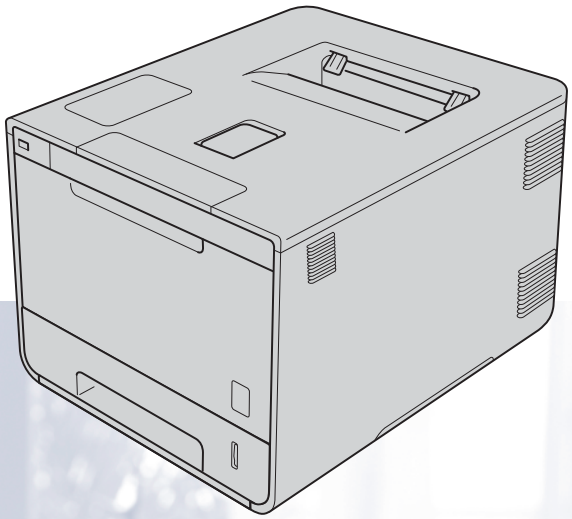
User’s Guide

Brother Laser Printer

HL-L9200CDWT
HL-L9300CDWTT



For visually-impaired users

You can read this manual with Screen Reader ‘text-to-speech’ software.

You must set up the hardware and install the driver before you can use the machine.

Please use the Quick Setup Guide to set up the machine. You can find a printed copy in the box.

Please read this User's Guide thoroughly before you use the machine.

Please visit http://solutions.brother.com/ where you can get product support, the latest driver updates and utilities, and answers to frequently asked questions (FAQs) and technical questions.

Note: Not all models are available in all countries.

Version A

UK/IRE

For HL-L9300CDWTT users

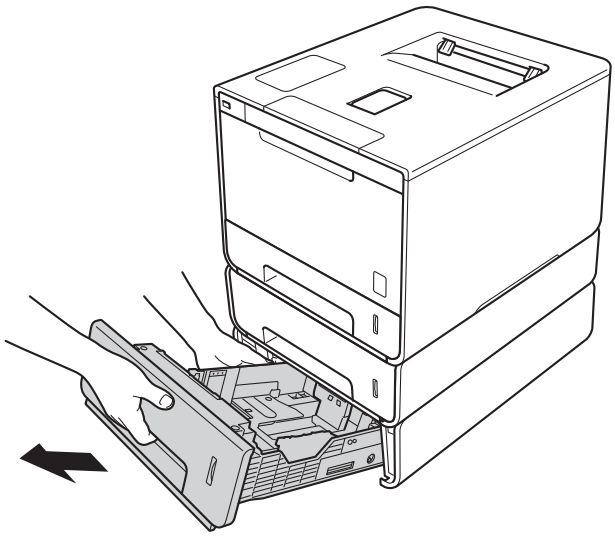
The following section describes the differences between the HL-L9300CDWTT and the HL-L9200CDWT.

The HL-L9300CDWTT has two lower trays (Tray 2 and Tray 3) as standard; each lower tray can hold up to 500 sheets of 80 g/m^2 paper. With both lower trays installed, the printer can hold up to 1300 sheets of plain paper.

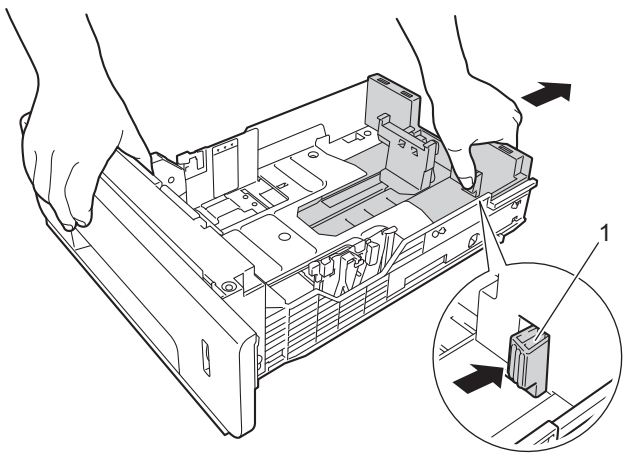
For HL-L9300CDWTT users, read the descriptions in this guide for Tray 2, as Tray 2 and Tray 3.

Loading paper in the optional lower tray

1. Slowly pull the paper tray out until it stops.
   Then slightly lift the front of the tray and pull the tray out of the machine.



2. For Legal or Folio size paper, press the release button (1) in the bottom of the paper tray and then pull out the back of the paper tray.
   (Legal or Folio size paper are not available in some regions.)



Optional lower tray

Model	HL-L9200CDWT	HL-L9300CDWTT
Model Name	LT-325CL	LT-328CL [1]
Amount of lower tray installed	1	2
Paper Source	Tray 2	Tray 2 and Tray 3 [2]
Maximum Paper Capacity [3]	800	1300

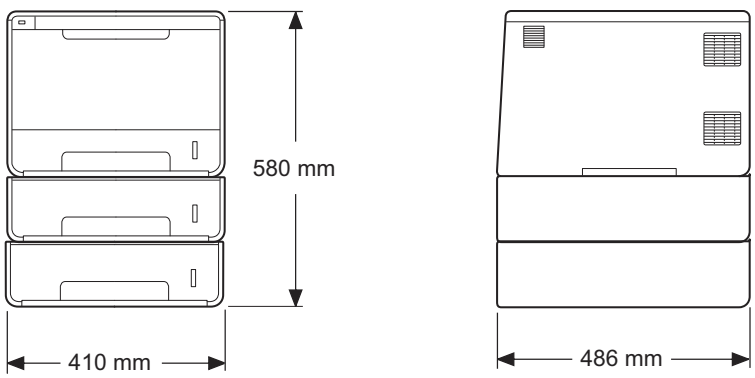
1 LT-328CL is functionally equivalent to LT-325CL.
For setup, see the User's Guide that we have supplied with the lower tray unit.

2 For Tray 3 users, read the descriptions in this guide for Tray 2, as Tray 2 and Tray 3.

3 80g/m^2 paper

Machine specifications

General

Model		HL-L9300CDWTT
Power Consumption [1] (Average)	Peak	Approx. 1180 W
	Printing	Approx. 555 W at 25 °C
	Printing(Quiet Mode)	Approx. 355 W at 25 °C
	Ready	Approx. 65 W at 25 °C
	Sleep	Approx. 10 W
	Deep Sleep	Approx. 1.3 W
	Power Off [2 3]	Approx. 0.04 W
Dimensions		
Weights (with supplies)		35.2 kg

1 USB connections to computer.

2 Measured according to IEC 62301 Edition 2.0.

3 Power consumption varies slightly depending on the usage environment or part wear.

User's Guides and where do I find them?

Which Guide?	What's in it?	Where is it?
Product Safety Guide	Read this Guide first. Read the Safety Instructions before you set up your machine. See this Guide for trademarks and legal limitations.	Printed / In the box
Quick Setup Guide	Follow the instructions for setting up your machine and installing the drivers and software for the operating system and connection type you are using.	Printed / In the box
User's Guide	Learn the print operations and how to replace supplies and perform routine maintenance. See troubleshooting tips.	(Windows®) PDF file / CD-ROM / In the Box (Macintosh) PDF file / Brother Solutions Center at http://solutions.brother.com/
Network User's Guide	This Guide provides useful information about wired and wireless network settings and security settings using the Brother machine. You can also find supported protocol information for your machine and detailed troubleshooting tips.	(Windows®) HTML file / CD-ROM / In the Box (Macintosh) HTML file / Brother Solutions Center at http://solutions.brother.com/
Google Cloud Print Guide	This Guide provides information about how to configure your Brother machine to a Google account and use Google Cloud Print services for printing over the Internet.	PDF file / Brother Solutions Center at http://solutions.brother.com/
Mobile Print/Scan Guide for Brother iPrint&Scan	This Guide provides useful information about printing from your mobile device and scanning from your Brother machine to your mobile device when connected on a Wi-Fi network.	PDF file / Brother Solutions Center at http://solutions.brother.com/
Web Connect Guide	This Guide provides details about how to configure and use your Brother machine to load and view images and files on certain websites that provide these services.	PDF file / Brother Solutions Center at http://solutions.brother.com/

Using the documentation

Thank you for buying a Brother machine! Reading the documentation will help you make the most of your machine.

Symbols and conventions used in the documentation

The following symbols and conventions are used throughout the documentation:

⚠ WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injuries.
IMPORTANT	IMPORTANT indicates a potentially hazardous situation which, if not avoided, may result in damage to property or loss of product functionality.
NOTE	Notes tell you how to respond to a situation that may arise or give tips about how the operation works with other features.
	Electrical Hazard icons alert you to possible electrical shocks.
	Fire Hazard icons alert you to the possibility of a fire.
	Hot Surface icons warn you not to touch machine parts that are hot.
	Prohibition icons indicate actions that must not be performed.
Bold	Bold style identifies buttons on the machine's Touchpanel or computer screen.
Italics	Italicized style emphasizes an important point or refers you to a related topic.
`Courier New`	Courier New font identifies the messages shown on the Touchscreen of the machine.

Accessing Brother Utilities (Windows®)

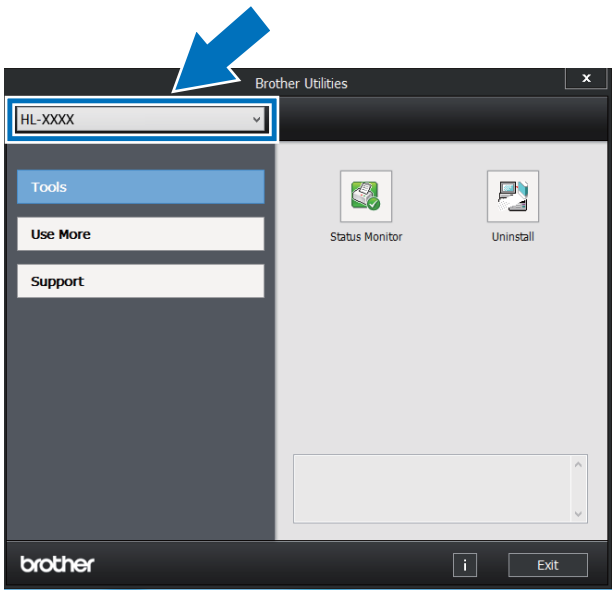
Brother Utilities is an application launcher that offers convenient access to all Brother applications installed on your device.

1. (Windows® XP, Windows Vista® and Windows® 7, Windows Server® 2003, Windows Server® 2008 and Windows Server® 2008 R2)
   Click (**Start**) > **All Programs** > **Brother** > **Brother Utilities**.

   (Windows® 8 and Windows Server® 2012)
   Tap or click (**Brother Utilities**) either on the Start screen or the desktop.

   (Windows® 8.1 and Windows Server® 2012 R2)
   Move your mouse to the lower left corner of the **Start** screen and click (if you are using a touch-based device, swipe up from the bottom of the **Start** screen to display the **Apps** screen). When the **Apps** screen appears, tap or click (**Brother Utilities**).

2. Select your machine.



3. Choose the operation you want to use.

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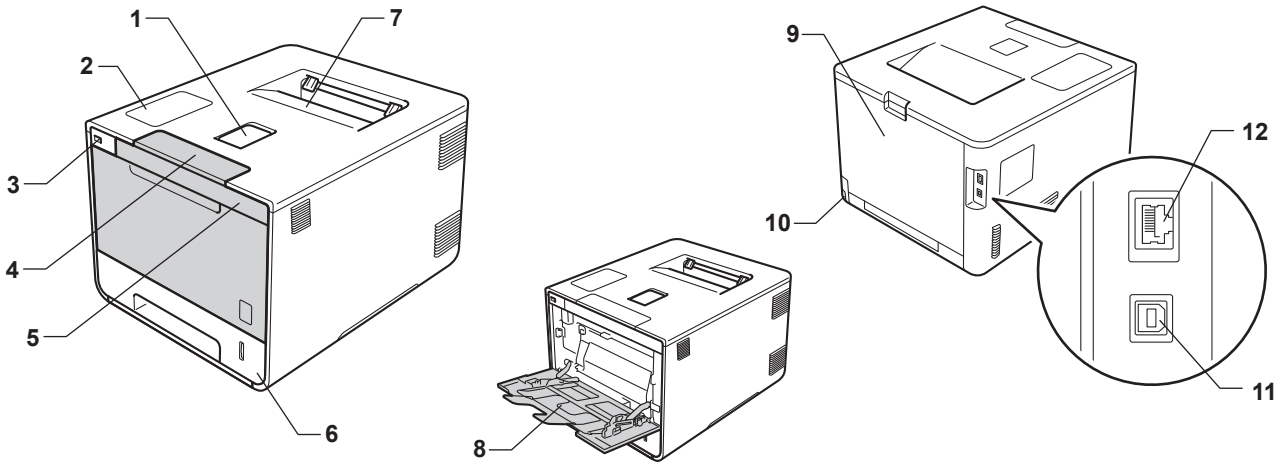
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1 Printing Methods

About this Machine

Front view and Back view



1 Face-down output tray support flap (support flap)
2 Touch panel with a tiltable Touchscreen LCD (Liquid Crystal Display)
3 USB direct print interface
4 Front cover release button
5 Front cover
6 Paper tray
7 Face-down output tray
8 Multi-purpose tray (MP tray)
9 Back cover (Face-up output tray when open)
10 AC power connector
11 USB connector
12 10BASE-T/100BASE-TX port

Acceptable paper and other print media

Print quality may vary according to the type of paper you are using.

You can use the following types of print media: plain paper, thin paper, thick paper, thicker paper, bond paper, recycled paper, labels, envelopes or glossy paper (see *Print media* on page 208).

For best results, follow the instructions below:

- DO NOT load different types of paper in the paper tray at the same time because it may cause paper jams or misfeeds.
- For correct printing, you must choose the same paper size in your software application as the paper in the tray.
- Avoid touching the printed surface of the paper immediately after printing.
- Before you buy a lot of paper, test a small quantity to make sure that the paper is appropriate for the machine.
- Use labels that are designed for use in *laser* machines.

Recommended paper and print media

Paper Type	Item
Plain paper	Xerox Premier TCF 80 g/m^2 Xerox Business 80 g/m^2
Recycled paper	Xerox Recycled Supreme 80 g/m^2
Labels	Avery laser label L7163
Envelopes	Antalis River series (DL)
Glossy paper	Xerox Colotech+ Gloss Coated 120g/m^2

Paper type and size

The machine feeds paper from the installed standard paper tray, multi-purpose tray or optional lower tray.

The names for the paper trays in the printer driver and this Guide are as follows:

Tray	Name
Paper tray	Tray 1
Optional lower tray unit (Standard equipment)	Tray 2
Multi-purpose tray	MP Tray

Paper Tray Capacity

	Paper size	Paper types	No. of sheets
Paper Tray (Tray 1)	A4, Letter, Legal, B5 (JIS), Executive, A5, A5 (Long Edge), A6, Folio [1]	Plain paper, Thin paper and Recycled paper	up to 250 sheets 80 g/m^2
Multi-purpose Tray (MP Tray)	Width: 76.2 to 215.9 mm Length: 127 to 355.6 mm	Plain paper, Thin paper, Thick paper, Thicker paper, Recycled paper, Bond paper, Labels, Envelopes, Env. Thin, Env.Thick and Glossy paper [2]	up to 50 sheets 80 g/m^2 3 Envelopes 1 Glossy paper
Optional Lower Tray (Tray 2) [3]	A4, Letter, Legal, B5(JIS), Executive, A5, Folio [1]	Plain paper, Thin paper and Recycled paper	up to 500 sheets 80 g/m^2

[1] Folio size is 215.9 mm x 330.2 mm.

[2] Load only one sheet of Glossy in the MP tray.

[3] Standard equipment.

Recommended paper specifications

The following paper specifications are appropriate for this machine:

Basis weight	75-90 g/m^2
Thickness	80-110 μm
Roughness	Higher than 20 sec.
Stiffness	90-150 cm^3/100
Grain direction	Long grain
Volume resistivity	10e^9-10e^{11} ohm
Surface resistivity	10e^9-10e^{12} ohm-cm
Filler	$CaCO_3$ (Neutral)
Ash content	Below 23 wt%
Brightness	Higher than 80%
Opacity	Higher than 85%

- Use plain paper that is appropriate for laser machines to make copies.
- Use paper that is 75 to 90 g/m^2.
- Use long grain paper with a neutral Ph value, and a moisture content of approx. 5%.
- This machine can use recycled paper that meets DIN 19309 specifications.

(Before you load paper in this machine, see *Important information for choosing your paper* on page 212.)

Handling and using special paper

The machine is designed to work well with most types of xerographic and bond paper. However, some paper variables may have an effect on print quality or handling reliability. Always test samples of paper before purchasing to ensure desirable performance. Store paper in its original packaging and keep it sealed. Keep the paper flat and away from moisture, direct sunlight and heat.

Some important guidelines when selecting paper are:

- DO NOT use inkjet paper because it may cause a paper jam or damage your machine.
- Preprinted paper must use ink that can withstand the temperature of the machine's fusing process 200 °C.
- If you use bond paper, paper having a rough surface, or paper that is wrinkled or creased, the paper may exhibit degraded performance.

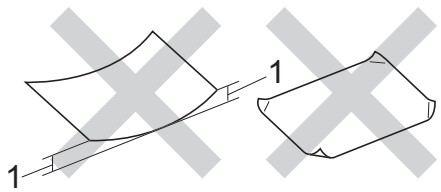
Types of paper to avoid

IMPORTANT

Some types of paper may not perform well or may cause damage to your machine.

DO NOT use paper:

- that is highly textured
- that is extremely smooth or shiny
- that is curled or warped



1 A curl of 2 mm or greater may cause jams to occur.

- that is coated or has a chemical finish
- that is damaged, creased or folded
- that exceeds the recommended weight specification in this guide
- with tabs and staples
- with letterheads using low temperature dyes or thermography
- that is multipart or carbonless
- that is designed for inkjet printing

If you use any of the types of paper listed above, they may damage your machine. This damage is not covered under any Brother warranty or service agreement.

Envelopes

Most envelopes can be used with your machine. However, some envelopes may have feed and print-quality problems because of the way they have been made. Envelopes should have edges with straight, well-creased folds. Envelopes should lie flat and not be of baggy or flimsy construction. Use only quality envelopes from a supplier who understands that you will be using the envelopes in a laser machine.

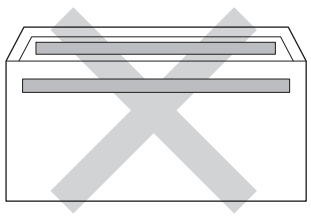
We recommend printing a test envelope to make sure the print results are what you want.

Types of envelopes to avoid

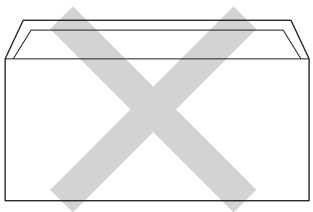
IMPORTANT

DO NOT use envelopes:

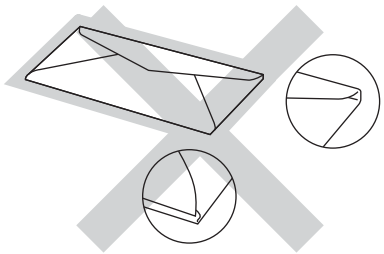
- that are damaged, curled, wrinkled or an unusual shape
- that are extremely shiny or textured
- with clasps, staples, snaps or tie strings
- with self-adhesive closures
- that are of a baggy construction
- that are not sharply creased
- that are embossed (have raised writing on them)
- that were previously printed by a laser printer or LED machine
- that are pre-printed on the inside
- that cannot be arranged neatly when stacked
- that are made of paper that weighs more than the paper weight specifications for the machine
- with edges that are not straight or consistently square
- with windows, holes, cut-outs or perforations
- with glue on the surface as shown in the figure below



- with double flaps as shown in the figure below



- with sealing flaps that are not folded down when purchased
- with each side folded as shown in the figure below



If you use any of the types of envelopes listed above, they may damage your machine. This damage may not be covered under any Brother warranty or service agreement.
Occasionally you may experience paper feed problems caused by the thickness, size and flap shape of the envelopes you are using.

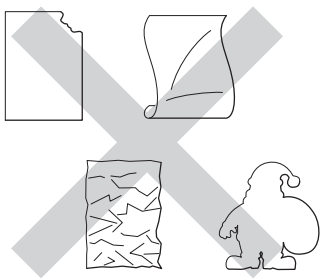
Labels

Most labels can be used with your machine. Labels should have an adhesive that is acrylic-based since this material is more stable at the high temperatures in the fuser unit. Adhesives should not come in contact with any part of the machine, because the label stock may stick to the drum unit or rollers and cause jams and print quality problems. No adhesive should be exposed between the labels. Labels should be arranged so that they cover the entire length and width of the sheet. Using labels with spaces may result in labels peeling off and causing serious jams or print problems.

All labels used in this machine must be able to withstand a temperature of 200 °C for a period of 0.1 seconds.

Types of labels to avoid

Do not use labels that are damaged, curled, wrinkled or an unusual shape.

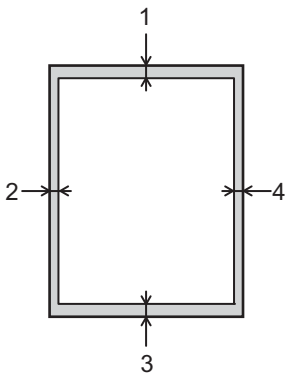


IMPORTANT

- DO NOT feed partially used label sheets or labels with the carrier sheet exposed because your machine will be damaged.
- DO NOT reuse or insert labels that have been used previously or are missing a few labels on the sheet.
- Label sheets should not exceed the paper weight specifications described in this User's Guide. Labels exceeding this specification may not feed or print correctly and may cause damage to your machine.

Unprintable area when printing from a computer

The figures below show maximum unprintable areas. The unprintable areas may vary depending on the paper size or settings in the application you are using.



Usage	Document Size	Top (1) Bottom (3)	Left (2) Right (4)
Print	Letter	4.23 mm	4.23 mm
	A4	4.23 mm	4.23 mm
	Legal	4.23 mm	4.23 mm

Loading paper

Loading paper and print media

The machine can feed paper from the standard paper tray, multi-purpose tray or optional lower tray.

When you load paper into the paper tray, note the following:

- If your application software supports paper size selection on the print menu, you can select it through the software. If your application software does not support it, you can set the paper size in the printer driver or by pressing the buttons on the Touchscreen.

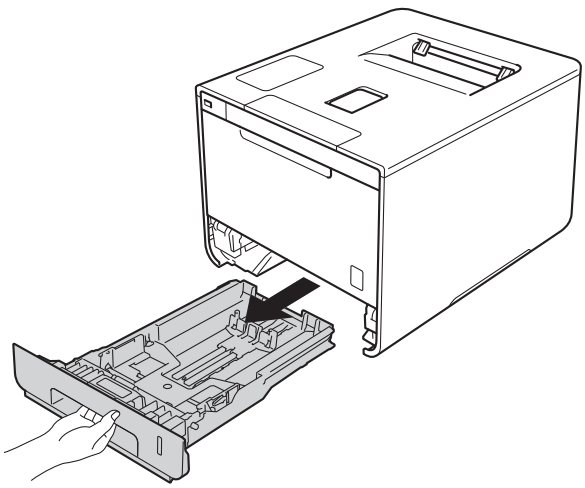
Loading paper in the standard paper tray and the optional lower tray

Load up to 250 sheets of paper in the standard paper tray (Tray 1). You can also load up to 500 sheets in the optional lower tray (Tray 2) [1]. Paper can be loaded up to the maximum paper mark (▼▼▼) on the right side of the paper tray. (For the recommended paper to use, see *Acceptable paper and other print media* on page 2.)

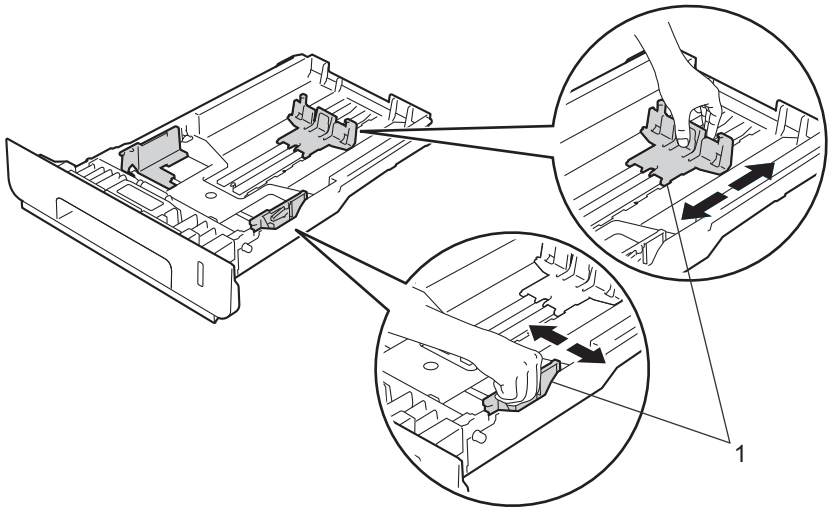
[1] Tray 2 is standard on HL-L9200CDWT.

Printing on plain paper, thin paper, or recycled paper from Tray 1 and Tray 2

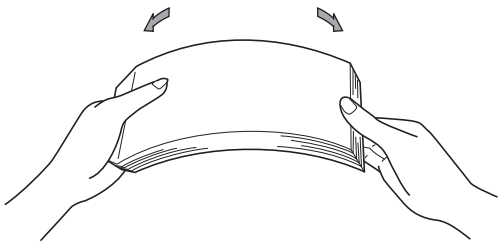
1. Pull the paper tray completely out of the machine.



2 While pressing the blue paper-guide release levers (1), slide the paper guides to fit the size of paper you are loading in the tray. Make sure that the guides are firmly in the slots.



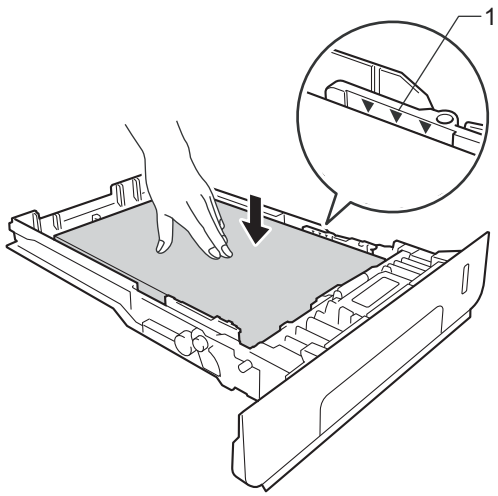
3 Fan the stack of paper well to avoid paper jams and misfeeds.



4 Load paper in the tray and make sure:

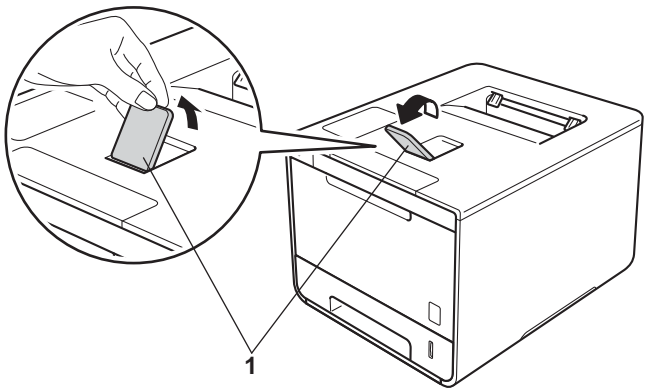
- The paper is below the maximum paper mark (▼ ▼ ▼) (1).

  Over filling the paper tray will cause paper jams.
- The side to be printed on is face down.
- The paper guides touch the sides of the paper so it will feed correctly.



5 Put the paper tray firmly back in the machine. Make sure that it is completely inserted into the machine.

6 Lift up the support flap (1) to prevent paper from sliding off the face-down output tray, or remove each page as soon as it comes out of the machine.



7 Change the printer driver settings for your operating system (for details, see *Chapter 2: Driver and Software*).

Choose the option you want from each of the following drop-down lists (for more information on acceptable paper sizes and types, see *Paper type and size* on page 2.):

■ **Paper Size**

A4

Letter

Legal

Executive

A5

JIS B5

Folio

A5 Long Edge

A6

For the acceptable paper sizes, see *Paper type and size* on page 2.

■ **Media Type**

Plain Paper

Thin Paper

Recycled Paper

■ **Paper Source**

Tray1

Tray2 (if available)

For other settings, see *Chapter 2: Driver and Software*.

NOTE

The name of options in the drop-down lists may vary depending on your operating system and its version.

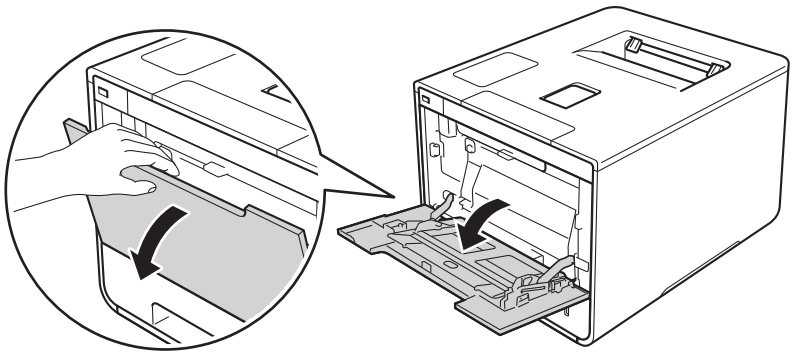
8 Send the print job to the machine.

Loading paper in the multi-purpose tray (MP tray)

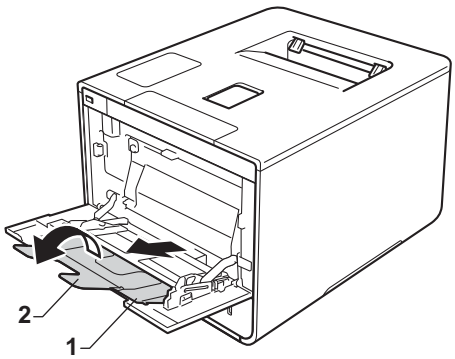
You can load up to three envelopes, one sheet of glossy paper, other special print media, or up to 50 sheets of plain paper in the MP tray. Use this tray to print on thick paper, bond paper, labels, envelopes or glossy paper. (For the recommended paper to use, see *Acceptable paper and other print media* on page 2.)

Printing on plain paper, thin paper, recycled paper, bond paper, or glossy paper from the MP tray

1. Open the MP tray and lower it gently.

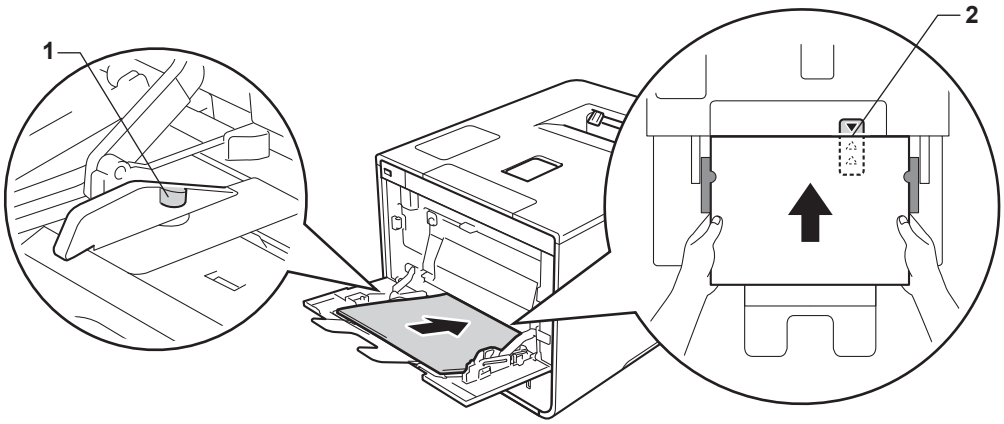


2. Pull out the MP tray support (1) and unfold the flap (2).



3 Load paper in the MP tray, making sure:

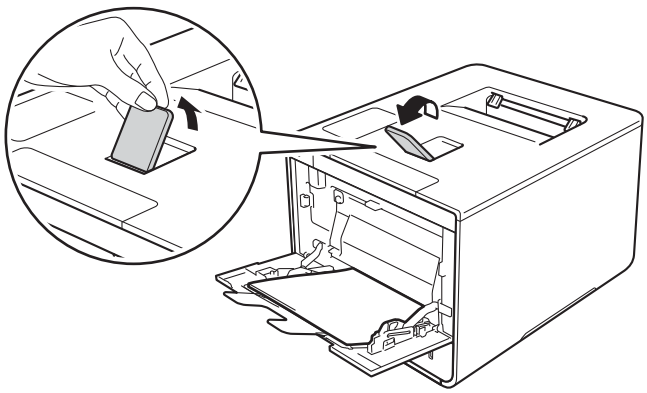
- The paper stays under the maximum paper tab (1).
- The paper's leading edge (top of paper) is positioned between the ▲▲ and ▼ arrows (2).
- The side to be printed on must be face up with the leading edge in first.
- The paper guides touch the sides of the paper so it will feed properly.



NOTE

When you are using glossy paper, load only one sheet at a time in the MP tray to avoid a paper jam.

4 Lift up the support flap to prevent paper from sliding off the face-down output tray, or remove each page as soon as it comes out of the machine.



5 Change the printer driver settings for your operating system (for details, see *Chapter 2: Driver and Software*).

Choose the option you want from each of the following drop-down lists (for more information on acceptable paper sizes and types, see *Paper type and size* on page 2.):

■ **Paper Size**

A4

Letter

Legal

Executive

A5

A5 Long Edge

A6

B5

JIS B5

3 x 5

Folio

Customized paper size [1]

[1] You can define your original paper size by choosing **User Defined...** in Windows® printer driver, **PostScript Custom Page Size** in BR-Script printer driver for Windows®, or **Manage Custom Sizes...** in Macintosh printer drivers.

For the acceptable paper sizes, see *Paper type and size* on page 2.

■ **Media Type**

Plain Paper

Thin Paper

Recycled Paper

Bond Paper

Glossy Paper

■ **Paper Source**

MP Tray

For other settings, see *Chapter 2: Driver and Software*.

NOTE

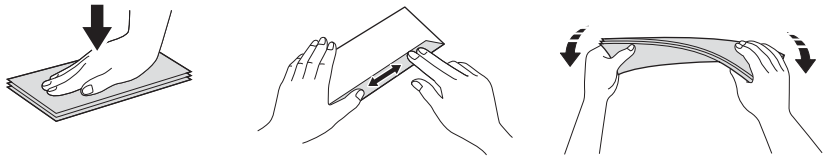
The names of options in the drop-down lists may vary depending on your operating system and its version.

6 Send the print job to the machine.

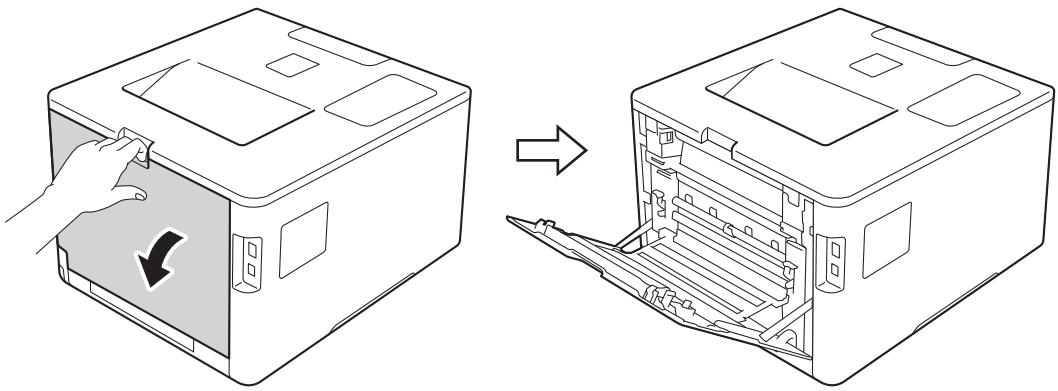
Printing on thick paper, labels and envelopes from the MP tray

When the back cover (face-up output tray) is pulled down, the machine has a straight paper path from the MP tray through to the back of the machine. Use this paper feed and output method when you print on thick paper, labels, or envelopes. (For the recommended paper to use, see *Acceptable paper and other print media* on page 2 and *Envelopes* on page 5.)

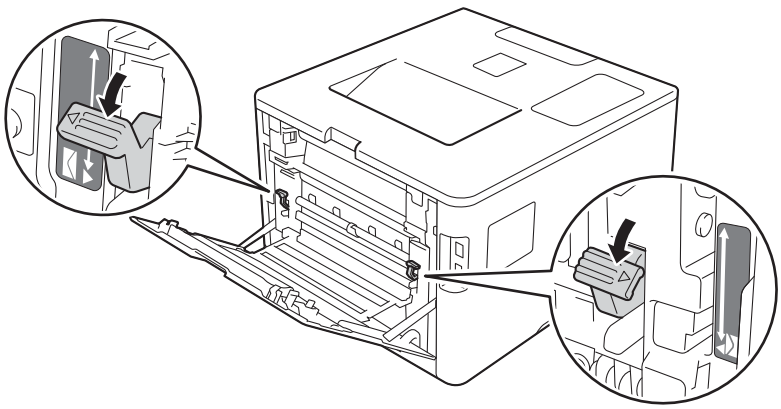
Before loading, press the corners and sides of the envelopes to make them as flat as possible.



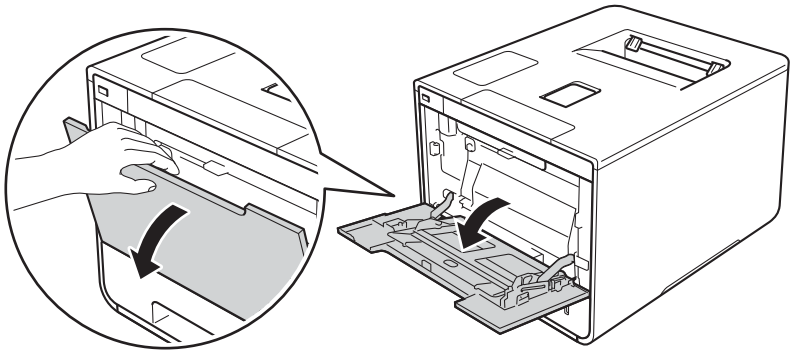
1. Open the back cover (face-up output tray).



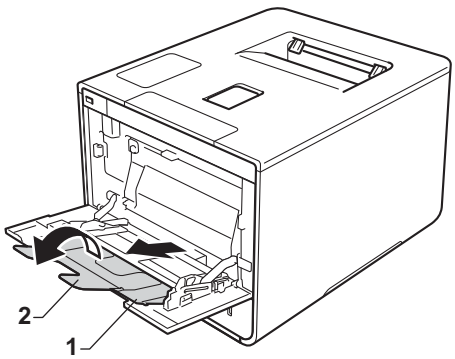
2. (For printing envelopes only)
   Pull down the two grey levers, one on the left side and one on the right side, toward you as shown in the illustration.



3 Open the MP tray and lower it gently.

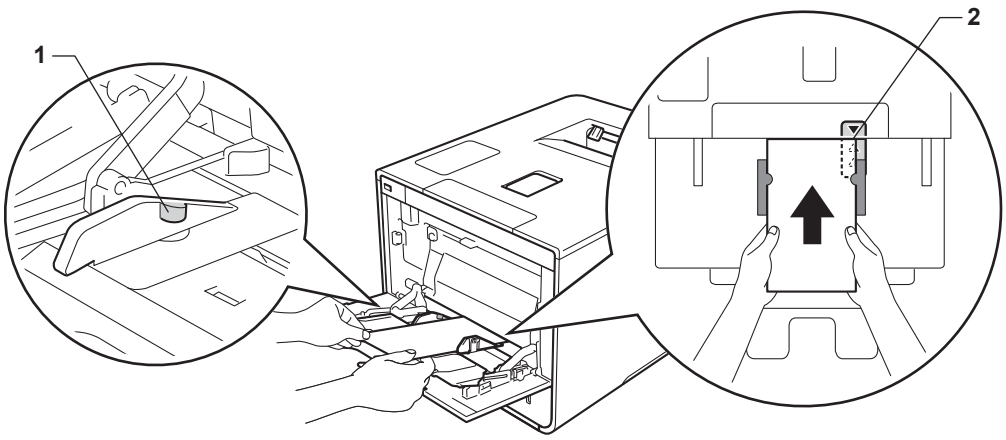


4 Pull out the MP tray support (1) and unfold the flap (2).



5 Load paper, labels, or envelopes in the MP tray, making sure:

- The number of envelopes in the MP tray does not exceed three.
- The paper, labels or envelopes stay under the maximum paper tab (1).
- The paper's leading edge (top of paper) is positioned between the ▲ and ▼ arrows (2).
- The side to be printed on is face up.



6 Change the printer driver settings for your operating system (for details, see *Chapter 2: Driver and Software*).

Choose the option you want from each of the following drop-down lists (for more information on acceptable paper sizes and types, see *Paper type and size* on page 2.):

■ **Paper Size**

For printing thick paper or labels

A4

Letter

Legal

Executive

A5

A5 Long Edge

A6

B5

JIS B5

3 x 5

Folio

Customized paper size [1]

For printing envelopes

Com-10

DL

C5

Monarch

Customized paper size [1]

[1] You can define your original paper size by choosing **User Defined...** in Windows® printer driver, **PostScript Custom Page Size** in BR-Script printer driver for Windows®, or **Manage Custom Sizes...** in Macintosh printer drivers.

For the acceptable paper sizes, see *Paper type and size* on page 2.

■ **Media Type**

For printing thick paper

Thick Paper

Thicker Paper

For printing labels

Label

For printing envelopes

Envelopes

Env. Thin

Env. Thick

■ **Paper Source**

MP Tray

For other settings, see *Chapter 2: Driver and Software*.

NOTE

- The name of options in the drop-down lists may vary depending on your operating system and its version.
- When you use Envelope #10, choose **Com-10** (for Windows®) or **Envelope #10** (for Macintosh) from the **Paper Size** drop-down list.
- For other envelopes that are not listed in the printer driver, such as Envelope #9 or Envelope C6, choose **User Defined...** (for Windows® printer driver), **PostScript Custom Page Size** (for BR-Script printer driver for Windows®), or **Manage Custom Sizes...** (for Macintosh printer driver).

7 Send the print job to the machine.

NOTE

- Remove each envelope as soon as it has been printed. Stacking the envelopes may cause them to jam or curl.
- If envelopes or thick paper get smudged during printing, set the **Media Type** to **Env. Thick** or **Thicker Paper** to increase the fixing temperature.
- If the envelopes are creased after they are printed, see *Improving the print quality* on page 197.
- If your thick paper curls during printing, load only one sheet at a time in the MP tray.
- Envelope joints that are sealed by the manufacturer should be secure.
- All sides of the envelope should be properly folded without wrinkles or creases.

8 (For printing envelopes only)
When you have finished printing, reset the two grey levers that you pulled down in step ❷ back to their original positions.

9 Close the back cover (face-up output tray).

2-sided printing

The supplied printer drivers all enable 2-sided printing. (Windows® Users) For more information about how to choose the settings, see the **Help** text in the printer driver.

Guidelines for printing on both sides of the paper

- If the paper is thin, it may wrinkle.
- If paper is curled, straighten it and put it back in the paper tray. If the paper continues to curl, replace the paper.
- If the paper is not feeding correctly, it may be curled. Remove the paper and straighten it. If the paper continues to curl, replace the paper.
- When you use the manual 2-sided setting, it is possible that there may be paper jams or poor print quality. (If the paper jams, see *Paper jams* on page 181. If you have a print quality problem, see *Improving the print quality* on page 197.)

NOTE

Make sure that the paper tray is completely inserted in the machine.

Automatic 2-sided printing

If you are using the Macintosh Printer Driver, see *2-sided Printing* on page 75.

Automatic 2-sided printing using the Windows® printer driver

1. Change the printer driver settings for your operating system (for details, see *Chapter 2: Driver and Software*).

   Choose the option you want from each of the following drop-down lists (for more information on acceptable paper sizes and types, see *Paper type and size* on page 2.):

   - **Paper Size**

     A4

   - **Media Type**

     Plain Paper

     Recycled Paper

     Thin Paper

     Glossy Paper (MP Tray only)

   - **Paper Source**

     Tray1

     MP Tray

     Tray2 (if available)

   - **2-sided / Booklet**

     2-sided

   - **2-sided Type** in **2-sided Settings**

     There are four options for each orientation (see *2-sided / Booklet* on page 38).

   - **Binding Offset** in **2-sided Settings**

     Specify the offset for binding (see *2-sided / Booklet* on page 38).

NOTE

- Do not use bond paper.
- The name of options in the drop-down lists may vary depending on your operating system and its version.

   For other settings, see *Chapter 2: Driver and Software*.

2. Send the print job to the machine. The machine will print on both sides of the paper automatically.

Automatic 2-sided printing using the BR-Script printer driver for Windows®

1. Change the printer driver settings for your operating system (for details, see *Chapter 2: Driver and Software*).

   Choose the option you want from each of the following drop-down lists (for more information on acceptable paper sizes and types, see *Paper type and size* on page 2.):

   - **Paper Size**
     - **A4**
   - **Media Type**
     - **Plain Paper**
     - **Recycled Paper**
     - **Thin Paper**
     - **Glossy Paper (MP Tray only)**
   - **Paper Source**
     - **Tray1**
     - **MP Tray**
     - **Tray2** (if available)
   - **Print on Both Sides**
     - **Flip on Short Edge**
     - **Flip on Long Edge**
   - **Page Order**
     - **Front to Back**
     - **Back to Front**

NOTE

- Do not use bond paper.
- The name of options in the drop-down lists may vary depending on your operating system and its version.

   For other settings, see *Chapter 2: Driver and Software*.

2. Send the print job to the machine. The machine will print on both sides of the paper automatically.

Manual 2-sided printing

The BR-Script printer driver for Windows® does not support manual 2-sided printing.

If you are using the Macintosh Printer Driver, see *Manual 2–sided Printing* on page 75.

Manual 2-sided printing using the Windows® printer driver

1. Change the printer driver settings for your operating system (for details, see *Chapter 2: Driver and Software*).

   Choose the option you want from each of the following drop-down lists (for more information on acceptable paper sizes and types, see *Paper type and size* on page 2.):

   - **Paper Size**

     You can use all the paper sizes specified for the tray you are using.

   - **Media Type**

     You can use all the media types that are specified for the tray you are using, except envelopes and labels, which have only one print side.

   - **Paper Source**

     Tray1

     MP Tray

     Tray2 (if available)

   - **2-sided / Booklet**

     2-sided (Manual)

   - **2-sided Type** in **2-sided Settings**

     There are four options for each orientation (see *2-sided / Booklet* on page 38).

   - **Binding Offset** in **2-sided Settings**

     Specify the offset for binding (see *2-sided / Booklet* on page 38).

   For other settings, see *Chapter 2: Driver and Software*.

2. Send the print job to the machine. The machine will print all the even-numbered pages on one side of the paper first. Then, the Windows® driver instructs you (with a pop-up message) to reinsert the paper to print the odd-numbered pages.

NOTE

Before reinserting the paper, straighten it well, or you may get a paper jam. Very thin or thick paper is not recommended.

Printing from a USB flash drive or digital camera supporting mass storage

With the Direct Print feature, you do not need a computer for printing. You can print by just plugging your USB flash drive into the machine's USB direct interface. You can also connect and print directly from a camera set to USB mass storage mode.

You can use a USB flash drive that has the following specifications:

USB Class	USB Mass Storage Class
USB Mass Storage Sub Class	SCSI or SFF-8070i
Transfer protocol	Bulk transfer Only
Format [1]	FAT12/FAT16/FAT32
Sector size	Max. 4096 Byte
Encryption	Encrypted devices are not supported.

[1] NTFS format is not supported.

NOTE

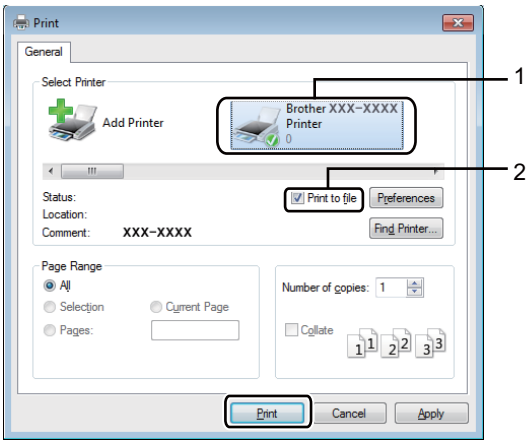
- Some USB flash drives may not work with the machine.
- If your camera is in PictBridge mode, you cannot print from it. See the documentation supplied with your camera to switch from PictBridge mode to mass storage mode.

Creating a PRN file for direct printing

NOTE

The screens in this section may vary depending on your application and operating system.

1. From the menu bar of an application, click **File**, then **Print**.
2. Choose **Brother HL-XXXX Printer** (1) and check the **Print to file** box (2). Click **Print**.



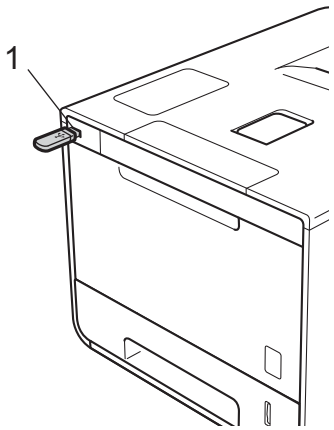
3. Choose the folder you want to save the file to and type the file name if prompted.
If you are prompted for a file name only, you can also specify the folder you want to save the file in by typing the directory name. For example: C:\Temp\FileName.prn
If a USB flash drive is connected to your computer, you can save the file directly to the USB flash drive.

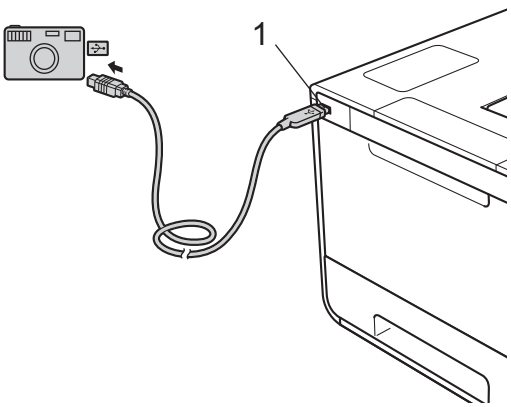
Printing directly from the USB flash drive or digital camera supporting mass storage

NOTE

- Make sure your digital camera is turned on.
- Your digital camera must be switched from PictBridge mode to mass storage mode.

1. Connect your USB flash drive or digital camera to the USB direct interface (1) on the front of the machine. The Touchscreen displays the `Checking Device` message.





IMPORTANT

- To prevent damage to your machine, DO NOT connect any device other than a digital camera or USB flash drive to the USB direct interface.

NOTE

- If an error occurs, the USB memory menu will not appear on the Touchscreen.
- When the machine is in Deep Sleep mode, the Touchscreen will not display any information even if you connect a USB flash drive to the USB direct interface. Press the Touchscreen to wake up the machine.
- If your machine has been set to Secure Function Lock `On`, you may not be able to access Direct Print (see the Network User's Guide).

2 Press ▲ or ▼ to choose the folder name and file name you want.
If you have selected the folder name, press it. Press ▲ or ▼ to choose the file name, and then press it.

NOTE

To print an index of the files, press  on the Touchscreen. Press `Start` to start printing.

3 Do one of the following:

- To change the current settings, press `Options`. Go to step ❹.
- If you do not want to change the current settings, go to step ❻.

4 Press ▲ or ▼ to display the setting you want to change, and then press it. Press ▲ or ▼ to select the option you want, and then press it.

NOTE

- You can choose the following settings:

  `Paper Type`
  `Paper Size`
  `Multiple Page`
  `Orientation`
  `2-sided`
  `Collate`
  `Print Quality`
  `Tray Use`
  `PDF Option`
  `Output Color`

- Depending on the file type, some of these settings may not appear.

5 Do one of the following:

- To change another setting, repeat step ❹.
- If you do not want to change other settings, press  and go to step ❻.

6 Enter the number of copies you want.

7 Press Start to start printing.

IMPORTANT

- DO NOT remove the USB flash drive or digital camera from the USB direct interface until the machine has finished printing.

NOTE

You can change the default settings for Direct Print by using the Touchscreen when the machine is not in the Direct Print mode. Press 

, and then Direct Print. (See *Direct Print* on page 104.)

2 Driver and Software

Printer driver

A printer driver is software that translates data from the format used by a computer to the format that a particular printer needs. Typically, this format is page description language (PDL).

The printer drivers for the supported versions of Windows® and Macintosh are on the CD-ROM we have supplied (Windows® only) or on the Brother Solutions Center website at http://solutions.brother.com/. Install the drivers by following the steps in the Quick Setup Guide. The latest printer drivers can be downloaded from the Brother Solutions Center website at:

http://solutions.brother.com/

For Windows®

- Windows® printer driver (the recommended printer driver for this product)
- BR-Script printer driver (PostScript® 3™ language emulation) [1]

[1] Install the driver using the Custom Install from the CD-ROM.

For Macintosh [1]

- Macintosh printer driver (the recommended printer driver for this product)
- BR-Script printer driver (PostScript® 3™ language emulation) [2]

[1] To download the printer driver for Macintosh, please visit your model page at http://solutions.brother.com/.

[2] For the installation instruction of the driver, please visit http://solutions.brother.com/.

For Linux® [1] [2]

- LPR printer driver
- CUPS printer driver

[1] For more information and to download the printer driver for Linux, please visit your model page at http://solutions.brother.com/ or use the link on the CD-ROM we have supplied.

[2] Depending on Linux distributions, the driver may not be available or it may be released after the initial release of your model.

Printing a document

When the machine receives data from your computer, it begins printing by picking up paper from the paper tray, multi-purpose tray or optional lower tray. The multi-purpose tray can feed many types of paper and envelopes (see *Paper Tray Capacity* on page 3).

1. From your application, choose the Print command.
   If other printer drivers are installed on your computer, choose **Brother HL-XXXX series** (where XXXX is your model name) as your printer driver from the Print or Print Settings menu in your software application, and then click **OK** or **Print** to begin printing.
2. Your computer sends the print job to the machine. The Touchscreen will display `Printing`.
3. When the machine finishes printing all the jobs, the Touchscreen return to the Home screen.

NOTE

- Select the paper size and orientation in your application software.
- If your application software does not support your custom paper size, choose the next largest paper size.
- Then adjust the print area by changing the right and left margins in your application software.

Printer driver settings

You can change the following printer settings when printing from your computer:

	Windows® printer driver	BR-Script printer driver for Windows®	Macintosh Printer Driver	BR-Script printer driver for Macintosh
Paper Size	✓	✓	✓	✓
Orientation	✓	✓	✓	✓
Copies	✓	✓	✓	✓
Media Type	✓	✓	✓	✓
Print Quality	✓	✓	✓	✓
Document Type	✓			
Colour/Mono	✓	✓	✓	✓
Multiple Page	✓	✓	✓	✓
2–sided [1] / Booklet [2]	✓	✓	✓	✓
Paper Source	✓	✓	✓	✓
Scaling	✓	✓	✓	✓
Reverse Print	✓		✓	✓
Use Watermark	✓			
Header-Footer Print	✓			
Toner Save Mode	✓	✓	✓	✓
Secure Print	✓	✓	✓	✓
Administrator	✓			
User Authentication	✓			
Colour Calibration	✓			
Sleep Time	✓	✓	✓	✓
Improve Print Output	✓	✓	✓	✓
Skip Blank Page	✓		✓	
Print Text in Black	✓			
Print Archive	✓			
Print Profile	✓			

[1] Manual 2-sided printing is not available with the BR-Script printer driver for Windows®.

[2] Booklet is not available with the Macintosh printer driver and the BR-Script printer driver for Macintosh.

Windows®

Accessing the printer driver settings

1. (For Windows® XP and Windows Server® 2003)
   Click **Start** > **Printers and Faxes**.
   (For Windows Vista® and Windows Server® 2008)
   Click the  (**Start**) button > **Control Panel** > **Hardware and Sound** > **Printers**.
   (For Windows® 7 and Windows Server® 2008 R2)
   Click the  (**Start**) button > **Devices and Printers**.
   (For Windows® 8 and Windows Server® 2012)
   Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Settings** > **Control Panel**. In the **Hardware and Sound** (**Hardware**) group, click **View devices and printers**.
   (For Windows Server® 2012 R2)
   Click **Control Panel** on the **Start** screen. In the **Hardware** group, click **View devices and printers**.
2. Right-click the **Brother HL-XXXX series** icon (where XXXX is your model name) and select **Printer properties** (**Properties**), and **Brother HL-XXXX series** if needed. The printer properties dialog box appears.
3. Click the **General** tab, and then click **Preferences...** (**Printing Preferences...**). To configure the tray settings, click the **Device Settings** tab.

Features in the Windows® printer driver

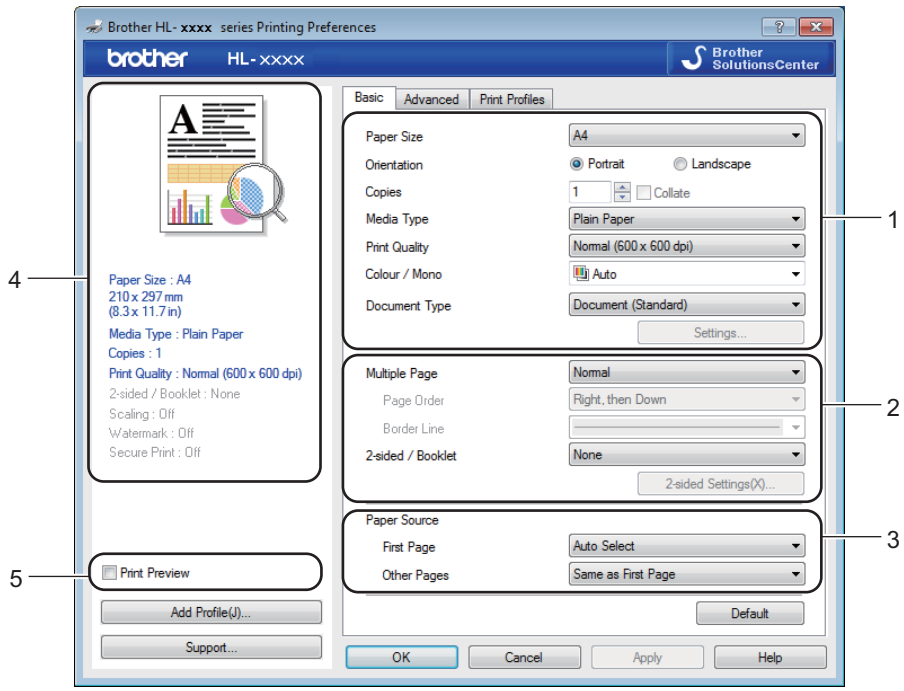
For more information, see the **Help** text in the printer driver.

NOTE

- The screens in this section are from Windows® 7. The screens on your computer will vary depending on your operating system.
- To access the printer driver settings, see *Accessing the printer driver settings* on page 32.

Basic tab

Chanme Layout settings by clicking the illustration on the left side of the **Basic** tab.



1. Choose the **Paper Size**, **Orientation**, **Copies**, **Media Type**, **Print Quality**, **Colour / Mono** and **Document Type** (1).
2. Choose **Multiple Page** and **2-sided / Booklet** (2).
3. Choose the **Paper Source** (3).
4. Review the displayed list of settings (4).
5. Click **OK** to confirm the settings.
   To return to the default settings, click **Default**, then **OK**.

NOTE

To preview your document before printing, select the **Print Preview** check box (5).

Paper Size

From the drop-down list choose the Paper Size you are using.

Orientation

Orientation selects the position of how your document will be printed (**Portrait** or **Landscape**).

Portrait (Vertical)	Landscape (Horizontal)
	

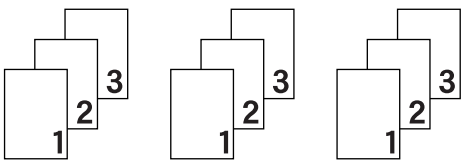
Copies

Click ▲ or ▼ to to enter the number of copies to be printed.

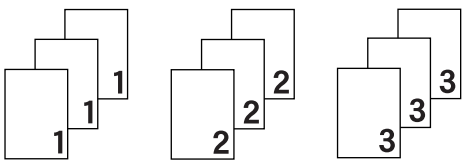
- **Collate**

  With the Collate check box selected, one complete copy of your document will be printed and then repeated for the number of copies you selected. If the Collate check box is not selected, then each page will be printed for all the copies before the next page of the document is printed.

Collate selected



Collate cleared



Media Type

You can use the following types of media in your machine. For the best print quality, select the type of media that matches the paper you are using.

- **Plain Paper**
- **Thin Paper**
- **Thick Paper**
- **Thicker Paper**
- **Bond Paper**
- **Envelopes**
- **Env. Thick**
- **Env. Thin**
- **Recycled Paper**
- **Label**
- **Glossy Paper**

NOTE

- When using ordinary plain paper 60 to 105 g/m^2 choose **Plain Paper**. When using heavier weight paper or rough paper choose **Thick Paper** or **Thicker Paper**. For bond paper, choose **Bond Paper**.
- When using envelopes, choose **Envelopes**. If the toner is not fixed to the envelope correctly when **Envelopes** is selected, choose **Env. Thick**. If the envelope is crumpled when **Envelopes** is selected, choose **Env. Thin**. For more information, see *Paper Tray Capacity* on page 3.
- When **Label** is selected in the printer driver, the machine will feed the paper from the MP tray, even if **MP Tray** is not selected as the paper source.

Print Quality

Choose one of the following print quality settings:

■ **Normal (600 x 600 dpi)**

600×600 dpi. Recommended for ordinary printing. Use this mode for good print quality with reasonable print speeds.

■ **Fine (2400 dpi class)**

2400 dpi class. The finest print mode. Use this mode to print precise images such as photographs. Since the print data is much larger than in Normal mode, processing time / data transfer time and print time will be longer.

NOTE

The print speed will change depending on the print quality setting you choose. Higher print quality takes longer to print, while lower print quality takes less time to print.

Colour / Mono

You can change the Colour/Mono settings in the printer driver as follows:

■ **Auto**

The machine checks the content of the document for colour. If colour is detected anywhere in the document, it will print the whole of the document using all the colours. In other words, it will mix some of the toners to help achieve every shade detected in the document, increasing the density of toner applied to the page. If no colour content is detected, it will print the document in monochrome. The default setting on your machine is **Auto**.

■ **Colour**

Whether the document contains colour or just monochrome, your machine will print the document using all the colours.

■ **Mono**

Select **Mono** if the document has only black and greyscale text and objects. If your document contains colour, then selecting **Mono** means it will print the document in 256 levels of grey using only the black toner.

NOTE

- The machine's colour sensor is very sensitive and may perceive faded black text or an off-white background as colour. If you know that your document is black and white and you want to conserve colour toner, select **Mono** mode.
- If either the Cyan, Magenta or Yellow toner reaches the end of its life while printing a colour document, the print job cannot be completed. You can cancel your print job and choose to start the print job again in **Mono** mode, as long as Black toner is available.

Document Type

Use **Document Type** to select the optimal settings for printing the relevant type of data.

■ **Document (Standard)**

Use this mode for printing a combination of graphics and text.

■ **Photo / Image**

Use this mode for printing photos or images.

■ **Document (Mixed)**

Use this mode for printing combinations of graphics/text and photos/images.

NOTE

Choosing **Document (Mixed)** may take longer to print the document.

■ **Manual**

Choosing **Manual** allows you to select the settings manually by clicking the **Settings** button.

Settings dialog box

To change the following settings, click **Settings...** in the **Basic** tab.

■ **Colour Mode**

The following options are available in colour Matching mode:

- **Normal**

  This is the default colour mode.

- **Vivid**

  The colour of all elements are adjusted to become a brighter colour.

- **Auto**

  The printer driver selects the **Colour Mode** type.

NOTE

Choosing **Auto** may take longer to print the data.

- **None**

- **Import...**

  To adjust the print configuration of a particular image, click **Settings**. When you have finished adjusting the image parameters, such as brightness and contrast, import those settings as a print configuration file. Use the **Export...** option to create a print configuration file from the current settings.

- **Export...**

  To adjust the print configuration of a particular image, click **Settings**. When you have finished adjusting the image parameters, such as brightness and contrast, export those settings as a print configuration file. Use the **Import...** option to load a previously exported configuration file.

- **Improve Grey Colour**

  You can improve the image quality of a shaded area.

- **Enhance Black Printing**

  If a black graphic does not print correctly, choose this setting.

- **Improve Thin Line**

  You can improve the image quality of thin lines.

- **Improve Pattern Printing**

  Select this option if printed fills and patterns are different from the patterns and fills you see on your computer.

Multiple Page

The Multiple Page selection can reduce the image size of a page to allow multiple pages to be printed on one sheet of paper or to enlarge the image size for printing one page on multiple sheets of paper.

- **Page Order**

  When the N in 1 option is selected, the page order can be selected from the drop-down list.

- **Border Line**

  When using the Multiple Page feature to print multiple pages on one sheet, you can choose to have a solid border, dash border or no border around each page on the sheet.

- **Print cut-out line**

  When the 1 in NxN pages option is selected, the **Print cut-out line** option can be selected. This option allows you to print a faint cut-out line around the printable area.

2-sided / Booklet

To print a booklet or do 2-sided printing, use this option.

■ **None**

Disable 2-sided printing.

■ **2-sided** / **2-sided (Manual)**

To do 2-sided printing, use these options.

- **2-sided**

  The machine prints on both sides of the paper automatically.

- **2-sided (Manual)**

  The machine prints all the even numbered pages first. Then the printer driver will stop and display the instructions required to re-insert the paper. When you click **OK** the odd numbered pages will be printed.

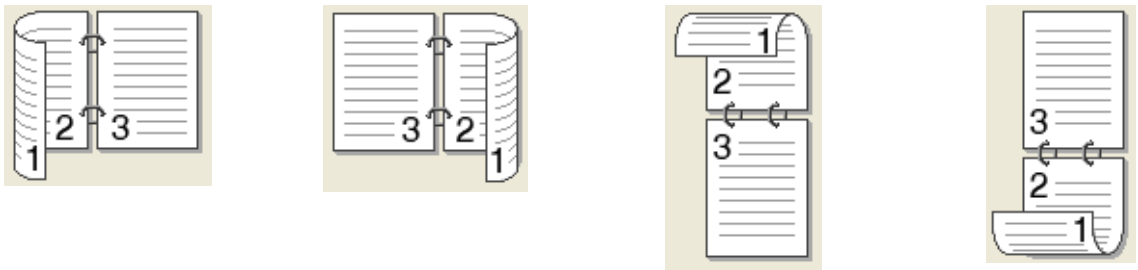
When you choose **2-sided** or **2-sided (Manual)**, the **2-sided Settings...** button becomes available to choose. You can choose from the following options in the **2-sided Settings** dialog box:

- **2-sided Type**

  There are four types of 2-sided binding directions available for each orientation.

Portrait

Long Edge (Left) **Long Edge (Right)** **Short Edge (Top)** **Short Edge (Bottom)**



Landscape

Long Edge (Top) **Long Edge (Bottom)** **Short Edge (Right)** **Short Edge (Left)**



- **Binding Offset**

  When you check **Binding Offset**, you can also specify the offset for binding in inches or millimetres.

■ Booklet / Booklet (Manual)

Use this option to print a document in booklet format using 2-sided printing; it will arrange the document according to the correct page number and allow you to fold at the centre of the print output without having to change the order of the page numbers.

- **Booklet**

  The machine prints on both sides of the paper automatically.

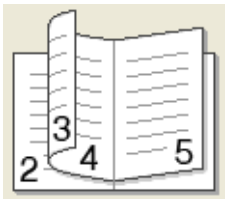
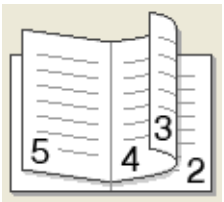
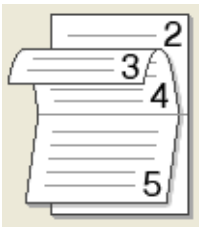
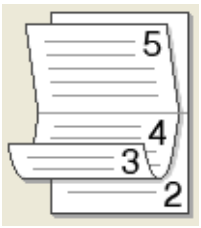
- **Booklet (Manual)**

  The machine prints all the even numbered sides first. Then the printer driver will stop and display the instructions required to reload the paper. When you click **OK** the odd numbered sides will be printed.

When you choose **Booklet** or **Booklet (Manual)**, the **2-sided Settings...** button becomes available to choose. You can choose the following settings in the **2-sided Settings** dialog box.

- **2-sided Type**

  There are two types of 2-sided binding directions available for each orientation.

Portrait		Landscape	
Left Binding	**Right Binding**	**Top Binding**	**Bottom Binding**
			

- **Booklet Printing Method**

  When **Divide into Sets** is selected:

  This option allows you to print the whole booklet in smaller individual booklet sets, and it still allows you to fold at the center of the smaller individual booklet sets without having to change the order of the page numbers. You can specify the number of sheets in each smaller booklet, from 1 to 15. This option is helpful for folding a printed booklet that has a large number of pages.

- **Binding Offset**

  Check **Binding Offset** to specify the offset for binding in inches or millimetres.

Paper Source

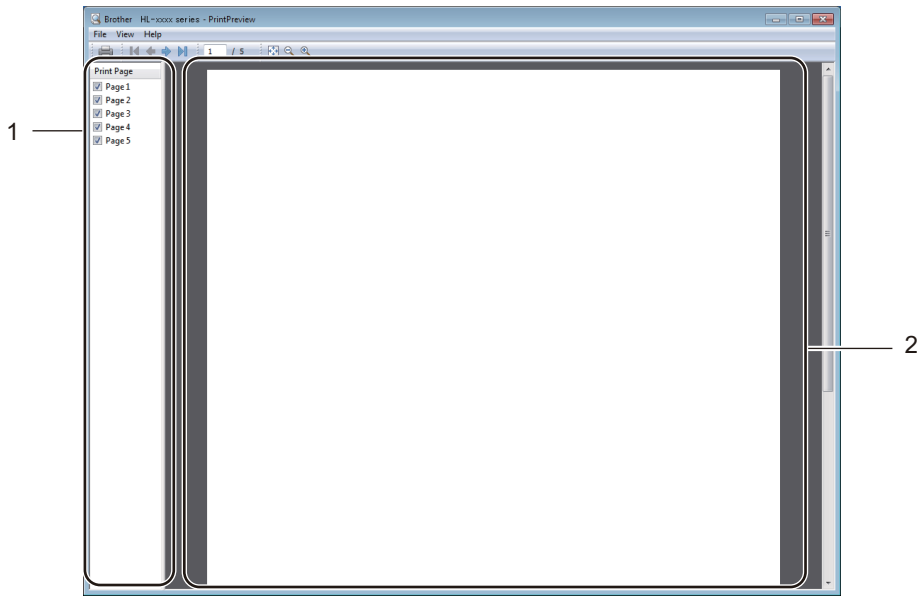
You can choose **Auto Select**, **Tray1**, **Tray2** [1] [2] or **MP Tray** and specify separate trays for printing the first page and for printing from the second page onward.

[1] Available if the optional tray is installed.

[2] Tray 2 is standard on HL-L9200CDWT.

Print Preview

Preview a document before it is printed. If you check the **Print Preview** check box the Print Preview Viewer window will open before printing starts.



■ (1) **Page List Area**

The Page List Area displays the page numbers for the actual pages that will be printed. If you choose a page in this list, a preview of the print results for the page will be displayed in the Preview Area. If you do not want to print a page, clear the check box.

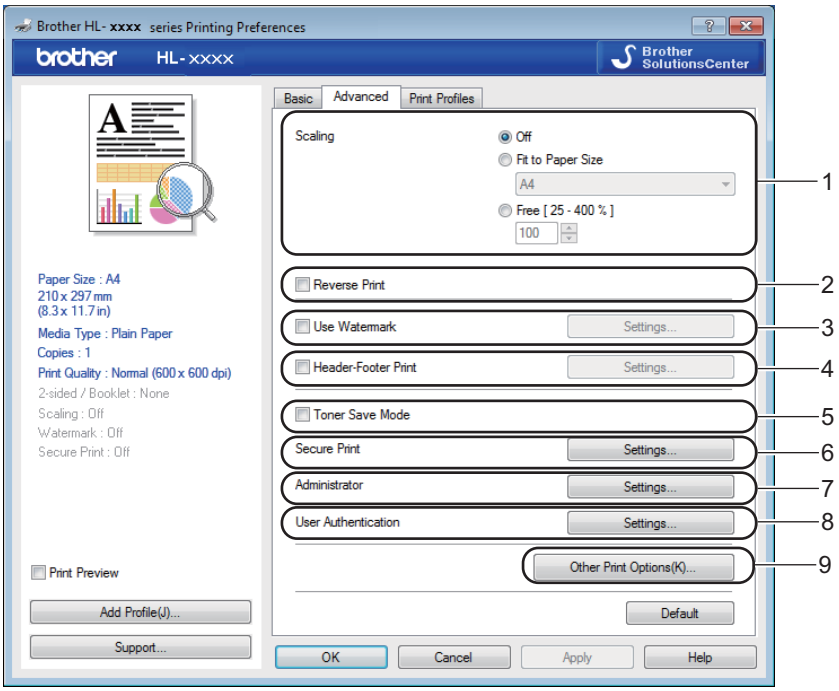
■ (2) **Preview Area**

The Preview Area displays a preview of the print results for the pages chosen in the Page List Area.

NOTE

- If the **Booklet** setting was selected in the Printer driver settings, you cannot use the Print Preview option.
- If the **2-sided** setting was selected in the Printer driver settings, you cannot delete pages using the Page List Area.

Advanced tab



Change the tab settings by clicking the following settings:

- (1) **Scaling**
- (2) **Reverse Print**
- (3) **Use Watermark**
- (4) **Header-Footer Print**
- (5) **Toner Save Mode**
- (6) **Secure Print**
- (7) **Administrator**
- (8) **User Authentication**
- (9) **Other Print Options**

Scaling

Select an option to change the scale of the printed image.

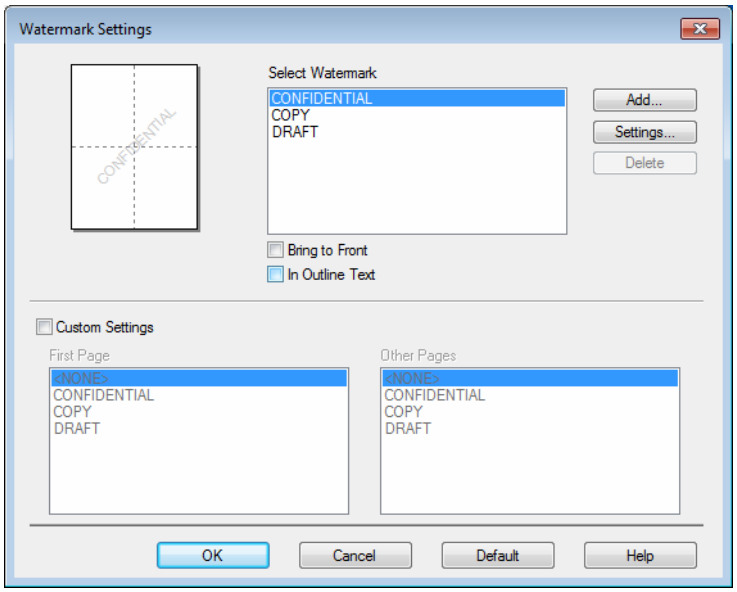
Reverse Print

Select **Reverse Print** to rotate the page 180 degrees.

Use Watermark

Add a logo or text to your document as a watermark. Choose one of the preset Watermarks, or use an image file that you have created. Check **Use Watermark**, and then click the **Settings...** button.

Watermark Settings



- **Bring To Front**

  Select this check box to overlay the selected characters or image onto your printed document.

- **In Outline Text**

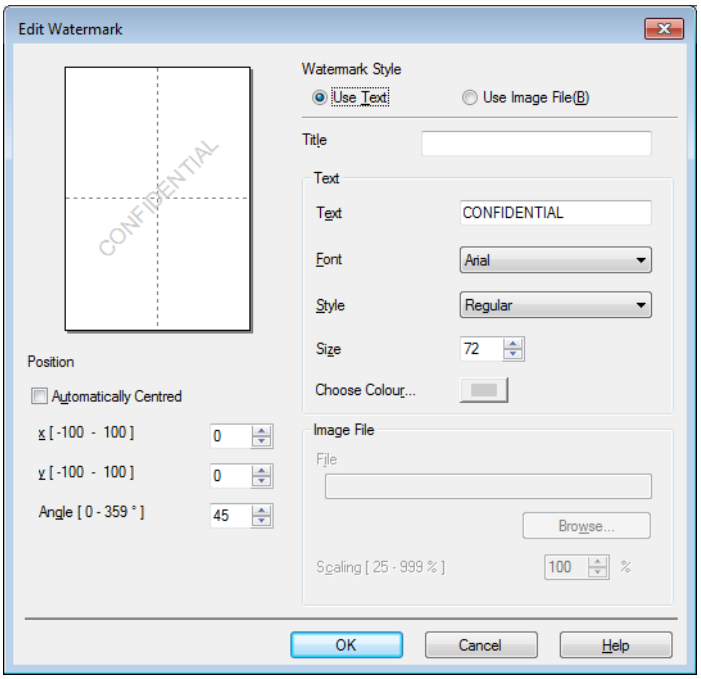
  Select this check box if you want to print only an an outline of a text watermark.

- **Custom Settings**

  Select this check box if you want to print one watermark on the first page and a different watermark on the following pages.

Edit Watermark

Click the **Add** button to add the watermark settings, and then choose **Use Text** or **Use Image File** in **Watermark Style**.



- **Title**

  Type an appropriate title for the watermark.

- **Text**

  Type your Watermark Text into the **Text** box, and then choose the **Font**, **Style**, **Size** and **Choose Colour...**.

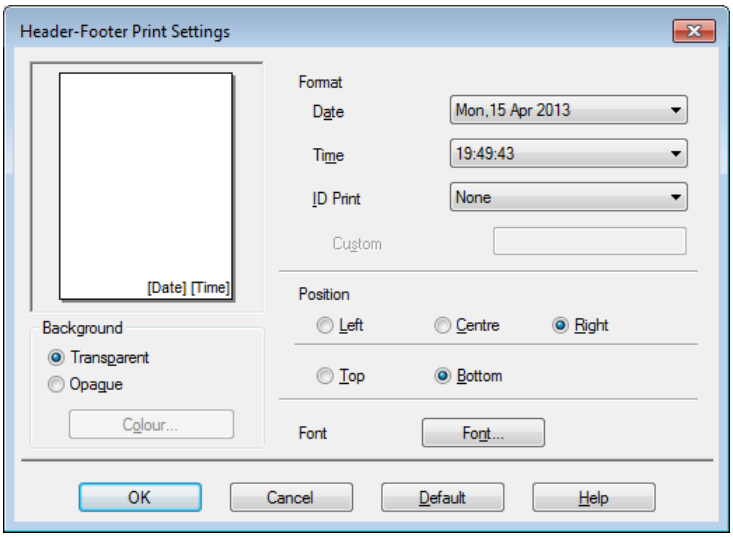
- **Image File**

  Type the file name and location of the Image File you want to use as the Watermark in **File**, or click **Browse** to search for the file. Bitmap, JPEG and PNG file formats are supported. The scaling of the image can be adjusted from 25 - 999%.

- **Position**

  Use this setting to control the position of the watermark on the page.

Header-Footer Print



When this feature is enabled, it will print the date and time on your document from your computer's system clock and the computer login user name or the text you typed. Click **Settings** to customize.

■ **ID Print**

Select **Login User Name** to print your computer login user name. To print a different name, select **Custom** and type a name in the **Custom** text box.

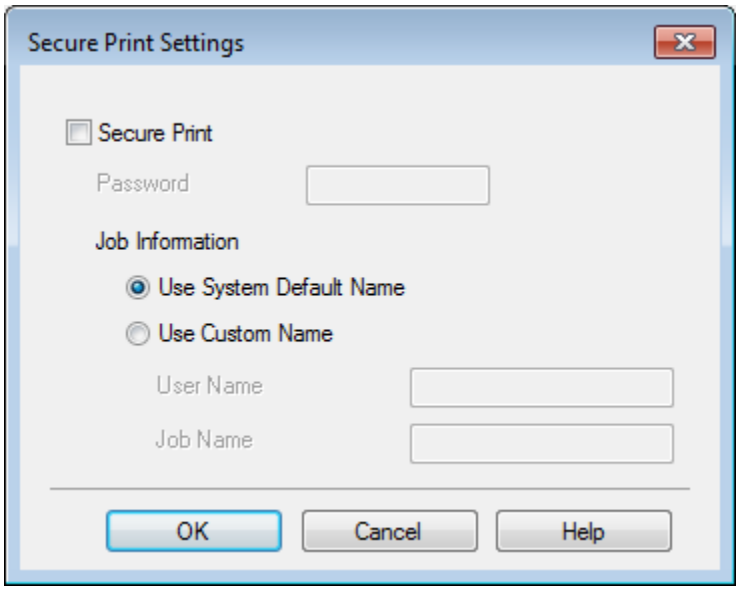
Toner Save Mode

Conserve toner use with this feature. When you set **Toner Save Mode** to On, print appears lighter. The default setting is Off (unchecked).

NOTE

We do not recommend **Toner Save Mode** for printing photo or greyscale images.

Secure Print



Secure documents are documents that are password-protected when they are sent to the machine. Only the people who know the password will be able to print them. Since the documents are secured at the machine, you must enter the password using the Touchscreen of the machine to print them.

To send a secured document:

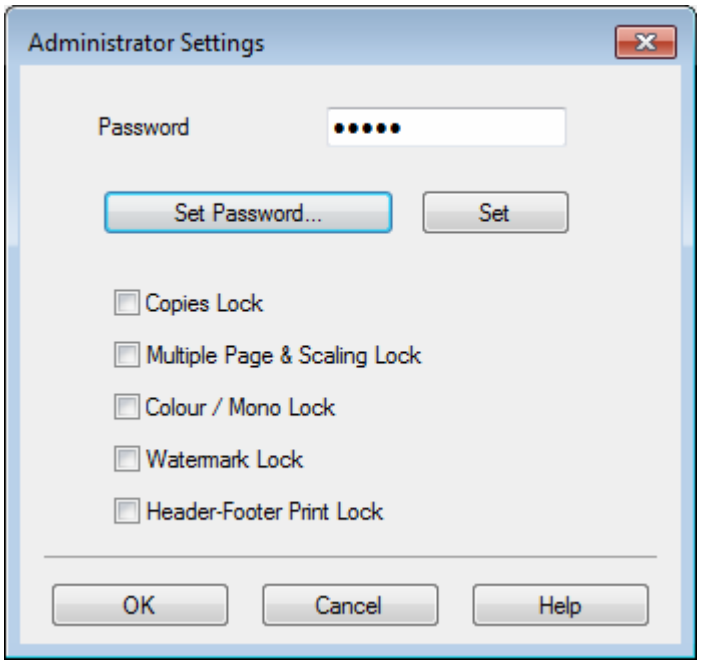
1. Click **Settings...** from **Secure Print** and check **Secure Print**.
2. Enter your password and click **OK**.
3. To print a secured document, you must enter your password using the Touchscreen of the machine (see *Printing Secure documents* on page 109).

To delete a secured document:

You must use the Touchpanel of the machine to delete a secured document (see *Printing Secure documents* on page 109).

Administrator

Administrators have the authority to limit access to settings such as scaling and watermark.



■ **Password**

Type the password in this box.

NOTE

Click **Set Password...** to change the password.

■ **Copies Lock**

Select this check box to lock the Copies selection in the Basic tab to prevent users from printing multiple copies.

■ **Multiple Page & Scaling Lock**

Select this check box to lock the multiple page and scaling settings.

■ **Colour / Mono Lock**

Select this check box to lock the Colour/Mono settings as Mono to prevent colour printing.

■ **Watermark Lock**

Select this check box to lock the settings of the Watermark option to prevent changes being made.

■ **Header-Footer Print Lock**

Select this check box to lock the settings of the Header-Footer Print option to prevent changes being made.

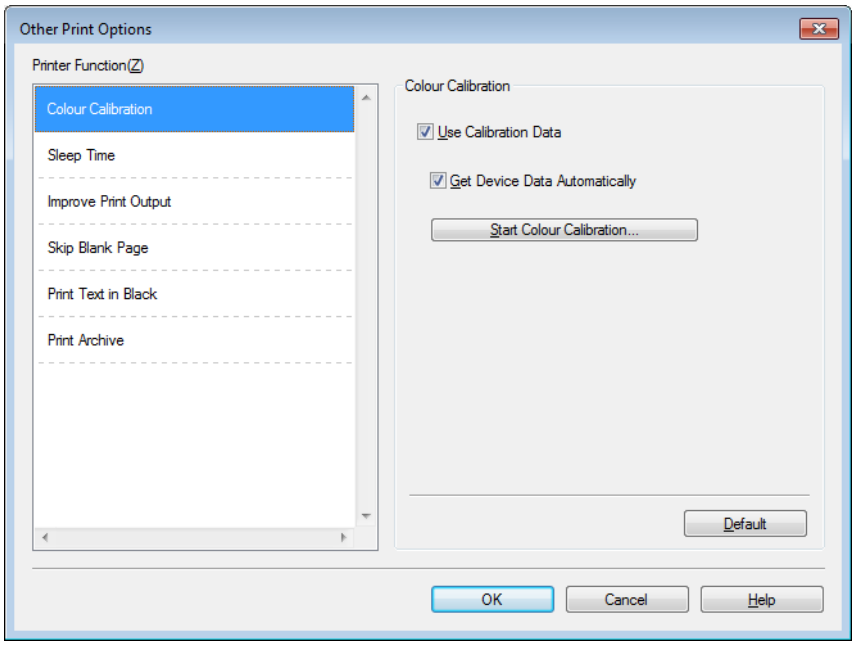
User Authentication

If you are restricted from using computer to print by the Secure Function Lock feature, you can check your current print status. Click **Check Print Status** to see your computer login name information, such as the restricted features and the remaining number of pages you are allowed to print when you are using the machine on a network. The **Authentication result** dialog box appears.

To cause the **Authentication result** dialog box to open each time you print, select the **Show print status before printing** check box.

For more information about Secure Function Lock, see the Network User's Guide

Other Print Options



You can set the following in **Printer Function**:

- **Colour Calibration**
- **Sleep Time**
- **Improve Print Output**
- **Skip Blank Page**
- **Print Text in Black**
- **Print Archive**

Colour Calibration

The output density of each colour may vary depending on the temperature and humidity of the machine's environment. This setting helps you improve colour density by letting the printer driver use the colour calibration data stored in your machine.

■ **Use Calibration Data**

If you select this check box, the printer driver will use the calibration data retrieved from the machine to set colour matching in the printer driver. This will ensure consistent print quality.

■ **Get Device Data Automatically**

If you select this check box, the printer driver will use the colour calibration data from your machine.

■ **Start Colour Calibration**

If you click this button, your machine will start the colour calibration process, and then the printer driver will use the calibration data from your machine.

Sleep Time

When the machine does not receive data for a certain period of time, it enters Sleep mode. In Sleep mode, the machine acts as though it were turned off. When you choose Printer Default, the timeout setting will be reset to the specific time set at the factory; this can be altered in the driver. Intelligent Sleep mode adjusts to the most appropriate timeout setting depending on the frequency of your machine use.

While the machine is in Sleep mode, the Touchscreen's backlight turns off, but the machine can still receive data. Receiving a print job will wake up the machine to start printing.

Improve Print Output

This feature allows you to improve a print quality problem.

■ **Reduce Paper Curl**

Select this setting to reduce paper curl.

If you are printing only a few pages, you do not have to choose this setting. We recommend changing the printer driver setting in **Media Type** to a thin setting.

NOTE

This operation will decrease the temperature of the machine's fusing process.

■ **Improve Toner Fixing**

Select this setting to improve the toner fixing capabilities. If this selection does not provide enough improvement, change the printer driver setting in **Media Type** to a thick setting.

NOTE

This operation will increase the temperature of the machine's fusing process.

Skip Blank Page

If **Skip Blank Page** is selected, the printer driver detects blank pages and excludes them from printing.

NOTE

This option does not work with the following options:

- **Use Watermark**
- **Header-Footer Print**
- **N in 1** and **1 in NxN Pages** in **Multiple Page**
- **2-sided (Manual)**, **Booklet**, **Booklet (Manual)** and **2-sided** with **Binding Offset** in **2-sided / Booklet**

Print Text in Black

Select this option to print all text in Black only.

NOTE

It may not work with certain characters.

Print Archive

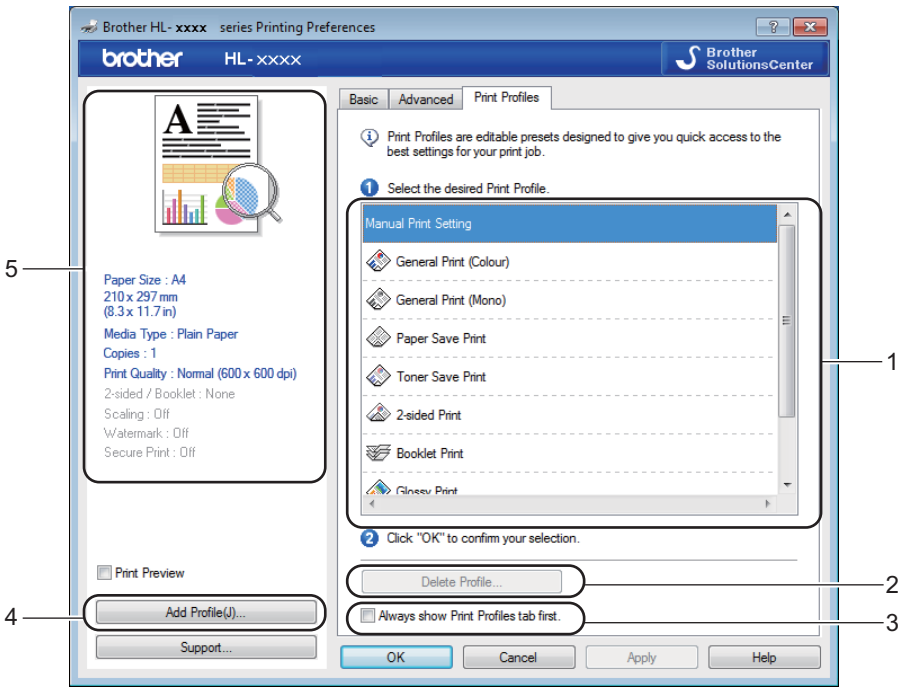
A copy of your printout can be saved as a PDF file to your computer. To change the file size, move the **File Size** slider to the right or left. The resolution is set according to the file size.

NOTE

By enabling this feature, there may be a longer wait before your machine begins printing.

Print Profiles tab

Print Profiles are editable presets designed to give you quick access to frequently used printing configurations.



- (1) **Print profile list box**
- (2) **Delete Profile**
- (3) **Always show Print Profiles tab first**
- (4) **Add Profile**
- (5) **Current print profile view**

1. Choose your profile from the print profile list box.
2. To display the **Print Profiles** tab at the front of the window every time you print, click **Always show Print Profiles tab first**.
3. Click **OK** to apply your chosen profile.

Add Profile

Click the **Add Profile** button to display the **Add Profile** dialog box. Add up to 20 new profiles with your preferred settings.

1. Type a title in **Name**.
2. Choose an icon you want to use from the Icon list, then click **OK**.
3. The settings shown on the left side of the printer driver window will be saved.

Delete Profile

Click **Delete Profile** to display the **Delete Profile** dialog box. You can delete any of the profiles you have added.

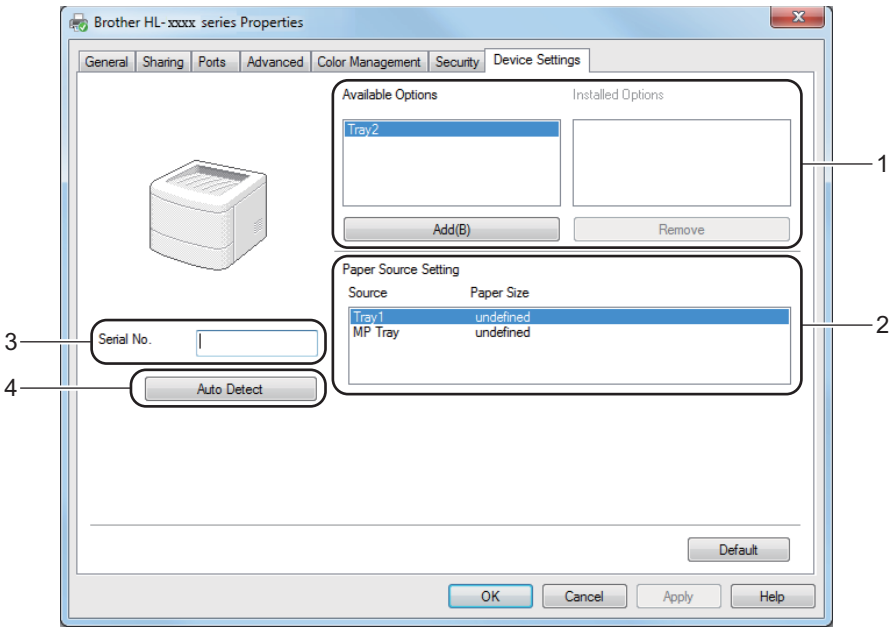
1. Choose your profile from the print profile list box.
2. Click **Delete**.
3. The selected profile will be deleted.

Device Settings tab

NOTE

To access the **Device Settings** tab, see *Accessing the printer driver settings* on page 32.

You can define the paper size for each paper tray and auto detect the serial number in the **Device Settings** tab as follows.



- (1) **Available Options** / **Installed Options**

  You can manually add and remove the options that are installed on the machine. Tray settings will match the installed options.

- (2) **Paper Source Setting**

  Click the **Auto Detect** (4) button to detect and display the machine's serial number and paper size setting for the paper trays.

- (3) **Serial No.**

  By clicking **Auto Detect** (4), the printer driver will probe the machine and display its serial number. If it fails to receive the information, the screen displays “----------”.

- (4) **Auto Detect**

  The **Auto Detect** setting finds the currently installed optional devices and displays the available options in the printer driver. When you click **Auto Detect**, options that are installed on the machine will be listed in **Available Options** (1). Manually add or remove the options by choosing an optional device you want to add or remove, and then clicking **Add** or **Remove**.

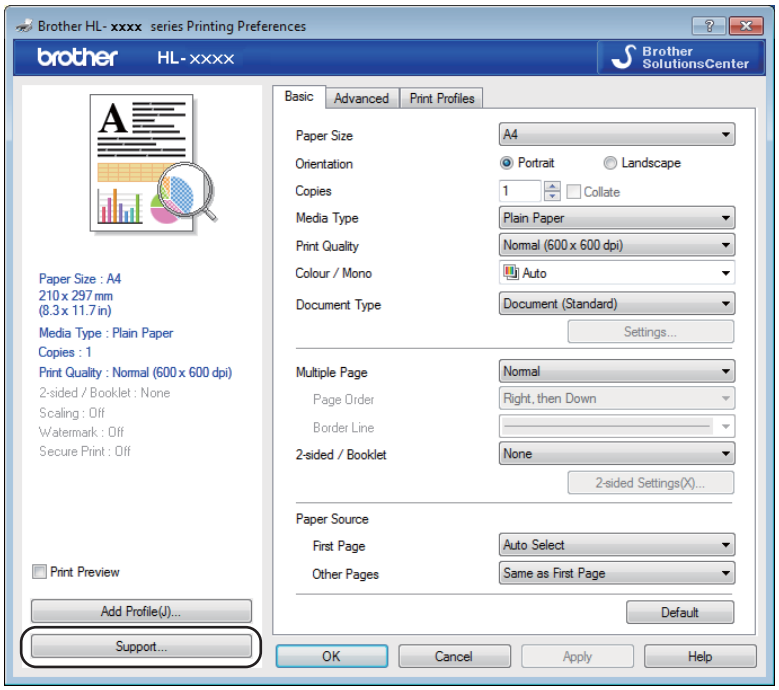
NOTE

The **Auto Detect** (4) setting is not available under the following machine conditions:

- The machine is turned off.
- The machine is in an error state.
- The machine is connected to the print server using a USB cable in a shared network environment.
- The cable is not connected to the machine correctly.

Support

Click **Support...** in the **Printing Preferences** dialog box.





■ (1) **Brother Solutions Center**

Click this button to visit the Brother Solutions Center website (http://solutions.brother.com/) for information about your Brother product including FAQs (Frequently Asked Questions), User's Guides, driver updates and tips for using your machine.

- (2) **Original Supplies Website**

  Click this button to visit our website for original Brother supplies.
- (3) **Brother CreativeCenter**

  Click this button to visit our website for free online solutions for business and home users.
- (4) **Print Settings**

  Click this button to print pages that show how the internal settings of the machine have been configured.
- (5) **Check Setting...**

  Click this button to check the printer driver settings.
- (6) **About...**

  Click this button to view a list of the printer driver files and version information.

BR-Script 3 printer driver features (PostScript® 3™ language emulation)

NOTE

The screens in this section are from Windows® 7. The screens on your computer may vary depending on your operating system.

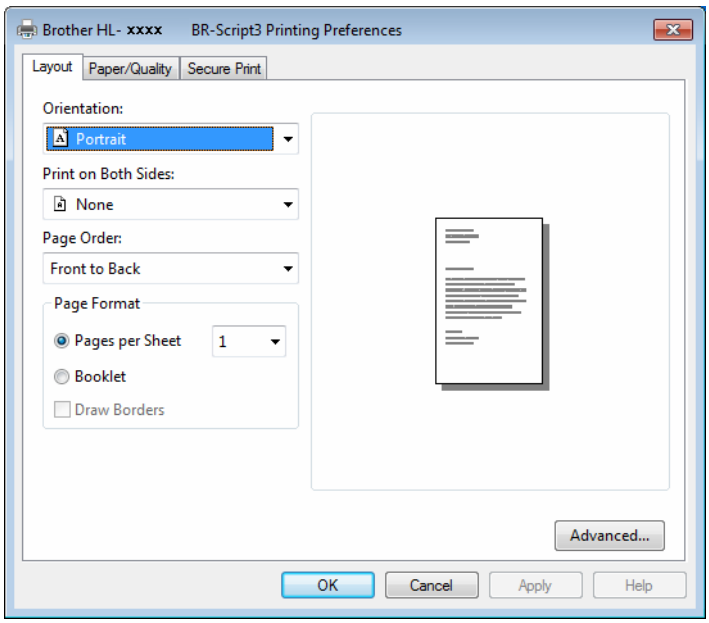
Printing Preferences

NOTE

To access the **Printing Preferences** dialog box, click **Preferences...** in the **General** tab of the **Brother HL-XXXX BR-Script3 Properties** dialog box.

■ **Layout** tab

Change the layout by choosing the settings for **Orientation**, **Print on Both Sides** (2-sided), **Page Order** and **Pages per Sheet**.



- **Orientation**

  Orientation selects the position of your document on the printed page.

  Portrait
  Landscape
  Rotated Landscape

- **Print on Both Sides**

  To do 2-sided printing, choose **Flip on Short Edge** or **Flip on Long Edge**.

- **Page Order**

  Specify the order in which the pages of your document will be printed. **Front to Back** prints the document so that page 1 is on top of the stack. **Back to Front** prints the document so that page 1 is on the bottom of the stack.

- **Pages per Sheet**

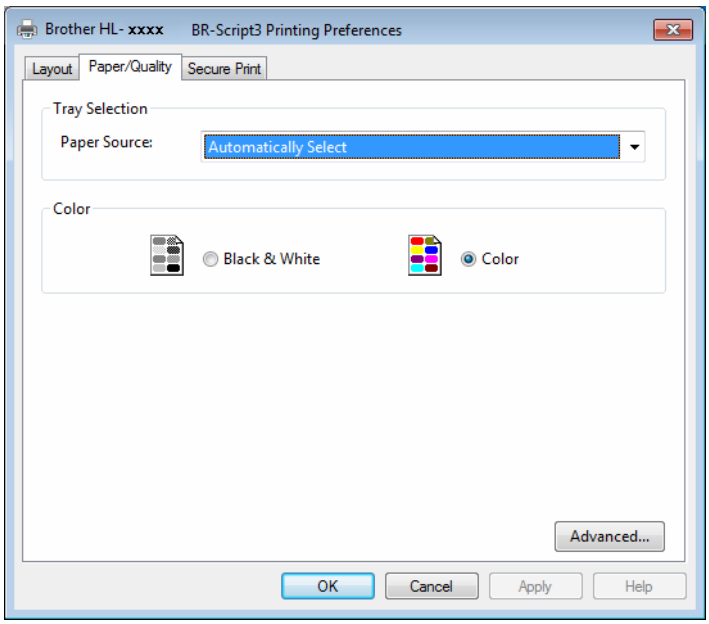
  Click **Pages per Sheet** to reduce the image size of a page by allowing multiple pages to be printed on one sheet of paper. Select **Booklet** to print a document in the booklet style.

- **Draw Borders**

  Select this check box to add a border.

■ **Paper/Quality** tab

Choose the **Paper Source**.



- **Paper Source**

  Automatically Select
  Auto Select by Printer
  Tray1
  Tray2 [1] [2]
  MP Tray

  Automatically Select

  Select this option to pull paper from any paper source that has a paper size defined in the printer driver that matches your document.

  Auto Select by Printer

  Select this option to pull paper from any paper source that has a paper size defined in the machine that matches your document.

  Tray1

  Select this option to pull paper from Tray 1.

  Tray2

  Select this option to pull paper from Tray 2. (Available if the optional tray is installed.) [2]

MP Tray

Select this option to pull paper from the multi-purpose tray. The paper size in the multi-purpose tray must match the size defined in the printer driver.

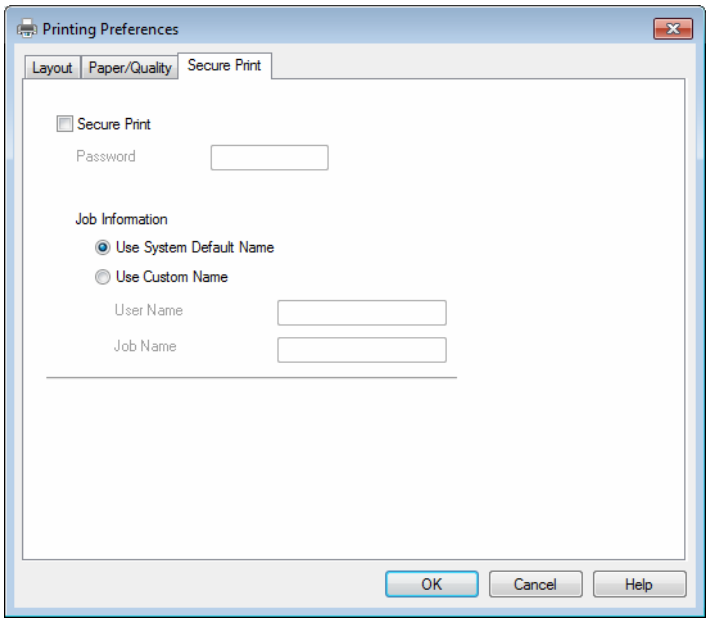
[1] Available if the optional tray is installed.

[2] Standard equipment.

- **Color**

  Select either Black & White or Color.

■ **Secure Print** tab



Secure documents are documents that are password protected when they are sent to the machine. Only the people who know the password will be able to print them. Since the documents are secured at the machine, you must enter the password using the Touchscreen of the machine to print them.

To send a secured document:

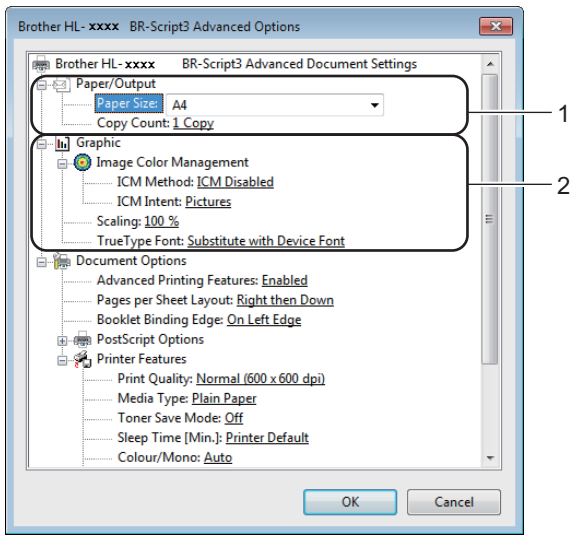
1. Check **Secure Print**.
2. Type your password and click **OK**.
3. To print the secured document, you must enter your password using the Touchscreen of the machine (see *Printing Secure documents* on page 109).

To delete a secured document:

You must use the Touchpanel of the machine to delete a secured document (see *Printing Secure documents* on page 109).

Advanced options

Access the **Advanced options** by clicking the **Advanced...** button on the **Layout** tab or **Paper/Quality** tab.



1. Choose the **Paper Size** and **Copy Count** (1).

   ■ **Paper Size**

   From the drop-down list choose the size of paper you are using.

   ■ **Copy Count**

   The copy selection sets the number of copies that will be printed.

2. Set the **Image Color Management**, **Scaling** and **TrueType Font** settings (2).

   ■ **Image Color Management**

   Specify how to print your colour graphics:

   - If you don't want to enable **Image Color Management**, click **ICM Disabled**.
   - If you want the calculations for colour matching to be performed on the host computer before it sends the document to the machine, click **ICM Handled by Host System**.
   - If you want the calculations for colour matching to be performed on your machine, click **ICM Handled by Printer using printer calibration**.

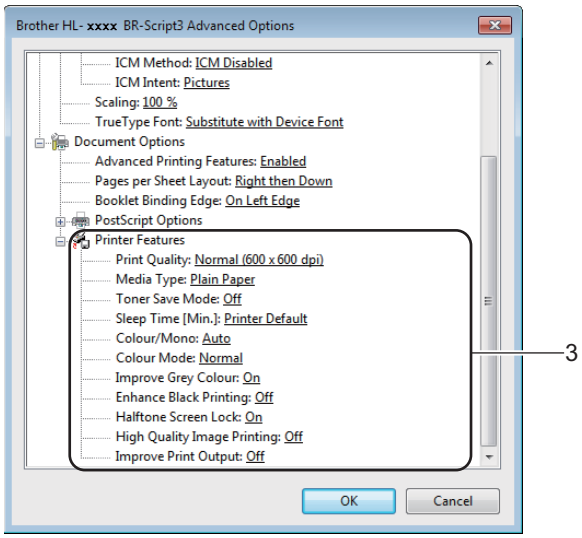
   ■ **Scaling**

   Specify whether to reduce or enlarge documents, and by what percentage.

   ■ **TrueType Font**

   Specify the TrueType font options. Click **Substitute with Device Font** (the default) to use equivalent printer fonts for printing documents that contain TrueType fonts. This will permit faster printing; however, you might lose special characters not supported by the printer font. Click **Download as Softfont** to download TrueType fonts for printing instead of using printer fonts.

c Change settings by choosing a setting in the **Printer Features** list (3):



■ **Print Quality**

Choose one of the following print quality settings:

- **Normal (600 x 600 dpi)**

  600 dpi class. Recommended for ordinary printing. Use this mode for good print quality with reasonable print speeds.

- **Fine (2400 dpi class)**

  2400 dpi class. The finest print mode. Use this mode to print precise images such as photographs. Since the print data is much larger than in Normal mode, processing time, data transfer time, and print time will be longer.

■ **Media Type**

You can use the following types of media in your machine. For the best print quality, select the type of media you are using.

- **Plain Paper**
- **Thin Paper**
- **Thick Paper**
- **Thicker Paper**
- **Bond Paper**
- **Envelopes**
- **Env. Thick**
- **Env. Thin**
- **Recycled Paper**
- **Label**
- **Glossy Paper**

■ **Toner Save Mode**

Conserve toner use with this feature. When you set **Toner Save Mode** to **On**, print appears lighter. The default setting is **Off**.

NOTE

We do not recommend **Toner Save Mode** for printing Photo or greyscale images.

■ **Sleep Time [Min.]**

When the machine does not receive data for a certain period of time, it enters Sleep mode. In Sleep mode, the machine acts as though it were turned off. When you choose **Printer Default**, the timeout setting will be reset to the specific time set at the factory; this can be altered in the driver.

While the machine is in Sleep mode, the Touchscreen's backlight turns off, but the machine can still receive data. Receiving a print job will wake up the machine to start printing.

■ **Colour / Mono**

You can change the Colour/Mono settings in the printer driver as follows:

- **Auto**

  The machine checks the content of the document for colour. If colour is detected anywhere in the document, it will print the whole of the document using all the colours. In other words, it will mix some of the toners to help achieve every shade detected in the document, increasing the density of toner applied to the page. If no colour content is detected, it will print the document in monochrome. The default setting on your machine is **Auto**.

- **Colour**

  Whether the document contains colour or just monochrome, your machine will print the document using all the colours.

- **Mono**

  Select this mode if the document has only black and greyscale text and objects. If your document contains colour, then selecting **Mono** means it will print the document in 256 levels of grey using only the black toner.

NOTE

- The machine’s colour sensor is very sensitive and may perceive faded black text or an off-white background as colour. If you know that your document is black and white and you want to conserve colour toner, select **Mono** mode.
- If either the Cyan, Magenta or Yellow toner reaches the end of its life while printing a colour document, the print job cannot be completed. You can cancel your print job and choose to start the print job again in **Mono** mode, as long as Black toner is available.

■ **Colour Mode**

The following options are available in Colour Matching mode:

- **Normal**

  This is the Default colour mode.

- **Vivid**

  The colour of all elements are adjusted to become a more vivid colour.

- **None**

■ **Improve Grey Colour**

You can improve the image of a shaded area.

■ **Enhance Black Printing**

If a black graphic does not print correctly, choose this setting.

■ **Halftone Screen Lock**

This lock stops other applications from modifying the Halftone settings. The default setting is **On**.

■ **High Quality Image Printing**

You can get high quality image printing. If you set **High Quality Image Printing** to **On**, the print speed will be slower.

■ **Improve Print Output**

This feature allows you to improve a print quality problem.

- **Reduce Paper Curl**

  If you choose this setting, the paper curl may be reduced. If you are printing only a few pages, you do not have to choose this setting. We recommend changing the printer driver setting in **Media Type** to a thin setting.

NOTE

This operation will decrease the temperature of the machine's fusing process.

- **Improve Toner Fixing**

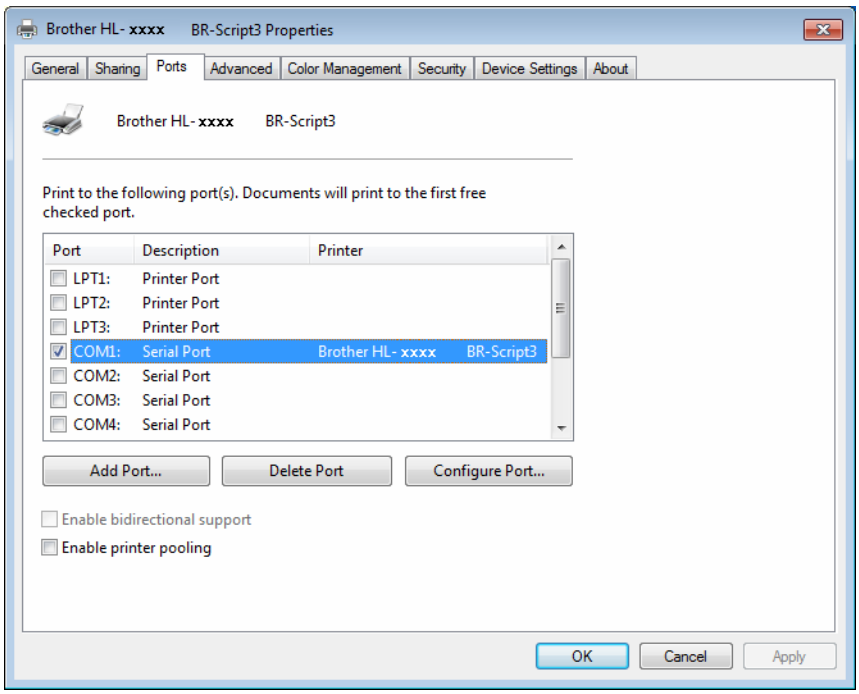
  If you choose this setting, the toner fixing capabilities may be improved. If this selection does not provide enough improvement, change the printer driver setting in **Media Type** to a thick setting.

NOTE

This operation will increase the temperature of the machine's fusing process.

Ports tab

To change the port where your machine is connected or the path to the network machine you are using, choose or add the port you want to use.



Uninstalling the printer driver

Uninstall the printer driver that you have installed with the following steps.

NOTE

- **Uninstall** is not available if you originally installed the printer driver from the Windows **Add a printer** setting.
- After uninstalling, we recommend restarting your computer to remove files that were in use during the uninstall.

(Windows® XP, Windows Vista® and Windows® 7)

1. Click the **Start** button, point to **All Programs**, **Brother**, **Brother Utilities** and then click the drop-down list and select your model name (if not already selected).
2. Click **Uninstall**.
3. Follow the instructions on the screen.

(Windows® 8)

1. Click  (**Brother Utilities**). Brother Utilities screen appears.
2. Click the drop-down list and select your model name (if not already selected).
3. Click **Tools** in the left navigation bar.
4. Click **Uninstall**.

Status Monitor

The Status Monitor utility is a configurable software tool for monitoring the status of one or more devices, allowing you to get immediate notification of errors.



- If you selected the **Enable Status Monitor on startup** check box during installation, you will find the button or the **Status Monitor** icon on the taskbar.
- To show the **Status Monitor** icon on your taskbar, click the button. The **Status Monitor** icon appears in the small window. Drag the icon to the taskbar.



Do one of the following:

- Double-click the icon in the task tray.
- (Windows® XP, Windows Vista® and Windows® 7)

  1. Click **Start** > **All Programs** > **Brother** > **Brother Utilities**. The Brother Utilities screen appears.
  2. Click the drop-down list and select your model name (if not already selected).
  3. Click **Tools** in the left navigation bar.
  4. Click **Status Monitor**.

- (Windows® 8)

  1. Click (**Brother Utilities**). The Brother Utilities screen appears.
  2. Click the drop-down list and select your model name (if not already selected).
  3. Click **Tools** in the left navigation bar.
  4. Click **Status Monitor**.

Troubleshooting

Click the **Troubleshooting** button to access the Brother Solutions Center at http://solutions.brother.com/ and visit FAQs on your model page for instructions.

Looking for replacement supplies?

Click the **Looking for replacement supplies?** button for more information on Brother genuine supplies.

NOTE

The automatic firmware update is active when the status monitor feature is enabled.

Monitoring the machine's status

When you start up your computer, the Brother Status Monitor icon appears on the tasktray.

	A green icon indicates the normal stand-by condition.
	A yellow icon indicates a warning.
	A red icon indicates an error has occurred.
	A grey icon indicates the offline condition.

The **Status Monitor** can be displayed in the tasktray or on the desktop of your computer.

Macintosh

Features in the printer driver (Macintosh)

This machine supports Mac OS X 10.7.5, 10.8.x, 10.9.x.

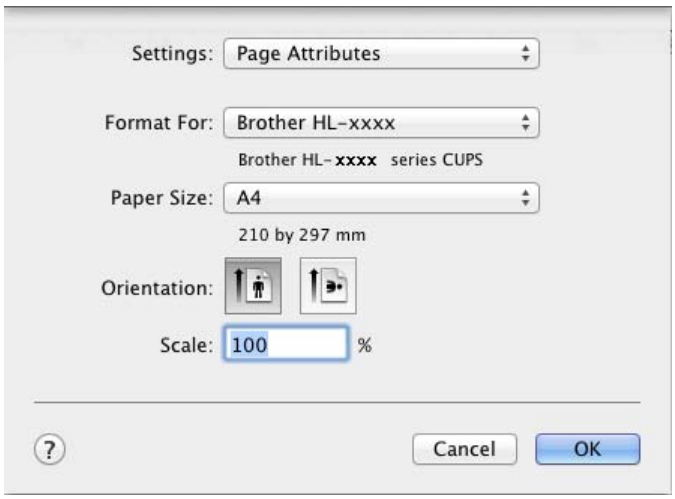
NOTE

The screens in this section are from OS X v10.7.x. The screens on your Macintosh will vary depending on your operating system version.

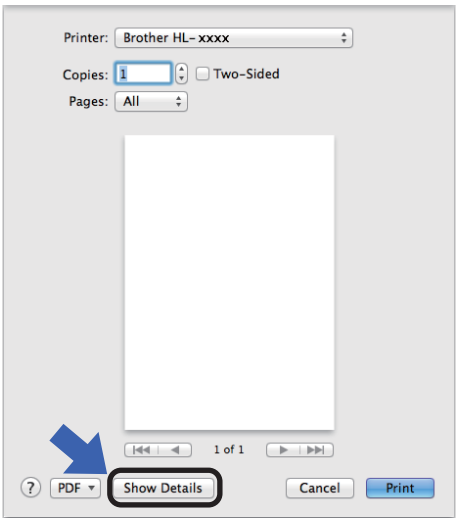
Choosing page setup options

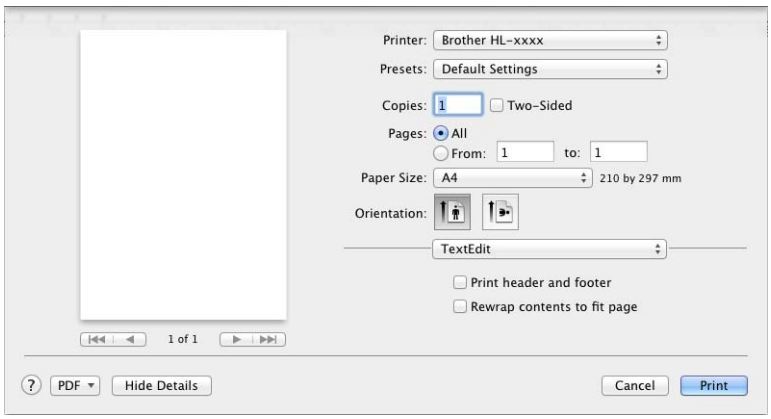
Select the **Paper Size**, **Orientation** and **Scale**.

1. From an application such as TextEdit, click **File**, then **Page Setup**. Make sure **Brother HL-XXXX** (where XXXX is your model name.) is chosen in the **Format For** pop-up menu. Select the settings for **Paper Size**, **Orientation** and **Scale**, then click **OK**.



2 From an application such as TextEdit, click **File**, then **Print** to start printing.
For more page setup options, click the **Show Details** button.



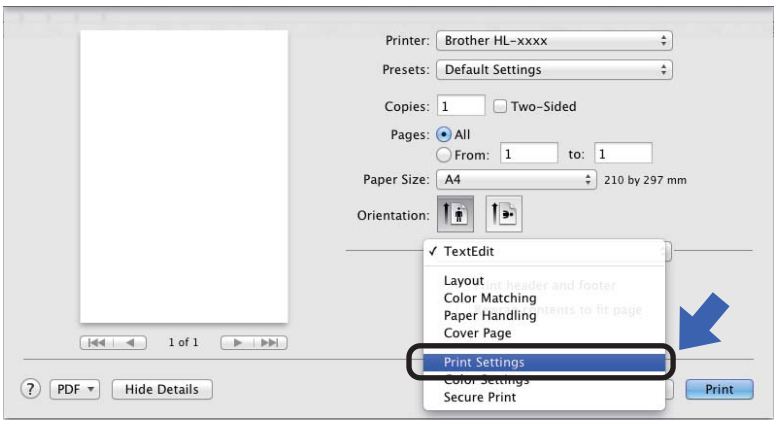


NOTE

Save the current settings as a preset by choosing **Save Current Settings as Preset...** from the **Presets** pop-up menu.

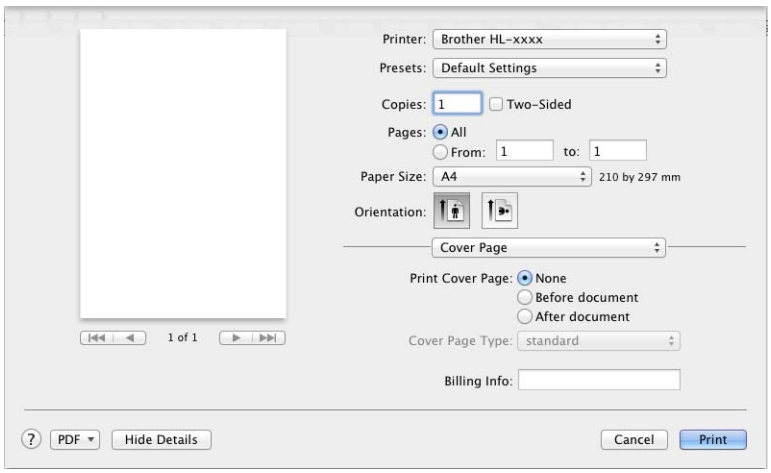
Choosing printing options

To control special printing features, choose **Print Settings** from the Print dialog box. For more information about the available options, see the following descriptions:



Cover Page

You can choose the following cover page settings:



- **Print Cover Page**

  To add a cover page to your document, use this setting.

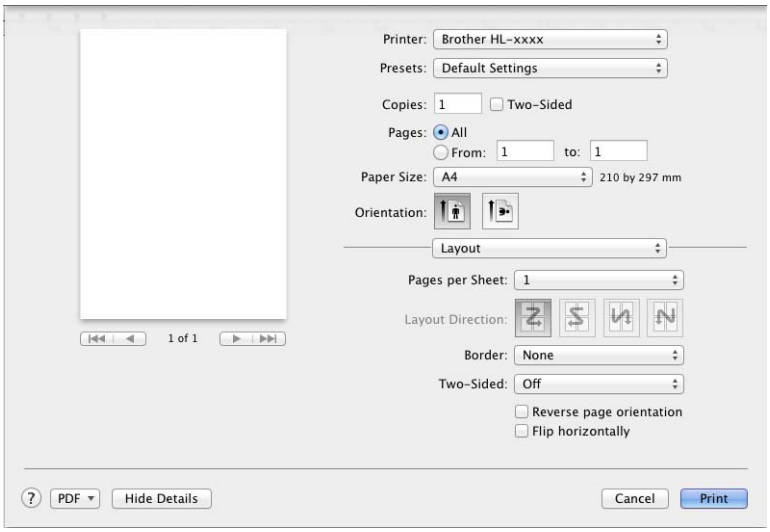
- **Cover Page Type**

  Choose a template for the cover page.

- **Billing Info**

  To add the billing information to the cover page, type text in the **Billing Info** text box.

Layout



- **Pages per Sheet**

  The **Pages per Sheet** selection can reduce the image size of a page by allowing multiple pages to be printed on one sheet of paper.

- **Layout Direction**

  When you specify the pages per sheet, you can also specify the direction of the layout.

- **Border**

  To add a border, use this setting.

- **Two-Sided**

  See *2-sided Printing* on page 75.

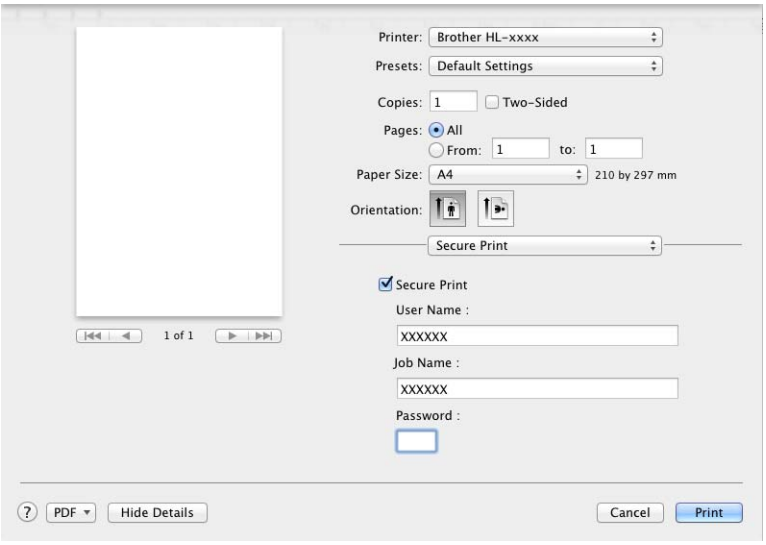
- **Reverse page orientation**

  Select **Reverse page orientation** to rotate the page 180 degrees.

- **Flip horizontally**

  Select **Flip horizontally** to print the page as a reflection flipped left-to-right.

Secure Print



■ **Secure Print**:

Secure documents are documents that are password protected when they are sent to the machine. Only the people who know the password will be able to print them. Since the documents are secured at the machine, you must enter the password using the Touchscreen of the machine to print them.

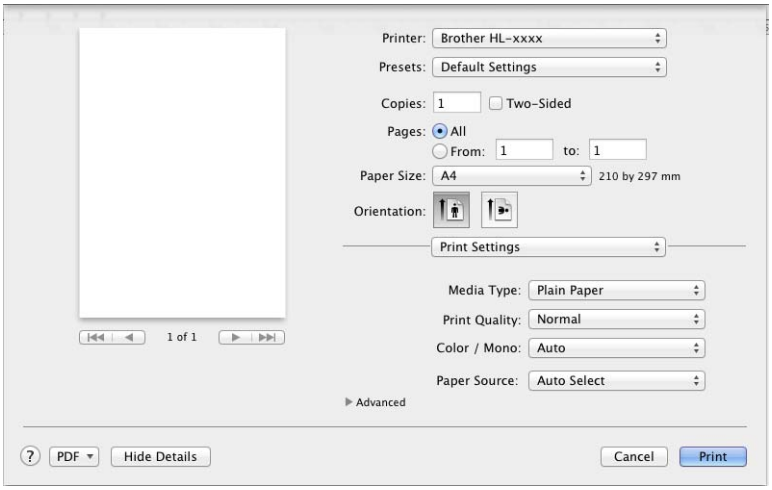
To send a secured document:

1. Select **Secure Print**.
2. Type your password, user name and job name, and then click **Print**.
3. To print a secured document, you must enter your password using the Touchscreen of the machine (see *Printing Secure documents* on page 109).

To delete a secured document, you must use the Touchscreen of the machine to delete it (see *Printing Secure documents* on page 109).

Print Settings

Choose your settings in the **Print Settings** list:



■ Media Type

Select one of the following media types:

- **Plain Paper**
- **Thin Paper**
- **Thick Paper**
- **Thicker Paper**
- **Bond Paper**
- **Envelopes**
- **Env. Thick**
- **Env. Thin**
- **Recycled Paper**
- **Label**
- **Glossy Paper**

NOTE

When **Label** is selected in the printer driver, the machine will feed the paper from the MP tray, even if **MP Tray** is not selected as the paper source.

Print Quality

Choose one of the following print quality settings:

- **Normal**

  600 dpi class. Recommended for ordinary printing. Use this mode for good print quality with reasonable print speeds.

- **Fine**

  2400 dpi class. The finest print mode. Use this mode to print precise images such as photographs. Since the print data is much larger than in Normal mode, processing time, data transfer time, and printing time will be longer.

NOTE

The print speed will change depending on the print quality setting you choose. Higher print quality takes longer to print, while lower print quality takes less time to print.

Color / Mono

You can change the Colour/Mono settings in the printer driver as follows:

- **Auto**

  The machine checks the content of the document for colour. If colour is detected anywhere in the document, it will print the whole of the document using all the colours. In other words, it will mix some of the toners to help achieve every shade detected in the document, increasing the density of toner applied to the page. If no colour content is detected, it will print the document in monochrome. The default setting on your machine is **Auto**.

- **Color**

  Whether the document contains colour or just monochrome, your machine will print the document using all the colours.

- **Mono**

  Select this mode if the document has only black and greyscale text and objects. If your document contains colour, then selecting **Mono** means it will print the document in 256 levels of grey using only the black toner.

NOTE

- The machine's colour sensor is very sensitive and may perceive faded black text or an off-white background as colour. If you know that your document is black and white and you want to conserve colour toner, select **Mono** mode.
- If either the Cyan, Magenta or Yellow toner reaches the end of its life while printing a colour document, the print job cannot be completed. You can cancel your print job and choose to start the print job again in **Mono** mode, as long as Black toner is available.

Paper Source

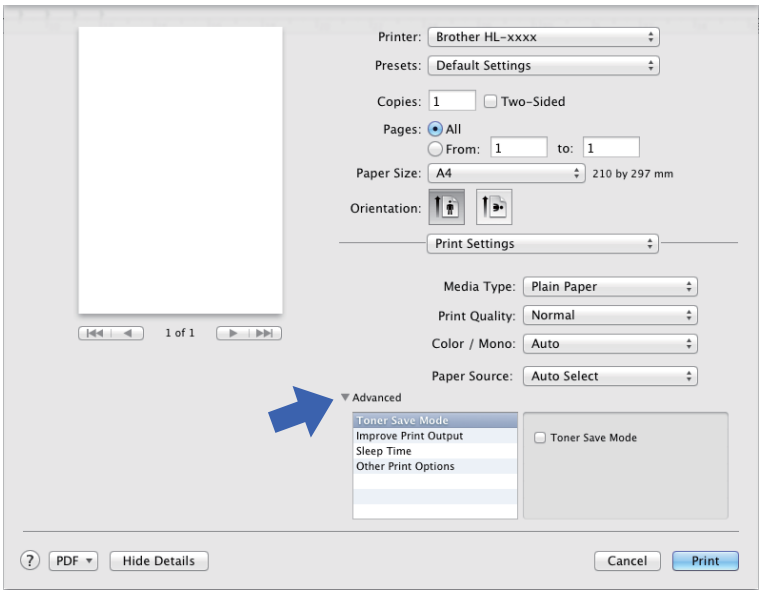
Choose **Auto Select**, **Tray1**, **Tray2** [1] [2] or **MP Tray**.

[1] Available if the optional tray is installed.

[2] Standard equipment.

Advanced print settings

When you click the triangle mark (▶) beside **Advanced**, the advanced print settings appear.



■ Toner Save Mode

Conserve toner use with this feature. When you select the **Toner Save Mode** check box, print appears lighter. The default setting is off (unchecked).

NOTE

We do not recommend **Toner Save Mode** for printing Photo or greyscale images.

■ Improve Print Output

This feature allows you to improve a print quality problem.

- **Reduce Paper Curl**

  If you choose this setting, the paper curl may be reduced.

  If you are printing only a few pages, you do not have to choose this setting. We recommend changing the printer driver setting in **Media Type** to a thin setting.

NOTE

This operation will decrease the temperature of the machine's fusing process.

- **Improve Toner Fixing**

  If you choose this setting, the toner fixing capabilities may be improved. If this selection does not provide enough improvement, change the printer driver setting in **Media Type** to a thick setting.

NOTE

This operation will increase the temperature of the machine's fusing process.

■ **Sleep Time**

When the machine does not receive data for a certain period of time, it enters Sleep mode. In Sleep mode, the machine acts as though it were turned off. If you choose **Printer Default**, the timeout setting will be reset to the specific time set at the factory; this can be altered in the driver. To change the Sleep Time, select **Manual**, and then type the time in the text box.

While the machine is in Sleep mode, the Touchscreen's backlight turns off, but the machine can still receive data. Receiving a print job will wake up the machine to start printing.

■ **Other Print Options**

- **Skip Blank Page**

  If **Skip Blank Page** is selected, the printer driver detects blank pages and excludes them from printing.

Color Settings

■ **Color Mode**

The following options are available in Color Matching mode:

- **Normal**

  This is the Default colour mode.

- **Vivid**

  The colour of all elements are adjusted to become a more vivid colour.

- **None**

■ **Improve Gray Color**

You can improve the image of a shaded area.

■ **Enhance Black Printing**

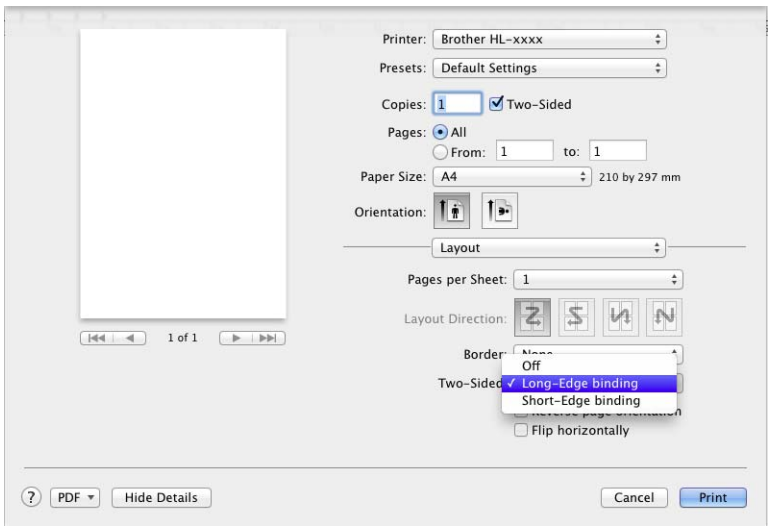
If a black graphic does not print correctly, choose this setting.

2-sided Printing

■ Automatic 2–sided Printing

Select **Layout**.

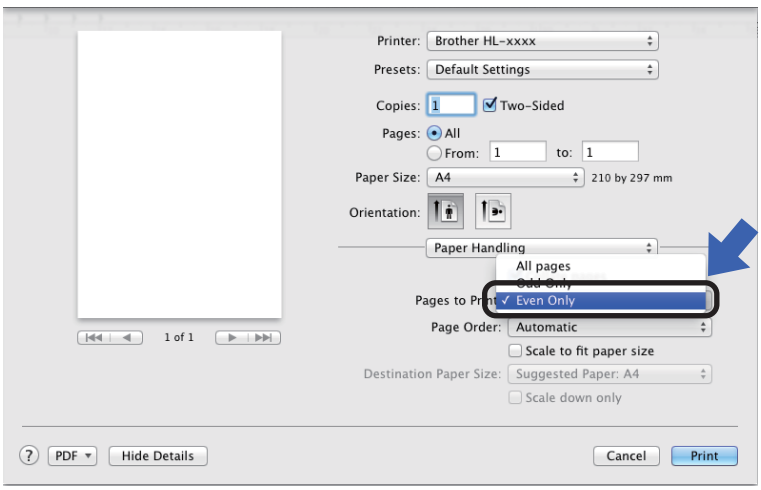
Choose **Long-Edge binding** or **Short-Edge binding** in **Two-Sided**.



■ Manual 2–sided Printing

Select **Paper Handling**.

- Choose **Even Only** and **Print**. Reload the printed paper into the tray (blank side face down in Tray 1 Tray 2, or blank side face up in the MP tray). Choose **Odd Only** and **Print**.

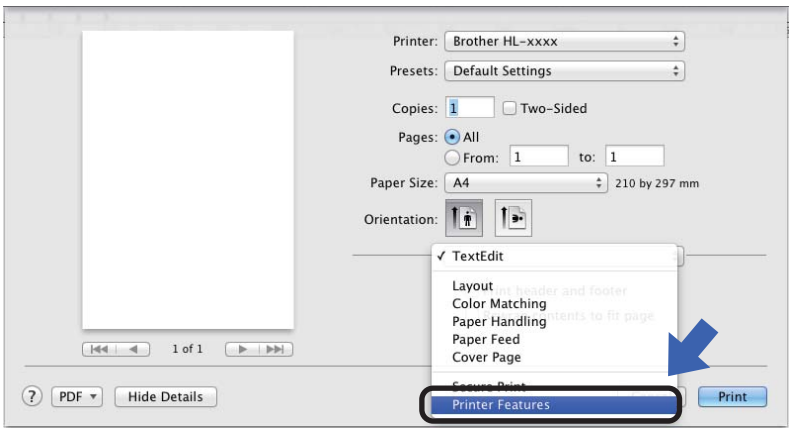


Features in the BR-Script3 printer driver (PostScript® 3™ language emulation)

This section introduces the distinctive operations of the BR-Script3 printer driver. For the basic operations of the BR-Script3 printer driver, see *Features in the printer driver (Macintosh)* on page 66 for **Page Setup**, **Cover Page**, **Paper Source** and **Layout**.

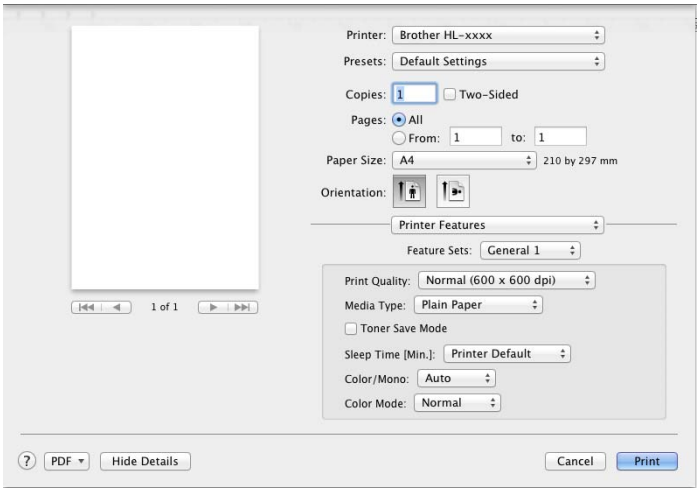
Choosing printing options

To control special print features, choose **Printer Features** in the Print dialog box.



Printer Features

Feature Sets: General 1



■ **Print Quality**

Select one of the following resolutions from the **Print Quality** pop-up menu:

- **Normal**

  600×600 dpi. Recommended for ordinary printing. Use this mode for good print quality with reasonable print speeds.

- **Fine**

  2400 dpi class. The finest print mode. Use this mode to print precise images such as photographs. Since the print data is much larger than in Normal mode, processing time / data transfer time and print time will be longer.

■ **Media Type**

Select the media type that matches the type of paper you loaded in the machine.

- **Plain Paper**
- **Thin Paper**
- **Thick Paper**
- **Thicker Paper**
- **Bond Paper**
- **Envelopes**
- **Env. Thick**
- **Env. Thin**
- **Recycled Paper**
- **Label**
- **Glossy Paper**
- **Hagaki** [1]

[1] Postcard with the size specified by Japan Post Service Co., LTD

Toner Save Mode

When you select the **Toner Save Mode** check box, print appears lighter. The default setting is Off (unchecked).

NOTE

We do not recommend **Toner Save Mode** for printing Photo or greyscale images.

Sleep Time [Min.]

When the machine does not receive data for a certain period of time, it enters Sleep mode. In Sleep mode, the machine acts as though it were turned off. If you choose **Printer Default**, the timeout setting will be reset to the specific time set at the factory; this can be altered in the driver. To change the Sleep Time, choose **2**, **10** or **30**.

While the machine is in Sleep mode, the Touchscreen's backlight turns off, but the machine can still receive data. Receiving a print job will wake up the machine to start printing.

Color / Mono

You can change the Colour/Mono settings in the printer driver as follows:

- **Auto**

  The machine checks the content of the document for colour. If colour is detected anywhere in the document, it will print the whole of the document using all the colours. In other words, it will mix some of the toners to help achieve every shade detected in the document, increasing the density of toner applied to the page. If no colour content is detected, it will print the document in monochrome. The default setting on your machine is **Auto**.

- **Color**

  Whether the document contains colour or just monochrome, your machine will print the document using all the colours.

- **Mono**

  Select this mode if the document has only black and greyscale text and objects. If your document contains colour, then selecting **Mono** means it will print the document in 256 levels of grey using only the black toner.

NOTE

- The machine’s colour sensor is very sensitive and may perceive faded black text or an off-white background as colour. If you know that your document is black and white and you want to conserve colour toner, select **Mono** mode.
- If either the Cyan, Magenta or Yellow toner reaches the end of its life while printing a colour document, the print job cannot be completed. You can cancel your print job and choose to start the print job again in **Mono** mode, as long as Black toner is available.

Color Mode

The following options are available in Colour Matching mode:

- **Normal**

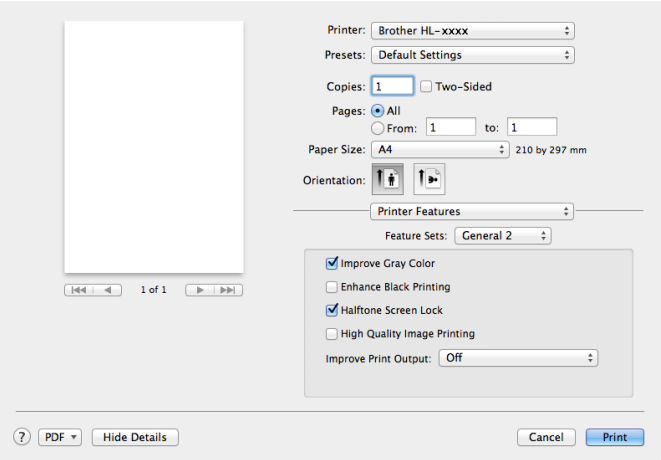
  This is the Default colour mode.

- **Vivid**

  The colour of all elements are adjusted to become a more vivid colour.

- **None**

Feature Sets: General 2



■ **Improve Gray Color**

You can improve the image of a shaded area.

■ **Enhance Black Printing**

If a black graphic does not print correctly, choose this setting.

■ **Halftone Screen Lock**

This lock stops other applications from modifying the Halftone settings. The Default setting is **On** (checked).

■ **High Quality Image Printing**

You can increase the quality of the printed image. If you set **High Quality Image Printing** to **On** (checked), the print speed will be slower.

■ **Improve Print Output**

This feature allows you to improve a print quality problem.

- **Reduce Paper Curl**

  If you choose this setting, the paper curl may be reduced.

  If you are printing only a few pages, you do not have to choose this setting. We recommend changing the printer driver setting in **Media Type** to a thin setting.

NOTE

This operation will decrease the temperature of the machine's fusing process.

- **Improve Toner Fixing**

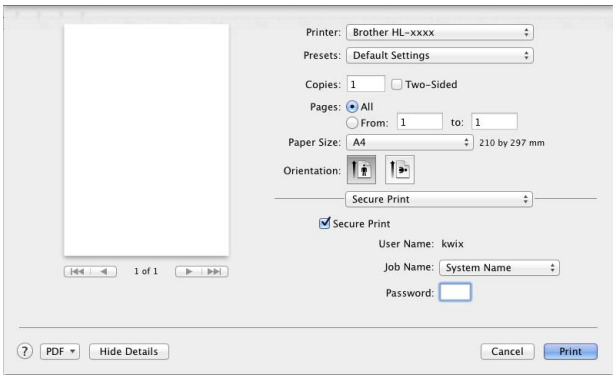
  If you choose this setting, the toner fixing capabilities may be improved. If this selection does not provide enough improvement, change the printer driver setting in **Media Type** to a thick setting.

NOTE

This operation will increase the temperature of the machine's fusing process.

Secure Print

Secure documents are documents that are password protected when they are sent to the machine. Only the people who know the password will be able to print them. Since the documents are secured at the machine, you must enter the password using the Touchscreen of the machine to print them.



To create a secure print job, select **Secure Print** and select the **Secure Print** check box. Type a password in the **Password** text box and click **Print**.

(For more information about Secure Print, see *Printing Secure documents* on page 109.)

Removing the printer driver

1. Log on as an ‘Administrator’.
2. From the Apple menu, choose **System Preferences**. Click **Print & Scan** or **Printers & Scanners** [1], then select the printer you want to remove and remove it by clicking the - button.
3. Click **Delete Printer**.

[1] **Printers & Scanners** for OS X v10.9.x users

Status Monitor

The **Status Monitor** utility is a configurable software tool for monitoring the status of the machine; it lets you see error messages such as paper empty or paper jam at pre-set update intervals and access the Web Based Management utility. Check the device status by launching Brother Status Monitor following these steps:

■ For OS X v10.7.5 and 10.8.x

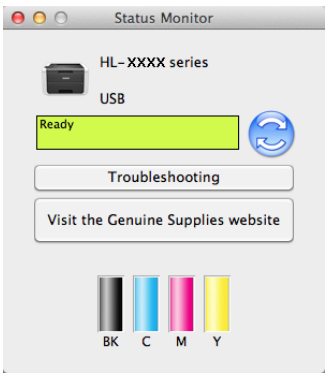
1. Run **System Preferences**, select **Print & Scan**, and then choose the machine.
2. Click **Options & Supplies...**. Click the **Utility** tab, and then click **Open Printer Utility**. The Status Monitor will start up.

■ For OS X v10.9.x

1. Run **System Preferences**, select **Printers & Scanners**, and then choose the machine.
2. Click **Options & Supplies...**. Click the **Utility** tab, and then click **Open Printer Utility**. The Status Monitor will start up.

Updating the machine's status

If you want the latest machine status while the **Status Monitor** window is open, click the Refresh  icon.



If the toner level is low or there is a problem with the toner cartridge, the following icons appear:

	The toner level is low.
	The toner cartridge is empty.

You can set the interval at which the software will update the machine's status information. Go to the menu bar, **Brother Status Monitor** and select **Preferences**.

Hiding or showing the window

After starting the **Status Monitor**, you can hide or show the window. To hide the window, go to the menu bar, click **Brother Status Monitor** and select **Hide Status Monitor**. To show the window, click the **Brother Status Monitor** icon in the dock.



Quitting the window

Click **Brother Status Monitor** in the menu bar, and then select **Quit Status Monitor** from the pop-up menu.

Web Based Management (Network Connection only)

Access the Web Based Management System by clicking the machine icon on the **Status Monitor** screen. A standard web browser can be used to manage your machine using HTTP (Hyper Text Transfer Protocol). For information about the Web Based Management System, see the Network User's Guide.

Software

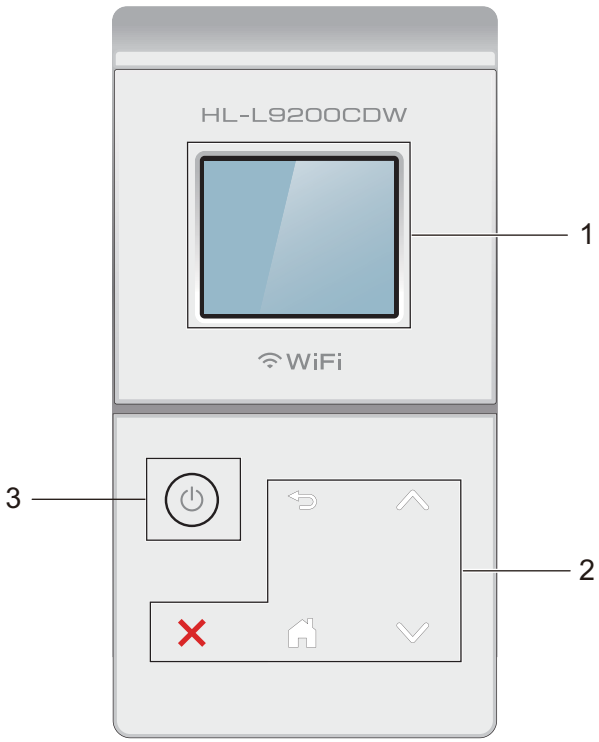
Software for networks

For information about network utility software, see the Network User’s Guide.

3 General Information

Control panel overview

This is a Touchscreen LCD with an electrostatic Touchpanel that only displays the LEDs when they can be used.



1 1.8 in. (44.9 mm) Touchscreen LCD (Liquid Crystal Display)

This is a Touchscreen LCD. You can access the menus and options by pressing them when they are displayed on the screen.

2 Touchpanel:

The LEDs on the Touchpanel only light up when they are available for use.

- **Back**
  Press to go back to the previous menu level.
- **Home**
  Press to return to the Home screen.
- **Stop**
  Press to cancel an operation when illuminated red.
- **▲ or ▼**
  Press to display the previous or next page. The Up and Down Arrows do not light up when there is only one page.

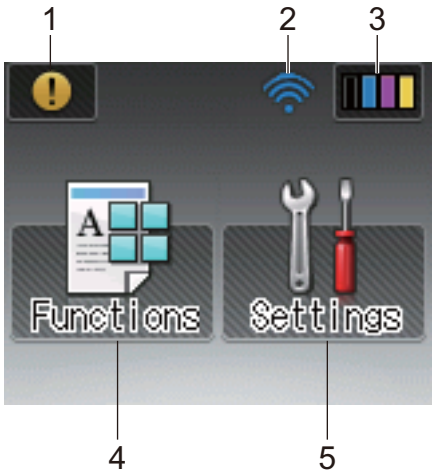
3 Power On/Off

Press to turn on the machine. Press and hold down to turn off the machine.

The Touchscreen LCD displays `Shutting Down` and stays on for a few seconds before going off.

Touchscreen LCD

The Touchscreen LCD displays the machine's status when the machine is idle.



1 Warning icon

The warning icon appears when there is an error or maintenance message; press to view it, and then press to return to Ready mode.

For details, see *Error and maintenance messages* on page 176.

2 Wireless Status

A four-level indicator on the Ready mode screen displays the current wireless signal strength if you are using a wireless connection.



If you see WiFi at the top on the screen, you can easily configure the wireless settings by pressing it (for more information, see the Network User's Guide).

3 (Toner)

Lets you see the remaining toner life and also lets you access the Toner menu.

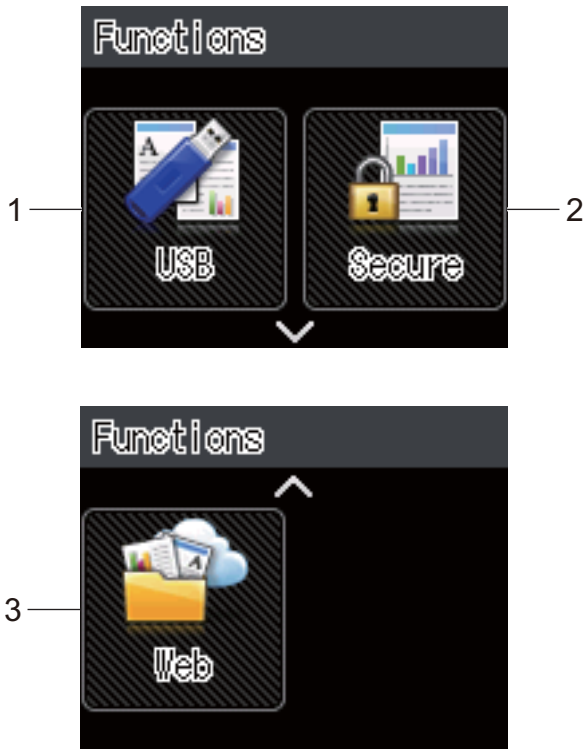
NOTE

The indication of the remaining toner life will vary depending on the types of documents printed and customer's usage.

4 **(Functions)**

The Touchscreen displays the machine's settings when you press .

You can access the machine’s settings from the following screen:



1 USB

Press to access the Direct Print menu.

2 Secure

Lets you access the Secure Print menu.

3 Web

Press to connect the Brother machine to an Internet service (for more information, see the Web Connect Guide).

5 **(Settings)**

Lets you access the full Settings menu.

Basic Operations

Press your finger on the Touchscreen LCD to operate it. To display and access all the settings and features tables and the available options, press ▲ or ▼ on the Touchpanel to scroll through them.

NOTE

DO NOT touch the Touchscreen immediately after plugging in the power cord or turning on the machine. Doing this may cause an error.

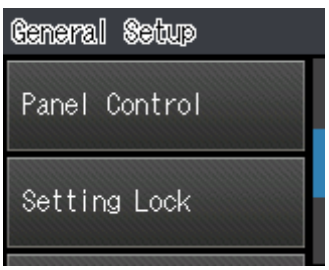
The following steps explain how to change a setting in the machine. In this example, the Touchscreen's Backlight setting is changed from `Light` to `Med`.

1. Press 

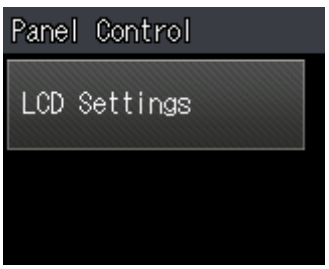
.
2. Press ▲ or ▼ on the Touchpanel to display `General Setup`.



3. Press `General Setup`.
4. Press ▲ or ▼ to display `Panel Control`.



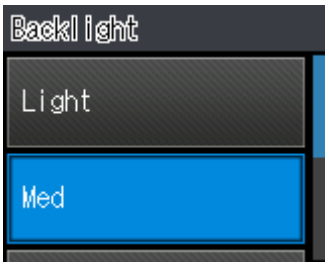
5. Press `Panel Control`.
6. Press `LCD Settings`.



7 Press Backlight.



8 Press Med.



NOTE

Press ⮌ to go back to the previous level.

9 Press ⌂.

Settings and features tables

Using the Settings Tables

Your machine's Touchscreen LCD is easy to set up and operate. All you have to do is press the settings and options you want as they are displayed on the screen. We created step-by-step Settings Tables and Features Tables so you can see at-a-glance all the available choices for each setting and feature. You can use these tables to quickly set up your preferred settings in the machine.

Settings Tables

The Settings tables will help you understand the menu settings and options that are found in the machine's programs. The factory settings are shown in Bold with an asterisk.

NOTE

The Touchscreen displays the tray names as follows:

- Standard paper tray: `Tray1`
- Multi-purpose tray: `MP Tray`
- Optional lower tray [1]: `Tray2` and `T2`

[1] Tray 2 is standard on HL-L9200CDWT.

Settings

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
Machine Information	Print Settings	-	-	-	Prints the Printer Settings page.
	Print NetSetting	-	-	-	Prints the Network Configuration Report.
	Print WLANReport	-	-	-	The WLAN Report shows the wireless LAN connectivity diagnosis.
	Test Print	-	-	-	Prints the test page.
	Drum Dot Print	-	-	-	Prints the drum dot check sheet.
	Print Font	HP LaserJet	-	-	Prints the font list and samples of HP LaserJet.
		BR-Script 3	-	-	Prints the font list and samples of BR-Script.
	Serial No.	-	-	-	Displays the machine's serial number.
	Version	Main Version	-	-	Displays the main firmware version.
		Sub1 Version	-	-	Displays the sub firmware version.

The factory settings are shown in Bold with an asterisk.

Settings (continued)

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
Machine Information (Continued)	Version (Continued)	Sub2 Version	-	-	Displays the sub firmware version.
		Sub4 Version	-	-	Displays the sub firmware version.
		RAM Size	-	-	Displays the size of memory in this machine.
	Page Count	Total	-	-	Displays the total printed pages.
		Color	-	-	Displays the total colour printed pages.
		Monochrome	-	-	Displays the total monochrome printed pages.
	Parts Life	Toner Life	-	-	Displays the remaining life for each toner cartridge.
		Drum Life	-	-	Displays the remaining life for the drum unit.
		Belt Life	-	-	Displays the remaining life for the belt unit.
		PF KitMP Life	-	-	Displays the pages left to print with the PF kit MP.
		PF Kit1 Life	-	-	Displays the pages left to print with the PF kit 1.
		PF Kit2 Life	-	-	Displays the pages left to print with the PF kit 2.
		Fuser Life	-	-	Displays the pages left to print with the fuser unit.
		Laser Life	-	-	Displays the pages left to print with the laser unit.
	Reset Parts Life (Appears only when the drum unit or belt unit has exceeded its rated life.)	Drum Unit	-	Yes / No	Resets the drum unit life. Appears when you replace the drum unit.
		Belt Unit	-	Yes / No	Resets the belt unit life. Appears when you replace the belt unit.

The factory settings are shown in Bold with an asterisk.

Level 1	Level 2	Options	Descriptions
Paper Tray	Tray Use	**Auto*** / MP Only / Tray1 Only / Tray2 Only [1]	Select the tray that will be used.
	Priority	(Without Tray2 installed) **MP>T1*** / T1>MP (With Tray2 installed) **MP>T1>T2*** / MP>T2>T1 / T1>T2>MP / T2>T1>MP	When Auto is chosen in Tray Use, the machine chooses the order in which it uses the paper trays that contain paper of the same size.
	2-sided	On(Long Bind) / On(Short Bind) / **Off***	Select whether to print on both sides of the paper.
	MP Size	**A4*** / Letter / B5(JIS) / B5(ISO) / A5 / A5(Long Edge) / A6 / Executive / Legal / Folio / Com-10 / Monarch / C5 / DL / 3"x5"	Select the size of paper you are loading in the MP tray.
	Tray1 Size	**A4*** / Letter / B5(JIS) / A5 / A5(Long Edge) / A6 / Executive / Legal / Folio	Choose the size of paper you loaded in the standard paper tray.
	Tray2 Size [1]	**A4*** / Letter / B5(JIS) / A5 / Executive / Legal / Folio	Choose the size of paper you loaded in the optional lower tray (Tray 2) [2].
	Check Size	**On*** / Off	Select whether to display the message telling you to check that the size of the paper in the machine and the machine's Paper Size setting match.
The factory settings are shown in Bold with an asterisk.			

[1] When Tray 2 is installed.

[2] Tray 2 is standard on HL-L9200CDWT.

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
General Setup	Local Language	-	-	**English*** / Français...	Select the Touchscreen language for your country.
	Ecology	Toner Save	-	On / **Off***	Increases the page yield of the toner cartridge.
		Sleep Time	-	0 / 1 / 2 / **3*** / 4 / 5 / ... 50 min	Set the time to return to Power Save mode.
		Quiet Mode	-	On / **Off***	Decreases printing noise.
		Auto Power Off	-	Off / **1hour*** / 2hours / 4hours / 8hours	Sets the number of hours that the machine will remain in Deep Sleep mode before going into Power Off mode. Choose Off if you do not want the machine to go into Power Off mode.
	Panel Control	LCD Settings	Backlight	**Light*** / Med / Dark	Adjust the brightness of the Touchscreen's backlight.
			Dim Timer	**Off*** / 10sec / 20sec / 30sec	Set how long the Touchscreen's backlight stays on after the last button press.
	Setting Lock	Set Password	-	-	Stop unauthorized users from changing the machine's settings.
		Lock Off⇒On	-	-	
	Interface	Select	-	**Auto*** / USB / Network	Choose the interface to use. If you select Auto, the machine changes the interface to USB or Ethernet depending on which interface is receiving data.
		Auto IF Time	-	1 / 2 / 3 / 4 / **5*** / ... / 99sec	You must set the time-out period for the auto interface selection.
		Input Buffer	-	Level 1 / 2 / 3 / **4*** / ... / 7	Increases or decreases the input buffer capacity.

The factory settings are shown in Bold with an asterisk.

Level 1	Level 2	Level 3	Options	Descriptions
Print Menu	Emulation	-	**Auto*** / HP LaserJet / BR-Script 3	Chooses the emulation mode you use.
	Auto Continue	-	**On*** / Off	Select this setting if you want the machine to clear paper size errors.
	Output Color	-	**Auto*** / Color / Monochrome	Sets the output colour.
	Paper Type	-	**Plain Paper*** / Thick Paper / Thicker Paper /Thin Paper /Recycled Paper / Bond Paper / Label Paper / Envelope / Env. Thick / Env. Thin / Glossy Paper	Sets the type of paper.
	Paper Size	-	**A4*** / Letter / B5(JIS) / B5(ISO) / A5 / A5(Long Edge) / A6 / Executive / Legal / Folio / Com-10 / Monarch / C5 / DL / 3"x5"	Sets the size of paper.
	Copies	-	**1*** / 2 / ... / 999	Sets the number of printed pages.
	Orientation	-	**Portrait*** / Landscape	This machine can print pages in portrait or landscape orientation.
	Print Position	X Offset	-500 / -499 / ... / -1 / **0*** / 1 / ... / 499 / 500dot(s)	Moves the print start position (at the top-left corner of pages) horizontally up to -500 (left) to +500 (right) dots in 300 dpi.
		Y Offset	-500 / -499 / ... / -1 / **0*** / 1 / ... / 499 / 500dot(s)	Moves the print start position (at the top-left corner of pages) vertically up to -500 (up) to +500 (down) dots in 300 dpi.
	Auto FF	-	On / **Off***	Allows the machine to print any remaining data automatically.

The factory settings are shown in Bold with an asterisk.

Level 1	Level 2	Level 3	Options	Descriptions
Print Menu (Continued)	HP LaserJet	Font No.	I000 / ... / **I059*** / ... / I071	Sets the font number.
		Font Pitch	0.44 / ... / **10.00*** / ... / 99.99	Sets the font pitch. The Font Pitch menu will appear when you choose I059 to I071 in Font No. setting.
		Font Point	4.00 / ... / **12.00*** / ... / 999.75	Sets the font size. The Font Point menu will appear when you choose I000 to I058 in Font No. setting.
		Symbol Set	**PC-8*** / PC-8 D/N / ...	Sets the symbol set or the character set.
		Table Print	-	Prints the code table. If Change Emulation appears on the Touchscreen, select Auto or HP LaserJet in Emulation of the Print Menu (see page 95).
		Auto LF	On / **Off***	ON: CR → CR+LF, OFF: CR → CR
		Auto CR	On / **Off***	ON: LF → LF+CR, FF → FF+CR, or VT → VT+CR OFF: LF → LF, FF → FF, or VT → VT
		Auto WRAP	On / **Off***	Chooses whether a line feed and carriage return will happen when the machine reaches the right margin.
The factory settings are shown in Bold with an asterisk.				

Level 1	Level 2	Level 3	Options	Descriptions
Print Menu (Continued)	HP LaserJet (Continued)	Auto SKIP	**On*** / Off	Chooses whether a line feed and carriage return will happen when the carriage position reaches the bottom margin.
		Left Margin	##	Sets the left margin at column 0 to 70 columns at 1 cpi. The default setting is 0 cpi.
		Right Margin	##	Sets the right margin at column 10 to 80 columns at 1 cpi. The default setting is 78 cpi (A4).
		Top Margin	#.##	Sets the top margin at a distance from the top edge of the paper: 0.00, 0.33, 0.50, 1.00, 1.50 or 2.00 inches. The default setting is 0.50 inches.
		Bottom Margin	#.##	Sets the bottom margin at a distance from the bottom edge of the paper: 0.00, 0.33, 0.50, 1.00, 1.50 or 2.00 inches. The default setting is 0.50 inches.
		Lines	###	Sets the number of lines on each page from 5 to 128 lines. The default setting is 64 lines (A4).
	BR-Script 3	Error Print	**On*** / Off	Choose whether the machine prints the error information when errors occur.
		CAPT	On / **Off***	Use CAPT (Colour Advanced Printing Technology) for optimal print quality when printing a PS file created by a non-Brother PS driver. Colours and photos appear clearer and more accurate. Print speed will be slower.
The factory settings are shown in Bold with an asterisk.				

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
Network	Wired LAN	TCP/IP	Boot Method	**Auto*** / Static / RARP / BOOTP / DHCP	Chooses the IP method that best suits your needs.
			IP Address	###.###.###.### **(000.000.000.000)*** [1]	Enter the IP address.
			Subnet Mask	###.###.###.### **(000.000.000.000)*** [1]	Enter the Subnet mask.
			Gateway	###.###.###.### **(000.000.000.000)*** [1]	Enter the Gateway address.
			IP Boot Tries	0 / 1 / 2 / **3*** / ... / 32767	Specifies the number of attempts the machine will try to obtain an IP address when the Boot Method is set to any setting except Static.
			APIPA	**On*** / Off	Automatically allocates the IP address from the link-local address range. [1]
			IPv6	On / **Off***	Enables or disables the IPv6 protocol.
		Ethernet	-	**Auto*** / 100B-FD / 100B-HD / 10B-FD / 10B-HD	Chooses Ethernet link mode.
		Wired Status	-	Active 100B-FD / Active 100B-HD / Active 10B-FD / Active 10B-HD / Inactive / Wired OFF	Displays Ethernet link status.
		MAC Address	-	-	Displays MAC address of the machine.
		Set to Default	Restores wired network settings of the internal print server to the factory settings.		
		Wired Enable	-	**On*** / Off	Chooses Ethernet link mode.

The factory settings are shown in Bold with an asterisk.

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
Network (Continued)	WLAN	TCP/IP	Boot Method	**Auto*** / Static / RARP / BOOTP / DHCP	Chooses the IP method that best suits your needs.
			IP Address	###.###.###.### **(000.000.000.000)*** [1]	Enter the IP address.
			Subnet Mask	###.###.###.### **(000.000.000.000)*** [1]	Enter the Subnet mask.
			Gateway	###.###.###.### **(000.000.000.000)*** [1]	Enter the Gateway address.
			IP Boot Tries	0 / 1 / 2 / **3*** / ... / 32767	Specifies the number of attempts the machine will try to obtain an IP address when the Boot Method is set to any setting except Static.
			APIPA	**On*** / Off	Automatically allocates the IP address from the link-local address range. [1]
			IPv6	On / **Off***	Enables or Disables the IPv6 protocol.
		WLAN Assistant	-	-	(Windows® only) You can configure your wireless network settings using the Brother CD-ROM.
		Setup Wizard	-	-	Configures the wireless network settings using the setup wizard.
		WPS/AOSS	-	-	Configures the wireless network settings using WPS or AOSS™ method.

The factory settings are shown in Bold with an asterisk.

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
Network (Continued)	WLAN (Continued)	WPS w/ PIN Code	-	-	Configures the wireless network settings using WPS with a PIN code.
		WLAN Status	Status	Active(11n) / Active(11b) / Active(11g) / Wired LAN Active / WLAN OFF / AOSS Active / Connection Failed	Displays wireless Ethernet link status.
			Signal	-	Displays the signal condition.
			SSID	-	Displays SSID [uses a maximum of 32 digits and characters 0-9, a-z and A-Z in ASCII values]
			Comm. Mode	Ad-hoc / Infrastructure	Displays the current Communication Mode.
		MAC Address	-	-	Displays MAC address of the machine.
		Set to Default	Restores wireless network settings of the internal print server to the factory settings.		
		WLAN Enable	-	On / **Off***	Turns the wireless interface on or off.
The factory settings are shown in Bold with an asterisk.					

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
Network (Continued)	Wi-Fi Direct	Push Button	-	-	You can easily configure your Wi-Fi Direct™ network settings using the one-button push method.
		PIN Code	-	-	You can easily configure your Wi-Fi Direct™ network settings using WPS with a PIN code.
		Manual	-	-	You can manually configure your Wi-Fi Direct™ network settings.
		Group Owner	-	On / Off	Sets your machine as the Group Owner.
		Device Info.	Device Name	-	You can see the device name of your machine.
			SSID	-	Displays SSID of Group Owner. When the machine is not connected, the Touchscreen displays Not Connected.
			IP Address	-	Displays the IP Address of your machine.
		Status Info.	Status	G/O Active(**) / Client Active / Not Connected / Off / Wired LAN Active ** = the number of devices	Displays the Wi-Fi Direct™ network status.
The factory settings are shown in Bold with an asterisk.					

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
Network (Continued)	Wi-Fi Direct (Continued)	Status Info. (Continued)	Signal	-	Displays the Wi-Fi Direct™ network signal strength. When your machine acts as the Group Owner, the Touchscreen always displays Strong.
		I/F Enable	-	On / **Off***	Enables or disables the Wi-Fi Direct™ connection.
	Web Connect Settings	Proxy Settings	Proxy Connection	On / **Off***	You can change the web connection settings.
			Address	-	
			Port	**8080***	
			User Name	-	
			Password	-	
	Security	IPsec	-	On / **Off***	IPsec is an optional security feature of the IP protocol that provides authentication and encryption services. We recommend contacting your network administrator before changing this setting.
	Network Reset	Restores all network settings of the internal print server to the factory settings.			
The factory settings are shown in Bold with an asterisk.					

[1] ### means a number within the range of 000 to 255. On connection to the network, if the machine's 'Boot Method' is 'Auto' the machine will attempt to set the IP address and Subnet Mask from a boot server such as DHCP or BOOTP. If a boot server cannot be found, an APIPA IP address will be allocated, such as 169. 254. [001-254]. [000-255]. If the 'Boot Method' of the machine is set to 'Static' you must manually enter an IP address from the machine's Touchscreen.

Level 1	Level 2	Description
Reset Menu	Network	Restores all network settings of the internal print server to the factory settings.
	Factory Reset	This operation resets *all* the machine's setting back to the defaults set at the factory. Brother strongly recommends you perform this operation when you dispose of the machine.
The factory settings are shown in Bold with an asterisk.		

Level 1	Level 2	Level 3	Options	Descriptions
Color Correction	Calibration	Calibrate	Yes / No	Performs a calibration to check and correct the colours.
		Reset	Yes / No	Set the calibration parameters back to the default settings.
	Registration	-	Yes / No	Aligns the print position of each colour.
	Auto Correction	-	**On*** / Off	Sets the machine to perform Colour Calibration and Registration automatically.
The factory settings are shown in Bold with an asterisk.				

Level 1	Level 2	Options	Descriptions
Direct Print	Paper Type	**Plain Paper*** / Thick Paper / Thicker Paper / Thin Paper / Recycled Paper / Bond Paper / Label Paper / Envelope / Env. Thick / Env. Thin / Glossy Paper	Set the print media type when printing directly from the USB flash drive.
	Paper Size	**A4*** / Letter/ B5(JIS) / B5(ISO) / A5 / A5(Long Edge) / A6 / Executive / Legal / Folio / Com-10 / Monarch / C5 / DL / 3"x5"	Set the paper size when printing directly from the USB flash drive.
	Multiple Page	**1in1*** / 2in1 / 4in1 / 9in1 / 16in1 / 25in1 / 1 in 2x2 pages/ 1 in 3x3 pages / 1 in 4x4 pages / 1 in 5x5 pages	Set the page layout when printing multiple pages directly from the USB flash drive.
	Orientation	**Portrait*** / Landscape	Set the page orientation when printing directly from the USB flash drive.
	Collate	**On*** / Off	Enable or disable page collation when printing directly from the USB flash drive.
	Print Quality	**Normal*** / Fine	Set the print quality option when printing directly from the USB flash drive.
	PDF Option	**Document*** / Document&Stamps / Document&Markup	Set the USB direct print setting to print either comments (Markup) or stamps in the PDF file along with the text.
	Index Print	**Simple*** / Details	Print a thumbnail page.
The factory settings are shown in Bold with an asterisk.			

Functions

Level 1	Level 2	Level 3	Options	Descriptions
USB	See *USB (Direct Print)* on page 106.			Access the USB Direct Print menu.
Secure	See *Printing Secure documents* on page 109.			Print secure data.
Web	See *Web* on page 107.			Connect the Brother machine to an Internet service.
The factory settings are shown in Bold with an asterisk.				

Features Table

Toner

Level 1	Level 2	Level 3	Options	Descriptions
	Toner Life	-	-	Displays the remaining life for each toner cartridge
	Test Print	-	-	Print the Test Print page.
	Calibration	Calibrate	Yes / No	Performs a calibration to revise the colours.
		Reset	Yes / No	Set the calibration parameters back to the default settings.
	Registration	-	Yes / No	Aligns the print position of each colour.
The factory settings are shown in Bold with an asterisk.				

Wi-Fi Setup

Level 1	Level 2	Level 3	Options	Descriptions
	WLAN Assistant	-	-	(Windows® only) You can configure your wireless network settings using the Brother CD-ROM.
	Setup Wizard	-	-	Configures the wireless network settings using the setup wizard.
	WPS/AOSS	-	-	Configures the wireless network settings using WPS or AOSS™ method.
The factory settings are shown in Bold with an asterisk.				

USB (Direct Print)

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
USB	Index Print	-	-	-	Print a thumbnail page.
	(Select File)	Number of Print (01-99)	Paper Type	**Plain Paper*** / Thick Paper / Thicker Paper / Thin Paper / Recycled Paper / Bond Paper / Label Paper / Envelope / Env. Thick / Env. Thin / Glossy Paper	Set the print media type when printing directly from the USB flash drive.
			Paper Size	**A4*** / Letter/ B5(JIS) / B5(ISO) / A5 / A5(Long Edge) / A6 / Executive / Legal / Folio / Com-10 / Monarch / C5 / DL / 3"x5"	Set the paper size when printing directly from the USB flash drive.
			Multiple Page	**1in1*** / 2in1 / 4in1 / 9in1 / 16in1 / 25in1 / 1 in 2x2 pages/ 1 in 3x3 pages / 1 in 4x4 pages / 1 in 5x5 pages	Set the page layout when printing multiple pages directly from the USB flash drive.
			Orientation	**Portrait*** / Landscape	Set the page orientation when printing directly from the USB flash drive.
			2-sided	On(Long Bind) / On(Short Bind) / **Off***	Choose the 2-sided print format when printing directly from the USB flash drive.

The factory settings are shown in Bold with an asterisk.

USB (Direct Print) menu is displayed after pressing Functions.

USB (Direct Print) (continued)

Level 1	Level 2	Level 3	Level 4	Options	Descriptions
USB (Continued)	(Select File) (Continued)	Number of Print (01-99) (Continued)	Collate	**On*** / Off	Enable or disable page collation when printing directly from the USB flash drive.
			Print Quality	**Normal*** / Fine	Set the print quality option when printing directly from the USB flash drive.
			Tray Use	(Without Tray2 installed) **Auto*** /MP Only / Tray1 Only (With Tray2 installed) **Auto*** /MP Only / Tray1 Only / Tray2 Only	Chooses the tray that will be used when printing directly from the USB flash drive.
			PDF Option	**Document*** / Document&Stamps / Document&Markup	Set the USB direct print setting whether to print comments (Markup) or stamps in the PDF file along with the text.
			Output Color	**Auto*** / Color / Monochrome	Choose colour or black & white when printing directly from the USB flash drive.

The factory settings are shown in Bold with an asterisk.

USB (Direct Print) menu is displayed after pressing Functions.

Web

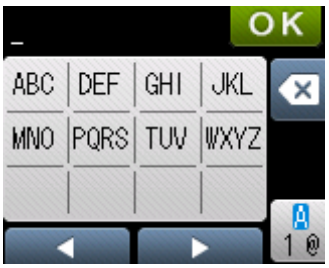
Level 1	Level 2	Level 3	Options	Descriptions
SkyDrive®	-	-	-	Connect the Brother machine to an Internet service. Visit the Brother Solutions Center to download the Web Connect Guide at http://solutions.brother.com/.
Box	-	-	-	
Google Drive™	-	-	-	
Dropbox	-	-	-	

The factory settings are shown in Bold with an asterisk. The Web menu is displayed after pressing Functions.

Entering Text

When you must enter text into the machine the keyboard will appear on the Touchscreen.

Press  to cycle among letters, numbers, and special characters.



Inserting spaces

To enter a space, press  twice to choose special characters, then press the space button .

NOTE

The characters that are available may differ depending on your country.

Making corrections

If you entered an incorrect character and want to change it, press ◀ to move the cursor under the incorrect character. Press , and then enter the correct character. You can also back up and insert letters.

If the Touchscreen does not display ◀, press  for each character you want to erase, or press and hold  to erase all the characters.

Repeating letters

If you must enter a letter that is on the same button as the letter before it, press ▶ to move the cursor to the right before you press the same button again.

Printing Secure documents

Secure documents

Secure documents are protected by a password and only those people who know the password will be able to print the document. The machine will not print the document when you send it for printing. To print the document, you must enter the password at the Touchscreen of the machine. Secure documents will be deleted after they are printed once.

When the area to spool documents is full, the Touchscreen displays `Print Data Full`. Press  to return to the Home screen.

To delete the spooled print job, you must delete it at the Touchpanel.

NOTE

- Secure documents will be deleted when the machine is turned off.
- If you wait 60 seconds to continue the Touchscreen operation, the Secure Print setting will close and the Touchscreen will return to the Home screen.
- For more information about the settings in the printer driver and how to create secure documents, see *Secure Print* on page 45 (for Windows® printer driver), *Secure Print tab* on page 57 (for Windows® BR-Script printer driver), *Secure Print* on page 70 (for Macintosh printer driver) or *Secure Print* on page 80 (for Macintosh BR-Script printer driver).

How to print Secure documents

1. Press 

.
2. Press `Secure`.
3. Press ▲ or ▼ to choose the user name, and then press it.
4. Press ▲ or ▼ to choose the job, and then press it.
5. Enter the registered four-digit password.
   To enter each digit, use the keyboard on the machine's Touchscreen, and then press `OK`, (see *Entering Text* on page 108).
6. Press + or − to enter the number of copies you want.
7. Press `Start`.

NOTE

To delete the secure document from the memory, replace steps 6 - 7 with the following step:

- Press `Delete`, and then press `Yes`.

The Touchscreen displays `Deleted` and returns to the Home screen.

Security features

Setting Lock

Setting Lock lets you set a password to stop other people from accidentally changing your machine's settings. Make a careful note of your password. If you forget it, you must reset the passwords stored in the machine. Call your administrator, Brother customer service or your local Brother dealer. While Setting Lock is `On`, you cannot access the machine settings.

Setting up the password

1. Press .
2. Press `General Setup` > `Setting Lock`.
3. Enter a four-digit password using the keyboard on the machine's Touchscreen.
   Press `OK`.
4. Re-enter the password when the Touchscreen displays `Verify:`.
   Press `OK`.
5. Press .

Changing your Setting Lock password

Turn Setting Lock off before you change the password (see *Turning Setting Lock on/off* on page 111).

1. Press .
2. Press `General Setup` > `Setting Lock` > `Set Password`.
3. Enter the old four-digit password using the keyboard on the machine's Touchscreen.
   Press `OK`.
4. Enter a four-digit number for the new password using the keyboard on the machine's Touchscreen.
   Press `OK`.
5. Re-enter the new password when the Touchscreen displays `Verify:`.
   Press `OK`.
6. Press .

Turning Setting Lock on/off

If you enter the wrong password when following the instructions below, the Touchscreen displays `Wrong Password`. Enter the correct password.

Turning Setting Lock on

1. Press 

.
2. Press `General Setup` > `Setting Lock` > `Lock Off⇒On`.
3. Enter the registered four-digit password using the keyboard on the machine's Touchscreen, and then press `OK`.

Turning Setting Lock off

1. Press 

on the Touchscreen.
2. Enter the registered four-digit administrator password using the keyboard on the machine's Touchscreen.
   Press `OK`.

Secure Function Lock 3.0

Use Secure Function Lock to configure passwords, set specific user page limits, and grant access to some or all of the operations listed here. You can configure and change the following Secure Function Lock 3.0 settings using Web Based Management or BRAdmin Professional 3 (Windows®):

- **Print** [1]
- **USB Direct Print**
- **Web Connect (Download)** [2]
- **Colour Print** [1] [2]
- **Page Limit** [2]

[1] Print and Colour Print include print jobs via Google Cloud Print and Brother iPrint&Scan.

[2] Available for **Print**, **USB Direct Print** and **Web Connect (Download)**.

NOTE

- Make a careful note of your password. If you forget it, you must reset the password stored in the machine. For information about how to reset the password contact Brother customer service or your local Brother dealer.
- Only administrators can set limitations and make changes for each user.

Active Directory Authentication

Active Directory Authentication restricts the use of the Brother machine. If Active Directory Authentication is enabled, the machine's Touchscreen will be locked. You cannot change the machine's settings until the user enters the user ID, domain name and password.

You can change the Active Directory Authentication setting using Web Based Management or BRAdmin Professional 3 (Windows®).

For more information about Active Directory Authentication, see the Network User's Guide.

IPSec

IPsec (Internet Protocol Security) is a security protocol that uses an optional Internet Protocol function to prevent manipulation and ensure the confidentiality of data transmitted as IP packets. IPsec encrypts data carried over the network, such as print data sent from computers to a printer. Because the data is encrypted at the network layer, applications that use a higher-level protocol use IPsec even if the user is not aware of its use.

IPsec supports the following operations:

- IPsec transmissions
- IPsec settings

For more information about IPsec, see the Network User's Guide.

Ecology features

Toner Save

Save toner by using this feature. When you set Toner Save to On, print appears lighter. The default setting is Off.

1. Press .
2. Press General Setup > Ecology > Toner Save.
3. Press On or Off.
4. Press .

NOTE

If your machine has been set to Quiet mode On, you cannot set Toner Save to On.

Sleep Time

The Sleep mode setting can reduce power consumption. When the machine is in Sleep mode (Power Save mode) it acts as though it were turned off. The machine will wake up and start printing when it receives a print job.

Choose how long the machine must be idle before it goes into Sleep mode. When the machine receives a print file or document, the timer will be reset. The default setting is 3 minutes. While the machine is in Sleep mode the Touchscreen's backlight turns off.

1. Press .
2. Press General Setup > Ecology > Sleep Time.
3. Enter the length of time (0-50 minutes) the machine will remain idle before entering Sleep mode, and then press OK.
4. Press .

Deep Sleep mode

If the machine is in Sleep mode and does not receive any jobs for a certain length of time, the machine will go into Deep Sleep mode and the Touchscreen's backlight turns off and  blinks. Deep Sleep mode uses less power than Sleep mode. The machine will wake up, when the machine receives a print job.

Auto Power Off

If the machine is in Deep Sleep mode for a certain length of time, it will go into Power Off mode. To start printing, press on the Touchpanel, and then send the print job.

You can choose how long the machine must be in Deep Sleep mode before it goes into Auto Power Off mode, by following these steps:

1. Press 

.
2. Press `General Setup` > `Ecology` > `Auto Power Off`.
3. Choose the length of time (`Off`, `1hour`, `2hours`, `4hours` or `8hours`) the machine will remain idle before entering Auto Power Off mode, and then press it.
4. Press .

NOTE

The machine does not go into Power Off mode when the machine is connected to a wired or wireless network or has secure documents in the memory.

Quiet mode feature

The Quiet mode setting can reduce printing noise. When Quiet Mode is turned on, the print speed becomes slower. The default setting is Off.

Turning Quiet mode on/off

1. Press 

.
2. Press `General Setup` > `Ecology` > `Quiet Mode`.
3. Press `On` or `Off`.
4. Press .

NOTE

If your machine has been set to Toner Save `On`, you cannot set Quiet mode to `On`.

Colour Correction

The output density and print position for each colour may vary depending on the machine's environment, such as temperature and humidity.

Colour Calibration

Calibration helps you improve the colour density.

NOTE

- If you are using the Windows® printer driver, the driver will get the calibration data automatically if both the **Use Calibration Data** and **Get Device Data Automatically** check boxes are selected. The default settings are On. See *Colour Calibration* on page 48.
- If you are using the Macintosh printer driver, you must perform the calibration using the Status Monitor. Turn on the Status Monitor, and then select **Color Calibration** from the **Control** menu. See *Status Monitor* on page 82 for how to turn on the Status Monitor.

Calibrate

1. Press 
2. Press `Calibration` > `Calibrate`.
3. Press `Yes` to confirm.
4. The Touchscreen displays `Completed`.
5. Press .

Reset

Reset the calibration parameters back to those set at the factory.

1. Press 
2. Press `Calibration` > `Reset`.
3. Press `Yes` to confirm.
4. The Touchscreen displays `Completed`.
5. Press .

Colour Registration

Registration helps you improve the print position for each colour.

1. Press 
2. Press `Registration`.
3. Press `Yes` to confirm.
4. The Touchscreen displays `Completed`.
5. Press .

Auto Correction

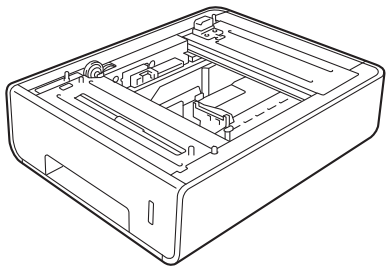
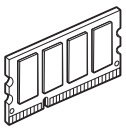
Select Auto Correction if you want the machine to perform Colour Calibration and Registration automatically. The factory setting is On. The colour correction process consumes some toner.

1. Press 

.
2. Press `Color Correction` > `Auto Correction`.
3. Press `On` or `Off`.
4. Press .

4 Options

This machine has the following optional accessories. You can increase the capabilities of the machine with these items.

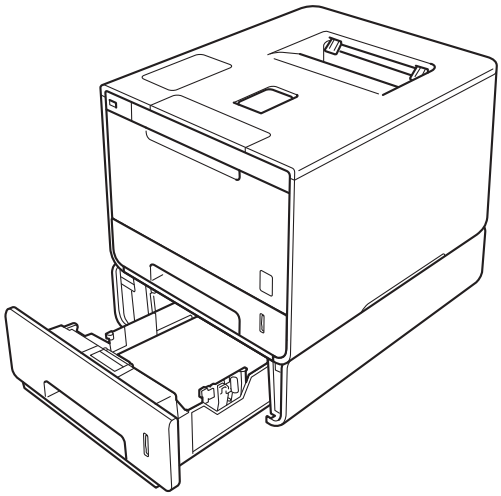
Lower tray [1]	SO-DIMM memory
LT-325CL	
	
See *Lower tray (LT-325CL)* on page 119.	See *SO-DIMM* on page 120.

[1] HL-L9200CDWT is equipped with the lower tray as standard. Only one lower tray can be installed.

Lower tray (LT-325CL)

One optional lower tray (Tray 2) [1] can be installed, and the lower tray can hold up to 500 sheets of 80 g/m^2 paper. When the optional lower tray is installed, the machine can hold up to 800 sheets of plain 80 g/m^2 paper. If you want to buy the optional lower tray unit, call the dealer you bought the machine from or Brother customer service.

[1] Standard equipment.



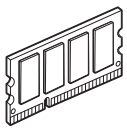
For setup, see the instructions that we have supplied with the lower tray unit.

⚠ WARNING

If you use a Lower Tray, DO NOT carry the machine with the Lower Tray as you may be injured or cause damage to the machine because it is not attached to the Lower Tray.

SO-DIMM

The machine has 128 MB of standard memory and one slot for optional memory expansion. You can increase the memory up to a maximum of 384 MB by installing one SO-DIMM (Small Outline Dual In-line Memory Module).



SO-DIMM types

You can install the following SO-DIMM:

- 256 MB Transcend TS256MHP423A

NOTE

For more information, visit the Transcend website at http://www.transcend.com.tw/.

In general, the SO-DIMM must have the following specifications:

Type: 144-pin and 16-bit output

CAS latency: 4

Clock frequency: 267 MHz (533 Mb/S/Pin) or more

Capacity: 256 MB

Height: 30.0 mm

DRAM type: DDR2 SDRAM

NOTE

- There might be some SO-DIMMs that will not work with the machine.
- For more information, call the dealer you bought the machine from or Brother customer service.

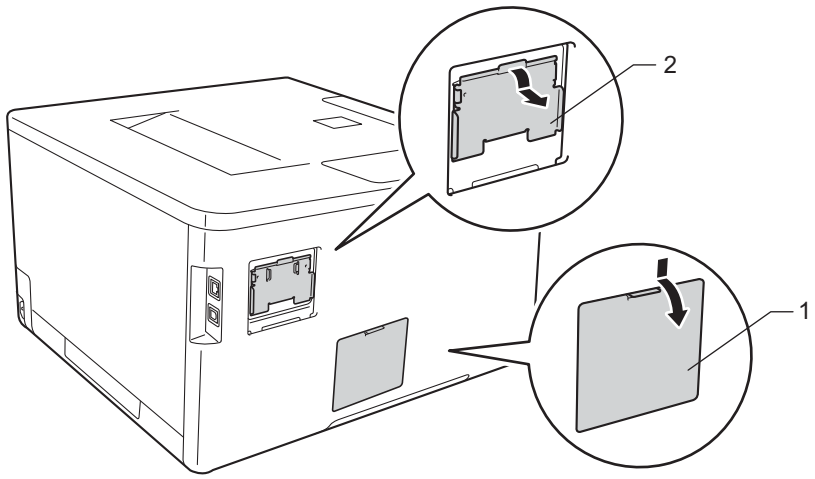
Installing extra memory

1. Turn off the machine's power switch.
2. Disconnect the interface cables from the machine, and then unplug the power cord from the AC power outlet.

NOTE

Always unplug the power cord from the AC power outlet before installing or removing the SO-DIMM.

3. Remove the plastic (1) and then the metal (2) SO-DIMM covers.

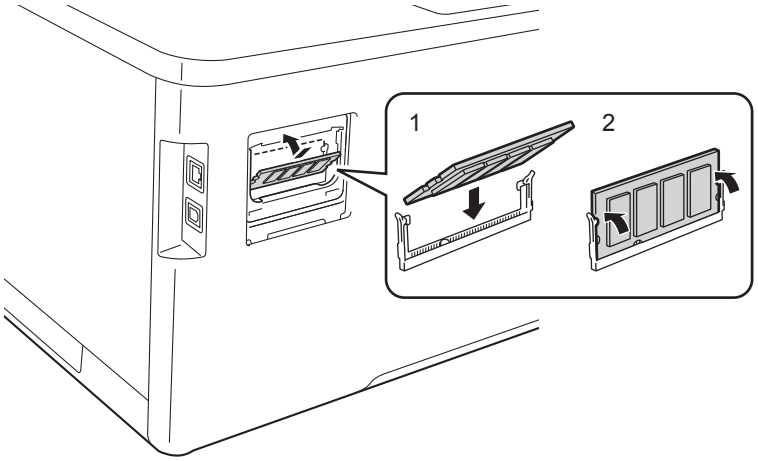


4. Unpack the SO-DIMM and hold it by its edges.

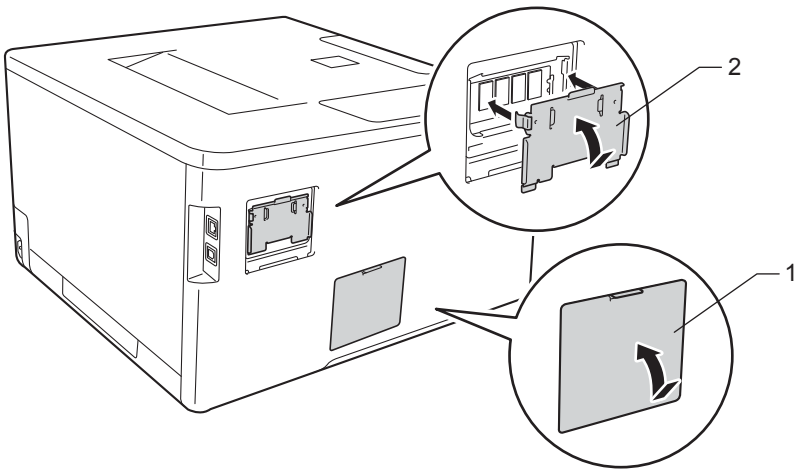
IMPORTANT

To prevent damage to the machine from static electricity, DO NOT touch the memory chips or the board's surface.

5 Hold the SO-DIMM by the edges and align the notches in the SO-DIMM with the protrusions in the slot. Insert the SO-DIMM diagonally (1), then tilt it toward the interface board until it locks into place (2).



6 Put the metal (2) and then the plastic (1) SO-DIMM covers back on.



7 Plug the machine's power cord back into the AC power outlet first, and then connect the interface cables.

8 Turn on the machine's power switch.

NOTE

To make sure that you have installed the SO-DIMM properly, you can print the Printer Settings page that shows the current memory size, (see *Machine Information* on page 91.)

5 Routine Maintenance

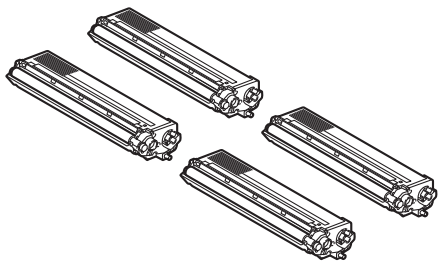
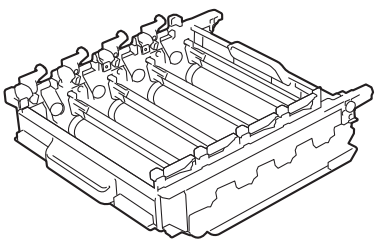
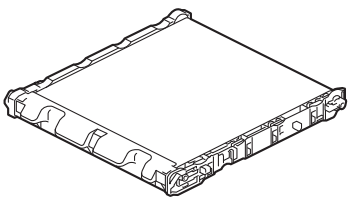
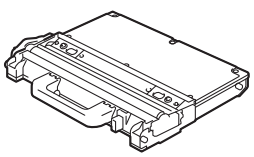
Replacing supplies

You must replace supplies when the machine indicates that the life of the supply is over. You can replace the following supplies yourself.

Using non-Brother supplies is not recommended and may affect the print quality, hardware performance, and machine reliability.

NOTE

The drum unit and toner cartridge are two separate parts.

Toner cartridge	Drum unit
See *Replacing the toner cartridges* on page 127. Model Name: TN-900BK, TN-900C, TN-900M, TN-900Y	See *Replacing the drum unit* on page 133. Model Name: DR-321CL
	
Belt unit	Waste toner box
See *Replacing the belt unit* on page 140. Model Name: BU-320CL	See *Replacing the waste toner box* on page 146. Model Name: WT-320CL
	

The following messages appear on the Touchscreen in the Ready mode. These messages provide advanced warnings to replace supplies before they reach their end of life. To avoid any inconvenience, you may want to buy spare supplies before the machine stops printing.

Touchscreen messages	Supply to get ready	Approximate life	How to replace	Model Name
Toner Low: X	Toner cartridge X = C, M, Y, BK C = Cyan M = Magenta Y = Yellow BK = Black	6,000 pages [1] [2]	See page 128	TN-900BK TN-900C TN-900M TN-900Y
Drum End Soon	Drum unit	25,000 pages [1] [3]	See page 134	DR-321CL
Belt End Soon	Belt unit	50,000 pages (5 pages per job) [1] [3] 20,000 pages (1 page per job) [1] [3]	See page 140	BU-320CL
WT Box End Soon	Waste toner box	50,000 pages [1] [3]	See page 146	WT-320CL

[1] A4 or Letter size single-sided pages

[2] Approximate cartridge yield is declared in accordance with ISO/IEC 19798.

[3] Life of supply is approximate and may vary by type of use.

You must clean the machine regularly and replace supplies when the following messages are displayed on the Touchscreen:

Touchscreen messages	Supply to replace	Approximate life	How to replace	Model Name
Replace Toner	Toner cartridge The Touchscreen displays the toner cartridge colour that you must replace. BK = Black C = Cyan M = Magenta Y = Yellow	6,000 pages [1] [2]	See page 128	TN-900BK TN-900C TN-900M TN-900Y
Replace Drum	Drum unit	25,000 pages [1] [3]	See page 134	DR-321CL
Drum Stop	Drum unit	25,000 pages [1] [3]	See page 134	DR-321CL
Replace Belt	Belt unit	50,000 pages (5 pages per job) [1] [3] 20,000 pages (1 page per job) [1] [3]	See page 140	BU-320CL
Replace WT Box	Waste toner box	50,000 pages [1] [3]	See page 146	WT-320CL
Replace Fuser	Fuser unit	100,000 pages [1] [3]	Contact your dealer or Brother customer service for a replacement fuser unit.	
Replace PF Kit MP	Paper feeding kit	50,000 pages [1] [3]	Contact your dealer or Brother customer service for a replacement PF kit MP.	
Replace PF Kit 1	Paper feeding kit	100,000 pages [1] [3]	Contact your dealer or Brother customer service for a replacement PF kit 1.	
Replace PF Kit 2	Paper feeding kit	100,000 pages [1] [3]	Contact your dealer or Brother customer service for a replacement PF kit 2.	
Replace Laser	Laser unit	100,000 pages [1] [3]	Contact your dealer or Brother customer service for a replacement laser unit.	

[1] A4 or Letter size single-sided pages

[2] Approximate cartridge yield is declared in accordance with ISO/IEC 19798.

[3] Life of supply is approximate and may vary by type of use.

NOTE

- Go to http://www.brother.com/original/index.html for instructions on how to return the used toner cartridge to the brother collection program. If you choose not to return your used toner cartridge, please discard the used toner cartridge according to local regulations, keeping it separate from domestic waste. If you have questions, contact your local waste disposal office (see the Product Safety Guide).
- We recommend placing used supplies on a piece of paper to prevent accidentally spilling or scattering the material inside.
- If you use paper that is not a direct equivalent of the recommended paper, the life of supplies and machine parts may be reduced.
- The projected life for each of the toner cartridges is based on ISO/ICE 19798. Frequency of replacement will vary depending on the print volume, percentage of coverage, types of media used, and powering on/off of the machine.
- Frequency of replacement supplies except toner cartridges will vary depending on the print volume, types of media used, and powering on/off of the machine.

Replacing the toner cartridges

Model Name: For the item number of the toner cartridges, see *Replacing supplies* on page 123

The toner cartridge can print approximately 6,000 pages (black, cyan, magenta, yellow) [1]. Actual page count will vary depending on your average type of document. When a toner cartridge is running low, theTouchscreen displays `Toner Low`.

The toner cartridge that comes supplied with the machine must be replaced after printing approximately 6,000 pages (black, cyan, magenta, yellow) [1].

[1] Approximate cartridge yield is declared in accordance with ISO/IEC 19798.

NOTE

- The indication of remaining toner life will vary depending on the types of documents printed and your usage.
- It is a good idea to keep a new toner cartridge ready for use when you see the `Toner Low` warning.
- To ensure high quality printing, we recommend using only Brother Original toner cartridges. When you want to buy toner cartridges, contact your local Brother dealer or Brother customer service.
- We recommend cleaning the machine when you replace the toner cartridge. See *Cleaning and Checking the machine* on page 153.
- DO NOT unpack the new toner cartridge until you are ready to install it.

Toner Low: X

If the Touchscreen displays `Toner Low: X`, buy a new toner cartridge for the colour indicated on the Touchscreen and have it ready before you get a `Replace Toner` message.

Replace Toner

When the Touchscreen displays `Replace Toner` the machine will stop printing until you replace the toner cartridge.

The Touchscreen indicates the toner cartridge colour that you must replace. (BK=Black, C=Cyan, M=Magenta, Y=Yellow).

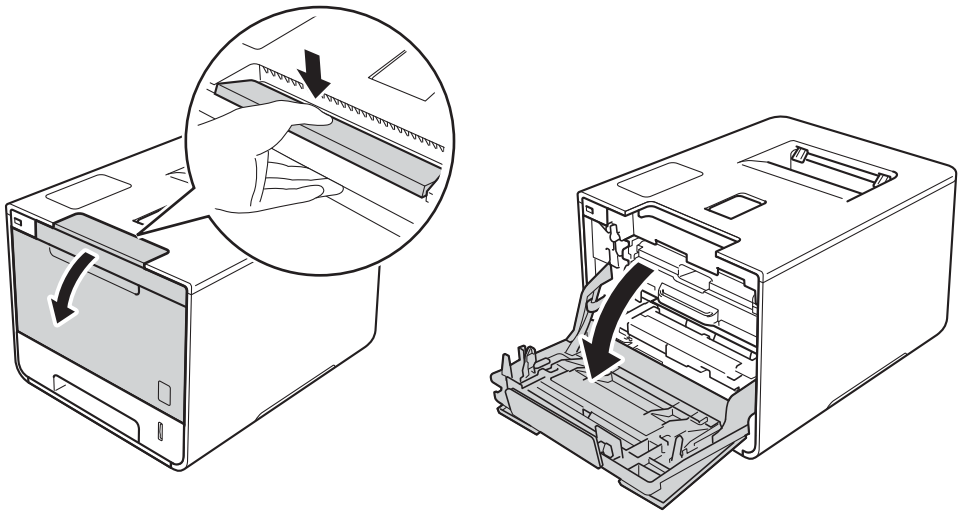
A new Brother Original toner cartridge will reset the Replace Toner message.

NOTE

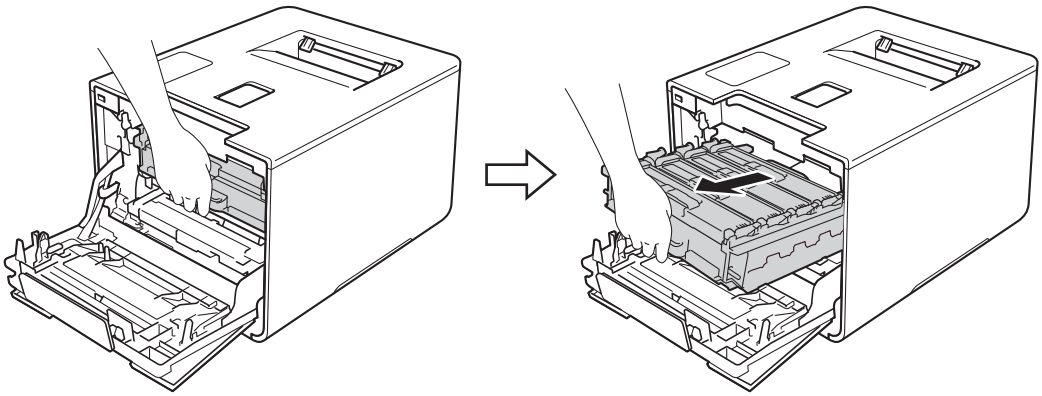
For more information about how toner cartridge life is calculated, see *Important information for the toner cartridge life* on page 214.

Replacing the toner cartridges

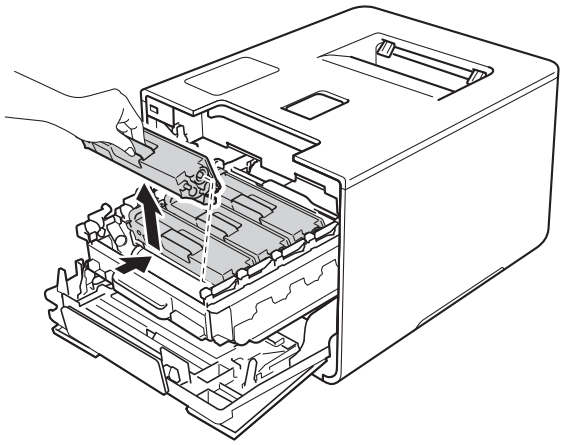
1. Make sure that the machine is turned on.
2. Press the front cover release button and pull open the front cover.



3. Hold the blue handle of the drum unit. Pull the drum unit out until it stops.



4 Hold the handle of the toner cartridge and gently push it forward to unlock it. Then pull it out of the drum unit. Repeat this for all the toner cartridges.



WARNING

- DO NOT put a toner cartridge into a fire. It could explode, resulting in injuries.
- DO NOT use flammable substances, any type of spray, or an organic solvent/liquid containing alcohol or ammonia to clean the inside or outside of the machine. Doing so could cause a fire or electrical shock. Instead, use only a dry, soft, lint-free cloth.

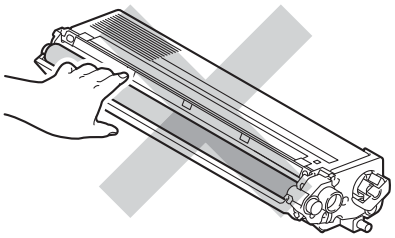
  (See the Product Safety Guide.)



IMPORTANT

- Handle the toner cartridge carefully. If toner scatters on your hands or clothes, immediately wipe or wash it off with cold water.
- To avoid print quality problems, DO NOT touch the shaded parts shown in the illustration.

  <Toner cartridge>



- We recommend placing the toner cartridge on a clean, flat, level, stable surface with a sheet of disposable paper or cloth underneath it in case you accidentally spill or scatter toner.

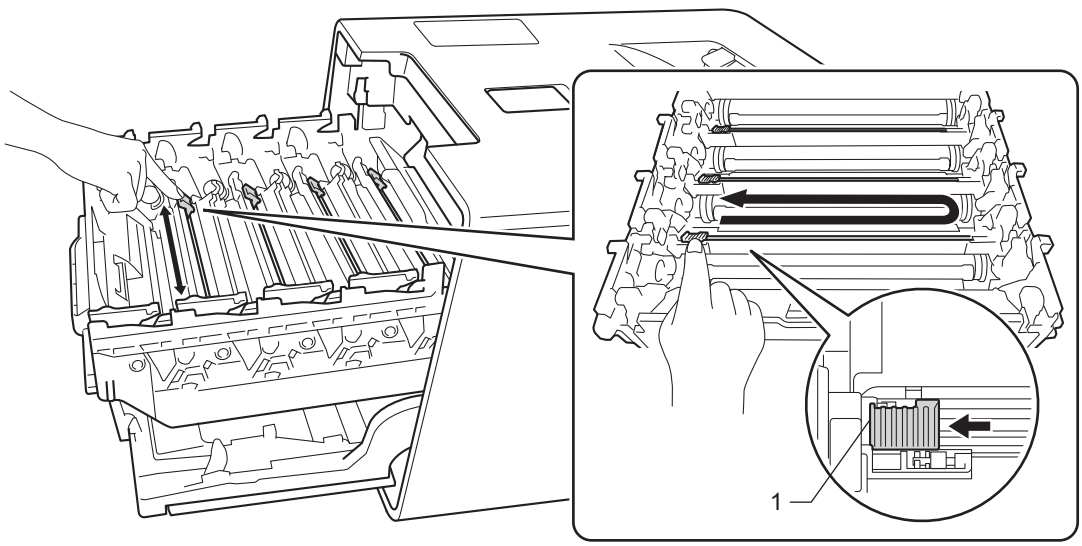
NOTE

- Be sure to seal up the used toner cartridge tightly in a bag so that toner powder does not spill out of the cartridge.
- Go to http://www.brother.com/original/index.html for instructions on how to return your used supplies to the Brother collection program. If you choose not to return your used supply, please discard the used supply according to local regulations, keeping it separate from domestic waste. If you have questions, contact your local waste disposal office (see the Product Safety Guide).

5 Clean the corona wire inside the drum unit by gently sliding the blue tab from left to right and right to left several times.

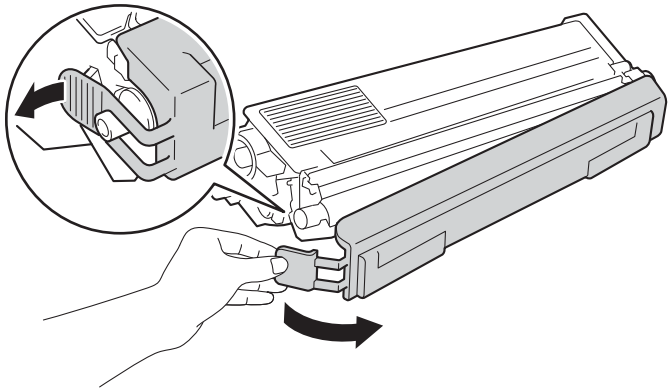
IMPORTANT

Be sure to return the tab to the home position (1). If you do not, printed pages may have a vertical stripe.



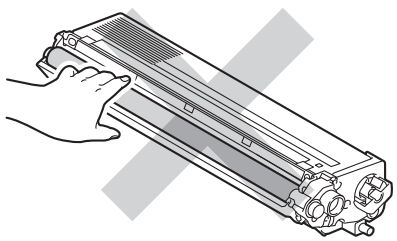
6 Repeat step ❺ to clean each of three remaining corona wires.

7 Unpack the new toner cartridge, then pull off the protective cover.

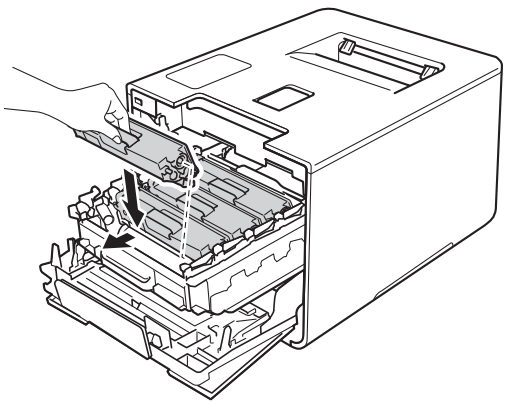


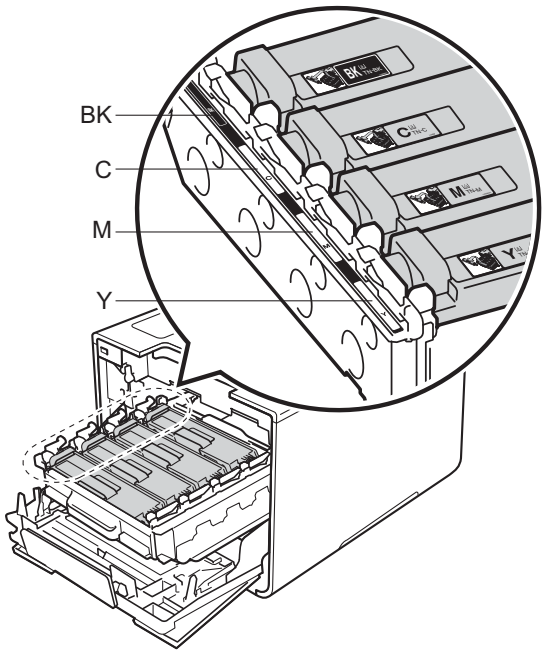
IMPORTANT

- DO NOT unpack the new toner cartridge until you are ready to install it. If a toner cartridge is left unpacked for a long time, the toner life will be shortened.
- If an unpacked drum unit is exposed to direct sunlight (or room light for long periods of time), the unit may be damaged.
- Brother machines are designed to work with toner of a particular specification and will work to a level of optimum performance when used with Brother Original toner cartridges. Brother cannot guarantee this optimum performance if toner or toner cartridges of other specifications are used. Brother does not therefore recommend the use of cartridges other than Brother Original cartridges with this machine, or the refilling of empty cartridges with toner from other sources. If damage is caused to the drum unit or other part of this machine as a result of the use of toner or toner cartridges other than Brother Original products due to the incompatibility or lack of suitability of those products with this machine, any repairs required as a result may not be covered by the warranty.
- Put the toner cartridge in the drum unit immediately after you have removed the protective cover. To prevent degradation to the print quality, DO NOT touch the shaded parts shown in the illustration.



8 Hold the handle of the toner cartridge and slide the toner cartridge into the drum unit then gently pull it toward you until you hear it click into place. Make sure that you match the toner cartridge colour to the same colour label on the drum unit. Repeat this for all the toner cartridges.



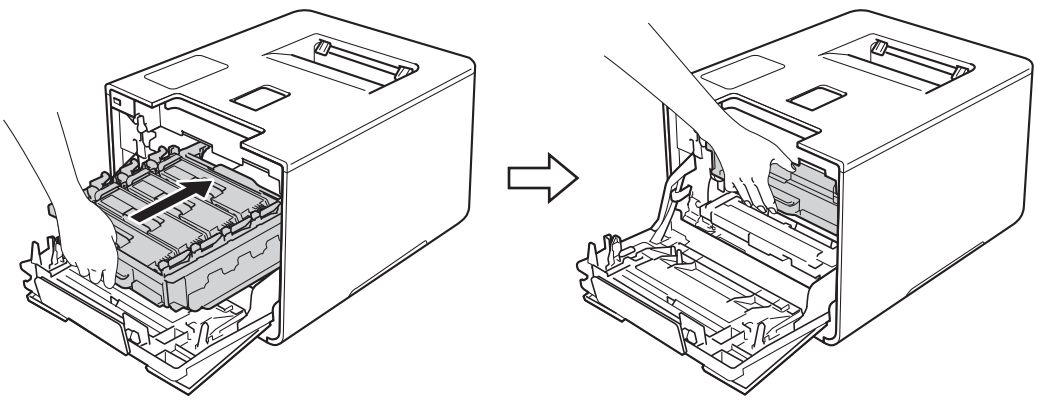


BK - Black
C - Cyan
M - Magenta
Y - Yellow

NOTE

Make sure you installed the toner cartridge correctly or it may separate from the drum unit.

9 Push the drum unit in until it stops.



10 Close the front cover of the machine.

NOTE

After replacing the toner cartridge, DO NOT turn off the machine's power switch or open the front cover until the Touchscreen returns to the Home screen.

Replacing the drum unit

Model Name: DR-321CL

A new drum unit can print approximately 25,000 pages. [1] [2]

[1] A4 or Letter size single-sided pages.

[2] Drum life is approximate and may vary by type of use.

IMPORTANT

For best performance, use a Brother Original drum unit and Brother Original toner units. Printing with a third-party drum unit or toner unit may reduce not only the print quality but also the quality and life of the machine itself. Warranty coverage may not apply to problems caused by the use of a third-party drum unit or toner unit.

Drum !

The corona wires are coated with paper dust or toner. Clean the corona wires in the drum unit (see *Cleaning the corona wires* on page 160).

Drum End Soon

The drum unit is nearing the end of its rated life and will require replacement. We recommend you keep a Brother Original drum unit ready for installation. Buy a new drum unit (DR-321CL) and have it ready before you get a `Replace Drum` message.

Replace Drum

The drum unit has exceeded its rated life. Please replace the drum unit with a new one. We recommend a Brother Original drum unit be installed at this time.

After replacement, reset the drum counter by following the instructions included with the new drum unit.

Drum Stop

We cannot guarantee the print quality. Please replace the drum unit with a new one. We recommend a Brother Original drum unit be installed at this time.

After replacement, reset the drum counter by following the instructions included with the new drum unit.

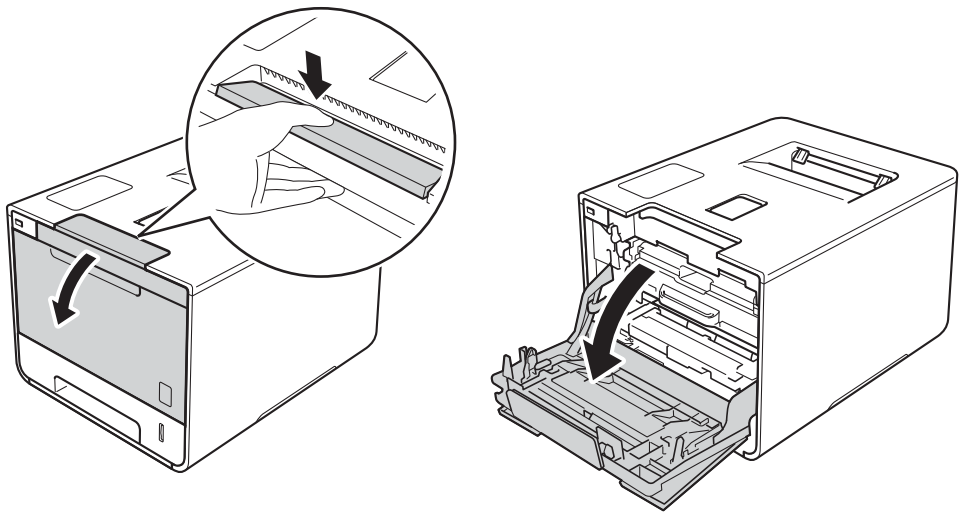
Replacing the drum unit

IMPORTANT

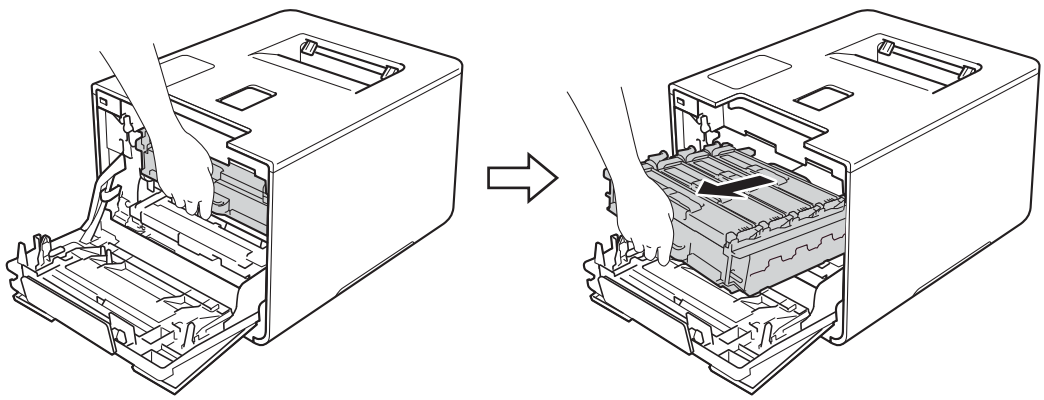
- While removing the drum unit, handle it carefully because it may contain toner. If toner scatters on your hands or clothes, immediately wipe or wash it off with cold water.
- Every time you replace the drum unit, clean the inside of the machine (see *Cleaning and Checking the machine* on page 153).

When you replace the drum unit with a new one, follow these steps, and then reset the drum counter by following the instructions included with the new drum unit.

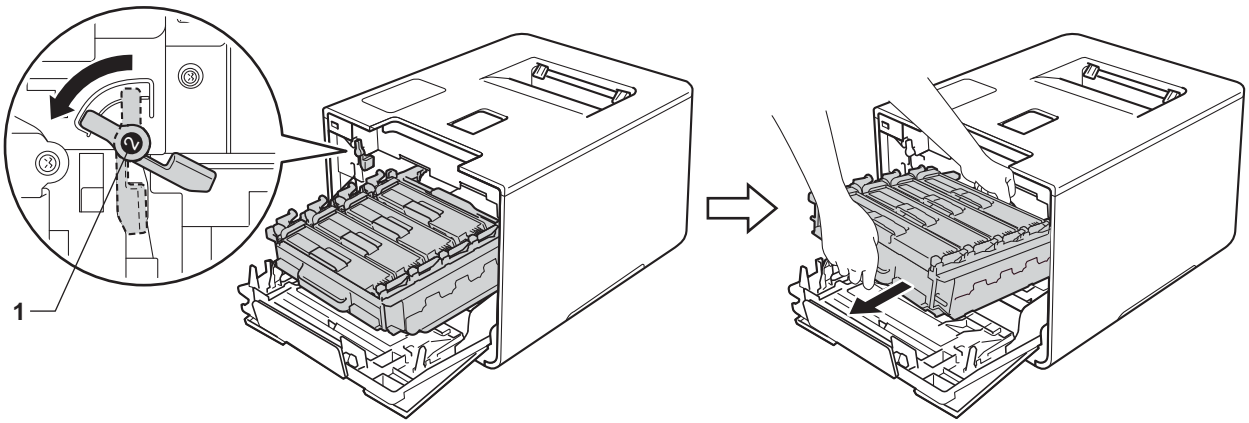
1. Make sure that the machine is turned on.
2. Press the front cover release button and pull open the front cover.



3. Hold the blue handle of the drum unit. Pull the drum unit out until it stops.

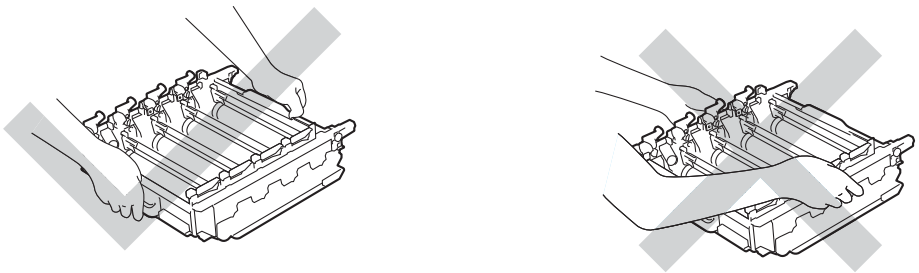


4 Turn the blue lock lever (1) at the left of the machine counterclockwise to the release position. Holding the blue handles of the drum unit, lift the front of the drum unit and remove it from the machine.

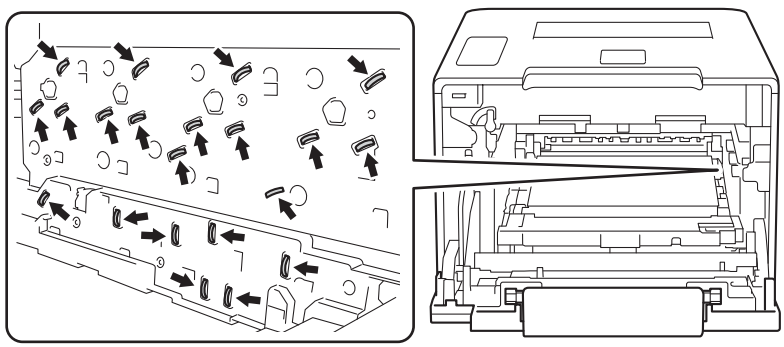


IMPORTANT

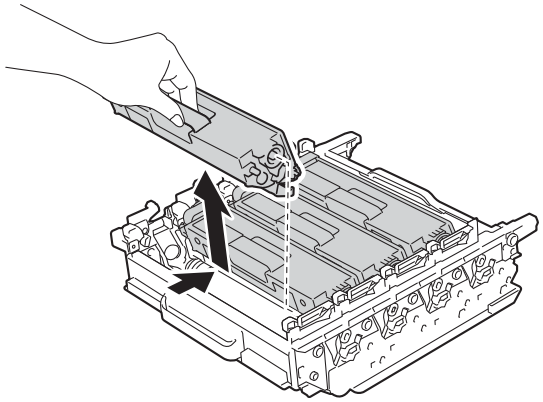
- Hold the blue handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



- We recommend placing the drum unit on a clean, flat, level, stable surface with a sheet of disposable paper or cloth underneath it in case you accidentally spill or scatter toner.
- To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.



5 Hold the handle of the toner cartridge and gently push it forward to unlock it. Then pull it out of the drum unit. Repeat this for all the toner cartridges.



⚠ WARNING

- DO NOT put a toner cartridge into a fire. It could explode, resulting in injuries.
- DO NOT use flammable substances, any type of spray, or an organic solvent/liquid containing alcohol or ammonia to clean the inside or outside of the machine. Doing so could cause a fire or electrical shock. Instead, use only a dry, soft, lint-free cloth.

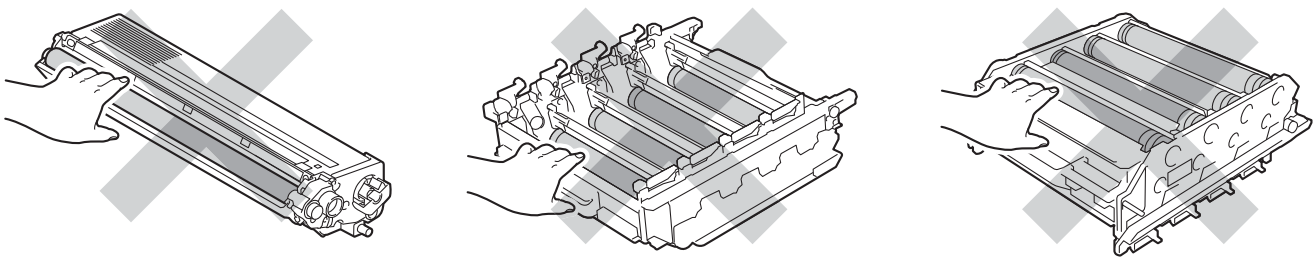
  (See the Product Safety Guide.)



IMPORTANT

- Handle the toner cartridge carefully. If toner scatters on your hands or clothes, immediately wipe or wash it off with cold water.
- To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.

<Toner cartridge> **<Drum unit>**

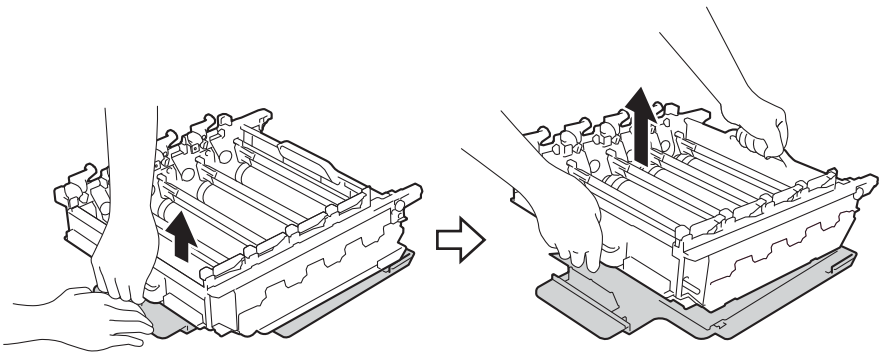


- We recommend placing the toner cartridge on a clean, flat, level, stable surface with a sheet of disposable paper or cloth underneath it in case you accidentally spill or scatter toner.

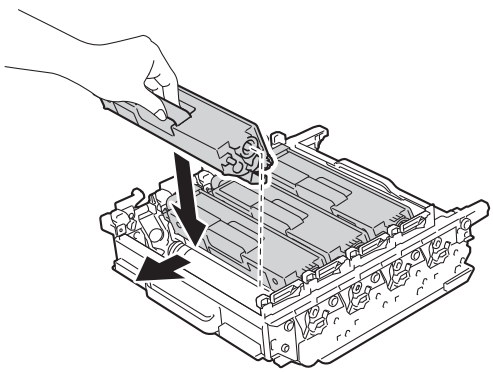
NOTE

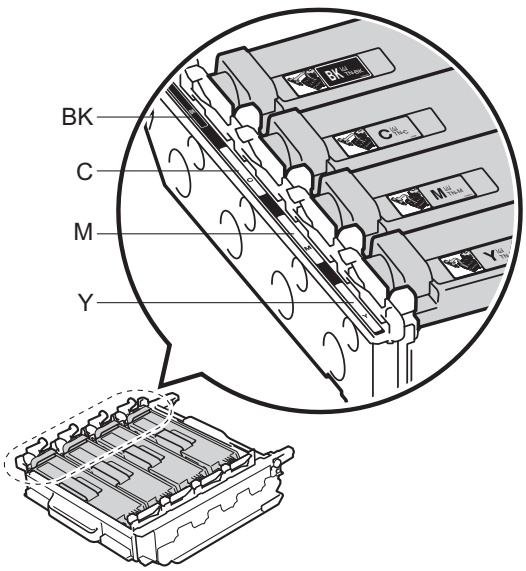
- Be sure to seal up the used drum unit tightly in a bag so that toner powder does not spill out of the drum unit.
- Go to http://www.brother.com/original/index.html for instructions on how to return your used supplies to the Brother collection program. If you choose not to return your used supply, please discard the used supply according to local regulations, keeping it separate from domestic waste. If you have questions, contact your local waste disposal office (see the Product Safety Guide).

6 Unpack the new drum unit and remove the protective cover.



7 Hold the handle of the toner cartridge and slide it into the appropriate coloured section of the drum unit until you hear it click into place.



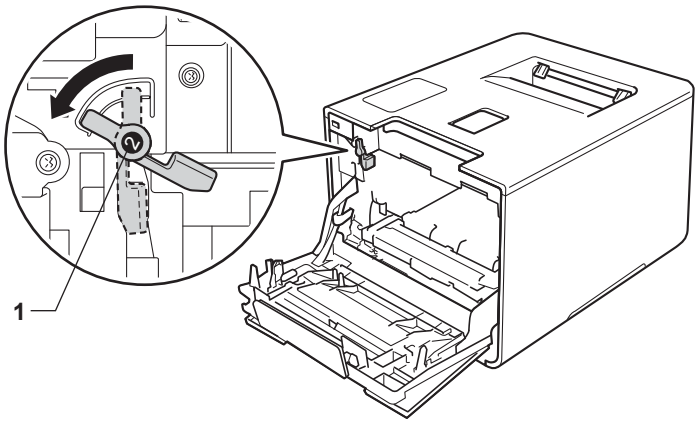


BK - Black
C - Cyan
M - Magenta
Y - Yellow

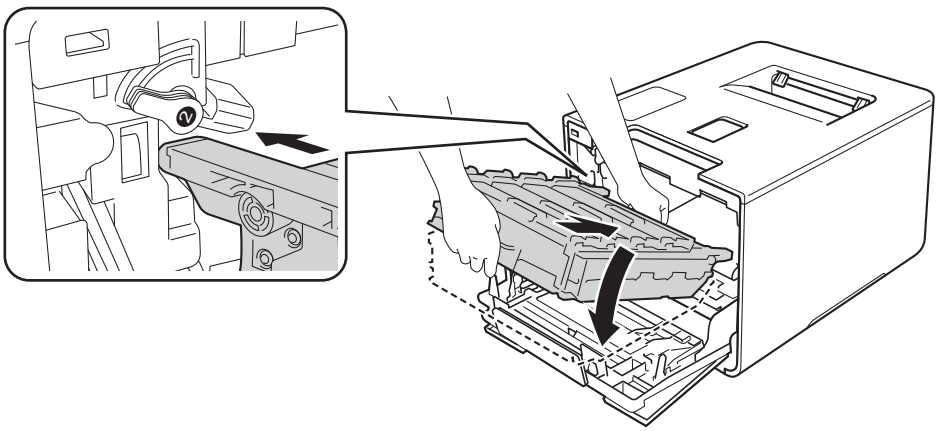
NOTE

Make sure you install the toner cartridge correctly or it may separate from the drum unit.

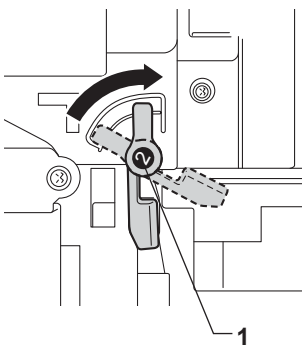
8 Make sure the blue lock lever (1) is in the release position as shown in the illustration.



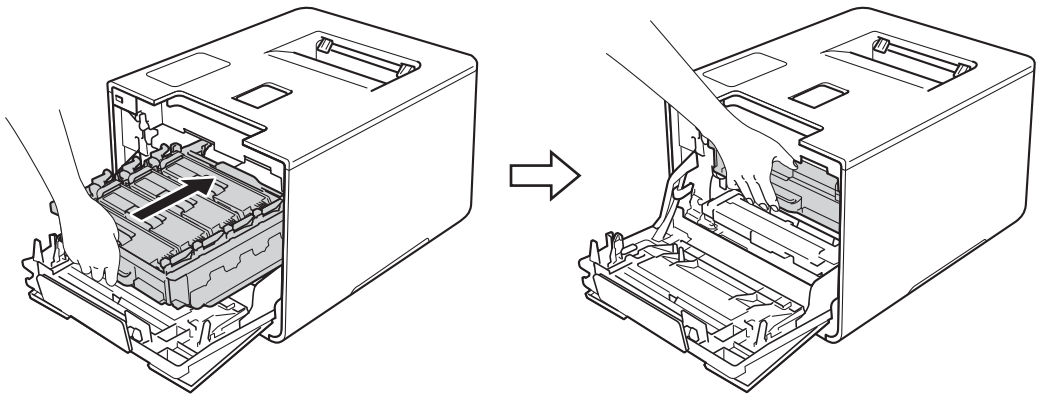
9 Gently slide the drum unit into the machine until it stops at the blue lock lever.



10 Turn the blue lock lever (1) clockwise to the lock position.



⓫ Push the drum unit in until it stops.



⓬ Close the front cover of the machine.

⓭ When you replace the drum unit with a new one, you need to reset the drum counter. Instructions of how to do this can be found in the box your new drum unit came in.

Replacing the belt unit

Model Name: BU-320CL

A new belt unit can print approximately 50,000 pages (5 pages per job) [1] [2] or 20,000 pages (1 page per job) [1] [2]

[1] A4 or Letter size single-sided pages.

[2] Belt unit life is approximate and may vary by type of use.

Belt End Soon

If the Touchscreen displays `Belt End Soon`, it means the belt unit is near the end of its life. Buy a new belt unit and have it ready before you get a `Replace Belt` message. To replace the belt unit, see *Replacing the belt unit* on page 140.

Replace Belt

When the `Replace Belt` message appears on the Touchscreen, you must replace the belt unit.

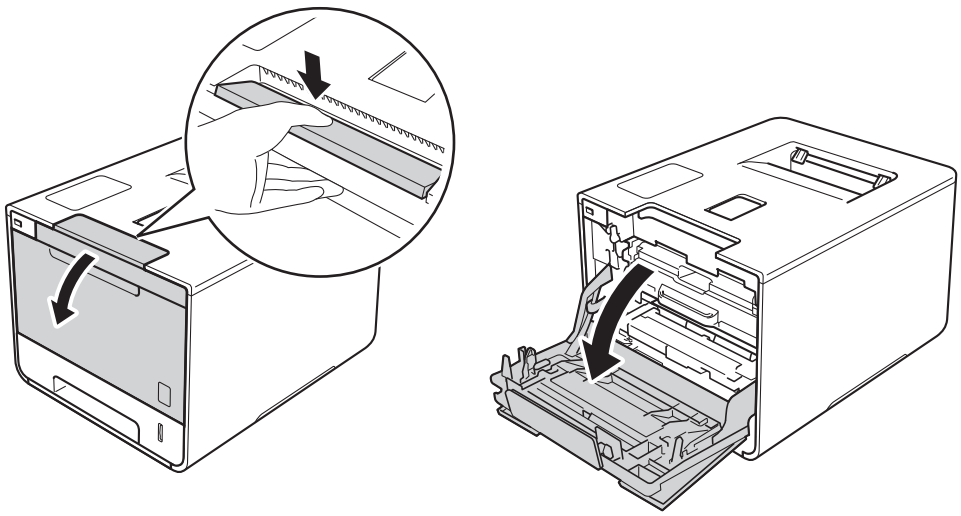
After replacement, reset the belt unit by following the instructions included with the new belt unit.

IMPORTANT

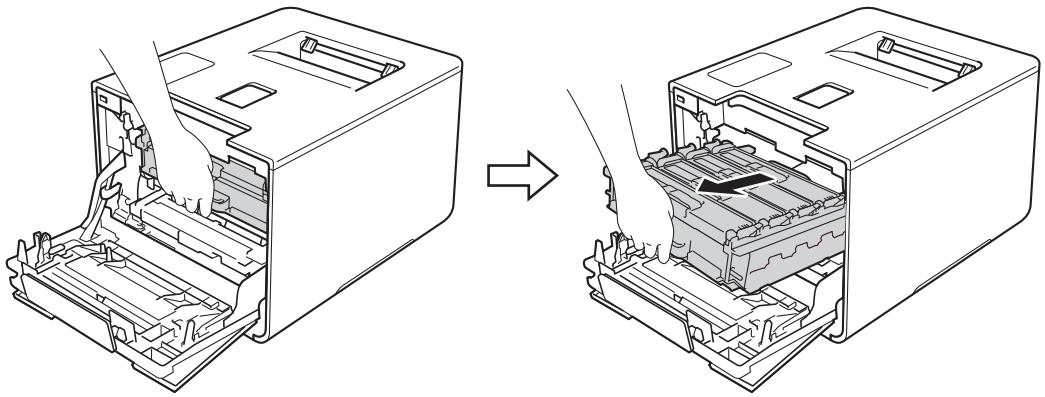
- DO NOT touch the surface of the belt unit. If you touch it, it could degrade print quality.
- Damage caused by incorrect handling of the belt unit may void your warranty.

Replacing the belt unit

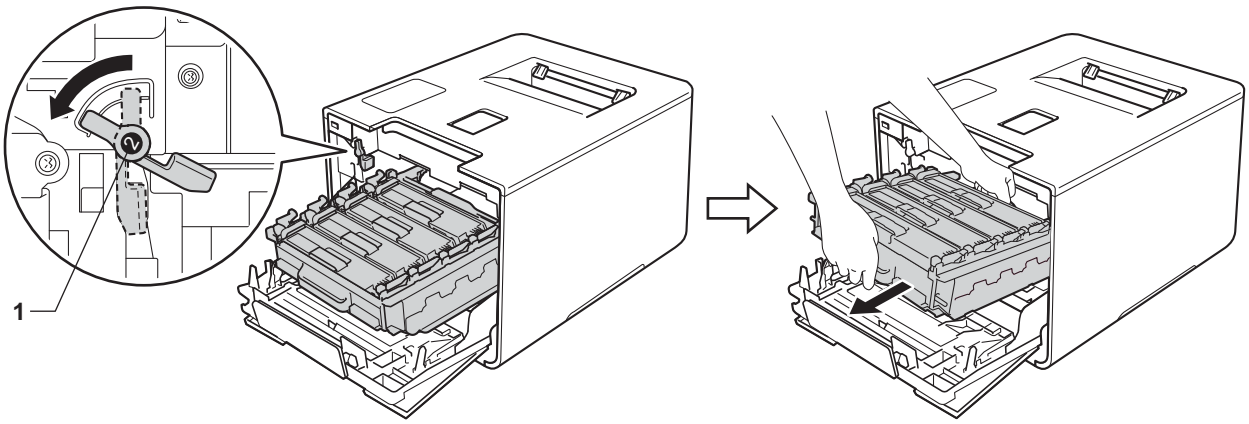
1. Make sure that the machine is turned on.
2. Press the front cover release button and pull open the front cover.



3 Hold the blue handle of the drum unit. Pull the drum unit out until it stops.



4 Turn the blue lock lever (1) at the left of the machine counterclockwise to the release position. Holding the blue handles of the drum unit, lift the front of the drum unit and remove it from the machine.

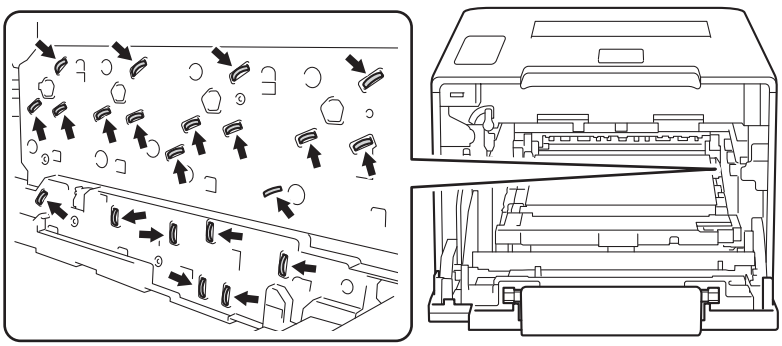


IMPORTANT

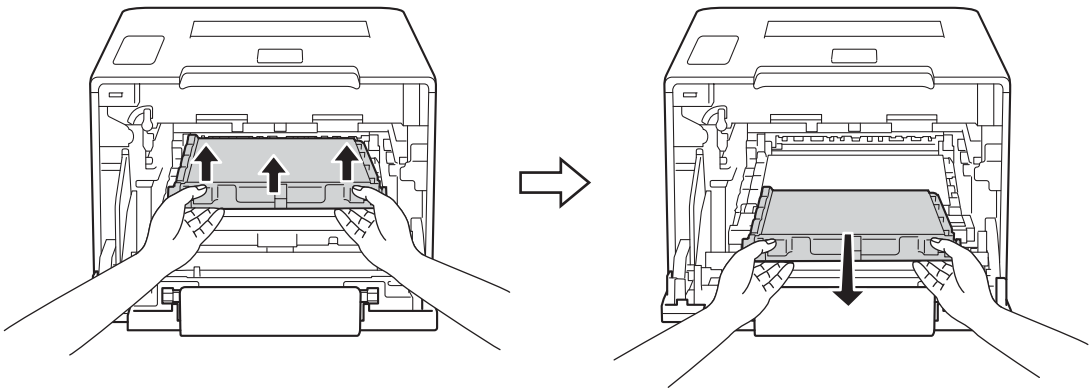
- Hold the blue handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



- We recommend placing the drum unit on a clean, flat, level, stable surface with a sheet of disposable paper or cloth underneath it in case you accidentally spill or scatter toner.
- To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.

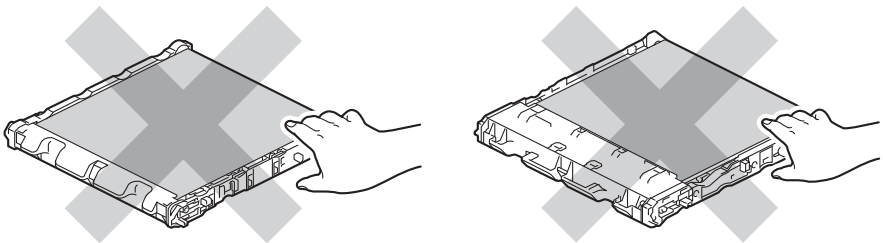


5 Hold the blue handle of the belt unit with both hands and lift the belt unit up, and then pull it out.

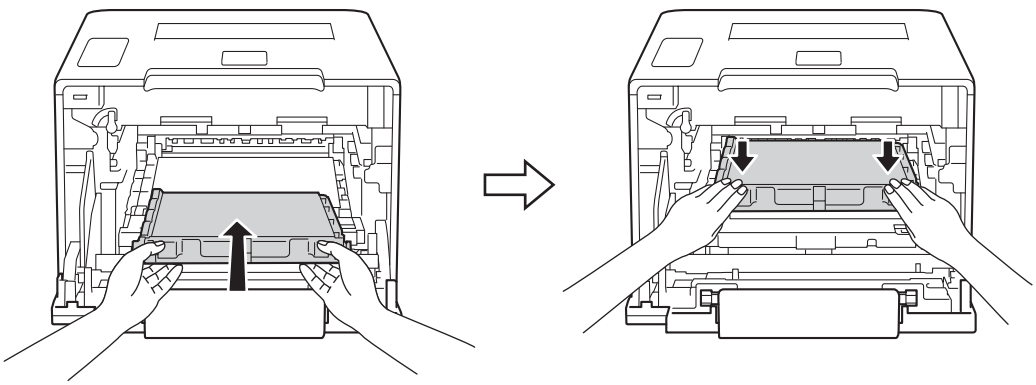


IMPORTANT

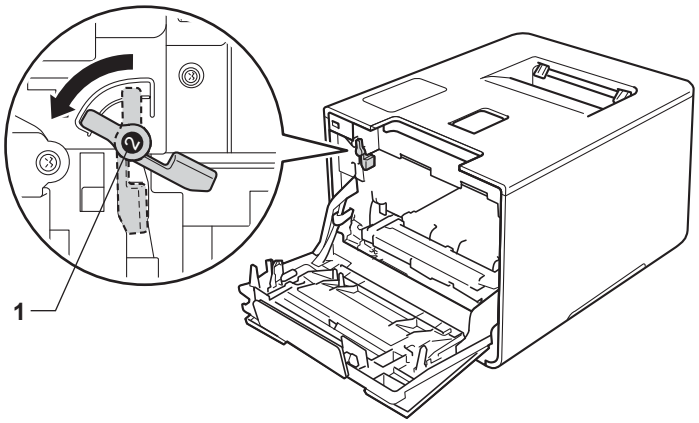
To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.



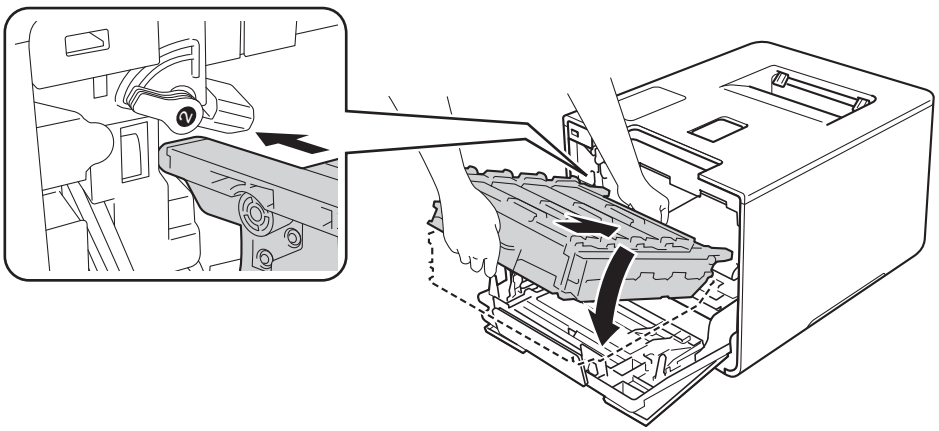
6 Unpack the new belt unit and install it in the machine. Make sure the belt unit is level and fits firmly into place.



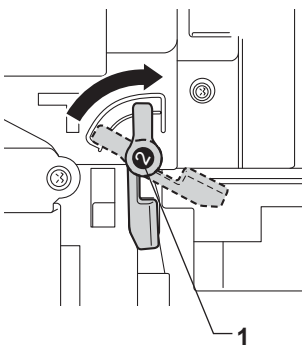
7 Make sure the blue lock lever (1) is in the release position as shown in the illustration.



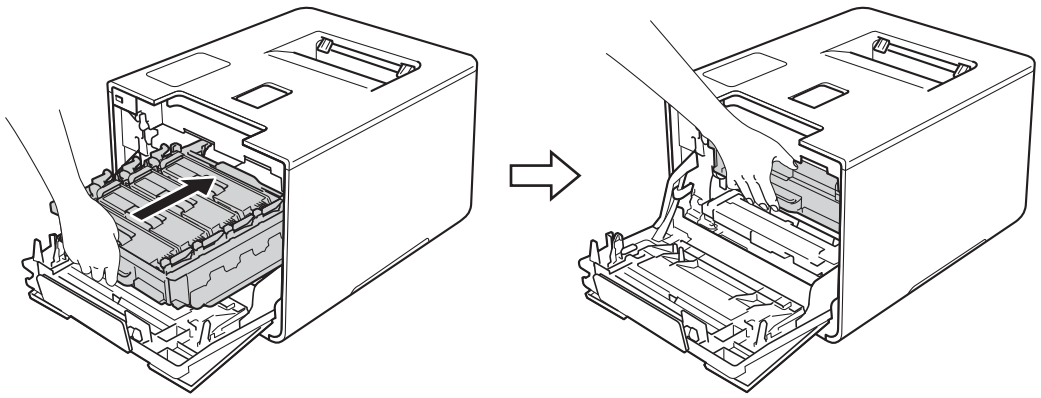
8 Gently slide the drum unit into the machine until it stops at the blue lock lever.



9 Turn the blue lock lever (1) clockwise to the lock position.



⑩ Push the drum unit in until it stops.



⑪ Close the front cover of the machine.

⑫ When you replace the belt unit with a new one, you need to reset the belt unit counter. Instructions of how to do this can be found in the box your new belt unit came in.

Replacing the waste toner box

Model Name: WT-320CL

The life of a waste toner box is approximately 50,000 pages. [1] [2]

[1] A4 or Letter size single-sided pages.

[2] Waste toner box life is approximate and may vary by type of use.

WT Box End Soon

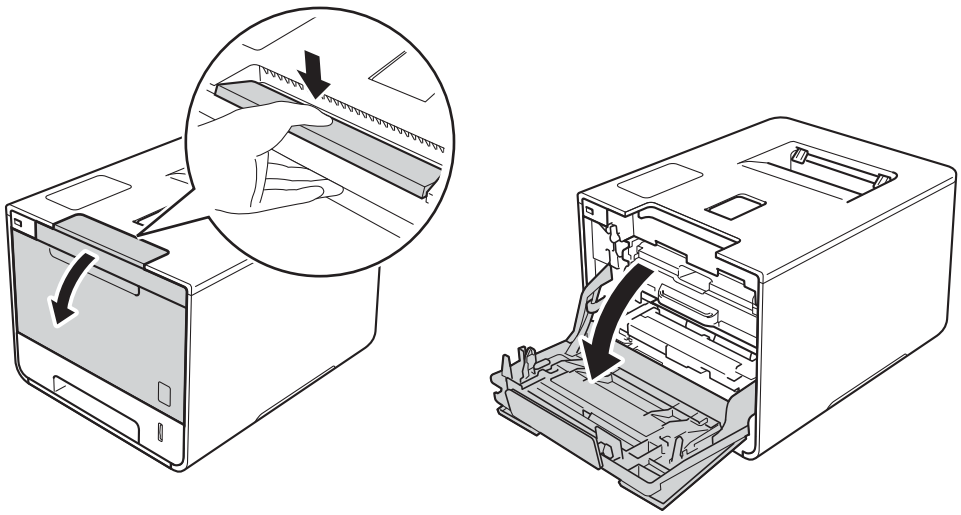
If the Touchscreen displays `WT Box End Soon`, it means the waste toner box is near the end of its life. Buy a new waste toner box and have it ready before you get a `Replace WT Box` message. To replace the waste toner box, see *Replacing the waste toner box* on page 146.

Replace WT Box

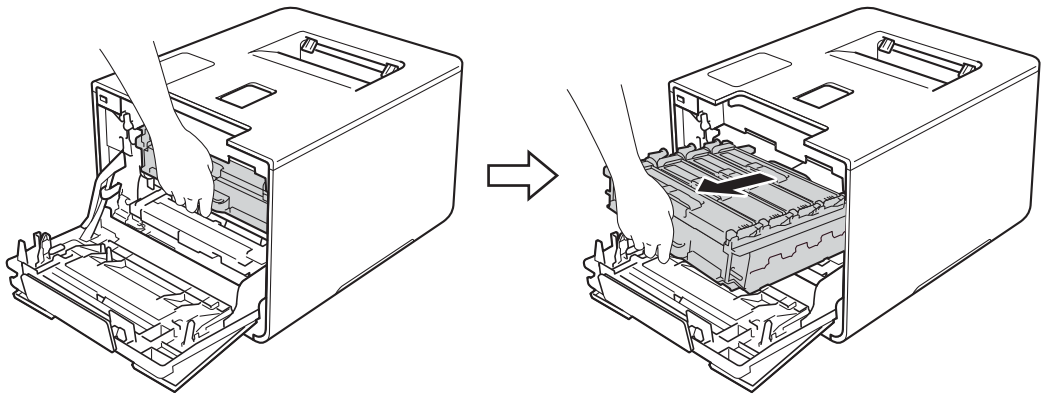
When the `Replace WT Box` message appears on the Touchscreen, you must replace the waste toner box.

Replacing the waste toner box

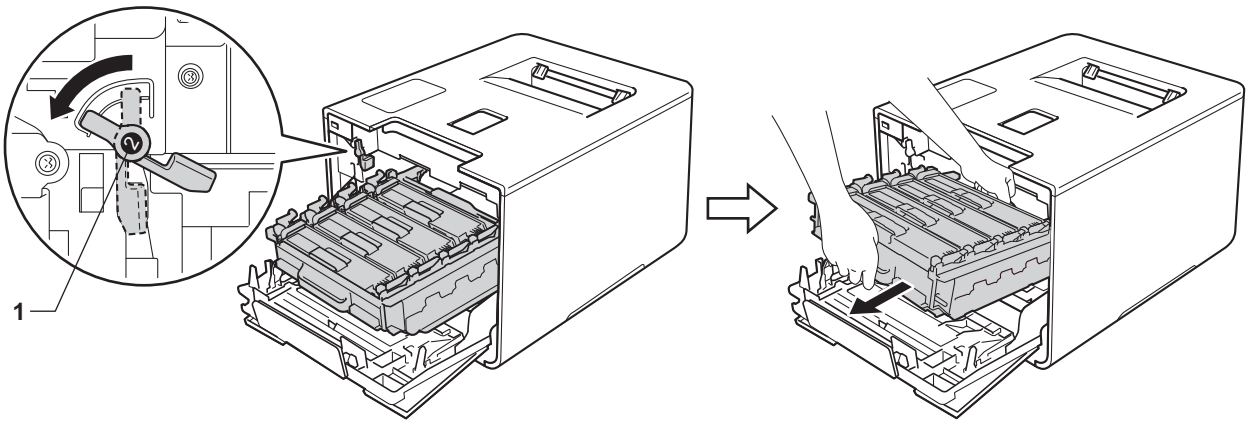
1. Make sure that the machine is turned on.
2. Press the front cover release button and pull open the front cover.



3 Hold the blue handle of the drum unit. Pull the drum unit out until it stops.



4 Turn the blue lock lever (1) at the left of the machine counterclockwise to the release position. Holding the blue handles of the drum unit, lift the front of the drum unit and remove it from the machine.

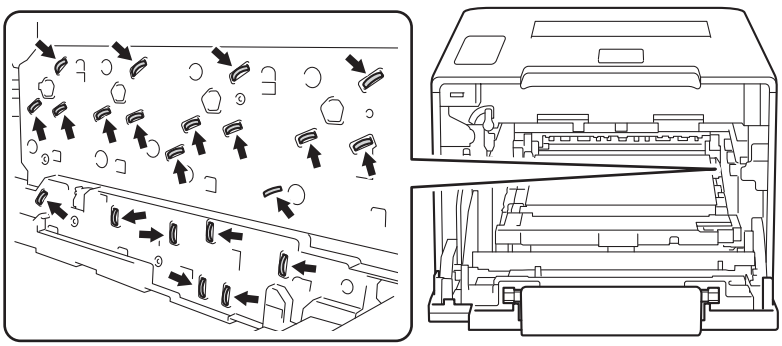


IMPORTANT

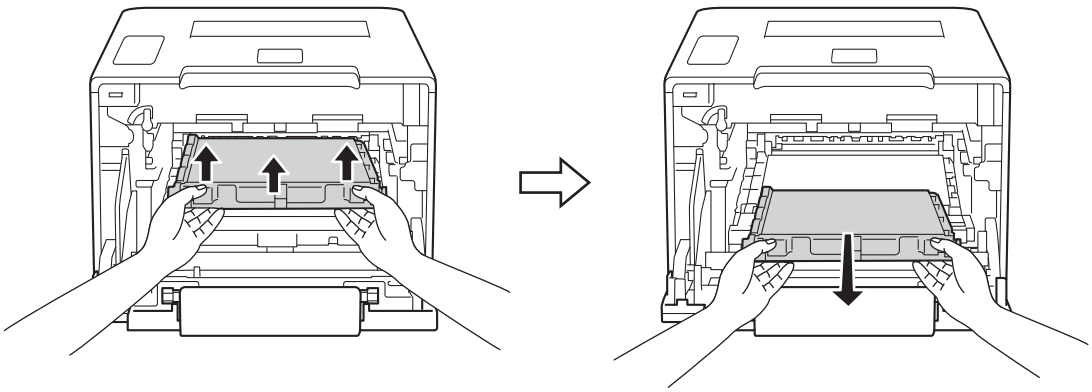
- Hold the blue handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



- We recommend placing the drum unit on a clean, flat, level, stable surface with a sheet of disposable paper or cloth underneath it in case you accidentally spill or scatter toner.
- To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.

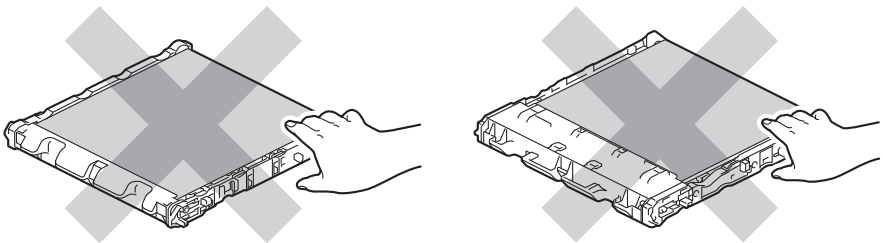


5 Hold the blue handle of the belt unit with both hands and lift the belt unit up, and then pull it out.

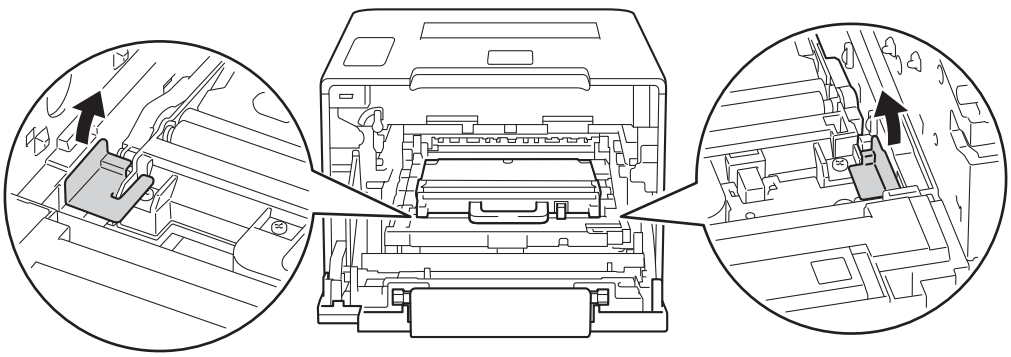


IMPORTANT

To avoid print quality problems, DO NOT touch the shaded parts shown in the illustrations.



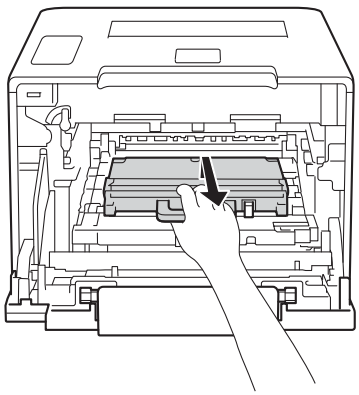
6 Remove the two pieces of orange packing material and discard them.



NOTE

This step is only necessary when you are replacing the waste toner box for the first time, and is not required for the replacement waste toner box. The orange packing pieces are installed at the factory to protect your machine during shipment.

7 Hold the blue handle of the waste toner box and remove the waste toner box from the machine.



IMPORTANT

DO NOT reuse the waste toner box.

WARNING

- DO NOT put the waste toner box into a fire. It could explode, resulting in injuries.
- DO NOT use flammable substances, any type of spray, or an organic solvent/liquid containing alcohol or ammonia to clean the inside or outside of the machine. Doing so could cause a fire or electrical shock. Instead, use only a dry, soft, lint-free cloth.

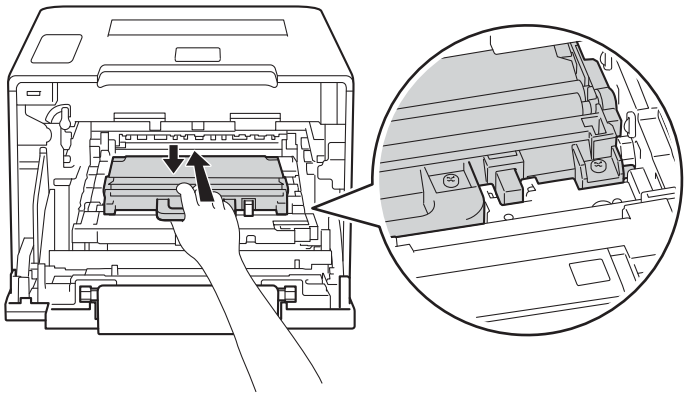
  (See the Product Safety Guide.)



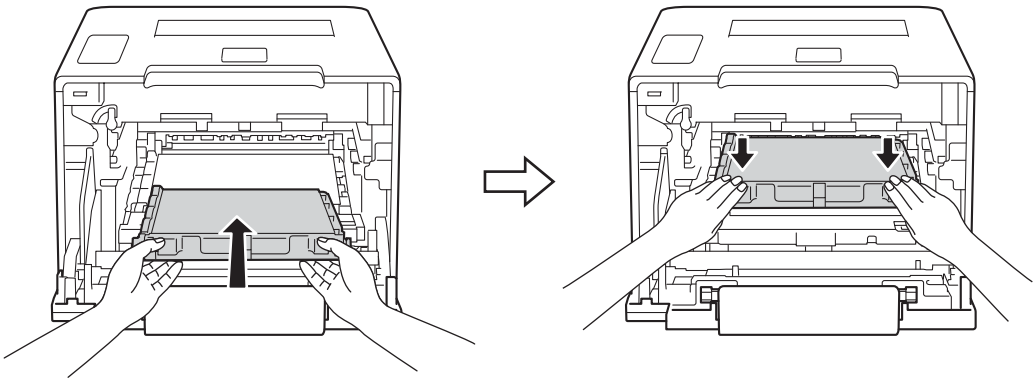
NOTE

- Be sure to seal up the waste toner box tightly in an appropriate bag so that toner powder does not spill out of the waste toner box.
- Discard the used waste toner box according to local regulations, keeping it separate from domestic waste. If you have questions, contact your local waste disposal office.

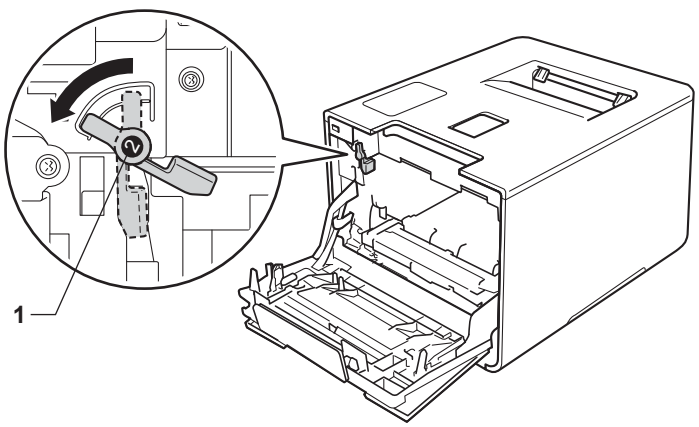
8 Unpack the new waste toner box and install it in the machine using the blue handle. Make sure the waste toner box is level and fits firmly into place.



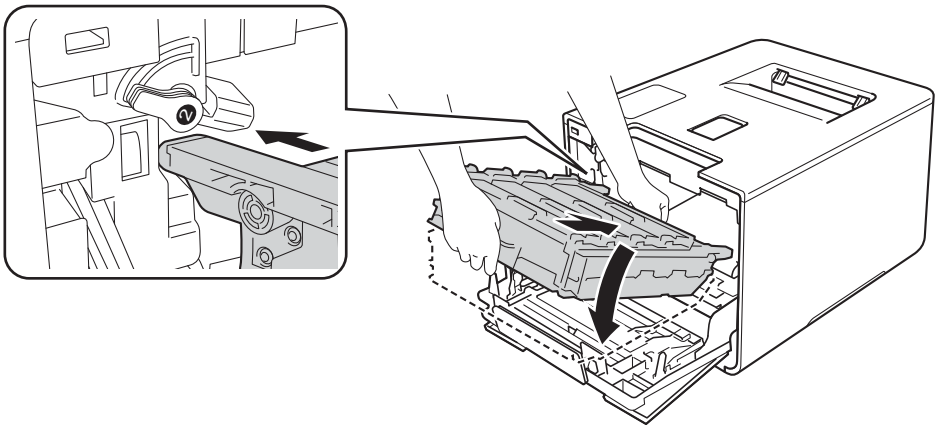
9 Slide the belt unit back into the machine. Make sure the belt unit is level and fits firmly into place.



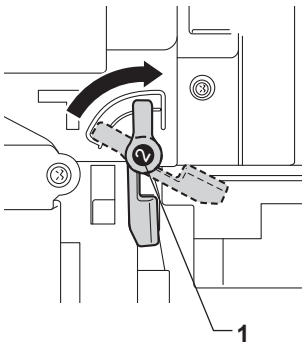
10 Make sure the blue lock lever (1) is in the release position as shown in the illustration.



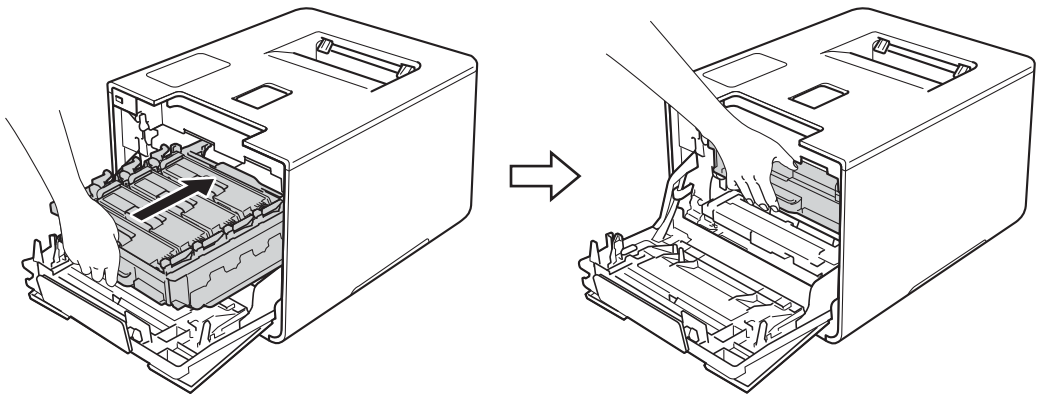
⓫ Gently slide the drum unit into the machine until it stops at the blue lock lever.



⓬ Turn the blue lock lever (1) clockwise to the lock position.



⓭ Push the drum unit in until it stops.



⓮ Close the front cover of the machine.

Cleaning and Checking the machine

Clean the outside and inside of the machine regularly with a dry, soft, lint-free cloth. When you replace the toner cartridge or the drum unit, make sure that you clean the inside of the machine. If printed pages are stained with toner, clean the inside of the machine with a dry, soft, lint-free cloth.

WARNING

- DO NOT put a toner cartridge into a fire. It could explode, resulting in injuries.
- DO NOT use flammable substances, any type of spray, or an organic solvent/liquid containing alcohol or ammonia to clean the inside or outside of the machine. Doing so could cause a fire or electrical shock. Instead, use only a dry, soft, lint-free cloth.

  (See the Product Safety Guide.)



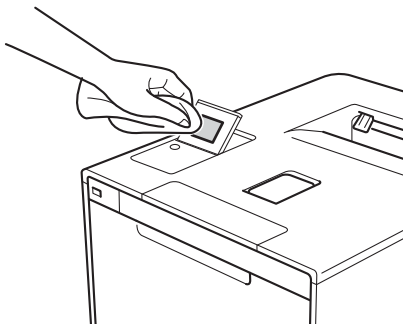
IMPORTANT

Use neutral detergents. Cleaning with volatile liquids such as thinner or benzine will damage the surface of the machine.

Cleaning the outside of the machine

Clean the Touchscreen as follows:

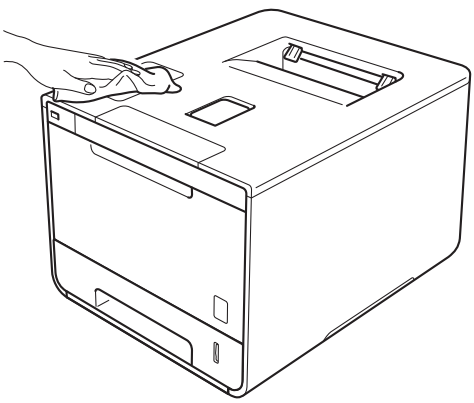
1. Press and hold down  to turn off the machine.
2. Clean the Touchscreen with a dry, soft lint-free cloth.



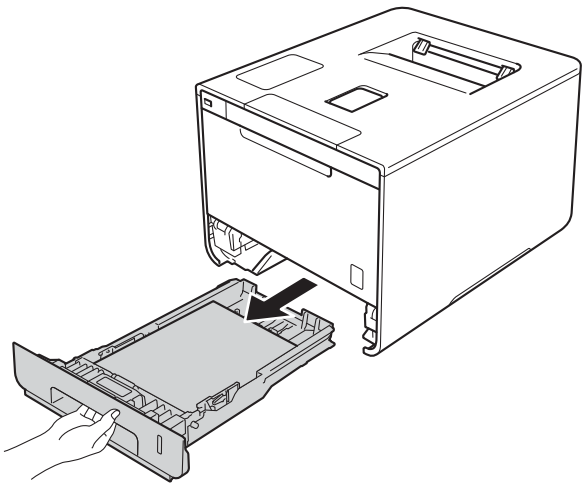
3. Press  to turn on the machine.

Clean the outside of the machine as follows:

1. Press and hold down  to turn the machine off.
2. Wipe the outside of the machine with a dry, soft, lint-free cloth to remove dust.



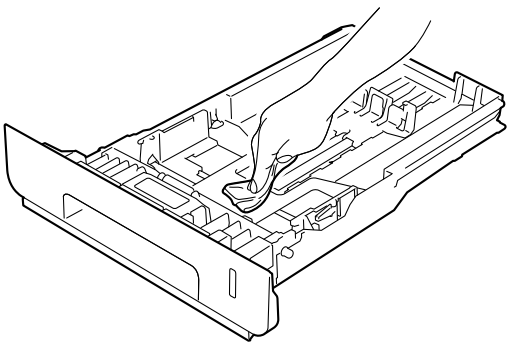
3 Pull the paper tray completely out of the machine.



4 If paper is loaded in the paper tray, remove it.

5 Remove anything that is stuck inside the paper tray.

6 Wipe the inside and the outside of the paper tray with a dry, soft, lint-free cloth to remove dust.

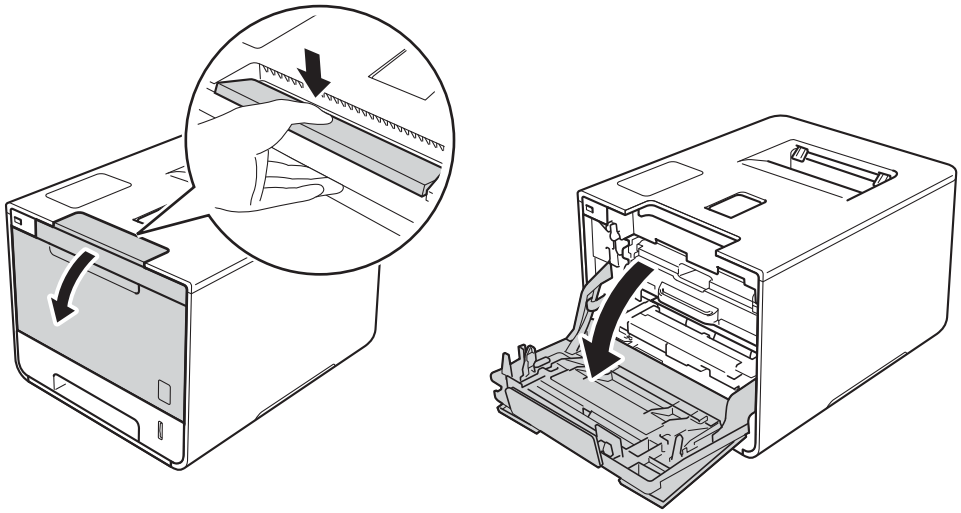


7 Re-load the paper and put the paper tray firmly back in the machine.

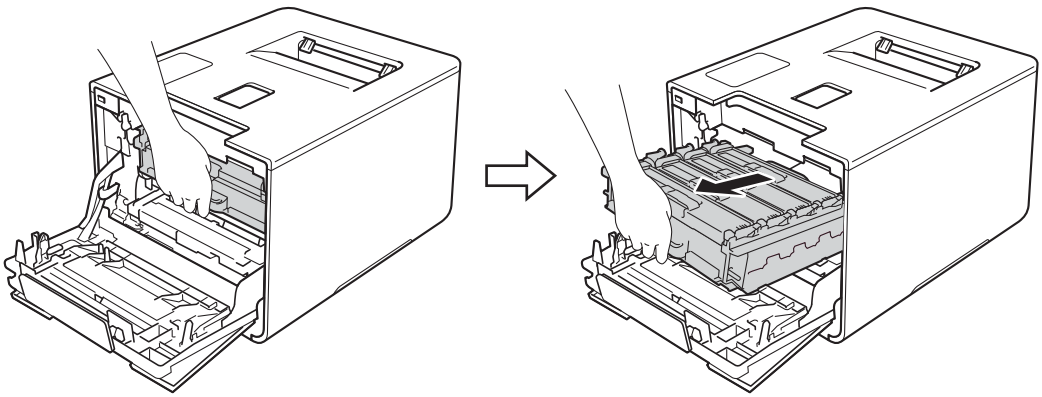
8 Turn on the machine.

Cleaning the inside of the machine

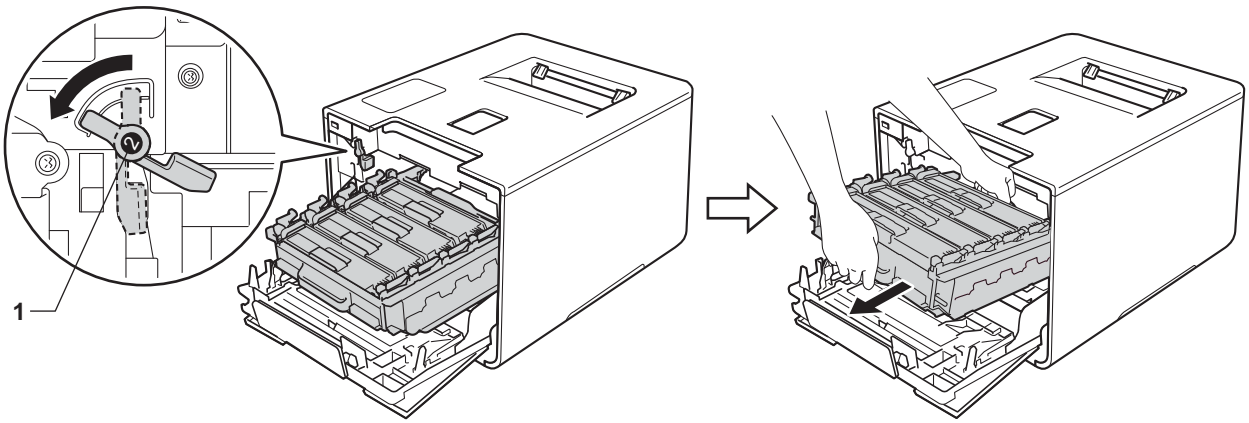
1. Press and hold down  to turn the machine off.
2. Press the front cover release button and pull open the front cover.



3. Hold the blue handle of the drum unit. Pull the drum unit out until it stops.

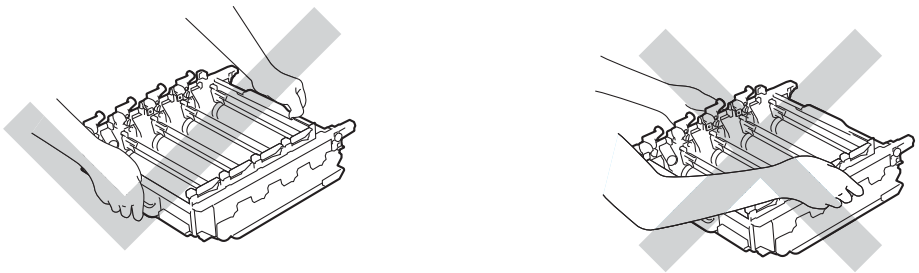


4 Turn the blue lock lever (1) at the left of the machine counterclockwise to the release position. Holding the blue handles of the drum unit, lift the front of the drum unit and remove it from the machine.

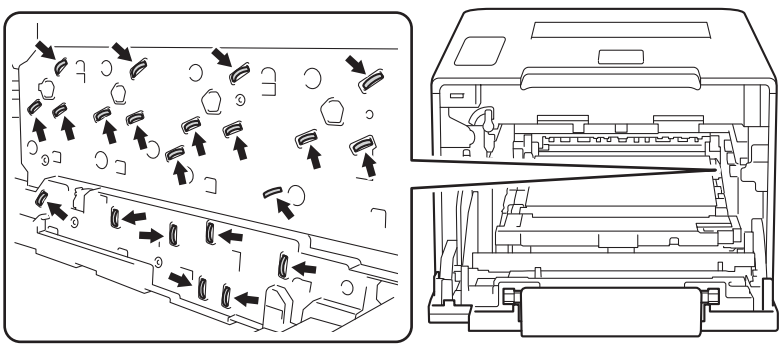


IMPORTANT

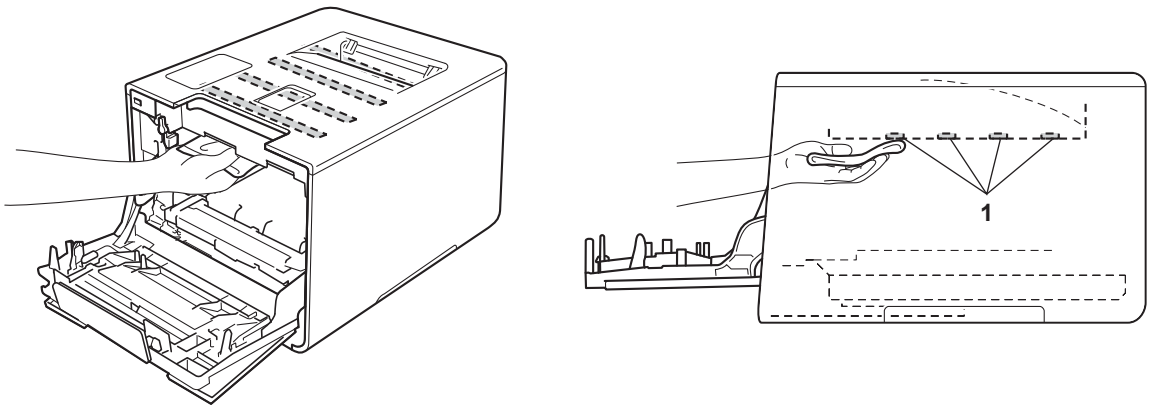
- Hold the blue handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



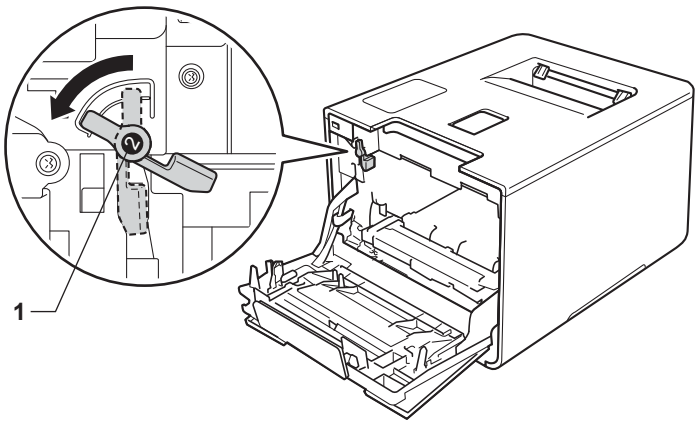
- We recommend placing the drum unit on a clean, flat, level, stable surface with a sheet of disposable paper or cloth underneath it in case you accidentally spill or scatter toner.
- To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.



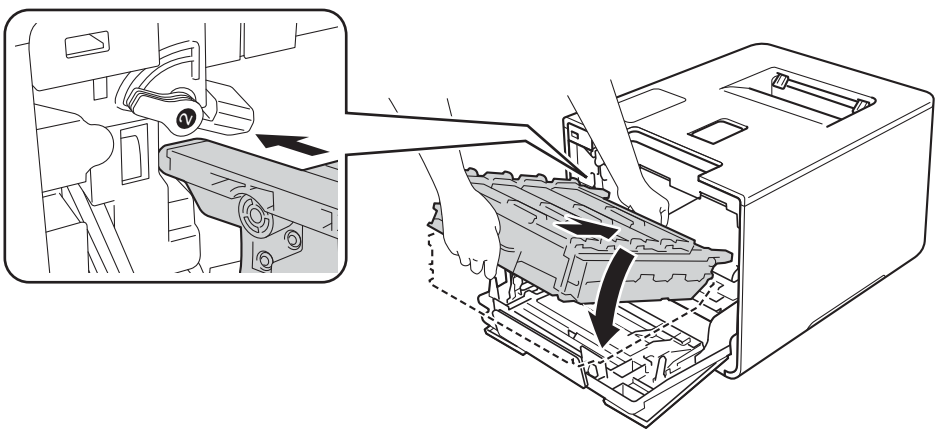
5 Wipe the four scanner windows (1) with a dry, soft, lint-free cloth.



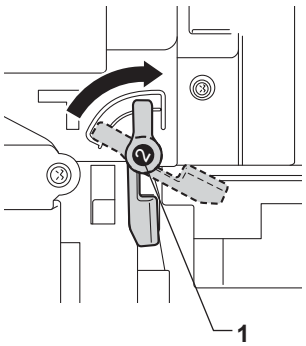
6 Make sure the blue lock lever (1) is in the release position as shown in the illustration.



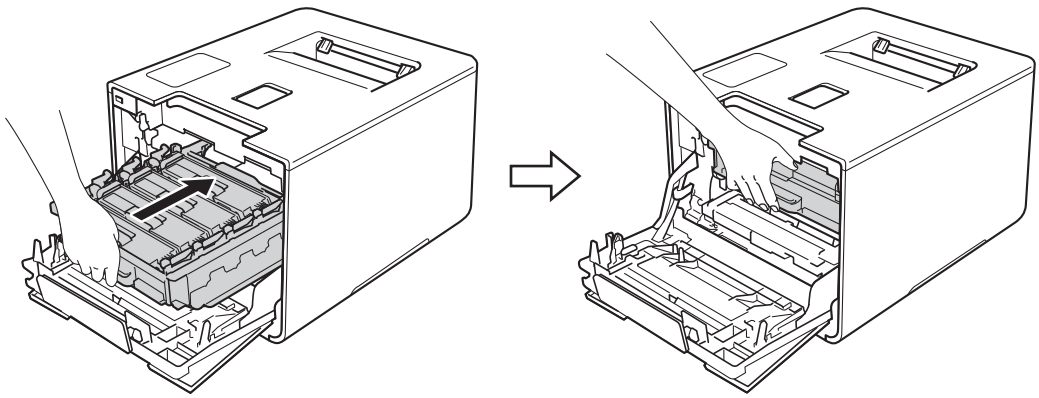
7 Gently slide the drum unit into the machine until it stops at the blue lock lever.



8 Turn the blue lock lever (1) clockwise to the lock position.



9 Push the drum unit in until it stops.



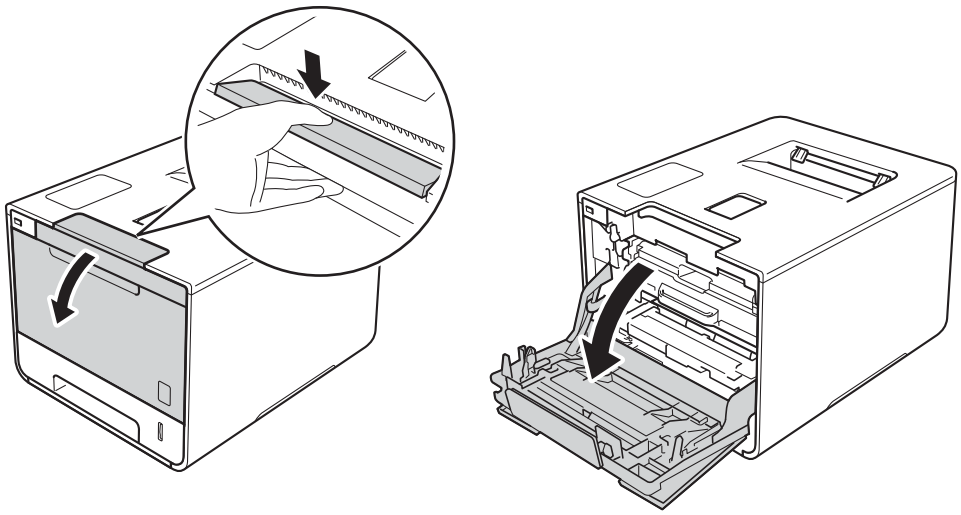
10 Close the front cover of the machine.

11 Turn on the power switch.

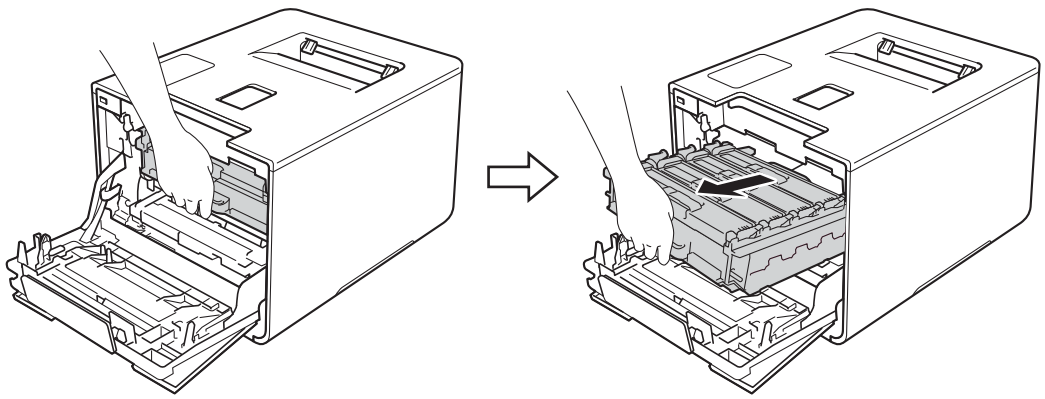
Cleaning the corona wires

If you have print quality problems, clean the corona wires as follows:

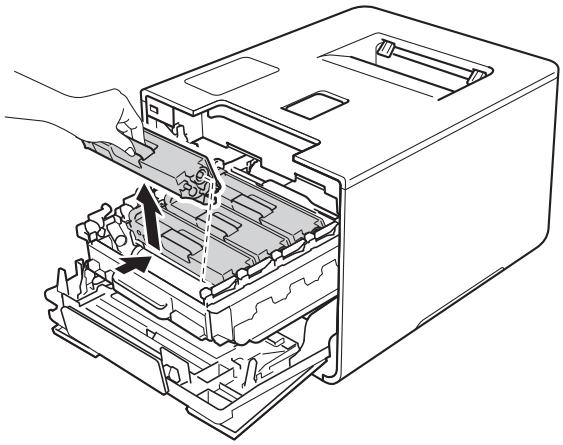
1. Make sure that the machine is turned on.
2. Press the front cover release button and pull open the front cover.



3. Hold the blue handle of the drum unit. Pull the drum unit out until it stops.



4 Hold the handle of the toner cartridge and gently push it forward to unlock it. Then pull it out of the drum unit. Repeat this for all the toner cartridges.



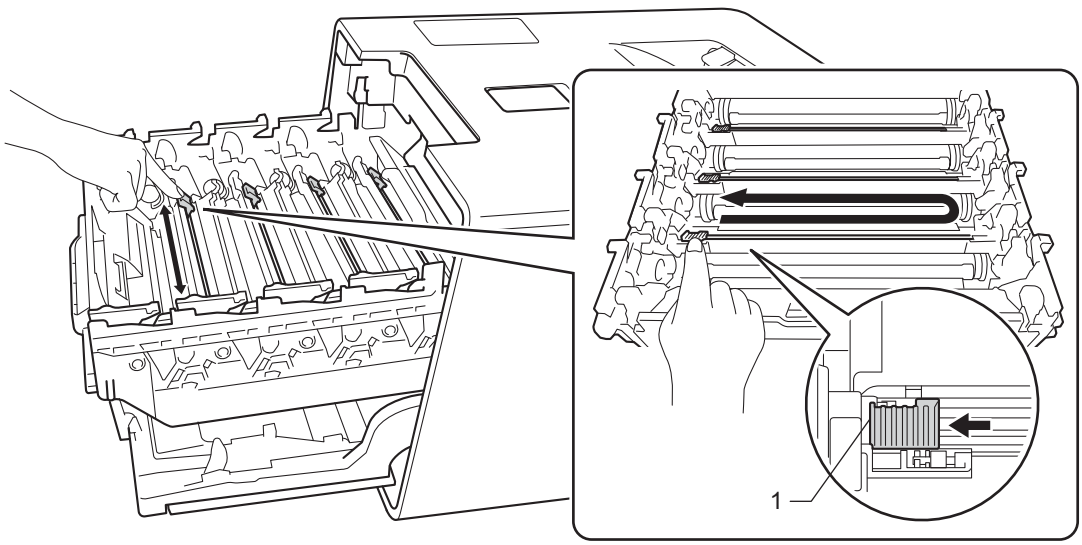
IMPORTANT

- We recommend placing the toner cartridges on a piece of disposable paper or cloth in case you accidentally spill or scatter toner.
- Handle the toner cartridges carefully. If toner scatters on your hands or clothes, immediately wipe or wash it off with cold water.

5 Clean the corona wire inside the drum unit by gently sliding the blue tab from left to right and right to left several times.

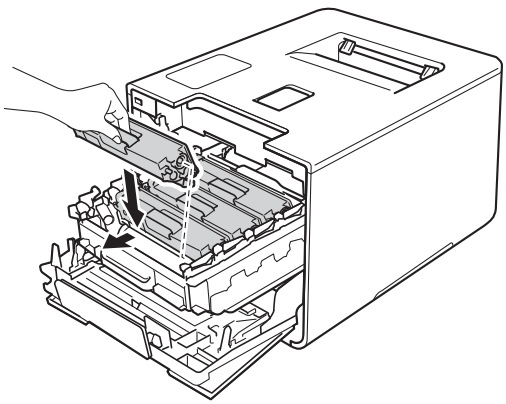
IMPORTANT

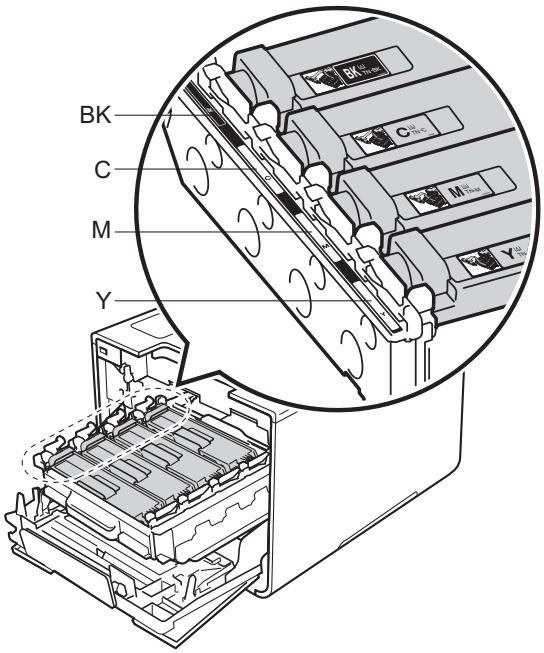
Be sure to return the tab to the home position (1). If you do not, printed pages may have a vertical stripe.



6 Repeat step ❺ to clean each of three remaining corona wires.

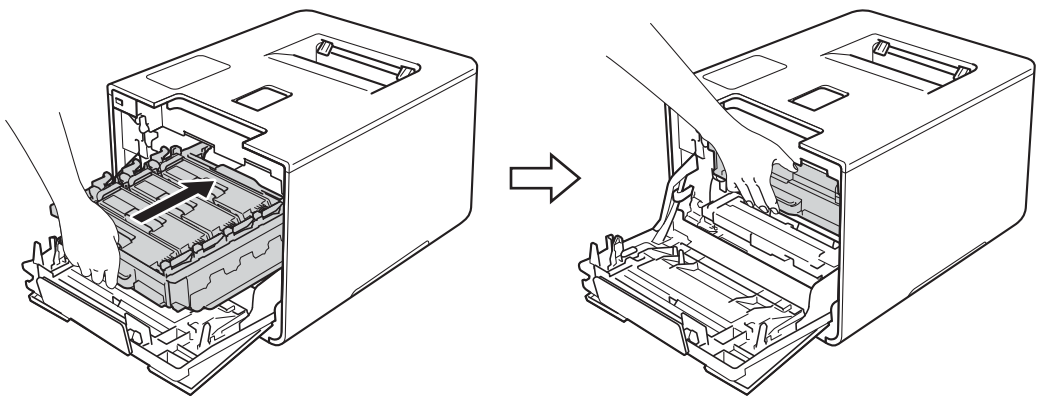
7 Hold the handle of the toner cartridge and slide the toner cartridge into the drum unit then gently pull it toward you until you hear it click into place. Make sure that you match the toner cartridge colour to the same colour label on the drum unit. Repeat this for all the toner cartridges.





BK - Black
C - Cyan
M - Magenta
Y - Yellow

8 Push the drum unit in until it stops.



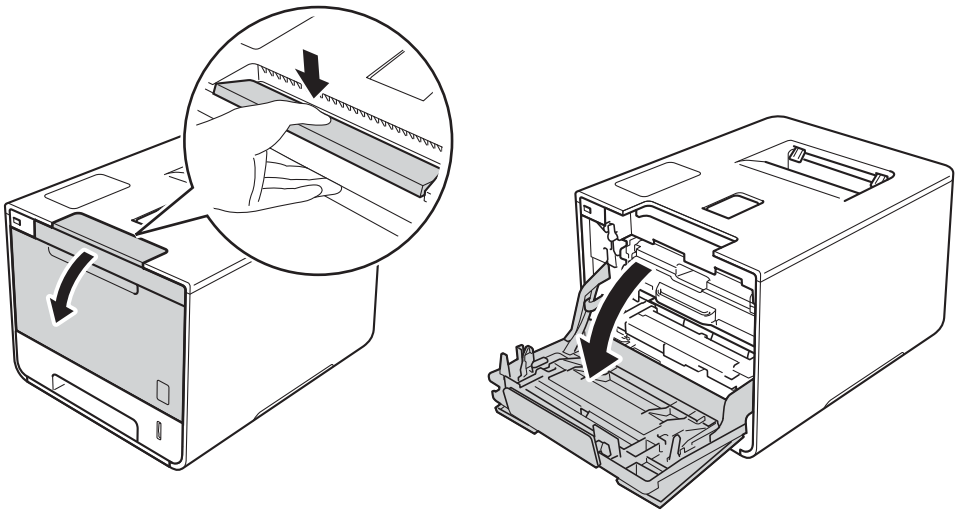
9 Close the front cover of the machine.

Cleaning the drum unit

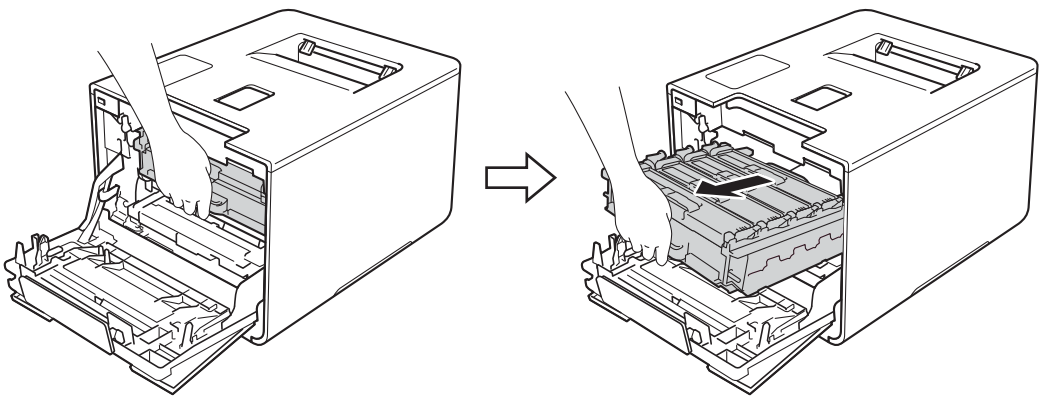
If your printout has coloured, white, or black dots at 94 mm intervals, the drum may have foreign material, such as glue from a label stuck on the drum surface. Follow the steps below to solve the problem:

1. Make sure the machine is in Ready mode.
2. Press 

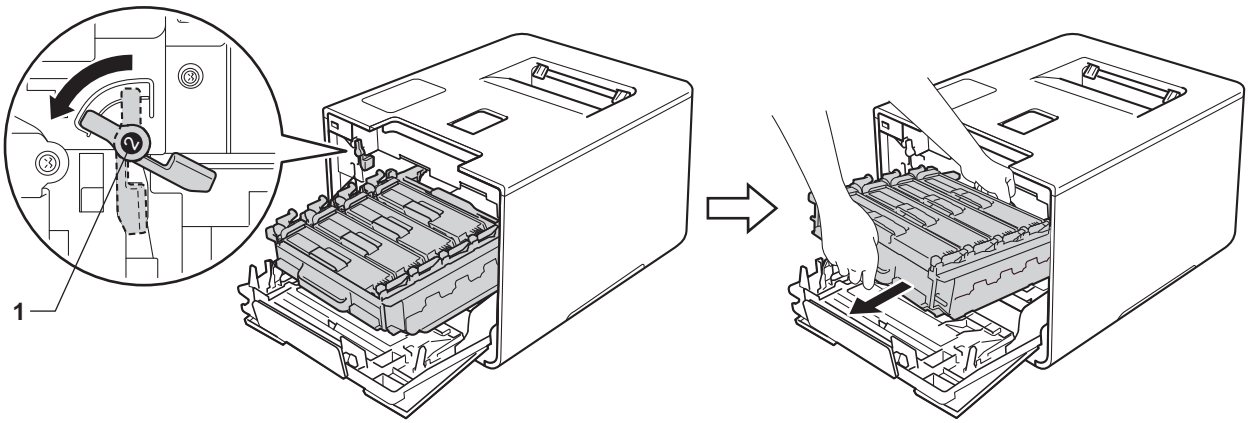
.
3. Press `Machine Information` > `Drum Dot Print`.
4. Press `OK` to print the drum dot check sheet.
5. Press and hold down  to turn the machine off.
6. Press the front cover release button and pull open the front cover.



7. Hold the blue handle of the drum unit. Pull the drum unit out until it stops.

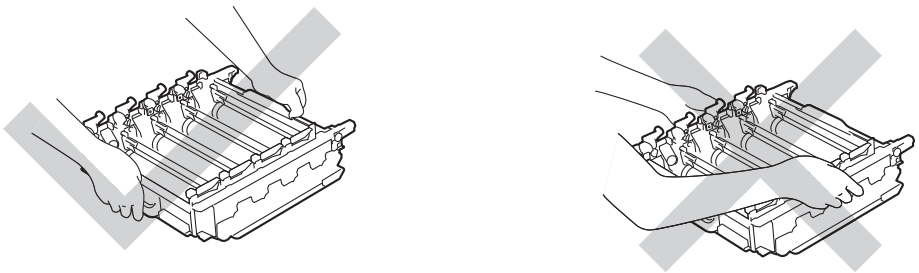


8 Turn the blue lock lever (1) at the left of the machine counterclockwise to the release position. Holding the blue handles of the drum unit, lift the front of the drum unit and remove it from the machine.

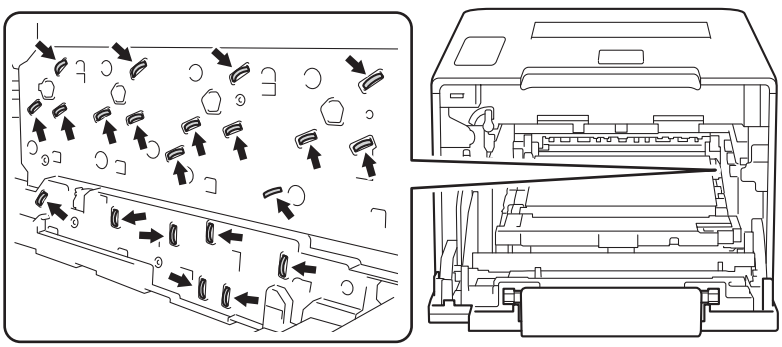


IMPORTANT

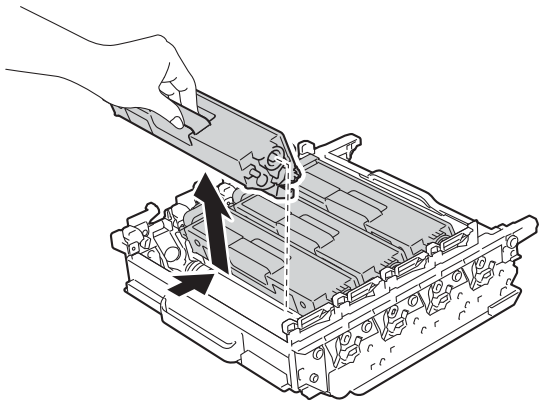
- Hold the blue handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



- We recommend placing the drum unit on a clean, flat, level, stable surface with a sheet of disposable paper or cloth underneath it in case you accidentally spill or scatter toner.
- To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.



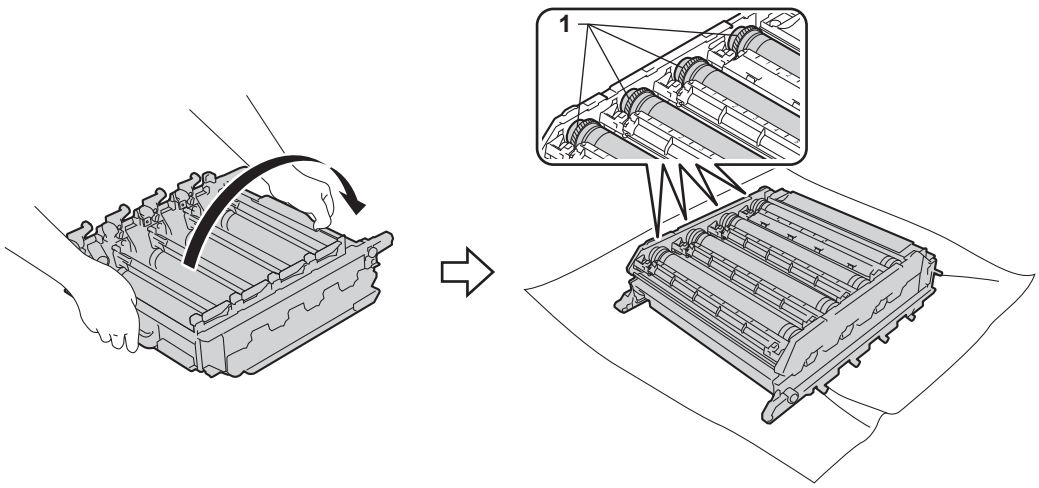
9 Hold the handle of the toner cartridge and gently push it forward to unlock it. Then pull it out of the drum unit.
Repeat this for all the toner cartridges.



IMPORTANT

Handle the toner cartridges carefully. If toner scatters on your hands or clothes, immediately wipe or wash it off with cold water.

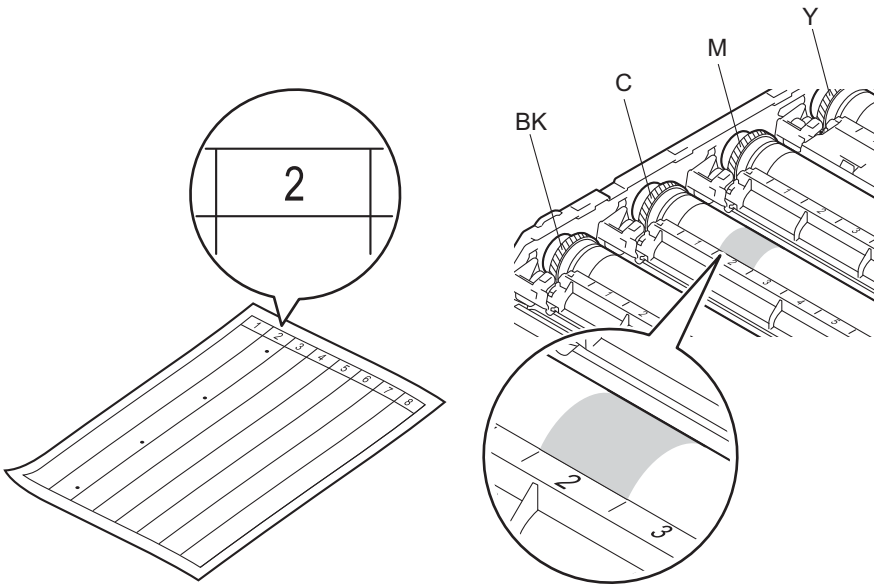
10 Turn the drum unit over by holding the blue handles. Make sure that the drum unit gears (1) are on the left side.



11 Read the following information from the drum dot check sheet:

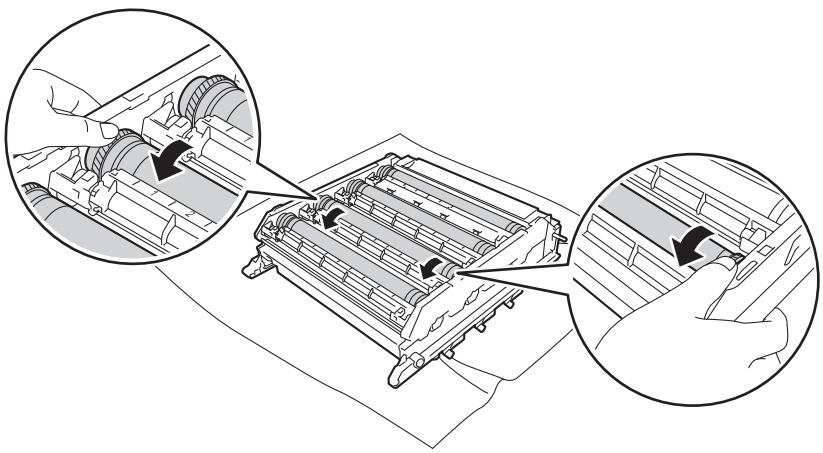
- Dot Colour problem: The colour of printed dots is the colour of the drum you will clean.
- Dot location: The sheet has eight numbered columns. The number of the column with the printed dot in it is used to find the dot position on the drum.

⓬ Use the numbered markers next to the drum roller to find the mark. For example, a cyan dot in column 2 on the check sheet would mean that there is a mark in the “2” region of the cyan drum.



BK - Black
C - Cyan
M - Magenta
Y - Yellow

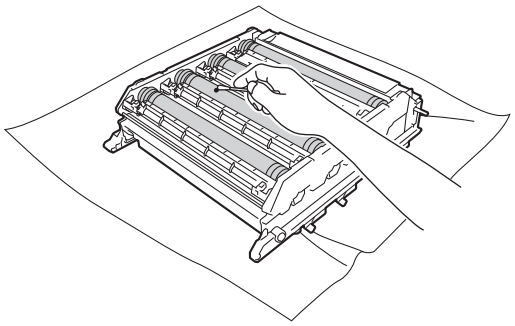
⓭ Once the drum has been selected, place one hand on the drum gear and at the other end of that drum place your other hand on the edge, then rotate the drum slowly towards you while looking at the surface of the suspected area.



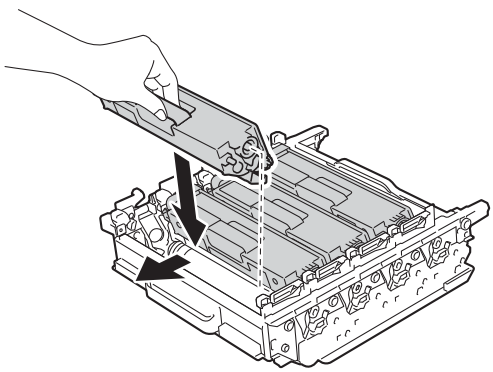
IMPORTANT

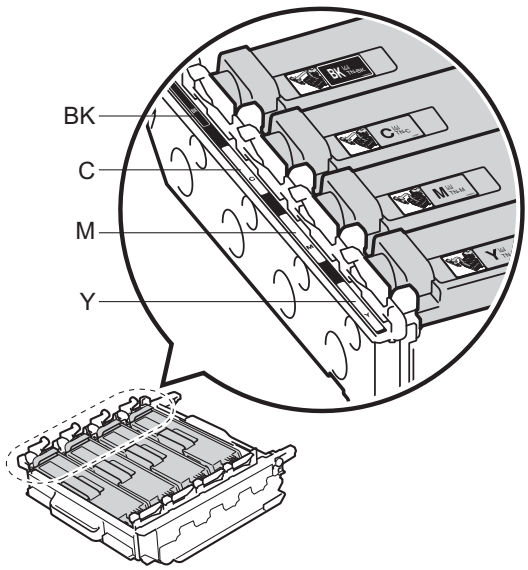
- To avoid print quality problems, DO NOT touch the surface of the drum unit with your bare hands.
- DO NOT clean the surface of the photosensitive drum with a sharp object or any liquids.

14 When you have found the mark on the drum that matches the drum dot check sheet, wipe the surface of the drum gently with a cotton swab until the mark on the surface comes off.



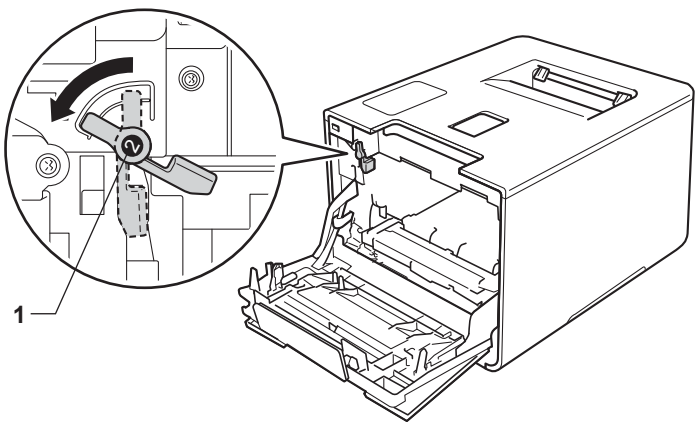
15 Hold the handle of the toner cartridge and slide it into the appropriate coloured section of the drum unit until you hear it click into place.



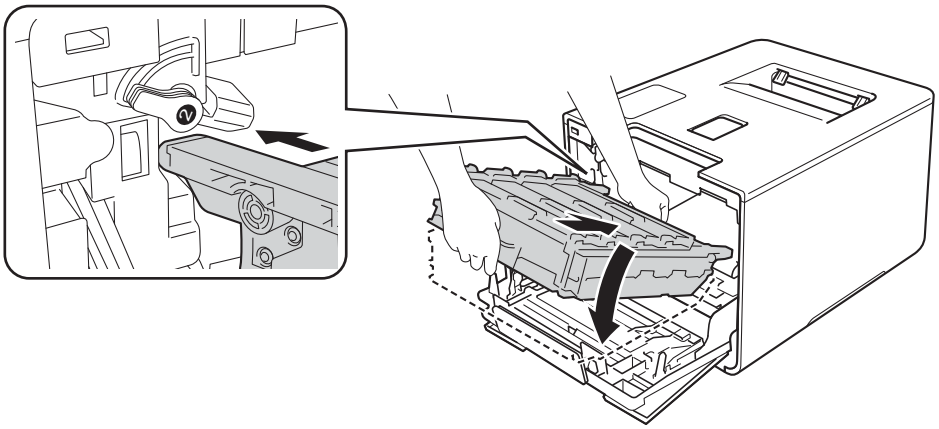


BK - Black
C - Cyan
M - Magenta
Y - Yellow

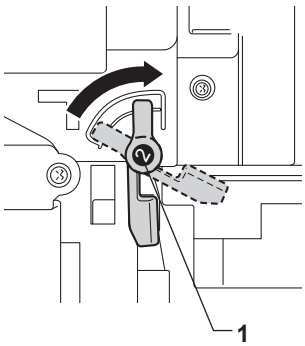
16 Make sure the blue lock lever (1) is in the release position as shown in the illustration.



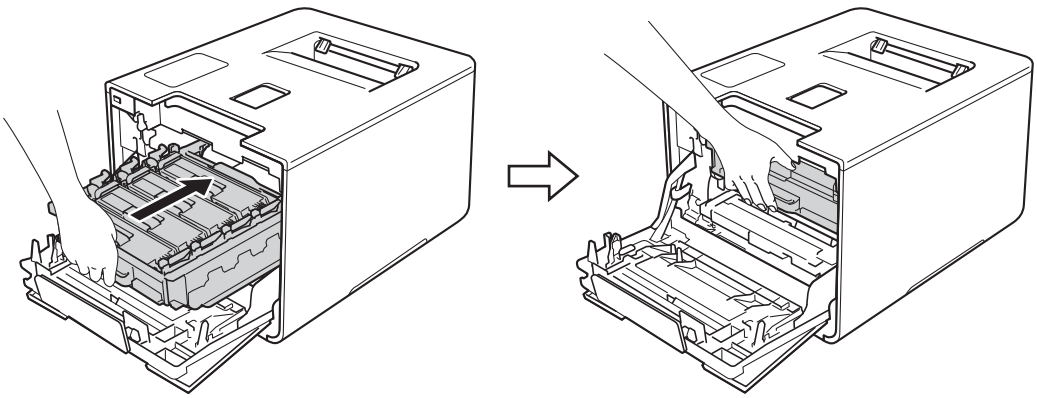
17 Gently slide the drum unit into the machine until it stops at the blue lock lever.



18 Turn the blue lock lever (1) clockwise to the lock position.



19 Push the drum unit in until it stops.



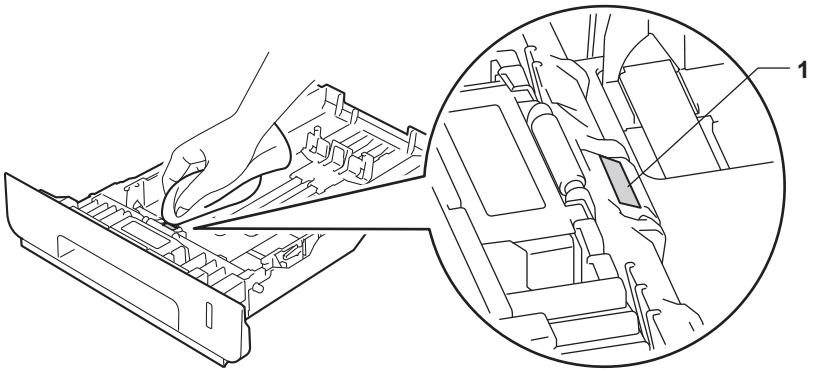
20 Close the front cover of the machine.

21 Turn on the power switch.

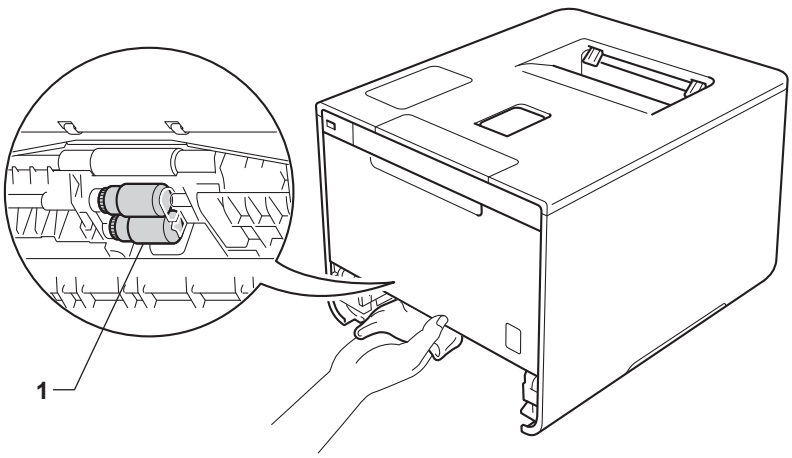
Cleaning the paper pick-up roller

Cleaning the paper pick-up roller periodically may prevent paper jams by insuring the proper feeding of paper.

1. Press and hold down  to turn the machine off.
2. Pull the paper tray completely out of the machine.
3. If paper is loaded in the paper tray, remove it.
4. Remove anything that is stuck inside the paper tray.
5. Tightly wring out a soft, lint-free cloth soaked in lukewarm water, and then wipe the separator pad (1) of the paper tray with it to remove dust.



6. Wipe the two pick-up rollers (1) inside of the machine to remove dust.



7. Reload the paper, and then put the paper tray firmly back in the machine.
8. Turn on the machine.

Replacing periodic maintenance parts

The periodic maintenance parts must be replaced regularly to maintain print quality. The parts listed below must be replaced after printing approximately 50,000 pages [1] for PF Kit MP and 100,000 pages [1] for PF Kit 1, PF Kit 2, Fuser and Laser.

Please contact your local Brother dealer or Brother customer service when the following messages appear on the Touchscreen:

Touchscreen message	Description
`Replace Fuser` [2]	Replace the fuser unit.
`Replace Laser` [2]	Replace the laser unit.
`Replace PF Kit 1` [2]	Replace the paper feeding kit for the paper tray.
`Replace PF Kit 2` [2] [3]	Replace the paper feeding kit for the lower tray (option).
`Replace PF Kit MP` [2]	Replace the paper feeding kit for the multi-purpose tray.

[1] A4 or Letter size single-sided pages.

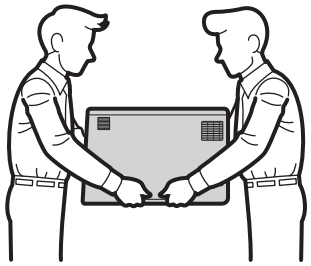
[2] Life of part is approximate and may vary by type of use.

[3] If the optional lower tray (standard equipment) is installed.

Packing and shipping the machine

⚠ WARNING

- This machine is heavy and weighs more than 28.3kg. To prevent possible injuries at least two people should lift the machine. One person should hold the front of the machine, and one person should hold the back, as shown in the illustration. Be careful not to pinch your fingers when you put the machine down.



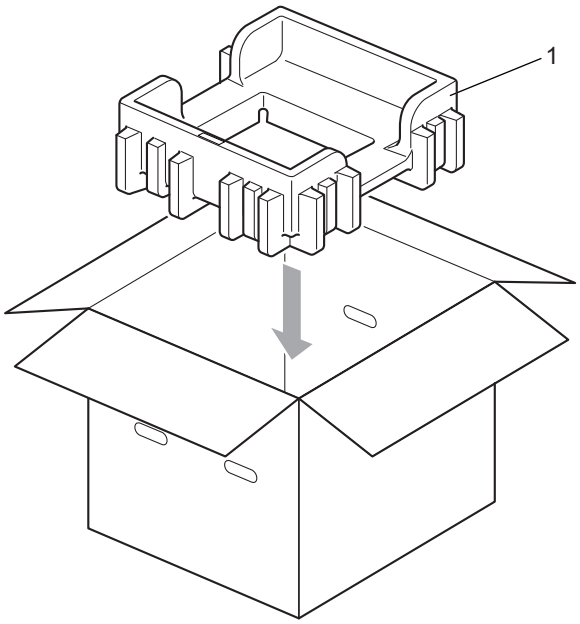
- If you use a Lower Tray, DO NOT carry the machine with the Lower Tray as you may be injured or cause damage to the machine because it is not attached to the Lower Tray.

If for any reason you must ship your machine, carefully repack the machine in the original packaging to avoid damage during transit. The machine should be adequately insured with the carrier.

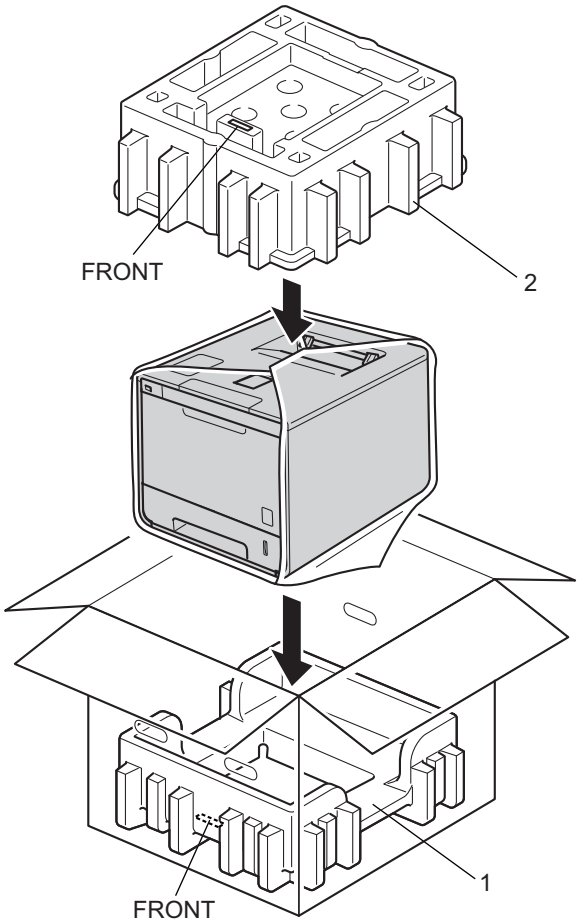
The lower tray and the machine in their original packing box, and then pack those in the largest original box.

1. Press and hold down  to turn the machine off. Leave the machine turned off for at least 10 minutes to cool down.
2. Disconnect all the cables, and then unplug the power cord from the electrical socket.

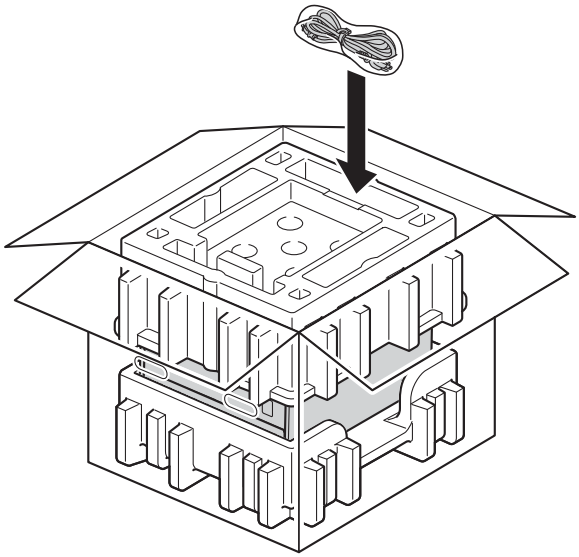
3 Put the packing material (1) into the carton.



4 Wrap the machine in a plastic bag. Put the machine on the bottom packing material (1) and the packing material (2) on the top of the machine. Match the front side of the machine to the “FRONT” mark on each packing material.

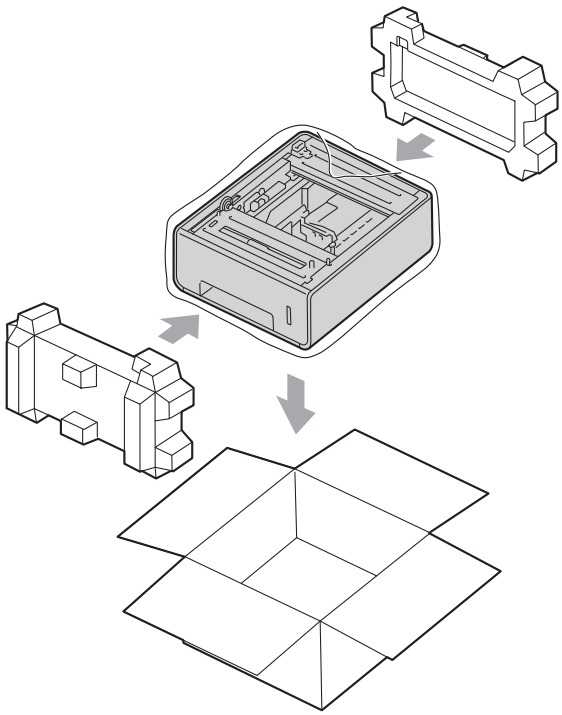


5 Put the AC power cord in the original carton as shown in the illustration.



6 Close the carton and tape it shut.

7 Pack the lower tray as shown in the illustration.



6 Troubleshooting

If you think there is a problem with your machine, check each item below first and follow the troubleshooting tips. You can solve most problems yourself.

Identifying the problem

First, check that

- The machine's power cord is connected correctly and the machine is turned on. If the machine does not turn on after connecting the power cord, see *Other difficulties* on page 196.
- All of the protective parts have been removed.
- Paper is inserted correctly in the paper tray.
- The interface cables are securely connected to the machine and the computer, or the wireless connection is set up on both the machine and your computer.
- Touchscreen Messages

  (See *Error and maintenance messages* on page 176.)

If you did not solve the problem with the above checks, identify the problem, and then go to the page suggested below.

Machine does not print.

- Paper handling

  (See *Paper handling difficulties* on page 194.)

Pages are printed, but there are still problems.

- Print quality

  (See *Improving the print quality* on page 197.)
- Printout is incorrect

  (See *Printing difficulties* on page 193.)

Network and other problems:

- *Network difficulties* on page 195
- *Other difficulties* on page 196

Error and maintenance messages

As with any sophisticated office product, errors may occur and supplies must be replaced. If this happens, your machine identifies the error or required routine maintenance and displays the appropriate message. The most common error and maintenance messages are shown below.

You can clear most errors and perform routine maintenance yourself. If you need more help, the Brother Solutions Center offers the latest FAQs and troubleshooting tips:
Visit http://solutions.brother.com/.

Using non-Brother supplies is not recommended and may affect the print quality, hardware performance, and machine reliability.

NOTE

The Touchscreen displays the tray names as follows.

- Standard paper tray: `Tray1`
- Multi-purpose tray: `MP Tray`
- Optional lower tray [1]: `Tray2` and `T2`

[1] Standard equipment.

Error message	Cause	Action
`2-sided Disabled`	The back cover of the machine is not closed completely.	Close the back cover of the machine.
`Access Denied`	The operation you want to use is restricted by Secure Function Lock.	Contact your administrator to check your Secure Function Lock settings.
`Access Error`	The device was removed from the USB direct interface while data was processing.	Press .Reinsert the device and try to print with Direct Print.
`Belt End Soon`	The belt unit is near the end of its life.	Buy a new belt unit before you get a `Replace Belt` message.
`Calibration`	Calibration failed.	■ Press and hold down to turn the machine off. Wait a few seconds, and then turn it on again. Perform the colour calibration again using the Touchscreen or the printer driver (see *Colour Calibration* on page 48). ■ Install a new belt unit (see *Replacing the belt unit* on page 140). ■ If the problem continues, contact Brother customer service or your local Brother dealer.
`Cartridge Error`	The toner cartridge is not installed correctly.	Pull out the drum unit, remove the toner cartridge for the colour that is indicated on the Touchscreen, and put it back into the drum unit again. Install the drum unit in the machine again. If the problem continues, contact Brother customer service or your local Brother dealer.

Error message	Cause	Action
Condensation	Condensation may have formed inside the machine after a room temperature change.	Leave the machine turned on. Wait for 30 minutes with the front cover in the open position. Then turn off the machine and close the cover. Turn it on again.
Cover is Open	The front cover is not closed completely.	Close the front cover of the machine.
	The fuser cover is not closed completely.	Close the fuser cover located inside the back cover of the machine.
DIMM Error	■ The DIMM is not installed correctly. ■ The DIMM is broken. ■ The DIMM does not meet the required specifications.	■ Turn off the machine and unplug the power cord. Remove the DIMM. (See *Installing extra memory* on page 121.) ■ Confirm that the DIMM meets the required specifications. (For details, see *SO-DIMM types* on page 120.) ■ Reinstall the DIMM correctly. Wait a few seconds. Plug in the power cord, and then turn the machine on again. ■ If this error message appears again, replace the DIMM with a new one. (See *Installing extra memory* on page 121.)
Drum End Soon	The drum unit is near the end of its life.	Order a new drum unit now so a replacement drum unit will be available when the Touchscreen displays Replace Drum (see *Drum End Soon* on page 133).
Drum !	The corona wire on the drum unit needs to be cleaned.	Clean all four corona wires inside the drum unit by sliding the blue tabs (see *Cleaning the corona wires* on page 160).
	The drum unit is not installed correctly.	Remove the drum unit, remove the toner cartridges from the drum unit, and put the toner cartridges back into the drum unit. Reinstall the drum unit in the machine.
Drum Stop	It is time to replace the drum unit.	Replace the drum unit (see *Replacing the drum unit* on page 133).
Jam 2-sided	The paper is jammed underneath the paper tray or the fuser unit.	See *Paper is jammed underneath the Paper Tray* on page 183.
Jam Inside	The paper is jammed inside the machine.	See *Paper is jammed inside the machine* on page 189.
Jam MP Tray	The paper is jammed in the multi-purpose tray of the machine.	See *Paper is jammed in the multi-purpose tray* on page 181.
Jam Rear	The paper is jammed in the back of the machine.	See *Paper is jammed at the back of the machine* on page 186.
Jam Tray Jam Tray1 Jam Tray2	The paper is jammed in the paper tray of the machine.	See *Paper is jammed in Paper Tray 1 or Tray 2* on page 181.
Limit Exceeded	The print limit set in Secure Function Lock was reached.	Contact your administrator to check your Secure Function Lock settings.

Error message	Cause	Action
Log Access Error	The machine could not access the print log file in the server.	Contact your administrator to check the Store Print Log to Network settings. (For detailed information, see the Network User's Guide)
No Belt Unit	The belt unit is not installed correctly.	Reinstall the belt unit (see the steps in *Replacing the belt unit* on page 140).
No Drum Unit	The drum unit is not installed correctly.	Reinstall the drum unit. (See *Replacing the drum unit* on page 133.)
No HUB Support	A USB hub device is connected to the USB direct interface.	Disconnect the USB hub device from the USB direct interface.
No Paper	The machine is out of paper or paper is not correctly loaded in the specified paper tray.	Load paper in the indicated paper tray. Make sure the paper guides are set to the correct size.
No Permission	Printing colour documents is restricted.	Contact your administrator to check your Secure Function Lock settings.
No Toner	The toner cartridge for the colour indicated on the Touchscreen is not installed correctly.	Remove the drum unit, remove the toner cartridge for the colour indicated on the Touchscreen from the drum unit, and put the toner cartridge back into the drum unit. Reinstall the drum unit in the machine. If the problem continues, replace the toner cartridge (see *Replacing the toner cartridges* on page 128).
No Tray	The paper tray that is indicated on the Touchscreen is not installed or not installed correctly.	Reinstall the paper tray that is indicated on the Touchscreen.
No Waste Toner	The waste toner box is not installed correctly.	Reinstall the Waste Toner Box (see the steps in *Replacing the waste toner box* on page 146).
Not Registerd	The requested operation is not permitted to all User IDs by Secure Function Lock.	Contact your administrator to check your Secure Function Lock settings.
Out of Memory	The machine's memory is full.	Reduce the complexity of your document or reduce the print resolution. Add more memory. (see *Installing extra memory* on page 121.)
Print Data Full	The machine's memory is full.	Press  and delete the previously stored secure print jobs. Add more memory. (see *Installing extra memory* on page 121.)
Print Unable ##	The machine has a mechanical problem.	Press and hold down  to turn the machine off. Wait a few seconds, then turn it on again. If the problem continues, contact Brother customer service or your local Brother dealer.

Error message	Cause	Action
Registration	Registration failed.	■ Press and hold down  to turn the machine off. Wait a few seconds, and then turn it on again. Perform the colour registration again using the Touchscreen (see *Colour Registration* on page 117). ■ Install a new belt unit (see *Replacing the belt unit* on page 140). ■ If the problem continues, contact Brother customer service or your local Brother dealer.
Replace Belt	It is time to replace the belt unit.	Replace the belt unit (see *Replacing the belt unit* on page 140).
Replace Drum	It is time to replace the drum unit.	Replace the drum unit (see *Replacing the drum unit* on page 133).
	The drum unit counter was not reset when a new drum was installed.	Reset the drum unit counter by following the instructions included with the new drum unit.
Replace Fuser	It is time to replace the fuser unit.	Contact Brother customer service or your local Brother dealer or a Brother Authorized Service Center to replace the fuser unit.
Replace Laser	It is time to replace the laser unit.	Contact Brother customer service or your local Brother dealer or a Brother Authorized Service Center to replace the laser unit.
Replace PF Kit 1 Replace PF Kit 2 Replace PF Kit MP	It is time to replace the paper feeding kit.	Contact Brother customer service or your local Brother dealer or a Brother Authorized Service Center to replace the PF kit.
Replace Toner	The toner cartridge is at the end of its life. The machine will stop all print operations.	Replace the toner cartridge for the colour indicated on the Touchscreen (see *Replacing the toner cartridges* on page 128).
Replace WT Box	It is time to replace the waste toner box.	Replace the waste toner box (see *Replacing the waste toner box* on page 146).
Screen Init. Fail	The Touchscreen was pressed before the power on initialization was completed.	Make sure nothing is touching or resting on the Touchscreen.
	Debris may be stuck between the lower part of the Touchscreen and its frame.	Insert a piece of stiff paper between the lower part of the Touchscreen and its frame and slide it back and forth to push out the debris.
Self-Diagnostic	The temperature of the fuser unit does not rise to a specified temperature within the specified time.	Turn the machine off, wait a few seconds, and then turn it on again. Leave the machine for 15 minutes with the power on.
	The fuser unit is too hot.	
Short paper	The length of the paper in the tray is too short for the machine to deliver it to the Face-down output tray.	Open the back cover (face-up output tray) to let the printed page exit onto the face-up output tray. Remove the printed pages, and then press Retry.

Error message	Cause	Action
Size Error	The paper size specified in the printer driver is not supported by the specified tray.	Choose a paper size that is supported for each tray. (see *Paper type and size* on page 2.)
Size Error 2-sided	The paper size specified in the printer driver and the Touchscreen menu is not available for automatic 2-sided printing.	Press . Choose a paper size that is supported by 2-sided printing. The paper size for automatic 2-sided printing is A4.
	The paper in the tray is not the correct size and is not available for automatic 2-sided printing.	Load the correct size of paper in the tray and set the size of paper for the tray (see *Paper Tray* on page 93). The paper size for automatic 2-sided printing is A4.
Size Mismatch	The paper in the indicated tray is not the correct size.	Do one of the following: Load the same size of paper in the paper tray that is selected in the printer driver, and then press Retry. In the printer driver select the size of paper that you loaded in the indicated paper tray.
Small paper	The paper size specified in the printer driver is too small for the machine to deliver it to the Face-down output tray.	Open the back cover (face-up output tray) to let the printed paper exit onto the face-up output tray, and then press Retry.
Toner Error	One or more toner cartridges are not installed correctly.	Pull out the drum unit. Remove all the toner cartridges, and then put them back into the drum unit.
Toner Low: X (X indicates the toner cartridge or drum unit colour that is near the end of its life. BK=Black, C=Cyan, M=Magenta, Y=Yellow.)	If the Touchscreen displays Toner Low you can still print; however, the machine is telling you that the toner cartridge is near the end of its life.	Order a new toner cartridge now so a replacement toner cartridge will be available when the Touchscreen displays Replace Toner.
Tray 2 Error	The optional lower tray is not installed correctly.	Reinstall the lower tray.
Unusable Device	An incompatible or defective device has been connected to the USB direct interface.	Remove the USB flash drive from the USB Direct Interface.
WT Box End Soon	The waste toner box is almost full.	Order a new waste toner box before you get a Replace WT Box message.

Paper jams

Always remove the remaining paper from the paper tray and straighten the stack when you are adding new paper. This helps prevent multiple sheets of paper from feeding through the machine at one time and prevents paper jams.

Paper is jammed in the multi-purpose tray

If the Touchscreen displays `Jam MP Tray`, follow these steps:

1. Remove the paper from the MP tray.
2. Remove any jammed paper from in and around the MP tray.
3. Fan the paper stack, and then put it back in the MP tray.

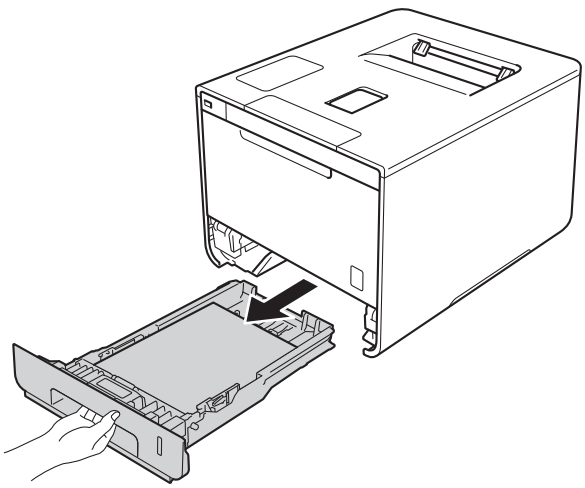


4. When loading paper in the MP tray, make sure that the paper stays under the maximum paper height guides on both sides of the tray.
5. Press `Retry` to resume printing.

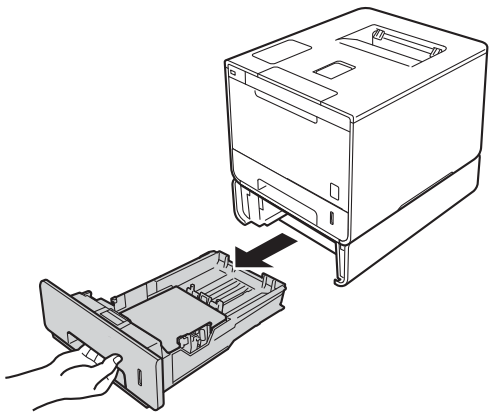
Paper is jammed in Paper Tray 1 or Tray 2

If the Touchscreen displays `Jam Tray`, `Jam Tray1` or `Jam Tray2`, follow these steps:

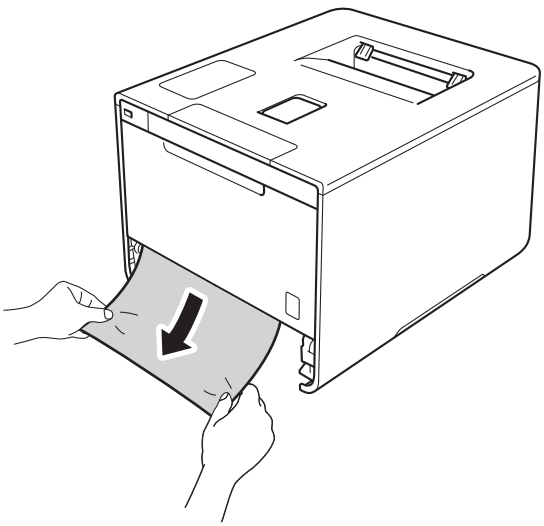
1. Pull the paper tray completely out of the machine.
   For `Jam Tray` or `Jam Tray1`:



For `Jam Tray2`:



2 Use both hands to slowly pull out the jammed paper.



NOTE

Pulling the jammed paper downward allows you to remove the paper more easily.

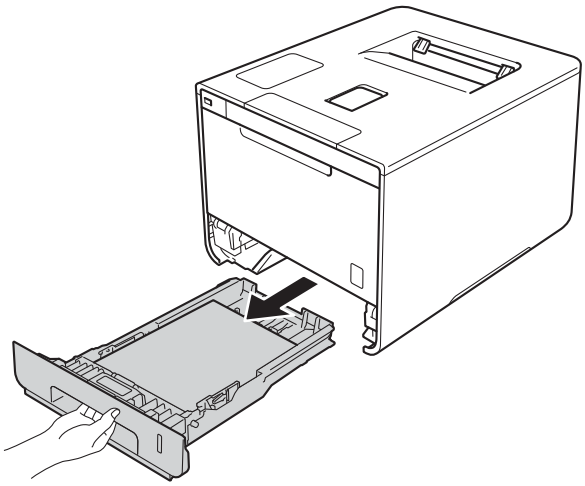
3 Make sure that the paper is below the maximum paper mark (▼▼▼) in the paper tray. While pressing the blue paper-guide release lever, slide the paper guides to fit the paper size. Make sure that the guides are firmly in the slots.

4 Put the paper tray firmly back in the machine.

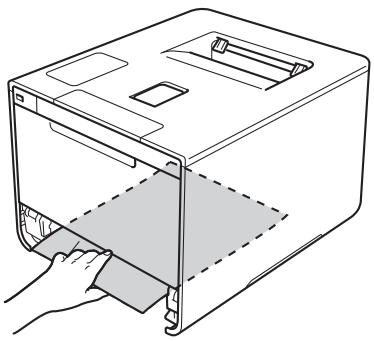
Paper is jammed underneath the Paper Tray

If theTouchscreen displays `Jam 2-sided`, follow these steps:

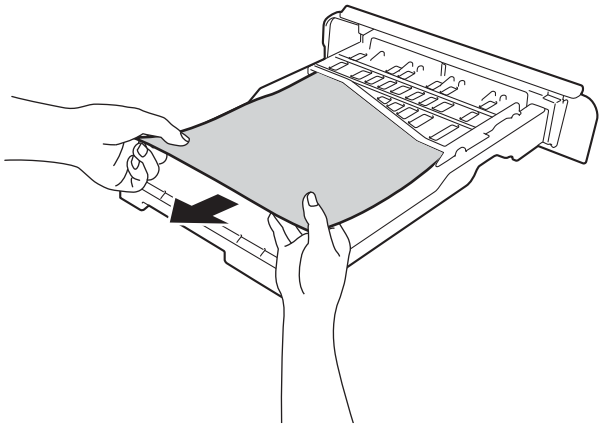
1. Leave the machine turned on for 10 minutes for the internal fan to cool the extremely hot parts inside the machine.
2. Pull the paper tray completely out of the machine.



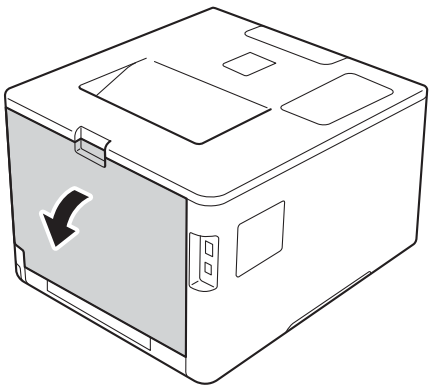
3. Make sure that the jammed paper does not remain inside the machine.



4 If paper is not caught inside the machine, check underneath the paper tray.



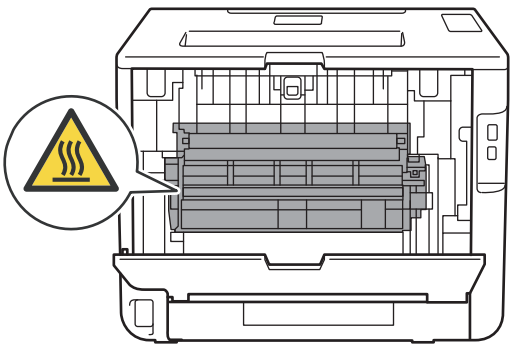
5 If the paper is not caught in the paper tray, open the back cover.



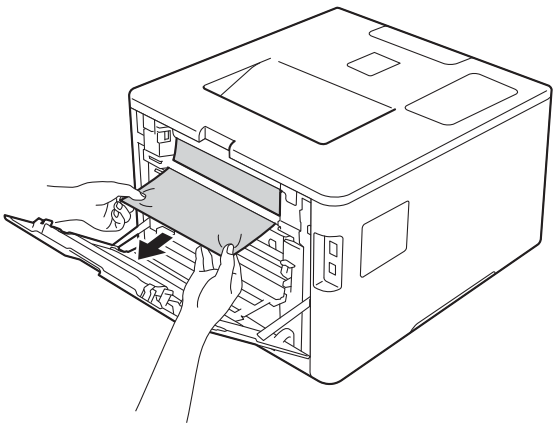
⚠ WARNING

HOT SURFACE

After you have just used the machine, some internal parts of the machine will be extremely hot. Wait for the machine to cool down before you touch the internal parts of the machine.



6 Use both hands to pull out the jammed paper slowly.



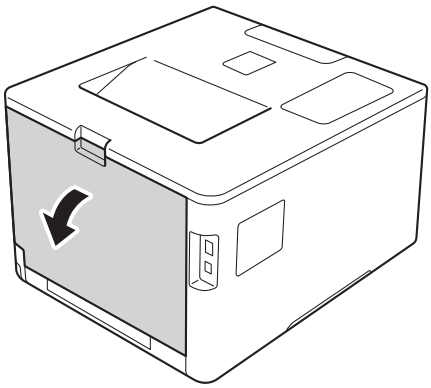
7 Close the back cover until it locks in the closed position.

8 Put the paper tray back in the machine.

Paper is jammed at the back of the machine

If the Touchscreen displays `Jam Rear`, a paper jam occurred behind the back cover. Follow these steps:

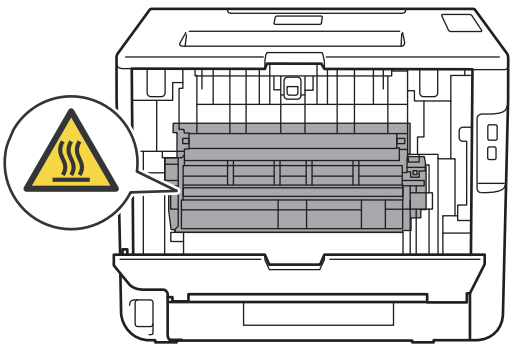
1. Leave the machine turned on for 10 minutes for the internal fan to cool the extremely hot parts inside the machine.
2. Open the back cover.



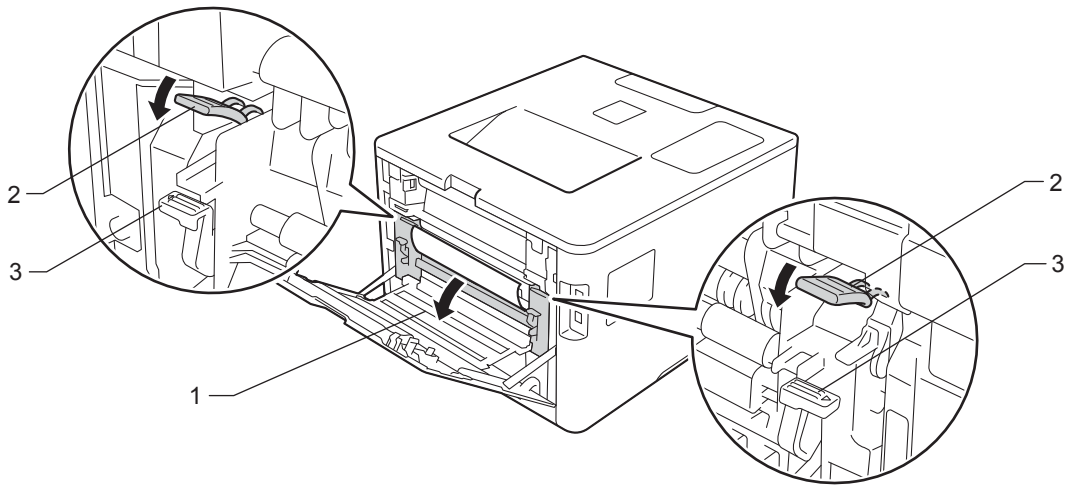
WARNING

HOT SURFACE

After you have just used the machine, some internal parts of the machine are extremely hot. Wait for the machine to cool down before you touch the internal parts of the machine.



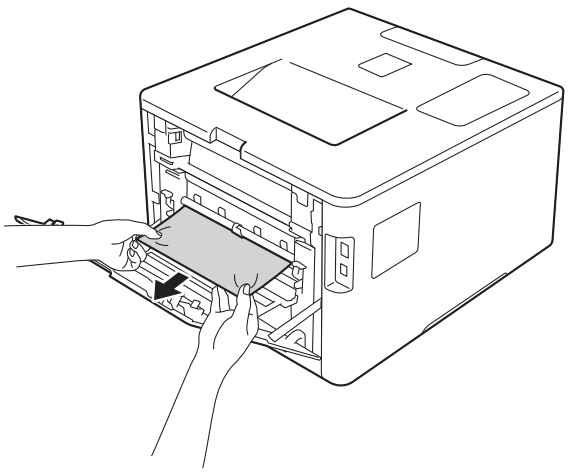
3 Pull the blue tabs (2) at the left and right sides toward you to release the fuser cover (1).



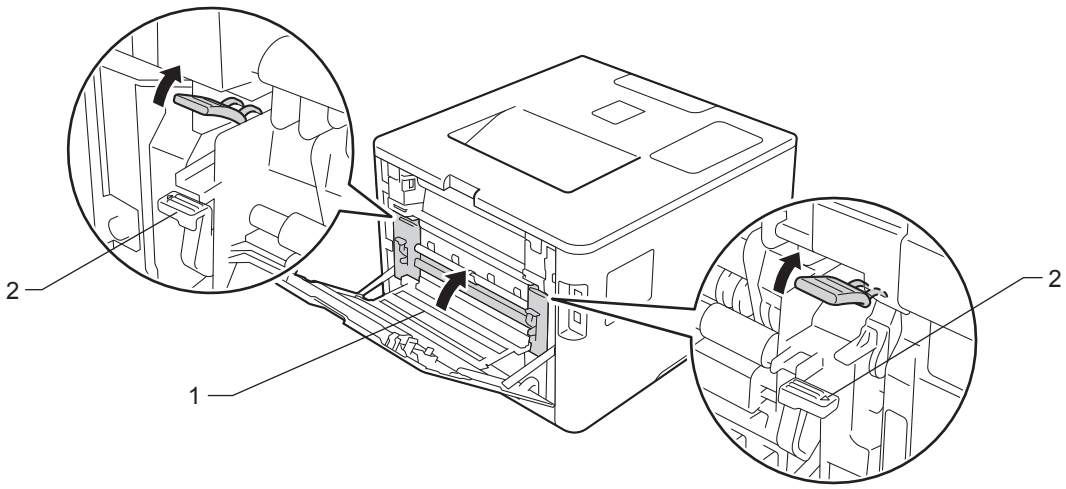
NOTE

If the envelope levers (3) inside the back cover are pulled down to the envelope position, lift these levers to the original position before pulling the blue tabs (2) down.

4 Use both hands to gently pull the jammed paper out of the fuser unit.



5 Close the fuser cover (1).



NOTE

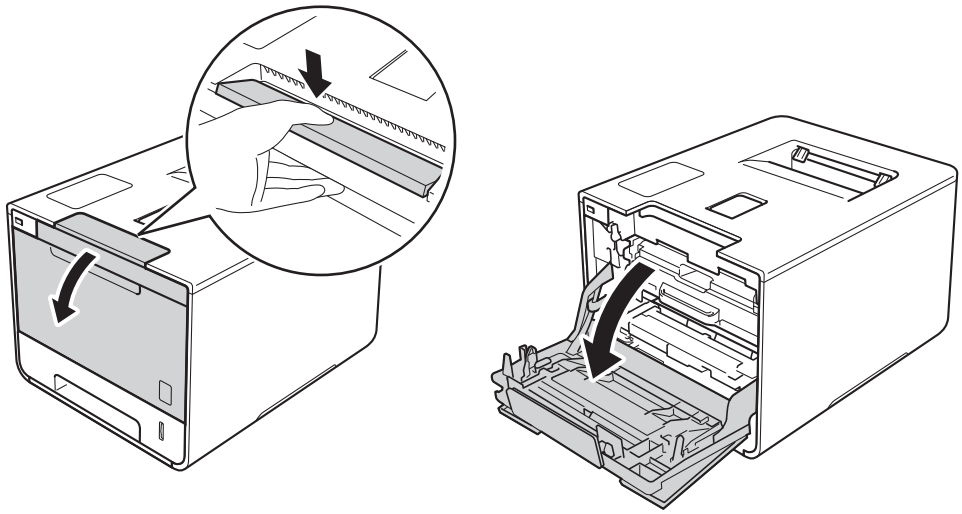
If you print on envelopes, pull down the envelope levers (2) to the envelope position again before closing the back cover.

6 Close the back cover.

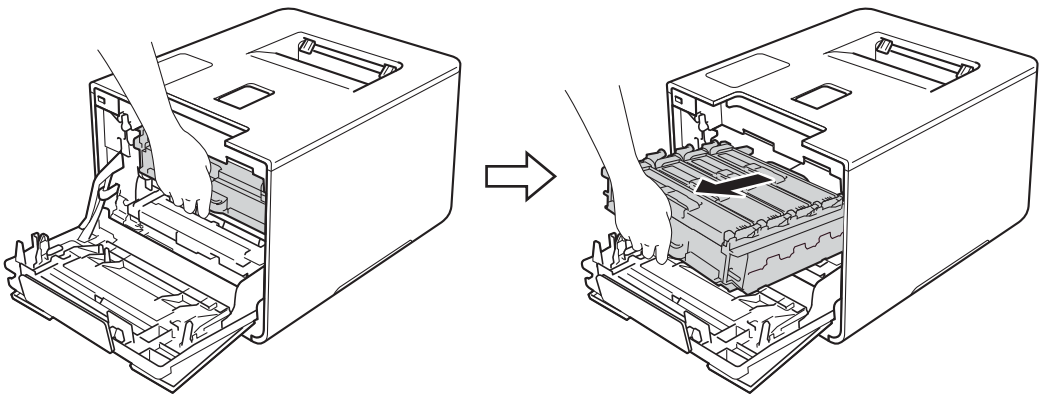
Paper is jammed inside the machine

If the Touchscreen displays `Jam Inside`, follow these steps:

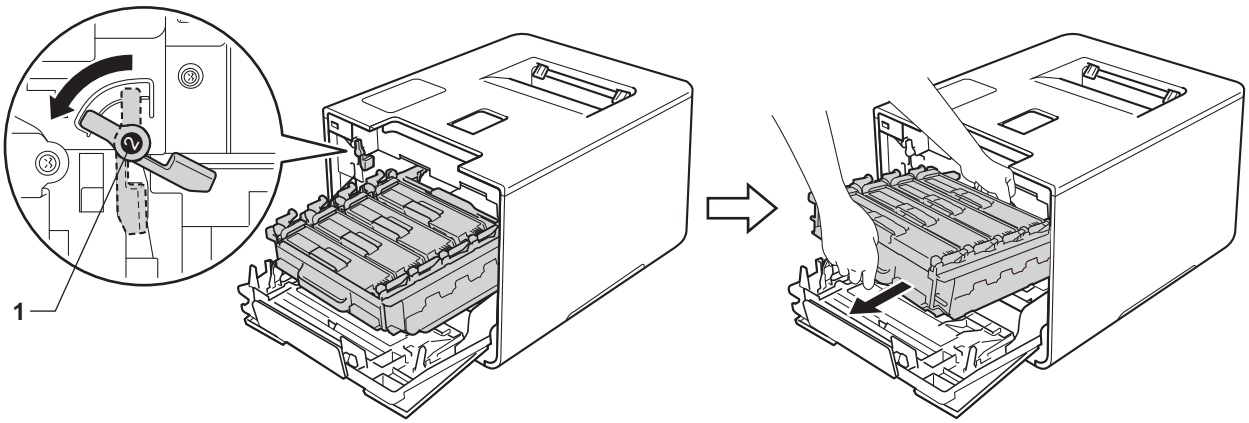
1. Press the front cover release button and pull open the front cover.



2. Hold the blue handle of the drum unit. Pull the drum unit out until it stops.

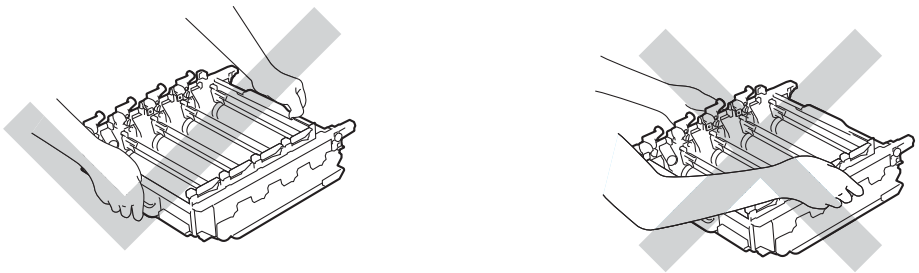


3 Turn the blue lock lever (1) at the left of the machine counterclockwise to the release position. Holding the blue handles of the drum unit, lift the front of the drum unit and remove it from the machine.

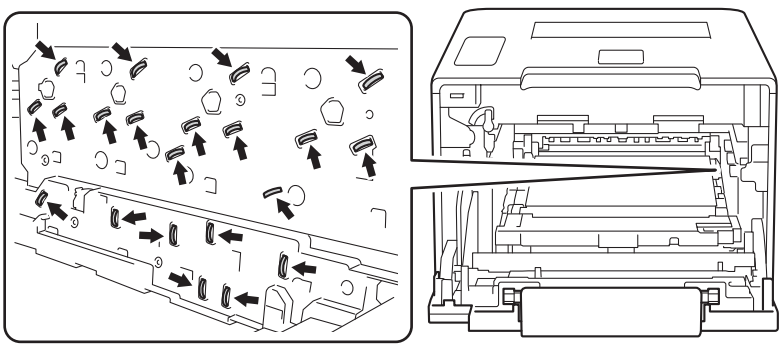


IMPORTANT

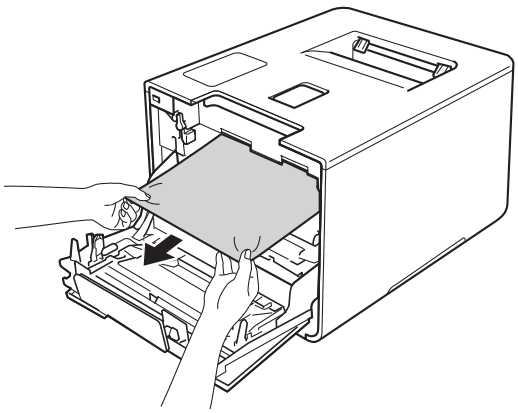
- Hold the blue handles of the drum unit when you carry it. DO NOT hold the sides of the drum unit.



- We recommend placing the drum unit on a clean, flat, level, stable surface with a sheet of disposable paper or cloth underneath it in case you accidentally spill or scatter toner.
- To prevent damage to the machine from static electricity, DO NOT touch the electrodes shown in the illustration.

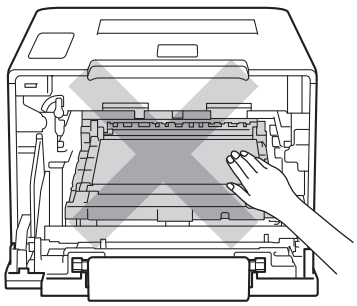


4 Pull out the jammed paper slowly.

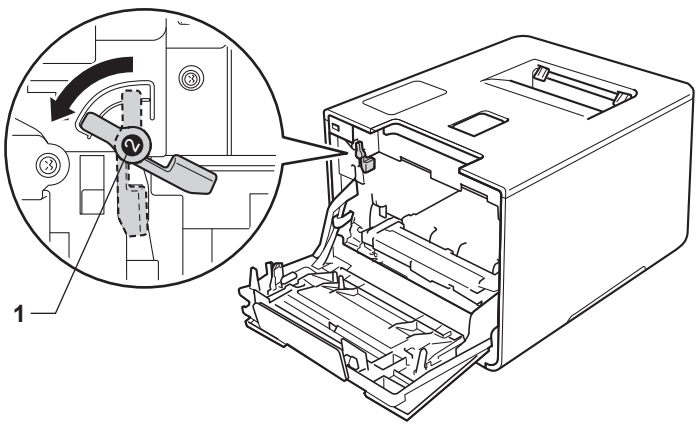


IMPORTANT

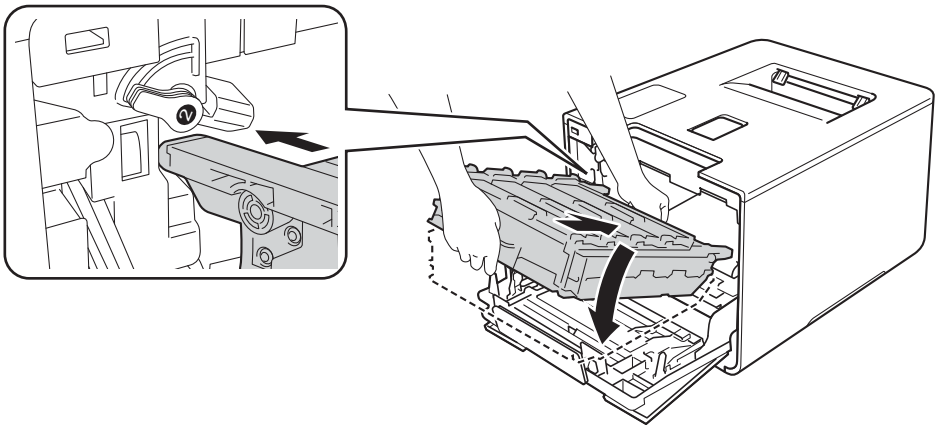
To avoid print quality problems, DO NOT touch the shaded parts shown in the illustration.



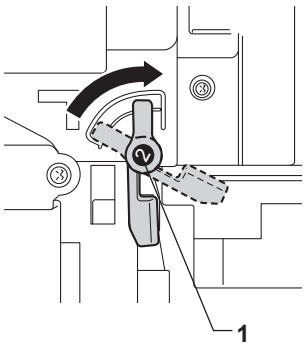
5 Make sure the blue lock lever (1) is in the release position as shown in the illustration.



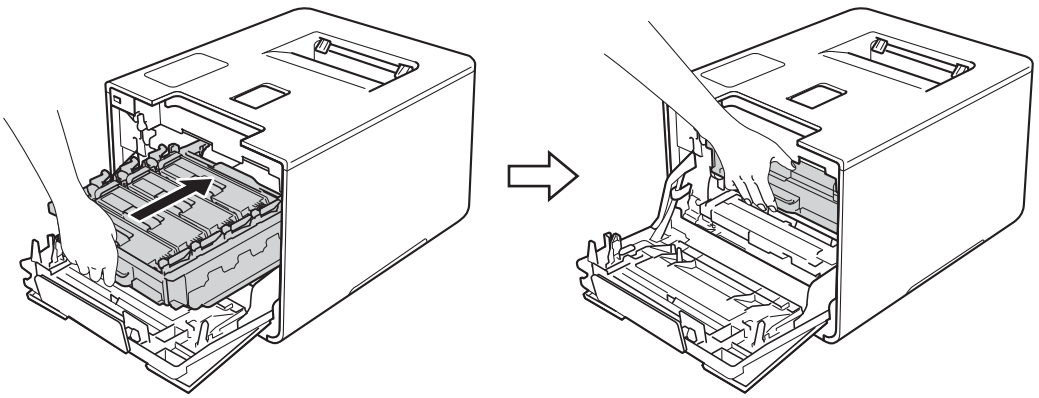
6 Gently slide the drum unit into the machine until it stops at the blue lock lever.



7 Turn the blue lock lever (1) clockwise to the lock position.



8 Push the drum unit in until it stops.



9 Close the front cover of the machine.

NOTE

If you turn off the machine during `Jam Inside`, the machine will print incomplete data from your computer when it is turned back on. Before you turn on the machine, delete the print spooler job on your computer.

If you are having difficulty with your machine

IMPORTANT

- For technical help, you must call Brother customer service or your local Brother dealer.
- If you think there is a problem with your machine, check the chart below and follow the troubleshooting tips. You can solve most problems yourself.
- If you need additional help, the Brother Solutions Center offers the latest FAQs and troubleshooting tips. Visit http://solutions.brother.com/.

Printing difficulties

Difficulties	Suggestions
No printout.	Check that the correct printer driver has been installed and chosen.
	Check to see if the Touchscreen is showing an error message. (See *Error and maintenance messages* on page 176.)
	Check the machine is online: (Windows® 7 and Windows Server® 2008 R2) Click the (**Start**) button > **Devices and Printers**. Right-click **Brother HL-XXXX series** and click **See what's printing**. Click **Printer**. Make sure you clear the check mark before **Use Printer Offline**. (Windows Vista® and Windows Server® 2008) Click the (**Start**) button > **Control Panel** > **Hardware and Sound** > **Printers**. Right-click **Brother HL-XXXX series**. Make sure you clear the check mark before **Use Printer Offline**. (Windows® XP and Windows Server® 2003) Click the **Start** button > **Printers and Faxes**. Right-click **Brother HL-XXXX series**. Make sure you clear the check mark before **Use Printer Offline**. (Windows® 8 and Windows Server® 2012) Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Settings** > **Control Panel**. In the **Hardware and Sound** (Hardware) group, click **View devices and printers**. Right-click the **Brother HL-XXXX Printer** > **See what's printing**. If printer driver options appear, select your printer driver. Click **Printer** in the menu bar. Make sure you clear the check mark before **Use Printer Offline**. (For Windows Server® 2012 R2) Click **Control Panel** on the **Start** screen. In the **Hardware** group, click **View devices and printers**. Right-click the **Brother HL-XXXX Printer** >**See what's printing**. If printer driver options appear, select your printer driver. Click **Printer** in the menu bar. Make sure you clear the check mark before **Use Printer Offline**.
	Contact your administrator to check your Secure Function Lock settings.
	Make sure the interface is set to `Auto` on the machine (see how to change the interface on page 94).

Printing difficulties (continued)

Difficulties	Suggestions
No printout. (continued)	Check that the machine is not in Power Off mode. If the machine is in Power Off mode, press  on the Touchpanel, and then re-send the print job. (See *Auto Power Off* on page 114.)
The machine is not printing or has stopped printing.	Press . The machine will cancel the print job and clear it from the memory. The printout may be incomplete.
The headers or footers appear when the document is displayed on the screen but they are not on the printed page.	There is an unprintable area on the top and bottom of the page. Adjust the top and bottom margins in your document to allow for this. (See *Unprintable area when printing from a computer* on page 7.)
The machine prints unexpectedly or it prints garbage.	Press  to cancel the print jobs.
	Check the settings in your application to make sure they are set to work with your machine.
The machine prints the first couple of pages correctly, then some pages have text missing.	Check the settings in your application to make sure that they are set to work with your machine.
	Your computer is not recognising the machine's input buffer's full signal. Make sure the interface cable is connected correctly.
Cannot perform 'Page Layout' printing.	Check that the paper size settings in the application and in the printer driver are the same.
Print speed is too slow.	Try changing the printer driver setting. The highest quality takes longer data processing, sending and printing time.
	If the machine is in Quiet mode, print speed is slower. Check the Quiet mode setting. (See *Turning Quiet mode on/off* on page 115.)
The machine does not print from Adobe® Illustrator®.	Reduce the print quality. (For Windows, see *Basic tab* on page 33.) (For Macintosh, see *Print Settings* on page 71.)
Poor print quality	See *Improving the print quality* on page 197.

Paper handling difficulties

Difficulties	Suggestions
The machine does not feed paper.	If the paper tray is empty, load a new stack of paper in the paper tray.
	If there is paper in the paper tray, make sure it is straight. If the paper is curled, straighten it. Sometimes it is helpful to remove the paper, turn the stack over and put it back in the paper tray.
	Reduce the amount of paper in the paper tray, and then try again.
	Make sure that MP Tray mode is not selected in the printer driver.
	Clean the paper pick-up roller. (See *Cleaning the paper pick-up roller* on page 169.)

Paper handling difficulties (continued)

Difficulties	Suggestions
The machine does not feed paper from the MP tray.	Make sure that **MP Tray** is selected in the printer driver.
	Fan the paper well and put the paper tray back in the machine.
How do I print on envelopes?	1 Open the back cover. 2 Pull down the two gray levers to the envelope position. 3 When you have finished printing envelopes, reset the two gray levers to their original positions and close the back cover. (See *Printing on thick paper, labels and envelopes from the MP tray* on page 15.) Load up to three envelopes at a time in the MP tray. Your application must be set to print the envelope size you are using. This is usually done in the Page Setup or Document Setup menu of your application. (See your application's manual for more information.)

Network difficulties

Difficulties	Suggestions
Cannot print over a network after completing the software installation.	When the **Cannot print to the networked printer.** screen appears, follow the on-screen instructions. If the problem is not solved, see the Network User's Guide.
	Make sure the interface is set to `Auto` on the machine (see how to change the interface on page 94).
The Brother software cannot be installed.	**(Windows®)** If the Security Software warning appears on the computer screen during the installation, change the Security Software settings to permit the Brother product setup program or other program to run. **(Macintosh)** If you are using a firewall function of anti-spyware or antivirus security software, temporarily disable it, and then install the Brother software.
Cannot connect to wireless network.	Investigate the problem using the WLAN Report. Print the WLAN Report. 1 Press  . 2 Press `Machine Information` > `Print WLANReport`. 3 Press `OK`. For more details, see the Network User's Guide.

For other problems concerning using your machine on a Network,see the Network User's Guide.

Other difficulties

Difficulties	Suggestions
The machine will not turn on.	Adverse conditions on the power connection (such as lightning or a power surge) may have triggered the machine's internal safety mechanisms. Turn the machine off and unplug the power cord. Wait for ten minutes, then plug in the power cord and turn the machine on. If the problem is not solved, turn off the machine. If you are using a power breaker, disconnect it to make sure it is not the problem. Plug the machine's power cord directly into a different known working wall electrical socket and turn on the machine. If there is still no power, try a different power cable.
The machine cannot print EPS data that includes binary with the BR-Script3 printer driver.	**(Windows®)** To print EPS data, do the following: 1 For Windows® 7 and Windows Server® 2008 R2: Click the (**Start**) button > **Devices and Printers**. For Windows Vista® and Windows Server® 2008: Click the (**Start**) button > **Control Panel**, **Hardware and Sound** > **Printers**. For Windows® XP and Windows Server® 2003: Click the **Start** button > **Printers and Faxes**. For Windows® 8 and Windows Server® 2012: Move your mouse to the lower right corner of your desktop. When the menu bar appears, click **Settings** > **Control Panel**. In the **Hardware and Sound** group, click **View devices and printers**. For Windows Server® 2012 R2: Click **Control Panel** on the **Start** screen. In the **Hardware** group, click **View devices and printers**. 2 For Windows® 7, Windows® XP, Windows Vista®, Windows Server® 2003,Windows Server® 2008 and Windows Server® 2008 R2: Right-click the **Brother HL-XXXX BR-Script3** icon and select **Printer properties** (**Properties**), and **Brother HL-XXXX BR-Script3** if needed. For Windows® 8, Windows Server® 2012 and Windows Server® 2012 R2: Right-click the **Brother HL-XXXX BR-Script3** icon, select **Printer properties**. 3 From the **Device Settings** tab, choose **TBCP** (Tagged binary communication protocol) in **Output Protocol**. **(Macintosh)** If your machine is connected to a computer with a USB interface, you cannot print EPS data that includes binary. You can print the EPS data at the machine through a network. For installing the BR-Script3 printer driver through the network, visit the Brother Solutions Center at http://solutions.brother.com/.

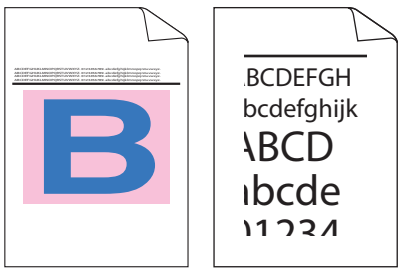
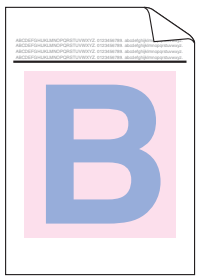
Improving the print quality

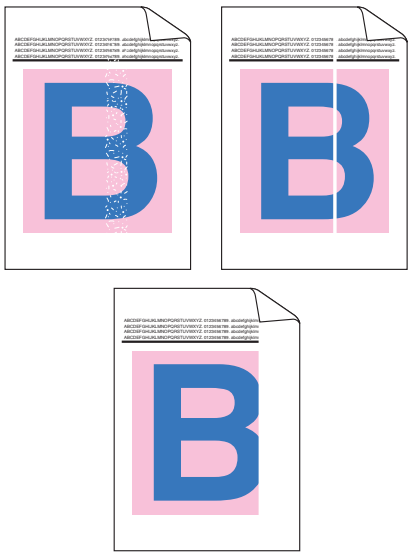
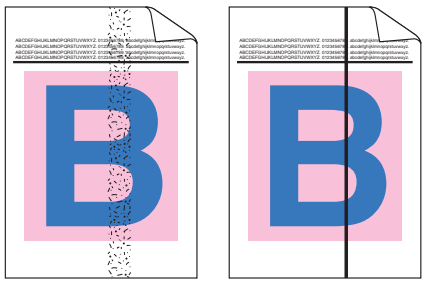
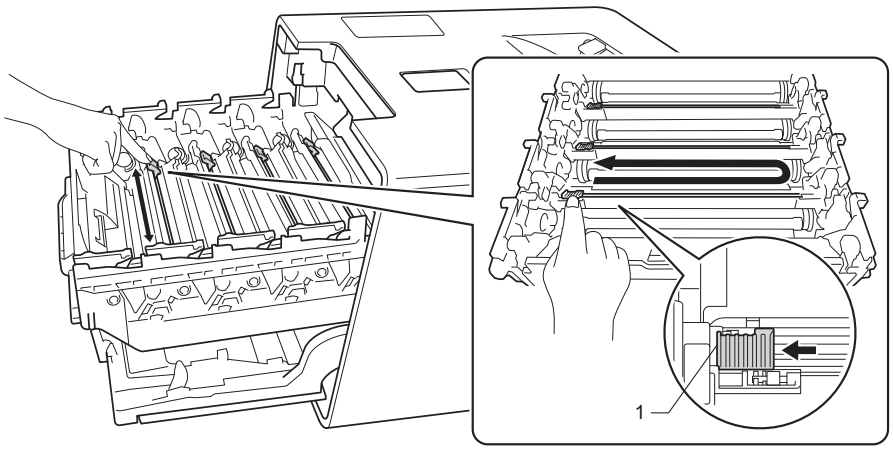
If you have a print quality problem, print a test page first (see *Machine Information* on page 91). If the printout looks good, the problem is probably not the machine. Check the interface cable or try the machine on another computer. If the printout has a quality problem, check the following steps first. And then, if you still have a print quality problem, check the chart below and follow the recommendations.

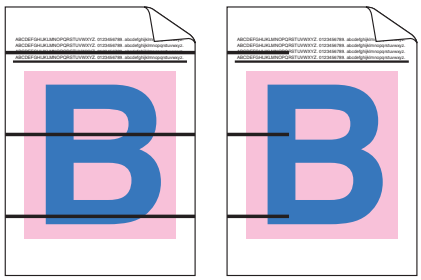
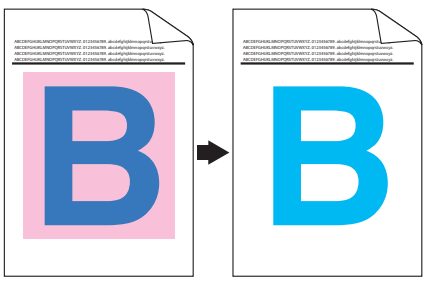
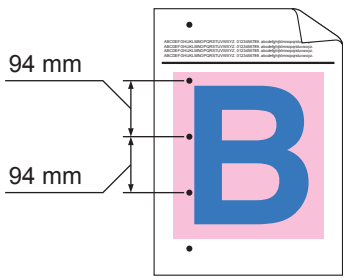
NOTE

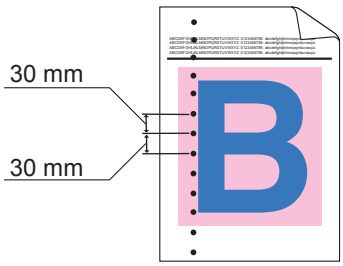
Brother does not recommend the use of cartridges other than genuine Brother Original cartridges or the refilling of used cartridges with toner from other sources.

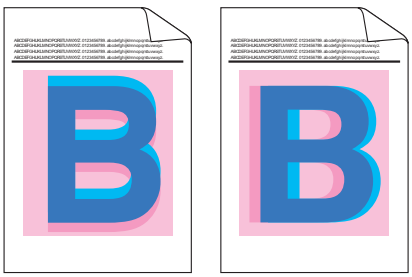
1. To get the best print quality, we suggest using the recommended paper. Check that you are using paper that meets our specifications (see *Acceptable paper and other print media* on page 2).
2. Check that the drum unit and toner cartridges are installed correctly.

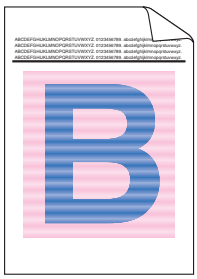
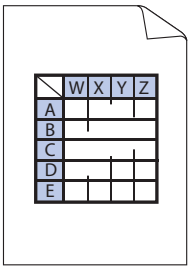
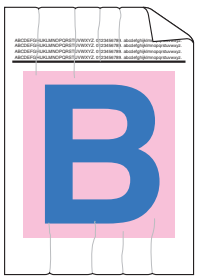
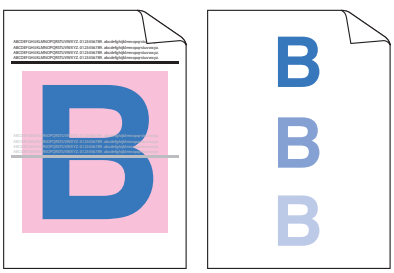
Examples of poor print quality	Recommendation
 **Printed pages are compressed, horizontal stripes appear, or characters in the top, bottom, left and right margins are cut off**	■ Adjust the print margins on your application and reprint the job.
 **Colours are light or faint on the whole page**	■ Perform the colour calibration using the Touchscreen or the printer driver (see *Colour Calibration* on page 116). ■ Make sure toner save mode is off in the Touchscreen or the printer driver. ■ Make sure that the media type setting in the driver matches the type of paper you are using (see *Acceptable paper and other print media* on page 2). ■ Shake all four toner cartridges gently. ■ Wipe the scanner windows with a dry, soft, lint-free cloth. (See *Cleaning the inside of the machine* on page 156.)

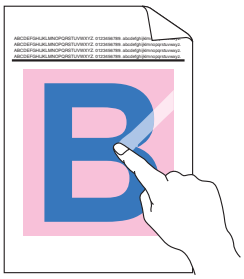
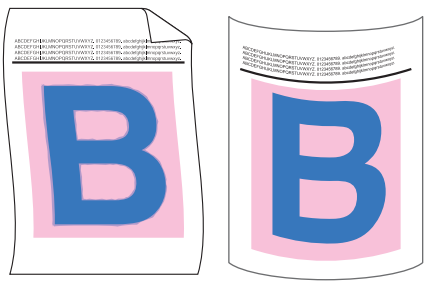
Examples of poor print quality	Recommendation
 **White streaks or bands down the page**	■ Wipe the scanner windows with a dry, soft, lint-free cloth (see *Cleaning the inside of the machine* on page 156.) ■ Make sure that foreign material such as a torn piece of paper, sticky note or dust is not inside the machine and around the drum unit and toner cartridge.
 **Coloured streaks or bands down the page**	■ Clean all four corona wires inside the drum unit by sliding the blue tabs (see *Cleaning the corona wires* on page 160). **IMPORTANT** Make sure the blue tabs of the corona wires are at the home position (1).  ■ Replace the toner cartridge that matches the colour of the streak or band (see *Replacing the toner cartridges* on page 128). To identify the colour of the toner cartridge, visit http://solutions.brother.com/ to view our FAQs and troubleshooting tips. ■ Install a new drum unit (see *Replacing the drum unit* on page 133).

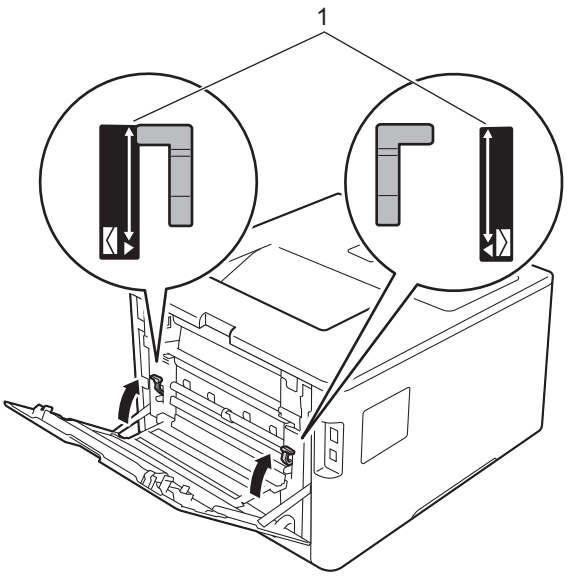
Examples of poor print quality	Recommendation
 **Coloured lines across the page**	■ Identify the colour causing the problem and replace the toner cartridge that matches the colour of the line (see *Replacing the toner cartridges* on page 127). To identify the colour of the toner cartridge, visit http://solutions.brother.com/ to view our FAQs and troubleshooting tips. ■ Install a new drum unit (see *Replacing the drum unit* on page 133).
 **White spots or hollow print**	■ Make sure that the media type setting in the printer driver matches the type of paper you are using (see *Acceptable paper and other print media* on page 2). ■ Check the machine's environment. Conditions such as high humidity can cause hollow print (See the Product Safety Guide). ■ If the problem is not solved after printing a few pages, the drum may have foreign material, such as glue from a label, stuck on the drum surface. Clean the drum unit (see *Cleaning the drum unit* on page 163). ■ Install a new drum unit (see *Replacing the drum unit* on page 133).
 **Blank page or some colours are missing**	■ Identify the colour causing the problem and put in a new toner cartridge (see *Replacing the toner cartridges* on page 128). To identify the colour of the toner cartridge, visit http://solutions.brother.com/ to view our FAQs and troubleshooting tips. ■ Install a new drum unit (see *Replacing the drum unit* on page 133).
 **Coloured spots at 94mm**	■ If the problem is not solved after printing a few pages, the drum may have foreign material, such as glue from a label, stuck on the drum surface. Clean the drum unit (see *Cleaning the drum unit* on page 163). ■ Install a new drum unit (see *Replacing the drum unit* on page 133).

Examples of poor print quality	Recommendation
 **Coloured spots at 30mm**	■ Identify the colour causing the problem and put in a new toner cartridge (see *Replacing the toner cartridges* on page 128). To identify the colour of the toner cartridge, visit http://solutions.brother.com/ to view our FAQs and troubleshooting tips.
 **Toner scatter or toner stain**	■ Check the machine's environment. Conditions such as high humidity and high temperatures may cause this print quality problem. ■ Identify the colour causing the problem and put in a new toner cartridge (see *Replacing the toner cartridges* on page 128). To identify the colour of the toner cartridge, visit http://solutions.brother.com/ to view our FAQs and troubleshooting tips. ■ Install a new drum unit (see *Replacing the drum unit* on page 133).

Examples of poor print quality	Recommendation
The colour of your printouts is not what you expected	■ To improve the colour density, calibrate the colours using first the Touchscreen and then the printer driver (see *Colour Calibration* on page 116). ■ To adjust the print position of colours for sharper edges, perform the colour registration using the Touchscreen (see *Colour Registration* on page 117). ■ Make sure toner save mode is off in the Touchscreen or the printer driver. See **Toner Save Mode** in *Advanced tab* on page 41 (For Windows® printer driver), *Advanced options* on page 58 (For Windows® BR-Script printer driver), *Advanced print settings* on page 73 (For Macintosh printer driver), *Printer Features* on page 77 (For Macintosh BR-Script printer driver). ■ If the print quality is poor, clear the **Improve Grey Colour** check box of the printer driver. See **Improve Grey Colour** in *Settings dialog box* on page 36 (for Windows® printer driver), *Advanced options* on page 58 (for Windows® BR-Script printer driver), *Advanced print settings* on page 73 (for Macintosh printer driver), or *Printer Features* on page 77 (for Macintosh BR-Script printer driver). If the print quality of the black portion is not what you expected, select the **Enhance Black Printing** check box of the printer driver. See **Enhance Black Printing** in *Settings dialog box* on page 36 (for Windows® printer driver), *Advanced options* on page 58 (for Windows® BR-Script printer driver), *Advanced print settings* on page 73 (for Macintosh printer driver), or *Printer Features* on page 77 (for Macintosh BR-Script printer driver). ■ Identify the colour causing the problem and put in a new toner cartridge (see *Replacing the toner cartridges* on page 128). To identify the colour of the toner cartridge, visit http://solutions.brother.com/ to view our FAQs and troubleshooting tips. ■ Install a new drum unit (see *Replacing the drum unit* on page 133).
 **Colour misregistration**	■ Make sure that the machine is on a solid level surface. ■ Perform the colour registration using the Touchscreen(see *Colour Registration* on page 117). ■ Install a new drum unit (see *Replacing the drum unit* on page 133). ■ Install a new belt unit (see *Replacing the belt unit* on page 140).

Examples of poor print quality	Recommendation
 **Uneven density appears periodically across the page**	■ Perform the calibration using the Touchscreen or the printer driver (see *Colour Calibration* on page 116). ■ Clear the **Improve Grey Colour** check box of the printer driver. ■ Identify the colour causing the problem and put in a new toner cartridge (see *Replacing the toner cartridges* on page 127). To identify the colour of the toner cartridge, visit http://solutions.brother.com/ to view our FAQs and troubleshooting tips. ■ Install a new drum unit (see *Replacing the drum unit* on page 133).
 **Missing image at thin line**	■ Make sure toner save mode is off in the Touchscreen or the printer driver. See **Toner Save Mode** in *Advanced tab* on page 41 (for Windows® printer driver), *Advanced options* on page 58 (for Windows® BR-Script printer driver), *Advanced print settings* on page 73 (for Macintosh printer driver), or *Printer Features* on page 77 (for Macintosh BR-Script printer driver). ■ Change the print resolution. ■ If you use a Windows printer driver, choose **Improve Pattern Printing** in Print Setting of the Basic tab (see *Settings dialog box* on page 36).
 **Wrinkled**	■ Check the paper type and quality (see *Acceptable paper and other print media* on page 2). ■ Make sure that the back cover is closed completely. ■ Make sure that the two grey levers inside the back cover are in the up positions. ■ Make sure that the media type setting in the driver matches the type of paper you are using (see *Acceptable paper and other print media* on page 2).
 **Ghost**	■ Check the machine's environment. Conditions such as low humidity and low temperatures may cause this print quality problem (see the Product Safety Guide). ■ Make sure that the media type setting in the printer driver matches the type of paper you are using (see *Acceptable paper and other print media* on page 2). ■ Make sure you lift up the two grey levers inside the back cover until they stop in the up position. ■ Install a new drum unit (see *Replacing the drum unit* on page 133).

Examples of poor print quality	Recommendation
 **Poor fixing**	■ Make sure you lift up the two grey levers inside the back cover until they stop in the up position. ■ Make sure that the media type setting in the printer driver matches the type of paper you are using (see *Acceptable paper and other print media* on page 2). ■ Choose **Improve Toner Fixing** mode in the printer driver. (For Windows, see *Other Print Options* on page 47.) (For Macintosh, see *Print Settings* on page 71.) If this selection does not provide enough improvement, change the printer driver setting in **Media Type** to a thick setting. If you are printing an envelope, choose **Env. Thick** in the media type setting.
 **Curled or wavy**	■ Choose **Reduce Paper Curl** mode in the printer driver. (For Windows, see *Other Print Options* on page 47.) (For Macintosh, see *Print Settings* on page 71.) If the problem is not solved, choose **Plain Paper** in the media type setting. If you are printing an envelope, choose **Env. Thin** in the media type setting. ■ If you do not use the machine often, the paper may have been in the paper tray too long. Turn over the stack of paper in the paper tray. Also, fan the paper stack, and then rotate the paper 180° in the paper tray. ■ Store the paper where it will not be exposed to high temperatures and high humidity. ■ Open the back cover (face-up output tray) to let the printed pages exit onto the face-up output tray.

Examples of poor print quality	Recommendation
 **Envelope Creases**	■ Make sure that the envelope levers inside the back cover are pulled down to the envelope position when you print envelopes. See *Loading paper in the multi-purpose tray (MP tray)* on page 12. **NOTE** When you have finished printing, open the back cover and reset the two grey levers back to their original positions (1) by lifting them up until they stop. 

Machine Information

Checking the Serial Number

You can see the machine's Serial Number on the Touchscreen.

1. Press 

.
2. Press `Machine Information` > `Serial No.`.

Default settings

The machine has two levels of default settings; the default settings have been set at the factory before shipment (see *Basic Operations* on page 88).

- Network
- Factory Reset

NOTE

- Changing the default settings does not modify the preset factory defaults.
- Page counters can never be changed.

Network default settings

To reset only the print server back to its default settings (by resetting all network information such as the password and IP address), follow these steps:

1. Press 

.
2. Press `Network` > `Network Reset`.
3. Press `Yes` after `Reset Network?` appears.
4. Press `Yes` for more than 2 seconds after `Reboot OK?` appears. The machine will restart automatically.

Factory Reset

This operation will reset all the machine's settings back to the ones that were set at the factory before shipment.

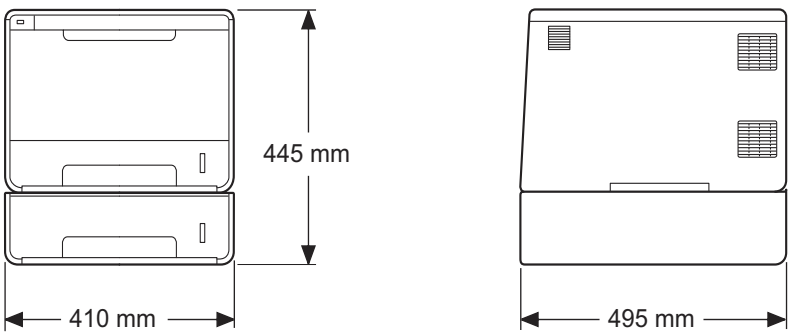
1. Press 

.
2. Press `Reset Menu` > `Factory Reset`.
3. Press `Yes` after `Factory Reset?` appears.
4. Press `Yes` for more than 2 seconds after `Reboot OK?` appears. The machine will restart automatically.

A Appendix

Machine specifications

General

Model		HL-L9200CDWT
Printer Type		Laser
Print Method		Electrophotographic Laser Printer (single-pass)
Memory Capacity	Standard	128 MB
	Optional	1 slot: DDR2 SO-DIMM (144-pin) up to 256 MB
LCD (liquid crystal display)		1.8 in. (44.9 mm) TFT Colour Touchscreen LCD [1] and Touchpanel
Power Source		220 - 240 V AC 50/60 Hz
Power Consumption [2] (Average)	Peak	Approx. 1180 W
	Printing	Approx. 540 W at 25 °C
	Printing (Quiet Mode)	Approx. 355 W
	Ready	Approx. 65 W at 25 °C
	Sleep	Approx. 8.0 W
	Deep Sleep	Approx. 1.1 W
	Power Off [3] [4]	Approx. 0.04 W
Dimensions		
Weights (with supplies)		28.3 kg

1 Measured diagonally

2 USB connections to computer.

3 Measured according to IEC 62301 Edition 2.0.

4 Power consumption varies slightly depending on the usage environment or part wear.

Model			HL-L9200CDWT
Noise Level	Sound Pressure	Printing	LpAm = 55.1 dB (A)
		Ready	LpAm = 27.3 dB (A)
		Printing (Quiet Mode)	LpAm = 50.8 dB (A)
	Sound Power [1] [2]	Printing	LWAd = 6.78 B (A)
		Ready	LWAd = 4.06 B (A)
		Printing (Quiet Mode)	(Colour) LWAd = 6.39 B (A) (Mono) LWAd = 6.41 B (A)
Temperature		Operating	10 to 32 °C
		Storage	0 to 40 °C
Humidity		Operating	20 - 80% (without condensation)
		Storage	10 - 90% (without condensation)

1 Measured in accordance with the method described in RAL-UZ171.

2 Office equipment with LWAd>6.30 B (A) is not suitable for use in rooms where people require high levels of concentration. Such equipment should be placed in separate rooms because of the noise emission.

Print media

Model			HL-L9200CDWT
Paper Input [1]	Paper Tray (Standard)	Paper Type	Plain paper, Thin paper, Recycled paper
		Paper Size	A4, Letter, B5 (JIS), A5, A5 (Long Edge), A6, Executive, Legal, Folio
		Paper Weight	60 to 105 g/m^2
		Maximum Paper Capacity	Up to 250 sheets of 80 g/m^2 Plain paper
	Multi-purpose tray (MP tray)	Paper Type	Plain paper, Thin paper, Thick paper, Thicker paper, Recycled paper, Bond paper, Label, Envelope, Env.Thin, Env.Thick, Glossy paper [2]
		Paper Size	Width: 76.2 to 215.9 mm Length: 127 to 355.6 mm
		Paper Weight	60 to 163 g/m^2
		Maximum Paper Capacity	Up to 50 sheets of 80 g/m^2 Plain paper
	Paper Tray (Optional) [3]	Paper Type	Plain paper, Thin paper, Recycled paper
		Paper Size	A4, Letter, B5 (JIS), A5, Executive, Legal, Folio
		Paper Weight	60 to 105 g/m^2
		Maximum Paper Capacity	Up to 500 sheets of 80 g/m^2 Plain paper
Paper Output [1]	Face-Down Output Tray		Up to 150 sheets of 80 g/m^2 Plain paper (face-down delivery to the face-down output paper tray)
	Face-Up Output Tray		One sheet (face-up delivery to the face-up output tray)
2-sided	Automatic 2-sided Printing	Paper Type	Plain paper, Thin paper, Recycled paper, Glossy paper
		Paper Size	A4
		Paper Weight	60 to 105 g/m^2

1 For labels, we recommend removing the printed sheets from the output paper tray immediately after they exit the machine to avoid the possibility of smudging.

2 For glossy paper, place only one sheet in the MP Tray.

3 Standard equipment.

Printer

Model			HL-L9200CDWT
Automatic 2-sided Print			Yes
Emulation			PCL6, BR-Script3 (PostScript® 3™)
Resolution			600 × 600 dpi 2400dpi (2400 × 600) quality
Print Speed [1] [2]	Single side print	Monochrome	Up to 30 ppm (A4 size) Up to 32 ppm (Letter size)
		Full colour	Up to 30 ppm (A4 size) Up to 32 ppm (Letter size)
	2-sided Print	Monochrome	Up to 14 sides per minute (7 sheets per minute) (A4 or Letter size)
		Full colour	Up to 14 sides per minute (7 sheets per minute) (A4 or Letter size)
First Print Time [3]			(Colour) Less than 15 seconds at 23 °C / 230 V (Mono) Less than 15 seconds at 23 °C / 230 V

[1] The print speed may change depending on the type of document you print.

[2] Print speed may be slower when the machine is connected by wireless LAN.

[3] From Ready mode and standard tray

Interface

Model	HL-L9200CDWT
USB	Hi-Speed USB 2.0 [1] [2] We recommend using a USB 2.0 cable (Type A/B) that is no more than 2 meters long.
Ethernet [3]	10BASE-T / 100BASE-TX Use a straight-through Category 5 (or greater) twisted-pair cable.
Wireless LAN [3]	IEEE 802.11b/g/n (Infrastructure Mode/Ad-hoc Mode) IEEE 802.11g (Wi-Fi Direct)

[1] Your machine has a Hi-Speed USB 2.0 interface. The machine can also be connected to a computer that has a USB 1.1 interface.

[2] Third party USB ports are not supported.

[3] For detailed network specifications, see *Network (LAN)* on page 210 and see the Network User's Guide.

Network (LAN)

Model		HL-L9200CDWT
LAN		You can connect your machine to a network for Network Printing. Also included is Brother BRAdmin Light [1] [2] Network Management software.
Protocols	IPv4	ARP, RARP, BOOTP, DHCP, APIPA(Auto IP), WINS/NetBIOS name resolution, DNS Resolver, mDNS, LLMNR responder, LPR/LPD, Custom Raw Port/Port9100, IPP/IPPS, FTP Server, TELNET Server, HTTP/HTTPS server, TFTP client and server, SMTP Client, SNMPv1/v2c/v3, ICMP, Web Services (Print), CIFS client, SNTP client, LDAP client
	IPv6	NDP, RA, DNS resolver, mDNS, LLMNR responder, LPR/LPD, Custom Raw Port/Port9100, IPP/IPPS, FTP Server,TELNET Server, HTTP/HTTPS server, TFTP client and server, SMTP Client, SNMPv1/v2c, ICMPv6, Web Services (Print), CIFS Client, SNTP Client, LDAP client
Security Protocols	Wired	SMTP-AUTH, SSL/TLS (IPPS, HTTPS, SMTP), SNMP v3 802.1x (EAP-MD5, EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, IPSec
	Wireless	SMTP-AUTH, SSL/TLS (IPPS, HTTPS, SMTP), SNMP v3 802.1x (LEAP, EAP-FAST, PEAP, EAP-TLS, EAP-TTLS), Kerberos, IPSec
Wireless Network Security		WEP 64/128 bit, WPA-PSK (TKIP/AES), WPA2-PSK (AES)
Wireless Network Setup Support Utility	**AOSS™**	Yes
	WPS	Yes

[1] (For Windows® users) Brother BRAdmin Light is available from the CD-ROM provided with the machine.
(For Macintosh users) Brother BRAdmin Light is available as a download from http://solutions.brother.com/.

[2] (For Windows® users) If you want more advanced printer management, use the latest Brother BRAdmin Professional utility version that is available as a download from http://solutions.brother.com/.

Direct Print feature

Model	HL-L9200CDWT
Compatibility	PDF version 1.7 [1], JPEG, Exif+JPEG, PRN (created by Brother printer driver), TIFF (scanned by all Brother MFC or DCP models), XPS version 1.0
Interface	USB direct interface

[1] PDF data including a JBIG2 image file, a JPEG2000 image file or a transparency file is not supported.

Computer requirements

Computer Platform & Operating System Version		PC Interface			Processor	Hard Disk Space to install
		USB [1]	10/100 Base-TX (Ethernet)	Wireless 802.11b/g/n		
Windows® Operating System	Windows® XP Home Windows® XP Professional	Printing			32bit (x86) or 64bit (x64) processor	80 MB
	Windows® XP Professional x64 Edition				64bit (x64) processor	
	Windows Vista®				32bit (x86) or 64bit (x64) processor	
	Windows® 7					
	Windows® 8					
	Windows Server® 2003	Printing			32bit (x86) or 64bit (x64) processor	
	Windows Server® 2003 x64 Edition				64bit (x64) processor	
	Windows Server® 2008				32bit (x86) or 64bit (x64) processor	
	Windows Server® 2008 R2				64bit (x64) processor	
	Windows Server® 2012				64bit (x64) processor	
	Windows Server® 2012 R2				64bit (x64) processor	
Macintosh Operating System	OS X v10.7.5	Printing			Intel® Processor	80 MB
	OS X v10.8.x					
	OS X v10.9.x					

[1] Third party USB ports are not supported.

For the latest driver updates, visit http://solutions.brother.com/.

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A

Important information for choosing your paper

The information in this section will help you choose paper to use with this machine.

NOTE

If you use paper that is not recommended, a paper jam or misfeed may occur in the machine.

Before you buy a large quantity of paper

Make sure that the paper is appropriate for the machine.

Paper for plain paper copies

Paper is divided by usage, such as paper for printing and paper for copying. The usage is usually written on the paper's package. Check the package to see whether it is appropriate for laser printers. Use paper that is appropriate for laser printers.

Basis weight

The basis weight of the paper for general use varies in different countries. We recommend using paper that weighs 75 to 90 g/m^2, although this machine is able to cope with thinner or thicker paper than these weights.

Long grain and short grain

The pulp fiber of the paper is aligned during paper manufacturing. Paper can be classified into two types, long grain and short grain.

Long grain paper fibers run in the same direction as the long edge of the paper. Short grain paper fibers run perpendicular to the long edge of the paper. Though most plain paper for copying is long grain, some is short grain. We recommend using long grain paper for this machine. Short grain paper is too weak for the paper transport of the machine.

Acid paper and neutralized paper

Paper can be classified as either acid paper or neutralized paper.

Though modern paper manufacture methods started with acid paper, neutralized paper is recently taking the place of acid paper because of environmental issues.

However, many forms of acid paper can be found in recycled paper. We recommend using neutralized paper for this machine.

Use an acid paper check pen to distinguish acid paper from neutral paper.

Print surface

The characteristics of the face side and reverse side of a sheet of paper may vary a little.

Usually, the opening side of the paper ream package is the print side. Follow the instructions on the paper package. Typically, the print side is indicated by an arrow.

Supplies

Model			HL-L9200CDWT	Model Name
Toner Cartridge	Inbox	Black, Cyan, Magenta, Yellow	Approx. 6,000 pages A4 or Letter page [1]	-
	Supply	Black, Cyan, Magenta, Yellow	Approx. 6,000 pages A4 or Letter page [1]	TN-900BK, TN-900C, TN-900M, TN-900Y
Drum Unit			Approx. 25,000 pages A4 or Letter pages [2]	DR-321CL
Belt Unit			50,000 pages (5 pages per job) [2] 20,000 pages (1 page per job) [2]	BU-320CL
Waste Toner Box			Approx. 50,000 pages A4 or Letter pages [2]	WT-320CL

[1] Approximate cartridge yield is declared in accordance with ISO/IEC 19798.

[2] Life of supply is approximate and may vary by type of use.

Important information for the toner cartridge life

Colour/Mono setting in the printer driver

Users can change the Colour/Mono settings on the printer driver as follows:

■ **Auto**

The machine checks the content of the document for colour. If colour is detected anywhere in the document, it will print the whole of the document using all the colours. In other words, it will mix some of the toners to help achieve every shade detected in the document, increasing the density of toner applied to the page. If no colour content is detected, it will print the document in monochrome.

The default setting on your machine is **Auto**.

NOTE

The machine's colour sensor is very sensitive and may perceive faded black text or an off-white background as colour. If you know that your document is black and white and you want to conserve colour toner, select **Mono** mode.

■ **Colour**

Whether the document contains colour or just monochrome, your machine will print the document using all the colours.

■ **Mono**

Select this mode if the document has only black and greyscale text and/or objects. If your document contains colour, this mode prints the document in 256 levels of grey using the black toner.

NOTE

If either the Cyan, Magenta or Yellow toner reaches the end of its life while printing a colour document, the print job cannot be completed. You can cancel your print job and choose to start the print job again in **Mono** mode, as long as Black toner is available.

For more information about the settings in the printer driver, see *Chapter 2: Driver and Software*.

Toner Cartridge Life

This product detects the life of the toner cartridges using the following two methods:

■ **Detection by counting the dots of each colour that are necessary to create an image**

■ **Detection by counting the rotations of the developer roller**

This product counts the dots of each colour used to print every document and the rotations of each toner cartridge's developer roller. The print operation will stop when either one of the upper limits are reached. The upper limit is set above the number of dots or rotations required for the cartridge to perform consistently with its advertised page yield. This feature is intended to reduce the risk of poor print quality and damage to the machine.

There are two messages that indicate when the toner nears or reaches its life end: `Toner Low` and `Replace Toner`.

`Toner Low` is displayed on the LCD when the number of dots or rotations of the developer roller nears its maximum count: `Replace Toner` is displayed on the LCD when the number of dots or rotations of the developer roller reaches its maximum count.

Colour Correction

The number of developer roller rotations that are counted may not only be for normal operations such as printing, but also for machine adjustments, such as Colour Calibration and Colour Registration.

■ **Colour Calibration (Adjustment of Colour Density)**

To obtain stable print quality, the density of each toner cartridge needs to be maintained at a fixed value. If the density balance between the colours cannot be kept, the tint becomes unstable, and accurate colour reproduction becomes unavailable. The toner density can change due to chemical changes to the toner that affect its electrical charge, deterioration of the developer unit, and temperature and humidity levels in the device. When calibration occurs, the density level adjustment test patterns are printed on the belt unit.

Calibration is mainly performed at the following times:

- When the user manually selects calibration from the operation panel or the printer driver. (Please perform calibration if colour density needs to be improved.)
- When a used toner cartridge is replaced with a new one.
- When the printer senses that the ambient temperature and humidity have changed.
- When a specified number of printed pages is reached.

■ **Colour Registration (Correction of Colour Position)**

In this device, the drum unit and developer unit are prepared for black (K), yellow (Y), magenta (M), and cyan (C), respectively. Four colour images are combined into one image, and therefore colour registration errors (i.e., how the four colour images align) might occur. When registration errors occur, registration correction test patterns are printed on the belt unit.

Registration is mainly performed at the following times:

- When the user manually selects registration from the operation panel. (Please perform registration if a colour registration error needs to be corrected.)
- When a specified number of printed pages is reached.

Brother numbers

IMPORTANT

For technical and operational help, you must call Brother customer service or your local Brother dealer.

Register your product

Please complete the Brother Warranty Registration or, for your convenience and most efficient way to register your new product, register on-line at

http://www.brother.com/registration/

Frequently asked questions (FAQs)

The Brother Solutions Center is our one-stop resource for all your machine needs. Download the latest drivers, software and utilities, read FAQs and troubleshooting tips to learn how to get the most from your Brother product.

http://solutions.brother.com/

Check here for Brother driver updates.

Customer Service

Visit http://www.brother.com/ for contact information on your local Brother office.

Service center locations

For service centres in Europe, contact your local Brother Office. Address and telephone contact information for European offices can be found at http://www.brother.com/ by selecting your country.

Internet Addresses

Brother Global Web Site: http://www.brother.com/

For Frequently Asked Questions (FAQs), Product Support and Technical Questions, and Driver Updates and Utilities: http://solutions.brother.com/

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