Bearing	--
11	41X3212	1	1	Booklet finisher buffer roll	--
12	41X3213	1	1	Booklet finisher entrance roll	--
13	41X3215	1	1	Ball bearing	--
14	41X3206	1	1	Booklet finisher top exit offset pinch shaft	See "Booklet finisher top exit offset pinch shaft removal" on page 1449
15	41X3211	1	1	Booklet finisher top exit guide roller	See "Booklet finisher top exit guide roller removal" on page 1453
16	41X3208	1	1	Booklet finisher exit compression roller	--
17	41X3210	1	1	Booklet finisher top transfer roll 1	--
18	41X3209	1	1	Booklet finisher top transfer roll 2	--

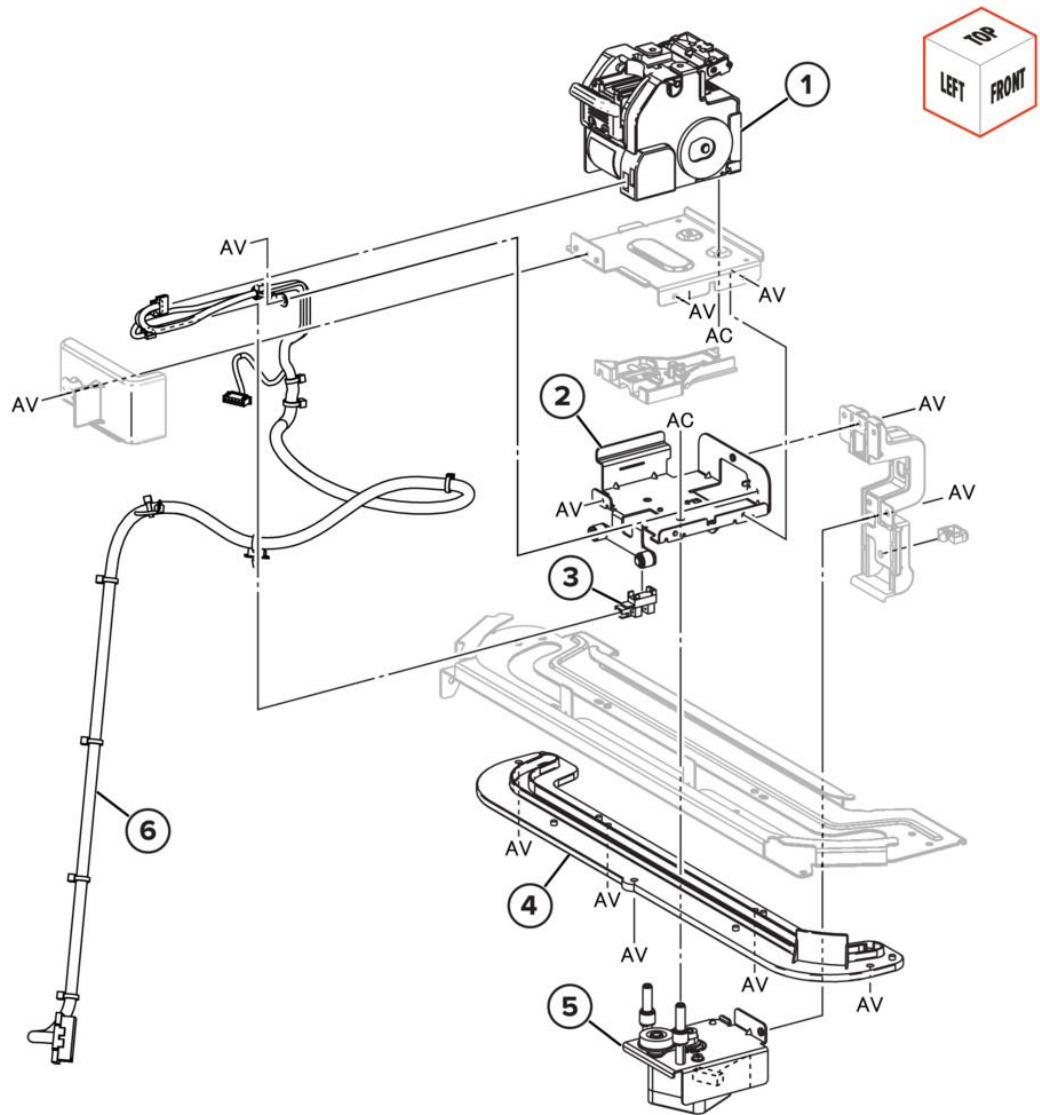
Booklet finisher frame caster



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3218	1	1	Booklet finisher plate docking cover	--
2	41X4167	4	1	Booklet finisher caster wheel	--

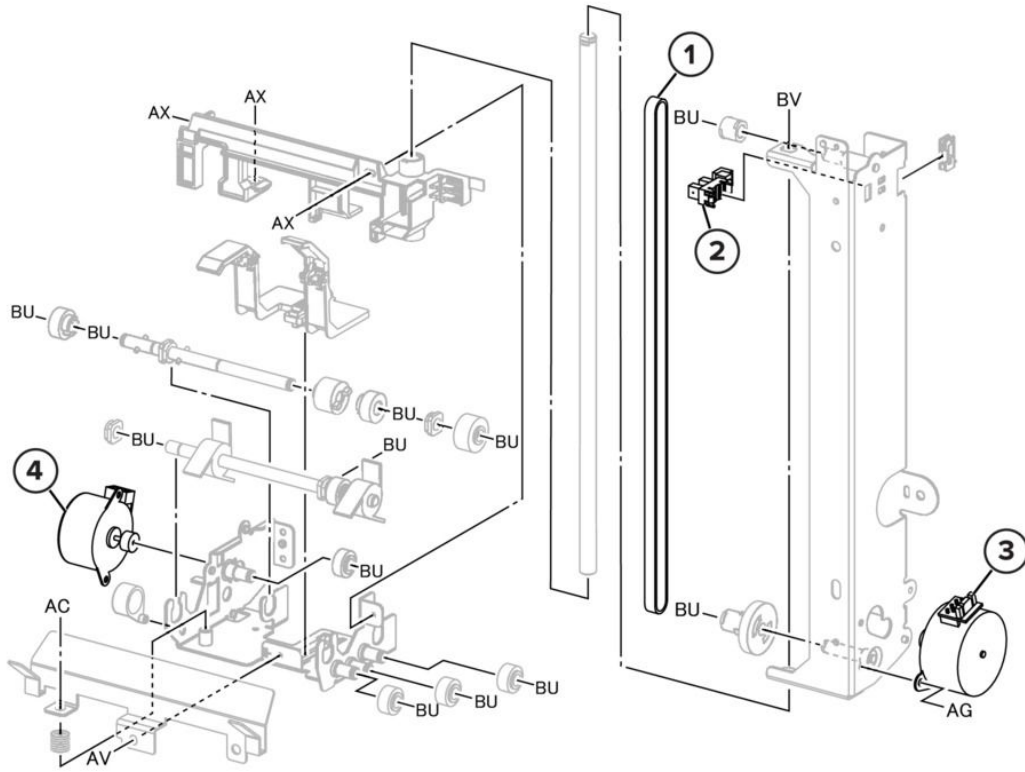
Booklet finisher stapler unit



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3231	1	1	Booklet finisher stapler head	See "Booklet finisher stapler head removal" on page 1421
2	41X3228	1	1	Upper stopper bracket	--
3	40X7403	1	1	Sensor (booklet finisher stapler position)	See "Sensor (booklet finisher stapler position) removal" on page 1424
4	41X3227	1	1	Booklet finisher stapler rail base	--
5	41X3229	1	1	Motor (booklet finisher stapler unit carriage)	See "Sensor (booklet finisher stapler position) removal" on page 1424
6	41X3230	1	1	Booklet finisher staple wire harness	--

Booklet finisher end guide bracket

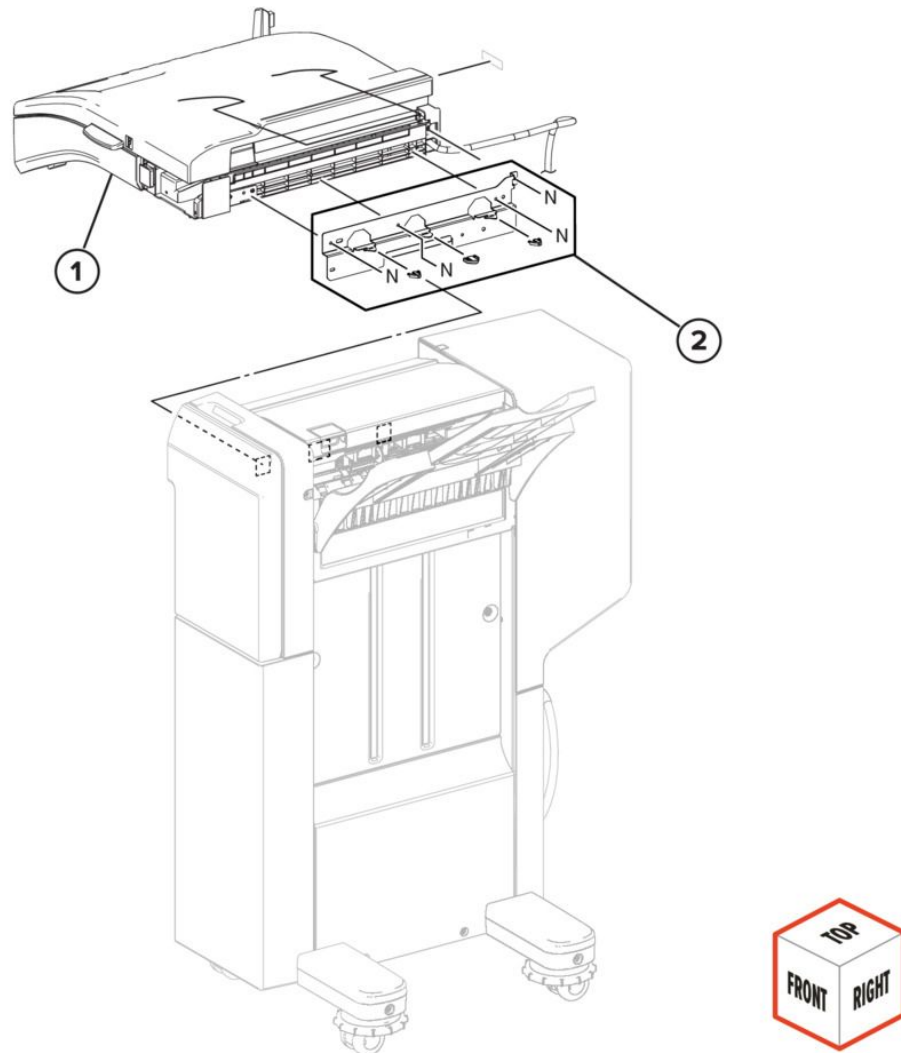


Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3283	1	1	Booklet finisher belt 1	--
2	41X3082	1	1	Sensor (booklet finisher compiler catch)	See "Sensor (booklet finisher compiler catch) removal" on page 1491
3	41X3282	1	1	Motor (booklet finisher compiler catch)	See "Motor (booklet finisher compiler catch) removal" on page 1493
4	41X3284	1	1	Motor (booklet finisher compiler paddle)	--

Staple, hole punch finisher (SHPF)

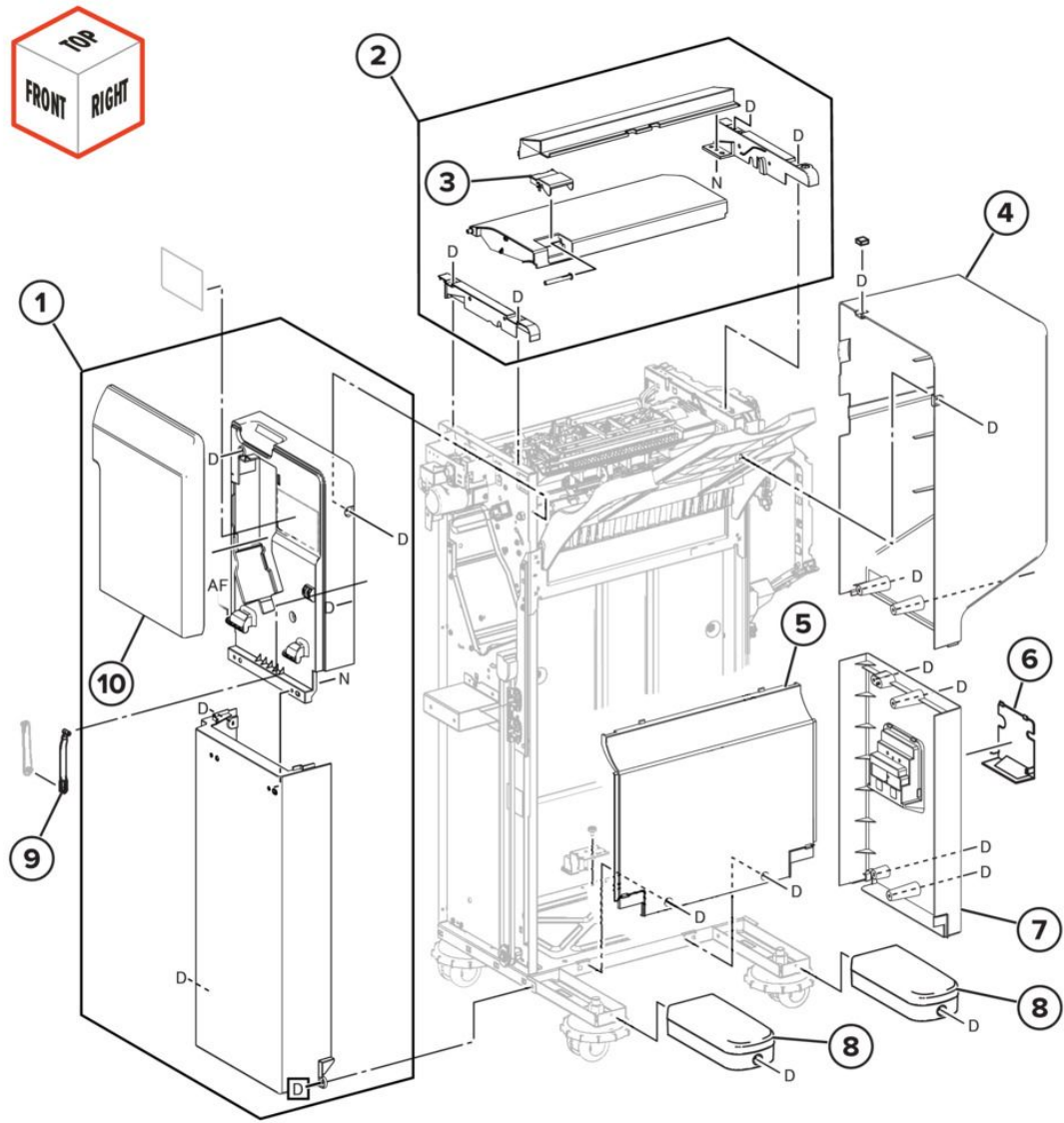
SHPF



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3963	1	1	HPT	--
2	41X3964	1	1	HPT docking bracket	--

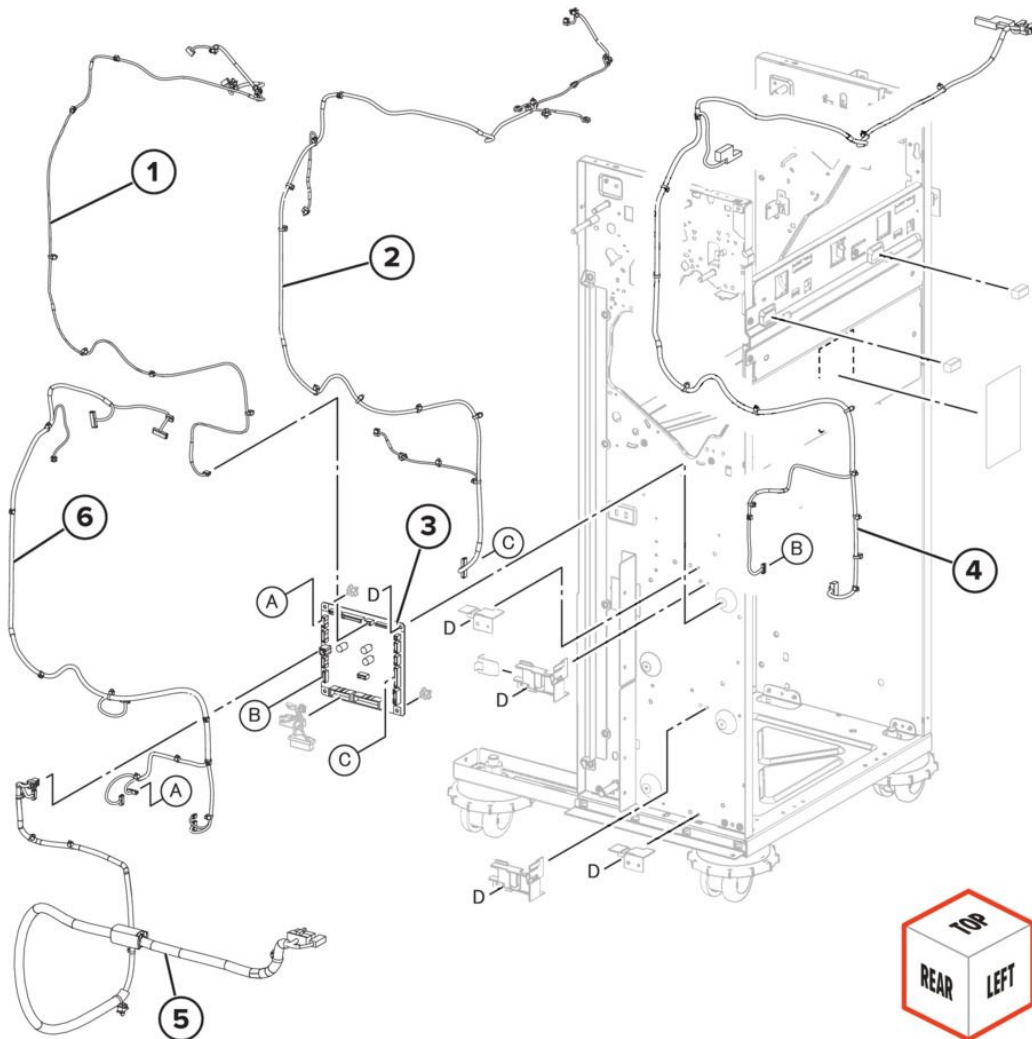
SHPF covers



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3988	1	1	SHPF front cover	See "Finisher front cover removal" on page 1656
2	41X3986	1	1	SHPF top door	See "Finisher top cover assembly removal" on page 1664
3	41X3987	1	1	SHPF top door handle	See "Finisher top cover assembly removal" on page 1664
4	41X3991	1	1	SHPF upper rear cover	See "Finisher upper rear cover removal" on page 1660
5	41X3994	1	1	SHPF right cover	--
6	41X3993	1	1	SHPF connector cover	--
7	41X3992	1	1	SHPF lower rear cover	See "Finisher lower rear cover removal" on page 1662
8	41X3995	1	2	SHPF foot cover	See "Foot cover removal" on page 1655
9	41X3990	1	1	SHPF front door strap	--
10	41X3989	1	1	SHPF front door	--

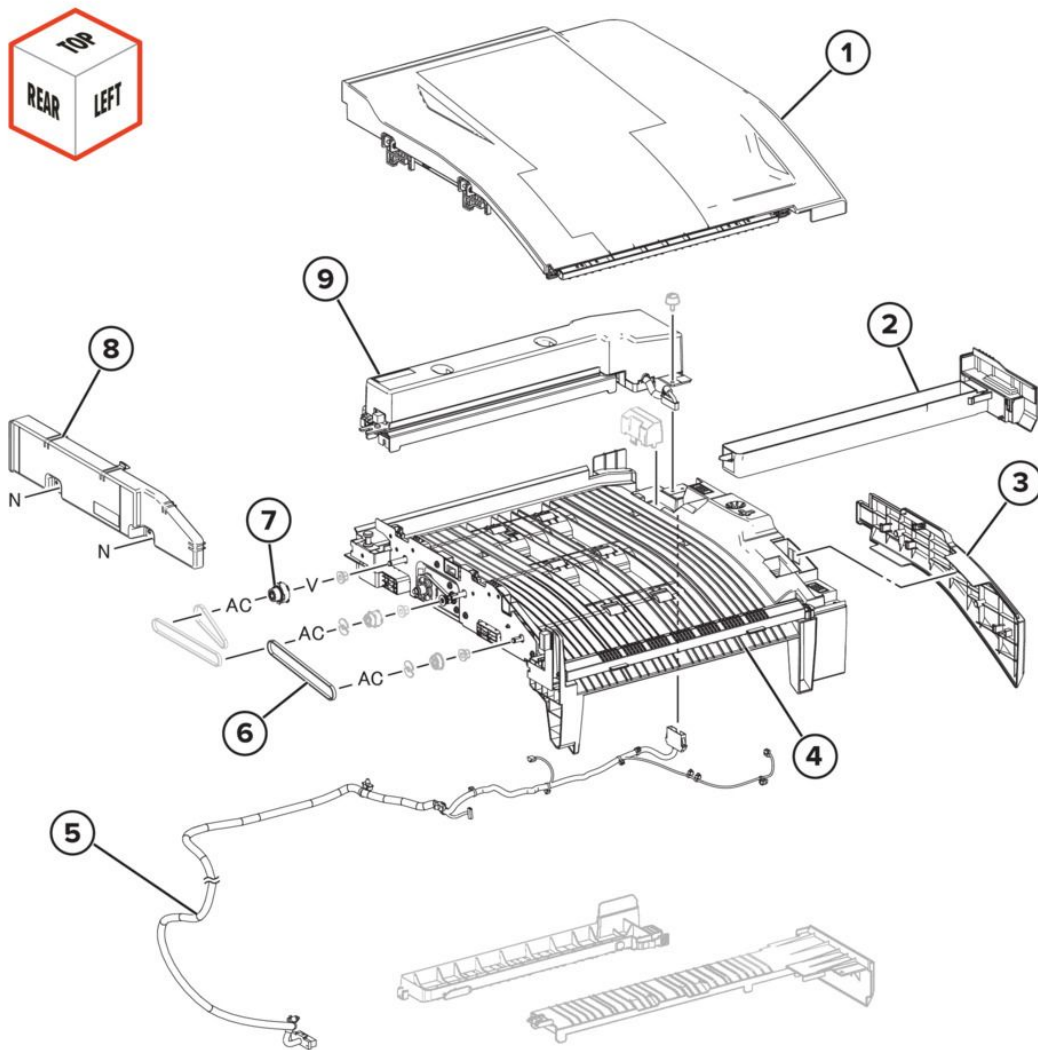
SHPF electronics



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4031	1	1	SHPF eject cable	--
2	41X4029	1	1	SHPF sensor cable	--
3	41X4026	1	1	SHPF controller board	--
4	41X4028	1	1	SHPF door cable	--
5	41X4027	1	1	SHPF interface cable	--
6	41X4030	1	1	SHPF transport cable	--

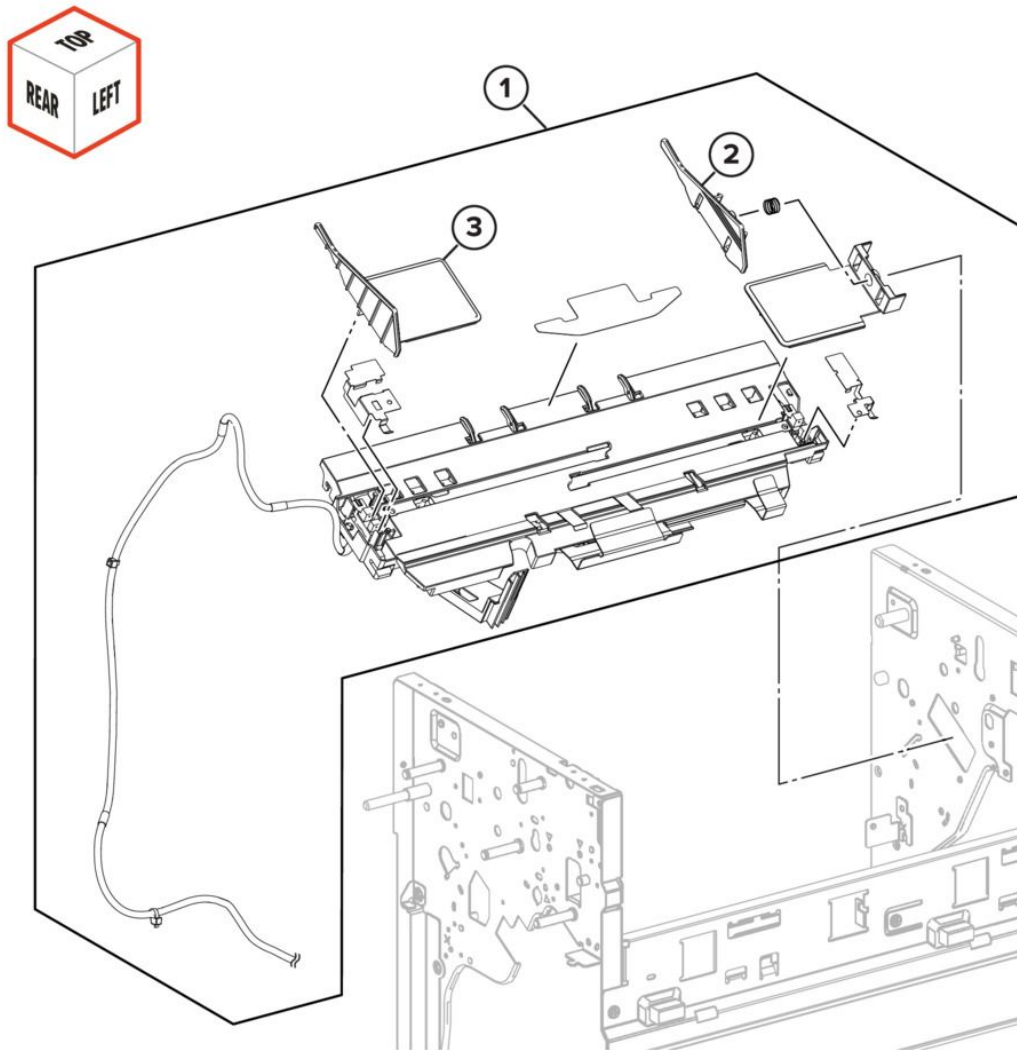
SHPF HTU punch



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3965	1	1	HTU door	--
2	41X3968	1	1	Hole punch box	--
3	41X3971	1	1	HTU front cover	--
4	41X3969	1	1	HTU transport	--
5	41X3974	1	1	HTU interface cable	--
6	41X3972	1	2	HTU transport belts	See "Horizontal transport belt removal" on page 1711
7	41X3973	1	1	HTU transport pulleys	--
8	41X3970	1	1	HTU rear cover	--
9	41X3966	1	1	Hole punch unit (2/4 hole)	--
9	41X3967	1	1	Hole punch unit (2/3 hole)	--
9	41X4528	1	1	Hole punch unit (Swedish)	--

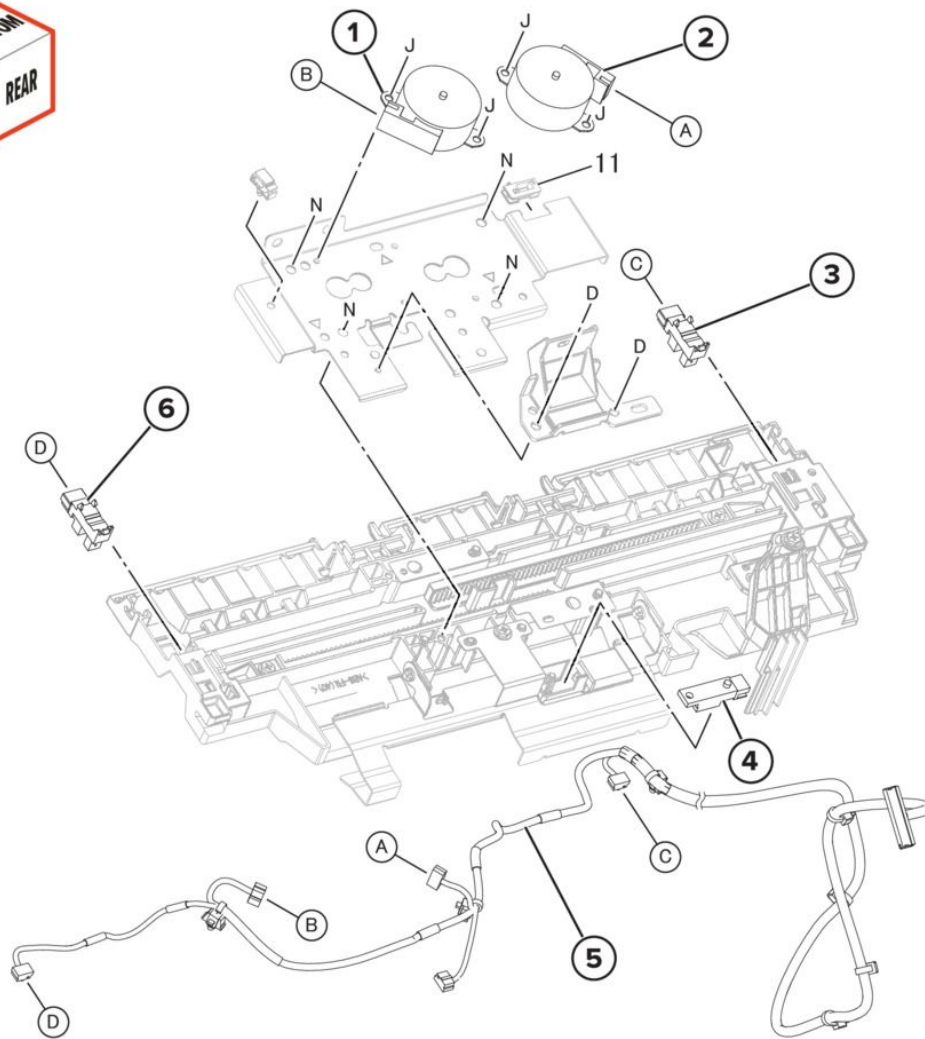
SHPF compile tray 1



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4015	1	1	SHPF compiler	--
2	41X4016	1	1	SHPF compiler front tamper	--
3	41X4017	1	1	SHPF compiler rear tamper	--

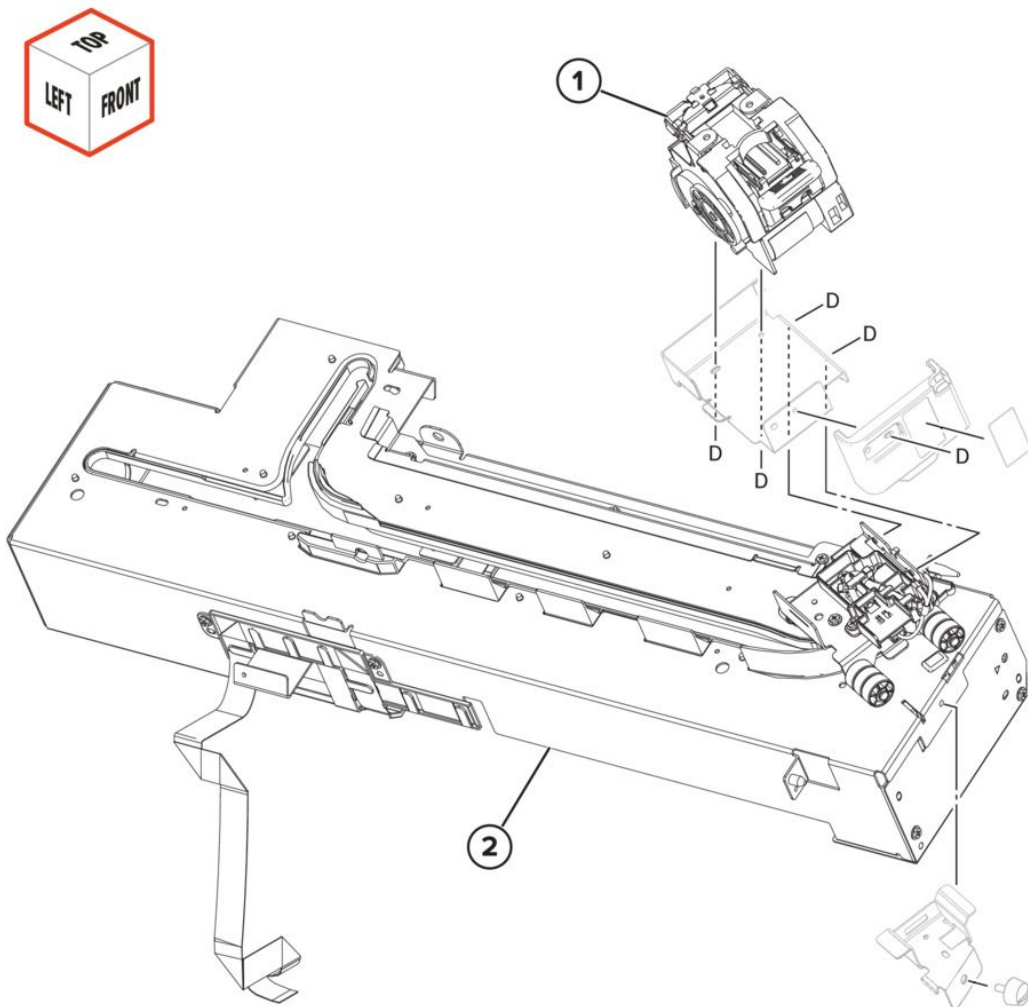
SHPF compile tray 2



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4018	1	1	Motor (SHPF compiler rear tamper)	--
2	41X4018	1	1	Motor (SHPF compiler front tamper)	--
3	41X3975	1	1	Sensor (SHPF compiler rear tamper)	--
4	41X3976	1	1	Sensor (SHPF compiler paper present)	--
5	41X4019	1	1	SHPF compiler cable	--
6	41X3975	1	1	Sensor (SHPF compiler front tamper)	--

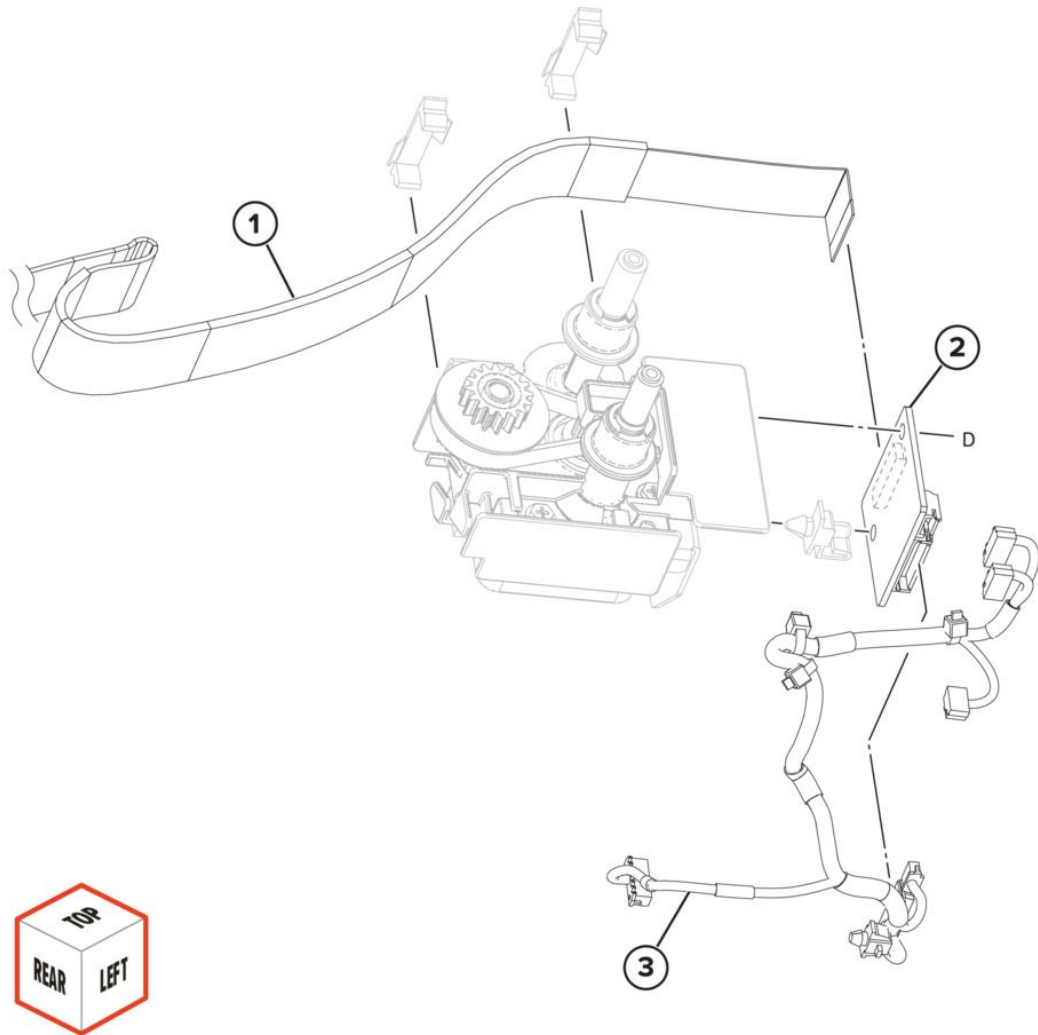
SHPF staple holder



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X3693	1	1	SHPF staple unit	See "Stapler assembly removal" on page 1705
2	41X4106	1	1	SHPF staple carriage rail	See "Rail assembly removal" on page 1707

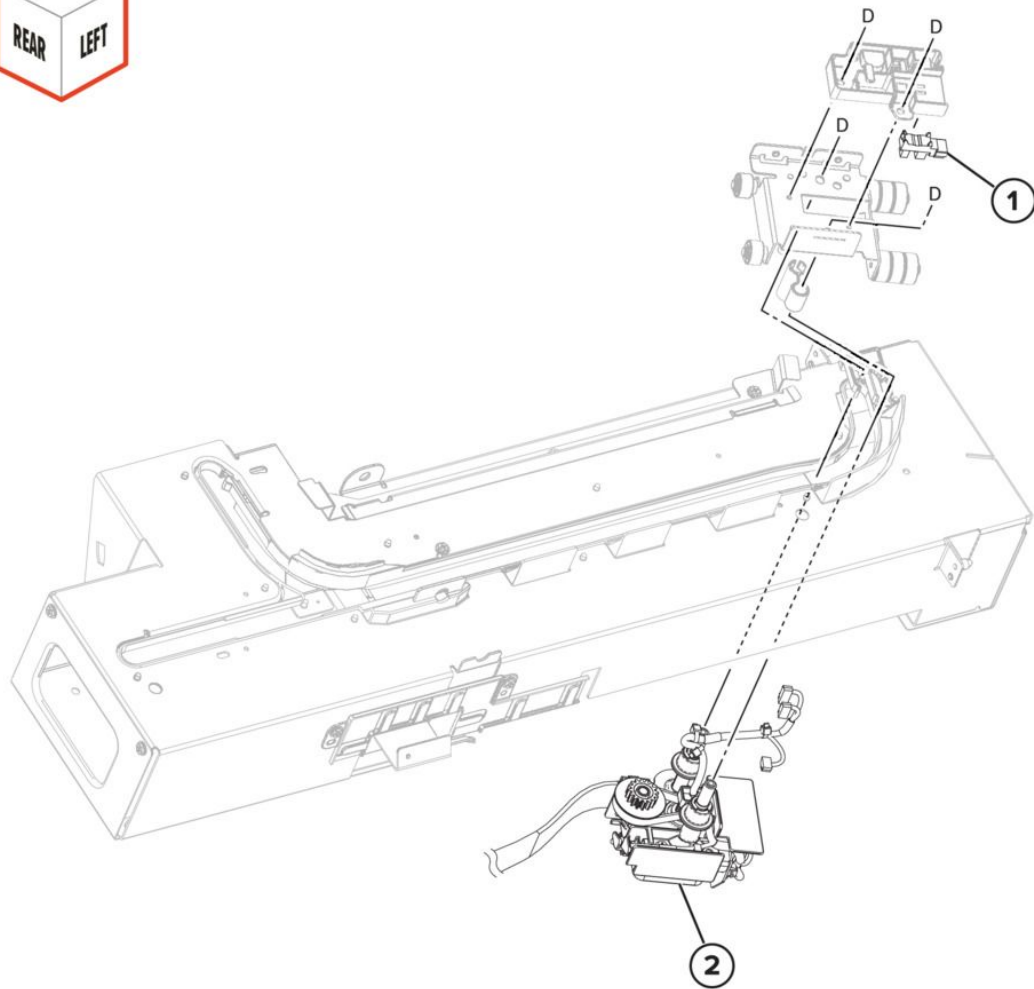
SHPF stapler drive



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4036	1	1	SHPF staple unit carriage FFC	--
2	41X4034	1	1	SHPF staple unit carriage board	--
3	41X4035	1	1	SHPF staple unit cable	--

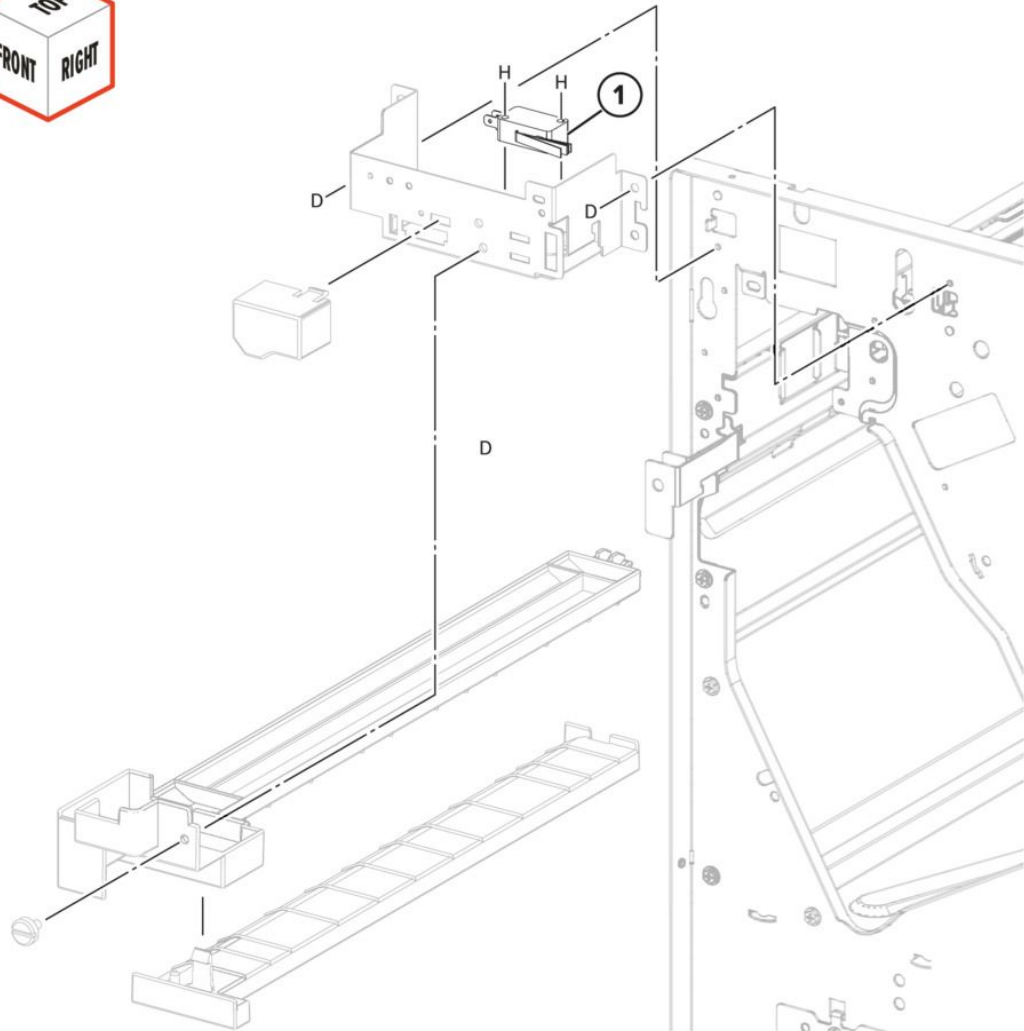
SHPF stapler rail



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description
1	41X3975	1	1	Sensor (SHPF staple unit carriage position)
2	41X4033	1	1	SHPF carriage transport

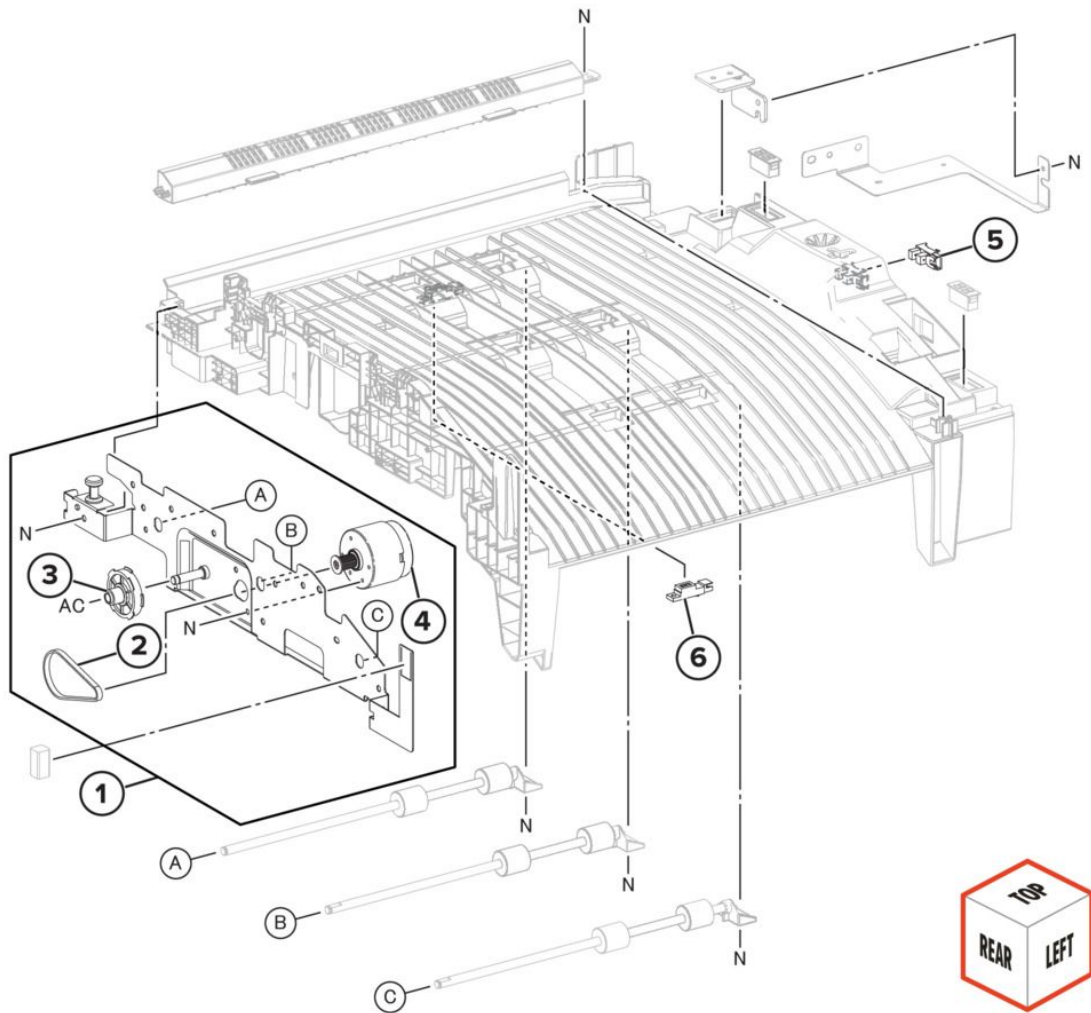
SHPF folder



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X4009	1	1	SHPF front door switch	--

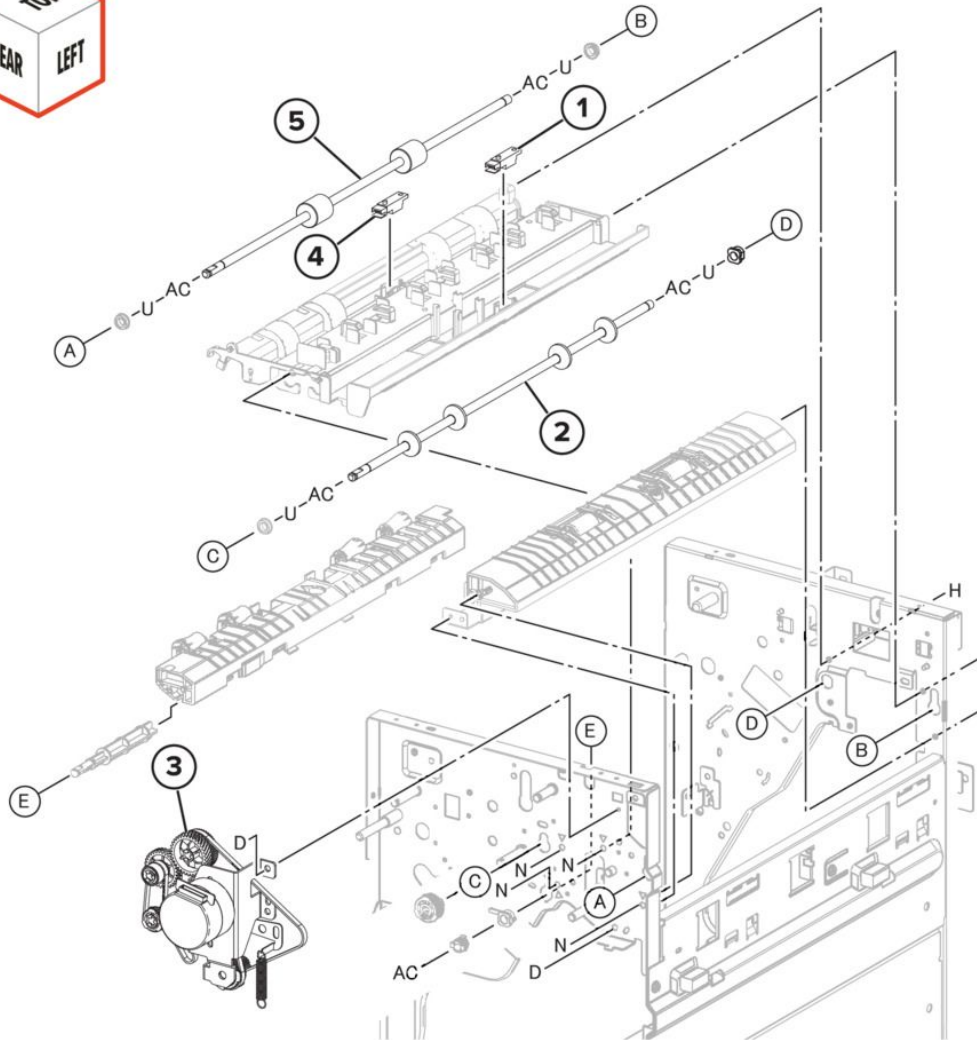
SHPF lower chute



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3977	1	1	HTU transport drive	--
2	41X3980	1	1	HTU drive belt	See "Horizontal transport belt removal" on page 1711
3	41X3979	1	1	HTU drive pulley	--
4	41X3978	1	1	Motor (HTU transport)	See "Horizontal transport motor assembly removal" on page 1713
5	40X7403	1	1	Sensor (HTU door)	--
6	41X3976	1	1	Sensor (HTU transport)	--

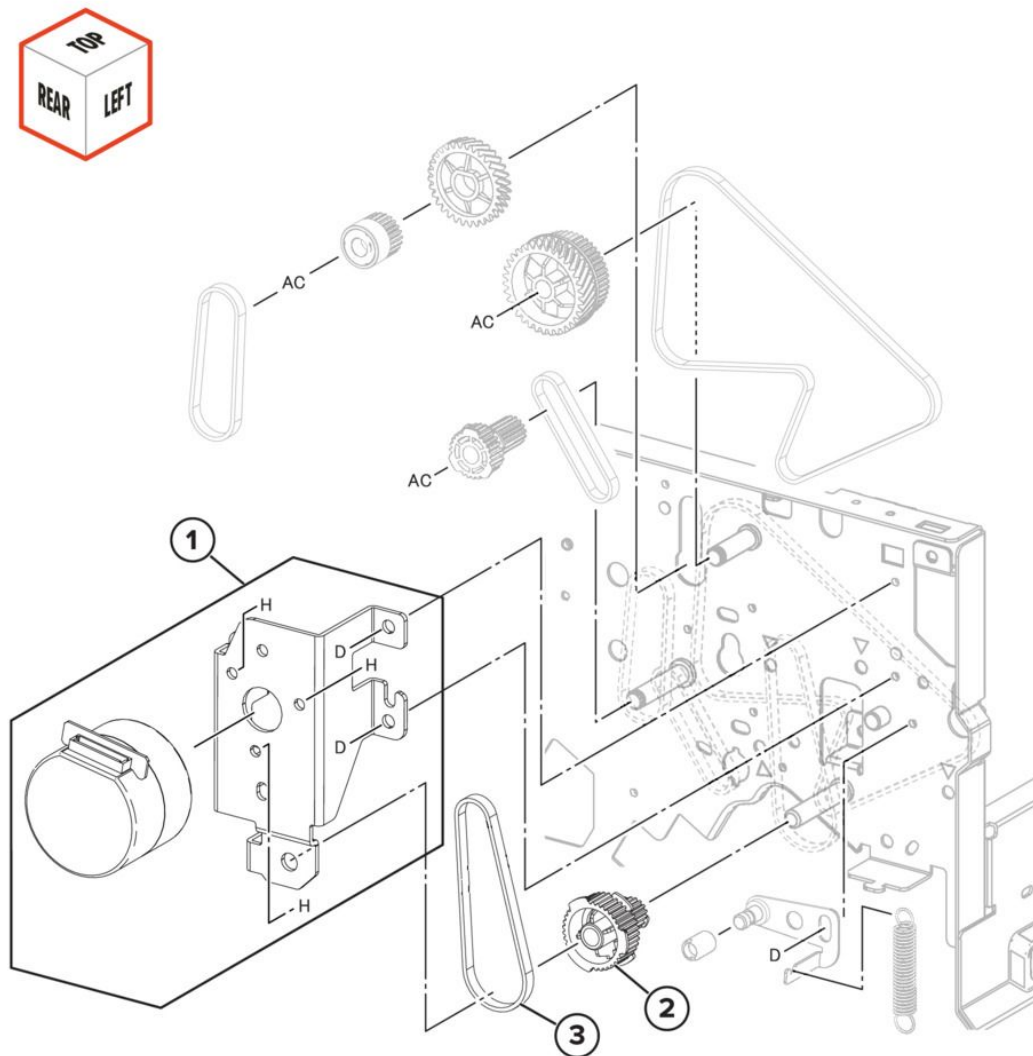
SHPF transport



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X3976	1	1	Sensor (SHPF feed)	--
2	41X4020	1	1	SHPF feed roller	--
3	41X4022	1	1	SHPF transport gearbox	--
4	41X3976	1	1	Sensor (SHPF transport)	--
5	41X4021	1	1	SHPF transport roller	--

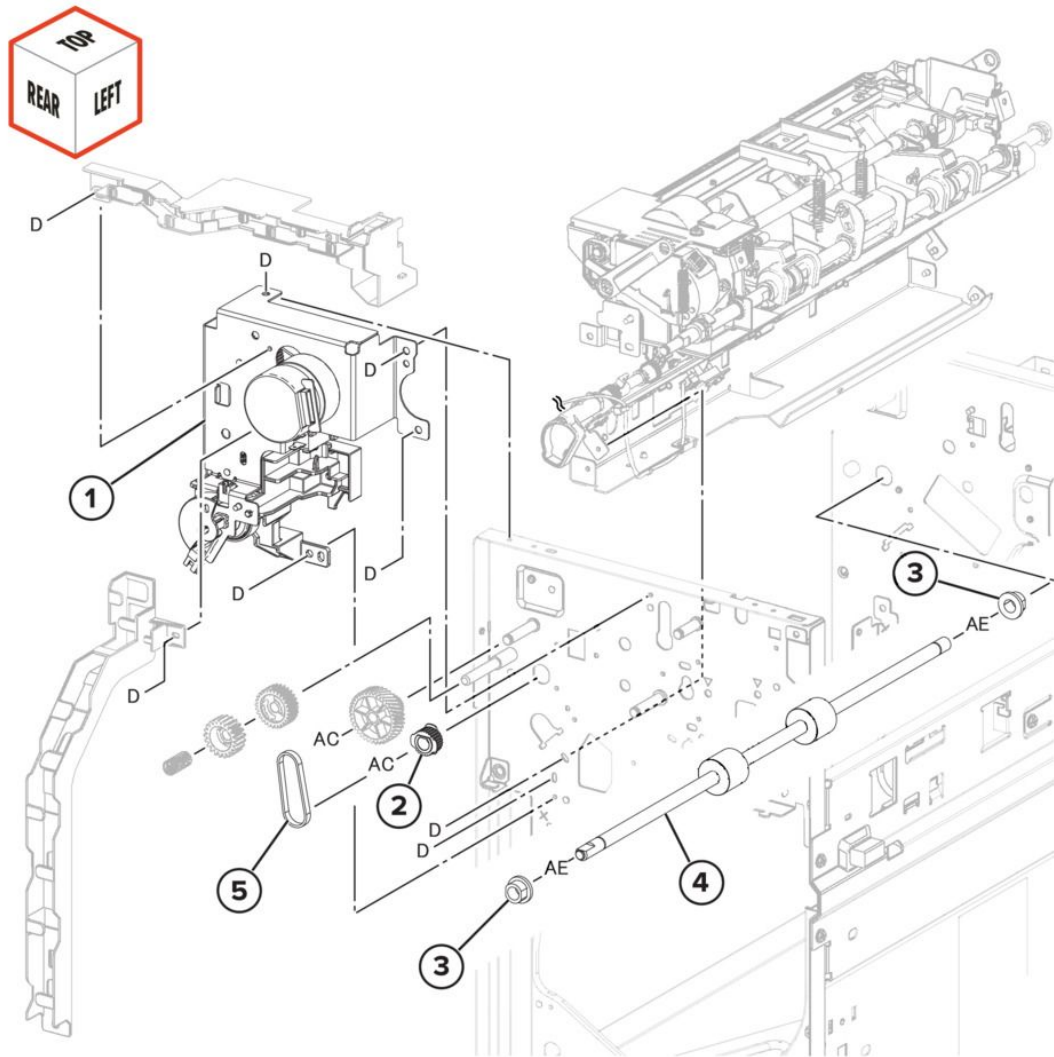
SHPF transport motor



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4023	1	1	Motor (SHPF transport)	See "Finisher transport motor removal" on page 1686
2	41X4024	1	1	SHPF transport pulley	--
3	41X4025	1	1	SHPF transport belt	See "Finisher transport belt removal" on page 1687

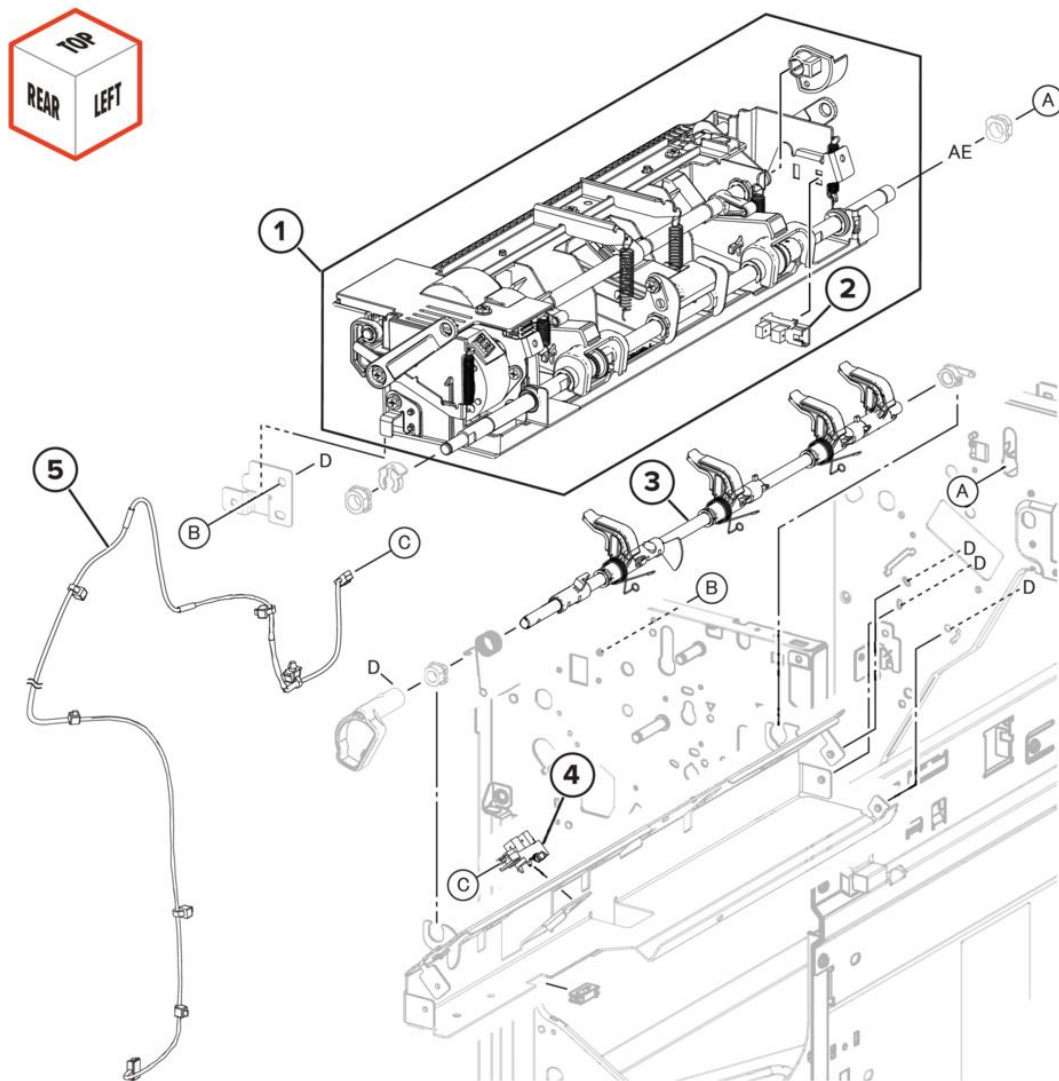
SHPF eject



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
1	41X4002	1	1	SHPF compiler eject gearbox	--
2	41X4003	1	1	SHPF lower exit pulley	--
3	40X1388	1	2	SHPF bearing	--
4	41X4005	1	1	SHPF lower exit roller	--
5	41X4004	1	1	SHPF lower exit belt	--

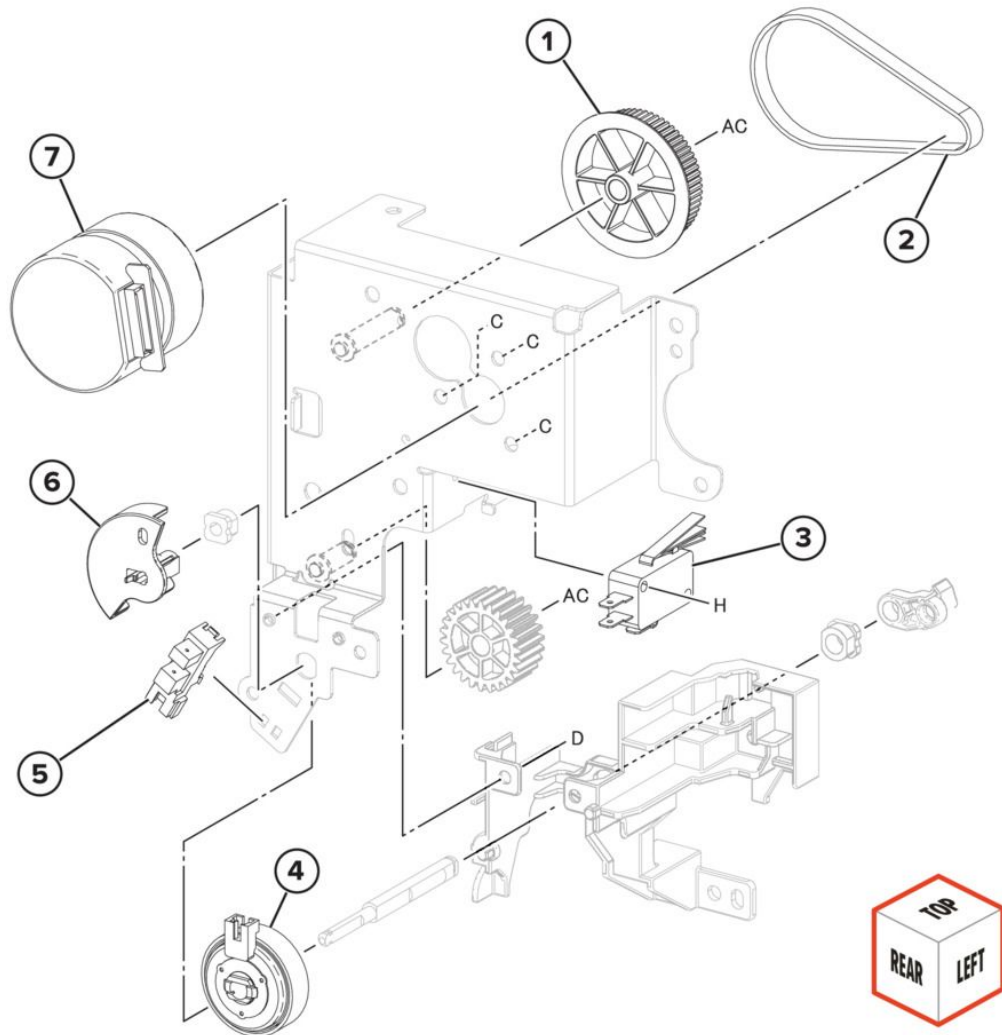
SHPF eject chute



Parts catalog

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
1	41X4012	1	1	SHPF eject clamp/paddle	See "Eject chute assembly removal" on page 1689
2	41X3975	1	1	Sensor (SHPF ejector clamp/paddle)	--
3	41X4013	1	1	SHPF stack clamp	--
4	41X3975	1	1	Sensor (SHPF stack height)	--
5	41X4014	1	1	SHPF stack height sensor cable	--

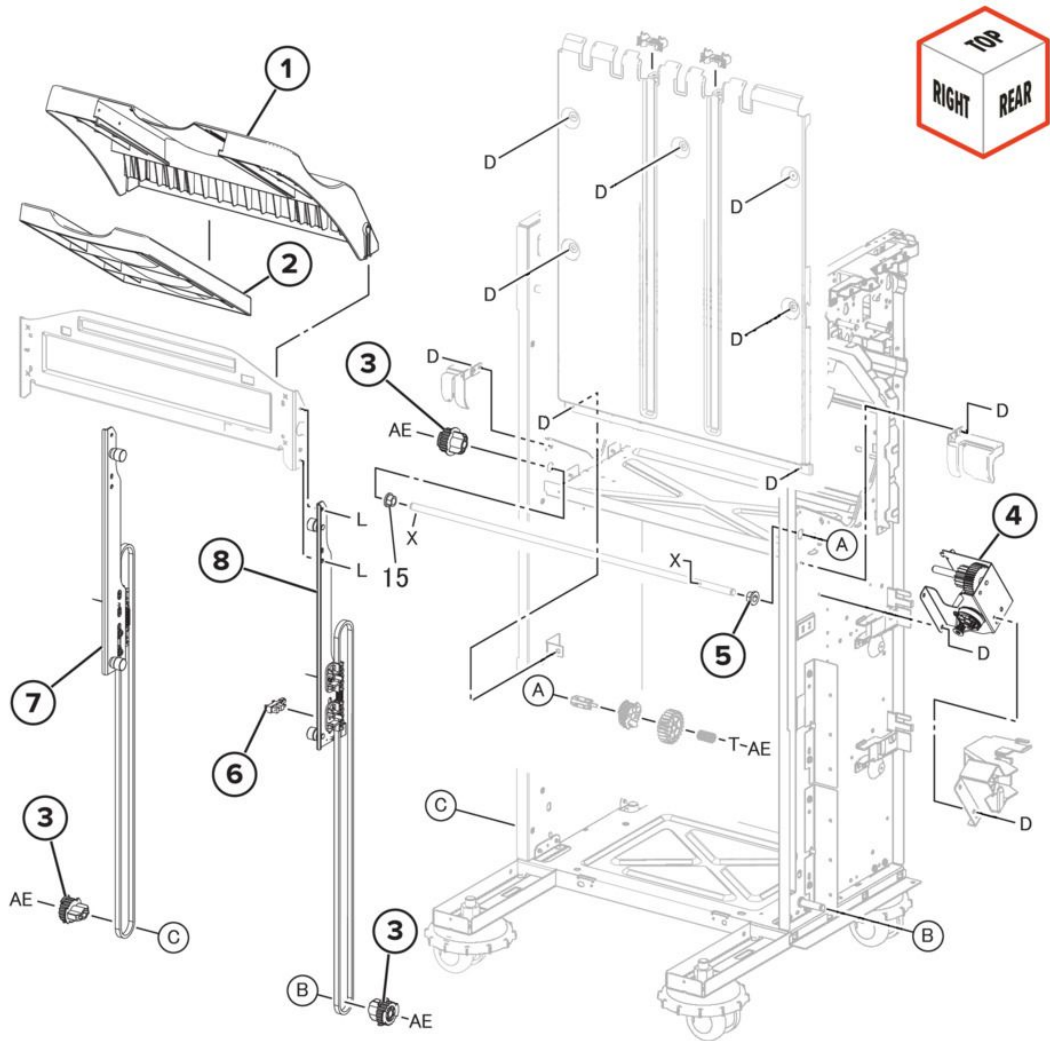
SHPF eject motor drive



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description
1	41X4007	1	1	SHPF compiler eject pulley
2	41X4008	1	1	SHPF compiler eject belt
3	41X4009	1	1	SHPF top door switch
4	41X4010	1	1	SHPF stack clamp clutch
5	41X3975	1	1	Sensor (SHPF stack clamp)
6	41X4011	1	1	SHPF stack clamp sensor actuator
7	41X4006	1	1	Motor (SHPF compiler eject)

SHPF stacker



Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description
1	41X3996	1	1	SHPF bin
2	41X3997	1	1	SHPF bin extender
3	41X4000	1	1	SHPF stacker belt pulley
4	41X4001	1	1	Motor (SHPF stacker bin)
5	40X1388	1	2	SHPF bearing
6	41X3975	1	1	Sensor (SHPF stacker bin)
7	41X3998	1	1	SHPF bin front belt
8	41X3999	1	1	SHPF bin rear belt

Miscellaneous

Parts catalog

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
NS	40X9652	1	1	Fiber Gigabit ISP adapter	--
NS	40X4819	1	1	RS232C serial adapter	--
NS	41X0997	1	1	Contact Authentication Device	--
NS	41X0998	1	1	Contactless Authentication Device	--
NS	41X1374	1	1	Fax card	--
NS	41X2854	1	1	Intelligent Storage Solution Flash Card (128GB)	--
NS	40X9934	1	1	Hard disk, 320GB	--
NS	41X2873	1	1	Trusted platform module smart card	--
NS	41X1872	1	1	Wireless network card	--
NS	40X0255	1	1	Power cord, 8 ft (right angle) —Argentina	--
NS	40X0256	1	1	Power cord, 8 ft (right angle) —USA	--
NS	40X0257	1	1	Power cord, 8 ft (right angle) —Italy	--
NS	40X0258	1	1	Power cord, 8 ft (right angle) —Europe	--
NS	40X0260	1	1	Power cord, 8 ft (right angle, 13 A)	--
NS	40X0283	1	1	Power cord, 8 ft (right angle)	--
NS	40X0295	1	1	Power cord, 8 ft (right angle) —Israel	--
NS	40X0304	1	1	Power cord, 8 ft (right angle)	--
NS	40X0305	1	1	Power cord, 8 ft	--
NS	40X0311	1	1	Power cord, 8 ft (right angle) —China	--
NS	40X0312	1	1	Power cord, 8 ft (right angle) —Australia, New Zealand	--
NS	41X4387	1	1	Power cord, 2.5 m (right angle, 10 A)—Brazil	--
NS	41X4388	1	1	Power cord, 2.5 m (right angle, 10 A)—India	--
NS	41X4389	1	1	Power cord, 2.5 m (right angle, 10 A)—Korea	--
NS	41X4390	1	1	Power cord, 2.5 m (right angle, 10 A)—EMEA	--
NS	41X4391	1	1	Power cord, 2.5 m (right angle, 10 A)—USA	--

Continued on page 2163

Continued from page 2162

Asm-index	P/N	Units/ mach	Units/ FRU	Description	Removal procedure
NS	41X4392	1	1	Power cord, 2.5 m (right angle, 10 A)—Taiwan	--
NS	41X4785	1	1	Input option installation bracket (for CS94x and CX94x models only)	--
NS	41X4919	1	1	SHPF installation kit	--
NS	40X6683	1	1	Optional tray installation screw	--
NS	41X4161	1	1	Trifold/Z-fold installation kit	--

Maintenance kits

Asm-index	P/N	Units/mach	Units/FRU	Description	Removal procedure
NS	41X3871	1	1	Transfer module cleaner and roller kit This part has a FRU sheet.	See "Replacing the transfer module cleaner" on page 1742
NS	41X3389	1	1	Second transfer roller This part has a FRU sheet.	--
NS	41X3872	1	1	Fuser and transfer module kit This part has a FRU sheet.	See "Replacing the fuser" on page 1732
NS	41X3873	1	1	Developer kit This part has a FRU sheet.	--
NS	41X3381	1	1	MPF roller kit This part has a FRU sheet.	--
NS	41X4168	1	1	2000-sheet tray roller kit This part has a FRU sheet.	See "Replacing the 2000-sheet tray roller kit" on page 1754

Printer specifications

Power consumption

Product power consumption

The following table documents the power consumption characteristics of the product.

NOTES

Some modes may not apply to your product.

Mode	Description	Power consumption (Watts)
Printing	The product is generating hard-copy output from electronic inputs.	Recto : 767 Recto verso : 700
Copy	The product is generating hard-copy output from hard-copy original documents.	N/A
Scan	The product is scanning hard-copy documents.	N/A
Ready	The product is waiting for a print job.	76
Sleep Mode	The product is in a high-level energy-saving mode.	1,3
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.lexmark.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, or between 1 minute and 114 minutes, depending on the printer model. If the printer speed is less than or equal to 30 pages per minute, then you can set the timeout only up to 60 minutes or 54 minutes, depending on the printer model. 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.

Some models support a **Deep Sleep Mode**, which further reduces power consumption after longer periods of inactivity.

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

Default Hibernate timeout

Factory default Hibernate Timeout for this product in all countries or regions	3 jours
--	---------

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.

Notes on EPEAT-registered imaging equipment products:

- Standby power level occurs in Hibernate or Off mode.
- The product shall automatically power down to a standby power level of ≤ 1 W. The auto standby function (Hibernate or Off) shall be enabled at product shipment.

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 estimate 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

Choose the right location for your printer to keep it safe and well-ventilated.

- Leave enough room to open trays, covers, and doors and to install hardware options.
- Set up the printer near an 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.



CAUTION—SHOCK HAZARD

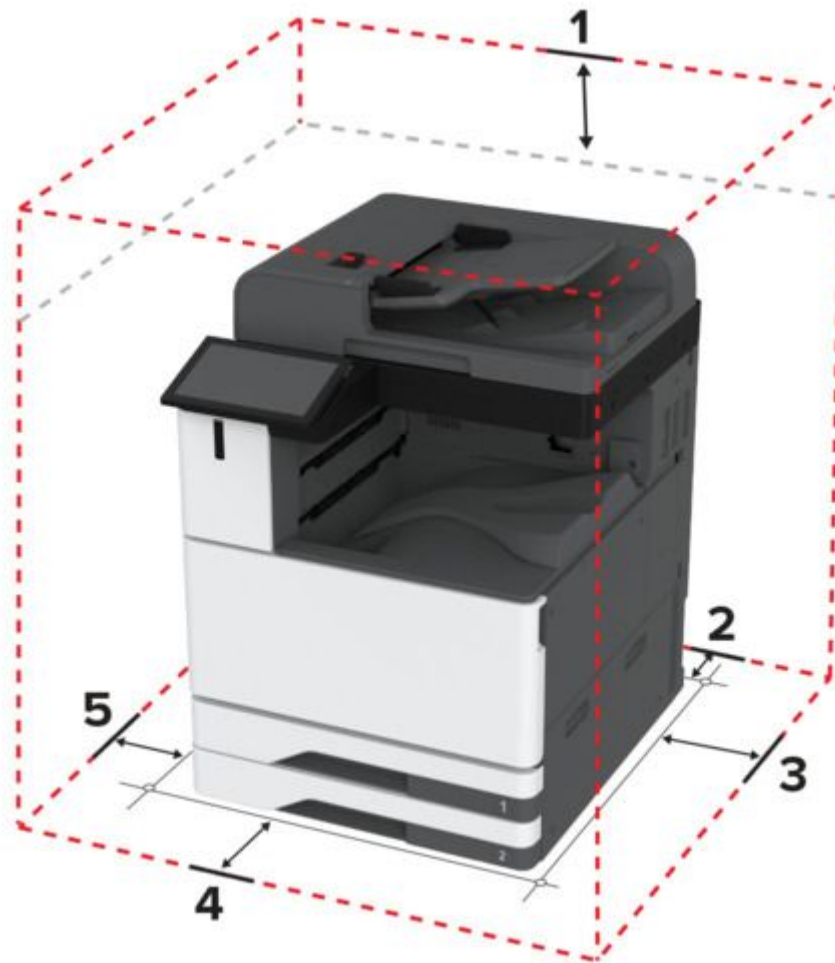
To avoid the risk of electrical shock, do not place or use this product near water or wet locations.

- 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:

Recommended temperatures

Ambient temperature	10 à 32,2 °C (50 à 90 °F)
Storage temperature	15,6 à 32,2 °C (60 à 90°F)

- Allow the following recommended amount of space around the printer for proper ventilation:



Recommended spaces around the printer

1	Top	150 mm (5,9 po)
2	Rear	120 mm (4,8 po)
3	Right side	400 mm (15,7 po)
4	Front	444,5 mm (17,5 po)
5	Left side	120 mm (4,8 po)

Noise emission levels

The following measurements were made in accordance with ISO 7779 and reported in conformance with ISO 9296.

NOTES

Some modes may not apply to your product.

1-meter average sound pressure, dBA	
Printing	Recto : 50Recto verso : 52
Scanning	N/A
Copying	N/A
Ready	15

Values are subject to change. See www.lexmark.com for current values.

Temperature information

Operating temperature and relative humidity	10 to 32.2°C (50 to 90°F) and 15 to 80% RH 15.6 to 32.2°C (60 to 90°F) and 8 to 80% RH Maximum wet-bulb temperature ² : 22.8°C (73°F) Non-condensing environment
Printer / cartridge / imaging unit long-term storage ¹	15.6 to 32.2°C (60 to 90°F) and 8 to 80% RH Maximum wet-bulb temperature ² : 22.8°C (73°F)
Printer / cartridge / imaging unit short-term shipping	-40 to 40°C (-40 to 104°F)

¹ Supplies shelf life is approximately 2 years. This is based on storage in a standard office environment at 22°C (72°F) and 45% humidity.

² Wet-bulb temperature is determined by the air temperature and the relative humidity.

Theory of operation

Electrophotographic (EP) process theory

EP process

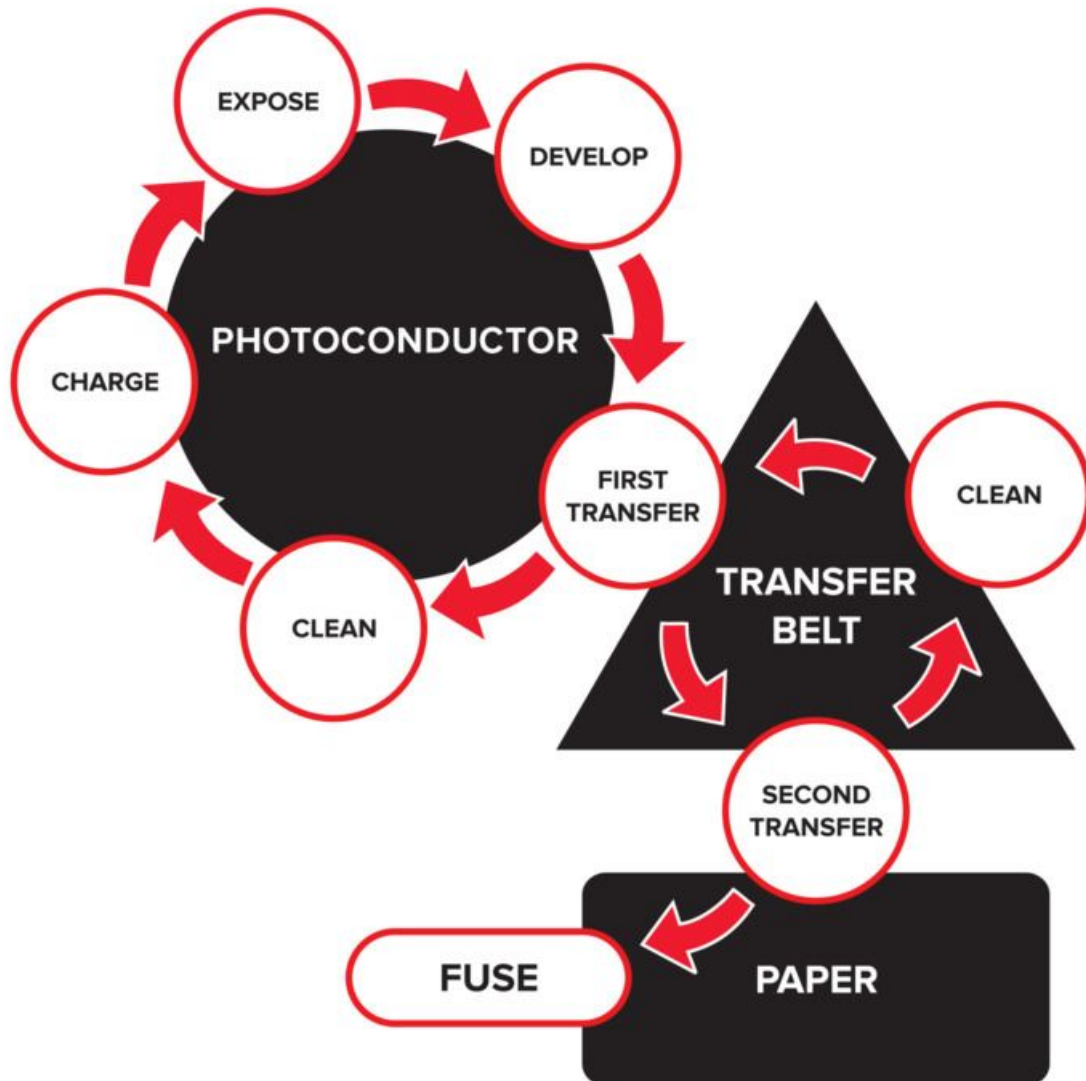
Four toner cartridges (cyan, yellow, magenta, and black) are used to create the text and images on the paper. Each of the colors has a dedicated photoconductor unit and developer unit. The transfer belt passes over the four photoconductor units to produce and transfer the four-color image to the paper in one pass.

During the printing process, the printer goes through the following steps of the EP process to create the output on the page:

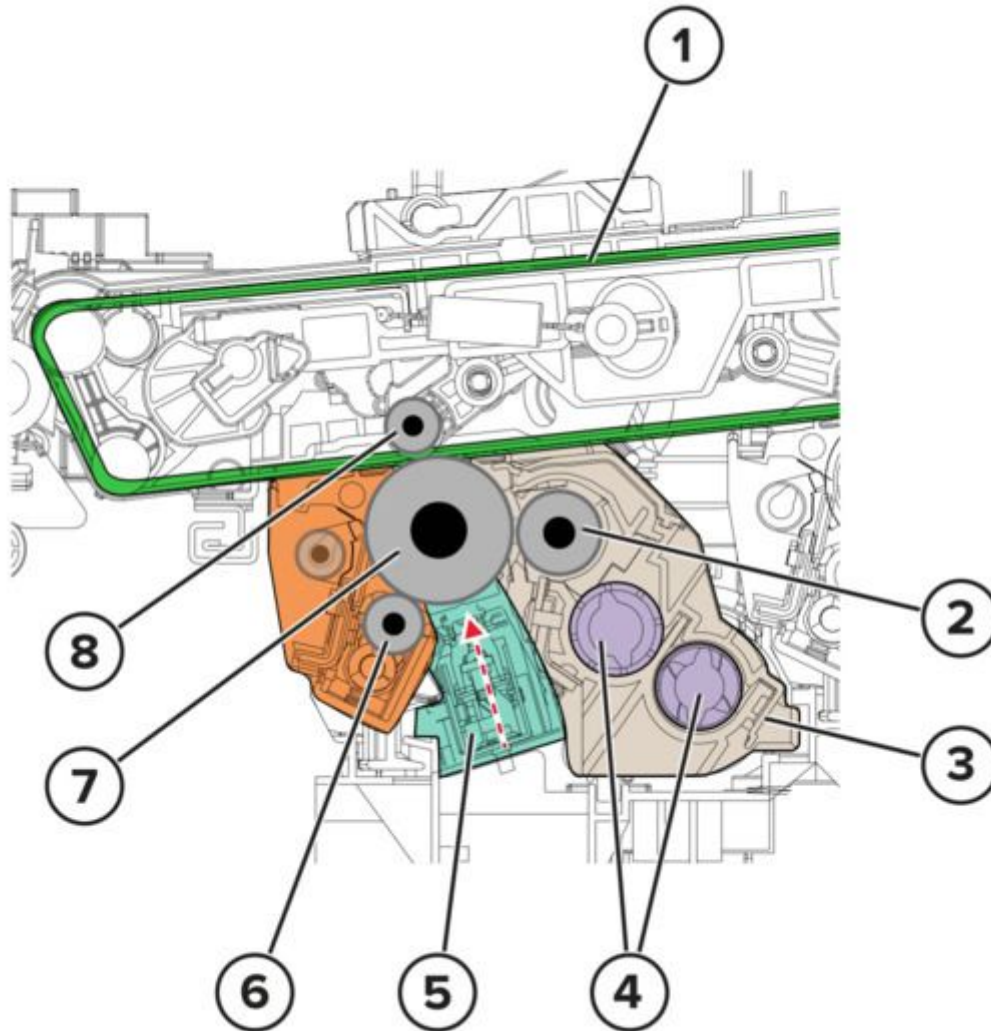
1. **Charge** — Charge the photoconductor drum.
2. **Expose** — Expose the photoconductor drums with light.
3. **Develop** — Develop toner on the photoconductor drum.
4. **First transfer** — Transfer the developed image to the transfer belt.
5. **Clean (charge roller and photoconductor drum)** — Clean the charge roller and photoconductor drums.
6. **Second transfer** — Transfer the developed image to the paper.
7. **Clean (transfer belt and second transfer roller)** — Clean the transfer belt and second transfer roller.
8. **Fuse** — Fuse the toner to the paper.

Print cycle

Flowchart



Charge



Charge theory

1	Transfer belt
2	Magnet roll
3	Developer unit
4	Auger
5	Printhead
6	Charge roller

Continued on page 2179

Continued from page 2178

7	Photoconductor drum
8	First transfer roller

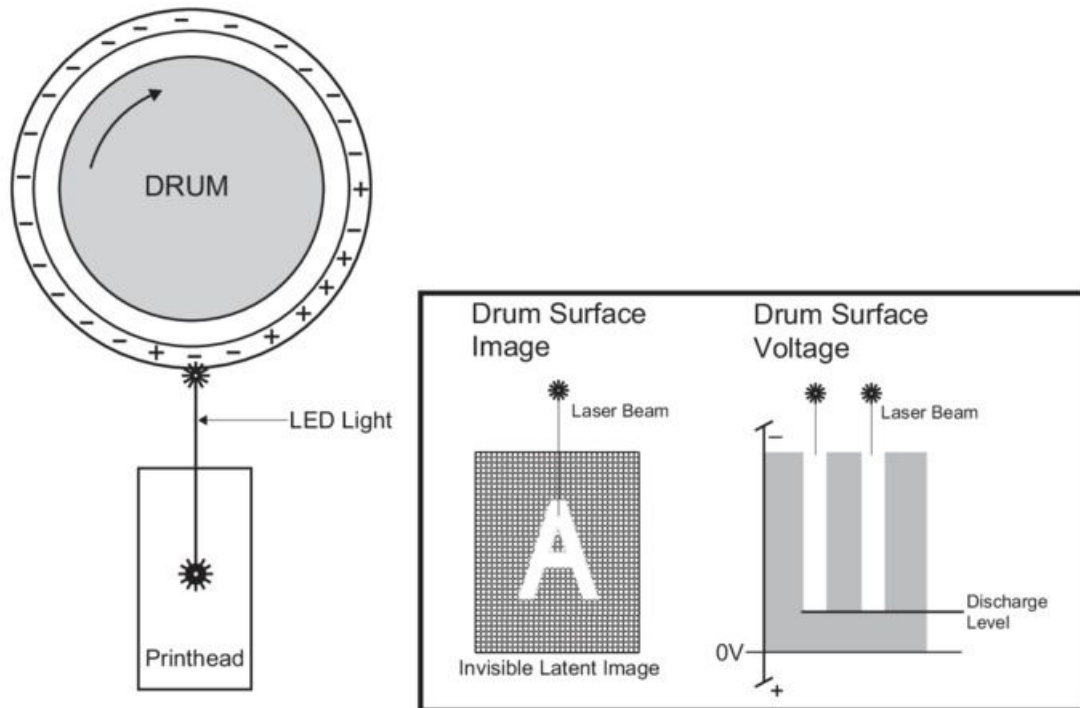
Voltage is sent from the HVPS to the charge roller which places a uniform negative electrostatic charge on the surface of the photoconductor drum. The drum surface is made of a photoconductive material that holds an electrical charge as long as the drum is not exposed to ambient light. Printhead LED light striking the drum causes the surface charge to neutralize.

Charge timing

Each photoconductor unit has a charge roller. The charge roller is a conductive roller that is positioned slightly below the surface of the photoconductor drum. The charge roller HVPS supplies voltage to each of the four charge rollers. The charge roller HVPS supplies the charge roller with two voltages: a negative DC charge voltage and an AC discharge voltage.

The charge roller AC voltage starts after a designated period when the motor (photoconductor) turns on. In addition, the charge time of the charge roller DC voltage is after a designated period from the start of the charge roller AC discharge voltage. The charge roller DC voltage turns off after a designated period when the first transfer roller turns off. After the charge roller DC voltage turns off, the AC discharge voltage then turns off after a designated period.

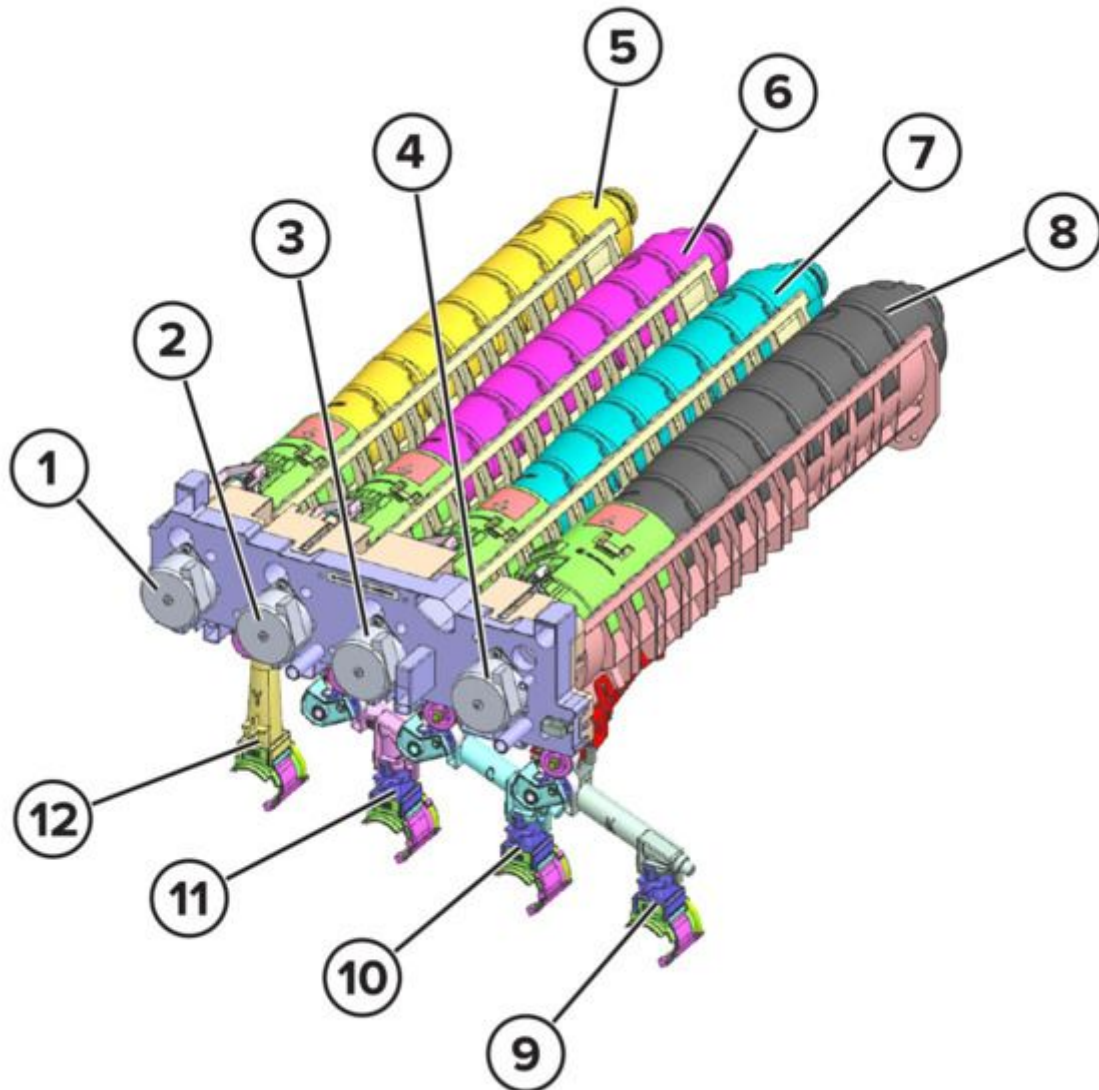
Expose



The printhead LED generates a scan line of LED light. Image data received from the controller board modulates the scan line and turns it on and off according to the image information that is received from the host computer and software.

The scan lines are applied on the negatively charged photoconductor drum surface. When the print controller sends a command to print a black pixel, the printhead LED switches on long enough to shine onto the photoconductor drum at a single pixel point. That point is now discharged and slightly less negative than the surrounding negative charge. The less negative areas are considered positive. This charge and discharge process creates an invisible electrostatic image on the surface of the photoconductor drum called a latent image.

Develop



Develop theory 1

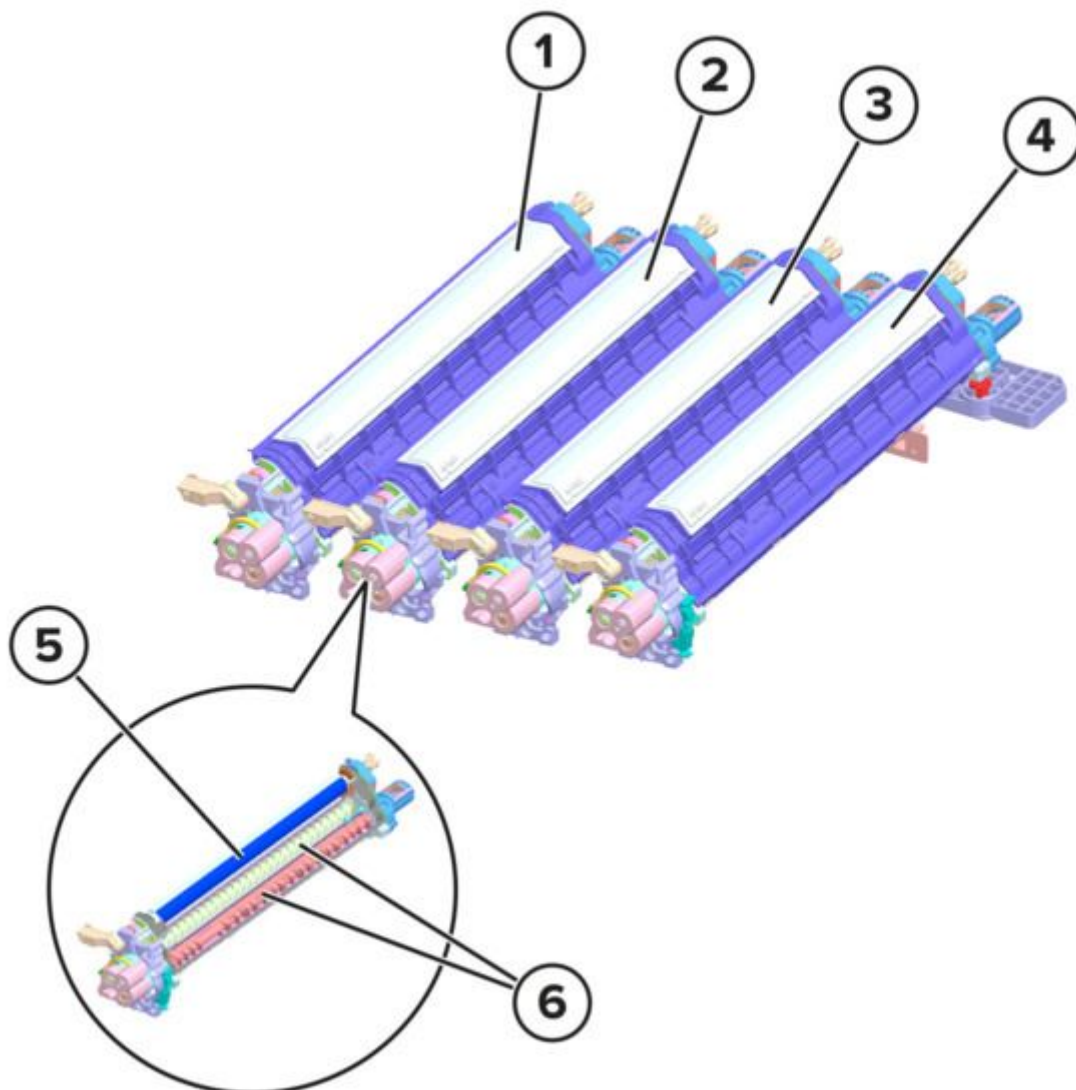
1	Motor (Y toner dispenser)
2	Motor (M toner dispenser)
3	Motor (C toner dispenser)
4	Motor (K toner dispenser)
5	Y toner cartridge
6	M toner cartridge

Continued on page 2182

Continued from page 2181

7	C toner cartridge
8	K toner cartridge
9	K toner auger
10	C toner auger
11	M toner auger
12	Y toner auger

Toner is supplied to the developer unit from the toner cartridge. Toner inside the cartridge is circulated using a toner auger driven by the motor (toner dispenser). The toner particles travel through the toner auger, and then to the developer unit.

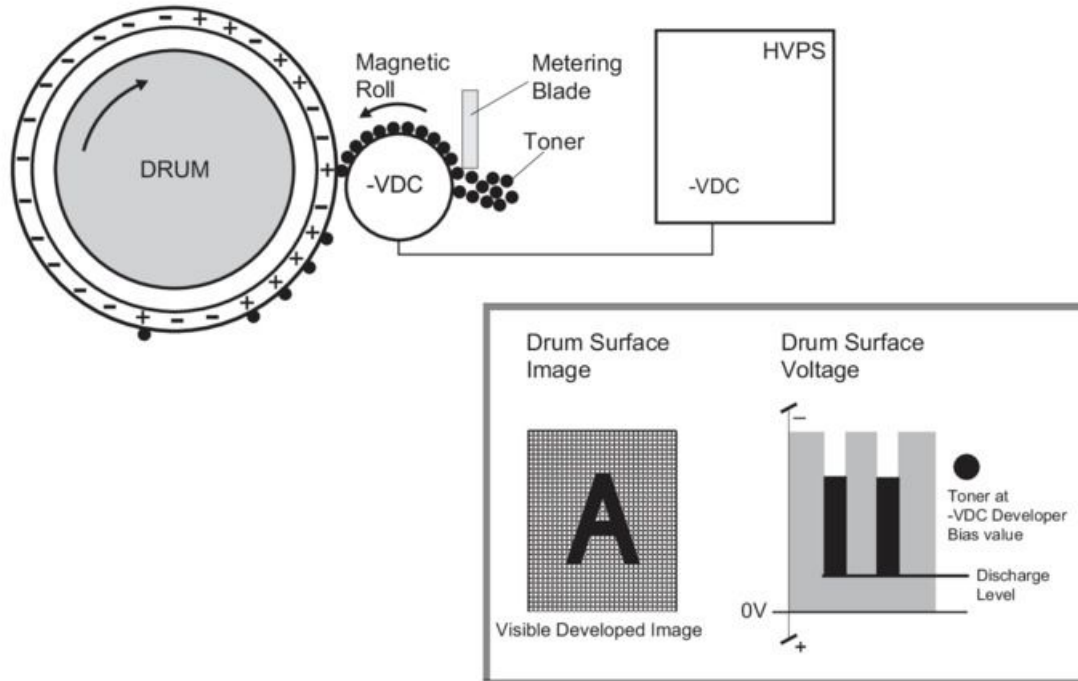


Develop theory 2

1	Y developer unit housing
2	M developer unit housing
3	C developer unit housing
4	K developer unit housing
5	Magnet roll
6	Auger

Inside the developer unit, the toner augers mix the toner with the development solution and carrier, and then distributes the toner particles into the magnet roll surface before they reach the photoconductor drum. The carrier has a positive charge.

The toner, which is statically charged during the mixing process, is electrically attracted to the carrier. Since the carrier is magnetic, it is attracted to the magnet roll which holds a magnetic field. A metering blade spreads the toner into a very thin and uniform layer on the magnet roll. Friction between the magnet roll and the blade generates a small electrical charge that is transferred to the toner.

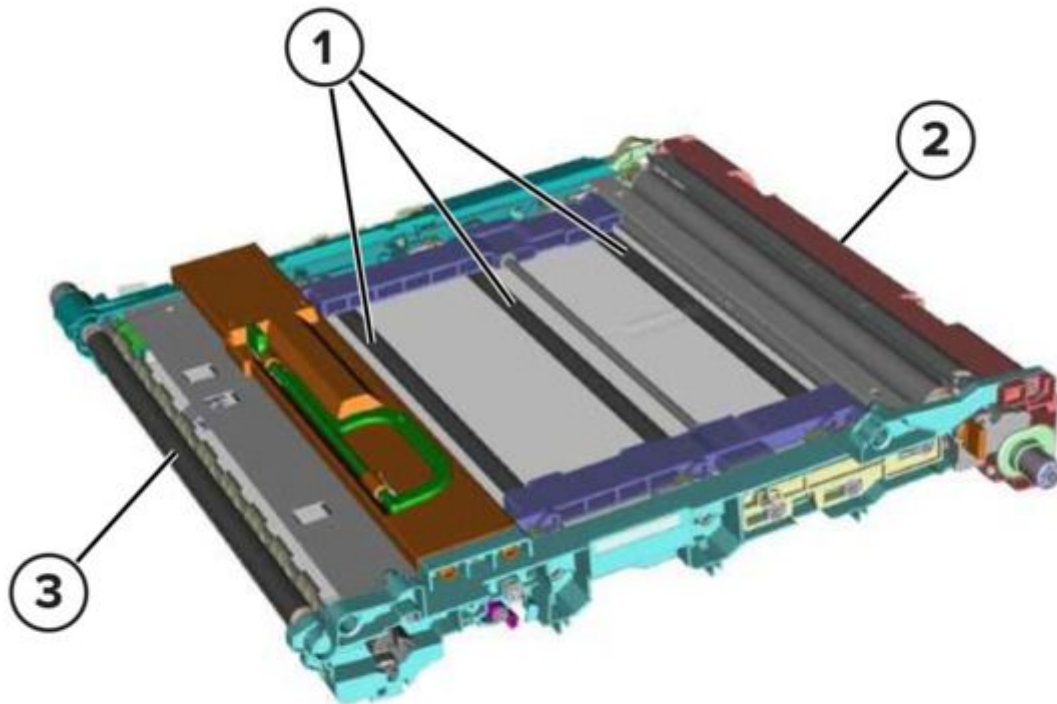


Toner is then applied from the magnet roll through the application of a negative development bias to the rotating magnet roll in order to form the toner image on the photoconductor drum surface. This process is performed for each color.

The toner adhering to the magnet roll is always in contact with the photoconductor drum surface. When a less negative point on the photoconductor drum comes in contact with the more negative charged toner on the magnet roll, the toner transfers from the magnet roll to that point on the drum. The toner will attract only to the area of the drum that was exposed to the printhead LED scan line.

A visible toner image is produced on the photoconductor drum surface called the developed image.

First transfer



First transfer theory

1	First transfer rollers
2	Transfer belt cleaner
3	Transfer belt drive roller

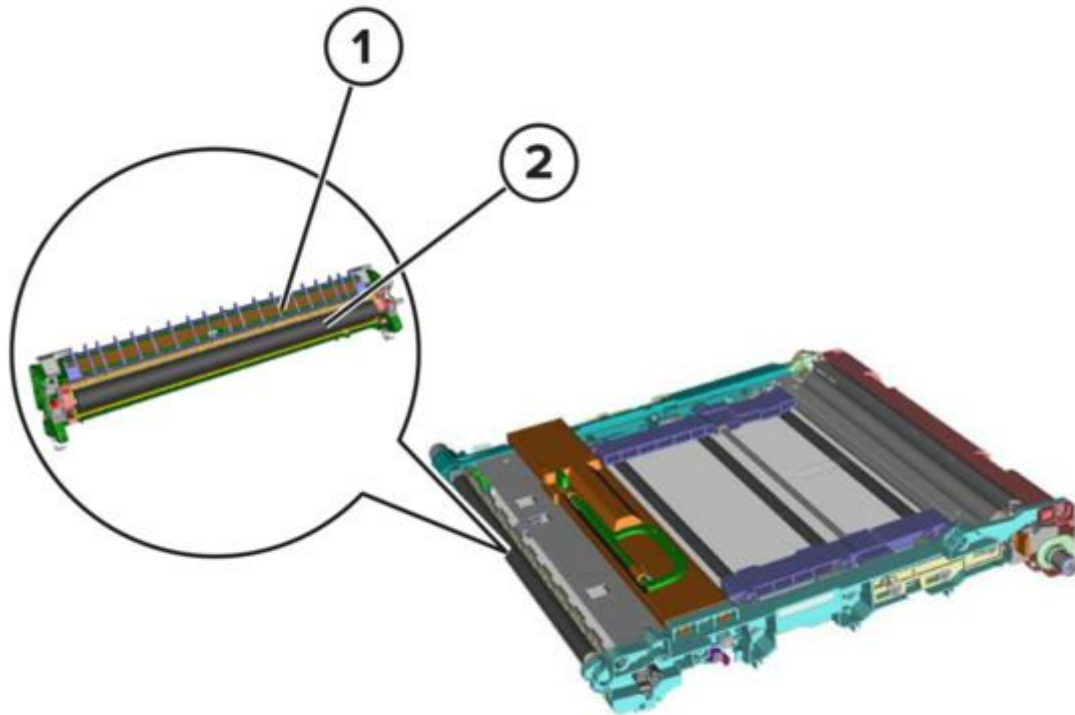
When the latent images are developed on each photoconductor drum, the HVPS sends voltage to the first transfer rollers inside the transfer belt. The charge difference between the developed toner image on the photoconductor surface and the first transfer roller causes the image to transfer to the surface of the transfer belt for each color. This process takes place during a direct surface-to-surface contact between the photoconductor and the transfer belt.

Clean (charge roller and photoconductor drum)

The charge roller becomes dirty due to the external additives of the toner. The charge roller is cleaned by the charge roller cleaning roll which is in constant contact with the charge roller.

The excess toner on the photoconductor drum is scraped off using the cleaning blade after the first transfer process. This action is performed after each plane of color has been transferred to the transfer belt from the photoconductor drums.

Second transfer

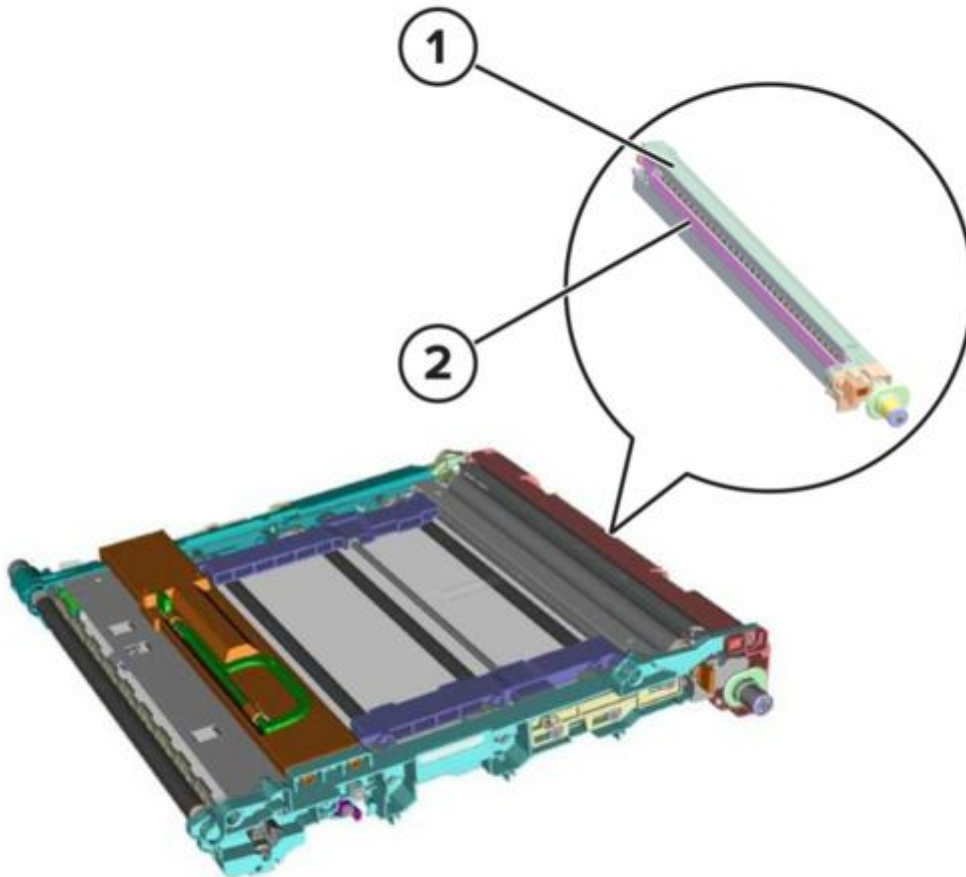


Second transfer theory

1	Transfer belt drive roller assembly
2	Second transfer roller

As the paper travels and contacts the transfer belt, the HVPS applies a negative DC voltage to the second transfer roller in the transfer belt drive roller assembly. This process causes the toner image on the transfer belt to transfer to the surface of the paper. The image is transferred by overlaying the four toner colors.

Clean (transfer belt and second transfer roller)



Clean (transfer belt and second transfer roller)

1	Transfer belt cleaner assembly
2	Cleaning blade

Some residual toner remains on the second transfer roller after the second transfer process. A combination of positive and negative polarity bias from the HVPS is applied to the second transfer roller to transfer the unwanted toner to the transfer belt. The residual toner left on the transfer belt is then removed by the cleaning blade inside the transfer belt cleaner assembly.

Fuse

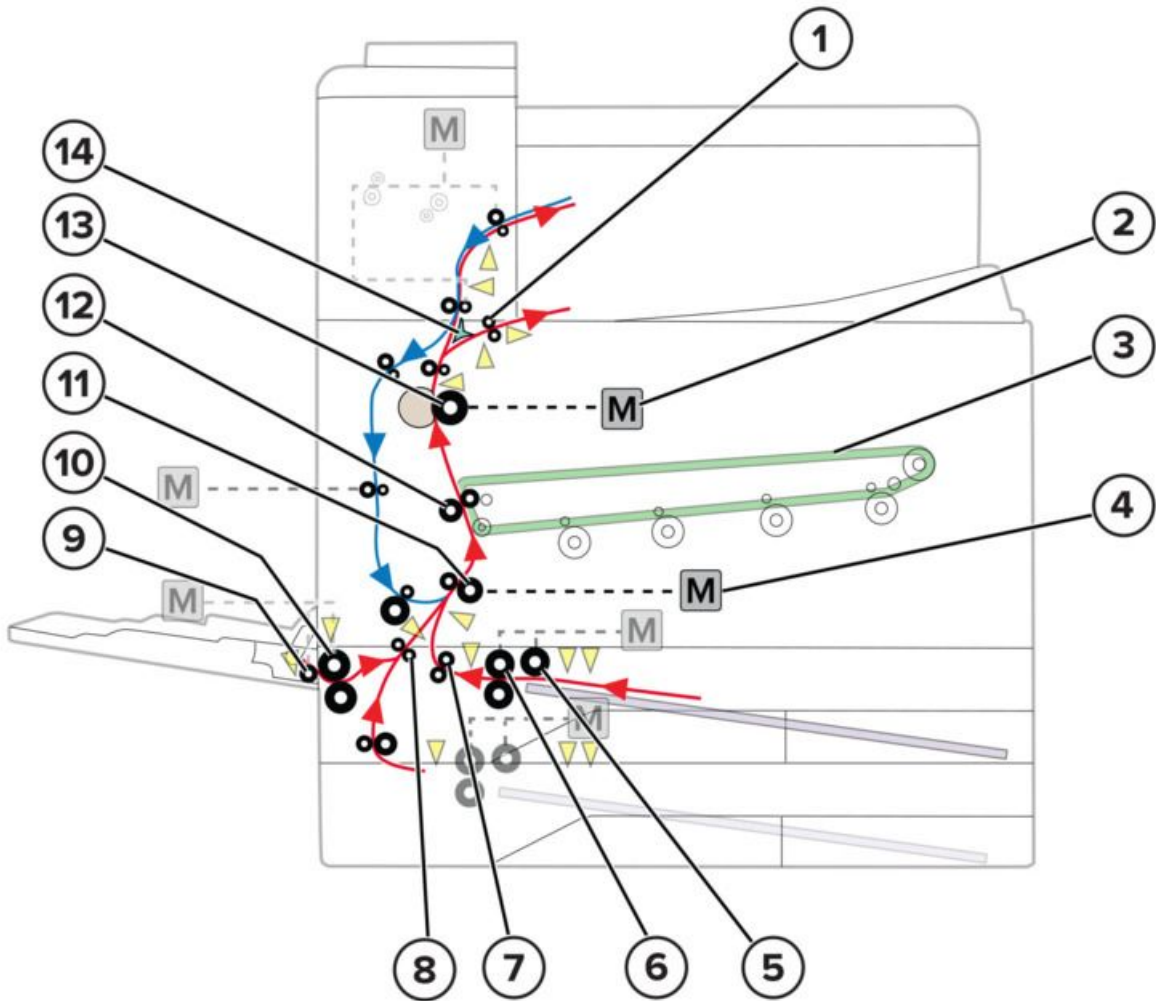
Even if the toner image is already on the paper, the toner particles are not yet permanently bonded to the surface. The paper with the toner image must go through a fusing process in order to bond the toner particles to the paper surface.

For the final part of printing, paper is transported to the fuser area where heat and pressure are applied to it. As a result, the toner particles melt and permanently fuse with the paper to complete the print process.

Printer operation

Printer paper path

Simplex print job



Simplex print job parts

1	Exit 1 roller
2	Motor (fuser/exit)
3	Transfer belt
4	Motor (registration)
5	Tray 1 pick roller

Continued on page 2191

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6	Tray 1 separator roller
7	Tray 1 transport roller
8	MPF tray transport roller
9	MPF pick roller
10	MPF separator roller
11	Registration roller
12	Second transfer roller
13	Fuser
14	Diverter

Paper from tray 1 is picked by the tray 1 pick roller, and then fed into the printer by the tray 1 separator roller.

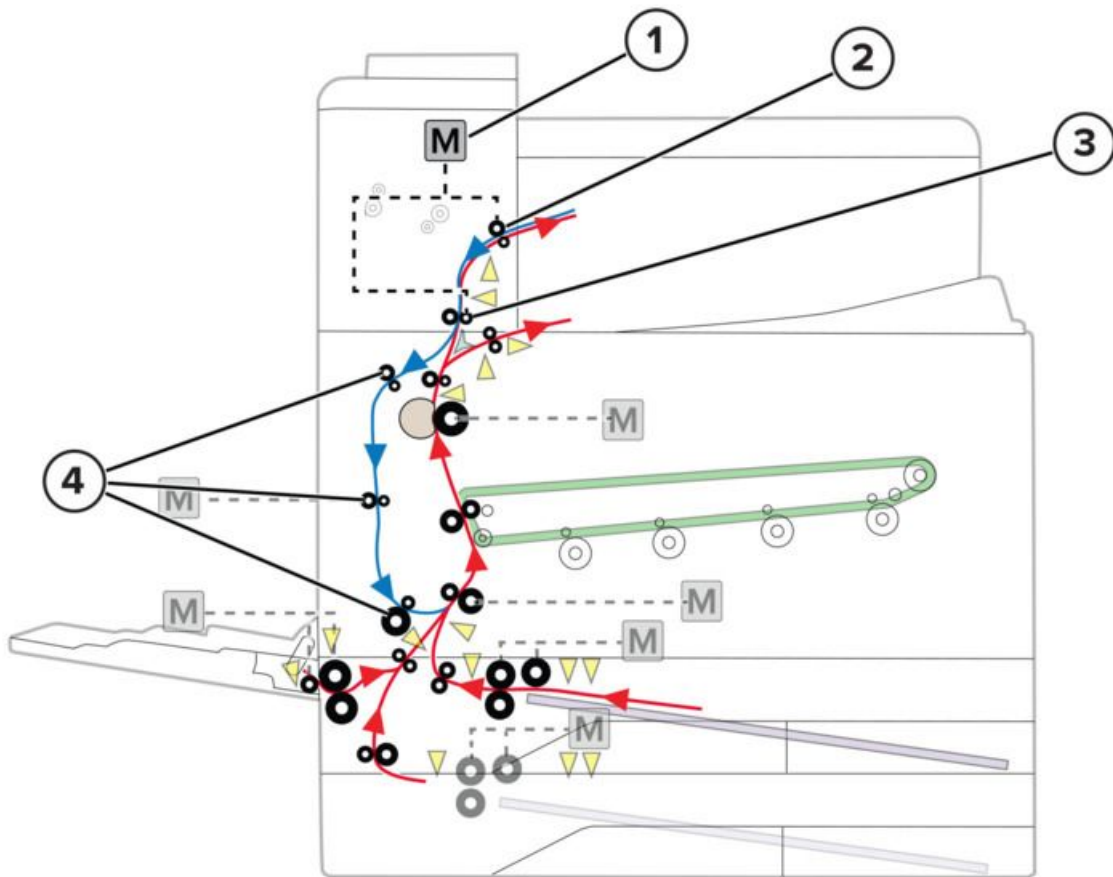
For MPF print jobs, the paper is picked by the MPF pick roller, and then fed into the printer by the MPF separator roller.

The tray 1 transport roller receives the paper fed from tray 1. The MPF tray transport roller receives the paper fed from the MPF tray. The transport rollers transport paper into the registration section.

When the paper arrives at the registration roller, a skew correction is performed. The motor (registration) drives the registration roller. The registration roller transports the paper through the transfer belt and the second transfer roller where the toner image is transferred to the paper.

The paper then goes through the fuser to permanently bond the toner image to the sheet. When the fusing is done, the default position of the diverter directs the paper toward the exit 1 roller and the paper is fed out into the bin. The motor (fuser/exit) drives the fuser and exit 1 roller.

Duplex print job



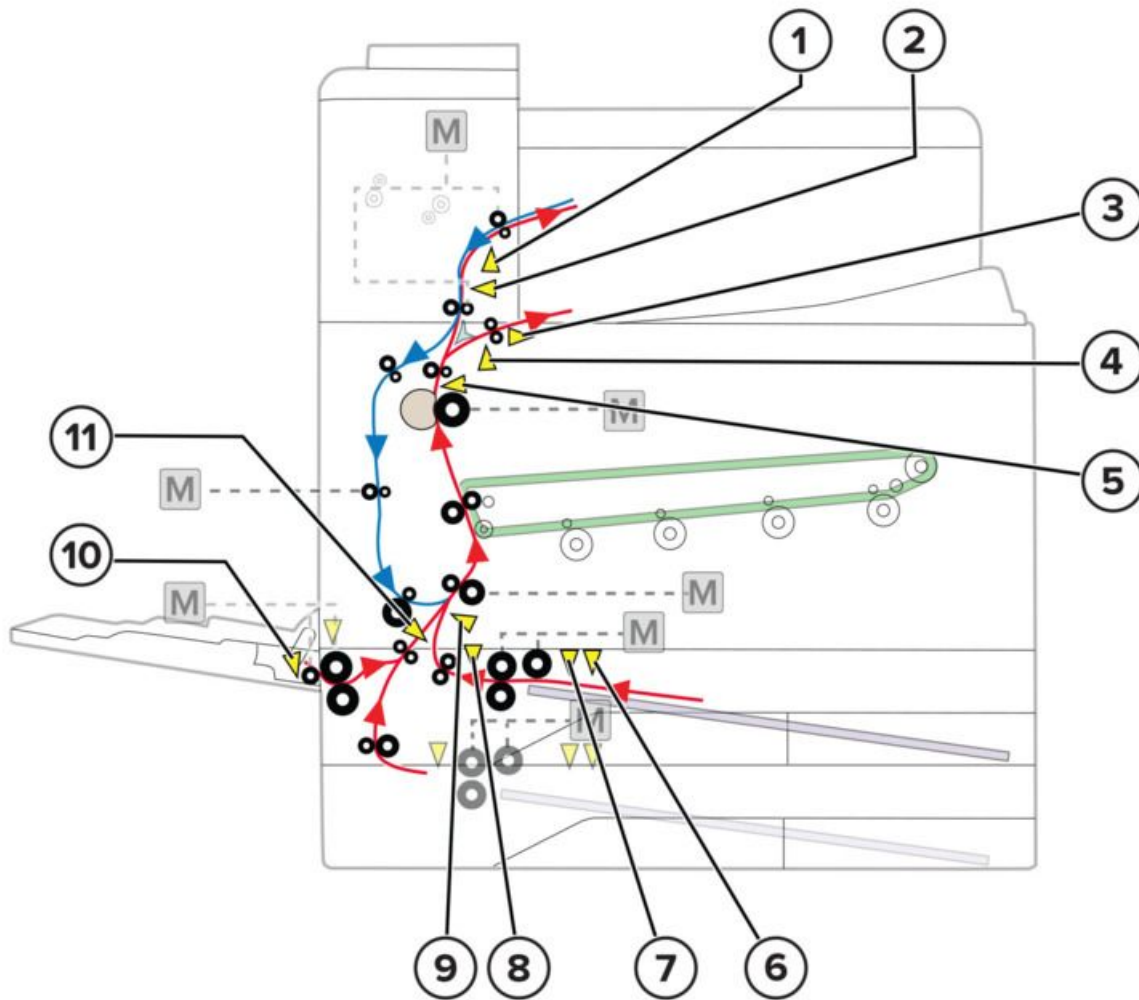
Duplex print job parts

1	Motor (exit)
2	Exit 2 roller
3	Redrive roller
4	Duplex transport rollers

After the fusing process, the diverter position determines if the paper is to be fed again for a duplex print job or to exit through the finisher or the output bin.

After the first side is printed, the motor (exit) drives the exit 2 roller and redrive roller to transport the paper to the duplex paper path. The paper stops at the horizontal paper transport while still in the exit 2 roller. The paper is fed back into the duplex paper path to have the opposite side printed. The paper travels along the duplex paper path through the duplex transport rollers.

Printer paper path sensors



Printer paper path sensors

#	Sensor	Description
1	Sensor (bin 2 offset home)	Detects overlapping paper as paper is transported to the finisher.
2	Sensor (exit 2)	Detects paper as it passes through the redrive roller.
3	Sensor (bin 1 full)	Detects if the bin is full.
4	Sensor (bin 1 offset home)	Detects overlapping paper as paper enters the output bin.

Continued on page 2194

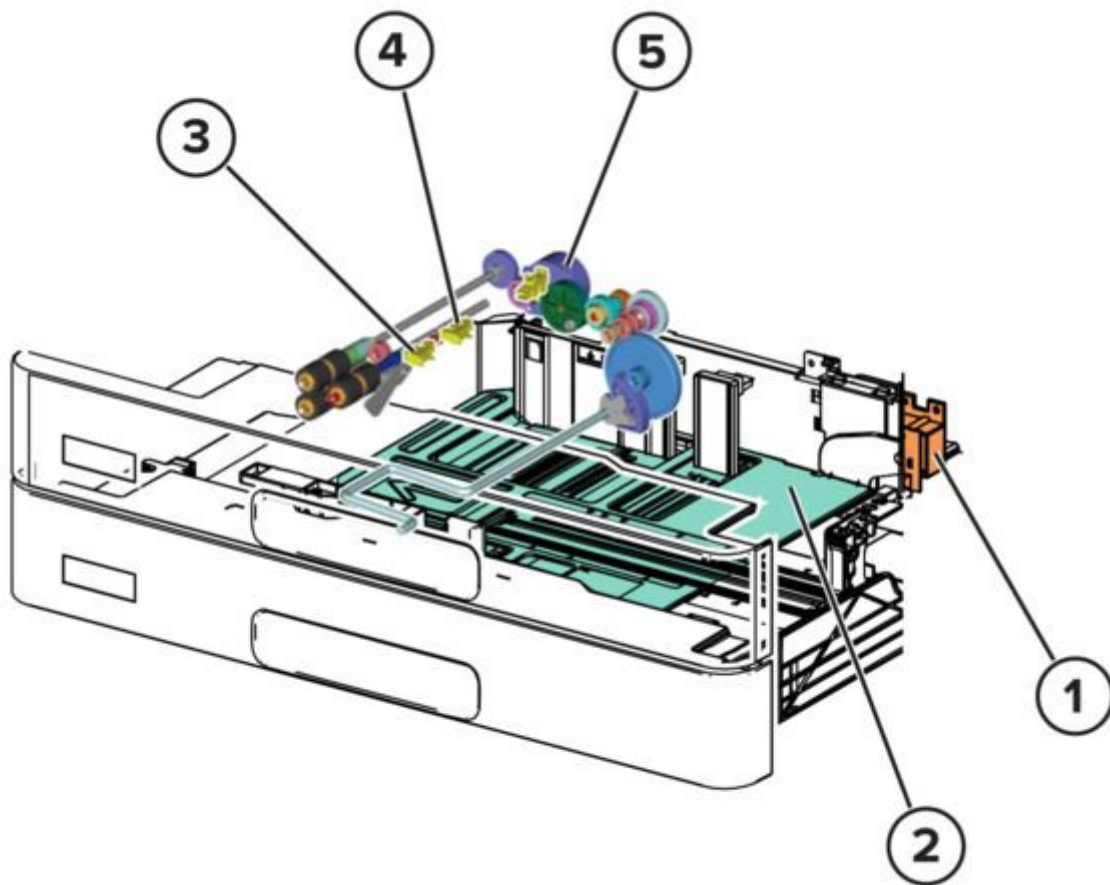
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#	Sensor	Description
5	Sensor (fuser exit)	Detects paper as it passes through the fuser.
6	Sensor (tray 1 pick position)	Detects if the pick roller is in the pick position.
7	Sensor (tray 1 paper present)	Detects paper presence in the tray.
8	Sensor (tray 1 transport)	Detects paper from the tray as it is fed into the printer.
9	Sensor (registration)	Detects paper as it passes through the registration roller and synchronizes the paper position and the image prepared on the transfer belt.
10	Sensor (MPF paper present)	Detects paper presence in the MPF.
11	Sensor (MPF transport)	Detects paper from the MPF as it is fed into the printer.

Trays operation

Tray paper detection and pick process

Tray 1 to tray 4



Tray 1 to tray 4

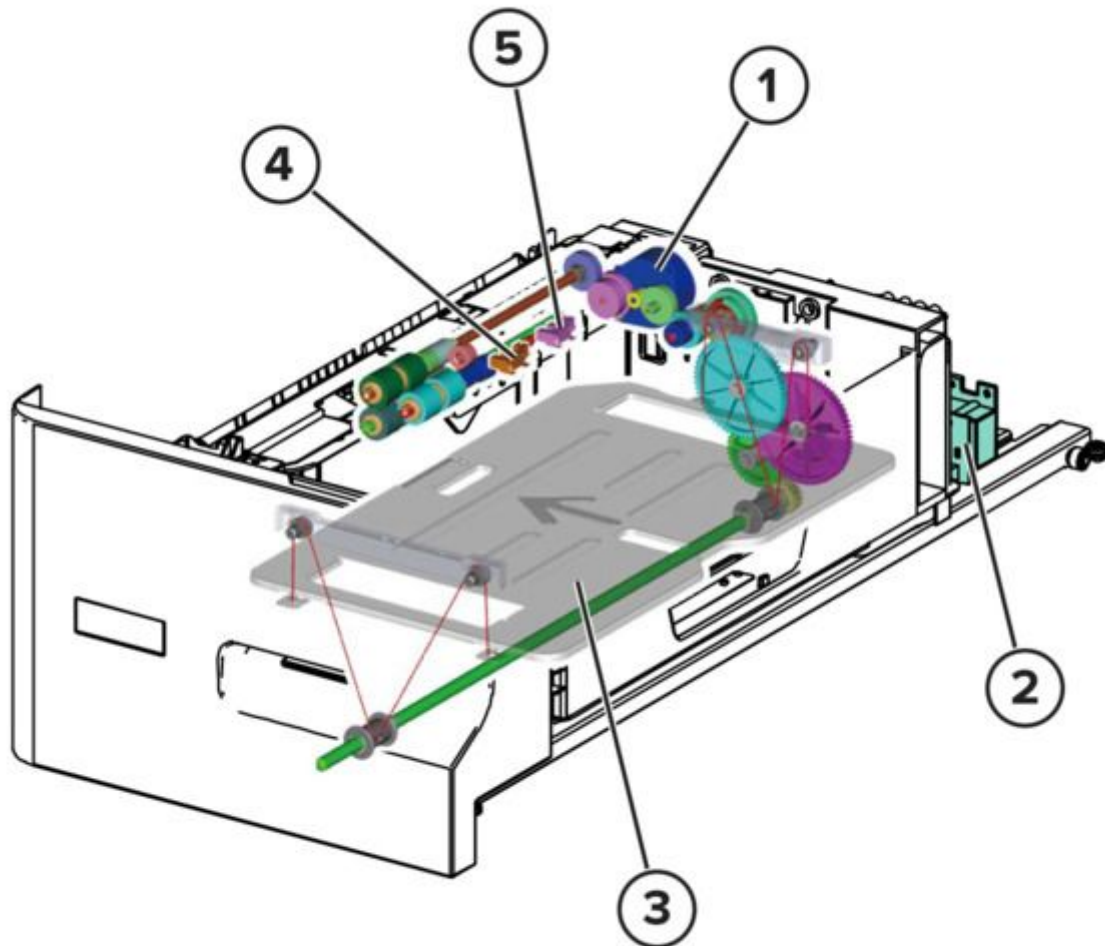
1	Sensor (tray paper size)
2	Tray lift plate
3	Sensor (tray empty)
4	Sensor (tray level)

Continued on page 2196

Continued from page 2195

5	Motor (tray feed)
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2000-sheet tandem tray



2000-sheet tandem tray

1	Motor (2000-sheet tandem tray feed)
2	Sensor (2000-sheet tandem tray paper size)
3	2000-sheet tandem tray lift plate
4	Sensor (2000-sheet tandem tray empty)

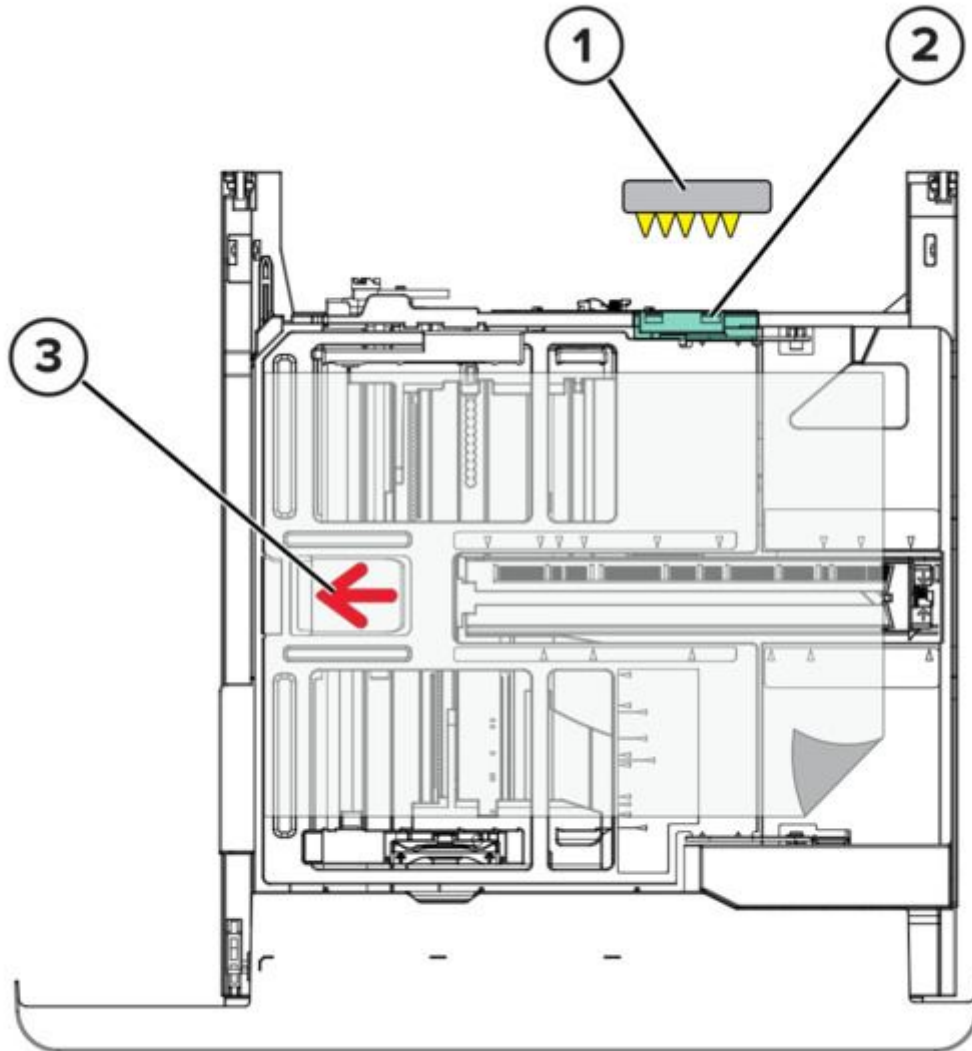
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5	Sensor (2000-sheet tandem tray level)
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The sensor (tray level) detects the tray lift plate when it is raised to the position where paper can be fed. The sensor (tray empty) detects when the tray is empty. The motor (tray feed) is a stepping motor capable of running clockwise or counterclockwise. The motor drives the gears that raise the tray lift plate when the motor runs counterclockwise. When the motor runs clockwise, the motor drives the nudge roller and feed roller to feed paper.

Tray 1 to tray 4 paper size detection

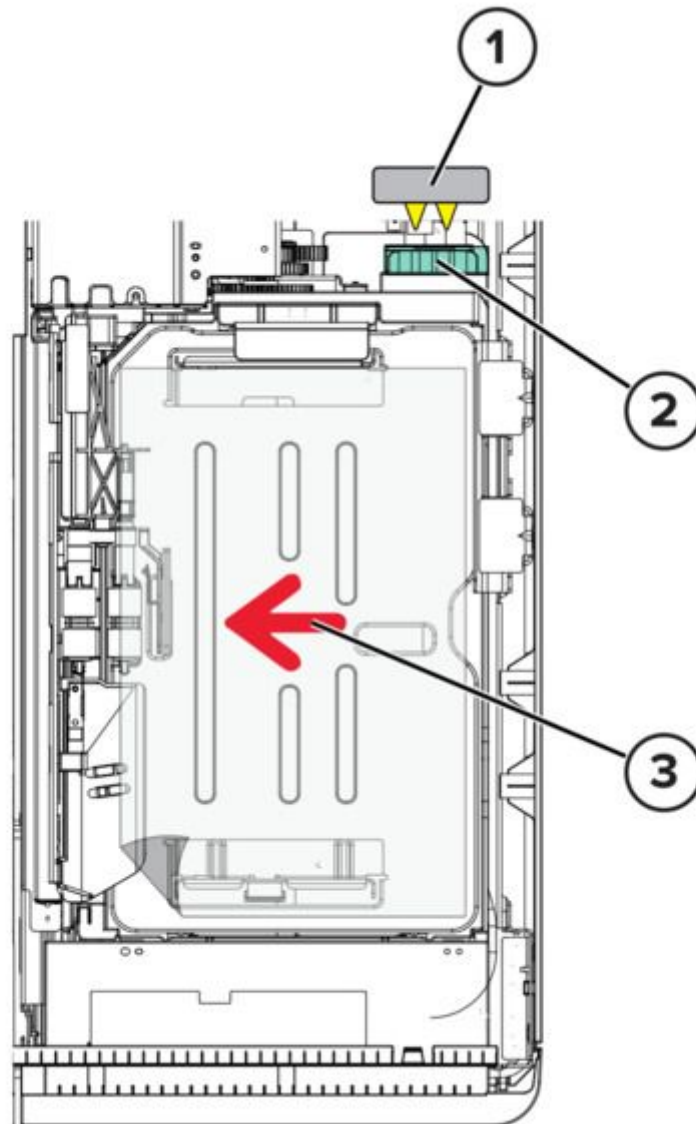


Tray 1 to tray 4 paper size detection

1	Sensor (tray paper size)
2	Actuators
3	Paper

The sensor (tray paper size) detects the paper size and paper presence in the tray. Paper size is determined according to the combination of five switches in the sensor (tray paper size). The actuator linked to the side guide and end guide of the tray presses these switches. When the paper guides on the tray are moved, the side guide actuator and end guide actuator at the rear of the tray changes position which also changes the combination of the five switches that are pressed.

2000-sheet tandem tray paper size detection

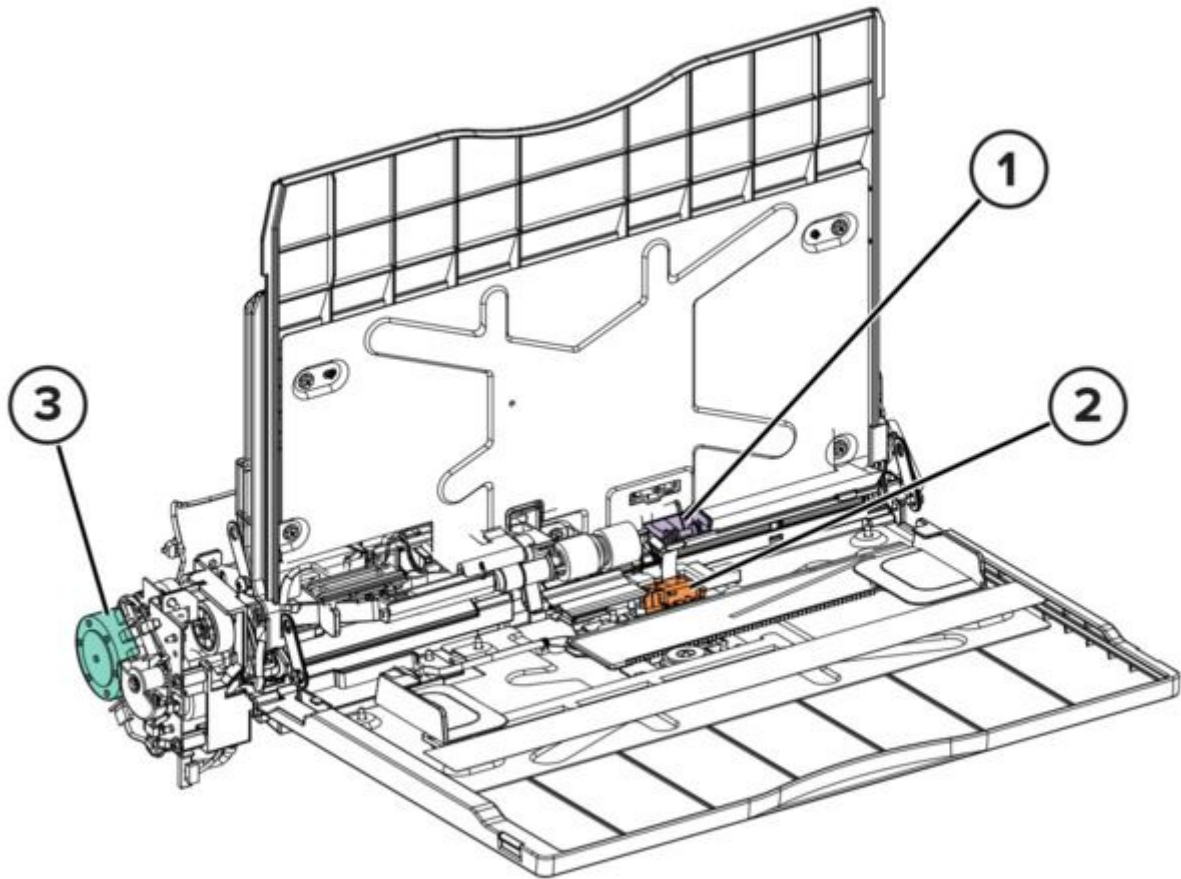


2000-sheet tandem tray paper size detection

1	Sensor (2000-sheet tandem tray paper size)
2	Actuators
3	Paper

The sensor (2000-sheet tandem tray paper size) detects the paper size and paper presence in the tray. Paper size is determined according to the combination of three switches in the sensor (2000-sheet tandem tray paper size). When the paper guide on the tray is moved, the actuator at the rear of the tray changes position, which also changes the combination of the three switches that are pressed.

MPF tray paper size detection

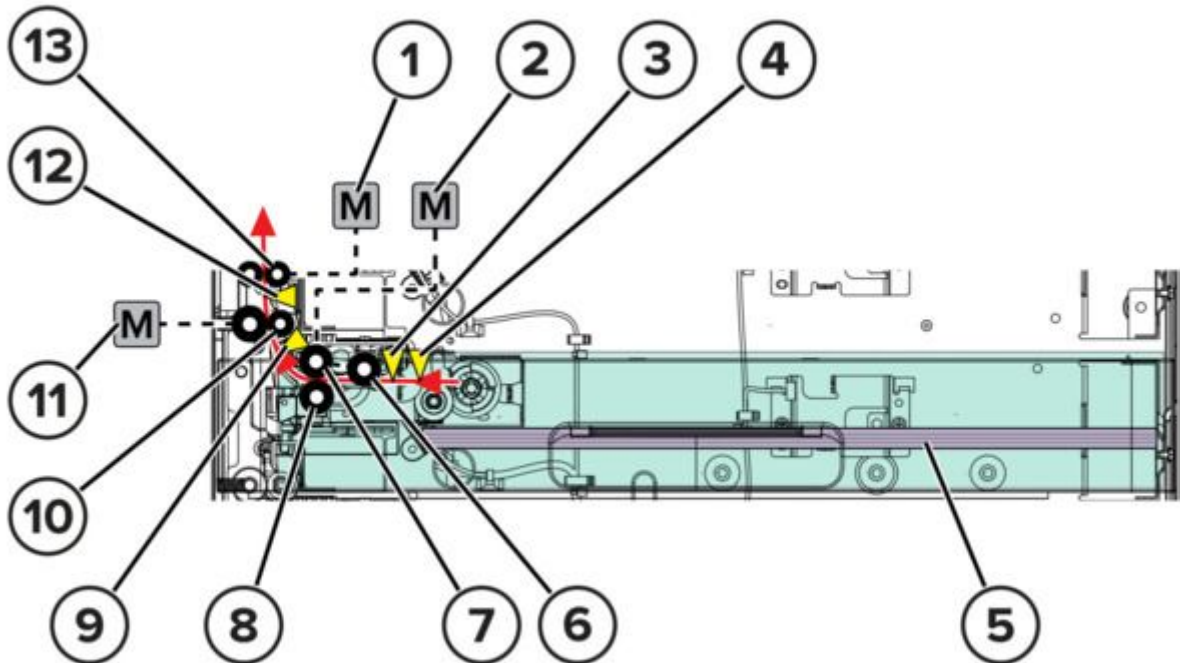


MPF tray paper size detection

1	Sensor (MPF tray empty)
2	Sensor (MPF tray paper size)
3	Motor (MPF tray feed)

The sensor (MPF tray empty) detects paper presence. The sensor (MPF tray paper size) detects paper size. The motor (MPF tray feed) is a stepping motor capable of running clockwise or counterclockwise. The motor lowers the nudge roller onto the paper when the motor runs counterclockwise. When the motor runs clockwise, the motor drives the nudge roller and feed roller to feed paper.

Tray 1 paper feed



Tray 1 paper feed

1	Motor (registration)
2	Motor (tray 1 pick/lift)
3	Sensor (tray 1 paper present)
4	Sensor (tray 1 pick position)
5	Paper
6	Tray 1 pick roller
7	Tray 1 feed roller
8	Tray 1 separation roller
9	Sensor (tray 1 transport)
10	Tray 1 transfer roller
11	Motor (transfer 1)

Continued on page 2202

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12	Sensor (registration)
13	Registration roller

The motor (transport 1) runs when printing starts. The motor (tray 1 pick/lift) runs and raises the tray lift plate. The paper is pressed in the tray against the tray 1 feed roller. At the same time, the tray 1 pick roller is also lowered and pressed against the paper in preparation for feeding.

As paper feed starts, the tray 1 pick roller rotates to feed paper between the feed roller and the separation roller. The separation roller ensures that only one sheet is fed at a time. When the paper is transported through the sensor (registration) and into the registration roller, the motor (registration) stops briefly. The registration roller stops and causes the paper to create a loop as the paper hits the roller. A skew correction is performed before the paper is fed through the registration roller. When the sensor (registration) detects the trailing edge of the paper, the motor (transfer 1) temporarily stops.

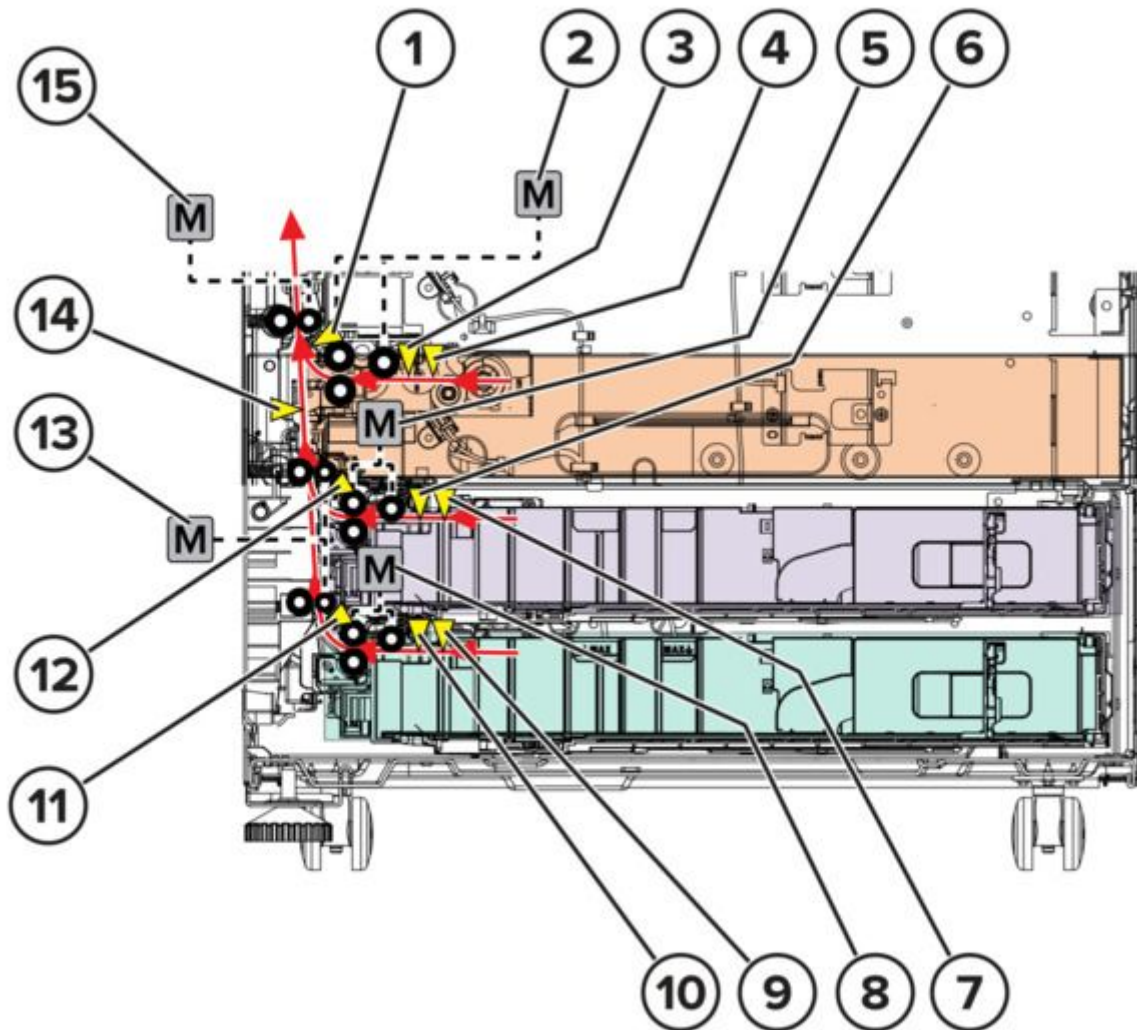
The motor (tray 1 pick/lift) reduces speed and stops temporarily when the sensor (tray 1 transport) detects the trailing edge of the paper. The next sheet of paper is fed after the trailing edge of the previous sheet passes through the sensor (tray 1 transport).

Tray 2 to tray 4 paper feed

The motor (transfer 1) starts when printing starts. If the printer has a 2000-sheet tandem tray module, the motor (transfer 2) also starts. After a designated period, the motors (tray 2/3/4 pick/lift) of the transport tray start and turn clockwise to begin the paper feed process. The paper is fed through the separator roller by the pick roller and feed roller in the tray. The motors (tray 2/3/4 pick/lift) decrease their speed and stop temporarily when the sensors (tray 2/3/4 transport) detect the trailing edge of the paper. The next sheet of paper is fed after the trailing edge of the previous sheet passes through the sensors (tray 2/3/4 transport) or at the feed pitch timing, whichever happens first. The paper is then fed through the sensor (registration) and registration roller. When the sensor (registration) detects the trailing edge of the paper, the motor (transfer 1) temporarily stops.

For printers with a 2 x 520-sheet tray module, the motor (2 x 520-sheet tray transfer) drives the tray 3 transfer roller and tray 4 transfer roller to transport paper out of the 2 x 520-sheet tray module. For printers with a 2000-sheet tandem tray module, the motor (2000-sheet tandem tray transfer) drives the tray 4 transfer rollers 1/2/3 to transport paper from tray 4.

2 x 520-sheet tray module paper feed



2 x 520-sheet tray module paper feed

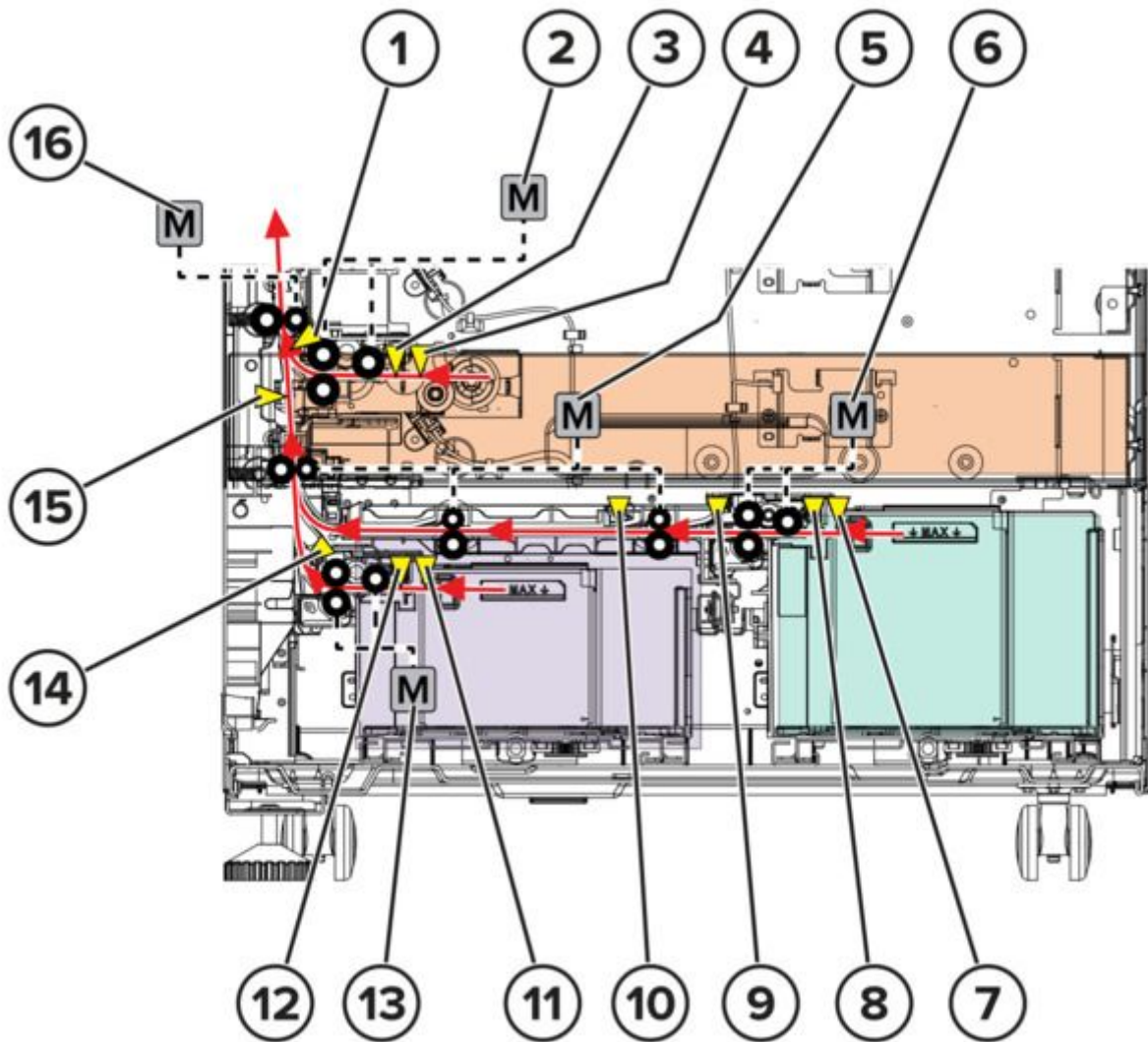
1	Sensor (tray 2 transport)
2	Motor (tray 2 pick/lift)
3	Sensor (tray 2 paper present)
4	Sensor (tray 2 pick position)
5	Motor (2 x 520-sheet tray 3 pick/lift)
6	Sensor (2 x 520-sheet tray 3 paper present)
7	Sensor (2 x 520-sheet tray 3 pick position)

Continued on page 2205

Continued from page 2204

8	Motor (2 x 520-sheet tray 4 pick/lift)
9	Sensor (2 x 520-sheet tray 4 pick position)
10	Sensor (2 x 520-sheet tray 4 paper present)
11	Sensor (2 x 520-sheet tray 4 transport)
12	Sensor (2 x 520-sheet tray 3 transport)
13	Motor (2 x 520-sheet tray transfer)
14	Sensor (2 x 520-sheet tray transport)
15	Motor (transfer 2)

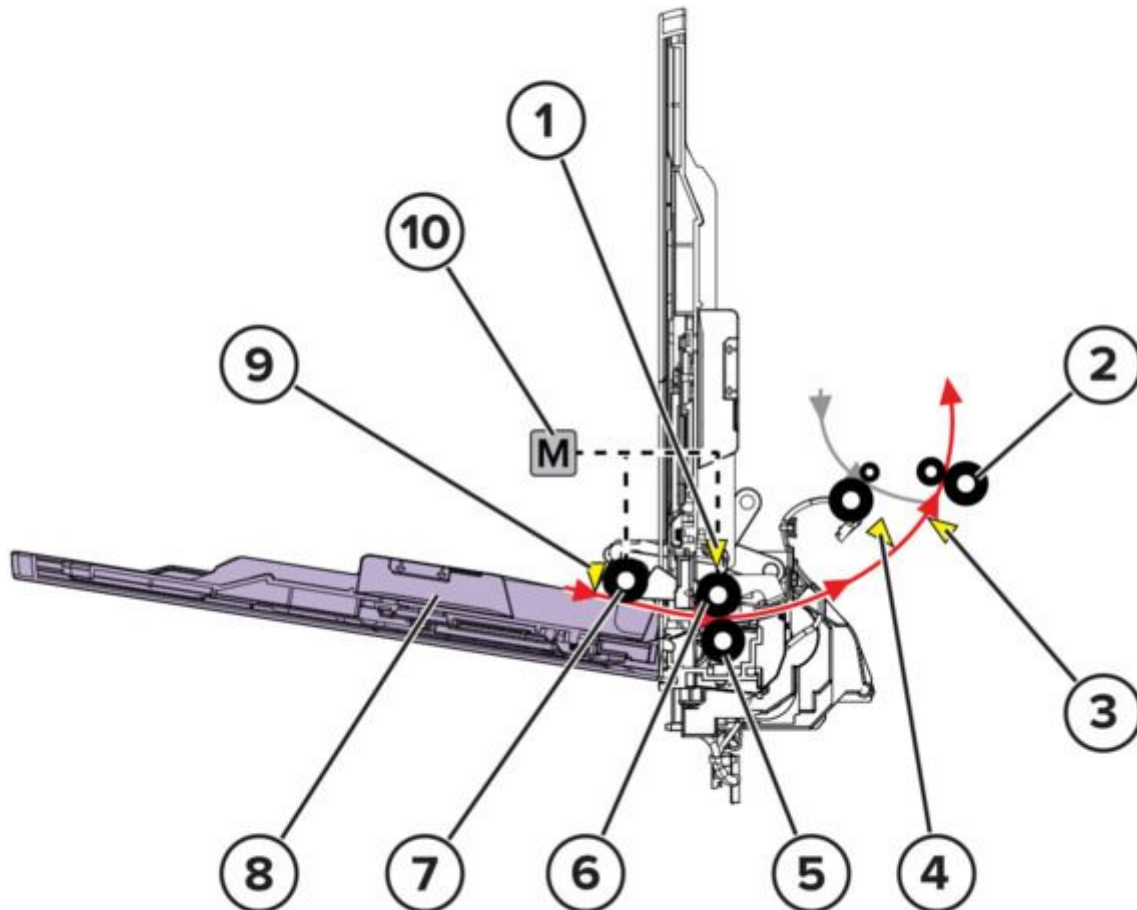
2000-sheet tandem tray module paper feed



2000-sheet tandem tray module paper feed

1	Sensor (tray 2 transport)
2	Motor (tray 2 feed)
3	Sensor (tray 2 paper present)
4	Sensor (tray 2 pick position)
5	Motor (2000-sheet tandem tray transfer)
6	Motor (2000-sheet tandem tray 4 feed)
7	Sensor (2000-sheet tandem tray 4 pick position)
8	Sensor (2000-sheet tandem tray 4 paper present)
9	Sensor (2000-sheet tandem tray 4 transport)
10	Sensor (2000-sheet tandem tray transport 1)
11	Sensor (2000-sheet tandem tray 3 pick position)
12	Sensor (2000-sheet tandem tray 3 paper present)
13	Motor (2000-sheet tandem tray 3 feed)
14	Sensor (2000-sheet tandem tray 3 transport)
15	Sensor (2000-sheet tandem tray transport 2)
16	Motor (transfer 2)

MPF tray paper feed



MPF tray paper feed

1	Sensor (MPF pick position)
2	Registration roller
3	Sensor (registration)
4	Sensor (MPF transport)
5	MPF separation roller
6	MPF feed roller

Continued on page 2208

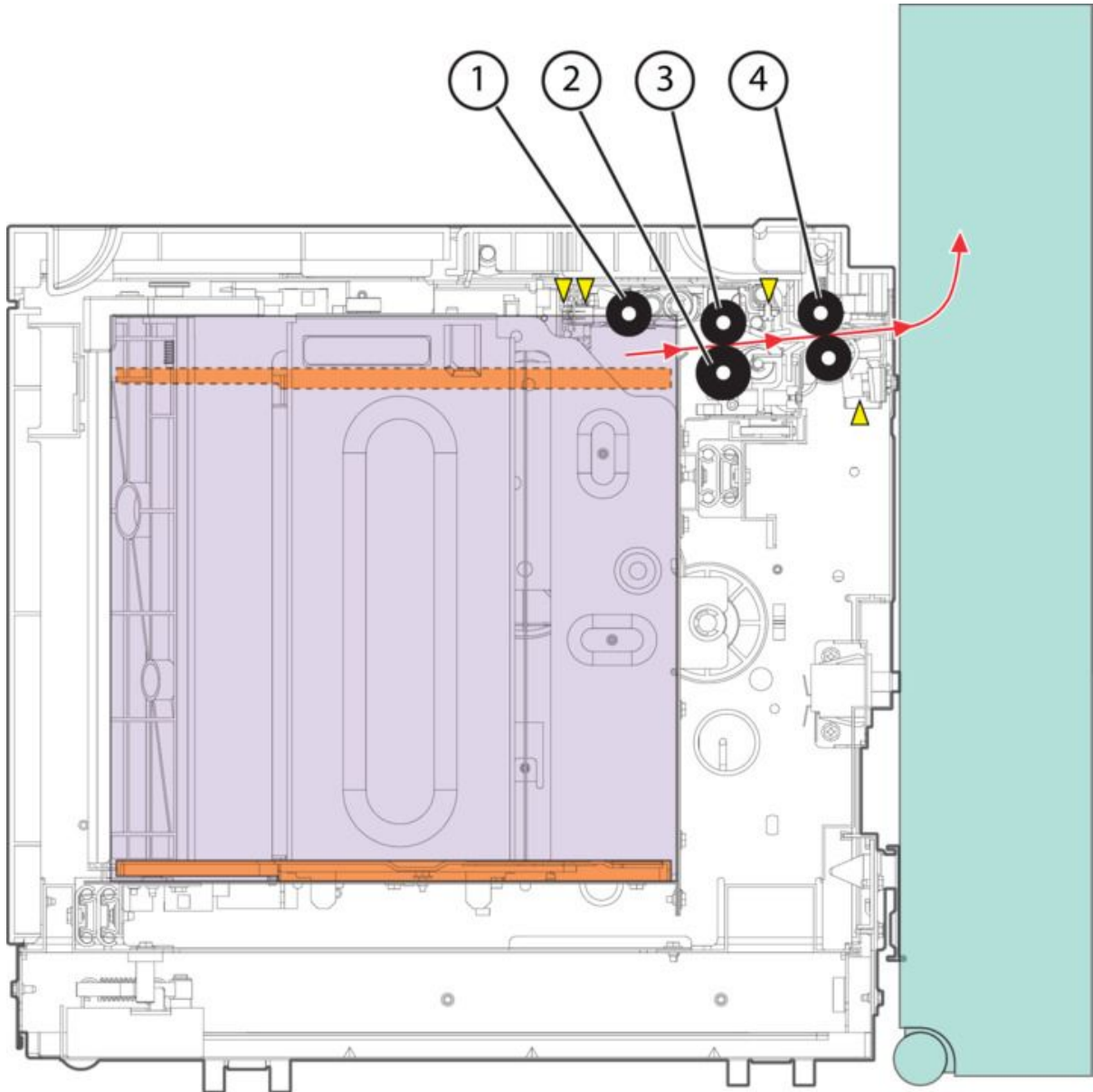
Continued from page 2207

7	MPF pick roller
8	MPF tray
9	Sensor (MPF paper present)
10	Motor (MPF feed)

The motor (MPF feed) drives and lowers the MPF pick roller onto the paper in preparation for feeding. The motor (MPF feed) drives the MPF pick roller and MPF feed roller to transport the paper through the sensor (registration) and registration roller. The MPF separation roller ensures that only one sheet is fed at a time. The motor (MPF feed) stops after a designated period when the sensor (MPF transport) detects the trailing edge of the paper. The next sheet is fed after the trailing edge of the previous sheet passes through the sensor (MPF transport).

Optional 2000-sheet tray

2000-sheet tray paper path rollers and sensors layout



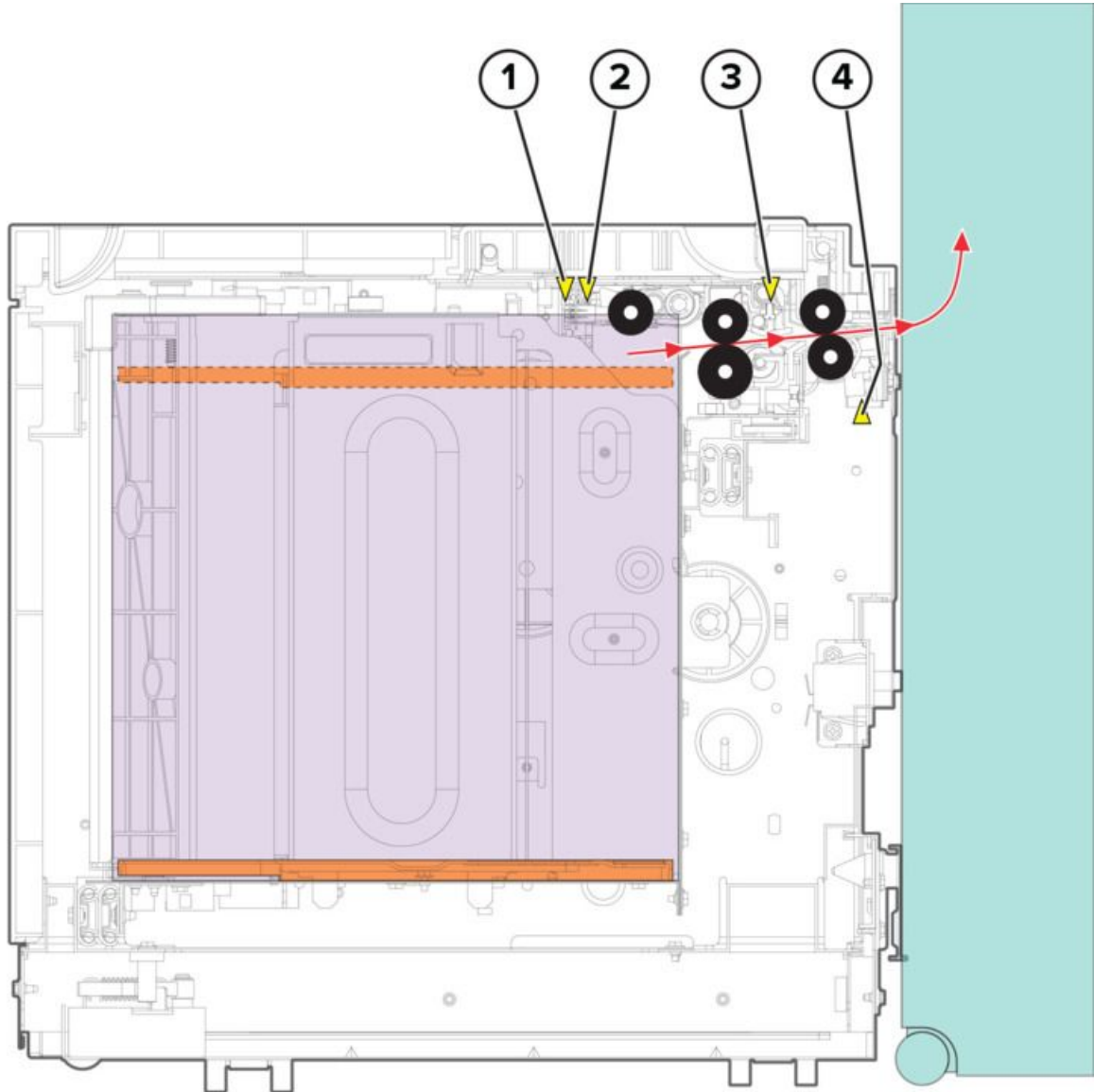
2000-sheet tray paper path rollers

#	Roller	Function
1	Pick roller	Picks the topmost paper to the feed roller.
2	Separator roller	Makes sure that only one sheet is fed at a time.

Continued on page 2210

Continued from page 2209

#	Roller	Function
3	Feed roller	Sends paper from the pick roller to the transport roller.
4	Transport roller	Pushes paper out of the tray.



2000-sheet tray paper path sensors

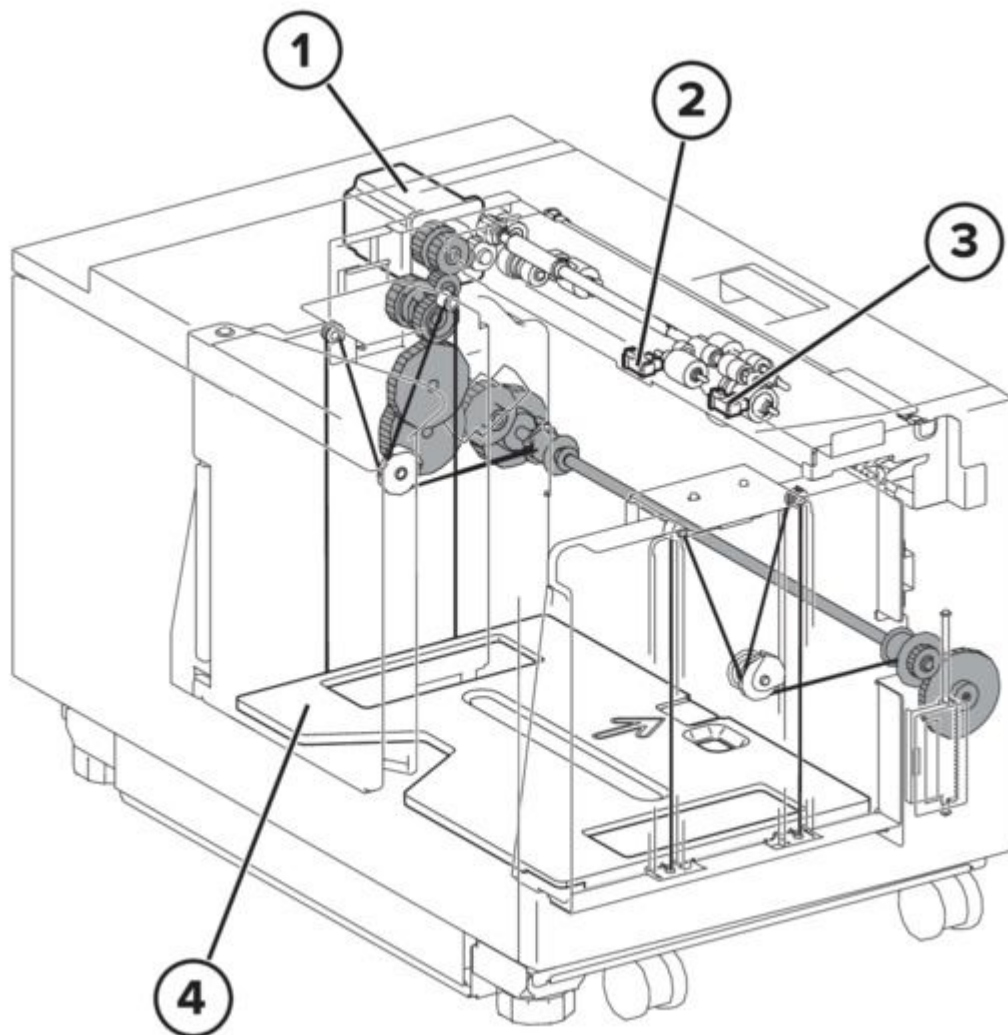
#	Sensor	Function
1	Sensor (pick position)	Detects if the pick roller is in the pick position.

Continued on page 2211

Continued from page 2210

#	Sensor	Function
2	Sensor (paper present)	Detects paper presence in the tray.
3	Sensor (feed)	Detects paper from the feed roller.
4	Sensor (transport)	Detects paper as it passes the transport roller.

2000-sheet tray elevation drive



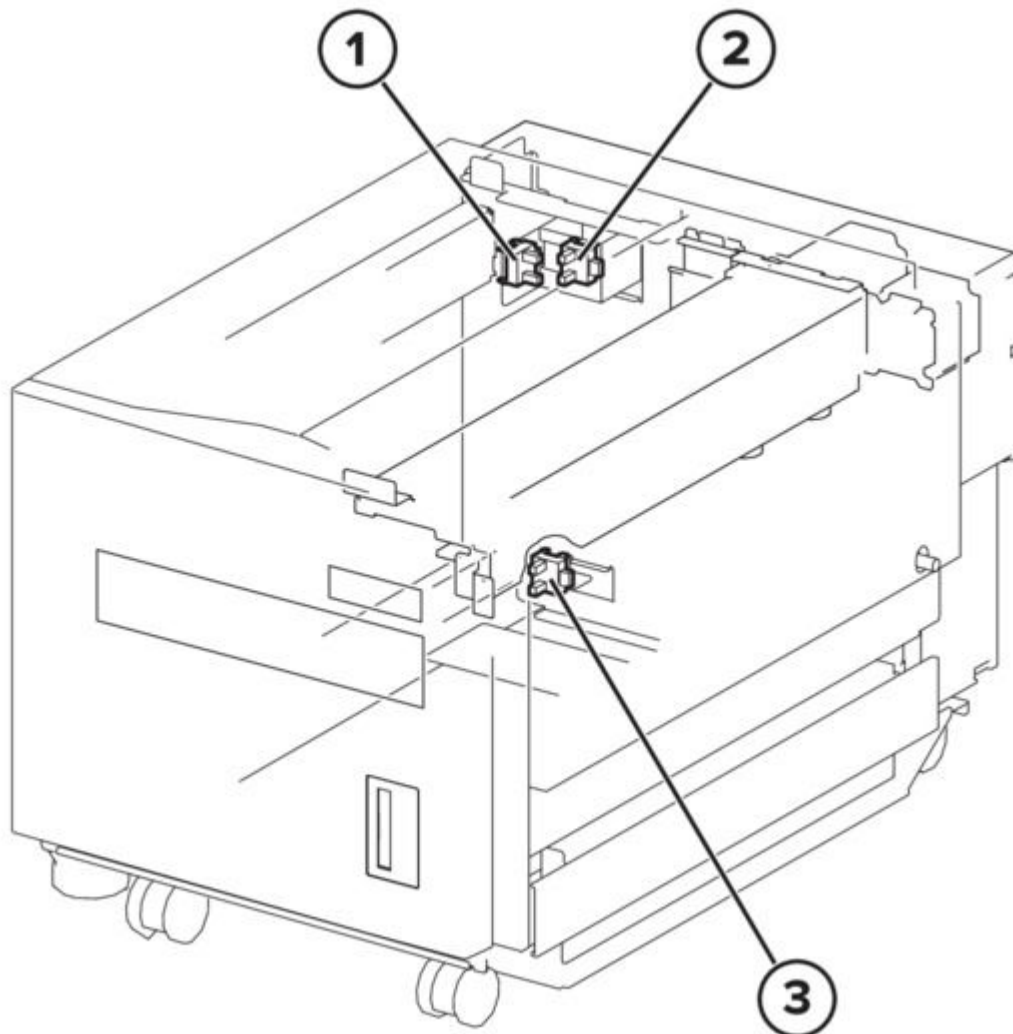
HCF elevation drive

1	Motor (pick/lift)
2	Sensor (pick position)
3	Sensor (paper present)
4	Elevator plate

In preparation for picking, the elevator plate raises to push the paper against the pick roller.

The motor (pick/lift) drives a network of cables and pulleys to control the movement of the elevator plate.

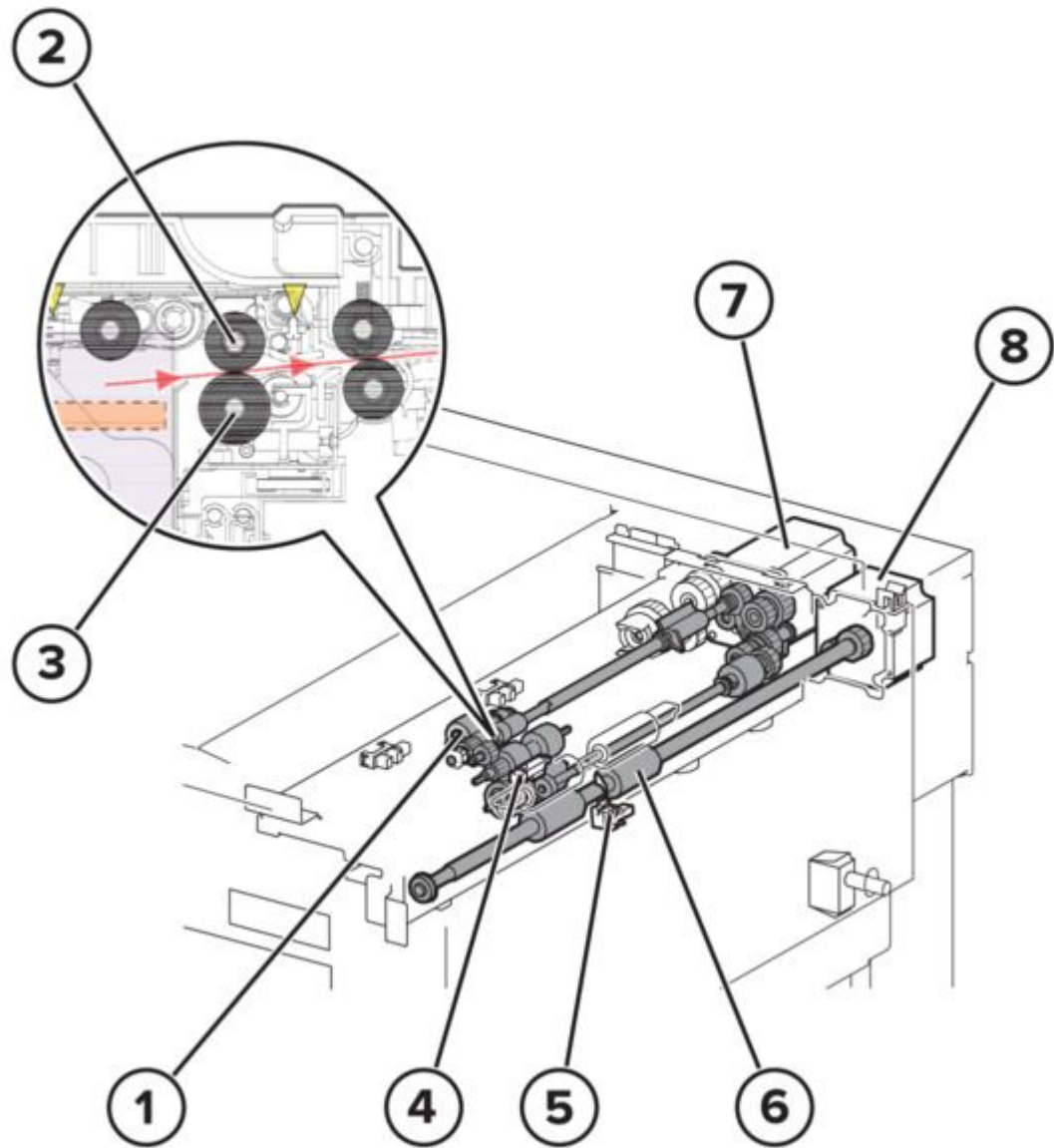
2000-sheet tray pick and transport drive



HCF tray pick

1	Sensor (paper size, letter)
2	Sensor (paper size, A4)
3	Sensor (tray present)

Before the paper is picked, the sensor (paper present) detects if the tray is empty. Paper guide positions are also detected to determine paper size.



HCF transport drive

1	Pick roller
2	Feed roller
3	Separator roller
4	Sensor (feed)
5	Sensor (transport)
6	Transport roller
7	Motor (pick/lift)
8	Motor (transport)

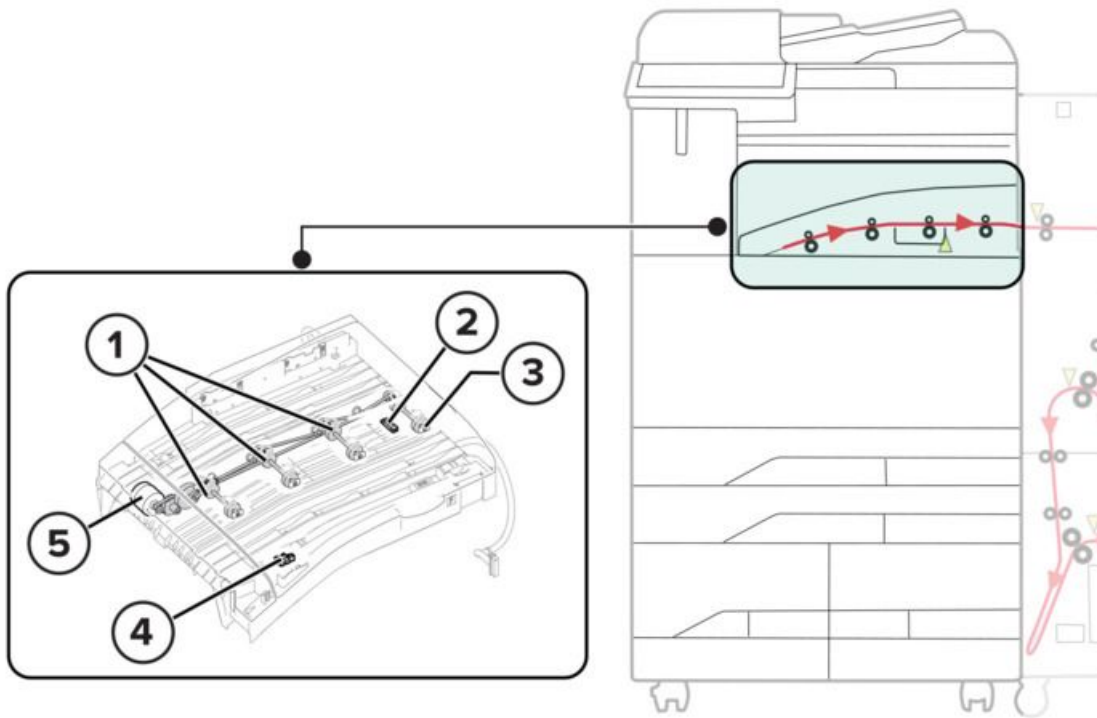
Theory of operation

The pick roller is lifted by the elevator plate until it triggers the sensor (pick position). At the pick position, the pick roller rotates to pick the topmost paper. The motor (pick/lift) drives the pick roller and the feed roller.

To avoid multiple sheet picking, the friction from the separator roller prevents the extra sheet from entering the printer.

The picked paper is then passed to the transport roller of the tray on the right. The motor (transport) drives the transport roller of the 2000-sheet tray.

Horizontal paper transport (HPT)



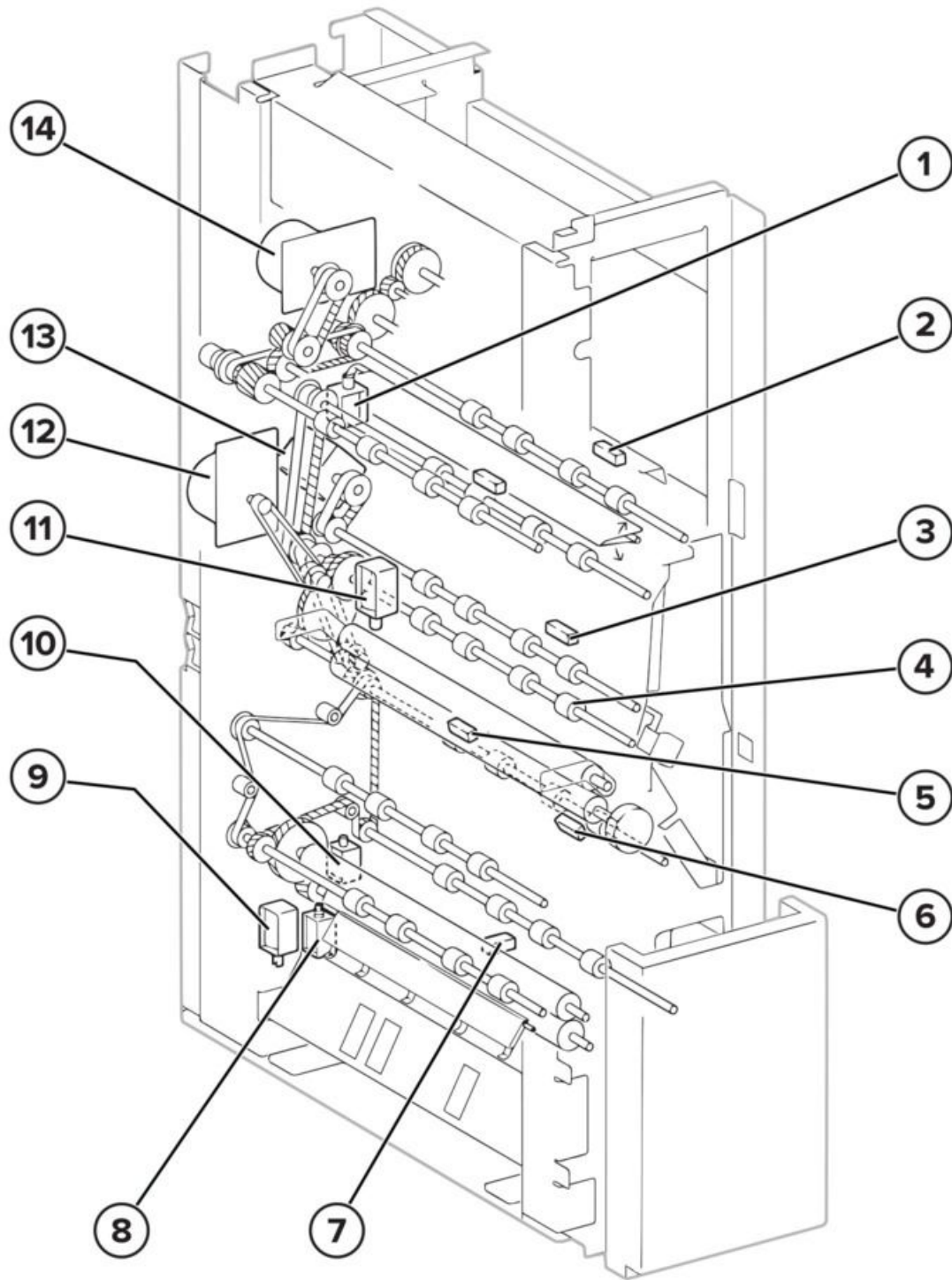
HPT

1	HPT transport rollers
2	HPT feed roller
3	Sensor (HPT feed/exit)
4	Sensor (HPT cover open)
5	Motor (HPT transport)

The motor (HPT transfer) drives the HPT transport rollers and HPT exit roller. The HPT transport rollers and HPT exit roller transport paper from the printer into the finisher. The sensor (HPT cover open) detects when the HPT cover is open. The sensor (HPT feed/exit) detects paper presence and paper transport to the finisher.

Trifold/Z-fold finisher (C-fold and Z-fold)

Folder components



Folder components

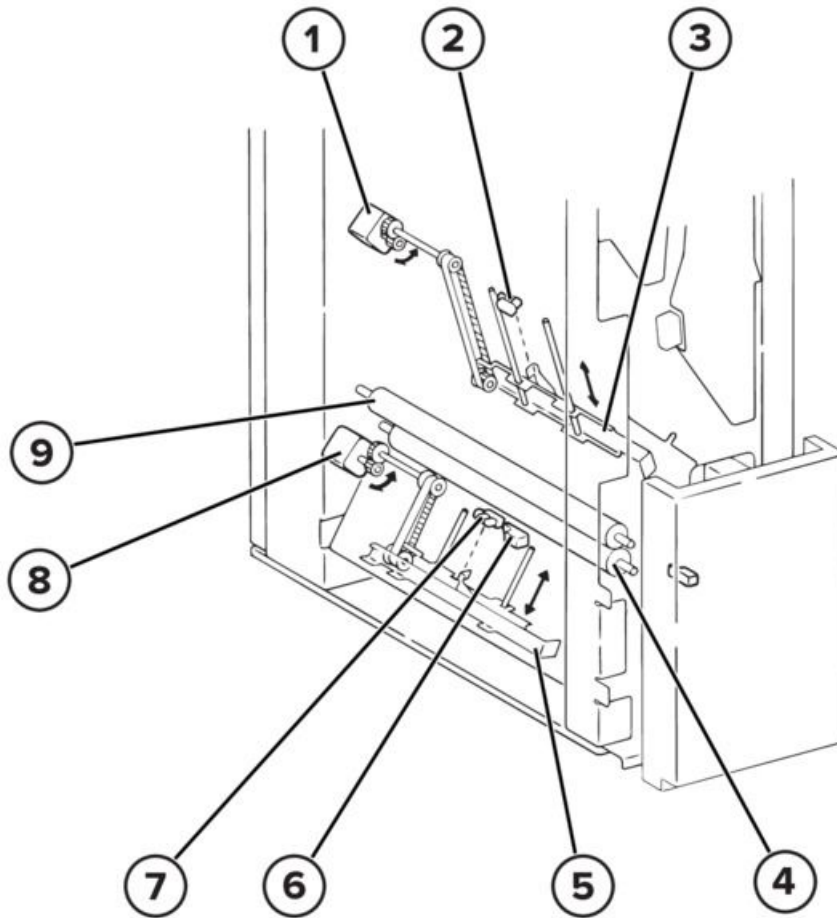
1	Diverter solenoid
2	Sensor (folder exit)
3	Sensor (folder path 1)
4	Folder exit roller
5	Sensor (folder path 2)
6	Sensor (folder path 4)
7	Sensor (folder path 3)
8	C-fold solenoid
9	Bin lock solenoid
10	Bin diverter solenoid
11	Roller release solenoid
12	Motor (folder transport 2)
13	Motor (folder transport 1)
14	Motor (folder feed)

The diverter solenoid opens the gate so paper is moved into the folder. The other solenoids enable the paper to be transported throughout the folding operation. The motors drive different parts of the folder.

The sensors (folder path) detect paper jam at different sections of the folder. The sensor (folder exit) detects if paper has passed through the folder.

For an overview of the folding process, see [See "Folder operation" on page 2221](#).

Folder end guide components



Folder end guide components

1	Motor (upper end guide)
2	Sensor (upper end guide)
3	Upper end guide
4	Lower folding roller
5	Lower end guide
6	Sensor (envelope tray full)
7	Sensor (lower end guide)
8	Motor (lower end guide)

Continued on page 2220

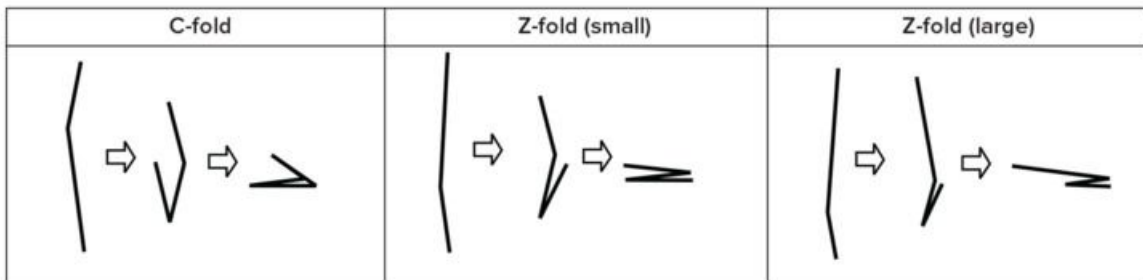
Continued from page 2219

9	Nip roller
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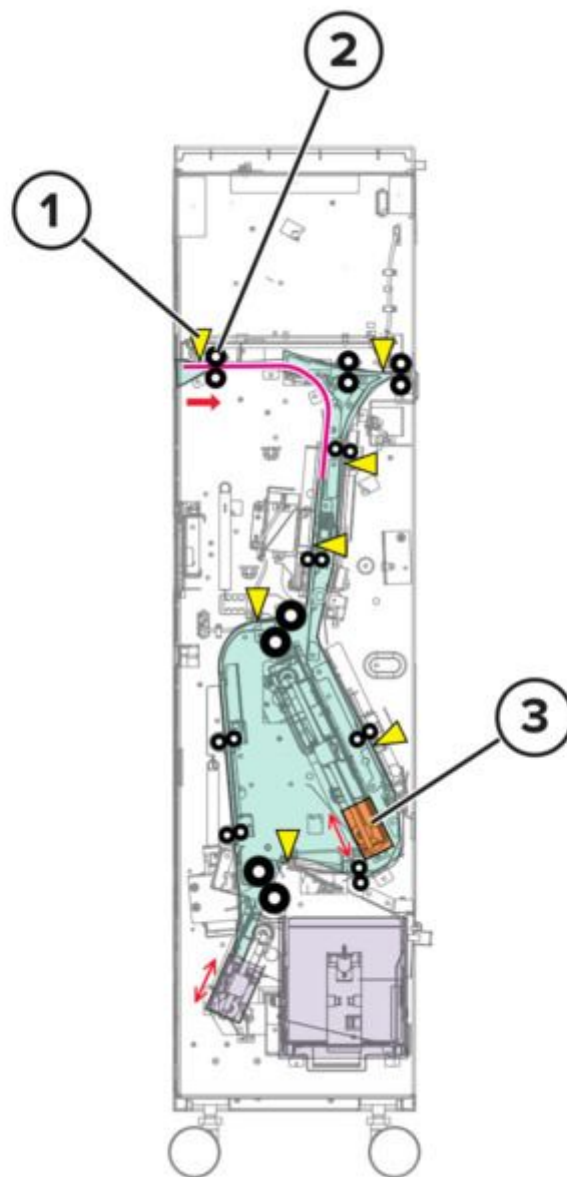
The motors raise and lower the upper end guide and the lower end guide. The sensors (guide) detect whether the upper or lower end guide is at the home position. The sensor (envelope tray full) detects if the tray is full of paper.

For an overview of the folding process, see [See "Folder operation" on page 2221](#).

Folder operation



The folder folds the paper in three patterns: C-fold , Z-fold (small), and Z-fold (large).

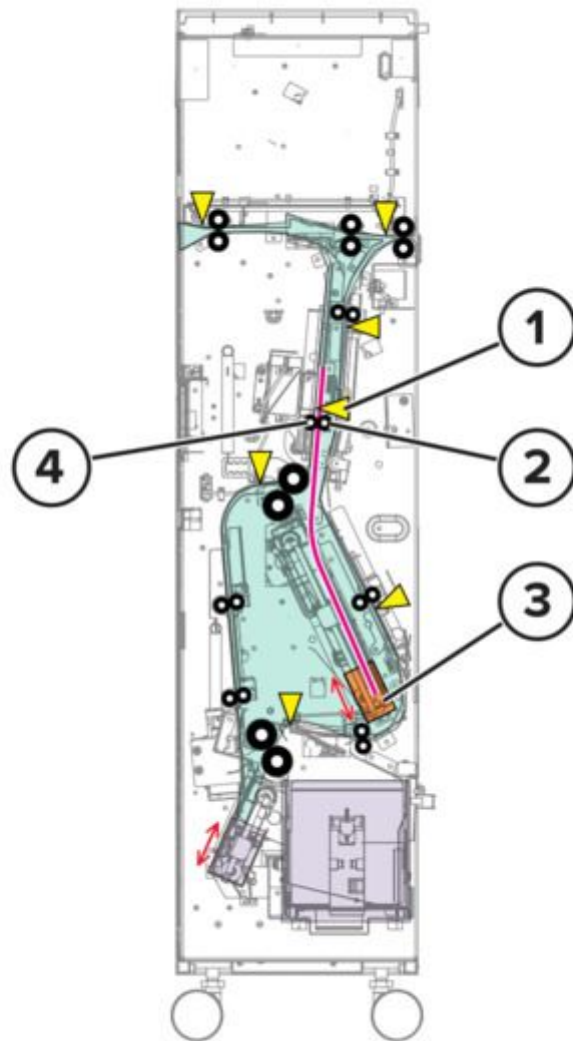


Folder paper path 1

1	Folder entrance roller
2	Diverter solenoid gate
3	Upper end guide

Paper from the HPT is transported through the folder entrance roller. If a folding job is selected, then the diverter solenoid gate is opened to the folder, and then the paper is transported to the upper end guide. The height of the upper end guide is adjusted according to the selected paper size and fold pattern.

If there is no folding job selected, then the paper is transported directly into the booklet finisher.



Folder paper path 2

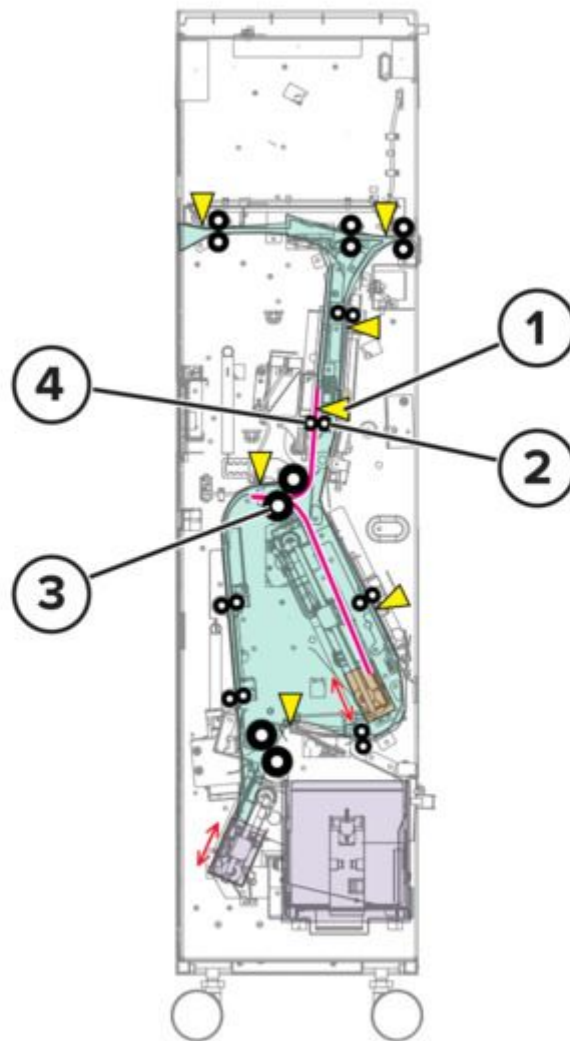
1	Roller release solenoid
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Continued on page 2223

Continued from page 2222

2	Folder transport roller 1
3	Upper end guide
4	Pinch roller

The folder transport roller 1 transports paper to the folder. The motor (folder transport 1) drives the folder transport roller until the paper reaches the upper end guide. During transport, the roller release solenoid is pulled out momentarily, which releases the nip between the folder transport roller 1 and the pinch roller to make a skew adjustment to the paper.



Folder paper path 3

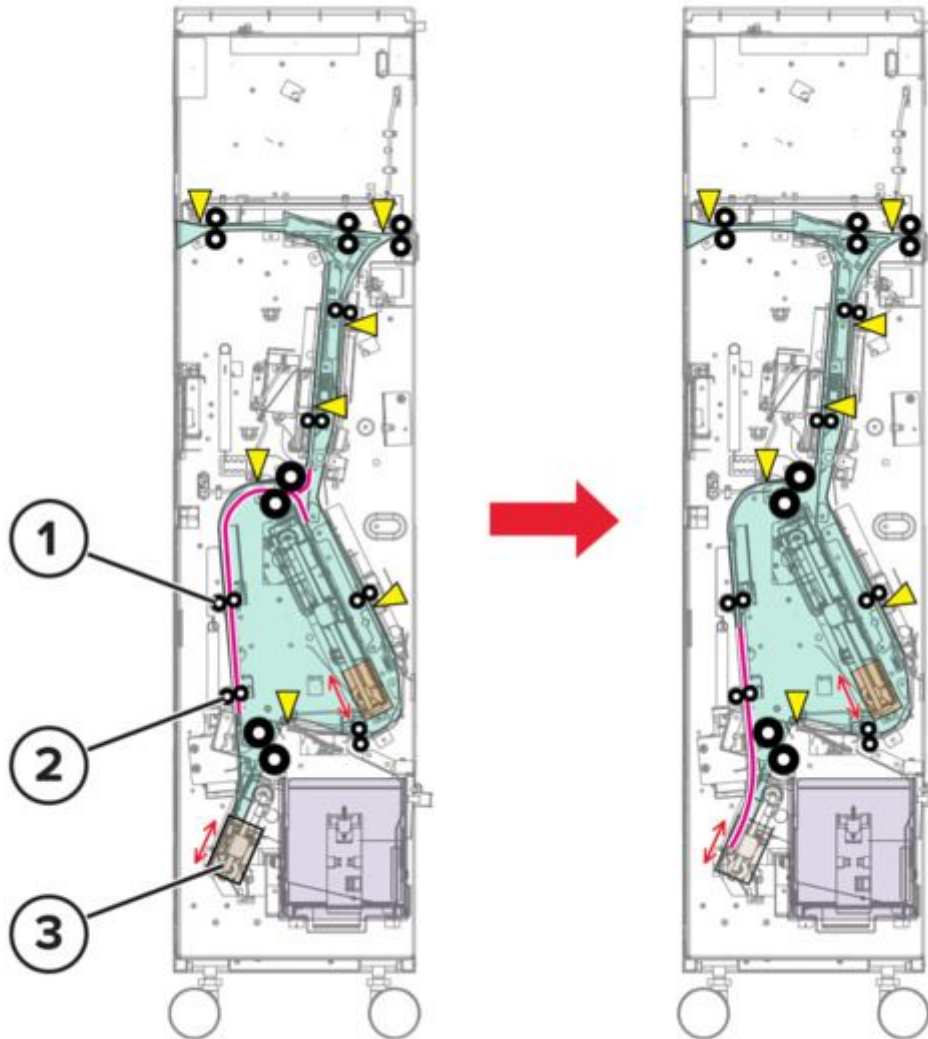
1	Roller release solenoid
2	Folder transport roller 1

Continued on page 2224

Continued from page 2223

3	Folding roller 1
4	Pinch roller

The roller release solenoid is then released, which nips the folder transport roller 1 and the pinch roller again. The paper is transported a little and forms a loop between the folding roller 1 and the nip roller. The folding roller 1, which is driven by the motor (folder transport 2), gives the paper its first fold.

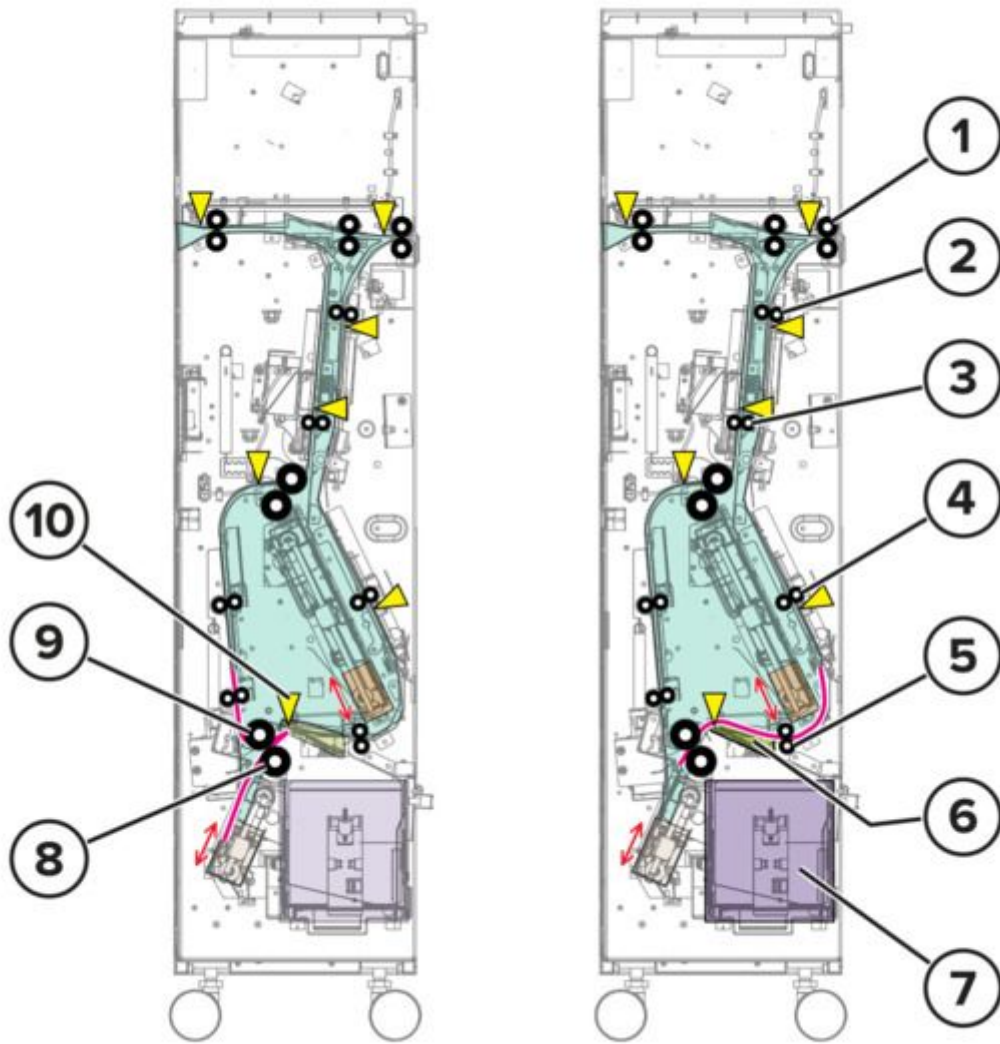


Folder paper path 4

1	Folder transport roller 2
2	Folder transport roller 3
3	Lower end guide

The paper from the first fold is transported to the lower end guide by the folder transport roller 2 and folder transport roller 3 which is driven by the motor (folder transport 2). The

height of the lower end guide is adjusted according to the selected paper size and fold pattern.



Folder paper path 5

1	Folder exit roller
2	Folder transport roller 7
3	Folder transport roller 6
4	Folder transport roller 5
5	Folder transport roller 4
6	Lower gate
7	Folder bin

Continued on page 2226

Continued from page 2225

8	Pinch roller
9	Lower folding roller
10	Bin diverter solenoid

The paper is transported further down the lower end guide which causes the paper to form a loop at the lower folding roller. The paper is drawn and folded between the lower folding roller and pinch roller as the rollers turn to transport the paper.

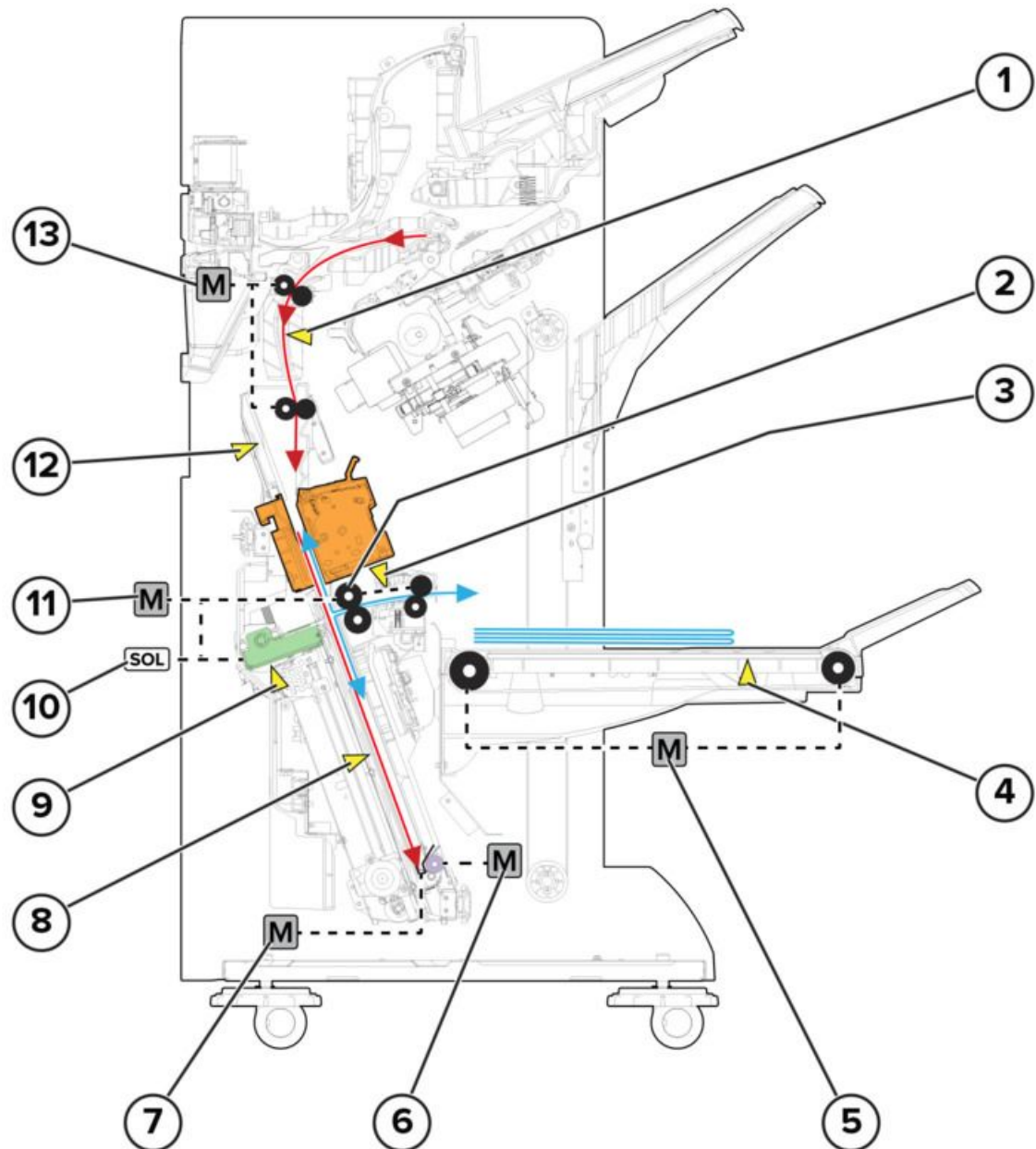
NOTES

If a C-fold is selected, then the C-fold solenoid energizes which drives the finger assembly to push the paper between the lower folding roller and the pinch roller without folding the paper.

Depending on the job selected, the folded paper is transported either to the booklet finisher or folder bin. If the job selected is to transport paper to the folder bin, then the bin diverter solenoid is opened to switch the lower gate to the folder bin. If the job selected is to transport paper to the booklet finisher, then the bin diverter solenoid is closed to switch the lower gate to the booklet finisher. The motor (folder transport 2) drives the folder transport rollers 4, 5, 6, and 7 to transport paper from the folder to the booklet finisher.

Booklet finisher

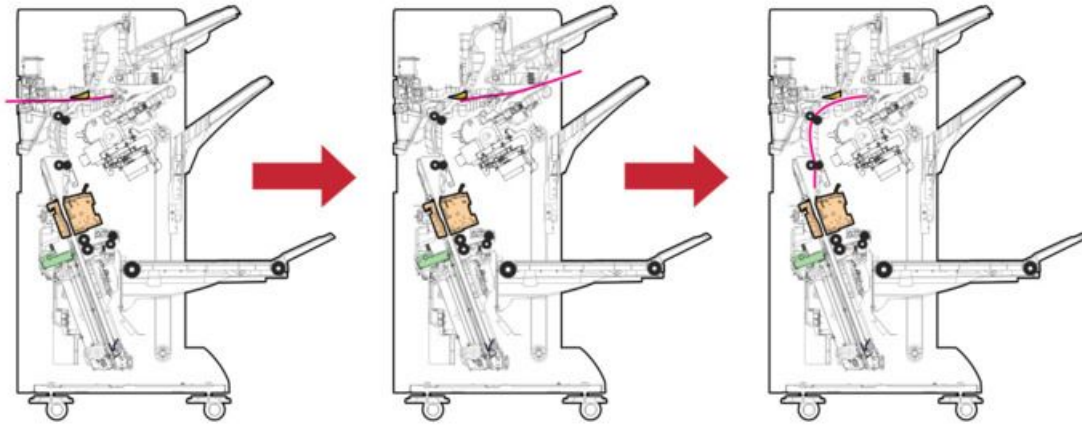
Booklet finisher components



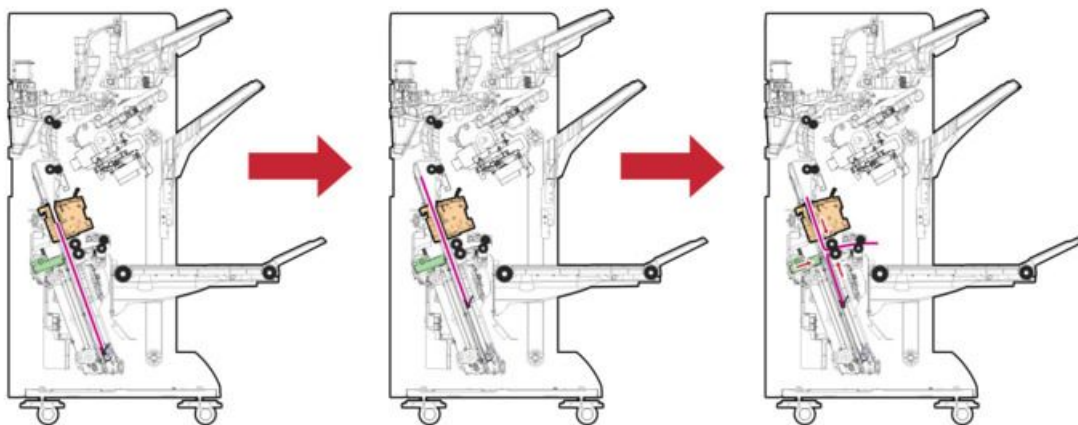
Booklet finisher components

#	Part	Description
1	Sensor (booklet feed)	Detects the paper transported to the booklet area
2	Booklet fold roller	Transports the folded paper out to the booklet tray
3	Sensor (booklet exit)	Detects paper transport out to the booklet tray
4	Sensor (booklet tray paper present)	Detects paper presence in the booklet tray
5	Motor (booklet bin belt)	Drives the booklet tray paper transport belt
6	Motor (booklet paddle)	Drives the paddle in the booklet area
7	Motor (booklet edge aligner)	Raises and lowers the end guide
8	Sensor (edge aligner)	Detects the end guide at its home position
9	Sensor (bifold knife)	Detects when the bifold knife is at its home position
10	Booklet bifold knife solenoid	Transmits the drive of the motor (booklet fold) to the bifold knife
11	Motor (booklet fold)	Drives the booklet fold roller, exit roller, and bifold knife
12	Sensor (booklet compiler paper present)	Detects paper presence in the compiler tray
13	Motor (exit)	Drives the booklet feed roller and tray feed roller

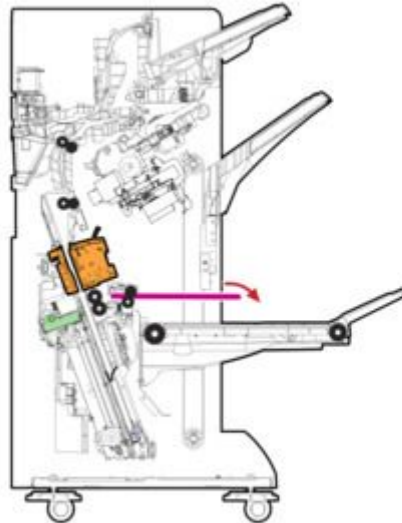
Booklet finisher operation



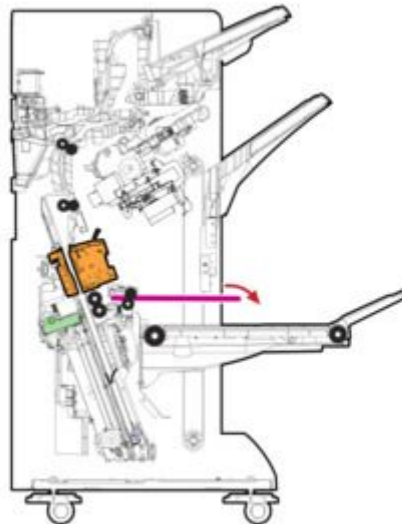
The punched paper passes through the transport gate and is then transported to the compiler. When the sensor (booklet feed) detects the paper, the motor (transport) rotates in reverse to feed the paper into the booklet area.



The motor (booklet paddle) drives the paddle to transport the paper into the booklet area. The paper is pushed against the end guide. When one sheet enters the compiler, the motor (booklet tamper) drives the rear and front tampers to compile the sheets. After the specified number of sheets are transported and compiled in the compiler, the end guide raises until the staple position of the staple head in the stapler assembly divides the paper in half. The sheets are stapled at the position. The end guide is driven until the staple position is in the fold position. The booklet bifold knife solenoid is energized, and then the motor (booklet fold) drives the knife. The knife sticks out and pushes the paper toward the booklet fold roller to fold the paper.



The folded paper is fed to the booklet tray through the booklet fold roller and the booklet exit roller that is driven by the motor (booklet fold).



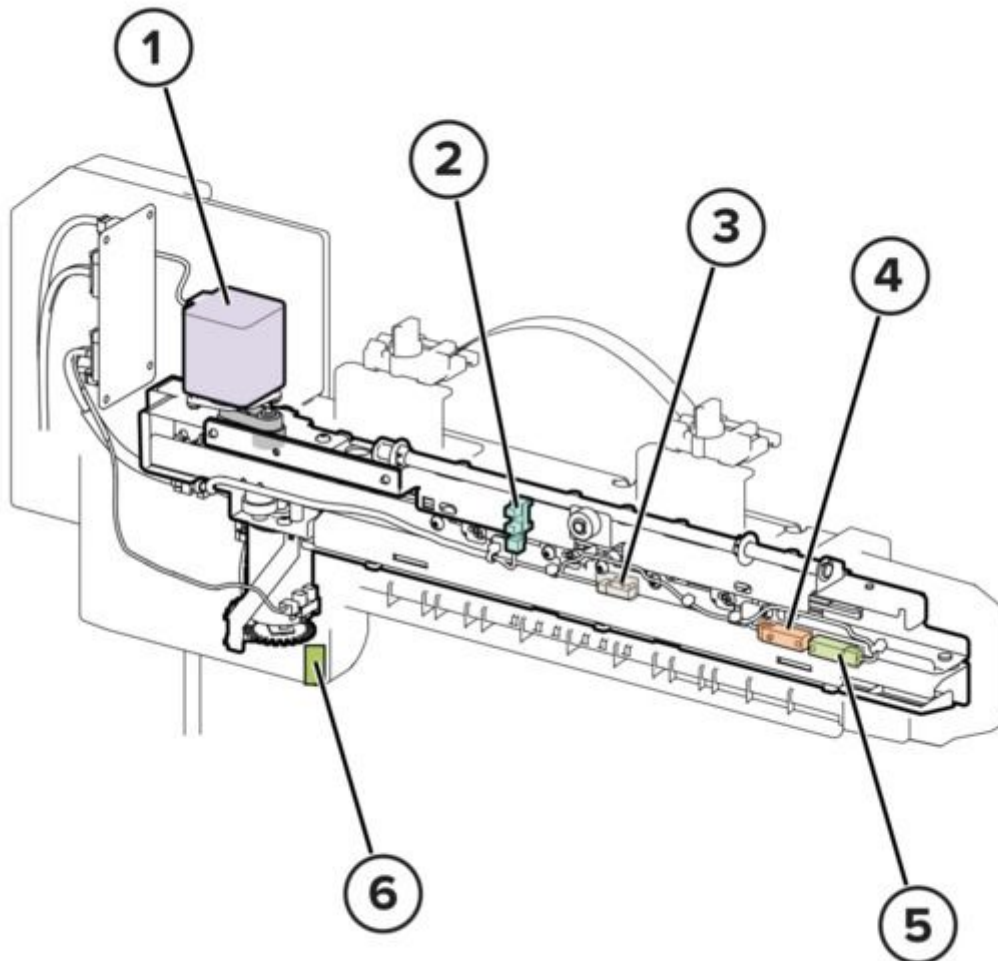
When the sensor (booklet exit) is triggered, the motor (booklet bin belt) starts stacking the sheets. Every time a single set of sheets is ejected and stacked on the tray, the motor (booklet bin belt) drives the booklet bin belt for a certain amount of time. The timing of starting and stopping the paper stacking operation varies depending on the number of folded sheets per set and the size of unfolded paper.

Puncher

Puncher

The puncher has two types: the two-three hole puncher and the two-four hole puncher.

Puncher components

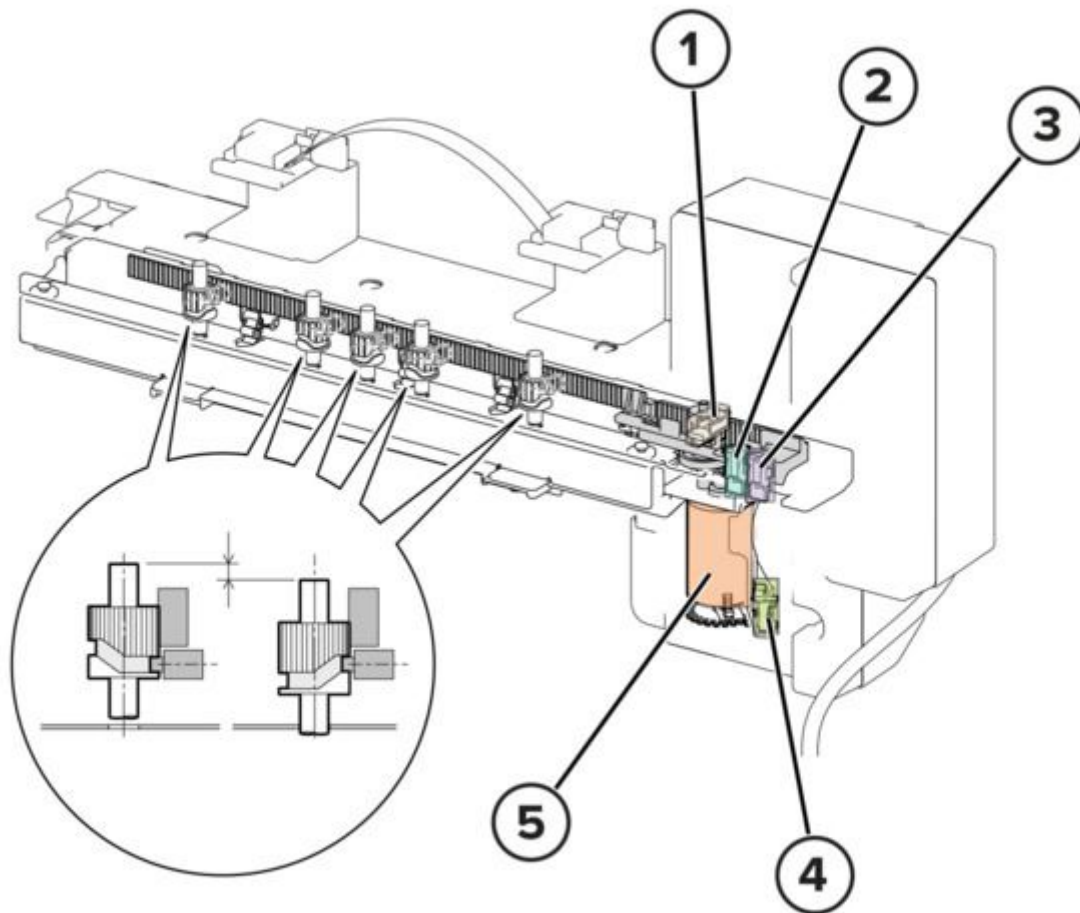


Puncher components

1	Motor (punch position)
2	Sensor (puncher A4 home)
3	Sensor (puncher registration adjust)
4	Sensor (edge detect 2)
5	Sensor (edge detect 1)
6	Sensor (hole punch box)

Theory of operation

The motor (punch position) drives the hole punch unit. When A4 is selected, the sensor (puncher A4 home) detects when the punch unit is at the home position. The sensor (edge detect 1) and sensor (edge detect 2) detect the paper width. The sensor (puncher registration adjust) triggers the registration of the paper that has reached the puncher. The sensor (hole punch box) detects the presence of the dust box that holds the puncher waste.



Puncher area components

1	Sensor (puncher home)
2	Sensor (puncher front)
3	Sensor (punch hole select)
4	Sensor (punch position)
5	Motor (puncher)

Theory of operation

The motor (puncher) drives the puncher assembly. The sensor (punch position) detects the number of rotations that the motor (puncher) performs based on the bottom cut-out that rotates with the rotating motor. The sensor (puncher home) detects when the puncher is at the home position when punching. The sensor (puncher front) detects the position of the puncher when the printer starts printing. The puncher stays at the position where it punched last, and then determines whether to move to the front or rear based on the state of the sensor (puncher front). The sensor (punch hole select) detects the switching between two-three hole and two-four hole punching.

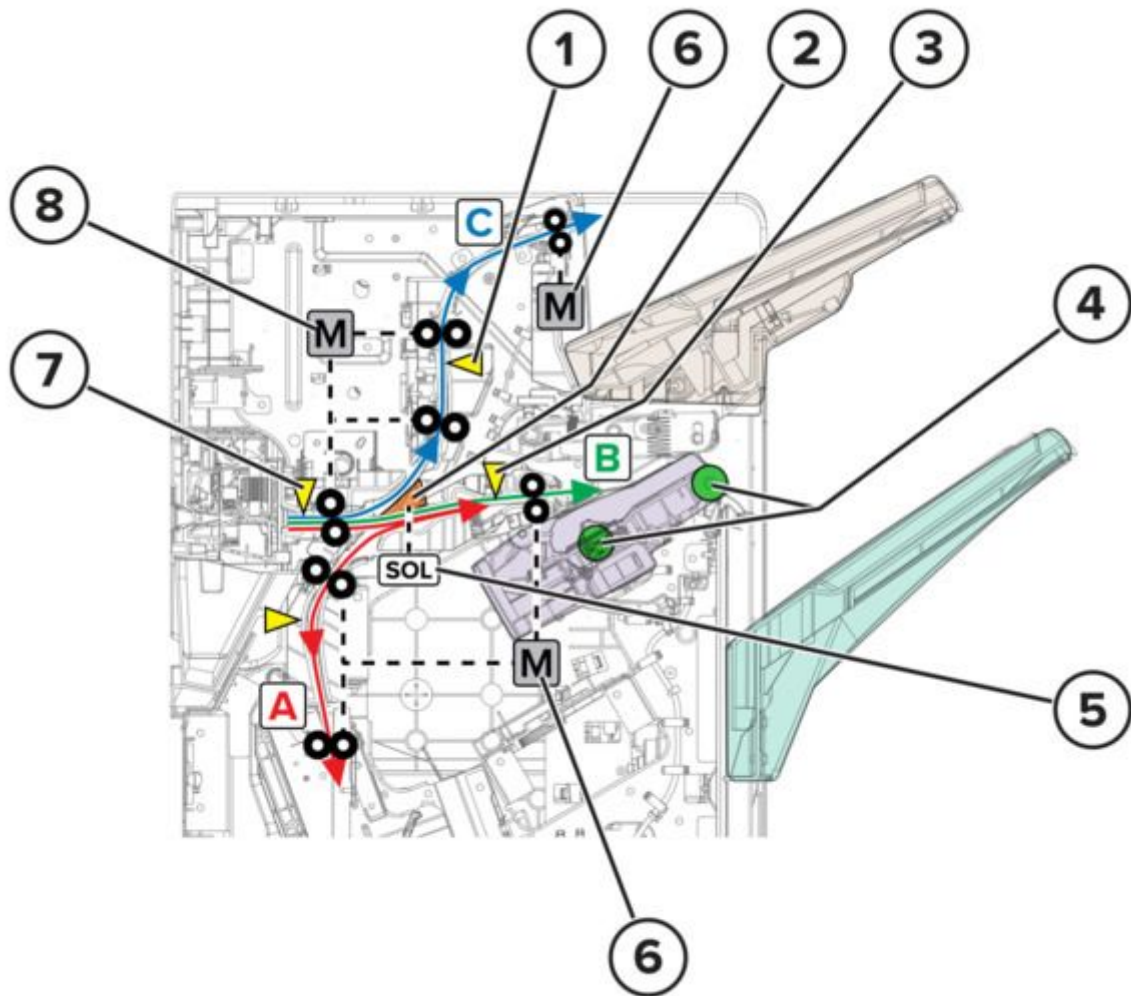
Puncher operation

Based on a combination of the on and off states of the sensor (puncher home), sensor (puncher front), and the selected number of punches, the exact punch position and operation direction are determined.

The motor (puncher) runs until the sensor (puncher home) turns off at the determined location, and the number of pulses corresponding to the number of holes in the punching operation are performed. When the sensor (puncher home) turns off, the motor keeps running until the sensor turns back on.

Number of holes	Number of pulses
2 holes	45
3 holes	52
4 holes	59

Puncher paper transport



Puncher paper transport

1	Sensor (top exit)
2	Transport gate
3	Sensor (finisher exit)
4	One-way clutch
5	Feed diverter solenoid
6	Motor (finisher exit)

Continued on page 2237

Continued from page 2236

7	Sensor (stacker feed)
8	Motor (finisher transport)

The paper is transported from the HPT or from the folder into the puncher. After the hole punch operation, the paper is transported to the top bin, stacker tray, or booklet finisher. Depending on the selected output destination of the job, the transport gate switches between these three output areas.

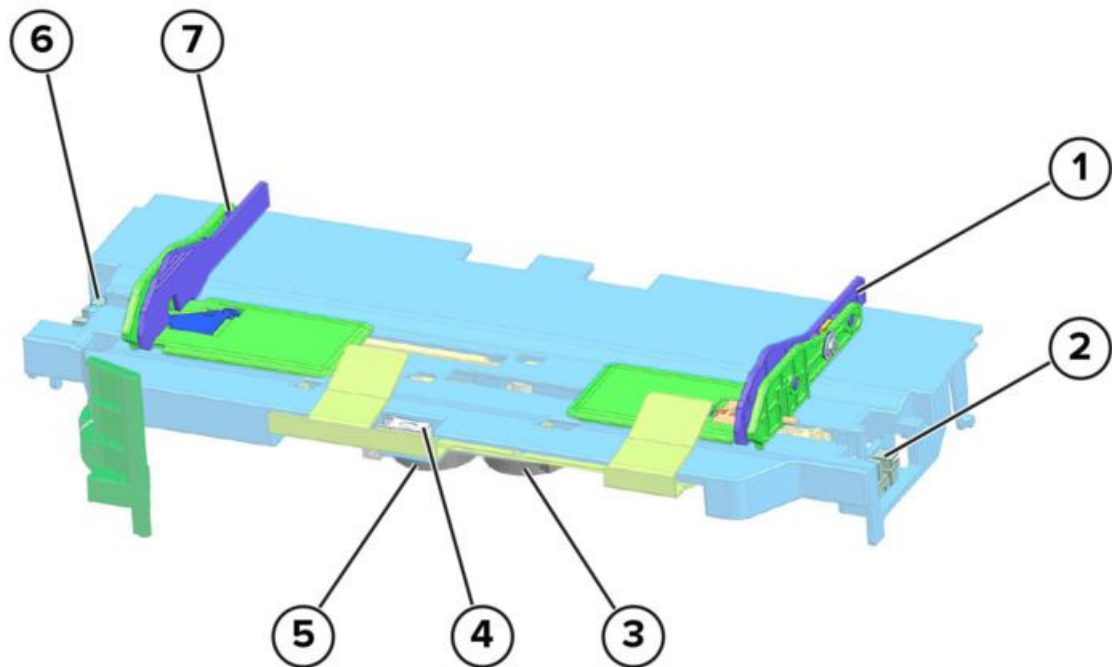
- **(A) Paper transport to the booklet finisher**—The paper from the HPT or trifold/Z-fold finisher passes through the puncher and is temporarily transported to the stacker tray by the feed diverter solenoid, which opens the transport gate. After the trailing edge of the paper passes the sensor (stacker feed), the motor (finisher exit) changes its driving direction toward the booklet path which transports the paper to the booklet finisher.
- **(B) Paper transport to the stacker tray**—The paper from the HPT passes through the puncher and is transported to the stacker tray by pushing the feed diverter solenoid. The motor (finisher exit) drives the finisher exit rollers to facilitate the paper transport into the stacker tray.
- **(C) Paper transport to the top bin**—When the feed diverter solenoid is pulled in, the transport gate changes its paper transport direction to the top tray. The motor (finisher exit) drives the top tray rollers 1 and 2 to feed paper into the top tray. The speed of the motor (finisher exit) slows down when the trailing edge of the paper passes through the sensor (top exit).

Compiler

Compiler operation

The compiler collects paper, and then performs the tamping operation to align the left and right edges of the sheets that are transported to the compiler tray until it is ready for stapling. If the stapled sheets are delivered to the same position on the stacker tray, then the stapled position may become too bulky. The bulk blocks the succeeding paper and causes the compiler to malfunction. To prevent this, the offset operation is done to shift the output position on the stacker tray to where the sheets are sent.

The motor (front tamper) drives the front tamper and the motor (rear tamper) drives the rear tamper. The sensor (rear tamper home) detects when the rear tamper is at the home position. The sensor (front tamper home) detects when the front tamper is at the home position. The sensor (compiler tray empty) detects paper presence in the compiler tray.



Compiler operation

1	Front tamper
2	Sensor (front tamper home)
3	Motor (front tamper)
4	Sensor (compiler tray empty)
5	Motor (rear tamper)
6	Sensor (rear tamper home)

Continued on page 2239

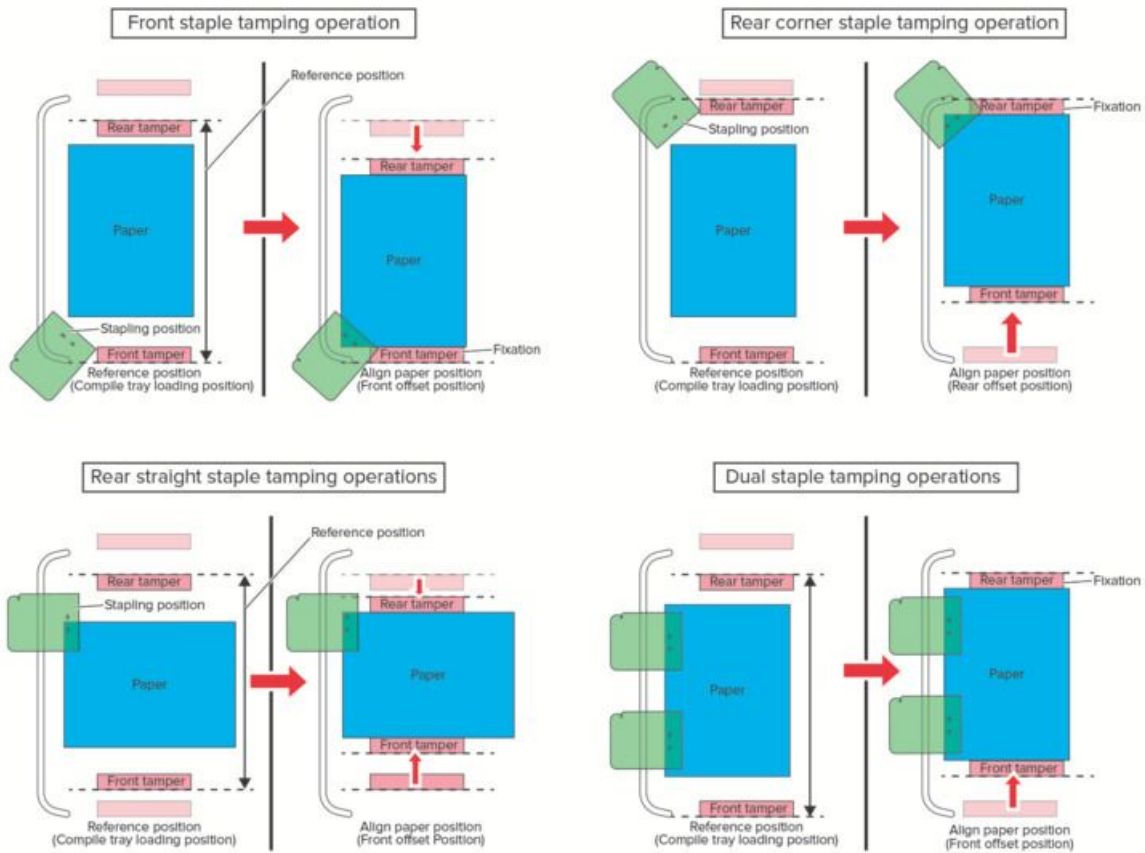
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7	Rear tamper
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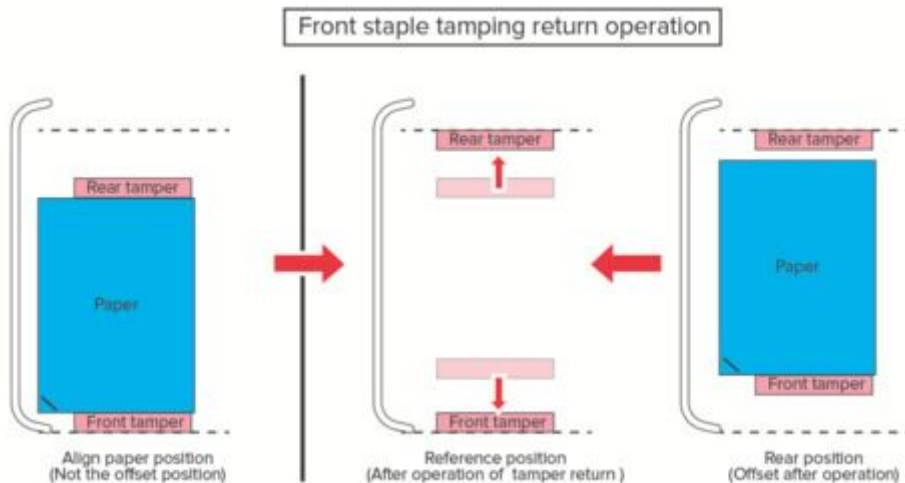
The tamper performs these four operations in each tamping cycle:

- **Home operation**—Drives the tamper and triggers the sensor (tamper home) to detect the tamper home position. If the sensor is already on, then the tamper moves to the off position before the home operation starts.
- **Size operation**—Calculates the distance that the tamper must move to the reference position according to the paper size.
- **Tamping operation**—Performs the tamping operation of the paper. Depending on the selected paper width and staple operation, the rear and front tampers operate separately.
- **Return operation**—Returns the front and rear tampers to their reference position for the tamping operation, after a set of sheets are sent from the compiler tray.

Tamping operation according to staple type



After a set of sheets are ejected from the compiler tray, the front and rear tamper return to their reference position.

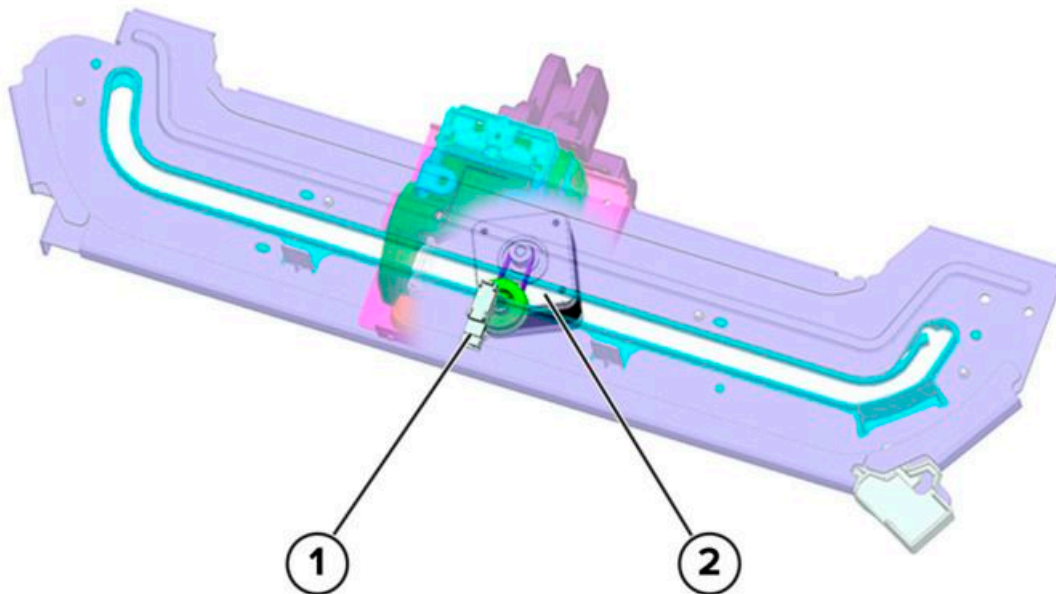


Stapler

Stapler operation

The sensor (staple unit carriage) detects when the stapler is in the home position. The motor (staple unit carriage) drives the movement of the staple head. When the motor rotates clockwise, the staple head moves to the front. When the motor rotates counterclockwise, the staple head moves to the rear.

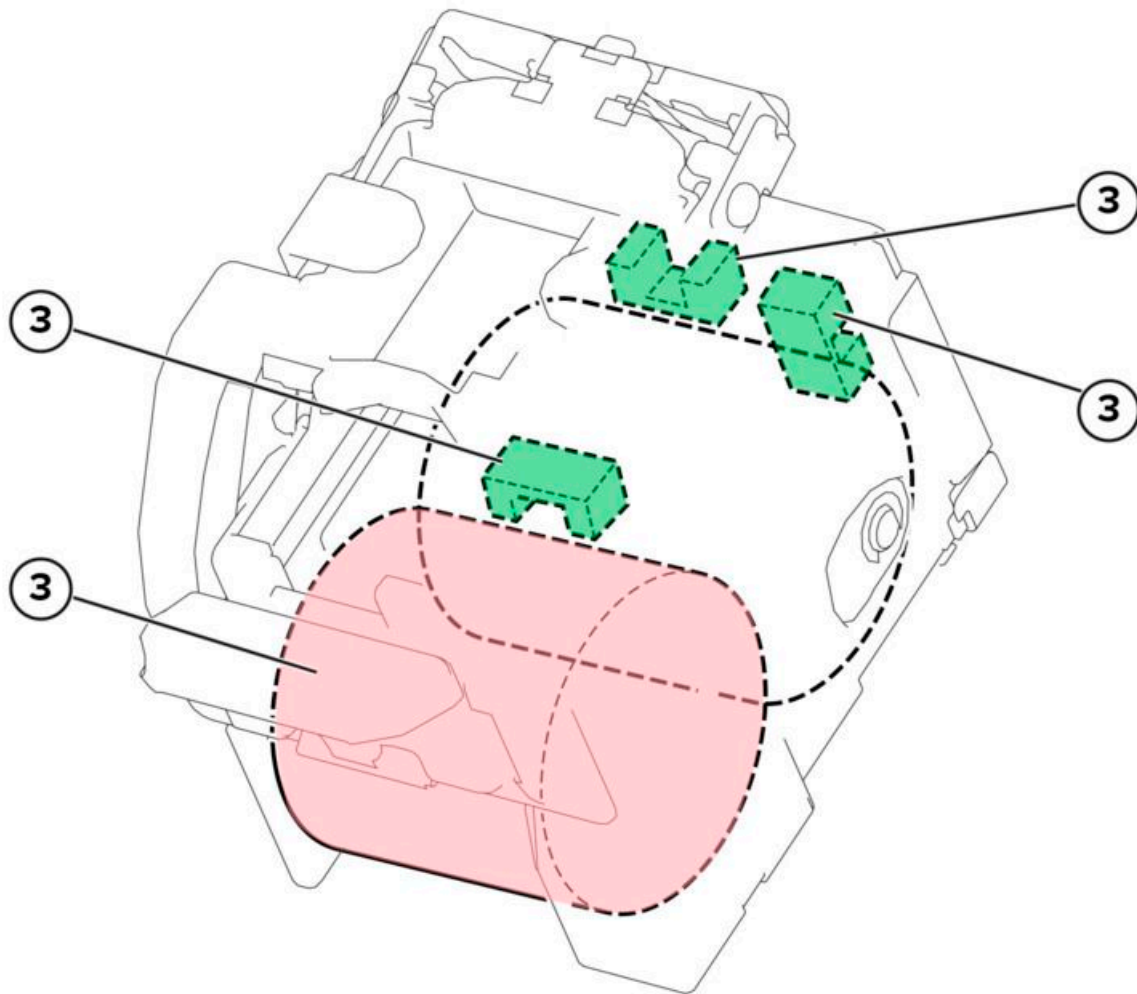
Staple carrier



Staple carrier

1	Sensor (staple unit carriage)
2	Motor (staple unit carriage)

Staple head



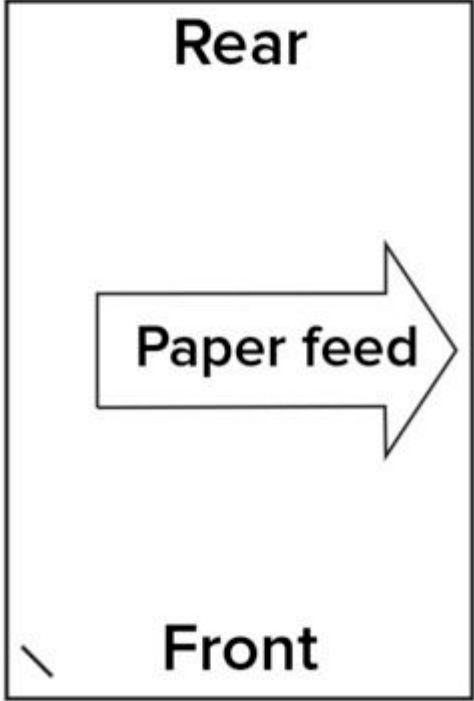
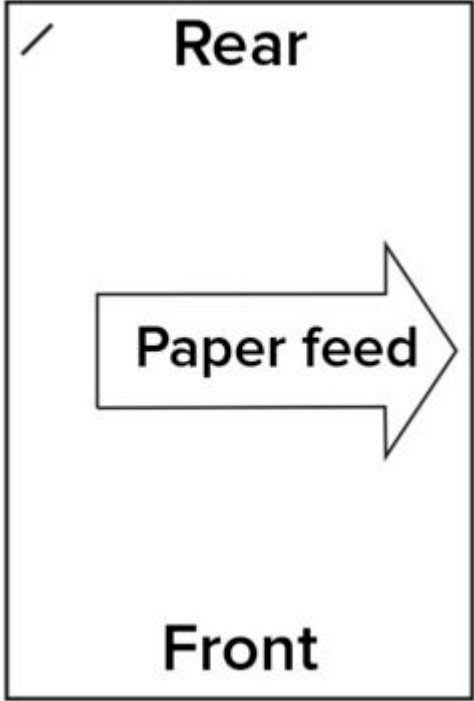
Staple head

1	Sensor (staple home)
2	Sensor (self-priming)
3	Motor (staple)
4	Sensor (stapler low)

The motor (staple) drives the staple head. When the motor (staple) rotates counterclockwise, the staple head closes to staple the sheets. After stapling, the staple head returns to its former position. If the sheets are not properly stapled, then the motor (staple) rotates clockwise to return the staple head to the home position. The sensor (stapler low) detects when staples are low. The sensor (self-priming) detects a stapling failure or when a staple reaches the staple head. The sensor (staple home) detects the staple head at the home position and functions as a trigger that stops the motor (staple).

Staple positions

Staple positions

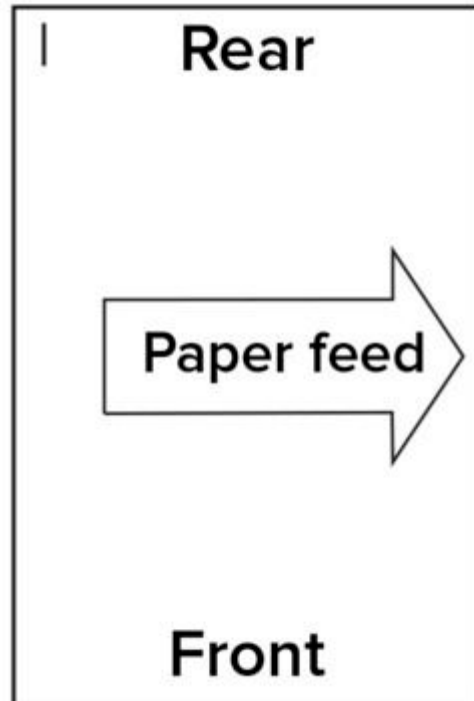
<p>Front staple (corner, front corner)</p> <ul style="list-style-type: none">• The rear tamper compiles the sheets to the front, and then the stapler staples the sheets at a 45-degree angle.	 <p>A rectangular diagram representing a sheet of paper. The top edge is labeled 'Rear' and the bottom edge is labeled 'Front'. A large arrow labeled 'Paper feed' points from the left side towards the right side. A small diagonal slash mark is located in the bottom-left corner.</p>
<p>Rear staple (corner, rear corner)</p> <ul style="list-style-type: none">• The front tamper compiles the sheets to the rear. The stapler moves to the rear corner, and then staples the sheets at a 45-degree angle.• This stapling position applies only to paper with a width of 250 mm or more.	 <p>A rectangular diagram representing a sheet of paper. The top edge is labeled 'Rear' and the bottom edge is labeled 'Front'. A large arrow labeled 'Paper feed' points from the left side towards the right side. A small diagonal slash mark is located in the top-left corner.</p>

Continued on page 2244

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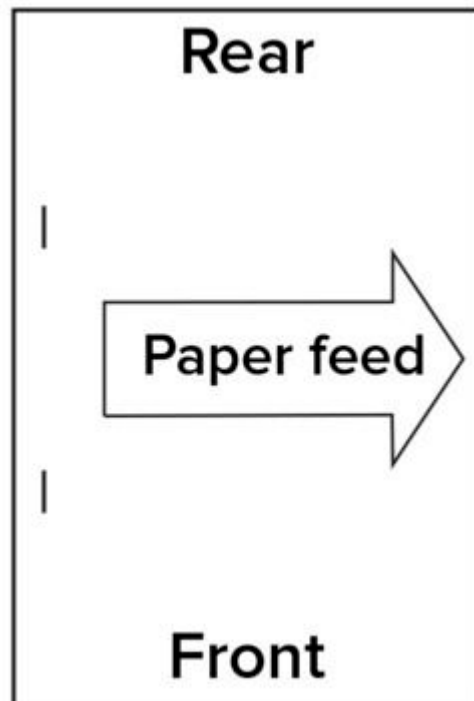
Rear staple (straight, rear straight)

- The front tamper compiles the sheets to the rear corner, and then the stapler staples in parallel with the paper edge.
- This stapling position applies only to paper with a width below 250 mm.



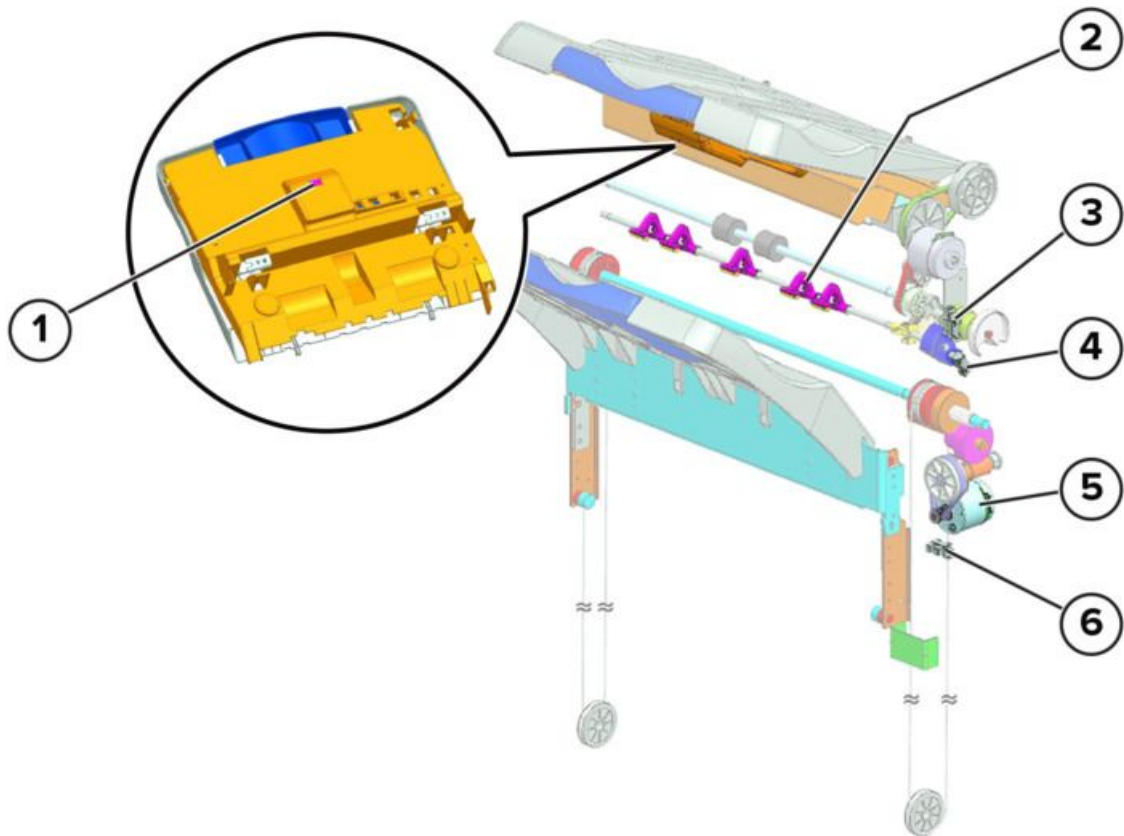
Dual staple

- The front tamper compiles the sheets to a specified position according to the paper size, and then the stapler puts in staples at the front and rear in parallel with the paper edge.
- The dual staple position is fixed.



Stacker tray

Stacker tray operation



Stacker tray operation

1	Sensor (standard bin paper present)
2	Sensor (stack height 2)
3	Sensor (stack height 1)
4	Motor (stacker)
5	Sensor (stacker bin paper present)
6	Set clamp

The raising and lowering of the stacker tray are controlled by the sensor (stack height 1) and sensor (stack height 2) so that it is set at the proper output position. The sensor (stack height 1) and sensor (stack height 2) also detect the height of the stacker tray. The sensor (standard bin paper present), which is located at the bottom of the standard bin, monitors the clearance between the position of the stacker tray and the bottom of the standard bin

Theory of operation

in order to secure enough space to hold Z-folded sheets. The sensor (stacker bin paper present) detects the lower limit and full stack paper presence on the stacker tray. the sensor (stacker bin paper present) is also used as the reference position for counting the encoder pulse of the motor (stacker).

The motor (stacker) rotates counterclockwise to lift the stacker tray. When the sensor (stack height 1) turns off, the motor (stacker) briefly stops. The motor rotates clockwise to lower the stacker tray until the sensor (stack height 1) is triggered, which then stops the motor. The set clamp prevents paper on the stacker tray from shifting, and keeps the top surface of the stacker tray at a constant height.

Staple finisher operation

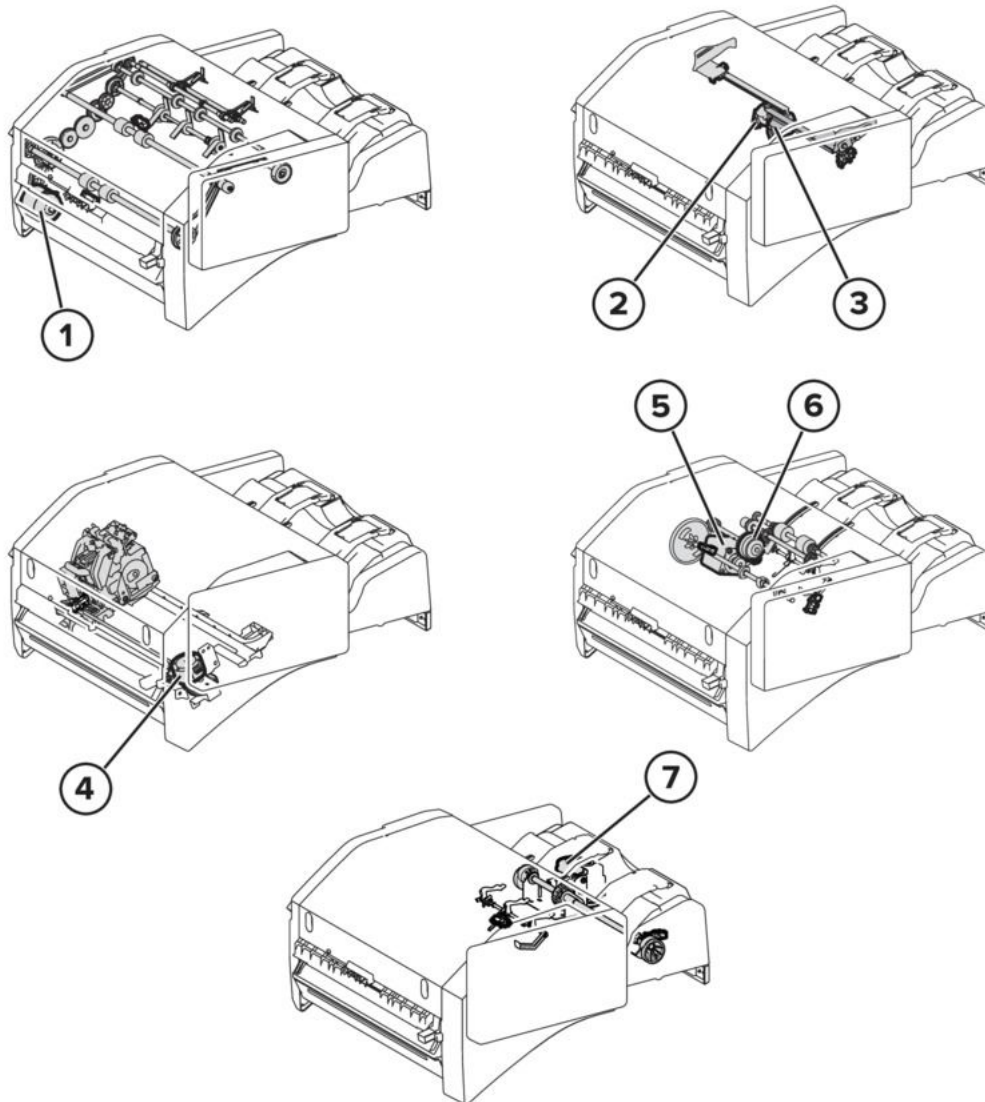
Staple finisher

The staple finisher offsets and staples the paper transported from the printer. The staple finisher consists of the following components:

- Transport
- Compiler
 - Ejector
 - Tamper
 - Stapler
- Stacker tray

Staple finisher motor and sensor components

Staple finisher motors



Staple finisher motors

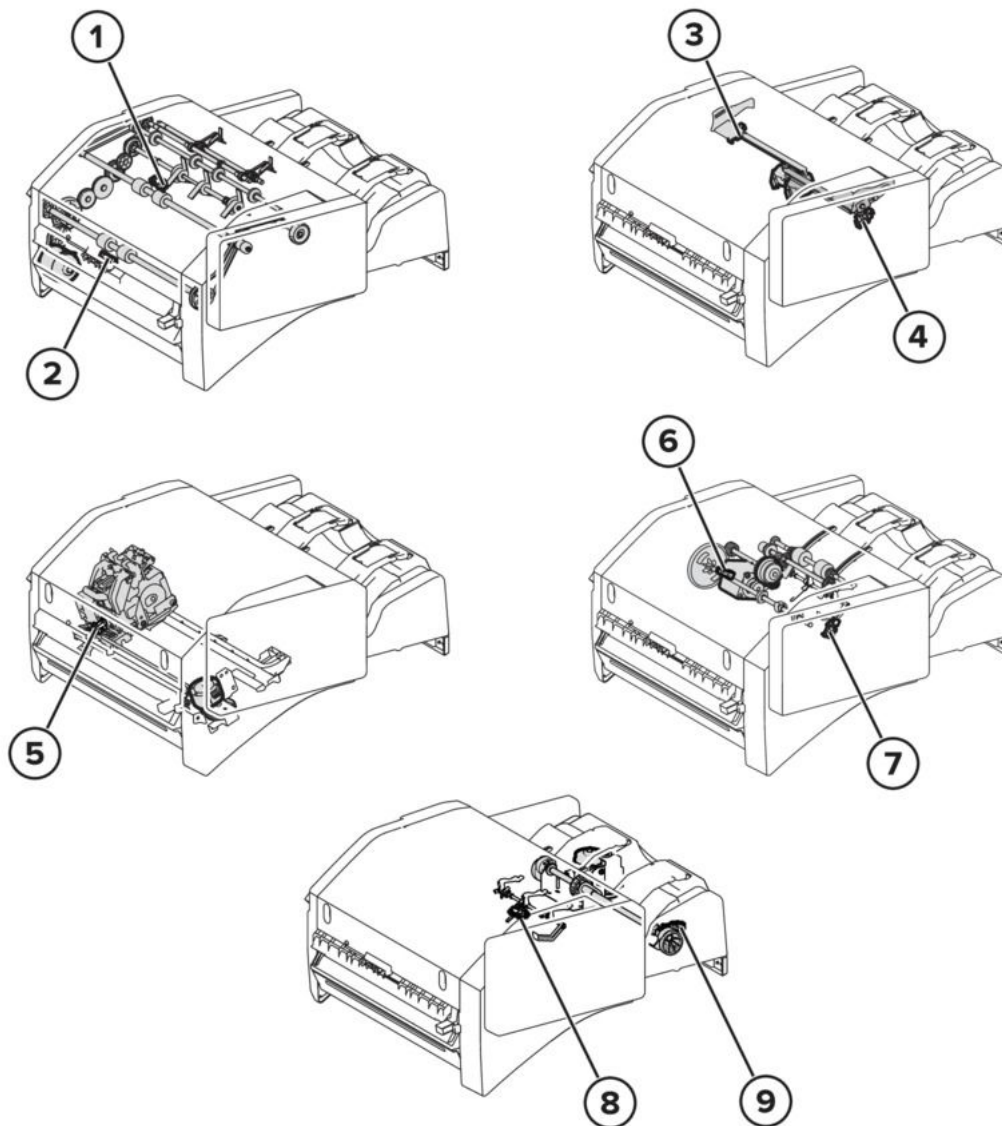
1	Motor (staple finisher transport)
2	Motor (staple finisher rear tamper)
3	Motor (staple finisher front tamper)
4	Motor (staple finisher staple)

Continued on page 2249

Continued from page 2248

5	Motor (staple finisher eject)
6	Motor (staple finisher eject clutch)
7	Motor (staple finisher stacker)

Staple finisher sensors



Staple finisher sensors

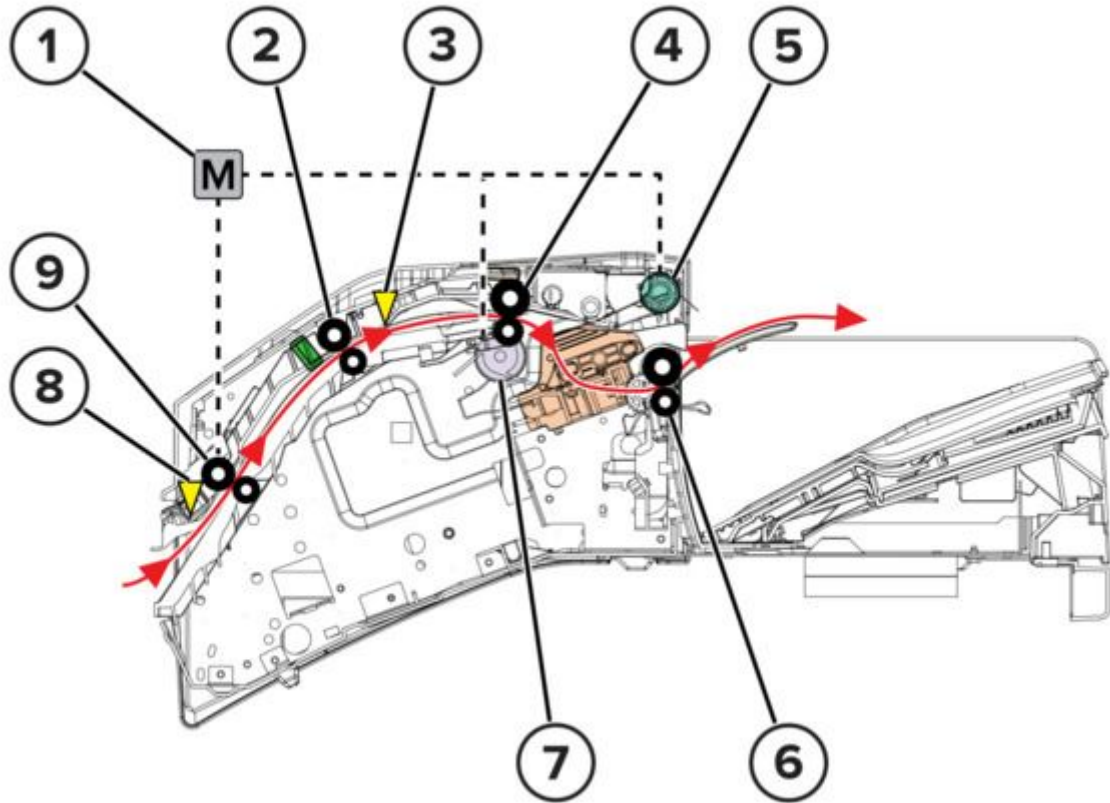
1	Sensor (staple finisher compiler feed)
2	Sensor (staple finisher feed)

Continued on page 2250

Continued from page 2249

3	Sensor (staple finisher rear tamper home)
4	Sensor (staple finisher front tamper home)
5	Sensor (staple finisher staple unit position)
6	Sensor (staple finisher eject)
7	Sensor (staple finisher bin stack)
8	Sensor (staple finisher stack height)
9	Sensor (staple finisher bin empty)

Transport



Staple finisher transport

1	Motor (staple finisher transport)
2	Staple finisher transport roller
3	Sensor (staple finisher compiler feed)
4	Staple finisher compiler exit roller
5	Subpaddle
6	Staple finisher exit roller
7	Main paddle
8	Sensor (staple finisher feed)
9	Staple finisher feed roller

Paper is transported from the printer through the staple finisher, and then into the compiler tray. The motor (staple finisher transport) drives the following components to transport paper into the compiler:

Theory of operation

- Staple finisher feed roller
- Staple finisher transport roller
- Staple finisher compiler exit roller
- Main paddle
- Subpaddle

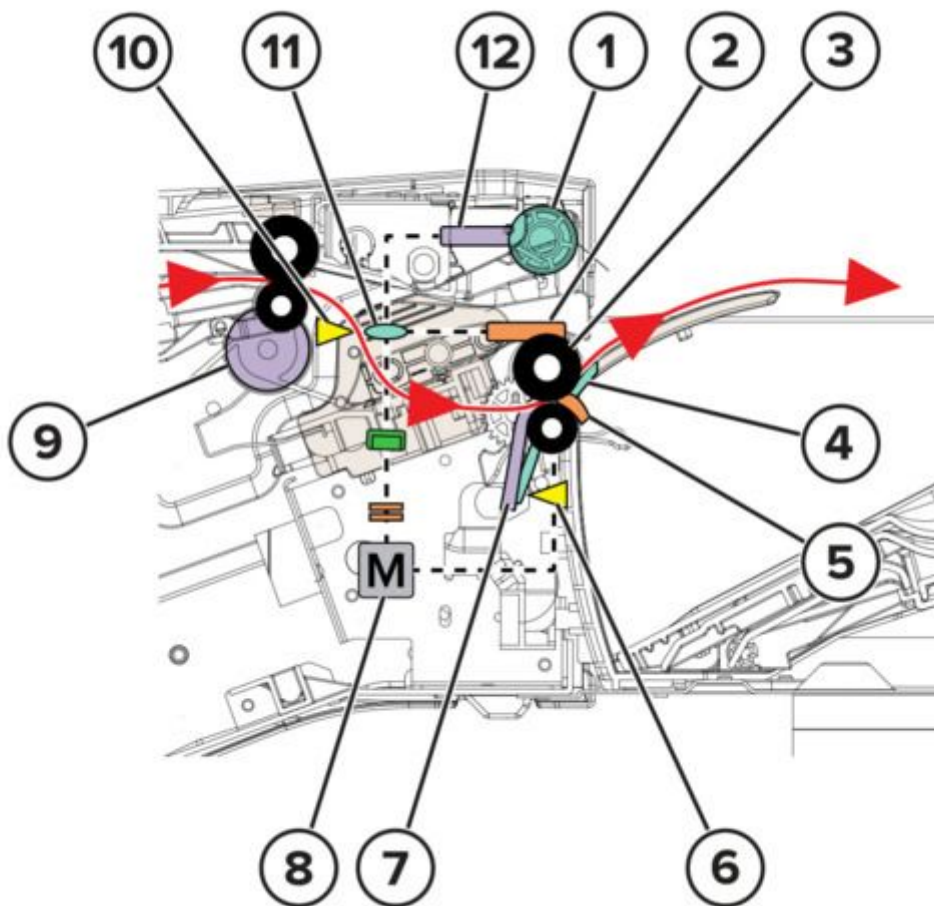
The sensor (staple finisher feed) detects paper transported from the printer. The sensor (staple finisher compiler feed) detects paper transported to the compiler tray.

Compiler

The compiler aligns the paper transported from the printer in the compiler tray. The stapling and offset processes are also performed in the compiler. The compiler consists of the following components:

- Compiler ejector
- Compiler tamper
- Compiler staple finisher

Compiler ejector



Staple finisher compiler ejector

1	Subpaddle
2	Eject clamp
3	Staple finisher eject roller
4	Shelf

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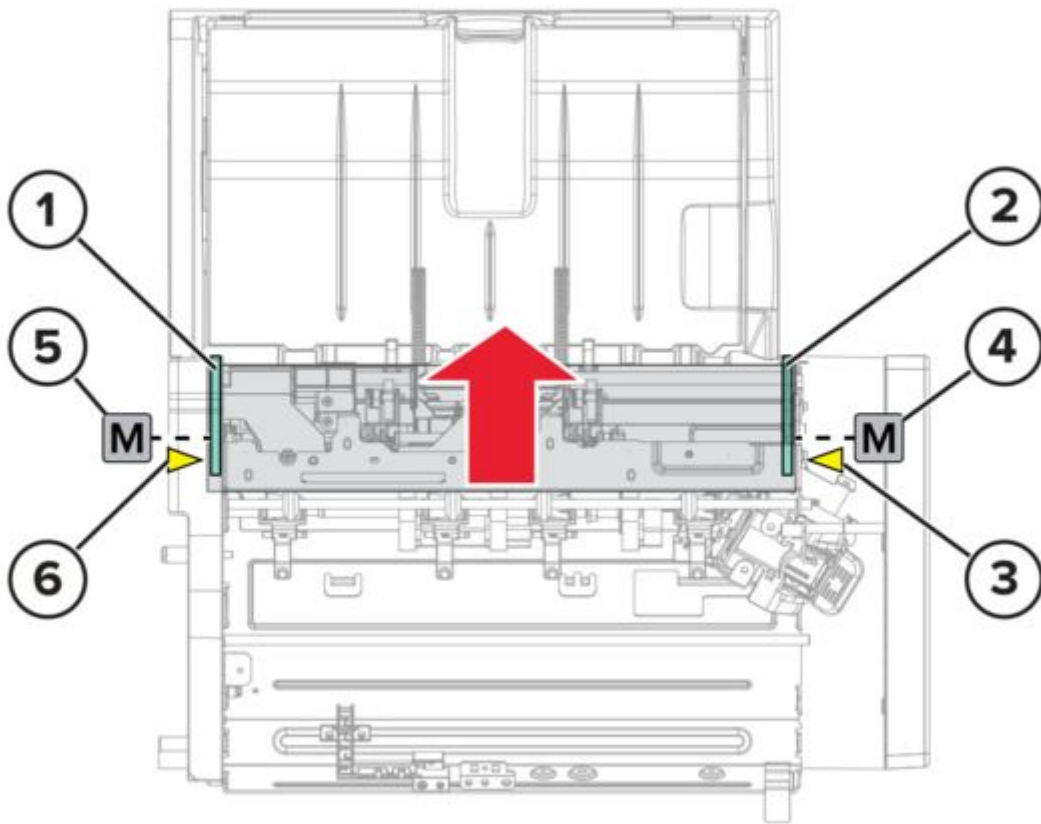
5	Set clamp
6	Sensor (staple finisher bin stack)
7	Roll guard
8	Motor (staple finisher eject)
9	Main paddle
10	Sensor (staple finisher eject)
11	Eject cam
12	Subpaddle arm

The ejector aligns the paper on the compiler tray, and then transports the paper to the stacker tray.

The motor (staple finisher eject) drives the eject roller, shelf, set clamp, roll guard, eject clamp, and the subpaddle arm. The main paddle aligns the trailing edge of the paper on the compiler tray. The subpaddle arm raises and lowers the subpaddle. The subpaddle performs back scraping of the paper that is transported into the compiler tray. The sensor (staple finisher bin stack) detects the set clamp at its home position and the sensor (staple finisher eject) detects the eject cam at its home position.

The shelf stacks paper that is for transport to the compiler tray. The roll guard lifts the paper when it is compiled. The eject clamp pinches the paper after it is compiled. The eject roller transports paper from the compiler tray into the stacker tray. The set clamp presses the paper onto the stacker tray.

Compiler tamper



Staple finisher compiler tamper

1	Staple finisher rear tamper
2	Staple finisher front tamper
3	Sensor (staple finisher front tamper home)
4	Motor (staple finisher front tamper)
5	Motor (staple finisher rear tamper)
6	Sensor (staple finisher rear tamper home)

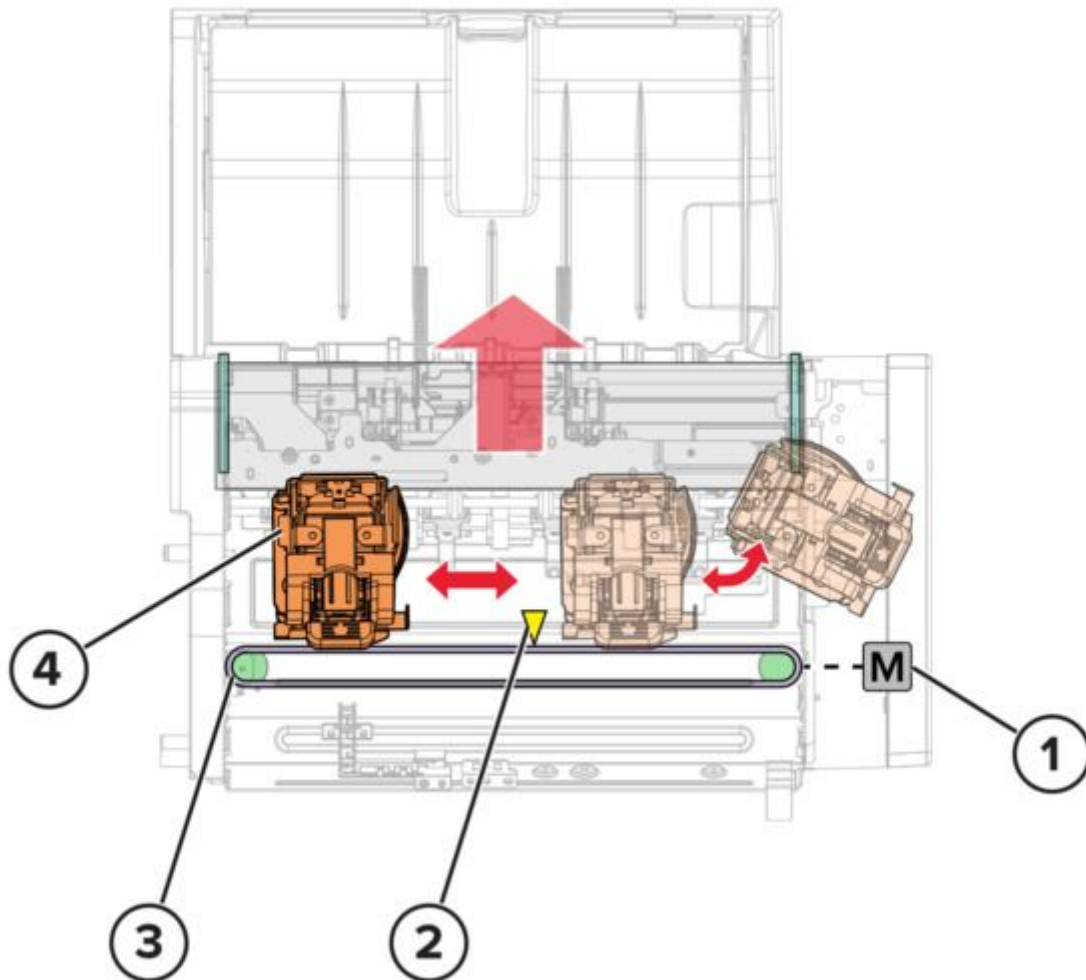
The tamper aligns the side edges of the paper on the compile tray.

The motor (staple finisher front tamper) drives the front tamper. When the motor rotates clockwise, the front tamper moves to the rear. When the motor rotates counterclockwise, the front tamper moves to the front. The motor (staple finisher rear tamper) drives the rear tamper. When the motor rotates clockwise, the rear tamper moves to the front. When the motor rotates counterclockwise, the rear tamper moves to the rear.

Theory of operation

The sensor (staple finisher front tamper home) and sensor (staple finisher rear tamper home) detects the front tamper and rear tamper at their home position.

Compiler staple finisher

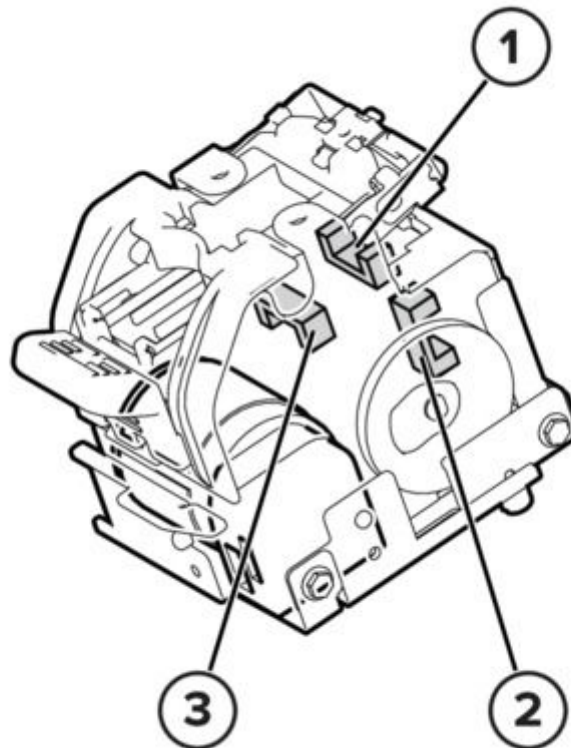


Staple finisher compiler finisher 1

1	Motor (staple finisher staple unit carriage)
2	Sensor (staple finisher staple unit position)
3	Staple finisher staple drive belt
4	Staple finisher stapler

The motor (staple finisher staple unit carriage) drives the position of the stapler head and performs the stapling operation. When the motor rotates clockwise, the stapler head moves to the front. When the motor rotates counterclockwise, the stapler head moves to

the rear. The sensor (staple finisher staple unit position) detects the stapler at its home position, rear staple corner position, and rear staple straight position.



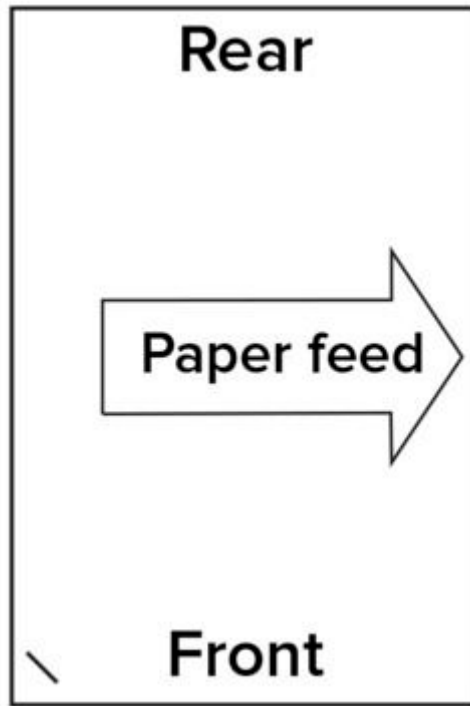
Staple finisher compiler finisher 2

1	Sensor (staple finisher staple head home)
2	Sensor (staple finisher staple low)
3	Sensor (staple finisher staple unit position)

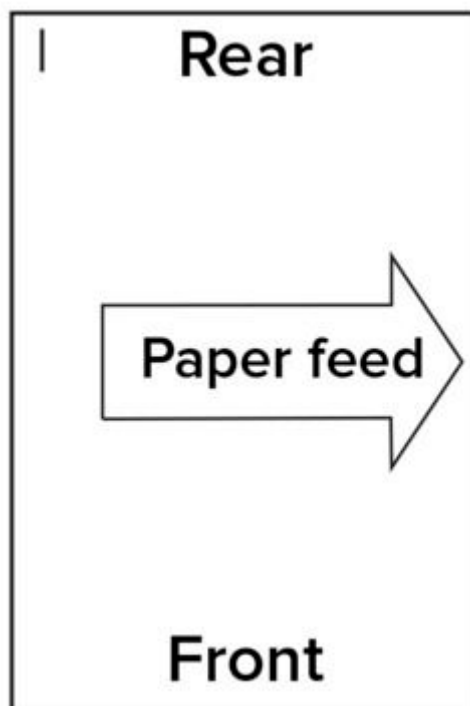
The sensor (stapler finisher staple unit position) detects when the stapler reaches the staple finisher head and detects a stapling failure. The sensor (staple finisher staple low) detects when the staple cartridge is low. The sensor (staple finisher staple head home) detects the staple head at its home position, detects stapling failure, and determines when to stop the motor (staple finisher staple unit carriage).

The following are the supported staple positions:

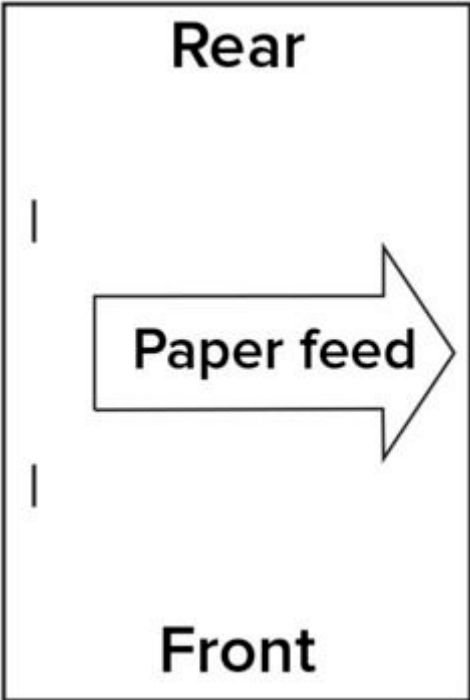
1. Front staple (corner)



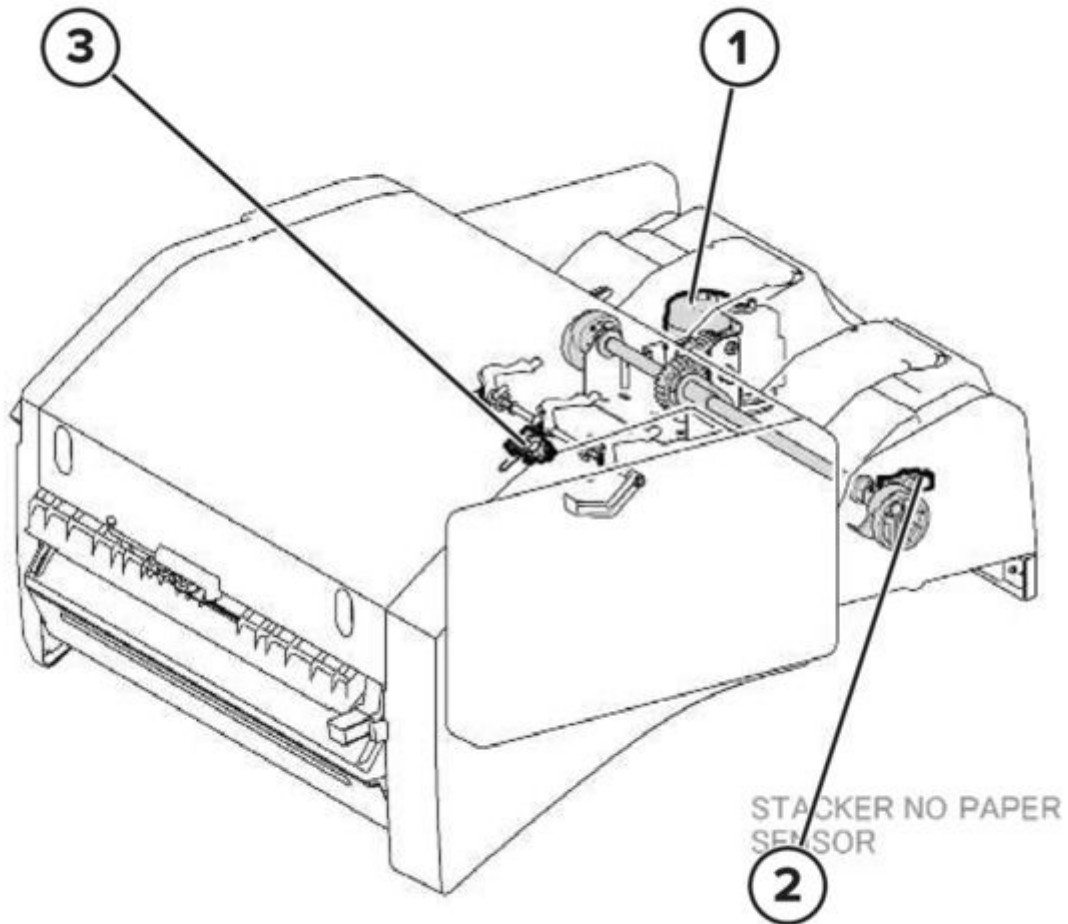
2. Rear staple (straight)



3. Dual staple



Stacker tray



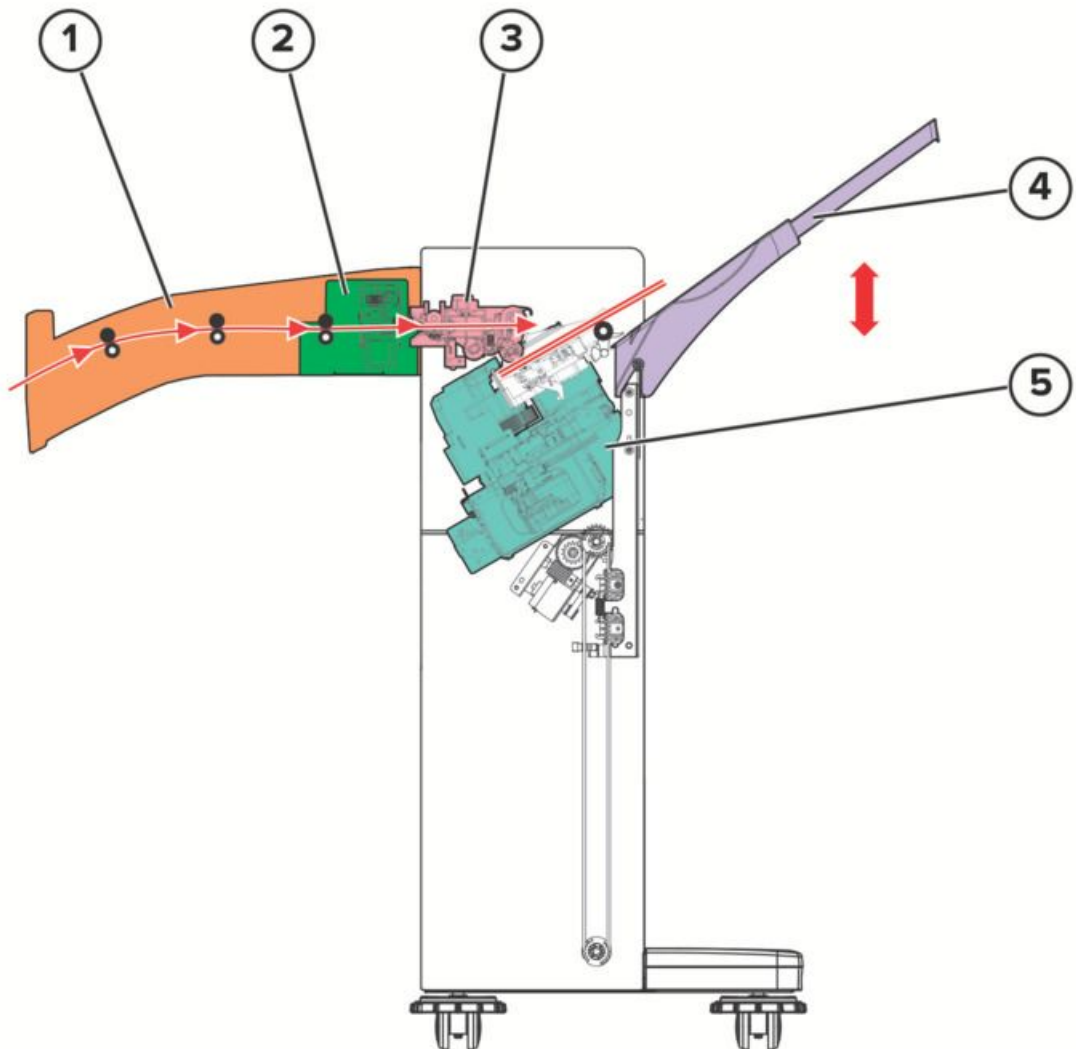
Staple finisher stacker tray

1	Motor (staple finisher stacker)
2	Sensor (staple finisher bin empty)
3	Sensor (staple finisher stack height)

The motor (staple finisher stacker) drives the stacker tray. The sensor (staple finisher stacker bin empty) detects paper presence on the stacker tray. The sensor (staple finisher stacker height) detects the stacker tray height and paper height on the stacker tray.

Staple, hole punch finisher (SHPF) operation

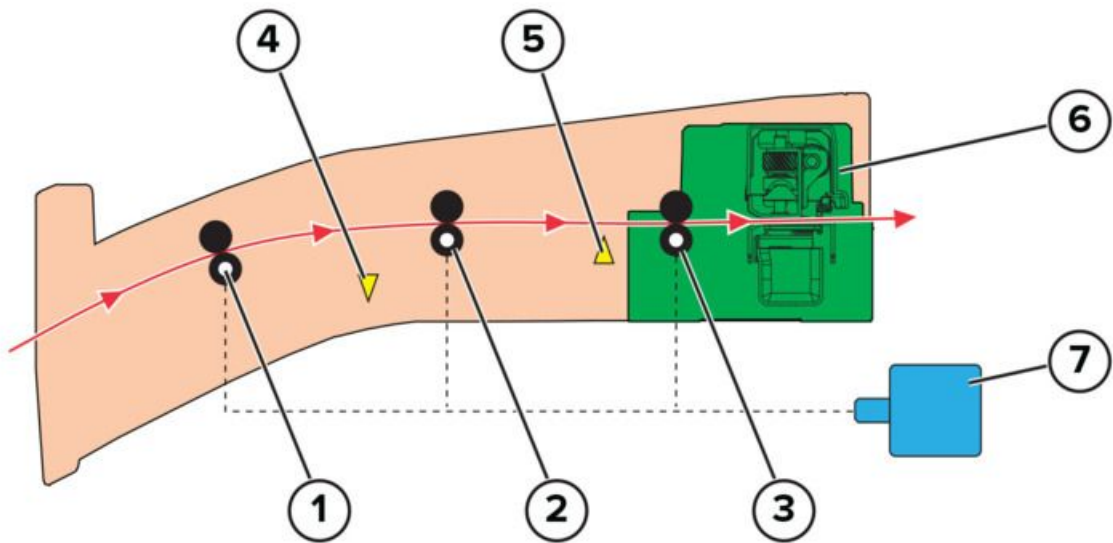
Finisher sections



Finisher sections

1	Horizontal paper transport (HPT)
2	Puncher
3	Transport
4	Stacker
5	Compiler and stapler

HPT paper path rollers and sensors



HPT rollers and sensors

1	HPT transport roller 1
2	HPT transport roller 2
3	HPT transport roller 3
4	Sensor (HPT open)
5	Sensor (HPT entrance)
6	Hole punch unit (HPU)
7	Motor (HPT)

The HPT transport rollers 1, 2, and 3 transport the paper from the printer to the finisher. The motor (HPT) drives the rollers.

The sensor (HPT entrance) detects the paper as it passes through the HPT. The sensor (HPT open) detects if the top cover is open.

For print jobs that require hole-punching, the HPU punches holes on the paper as it passes through the HPT.

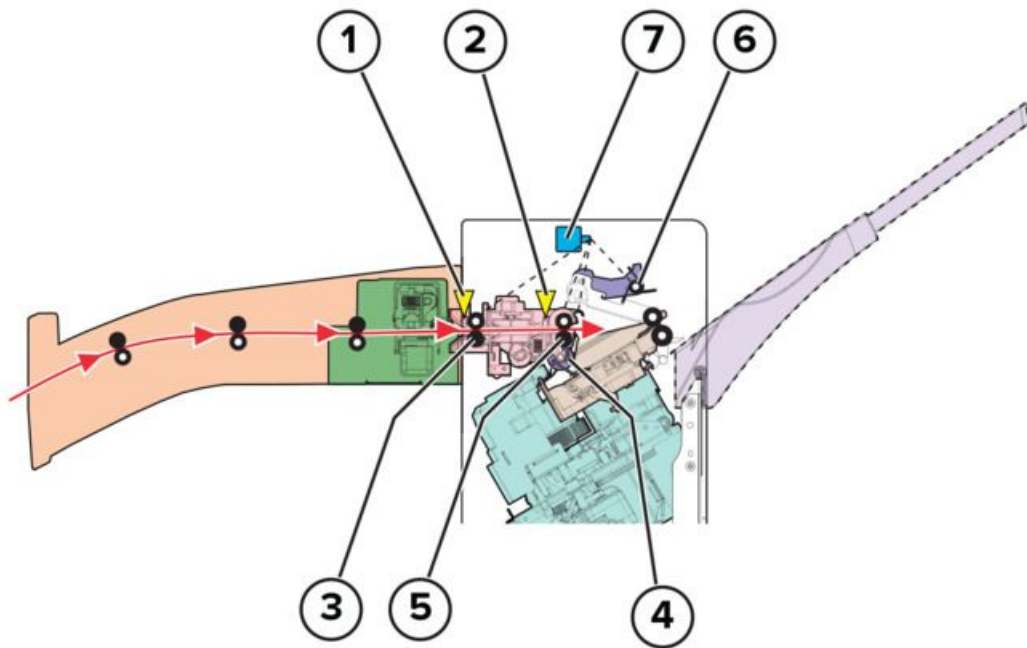
Hole punch capacity

hole punch capacity

Punch configuration	Scrap capacity (number of sheets)
2/4 hole punch unit	750 sheets or over
U.S. 2/3 hole punch unit	750 sheets or over
Swedish 4 hole punch unit	500 sheets or over

If the hole punch job count reaches a certain number, then the printer displays an error message. Remove, and then empty the hole punch waste bin to resolve the error.

Transport section rollers and sensors



Standard print job rollers

1	Sensor (finisher entrance)
2	Sensor (transport)
3	Finisher entrance roller
4	Main paddle
5	Compiler transport roller
6	Subpaddle
7	Motor (compiler transport)

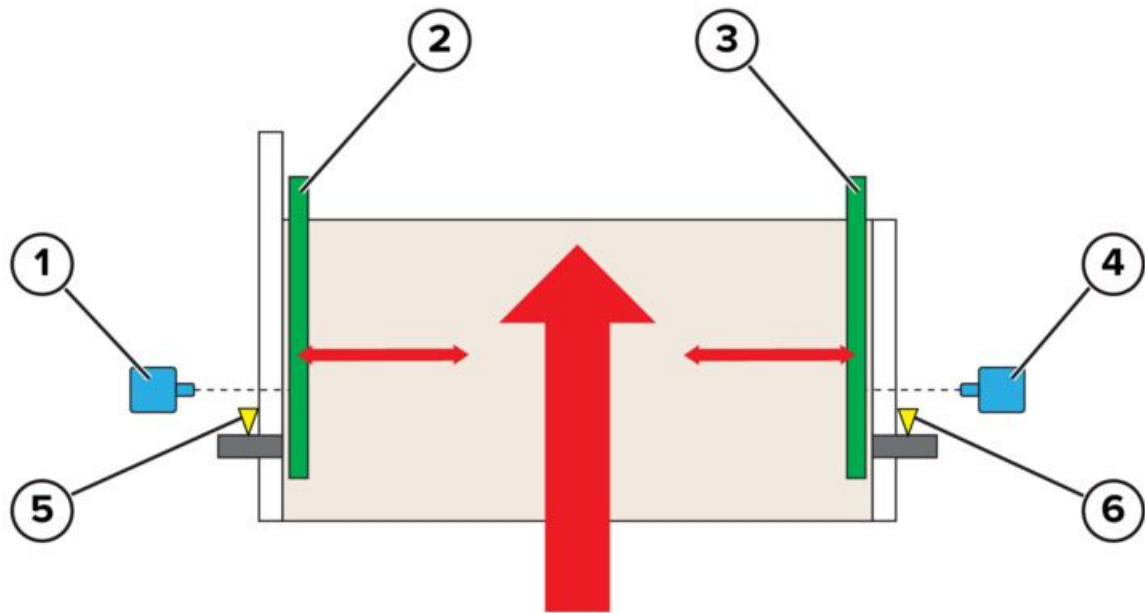
The finisher transport section transports paper received from the HPT to the compiler. The sensor (finisher entrance) detects the paper ejected from the HPT. The sensor (transport) detects the paper as it moves to the compiler.

The finisher entrance roller and compiler transport roller move the paper to the compiler. After the paper arrives at the compiler, the subpaddle pulls the paper to deliver it to the main paddle. The main paddle pushes the trailing edge of the paper to the compiler tray catch.

The compiler tray catch aligns the trailing edge of the paper stack. The motor (compiler transport) drives the rollers and paddles.

Compiler sections

Tamper rollers and sensors

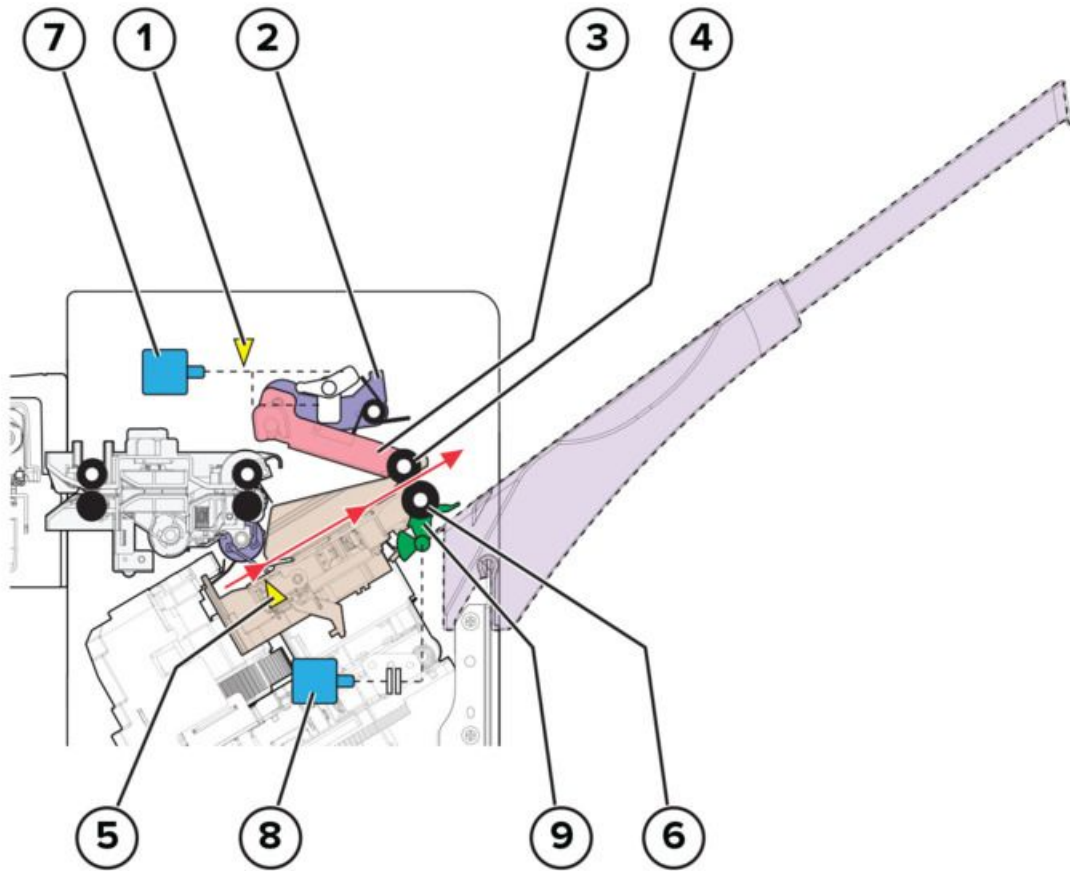


Tamper rollers and sensors

1	Motor (rear tamper)
2	Rear tamper
3	Front tamper
4	Motor (front tamper)
5	Sensor (rear tamper home position)
6	Sensor (front tamper home position)

The front and rear tampers align the edges of the paper for offset stacking.
Each of the tampers has a sensor (home position) that detects the tampers at their home position.
Each of the tampers has a motor (tamper).

Ejector rollers and sensors



Ejector rollers and sensors

1	Sensor (eject arm subpaddle home position)
2	Subpaddle arm
3	Eject arm
4	Eject partner roller
5	Sensor (compile tray paper present)
6	Eject roller
7	Motor (eject lift)
8	Motor (eject)
9	Stacker clamp

The ejector section of the compiler ejects the processed paper to the stacker.

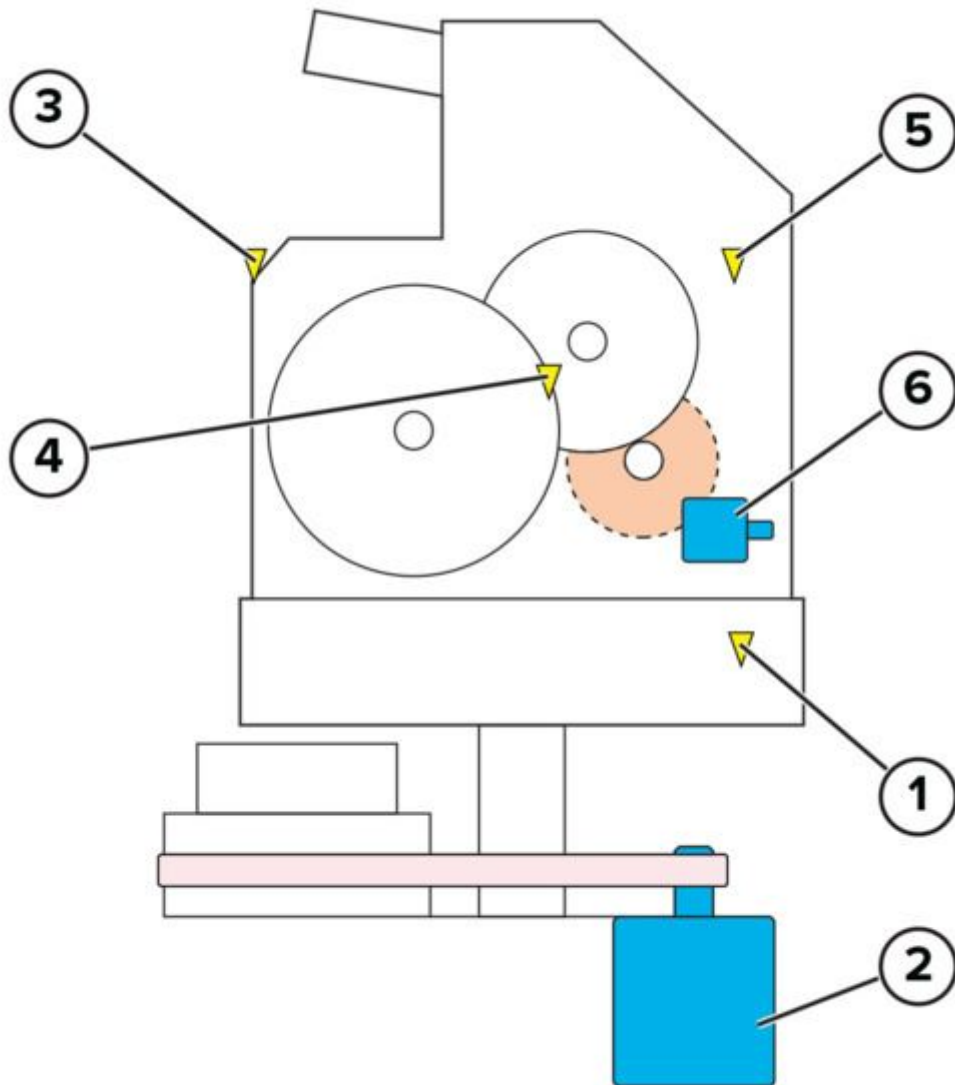
Theory of operation

The sensor (compile tray paper present) detects if a paper stack is on the compiler tray. The sub-paddle arm drives the subpaddle to move vertically. The eject arm lowers the eject partner roller, and then the eject partner roller works with the eject roller to transport the paper to the stacker.

The sensor (eject arm subpaddle home position) detects if the eject arm and sub-paddle are at their home positions. The motor (eject) drives the eject arm, sub-paddle, eject roller, and stacker clamp.

The stacker clamp holds down the paper stack on the stacker.

Staple sensors and motors



Stapler rollers and sensors

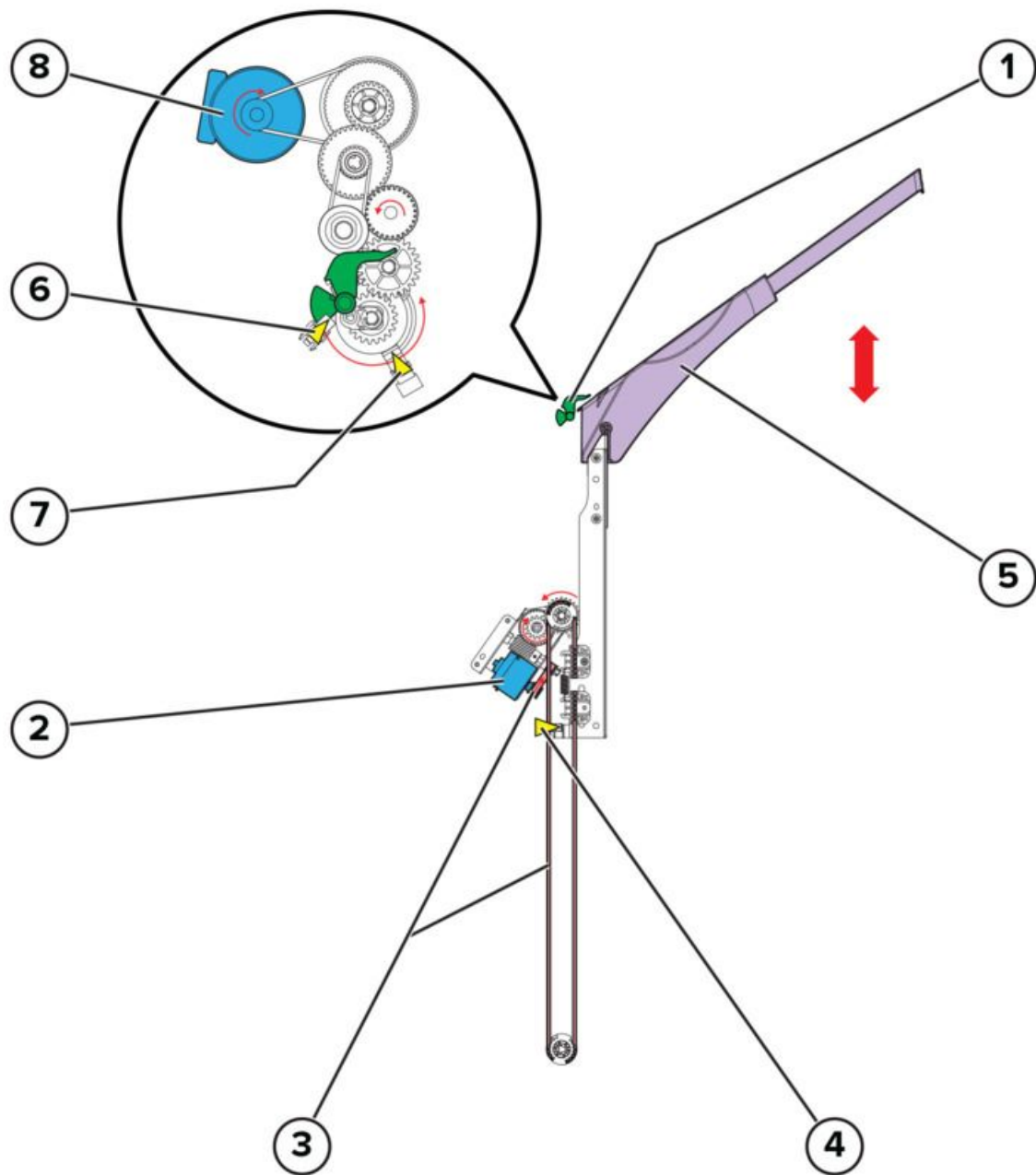
#	Sensor	Function
1	Sensor (stapler move position)	Detects if the stapler head is at its various positions.
2	Motor (stapler move position)	Drives the stapler head to perform a stapling operation.

Continued on page 2269

Continued from page 2268

#	Sensor	Function
3	Sensor (staple ready)	Detects if a staple is loaded in the stapler head.
4	Sensor (staple home position)	Detects if the stapler head is at its home position.
5	Sensor (staple low)	Detects if the staple head is low on staple supply.
6	Motor (staple)	Drives the inside of the stapler head when a staple job is performed.

Stacker tray operation



Sacker tray parts

1	Stacker clamp
2	Motor (stacker)
3	Timing belt

Continued on page 2271

Continued from page 2270

4	Sensor (stacker tray home position)
5	Stacker tray
6	Sensor (stacker tray height)
7	Sensor (stacker clamp home position)
8	Motor (eject)

The stacker drives the stacker tray to move vertically to accommodate the volume of the paper stack.

The stacker clamp serves as an actuator for the sensor (stacker tray height) to detect the height of the paper stack in the stacker tray.

The sensor (stacker clamp home position) detects the position of the stacker clamp. The motor (eject) drives the stacker clamp.

The sensor (stacker tray home position) detects the position of the stacker tray.

The sensor (stacker tray home position) with the sensor (stacker tray height) detects if a paper stack is on the stacker tray.

The motor (stacker) drives the stacker tray.

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