## **Basic printing**

#### **Eco printing**

The **Eco** function reduces toner consumption and paper usage. The **Eco** function allows you to save print resources and lead you to eco-friendly printing.

If you press the **Eco** button from the control panel, Eco mode is enabled. The default setting of Eco mode is double-sided printing (long edge), multiple pages per side (2-up), skip blank pages, and toner save. Some features may not be available depending on the model.



- Double-sided printing (long edge) feature is only available for duplex models (see "Variety feature" on page 10).
- Depending on the printer driver you use, Skip blank pages may not work properly. If Skip blank pages feature does not work properly, set the feature from the Easy Eco Driver (see "Easy Eco Driver" on page 232).

#### **Setting Eco mode on the control panel**



- For models that do not have the display screen on the control panel, this feature is not applicable.
- The settings set from the machine's driver override the settings on the control panel.
- It may be necessary to press **OK** to navigate to lower-level menus for some models.

- 1 Select \* (Menu) > System Setup > Eco Setup on the control panel.
- Select the option you want and press **OK**.
  - **Default Mode:** Select this to turn on or off the eco mode.
    - **Off**: Set the eco mode off.
    - **On**: Set the eco mode on.



If you set the eco mode on with a password from the SyncThru<sup>™</sup> Web Service (**Settings** tab > **Machine Settings** > **System** > **Eco Settings**) or Samsung Easy Printer Manager (**Device Settings** > **Eco**), the **On force** message appears. You have to enter the password to change the eco mode status.

- Change Temp.: Follow the settings from Syncthru<sup>™</sup> Web Service or Samsung Easy Printer Manager. Before you select this item, you must set the eco function in SyncThru<sup>™</sup> Web Service (Settings tab > Machine Settings > System > Eco Settings) or Samsung Easy Printer Manager (Device Settings > Eco).
  - Default Eco: The machine is set to Default Eco mode.
  - **Custom Eco**: Change any necessary values.
- Press **OK** to save the selection.

## **Basic printing**

#### Setting eco mode on the driver



To take advantage of the advanced printing features, click **Properties** or **Preferences** from the **Print** window (see "Opening printing preferences" on page 49).

Open the **Eco** tab to set Eco mode. When you see the eco image ( ), that means the eco mode is currently enabled.

#### **Eco options**

- Printer Default: Follows the settings from the machine's control panel.
- None: Disables Eco mode.
- **Eco Printing:** Enables eco mode. Activate the various Eco items you want to use.
- **Password:** If the administrator fixed to enable the Eco mode, you have to enter the password to change the status.



Password button: You can set from SyncThru<sup>™</sup> Web Service (Settings tab > Machine Settings > System > Eco Settings) or Samsung Easy Printer Manager (Device Settings > Eco), the password button is activated. To change the print settings, click on this button, enter the password or need to contact the administrator.

#### **Result simulator**

**Result Simulator** shows the results of reduced emission of carbon dioxide, used electricity, and the amount of saved paper in accordance with the settings you selected.

- The results are calculated on the basis that the total number of printed paper is one hundred without a blank page when the Eco mode is disabled.
- Refers to the calculation coefficient about CO2, energy, and paper from IEA, the index of Ministry of Internal Affairs and Communication of Japan and www.remanufacturing.org.uk. Each model has a different index.
- The power consumption in printing mode refers to the average printing power consumption of this machine.
- The actual amount displayed is only an estimate as the actual amount may differ depending on the operating system used, computing performance, application software, connection method, media type [thickness], media size, job complexity, etc.

#### **Secure printing**



- This feature is not supported for M332xND/M382xD.
- Some menus may not appear on the display depending on options or models. If so, it is not applicable to your machine.
- You might not be able to print a complex document using the RAM disk. Install an optional memory to print a complex document.

### **Basic printing**

When you use a printing device in an office, school or other public place, you can protect your personal documents or confidential information by using the secure printing feature.

### Starting secure printing from the SyncThru™ Web Service

- 1 Access a web browser, such as Internet Explorer, from Windows.

  Enter the machine IP address of your printer (http://xxx.xxx.xxx) in the address field and press the Enter key or click **Go**.
- Click Login on the upper right of SyncThru™ Web Service website.
- **Settings** > Machine Settings > System > Ram Disk.
- Enable Ram Disk.



This features may not appear on the display depending on options or models. If so, it is not applicable to your machine.

#### Printing secure documents from the control panel

- 1 Select [I] (Menu) > Job Management > Stored Job on the printer's control panel.
- Select the document to print.
- **2** Enter the password that you set from the printer driver.
- Print or delete the document.



# 3. Maintenance

This chapter provides information about purchasing supplies, accessories and maintenance parts available for your machine.

•	Ordering supplies and accessories	55
•	Available consumables	56
•	Available accessories	58
•	Available maintenance parts	59
•	Storing the toner cartridge	60
•	Redistributing toner	62
•	Replacing the toner cartridge	64
•	Replacing the imaging unit	68
•	Installing accessories	71
•	Monitoring the supplies life	75
•	Setting the toner/imaging unit low alert	76
•	Cleaning the machine	77
•	Tips for moving & storing your machine	82

# Ordering supplies and accessories



Available accessories may differ from country to country. Contact your sales representatives to obtain the list of available supplies, and maintenance parts.

To order Samsung-authorized supplies, accessories, and maintenance parts, contact your local Samsung dealer or the retailer where you purchased your machine. You can also visit **www.samsung.com/supplies**, and then select your country/region to obtain the contact information for service.

### **Available consumables**

When supplies reach the end of their life spans, you can order the followings of consumables for your machine:

Туре	Average yield <sup>a</sup>	Part name
	Approx. 3,000 pages	• <b>M3320 M3820 M4020 series:</b> MLT-D203S
		• M3325 M3825 M4025 series: MLT-D204S
	Approx. 5,000 pages	• M3320 M3820 M4020 series: MLT-D203L
Tonor cortridge		• M3325 M3825 M4025 series: MLT-D204L
Toner cartridge	Approx. 10,000 pages	• <b>M3820 M4020 series:</b> MLT-D203E
		• <b>M3825 M4025 series:</b> MLT-D204E
	Approx. 15,000 pages	• <b>M4020</b> series: MLT-D203U
		• <b>M4025 series:</b> MLT-D204U
	Approx. 30,000 pages	• M3325 M3825 M4025 series: MLT-R204
<b>Imaging Unit</b>	(based on 3 average letter/A4 size pages for	
	print job)	

a. Declared yield value in accordance with ISO/IEC 19752.



Depending on the options, percentage of image area and job mode used, the toner cartridge's lifespan may differ.



When purchasing new toner cartridges or other consumables, these must be purchased in the same country as the machine you are using. Otherwise, new toner cartridges or other consumables will be incompatible with your machine due to different configurations of toner cartridges and other consumables according to the specific country conditions.

## Available consumables



Samsung does not recommend using non-genuine Samsung toner cartridge such as refilled or remanufactured toner. Samsung cannot guarantee non-genuine Samsung toner cartridge's quality. Service or repair required as a result of using non-genuine Samsung toner cartridges will not be covered under the machine's warranty.

### **Available accessories**

You can purchase and install accessories to enhance your machine's performance and capacity.



Some features and optional goods may not be available depending on models or countries (see "Features by models" on page 8).

Accessory	Function	Part name
Memory module <sup>a</sup>	Extends your machine's memory capacity.	ML-MEM370: 512 MB
Optional tray <sup>b</sup>	If you are experiencing frequent paper supply problems, you can attach an additional 520 <sup>c</sup> sheet tray.	<ul> <li>SL-SCF3800<sup>d</sup></li> <li>SL-SCF3805<sup>e</sup></li> </ul>
IEEE 1284B parallel Connector <sup>f</sup>	Allows you to use various interface.	ML-PAR100
	• When installing the printer driver with an IEEE1284B parallel connector, the machine might not be found and after installing the printer driver, only basic printing features are available.	
	<ul> <li>If you want to check the machine's status or set the settings, connect the machine to a computer with a USB cable or a network.</li> </ul>	
	If you use the IEEE 1284B parallel connector, you can not use the USB cable.	

- a. Not available for M332xND/382xD
- b. Not available for 382xD
- c. Plain paper 80 g/m<sup>2</sup> (20 lb bond).
- d. For M3320ND/M3820ND/M3820DW/M4020ND.
- e. For M3325ND/M3825ND/M3825DW/M4025ND.
- f. The optional IEEE 1284B parallel connector can be used by plugging in both the USB port and the 5V output port.

### **Available maintenance parts**

To purchase maintenance parts, contact the source where you bought the machine. Replacing maintenance parts can be performed only by an authorized service provider, dealer, or the retailer where you bought the machine. The warranty does not cover the replacement of any maintenance parts once it has reached its "Average yield".

Maintenance parts are replaced at specific intervals to avoid print quality and paper feed problems resulting from worn parts, see table below. The purpose of which is to maintain your machine in top working condition. The maintenance parts below should be replaced when the life span of each item has been met.

Parts	Average yield <sup>a</sup>
Tray 1 roller	Approx. 90,000 pages
Tray 1 retard roller	Approx. 60,000 pages
Tray 2 roller	Approx. 200,000 pages
Tray 2 retard roller	Approx. 100,000 pages
MP roller	Approx. 100,000 pages
MP retard roller	Approx. 80,000 pages
Fuser unit	Approx. 90,000 pages

a. It will be affected by the operating system used, computing performance, application software, connecting method, media, media size and job complexity.

## Storing the toner cartridge

Toner cartridges contain components that are sensitive to light, temperature and humidity. Samsung suggests users follow these recommendations to ensure optimal performance, highest quality, and longest life from your new Samsung toner cartridge.

Store this cartridge in the same environment in which the printer will be used. This should be in controlled temperature and humidity conditions. The toner cartridge should remain in its original and unopened package until installation – if original packaging is not available, cover the top opening of the cartridge with paper and store in a dark cabinet.

Opening the cartridge package prior to use dramatically shortens its useful shelf and operating life. Do not store on the floor. If the toner cartridge is removed from the printer, follow the instructions below to store the toner cartridge properly.

- Store the cartridge inside the protective bag from the original package.
- Store lying flat (not standing on end) with the same side facing up as if it
  were installed in the machine.
- Do not store consumables in any of the following conditions:
  - Temperature greater than 40°C (104°F).
  - Humidity range less than 20% or greater than 80%.
  - An environment with extreme changes in humidity or temperature.
  - Direct sunlight or room light.
  - Dusty places.
  - A car for a long period of time.
  - An environment where corrosive gases are present.

- An environment with salty air.

#### **Handling instructions**

- Do not touch the surface of the photoconductive drum in the cartridge.
- Do not expose the cartridge to unnecessary vibrations or shock.
- Never manually rotate the drum, especially in the reverse direction; this can cause internal damage and toner spillage.

#### **Toner cartridge usage**

Samsung Electronics does not recommend or approve the use of non-Samsung brand toner cartridges in your printer including generic, store brand, refilled, or remanufactured toner cartridges.



Samsung's printer warranty does not cover damage to the machine caused by the use of a refilled, remanufactured, or non-Samsung brand toner cartridges.

## Storing the toner cartridge

#### **Estimated cartridge life**

Estimated cartridge life (the life of the toner cartridge yield) depends on the amount of toner that print jobs require. The actual print yield may vary depending on the print density of the pages you print on, operating environment, percentage of image area, printing interval, media type and/or media size. For example, if you print a lot of graphics, the consumption of the toner is higher and you may need to change the cartridge more often.

### Redistributing toner

When the toner cartridge is near the end of its life:

- White streaks or light printing occurs and/or density variation side to side.
- The **Status** LED blinks red. The toner-related message saying that the toner is low may appear on the display.

If this happens, you can temporarily improve print quality by redistributing the remaining toner in the cartridge. In some cases, white streaks or light printing will still occur even after you have redistributed the toner. Check the type of the toner cartridge for your machine (see "Available consumables" on page 56).



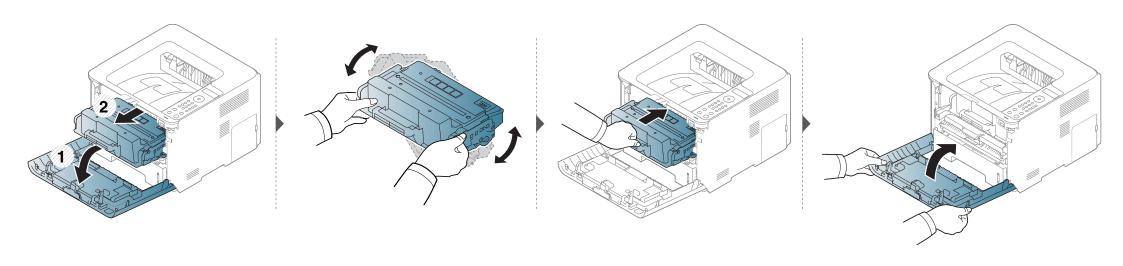
Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 20).



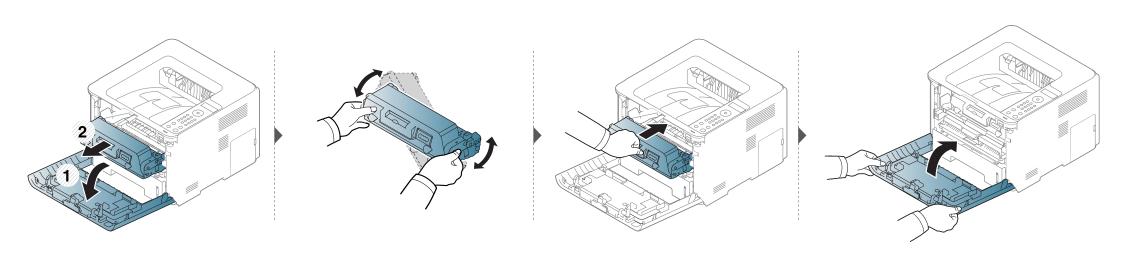
- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green area of the toner cartridge. Use the handle on the cartridge to avoid touching this area.
- Do not use sharp objects such as a knife or scissors to open the toner cartridge package. They might scratch the drum of the cartridge.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

# Redistributing toner

#### M3320/M3820/M4020 series



#### M3325/M3825/M4025 series



A toner cartridge has almost reached its estimated cartridge life:

- The status LED and the toner-related message on the display indicate when the toner cartridge should be replaced.
- The computer's Samsung Printing Status Program window appears on the computer telling you when the cartridge is empty (see "Using Samsung Printer Status" on page 240).



- Shake the toner cartridge thoroughly, it will increase the initial print quality.
- Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 20).



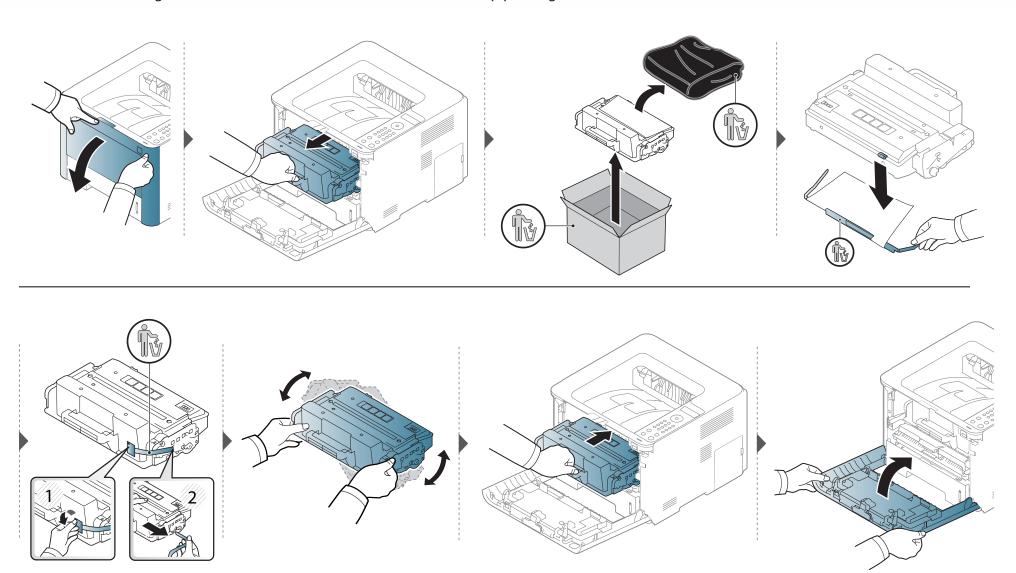
- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green area of the toner cartridge. Use the handle on the cartridge to avoid touching this area.
- Do not use sharp objects such as a knife or scissors to open the toner cartridge package. They might scratch the drum of the cartridge.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

#### M3320 M3820 M4020 series



Click this link to open an animation about replacing a toner cartridge.

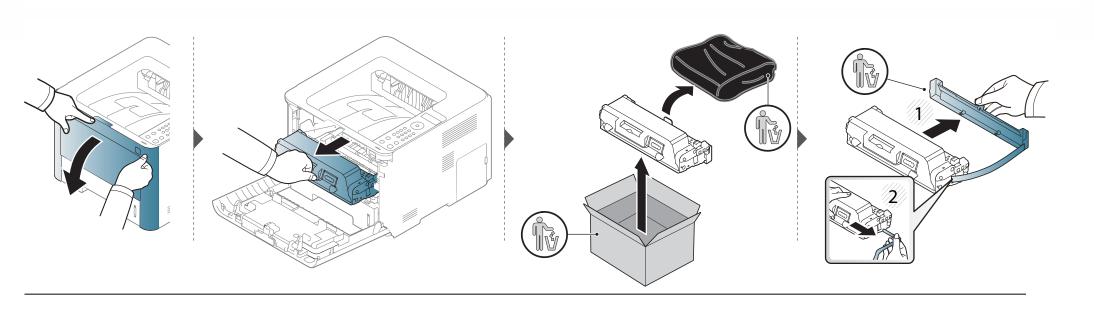
When a toner cartridge has reached the end of life, the machine will stop printing.

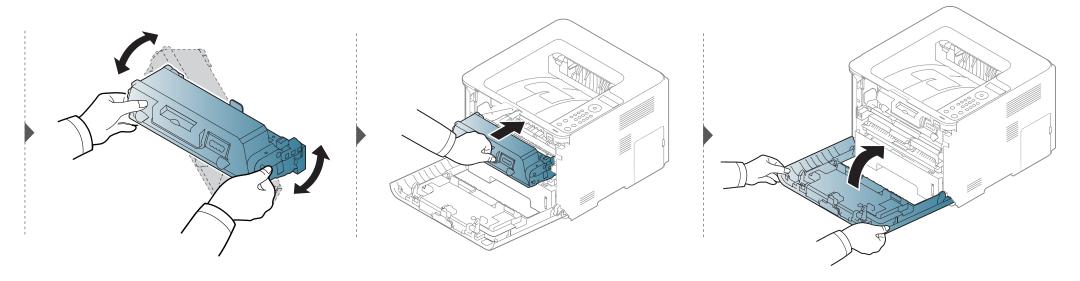


#### M3325 M3825 M4025 series



Click this link to open an animation about replacing a toner cartridge.





## Replacing the imaging unit

When a imaging unit has reached the end of life, the machine will stop printing.



- Do not use sharp objects such as a knife or scissors to open the toner cartridge package. They might scratch the drum of the cartridge.
- If toner gets on your clothing, wipe it off with a dry cloth and wash clothing in cold water. Hot water sets toner into fabric.

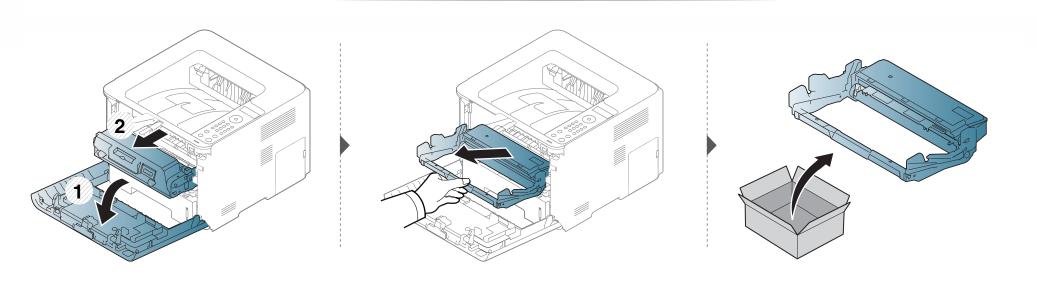
# Replacing the imaging unit

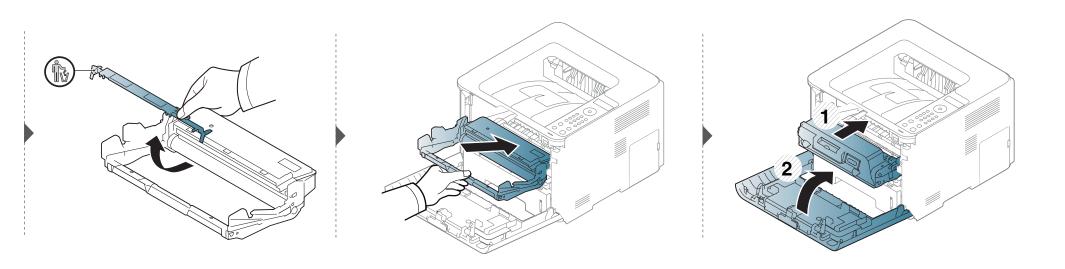
#### M3325/M3825/M4025 series



Click this link to open an animation about replacing a imaging unit.

# Replacing the imaging unit





#### **Precautions**

- Disconnect the power cord
  - Never remove the control board cover while the power is turned on.
  - To avoid the possibility of an electrical shock, always disconnect the power cord when installing or removing ANY internal or external accessories.
- Discharge static electricity
  - The control board and internal accessories (network interface card or memory module) are sensitive to static electricity. Before installing or removing any internal accessories, discharge static electricity from your body by touching something metal, such as the metal back plate on any device plugged into a grounded power source. If you walk around before finishing the installation, repeat this procedure to discharge any static electricity again.



When installing accessories, the battery inside the machine is a service component. Do not change it by yourself. There is a risk of an explosion if battery is replaced by an incorrect type. Dispose used batteries according to the instructions.

#### **Setting Device Options**

When you install the optional devices such as optional tray, memory, etc, this machine automatically detects and sets the optional devices. If you cannot use the optional devices you installed in this driver, you need to set the optional devices in **Device Options**.

- Click the Windows Start menu.
  - For Windows 8, from the Charms, select Search > Settings.
- **7** For Windows XP/2003, select **Printers and Faxes**.
  - For Windows 2008/Vista, select Control Panel > Hardware and Sound > Printers.
  - For Windows 7, select Control Panel > Hardware and Sound > Devices and Printers.
  - For Windows 8, search for Devices and Printers.
  - For Windows Server 2008 R2, select **Control Panel** > **Hardware** > **Devices and Printers**.
- Right-click your machine.
- For Windows XP/2003/2008/Vista, press **Properties**.
  - For Windows 7, Windows 8, and Windows Server 2008 R2, from context menus, select the **Printer properties**.



If **Printer properties** item has ▶ mark, you can select other printer drivers connected with selected printer.

- 5 Select **Device Options** or **Device Settings**.

The **Properties** window may differ depending on the driver or operating system you are using.

- 6 Select the appropriate option.

Some menus may not appear in the display depending on options or models. if so, it is not applicable to your machine.

- Tray Options: Select the optional tray you installed. You can select the tray.
- **Storage Options:** Select the optional memory you installed. If this feature is checked, you can select the **Print Mode**.
- **Printer Configuration:** Select the printer language for the print job.
- Administrator Settings: You can select the Printer Status and EMF Spooling.

- Admin Job Accounting: Allows you to associate user and account identification information with each document you print.
  - **User permission:** If you check this option, only users with user permission can start a print job.
  - **Group permission:** If you check this option, only groups with group permission can start a print job.



If you want to encrypt job accounting password, check **Job Accounting Password Encryption**.

- Custom Paper Size Settings: You can specify custom paper size.
- 7 Click **OK** until you exit the **Properties** or **Printer properties** window.

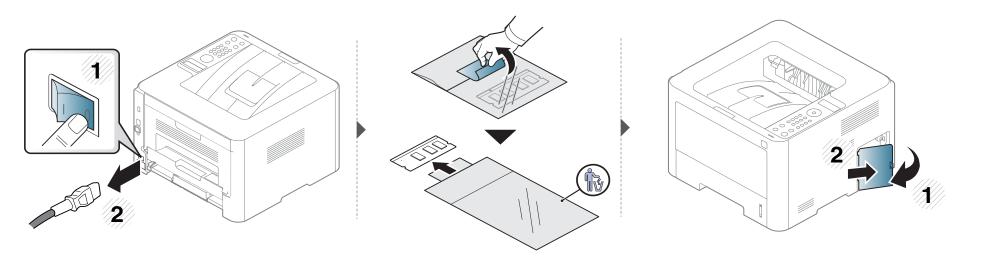
#### **Upgrading a memory module**

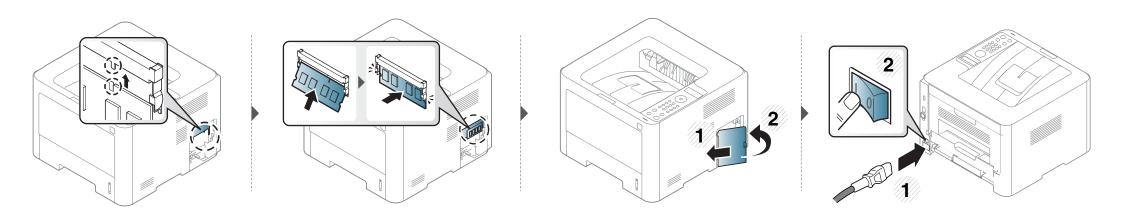
Your machine has a dual in-line memory module (DIMM). Use this memory module slot to install additional memory. We recommend the use of only genuine Samsung DIMM's. You may void your warranty if it is determined that your machine problem is being caused by third party DIMM's.

The order information is provided for optional accessories (see "Available accessories" on page 58).



- After installing the optional memory, you can use the advanced printing features, such as proofing a job and specifying of printing a secure print job in the printer properties window. You can control the active job queue and file policy in **Job Management** menu (see "Using optional device features" on page 226).
- Not supported for M332xND/M3825D.





### Monitoring the supplies life

If you experience frequent paper jams or printing problems, check the number of pages the machine has printed or scanned. Replace the corresponding parts, if necessary.



- For models that do not support the display screen: In ready mode, press and hold (Cancel) button for about 6 seconds, then release. A supplied Information report prints out.
- It may be necessary to press **OK** to navigate to lower-level menus for some models.
- 1 Select [ (Menu) > System Setup > Maintenance > Supplies Life on the control panel.
- **>** Select the option you want and press **OK**.
- Press ( (Cancel) to return to ready mode.

### Setting the toner/imaging unit low alert

If the amount of toner in the cartridge is low, a message or LED informing the user to change the toner cartridge appears. You can set the option for whether or not this message or LED appears.



For models that do not support the display screen on the control panel, you can set the machine's settings by using the **Device Settings** in Samsung Easy Printer Manager program.

- For Windows and Mac users, you set from Samsung Easy Printer Manager > [Switch to advanced mode] > Device Settings, see "Device Settings" on page 239.
- Select (Menu) > System Setup > Maintenance > TonerLow Alert or ImgU.Low Alert on the control panel.
- Select the option you want.
- Press **OK** to save the selection.

If printing quality problems occur or if you use your machine in a dusty environment, you need to clean your machine regularly to keep it in the best printing condition and use your machine longer.



- Cleaning the cabinet of the machine with cleaning materials containing large amounts of alcohol, solvents, or other strong substances can discolor or distort the cabinet.
- If your machine or the surrounding area is contaminated with toner, we recommend you use a cloth or tissue dampened with water to clean it. If you use a vacuum cleaner, toner blows in the air and might be harmful to you.

#### **Cleaning the outside**

Clean the machine cabinet with a soft, lint-free cloth. Dampen the cloth slightly with water, but be careful not to let any water drip onto or into the machine.

#### Cleaning the inside

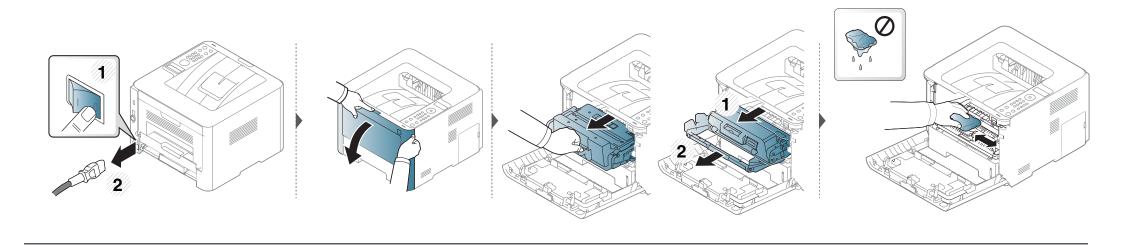
During the printing process, paper, toner, and dust particles can accumulate inside the machine. This buildup can cause print quality problems, such as toner specks or smearing. Cleaning the inside of the machine clears and reduces these problems.

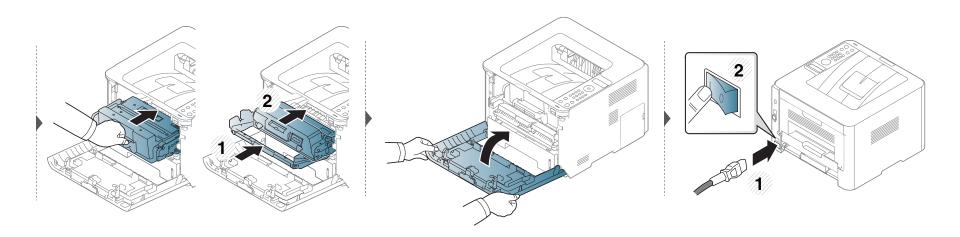


- To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. Cover it with a piece of paper, if necessary.
- Do not touch the green area of the toner cartridge. Use the handle on the cartridge to avoid touching this area.
- Use a dry lint free cloth when cleaning the inside of the machine, be careful not to damage the transfer roller or any other inside parts. Do not use solvents such as benzene or thinner. Printing quality problems can occur and cause damage to the machine.



- Use a dry lint-free cloth to clean the machine.
- Turn the machine off and unplug the power cord. Wait for the machine to cool down. If your machine has a power switch, turn the power switch off before cleaning the machine.
- Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 20).

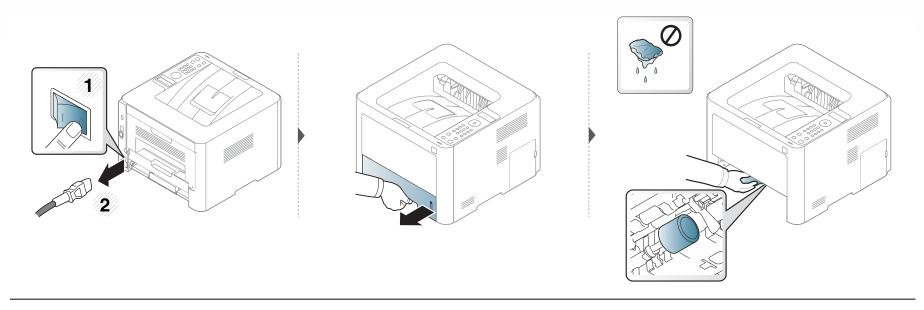


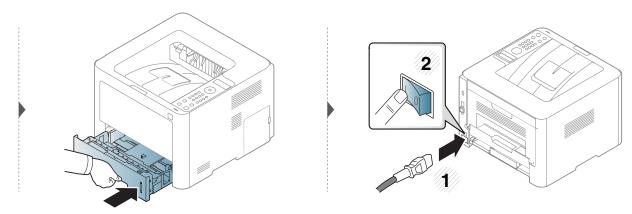


#### **Cleaning the pickup roller**



- Turn the machine off and unplug the power cord. Wait for the machine to cool down. If your machine has a power switch, turn the power switch off before cleaning the machine.
- Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 20).





## Tips for moving & storing your machine

- When moving the machine, do not tilt or turn it upside down. Otherwise, the inside of the machine may be contaminated by toner, which can cause damage to the machine or reduce print quality.
- When moving the machine, make sure at least two people are holding the machine securely.



# 4. Troubleshooting

This chapter gives helpful information for what to do if you encounter an error.

•	Tips for avoiding paper jams	84
•	Clearing paper jams	85
•	Understanding the status LED	98
•	Understanding display messages	101



This chapter gives helpful information for what to do if you encounter an error. If your machine has a display screen, check the message on the display screen first to solve the error.

If you cannot find a solution to your problem in this chapter, refer to the **Troubleshooting** chapter in the Advanced Guide (see "Troubleshooting" on page 252).

If you cannot find a solution in the User's Guide or the problem persists, call for service.

### Tips for avoiding paper jams

By selecting the correct medias, most paper jams can be avoided. To avoid paper jams, refer to the following guidelines:

- Ensure that the adjustable guides are positioned correctly (see "Tray overview" on page 36).
- Do not remove paper from the tray while your machine is printing.
- Flex, fan, and straighten paper before loading.
- Do not use creased, damp, or highly curled paper.
- Do not mix papers in a tray.
- Use only recommended print media (see "Print media specifications" on page 110).



To avoid tearing the paper, pull the jammed paper out slowly and gently.

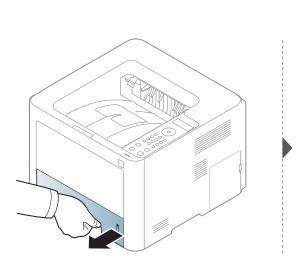
#### In tray 1

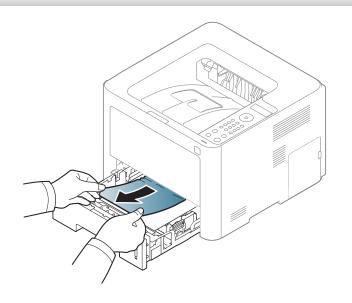


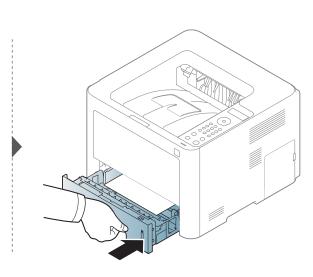
Click this link to open an animation about clearing a jam.



Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type (see "Front view" on page 20).



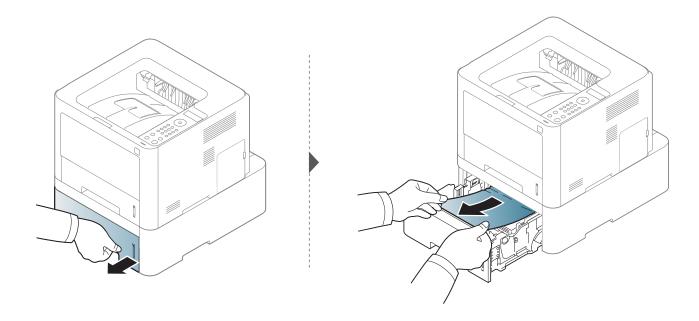




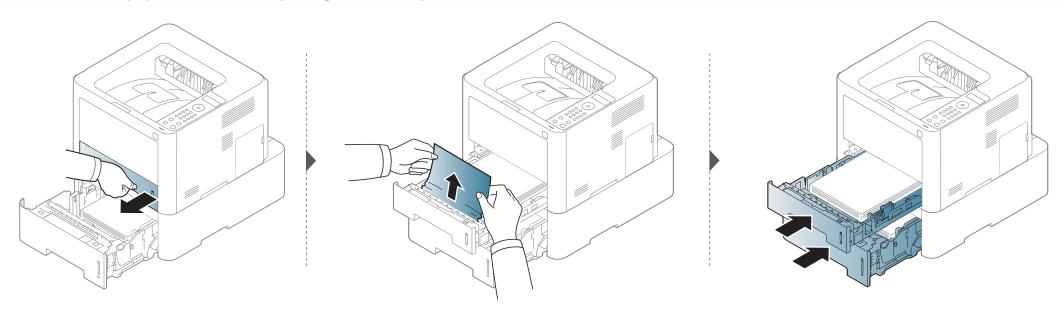
#### In optional tray



Click this link to open an animation about clearing a jam.



If you do not see the paper in this area, stop and go to next step:

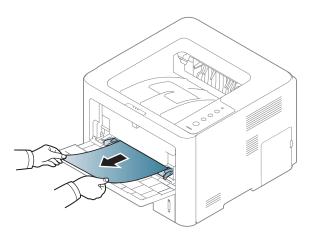


#### In the manual feeder/multi-purpose tray

#### M332xND/M382xD series



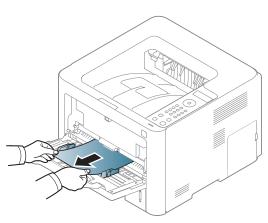
Click this link to open an animation about clearing a jam.



#### M382xND/M382xDW/M402xND series



Click this link to open an animation about clearing a jam.



#### Inside the machine

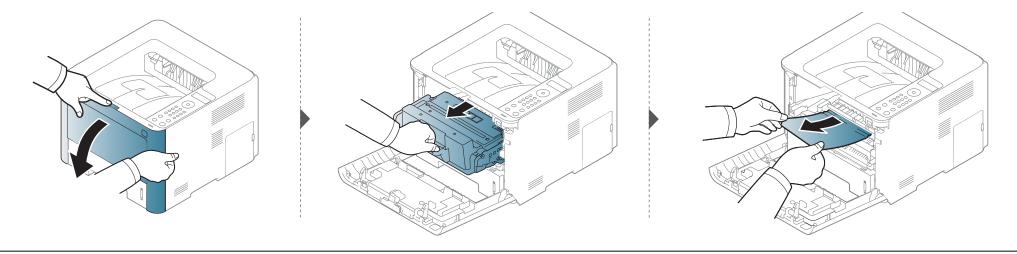


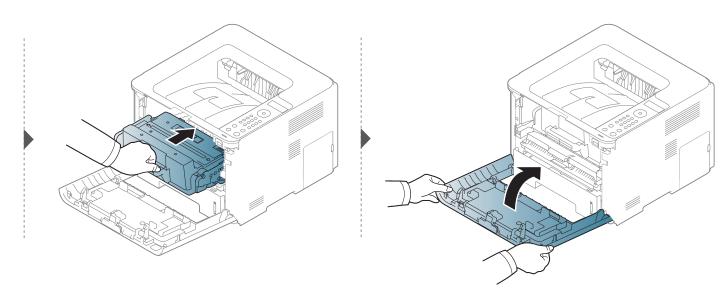
The fuser area is hot. Take care when removing paper from the machine.

#### M3320/M3820/M4020 series



Click this link to open an animation about clearing a jam.

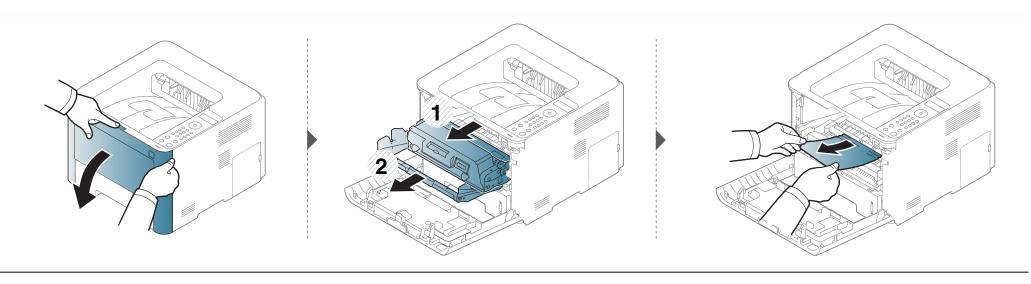


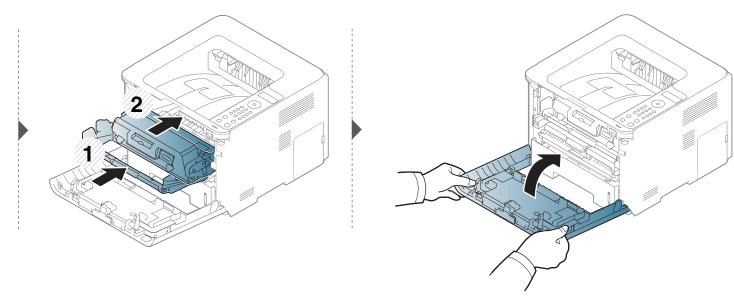


#### M3325/M3825/M4025 series



Click this link to open an animation about clearing a jam.





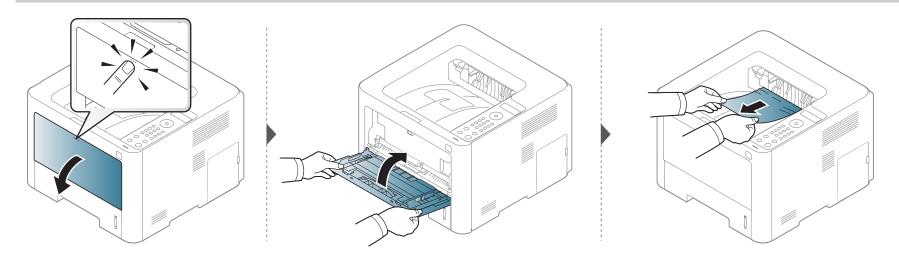
#### In exit area



Click this link to open an animation about clearing a jam.



The fuser area is hot. Take care when removing paper from the machine.



If you do not see the paper in this area, stop and go to next step:

