

Mono Laser Printers

User's Guide

July 2023

Machine type:

4602

Models:

480, 680, 685 and their equivalent models

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Safety information

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.

Product statements



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: 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—SHOCK HAZARD: To avoid the risk of electrical shock, do not place or use this product near water or wet locations.





CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, do not set up this product or make any electrical or cabling connections, such as the power cord, fax feature, or telephone, during a lightning storm.





CAUTION—POTENTIAL INJURY: Do not cut, twist, bind, crush, or place heavy objects on the power cord. Do not subject the power cord to abrasion or stress. Do not pinch the power cord between objects such as furniture and walls. If any of these things happen, a risk of fire or electrical shock results. Inspect the power cord regularly for signs of such problems. Remove the power cord from the electrical outlet before inspecting it.

 **CAUTION—SHOCK HAZARD:** To avoid the risk of electrical shock, make sure that all external connections (such as Ethernet and telephone system connections) are properly installed in their marked plug-in ports.


 **CAUTION—SHOCK HAZARD:** To avoid the risk of electrical shock, if you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.


 **CAUTION—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—POTENTIAL INJURY:** If the printer weight is greater than 20 kg (44 lb), then it may require two or more people to lift it safely.


 **CAUTION—POTENTIAL INJURY:** When moving the printer, follow these guidelines to avoid personal injury or printer damage:

- Make sure that all doors and trays are closed.
- Turn off the printer, and then unplug the power cord from the electrical outlet.
- Disconnect all cords and cables from the printer.
- If the printer has separate floor-standing optional trays or output options attached to it, then disconnect them before moving the printer.
- If the printer has a caster base, then carefully roll it to the new location. Use caution when passing over thresholds and breaks in flooring.
- If the printer does not have a caster base but is configured with optional trays or output options, then remove the output options and lift the printer off the trays. Do not try to lift the printer and any options at the same time.
- Always use the handholds on the printer to lift it.
- Any cart used to move the printer must have a surface able to support the full footprint of the printer.
- Any cart used to move the hardware options must have a surface able to support the dimensions of the options.
- Keep the printer in an upright position.
- Avoid severe jarring movements.
- Make sure that your fingers are not under the printer when you set it down.
- Make sure that there is adequate clearance around the printer.

 **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.

 **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.



CAUTION—POTENTIAL INJURY: This product uses a laser. Use of controls or adjustments or performance of procedures other than those specified in the *User's Guide* may result in hazardous radiation exposure.



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.

This product is designed, tested, and approved to meet strict global safety standards with the use of specific manufacturer's components. The safety features of some parts may not always be obvious. The manufacturer is not responsible for the use of other replacement parts.

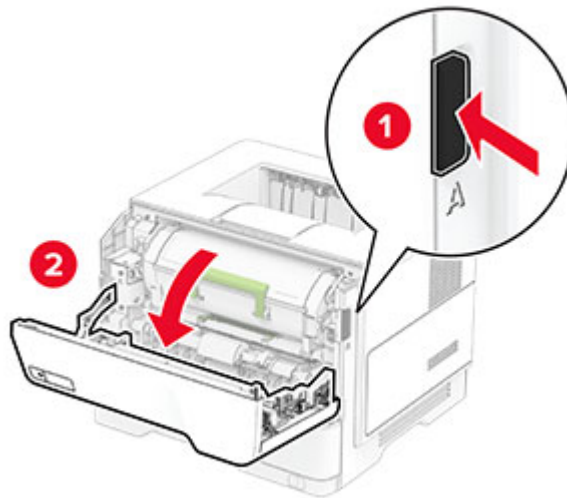
Refer service or repairs, other than those described in the user documentation, to a service representative.

SAVE THESE INSTRUCTIONS.

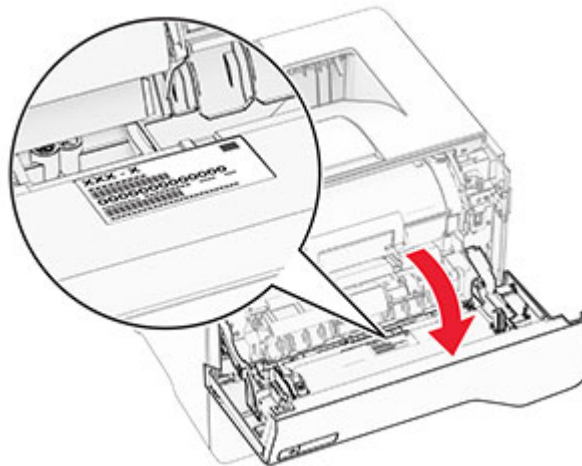
Learn about the printer

Finding the printer serial number



- 1 Open door A.



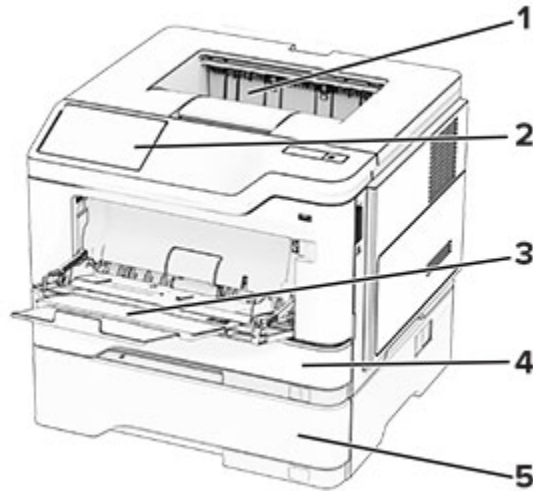
- 2 Locate the serial number.



Printer configurations

-  **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.

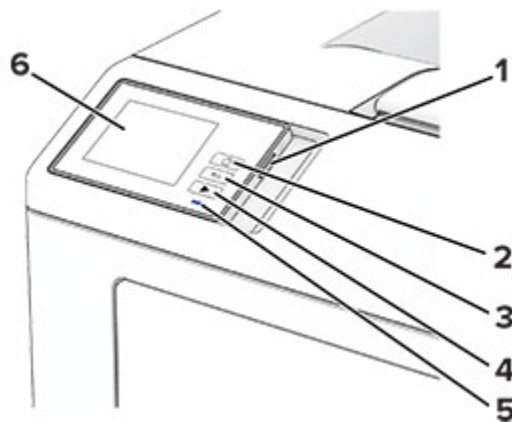
You can configure your printer by adding up to three optional 250- or 550-sheet trays. For more information, see [“Installing optional trays” on page 33](#).



1	Standard bin
2	Control panel
3	Multipurpose feeder
4	Standard 250- or 550-sheet tray
5	Optional 250- or 550-sheet tray

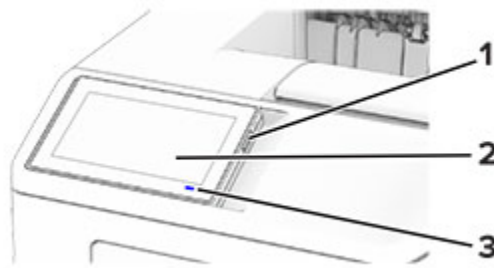
Using the control panel

Panel with 2.8-inch touch-screen display



	Control panel part	Function
1	Power button	<ul style="list-style-type: none"> Turn on or turn off the printer. Note: To turn off the printer, press and hold the power button for five seconds. Set the printer to Sleep mode. Wake the printer from Sleep or Hibernate mode.
2	Home button	Go to the home screen.
3	Back button	Return to the previous screen.
4	Start button	Start a job.
5	Indicator light	Check the status of the printer.
6	Display	<ul style="list-style-type: none"> View the printer messages and supply status. Set up and operate the printer.

Panel with 4.3-inch touch-screen display



	Control panel part	Function
1	Power button	<ul style="list-style-type: none"> Turn on or turn off the printer. Note: To turn off the printer, press and hold the power button for five seconds. Set the printer to Sleep mode. Wake the printer from Sleep or Hibernate mode.
2	Display	<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

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.

Indicator light	Printer status
Blinking amber	The printer is in Deep Sleep or Hibernate mode.

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.

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 $18\text{--}24^\circ\text{C}$ ($65\text{--}75^\circ\text{F}$) 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.

Supported paper sizes

Paper size	Standard 250- or 550-sheet tray	Optional 250- or 550-sheet tray	Multipurpose feeder	Two-sided printing
A4 210 x 297 mm (8.27 x 11.7 in.)	✓	✓	✓	✓
A5 Portrait (SEF) 148 x 210 mm (5.83 x 8.27 in.)	✓	✓	✓	X
A5 Landscape (LEF)¹ 210 x 148 mm (8.27 x 5.83 in.)	✓	✓ ²	✓	X
A6² 105 x 148 mm (4.13 x 5.83 in.)	✓	✓	✓	X
JIS B5 182 x 257 mm (7.17 x 10.1 in.)	✓	✓	✓	X
Oficio (Mexico) 216 x 340 mm (8.5 x 13.4 in.)	✓	✓	✓	✓
Hagaki 100 x 148 mm (3.93 x 5.83 in.)	X	X	✓	X

¹ The default support is short-edge feed.

² Supported only in the MS639 printer model.

³ When Universal is selected, the page is formatted for 215.90 x 355.60 mm (8.5 x 14 in.) unless specified by the application.

⁴ Paper must at least be 210 mm (8.27 in.) wide and 279.4 mm (11 in.) long for two-sided printing.

Paper size	Standard 250- or 550-sheet tray	Optional 250- or 550-sheet tray	Multipurpose feeder	Two-sided printing
Statement 139.7 x 215.9 mm (5.5 x 8.5 in.)	✓	✓	✓	X
Executive 184.2 x 266.7 mm (7.25 x 10.5 in.)	✓	✓	✓	X
Letter 215.9 x 279.4 mm (8.5 x 11 in.)	✓	✓	✓	✓
Legal 215.9 x 355.6 mm (8.5 x 14 in.)	✓	✓	✓	✓
Folio 215.9 x 330.2 mm (8.5 x 13 in.)	✓	✓	✓	✓
Universal³ 105 x 148 mm to 215.9 x 359.92 mm (4.13 x 5.83 in. to 8.5 x 14.17 in.)	✓	✓	X	✓ ⁴
Universal³ 76.2 x 127 mm to 215.9 x 359.92 mm (3 x 5.83 in. to 8.5 x 14.17 in.)	X	X	✓	X
Universal³ 25.4 x 25.4 mm to 215.9 x 355.6 mm (1 x 1 in. to 8.5 x 14 in.)	X	X	X	X
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

¹ The default support is short-edge feed.

² Supported only in the MS639 printer model.

³ When Universal is selected, the page is formatted for 215.90 x 355.60 mm (8.5 x 14 in.) unless specified by the application.

⁴ Paper must at least be 210 mm (8.27 in.) wide and 279.4 mm (11 in.) long for two-sided printing.

Paper size	Standard 250- or 550-sheet tray	Optional 250- or 550-sheet tray	Multipurpose feeder	Two-sided printing
10 Envelope 104.8 x 241.3 mm (4.12 x 9.5 in.)	X	X	✓	X
DL Envelope 110 x 220 mm (4.33 x 8.66 in.)	X	X	✓	X
C5 Envelope 162 x 229 mm (6.38 x 9.01 in.)	X	X	✓	X
B5 Envelope 176 x 250 mm (6.93 x 9.84 in.)	X	X	✓	X
Other Envelope 76.2 x 127 mm to 215.9 x 359.92 mm (3 x 5.83 in. to 8.5 x 14.17 in.)	X	X	✓	X
¹ The default support is short-edge feed. ² Supported only in the MS639 printer model. ³ When Universal is selected, the page is formatted for 215.90 x 355.60 mm (8.5 x 14 in.) unless specified by the application. ⁴ Paper must at least be 210 mm (8.27 in.) wide and 279.4 mm (11 in.) long for two-sided printing.				

Supported paper types

Paper type	Standard 250- or 550-sheet tray	Optional 250- or 550-sheet tray	Multipurpose feeder	Two-sided printing
Plain paper	✓	✓	✓	✓
Card stock	X	X	✓	X
Recycled	✓	✓	✓	✓
Paper labels*	✓	✓	✓	X
Bond	✓	✓	✓	✓
Letterhead	✓	✓	✓	✓
Preprinted	✓	✓	✓	✓
Colored Paper	✓	✓	✓	✓
* One-sided paper labels are supported for occasional use of less than 20 pages per month. Vinyl, pharmacy, or two-sided labels are not supported.				

Paper type	Standard 250- or 550-sheet tray	Optional 250- or 550-sheet tray	Multipurpose feeder	Two-sided printing
Light Paper	✓	✓	✓	✓
Heavy Paper	✓	✓	✓	✓
Rough/Cotton	✓	✓	✓	✓
Envelope	X	X	✓	X
Rough envelope	X	X	✓	X
* One-sided paper labels are supported for occasional use of less than 20 pages per month. Vinyl, pharmacy, or two-sided labels are not supported.				

Supported paper weights

Standard 250- or 550-sheet tray	Optional 250- or 550-sheet tray	Multipurpose feeder	Two-sided printing*
60–120 g/m ² (16–32 lb. bond)	60–120 g/m ² (16–32 lb. bond)	60–216 g/m ² (16–58 lb. bond)	60–120 g/m ² (16–24 lb. bond)
* Does not support card stock, labels, or envelopes.			

Set up, install, and configure

Selecting a location for the printer

- Leave enough room to open trays, covers, and doors and to install hardware options.
- Set up the printer near an electrical outlet.



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.

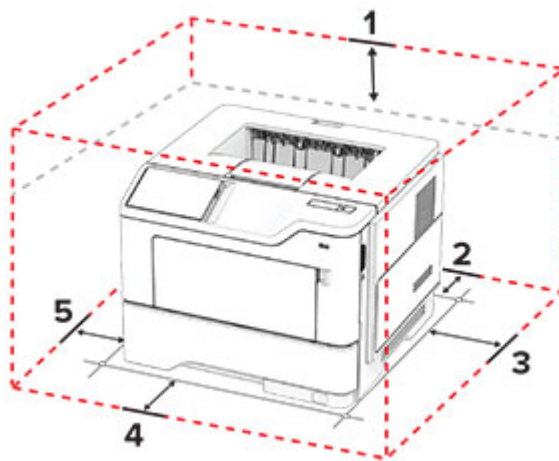


CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, do not place or use this product near water or wet locations.

- 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:

Ambient temperature	10 to 32.2°C (50 to 90°F)
Storage temperature	15.6 to 32.2°C (60 to 90°F)

- Allow the following recommended amount of space around the printer for proper ventilation:



1	Top	305 mm (12 in.)
2	Rear	100 mm (3.94 in.)
3	Right side	76.2 mm (3 in.)

4	Front	305 mm (12 in.) Note: The minimum space needed in front of the printer is 76 mm (3 in.).
5	Left side	110 mm (4.33 in.)

Attaching cables



CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, do not set up this product or make any electrical or cabling connections, such as the power cord, fax feature, or telephone, during a lightning storm.

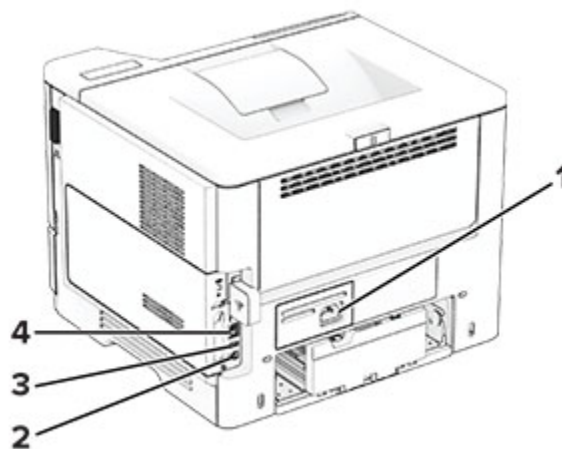


CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.



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.

Warning—Potential Damage: To avoid loss of data or printer malfunction, do not touch the USB cable, any wireless network adapter, or the printer in the areas shown while actively printing.



	Printer port	Function
1	Power cord socket	Connect the printer to a properly grounded electrical outlet.
2	USB printer port	Connect the printer to a computer.
3	USB port	Attach a keyboard or any compatible option.
4	Ethernet port	Connect the printer to a network.

Setting up and using the home screen applications

Using the home screen

Note: Your home screen may vary depending on your home screen customization settings, administrative setup, and active embedded solutions.



	Icon	Function
1	Stop or Cancel button	Stop the current printer task.
2	Status/Supplies	<ul style="list-style-type: none"> Show a warning or error message whenever the printer requires intervention to continue processing. View more information on the printer warning or message and how to clear it. Note: You can also access this setting by touching the top section of the home screen.
3	Job Queue	Show all the current print jobs. Note: You can also access this setting by touching the top section of the home screen.
4	Change Language	Change the language on the display.
5	Settings	Access the printer menus.
6	USB Drive	Print photos and documents from a flash drive.
7	Held Jobs	Show the print jobs that are held in the printer memory.
8	Address Book	Manage a contact list that other applications on the printer can access.
9	On-screen keypad	Enter numbers or symbols in an input field.

Customizing the home screen

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

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

2 Click **Settings > Device > Home Screen Customization**.

3 Do one or more of the following:

- To add an icon to the home screen, click **+**, select the app name, and then click **Add**.
- To remove a home screen icon, select the app name, and then click **Remove**.

- To customize an app name, select the app name, click **Edit**, and then assign a name.
- To restore the name of an app, select the app name, click **Edit**, and then select **Restore app label**.
- To add a space between apps, click **+**, select **BLANK SPACE**, and then click **Add**.
- To arrange the apps, drag the app names in the order that you want.
- To restore the default home screen, click **Restore home screen**.

4 Apply the changes.

Using Display Customization

Before using the application, make sure to enable and configure the screen saver, slideshow, and wallpaper settings from the Embedded Web Server.

Managing screen saver and slide show images

1 From the Embedded Web Server, click **Apps > Display Customization > Configure**.

2 In the Screen Saver and Slideshow Images section, add, edit, or delete an image.

Notes:

- You can add up to 10 images.
- When enabled, the status icons appear on the screen saver only when there are errors, warnings, or cloud-based notifications.

3 Apply the changes.

Changing the wallpaper image

1 From the home screen, touch **Change Wallpaper**.

2 Select an image to use.

3 Apply the changes.

Running a slide show from a flash drive

1 Insert a flash drive into the front USB port.

2 From the home screen, touch **Slideshow**.

Note: You can remove the flash drive after the slide show starts, but the images are not stored in the printer. If the slide show stops, then insert the flash drive again to view the images.

Using Customer Support

Notes:

- This application is supported only in some printer models.
- For information on how to configure the application settings, see the *Customer Support Administrator's Guide*.

1 From the home screen, touch **Customer Support**.

2 Print or e-mail the information.

Setting up Device Quotas

Notes:

- This application is supported only in some printer models.
- For information on how to configure the application settings, see the *Device Quotas Administrator's Guide*.

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

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

2 Click **Apps > Device Quotas > Configure**.

3 In the User Accounts section, add or edit a user, and then set the user quota.

4 Apply the changes.

Managing bookmarks

Creating bookmarks

Use bookmarks to print frequently accessed documents that are stored in servers or on the web.

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

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

2 Click **Bookmarks > Add Bookmark**, and then type a bookmark name.

3 Select an Address protocol type, and then do one of the following:

- For HTTP and HTTPS, type the URL that you want to bookmark.
- For HTTPS, make sure to use the host name instead of the IP address. For example, type **myWebsite.com/sample.pdf** instead of typing **123.123.123.123/sample.pdf**. Make sure that the host name also matches the Common Name (CN) value in the server certificate. For more information on obtaining the CN value in the server certificate, see the help information for your web browser.
- For FTP, type the FTP address. For example, **myServer/myDirectory**. Enter the FTP port number. Port 21 is the default port for sending commands.
- For SMB, type the network folder address. For example, **myServer/myShare/myFile.pdf**. Type the network domain name.
- If necessary, select the Authentication type for FTP and SMB.

To limit access to the bookmark, enter a PIN.

Note: The application supports the following file types: PDF, JPEG, and TIFF. Other file types such as DOCX and XLSX are supported in some printer models.

4 Click **Save**.

Creating folders

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

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

2 Click **Bookmarks > Add Folder**, and then type a folder name.

Note: To limit access to the folder, enter a PIN.






3 Click **Save**.

Note: You can create folders or bookmarks inside a folder. To create a bookmark, see [“Creating bookmarks” on page 21](#).

Managing contacts

1 From the home screen, touch **Address Book**.

2 Do one or more of the following:

- To add a contact, touch  on top of the screen, and then touch **Create Contact**. If necessary, specify a login method to allow application access.
- To delete a contact, touch  on top of the screen, touch **Delete Contacts**, and then select the contact.
- To edit contact information, touch the contact name.
- To create a group, touch  on top of the screen, and then touch **Create Group**. If necessary, specify a login method to allow application access.
- To delete a group, touch  on top of the screen, touch **Delete Groups**, and then select the group.
- To edit a contact group, touch **GROUPS** > select a group name >  > select the action you want to make.

3 Apply the changes.

Setting up and using the accessibility features

Activating Voice Guidance

From the home screen

- 1 In one motion and using one finger, slowly swipe left then up on the display until you hear a voice message.

Note: For printer models without built-in speakers, use headphones to hear the message.

- 2 Using two fingers, touch **OK**.

Note: If the gesture does not work, then apply more pressure.

From the keyboard

- 1 Press and hold the **5** key until you hear a voice message.

Note: For printer models without built-in speakers, use headphones to hear the message.

- 2 Press **Tab** to navigate the focus cursor to the OK button, and then press **Enter**.

Notes:

- When Voice Guidance is activated, always use two fingers to select any item on the display.
- Voice Guidance has limited language support.

Deactivating Voice Guidance

- 1 In one motion and using one finger, slowly swipe left then up on the display until you hear a voice message.

Note: For printer models without built-in speakers, use headphones to hear the message.

- 2 Using two fingers, do either of the following:

- Touch **Voice Guidance**, then touch **OK**.
- Touch **Cancel**.

Note: If the gesture does not work, then apply more pressure.

You can also deactivate Voice Guidance by doing either of the following:

- Using two fingers, double tap the home screen.
- Press the power button to put the printer in Sleep or Hibernate mode.

Navigating the screen using gestures

Notes:

- Most of the gestures are applicable only when Voice Guidance is activated.
- Enable Magnification to use the zoom and pan gestures.
- Use a physical keyboard to type characters and adjust certain settings.

Gesture	Function
Swipe left then up using one finger	Launch Accessibility mode. Use the same gesture to exit Accessibility mode. Note: This gesture is also applicable when the printer is in normal mode.
Double-tap using one finger	Select an option or item on the screen.
Double-tap the home icon using two fingers	Deactivate the Accessibility mode.
Triple-tap using one finger	Zoom in or zoom out text and images.
Swipe right or swipe down using one finger	Move to the next item on the screen.
Swipe left or swipe up using one finger	Move to the previous item on the screen.
Swipe up then down using one finger	Move to the first item on the screen.
Pan	Access parts of the zoomed image that are beyond the limit of the screen. Note: Use two fingers to drag a zoomed image.
Swipe up then right using one finger	Increase the volume. Note: This gesture is also applicable when the printer is in normal mode.
Swipe down then right using one finger	Decrease the volume. Note: This gesture is also applicable when the printer is in normal mode.
Swipe up then left using one finger	Exit an application and return to the home screen.
Swipe down then left using one finger	Go back to the previous setting.

Using the on-screen keyboard

When the on-screen keyboard appears, do one or more of the following:

- Touch a key to announce and type the character in the field.
- Drag a finger across different characters to announce and type the character in the field.
- Touch a text box using two fingers to announce the characters in the field.
- Touch **Backspace** to delete characters.

Enabling Magnification mode

- 1 In one motion and using one finger, slowly swipe left then up on the display until you hear a voice message.

Note: For printer models without built-in speakers, use headphones to hear the message.

- 2 Using two fingers, do the following:

a Touch **Magnification mode**.

b Touch **OK**.

Note: If the gesture does not work, then apply more pressure.

For more information on navigating a magnified screen, see [“Navigating the screen using gestures” on page 23](#).

Adjusting the Voice Guidance speech rate


- 1 From the home screen, touch **Settings** > **Device** > **Accessibility** > **Speech Rate**.
- 2 Select the speech rate.

Adjusting the default headphone volume

- 1 From the home screen, touch **Settings** > **Device** > **Accessibility**.
- 2 Adjust the headphone volume.

Note: The volume resets to the default value after the user exits Accessibility mode or when the printer wakes from Sleep or Hibernate mode.

Adjusting the default internal speaker volume

- 1 From the home screen, touch .
- 2 Adjust the volume.

Notes:

- If Quiet Mode is enabled, then audible alerts are turned off. This setting also slows the printer performance.
- The volume resets to the default value after the user exits Accessibility mode or when the printer wakes from Sleep or Hibernate mode.

Enabling spoken passwords or personal identification numbers

- 1 From the home screen, touch **Settings** > **Device** > **Accessibility** > **Speak Passwords/PINs**.
- 2 Enable the setting.

Loading paper and specialty media

Setting the paper size and type

- 1 From the home screen, touch **Settings** > **Paper** > **Tray Configuration** > **Paper Size/Type** > select a paper source.
- 2 Set the paper size and type.

Configuring Universal paper settings

- 1 From the home screen, touch **Settings** > **Paper** > **Media Configuration** > **Universal Setup**.
- 2 Configure the settings.

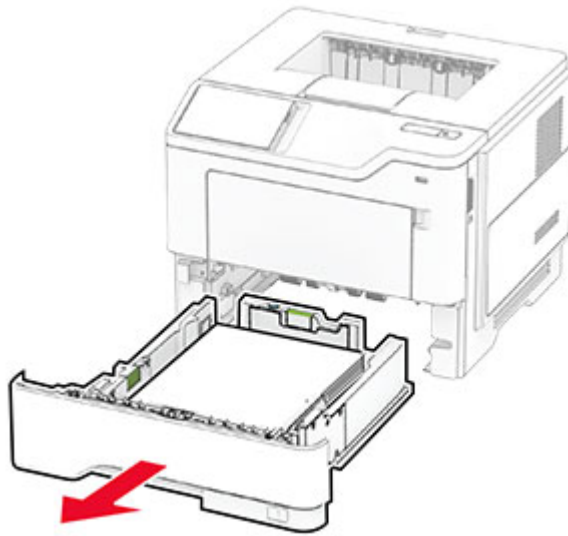
Loading trays



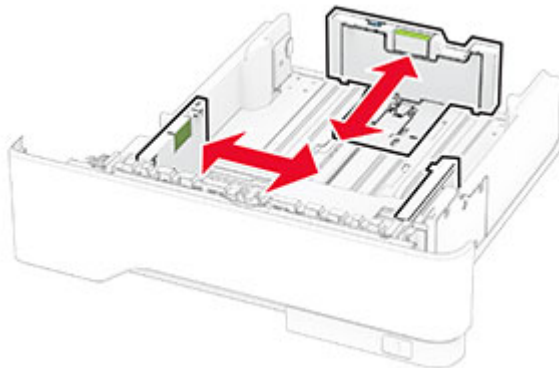
CAUTION—TIPPING HAZARD: To reduce the risk of equipment instability, load each tray separately. Keep all other trays closed until needed.

- 1 Remove the tray.

Note: To avoid paper jams, do not remove the tray while the printer is busy.



- 2 Adjust the guides to match the size of the paper that you are loading.



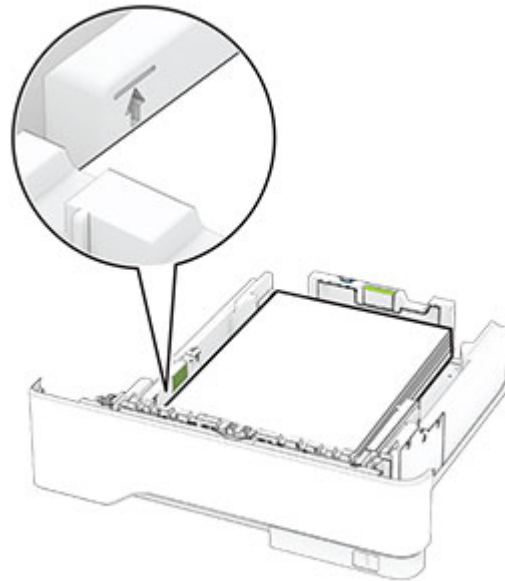
3 Flex, fan, and align the paper edges before loading.



4 Load the paper stack with the printable side facedown, and then make sure that the guides fit snugly against the paper.

Notes:

- Load letterhead facedown with the header toward the front of the tray for one-sided printing.
- Load letterhead faceup with the header toward the back of the tray for two-sided printing.
- Do not slide paper into the tray.
- To avoid paper jams, make sure that the stack height is below the maximum paper fill indicator.

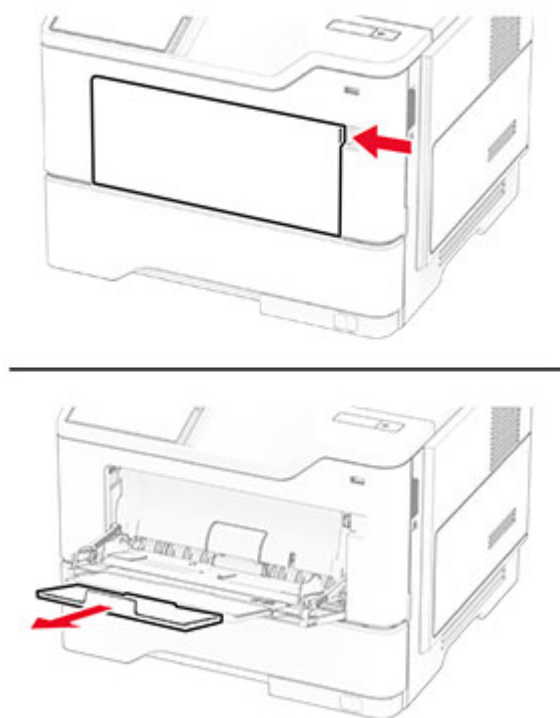


5 Insert the tray.

If necessary, set the paper size and paper type from the control panel to match the paper loaded.

Loading the multipurpose feeder

- 1 Open the multipurpose feeder.



- 2 Flex, fan, and align the paper edges before loading.



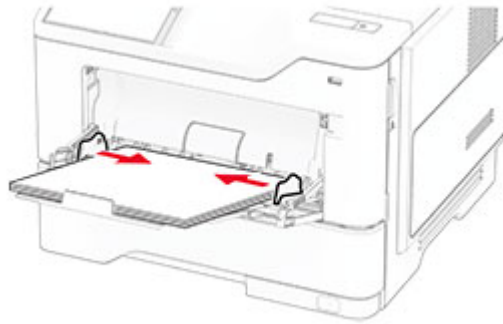
- 3 Load paper with the printable side faceup.

Notes:

- Load letterhead faceup with the header toward the rear of the printer for one-sided printing.
- Load letterhead facedown with the header toward the front of the printer for two-sided printing.
- Load envelopes with the flap facedown on the left side.

Warning—Potential Damage: Do not use envelopes with stamps, clasps, snaps, windows, coated linings, or self-stick adhesives.

- 4 Adjust the guide to match the size of the paper that you are loading.



- 5 From the control panel, set the paper size and paper type to match the paper loaded.

Linking trays

- 1 From the home screen, touch **Settings** > **Paper** > **Tray Configuration** > select a paper source.
- 2 Set the same paper size and paper type for the trays that you are linking.
- 3 From the home screen, touch **Settings** > **Device** > **Maintenance** > **Configuration Menu** > **Tray Configuration** > **Tray Linking**.
- 4 Touch **Automatic**.

To unlink trays, make sure that no trays have the same paper size and paper type settings.

Warning—Potential Damage: The temperature of the fuser varies according to the specified paper type. To avoid printing issues, match the paper type setting in the printer with the paper loaded in the tray.

Installing and updating software, drivers, and firmware

Installing the printer software

Notes:

- The print driver is included in the software installer package.
 - For Macintosh computers with macOS version 10.7 or later, you do not need to install the driver to print on an AirPrint-certified printer. If you want custom printing features, then download the print driver.
- 1 Obtain a copy of the software installer package.
 - From the software CD that came with your printer.
 - From our website or the place where you purchased the printer.
 - 2 Run the installer, and then follow the instructions on the computer screen.

Adding printers to a computer

Before you begin, do one of the following:

- Connect the printer and the computer to the same network. For more information on connecting the printer to a network, see [“Connecting the printer to a Wi-Fi network” on page 44](#).
- Connect the computer to the printer. For more information, see [“Connecting a computer to the printer” on page 46](#).
- Connect the printer to the computer using a USB cable. For more information, see [“Attaching cables” on page 18](#).

Note: The USB cable is sold separately.

For Windows users

- 1 From a computer, install the print driver.

Note: For more information, see [“Installing the printer software” on page 29](#).

- 2 Open the printers folder, and then click **Add a printer or scanner**.

- 3 Depending on your printer connection, do one of the following:

- Select a printer from the list, and then click **Add device**.
- Click **Show Wi-Fi Direct printers**, select a printer, and then click **Add device**.
- Click **The printer that I want isn't listed**, and then from the Add Printer window, do the following:
 - a Select **Add a printer using a TCP/IP address or hostname**, and then click **Next**.
 - b In the “Hostname or IP address” field, type the printer IP address, and then click **Next**.

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

- c Select a print driver, and then click **Next**.
- d Select **Use the print driver that is currently installed (recommended)**, and then click **Next**.
- e Type a printer name, and then click **Next**.
- f Select a printer sharing option, and then click **Next**.
- g Click **Finish**.

For Macintosh users

- 1 From a computer, open **Printers & Scanners**.
- 2 Click **+**, and then select a printer.
- 3 From the Use menu, select a print driver.

Notes:

- To use the Macintosh print driver, select either **AirPrint** or **Secure AirPrint**.
- If you want custom printing features, then select the manufacturer print driver. To install the driver, see [“Installing the printer software” on page 29](#).

- 4 Add the printer.

Updating firmware

To enhance printer performance and fix issues, update the printer firmware regularly.

For more information on updating the firmware, contact your sales representative.

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

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

- 2 Click **Settings > Device > Update Firmware**.

- 3 Do either of the following:

- Click **Check for updates now > I agree, start update**.
- Upload the flash file.
 - a Browse to the flash file.
 - b Click **Upload > Start**.

Exporting or importing a configuration file

You can export the configuration settings of your printer into a text file, and then import the file to apply the settings to other printers.

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

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

- 2 From the Embedded Web Server, click **Export Configuration** or **Import Configuration**.

- 3 Follow the instructions on the screen.

- 4 If the printer supports applications, then do the following:

- a Click **Apps > select the application > Configure**.
- b Click **Export** or **Import**.

Adding available options in the print driver

For Windows users

- 1 Open the printers folder.
- 2 Select the printer you want to update, and then do either of the following:
 - For Windows 7 or later, select **Printer properties**.
 - For earlier versions, select **Properties**.

- 3** Navigate to the Configuration tab, and then select **Update Now - Ask Printer**.
- 4** Apply the changes.

For Macintosh users

- 1** From System Preferences in the Apple menu, navigate to your printer, and then select **Options & Supplies**.
- 2** Navigate to the list of hardware options, and then add any installed options.
- 3** Apply the changes.

Installing hardware options

Available internal options

- Intelligent storage drive
 - Fonts
 - Simplified Chinese
 - Traditional Chinese
 - Japanese
 - Korean
 - Arabic
 - Mass storage
- Hard disk
- Licensed features
 - IPDS
 - Bar Code
- Internal solutions port
 - RS-232C Serial Interface Card
 - Parallel 1284-B Interface Card
 - MarkNet™ N8230 Fiber Ethernet

Notes:

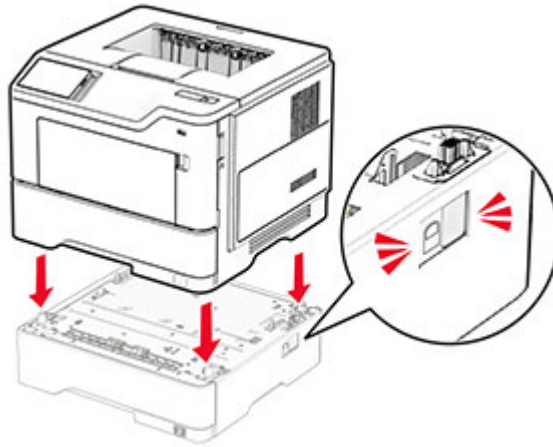
- An intelligent storage drive or a hard disk is required to activate Forms Merge and some IPDS features.
- Some options are available only in some printer models. For more information, contact the place where you purchased the printer.

Installing optional trays

CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, if you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

- 1 Turn off the printer.
- 2 Unplug the power cord from the electrical outlet, and then from the printer.
- 3 Unpack the optional tray, and then remove all packing material.
- 4 Align the printer with the optional tray, and then lower the printer into place.

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.



- 5 Connect the power cord to the printer, and then to the electrical outlet.

CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.

- 6 Turn on the printer.

Add the tray in the print driver to make it available for print jobs. For more information, see [“Adding available options in the print driver” on page 31](#).

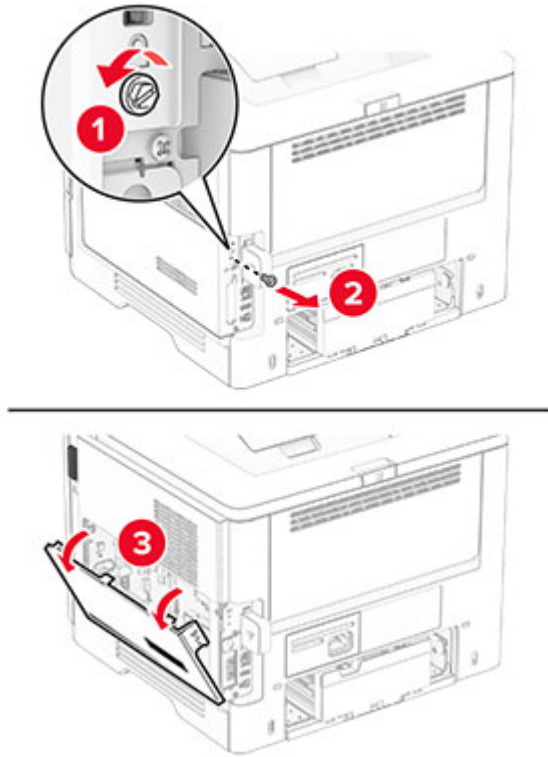
Installing the intelligent storage drive

CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, if you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

- 1 Turn off the printer.
- 2 Unplug the power cord from the electrical outlet, and then from the printer.

- 3** Using a flat-head screwdriver, open the controller board access cover.

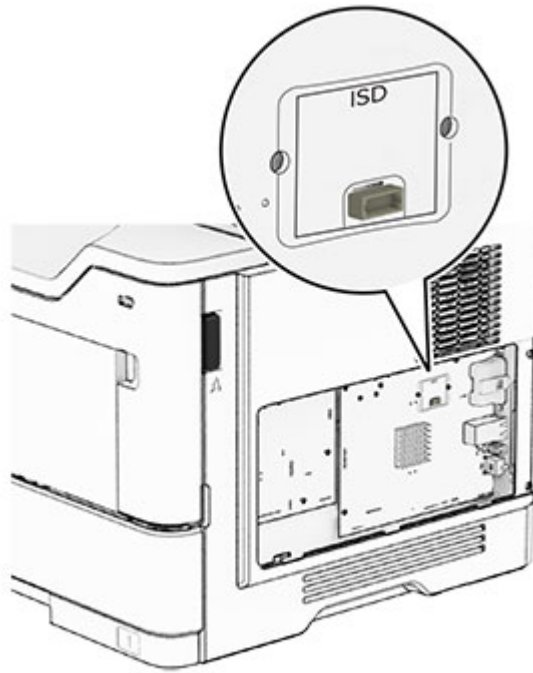
Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board components or connectors.



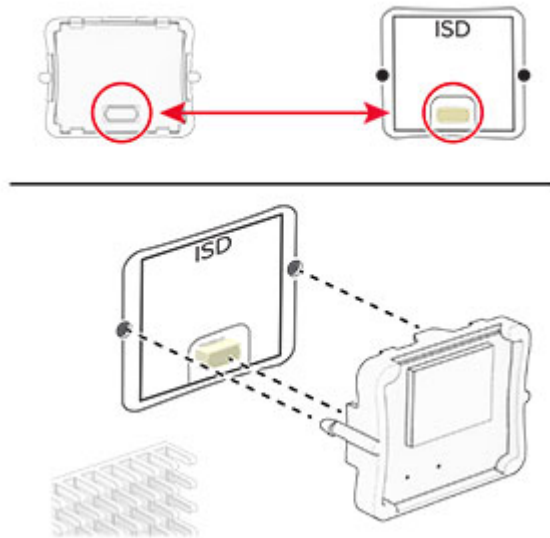
- 4** Unpack the intelligent storage drive (ISD).

Warning—Potential Damage: Avoid touching the connection points along the edge of the storage drive.

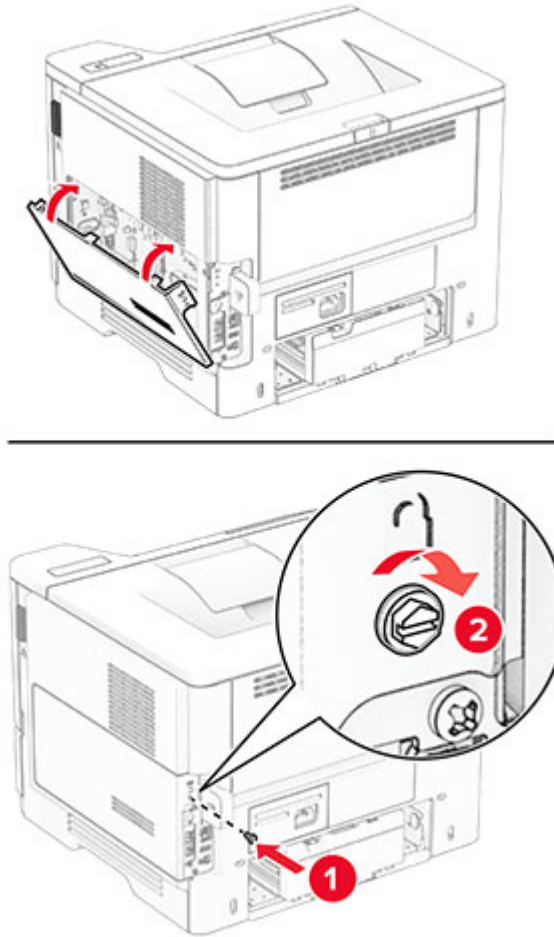
5 Locate the ISD connector.



6 Insert the ISD to its connector.



- 7** Close the controller board access cover, and then install the screw.



- 8** Connect the power cord to the printer, and then to the electrical outlet.



CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.

- 9** Turn on the printer.

Installing a printer hard disk

Note: These instructions apply only to printers that support printer hard disk.

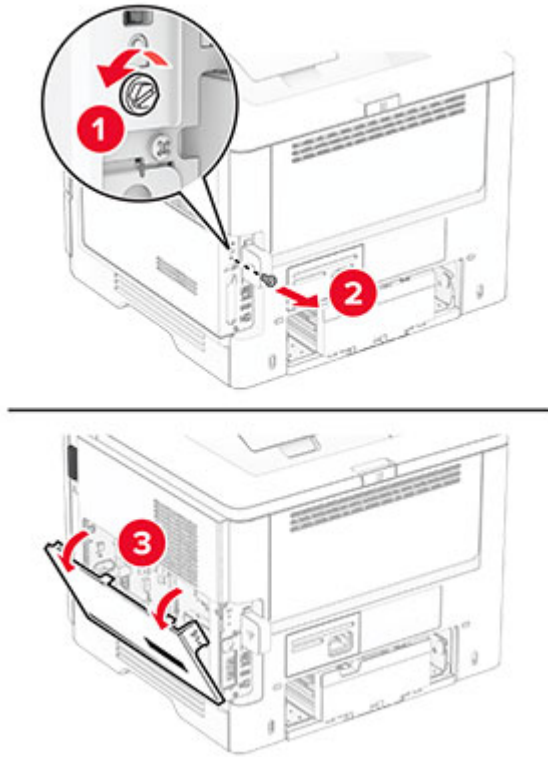


CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, if you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

- 1** Turn off the printer.
- 2** Unplug the power cord from the electrical outlet, and then from the printer.

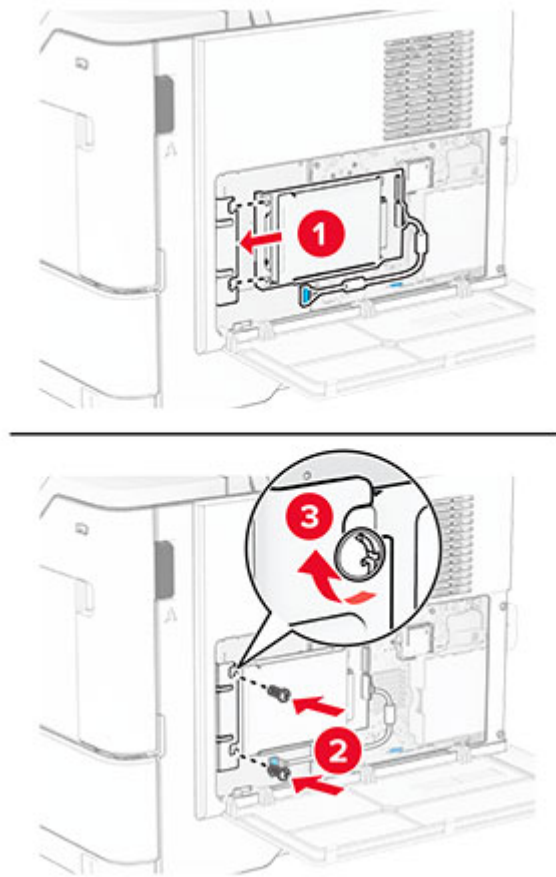
- 3** Using a flat-head screwdriver, open the controller board access cover.

Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board components or connectors.

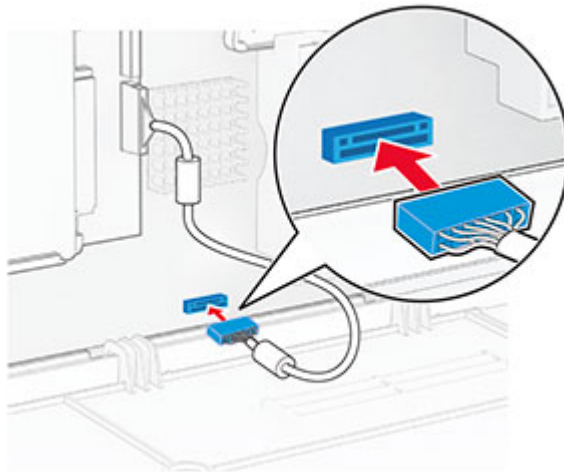


- 4** Unpack the hard disk.
- 5** Attach the hard disk to the controller board, and then install the screws.

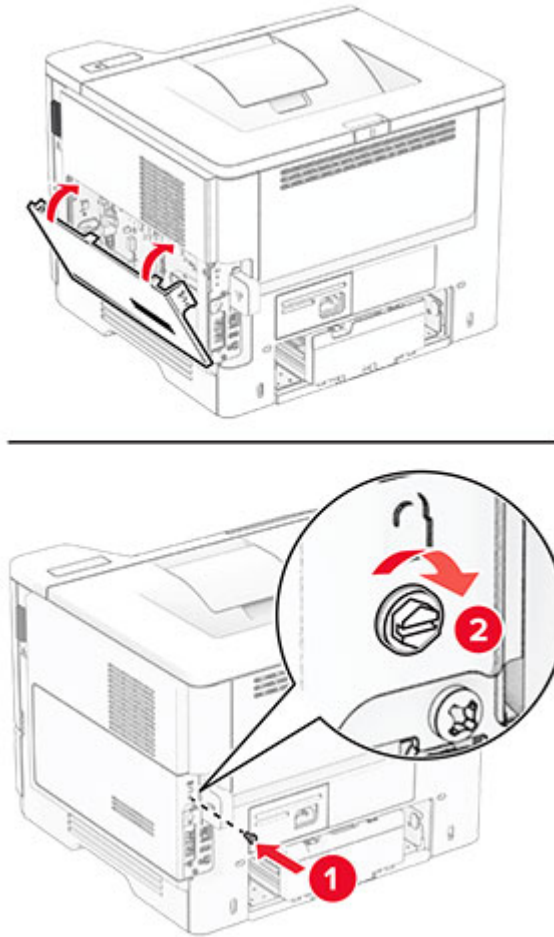
Warning—Potential Damage: Do not touch or press the center of the hard disk.



6 Attach the hard disk interface cable to the controller board.



- 7** Close the controller board access cover, and then install the screw.



- 8** Connect the power cord to the printer, and then to the electrical outlet.



CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.

- 9** Turn on the printer.

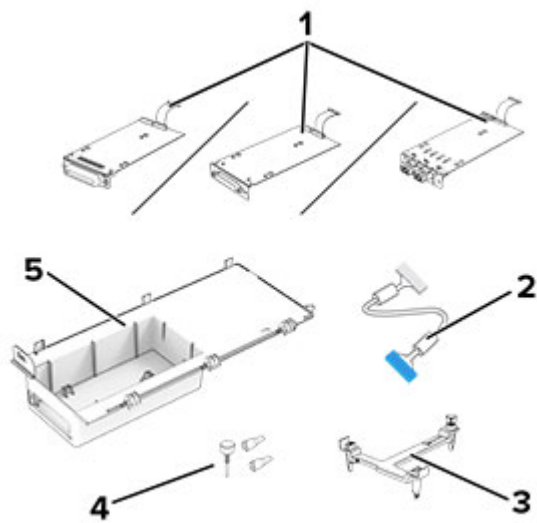
Installing an internal solutions port



CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, if you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

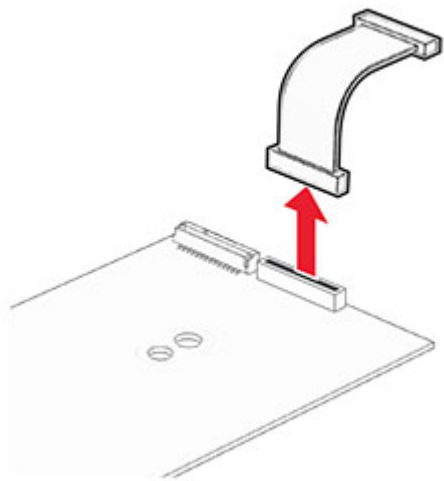
- 1** Turn off the printer.
- 2** Unplug the power cord from the electrical outlet, and then from the printer.

3 Unpack the internal solutions port (ISP) kit.

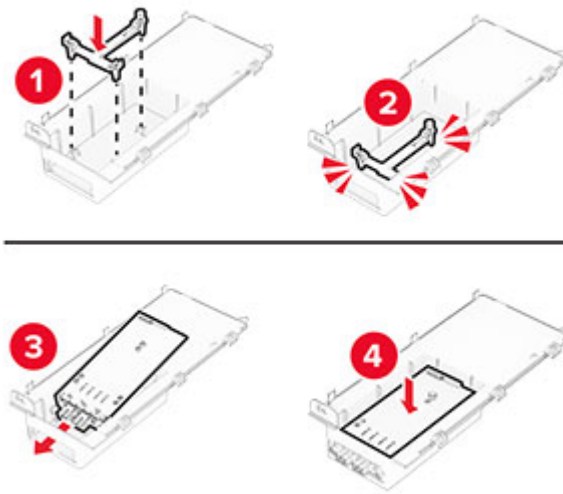


1	ISP <ul style="list-style-type: none">• RS-232C Serial Interface Card• Parallel 1284-B Interface Card• MarkNet N8230 Fiber Ethernet
2	ISP extended cable
3	Mounting bracket
4	Thumbscrews
5	Housing

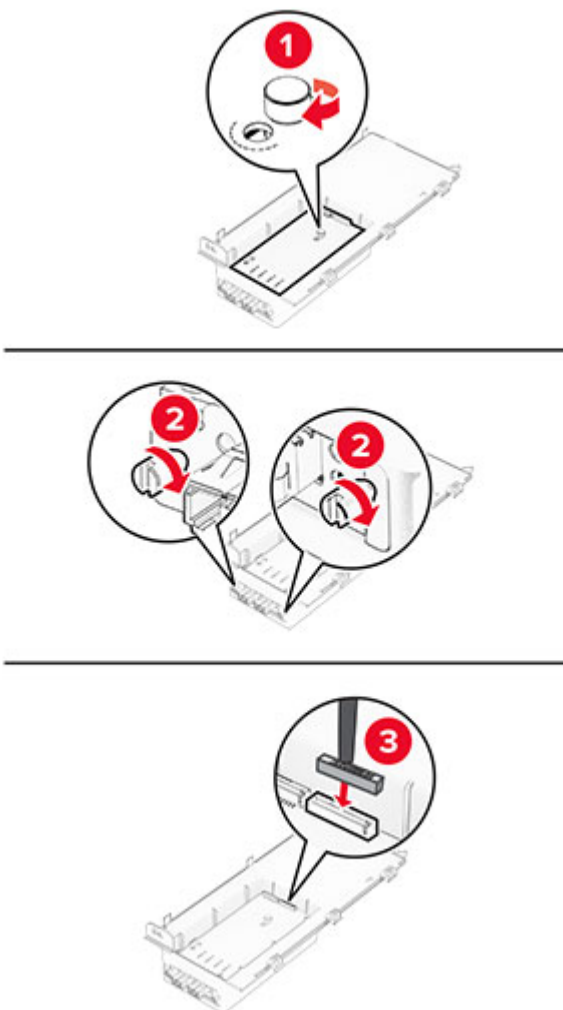
4 Remove the preinstalled interface cable from the ISP.



5 Install the ISP into its housing.

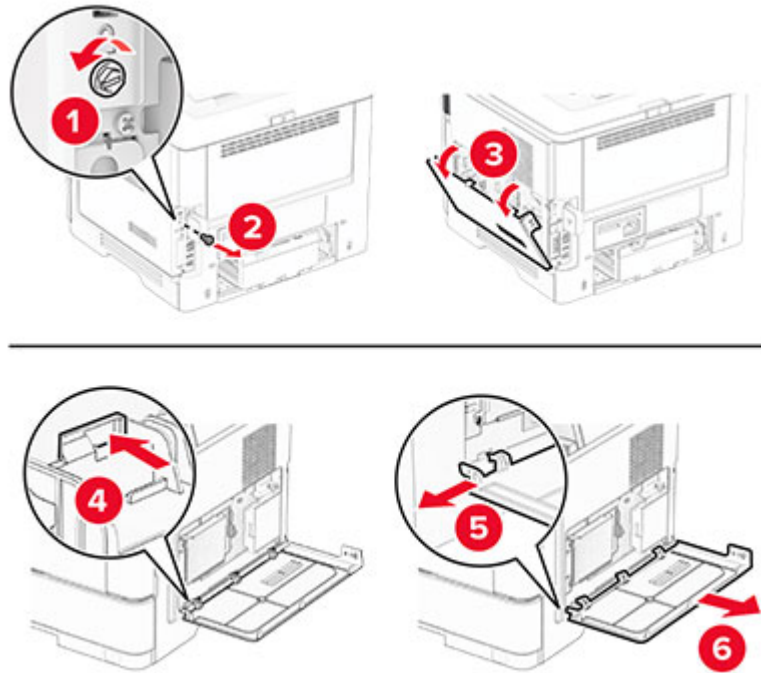


6 Secure the ISP in place, and then attach the ISP extended cable.

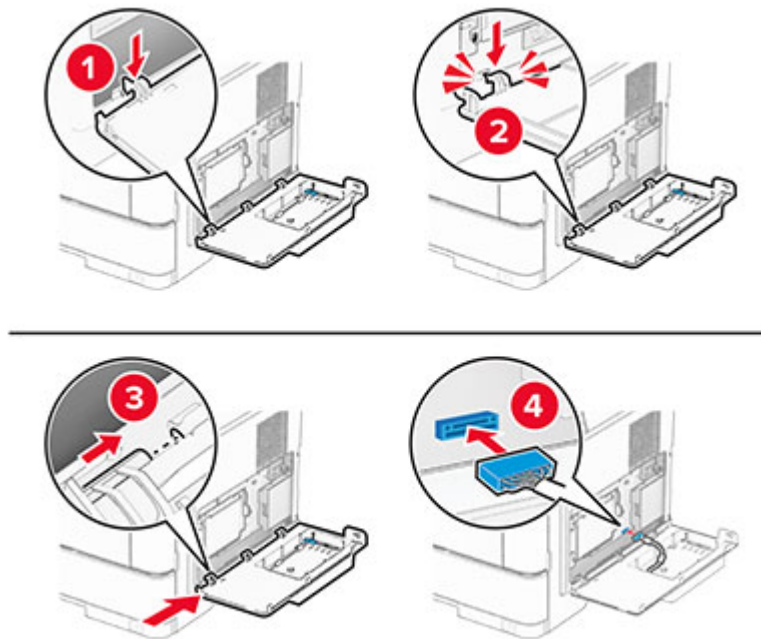


- 7 Using a flat-head screwdriver, remove the controller board access cover.

Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board electronic components or connectors.



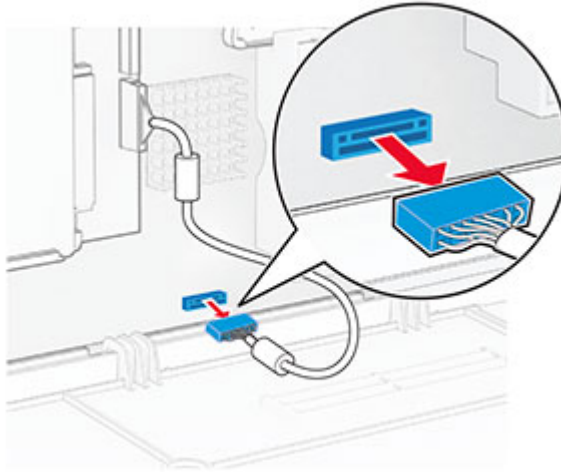
- 8 Attach the ISP kit to the printer.



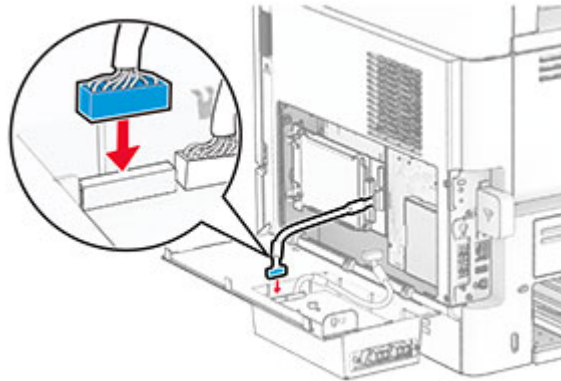
If a hard disk is installed, then disconnect the hard disk interface cable before installing the ISP.

Note: Hard disk is supported only in some printer models.

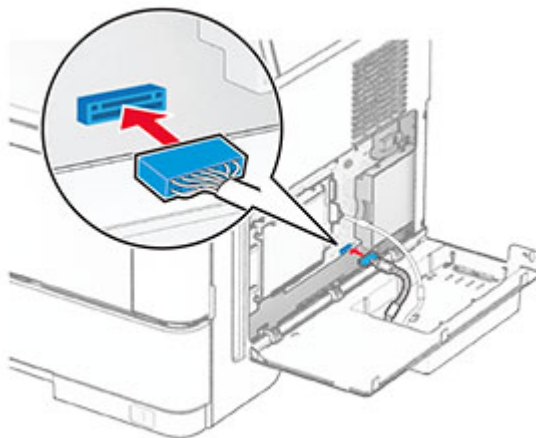
- a** Disconnect the hard disk interface cable from the controller board.



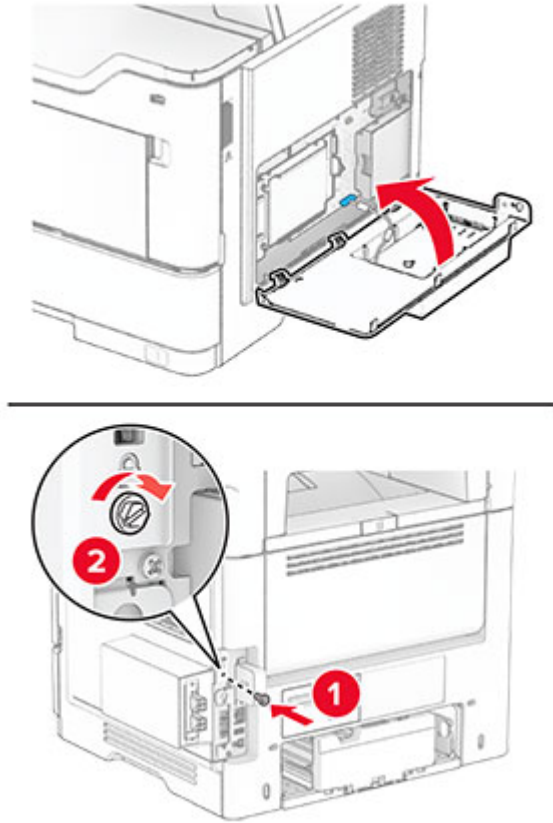
- b** Connect the hard disk interface cable to the ISP.



- c** Connect the ISP extended cable to the ISP connector.



- 9 Close the ISP kit, and then install the screw.



- 10 Connect the power cord to the printer, and then to the electrical outlet.



CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.

- 11 Turn on the printer.

Networking

Connecting the printer to a Wi-Fi network

Make sure that Active Adapter is set to Auto. From the home screen, touch **Settings > Network/Ports > Network Overview > Active Adapter**.

- 1 From the home screen, touch **Settings > Network/Ports > Wireless > Setup On Printer Panel > Choose Network**.
- 2 Select a Wi-Fi network, and then type the network password.

Note: For Wi-Fi-network-ready printer models, a prompt for Wi-Fi network setup appears during initial setup.

Connecting the printer to a wireless network using Wi-Fi Protected Setup (WPS)

Before you begin, make sure that:

- The access point (wireless router) is WPS-certified or WPS-compatible. For more information, see the documentation that came with your access point.
- A wireless network adapter is installed in your printer. For more information, see the instructions that came with the adapter.
- Active Adapter is set to Auto. From the home screen, touch **Settings** > **Network/Ports** > **Network Overview** > **Active Adapter**.

Using the Push Button method

- 1 From the home screen, touch **Settings** > **Network/Ports** > **Wireless** > **Wi-Fi Protected Setup** > **Start Push Button Method**.
- 2 Follow the instructions on the display.

Using the personal identification number (PIN) method

- 1 From the home screen, touch **Settings** > **Network/Ports** > **Wireless** > **Wi-Fi Protected Setup** > **Start PIN Method**.
- 2 Copy the eight-digit WPS PIN.
- 3 Open a web browser, and then type the IP address of your access point in the address field.

Notes:

- To know the IP address, see the documentation that came with your access point.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

- 4 Access the WPS settings. For more information, see the documentation that came with your access point.
- 5 Enter the eight-digit PIN, and then save the changes.

Configuring Wi-Fi Direct

Wi-Fi Direct^{fi} is a Wi-Fi-based peer-to-peer technology that allows wireless devices to connect directly to a Wi-Fi Direct-enabled printer without using an access point (wireless router).

Make sure that Active Adapter is set to Auto. From the home screen, touch **Settings** > **Network/Ports** > **Network Overview** > **Active Adapter**.

- 1 From the home screen, touch **Settings** > **Network/Ports** > **Wi-Fi Direct**.
- 2 Configure the settings.
 - **Enable Wi-Fi Direct**—Enables the printer to broadcast its own Wi-Fi Direct network.
 - **Wi-Fi Direct Name**—Assigns a name for the Wi-Fi Direct network.
 - **Wi-Fi Direct Password**—Assigns the password for negotiating the wireless security when using the peer-to-peer connection.

- **Show Password on Setup Page**—Shows the password on the Network Setup Page.
- **Auto-Accept Push Button Requests**—Lets the printer accept connection requests automatically.

Note: Accepting push-button requests automatically is not secured.

Notes:

- By default, the Wi-Fi Direct network password is not visible on the printer display. To show the password, enable the password peek icon. From the home screen, touch **Settings > Security > Miscellaneous > Enable Password/PIN Reveal**.
- You can see the password of the Wi-Fi Direct network without showing it on the printer display. From the home screen, touch **Settings > Reports > Network > Network Setup Page**.

Connecting a mobile device to the printer

Before connecting your mobile device, make sure that Wi-Fi Direct has been configured. For more information, see [“Configuring Wi-Fi Direct” on page 45](#).

Connecting using Wi-Fi Direct

Note: These instructions apply only to Android mobile devices.

- 1 From the mobile device, go to the settings menu.
- 2 Enable **Wi-Fi**, and then tap **Wi-Fi Direct**.
- 3 Select the printer Wi-Fi Direct name.
- 4 Confirm the connection on the printer control panel.

Connecting using Wi-Fi

- 1 From the mobile device, go to the settings menu.
- 2 Tap **Wi-Fi**, and then select the printer Wi-Fi Direct name.

Note: The string DIRECT-xy (where x and y are two random characters) is added before the Wi-Fi Direct name.

- 3 Enter the Wi-Fi Direct password.

Connecting a computer to the printer

Before connecting your computer, make sure that Wi-Fi Direct has been configured. For more information, see [“Configuring Wi-Fi Direct” on page 45](#).

For Windows users

- 1 Open the printers folder, and then click **Add a printer or scanner**.
- 2 Click **Show Wi-Fi Direct printers**, and then select the printer Wi-Fi Direct name.
- 3 From the printer display, take note of the eight-digit PIN of the printer.
- 4 Enter the PIN on the computer.

Note: If the print driver is not already installed, then Windows downloads the appropriate driver.

For Macintosh users

- 1 Click the wireless icon, and then select the printer Wi-Fi Direct name.

Note: The string DIRECT-xy (where x and y are two random characters) is added before the Wi-Fi Direct name.

- 2 Type the Wi-Fi Direct password.

Note: Switch your computer back to its previous network after disconnecting from the Wi-Fi Direct network.

Deactivating the Wi-Fi network

- 1 From the home screen, touch **Settings > Network/Ports > Network Overview > Active Adapter > Standard Network**.
- 2 Follow the instructions on the display.

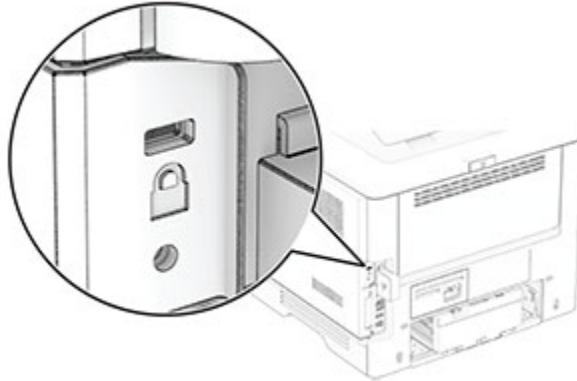
Checking the printer connectivity

- 1 From the home screen, touch **Settings > Reports > Network > Network Setup Page**.
- 2 Check the first section of the network setup page, and confirm that the status is connected.
If the status is not connected, then the LAN drop may be inactive, or the network cable may be malfunctioning. Contact your administrator for assistance.

Secure the printer

Locating the security slot

The printer is equipped with a security lock feature. Attach a security lock compatible with most laptop computers in the location shown to secure the printer in place.



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 Select the **Sanitize all information on nonvolatile memory** check box, and then touch **ERASE** or **OK**.
- 3 Touch **Start initial setup wizard** or **Leave printer offline**, and then touch **Next** or **OK**.
- 4 Start the operation.

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

Erasing printer storage drive

- 1 From the home screen, touch **Settings > Device > Maintenance > Out of Service Erase**.
- 2 Depending on the storage drive that is installed on your printer, do either of the following:
 - For hard disk, touch the **Sanitize all information on hard disk** check box, touch **ERASE**, and then select a method to erase data.

Note: The process to sanitize the hard disk can take from several minutes to more than an hour, making the printer unavailable for other tasks.
 - For intelligent storage drive (ISD), touch **Erase Intelligent Storage Drive**, and then touch **ERASE** to erase all user data.

- 3 Start the operation.

Restoring factory default settings

- 1 From the home screen, touch **Settings** > **Device** > **Restore Factory Defaults**.
- 2 Touch **Restore Settings** > select the settings that you want to restore > **RESTORE**.
- 3 Start the operation.

Statement of Volatility

Type of memory	Description
Volatile memory	The printer uses standard random access memory (RAM) to buffer temporarily user data during simple print jobs.
Nonvolatile memory	The printer may use two forms of non-volatile memory: EEPROM and NAND (flash memory). Both types store the operating system, printer settings, and network information. They also store bookmark settings and embedded solutions.
Hard disk storage drive	Some printers may have a hard disk drive installed. The printer hard disk is designed for printer-specific functionality. The hard disk lets the printer 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.

Erase the content of any installed printer memory in the following circumstances:

- The printer is decommissioned.
- The printer hard disk or ISD is replaced.
- The printer is moved to a different department or location.
- The printer is serviced by someone from outside your organization.
- The printer is removed from your premises for service.
- The printer is sold to another organization.

Note: To dispose a storage drive, follow the policies and procedures of your organization.

Print

Printing from a computer

Note: For labels, card stock, and envelopes, set the paper size and paper type in the printer before printing.



- 1 From the document that you are trying to print, open the Print dialog.
- 2 If necessary, adjust the settings.
- 3 Print the document.

Printing from a mobile device

Printing from a mobile device using Mopria Print Service

Mopria^{fi} Print Service is a mobile printing solution for mobile devices running on Android™ version 5.0 or later. It allows you to print directly to any Mopria-certified printer.


Note: Make sure that you download the Mopria Print Service application from the Google Play™ store and enable it in the mobile device.

- 1 From your Android mobile device, launch a compatible application or select a document from your file manager.
- 2 Tap  > **Print**.
- 3 Select a printer, and then adjust the settings, if necessary.
- 4 Tap .

Printing from a mobile device using AirPrint

The AirPrint software feature is a mobile printing solution that allows you to print directly from Apple devices to an AirPrint-certified printer.



Notes:

- Make sure that the Apple device and the printer are connected to the same network. If the network has multiple wireless hubs, then make sure that both devices are connected to the same subnet.
 - This application is supported only in some Apple devices.
- 1 From your mobile device, select a document from your file manager or launch a compatible application.
 - 2 Tap  > **Print**.
 - 3 Select a printer, and then adjust the settings, if necessary.
 - 4 Print the document.

Printing from a mobile device using Wi-Fi Direct^{fi}

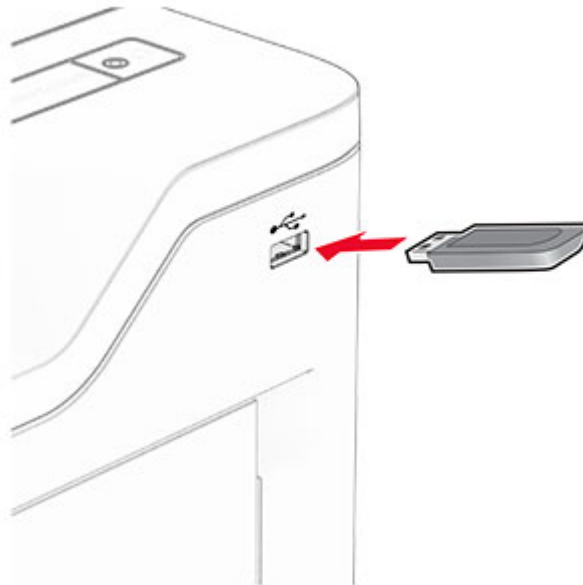
Wi-Fi Direct^{fi} is a printing service that lets you print to any Wi-Fi Direct-ready printer.

Note: Make sure that the mobile device is connected to the printer wireless network. For more information, see [“Connecting a mobile device to the printer” on page 46](#).

- 1 From your mobile device, launch a compatible application or select a document from your file manager.
- 2 Depending on your mobile device, do one of the following:
 - Tap  > **Print**.
 - Tap  > **Print**.
 - Tap ... > **Print**.
- 3 Select a printer, and then adjust the settings, if necessary.
- 4 Print the document.

Printing from a flash drive

- 1 Insert the flash drive.



Notes:

- If you insert the flash drive when an error message appears, then the printer ignores the flash drive.
 - If you insert the flash drive while the printer is processing other print jobs, then **Busy** appears on the display.
- 2 From the display, touch the document that you want to print.
If necessary, configure the print settings.
 - 3 Print the document.
To print another document, touch **USB Drive**.

Warning—Potential Damage: To avoid loss of data or printer malfunction, do not touch the flash drive or the printer in the area shown while actively printing, reading, or writing from the memory device.



Supported flash drives and file types

Flash drives

- Flash drives that support USB 2.0 or lower.
- Flash drives that support a New Technology File System (NTFS) or the File Allocation Table (FAT32) file system.

File types

Documents	Images
<ul style="list-style-type: none">• PDF (version 1.7 or earlier)• Microsoft file formats (DOC, DOCX, XLS, XLSX, PPT, PPTX)	<ul style="list-style-type: none">• JPEG or JPG• TIFF or TIF• GIF• BMP• PNG• PCX• DCX

Configuring confidential jobs

- 1 From the home screen, touch **Settings** > **Security** > **Confidential Print Setup**.
- 2 Configure the settings.

Setting	Description
Max Invalid PIN	Set the limit for entering an invalid PIN. Note: When the limit is reached, the print jobs for that user name are deleted.
Confidential Job Expiration	Set an individual expiration time for each held job before it is automatically deleted from the printer memory, hard disk, or intelligent storage drive. Note: A held job is either Confidential, Repeat, Reserve, or Verify.
Repeat Job Expiration	Set the expiration time for print jobs that you want to repeat.
Verify Job Expiration	Set the expiration time for printing a copy of a job for you to check its quality before printing the remaining copies.
Reserve Job Expiration	Set the expiration time for jobs that you want to store in the printer for printing later.
Require All Jobs to be Held	Set the printer to hold all print jobs.
Keep duplicate documents	Set the printer to keep all documents with the same file name.

Printing confidential and other held jobs

For Windows users

- 1 With a document open, click **File > Print**.
- 2 Select a printer, and then click **Properties, Preferences, Options, or Setup**.
- 3 Click **Print and Hold**.
- 4 Select **Use Print and Hold**, and then assign a user name.
- 5 Select the print job type (Confidential, Repeat, Reserve, or Verify).
If you select **Confidential**, then secure the print job with a personal identification number (PIN).
- 6 Click **OK** or **Print**.
- 7 From the printer home screen, release the print job.
 - For confidential print jobs, touch **Held jobs** > select your user name > **Confidential** > enter the PIN > select the print job > configure the settings > **Print**.
 - For other print jobs, touch **Held jobs** > select your user name > select the print job > configure the settings > **Print**.

For Macintosh users

Using AirPrint

- 1 With a document open, choose **File > Print**.
- 2 Select a printer, and then from the drop-down menu following the Orientation menu, choose **PIN Printing**.
- 3 Enable **Print with PIN**, and then enter a four-digit PIN.

- 4 Click **Print**.
- 5 From the printer home screen, release the print job. Touch **Held jobs** > select your computer name > **Confidential** > enter the PIN > select the print job > **Print**.

Using the print driver

- 1 With a document open, choose **File** > **Print**.
- 2 Select a printer, and then from the drop-down menu following the Orientation menu, choose **Print and Hold**.
- 3 Choose **Confidential Print**, and then enter a four-digit PIN.
- 4 Click **Print**.
- 5 From the printer home screen, release the print job. Touch **Held jobs** > select your computer name > **Confidential** > select the print job > enter the PIN > **Print**.


Printing a font sample list

- 1 From the home screen, touch **Settings** > **Reports** > **Print** > **Print Fonts**.
- 2 Touch **PCL Fonts** or **PS Fonts**.

Placing separator sheets between copies

- 1 From the home screen, touch **Settings** > **Print** > **Layout** > **Separator Sheets** > **Between Copies**.
- 2 Print the document.

Canceling a print job

- 1 From the home screen, touch .
- 2 Select the job to cancel.

Note: You can also cancel a job by touching **Job Queue**.

Adjusting toner darkness

- 1 From the home screen, touch **Settings** > **Print** > **Quality** > **Toner Darkness**.
- 2 Adjust the setting.

Use printer menus

Menu map

Device	<ul style="list-style-type: none"> • Preferences • Eco-Mode • Remote Operator Panel • Notifications • Power Management • Anonymous Data Collection 	<ul style="list-style-type: none"> • Accessibility¹ • Restore Factory Defaults • Maintenance • Home Screen Customization^{2,3} • Update Firmware • About this Printer
Print	<ul style="list-style-type: none"> • Layout • Setup • Quality • Job Accounting 	<ul style="list-style-type: none"> • PDF • PostScript • PCL • Image
Paper	<ul style="list-style-type: none"> • Tray Configuration 	<ul style="list-style-type: none"> • Media Configuration
USB Drive	Flash Drive Print	
Network/Ports	<ul style="list-style-type: none"> • Network Overview • Wireless • Wi-Fi Direct • AirPrint² • Mobile Services Management • Ethernet • TCP/IP • SNMP 	<ul style="list-style-type: none"> • IPSec • 802.1x • LPD Configuration • HTTP/FTP Settings • ThinPrint¹ • USB • Restrict external network access
Security	<ul style="list-style-type: none"> • Login Methods¹ • Schedule USB Devices¹ • Security Audit Log • Certificate Management² • Login Restrictions 	<ul style="list-style-type: none"> • Confidential Print Setup • Disk Encryption¹ • Erase Temporary Data Files • Solutions LDAP Settings • Miscellaneous
Reports	<ul style="list-style-type: none"> • Menu Settings Page • Device 	<ul style="list-style-type: none"> • Print • Network
Troubleshooting	Print Quality Test Pages	
Forms Merge ⁴	Forms Merge	

¹ Available only in some printer models.

² Appears only in the Embedded Web Server.

³ In some printer models, this menu appears as Visible Home Screen Icons.

⁴ Appears only when a hard disk or an intelligent storage drive is installed.

Device

Preferences

Menu item	Description
Display Language [List of languages]	Set the language of the text that appears on the display.
Country/Region [List of countries or regions]	Identify the country or region where the printer is configured to operate.
Run initial setup Off* On	Run the setup wizard.
Keyboard Keyboard Type [List of languages]	Select a language as a keyboard type. Note: All the Keyboard Type values may not appear or may require special hardware to appear.
Displayed information Display Text 1 (IP Address*) Display Text 2 (Date/Time*) Custom Text 1 Custom Text 2	Specify the information to appear on the home screen.
Date and Time Configure Current Date and Time Manually Set Date and Time Date Format (MM-DD-YYYY*) Time Format (12 hour A.M./P.M.*) Time Zone UTC (GMT) Offset DST Start DST End DST Offset Network Time Protocol Enable NTP (On*) NTP Server Enable Authentication (None*) Key ID Password	Configure the printer date and time and network time protocol. Notes: <ul style="list-style-type: none"> MM-DD-YYYY is the U.S. factory default setting. DD-MM-YYYY is the international factory default setting. UTC (GMT) Offset, DST Start, DST End, and DST Offset appear only when Time Zone is set to (UTC+user) Custom. Key ID and Password appear only when Enable Authentication is set to MD5 key.
Paper Sizes US* Metric	Specify the unit of measurement for paper sizes. Note: The country or region selected in the initial setup wizard determines the initial paper size setting.
Screen Brightness 20–100% (100*)	Adjust the brightness of the display.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Flash Drive Access Disabled Enabled*	Enable access to the flash drive.
Device Sounds Mute All Sounds (Off*) Button Feedback (On*) Volume (5*) Alarm Control (Single*) Cartridge Alarm (Single*)	Configure the sound settings of the printer. Note: This menu item appears only in some printer models.
Screen Timeout 5–300 (60*)	Set the idle time in seconds before the display shows the home screen, or before the printer logs out a user account automatically.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Eco-Mode

Menu item	Description
Print Sides 1-Sided* 2-Sided	Specify whether to print on one side or two sides of the paper.
Print Pages per Side Off* 2 pages per side 3 pages per side 4 pages per side 6 pages per side 9 pages per side 12 pages per side 16 pages per side	Print multiple page images on one side of a sheet of paper.
Print Toner Darkness 1–10 (8*)	Determine the lightness or darkness of text images.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Remote Operator Panel

Menu item	Description
External VNC Connection Don't Allow* Allow	Connect an external Virtual Network Computing (VNC) client to the remote control panel.
Authentication Type None* Standard Authentication	Set the authentication type when accessing the VNC client server.
VNC Password	Specify the password to connect to the VNC client server. Note: This menu item appears only if Authentication Type is set to Standard Authentication.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Notifications

Menu item	Description
Alarm Control Off Single* Continuous	Set the number of times that the alarm sounds when the printer requires user intervention. Note: This menu item is available only in some printer models.
Supplies Show Supply Estimates Show estimates* Do not show estimates	Show the estimated status of the supplies.
Supplies Cartridge Alarm Off Single* Continuous	Set the number of times that the alarm sounds when the cartridge is low. Note: This menu item is available only in some printer models.
Supplies Custom Supply Notifications	Configure notification settings when the printer requires user intervention. Note: This menu item appears only in the Embedded Web Server.
E-mail Alerts Setup E-mail Setup Primary SMTP Gateway	Type the IP address or host name of the primary SMTP server for sending e-mail.
E-mail Alerts Setup E-mail Setup Primary SMTP Gateway Port (25*)	Enter the port number of the primary SMTP server.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
E-mail Alerts Setup E-mail Setup Secondary SMTP Gateway	Type the server IP address or host name of your secondary or backup SMTP server.
E-mail Alerts Setup E-mail Setup Secondary SMTP Gateway Port (25*)	Enter the server port number of your secondary or backup SMTP server.
E-mail Alerts Setup E-mail Setup SMTP Timeout (30*)	Specify how long before the printer times out if the SMTP server does not respond.
E-mail Alerts Setup E-mail Setup Reply Address	Specify a reply address in the e-mail.
E-mail Alerts Setup E-mail Setup Always use SMTP default Reply Address (Off*)	Use the SMTP default Reply Address.
E-mail Alerts Setup E-mail Setup Use SSL/TLS (Disabled*)	Send an e-mail using an encrypted link.
E-mail Alerts Setup E-mail Setup Require Trusted Certificate (On*)	Require a trusted certificate when accessing the SMTP server.
E-mail Alerts Setup E-mail Setup SMTP Server Authentication (No authentication required*)	Set the authentication type for the SMTP server.
E-mail Alerts Setup E-mail Setup Device-Initiated E-mail (None*)	Set whether credentials are required for device-initiated e-mails.
E-mail Alerts Setup E-mail Setup User-Initiated E-mail (None*)	Set whether credentials are required for user-initiated e-mails. Note: This menu item is available only in some printer models.
E-mail Alerts Setup E-mail Setup Use Active Directory Device Credentials (Off*)	Enable user credentials and group designations to connect to the SMTP server.
E-mail Alerts Setup E-mail Setup Device Userid	Specify the user ID to connect to the SMTP server.

Note: An asterisk (*) next to a value indicates the factory default setting.

Menu item	Description
E-mail Alerts Setup E-mail Setup Device Password	Specify the password to connect to the SMTP server.
E-mail Alerts Setup E-mail Setup Kerberos 5 REALM	Specify the realm for the Kerberos 5 authentication protocol.
E-mail Alerts Setup E-mail Setup NTLM Domain	Specify the domain name for the NTLM security protocol.
E-mail Alerts Setup E-mail Setup Disable "SMTP server not set up" error (Off*)	Disable an SMTP setup error message to appear on the display.
Error Prevention Jam Assist Off On*	Set the printer to check for jammed paper automatically.
Error Prevention Auto Continue Off On* (5 seconds) Auto Continue Time (5*)	Let the printer continue processing or printing a job automatically after clearing certain attendance conditions. Note: Auto Continue Time is available only in some printer models.
Error Prevention Auto Reboot Auto Reboot Reboot when idle Reboot always* Reboot never	Set the printer to restart when an error occurs.
Error Prevention Auto Reboot Max Auto Reboots (2*)	Set the number of automatic reboots that the printer can perform.
Error Prevention Auto Reboot Auto Reboot Window (720*)	Set the number of seconds before the printer performs an automatic reboot.
Error Prevention Auto Reboot Auto Reboot Counter	Show a read-only information of the reboot counter.
Error Prevention Auto Reboot Reset Auto Reboot Counter Cancel Continue	Reset Auto Reboot Counter. Note: Reset Auto Reboot Counter is available only in some printer models.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Error Prevention Display Short Paper Error On Auto-clear*	Set the printer to show a message when a short paper error occurs. Note: Short paper refers to the size of the paper loaded.
Error Prevention Page Protect Off* On	Set the printer to process the entire page into the memory before printing it.
Jam Content Recovery Jam Recovery Off On Auto*	Set the printer to reprint jammed pages.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Power Management

Menu item	Description
Sleep Mode Profile Print from Sleep Mode Stay awake after printing Enter Sleep Mode after printing*	Set the printer to stay awake or enter Sleep mode after printing.
Sleep Mode Profile Touch to Wake from Deep Sleep Off On*	Wake the printer from Deep Sleep mode by touching the printer display.
Timeouts Sleep Mode 1–114 minutes (15*)	Set the idle time before the printer begins operating in Sleep mode.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Timeouts Hibernate Timeout Disabled 1 hour 2 hours 3 hours 6 hours 1 day 2 days 3 days* 1 week 2 weeks 1 month	Set the time before the printer turns off.
Timeouts Hibernate Timeout on Connection Hibernate Do Not Hibernate*	Set Hibernate Timeout to turn off the printer while an active Ethernet connection exists.
Schedule Power Modes Schedules Add New Schedule	Schedule the printer when to enter Sleep or Hibernate mode.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Anonymous Data Collection

Menu item	Description
Anonymous Data Collection Device Usage and Performance Information None*	Send printer usage and performance information to the manufacturer. Note: Anonymous Data Send Time appears only when you set Anonymous Data Collection to Device Usage and Performance Information.
Anonymous Data Send Time Start Time Stop Time	
Note: An asterisk (*) next to a value indicates the factory default setting.	

Accessibility

Note: This menu appears only in some printer models.

Menu item	Description
Duplicate Key Strike Interval 0–5 (0*)	Set the interval in seconds during which the printer ignores duplicate key presses on an attached keyboard.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Key Repeat Initial Delay 0.25–5 (1*)	Set the initial length of delay in seconds before a repeating key starts repeating. Note: This menu item appears only when a keyboard is attached to the printer.
Key Repeat Rate 0.5–30 (30*)	Set the number of presses per second for a repeating key. Note: This menu item appears only when a keyboard is attached to the printer.
Prolong Screen Timeout Off* On	Let the user remain in the same location and reset the Screen Timeout timer when it expires instead of returning to the home screen.
Headphone Volume 1–10 (5*)	Adjust the headphone volume. Note: This menu item appears only when a headphone is attached to the printer.
Enable Voice Guidance When Headphone Is Attached Off* On	Enable Voice Guidance when a headphone is attached to the printer.
Speak Passwords/PINs Off* On	Set the printer to read out loud passwords or personal identification numbers. Note: This menu item appears only when a headphone or a speaker is attached to the printer.
Speech Rate Very Slow Slow Normal* Fast Faster Very Fast Rapid Very Rapid Fastest	Set the Voice Guidance speech rate. Note: This menu item appears only when a headphone or a speaker is attached to the printer.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Restore Factory Defaults

Menu item	Description
Restore Settings Restore all settings Restore printer settings Restore network settings Restore app settings	Restore the printer factory default settings. Note: Restore app settings appears only in some printer models.

Maintenance

Configuration Menu

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

Note: An asterisk (*) next to a value indicates the factory default setting.

Menu item	Description
Tray Configuration Multiple Universal Sizes Off* On	Set the tray to support multiple universal sizes.
Reports Menu Settings Page Event Log Event Log Summary	Print reports about printer menu settings, status, and event logs.
Supply Usage And Counters Clear Supply Usage History	Reset the supply usage history to the factory default level.
Supply Usage And Counters Reset Maintenance Counter	Reset the counter after installing a new maintenance kit.
Printer Emulations PPDS Emulation Off* On	Set the printer to recognize and use the PPDS data stream.
Printer Emulations PS Emulation Off On*	Set the printer to recognize and use the PS data stream.
Printer Emulations Enable Formsmerge Off* On	Activate Forms Merge to store the forms into the hard disk or intelligent storage drive (ISD). Note: A hard disk or an ISD must be installed.
Printer Emulations Enable Prescribe Off* On	Activate Prescribe. Note: The Prescribe license must be installed.
Printer Emulations Emulator Security Page Timeout (60 minutes*) Reset Emulator After Job (Off*) Disable Printer Message Access (On*)	Configure the security settings of the printer during emulation mode.
Print Configuration Font Sharpening 0–150 (24*)	Set a text point-size value below which the high-frequency screens are used when printing font data. For example, if the value is 24, then all fonts sized 24 points or less use the high-frequency screens.
Print Configuration Print Density Disabled 1–5 (3*)	Adjust the toner density when printing documents.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Device Operations Quiet Mode Off* On	Set the printer to operate in Quiet Mode. Note: Enabling this setting slows down the overall performance of the printer.
Device Operations Safe Mode Off* On	Set the printer to operate in a special mode, in which it attempts to continue offering as much functionality as possible, despite known issues. For example, when set to On, and the duplex motor is nonfunctional, the printer performs one-sided printing of the documents even if the job is two-sided printing.
Device Operations Clear Custom Status	Erase user-defined strings for the Default or Alternate custom messages.
Device Operations Clear all remotely-installed messages	Erase messages that were remotely installed.
Device Operations Automatically Display Error Screens Off On*	Show existing error messages on the display after the printer remains inactive on the home screen for a length of time.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Out of Service Erase

Menu item	Description
Out of Service Erase Memory Last Sanitized ISD last erased	Show a read-only information on when the printer memory or storage drive was last erased. Note: ISD last erased appears only when an intelligent storage drive is installed.
Out of Service Erase Sanitize all information on nonvolatile memory Erase all printer and network settings Erase all apps and app settings Erase all shortcuts and shortcut settings Erase Intelligent Storage Drive	Clear all information on nonvolatile memory and on the storage drive. Note: Erase Intelligent Storage Drive appears only when an ISD is installed.

Home Screen Customization

Note: This menu appears only in the Embedded Web Server.

Menu	Description
Status/Supplies Job Queue Settings Address Book USB Drive Held Jobs	Specify which icons to show on the home screen.

Update firmware

Menu item	Description
Current Version	Show the current firmware version installed on the printer.
Check for updates now	Check for firmware updates.
Auto check for updates	Set the printer to check for firmware updates automatically.

About this Printer

Menu item	Description
Asset Tag	Specify the identity of the printer. The maximum length is 32 characters.
Printer's Location	Specify the printer location. The maximum length is 63 characters.
Contact	Specify the contact information for the printer. The maximum length is 63 characters.
Firmware Version	Show the firmware version installed on the printer.
Engine	Show the engine number of the printer.
Serial Number	Show the serial number of the printer.
Export Configuration File to USB	Export the configuration file to a flash drive.
Export Compressed Logs to USB	Export the compressed log files to a flash drive.

Print

Layout

Menu item	Description
Sides 1-Sided* 2-Sided	Specify whether to print on one side or both sides of the paper.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Flip Style Long Edge* Short Edge	Determine which side of the paper is bound when performing two-sided printing.
Blank Pages Print Do Not Print*	Print blank pages that are included in a print job.
Collate Off (1,1,1,2,2,2) On (1,2,1,2,1,2)*	Keep the pages of a print job stacked in sequence, particularly when printing multiple copies of the job.
Separator Sheets None* Between Copies Between Jobs Between Pages	Insert blank separator sheets when printing.
Separator Sheet Source Tray [x] (1*) Multipurpose Feeder	Specify the paper source for the separator sheet.
Pages per Side Off* 2 pages per side 3 pages per side 4 pages per side 6 pages per side 9 pages per side 12 pages per side 16 pages per side	Print multiple page images on one side of a sheet of paper.
Pages per Side Ordering Horizontal* Reverse Horizontal Vertical Reverse Vertical	Specify the positioning of multiple page images when using the Pages per Side menu.
Pages per Side Orientation Auto* Landscape Portrait	Specify the orientation of multiple page images when using the Pages per Side menu.
Pages per Side Border None* Solid	Print a border around each page image when using the Pages per Side menu.
Copies 1–9999 (1*)	Specify the number of copies for each print job.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Print Area Normal* Whole Page	Set the printable area on a sheet of paper.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Setup

Menu item	Description
Printer Language PCL Emulation* PS Emulation	Set the printer language. Note: Setting a printer language default does not prevent a software program from sending print jobs that use another printer language.
Job Waiting Off* On	Preserve print jobs requiring supplies so that jobs not requiring the missing supplies can print. Note: This menu item appears only when a hard disk or an intelligent storage drive (ISD) is installed.
Job Hold Timeout 0–255 (30*)	Set the time in seconds that the printer waits for user intervention before it holds jobs that require unavailable resources. Note: This menu item appears only when a hard disk or an ISD is installed.
Download Target RAM* Disk	Specify where to save all permanent resources that have been downloaded to the printer. Note: This menu item appears only when a hard disk or an ISD is installed.
Resource Save Off* On	Determine what the printer does with downloaded resources when it receives a job that requires more than the available memory. Notes: <ul style="list-style-type: none"> • When set to Off, the printer retains downloaded resources only until memory is needed. Resources associated with the inactive printer language are deleted. • When set to On, the printer preserves all the permanent downloaded resources across all language switches. When necessary, the printer shows memory full messages instead of deleting permanent resources.
Print All Order Alphabetical* Newest First Oldest First	Specify the order when you choose to print all held and confidential jobs.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Quality

Menu item	Description
Print Resolution 600 dpi 1200 Image Q* 2400 Image Q 1200 dpi 300 dpi	Set the resolution for the printed output.
Pixel Boost Off* Fonts* Horizontally Vertically Both directions	Enable more pixels to print in clusters for clarity, to enhance images horizontally or vertically or to enhance fonts.
Toner Darkness 1 to 10 (8*)	Determine the lightness or darkness of text images.
Halftone Normal* Detail	Enhance the printed output to have smoother lines with sharper edges.
Brightness -6 to 6 (0*)	Adjust the printed output either by lightening or darkening it.
Contrast 0 to 5 (0*)	Adjust the contrast of printed objects.
Gray Correction Off Auto*	Enable the gray correction algorithm of the printer on printed images in mid-gray level.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Job Accounting

Menu item	Description
Job Accounting Off* On	Set the printer to create a log of the print jobs that it receives.
Accounting Log Frequency Daily Weekly Monthly*	Specify how often the printer creates a log file.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Log Action at End of Frequency None* E-mail Current Log E-mail & Delete Current Log Post Current Log Post & Delete Current Log	Specify how the printer responds when the frequency threshold expires. Note: The value defined in Accounting Log Frequency determines when this action is triggered.
Log Near Full Level Off On* (5)	Specify the maximum size of the log file before the printer executes Log Action at Near Full. Note: This menu item appears only when a hard disk or an ISD is installed.
Log Action at Near Full None* E-mail Current Log E-mail & Delete Current Log E-mail & Delete Oldest Log Post Current Log Post & Delete Current Log Post & Delete Oldest Log Delete Current Log Delete Oldest Log Delete All But Current Delete All Logs	Specify how the printer responds when the hard disk or ISD is nearly full. Note: The value defined in Log Near Full Level determines when this action is triggered.
Log Action at Full None* E-mail & Delete Current Log E-mail & Delete Oldest Log Post & Delete Current Log Post & Delete Oldest Log Delete Current Log Delete Oldest Log Delete All But Current Delete All Logs	Specify how the printer responds when hard disk or ISD usage reaches the maximum limit (100MB).
URL to Post Log	Specify where the printer posts job accounting logs.
E-mail Address to Send Logs	Specify the email address to which the printer sends job accounting logs.
Log File Prefix	Specify the prefix for the log files. Note: The current host name defined in the TCP/IP menu is used as the default log file prefix.
Note: An asterisk (*) next to a value indicates the factory default setting.	

PDF

Menu item	Description
Scale To Fit Off* On	Scale the page content to fit the selected paper size.
Annotations Print Do Not Print*	Specify whether to print annotations in the PDF.
Print PDF Error Off On*	Enable the printing of PDF error.
Note: An asterisk (*) next to a value indicates the factory default setting.	

PostScript

Menu item	Description
Print PS Error Off* On	Print a page that describes the PostScriptfi error. Note: When an error occurs, processing of the job stops, the printer prints an error message, and the rest of the print job is flushed.
Minimum Line Width 1–30 (2*)	Set the minimum stroke width. Note: Jobs printed in 1200 dpi use the value directly.
Lock PS Startup Mode Off On*	Disable the SysStart file. Note: Enabling the SysStart file exposes your printer or network to a security risk.
Font Priority Resident* Flash/Disk	Establish the font search order. Notes: <ul style="list-style-type: none"> Resident sets the printer to search its memory for the requested font before searching the hard disk or intelligent storage drive (ISD). Flash/Disk sets the printer to search the hard disk or ISD for the requested font before searching the printer memory. This menu item appears only when a hard disk or an ISD is installed.
Wait Timeout Off On* (40 seconds)	Enable the printer to wait for more data before canceling a print job.
Note: An asterisk (*) next to a value indicates the factory default setting.	

PCL

Menu item	Description
Font Source Resident* Disk Download Flash Font Card All	Select the source which contains the default font selection. Notes: <ul style="list-style-type: none"> • Disk and Flash appear only when a hard disk or an intelligent storage drive (ISD) that contains fonts is installed. • Download appears only if downloaded fonts exist in the printer memory. • Font Card appears only when an ISD is installed.
Font Name [List of available fonts] (Courier*)	Select a font from the specified font source.
Symbol Set [List of available symbol set] (10U PC-8*)	Specify the symbol set for each font name. Note: A symbol set is a set of alphabetic and numeric characters, punctuation, and special symbols. Symbol sets support the different languages or specific programs such as math symbols for scientific text.
Pitch 0.08–100.00 (10.00*)	Specify the pitch for fixed or monospaced fonts. Note: Pitch refers to the number of fixed-space characters in a horizontal inch of type.
Orientation Portrait* Landscape Reverse Portrait Reverse Landscape	Specify the orientation of text and graphics on the page.
Lines per Page 1–255	Specify the number of lines of text for each page printed through the PCLfi data stream. Notes: <ul style="list-style-type: none"> • This menu item activates vertical escapement that causes the selected number of requested lines to print between the default margins of the page. • 60 is the U.S. factory default setting. 64 is the international factory default setting.
PCL5 Minimum Line Width 1–30 (2*)	Set the initial minimum stroke width.
PCLXL Minimum Line Width 1–30 (2*)	
A4 Width 198 mm* 203 mm	Set the width of the logical page on A4-size paper. Note: Logical page is the space on the physical page where data is printed.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Auto CR after LF On Off*	Set the printer to perform a carriage return after a line feed control command. Note: Carriage return is a mechanism that commands the printer to move the position of the cursor to the first position on the same line.
Auto LF after CR On Off*	Set the printer to perform a line feed after a carriage return control command.
Tray Renumber Assign MP Feeder Assign Tray [x] Assign Manual Paper Assign Manual Envelope	Configure the printer to work with a different print driver or custom application that uses a different set of source assignments to request a given paper source. Choose from the following options: Off*—The printer uses the factory default paper source assignments. None—The paper source ignores the Select Paper Feed command. 0–199—Select a numeric value to assign a custom value to a paper source.
Tray Renumber View Factory Defaults	Show the factory default value assigned for each paper source.
Tray Renumber Restore Defaults	Restore the tray renumber values to their factory defaults.
Print Timeout Off On* (90 seconds)	Set the printer to end a print job after it has been idle for the specified amount of time. Note: Print Timeout Time appears only when Print Timeout is enabled.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Image

Menu item	Description
Auto Fit On Off*	Select the best available paper size and orientation setting for an image. Note: When set to On, this menu item overrides the scaling and orientation settings for the image.
Invert Off* On	Invert bitonal monochrome images. Note: This menu item does not apply to GIF or JPEG image formats.
Scaling Anchor Top Left Best Fit* Anchor Center Fit Height/Width Fit Height Fit Width	Adjust the image to fit the printable area. Note: When Auto Fit is set to On, Scaling is automatically set to Best Fit.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Orientation Portrait* Landscape Reverse Portrait Reverse Landscape	Specify the orientation of text and graphics on the page.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Paper

Tray Configuration

Menu item	Description
Default Source Tray [x] (1*) Multipurpose Feeder Manual Paper Manual Envelope	Set the paper source for all print jobs.
Paper Size/Type Tray [x] Multipurpose Feeder Manual Paper Manual Envelope	Specify the paper size or paper type loaded in each paper source.
Substitute Size Off Letter/A4 All Listed*	Set the printer to substitute a specified paper size if the requested size is not loaded in any paper source. Notes: <ul style="list-style-type: none"> Off prompts the user to load the required paper size. All Listed allows all available substitutions.
Configure MP Cassette* Manual First	Determine the behavior of the multipurpose feeder. Notes: <ul style="list-style-type: none"> Cassette configures the multipurpose feeder as the automatic paper source. Manual sets the multipurpose feeder only for manual-feed print jobs. First configures the multipurpose feeder as the primary paper source.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Media Configuration

Universal Setup

Menu item	Description
Units of Measure Inches Millimeters	Specify the unit of measurement for the universal paper. Note: Inches is the U.S. factory default setting. Millimeters is the international factory default setting.
Portrait Width 3.00–14.17 inches (8.50*) 76–360 mm (216*)	Set the portrait width of the universal paper.
Portrait Height 3.00–14.17 inches (14*) 76–360 mm (356*)	Set the portrait height of the universal paper.
Feed Direction Short Edge* Long Edge	Set the printer to pick paper from the short edge or long edge direction. Note: Long Edge appears only when the longest edge is shorter than the maximum width supported.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Media Types

Menu item	Description
Plain Paper Card Stock Recycled Labels Bond Envelope Rough Envelope Letterhead Preprinted Colored Paper Light Paper Heavy Paper Rough/Cotton Custom Type [X]	Specify the texture, weight, and orientation of the paper.

USB Drive

Flash Drive Print

Menu item	Description
Number of Copies 1–9999 (1*)	Set the number of copies.
Paper Source Tray [x] (1*) Multipurpose Feeder Manual Paper Manual Envelope	Set the paper source for the print job.
Collate Off [1,1,1,2,2,2] On [1,2,1,2,1,2]*	Keep the pages of a print job stacked in sequence, particularly when printing multiple copies of the job.
Sides 1-Sided* 2-Sided	Specify whether to print on one side or both sides of the paper.
Flip Style Long Edge* Short Edge	Determine which side of the paper is bound when performing two-sided printing.
Pages per Side Off* 2 pages per side 3 pages per side 4 pages per side 6 pages per side 9 pages per side 12 pages per side 16 pages per side	Print multiple page images on one side of a sheet of paper.
Pages per Side Ordering Horizontal* Reverse Horizontal Reverse Vertical Vertical	Specify the positioning of multiple page images when using Pages per Side menu.
Pages per Side Orientation Auto* Landscape Portrait	Specify the orientation of multiple page images when using Pages per Side menu.
Pages per Side Border None* Solid	Print a border around each page image when using Pages per Side menu.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Separator Sheets Off* Between Copies Between Jobs Between Pages	Insert blank separator sheets when printing.
Separator Sheet Source Tray [x] (1*) Multipurpose Feeder	Specify the paper source for the separator sheet.
Blank Pages Do Not Print* Print	Print blank pages in a print job.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Network/Ports

Network Overview

Menu item	Description
Active Adapter Auto* Standard Network Wireless	Specify the type of the network connection. Note: Wireless is available only in printers connected to a wireless network.
Network Status	Show the connectivity status of the printer network.
Display Network Status on Printer Off On*	Show the network status on the display.
Speed, Duplex	Show the speed of the currently active network card.
IPv4	Show the IPv4 address.
All IPv6 Addresses	Show all IPv6 addresses.
Reset Print Server	Reset all active network connections to the printer. Note: This setting removes all network configuration settings.
Network Job Timeout Off On* (90 seconds)	Set the time before the printer cancels a network print job.
Banner Page Off* On	Print a banner page.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Enable Network Connections Off On*	Enable the printer to connect to a network.
Enable LLDP Off* On	Enable Link Layer Discovery Protocol (LLDP) in the printer.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Wireless

Note: This menu is available only in printers connected to a Wi-Fi network or printers that have a wireless network adapter.

Menu item	Description
Setup On Printer Panel Choose Network Add Wi-Fi Network Network Name Network Mode Infrastructure Wireless Security Mode Disabled* WPA2/WPA - Personal WPA2 - Personal WPA2/WPA3 - Personal WPA3 - Personal 802.1x - RADIUS	Configure the Wi-Fi connection using the control panel. Note: This menu item appears as <i>Wireless Connection Setup</i> in the Embedded Web Server.
Wi-Fi Protected Setup Start Push Button Method Start PIN Method	Establish a Wi-Fi network and enable network security. Notes: <ul style="list-style-type: none"> Start Push Button Method connects the printer to a Wi-Fi network when buttons on both the printer and the access point (wireless router) are pressed within a given time. Start PIN Method connects the printer to a Wi-Fi network when a PIN on the printer is entered into the wireless settings of the access point.
Compatibility 802.11b/g/n (2.4GHz)* 802.11a/b/g/n/ac (2.4GHz/5GHz) 802.11a/n/ac (5GHz)	Specify the standard for the Wi-Fi network. Note: 802.11a/b/g/n/ac (2.4GHz/5GHz) and 802.11a/n/ac (5GHz) only appear when a Wi-Fi option is installed.

Menu item	Description
Wireless Security Mode Disabled* WPA2/WPA-Personal WPA2-Personal WPA2/WPA3 - Personal WPA3 - Personal 802.1x - RADIUS	Set the security mode for connecting the printer to Wi-Fi devices.
WPA2/WPA Personal AES*	Enable Wi-Fi security through Wi-Fi Protected Access (WPA). Note: This menu item appears only when the Wireless Security Mode is set to WPA2/WPA-Personal.
Set PSK	Set the password for secure Wi-Fi connection.
WPA2-Personal AES*	Enable Wi-Fi security through WPA2. Note: This menu item appears only when the Wireless Security Mode is set to WPA2-Personal.
802.1x Encryption Mode WPA+ WPA2* WPA2 + PMF*	Enable Wi-Fi security through 802.1x standard. Note: This menu item appears only when the Wireless Security Mode is set to 802.1x - RADIUS.
IPv4 Enable DHCP On* Off Set Static IP Address IP Address Netmask Gateway	Enable and configure IPv4 settings in the printer.
IPv6 Enable IPv6 On* Off Enable DHCPv6 On Off* Stateless Address Autoconfiguration On* Off DNS Server Address Manually Assigned IPv6 Address Manually Assigned IPv6 Router Address Prefix All IPv6 Addresses All IPv6 Router Addresses	Enable and configure IPv6 settings in the printer.

Menu item	Description
Network Address UAA LAA	View the network addresses.
PCL SmartSwitch On* Off	Set the printer to switch automatically to PCL emulation when a print job requires it, regardless of the default printer language. Note: If PCL SmartSwitch is off, then the printer does not examine incoming data and uses the default printer language specified in the Setup menu.
PS SmartSwitch On* Off	Set the printer to switch automatically to PS emulation when a print job requires it, regardless of the default printer language. Note: If PS SmartSwitch is off, then the printer does not examine incoming data and uses the default printer language specified in the Setup menu.
Job Buffering On Off*	Temporarily store print jobs in the hard disk or intelligent storage drive (ISD) before printing. Note: This menu item appears only when a hard disk or an ISD is installed.
Mac Binary PS Auto* On Off	Set the printer to process Macintosh binary PostScript print jobs. Notes: <ul style="list-style-type: none"> On processes raw binary PostScript print jobs. Off filters print jobs using the standard protocol.

Wi-Fi Direct

Note: This menu is available only in printers connected to a Wi-Fi network or printers that have a wireless network adapter.

Menu item	Description
Enable Wi-Fi Direct On Off*	Set the printer to connect directly to Wi-Fi devices.
Wi-Fi Direct Name	Specify the name of the Wi-Fi Direct network.
Wi-Fi Direct Password	Set the password to authenticate and validate users on a Wi-Fi connection.
Show Password on Setup Page Off On*	Show the Wi-Fi Direct Password on the Network Setup Page.
Preferred Channel Number 1–11 Auto*	Set the preferred channel of the Wi-Fi network.
Group Owner IP Address	Specify the IP address of the group owner.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Auto-Accept Push Button Requests Off* On	Accept requests to connect to the network automatically. Note: Accepting clients automatically is not secured.
Note: An asterisk (*) next to a value indicates the factory default setting.	

AirPrint

Note: This menu appears only in the Embedded Web Server.

Menu item	Description
All AirPrint Functions	Show the AirPrint status of the printer.
Enable AirPrint On* Off	Enable the AirPrint feature. Note: This menu item appears only if Internet Printing Protocol (IPP) or mDNS is disabled.
Enable iBeacon On Off*	Enable the iBeacon feature.
Bonjour Name	Identify printer designation and location.
Organization Name	
Organizational Unit	
Printer Location	
Printer's Latitude	
Printer's Longitude	
Printer's Altitude	
More Options	
Note: An asterisk (*) next to a value indicates the factory default setting.	

Mobile Services Management

Menu item	Description
Enable IPP Print On* Off	Allow printing from mobile devices using Internet Printing Protocol (IPP).
Enable IPP Over USB On* Off	Allow print or scan jobs using USB connection.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Enable Mopria Print Discovery On* Off	Allow Mopria-enabled devices to discover the printer.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Ethernet

Menu item	Description
Network Speed	Show the speed of the active network adapter.
IPv4 Enable DHCP (On*) Set Static IP Address	Configure the IPv4 settings.
IPv6 Enable IPv6 (On*) Enable DHCPv6 (Off*) Stateless Address Autoconfiguration (On*) DNS Server Address Manually Assigned IPv6 Address Manually Assigned IPv6 Router Address Prefix (64*) All IPv6 Addresses All IPv6 Router Addresses	Configure the IPv6 settings.
Network Address UAA LAA	Specify the network address.
PCL SmartSwitch Off On*	Set the printer to switch automatically to PCL emulation when a print job requires it, regardless of the default printer language. Note: When this setting is disabled, the printer does not examine incoming data and uses the default printer language specified in the Setup menu.
PS SmartSwitch Off On*	Set the printer to switch automatically to PostScript emulation when a print job requires it, regardless of the default printer language. Note: When this setting is disabled, the printer does not examine incoming data and uses the default printer language specified in the Setup menu.
Job Buffering Off* On	Temporarily store print jobs in the hard disk or intelligent storage drive (ISD) before printing. Note: This menu item appears only when a hard disk or an ISD is installed.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Mac Binary PS Auto* On Off	Set the printer to process Macintosh binary PostScript print jobs. Notes: <ul style="list-style-type: none"> • Auto processes print jobs from computers using either Windows or Macintosh operating systems. • Off filters PostScript print jobs using the standard protocol.
Energy Efficient Ethernet On Off Auto*	Reduce power consumption when the printer does not receive data from the Ethernet network.
Note: An asterisk (*) next to a value indicates the factory default setting.	

TCP/IP

Note: This menu appears only in network printers or printers attached to print servers.

Menu item	Description
Set Hostname	Set the current TCP/IP host name.
Domain Name	Set the domain name.
Allow DHCP/BOOTP to update NTP server On* Off	Allow the DHCP and BOOTP clients to update the NTP settings of the printer.
Zero Configuration Name	Specify a service name for the zero configuration network.
Enable Auto IP Off On*	Assign an IP address automatically.
DNS Server Address	Specify the current Domain Name System (DNS) server address.
Backup DNS Address	Specify the backup DNS server addresses.
Backup DNS Address 2	
Backup DNS Address 3	
Domain Search Order	Specify a list of domain names to locate the printer and its resources that reside in different domains on the network.
Enable DDNS Off* On	Update the Dynamic DNS settings.
DDNS TTL	Specify the current DDNS settings.
Default TTL	
DDNS Refresh Time	
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Enable mDNS Off On*	Update the multicast DNS settings.
WINS Server Address	Specify a server address for Windows Internet Name Service (WINS).
Enable BOOTP Off* On	Allow the BOOTP to assign a printer IP address.
Restricted Server List	Specify the IP addresses that are allowed to communicate with the printer over TCP/IP. Notes: <ul style="list-style-type: none"> • Use a comma to separate each IP address. • You can add up to 50 IP addresses. • This menu item is available only in some printer models.
Restricted Server List Options Block All Ports* Block Printing Only Block Printing and HTTP Only	Specify the access option for IP addresses that are not in the list. Note: This menu item is available only in some printer models.
MTU 256–1500 Ethernet (1500*)	Specify a maximum transmission unit (MTU) parameter for the TCP connections.
Raw Print Port 1–65535 (9100*)	Specify a raw port number for printers connected on a network.
Outbound Traffic Maximum Speed Off* On	Set the maximum transfer rate of the printer. Note: When enabled, the option for this setting is 100–1000000 Kilobits/second.
TLS Support Enable TLSv1.0 (Off) Enable TLSv1.1 (Off*) Enable TLSv1.2 (On*)	Enable the Transport Layer Security protocol.
SSL Cipher List	Specify the cipher algorithms to use for the SSL or the TLS connections.
TLSv1.3 SSL Cipher List	Specify the specific cipher string to use for TLS v1.3.
Note: An asterisk (*) next to a value indicates the factory default setting.	

SNMP

Note: This menu appears only in network printers or printers that are attached to print servers.

Menu item	Description
SNMP Versions 1 and 2c Enabled Off On* Allow SNMP Set Off On* Enable PPM MIB Off On* SNMP Community	Configure Simple Network Management Protocol (SNMP) versions 1 and 2c to install print drivers and applications.
SNMP Version 3 Enabled Off On* Context Name Set Read/Write Credentials User Name Authentication Password Privacy Password Set Read-only Credentials User Name Authentication Password Privacy Password Authentication Hash MD5 SHA1* Minimum Authentication Level No Authentication, No Privacy Authentication, No Privacy Authentication, Privacy* Privacy Algorithm DES AES-128*	Configure SNMP version 3 to install and update the printer security.
Note: An asterisk (*) next to a value indicates the factory default setting.	

IPSec

Note: This menu appears only in network printers or printers that are attached to print servers.

Menu item	Description
Enable IPSec Off* On	Enable Internet Protocol Security (IPSec).
Base Configuration Default* Compatibility Secure	Set the IPSec base configuration. Note: This menu item appears only when Enable IPSec is set to On.
DH (Diffie-Hellman) Group Proposal modp2048 (14)* modp3072 (15) modp4096 (16) modp6144 (17)	Set the IPSec base configuration. Note: This menu item appears only when Base Configuration is set to Compatibility.
Proposed Encryption Method 3DES AES*	Set the encryption method. Note: This menu item appears only when Base Configuration is set to Compatibility.
Proposed Authentication Method SHA1 SHA256* SHA512	Set the authentication method. Note: This menu item appears only when Base Configuration is set to Compatibility.
IKE SA Lifetime (Hours) 1 2 4 8 24*	Specify the IKE SA expiry period. Note: This menu item appears only when Base Configuration is set to Secure.
IPSec SA Lifetime (Hours) 1 2 4 8* 24	Specify the IPSec SA expiry period. Note: This menu item appears only when Base Configuration is set to Secure.
IPSec Device Certificate	Specify an IPSec certificate. Note: This menu item appears only when Enable IPSec is set to On.
Pre-Shared Key Authenticated Connections Host [x]	Configure the authenticated connections of the printer. Note: These menu items appear only when Enable IPSec is set to On.
Certificate Authenticated Connections Host [x] Address[/subnet]	
Note: An asterisk (*) next to a value indicates the factory default setting.	

802.1x

Note: This menu appears only in network printers or printers that are attached to print servers.

Menu item	Description
Active Off* On	Let the printer join networks that require authentication before allowing access.
802.1x Authentication Device Login Name Device Login Password Validate Serve Certificate (On*) Enable Event Logging (Off*) 802.1x Device Certificate	Configure the settings for authenticating the 802.1x connection.
Authentication Mechanisms EAP - MD5 (On*) EAP - MSCHAPv2 (On*) LEAP (On*) PEAP (On*) EAP - TLS (On*) EAP - TTLS (On*) TTLS Authentication Method (MSCHAPv2*)	Configure the allowed authentication mechanisms for the 802.1x connection.
Note: An asterisk (*) next to a value indicates the factory default setting.	

LPD Configuration

Note: This menu appears only in network printers or printers that are attached to print servers.

Menu item	Description
LPD Timeout 0–65535 seconds (90*)	Set the time-out value to stop the Line Printer Daemon (LPD) server from waiting indefinitely for hung or invalid print jobs.
LPD Banner Page Off* On	Print a banner page for all LPD print jobs. Note: A banner page is the first page of a print job used as a separator of print jobs and to identify the originator of the print job request.
LPD Trailer Page Off* On	Print a trailer page for all LPD print jobs. Note: A trailer page is the last page of a print job.
LPD Carriage Return Conversion Off* On	Enable carriage return conversion. Note: Carriage return is a mechanism that commands the printer to move the position of the cursor to the first position on the same line.
Note: An asterisk (*) next to a value indicates the factory default setting.	

HTTP/FTP Settings

Menu item	Description
Proxy HTTP Proxy IP Address HTTP Default IP Port FTP Proxy IP Address FTP Default IP Port Authentication User Name Password Local Domains	Configure the HTTP and FTP server settings.
Other Settings Enable HTTP Server (On*)	Access the Embedded Web Server to monitor and manage the printer.
Other Settings Enable HTTPS (On*)	Enable Hypertext Transfer Protocol Secure (HTTPS) to encrypt data transferring to and from the print server.
Other Settings Force HTTPS Connections (Off*)	Force the printer to use HTTPS connections.
Other Settings Enable FTP/TFTP (On*)	Send files using FTP/TFTP.
Other Settings HTTPS Device Certificate (default*)	View the HTTP device certificate used on the printer.
Other Settings Timeout for HTTP/FTP Requests (30*)	Specify the amount of time before the server connection stops.
Other Settings Retries for HTTP/FTP Requests (3*)	Set the number of retries to connect to the HTTP/FTP server.
Note: An asterisk (*) next to a value indicates the factory default setting.	

ThinPrint

Menu item	Description
Enable ThinPrint Off* On	Print using ThinPrint.
Port Number 4000–4999 (4000*)	Set the port number for the ThinPrint server.
Bandwidth (bits/sec) 100–1000000 (0*)	Set the speed to transmit data in a ThinPrint environment.
Packet Size (kbytes) 0–64000 (0*)	Set the packet size for data transmission.
Note: An asterisk (*) next to a value indicates the factory default setting.	

USB

Menu item	Description
PCL SmartSwitch Off On*	Set the printer to switch to PCL emulation when a print job received through a USB port requires it, regardless of the default printer language. Note: When this setting is disabled, the printer does not examine incoming data and uses the default printer language specified in the Setup menu.
PS SmartSwitch Off On*	Set the printer to switch to PostScript emulation when a print job received through a USB port requires it, regardless of the default printer language. Note: When this setting is disabled, the printer does not examine incoming data and uses the default printer language specified in the Setup menu.
Job Buffering Off* On	Temporarily store print jobs in the hard disk or intelligent storage drive (ISD) before printing. Note: This menu item appears only when a hard disk or an ISD is installed.
Mac Binary PS Auto* On Off	Set the printer to process Macintosh binary PostScript print jobs. Notes: <ul style="list-style-type: none"> • Auto processes print jobs from computers using either Windows or Macintosh operating systems. • Off filters PostScript print jobs using the standard protocol.
Enable USB Port Off On*	Enable the front USB drive port.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Restrict external network access

Menu item	Description
Restrict external network access Off* On	Restrict access to network sites.
External network address	Specify the network addresses with restricted access.
E-mail address for notification	Specify an e-mail address to send a notification of logged events.
Ping frequency 1–300 (10*)	Specify the network query interval in seconds.
Subject	Specify the subject and message of the notification e-mail.
Message	
Note: An asterisk (*) next to a value indicates the factory default setting.	

Security

Login Methods

Manage Permissions

Menu item	Description
Function Access Modify Address Book Manage Shortcuts Create Profiles Manage Bookmarks Flash Drive Print Held Jobs Access Use Profiles Cancel Jobs at the Device Change Language Internet Printing Protocol (IPP) B/W Print	Control access to the printer functions.
Administrative Menus Security Menu Network/Ports Menu Paper Menu Reports Menu Function Configuration Menus Supplies Menu Option Card Menu SE Menu Device Menu	Control access to the printer menus.
Device Management Remote Management Firmware Updates Apps Configuration Operator Panel Lock Embedded Web Server Access Import / Export All Settings Out of Service Erase	Control access to the printer management options.
Apps New Apps Slideshow Change Wallpaper Screen Saver	Control access to the printer applications.

Local Accounts

Menu item	Description
Manage Groups/Permissions Add Group Import Access Controls Function Access Administrative Menus Device Management Apps All Users Import Access Controls Function Access Administrative Menus Device Management Apps Admin	Control group or user access to the printer functions, applications, and security settings.
Add User User Name/Password User Name Password PIN	
User Name/Password Accounts Add User	
User Name Accounts Add User	
Password Accounts Add User	
PIN Accounts Add User	

Schedule USB Devices

Menu item	Description
Schedules Add New Schedule	Schedule access to the front USB port.

Security Audit Log

Menu item	Description
Enable Audit Off* On	Record the events in the secure audit log and remote syslog.
Enable Remote Syslog Off* On	Send audit logs to a remote server.
Remote Syslog Server	Specify the remote syslog server.
Remote Syslog Port 1–65535 (514*)	Specify the remote syslog port.
Remote Syslog Method Normal UDP* Stunnel	Specify a syslog method to transmit logged events to a remote server.
Remote Syslog Facility 0 - Kernel Messages 1 - User-Level Messages 2 - Mail System 3 - System Daemons 4 - Security/Authorization Messages* 5 - Messages Generated Internally by Syslogs 6 - Line Printer Subsystem 7 - Network News Subsystem 8 - UUCP Subsystem 9 - Clock Daemon 10 - Security/Authorization Messages 11 - FTP Daemon 12 - NTP Subsystem 13 - Log Audit 14 - Log Alert 15 - Clock Daemon 16 - Local Use 0 (local0) 17 - Local Use 1 (local1) 18 - Local Use 2 (local2) 19 - Local Use 3 (local3) 20 - Local Use 4 (local4) 21 - Local Use 5 (local5) 22 - Local Use 6 (local6) 23 - Local Use 7 (local7)	Specify a facility code that the printer uses when sending log events to a remote server.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Severity of Events to Log 0 - Emergency 1 - Alert 2 - Critical 3 - Error 4 - Warning* 5 - Notice 6 - Informational 7 - Debug	Specify the priority level cutoff for logging messages and events.
Remote Syslog Non-Logged Events Off* On	Send all events, regardless of severity level, to the remote server.
Admin's E-mail Address	Send e-mail notification of logged events to the administrator.
E-mail Log Cleared Alert Off* On	Send e-mail notification to the administrator when a log entry is deleted.
E-mail Log Wrapped Alert Off* On	Send e-mail notification to the administrator when the log becomes full and begins to overwrite the oldest entries.
Log Full Behavior Wrap Over Oldest Entries* E-mail Log Then Delete All Entries	Resolve log storage issues when the log fills its allotted memory.
E-mail % Full Alert Off* On	Send e-mail notification to the administrator when the log fills its allotted memory.
% Full Alert Level 1–99 (90*)	
E-mail Log Exported Alert Off* On	Send e-mail notification to the administrator when a log is exported.
E-mail Log Settings Changed Alert Off* On	Send e-mail notification to the administrator when Enable Audit is set.
Log Line Endings LF (\n)* CR (\r) CRLF (\r\n)	Specify how the log file terminates the end of each line.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Digitally Sign Exports Off* On	Add a digital signature to each exported log file.
Clear Log	Delete all audit logs.
Export Log Syslog (RFC 5424) Syslog (RFC 3164) CSV	Export a security log to a flash drive.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Certificate Management

Menu item	Menu item
Configure Certificate Defaults Common Name Organization Name Unit Name Country/Region Province Name City Name Subject Alternate Name	Set the default values for generated certificates.
Device Certificates	Generate, delete, or view device certificates.
Manage CA Certificates	Load, delete, or view Certificate Authority (CA) certificates.

Login Restrictions

Menu item	Description
Login failures 1–10 (3*)	Specify the number of failed login attempts before the user gets locked out.
Failure time frame 1–60 minutes (5*)	Specify the time frame between failed login attempts before the user gets locked out.
Lockout time 1–60 minutes (5*)	Specify the lockout duration.
Web Login Timeout 1–120 minutes (10*)	Specify the delay for a remote login before the user is logged off automatically.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Confidential Print Setup

Menu item	Description
Max Invalid PIN 2–10	Set the limit for entering an invalid PIN. Note: When the limit is reached, the print jobs for that user name are deleted.
Confidential Job Expiration Off* 1 Hour 4 Hours 24 Hours 1 Week	Set an individual expiration time for each held job before it is automatically deleted from the hard disk or intelligent storage drive. Note: A held job is either Confidential, Repeat, Reserve, or Verify.
Repeat Job Expiration Off* 1 Hour 4 Hours 24 Hours 1 Week	Set the expiration time for a print job that you want to repeat.
Verify Job Expiration Off* 1 Hour 4 Hours 24 Hours 1 Week	Set the expiration time for printing a copy of a job for you to check its quality before printing the remaining copies.
Reserve Job Expiration Off* 1 Hour 4 Hours 24 Hours 1 Week	Set the expiration time for jobs that you want to store in the printer for printing later.
Require All Jobs to be Held Off* On	Set the printer to hold all print jobs.
Keep duplicate documents Off* On	Set the printer to keep all documents with the same file name.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Disk Encryption

Note: This menu item appears only when a hard disk or an intelligent storage drive is installed.

Menu item	Description
Hard Disk	Show the encryption status of the hard disk or intelligent storage drive.
Intelligent Storage Drive	

Erase Temporary Data Files

Menu item	Description
Stored in onboard memory Off* On	Delete all files stored on the printer memory.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Solutions LDAP Settings

Menu item	Description
Follow LDAP Referrals Off* On	Search the different servers in the domain for the logged-in user account.
LDAP Certificate Verification Yes No*	Enable verification of LDAP certificates.

Miscellaneous

Menu item	Description
Protected Features Show* Hide	<p>Show all the features that Function Access Control (FAC) protects regardless of the security permission that the user has.</p> <p>Note: Hide displays only FAC-protected features that the user has access.</p>
Print Permission Off* On	Let the user log in before printing.
Default Print Permission Login PIN* User Name/Password User Name	Set the default login for Print Permission.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Security Reset Jumper Enable "Guest" access* No Effect	Specify user access to the printer. Notes: <ul style="list-style-type: none"> • Enable "Guest" access allows for device recovery if the admin password is lost. If this issue occurs, then contact customer support. • No effect prevents using the security jumper for device recovery. • This menu item appears only when an actual security jumper hardware is installed.
Use Intelligent Storage Drive for User Data Off On*	Enable intelligent storage drive to store user data. Note: This menu item appears only when an intelligent storage drive is installed.
Minimum Password Length 0–32 (0*)	Specify the password length.
Enable Password/PIN Reveal Off* On	Show the password or personal identification number.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Reports

Menu Settings Page

Menu item	Description
Menu Settings Page	Print a report that contains the printer menus.

Device

Menu item	Description
Device Information	Print a report that contains information about the printer.
Device Statistics	Print a report about printer usage and supply status.
Profiles List	Print a list of profiles that are stored in the printer.
Asset Report	Print a diagnostic tool for print problems. Note: To avoid clipping the content, print the report on letter- or A4-size paper.

Print

Menu item	Description
Print Fonts PCL Fonts PS Fonts	Print samples and information about the fonts that are available in each printer language.
Print Demo Demo Page	Print a page that shows the printer capabilities and supported solutions.
Print Directory	Print the resources that are stored in the flash drive, hard disk, or intelligent storage drive (ISD). Note: This menu item appears only when a flash drive, a hard disk, or an ISD is installed.

Network

Menu item	Description
Network Setup Page	Print a page that shows the configured network and wireless settings on the printer. Note: This menu item appears only in network printers or printers connected to print servers.
Wi-Fi Direct Connected Clients	Print a page that shows the list of devices that are connected to the printer using Wi-Fi Direct. Note: This menu item appears only when Enable Wi-Fi Direct is set to On.

Troubleshooting

Menu item	Description
Print Quality Test Pages	Print sample pages to identify and correct print quality defects.

Forms Merge

Note: This menu appears only when a hard disk or an intelligent storage drive is installed.

Menu item	Description
Merge Mode Print* Data Capture Disabled	Specify the mode of operation for Forms Merge.
Data Capture Target Flash*	Set the target destination where the captured data is forwarded. Note: This menu item appears only when Merge Mode is set to Data Capture.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Print Port and Filter Settings Network Port On* Off	Enable Forms Merge to process all data that are sent to the network port.
Print Port and Filter Settings Network Filter Disabled* NULL OFIS OFIS+NULL OFIS+AS400 AS400 PCL ZPL ZPLF	Specify the network filter for all data sent to the printer.
Print Port and Filter Settings USB Port On* Off	Enable Forms Merge to process all data that are sent to the USB port.
Print Port and Filter Settings USB Filter Disabled* NULL OFIS OFIS+NULL OFIS+AS400 AS400 PCL ZPL ZPLF	Specify the USB filter for all data sent to the printer.
Print Port and Filter Settings Local Port Timeout 1–100 (10*)	Specify the time-out value for Forms Merge jobs that are sent to the local port.
Miscellaneous Print All Forms	Print all form sets stored in the intelligent storage drive or hard disk of the printer.
Miscellaneous Error Page Print On* Off	Enable printing of an error page when an error is encountered in a Forms Merge job.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Printing the Menu Settings Page

From the home screen, touch **Settings > Reports > Menu Settings Page**.

Maintain the printer

Checking the status of parts and supplies

- 1 From the home screen, touch **Status/Supplies**.
- 2 Select the parts or supplies that you want to check.

Note: You can also access this setting by touching the top section of the home screen.

Configuring supply notifications

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

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

- 2 Click **Settings > Device > Notifications**.
- 3 From the Supplies menu, click **Custom Supply Notifications**.
- 4 Select a notification for each supply item.
- 5 Apply the changes.

Setting up e-mail alerts

Configure the printer to send e-mail alerts when supplies are low, when paper must be changed or added, or when there is a paper jam.

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

Notes:

- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.

- 2 Click **Settings > Device > Notifications > E-mail Alert Setup**, and then configure the settings.

Note: For more information on SMTP settings, contact your e-mail provider.
- 3 Apply the changes.
- 4 Click **Setup E-mail Lists and Alerts**, and then configure the settings.
- 5 Apply the changes.

Viewing reports

- 1 From the home screen, touch **Settings** > **Reports**.
- 2 Select the report that you want to view.

Ordering parts and supplies

To order supplies, contact the place where you purchased the printer.

Note: All life estimates for printer supplies assume printing on letter- or A4-size plain paper.

Warning—Potential Damage: Failure to maintain optimum printer performance, or to replace parts and supplies, may cause damage to your printer.

Ordering a toner cartridge

Notes:

- The estimated cartridge yield is based on the ISO/IEC 19752 standard.
- Extremely low print coverage for extended periods of time may negatively affect actual yield.

To order a toner cartridge, contact the place where you purchased the printer.

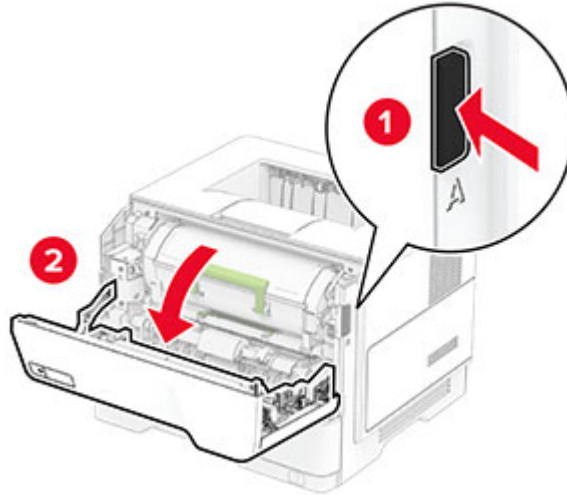
Ordering an imaging unit

To order an imaging unit, contact the place where you purchased the printer.

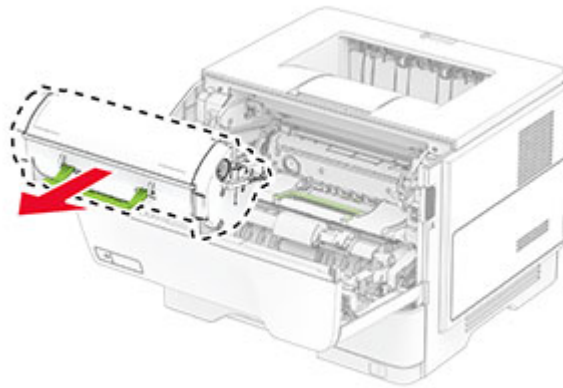
Replacing parts and supplies

Replacing the toner cartridge

- 1 Open door A.

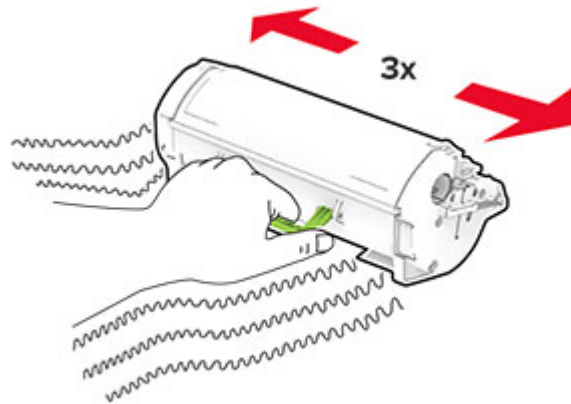


- 2 Remove the used toner cartridge.

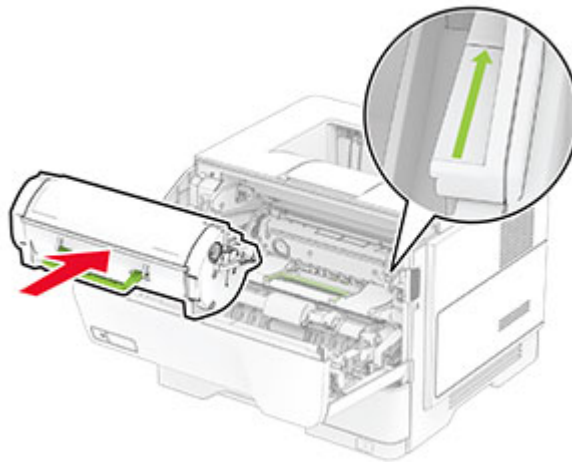


- 3 Unpack the new toner cartridge.

- 4 Shake the toner cartridge to redistribute the toner.



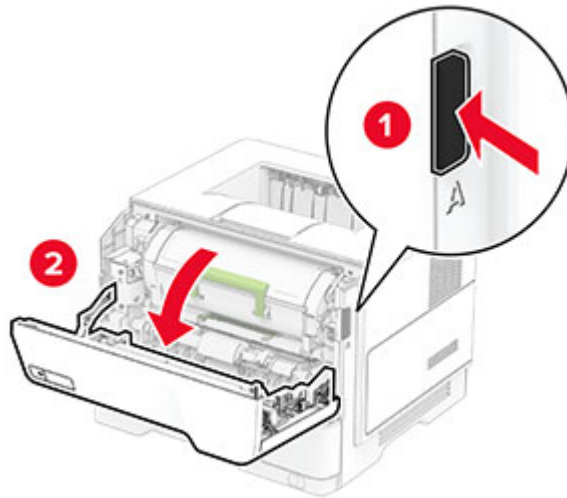
- 5 Insert the new toner cartridge.



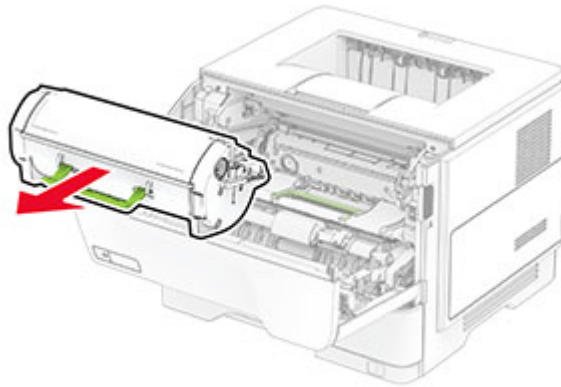
- 6 Close door A.

Replacing the imaging unit

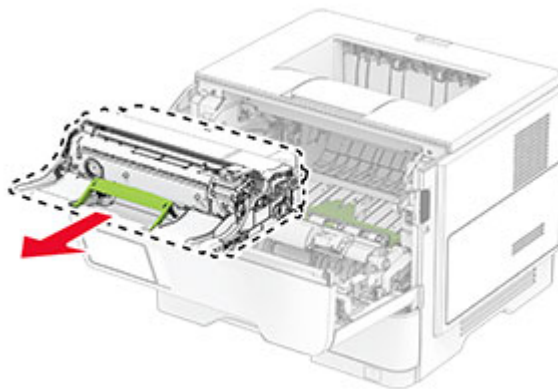
- 1 Open door A.



- 2 Remove the toner cartridge.

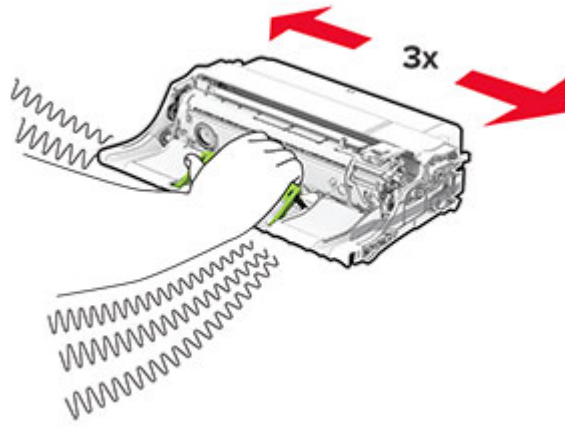


- 3 Remove the used imaging unit.



- 4 Unpack the new imaging unit.

- 5 Shake the imaging unit to redistribute the toner.

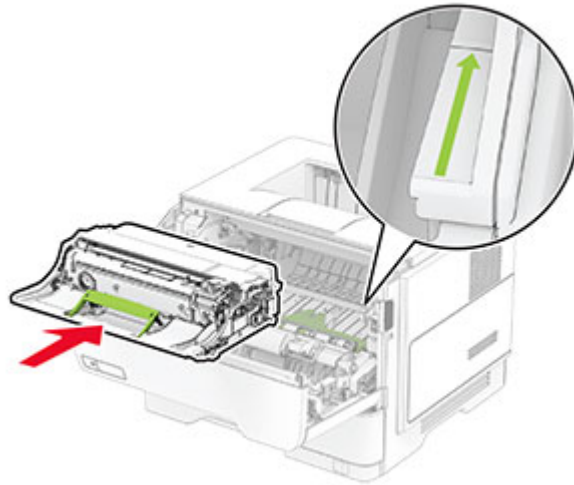


Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.

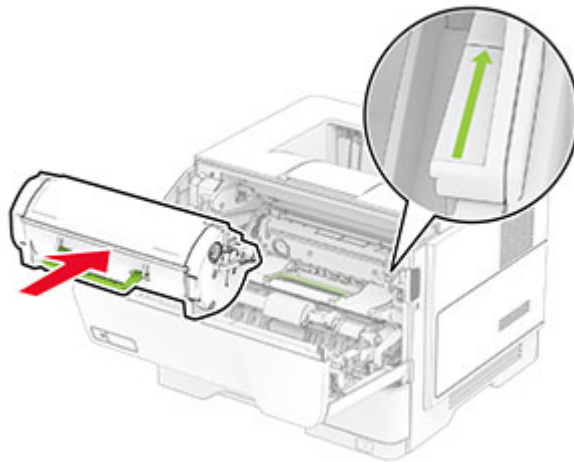
Warning—Potential Damage: Do not touch the photoconductor drum. Doing so may affect the quality of future print jobs.



- 6 Insert the new imaging unit.



- 7 Insert the toner cartridge.



- 8 Close door A.

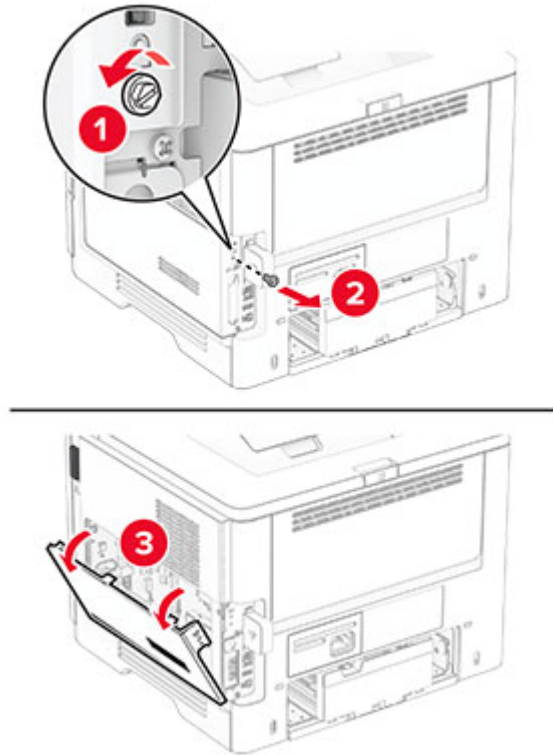
Replacing MarkNet N8450 Wireless Print Server

CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, if you are accessing the controller board or installing optional hardware or memory devices sometime after setting up the printer, then turn the printer off, and unplug the power cord from the electrical outlet before continuing. If you have any other devices attached to the printer, then turn them off as well, and unplug any cables going into the printer.

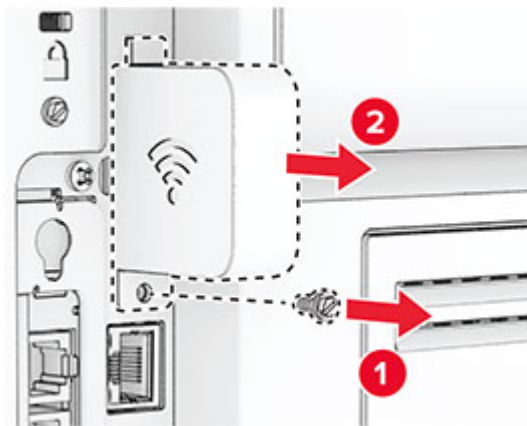
Note: This task requires a flat-head screwdriver.

- 1 Turn off the printer.
- 2 Unplug the power cord from the electrical outlet, and then from the printer.
- 3 Open the controller board access cover.

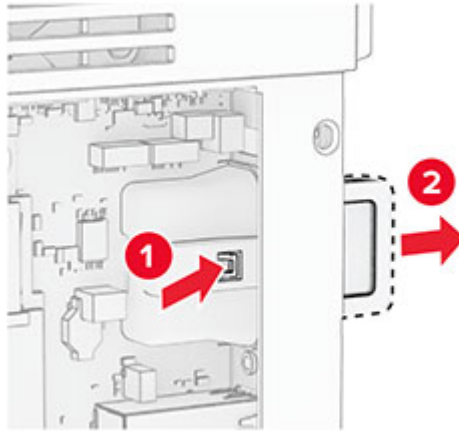
Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board components or connectors.



4 Remove the wireless print server cover.

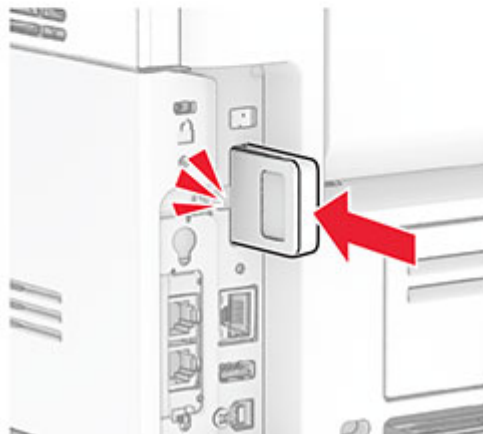
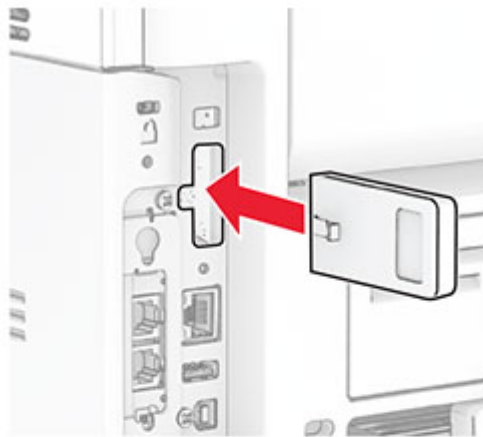


- 5** Remove the used wireless print server.

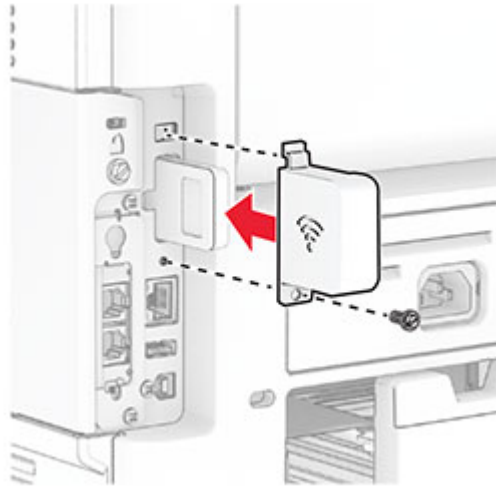


- 6** Unpack the new wireless print server.

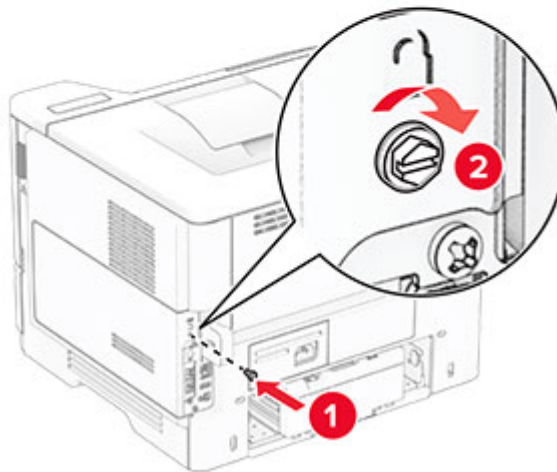
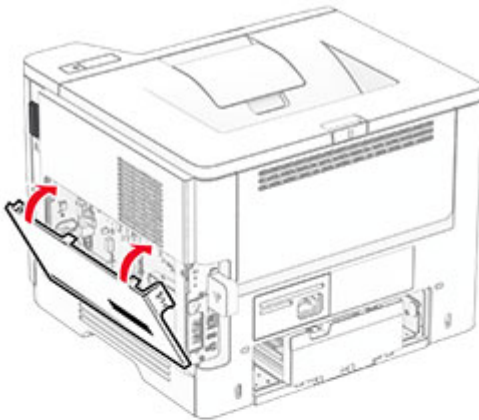
- 7** Insert the new wireless print server until it *clicks* into place.



- 8** Attach the wireless print server cover, and then install the screw.



- 9** Close the controller board access cover, and then install the screw.



- 10 Connect the power cord to the printer, and then to the electrical outlet.

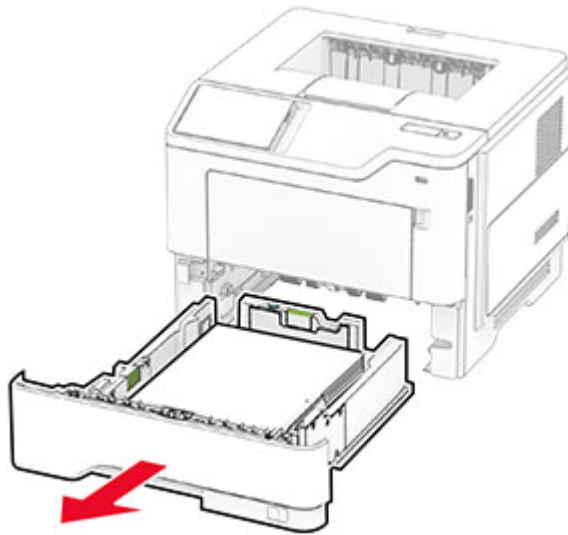


CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.

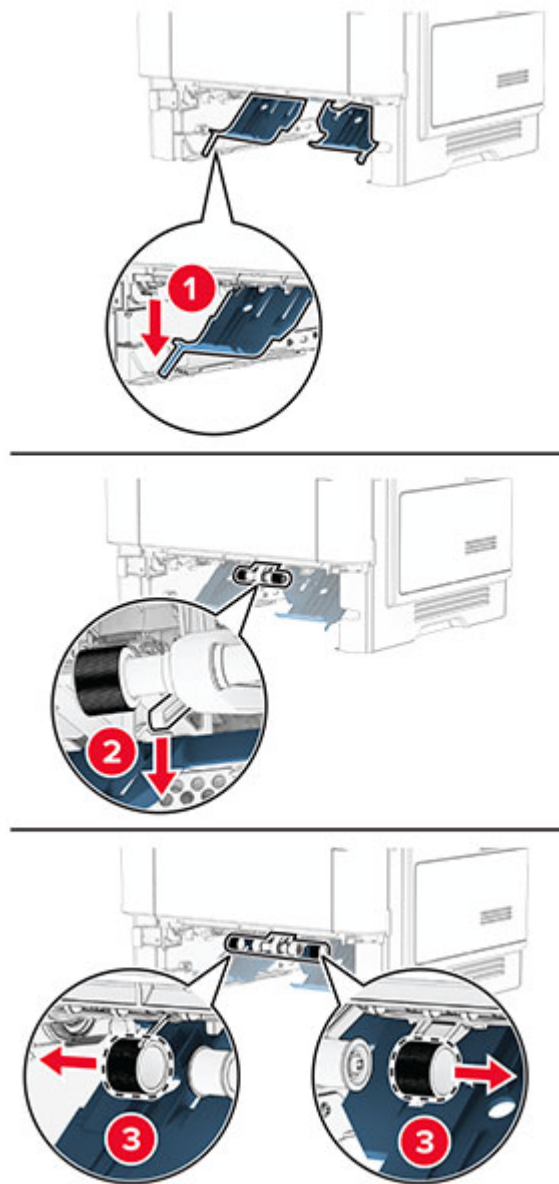
- 11 Turn on the printer.

Replacing the pick tires

- 1 Turn off the printer.
- 2 Unplug the power cord from the electrical outlet, and then from the printer.
- 3 Remove the tray.

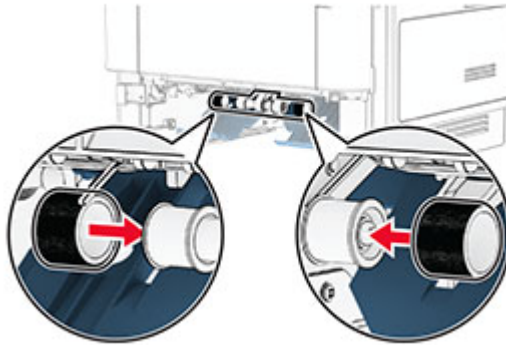


4 Remove the used pick tires.



5 Unpack the new pick tires.

- 6 Insert the new pick tires.



- 7 Insert the tray.
- 8 Connect the power cord to the printer, and then to the electrical outlet.



CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.

- 9 Turn on the printer.

Resetting the supply usage counters

- 1 From the home screen, touch **Settings > Device > Maintenance > Configuration Menu > Supply Usage And Counters**.
- 2 Select the counter that you want to reset.

Warning—Potential Damage: Supplies and parts without use-and-return program agreement terms may be reset and remanufactured. However, the manufacturer's warranty does not cover any damage caused by non-genuine supplies or parts. Resetting counters on the supply or part without proper remanufacturing can cause damage to your printer. After resetting the supply or part counter, your printer may display an error indicating the presence of the reset item.

Cleaning printer parts

Cleaning the printer



CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock when cleaning the exterior of the printer, unplug the power cord from the electrical outlet and disconnect all cables from the printer before proceeding.

Notes:

- 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.

Notes:

- 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.

Notes:

- 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.

Saving energy and paper

Configuring the power save mode settings

Sleep mode

- 1 From the home screen, touch **Settings > Device > Power Management > Timeouts > Sleep Mode**.
- 2 Specify the amount of time that the printer stays idle before it enters Sleep Mode.

Hibernate mode

- 1 From the home screen, touch **Settings > Device > Power Management > Timeouts > Hibernate Timeout**.
- 2 Select the amount of time that the printer stays idle before it enters Hibernate mode.

Notes:

- For Hibernate Timeout to work, set Hibernate Timeout on Connection to Hibernate.
- The Embedded Web Server is disabled when the printer is in Hibernate mode.

Adjusting the brightness of the display

- 1 From the home screen, touch **Settings > Device > Preferences**.
- 2 In the Screen Brightness menu, adjust the setting.

Conserving supplies

- Print on both sides of the paper.
Note: Two-sided printing is the default setting in the print driver.
- Print multiple pages on a single sheet of paper.
- Use the preview feature to see how the document looks like before printing it.
- Print one copy of the document to check its content and format for accuracy.

Moving the printer to another location



CAUTION—POTENTIAL INJURY: If the printer weight is greater than 20 kg (44 lb), then it may require two or more people to lift it safely.



CAUTION—POTENTIAL INJURY: 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: When moving the printer, follow these guidelines to avoid personal injury or printer damage:

- Make sure that all doors and trays are closed.
- Turn off the printer, and then unplug the power cord from the electrical outlet.
- Disconnect all cords and cables from the printer.

- If the printer has separate floor-standing optional trays or output options attached to it, then disconnect them before moving the printer.
- If the printer has a caster base, then carefully roll it to the new location. Use caution when passing over thresholds and breaks in flooring.
- If the printer does not have a caster base but is configured with optional trays or output options, then remove the output options and lift the printer off the trays. Do not try to lift the printer and any options at the same time.
- Always use the handholds on the printer to lift it.
- Any cart used to move the printer must have a surface able to support the full footprint of the printer.
- Any cart used to move the hardware options must have a surface able to support the dimensions of the options.
- Keep the printer in an upright position.
- Avoid severe jarring movements.
- Make sure that your fingers are not under the printer when you set it down.
- Make sure that there is adequate clearance around the printer.

Note: Damage to the printer caused by improper moving is not covered by the printer warranty.

Shipping the printer

When shipping the printer, use the original packaging or contact the place where you purchased the printer.

Troubleshoot a problem

Print quality problems

Find the image that resembles the print quality problem you are having, and then click the link below it to read problem-solving steps.



[“Blank or white pages” on page 119](#)



[“Dark print” on page 120](#)



[“Fine lines are not printed correctly” on page 122](#)



[“Folded or wrinkled paper” on page 123](#)



[“Gray background” on page 124](#)



[“Horizontal light bands” on page 134](#)



[“Incorrect margins” on page 126](#)



[“Light print” on page 126](#)



[“Mottled print and dots” on page 128](#)



[“Paper curl” on page 129](#)



[“Print crooked or skewed” on page 131](#)



[“Repeating defects” on page 139](#)



[“Solid black pages” on page 131](#)



[“Text or images cut off” on page 132](#)



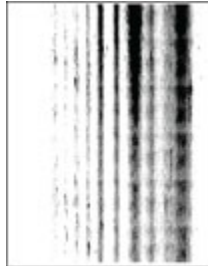
[“Toner easily rubs off” on page 133](#)



[“Vertical dark bands” on page 136](#)



[“Vertical dark lines or streaks” on page 138](#)



[“Vertical dark streaks with print missing” on page 139](#)



[“Vertical light bands” on page 135](#)

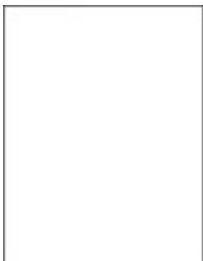


[“Vertical white lines” on page 136](#)

Printing problems

Print quality is poor

Blank or white pages



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Is the printer printing blank or white pages?	Go to step 2.	The problem is solved.
Step 2 a Remove any packing material that is left on the imaging unit. 1 Remove the toner cartridge, and then remove the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs. 2 Check the imaging unit for signs of damage, and replace if necessary. Note: Make sure that the photoconductor drum contact is not bent or out of place. 3 Firmly shake the imaging unit to redistribute the toner. 4 Insert the imaging unit, and then insert the toner cartridge. b Print the document. Is the printer printing blank or white pages?	Go to step 3.	The problem is solved.
Step 3 Check the status of the toner cartridge, and replace if necessary. a From the home screen, touch Status/Supplies > Supplies . b Print the document. Is the printer printing blank or white pages?	Contact customer support .	The problem is solved.

Dark print



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Is the print dark?	Go to step 2.	The problem is solved.
Step 2 a Turn off the printer, wait for about 10 seconds, and then turn on the printer. b Reduce toner darkness. From the home screen, touch Settings > Print > Quality > Toner Darkness . c Print the document. Is the print dark?	Go to step 3.	The problem is solved.
Step 3 a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog. Notes: <ul style="list-style-type: none"> Make sure that the setting matches the paper loaded. You can also change the setting on the printer control panel. From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type. b Print the document. Is the print dark?	Go to step 4.	The problem is solved.
Step 4 Check if the paper has texture or rough finishes. Are you printing on textured or rough paper?	Go to step 5.	Go to step 6.
Step 5 a Replace textured paper with plain paper. b Print the document. Is the print dark?	Go to step 6.	The problem is solved.

Action	Yes	No
Step 6 a Load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you are ready to use it. b Print the document. Is the print dark?	Go to step 7.	The problem is solved.
Step 7 a Remove, and then insert the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs. b Print the document. Is the print dark?	Go to step 8.	The problem is solved.
Step 8 a Replace the imaging unit. b Print the document. Is the print dark?	Contact customer support .	The problem is solved.

Fine lines are not printed correctly



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Are fine lines printed correctly?	The problem is solved.	Go to step 2.
Step 2 a Adjust the print quality settings. 1 From the home screen, touch Settings > Print > Quality > Pixel Boost > Fonts . 2 Adjust Toner Darkness to 7. From the home screen, touch Settings > Print > Quality > Toner Darkness . b Print the document. Are fine lines printed correctly?	The problem is solved.	Contact customer support .

Folded or wrinkled paper



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings > Troubleshooting > Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Is the paper folded or wrinkled?	Go to step 2.	The problem is solved.

Action	Yes	No
Step 2 a Load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you are ready to use it. b Print the document. Is the paper folded or wrinkled?	Go to step 3.	The problem is solved.
Step 3 a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog. Notes: <ul style="list-style-type: none"> Make sure that the setting matches the paper loaded. You can also change the setting from the printer control panel. From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type. b Print the document. Is the paper folded or wrinkled?	Contact customer support .	The problem is solved.

Gray background



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings > Troubleshooting > Print Quality Test Pages**.

Action	Yes	No
Step 1 a Turn off the printer, wait for 10 seconds, and then turn on the printer. b Decrease toner darkness. From the home screen, touch Settings > Print > Quality > Toner Darkness . c Print the document. Does gray background appear on prints?	Go to step 2.	The problem is solved.

Action	Yes	No
Step 2 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Does gray background appear on prints?	Go to step 3.	The problem is solved.
Step 3 a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog. Notes: <ul style="list-style-type: none"> Make sure that the setting matches the paper loaded. You can also change the setting from the printer control panel. From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type. b Print the document. Does gray background appear on prints?	Go to step 4.	The problem is solved.
Step 4 a Remove, and then insert the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light. Extended exposure to light may cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum. Doing so may affect the quality of future print jobs. b Print the document. Does gray background appear on prints?	Go to step 5.	The problem is solved.
Step 5 a Update the printer firmware. For more information, see “Updating firmware” on page 31 . b Print the document. Does gray background appear on prints?	Go to step 6.	The problem is solved.
Step 6 a Replace the imaging unit. b Print the document. Does gray background appear on prints?	Contact customer support .	The problem is solved.

Incorrect margins



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Adjust the paper guides in the tray to the correct position for the paper loaded. b Print the document. Are the margins correct?	The problem is solved.	Go to step 2.
Step 2 a Depending on your operating system, specify the paper size from the Printing Preferences or Print dialog. Notes: <ul style="list-style-type: none"> Make sure that the setting matches the paper loaded. You can also change the setting on the printer control panel. From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type. b Print the document. Are the margins correct?	The problem is solved.	Contact customer support .

Light print



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Is the print light?	Go to step 2.	The problem is solved.
Step 2 a Turn off the printer, wait for about 10 seconds, and then turn on the printer. b Increase toner darkness. From the home screen, touch Settings > Print > Quality > Toner Darkness . c Print the document. Is the print light?	Go to step 3.	The problem is solved.
Step 3 a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog. Notes: <ul style="list-style-type: none"> • Make sure that the setting matches the paper loaded. • You can also change the setting on the printer control panel. From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type. b Print the document. Is the print light?	Go to step 4.	The problem is solved.
Step 4 a Depending on your operating system, specify the print resolution from the Printing Preferences or Print dialog. b Set the resolution to 600 dpi . c Print the document. Is the print light?	Go to step 5.	The problem is solved.

Action	Yes	No
Step 5 a Remove the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light. Extended exposure to light can cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum. Doing so may affect the quality of future print jobs. b Firmly shake the imaging unit to redistribute the toner. c Insert the imaging unit. d Turn off the printer, wait for 10 seconds, and then turn on the printer. e Print the document. Is the print light?	Go to step 6.	The problem is solved.
Step 6 a Check the status of the toner cartridge. From the home screen, touch Settings > Reports > Device > Device Statistics . b From the Supply Information section of the pages printed, check the status of the toner cartridge. Is the toner cartridge near end of life?	Go to step 7.	Contact customer support .
Step 7 a Replace the toner cartridge. b Print the document. Is the print light?	Contact customer support .	The problem is solved.

Mottled print and dots



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Is the print mottled?	Go to step 2.	The problem is solved.
Step 2 Check the printer for leaked toner contamination. Is the printer free of leaked toner?	Go to step 4.	Go to step 3.
Step 3 a Replace the toner cartridge. b Print the document. Is the print mottled?	Go to step 4.	The problem is solved.
Step 4 Check the status of the imaging unit. From the home screen, touch Status/Supplies > Supplies . Is the imaging unit near end of life?	Go to step 5.	Contact customer support .
Step 5 a Replace the imaging unit. b Print the document. Is the print mottled?	Contact customer support .	The problem is solved.

Paper curl



Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Is the paper curled?	Go to step 2.	The problem is solved.
Step 2 a Adjust the guides in the tray to the correct position for the paper loaded. b Print the document. Is the paper curled?	Go to step 3.	The problem is solved.
Step 3 a Depending on your operating system, specify the paper size and paper type from the Printing Preferences or Print dialog. Notes: <ul style="list-style-type: none"> • Make sure that the settings match the paper loaded. • You can also change the settings from the printer control panel. b Print the document. Is the paper curled?	Go to step 4.	The problem is solved.
Step 4 a Remove paper from the tray, and then turn over the paper. b Print the document. Is the paper curled?	Go to step 5.	The problem is solved.
Step 5 a Load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you are ready to use it. b Print the document. Is the paper curled?	Go to step 6.	The problem is solved.
Step 6 a Check if the paper loaded is supported. Note: If paper is not supported, then load a supported one. b Print the document. Is the paper curled?	Contact customer support .	The problem is solved.

Print crooked or skewed



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Pull out the tray. b Remove the paper, and then load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you are ready to use it. c Squeeze and slide the paper guides to the correct position for the size of the paper you are loading. d Insert the tray. e Print the document. Is the print crooked or skewed?	Go to step 2.	The problem is solved.
Step 2 a Check if you are printing on a supported paper. b Print the document. Is the print crooked or skewed?	Contact customer support .	The problem is solved.

Solid black pages



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Is the printer printing solid black pages?	Go to step 2.	The problem is solved.
Step 2 a Remove the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs. b Remove any packing material that is stuck on the imaging unit. Note: Make sure to remove any obstruction between the charge roller and photoconductor drum. c Insert the imaging unit. d Print the document. Is the printer printing solid black pages?	Go to step 3.	The problem is solved.
Step 3 Check the imaging unit for signs of damage. Is the imaging unit free from damage?	Contact customer support .	Go to step 4.
Step 4 a Replace the imaging unit. b Print the document. Is the printer printing solid black pages?	Contact customer support .	The problem is solved.

Text or images cut off



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Are text or images cut off?	Go to step 2.	The problem is solved.
Step 2 a Remove the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs. b Remove any packing material that is stuck on the imaging unit. Note: Make sure to remove any obstruction between the charge roller and photoconductor drum. c Insert the imaging unit. d Print the document. Are text or images cut off?	Go to step 3.	The problem is solved.
Step 3 a Replace the imaging unit. b Print the document. Are text or images cut off?	Contact customer support .	The problem is solved.

Toner easily rubs off



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Does toner easily rub off?	Go to step 2.	The problem is solved.
Step 2 a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog. Notes: <ul style="list-style-type: none"> Make sure that the setting matches the paper loaded. You can also change the setting on the printer control panel. From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type. b Print the document. Does toner easily rub off?	Contact customer support .	The problem is solved.

Horizontal light bands



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Do horizontal light bands appear on prints?	Go to step 2.	The problem is solved.

Action	Yes	No
Step 2 a Remove, and then insert the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light. Extended exposure to light may cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum. Doing so may affect the quality of future print jobs. b Print the document. Do horizontal light bands appear on prints?	Go to step 3.	The problem is solved.
Step 3 a Replace the imaging unit. b Print the document. Do horizontal light bands appear on prints?	Go to step 4.	The problem is solved.
Step 4 a Turn off the printer, wait for 10 seconds, and then turn on the printer. b Print the document. Do horizontal light bands appear on prints?	Contact customer support .	The problem is solved.

Vertical light bands



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Do vertical light bands appear on prints?	Contact customer support .	The problem is solved.

Vertical white lines



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Do vertical white lines appear on prints?	Go to step 2.	The problem is solved.
Step 2 a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog. Notes: <ul style="list-style-type: none"> Make sure that the setting matches the paper loaded. You can also change the setting on the printer control panel. From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type. b Print the document. Do vertical white lines appear on prints?	Contact customer support .	The problem is solved.

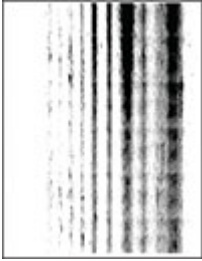
Vertical dark bands



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Do vertical dark bands appear on prints?	Go to step 2.	The problem is solved.
Step 2 a Remove the toner cartridge, and then remove the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs. b Insert the imaging unit, and then insert the cartridge. c Print the document. Do vertical dark bands appear on prints?	Go to step 3.	The problem is solved.
Step 3 a Remove the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs. b Remove any packing material that is stuck on the imaging unit. Note: Make sure to remove any obstruction between the charge roller and photoconductor drum. c Insert the imaging unit. d Print the document. Do vertical dark bands appear on prints?	Go to step 4.	The problem is solved.
Step 4 a Check if a bright light enters the right side of the printer, and move the printer if necessary. b Print the document. Do vertical dark bands appear on prints?	Contact customer support .	The problem is solved.

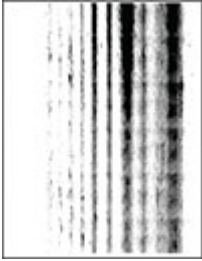
Vertical dark lines or streaks



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Do vertical dark lines or streaks appear on prints?	Go to step 2.	The problem is solved.
Step 2 a Remove, and then insert the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light can cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs. b Print the document. Do vertical dark lines or streaks appear on prints?	Go to step 3.	The problem is solved.
Step 3 a Replace the imaging unit. b Print the document. Do vertical dark lines or streaks appear on prints?	Contact customer support .	The problem is solved.

Vertical dark streaks with print missing



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge. Note: If the cartridge is not supported, then install a supported one. b Print the document. Do vertical dark streaks with missing images appear on prints?	Go to step 2.	The problem is solved.
Step 2 a Remove the imaging unit. Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems. Warning—Potential Damage: Do not touch the photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs. b Remove any packing material that is stuck on the imaging unit. Note: Make sure to remove any obstruction between the charge roller and photoconductor drum. c Insert the imaging unit. d Print the document. Do vertical dark streaks with missing images appear on prints?	Contact customer support .	The problem is solved.

Repeating defects



Note: Before solving the problem, print the Print Quality Test Pages. From the home screen, touch **Settings** > **Troubleshooting** > **Print Quality Test Pages**.

Action	Yes	No
Step 1 Using the Print Quality Test Pages, check if the distance between the repeating defects is equal to any of the following: <ul style="list-style-type: none"> • 97 mm (3.82 in.) • 47 mm (1.85 in.) • 38 mm (1.5 in.) Does the distance between the repeating defects match any of the measurements?	Go to step 2.	Take note of the distance, and then contact customer support .
Step 2 a Replace the imaging unit. b Print the document. Do the repeating defects appear?	Contact customer support .	The problem is solved.

Print jobs do not print

Action	Yes	No
Step 1 a From the document you are trying to print, open the Print dialog, and then check if you have selected the correct printer. b Print the document. Is the document printed?	The problem is solved.	Go to step 2.
Step 2 a Check if the printer is on. b Resolve any error messages that appear on the display. c Print the document. Is the document printed?	The problem is solved.	Go to step 3.
Step 3 a Check if the ports are working and if the cables are securely connected to the computer and the printer. For more information, see the setup documentation that came with the printer. b Print the document. Is the document printed?	The problem is solved.	Go to step 4.

Action	Yes	No
Step 4 a Turn off the printer, wait for about 10 seconds, and then turn on the printer. b Print the document. Is the document printed?	The problem is solved.	Go to step 5.
Step 5 a Remove, and then reinstall the print driver. b Print the document. Is the document printed?	The problem is solved.	Contact customer support .

Confidential and other held documents do not print

Action	Yes	No
Step 1 a From the control panel, check if the documents appear in the Held Jobs list. Note: If the documents are not listed, then print the documents using the Print and Hold options. b Print the documents. Are the documents printed?	The problem is solved.	Go to step 2.
Step 2 The print job may contain a formatting error or invalid data. <ul style="list-style-type: none"> • Delete the print job, and then send it again. • For PDF files, generate a new file, and then print the documents. Are the documents printed?	The problem is solved.	Go to step 3.

Action	Yes	No
Step 3 If you are printing from the Internet, then the printer may be reading the multiple job titles as duplicates. For Windows users <ul style="list-style-type: none"> a Open the Printing Preferences dialog. b From the Print and Hold tab, click Use Print and Hold, and then click Keep duplicate documents. c Enter a PIN, and then save the changes. d Send the print job. For Macintosh users <ul style="list-style-type: none"> a Save and name each job differently. b Send the job individually. Are the documents printed?	The problem is solved.	Go to step 4.
Step 4 <ul style="list-style-type: none"> a Delete some held jobs to free up printer memory. b Print the documents. Are the documents printed?	The problem is solved.	Go to step 5.
Step 5 <ul style="list-style-type: none"> a Add printer memory. b Print the documents. Are the documents printed?	The problem is solved.	Contact customer support .

Job prints from the wrong tray or on the wrong paper

Action	Yes	No
Step 1 <ul style="list-style-type: none"> a Check if you are printing on the correct paper. b Print the document. Is the document printed on the correct paper?	Go to step 2.	Load the correct paper size and paper type.

Action	Yes	No
Step 2 a Depending on your operating system, specify the paper size and paper type from the Printing Preferences or Print dialog. Note: You can also change the settings on the printer control panel. From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type . b Make sure that the settings match the paper loaded. c Print the document. Is the document printed on the correct paper?	The problem is solved.	Go to step 3.
Step 3 a Check if the trays are linked. For more information, see “Linking trays” on page 29 . b Print the document. Is the document printed from the correct tray?	The problem is solved.	Contact customer support .


Slow printing

Action	Yes	No
Step 1 Make sure that the printer cable is securely connected to the printer and to the computer, print server, option, or other network device. Is the printer printing slow?	Go to step 2.	The problem is solved.
Step 2 a Make sure that the printer is not in Quiet Mode. From the home screen, touch Settings > Device > Maintenance > Configuration Menu > Device Operations > Quiet Mode . b Print the document. Is the printer printing slow?	Go to step 3.	The problem is solved.
Step 3 a Depending on your operating system, specify the print resolution from the Printing Preferences or Print dialog. b Set the resolution to 600 dpi . c Print the document. Is the printer printing slow?	Go to step 4.	The problem is solved.

Action	Yes	No
<p>Step 4</p> <p>a From the home screen, touch Settings > Print > Quality > Print Resolution.</p> <p>b Set the resolution to 600 dpi.</p> <p>c Print the document.</p> <p>Is the printer printing slow?</p>	Go to step 5.	The problem is solved.
<p>Step 5</p> <p>a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.</p> <p>Notes:</p> <ul style="list-style-type: none"> • Make sure that the setting matches the paper loaded. • You can also change the setting on the printer control panel. • Heavier paper prints more slowly. • Paper narrower than letter, A4, and legal may print more slowly. <p>b Print the document.</p> <p>Is the printer printing slow?</p>	Go to step 6.	The problem is solved.
<p>Step 6</p> <p>a Make sure that the printer settings for texture and weight match the paper being loaded.</p> <p>From the home screen, touch Settings > Paper > Media Configuration > Media Types.</p> <p>Note: Rough paper textures and heavy paper weights may print more slowly.</p> <p>b Print the document.</p> <p>Is the printer printing slow?</p>	Go to step 7.	The problem is solved.
<p>Step 7</p> <p>Remove held jobs.</p> <p>Is the printer printing slow?</p>	Go to step 8.	The problem is solved.

Action	Yes	No
Step 8 a Make sure that the printer is not overheating. Notes: <ul style="list-style-type: none"> Allow the printer to cool down after a long print job. Observe the recommended ambient temperature for the printer. For more information, see “Selecting a location for the printer” on page 17. b Print the document. Is the printer printing slow?	Contact customer support .	The problem is solved.

The printer is not responding

Action	Yes	No
Step 1 Check if the power cord is connected to the electrical outlet.  CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible. Is the printer responding?	The problem is solved.	Go to step 2.
Step 2 Check if the electrical outlet is turned off by a switch or breaker. Is the electrical outlet turned off by a switch or breaker?	Turn on the switch or reset the breaker.	Go to step 3.
Step 3 Check if the printer is on. Is the printer on?	Go to step 4.	Turn on the printer.
Step 4 Check if the printer is in Sleep or Hibernate mode. Is the printer in Sleep or Hibernate mode?	Press the power button to wake the printer.	Go to step 5.
Step 5 Check if the cables connecting the printer and the computer are inserted to the correct ports. Are the cables inserted to the correct ports?	Go to step 6.	Insert the cables to the correct ports.

Action	Yes	No
Step 6 Turn off the printer, install the hardware options, and then turn on the printer. For more information, see the documentation that came with the option. Is the printer responding?	The problem is solved.	Go to step 7.
Step 7 Install the correct print driver. Is the printer responding?	The problem is solved.	Go to step 8.
Step 8 Turn off the printer, wait for about 10 seconds, and then turn on the printer. Is the printer responding?	The problem is solved.	Contact customer support .

Unable to read flash drive

Action	Yes	No
Step 1 Check if the printer is not busy processing another print job. Is the printer ready?	Go to step 3.	Go to step 2.
Step 2 <ul style="list-style-type: none"> Wait for the printer to finish processing the other job. Remove, and then insert the flash drive. Does the printer recognize the flash drive?	The problem is solved.	Go to step 3.
Step 3 Check if the flash drive is inserted into the front USB port. Note: The flash drive does not work when it is inserted into the rear USB port. Is the flash drive inserted into the correct port?	Go to step 5.	Go to step 4.
Step 4 Insert the flash drive into the correct port. Does the printer recognize the flash drive?	The problem is solved.	Go to step 5.

Action	Yes	No
Step 5 Check if the flash drive is supported. For more information, see “Supported flash drives and file types” on page 52. Is the flash drive supported?	Go to step 7.	Go to step 6.
Step 6 Insert a supported flash drive. Does the printer recognize the flash drive?	The problem is solved.	Go to step 7.
Step 7 Remove, and then insert the flash drive. Does the printer recognize the flash drive?	The problem is solved.	Contact customer support .

Enabling the USB port

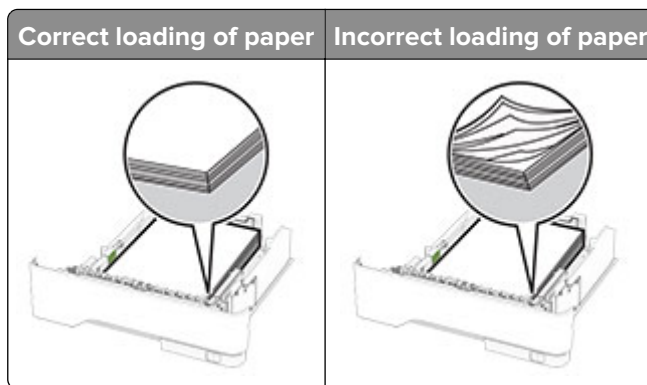
From the home screen, touch **Settings > Network/Ports > USB > Enable USB Port**.

Clearing jams

Avoiding jams

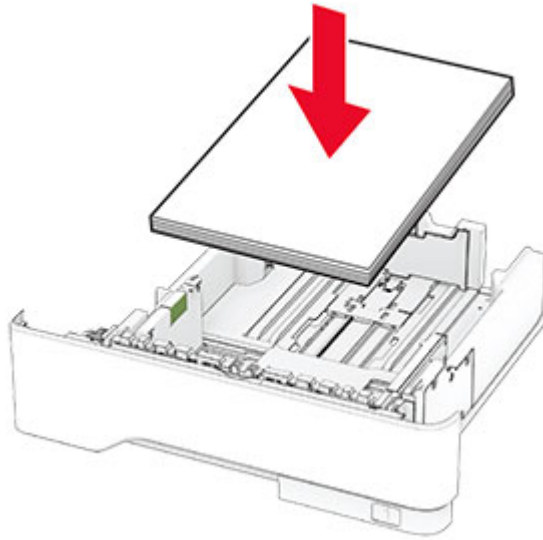
Load paper properly

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



- 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.

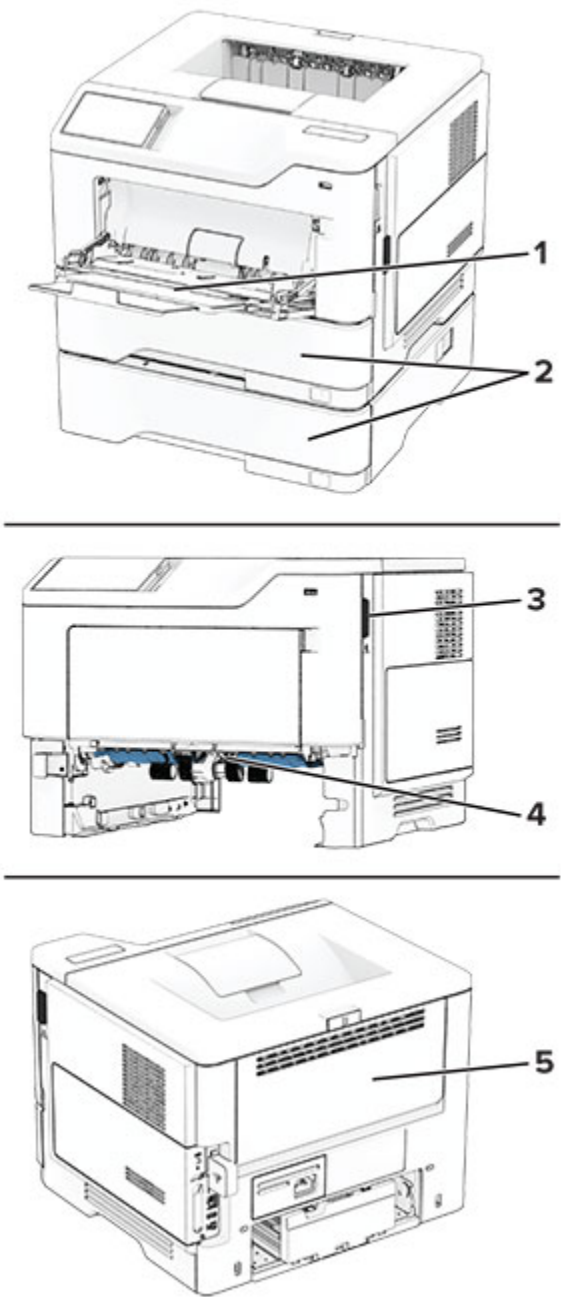


- Do not use paper that has been cut or trimmed by hand.
- Do not mix paper sizes, weights, or types in the same tray.
- Make sure that the paper size and type are set correctly on the computer or printer control panel.
- Store paper according to manufacturer recommendations.

Identifying jam locations

Notes:

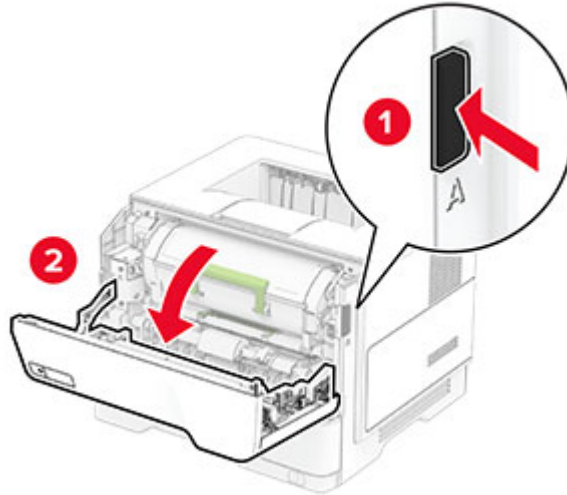
- When Jam Assist is set to On, the printer flushes blank pages or pages with partial prints after a jammed page has been cleared. Check your printed output for blank pages.
- When Jam Recovery is set to On or Auto, the printer reprints jammed pages.



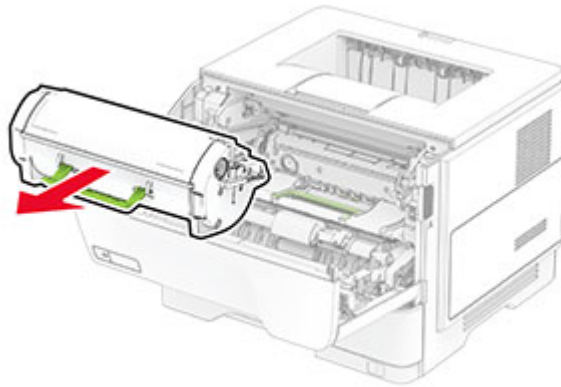
	Jam locations
1	Multipurpose feeder
2	Trays
3	Door A
4	Duplex unit
5	Door B

Paper jam in door A

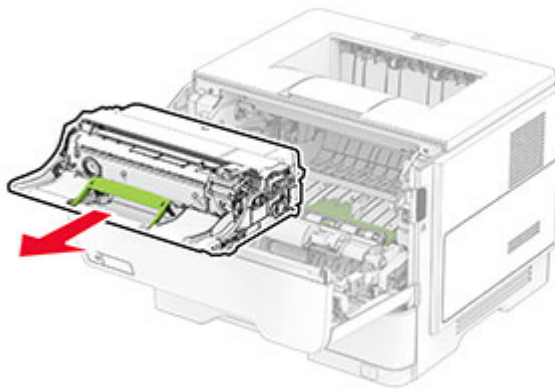
- 1 Open door A.



- 2 Remove the toner cartridge.

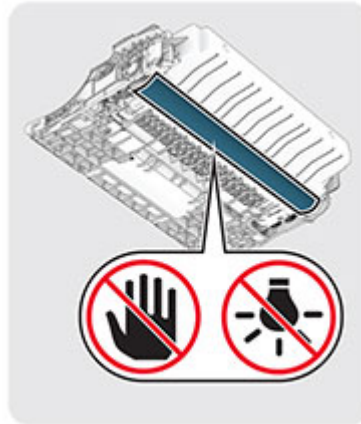


- 3 Remove the imaging unit.



Warning—Potential Damage: Do not expose the imaging unit to direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.

Warning—Potential Damage: Do not touch the photoconductor drum. Doing so may affect the quality of future print jobs.

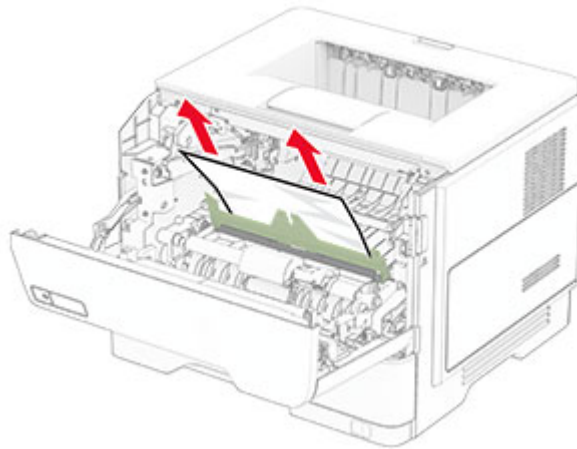


4 Remove the jammed paper.



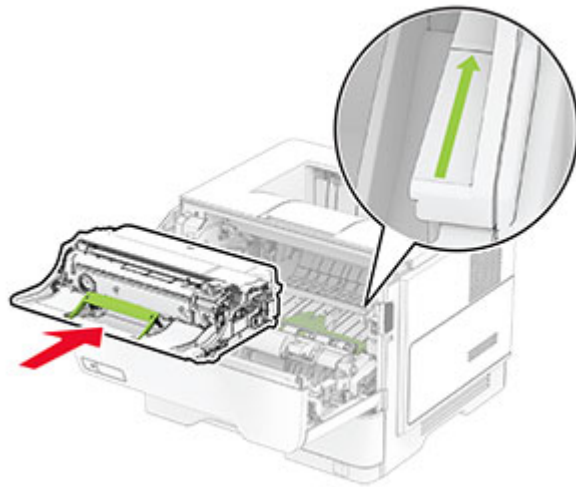
CAUTION—HOT SURFACE: The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.

Note: Make sure that all paper fragments are removed.



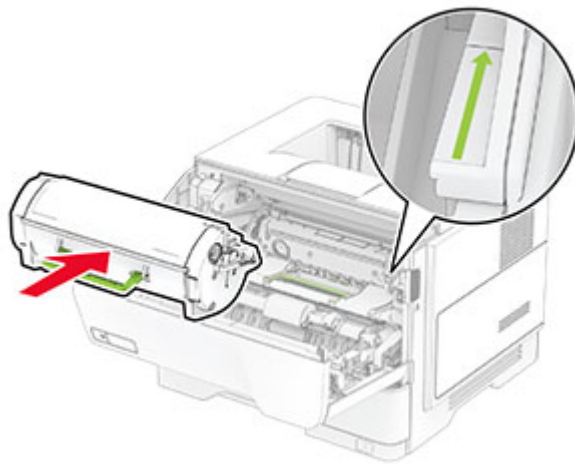
5 Insert the imaging unit.

Note: Use the arrows inside the printer as guides.



6 Insert the toner cartridge.

Note: Use the arrows inside the printer as guides.



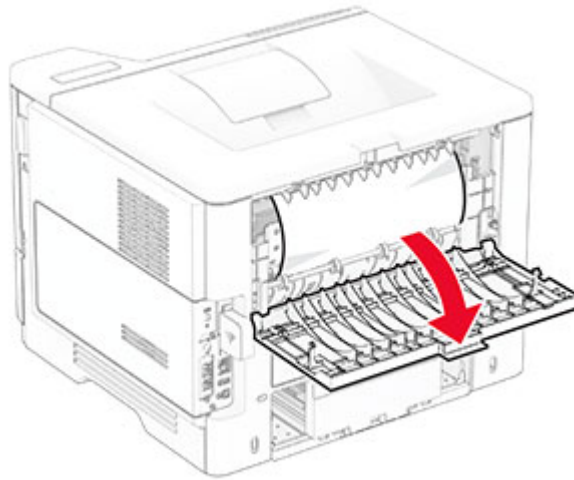
7 Close door A.

Paper jam in door B

1 Open door B.

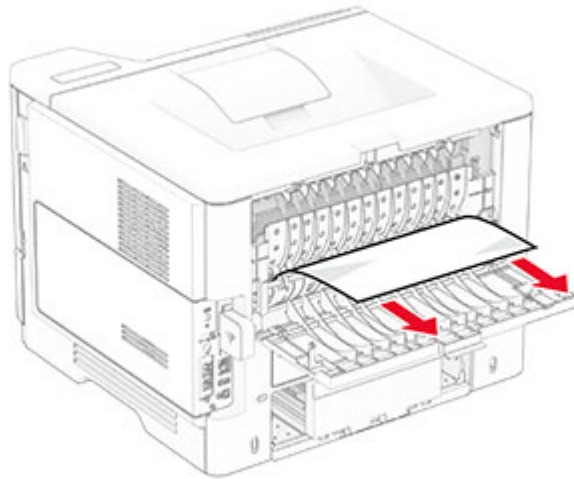


CAUTION—HOT SURFACE: The inside of the printer might be hot. To reduce the risk of injury from a hot component, allow the surface to cool before touching it.



2 Remove the jammed paper.

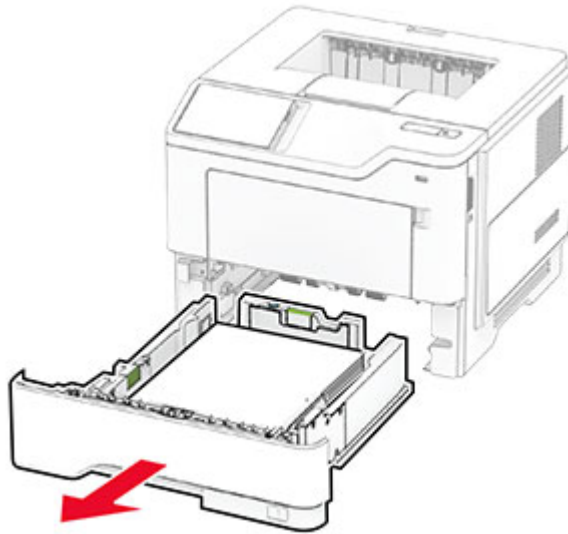
Note: Make sure that all paper fragments are removed.



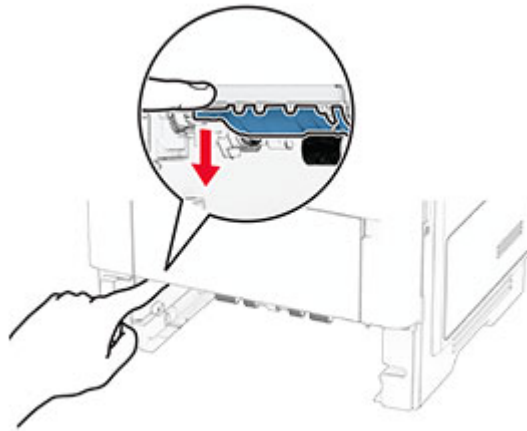
3 Close door B.

Paper jam in the duplex unit

- 1 Remove the tray.

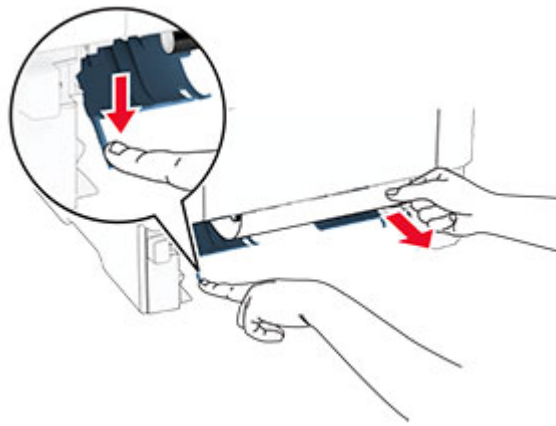


- 2 Push the duplex unit latch to open the duplex unit.



- 3 Remove the jammed paper.

Note: Make sure that all paper fragments are removed.

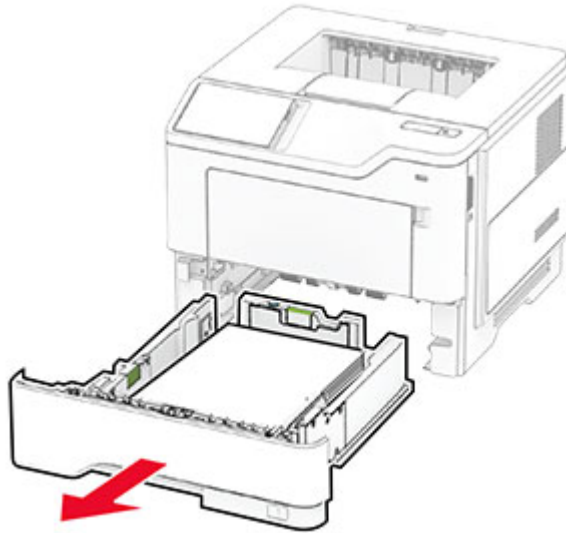


- 4 Insert the tray.

Paper jam in trays

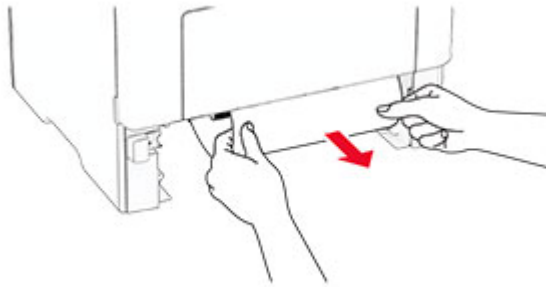
- 1 Remove the tray.

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.



- 2 Remove the jammed paper.

Note: Make sure that all paper fragments are removed.



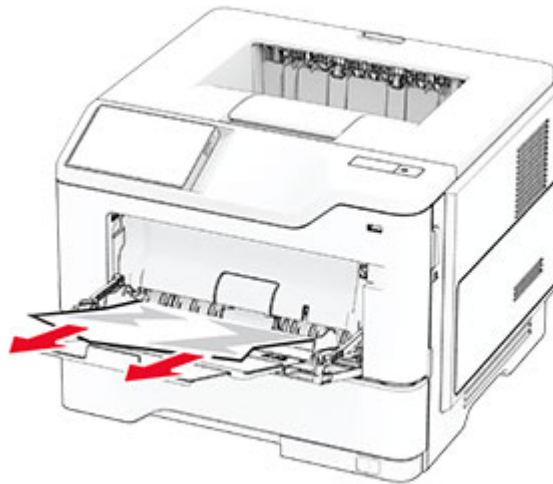
3 Insert the tray.

Paper jam in the multipurpose feeder

1 Remove paper from the multipurpose feeder.

2 Remove the jammed paper.

Note: Make sure that all paper fragments are removed.



3 Reload paper, and then adjust the paper guide.

Network connection problems

Cannot open Embedded Web Server

Action	Yes	No
Step 1 a Check if the printer is on. b Access the printer Embedded Web Server (EWS). Can you open the EWS?	The problem is solved.	Go to step 2.


Action	Yes	No
Step 2 a Make sure that the printer IP address is correct. Notes: <ul style="list-style-type: none"> • View the IP address on the home screen. • An IP address appears as four sets of numbers separated by periods, such as 123.123.123.123. b Access the EWS. Can you open the EWS?	The problem is solved.	Go to step 3.
Step 3 a Make sure that you installed a supported browser: <ul style="list-style-type: none"> • Internet Explorer version 11 or later • Microsoft Edge • Safari version 6 or later • Google Chrome™ version 32 or later • Mozilla Firefox version 24 or later b Access the EWS. Can you open the EWS?	The problem is solved.	Go to step 4.
Step 4 a Check if the network connection is working. Note: If the connection is not working, then contact your administrator. b Access the EWS. Can you open the EWS?	The problem is solved.	Go to step 5.
Step 5 a Make sure that the cable connections to the printer and print server are secure. For more information, see the documentation that came with the print server. b Access the EWS. Can you open the EWS?	The problem is solved.	Go to step 6.
Step 6 a Check if the web proxy servers are disabled. Note: If the servers are disabled, then contact your administrator. b Access the EWS. Can you open the EWS?	The problem is solved.	Contact customer support .

Cannot connect the printer to the Wi-Fi network

Action	Yes	No
Step 1 Make sure that Active Adapter is set to Auto. From the home screen, touch Settings > Network/Ports > Network Overview > Active Adapter > Auto . Can the printer connect to the Wi-Fi network?	The problem is solved.	Go to step 2.
Step 2 Check if the correct Wi-Fi network is selected. Note: Some routers may share the default SSID. Are you connecting to the correct Wi-Fi network?	Go to step 4.	Go to step 3.
Step 3 Connect to the correct Wi-Fi network. For more information, see “Connecting the printer to a Wi-Fi network” on page 44 . Can the printer connect to the Wi-Fi network?	The problem is solved.	Go to step 4.
Step 4 Check the wireless security mode. From the home screen, touch Settings > Network/Ports > Wireless > Wireless Security Mode . Is the correct wireless security mode selected?	Go to step 6.	Go to step 5.
Step 5 Select the correct wireless security mode. Can the printer connect to the Wi-Fi network?	The problem is solved.	Go to step 6.
Step 6 Make sure that you entered the correct network password. Note: Take note of the spaces, numbers, and capitalization in the password. Can the printer connect to the Wi-Fi network?	The problem is solved.	Contact customer support .

Hardware options problems

Cannot detect internal option

Action	Yes	No
Step 1 Turn off the printer, wait for about 10 seconds, and then turn on the printer. Does the printer detect the internal option?	The problem is solved.	Go to step 2.
Step 2 Print the Menu Settings Page, and then check if the internal option appears in the Installed Features list. Is the internal option listed?	Go to step 4.	Go to step 3.
Step 3 Check if the internal option is installed properly into the controller board. a Turn off the printer, and then unplug the power cord from the electrical outlet. b Make sure that the internal option is installed into the appropriate connector on the controller board. c 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. Does the printer detect the internal option?	The problem is solved.	Go to step 4.
Step 4 a Check if the internal option is available in the print driver. Note: If necessary, manually add the internal option in the print driver to make it available for print jobs. For more information, see “Adding available options in the print driver” on page 31. b Print the document. Does the printer detect the internal option?	The problem is solved.	Contact customer support .

Defective flash detected

Try one or more of the following:

- Replace the defective intelligent storage drive.
- From the home screen, touch **Continue** to ignore the message and continue printing.

- Cancel the current print job.

Not enough free space in flash memory for resources

Try one or more of the following:

- Touch **Continue** to clear the message and continue printing.
- Delete fonts, macros, and other data stored in the flash memory.
- Install a hard disk.

Note: Downloaded fonts and macros that are not previously stored in the flash memory are deleted.

Issues with supplies

Replace cartridge, printer region mismatch

Install the correct toner cartridge.

Non-Printer Manufacturer supply

The printer has detected an unrecognized supply or part installed in the printer.

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

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

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

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

If you do not want to accept these risks, then remove the third-party supply or part from your printer and install a genuine supply or part from the printer manufacturer.

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

Paper feed problems

Envelope seals when printing

Action	Yes	No
Step 1 a Use an envelope that has been stored in a dry environment. Note: Printing on envelopes with high moisture content can seal the flaps. b Send the print job. Does the envelope seal when printing?	Go to step 2.	The problem is solved.
Step 2 a Make sure that paper type is set to Envelope. From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type . b Send the print job. Does the envelope seal when printing?	Contact customer support .	The problem is solved.

Collated printing does not work

Action	Yes	No
Step 1 a From the home screen, touch Settings > Print > Layout > Collate . b Touch On [1,2,1,2,1,2] . c Print the document. Is the document collated correctly?	The problem is solved.	Go to step 2.
Step 2 a From the document that you are trying to print, open the Print dialog, and then select Collate . b Print the document. Is the document collated correctly?	The problem is solved.	Go to step 3.
Step 3 a Reduce the number of pages to print. b Print the document. Are the pages collated correctly?	The problem is solved.	Contact customer support .

Tray linking does not work

Action	Yes	No
Step 1 a Check if the trays contain the same paper size and paper type. b Check if the paper guides are positioned correctly. c Print the document. Do the trays link correctly?	The problem is solved.	Go to step 2.
Step 2 a From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type . b Set the paper size and paper type to match the paper loaded in the linked trays. c Print the document. Do the trays link correctly?	The problem is solved.	Go to step 3.
Step 3 a Make sure that Tray Linking is set to Automatic. For more information, see “Linking trays” on page 29 . b Print the document. Do the trays link correctly?	The problem is solved.	Contact customer support .

Paper frequently jams

Action	Yes	No
Step 1 a Remove the tray. b Check if paper is loaded correctly. Notes: <ul style="list-style-type: none"> Make sure that the paper guides are positioned correctly. Make sure that the stack height is below the maximum paper fill indicator. Make sure to print on recommended paper size and type. c Insert the tray. d Print the document. Do paper jams occur frequently?	Go to step 2.	The problem is solved.

Action	Yes	No
Step 2 a From the home screen, touch Settings > Paper > Tray Configuration > Paper Size/Type . b Set the correct paper size and type. c Print the document. Do paper jams occur frequently?	Go to step 3.	The problem is solved.
Step 3 a Load paper from a fresh package. Note: Paper absorbs moisture due to high humidity. Store paper in its original wrapper until you are ready to use it. b Print the document. Do paper jams occur frequently?	Contact customer support .	The problem is solved.

Jammed pages are not reprinted

Action	Yes	No
a From the home screen, touch Settings > Device > Notifications > Jam Content Recovery . b In the Jam Recovery menu, touch On or Auto . c Print the document. Are the jammed pages reprinted?	The problem is solved.	Contact customer support .

Contacting customer support

Before contacting customer support, make sure to have the following information:

- Printer problem
- Error message
- Printer model type and serial number

Visit the place where you purchased your printer.

Notices

Product information

Product name:

Mono Laser Printers

Machine type:

4602

Models:

480, 680, 685 and their equivalent models

Edition notice

July 2023

The following paragraph does not apply to any country where such provisions are inconsistent with local law: THIS PUBLICATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This publication could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in later editions. Improvements or changes in the products or the programs described may be made at any time.

GOVERNMENT END USERS

The Software Program and any related documentation are "Commercial Items," as that term is defined in 48 C.F.R. 2.101, "Computer Software" and "Commercial Computer Software Documentation," as such terms are used in 48 C.F.R. 12.212 or 48 C.F.R. 227.7202, as applicable. Consistent with 48 C.F.R. 12.212 or 48 C.F.R. 227.7202-1 through 227.7202-4, as applicable, the Commercial Computer Software and Commercial Software Documentation are licensed to the U.S. Government end users (a) only as Commercial Items and (b) with only those rights as are granted to all other end users pursuant to the terms and conditions herein.

Licensing notices

All licensing notices associated with this product can be viewed from the CD:\NOTICES directory of the installation software CD.

Hot surface notice



此符號表示該表面或元件會發熱。

請當心：為避免被發熱表面或元件燙傷的危險，請先讓該表面或元件冷卻之後再觸摸。

Noise emission levels

The following measurements were made in accordance with ISO 7779 and reported in conformance with ISO 9296.

Note: Some modes may not apply to your product.

1-meter average sound pressure, dBA	
Printing	One-sided: 55 (4602-480); 56 (4602-680; 4602-685) Two-sided: 55 (4602-480)
Ready	14

Waste from Electrical and Electronic Equipment (WEEE) directive



The WEEE logo signifies specific recycling programs and procedures for electronic products in countries of the European Union. We encourage the recycling of our products. If you have further questions about recycling options, contact your local sales office.

India E-Waste notice



This product including components, consumables, parts and spares complies with the “India E-Waste Rules” and prohibits use of lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers in concentrations exceeding 0.1% by weight and 0.01% by weight for cadmium, except for the exemption set in the Rule.

Lithium-ion rechargeable battery



This product may contain a coin-cell, lithium-ion rechargeable battery, which should only be removed by a trained technician. Crossed-out wheeled bin means the product should not be discarded as unsorted waste but must be sent to separate collection facilities for recovery and recycling. In the event the battery is removed, do not dispose of the battery in your household waste. There may be separate collection systems for batteries in your local community, such as a battery-recycling drop-off location. The separate collection of waste batteries assures appropriate treatment of waste including reuse and recycling and prevents any potential negative effects on human health and environment. Please responsibly dispose of the batteries.

WEEE (Turkey)

Türkiye Cumhuriyeti: AEEE Yönetmeliğine Uygundur.

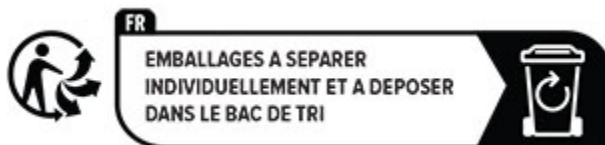
Guide de Tri pour la France

We support worldwide collection programs and environment approaches to recycling.

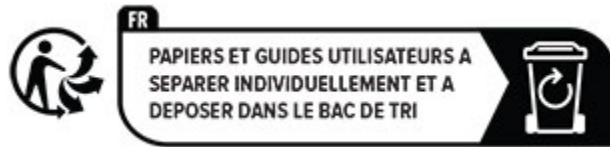
Là où les systèmes locaux de collecte des déchets électriques et électroniques sont disponibles, les imprimantes et leurs composants sont recyclables. Ne jetez pas l'imprimante, les fournitures, l'emballage ou tout autre contenu du boîtier de l'imprimante de la même manière que les déchets ménagers normaux. Consultez les autorités locales pour connaître les possibilités d'élimination et de recyclage. Cette notice s'applique aux modèles d'imprimantes mentionnés dans ce guide.

Le logo Triman, élaboré à partir du décret français 2014-15733, est une signalétique commune obligatoire pour les produits en fin de vie. Il permet d'harmoniser les différents systèmes de collecte en France. Ce symbole, plus facile à comprendre pour les citoyens et les consommateurs en France, permet de trier correctement les produits recyclables en fin de vie.

Eléments d'emballage:



Papiers:



Produits et batteries:



Product disposal

Do not dispose of the printer or supplies in the same manner as normal household waste. Consult your local authorities for disposal and recycling options.

環境保護署廢乾電池回收標誌注意事項

依環境保護署公告之廢棄物清理法第十五條應負回收、清除、處理責任之乾電池製造或輸入業者，乾電池裝配於物品中，且隨該物品銷售、贈送或促銷予消費者，得於該物品之個包裝、標籤或說明書上，標示回收標誌及回收標誌相鄰處說明「廢電池請回收」字樣。廢乾電池之回收標誌圖樣及回收標誌相鄰處說明字樣如下所示。請您將廢棄之乾電池送到標示可提供廢電池回收的廠商以提供正確的廢電池處理方法。



BSMI battery notice

警告
如果更換不正確之電池型式會有爆炸的風險
請依製造商說明書處理用過之電池

BSMI RoHS information 限用物質含有情況標示

適用於印表機、雷射印表機、多功能複合機或多功能印表機。

Applies to Printer, Laser Printer, Multifunction Machine, or Multifunction Printer.

型號（型式）：請參閱「注意事項」章節或「控管資訊」章節。

Type designation (Type): Please see the “Notices” section or the “Regulatory information” section.

單元	限用物質及其化學符號					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr ⁺⁶)	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
電路板	—	○	○	○	○	○
電源供應器	—	○	○	○	○	○
電源線	—	○	○	○	○	○
連接器	—	○	○	○	○	○
機械組件—軸、滾軸	—	○	○	○	○	○
機械組件—馬達	—	○	○	○	○	○
機械組件—其他	—	○	○	○	○	○
液晶/LED 顯示面板	—	○	○	○	○	○
備考 1. “○” 係指該項限用物質之百分比含量未超出百分比含量基準值。 備考 2. “—” 係指該項限用物質為排除項目。						

Information for China RoHS program

Part name	Toxic and hazardous substances or elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr VI)	Polybrominated biphenyl (PBB)	Polybrominated diphenylether (PBDE)
Circuit boards	X	O	O	O	O	O
Power supply	X	O	O	O	O	O
Power cords	X	O	O	O	O	O
Connectors	X	O	O	O	O	O
Mechanical assemblies— shafts, rollers	X	O	O	O	O	O
Mechanical assemblies— motors	X	O	O	O	O	O

Mechanical assemblies—other	X	O	O	O	O	O
Scanner assembly, for multifunction device only	X	O	O	O	O	O
LCD/LED display	X	O	O	O	O	O

This table is based on SJ/T 11364 regulations.

O: Indicates that the content of the toxic and hazardous substance in all the homogenous materials of the part is below the concentration limit requirement as described in GB/T 26572.

X: Indicates that the content of the toxic and hazardous substance in at least one homogenous material of the part exceeds the concentration limit requirement as described in GB/T 26572.

This product is compliant with the China RoHS Directive concerning the restriction of use of certain hazardous substances.



The Environmentally Friendly Use Period (EFUP) for all enclosed products and their components are per the symbol shown here, unless otherwise marked. Certain components may have a different EFUP and so are marked to reflect such. The Environmentally Friendly Use Period is valid only when the product is operated under the conditions defined in the product manual.



Static sensitivity notice



This symbol identifies static-sensitive parts. Do not touch the areas near these symbols without first touching a metal surface in an area away from the symbol.

To prevent damage from electrostatic discharge when performing maintenance tasks such as clearing paper jams or replacing supplies, touch any exposed metal frame of the printer before accessing or touching interior areas of the printer even if the symbol is not present.

ENERGY STAR

Any product bearing the ENERGY STAR[®] emblem on the product or on a start-up screen is certified to comply with Environmental Protection Agency (EPA) ENERGY STAR requirements as of the date of manufacture.



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.	

Información de la energía de México

Consumo de energía en operación:

644 Wh (4602-480), 657 Wh (4602-680), 669 Wh (4602-685)

Consumo de energía en modo de espera:

0.1 Wh

Cantidad de producto por unidad de energía consumida:

4.29 páginas / Wh (4602-480); 4.57 páginas / Wh (4602-680); 4.48 páginas / Wh (4602-685)

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:

Class: IIIb (3b) AlGaInP

Nominal output power (milliwatts): 15

Wavelength (nanometers): 650–670

Power consumption

Product power consumption

The following table documents the power consumption characteristics of the product.

Note: Some modes may not apply to your product.

Mode	Description	Power consumption (Watts)
Printing	The product is generating hard-copy output from electronic inputs.	One-sided: 644 (4602-480); 657 (4602-680); 669 (4602-685) Two-sided: 397 (4602-480); 401 (4602-680); 417 (4602-685)
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.	6.8 (4602-480); 7.1 (4602-680); 7.7 (4602-685)
Sleep Mode	The product is in a high-level energy-saving mode.	0.9 (4602-480, 4602-685); 1.0 (4602-685)
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.

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):	0.9 (4602-480, 4602-680); 1.0 (4602-685)
---	--

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

Factory default Hibernate Timeout for this product in all countries or regions	3 days
--	--------

The amount of time the printer waits after a job is printed before it enters Hibernate mode can be modified between one hour and one month.

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.

Thailand NBTC technical standards conformity statement

คำประกาศเรื่องการเป็นไปตามมาตรฐานทางเทคนิคของ กสทช. ประเทศไทย

This telecommunication equipment conforms to the technical standards or requirements of NBTC.

เครื่องโทรคมนาคมและอุปกรณ์นี้มีความสอดคล้องตามมาตรฐานหรือข้อกำหนดทางเทคนิคของ กสทช.

Aviso aos usuários de produtos no Brasil

Este equipamento não tem direito à proteção contra interferência prejudicial e não pode causar interferência em sistemas devidamente autorizados.

Regulatory notices for wireless products

This section contains regulatory information that applies only to wireless models.

If in doubt as to whether your model is a wireless model, go to our website.

Modular component notice

Wireless models contain the following modular component:

AzureWave AW-CM467-SUR; FCC ID:TLZ-CM467; IC:6100A-CM467

To determine which modular components are installed in your particular product, refer to the labeling on your actual product.

Exposure to radio frequency radiation

The radiated output power of this device is far below the radio frequency exposure limits of the FCC and other regulatory agencies. A minimum separation of 20 cm (8 inches) must be maintained between the antenna and any persons for this device to satisfy the RF exposure requirements of the FCC and other regulatory agencies.

Innovation, Science and Economic Development Canada

This device complies with Innovation, Science and Economic Development Canada license-exempt RSS standards. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Innovation, Sciences et Développement économique Canada

Cet appareil est conforme aux normes RSS exemptes de licence d'Innovation, Sciences et Développement économique Canada. Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférences et (2) il doit accepter toutes les interférences, y compris les celles qui peuvent entraîner un fonctionnement indésirable.

European Community (EC) directives conformity

This product is in conformity with the protection requirements of EC Council directive 2014/53/EU on the approximation and harmonization of the laws of the Member States relating to radio equipment.

Compliance is indicated by the CE marking:



Restrictions

This radio equipment is restricted to indoor use only. Outdoor use is prohibited. This restriction applies to all the countries listed in the table below:

AT	BE	BG	CH	CY	CZ	DE	DK	EE
EL	ES	FI	FR	HR	HU	IE	IS	IT
LI	LT	LU	LV	MT	NL	NO	PL	PT
RO	SE	SI	SK	TR	UK (NI)			

EU and other countries statement of radio transmitter operational frequency bands and maximum RF power

This radio product transmits in either the 2.4GHz (2.412–2.472 GHz in the EU) or 5GHz (5.15–5.35, 5.47–5.725 in the EU) bands. The maximum transmitter EIRP power output, including antenna gain, is ≤ 20 dBm for both bands.

United Kingdom (UK) conformity

This product is in conformity with the protection requirements of the Radio Equipment Regulations 2017.

Compliance is indicated by the UKCA marking:



Restrictions or requirements in the UK

This radio equipment is restricted to indoor use only. Outdoor use is prohibited.

UK statement of radio transmitter operational frequency bands and maximum RF power

This radio product transmits in either the 2.4GHz (2.412–2.472 GHz in the UK) or 5GHz (5.15–5.35, 5.47–5.725 in the UK) bands. The maximum transmitter EIRP power output, including antenna gain, is $\leq 20\text{dBm}$ for both bands.

NCC Type Approval Devices Notice

Low-power Radio-frequency Devices Notice

NCC 型式認證器材注意事項

依據低功率射頻器材技術規範

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前述合法通信，指依電信管理法規定作業之無線電通信。低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

應避免影響附近雷達系統之操作。

高增益指向性天線只得應用於固定式點對點系統。

Notice to users in Thailand

ประกาศถึงผู้ใช้ในประเทศไทย

This radiocommunication equipment has the electromagnetic field strength in compliance with the Safety Standard for the Use of Radiocommunication Equipment on Human Health announced by the National Telecommunications Commission.

เครื่องวิทยุคมนาคมนี้มีระดับการแผ่คลื่นแม่เหล็กไฟฟ้าสอดคล้องตามมาตรฐาน ความปลอดภัยต่อสุขภาพของมนุษย์จากการใช้เครื่องวิทยุคมนาคมที่คณะกรรมการกิจการโทรคมนาคมแห่งชาติประกาศกำหนด



Federal Communications Commission (FCC) compliance information statement

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC Class B limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult your point of purchase or service representative for additional suggestions.

The manufacturer is not responsible for radio or television interference caused by using other than recommended cables or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate this equipment.

Note: To assure compliance with FCC regulations on electromagnetic interference for a Class B computing device, use a properly shielded and grounded cable such as Lexmark part number 1021231 for parallel attach or 1021294 for USB attach. Use of a substitute cable not properly shielded and grounded may result in a violation of FCC regulations.

Any questions regarding this compliance information statement should be directed to:

Director of Lexmark Technology & Services
Lexmark International, Inc.
740 West New Circle Road
Lexington, KY 40550
Telephone: (859) 232-2000
E-mail: regulatory@lexmark.com

Innovation, Science and Economic Development Canada compliance statement

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Standard ICES-003.

Avis de conformité aux normes de l'Innovation, Sciences et Développement économique Canada

Cet appareil numérique de classe B est conforme aux exigences de la norme canadienne relative aux équipements pouvant causer des interférences NMB-003.

日本の VCCI 規定

製品にこのマークが表示されている場合、次の要件を満たしています。



この装置は、クラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをしてください。

VCCI-B

Korean KC statement

제품에 이 기호가 있는 경우 다음 문구가 적용됩니다.

B급 기기 (가정용 정보통신기기)



이 기기는 가정용으로 전자파적합등록을 한 기기로서
주거지역에서는 물론 모든 지역에서 사용할 수 있습니다.

European Community (EC) directives conformity

This product is in conformity with the protection requirements of EC Council directives 2014/30/EU, 2014/35/EU, 2009/125/EC, and 2011/65/EU as amended by (EU) 2015/863 on the approximation and harmonization of the laws of the Member States relating to electromagnetic compatibility, safety of electrical equipment designed for use within certain voltage limits, the ecodesign of energy-related products, and on the restrictions of use of certain hazardous substances in electrical and electronic equipment.

This product satisfies the Class B limits of EN 55032 and safety requirements of EN 62368-1.

United Kingdom (UK) conformity

This product is in conformity with the protection requirements of the Electromagnetic Compatibility Regulations 2016, the Electrical Equipment (Safety) Regulations 2016, the Ecodesign for Energy-Related Products and Energy Information (Amendment) (EU Exit) Regulations 2019, and the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012.

This product satisfies the Class B limits of BS EN 55032 and safety requirements of BS EN 62368-1.

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