

ST9820 User's Manual

Mono Laser Printer

User's Guide

September 2018

Machine type(s):

4600

Model(s):

630, 690, 830, 835, 895, and their equivalent models

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5 Safety information

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.

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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.

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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.

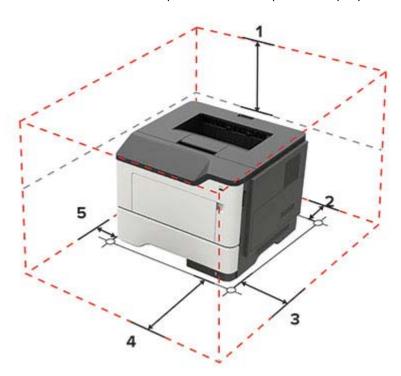


CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock, do not place or use this product near water or wet locations.

- 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	Тор	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 <u>"Installing optional trays" on page 126</u>.



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.

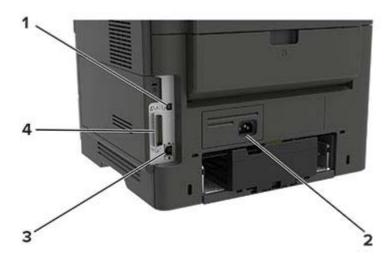


CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, connect the power cord to an appropriately rated and properly grounded electrical outlet that is near the product and easily accessible.



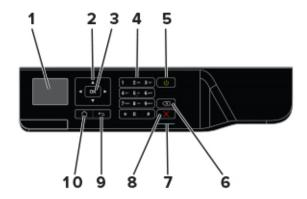
CAUTION—POTENTIAL INJURY: To avoid the risk of fire or electrical shock, use only the power cord provided with this product or the manufacturer's authorized replacement.

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	То		
1 USB printer port Connect the printer to a computer.		Connect the printer to a computer.			
	2	Power cord socket	ocket Connect the printer to an electrical outlet.		
	3	Ethernet port Connect the printer to a network.			
	4	Parallel port	Connect the printer to a computer.		

Using the control panel



	Use the	То	
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:



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:

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:

- 2 Select Portrait Width or Portrait Height, and then press OK
- **3** Adjust the settings, and then press OK

Loading trays

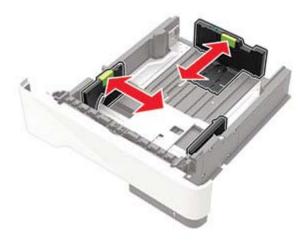
CAUTION—TIPPING HAZARD: To reduce the risk of equipment instability, load each tray separately. Keep all other trays closed until needed.

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:

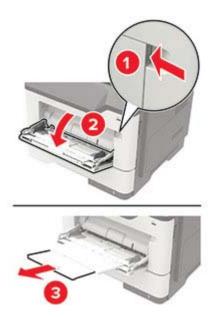
- Load letterhead facedown with the top edge of the sheet toward the front of the tray for one-sided printing.
- Load letterhead faceup with the bottom edge of the sheet toward the front of the tray for two-sided printing.
- Do not slide paper into the tray.
- To avoid paper jams, make sure that the 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.
- 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.

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Paper support

Supported paper sizes

Paper size	Tray	Multipurpose feeder	Two-sided printing
Α4	✓	✓	✓
210 x 297 mm (8.3 x 11.7 in.)			
A5	✓	✓	X
210 x 148 mm (5.8 x 8.3 in.)			
A5 LEF*	✓	✓	X
148 x 210 mm (5.8 x 8.3 in.)		,	
A6 * 105 x 148 mm (4.1 x 5.8 in.)	✓	✓	X
JIS B5	./	./	х
182 x 257 mm (7.2 x 10.1 in.)	V	V	
Oficio (Mexico) 216 x 340 mm (8.5 x 13.4 in.)	✓	✓	√
Hagaki	Х	1	X
100 x 148 mm (3.9 x 5.8 in.)	^	V	
Statement	1	1	X
140 x 216 mm (5.5 x 8.5 in.)	V	V	
Executive	./	./	X
184 x 267 mm (7.3 x 10.5 in.)	V	V	
Letter	J	./	./
216 x 279 mm (8.5 x 11 in.)	v	٧	v
Legal	J	J	J
216 x 356 mm (8.5 x 14 in.)	· ·	٧	•
Folio	J	_/	J
216 x 330 mm (8.5 x 13 in.)	•	ν	•
Universal	J	1	х
76.2 x 127 mm (3 x 5 in.) to 216 x 356 mm (8.5 x 14 in.)	•	•	
7 3/4 Envelope (Monarch)	х	1	х
98 x 191 mm (3.9 x 7.5 in.)		٧	
9 Envelope	х	J	х
98 x 225 mm (3.9 x 8.9 in.)		٧	
10 Envelope	х	1	х
105 x 241 mm (4.1 x 9.5 in.)		٧	
* This paper size is not supported	in the optional tray.		

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

^{*} 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	х	√	x
Transparency	✓	√	x
Recycled	✓	✓	✓
Paper labels ¹	✓	✓	x
Bond ²	✓	✓	✓
Letterhead	✓	✓	✓
Preprinted	✓	✓	✓
Colored Paper	✓	✓	√
Light Paper	✓	✓	✓
Heavy Paper ²	✓	✓	✓
Rough/Cotton	✓	✓	✓
Envelope	х	✓	х
Rough envelope	х	✓	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/m² (24-lb) paper weight.

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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)

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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 PrintTM is a mobile printing service that allows enabled applications on mobile devices to print to any Google Cloud Print-ready printer.

- 1 From the home screen of your mobile device, launch an enabled application.
- **2** Tap **Print**, and then select a printer.
- 3 Print the document.

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 a printer.
- **3** Print the document.

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.

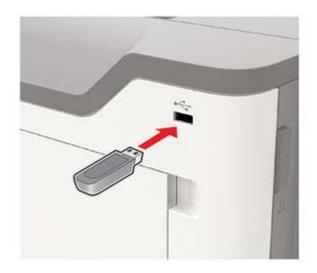
Note: This application is supported only in some Apple devices.

- 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.

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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.



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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:

- .doc or .docx
- .xls or .xlsx
- .ppt or .pptx
- .pdf
- .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:



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

Printing a directory list

1 From the control panel, navigate to:



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

Understanding the printer menus

Menu map

Device	• Preferences	Restore Factory Defaults
	• Remote Operator Panel	Maintenance
	Notifications	About This Printer
	Power Management	
Print	• <u>Layout</u>	• PDF
	• <u>Setup</u>	• PostScript
	Quality	• PCL
	Job Accounting	• HTML
	• <u>XPS</u>	• <u>Image</u>
Paper	Tray Configuration	Media Configuration
Network/Ports	Network Overview	• LPD Configuration
	• Wireless	HTTP/FTP Settings
	• Ethernet	• <u>ThinPrint</u>
	• TCP/IP	• <u>USB</u>
	• SNMP	Google Cloud Print
	• <u>IPSec</u>	Wi-Fi Direct
	• <u>802.1x</u>	
Reports	Menu Settings Page	• Print
	• <u>Device</u>	• <u>Network</u>
Security	Security Audit Log	Solutions LDAP Settings
	• Login Restrictions	Mobile Services Management
	Confidential Print Setup	Miscellaneous
<u>Help</u>	Print All Guides	Media Guide
	Mono Quality Guide	Moving Guide
	Connection Guide	Print Quality Guide
	Information Guide	Supplies Guide
<u>Troubleshooting</u>	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. Note: Not all languages are available for all printer models. You may need to install special hardware for some languages to appear.
Country/Region [List of countries]	Identify the country that the printer is configured to operate.
Run Initial Setup Yes No*	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. Note: Custom Text 1 and Custom Text 2 appear only in some printer models.
Date and Time Configure Current Date and Time Manually Set Date and Time Network Time Protocol Enable NTP NTP Server	 Configure the printer date and time. Notes: Enable Authentication appears only in some printer models. When Enable Authentication is set to MD5 key, Key ID and Password appear.
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. Note: This menu item appears only in some printer models.
Screen Timeout 10–300 (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	

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 fa	ctory default setting.

Notifications

Menu item	Description
Supplies Show Supply Estimates Show estimates* Do not show estimates	Show the estimated supply status information.
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 Jam Assist Off On*	Set the printer to check for jammed paper automatically.
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.

Menu item	Description
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.

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

Menu item	Description
Timeouts	Set the time before the printer enters Hibernate mode.
Hibernate Timeout	
Disabled	
1 hour	
2 hours	
3 hours	
6 hours	
1 day	
2 days	
3 days*	
1 week	
2 weeks	
1 month	
Timeouts	Set the printer to Hibernate mode even when an active
Hibernate Timeout on Connection	Ethernet connection exists.
Hibernate	
Do Not Hibernate*	
Eco-Mode	Minimize the use of energy, paper, or specialty media.
Off*	Note: Setting Eco-Mode to Energy or Paper may affect
Energy	printer performance, but not print quality.
Energy/Paper	
Paper	

Restore Factory Defaults

Menu item	Description
Restore Settings	Restore the printer factory default settings.
Restore all settings	
Restore printer settings	
Restore network settings	

Maintenance

Config Menu

Menu item	Description
USB Configuration USB PnP	Change the USB driver mode of the printer to improve its compatibility with a personal computer.
2	
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
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.
Reports Menu Settings Page Event Log Event Log Summary HealthCheck Statistics Note: An asterisk (*) next to a value indicates the	Print reports about printer menu settings, printer events, and event logs.

Menu item	Description
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.
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 t	he factory default setting.

Out of Service Erase

Menu item	Description
Out of Service Erase	Show information on when the printer memory was last
Printer Memory Last Sanitized	sanitized.

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

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*	Determine which side of the paper (long edge or short edge) is bound when performing two-sided printing.
Short Edge	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.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
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.
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.

Setup

Description
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.
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.
Specify the order in which held and confidential jobs are printed when Print All is selected.

Quality

Menu item	Description
Print Resolution	Set the resolution for the text and images on the printed output.
600 dpi*	Note: Resolution is determined in dots per inch or image quality.
1200 Image Q	
2400 Image Q	
1200 dpi	
300 dpi	
Pixel Boost	Enable more pixels to print in clusters for clarity, in order to enhance text and
Off*	images.
Fonts	
Horizontally	
Vertically	
Both directions	
Toner Darkness	Determine the lightness or darkness of text images.
1–10 (8*)	
Halftone	Enhance the printed output to have smoother lines with sharper edges.
Normal*	
Detail	
Brightness	Adjust the brightness of the printed output.
-6 to 6 (0*)	
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
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.
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 Current Log Delete Current Log Delete Current 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.

Menu item	Description	
Log Action at Full	Specify how the printer responds when disk usage reaches the maximum limit	
None*	(100MB).	
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		
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	Scale the page content to fit the selected paper size.
Yes	
No*	
Annotations	Specify whether to print annotations in the PDF.
Print	
Do Not Print*	
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	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.
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	Choose the source which contains the default font selection.	
Resident*	Notes:	
Disk Download	Flash and Disk appear only in some printer models.	
Flash All	 For Flash and Disk to appear, make sure that they are not read- or write-protected. 	
Font Name [List of available fonts]	Select a font from the specified font source.	
Symbol Set	Specify the symbol set for each font name.	
[List of available symbol set]	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	Specify the font pitch for scalable monospaced fonts.	
0.08–100 (10*)	Note: Pitch refers to the number of fixed-space characters in a horizontal inch of type.	
Note: An asterisk (*) next to a value indicates the factory default setting.		

Menu item	Description
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	Set the initial minimum stroke width.
1–30 (2*)	Notes:
PCLXL Minimum Line Width	Jobs printed in 1200 dpi use the value directly.
1–30 (2*)	Jobs printed in 4800CQ use half the value.
A4 Width	Set the width of the logical page on A4-size paper.
198 mm*	Note: Logical page is the space on the physical page where data is
203 mm	printed.
Auto CR after LF Off*	Set the printer to perform a carriage return after a line feed control command.
On	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	Set the printer to perform a line feed after a carriage return control
Off*	command.
On	

Menu item	Description
Tray Renumber Assign MP Feeder Off*	Configure the printer to work with print drivers or applications that use different source assignments for the paper source.
None 0–201 Assign Tray [x] Off*	
None 0–201 Assign Manual Paper	
Off* None 0–201	
Assign Manual Envelope Off* None 0–201	
Tray Renumber View Factory Defaults Restore Defaults	Show the factory default setting assigned for each paper source.
Tray Renumber Restore Defaults	Return all tray assignments to factory default values.
Print Timeout Disabled 1–255 (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 ind	dicates 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.
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
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	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
On*	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.

Paper

Tray Configuration

Menu item	Description
Default Source	Set the paper source for all print jobs.
Tray [x] (1*)	Note: For MP Feeder to appear, set Configure MP to Cassette from the Paper
MP Feeder	menu.
Manual Paper	
Manual Envelope	

Menu item	Description
Paper Size/Type Tray [x] MP Feeder Manual Paper Manual Envelope	Specify the paper size or paper type loaded in each paper source.
Substitute Size Off Letter/A4 All Listed*	Set the printer to substitute a specified paper size if the requested size is not loaded in any paper source. Notes: 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.

Media Configuration menu

Universal Setup

Menu item	Description
Units of Measure	Specify the unit of measurement for the universal paper.
Inches Millimeters	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*	Set the printer to pick paper from the short edge or long edge direction.
Long Edge	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	Specify the texture and weight of the paper loaded.
Card Stock	Select from the following options:
Transparency	Paper Texture
Recycled	Smooth
Labels	Normal*
Bond	Rough
Envelope	Paper Weight
Rough Envelope	Light
Letterhead	Normal*
Preprinted	Heavy
Colored Paper	
Light	
Heavy	
Rough/Cotton	
Custom Type [x]	
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	Print a banner page.
Off*	
On	
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	Configure the Wi-Fi connection using the control 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	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 and configure IPv6 settings in the printer.
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	
Network Address	View the meture of discours
UAA	View the network addresses.
LAA	
PCL SmartSwitch	Sot the printer to switch automatically to PCL amulation when a print
Off	Set the printer to switch automatically to PCL emulation when a print job requires it, regardless of the default printer language.
On*	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	Set the printer to switch automatically to PS emulation when a print job requires it, regardless of the default printer language.
On*	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	Temporarily store print jobs in the printer hard disk before printing.
On	Note: This menu item appears only when a hard disk is installed.
Off*	
Mac Binary PS	Set the printer to process Macintosh binary PostScript print jobs.
Auto*	Notes:
On	On processes raw binary PostScript print jobs.
Off	on proceed rain smary receives principles.
	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 Dynamic Host Configuration Protocol (DHCP).
Enable DHCP On* Off	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	Show the printer Media Access Control (MAC) addresses: Locally Administered Address (LAA) and Universally Administered Address (UAA).
LAA	Note: You can change the printer LAA manually.
PCL SmartSwitch On*	Set the printer to switch automatically to PCL emulation when a print job requires it, regardless of the default printer language.
Off	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*	Set the printer to switch automatically to PS emulation when a print job requires it, regardless of the default printer language.
Off	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.
011	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	Allow the DHCP and BOOTP clients to update the NTP settings of the printer.	
On* Off		
Zero Configuration Name	Specify a service name for the zero configuration network.	
Enable Auto IP On* Off	Assign an IP address automatically.	
DNS 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 On* Off	Update the Dynamic DNS settings.	
DDNS TTL	Specify the current DDNS settings.	
Default TTL		
DDNS Refresh Time		
Note: An asterisk (*) next to a value indicates the factory default setting.		

Enable mDNS	Menu item	Description	
Enable BOOTP Off* On Restricted Server List 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. Specify how the IP addresses in the list can access the printer functionality. Block All Ports* Block All Ports* Block Printing Only Block Printing and HTTP Only Specify a maximum transmission unit (MTU) parameter for the TCP connection Raw Print Port 1-65535 (9100*) Dutbound Traffic Maximum Speed Off* On Enable SSLv2 Off* On Enable SSLv3 Off* On Enable the SSLv3 protocol. Enable the SSLv3 protocol. Enable the TLSv1.0 Off On* Enable the TLSv1.0 protocol. Enable the TLSv1.1 protocol.	Off	Update multicast DNS settings.	
Offf On 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 MTU Specify a maximum transmission unit (MTU) parameter for the TCP connection Raw Print Port 1-65535 (9100*) Outbound Traffic Maximum Speed Offf On Enable SSLv2 Offf On Enable SSLv3 Off On Enable TLSv1.0 Off On* Enable the TLSv1.0 protocol. Enable the TLSv1.1 protocol.	WINS Address	Specify a server address for Windows Internet Name Service (WINS).	
Notes: Use a comma to separate each IP address. You can add up to 50 IP addresses. Specify how the IP addresses in the list can access the printer functionality. Block All Ports* Block Printing Only Block Printing and HTTP Only MTU Specify a maximum transmission unit (MTU) parameter for the TCP connection Raw Print Port 1-65535 (9100*) Outbound Traffic Maximum Speed Off* On Enable SSLv2 Off* On Enable SSLv2 Off* On Enable TLSv1.0 Off On* Enable the TLSv1.1 protocol. Enable the TLSv1.1 protocol.	Off*	Allow the BOOTP to assign a printer IP address.	
● 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 MTU Specify a maximum transmission unit (MTU) parameter for the TCP connection Raw Print Port 1-65535 (9100*) Outbound Traffic Maximum Speed Off* On Enable SSLv2 Off* On Enable SSLv3 Off* On Enable the SSLv3 protocol. Off* On Enable TLSv1.0 Off On* Enable the TLSv1.0 protocol. Finable the TLSv1.1 protocol.	Restricted Server List	Specify an IP address for the TCP connections.	
Restricted Server List Options Block All Ports* Block Printing Only Block Printing and HTTP Only MTU Specify a maximum transmission unit (MTU) parameter for the TCP connection Raw Print Port 1-65535 (9100*) Specify a raw port number for printers connected on a network. Enable the printer maximum transfer rate. Enable SSLv2 Off* On Enable the SSLv2 protocol. Off* On Enable the SSLv3 protocol. Off* On Enable TLSv1.0 Off On* Enable the TLSv1.0 protocol. Off On* Enable the TLSv1.1 protocol.		Notes:	
Block All Ports* Block Printing Only Block Printing and HTTP Only MTU Specify a maximum transmission unit (MTU) parameter for the TCP connection Raw Print Port 1–65535 (9100*) Outbound Traffic Maximum Speed Off* On Enable SSLv2 Off* On Enable SSLv3 Off* On Enable TLSv1.0 Off On* Enable TLSv1.0 Off Enable TLSv1.1 Off Enable the TLSv1.1 protocol.		·	
Raw Print Port 1–65535 (9100*) Outbound Traffic Maximum Speed Off* On Enable SSLv2 Off* On Enable SSLv3 Off* On Enable TLSv1.0 Off On* Enable TLSv1.1 Off Enable TLSv1.1 Off	Block All Ports* Block Printing Only	Specify how the IP addresses in the list can access the printer functionality.	
1–65535 (9100*) Outbound Traffic Maximum Speed Off* On Enable SSLv2 Off* On Enable SSLv3 Off* On Enable TLSv1.0 On* Enable TLSv1.1 Off	MTU	Specify a maximum transmission unit (MTU) parameter for the TCP connections.	
Speed Off* On Enable SSLv2 Off* On Enable SSLv3 Off* On Enable TLSv1.0 Off On* Enable TLSv1.1 Off		Specify a raw port number for printers connected on a network.	
Off* On Enable SSLv3 Off* On Enable TLSv1.0 Off On* Enable TLSv1.1 Off Enable TLSv1.1 Off	Speed Off*	Enable the printer maximum transfer rate.	
Off* On Enable TLSv1.0 Off On* Enable the TLSv1.0 protocol. Enable TLSv1.1 Off Off	Off*	Enable the SSLv2 protocol.	
Off On* Enable TLSv1.1 Off Off	Off*	Enable the SSLv3 protocol.	
Off	Off	Enable the TLSv1.0 protocol.	
	Off	Enable the TLSv1.1 protocol.	
SSL Cipher List Specify the cipher algorithms to use for the SSL or the TLS connections.	SSL Cipher List	Specify the cipher algorithms to use for the SSL or the TLS connections.	

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	Configure Simple Network Management Protocol (SNMP) versions 1
Enabled	and 2c to install print drivers and applications.
Off	
On*	
Allow SNMP Set	
Off	
On*	
Enable PPM MIB	
Off	
On*	
SNMP Community	
SNMP Version 3	Configure SNMP version 3 to install and update printer security.
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*	

802.1x

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

Menu item	Description
Active Off*	Let the printer join networks that require authentication before allowing access.
On	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	Enable Internet Protocol Security (IPSec).	
Off*		
On		
Base Configuration	Set the IPSec base configuration.	
Default*	Note: This menu item appears only when Enable IPSec is set to	
Compatibility	On.	
Secure		
DH (Diffie-Hellman) Group Proposal	Set the IPSec encryption.	
modp2048 (14)*	Note: This menu item appears only when Base Configuration is set	
modp3072 (15) modp4069 (16)	to Compatibility.	
modp6144 (17)		
modp8192 (18)		
IKE SA Lifetime (Hours)	Set the amount of time before a new authentication key is generated.	
1	Note: These menu items appear only when Base Configuration is	
2	set to Secure.	
4		
8		
24*		
IPSec SA Lifetime (Hours)		
1		
2		
8		
24*		
Proposed Encryption Method	Specify the encryption and authentication methods to connect to a	
3DES	network securely.	
AES*	Note: These menu items appear only when Base Configuration is	
Proposed Authentication Method	set to Compatibility.	
SHA1		
SHA256*		
SHA512		
IPSec Device Certificate	Specify an IPSec certificate.	
	Note: This menu item appears only when Base Configuration is set to Compatibility.	
Note: An asterisk (*) next to a value indicates the factory default setting.		

Description
Configure the authenticated connections of the printer.
Note: These menu items appear only when Enable IPSec is set to
On.

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*	Print a banner page for all LPD print jobs.
On	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	Print a trailer page for all LPD print jobs.
Off* On	Note: A trailer page is the last page of a print job.
LPD Carriage Return Conversion	Enable carriage return conversion.
Off* On	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	Access the Embedded Web Server to monitor and manage the printer.
Off	
On*	
Enable HTTPS	Configure the Hypertext Transfer Protocol Secure (HTTPS) settings.
Off	
On*	
Note: An asterisk (*) next to a value indicates the factory default setting.	

Menu item	Description
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 valu	ue 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

Set the printer to switch to PCL emulation when a print job received through a JSB 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. Set the printer to switch to PS emulation when a print job received through a JSB 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.
data and uses the default printer language specified in the Setup menu. 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
JSB port requires it, regardless of the default printer language. Note: If PS SmartSwitch is off, then the printer does not examine incoming
ata and uses the default printer language specified in the Setup menu.
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 the standard USB port.

Google Cloud Print

Menu item	Description
Registration Register	Register the printer to the Google Cloud Print server.
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 indicate	s 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

Description
Set the number of copies.
Set the paper source for the print job. Note: The multipurpose feeder is available only in some printer models.
Print multiple copies in sequence.
Specify whether to print on one side or two sides of the paper.
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.

Menu item	Description
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.
Separator Sheets Off* Between Copies Between Jobs Between Pages	Specify whether to insert blank separator sheets when printing.
Separator Sheet Source Tray [x] (1*) Multipurpose Feeder	Specify the paper source for the separator sheet. Note: The multipurpose feeder is available only in some printer models.
Blank Pages Do Not Print* Print	Specify whether to print blank pages in a print job.

Security

Security Audit Log

Menu item	Description
Enable Audit	Record the events in the secure audit log and remote syslog.
Off*	
On	
Enable Remote Syslog	Send audit logs to a remote server.
Off*	
On	
Remote Syslog Server	Specify the remote syslog server.
Remote Syslog Facility	Specify a facility code that the printer uses when sending log events to a remote
0 - Kernel Messages	server.
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)	
Note: An asterisk (*) next to a value	e indicates the factory default setting.

Description
 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.
Delete all audit logs.
Export a security log to a flash drive.

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	Set the number of times an invalid PIN can be entered.
2–10	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.
Note: An asterisk (*) next to a value indicates the factory default setting.	

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

Mobile Services Management

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

Miscellaneous

Menu item	Description	
Protected Features	Show secured applications or functions on the home screen.	
Show	Note: This menu item appears only in some printer models.	
Hide*		
Print Permission	Allow users to print.	
Off*		
On		
Default Print Permission Login	Set the login credentials that allow users to print.	
	Note: This menu item appears only in some printer models.	
Security Reset Jumper	Specify the effect of using the security reset jumper.	
Enable "Guest" access*	Notes:	
No Effect	The jumper is located beside a lock icon on the controller board.	
	Enable "Guest" access provides guests with full access control.	
	 No Effect means that the reset has no effect on the printer security configuration. 	
Minimum Password Length 0-32 (0*)	Specify the minimum characters 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.	

Menu item	Description
Profiles List	Print a list of profiles that are stored in the printer.

Print

Menu item	Description
Print Fonts PCL Fonts PS Fonts	Print samples and information about the fonts that are available in each printer language.
Print Directory	Print the resources that are stored in the flash drive or printer hard disk. Note: This menu item appears only when a flash drive or printer hard disk is installed.

Network

Menu item	Description
Network Setup Page	Print a page that shows the configured network and wireless settings on the printer.
	Note: This menu item appears only in network printers or printers connected to print servers.

Help

Menu item	Description	
Print All Guides	Prints all the guides	
Media Guide	rovides information about loading paper and specialty media	
Print Quality Guide	rovides 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:



2 Select Menu Settings Page, and then press OK.

Securing the printer 60

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:



- 2 Select Sanitize all information on nonvolatile memory, and then press
- **3** To start the job, select **Continue**, and then press
- **4** Follow the instructions on the display.

Securing the printer 61

Restoring factory default settings

1 From the control panel, navigate to:



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 <u>"Erasing printer memory" on page 60.</u>

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 printer control panel, navigate to:

Settings > **Network/Ports** > **Wireless**

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

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:



- 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:



- 2 Select Wi-Fi Protected Setup, and then press OK
- 3 Select Start PIN Method, and then press

- 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.
- 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 of to navigate through the settings.

2 Follow the instructions on the display.

Cleaning the printer



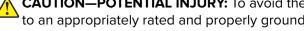
CAUTION—SHOCK HAZARD: To avoid the risk of electrical shock when cleaning the exterior of the printer, unplug the power cord from the electrical outlet and disconnect all cables from the printer before proceeding.

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:



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:

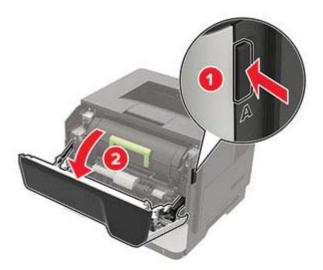
- View the printer IP address on the printer home screen. The IP address appears as four sets of numbers separated by periods, such as 123.123.123.
- If you are using a proxy server, then temporarily disable it to load the web page correctly.
- 2 Click Settings > Device > Notifications.
- **3** From the Supplies menu, click **Custom Supply Notifications**.
- **4** Select a notification for each supply item.
- **5** Apply the changes.

Replacing parts and supplies

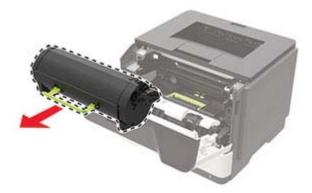
Replacing the toner cartridge

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.

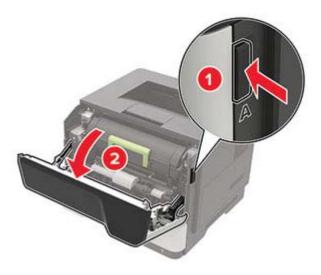


5 Close door A.

Replacing the imaging unit

1 Open door A.

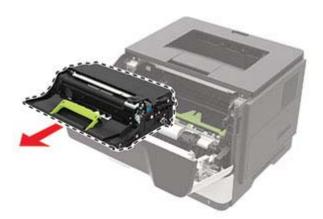
Warning—Potential Damage: To prevent damage from electrostatic discharge, touch any exposed metal frame of the printer before accessing or touching interior areas of the printer.



Remove the toner cartridge.



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.



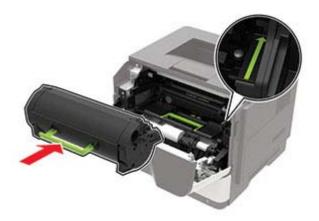
5 Insert the new imaging unit.

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.

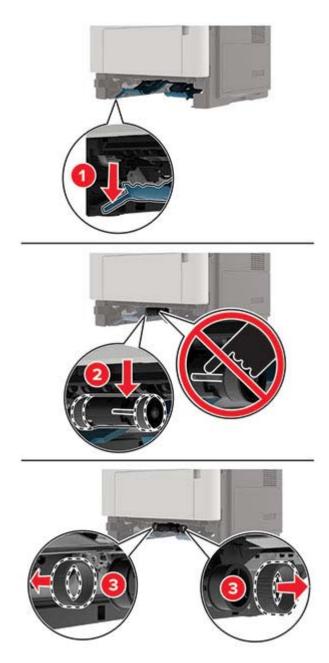
Replacing the pick tires

- **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.

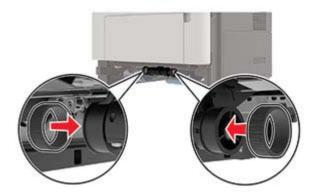


4 Remove the used pick tires one after the other.

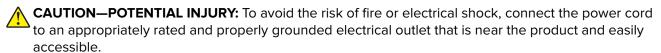


5 Unpack the new pick tires.

6 Insert the new pick tires.



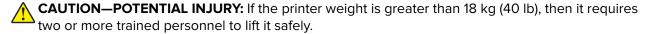
- 7 Insert the tray.
- **8** Connect the power cord to the printer, and then to the electrical outlet.



9 Turn on the printer.

Replacing the pick roller assembly

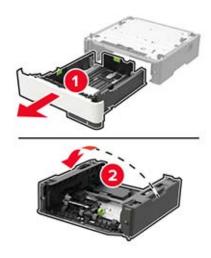
- 1 Turn off the printer.
- **2** Unplug the power cord from the electrical outlet, and then from the printer.
- **3** Remove the optional tray.



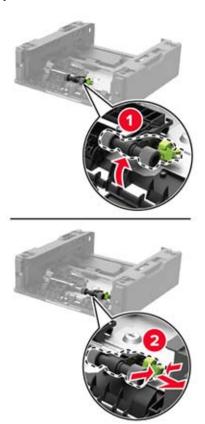


4 Remove the tray insert, and then flip the tray base.

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.



Remove the used pick roller assembly.



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:



2 Select a setting.

Sleep mode

1 From the control panel, navigate to:



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:



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.

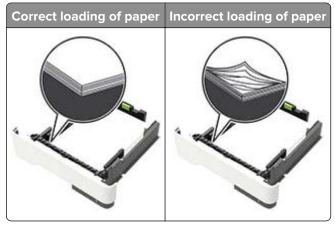
- Print multiple pages on a single sheet of paper.
- Use the preview feature to see how the document looks like before printing it.
- Print one copy of the document to check its content and format for accuracy.

Clearing jams

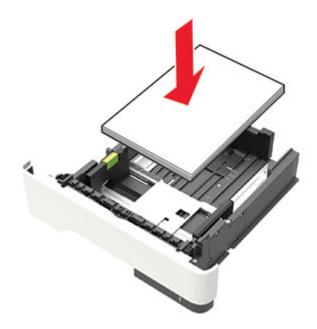
Avoiding jams

Load paper properly

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



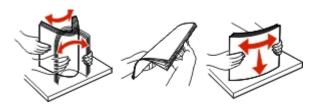
- Do not load or remove a tray while the printer is printing.
- Do not load too much paper. Make sure that the stack height is below the maximum paper fill indicator.
- Do not slide paper into the tray. Load paper as shown in the illustration.



- 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	

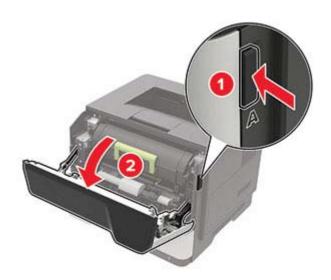
Paper jam in door A

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.

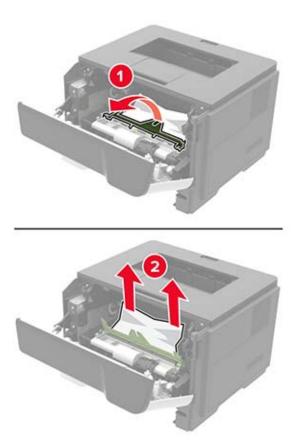
Warning—Potential Damage: Do not touch the photoconductor drum. Doing so may affect the quality of future print jobs.



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.

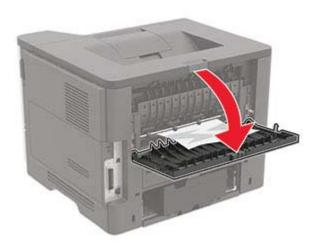
Paper jam in the rear door

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.

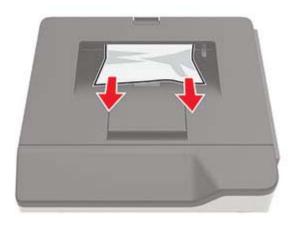


3 Close the rear door.

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

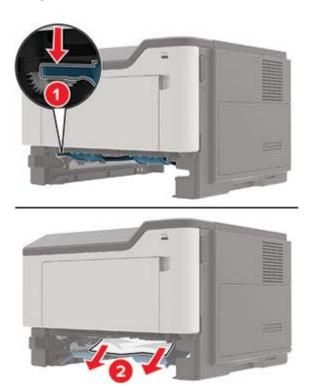
1 Remove the tray.

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	Go to step 2.	Turn on the printer.
Check if the printer is on.		
Is the printer on?		
Step 2	Go to step 3.	Type the correct
Make sure that the printer IP address is correct. View the printer IP address:		printer IP address in the address field.
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.		
Is the printer IP address correct?		
Step 3	Go to step 4.	Install a supported
Check if you are using a supported browser:		browser.
Internet Explorer® version 11 or later		
Microsoft Edge TM		
Safari version 6 or later		
 Google ChromeTM version 32 or later 		
Mozilla Firefox version 24 or later		
Is your browser supported?		
Step 4	Go to step 5.	Contact your
Check if the network connection is working.		administrator.
Is the network connection working?		
Step 5	Go to step 6.	Secure the cable
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.		connections.
Are the cable connections secure?		

Action	Yes	No
Step 6 Check if the web proxy servers are disabled.	Go to step 7.	Contact your administrator.
Are the web proxy servers disabled?		
Step 7 Access the Embedded Web Server.	The problem is solved.	Contact <u>customer</u> <u>support</u> .
Did the Embedded Web Server open?		

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.	Go to step 2.	Wait for the printer to finish processing the other job.
Is the printer ready?		
Step 2 Check if the flash drive is inserted into the front USB port.	Go to step 3.	Insert the flash drive into the correct 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?		
Step 3 Check if the flash drive is supported. For more information, see "Supported flash drives and file types" on page 22.	Go to step 4.	Insert a supported flash drive.
Is the flash drive supported?		
 Step 4 a Check if the USB port is enabled. For more information, see "Enabling the USB port" on page 89. b Remove, and then insert the flash drive. 	The problem is solved.	Contact <u>customer</u> <u>support</u> .
Does the printer recognize the flash drive?		

Enabling the USB port

1 From the control panel, navigate to:



2 Select Enable USB Port, and then press OK.

Checking the printer connectivity

1 From the control panel, navigate to:



- 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	Go to step 2.	The problem is
a Use an envelope that has been stored in a dry environment.		solved.
Note: Printing on envelopes with high moisture content can seal the flaps.		
b Send the print job.		
Does the envelope seal when printing?		
Step 2	Contact <u>customer</u>	The problem is
a Make sure that paper type is set to Envelope.	support.	solved.
From the control panel, navigate to:		
Settings > Paper > Tray Configuration > Paper Size/Type		
b Send the print job.		
Does the envelope seal when printing?		

Collated printing does not work

Action	Yes	No
Step 1	The problem is	Go to step 2.
a From the control panel, navigate to:	solved.	
> 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?		
Step 2	The problem is	Go to step 3.
a From the document that you are trying to print, open the Print dialog, and then select Collate.	solved.	
b Print the document.		
Is the document collated correctly?		

Action	Yes	No
Step 3a Reduce the number of pages to print.b Print the document.	The problem is solved.	Contact <u>customer</u> <u>support</u> .
Is the document collated correctly?		

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.	The problem is solved.	Go to step 2.
Do the trays link correctly?		
 Step 2 a From the control panel, navigate to: Settings > Paper > Tray Configuration > Paper Size/Type For non-touch-screen printer models, press 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. 	The problem is solved.	Go to step 3.
Do the trays link correctly?		
 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 <u>customer</u> <u>support</u> .

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	Go to step 3.	The problem is
a From the control panel, navigate to: Settings > Paper > Tray Configuration > Paper Size/Type	Oo to step 3.	solved.
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?		
Step 3	Contact <u>customer</u>	The problem is
 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. 	support.	solved.
b Print the document.		
Do paper jams occur frequently?		

Jammed pages are not reprinted

Action	Yes	No
1 From the control panel, navigate to:	The problem	Contact
> Settings > OK > Device > OK > Notifications > OK	is solved.	<u>customer</u> <u>support</u> .
2 From the Jam Content Recovery menu, set Jam Recovery to On or Auto,		
and then press OK.		
Are the jammed pages reprinted?		

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

Ac	tion	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge.		Go to step 2.	The problem is solved.
	Note: If the cartridge is not supported, then install a supported one.		
b	Print the document.		
ls t	the printer printing blank or white pages?		

Act	ior	1	Yes	No
Step 2		2	Go to step 3.	The problem is
а	Re	move any packing material that is left on the imaging unit.		solved.
	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	Pri	nt the document.		
ls t	ne	printer printing blank or white pages?		
Ste	рЗ	3	Contact <u>customer</u>	The problem is
Ch	Check the status of the toner cartridge, and replace if necessary.		support.	solved.
a From the control panel, navigate to:		om the control panel, navigate to:		
	Sta	atus/Supplies > Supplies		
b	Pri	nt the document.		
ls t	ne	printer printing blank or white pages?		

Dark print



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

Action	Yes	No
Step 1	Go to step 2.	The problem is
a Check if the printer is using a genuine and supported toner cartridge.		solved.
Note: If the cartridge is not supported, then install a supported one.		
b Print the document.		
Is the print dark?		
Step 2	Go to step 3.	The problem is
a Turn off the printer, wait for about 10 seconds, and then turn on the printer.		solved.
b Reduce toner darkness. From the control panel, navigate to:		
Settings > Print > Quality		
c Print the document.		
Is the print dark?		
Step 3	Go to step 4.	The problem is
a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.		solved.
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?		
Step 4	Go to step 5.	Go to step 6.
Check if the paper has texture or rough finishes.		
Are you printing on textured or rough paper?		
Step 5	Go to step 6.	The problem is
a Replace textured paper with plain paper.		solved.
b Print the document.		
Is the print dark?		
Step 6	Go to step 7.	The problem is
a Load paper from a fresh package.		solved.
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?		

Action	Yes	No
Step 7 a Remove, and then insert the imaging unit.	Go to step 8.	The problem is solved.
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?		
Step 8	Contact <u>customer</u>	The problem is
a Replace the imaging unit.	support.	solved.
b Print the document.		
Is the print dark?		

Fine lines are not printed correctly



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

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge.	Go to step 2.	The problem is solved.
Note: If the cartridge is not supported, then install a supported one.		
b Print the document.		
Are fine lines not printed correctly?		

Action	Yes	No
Step 2	Contact <u>customer</u>	The problem is solved.
a Adjust the print quality settings.	support.	solved.
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?		

Folded or wrinkled paper



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

Action	Yes	No
Step 1	Go to step 2.	The problem is
a Check if the printer is using a genuine and supported toner cartridge.		solved.
Note: If the cartridge is not supported, then install a supported one.		
b Print the document.		
Is the paper folded or wrinkled?		
Step 2	Go to step 3.	The problem is
a Load paper from a fresh package.		solved.
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?		

Action	Yes	No
Step 3 a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.	Contact <u>customer</u> <u>support</u> .	The problem is solved.
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?		

Gray background



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

Action	Yes	No
Step 1	Go to step 2.	The problem is
a Turn off the printer, wait for 10 seconds, and then turn on the printer.		solved.
b Increase toner darkness.		
From the control panel, navigate to:		
Settings > Print > Quality		
c Print the document.		
Does gray background appear on prints?		
Step 2	Go to step 3.	The problem is
a Check if the printer is using a genuine and supported toner cartridge.		solved.
Note: If the toner cartridge is not supported, then install a supported one.		
b Print the document.		
Does gray background appear on prints?		

Action	Yes	No
Step 3	Go to step 4.	The problem is
a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.		solved.
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?		
Step 4	Go to step 5.	The problem is
Check the status of the toner cartridge, and replace if necessary.		solved.
a From the control panel, navigate to:		
Status/Supplies > Supplies		
b Print the document.		
Does gray background appear on prints?		
Step 5	Go to step 6.	The problem is
a Remove the imaging unit.	Go to step o.	solved.
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?		
Step 6	Contact <u>customer</u>	The problem is
a Replace the imaging unit.	support.	solved.
b Print the document.		
Does gray background appear on prints?		

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	Ye	es es	No
a Check if the printer is using a genuine ar cartridge.			The problem is solved.
Note: If the cartridge is not supported, the supported one.	en install a		
b Print the document.			
Do horizontal light bands appear on prints?			

Incorrect margins



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

Action	Yes	No
Step 2 a Depending on your operating system, specify the paper size from the Printing Preferences or Print dialog.	The problem is solved.	Contact <u>customer</u> <u>support</u> .
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?		

Light print



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

Action		Yes	No
Step 1		Go to step 2.	The problem is
a Check if the cartridge.	printer is using a genuine and supported toner		solved.
Note: If the supported o	cartridge is not supported, then install a ne.		
b Print the doo	cument.		
Is the print light	?		
Step 2		Go to step 3.	The problem is
a Turn off the the printer.	printer, wait for about 10 seconds, and then turn on		solved.
b Increase ton	ner darkness. From the control panel, navigate to:		
Settings > P	rint > Quality		
c Print the doo	cument.		
Is the print light	?		

Action	Yes	No
Step 3	Go to step 4.	The problem is
a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.		solved.
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?		
Step 4	Go to step 5.	The problem is
Check the status of the toner cartridge, and replace if necessary.	Go to step 5.	solved.
a From the control panel, navigate to:		
Status/Supplies > Supplies		
b Print the document.		
Is the print light?		
Step 5	Go to step 6.	The problem is
a Remove the toner cartridge, and then remove the imaging unit.		solved.
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 <i>clicks</i> 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?		

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.	Go to step 7.	The problem is solved.
b Print the document. Is the print light?		
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 <u>customer</u> <u>support</u> .
Step 8 a Replace the imaging unit. b Print the document. Is the print light?	Contact <u>customer</u> <u>support</u> .	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

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

Action	Yes	No
Step 2	Go to step 4.	Go to step 3.
Check the printer for leaked toner contamination.		
Is the printer free of leaked toner?		
Step 3	Go to step 4.	The problem is
a Replace the toner cartridge.		solved.
b Print the document.		
Is the print mottled?		
Step 4	Go to step 5.	Contact <u>customer</u>
Check the status of the imaging unit. From the control panel, navigate to:		support.
Status/Supplies > Supplies		
Is the imaging unit near end of life?		
Step 5	Contact <u>customer</u>	The problem is
a Replace the imaging unit.	support.	solved.
b Print the document.		
Is the print mottled?		

Paper curl



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

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

Action	Yes	No
 Step 2 a Adjust the guides in the tray to the correct position for the paper loaded. b Print the document. 	Go to step 3.	The problem is solved.
Is the paper curled?		
Step 3 a Depending on your operating system, specify the paper size and paper type from the Printing Preferences or Print dialog.	Go to step 4.	The problem is solved.
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?		
Step 4a Remove paper from the tray, and then turn over the paper.b Print the document.	Go to step 5.	The problem is solved.
Is the paper curled?		
 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. 	Go to step 6.	The problem is solved.
· ·	Contact customer	The problem is
 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. 	Contact <u>customer</u> <u>support</u> .	The problem is solved.
Is the paper curled?		

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.	Go to step 2.	The problem is solved.
b Print the document.		
Is the print crooked or skewed?		
Step 2	Go to step 3.	The problem is
a Check if the paper loaded is supported.		solved.
Note: If paper is not supported, then load a supported paper.		
b Print the document.		
Is the print crooked or skewed?		
Step 3	Contact <u>customer</u>	The problem is
a Check the pick tire in the tray for signs of damage and contamination, and replace if necessary.	support.	solved.
b Print the document.		
Is the print crooked or skewed?		

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.)	Go to step 2.	Take note of the distance, and then contact customer support.
Does the distance between the repeating defects match any of the measurements?		
Step 2 a Replace the imaging unit. b Print the document.	Contact <u>customer</u> <u>support</u> .	The problem is solved.
Do the repeating defects appear?		

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.	Go to step 2.	The problem is solved.
Note: If the toner cartridge is not supported, then install a supported one.		
b Print the document.		
Is the printer printing solid black pages?		

Action	Yes	No
Step 2	Go to step 3.	The problem is
a Remove, and then insert the imaging unit.		solved.
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?		
Step 3	Go to step 4.	The problem is
a Remove the imaging unit.		solved.
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?		
Step 4	Contact <u>customer</u>	Go to step 5.
Check the imaging unit for signs of damage.	support.	
Is the imaging unit free from damage?		
Step 5	Contact <u>customer</u>	The problem is
a Replace the imaging unit.	support.	solved.
b Print the document.		
Is the printer printing solid black pages?		

Text or images cut off



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

Action	Yes	No
Step 1 a Check if the printer is using a genuine and supported toner cartridge.	Go to step 2.	The problem is solved.
Note: If the toner cartridge is not supported, then install a supported one.		
b Print the document.		
Are text or images cut off?		
Step 2	Go to step 3.	The problem is
a Remove, and then insert the imaging unit.		solved.
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?		

Acti	ion	Yes	No
Ste	p 3	Go to step 4.	The problem is
a I	Remove the imaging unit.		solved.
t	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.		
1	Warning—Potential Damage: Do not touch the photoconductor drum under the imaging unit. Doing so may affect the quality of future print jobs.		
b I	Remove any packing material that is stuck on the imaging unit.		
1	Note: Make sure to remove any obstruction between the charge roller and photoconductor drum.		
c I	Insert the imaging unit.		
d I	Print the document.		
Are	text or images cut off?		
Ste	p 4	Contact <u>customer</u>	The problem is
a I	Replace the imaging unit.	support.	solved.
b I	Print the document.		
Are	text or images cut off?		

Toner easily rubs off



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

Action	Yes	No
Step 1	Go to step 2.	The problem is
a Check if the printer is using a genuine and supported toner cartridge.		solved.
Note: If the toner cartridge is not supported, then install a supported one.		
b Print the document.		
Does the toner easily rub off?		
Step 2	Contact <u>customer</u>	The problem is
a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.	support.	solved.
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?		

Vertical dark bands



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

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

	Yes	No
Step 2	Go to step 3.	The problem is
a Remove the toner cartridge, and then remove the imaging unit		solved.
Warning—Potential Damage: Do not expose the imaging unito direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.	t	
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?		
Step 3	Go to step 4.	The problem is
a Remove the imaging unit.		solved.
Warning—Potential Damage: Do not expose the imaging unito direct light for more than 10 minutes. Extended exposure to light may cause print quality problems.	t	
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?		
Step 4	Contact <u>customer</u>	The problem is
a Check if a bright light enters the right side of the printer, and move the printer if necessary.	support.	solved.
b Print the document.		
Do vertical dark bands appear on prints?		

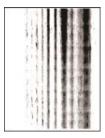
Vertical dark lines or streaks



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

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.
•	Contact <u>customer</u> <u>support</u> .	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

Ac	tion	Yes	No
Sto	ep 1	Go to step 2.	The problem is
а	Remove the imaging unit.		solved.
	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.		
c	Note: Make sure to remove any obstruction between the charge roller and photoconductor drum. Insert the imaging unit.		
	Print the document.		
u	Fillit tile document.		
Do	vertical dark streaks with missing images appear on prints?		
Sto	ep 2	Contact <u>customer</u>	The problem is
а	Check if the printer is using a genuine and supported toner cartridge.	support.	solved.
	Note: If the toner cartridge is not supported, then install a supported one.		
b	Print the document.		
Do	o vertical dark streaks with missing images appear on prints?		

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 to navigate through the settings.

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

Vertical white lines



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

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

Action	Yes	No
Step 2 a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.	Contact <u>customer</u> <u>support</u> .	The problem is solved.
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?		

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. 	Go to step 2.	The problem is solved.
Is the printer still printing slow?		
Step 2 a Depending on your operating system, specify the paper type from the Printing Preferences or Print dialog.	Go to step 3.	The problem is solved.
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?		
 Step 3 a Reduce the number of pages to print. b Print the document. 	Go to step 4.	The problem is solved.
Is the printer still printing slow?		
 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. 	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. 	Go to step 6.	The problem is solved.
Is the printer still printing slow?		
Step 6 a Make sure that the printer is not overheating. Notes:	Go to step 7.	The problem is solved.
 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? 		
Step 7 a Add more printer memory. b Print the document. Is the printer still printing slow?	Contact <u>customer</u> <u>support</u> .	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. 	The problem is solved.	Go to step 2.
Is the document printed?		
 Step 2 a Check if the printer is on. b Resolve any error messages that appear on the display. c Print the document. 	The problem is solved.	Go to step 3.
Is the document printed?		

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. 	The problem is solved.	Go to step 4.
Is the document printed?		
 Step 4 a Turn off the printer, wait for about 10 seconds, and then turn on the printer. b Print the document. 	The problem is solved.	Go to step 5.
Is the document printed?		
Step 5a Remove, and then reinstall the print driver.b Print the document.	The problem is solved.	Contact <u>customer</u> <u>support</u> .
Is the document printed?		

The printer is not responding

Action	Yes	No
Step 1 Connect the power cord to the electrical outlet.	The problem is solved.	Go to step 2.
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?		
Step 2 Check if the electrical outlet is turned off by a switch or breaker.	Turn on the switch or reset the breaker.	Go to step 3.
Is the electrical outlet turned off by a switch or breaker?		
Step 3	Go to step 4.	Turn on the printer.
Check if the printer is on.		
Is the printer on?		
Step 4 Check if the printer is in sleep or hibernate mode.	Press the power button to wake the printer.	Go to step 5.
Is the printer in sleep or hibernate mode?		

Action	Yes	No
Step 5 Check if the cables connecting the printer and the computer are	Go to step 6.	Make sure to match the following:
inserted in the correct ports. Are the cables inserted in the correct ports?		The USB cable with the USB port on the printer
Are the easies inserted in the correct ports.		The Ethernet cable with the Ethernet port on the printer
Step 6	The problem is	Go to step 7.
Turn off the printer, reinstall the hardware options, and then turn it back on.	solved	
For more information, see the documentation that came with the option.		
Is the printer responding?		
Step 7	The problem is	Go to step 8.
Install the correct print driver.	solved	
Is the printer responding?		
Step 8 Turn off the printer, wait for about 10 seconds, and then turn it back on.	The problem is solved.	Contact <u>customer</u> <u>support</u> .
Is the printer responding?		

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 1a Check if you are printing on the correct paper.b Print the document.	Go to step 2.	Load the correct paper size and paper type.
Is the document printed on the correct paper?		

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.	The problem is solved.	Go to step 3.
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?		
Step 3	The problem is	Contact <u>customer</u>
a Check if the trays are not linked.	solved.	support.
For more information, see <u>"Linking trays" on page 16</u> .		
b Print the document.		
Is the document printed from the correct tray?		

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

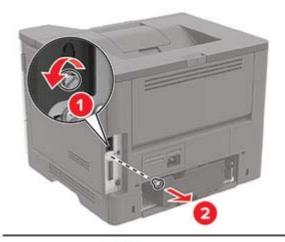
Accessing the controller board



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.

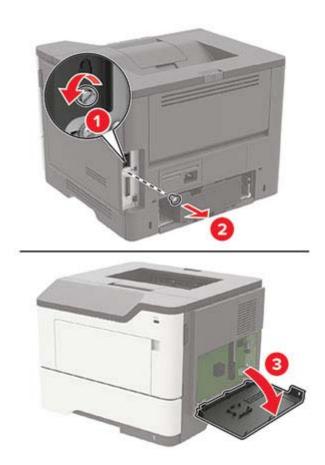
Installing a memory card



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.

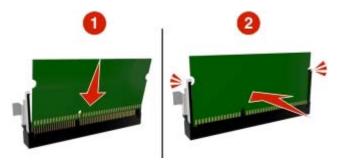
Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any controller board components or connectors.



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.

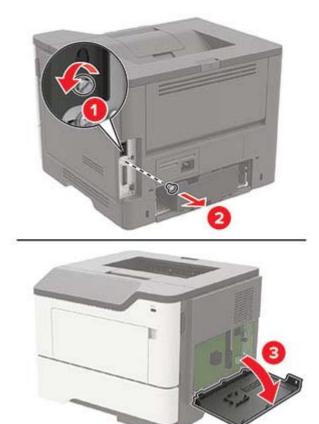
Installing an optional card

4

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.

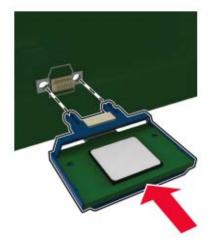
Warning—Potential Damage: Controller board electronic components are easily damaged by static electricity. Touch a metal surface on the printer before touching any components or connectors.



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 <u>"Adding available options in the print driver" on page 128</u>.

Software

Supported operating systems

Using the software CD, you can install the printer software on the following operating systems:

- Windows 10
- Windows 8.1
- Windows Server 2012 R2
- Windows Server 2012
- Windows 7 SP1
- Windows Server 2008 R2 SP1
- Windows Server 2008 SP2
- Windows Vista SP2
- Mac OS X version 10.7 or later
- Red Hat Enterprise Linux WS

- openSUSE Linux
- SUSE Linux Enterprise Server
- Debian GNU/Linux
- Ubuntu
- Fedora
- IBM AIX
- Oracle Solaris SPARC
- Oracle Solaris x86

Notes:

- For Windows operating systems, the print drivers and utilities are supported in both 32- and 64-bit versions.
- For drivers and utilities that are compatible with Mac OS X version 10.6 or earlier and for specific supported Linux or UNIX operating system versions, go to our website.
- For more information on software compatibility with all other operating systems, contact customer support.

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.
- 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, 835, 895, and their equivalent models

Edition notice

September 2018

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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) AIGaInP 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)
Сору	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

This product may contain the following modular component(s):

Regulatory Type/Model LEX-M07-001; FCC ID: IYLLEXM07001; Industry Canada IC: 2376A-LEXM07001

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)

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (EIRP) is not more than that necessary for successful communication.

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.

To prevent radio interference to the licensed service and to reduce the potential for harmful interference to cochannel mobile satellite systems, this device is intended to be operated indoors and away from windows to provide maximum shielding.

High-power radars are allocated as primary users (i.e., priority users) of the bands 5250–5350MHz and 5650–5850MHz. These radars could cause interference and/or damage to LE-LAN devices.

Industrie Canada (Canada)

Selon la réglementation d'Industrie Canada, l'émetteur radio ne fonctionne qu'avec une antenne dont le type et le gain maximal (ou inférieur) ont été approuvés par Industrie Canada. Pour réduire les interférences radio potentielles auprès d'autres utilisateurs, le type d'antenne et son gain doivent être choisis de telle sorte que la puissance isotrope rayonnée équivalente (PIRE) ne soit pas supérieure à ce qui est nécessaire pour assurer la réussite de la communication.

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.

Afin de prévenir les interférences radio des services sous licence et pour réduire le risque d'interférences nuisibles aux systèmes de satellites mobiles utilisant les mêmes canaux, cet appareil est destiné à être utilisé à l'intérieur et loin des fenêtres afin de fournir une protection maximale.

Les radars à haute puissance sont définis comme les utilisateurs principaux (p. ex., utilisateurs prioritaires) dans les bandes de 5250-5350 MHz et 5650-5850 MHz. Ces radars peuvent causer des interférences ou des dommages aux appareils RELOC-EL.

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

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.

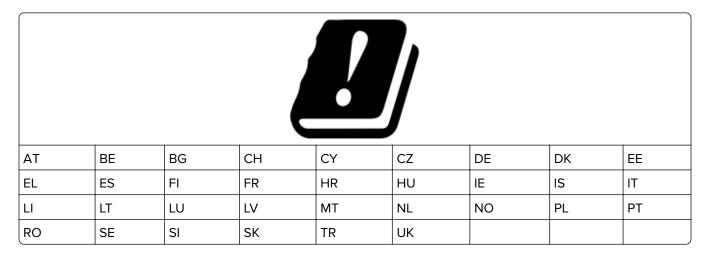
A declaration of conformity to the requirements of the Directives is available upon request from Lexmark International Technology Hungária Kft., 8 Lechner Ödön fasor, Millennium Tower III, 1095 Budapest HUNGARY.

Compliance is indicated by the CE marking:



Restrictions

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



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

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

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