ST9817 & ST9821
User's Manual

Mono Laser Printer

User's Guide

February 2019

Contents

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 18 kg (40 lb), then it requires two or more trained personnel 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.

This product uses a printing process that heats the print media, and the heat may cause the media to release emissions. You must understand the section in your operating instructions that discusses the guidelines for selecting print media to avoid the possibility of harmful emissions.

This product may produce small amounts of ozone during normal operation, and may be equipped with a filter designed to limit ozone concentrations to levels well below the recommended exposure limits. To avoid high ozone concentration levels during extensive usage, install this product in a well-ventilated area and replace the ozone and exhaust filters if instructed to do so in the product maintenance instructions. If there are no references to filters in the product maintenance instructions, then there are no filters requiring replacement for this product.

SAVE THESE INSTRUCTIONS.

Learning about the printer

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°C (50 to 90°F)
Storage temperature	0 to 40°C (32 to 104°F)

- Allow the following recommended amount of space around the printer for proper ventilation:
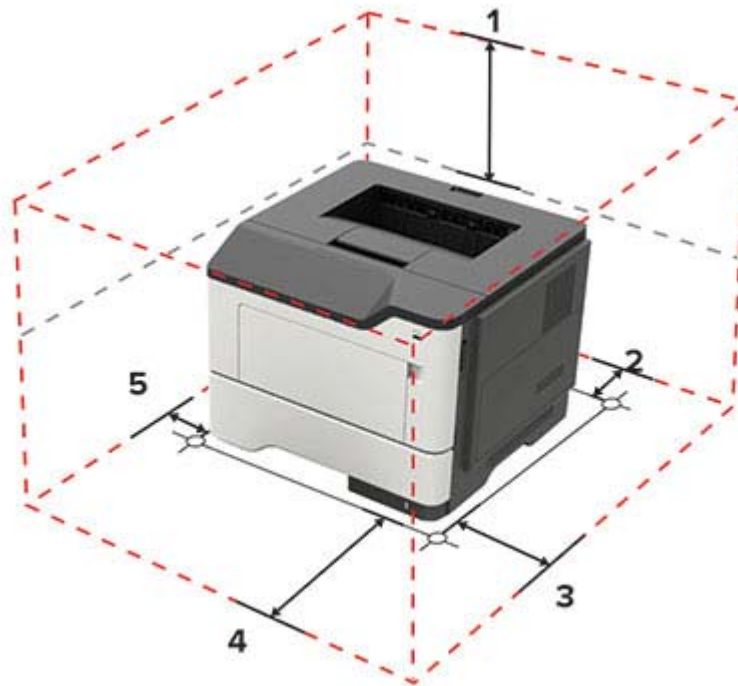
1	Top	305 mm (12 in.)
2	Rear	100 mm (3.94 in.)
3	Right side	110 mm (4.33 in.)
4	Front	305 mm (12 in.)
		Note: The minimum space needed in front of the printer is 75 mm (3 in.)
5	Left side	65 mm (2.56 in.)

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 optional 250- or 550-sheet trays. For more information, see .

1	Control panel
2	Standard bin
3	Controller board access cover
4	Standard 250- or 550-sheet tray
	Note: The standard tray may vary depending on your printer model.

5	Optional 250- or 550-sheet tray
6	Multipurpose feeder
7	Door A

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.
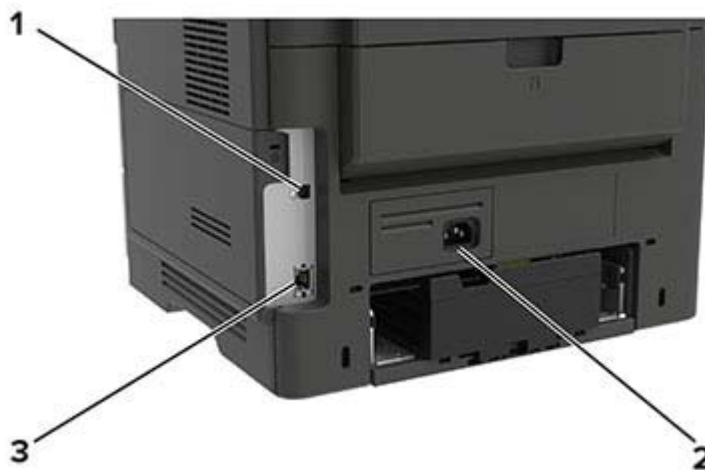
	Use the	To
1	USB printer port	Connect the printer to a computer.
2	Power cord socket	Connect the printer to an electrical outlet.
3	Ethernet port	Connect the printer to a network.

Using the control panel
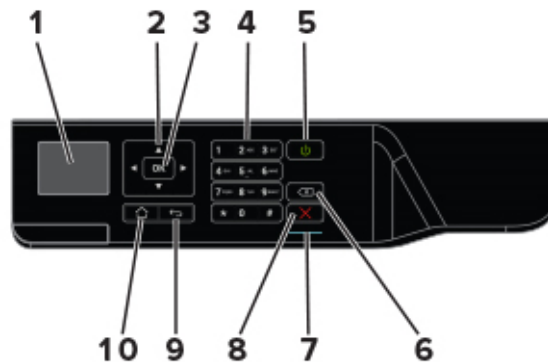
	Use the	To
1	Display	View printing options, printer status, and error messages.
2	Arrow buttons	Scroll through menus or move between screens and menu options.
3	Select button	• Select menu options. • Save the setting.
4	Numeric keypad	Enter numbers or symbols in an input field.
5	Power button	Turn on or turn off the printer. **Note:** To turn off the printer, press and hold the power button for five seconds.
6	Backspace button	Move the cursor backward and delete a character in an input field.
7	Indicator light	Check the printer status.
8	Stop or Cancel button	Stop the current printer task.
9	Back button	Return to the previous screen.
10	Home button	Go to the home screen.

Understanding the status of the power button and indicator light

Indicator light	Printer status
Off	The printer is off or in Hibernate mode.
Blue	The printer is ready or processing data.
Red	The printer requires user intervention.

Power button light	Printer status
Off	The printer is off, ready, or processing data.
Solid amber	The printer is in Sleep mode.
Blinking amber	The printer is in Hibernate mode.

Printing the Network Setup Page

1 From the control panel, navigate to:

[home icon] > **Settings** > [OK] > **Reports** > [OK] > **Network** > [OK]

2 Select **Network Setup Page**, and then press [OK].

Loading paper and specialty media

Setting the size and type of the specialty media

1 From the control panel, navigate to:

[home] > **Settings** > [OK] > **Paper** > [OK] > **Tray Configuration** > [OK] > **Paper Size/Type** > [OK]

2 Select a paper source, and then configure the size and type of the specialty media.

Configuring Universal paper settings

1 From the control panel, navigate to:

[home] > **Settings** > [OK] > **Paper** > [OK] > **Media Configuration** > [OK] > **Universal Setup** > [OK]

2 Select **Portrait Width** or **Portrait Height**, and then press [OK].

3 Adjust the settings, and then press [OK].

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 trays while the printer is busy.
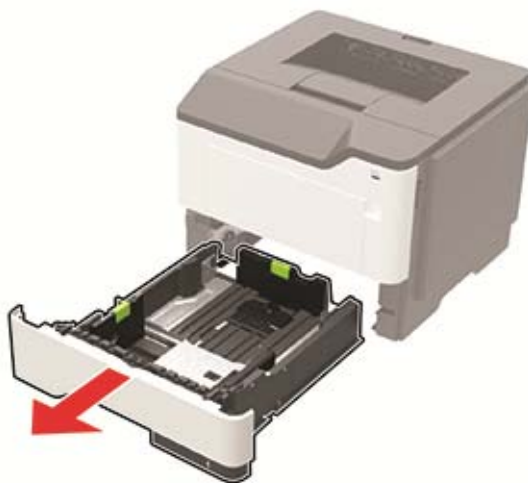
2 Adjust the paper guides to match the size of the paper that you are loading.
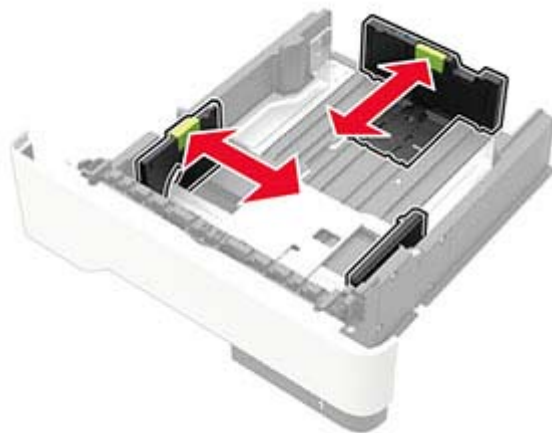
3 Flex, fan, and align the paper edges before loading.

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

Notes:

- Load letterhead facedown with the top edge of the sheet toward the front of the tray for one-sided printing.
- Load letterhead faceup with the bottom edge of the sheet toward the front 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.
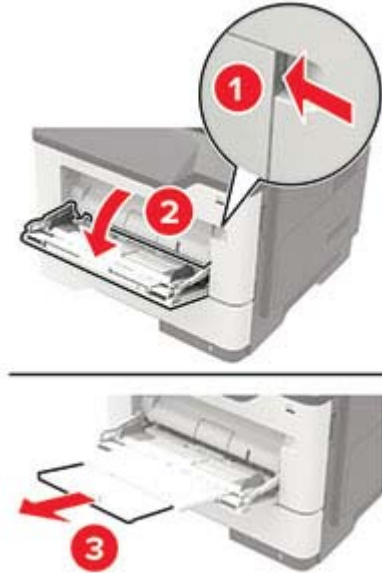
2 Adjust the guide to match the size of the paper that you are loading.

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

4 Load paper with the printable side faceup.

Notes:

- Load letterhead faceup with the top edge of the sheet toward the front of the tray for one-sided printing.
- Load letterhead facedown with the bottom edge of the sheet toward the front of the tray for two-sided printing.

- Load envelopes with the flap facedown on the left side.
- Load European envelopes with the flap facedown and entering the printer first.

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

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

Linking trays

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** > **Paper** > **Tray Configuration**.

3 Set the same paper size and paper type for the trays that you are linking.

4 Save the settings.

5 Click **Settings** > **Device** > **Maintenance** > **Configuration Menu** > **Tray Configuration**.

6 Set Tray Linking to **Automatic**.

7 Save the settings.

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.

Paper support

Supported paper sizes

Paper size	Tray	Multipurpose feeder	Two-sided printing
A4 210 x 297 mm (8.3 x 11.7 in.)	✓	✓	✓
A5 210 x 148 mm (5.8 x 8.3 in.)	✓	✓	X
A5 LEF* 148 x 210 mm (5.8 x 8.3 in.)	✓	✓	X*
A6* 105 x 148 mm (4.1 x 5.8 in.)	✓	✓	X
JIS B5 182 x 257 mm (7.2 x 10.1 in.)	✓	✓	X
Oficio (Mexico) 216 x 340 mm (8.5 x 13.4 in.)	✓	✓	✓
Hagaki 100 x 148 mm (3.9 x 5.8 in.)	X	✓	X
Statement 140 x 216 mm (5.5 x 8.5 in.)	✓	✓	X
Executive 184 x 267 mm (7.3 x 10.5 in.)	✓	✓	X
Letter 216 x 279 mm (8.5 x 11 in.)	✓	✓	✓
Legal 216 x 356 mm (8.5 x 14 in.)	✓	✓	✓
Folio 216 x 330 mm (8.5 x 13 in.)	✓	✓	✓
Universal 76.2 x 127 mm (3 x 5 in.) to 216 x 356 mm (8.5 x 14 in.)	✓	✓	X
7 3/4 Envelope (Monarch) 98 x 191 mm (3.9 x 7.5 in.)	X	✓	X
9 Envelope 98 x 225 mm (3.9 x 8.9 in.)	X	✓	X
10 Envelope 105 x 241 mm (4.1 x 9.5 in.)	X	✓	X

* This paper size is not supported in the optional tray.

Paper size	Tray	Multipurpose feeder	Two-sided printing
DL Envelope 110 x 220 mm (4.3 x 8.7 in.)	X	✓	X
C5 Envelope 162 x 229 mm (6.4 x 9 in.)	X	✓	X
B5 Envelope 176 x 250 mm (6.9 x 9.8 in.)	X	✓	X
Other Envelope 76.2 x 127 mm (3 x 5 in.) to 216 x 356 mm (8.5 x 14 in.)	X	✓	X
* This paper size is not supported in the optional tray.			

Supported paper types

Paper type	Tray	Multipurpose feeder	Two-sided printing
Plain paper	✓	✓	✓
Card stock	X	✓	X
Transparency	✓	✓	X
Recycled	✓	✓	✓
Paper labels[1]	✓	✓	X
Bond[2]	✓	✓	✓
Letterhead	✓	✓	✓
Preprinted	✓	✓	✓
Colored Paper	✓	✓	✓
Light Paper	✓	✓	✓
Heavy Paper[2]	✓	✓	✓
Rough/Cotton	✓	✓	✓
Envelope	X	✓	X
Rough envelope	X	✓	X
[1] One-sided paper labels designed for laser printers are supported for occasional use. It is recommended to print 20 or fewer pages of paper labels per month. Vinyl, pharmacy, and two-sided labels are not supported.			
[2] Bond and Heavy Paper are supported in two-sided printing up to 90-g/m^2 (24-lb) paper weight.			

Supported paper weights

	Tray	Multipurpose feeder	Two-sided printing
Paper weight	60–120 g/m^2 (16–32 lb)	60–216 g/m^2 (16–58 lb)	60–90 g/m^2 (16–24 lb)

Printing

Printing from a computer

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

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 Google Cloud Print

Google Cloud Print™ is a printing service that allows you to print to any Google Cloud Print-ready printer.

Before you begin, make sure that:

- The printer is registered to the Google Cloud Print server.
- The Cloud Print plugin is downloaded from the Google Play™ store and is enabled in the mobile device.

1 From your Android™ mobile device, open a document or select a document from your file manager.

2 Tap ⋮ > **Print**.

3 Select a printer, and then tap 🖨.

Printing from a mobile device using Mopria Print Service

Mopria® Print Service is a mobile printing solution for mobile devices running on Android version 4.4 or later. It allows you to print directly to any Mopria-certified printer.

Note: Before printing, make sure that the Mopria Print Service is enabled.

1 From the home screen of your mobile device, launch a compatible application.

2 Tap **Print**, and then select the printer.

3 Send the print job.

Printing from a mobile device using AirPrint

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

Note: This application is supported only in some Apple devices.

1 From the home screen of your mobile device, launch a compatible application.

2 Select an item to print, and then tap the share icon.

3 Tap **Print**, and then select the printer.

4 Send the print job.

Printing from a flash drive

1 Insert the flash drive.
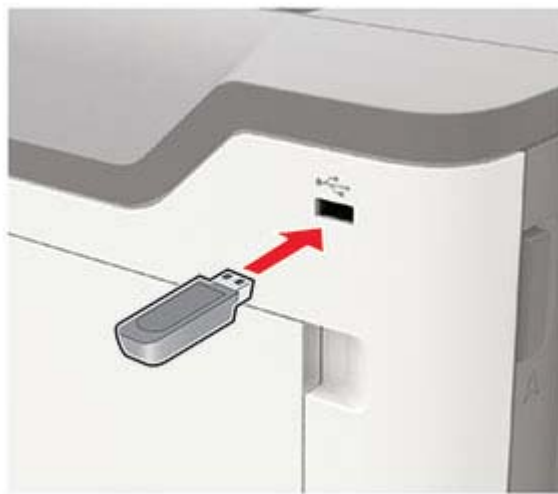
Notes:

- 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 Select the document that you want to print.

If necessary, configure other print settings.

3 Print the document.

To print another document, select **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

Notes:

- The printer supports high-speed USB flash drives with full-speed standard.
- USB flash drives must support the File Allocation Table (FAT) system.

Many flash drives are tested and approved for use with the printer. For more information, contact the place where you purchased the printer.

File types

Documents

- PDF (version 1.7 or earlier)
- XPS

Images

- .dcx
- .gif
- .JPEG or .jpg
- .bmp
- .pcx
- .TIFF or .tif
- .png

Printing a font sample list

1 From the control panel, navigate to:

⌂ > **Settings** > OK > **Reports** > OK > **Print** > OK > **Print Fonts**

2 Select **PCL Fonts** or **PostScript Fonts**, and then press OK .

Printing a directory list

1 From the control panel, navigate to:

⌂ > **Settings** > OK > **Reports** > OK > **Print** > OK

2 Select **Print Directory**, and then press OK .

Understanding the printer menus

Menu map

Device	• **Preferences** • **Remote Operator Panel** • **Notifications** • **Power Management**	• **Restore Factory Defaults** • **Maintenance** • **About This Printer**
Print	• **Layout** • **Setup** • **Quality** • **Job Accounting** • **XPS**	• **PDF** • **PostScript** • **PCL** • **HTML** • **Image**
Paper	• **Tray Configuration**	• **Media Configuration**
Network/Ports	• **Network Overview** • **Wireless** • **Ethernet** • **TCP/IP** • **SNMP** • **IPSec** • **802.1x**	• **LPD Configuration** • **HTTP/FTP Settings** • **ThinPrint** • **USB** • **Google Cloud Print** • **Wi-Fi Direct**
Reports	• **Menu Settings Page** • **Device**	• **Print** • **Network**
Security	• **Security Audit Log** • **Login Restrictions** • **Confidential Print Setup**	• **Solutions LDAP Settings** • **Mobile Services Management** • **Miscellaneous**
Help	• Print All Guides • Mono Quality Guide • Connection Guide • Information Guide	• Media Guide • Moving Guide • Print Quality Guide • Supplies Guide
Troubleshooting	• Print Quality Test Pages	

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 No Yes*	Run the setup wizard.
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 [GMT*]
	Configure the printer date and time.

Date and Time
Network Time Protocol
    Enable NTP [On*]
    NTP Server
	Configure the settings for Network Time Protocol (NTP).

Paper Sizes U.S.* 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.
Flash Drive Access Enabled* Disabled	Enable access to the flash drive.
Screen Timeout 5–300 (60*)	Set the idle time in seconds before the display shows the home screen, or before the printer logs off a user account automatically.
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

Supplies
    Show Supply Estimates
        Show estimates*
        Do not show estimates
	Show the estimated supply status information.

Supplies
    Display Estimates
        Pages*
        Percent
	Determine the unit that the printer uses to estimate supply usage and trigger custom notifications when user intervention is required.
	Note: This menu item appears only in the Embedded Web Server.

Supplies
    Cartridge Alarm
        Off
        Single*
        Continuous
	Set the number of times that the alarm sounds when the toner cartridge is low.

Supplies Custom Supply Notifications	Configure notification settings when the printer requires user intervention. **Note:** This menu item appears only in the Embedded Web Server.

Error Prevention
    Jam Assist
        Off
        On*
	Set the printer to check for jammed paper automatically.

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

Menu item	Description

Error Prevention
  Auto Continue
    Disabled
    5–255 (5*)
	Let the printer continue processing or printing a job automatically after clearing certain attendance conditions.

Error Prevention
  Auto Reboot
    Auto Reboot
      Reboot always*
      Reboot never
      Reboot when idle
	Set the printer to restart when an error occurs.

Error Prevention
  Auto Reboot
    Max Auto Reboots
      1–20 (2*)
	Set the number of automatic reboots that the printer can perform.

Error Prevention
  Auto Reboot
    Auto Reboot Window
      1–525600 (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
  Display Short Paper Error
    Auto-clear*
    On
	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 with Display off
    Allow printing with display off*
    Display on when printing
	Allow printing with the display turned off.

Timeouts
  Sleep Mode
    1–120 minutes (15*)
	Set the idle time before the printer begins operating in Sleep mode.

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 enters Hibernate mode.

Timeouts
  Hibernate Timeout on Connection
    Hibernate
    Do Not Hibernate*
	Set the printer to Hibernate mode even when an active Ethernet connection exists.

Eco-Mode
  Off*
  Energy
  Energy/Paper
  Paper
	Minimize the use of energy, paper, or specialty media.
	
	Note: Setting Eco-Mode to Energy or Paper may affect printer performance, but not print quality.

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 the printer factory default settings.

Maintenance

Config 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	Show the `Tray Insert` message.
Tray Configuration 　A5 Loading 　　Short Edge 　　Long Edge*	Specify the page orientation when loading A5-size paper.
Tray Configuration 　Paper Prompts 　　Auto* 　　MP Feeder 　　Manual Paper	Set the paper source that the user fills when a prompt to load paper appears. **Note:** For MP Feeder to appear, set Configure MP to Cassette from the Paper menu.
Tray Configuration 　Envelope Prompts 　　Auto* 　　MP Feeder 　　Manual Envelope	Set the paper source that the user fills when a prompt to load envelope appears. **Note:** For MP Feeder to appear, set Configure MP to Cassette from the Paper menu.
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

Reports
   Menu Settings Page
   Event Log
   Event Log Summary
   HealthCheck Statistics
	Print reports about printer menu settings, printer events, and event logs.

Supply Usage And Counters
   Clear Supply Usage History
   Reset Black Cartridge Counter
   Reset Black Imaging Unit Counter
   Reset Maintenance Counter
	Reset the supply usage history or the supply page counters after replacing the toner cartridge and imaging unit.

Printer Emulations
   PPDS Emulation
     Off*
     On
	Set the printer to recognize and use the PPDS data stream.

Print Configuration
   Font Sharpening
     0–150 (24*)
	Set a text point-size value below which the high-frequency screens are used when printing font data.
	For example, if the value is 24, then all fonts sized 24 points or less use the high-frequency screens.

Print Configuration
   Print Density
     Disabled*
     1–5 (3*)
	Adjust the toner density when printing documents.

Device Operations
   Quiet Mode
     Off*
     On
	Set the amount of noise that the printer produces.
	Note: Enabling this setting slows the printer performance.

Device Operations
   Panel Menus
     Enable*
     Disable
	Enable access to the control panel menus.
	Note: This menu item appears only in the Embedded Web Server.

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

Menu item	Description

Device Operations
  Automatically Display Error Screens
    On*
    Off
	Show existing error messages on the display after the printer remains inactive on the home screen for a length of time equal to the Screen Timeout setting.

Device Operations
  Enable Optional Parallel Port
    Off*
    On
	Enable an optional parallel port.
	Note: When set to On, the printer restarts.

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

Out of Service Erase

Menu item	Description
Out of Service Erase Printer Memory Last Sanitized	Show information on when the printer memory was last sanitized.
Out of Service Erase Sanitize all information on nonvolatile memory	Clear all settings and applications that are stored in the printer memory.
Out of Service Erase Erase all printer and network settings	Clear all settings and applications that are stored in the printer and network.

Visible Home Screen Icons

Menu	Description

Change Language
  Bookmarks
  Held Jobs
  USB
	Specify which icons to show on the home screen.
	Note: USB appears only in the 4702P printer model.

About this Printer

Menu item	Description
Asset Tag	Show the serial number of the printer.
Printer's Location	Identify the printer location. Maximum length is 63 characters.
Contact	Personalize the printer name. Maximum length is 63 characters.
Export Configuration File to USB	Export configuration files to a flash drive.
Export Compressed Logs to USB	Export 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 two sides of the paper.
Flip Style 　Long Edge* 　Short Edge	Determine which side of the paper (long edge or short edge) is bound when performing two-sided printing. **Note:** Depending on the option selected, the printer automatically offsets each printed information of the page to bind the job correctly.
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*) 　MP 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 Pages per Side. **Note:** The positioning depends on the number of page images and their page orientation.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Pages per Side Orientation Auto* Landscape Portrait	Specify the orientation of a multiple-page document when using Pages per Side.
Pages per Side Border None* Solid	Print a border around each page image when using Pages per Side.
Copies 1–9999 (1*)	Specify the number of copies for each print job.
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 default printer language does not prevent a software program from sending print jobs that use another printer language.
Resource Save Off* On	Set the printer to handle temporary downloads when it receives a job that requires more than the available memory. **Notes:** • Off sets the printer to retain downloads only until memory is needed. Downloads are deleted to process print jobs. • When set to On and the printer runs out of memory, a `Memory Full [38]` appears on the display but downloads are not deleted.
Print All Order Alphabetical* Oldest First Newest First	Specify the order in which held and confidential jobs are printed when Print All is selected.
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 text and images on the printed output. **Note:** Resolution is determined in dots per inch or image quality.
Pixel Boost Off* Fonts Horizontally Vertically Both directions	Enable more pixels to print in clusters for clarity, in order to enhance text and images.
Toner Darkness 1–10 (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 brightness of the printed output.
Contrast 0 to 5 (0*)	Adjust the contrast of the printed output.
Gray Correction Off Auto*	Adjust the contrast enhancement applied to images.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Job Accounting

Note: This menu appears only when a printer hard disk is installed.

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	Specify the maximum size of the log file before the printer executes the Log Action at Near Full.
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 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 disk 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 e-mail address to which the printer sends job accounting logs.
Log File Prefix	Specify the prefix for the log file name. **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.	

XPS

Menu item	Description
Print Error Pages Off* On	Print a test page that contains information on errors, including XML markup errors.
Minimum Line Width 1–30 (2*)	Set the minimum stroke width of any job printed in 1200 dpi.
Note: An asterisk (*) next to a value indicates the factory default setting.	

PDF

Menu item	Description
Scale To Fit Yes No*	Scale the page content to fit the selected paper size.
Annotations Print Do Not Print*	Specify whether to print annotations in the PDF.
Note: An asterisk (*) next to a value indicates the factory default setting.	

PostScript

Menu item	Description
Print PS Error On Off*	Print a test page that contains the PostScript error.
Minimum Line Width 1–30 (2*)	Set the minimum stroke width of any job printed in 1200 dpi.
Lock PS Startup Mode On Off*	Disable the SysStart file.
Font Priority Resident* Flash/Disk	Establish the font search order. **Notes:** • Resident sets the printer to search its memory for the requested font before searching the flash memory. • Flash/Disk sets the printer to search the flash memory for the requested font before searching the printer memory. • This menu item appears only when a flash memory is installed.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Wait Timeout Disabled 15–65535 (40*)	Set the printer to wait for additional 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 Flash All	Select the source which contains the default font selection. **Notes:** • Flash and Disk appear only in some printer models. • For Flash and Disk to appear, make sure that they are not read- or write-protected.
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 (10*)	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	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 PCL® datastream. **Notes:** • 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. **Note:** Jobs printed in 1200 dpi use the value directly.
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 Off* On	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 Off* On	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: 0–199—A numeric value to assign a custom value to a paper source. 200—The printer uses the factory default paper source assignments. 201—The paper source ignores the Select Paper Feed command.
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)	Set the printer to end a print job after it has been idle for the specified amount of time in seconds.
Note: An asterisk (*) next to a value indicates the factory default setting.	

HTML

Menu item	Description
Font Name [List of fonts] (Times*)	Set the font to use for HTML documents.
Font Size 1–255 (12*)	Set the font size to use for HTML documents.
Scale 1–400% (100*)	Scale HTML documents.
Orientation Portrait* Landscape	Set the page orientation for HTML documents.
Margin Size 8–255 mm (19*)	Set the page margin for HTML documents.
Backgrounds Do Not Print Print*	Print background information or graphics for HTML documents.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Image

Menu item	Description
Auto Fit Off On*	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 Best Fit* Anchor Top Left 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.
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*) MP Feeder Manual Paper Manual Envelope	Set the paper source for all print jobs. **Note:** For MP Feeder to appear, set Configure MP to Cassette from the Paper menu.
Paper Size/Type Tray [x] MP Feeder Manual Paper Manual Envelope	Specify the paper size or paper type loaded in each paper source.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
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:** • Off prompts the user to load the required paper size. • Letter/A4 prints A4-size document on letter when loading letter and letter-size jobs on A4 paper size when loading letter. • All Listed substitutes Letter/A4.
Configure MP Cassette* Manual First	Set the printer when to pick paper loaded in the multipurpose feeder. **Notes:** • When set to Cassette, the printer treats the multipurpose feeder like a tray. • When set to Manual, the printer treats the multipurpose feeder like a manual feeder. • When set to First, the printer picks paper from the multipurpose feeder until it is empty, regardless of the required paper source or paper size.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Media Configuration menu

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 3–14.17 inches (8.50*) 76–359.91 mm (216*)	Set the portrait width of the universal paper.
Portrait Height 3–14.17 inches (14*) 76–359.91 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
Card Stock
Transparency
Recycled
Labels
Bond
Envelope
Rough Envelope
Letterhead
Preprinted
Colored Paper
Light
Heavy
Rough/Cotton
Custom Type [x]
	Specify the texture and weight of the paper loaded.
	Select from the following options:
	    Paper Texture
	        Smooth
	        Normal*
	        Rough
	    Paper Weight
	        Light
	        Normal*
	        Heavy

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

Network/Ports

Network Overview

Menu item	Description

Active Adapter
    Auto*
    Standard Network
	Specify how a network is connected.

Network Status	Show the connection status of the printer network.

Display Network Status on Printer
    On*
    Off
	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.

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

Menu item	Description
Banner Page Off* On	Print a banner page.
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*
      WEP
      WPA2/WPA ‑ Personal
      WPA2 ‑ Personal
      802.1x ‑ RADIUS
	Configure the Wi‑Fi connection using the control panel.
	
	Note: 802.1x ‑ RADIUS can be configured only from the Embedded Web Server.

Wi‑Fi Protected Setup
WPS Auto Detect
    Off
    On*
Start Push Button Method
Start PIN Method
	Establish a Wi‑Fi network and enable network security.
	
	Notes:
	• WPS Auto Detect appears only when the Wireless Security Mode is set to WEP.
	• 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.

Network Mode BSS Type Infrastructure*	Specify the network mode.
Enable Wi‑Fi Direct On Off*	Enable Wi‑Fi Direct‑capable devices to connect directly to the printer.
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* WEP WPA2/WPA-Personal WPA2-Personal 802.1x - RADIUS	Set the security mode for connecting the printer to Wi-Fi devices. **Note:** 802.1x - RADIUS can be configured only from the Embedded Web Server.
WEP Authentication Mode Auto* Open Shared	Set the type of Wireless Encryption Protocol (WEP) for the printer. **Note:** This menu item appears only when the Wireless Security Mode is set to WEP.
Set WEP Key	Specify a WEP password for secure Wi-Fi connection.
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 Pre-Shared Key	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*	Enable Wi-Fi security through 802.1x standard. **Notes:** • This menu item appears only when the Wireless Security Mode is set to 802.1x - RADIUS. • 802.1x - RADIUS can be configured only from the Embedded Web Server.
IPv4 Enable DHCP On* Off Set Static IP Address IP Address Netmask Gateway	Enable and configure IPv4 settings in the printer.

Menu item	Description
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.
Network Address UAA LAA	View the network addresses.
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:** 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 Off On*	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 printer hard disk before printing. **Note:** This menu item appears only when a hard disk is installed.
Mac Binary PS Auto* On Off	Set the printer to process Macintosh binary PostScript print jobs. **Notes:** • On processes raw binary PostScript print jobs. • Off filters print jobs using the standard protocol.

Ethernet

Menu item	Description
Network Speed	Show the speed of an active network adapter.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
IPv4 　Enable DHCP 　　On* 　　Off	Enable Dynamic Host Configuration Protocol (DHCP). **Note:** DHCP is a standard protocol that allows a server to dynamically distribute IP addressing and configuration information to clients.
IPv4 　Set Static IP Address 　　IP Address 　　Netmask 　　Gateway	Set the static IP address of your printer.
Enable IPv6 　On* 　Off	Configure IPv6 in the printer.
Enable DHCPv6 　On 　Off*	Run DHCPv6 in an IPv6 network.
Stateless Address Autoconfiguration 　On* 　Off	Set the network adapter to accept the automatic IPv6 address configuration entries provided by a router.
DNS Address	Specify the DNS server address, IP address, and the router for IPv6 network.
Manually Assigned IPv6 Address	
Manually Assigned IPv6 Router	
Address Prefix 　0–128 (64*)	
All IPv6 Addresses	Show all IP and router addresses used in an IPv6 network.
All IPv6 Router Addresses	
Network Address 　UAA 　LAA	Show the printer Media Access Control (MAC) addresses: Locally Administered Address (LAA) and Universally Administered Address (UAA). **Note:** You can change the printer LAA manually.
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.
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:** - On processes raw binary PostScript print jobs. - Off filters print jobs using the standard protocol.
Energy Efficient Ethernet On* Off	Reduce power consumption when the printer receives no 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 Off On*	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.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
DDNS TTL 300-31536000 (3600*)	Specify the current DDNS settings.
Default TTL 5-254 (254*)	
DDNS Refresh Time 300-31536000 (604800*)	
Enable mDNS Off On*	Update multicast DNS settings.
WINS 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 an IP address for the TCP connections. **Notes:** • Use a comma to separate each IP address. • You can add up to 50 IP addresses.
Restricted Server List Options Block All Ports* Block Printing Only Block Printing and HTTP Only	Specify how the IP addresses in the list can access the printer functionality.
MTU 256-1500 (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	Enable the printer maximum transfer rate.
Enable SSLv2 Off* On	Enable the SSLv2 protocol.
Enable SSLv3 Off* On	Enable the SSLv3 protocol.
Enable TLSv1.0 Off On*	Enable the TLSv1.0 protocol.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Enable TLSv1.1 　Off 　On*	Enable the TLSv1.1 protocol.
SSL Cipher List	Specify the cipher algorithms to use for the SSL or the TLS connections.
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* 　Set Read/Write Credentials 　　User Name 　　Password 　Set Read-only Credentials 　　User Name 　　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 printer security.
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. **Note:** To configure the settings of this menu item, access the Embedded Web Server.
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 encryption. **Note:** This menu item appears only when Base Configuration is set to Compatibility.
Proposed Encryption Method 3DES AES*	Specify the encryption and authentication methods to connect to a network securely. **Note:** These menu items appear only when Base Configuration is set to Compatibility.
Proposed Authentication Method SHA1 SHA256* SHA512	
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
IKE SA Lifetime (Hours) 1 2 4 8 24*	Set the amount of time before a new authentication key is generated. **Note:** These menu items appear only when Base Configuration is set to Secure.
IPSec SA Lifetime (Hours) 1 2 4 8* 24	
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]
  Address
  Key
	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] Address[/subnet]	
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.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
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

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

Menu item	Description
Enable HTTP Server Off On*	Access the Embedded Web Server to monitor and manage the printer.
Enable HTTPS Off On*	Configure the Hypertext Transfer Protocol Secure (HTTPS) settings.
Force HTTPS Connections Off* On	Force the printer to use the HTTPS connections.
Enable FTP/TFTP Off On*	Send files using FTP.
Local Domains	Specify domain names for HTTP and FTP servers.
HTTP Proxy IP Address	Configure the HTTP and FTP server settings.
FTP Proxy IP Address	
HTTP Default IP Port 1–65535 (80*)	
HTTPS Device Certificate	
FTP Default IP Port 1–65535 (21*)	
Timeout for HTTP/FTP Requests 1–299 (30*)	Specify the amount of time before the server connection stops.
Retries for HTTP/FTP Requests 1–299 (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) 0* 100–1000000	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 On* Off	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:** 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 to PS emulation when a print job received through a USB port 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.
Mac Binary PS Auto* On Off	Set the printer to process Macintosh binary PostScript print jobs. **Notes:** • On processes raw binary PostScript print jobs. • Off filters print jobs using the standard protocol.
Enable USB Port Enable* Disable	Enable the standard USB port.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Google Cloud Print

Menu item	Description
Registration Register	Register the printer to the Google Cloud Print server.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description

Options
    Enable Google Cloud Print
        Off
        On*
	Print directly from your Google account.

Options
    Enable Local Discovery
        Off
        On*
	Allow the registered user and other users on the same subnet to send jobs to the printer locally.

Options
    Enable SSL Peer Verification
        Off
        On*
	Verify authenticity of the peer certificate to connect to your Google account.

Options
    Always Print As Image
        Off*
        On
	Set the printer to process PDF files as an image for faster printing.

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

Wi-Fi Direct

Note: This menu appears only when a direct Wi-Fi network is the active network.

Menu item	Description
SSID	Specify the service set identifier (SSID) of the Wi-Fi network.
Set Preshared Key	Set the preshared key (PSK) to authenticate and validate users on a Wi-Fi connection.

Show PSK on Setup Page
    On*
    Off
	Show the PSK on the Network Setup Page.

Group Owner IP Address	Specify the IP address of the group owner.

Auto-Accept Push Button Requests
    On
    Off*
	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.	

USB Drive

Note: This menu appears only in some printer models.

Flash Drive Print

Menu item	Description
Number of Copies 1–9999 (1*)	Set the number of copies.
Paper Source Tray [x] (1*) MP Feeder Manual Paper Manual Envelope	Set the paper source for the print job.
Collate 1,1,1 - 2,2,2 1,2,3 - 1,2,3*	Print multiple copies in sequence.
Sides 1-Sided* 2-Sided	Specify whether to print on one side or two sides of the paper.
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. **Note:** The positioning depends on the number of page images and their page orientation.
Pages per Side Orientation Auto* Landscape Portrait	Specify the orientation of a multiple-page document when using Pages per Side.
Pages per Side Border None* Solid	Print a border around each page image when using Pages per Side.
Note: An asterisk (*) next to a value indicates the factory default setting.	

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

Security

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

Menu item	Description
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.
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. **Notes:** • 0 - Emergency is the highest severity. 7 - Debug is the lowest. • The selected severity level and anything higher are logged. For example, selecting 4 - Warning logs the severity levels from 0 to 4.
Clear Log Start	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.	

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 number of times an invalid PIN can be entered. **Notes:** • A value of zero turns off this setting. • When the limit is reached, the print jobs for that user name and PIN are deleted. • This menu item appears only when a hard disk is installed.
Confidential Job Expiration Off* 1 Hour 4 Hours 24 Hours 1 Week	Set the expiration time for confidential print jobs. **Notes:** • If this menu item is changed while confidential print jobs reside in the printer memory or hard disk, then the expiration time for those print jobs does not change to the new default value. • If the printer is turned off, then all confidential jobs held in the printer memory are deleted.
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 that the printer prints a copy for the user to examine its quality, before printing the remaining copies.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Reserve Job Expiration Off* 1 Hour 4 Hours 24 Hours 1 Week	Set the expiration time that the printer stores print jobs 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 print other documents with the same file name without overwriting any of the print jobs.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Solutions LDAP Settings

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

Mobile Services Management

Use	To
AirPrint Print Scan Fax	Enable functions in the AirPrint software feature.

Miscellaneous

Menu item	Description
Print Permission Off* On	Let the user log in before printing.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
Security Reset Jumper Enable "Guest" access* No Effect	Specify the effect of using the security reset jumper. **Notes:** • The jumper is located beside a lock icon on the controller board. • Enable "Guest" access provides full access control to users who are not logged in. • No Effect means that the reset has no effect on the printer security configuration.
Minimum Password Length 0–32 (0*)	Specify the minimum characters that are allowed for a password.
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 preferences, settings, and configurations.

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.

Print

Menu item	Description
Print Fonts PCL Fonts PostScript Fonts	Print samples and information about the fonts that are available in each printer language.

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.

Help

Menu item	Description
Print All Guides	Prints all the guides
Media Guide	Provides information about loading paper and specialty media
Print Quality Guide	Provides information about solving print quality issues
Mono Quality Guide	Provides information about mono print quality settings
Information Guide	Provides more information sources about the printer
Connection Guide	Provides information about connecting the printer locally (USB) or to a network
Moving Guide	Provides information about moving, locating, or shipping the printer
Supplies Guide	Provides information about ordering supplies

Troubleshooting

Troubleshooting

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

Printing the Menu Settings Page

1 From the control panel, navigate to:

> **Settings** > OK > **Reports** > OK

2 Select **Menu Settings Page**, and then press OK .

Securing 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, turn off the printer.

To erase non‑volatile memory or individual settings, device and network settings, security settings, and embedded solutions, do the following:

1 From the control panel, navigate to:

[home] > **Settings** > [OK] > **Device** > [OK] > **Maintenance** > [OK] > **Out of Service Erase** > [OK]

2 Select **Sanitize all information on nonvolatile memory**, and then press [OK].

3 To start the job, select **Continue**, and then press [OK].

4 Follow the instructions on the display.

Restoring factory default settings

1 From the control panel, navigate to:

⌂ > **Settings** > OK > **Device** > OK > **Restore Factory Defaults** > OK > **Restore Settings** > OK

2 Select **Restore all settings**, and then press OK .

3 Select **RESTORE**, and then press OK .

For a more comprehensive method of restoring the factory default settings, see "Erasing printer memory" on page 61.

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 and copy jobs.
Non-volatile memory	The printer may use two forms of non-volatile memory: EEPROM and NAND (flash memory). Both types are used to store the operating system, printer settings, network information, scanner and bookmark settings, and embedded solutions.
Hard disk memory	Some printers 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.

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

- The printer is decommissioned.
- The printer hard disk 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.

Disposing of a printer hard disk

- **Degaussing**—Flushes the hard disk with a magnetic field that erases stored data
- **Crushing**—Physically compresses the hard disk to break component parts and render them unreadable
- **Milling**—Physically shreds the hard disk into small metal bits

Note: To guarantee that all data are completely erased, destroy physically each hard disk where data is stored.

Maintaining the printer

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

Networking

Connecting the printer to a Wi‑Fi network

1 From the control panel, navigate to:

    ⌂ > **Settings** > OK > **Network/Ports** > OK > **Wireless** > OK

2 Select **Setup On Printer Panel**, and then follow the instructions on the display.

   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.

Using the Push Button method

1 From the control panel, navigate to:

    ⌂ > **Settings** > OK > **Network/Ports** > OK > **Wireless** > OK

2 Select **Wi‑Fi Protected Setup**, and then press OK .

3 Select **Start Push Button Method**, and then press OK .

4 Follow the instructions on the display.

Using the personal identification number (PIN) method

1 From the control panel, navigate to:

    ⌂ > **Settings** > OK > **Network/Ports** > OK > **Wireless** > OK

2 Select **Wi‑Fi Protected Setup**, and then press OK .

3 Select **Start PIN Method**, and then press OK .

4 Copy the eight-digit WPS PIN.

5 Open a web browser, and then type the IP address of your access point 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.

6 Access the WPS settings. For more information, see the documentation that came with your access point.

7 Enter the eight-digit PIN, and then save the changes.

Deactivating the Wi‑Fi network

1 From the printer control panel, navigate to:

Settings > **Network/Ports** > **Network Overview** > **Active Adapter** > **Standard Networking**

For non‑touch‑screen printer models, press <kbd>OK</kbd> to navigate through the settings.

2 Follow the instructions on the display.

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.

Ordering parts and supplies

To order parts and 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.

Checking the status of parts and supplies

From the control panel, navigate to:

[home icon] > **Status/Supplies** > OK > **Supplies** > OK

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.

Ordering a maintenance kit

To order a maintenance kit, contact the place where you purchased the printer.

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.

Replacing parts and supplies

Replacing the toner cartridge

1 Open door A.

> **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.
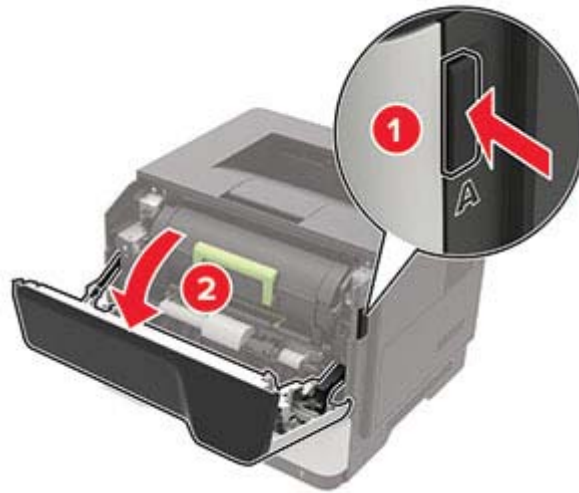
2 Remove the used toner cartridge.
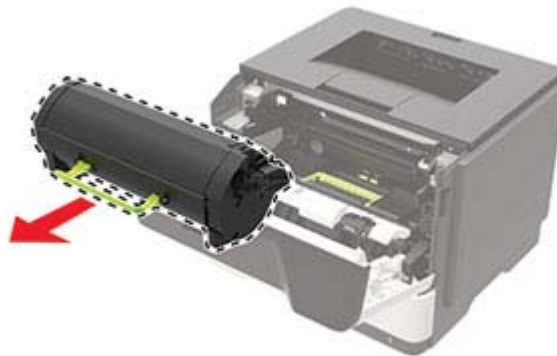
3 Unpack the new toner cartridge, and then shake it three times to redistribute the toner.

4 Insert the new toner cartridge.

Note: Use the arrows inside the printer as guides.
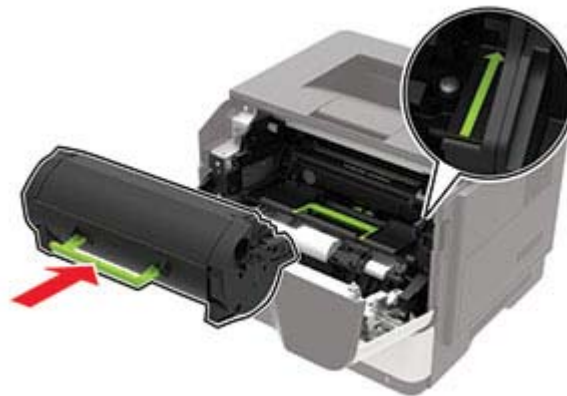
5 Close door A.

Replacing the imaging unit

1 Open door A.

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.
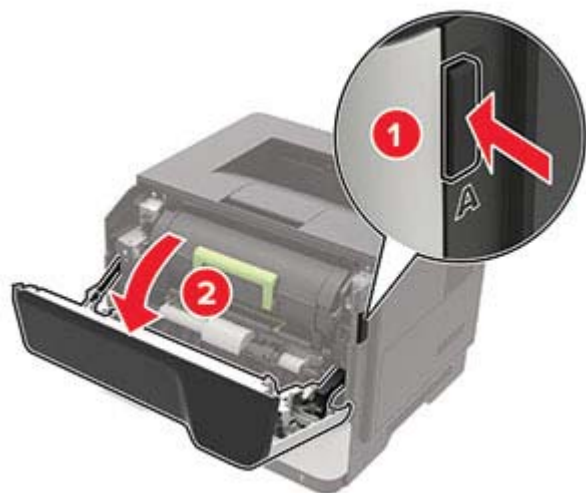
2 Remove the toner cartridge.

3 Remove the used imaging unit.

4 Unpack the new imaging unit, and then shake it three times 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.
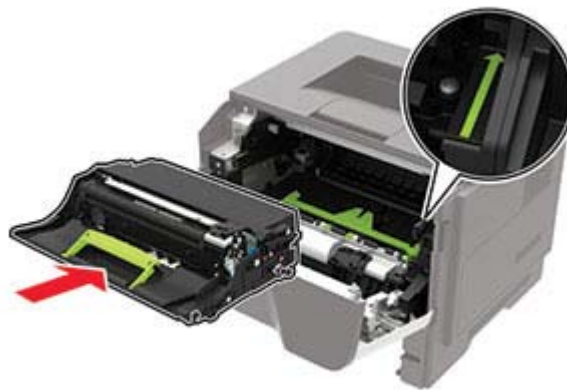
5 Insert the new imaging unit.

Note: Use the arrows inside the printer as guides.
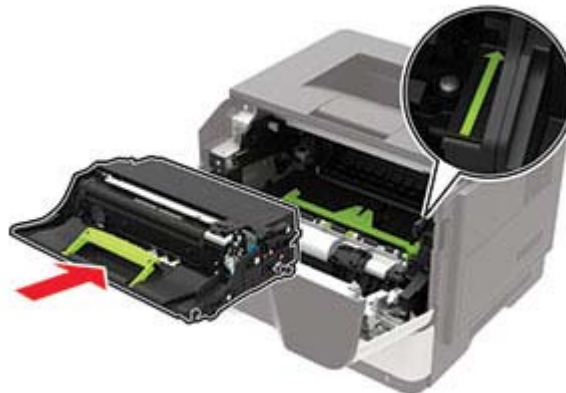
6 Insert the toner cartridge.

Note: Use the arrows inside the printer as guides.
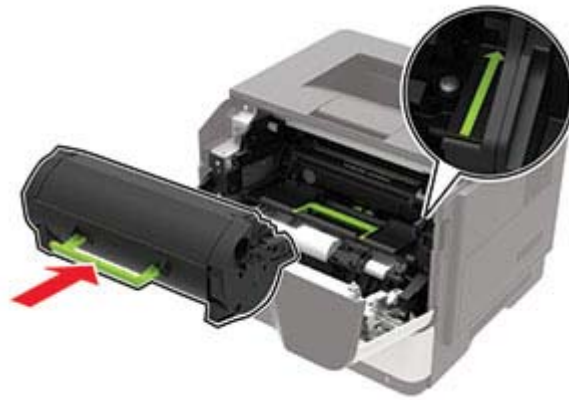
7 Close door A.

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.

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.

4 Remove the used pick tires one after the other.
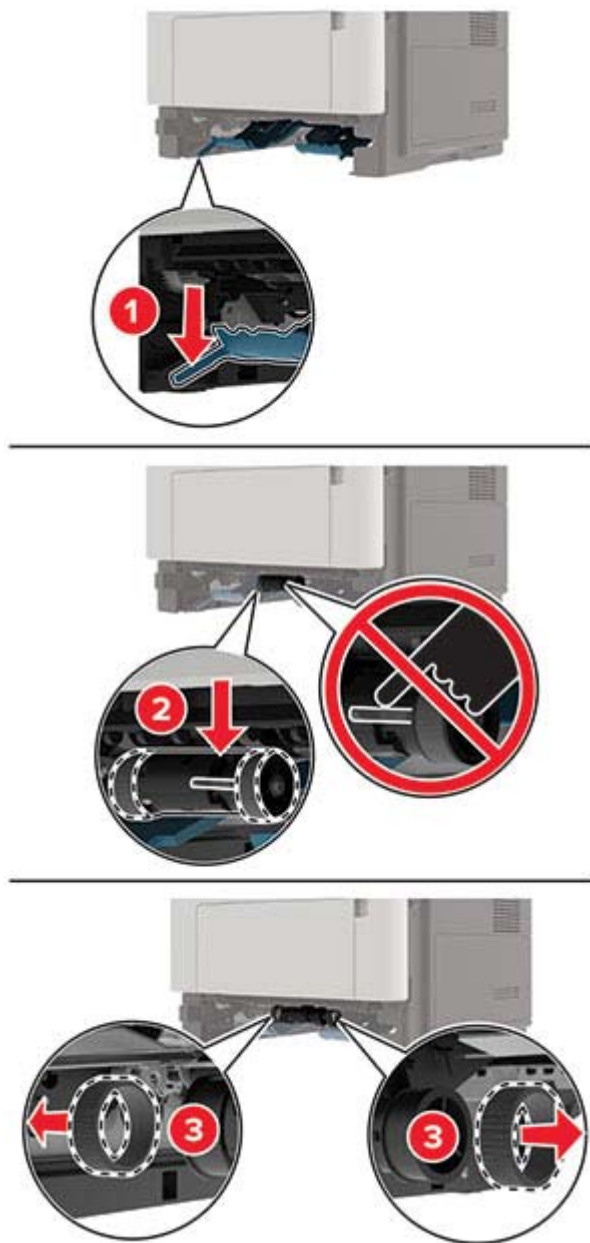
5 Unpack the new pick tires.

6 Insert the new pick tires.
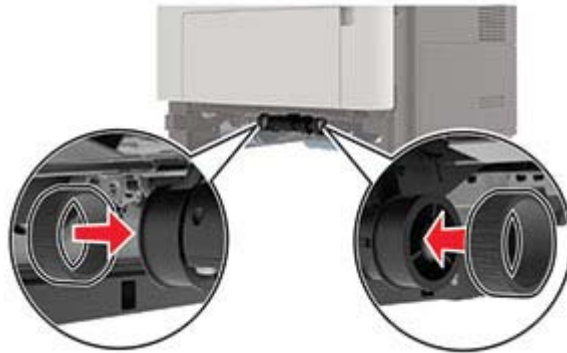
7 Insert the tray.

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.

Replacing the pick roller assembly

1 Turn off the printer.

2 Unplug the power cord from the electrical outlet, and then from the printer.

3 Remove the optional tray.

> ⚠ **CAUTION—POTENTIAL INJURY:** If the printer weight is greater than 18 kg (40 lb), then it requires two or more trained personnel to lift it safely.

4 Remove the tray insert, and then flip the tray base.

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.

5 Remove the used pick roller assembly.
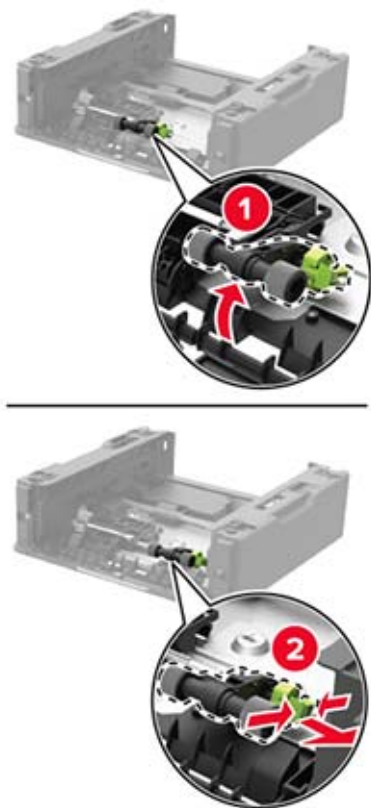
6 Unpack the new pick roller assembly.

7 Insert the new pick roller assembly.
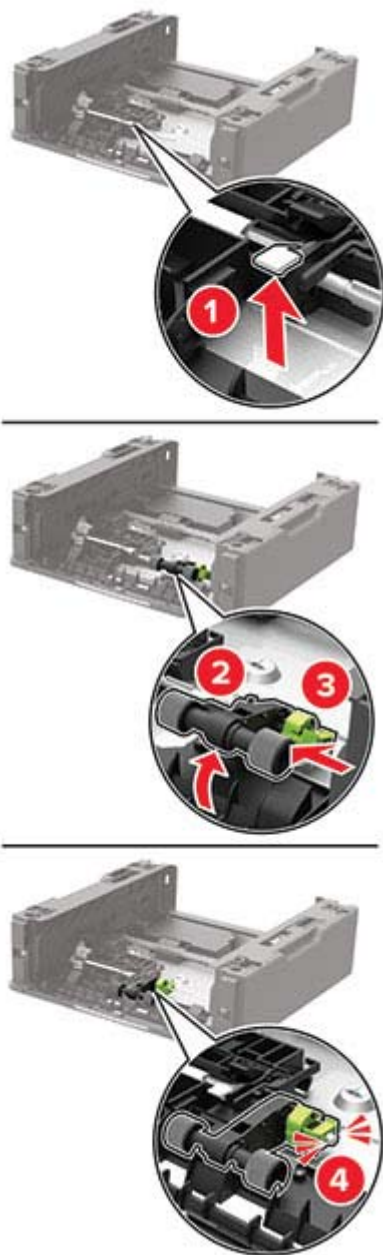
8 Flip the tray base, and then insert the tray insert.

9 Align the printer with the optional tray, and then lower the printer until it *clicks* into place.

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.

Moving the printer

Moving the printer to another location

⚠️ **CAUTION—POTENTIAL INJURY:** If the printer weight is greater than 18 kg (40 lb), then it requires two or more trained personnel 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.

Saving energy and paper

Configuring power save mode settings

Eco-Mode

1 From the control panel, navigate to:

⌂ > **Settings** > OK > **Device** > OK > **Power Management** > OK > **Eco-Mode** > OK

2 Select a setting.

Sleep mode

1 From the control panel, navigate to:

⌂ > **Settings** > OK > **Device** > OK > **Power Management** > OK > **Timeouts** > OK > **Sleep Mode** >
OK

2 Enter the amount of time that the printer stays idle before it enters Sleep mode.

Hibernate mode

1 From the control panel, navigate to:

 > Settings > **> Device >** **> Power Management >** **> Timeouts >** **> Hibernate Timeout >**

2 Select the amount of time before the printer enters Hibernate mode.

Notes:

- Make sure to wake the printer from Hibernate mode before sending a print job.
- The Embedded Web Server is disabled when the printer is in Hibernate mode.

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.

Clearing jams

Avoiding jams

Load paper properly

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

Correct loading of paper	Incorrect loading of paper
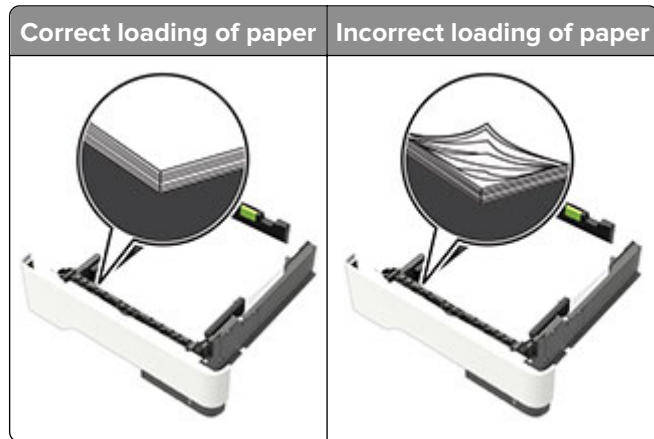
- Do not load or remove a tray while the printer is printing.
- Do not load too much paper. Make sure that the stack height is below the maximum paper fill indicator.
- Do not slide paper into the tray. Load paper as shown in the illustration.
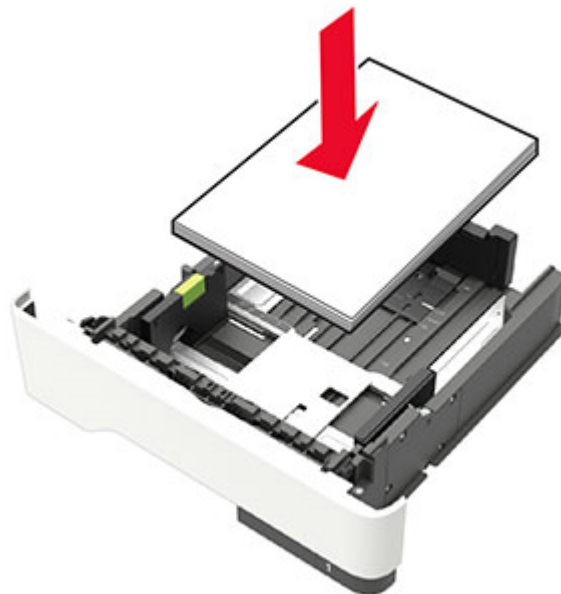
- Make sure that the paper guides are positioned correctly and are not pressing tightly against the paper or envelopes.
- Push the tray firmly into the printer after loading paper.

Use recommended paper

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

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

Identifying jam locations

Notes:

- When Jam Assist is set to On, the printer automatically flushes blank pages or partially printed pages 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 location
1	Standard bin
2	Rear door
3	Tray [x]
4	Multipurpose feeder
5	Door A

Paper jam in door A

1 Remove the tray.

2 Open door A.

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.
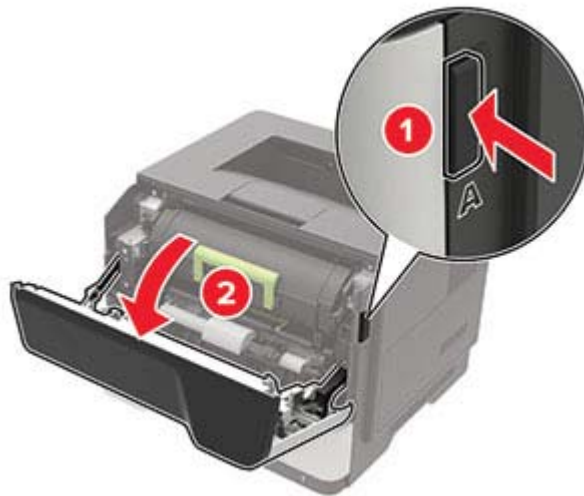
3 Remove the toner cartridge.

4 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.

5 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.
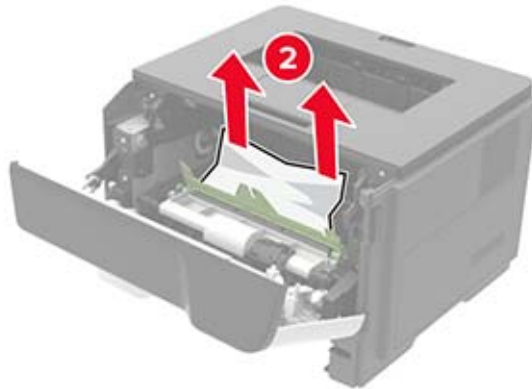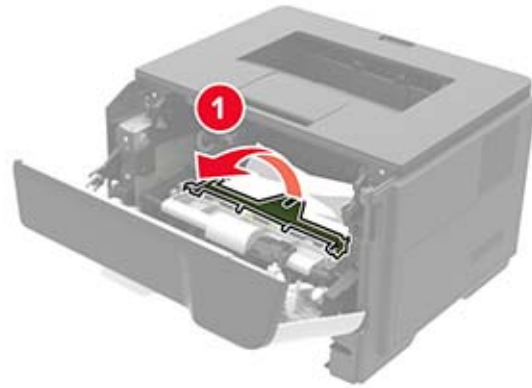
6 Insert the imaging unit.

Note: Use the arrows inside the printer as guides.

7 Insert the toner cartridge.

Note: Use the arrows inside the printer as guides.
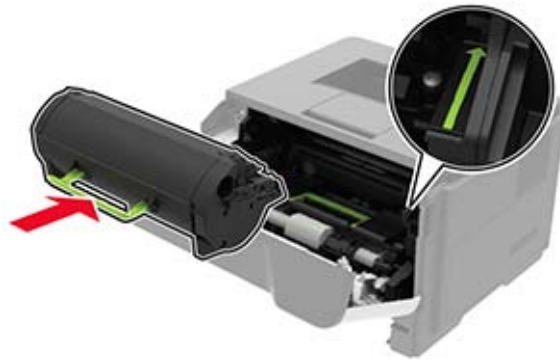
8 Close the door.

9 Insert the tray.

Paper jam in the rear door

1 Open the rear door.

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

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 Close the rear door.

Paper jam in the standard bin

Remove the jammed paper.

Note: Make sure that all paper fragments are removed.
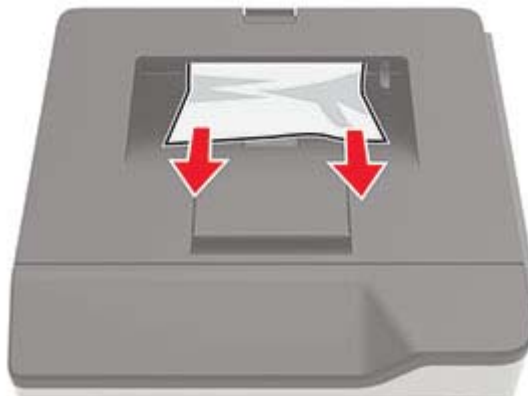
Paper jam in the duplex unit

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

4 Reload paper, and then adjust the paper guide.

Troubleshooting

Network connection problems

Cannot open Embedded Web Server

Action	Yes	No
Step 1 Check if the printer is on. Is the printer on?	Go to step 2.	Turn on the printer.
Step 2 Make sure that the printer IP address is correct. 　　View the printer IP address: 　　• From the home screen 　　• From the TCP/IP section in the Network/Ports menu 　　• By printing a network setup page or menu settings page, and then finding the TCP/IP section **Note:** An IP address appears as four sets of numbers separated by periods, such as 123.123.123.123. Is the printer IP address correct?	Go to step 3.	Type the correct printer IP address in the address field.
Step 3 Check if you are using a supported browser: • Internet Explorer® version 11 or later • Microsoft Edge^{TM} • Safari version 6 or later • Google Chrome^{TM} version 32 or later • Mozilla Firefox version 24 or later Is your browser supported?	Go to step 4.	Install a supported browser.
Step 4 Check if the network connection is working. Is the network connection working?	Go to step 5.	Contact your administrator.
Step 5 Make sure that the cable connections to the printer and print server are secure. For more information, see the documentation that came with the printer. Are the cable connections secure?	Go to step 6.	Secure the cable connections.

Action	Yes	No
Step 6 Check if the web proxy servers are disabled. Are the web proxy servers disabled?	Go to step 7.	Contact your administrator.
Step 7 Access the Embedded Web Server. Did the Embedded Web Server open?	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, copy, scan, or fax job. Is the printer ready?	Go to step 2.	Wait for the printer to finish processing the other job.
Step 2 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 3.	Insert the flash drive into the correct port.
Step 3 Check if the flash drive is supported. For more information, see "Supported flash drives and file types" on page 22. Is the flash drive supported?	Go to step 4.	Insert a supported flash drive.
Step 4 **a** Check if the USB port is enabled. For more information, see "Enabling the USB port" on page 90. **b** 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

1 From the control panel, navigate to:

⌂ > **Settings** > `OK` > **Network/Ports** > `OK` > **USB** > `OK`

2 Select **Enable USB Port**, and then press `OK`.

Checking the printer connectivity

1 From the control panel, navigate to:

![home] > **Settings** > ![OK] > **Reports** > ![OK] > **Network** > ![OK]

2 Select **Network Setup Page**, and then press ![OK].

3 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 unplugged or malfunctioning. Contact your administrator for assistance.

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, from the control panel, press and hold **X** and ![OK] simultaneously for 15 seconds.

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.

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 control panel, navigate to:
    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 control panel, navigate to: ⌂ > **Settings** > OK > **Print** > OK > **Layout** > OK **b** Select **Collate**, and then press OK . **c** Set Collate to On, and then press OK . **d** 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.

Action	Yes	No
Step 3 **a** Reduce the number of pages to print. **b** Print the document. Is the document 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 control panel, navigate to: **Settings** > **Paper** > **Tray Configuration** > **Paper Size/Type** For non-touch-screen printer models, press OK to navigate through the settings. **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 16. **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:
      • 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.

Step 2
a From the control panel, navigate to:
    Settings > **Paper** > **Tray Configuration** > **Paper Size/Type**
    For non-touch-screen printer models, press ▣ **OK** to navigate through the settings.
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
1 From the control panel, navigate to: ⌂ > **Settings** > ▣ **OK** > **Device** > ▣ **OK** > **Notifications** > ▣ **OK** **2** From the Jam Content Recovery menu, set Jam Recovery to **On** or **Auto**, and then press ▣ **OK**. Are the jammed pages reprinted?	The problem is solved.	Contact **customer support**.

Printing problems

Print quality is poor
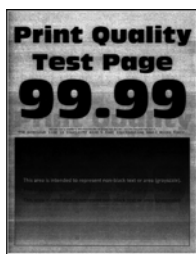
Blank or white pages

Note: Before solving the problem, print the Print Quality Test Pages. From the control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press to navigate through the settings.

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.

Action	Yes	No

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 control panel, navigate to: **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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non‑touch‑screen printer models, press to navigate through the settings.

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 control panel, navigate to: **Settings** > **Print** > **Quality** **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:
    • Make sure that the setting matches the paper loaded.
    • You can also change the setting on the printer control panel.
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.
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.

Action	Yes	No
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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press `OK` to navigate through the settings.

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 not printed correctly?	Go to step 2.	The problem is solved.

Action	Yes	No

Step 2
a Adjust the print quality settings.
  1 From the control panel, navigate to:
    Settings > **Print** > **Quality** > **Pixel Boost** > **Fonts**
  2 Adjust Toner Darkness to 7. From the control panel, navigate to:
    Settings > **Print** > **Quality**
b Print the document.
 	
Are fine lines not printed correctly?
	Contact **customer support**.	The problem is solved.

Folded or wrinkled paper

Note: Before solving the problem, print the Print Quality Test Pages. From the control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press `OK` to navigate through the settings.

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.
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.

Action	Yes	No

Step 3
a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.
   Notes:
     • Make sure that the setting matches the paper loaded.
     • You can also change the setting from the printer control panel.
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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press $\boxed{\text{OK}}$ to navigate through the settings.

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 control panel, navigate to:
   Settings > **Print** > **Quality**
c Print the document.
 	
Does gray background appear on prints?
	Go to step 2.	The problem is solved.

Step 2 **a** Check if the printer is using a genuine and supported toner cartridge. **Note:** If the toner 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.

Action	Yes	No
Step 3 **a** Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog. **Notes:** • Make sure that the setting matches the paper loaded. • You can also change the setting from the printer control panel. **b** Print the document. Does gray background appear on prints?	Go to step 4.	The problem is solved.
Step 4 **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. Does gray background appear on prints?	Go to step 5.	The problem is solved.
Step 5 **a** Replace the imaging unit. **b** Print the document. Does gray background appear on prints?	Contact **customer support**.	The problem is solved.

Horizontal light bands

Note: Before solving the problem, print the Print Quality Test Pages. From the control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press to navigate through the settings.

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.
Step 2 **a** Turn off the printer, wait for about 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.

Incorrect margins

Action	Yes	No
Step 1 **a** Adjust the paper guides to the correct position for the paper loaded. **b** Print the document. Are the margins correct?	The problem is solved.	Go to step 2.

Action	Yes	No

Step 2
a Depending on your operating system, specify the paper size from the Printing Preferences or Print dialog.
 	
Notes:
 	
   • Make sure that the setting matches the paper loaded.
   • You can also change the setting from the printer control panel.
 	
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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non‑touch‑screen printer models, press OK to navigate through the settings.

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 control panel, navigate to: **Settings** > **Print** > **Quality** **c** Print the document. Is the print light?	Go to step 3.	The problem is solved.

Action	Yes	No

Step 3
a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.
Notes:
    • Make sure that the setting matches the paper loaded.
    • You can also change the setting on the printer control panel.
b Print the document.
 	
Is the print light?
	Go to step 4.	The problem is solved.

Step 4 Check the status of the toner cartridge, and replace if necessary. **a** From the control panel, navigate to: **Status/Supplies** > **Supplies** **b** Print the document. Is the print light?	Go to step 5.	The problem is solved.

Step 5
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 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 Push either side of the transfer roller, located below the imaging unit, to check if it depresses and bounces back into place.
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.
c If the transfer roller does not depress and bounce back into place, then remove and insert it.
    1 Pull up one end of the transfer roller and push it down until it *clicks* into place.
    2 If necessary, repeat the step on the other end.
d Firmly shake the imaging unit to redistribute the toner, and then insert it.
e Insert the toner cartridge.
f Turn off the printer, wait for 10 seconds, and then turn on the printer.
g Print the document.
 	
Is the print light?
	Go to step 6.	The problem is solved.

Action	Yes	No
Step 6 **a** If the issue happens after installing a new maintenance kit, then check whether the transfer roller included with the kit is installed. **Note:** If necessary, replace the transfer roller. **b** Print the document. Is the print light?	Go to step 7.	The problem is solved.
Step 7 Check the status of the imaging unit. From the control panel, navigate to: **Status/Supplies** > **Supplies** Is the imaging unit near End of Life?	Go to step 8.	Contact **customer support**.
Step 8 **a** Replace the imaging unit. **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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press to navigate through the settings.

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.

Action	Yes	No
Step 2 Check the printer for leaked toner contamination. Is the printer free of leaked toner?	Go to step 3.	Contact **customer support**.
Step 3 Check the status of the imaging unit. From the control panel, navigate to: **Status/Supplies** > **Supplies** Is the imaging unit near end of life?	Go to step 4.	Contact **customer support**.
Step 4 **a** Replace the imaging unit. **b** Print the document. Is the print mottled?	Contact **customer support**.	The problem is solved.

Paper curl

Note: Before solving the problem, print the Print Quality Test Pages. From the control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press OK to navigate through the settings.

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.

Action	Yes	No
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:
 	
   • 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 paper. **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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press to navigate through the settings.
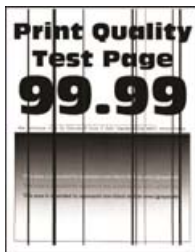
Action	Yes	No
Step 1 **a** Adjust the guides in the tray to the correct position for the paper loaded. **b** Print the document. Is the print crooked or skewed?	Go to step 2.	The problem is solved.
Step 2 **a** Check if the paper loaded is supported. **Note:** If paper is not supported, then load a supported paper. **b** Print the document. Is the print crooked or skewed?	Go to step 3.	The problem is solved.
Step 3 **a** Check the pick tire in the tray for signs of damage and contamination, and replace if necessary. **b** Print the document. Is the print crooked or skewed?	Contact **customer support**.	The problem is solved.

Repeating defects

Note: Before solving the problem, print the Print Quality Test Pages. From the control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press to navigate through the settings.

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: • 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.

Solid black pages
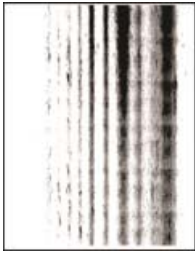
Note: Before solving the problem, print the Print Quality Test Pages. From the control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press to navigate through the settings.

Action	Yes	No
Step 1 **a** Check if the printer is using a genuine and supported toner cartridge. **Note:** If the toner 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.

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 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 printer printing solid black pages?	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. Is the printer printing solid black pages?	Go to step 4.	The problem is solved.
Step 4 Check the imaging unit for signs of damage. Is the imaging unit free from damage?	Contact **customer support**.	Go to step 5.
Step 5 **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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press OK to navigate through the settings.

Action	Yes	No
Step 1 **a** Check if the printer is using a genuine and supported toner cartridge. **Note:** If the toner 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, 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. Are text or images cut off?	Go to step 3.	The problem is solved.

Action	Yes	No
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. Are text or images cut off?	Go to step 4.	The problem is solved.
Step 4 **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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press OK to navigate through the settings.

Action	Yes	No
Step 1 **a** Check if the printer is using a genuine and supported toner cartridge. **Note:** If the toner cartridge is not supported, then install a supported one. **b** Print the document. Does the 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:** - Make sure that the setting matches the paper loaded. - You can also change the setting on the printer control panel. **b** Print the document. Does the toner easily rub off?	Contact **customer support**.	The problem is solved.

Vertical dark bands

Note: Before solving the problem, print the Print Quality Test Pages. From the control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press ![OK] to navigate through the settings.

Action	Yes	No
Step 1 **a** Check if the printer is using a genuine and supported toner cartridge. **Note:** If the toner 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.

Action	Yes	No
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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press OK to navigate through the settings.

Action	Yes	No
Step 1 **a** Check if the printer is using a genuine and supported toner cartridge. 　　**Note:** If the toner 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 reinstall 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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press OK to navigate through the settings.

Action	Yes	No
Step 1 **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?	Go to step 2.	The problem is solved.
Step 2 **a** Check if the printer is using a genuine and supported toner cartridge. **Note:** If the toner cartridge is not supported, then install a supported one. **b** Print the document. Do vertical dark streaks with missing images 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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press **OK** to navigate through the settings.

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 control panel, navigate to

Settings > **Troubleshooting** > **Print Quality Test Pages**. For non-touch-screen printer models, press **OK** to navigate through the settings.

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.

Action	Yes	No

Step 2
a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.
    Notes:
      • Make sure that the setting matches the paper loaded.
      • You can also change the setting on the printer control panel.
b Print the document.
 	
Do vertical white lines appear on prints?
	Contact **customer support**.	The problem is solved.

Slow printing

Action	Yes	No
Step 1 **a** Make sure that the printer is not in Eco‑Mode and Quiet Mode. **b** Print the document. Is the printer still printing slow?	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:
      • Make sure that the setting matches the paper loaded in the tray.
      • You can also change the setting from the Paper menu on the printer control panel.
b Print the document.
 	
Is the printer still printing slow?
	Go to step 3.	The problem is solved.

Step 3 **a** Reduce the number of pages to print. **b** Print the document. Is the printer still printing slow?	Go to step 4.	The problem is solved.
Step 4 **a** Connect the printer cable securely to the printer and the computer, print server, option, or other network device. **b** Print the document. Is the printer still printing slow?	Go to step 5.	The problem is solved.

Action	Yes	No
Step 5 **a** From the Quality menu on the control panel, set Print Resolution to 600 dpi. **b** Print the document. Is the printer still printing slow?	Go to step 6.	The problem is solved.

Step 6
a Make sure that the printer is not overheating.
Notes:
   • Allow the printer to cool down after a very long print job.
   • Observe the recommended ambient temperature for the printer. For more information, see "Selecting a location for the printer" on page 8.
b Print the document.
 	
Is the printer still printing slow?
	Go to step 7.	The problem is solved.

Step 7 **a** Add more printer memory. **b** Print the document. Is the printer still printing slow?	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.

Action	Yes	No
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.
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**.

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.

Action	Yes	No
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.
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**.

Adjusting toner darkness

1 From the control panel, navigate to:

Settings > **Print** > **Quality** > **Toner Darkness**

For non-touch-screen printer models, press **OK** to navigate through the settings.

2 Adjust the setting.

3 Apply the changes.

Job prints from the wrong tray or on the wrong paper

Action	Yes	No
Step 1 **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. **Notes:** - Make sure that the settings match the paper loaded in the tray. - You can also change the settings on the printer control panel. **b** Print the document. Is the document printed from the correct tray or on the correct paper?	The problem is solved.	Go to step 3.
Step 3 **a** Check if the trays are not linked. For more information, see "Linking trays" on page 16. **b** Print the document. Is the document printed from the correct tray?	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.

Upgrading and migrating

Hardware

Available internal options

- Flash memory
- Font cards
- Firmware cards
  - Forms and Bar Code
  - IPDS
  - PRESCRIBE
- Internal solutions port
  - Thin Parallel

Accessing the controller board

⚠ **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.
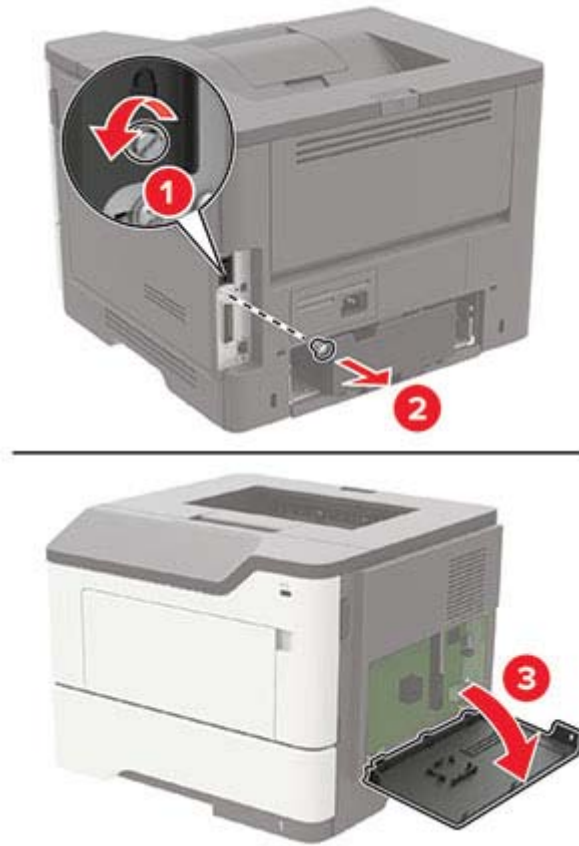
4 Close the access cover.

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

6 Turn on the printer.

Installing a memory card

> ⚠️ **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 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 memory card.

   Warning—Potential Damage: Do not touch the connection points along the edge of the card.

5 Insert the memory card until it *clicks* into place.
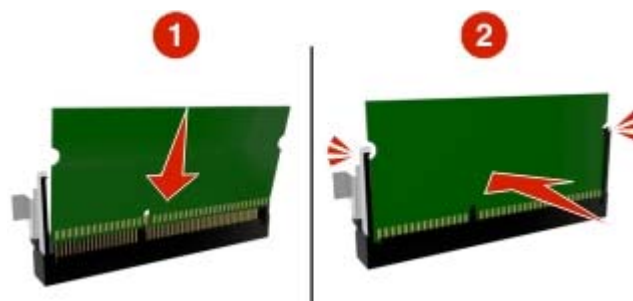
6 Close the controller board access cover.

7 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.

8 Turn on the printer.

Installing an optional card

⚠️ **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 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 components or connectors.
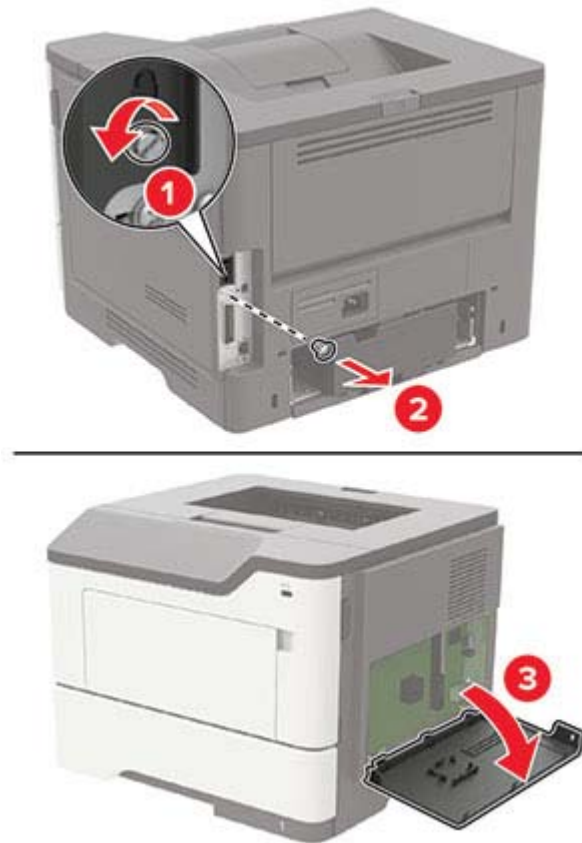
4 Unpack the optional card.

> **Warning—Potential Damage:** Do not touch the connection points along the edge of the card.

5 Push the card firmly into place.
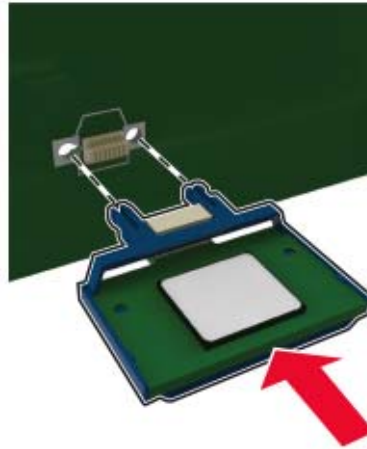
Note: The entire length of the connector on the card must touch and be flush against the controller board.

Warning—Potential Damage: Improper installation of the card may cause damage to the card and the controller board.

6 Close the access cover.

7 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.

8 Turn on 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.

Note: If optional trays are already installed, then unlock them from the printer before lifting the printer. Do not try to lift the printer and trays at the same time.

4 Align the printer with the optional tray, and then lower the printer until it *clicks* into place.

⚠ **CAUTION—POTENTIAL INJURY:** If the printer weight is greater than 18 kg (40 lb), then it requires two or more trained personnel 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 .

Software

Installing the printer software

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.

3 For Macintosh users, add the printer.

Note: Obtain the printer IP address from the TCP/IP section in the Network/Ports menu.

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.

Firmware

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 Export or import a configuration file for one or multiple applications.

For one application

a From the Embedded Web Server, click **Apps** > the application that you want > **Configure**.

b Click **Export** or **Import**.

For multiple applications

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

b Follow the instructions on the screen.

Updating firmware

Some applications require a minimum device firmware level to operate correctly.

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

1 From the Embedded Web Server, click **Settings** > **Device** > **Update Firmware**.

2 Browse to locate the required flash file.

3 Apply the changes.

Notices

Product information

Product name:

Mono Laser Printer

Machine type:

4600

Model(s):

630, 690, 830, and their equivalent models

Edition notice

February 2019

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Licensing notices

All licensing notices associated with this product can be viewed from the program folder.

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	55
Ready	15

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 complies with the India E-Waste (Management and Handling) Rules, 2011, which prohibit 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 Schedule II of the Rules.

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.

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.

Temperature information

Ambient operating temperature	10 to 32°C (50 to 90°F)
Shipping temperature	-20 to 40°C (-4 to 104°F)
Storage temperature and relative humidity	0 to 40°C (32 to 104°F) 8 to 80% RH

Laser notice

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

Class I laser products are not considered to be hazardous. The printer contains internally a Class IIIb (3b) AlGaInP laser that is nominally 15 milliwatts operating in the wavelength region of 650–670 nanometers and enclosed in a non-serviceable printhead assembly. 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.

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.	640 (One-sided), 460 (Two-sided)

Mode	Description	Power consumption (Watts)
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.	10
Sleep Mode	The product is in a high-level energy-saving mode.	5
Hibernate	The product is in a low-level energy-saving mode.	0.5
Off	The product is plugged into an electrical outlet, but the power switch is turned off.	0

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):	15

By using the configuration menus, the Sleep Mode Timeout can be modified between 1 minute and 120 minutes. Setting the Sleep Mode Timeout to a low value reduces energy consumption, but may increase the response time of the product. Setting the Sleep Mode Timeout to a high value maintains a fast response, but uses more energy.

Hibernate Mode

This product is designed with an ultra-low power operating mode called *Hibernate mode*. When operating in Hibernate Mode, all other systems and devices are powered down safely.

The Hibernate mode can be entered in any of the following methods:
- Using the Hibernate Timeout
- Using the Schedule Power modes

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

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

Off mode

If this product has an off mode which still consumes a small amount of power, then to completely stop product power consumption, disconnect the power supply cord from the electrical outlet.

Total energy usage

It is sometimes helpful to 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.

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 one of the following modular components:

Regulatory Type/Model Number LEX-M07-001; FCC ID:IYLLEXM07001; IC:2376A-LEXM07001
Regulatory Type/Model Number LEX-M08-001; FCC ID:IYLLEXM08001; IC:2376A-LEXM08001

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.

Industry Canada (Canada)

This device complies with Industry 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.

Industrie Canada (Canada)

Cet appareil est conforme aux normes RSS exemptes de licence d'Industrie 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.

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) 232–3000
E-mail: regulatory@lexmark.com

Industry 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'industrie du Canada

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

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 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.

A declaration of conformity to the requirements of the Directives is available upon request from Lexmark International Technology Hungária Kft., 8 Lechner Ödön fasor, Millennium Tower III, 1095 Budapest HUNGARY.

This product satisfies the Class B limits of EN 55022 and EN55032 and safety requirements of EN 60950-1 or EN 62368-1.

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.

A declaration of conformity to the requirements of the Directives is available upon request from Lexmark International Technology Hungária Kft., 8 Lechner Ödön fasor, Millennium Tower III, 1095 Budapest HUNGARY.

Compliance is indicated by the CE marking:

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

This radio product transmits in the 2.4GHz (2.412–2.472GHz) band in the EU. The maximum transmitter EIRP power output, including antenna gain, is ≤ 20dBm.

Index