
magicolor[®] 2300 DL

User's Guide

1800687-001B

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Registering the Printer

Mail—Fill out and send in the registration card enclosed in your shipment or downloaded from www.onlineregister.com/minolta-qms/

Internet—Follow the instructions on www.onlineregister.com/minolta-qms/

or

Software Utilities CD-ROM—Follow the instructions on the CD-ROM.

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***Software
Installation***

1

Utilities and Documentation CD-ROM

Drivers and Utilities

Drivers

Drivers/Location	Use/Benefit
Printer Driver for Windows Me/98/95	These drivers give you access to all of the printer features, including finishing and advanced layout. See also "Working with the Printer Driver" on page 37.
Printer Driver for Windows XP/2000	
Printer Driver for Windows NT 4.0	

Utilities

Utilities	Use/Benefit
Print Monitor	magicolor TCP/IP port in Windows Me/98/95 environments Microsoft Print Monitor in Windows XP/2000/NT environments
Status Display	See also "Working with the Status Display" on page 45.

Installing the Printer Drivers and Software

System Requirements

- PC with a clock speed of 200 MHz or more (300 MHz recommended) Intel Pentium/Celeron series, AMD K6/Athron/Duron family, or compatible processor
- Microsoft Windows 95, Windows 98/98SE, Windows Me, Windows NT 4.0 Workstation, Windows 2000 Professional, Windows XP Home Edition/Professional
- Free hard disk space
 - Approximately 20 MB of free hard disk space for printer driver and status display
 - Approximately 16 MB of free hard disk space for image processing
- Memory capacity
 - Windows 95/98/98SE/NT 4.0 Workstation:
At least 32 MB of RAM
 - Windows Me:
At least 32 MB of RAM
 - Windows 2000 Professional:
At least 64 MB of RAM
 - Windows XP Home Edition/Professional:
At least 128 MB of RAM
- CD-ROM drive
- 10BaseT/100BaseTX Ethernet interface port, IEEE 1284 compliant type B parallel port, or USB Revision 1.1 compliant port

Windows

- 1 Insert the magicolor 2300 DL *Utilities and Documentation* CD-ROM in your PC's CD-ROM drive. The CD-ROM installer program starts automatically (if not, browse with the Windows Explorer to the CD-ROM location and double-click on setup.exe).
- 2 Choose Printer Setup.



- 3 Follow the instructions on the screen to install printer drivers, printer management utilities, and latest printer system software.



Note: If your printer's system software is newer than the version on the CD-ROM, an error page will print. The installation program will not install an older version of system software over a newer version.

- 4 When you have finished installing drivers and software, choose Main Menu.
- 5 If you want to register your printer, review the driver or utility documentation, or purchase supplies online, do that now.
- 6 Choose Exit.
- 7 Remove the *Utilities and Documentation* CD-ROM from your PC's CD-ROM drive and store it in a safe place.

Selecting Driver Options/Defaults

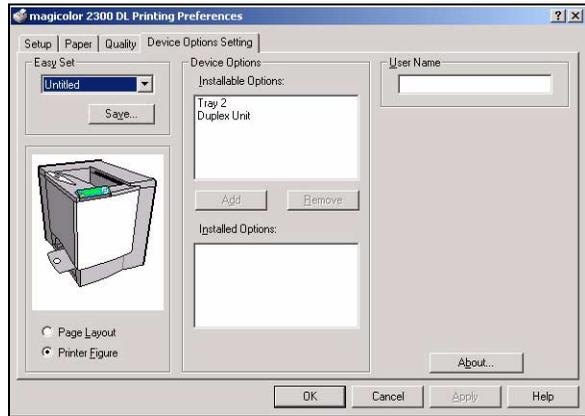
Before you start working with your printer, you are advised to verify/change the default driver settings. Also, in case you have options installed, you should “declare” the options in the driver.

- 1 Choose the driver’s properties as follows:
 - (Windows Me/98/95)
From the **Start** menu, choose **Settings** and then **Printers** to display the **Printers** directory. Right-click the magicolor 2300 DL printer icon and choose **Properties**. Choose the **Printer Properties**.
 - (Windows 2000/XP)
From the **Start** menu, choose **Settings** and then **Printers** to display the **Printers** directory. Right-click the magicolor 2300 DL printer icon and choose **Properties**. Choose **Printing Preferences**.
 - (Windows NT 4.0)
From the **Start** menu, choose **Settings** and then **Printers** to display the **Printers** directory. Right-click the magicolor 2300 DL printer icon and choose **Document Defaults**.
- 2 Choose the **Paper** tab. Select the default settings for your printer, such as the default media format you use.
- 3 Click on **Apply**.
- 4 If you have installed available options, proceed with the next step. Otherwise, proceed with step 8.



5 Select the **Device Options Setting** tab.

6 Select an option (one at a time) and click **Add**. The option moves to the **Installed Options** list.



*If you accidentally select an uninstalled option, select the option in the **Installed Options** list and then click **Remove**.*

7 Click **Apply**.



*Depending on the version of the operating system, **Apply** may not appear. If this is the case, continue with the next step.*

8 Click **OK** to exit from the properties (preferences) dialog box.

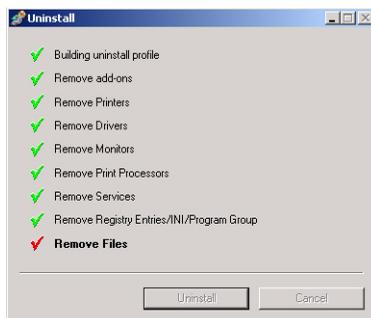
Uninstalling the Printer Driver

This section describes how to uninstall the magicolor 2300 DL Printer Driver if necessary.

- 1 From the Window's taskbar, select **Start/Programs/magicolor 2300DL Utilities**.
- 2 In the **Uninstall** window, select the magicolor 2300 DL. Then click on **Uninstall**.



- 3 The magicolor 2300 DL driver will be uninstalled from your computer.
- 4 Restart your computer.



Using Media

2

Introduction

This chapter provides information on handling, selecting, loading, and storing media.

Getting Started	
What types and sizes of media can I load?	page 11
What is the guaranteed imageable (printable) area?	page 18
Other Information	
How do I load media?	page 20
How do I duplex ?	page 24
How do I store media?	page 26
Where can I order MINOLTA-QMS-approved media or get more information ?	page 27

- All media is fed short edge first, face up.
- There is a 0.157" (4 mm) non-print border for all edges on all media types. Refer to page 18 for paper longer than 11.7" (297 mm).
- See your application documentation for specific information on formatting data and printing.
- Try printing your data on a plain sheet of paper first to check placement.
- Only plain paper, 16–24 lb (60–90 g/m²) can be autoduplexed. See “Media Specifications” for supported sizes.

Attention

Use only MINOLTA-QMS-approved media. Using unsupported media such as inkjet paper will result in damaging the printer and in voiding your warranty.

Media Specifications

What types and sizes of media can I load?

Media	Media Size		Tray*	Duplex	Mode	Weight
	Inches	Millimeters				
A4	8.2 x 11.7	210.0 x 297.0	1 & 2	Yes	Plain Paper	16–24 lb bond (60–90 g/m ²)
A5	5.9 x 8.3	148.0 x 210.0	1	No		
B5 (JIS)	7.2 x 10.1	182.0 x 257.0	1	No		
Custom, Minimum	3.6 x 8.3	92.0 x 210.0	1	No		
Custom, Maximum	8.5 x 14.0	216.0 x 356.0	1	No		
Executive	7.25 x 10.5	184.0 x 267.0	1	No		
Folio	8.3 x 13.0	210.0 x 330.0	1	Yes		
Foolscap	8.0 x 13.0	203.2 x 330.2	1	Yes		
Government Legal	8.5 x 13.0	216.0 x 330.0	1	Yes		
Kai 16	7.3 x 10.2	185.0 x 260.0	1	No		
Kai 32	5.1 x 7.3	130.0 x 185.0	1	No		
Legal	8.5 x 14.0	215.9 x 355.6	1	Yes		
Letter	8.5 x 11.0	215.9 x 279.4	1 & 2	Yes		
Letter Plus	8.5 x 12.7	215.9 x 322.3	1	Yes		
Statement	5.5 x 8.5	140.0 x 216.0	1	No		
UK Quarto	8.0 x 10.0	203.2 x 254.0	1	No		
A4 Transparency	8.2 x 11.7	210.0 x 297.0	1	No	Transparency	Use only approved media
Letter Transparency	8.5 x 11.0	215.9 x 279.4	1	No		
Japanese Postcard	3.9 x 5.8	100.0 x 148.0	1	No	Postcard	Use only approved media
Envelope B5 (ISO)	6.9 x 9.8	176.0 x 250.0	1	No	Envelope	
Envelope C5	6.4 x 9.0	162.0 x 229.0	1	No		
Envelope C6	4.5 x 6.4	114.0 x 162.0	1	No		
Envelope Commercial #10	4.1 x 9.5	104.1 x 241.3	1	No		
Envelope International DL	4.3 x 8.7	110.0 x 220.0	1	No		
Envelope Monarch	3.9 x 7.5	99.0 x 190.5	1	No		
Envelope Chou #3	4.7 x 9.2	120.0 x 235.0	1	No		
Envelope Chou #4	3.5 x 8.1	90.0 x 205.0	1	No		
Thick Stock—Only supported for letter, A4, or smaller media.						
Custom, Minimum	3.6 x 5.8	92.0 x 148.0	1	No	Thick Stock	25–90 lbs (91–163 g/m ²)
Custom, Maximum	8.5 x 11.7	216.0 x 297.0				
Notes: *Tray 1 = Multipurpose Tray (MPT), Tray 2 = Optional Lower Feeder Unit Media Tray (letter or A4 media only)						

Media Types

Before purchasing a large quantity of special media, do a trial printing with the same media and check print quality. Check our web site www.minolta-qms.com for a list of currently approved media.

Keep media on a flat, level surface in its original wrapper until it is time to load it.

Plain Paper

Capacity	Tray 1 (multipurpose tray)	200 sheets of 22 lb bond (80 g/m ²) paper; capacity for other weights varies accordingly.
	Tray 2 (optional lower feeder unit media tray)	500 sheets of 22 lb bond (80 g/m ²) paper (letter/A4 only); capacity for other weights varies accordingly.
Orientation	Face up	
Type	Check www.minolta-qms.com/support (click on Answer Base) for currently approved media. To order approved media, go to www.q-shop.com .	
Driver Mode	Plain paper	
Weight	16–24 lb bond (60–90 g/m ²)	
Duplexing	See page 11 for supported sizes.	

Use media that is

Suitable for plain-paper laser printers, such as standard or recycled office paper.

Attention

Do not use the media types listed below. These could cause poor print quality, media jams, or damage to the printer.

Do not use media that is

- Coated with a processed surface (such as carbon paper, digitally gloss-coated media, colored paper that has been treated)
- Carbon backed
- Unapproved iron-on transfer media (heat-sensitive paper, heat-pressure paper, heat-press transfer paper)

- Cold-water-transfer paper
- Pressure sensitive
- Designed specifically for inkjet printers (superfine paper, glossy paper, glossy film, postcards, etc.)
- Already been printed on by another printer, copier, or fax machine
- Dusty
- Wet (or damp)
 -  *Keep media between 35% to 85% relative humidity. Toner does not adhere well to moist or wet paper .*
- Layered
- Adhesive
- Folded, creased, curled, embossed, warped, or wrinkled
- Perforated, three-hole punched, or torn
- Too slick, too coarse, too textured
- Different in texture (roughness) on the front and back
- Too thin or too thick
- Stuck together with static electricity
- Composed of foil or gilt; too luminous
- Heat sensitive or cannot withstand the fusing temperature (356° F/180° C)
- Irregularly shaped (not rectangular or not cut at right angles)
- Attached with glue, tape, paper clips, staples, ribbons, hooks, or buttons
- Acidic
- Any other media that is not approved

Thick Stock

Paper thicker than 24 lb (90 g/m²) bond is referred to as thick stock. Test all thick stock to ensure acceptable performance and to ensure that the image does not shift.

Capacity	Tray 1	Up to 50 thick stock sheets, depending on their thickness. Thick stock is supported only in letter, A4, or smaller media sizes.
	Tray 2	Not supported
Orientation	Face up	
Type	Check www.minolta-qms.com/support (click on Answer Base) for currently approved media. To order approved media, go to www.q-shop.com .	

Driver Mode	Thick stock
Weight	25–43 lb bond (91–163 g/m ²)
Duplexing	Not supported
Notes	43 lb (163 g/m ²) bond is also referred to as 90 lb index stock.

Do not use thick stock that is

- Mixed with any other media in the media trays (as this will cause printer jamming)

Envelopes

Print on the front (address) side only. Some parts of the envelope consist of three layers of paper—the front, back, and flap. Anything printed in these layered regions may be lost or faded.

Capacity	Tray 1	Up to 50 envelopes, depending on their thickness
	Tray 2	Not supported
Orientation	Face up	
Type	Check www.minolta-qms.com/support (click on Answer Base) for currently approved media. To order approved media, go to www.q-shop.com .	
Driver Mode	Envelope	
Weight	25–43 lb bond (91–163 g/m ²)	
Duplexing	Not supported	

Use envelopes that are

- Common office envelopes approved for laser printing with diagonal joints, sharp folds and edges, and ordinary gummed flaps



Because the envelopes pass through heated rollers, the gummed area on the flaps may seal. Using envelopes with emulsion-based glue avoids this problem.

- Approved for laser printing
- Dry
- Printed on the front address side only

Do not use envelopes that have

- Sticky flaps
- Tape seals, metal clasps, paper clips, fasteners, or peel-off strips for sealing

- Transparent windows
- Too rough of a surface
- Material that will melt, vaporize, offset discolor, or emit dangerous fumes
- Been presealed

Labels

A sheet of labels consists of a face sheet (the printing surface), adhesive, and a carrier sheet:

- The face sheet must follow the plain paper specification.
- The face sheet surface must cover the entire carrier sheet, and no adhesive should come through on the surface.

You can print continuously with label paper. However, this could affect the media feed, depending on the media quality and printing environment. If problems occur, stop the continuous printing and print one sheet at a time.

Format label data within your application. Try printing your data on a plain sheet of paper first to check placement. Check your application documentation for other information on printing labels.

Capacity	Tray 1	Up to 50 label sheets, depending on their thickness
	Tray 2	Not supported
Orientation	Face up	
Type	Check www.minolta-qms.com/support (click on Answer Base) for currently approved media. To order approved media, go to www.q-shop.com .	
Driver Mode	Labels	
Weight	16–90 lb (60–163 g/m ²)	
Duplexing	Not supported	

Use label sheets that are

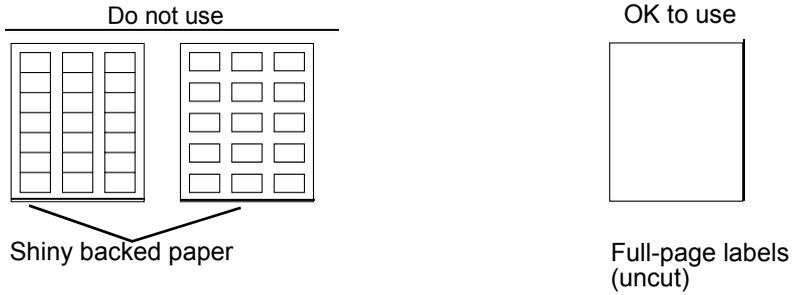
- Recommended for laser printers
- Letter or A4 size (adhesive label stock)

Do not use label sheets that

- Have labels that easily peel off
- Have the backing sheets that have peeled away or have exposed adhesive

Labels may stick to the fuser, causing them to peel off and media jams to occur.

- Are precut or perforated



Letterhead and Memo Media

Format letterhead or memo data within your application. Try printing your data on a plain sheet of paper first to check placement.

Capacity	Tray 1	Up to 200 sheets, depending on their size and thickness
	Tray 2	Up to 500 sheets of 22 lb bond (80 g/m ²) paper (letter/A4 only)
Orientation	Face up	
Type	Check www.minolta-qms.com/support (click on Answer Base) for currently approved media. To order approved media, go to www.q-shop.com .	
Driver Mode	Plain paper	
Weight	16–24 lb bond (60–90 g/m ²)	
Duplexing	See page 11 for supported sizes (face up—top of page first).	

Postcards

Format postcard data within your application. Try printing your data on a plain sheet of paper first to check placement.

Capacity	Tray 1	Up to 50 postcards, depending on their thickness
	Tray 2	Not supported
Orientation	Face up	
Type	Check www.minolta-qms.com/support (click on Answer Base) for currently approved media. To order approved media, go to www.q-shop.com .	

Driver Mode	Postcard
Weight	16–90 lb (60–163 g/m ²)
Duplexing	Not supported

Use postcards that are

- Recommended for laser printers

Do not use postcards that are

- Coated
- Designed for inkjet printers
- Precut or perforated
- Warped



If the postcard is warped, press on the warped area before putting it in Tray 1. Preprinted or multicolored (may result in media jams)



Transparencies

Attention

Use only the MINOLTA-QMS-approved media. Using unsupported transparencies will result in damaging your printer and in voiding your warranty. Check www.minolta-qms.com for currently approved media. To order approved media, go to www.q-shop.com.



Do not fan transparencies before loading them. Resulting static electricity may cause printing errors.



Do not handle transparencies too much. If you touch the face of the transparencies with your bare hands, print quality may be affected.



Keep the media path clean. Transparencies are especially sensitive to a dirty media path. If there are shadows on either the top or the bottom of the sheets, see chapter 7, “Maintaining the Printer.”



Remove transparencies as soon as possible from the output tray to avoid static buildup.

You can print continuously with transparencies. However, this could affect the media feed, depending on the media quality, static buildup, and printing environment.

Format the information to be printed on the transparencies within your

application. Try printing your data on a plain sheet of paper first to check placement.



If you have problems feeding 50 sheets, try loading only 1–10 sheets at a time. Loading a large number of transparencies at a time may cause static buildup, thus causing feeding problems.

Capacity	Tray 1	Up to 50 transparencies, depending on their thickness
	Tray 2	Not supported
Orientation	Face up	
Type	Check www.minolta-qms.com/support (click on Answer Base) for currently approved media. To order approved media, go to www.q-shop.com .	
Driver Mode	Transparency	
Duplexing	Not supported	

Use transparencies that are

- Approved by MINOLTA-QMS

Do not use transparencies that

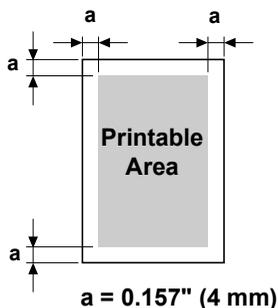
- Have static electricity that will cause them to stick together

What Is the Guaranteed Imageable (Printable) Area?

The printable area on all media sizes is up to 0.157" (4 mm) from the edges of the media.

Each media size has a specific imageable area, the maximum area on which the printer can print clearly and without distortion.

This area is subject to both hardware limits (the physical media size and the margins required by the printer) and software constraints (the amount of memory available for the full-page frame buffer). The guaranteed imageable (printable) area for all media sizes is the page size minus 0.157" (4 mm) from all edges of the media.



Nonguaranteed Area—Media Longer Than 11.7" (297 mm)

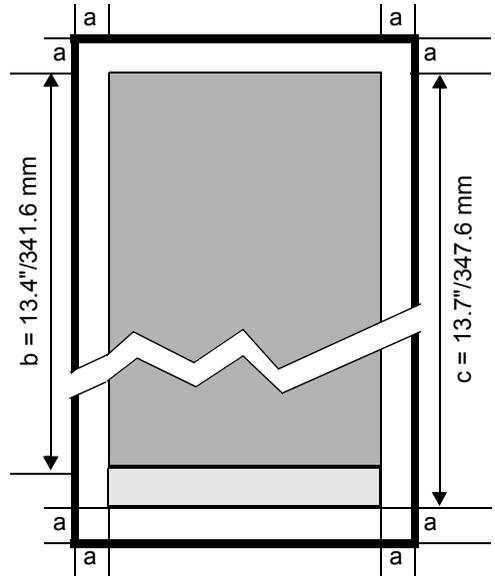
Any media longer than 11.7" (297 mm) has an additional nonguaranteed area of 0.236" (6 mm) on the bottom of each page.

Color printing starts 0.157" (4 mm) from the top of the page and extends as far as 13.4" (341.6 mm). Monochrome printing starts 0.157" (4 mm) from the top of the page and extends as far as 13.7" (347.6 mm).

a = nonprintable area
(0.157"/4 mm)

b = color guaranteed printable area =
up to 13.4"/
341.6 mm

c = monochrome guaranteed printable area =
up to 13.7"/
347.6 mm

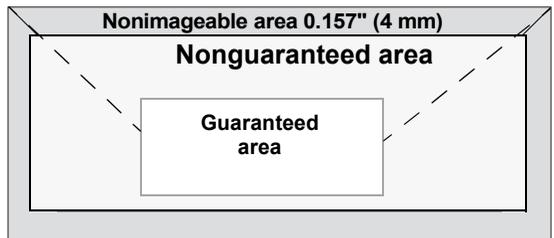


Imageable Area—Envelopes

Envelopes have a nonguaranteed flap area that varies with envelope type.



Envelope print orientation is determined by your application.



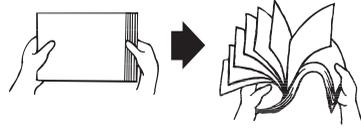
Page Margins

Margins are set through your application. Some applications allow you to set custom page sizes and margins while others have only standard page sizes and margins from which to choose. If you choose a standard format, you may lose part of your image (due to imageable area constraints). If you can custom-size your page in your application, use those sizes given for the imageable area for optimum results.

Loading Media

How do I load media?

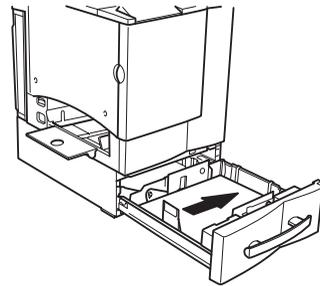
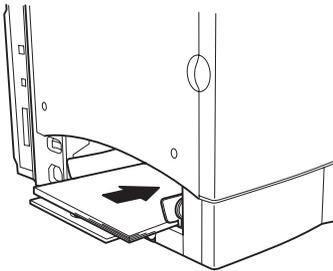
Take off the top and bottom sheets of a ream of paper. Holding a stack of approximately 200 sheets at a time, fan the stack to prevent static buildup for the paper before inserting it in a tray.



Do not fan transparencies.

Attention

Although this printer was designed for printing on a wide range of media types, it is not intended to print exclusively on a single media type except plain paper. Continuous printing on media other than plain paper (such as envelopes, labels, thick stock, or transparencies) may adversely affect print quality or reduce engine life.



When refilling media, first remove any media remaining in the tray. Stack it with the new media, even the edges, then reload it.

Tray 1 (Multipurpose Tray)

All supported media sizes and types can be printed from Tray 1. Letter and A4 plain paper can be printed from Tray 1 or Tray 2.

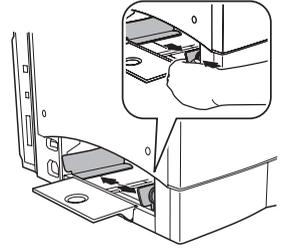
See “Media Specifications” on page 11 for more information about media.

Plain Paper

- 1 If you already have media in Tray 1 and wish to change it, remove the media from Tray 1.

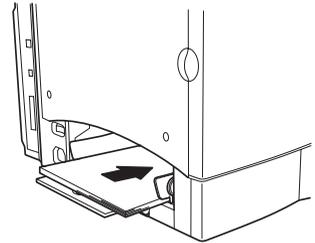
- 2 Adjust the media guides to fit the appropriate media sizes.

Squeeze the front media guide to open the media guides.

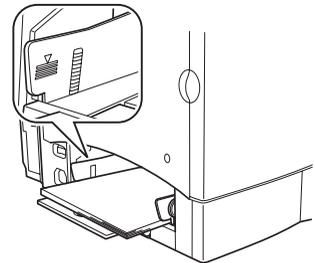


- 3 Load the media face up, short edge (or letterhead) first.

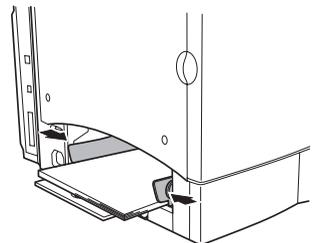
Often, an arrow on the paper package label indicates the face-up (printing) side of the paper.



A fill limit mark is provided on the inside of the media guides on Tray 1 (the multipurpose tray). Tray 1 holds 200 sheets of 22 lb bond (80 g/m²) paper.



- 4 Slide the media guides up against the edge of the media.



⚠ Attention

Always adjust the media guides after inserting the media. A guide that is not properly adjusted can cause poor print quality, media jams, or printer damage.

- 5 In the printer driver, select the appropriate media mode. Then print the job.

Other Media

When loading media other than plain paper, set the media mode (for example, Envelope, Label, Thick Stock, or Transparency) in the driver.

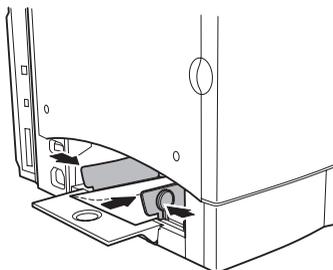


For optimum printing results it's important to specify the type of media loaded into Tray 1.

Envelopes

- 1 Flex the envelope stack (including the edges) to remove any stiffness.
- 2 Place the envelopes on a flat surface, and flatten them by pressing down the corners.
- 3 Correct any bent corners, and then tap the envelopes on a flat surface to align them.
- 4 Place the envelope stack into Tray 1 with the flap-side underneath. If the flap is on the short end of the envelope, insert it into the printer first.

Print a single envelope to check the orientation before printing multiple copies.

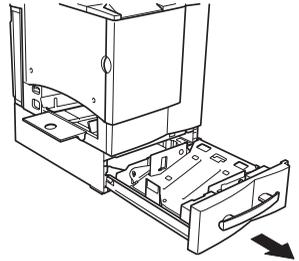


- 5 Adjust the media guides to the width of the envelopes.
Make sure the guides are snug enough to keep the envelopes straight, but not so tight that they buckle the envelopes.
- 6 In the printer driver, select Envelope mode. Then print the job.
- 7 Open the flap of each envelope immediately (before it cools) after the envelope is delivered to the output tray.

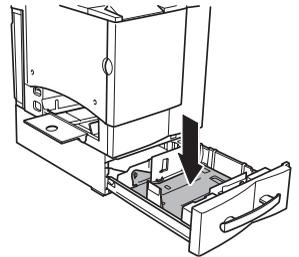
Tray 2 (Optional Lower Feeder Unit Media Tray)

Depending on which tray you have purchased, letter or A4 plain paper can be printed from Tray 2.

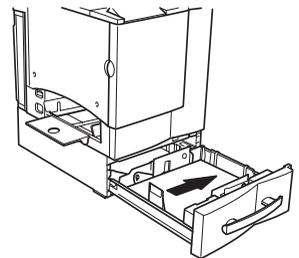
- 1 Slide the media tray open.



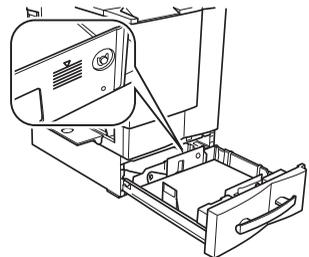
- 2 Push the media pressure plate down to lock it in position.



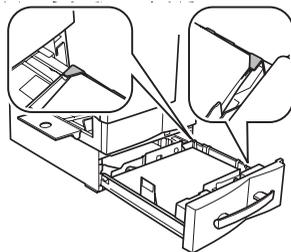
- 3 Load the paper face-up, short edge (or letterhead) toward the right of the tray.
Often, an arrow on the media package label indicates the printing-side of the media.
Do not overfill the tray.



A fill limit mark is provided on the inside of the tray. Tray 2 holds 500 sheets of 22 lb bond (80 g/m²) paper.



Make sure that the paper fits easily between the guides and the paper corners are under the left and right media-separating tabs and are not bent.

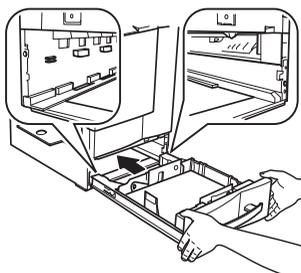


- 4 Slide the tray back into the printer.



If you have removed the tray from the printer, slightly tilt up the tray to insert it into the rails to slide it back in.

- 5 In the printer driver, select the appropriate media mode. Then print the job.



Duplexing

How do I print back-to-back (duplex)?

Select paper with high opacity for duplex (2-sided) printing. Opacity refers to how effectively paper blocks out what is written on the opposite side of the page. If the paper has low opacity (high translucency), then the printed data from one side of the page will show through to the other side. Check your application for margin information. For best results, print a small quantity to make sure the opacity is acceptable.

Duplex (2-sided) printing can be done manually or can be done automatically with the duplex option installed and selected.

Attention

Only plain paper, 16–24 lb (60–90 g/m²) can be autoduplexed. See “Media Specifications” for supported sizes.

Duplexing custom-sized media, envelopes, labels, postcards, thick stock, or transparencies is not supported.

How do I manually duplex?



Media jams may occur if the printed sheet(s) are not reinserted entirely flat.

- 1 In the printer driver (Setup tab), select Duplex/Booklet/Off, then double-click OK.



If you do not have a duplex option installed, the Booklet setting should always be turned off.

- 2 In the Print Document screen, select All.
- 3 Select and print the Odd-Numbered Pages.
- 4 Remove the media, flip it over blank face-side up, and select and print the Even-Numbered Pages.



If you are manually duplexing letterhead, in Tray 1, load the media face-up with the letterhead first in. In Tray 2, load the media face-up with the top toward the right.

How do I aut duplex?

You should verify that the duplex option is physically installed on the printer to have the job duplex successfully. Otherwise, the print job will print as simplex even if you selected duplex.

Your printer is configured with 32 MB of RAM. Duplex (2-sided) printing can be done automatically with a duplex option and enough memory installed, and with a duplex option selected in the printer. For example, a 1200 x 600 dpi duplex legal-size monochrome page can be duplexed with 32 MB RAM for a standard business document, or it could require 64 MB of SDRAM or more for very high coverage (for example high content and graphics) pages. Additional memory can be added up to 288 MB. Very high coverage pages may revert to 600 dpi when duplex printing if enough memory is not installed.

The standard 32 MB RAM will allow printing of most standard color business documents at 2400 x 600 dpi. The chart below shows the minimum RAM required to print full-page coverage such as a full-page-size photograph.

Print Type Media Size	Simplex					Duplex				
	600 x 600 dpi	1200 x 600 dpi	1200 x 600 line art dpi	2400 x 600 dpi	2400 x 600 line art dpi	600 x 600 dpi	1200 x 600 dpi	1200 x 600 line art dpi	2400 x 600 dpi*	2400 x 600 line art dpi
Monochrome										
Letter/A4	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	64 MB	64 MB
Legal	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	64 MB	64 MB
Color										
Letter/A4	32 MB	64 MB	64 MB	64 MB	64 MB	128 MB	128 MB	128 MB	256 MB	256 MB
Legal	32 MB	64 MB	64 MB	64 MB	64 MB	128 MB	128 MB	128 MB	256 MB	256 MB
Notes	*You can duplex 2400 x 600 with 32 MB based on standard business documents (for example, without graphics).									

Check your application to determine how to set your margins for duplex printing.

- 1 To print duplex (both sides of the sheet), load the media printing-side up.
 - a For Tray 1, load the media with the top of the media toward the back of the tray.
 - b For Tray 2, load the media with the top of the media toward the right side of the tray.



In autoduplexing, the back side is printed first and the front side is printed last.

- 2 Set the driver for the duplex layout you prefer.

Long Edge creates a document that flips horizontally as in a loose-leaf notebook; Short Edge creates a document that flips vertically, as on a clipboard.

- 3 Click OK.

Output Tray

All media is output to the output tray on top of the printer. The face-down output tray has a capacity of 200 sheets of 22 lb (80 g/m²) bond paper.



If the media is stacked too high, your printer may experience media jams, excessive media curl, or static buildup.



Remove transparencies as soon as possible from the output tray to avoid static buildup.

Media Storage

How do I store media?

- Keep media on a flat, level surface in its original wrapper until it is time to load it.

Media that has been stored for a long time without staying in its packaging may dry up too much and cause jamming.

- If media has been removed from its wrapper, place it in its original packaging and store in a cool, dark place on a level surface.
- Avoid moisture, excess humidity, direct sunlight, excess heat (above 95° F/35° C), and dust
- Avoid leaning against other objects or placed in an upright position

Before using stored media, do a trial printing and check print quality.

Additional Assistance

Where can I order MINOLTA-QMS-approved media or get more information?

Check www.minolta-qms.com/support (click on Answer Base) for currently approved media. To order approved media, go to www.q-shop.com.

See the *Service & Support Guide* for a list of sources of service and support in the Americas. The most up-to-date worldwide information can be found at www.minolta-qms.com.

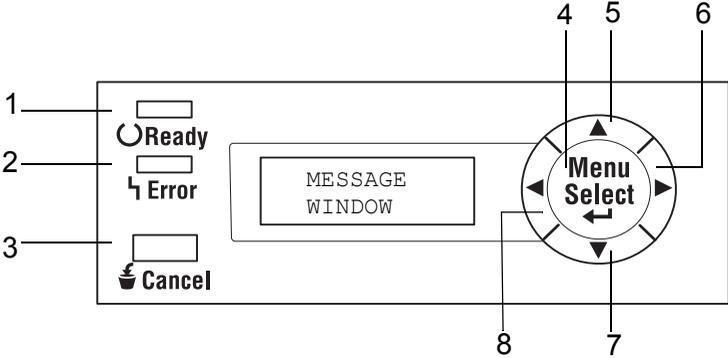
***Working with the
Printer***

3

About the Control Panel

The control panel, located on the top of the printer, allows you to direct the printer's operation. In addition, it displays the current status of the printer, including any condition that needs your attention.

- Two indicators (LEDs) to provide printer status information.
- A message window displays status and configuration information.
- Six keys allow you to control the printer configuration through access to frequently used printer functions.



Control Panel Indicators and Keys

No.	Indicator	Off	On
1	Ready	The printer is not ready to accept data.	The printer is ready to accept data.
2	Error	No problem.	The printer requires operator attention (usually accompanied by a status message in the message window.)

No.	Key	Function
3	Cancel	<ul style="list-style-type: none"> ■ Allows you to cancel the current, or all print jobs ■ Cancels the menu choice or selection if the user is in the menu structure at the time

No.	Key	Function
4	Menu Select 	<ul style="list-style-type: none"> ■ Initially enters the menu system ■ If within the menu system and on a menu level, moves down in in the menu structure ■ If within the menu system and on a selectable item, selects the displayed choice (no matter what position the cursor is in)
5		<ul style="list-style-type: none"> ■ Moves up in the menu structure ■ If within a selectable menu choice that is changeable character by character, scrolls upward through the available characters
6		<ul style="list-style-type: none"> ■ Moves right in the menu structure ■ Moves right through the scrollable menu selections when selections are whole words, not characters
7		<ul style="list-style-type: none"> ■ Moves down in the menu structure. ■ If within a selectable menu choice that is changeable character by character, scrolls downward through the available characters
8		<ul style="list-style-type: none"> ■ Moves left in the menu structure ■ Moves left through the scrollable menu selections when selections are whole words, not characters

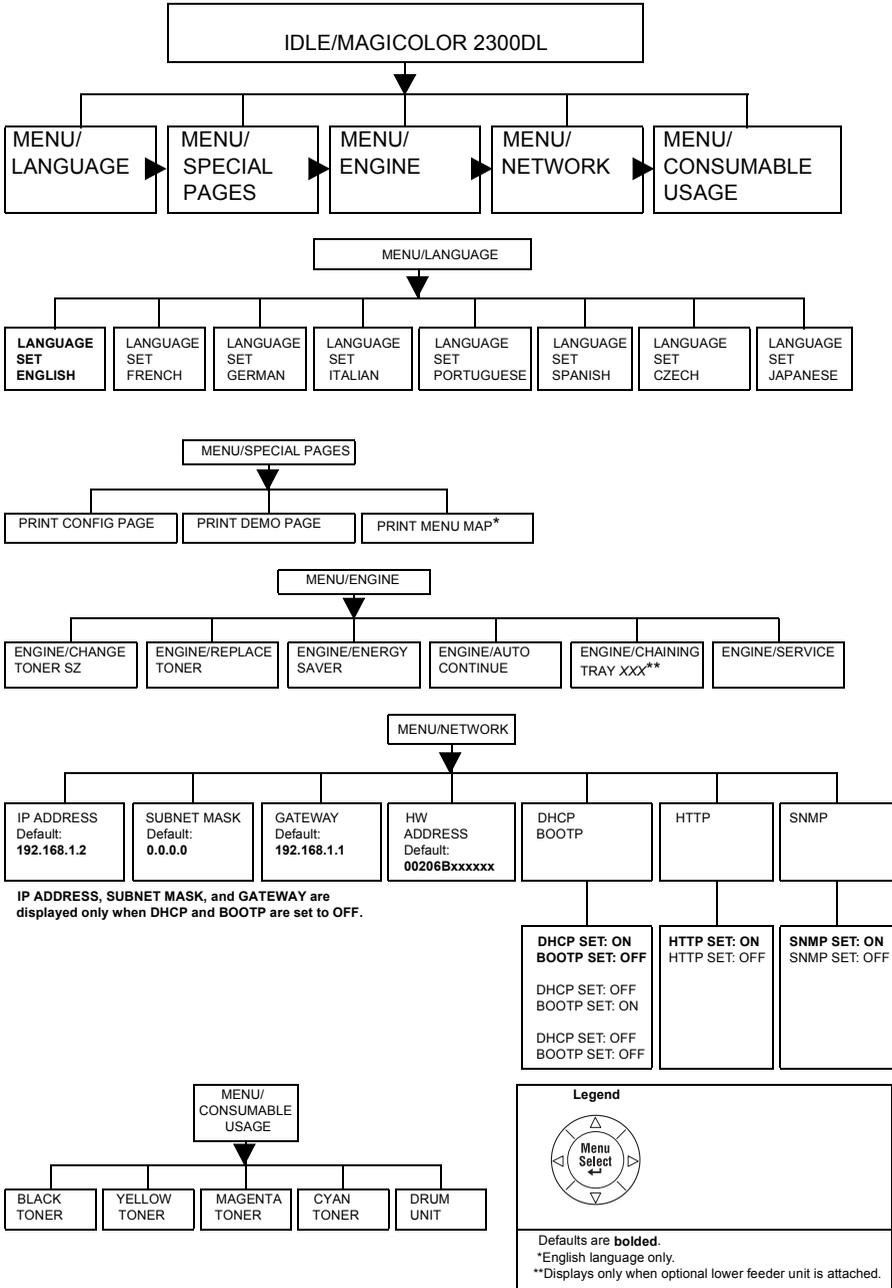
Cancelling Print Jobs

You can cancel one or all print jobs that are currently being processed.

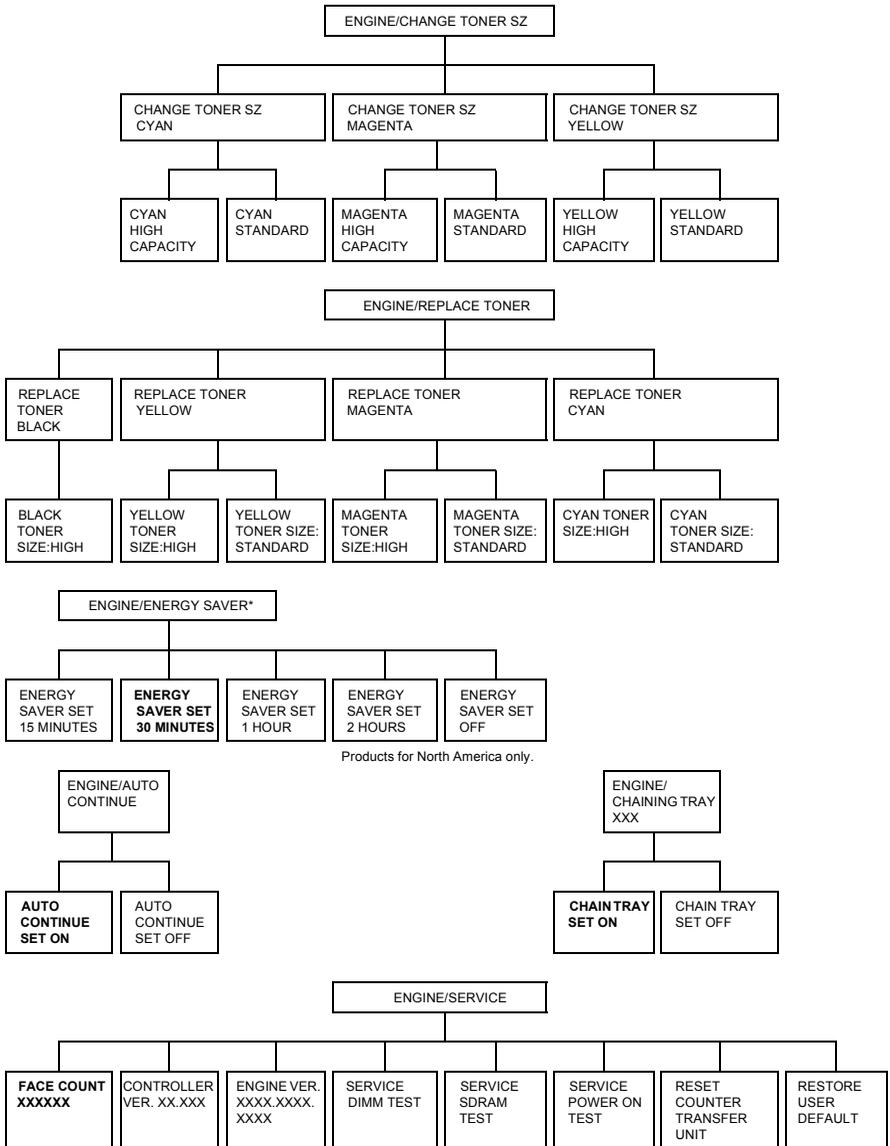
- 1 While data is being processed or printed, press the **Cancel** key.
- 2 By pressing the **Right** or **Left** keys, select either `JOB CANCEL/CURRENT JOB` or `JOB CANCEL/ALL JOBS`.
- 3 Press the **Select** key.

The print job(s) have now been cancelled.

Configuration Menu Overview



MENU/ENGINE Submenus



Defaults are bolded.

* To disable Energy Saver from the ENGINE/ENERGY SAVER menu, press and hold the Menu/Select key and down arrow at the same time for approximately three seconds. Once the display reads OFF, release the two keys and press the Menu/Select key to select the Off option. In order to turn the Energy Saver back on, go to the Energy Saver menu and make another selection or select ENGINE/SERVICE/ RESTORE USER DEFAULT.

Selecting a Message Window Language

When you receive your printer, the message window language is set to English. However, status messages and configuration menus can be displayed in the message window in English, French, German, Italian, Portuguese, Spanish, Czech, and Japanese.

If you want to change the message window language, use the following control panel sequence.

Press Key	(Until) Display Reads
	IDLE/MAGICOLOR 2300DL
Menu Select ←	MENU/ LANGUAGE
Menu Select ←	LANGUAGE SET ENGLISH
▶	Press the Right or Left key until the appropriate language is displayed.
Menu Select ←	<LANGUAGE> is selected.

Special Pages Menu

Config Page	Print a configuration page.
Demo Page	Print a demonstration page.
Menu Map Page	Print a menu map (English language only).

Engine Menu

Energy Saver	<p>Set the length of time until the printer enters Energy Saver mode after it no longer receives print jobs or is not operated.</p> <p>If a printjob is received while the printer is in Energy Saver mode, the printer warms up, then returns to normal print mode before starting to print.</p>
---------------------	---

Auto Continue	When set to On, the printer continues printing if the specified tray is not loaded with paper of the correct size. The Auto Continue setting can also be changed while printing. If this is done, the setting will remain valid for future print jobs.
Chaining Tray (only available if optional Tray 2 [lower feeder unit media tray] is present)	When set to On, the printer automatically switches to a different media tray containing paper of the same size and type and continues printing if the specified tray runs out of paper. When set to Off, the printer stops and displays a message indicating that paper should be loaded into the specified tray if the specified tray runs out of paper.
Change Toner Sz (Size)	Use this submenu to change the toner cartridge capacity. Yellow, magenta, and cyan toner cartridge sizes available are standard capacity (1,500 pages) and high capacity (4,500 pages). Black cartridges available are high capacity (4,500 pages).
Replace Toner	By selecting the color of the toner cartridge that you want to replace, the carousel is automatically repositioned so that the selected toner cartridge can be removed. Refer to “Replacing a Toner Cartridge” on page 53.

Service Menu

Page Count	The number of pages that have been printed to date.
Controller Ver.	The current controller firmware version
Engine Ver.	The printer engine firmware version
DIMM Test	Allows you to verify the DIMM by performing a DIMM test.
SDRAM Test	Allows you to check that there are no errors in the SDRAM
Power On Test	Performs an AIDC (Auto-Image Density Control) calibration cycle. Wait until the test is finished and <code>IDLE/MAGICOLOR 2300DL</code> is displayed (less than 150 seconds).
User Default	Resets the settings for Energy Saver, Auto Continue, and Chaining Tray (if lower feeder unit is attached) to their defaults: Energy Saver: 30 minutes Auto Continue: On Chaining Tray: On

Network Menu

If the printer is connected to a network, the following settings should be specified. For details about each setting, contact your network administrator.

IP Address	Set the IP address of this printer on the network. Use the Up, Down, Left, and Right keys to enter the value. When manually setting the IP address, turn off DHCP and BOOTP first.
Subnet Mask	Set the subnet mask value of the network. Use the Up, Down, Left, and Right keys to enter the value.
Gateway	If a router is used on the network, enter the IP address of the router. Use the Up, Down, Left, and Right keys to enter the value.
HW Address	The Ethernet hardware address for this printer can be displayed. (It cannot be changed.)
DHCP*	If there is a DHCP server on the network, specify whether the IP address is automatically assigned by the DHCP server and other network information is loaded (can be set to On or Off).
BOOTP*	Specify whether the IP address is automatically assigned by BOOTP and other network information is loaded (can be set to On or Off).
HTTP*	HTTP can be set to On or Off. On enables the Internal Web Page inside the printer, Off disables it.
SNMP*	SNMP is a scalable, distributed management suite for managing small to large size networks. SNMP can be set to On or Off.
Notes	*You must turn the printer off and then on again before these settings take effect.

Consumables Menu

Black Toner	The amount of toner remaining in the black toner cartridge.
Yellow Toner	The amount of toner remaining in the yellow toner cartridge.
Magenta Toner	The amount of toner remaining in the magenta toner cartridge.
Cyan Toner	The amount of toner remaining in the cyan toner cartridge.
Drum Unit	The remaining service life for the OPC drum cartridge.

***Working with the
Printer Driver***

4

Displaying Printer Driver Settings



The Windows operating system also uses tabs. The General and Details tabs are automatically determined by the operating system and are therefore not described in this manual.

Refer to the printer driver's online help for information about all of these functions.

Displaying Settings in Windows 2000/XP

- 1 From the **Start** menu, choose **Settings** and then **Printers** to display the **Printers** directory.
- 2 Right-click the magicolor 2300 DL printer icon and choose **Properties**.
- 3 Choose **Printing Preferences**.

Displaying Settings in Windows NT 4.0

- 1 From the **Start** menu, choose **Settings** and then **Printers** to display the **Printers** directory.
- 2 Right-click the magicolor 2300 DL printer icon and choose **Document Defaults**.

Displaying Settings in Windows Me/98/95

- 1 From the **Start** menu, choose **Settings** and then **Printers** to display the **Printers** directory.
- 2 Right-click the magicolor 2300 DL printer icon and choose **Properties**.
- 3 Choose the **Printer Properties**.

Common Settings for All Tabs

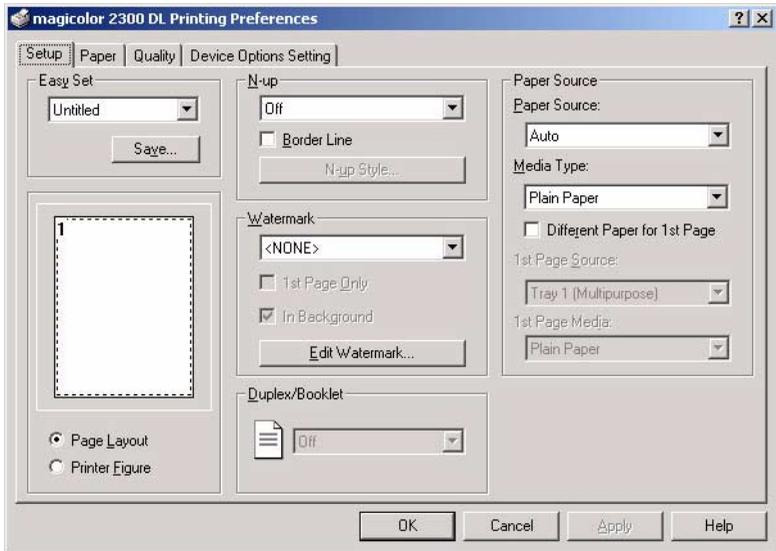
Save [Easy Set]

1 To save the current settings, click Save....



Multiple settings can be saved. Select your preferred settings, and type a title in the dropdown list box.

Afterward, the saved settings can be selected from the dropdown list.



2 Select Default from the dropdown list to reset the functions of the tab to their original values.

Page Layout

Click this radio button to display a sample of the page layout in the figure area.

Settings available are:

- Imaging area
- Paper size
- Orientation
- N-up
- Watermark
- Duplex/booklet

Refer to the printer driver's online help for information on all of these functions.

Printer Figure

Click this radio button to display an image of the printer in the figure area.

Common Buttons

OK

Click to OK the properties dialog box, saving any changes made.

Cancel

Click to Cancel the properties dialog box without saving any changes made.

Apply

Click to Apply all changes without exiting the properties dialog box.



Depending on the version of the operating system, Apply may not appear.

Help

Click to Help online help.

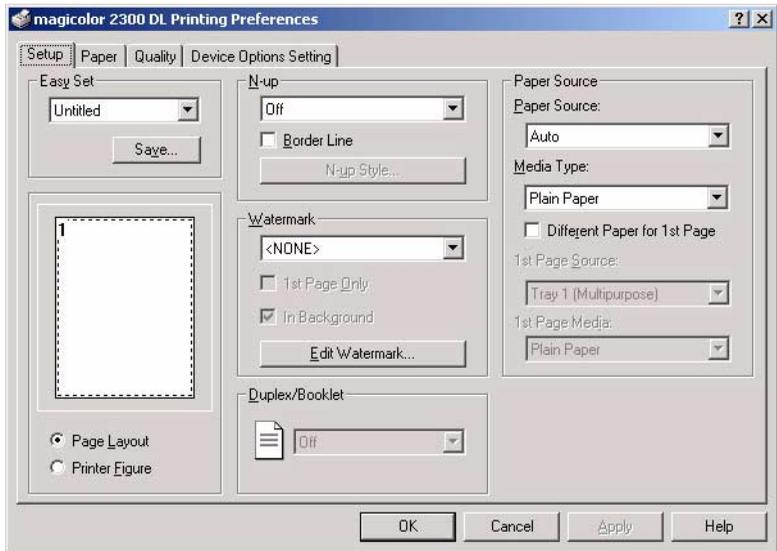
Help on a Specific Item(?)

Click to show a description of the item clicked in the title bar.

Close

Click to Close the Properties Sheet without saving any changes made.

Setup Tab



This tab allows you to:

- Print several pages of a document on the same print page (N-up)
- Provide printouts with a watermark
- Design custom watermarks
- Specify duplex and booklet printing
- Specify paper source
- Define the type of media

Refer to the printer driver's online help for information on all of these functions.

Paper Tab

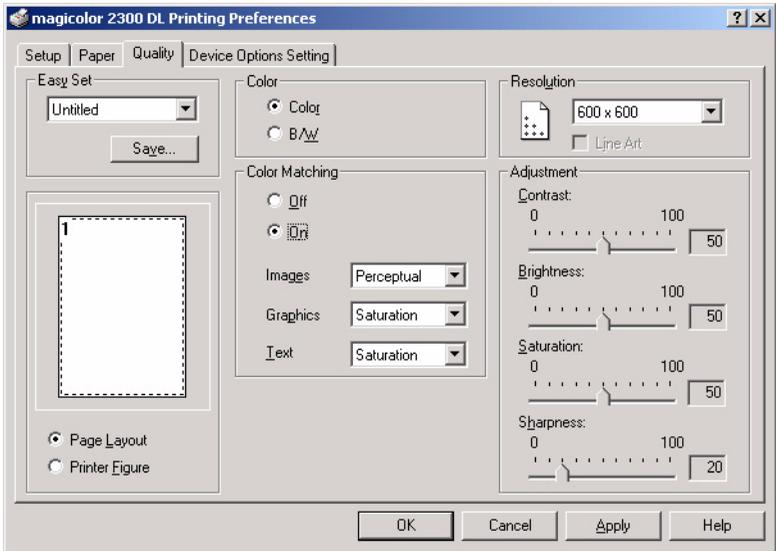


This tab allows you to:

- Select an original document size
- Set up custom paper sizes
- Select the output paper size
- Scale (enlarge/reduce) documents upon printout
- Specify the orientation of the paper
- Specify the number of copies
- Select/deselect collation
- Print using a form overlay
- Edit/create a form overlay

Refer to the printer driver's online help for information on all of these functions.

Quality Tab

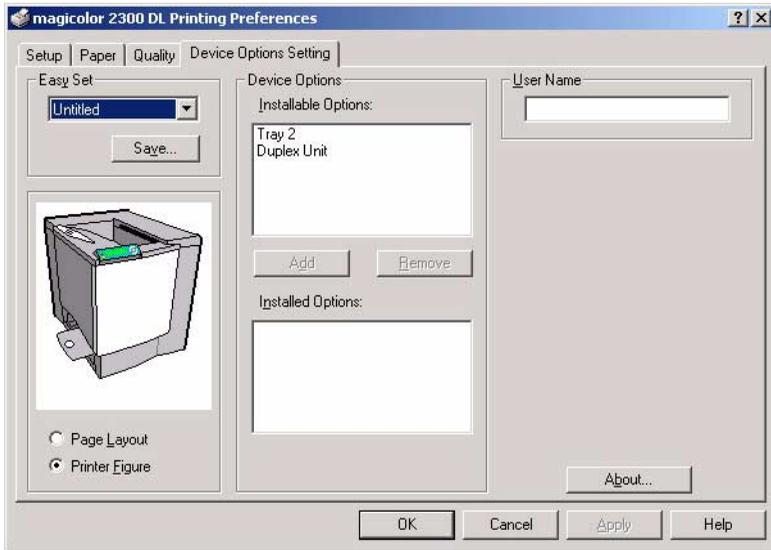


This tab allows you to:

- Switch between color and monochrome printing
- Specify color matching (Images, Graphics and Text)
- Specify the resolution for the printout
- Control the tones of an image (Contrast)
- Control the darkness of an image (Brightness)
- Control the color purity of an image (Saturation)
- Control the clarity of an image (Sharpness)

Refer to the printer driver's online help for information on all of these functions.

Device Options Setting Tab



This tab allows you to:

- Activate the optional Tray 2 (lower feeder unit) and/or the duplex option
- Enter the user name that is sent with the print job(s)
- View information about the printer driver

Refer to the printer driver's online help for information on all of these functions.

***Working with the
Status Display***

5

Working with the Status Display

The Status Display displays information about the current status of the computer's local printer. If you used the CD-ROM Installer to install the printer driver, the Status Display was also installed. If you use Add Printer to manually install the printer driver, Status Display is not installed.

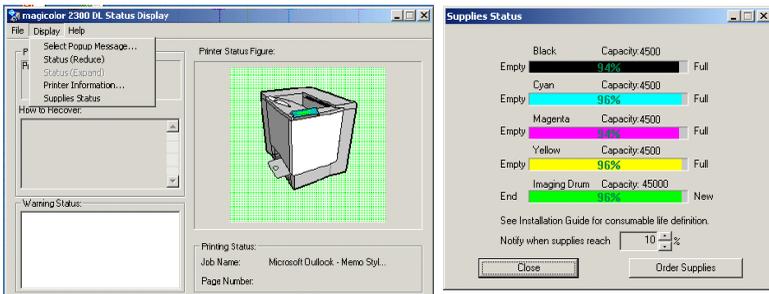
Environment

The Status Display functions only for the system default printer on the following Parallel and USB operating systems and interfaces.

	IEEE 1284 Parallel	USB
Windows XP	Available	Available
Windows Me	Available	Available
Windows 2000	Available	Available
Windows 98 SE	Available	Available
Windows 98	Available	Not available
Windows 95	Available	Not available
Windows NT 4.0	Available	Not available

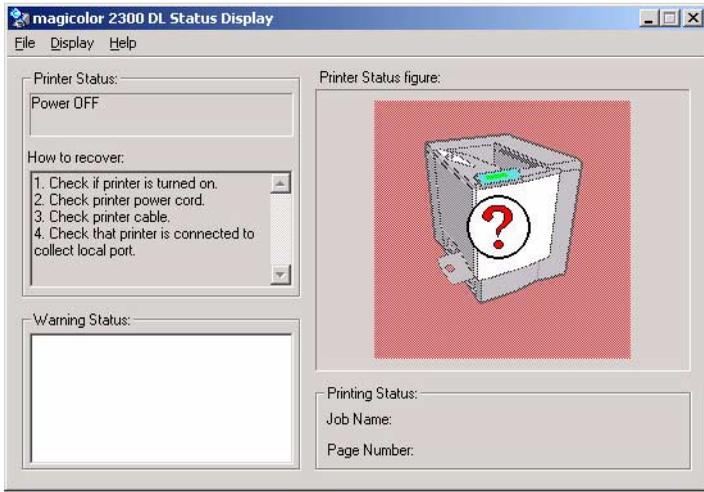
Opening the Status Display and Showing Supplies Status

- 1 From the Start menu, choose Programs, then magicolor 2300 DL Utilities, and then magicolor 2300 DL Status.
- 2 From the Display menu, choose Supplies Status to view remaining consumables life.



Using the Status Display

- When the background of the right-hand printer graphic is green, the printer is in standby mode or a job is printing normally.
- When the background of the right-hand printer graphic is red, there is an error and the job has been interrupted. The status of the printer and the error message are shown in the dialog boxes on the left.



The function areas include:

- **Printer status**—Displays text messages that describe the current operational status of the printer.
- **How to recover**—Provides you with explanations of what you need to do in order to correct problems and recover from error conditions.
- **Warning status**—Displays text messages that warn you of such conditions as low toner.
- **Printer status figure**—Shows a graphic representation of the printer and indicates where there is a problem.
- **Printing status**—Displays the status of the current print job.
- **Select popup message**—Allows you to choose which message(s) you want brought to the foreground when that particular condition occurs on the printer.
- **Supplies status**—Displays consumables usage statuses (percentage remaining) for toner cartridges and the OPC.

Refer to the Status Display's online help for information on all of its functions.

Altering the Size of the Status Display Window

- From the Display menu, choose Status (Reduce) to decrease the size of the window, or
- From the Display menu, choose Status (Expand) to increase the size of the window.

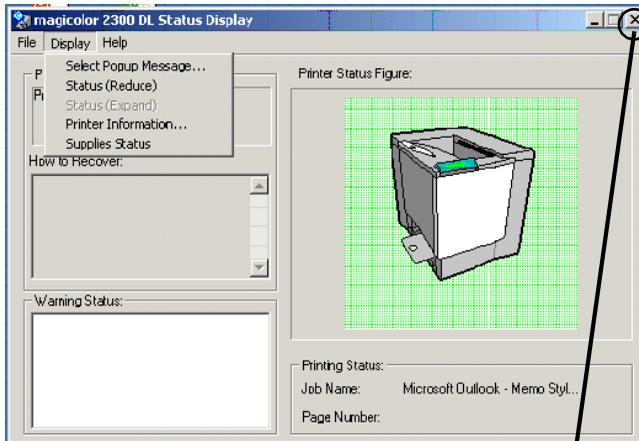


Closing the Status Display

To close the Status Display from the File menu, choose Exit.



If you click the X button in the upper-right corner of the Status Display window to close the window, the Status Display remains available at the right end of the taskbar. Double-click the icon to open it again.



***Replacing
Consumables***

6

Consumable Life Expectancies

Plain Paper

The stated life expectancy of each consumable is based on printing under specific operating conditions such as media type, number of color planes, page size, and page coverage (at normal 5% coverage of letter-/A4-size media). The actual life expectancy will vary depending on these and other printing variables, including continuous or intermittent printing, ambient temperature, and humidity. For current information about consumable life expectancies, refer to www.minolta-qms.com/support, then click on the Answer Base.

The following messages on the control panel's message window indicate that a consumable needs to be replaced.

Message	This item needs replacing by user after...	Comment
DRUM CART- RIDGE END OF LIFE	Up to 45,000 continuous monochrome or 11,250 continuous four-color pages, or 10,000 intermittent (one-page jobs) monochrome or 7,500 intermittent color pages.	See "Replacing the OPC Drum Cartridge" on page 59.
TONER EMPTY <COLOR>	<p>Standard capacity: Approximately 1,500 single-sided pages per cartridge—yellow, magenta, cyan at 5% coverage of each color.</p> <p>High capacity: Approximately 4,500 single-sided pages per cartridge—black, yellow, magenta, cyan at 5% coverage of each color.</p>	See "Replacing a Toner Cartridge" on page 53.
WASTE TONER BOX FULL	Approximately 25,000 continuous monochrome or 21,600 intermittent (one-page jobs) monochrome, or 6,250 continuous or intermittent color pages (based on the standard mode with 5% toner coverage of letter/A4 media).	See "Replacing the Waste Toner Bottle" on page 58.

If multiple toner cartridges or consumables are empty at the same time, each message will flash for 3 seconds. Handle each message displayed on the message window.

Special Media

The stated life expectancy of each consumable on page 50 is based on letter-/A4-size plain paper. If you are using special media such thick stock or transparencies, the life expectancy will vary depending on those printing variables and the print speed automatically determined by the thick stock or transparency selection on the driver's Paper Tab. The life expectancies for letter-/A4-size special media are:

Consumables (Special Media)	This item needs replacing by user after...
OPC Drum Cartridge	Up to 15,000 continuous monochrome or 7,500 continuous four-color pages, or 5,000 intermittent (one-page jobs) monochrome or 4,100 intermittent color pages.
Toner Cartridge (pages per cartridge at 5% coverage of each color)	Standard capacity (black): Approximately 1,500 continuous single-sided pages or 1,000 intermittent single-sided pages (if monochrome black printing only).
	Standard capacity (yellow, magenta, cyan): Approximately 1,500 continuous or intermittent single-sided pages.
	High capacity (black): Approximately 4,500 continuous single-sided pages or 3,200 intermittent single-sided pages (if monochrome black printing only).
	High capacity (yellow, magenta, cyan): Approximately 4,500 continuous or intermittent single-sided pages.
Waste Toner Box	Approximately 25,000 continuous or 14,400 intermittent (one-page jobs) monochrome pages or 6,250 continuous or intermittent color pages.

For current information about consumable life expectancies, refer to www.minolta-qms.com/support, then click on the Answer Base.

Auto-Image Density Control (AIDC)

The printer periodically pauses for the color calibration procedure (also known as the Auto-Image Density Control [AIDC] cycle). This process is provided to make sure reliable printer operation with optimum output quality.

This 150-second calibration cycle automatically occurs after the installation of a new toner cartridge or OPC drum.



*If you open the door before the message window reads **IDLE/MAGICOLOR 2300DL**, the printer stops and repeats the calibration cycle.*



The printer also pauses to do a 90-second AIDC cycle after 200 1-sided pages of a continuous print run, and a 150-second AIDC cycle when waking up from ENERGY SAVER with more than 1,000 pages since the last AIDC cycle or when there has been an environmental change such as in temperature or humidity.

Toner Cartridge Life

A high-capacity toner cartridge contains enough toner (yellow, magenta, cyan, or black) to print a maximum of 4,500 (at normal 5% page coverage) simplex letter/A4-size pages of continuous print. The standard-capacity toner cartridge contains enough toner to print a maximum of 1,500 (at normal 5% page coverage) simplex letter/A4-size pages of continuous print.

With heavier coverages, the approximate maximum capacities will decrease:



To determine your average percent coverage, print a consumables statistics page (Special Pages/Config Page). Current toner cartridge capacity information can be found at www.minolta-qms.com (click on the Answer Base).

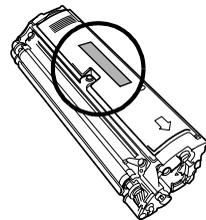
How do I know if I need to replace the toner?

When it's time to replace the toner, **X TONER LOW** displays in the message window (X indicates the toner color). Printing can continue even though the warning appears. However, the color gradually fades out, so replace the toner cartridge as soon as possible.

You can also access the toner cartridge supplies status using the Status Display (refer to "Working with the Status Display" on page 46).

How can I tell if a toner cartridge is standard or high capacity?

Refer to the label on the toner cartridge.



Replacing Consumables



Attention

Failure to follow instructions as outlined in this manual could result in voiding your warranty.

Refilled Toner Cartridges

Attention

Do not use refilled toner cartridges. Any damage to the printer or quality problems caused by a refilled toner cartridge will void your warranty.

Replacing a Toner Cartridge

Characters and images are created in your laser printer through a photosensitive process that applies toner to the Optical Photo Conductor (OPC) drum (which functions like photographic film). Your printer uses four toner cartridges: black, yellow, magenta, and cyan. Handle the toner cartridges carefully to avoid spilling toner inside the printer or on yourself.



The toner is nontoxic. If you get toner on your hands, wash them in cool water or a neutral detergent. If you get toner on your clothes, lightly dust them off as much as possible. If some toner remains on your clothes, use cool, not hot water, to rinse the toner off.

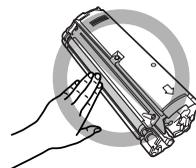
WARNING!

If you get toner in your eyes, wash it out immediately and consult a doctor. Material Safety Data Sheets (MSDS) information can be found at www.minolta-qms.com (click on the Answer Base).

Attention

Do not hold a toner cartridge vertically.

Do not touch the toner roller surface. This could lower image quality.



Keep toner cartridges:

- In their packaging until you're ready to install them.
- In a cool, dry location away from sunlight (due to heat).

The maximum storage temperature is 95° F (35° C) and the maximum storage humidity is 85% (noncondensing). If the toner cartridge is moved from a cold place to a warm, humid place, condensation may occur, degrading print quality. Allow the toner to adapt to the environment for about one hour before use.

- Level during storage.

Do not stand or store cartridges on their ends or turn them upside down; the toner inside the cartridges may become caked or unequally distributed.

- Away from salty air and corrosive gases such as aerosols.

Steps for Replacing a Toner Cartridge

Attention

Be careful not to spill toner while replacing a toner cartridge. If toner spills, immediately wipe it off with a soft, dry cloth.

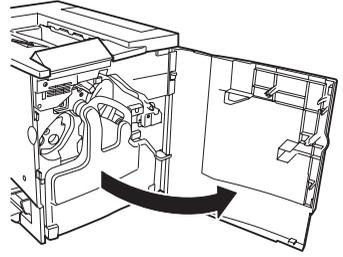


After printing 6000 pages, "TONER EMPTY" displays, and you will no longer be able to print. Follow the steps below to replace the toner.

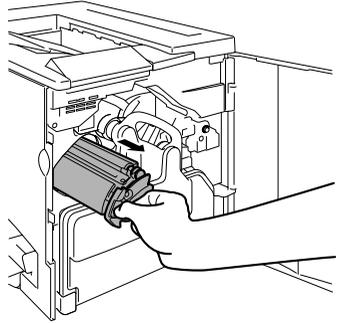
- 1 Check the message window to see which color (x) toner is out. Follow the steps below.
By carrying out the steps below, the carousel automatically stops at the position where the empty toner cartridge can be removed.

Press Key	(Until) Message Window Reads
	TONER EMPTY/X
Press until appropriate color is displayed. 	REPLACE TONER/X
Press the right arrow to start the replacement process. Menu Select 	
Press until appropriate size is displayed. 	REPLACE X TONER SIZE:STANDARD
	or REPLACE X TONER SIZE:HIGH
Once the appropriate size is displayed, press Menu Select PLEASE WAIT.....
	Then, it displays OPEN DOOR/REPLACE TONER.

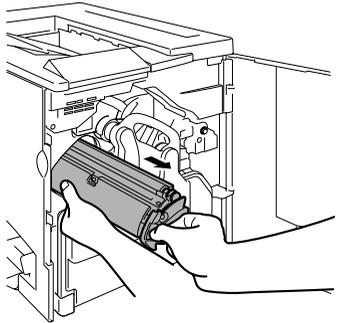
- 2 Open the printer's front door.



- 3 Insert the thumb and index finger of your hand into the two holes in the front of the toner cartridge, and then pull the cartridge straight out about 6" (152 mm).



- 4 Support the middle of the cartridge with your left hand, and then pull out the cartridge.



WARNING!

Contact toner_recycle@minolta-qms.com for toner recycling availability, or dispose of the used toner cartridge according to your local regulations. Do not dispose of it by burning.



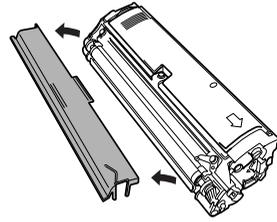
Recyclable
Material

- 5 Take out from the shipping carton a new toner cartridge of the same color as the one you are replacing.

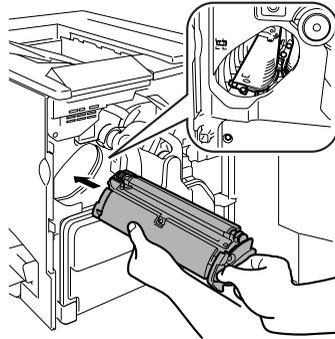
- 6 Remove the protective cover clearly marked "Remove."



Each toner cartridge has a colored end that corresponds to a color inside the cartridge slots. Always install the toner cartridge in the slot of the same color.



- 7 Support the middle of the cartridge with your left hand, insert the thumb and index finger of your right hand into the two holes in the front of the toner cartridge, and then insert the cartridge so that the guides on the cartridge fit into the rails in the cartridge compartment in the carousel.



- 8 Gently push the new toner cartridge into the printer.

- 9 Close the printer's front door.



The printer must complete a 150-second calibration cycle after any consumable has been replaced. If you open the door before the message window reads `IDLE/MAGICOLOR 2300DL`, the printer stops and repeats the calibration cycle.

Replacing a Toner Cartridge That Is Not Empty

You can choose to replace a toner cartridge that is not empty. For example, if the consumable monitor on your printer driver indicates that a particular color cartridge is running low and you need to print a lengthy job when no one will be available to change the cartridge, you might want to replace the cartridge before it is empty.

- 1 Indicate in the message window which color toner you want to replace. Follow the steps below.

Press Key	(Until) Message Window Reads
	IDLE/MAGICOLOR 2300DL
Menu Select ←	MENU/LANGUAGE

Press Key	(Until) Message Window Reads
Press the right arrow to start the replacement process. 	MENU/ENGINE
Menu Select 	
	ENGINE/REPLACE TONER
Menu Select 	REPLACE TONER BLACK
Press until appropriate color is displayed. 	REPLACE TONER YELLOW
Menu Select 	YELLOW TONER SIZE:HIGH
Press until appropriate size is displayed. 	YELLOW TONER SIZE:STANDARD
	or
	YELLOW TONER SIZE:HIGH
Once the appropriate size is displayed, press Menu Select PLEASE WAIT.....
	Then, it displays OPEN DOOR/REPLACE TONER .

- 2 Open the printer's front door.
- 3 Remove the toner cartridge.
- 4 Remove the protective cover from the new toner cartridge and insert the cartridge into the carousel.
- 5 Close the printer's front door.



*The printer must complete a 150-second calibration cycle after any consumable has been replaced. If you open the door before the message window reads **IDLE/MAGICOLOR 2300DL**, the printer stops and repeats the calibration cycle.*

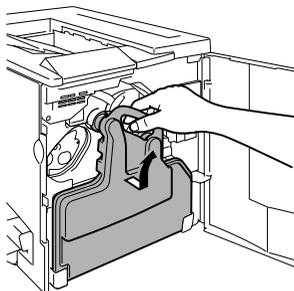
Replacing the Waste Toner Bottle

When the waste toner bottle becomes full, the message **WASTE TONER BOX FULL** appears. The printer will stop and will not start again until the waste toner bottle is replaced.

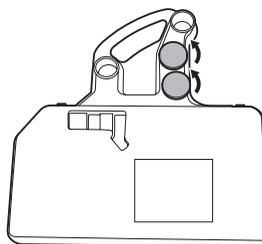
Removing the Used Waste Toner Bottle

- 1 Open the printer's front door.
- 2 Grasp the waste toner bottle's handle and lift it up, and then carefully remove the waste toner bottle.

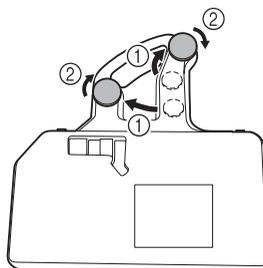
Keep the waste toner bottle upright so the toner does not spill.



- 3 Remove the two caps by turning them counterclockwise.



- 4 Secure the two caps onto the two holes by turning them clockwise.



5 Dispose of the used waste toner bottle.

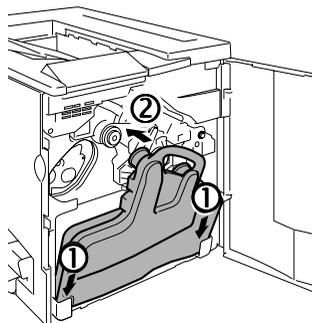
WARNING!

Dispose of the used waste toner bottle properly according to your local regulations (do not dispose of it by burning).

Installing the New Waste Toner Bottle

- 1 Remove the new waste toner bottle from its carton.
- 2 Insert the bottom of the waste toner bottle ① into its installation position in the printer.
- 3 Push the top of the waste toner bottle ② into position until it is firmly seated.
- 4 Close the printer's front door.

If the waste toner bottle is not correctly installed or the transfer belt release lever is at its top position (11 o'clock), the front door cannot be closed.



The printer must complete a 150-second calibration cycle after any consumable has been replaced. If you open the door before the message window reads `IDLE/MAGICOLOR 2300DL`, the printer stops and repeats the calibration cycle.

Replacing the OPC Drum Cartridge

When the OPC drum is worn out, the message `DRUM CARTRIDGE END OF LIFE` appears. Printing can continue even after this message appears; however, since print quality is reduced, the OPC drum cartridge and waste toner bottle should be replaced immediately.



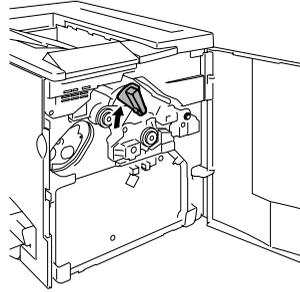
The OPC drum life is directly related to the number of rotations of the drum. Longest drum life is achieved with continuous printing. Intermittent printing with small job sizes requires cleaning rotations before and after each job, and subsequently will impact OPC life.

You can also access the OPC drum cartridge supplies status using the Status Display (refer to “Working with the Status Display” on page 46).

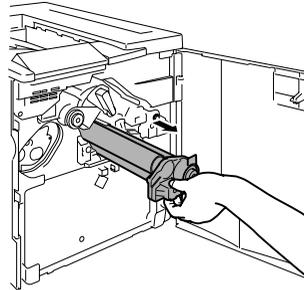
Removing the Used OPC Drum Cartridge

- 1 With the front door open and the used waste toner bottle removed (see page 58), rotate the transfer belt unit release lever clockwise to the top (11 o'clock) position.

This releases the pressure on the transfer belt unit.



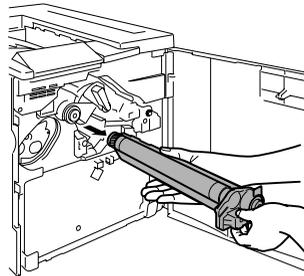
- 2 Grasp the release lever for the OPC drum cartridge, and then pull the cartridge straight out about 6 inches (152 mm).



- 3 Support the bottom of the drum with your hand, then carefully pull the cartridge toward you and remove it.



Dispose of the cartridge properly according to your local regulations.



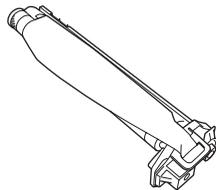
Installing the New OPC Drum Cartridge

Attention

The OPC drum is extremely sensitive to bright light and direct sunlight. Always leave it in its protective bag until you're ready to install it. Any exposure to light should be avoided, or permanent damage could result.

Any damage resulting from mishandling of the OPC drum will void the warranty of the OPC drum. Also, handle the cartridge carefully by its sides so you don't touch the surface (the green part) of the drum. The drum is also extremely sensitive to hand oils and scratches, both of which reduce print quality.

- 1 Remove the new OPC drum cartridge from its carton.



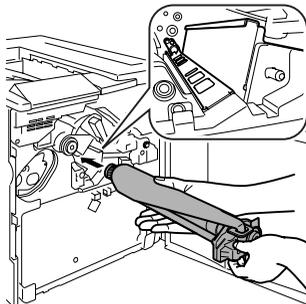
Attention

Keep the protective sheet on the cartridge. Do not touch the protective sheet on the photosensitive (green) surface or scratch the surface. This could lower image quality.

Make sure the transfer belt release lever is still set to its top position (11 o'clock).

- 2 Holding the OPC drum cartridge level, place the front end of the OPC drum cartridge guide into the rail.
- 3 Carefully push the OPC drum cartridge in.

When installing the OPC drum cartridge, be sure not to press on the release lever. If the lever is pressed during installation, the lock is released, and the cartridge is not installed correctly.



Attention

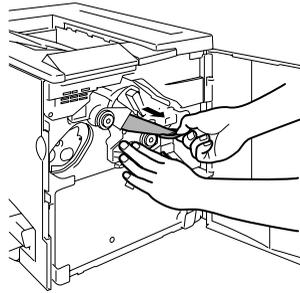
The cartridge should slide easily into the printer. Don't force it.

- 4 Press on the front handle of the OPC drum cartridge with one hand and hold the handle of the OPC protective cover with the other hand.

- 5 Peel the protective cover handle straight toward you.

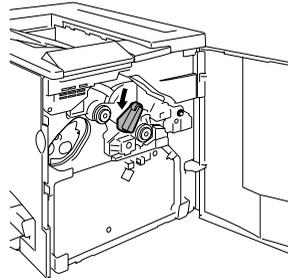


Dispose of it properly according to your local regulations.



- 6 Rotate the transfer belt release lever counterclockwise to its correct position (7 o'clock).

This lowers the transfer belt.



Attention

If the transfer belt release lever is not at its correct position (7 o'clock), the waste toner bottle cannot be installed.

- 7 Install a new waste toner bottle (see page 59).



The printer must complete a 150-second calibration cycle after any consumable has been replaced. If you open the door before the message window reads `IDLE/MAGICOLOR 2300DL`, the printer stops and repeats the calibration cycle.

Ordering Consumables

Choosing the right consumables for your printer not only increases its reliability and performance, but also minimizes the risk of damage. For example, only MINOLTA-QMS toner cartridges are designed to meet the exact specifications of your MINOLTA-QMS printer, giving maximum performance, efficiency, and long life.

Toner cartridges and other consumables for your printer are available from your local vendor or Q-SHOP (www.q-shop.com).

See the *Service & Support Guide* for a list of sources of service and support in the Americas. The most up-to-date worldwide information can be found at www.minolta-qms.com.

***Maintaining the
Printer***

7

Maintaining the Printer

Attention

Read all caution and warning labels carefully, making sure to follow any instructions contained in them. These labels are located on the inside of the printer's doors and the interior of the printer body.

Handle the printer with care to preserve its life. Abuse may cause damage and void your warranty. If dust and paper scraps remain on the inside or outside of the printer, printer performance and print quality will suffer, so the printer should be cleaned periodically. Keep the following guidelines in mind.

WARNING!

Turn off the printer, unplug the power cord, and disconnect all interface cables before cleaning. Do not spill water or detergent into the printer; otherwise the printer will be damaged and an electric shock may occur.

- Either clean the printer before use, or allow time after unplugging it to allow the fuser unit to cool down.

Attention

The fuser unit is hot. When the right door is opened, the fuser unit temperature drops gradually (one hour wait time).



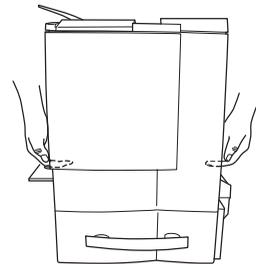
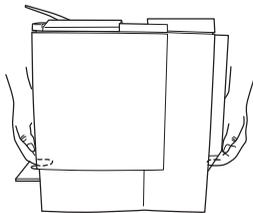
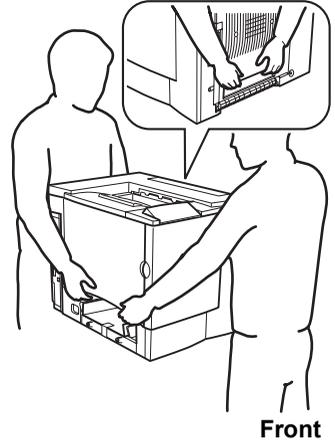
- Be careful when cleaning the inside or removing paper jams, as the fuser unit and other internal parts may become very hot.
- Do not place anything on the top of the printer.
- Use a soft cloth to clean the printer.
- Never spray cleaning solution directly on the printer's surface; the spray could penetrate through the air vents of the printer and damage the internal circuits. Avoid using abrasive or corrosive solutions or solutions that contain solvents, (such as alcohol and benzene) to clean the printer.
- Always test any cleaning solution (such as mild detergent) on a small area of your printer to check the solution's performance.
- Never use sharp or rough implements, such as wire or plastic cleaning pads.
- Always close the printer doors gently. Never expose the printer to vibrations.
- Do not cover the printer immediately after using it. Turn it off and wait until it cools down.
- Do not leave the printer's covers and doors open for any length of time, especially in well-lit places; light may damage the OPC.

- Do not open the printer during printing.
- Do not tap paper stacks on the printer.
- Do not tilt, lubricate, or disassemble the printer.
- Do not touch the electrical contacts, gears, or laser beam devices. Doing so may damage the printer and cause the print quality to deteriorate.
- Keep media in the output tray at minimum level. If the media stacks too high, your printer may experience media jams and excessive media curl.
- Make sure two people are available to lift the printer when moving it.

When moving the printer, keep the printer level to avoid toner spillage.

- When lifting the printer, grasp the handles at the top of the Tray 1 and at the bottom-right side of the printer (or the handles at the bottom of the duplex unit if it is installed).

Even if an optional media tray is installed, be sure to lift the printer as described above. Do not grasp the grip of Tray 2 or the cover on its right side; otherwise, the media tray may be damaged.



- If you get toner on your skin, wash it off with cool water and neutral detergent.

WARNING!

If you get toner in your eyes, wash it out immediately with cool water and consult a doctor. Material Safety Data Sheets (MSDS) information can be found at www.minolta-qms.com (click on the Answer Base).

- Make sure any parts removed during cleaning are replaced before you plug in the printer.

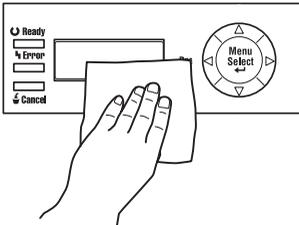
Cleaning the Printer

Always test any cleaning solution (such as a mild detergent) on a small area of your printer to check the solution's performance.

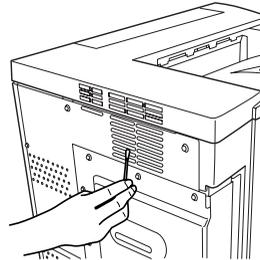
Exterior

This item needs cleaning...	After...	Use	Avoid
Control panel	Every 30,000 single-sided pages or every 12 months, whichever comes first.	A soft, dry cloth	Sharp or rough implements (such as wire or plastic cleaning pads)
Exhaust duct		Cotton swab	
Printer exterior		A soft, damp cloth (mild detergent)	Sharp or rough implements (such as wire or plastic cleaning pads)
			Abrasive or corrosive solutions that contain solvents (such as alcohol or benzene)

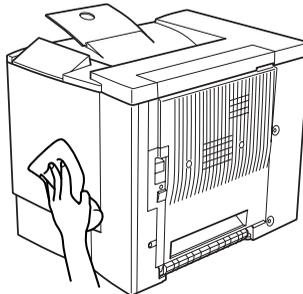
Control Panel



Exhaust Duct



Printer Exterior



Interior

Attention

Be sure to turn off the printer and unplug the power cord before cleaning inside.

This item needs cleaning...	After...	Use	Avoid
Duplex option feed rollers	Media misfeeds occur frequently or the printout is dirty.	A damp cloth that has been wrung out well	Abrasives or detergents
Tray 2 media rollers			
Tray 1 interior feed rollers	Every 30,000 single-sided pages, every 12 months, or as needed, whichever comes first.	A soft, dry cloth	Liquids, abrasives, or detergents
Laser lens cover	Removing the waste toner bottle to clean around it. Every 30,000 single-sided pages, every 12 months, or as needed, whichever comes first.		
Printer interior (such as the inside of the door, around the waste toner bottle)	Every 30,000 single-sided pages, every 12 months, or as needed, whichever comes first.		

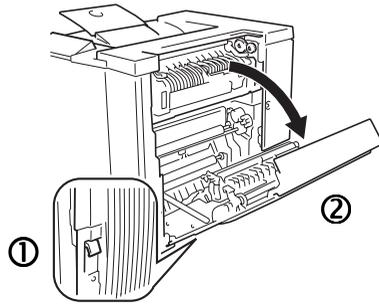
Media Rollers

The accumulation of paper dust and other debris on the paper transport roller can cause media-feeding problems.

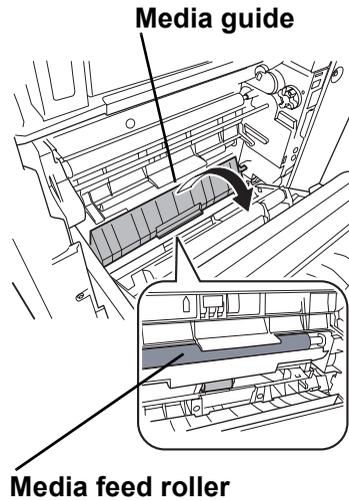
Tray 1 (Multipurpose Tray) Interior Feed Rollers

- 1 Remove all media from Tray 1.

- 2 Pull the right-side door release ①, and then open the right-side door ②.

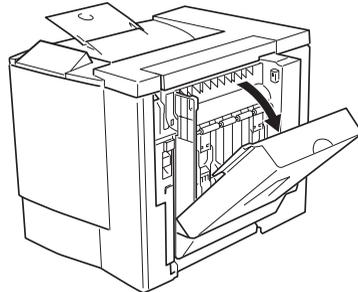


- 3 While pressing down the media guide with one hand, clean the feed roller by wiping it with a soft, dry cloth.
- 4 Close the media guide.
- 5 Close the right door.
- 6 Load the media into the tray again.

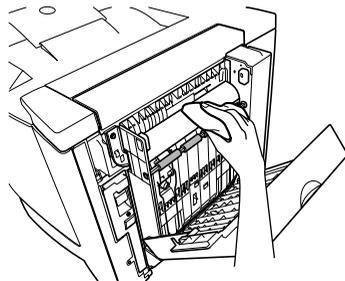


Duplex Option Feed Rollers

- 1 Open the duplex option door.

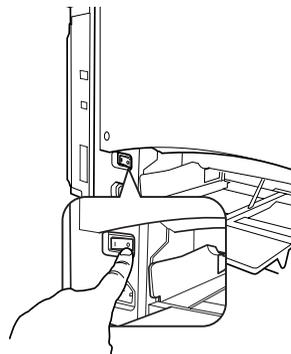


- 2 Clean the feed rollers by wiping them with a soft, damp cloth that has been wrung out well.
- 3 Close the duplex option door.



Tray 2 (Optional Lower Feeder Unit) Media Rollers

- 1 Turn off the printer, unplug the power cord, and disconnect all interface cables.
- 2 Remove the media from Tray 2.

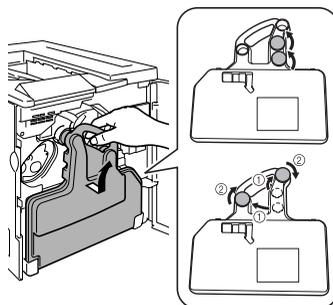


- 3 Remove the waste toner bottle.



The waste toner bottle contains waste toner. Be careful not to tilt the bottle while removing it.

- 4 Hold the waste toner bottle vertically, and then plug the two openings with the caps.

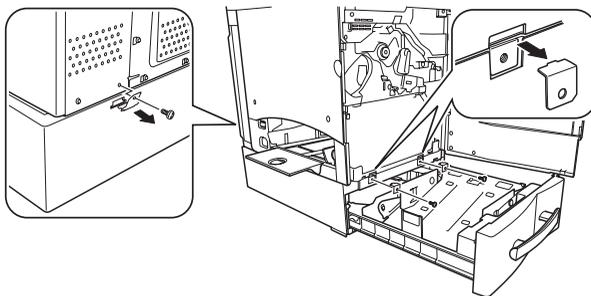


Place the removed waste toner bottle, with the openings facing up, on a stable surface (not the printer).



Removing the waste toner bottle first will permit a clearer view of the brackets.

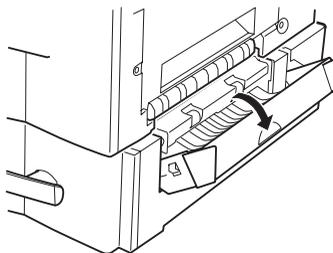
- 5 Remove the brackets (two at the front and one at the back) used to attach the lower feeder unit to the printer..



WARNING!

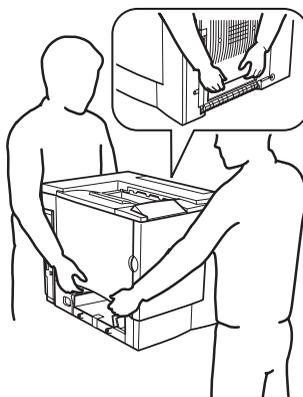
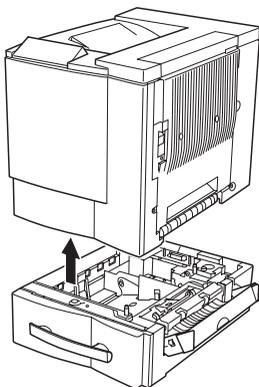
Your printer weighs approximately 62 lbs (28 kg). Be sure to have help when lifting and moving it.

- 6 Open the right door of the lower feeder unit.

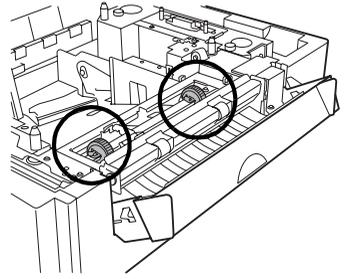


- 7 Lift the printer off of the lower feeder unit. Make sure two people are available to lift the printer when moving it.

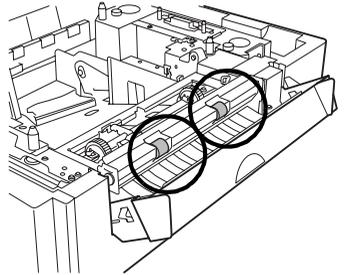
When moving the printer, keep the printer level to avoid toner spillage.



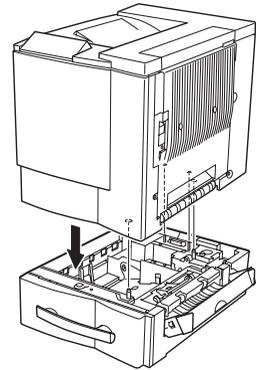
- 8 Wipe the paper feed rollers with a soft, damp cloth.



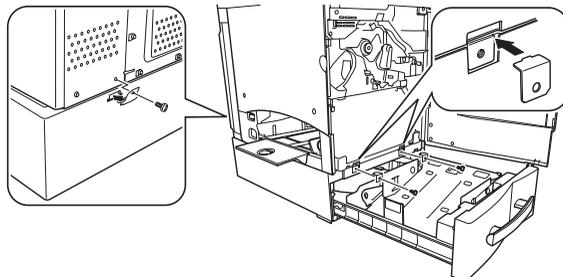
- 9 Wipe the paper feed rollers inside the right door with a soft, damp cloth.



- 10 With the right door still open, place the printer on the lower feeder unit.

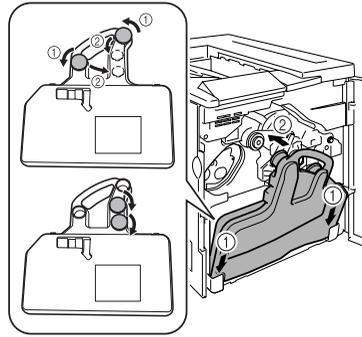


- 11 Install the brackets (two at the front and one at the back), and then close the right door.

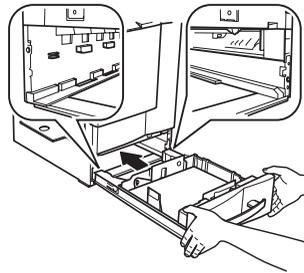


- 12 Hold the waste toner bottle vertically, and then move the two caps from the openings onto the cap holders. Turn the caps clockwise to secure them.

- 13 Set the bottom of the waste toner bottle into its compartment, and then push the top of the bottle into place.



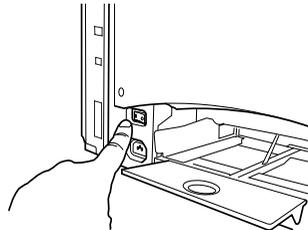
- 14 Slide the tray back into the printer.



- 15 Reconnect the interface cables and power cord, and turn on the printer.



In compliance with UL guidelines, "The appliance inlet is considered to be the main disconnect device."



Printer Interior and Laser Lens Cover

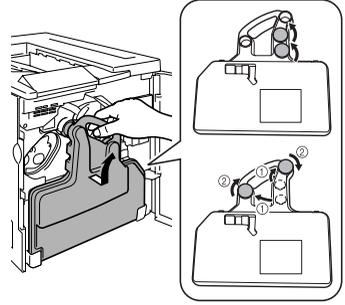
- 1 Open the front door.

- 2 Remove the waste toner bottle.



The waste toner bottle contains waste toner. Be careful not to tilt the bottle while removing it.

- 3 Hold the waste toner bottle vertically, and then plug the two openings with the caps.

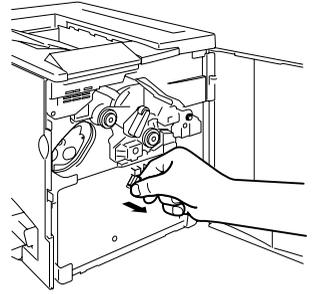


Place the removed waste toner bottle, with the openings facing up, on a stable surface (not the printer).

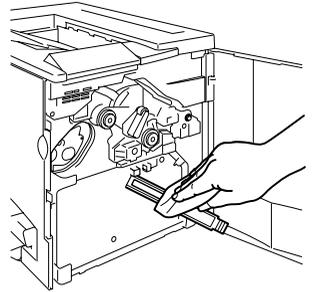
- 4 Pull out the laser lens cover.



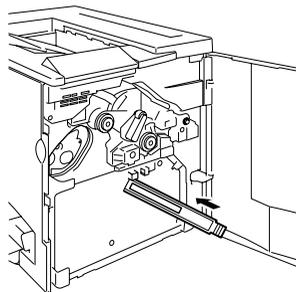
The laser lens cover cannot be removed. Do not pull it with too much force.



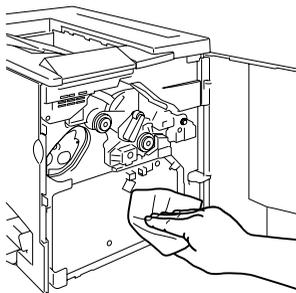
- 5 Wipe the surface of the laser lens cover with a soft, dry cloth.



- 6** Reinsert the laser lens cover.

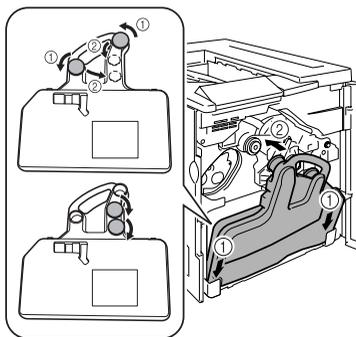


- 7** Wipe the inside of the printer with a soft, dry cloth.



- 8** Hold the waste toner bottle vertically, and then move the two caps from the openings onto the cap holders. Turn the caps clockwise to secure them.

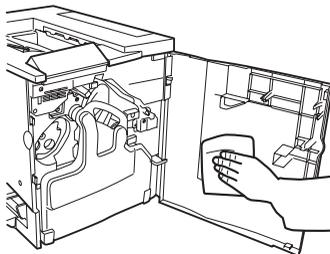
- 9** Set the bottom of the waste toner bottle into its compartment, and then push the top of the bottle into place.



- 10** Wipe the inside of the front door with a soft, dry cloth.

- 11** Wipe the outside of the waste toner bottle with a soft, dry cloth.

- 12** Close the front door.



Troubleshooting

8

Introduction

This chapter provides information to aid you in resolving printer problems you may encounter, or at least guide you to the proper sources for help.

Printing a configuration page	page 76
Preventing media jams	page 77
Understanding the media path	page 78
Clearing media jams	page 79
Solving problems with media jams	page 86
Solving other problems	page 89
Solving problems with printing quality	page 94
Status, error, and service messages	page 101
Additional information	page 107

Printing a Configuration Page

Print a configuration (CONFIG) page to verify the printer is printing correctly.

Press Key	(Until) Display Reads
	IDLE/MAGICOLOR 2300DL
Menu Select ←	LANGUAGE
▶	SPECIAL PAGES
Menu Select ←	PRINT CONFIG PAGE
Menu Select ←	The configuration page prints and the printer goes back to IDLE/MAGICOLOR 2300DL

Preventing Media Jams

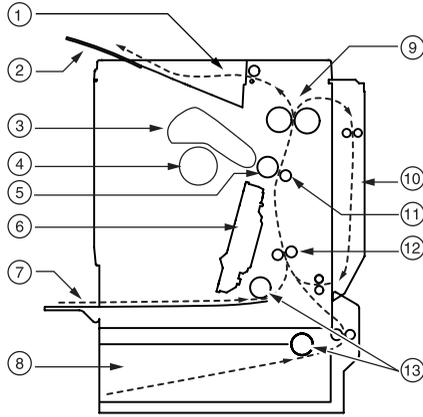
Make sure that...
Media matches the printer specifications.
Media is flat, especially on the leading edge.
The printer is on a hard, flat, level surface.
You store media in a dry location away from moisture and humidity.
You remove transparencies from the output tray immediately to avoid static buildup.
You always adjust the media guides in Tray 1 <i>after</i> inserting the media (<i>a guide that is not properly adjusted can cause poor print quality, media jams, or printer damage</i>).
You load the media (for single-sided pages) printing-side up in Tray 1 or 2 (<i>many manufacturers place an arrow on the end of the wrapper to indicate the printing side</i>).

Avoid...
Media that is folded, wrinkled, or excessively curled.
Double feeding (<i>remove the media and fan the sheets—they may be sticking together</i>).
Fanning transparencies since this causes static.
Loading more than one type/size/weight of media in a tray at the same time.
Overfilling the media input trays.
Allowing the output tray to overfill (<i>the face-down output tray has a 200-sheet capacity—jamming may occur if you allow media to accumulate more than 200 sheets at a time</i>).
Allowing the output tray to fill with more than a few transparencies.

Understanding the Media Path

Understanding the printer's media path will help you locate media jams.

- 1 Media exit
- 2 Output tray
- 3 Transfer belt
- 4 Toner cartridge
- 5 OPC drum cartridge
- 6 Laser
- 7 Tray 1 (multipurpose tray)
- 8 Tray 2 (optional lower feeder unit with 500-sheet media tray)
- 9 Fuser unit
- 10 Duplex option
- 11 Transfer roller
- 12 Registration rollers
- 13 Pickup rollers



Tray 1 (Multipurpose Tray)

Tray 1 is located at the left of the printer. The media is picked from Tray 1, passed under the OPC and the transfer belt, passed through the fuser, and delivered via the paper exit unit to the output tray on top of the printer.

Tray 2 (Optional Lower Feeder Unit with 500-sheet Media Tray)

The media tray is located at the bottom front of the printer. The media is picked from the tray, passed under the OPC drum cartridge and the transfer belt, passed through the fuser, and delivered via the paper exit unit to the output tray on top of the printer.

Duplex Option

The media is picked from a media tray, passed under the transfer belt, passed through the fuser, fed into the duplex option where the media undergoes a change in direction, cycles through the transfer belt and fuser again, and is delivered via the paper exit unit to the output tray, which is at the top of the printer.



Since several sheets cycle through the printer/duplex unit at the same time, recovering from a media jam may require the removal of more than one sheet.

Clearing Media Jams

To avoid damage, always remove jammed media gently, without tearing it. Any pieces of media left in the printer, whether large or small, can obstruct the media path and cause further jams. Do not reload media that has jammed.

Attention

The image is not fixed on the media before the fusing process. If you touch the printed surface, the toner may stick to your hands, so be careful not to touch the print face when removing the jammed media. Make sure not to spill any toner inside the printer.

Unfused toner can dirty your hands, clothes, or anything else it gets on. If you accidentally get toner on your clothes, lightly dust them off as much as possible. If some toner remains on your clothes, use cool, not hot water, to rinse the toner off. If toner gets on your skin, wash it off with water or a neutral detergent.

WARNING!

If you get toner in your eyes, wash it out immediately and consult a doctor. Material Safety Data Sheets (MSDS) information can be found at www.minolta-qms.com (click on the Answer Base).

If, after clearing the media jam, the jam message in the control panel window persists, open and close the printer's doors. This should clear the jam message.

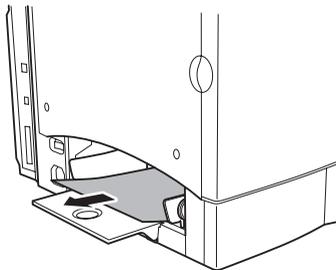
Handling Media Jams by Location

Location of Jam	Page Reference
Tray 1	page 79
Tray 2	page 80
Inside the printer	page 82
Near the duplex option	page 84
In the output tray	page 85

Tray 1 (Multipurpose Tray)

- 1 Remove the media from Tray 1.

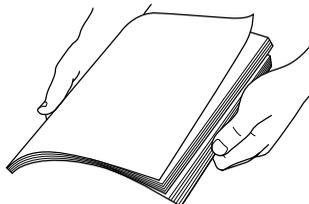
- 2 Carefully remove the jammed media.



- 3 Fan the removed media to prevent static buildup and even up the front edges.



Do not fan transparencies before loading them. Resulting static electricity may cause printing errors.



- 4 Reinsert the media printing face up.

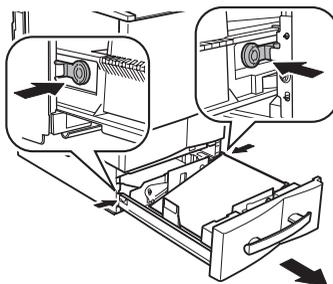
Make sure the media is lying flat and doesn't exceed the media limit mark. Check to see if the media width guides are correct.

- 5 Open the right-side door, then close it.

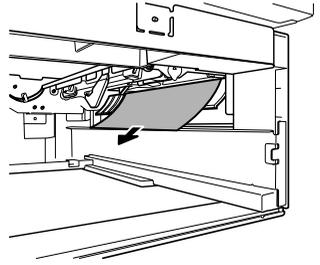
The media jam message is no longer displayed in the printer message window.

Tray 2 (Optional Lower Feeder Unit Media Tray)

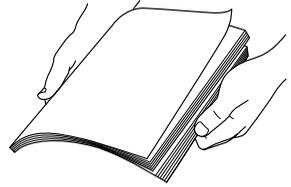
- 1 While pressing in the tabs on each side of the media tray, remove the media tray.



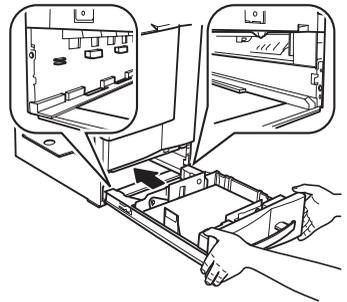
- Carefully remove the jammed media in the direction shown on the illustration and dispose of it.



- Remove the media from Tray 2, fan it to prevent static buildup, and even up the front edges.
- Reinsert the media printing face up.
Make sure the media is lying flat and doesn't exceed the media limit mark.

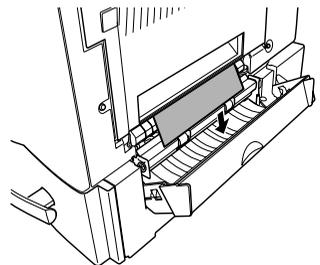


- Slide the tray back into the printer.
- Open the right-side door, then close it.
The media jam message is no longer displayed in the printer message window.



Inside Tray 2's Right Door

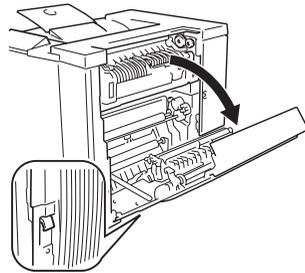
- Open the right door of the lower feeder unit.
- Carefully remove the jammed media.
- Close the door.
The media jam message is no longer displayed in the printer message window.



Inside the Printer

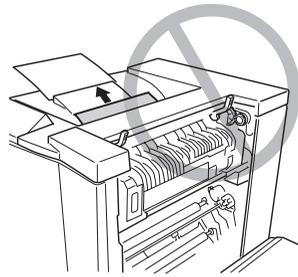
Media Path Jam

- 1 Pull the right door release lever, and then carefully open the right door. If Tray 2 is installed, the lower-right door opens at the same time that the right door is opened.

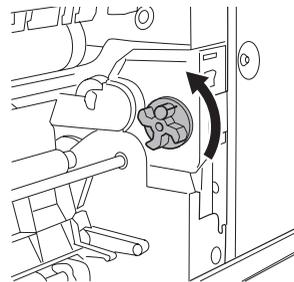


Attention

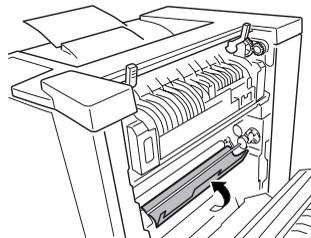
Do not pull jammed media from the top of the printer through the fuser unit; otherwise, unfused toner may dirty the fuser rollers.



If it is difficult to remove the jammed media, turn the misfeed-clearing dial counterclockwise to feed the media downward.

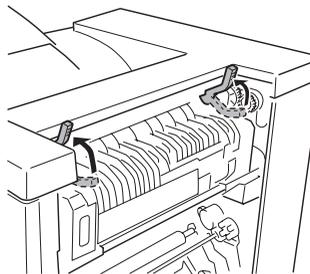


- 2 If a misfeed occurs in the vertical transport area, open the inner media guide, and then pull the misfed media down to remove it.
- 3 Close the inner media guide.

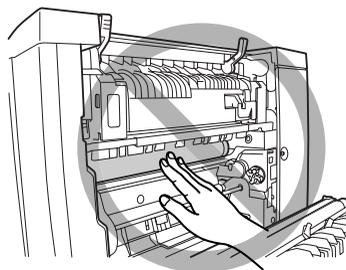


Fuser Jams

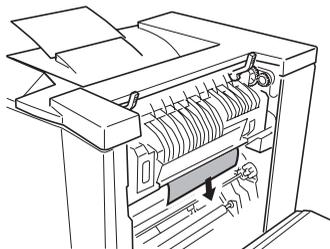
- 1 Lift up the two fuser unit levers.



When removing the jammed media, be careful not to touch the transfer belt. Touching the transfer belt may result in decreased print quality.

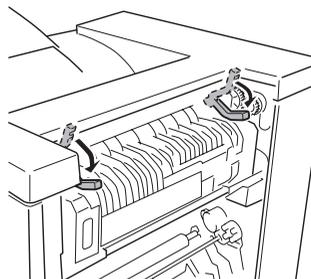


- 2 Open the misfeed-clearing guide for the fuser unit, and then, while checking the misfeed, pull the jammed media down to remove it.



- 3 Close the misfeed-clearing guide for the fuser unit.

- 4 Lower the two fuser unit levers.

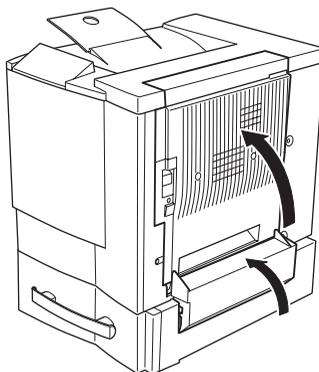
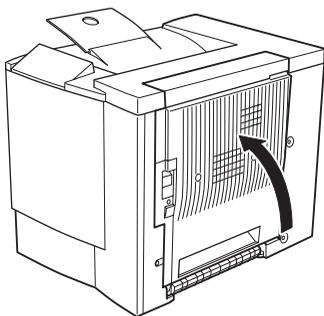


A Attention

Be sure to lower the two fuser unit levers before closing the right door. If the levers are not lowered, the right door cannot be closed.

- 5 Close the right-side door.

If the optional lower feeder unit is installed, close the lower-right door.

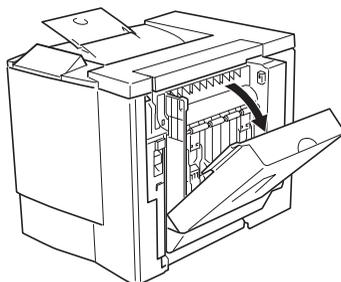


The media jam message is no longer displayed in the printer message window.

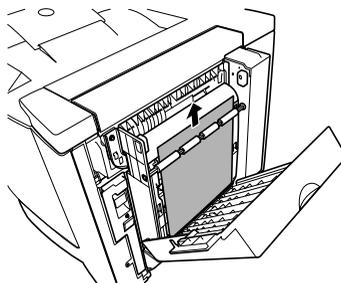
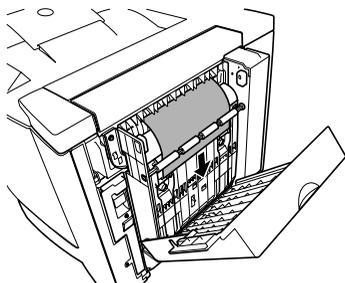
Check the right-side release to make sure the door is securely closed.

Duplex Option

- 1 Pull off the top of the duplex option to open the duplex option cover.



- 2 Remove the jammed media in the directions shown in the illustration.



3 Open the right-side door, then close it.

If the optional media feed unit is installed, close the lower-right door.

The media jam message is no longer displayed in the printer message window.

Output Tray

Remove jammed media from the output tray by gently pulling it to the left away from the media exit area.

Solving Problems with Media Jams



Frequent jams in any area indicate that area should be checked, repaired, or cleaned. Repeated jams may also happen if you're using unsupported print media.

Symptom	Cause	Solution
Several sheets go through the printer together.	The front edges of the media are not even.	Remove the media and even up the front edges, then reload it.
	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
	Too much static electricity is present.	Do not fan transparency media.
Media jam message stays on.	Right-side door needs to be opened and closed again to reset the printer.	Open and close the right-side door of the printer again.
	Some media remains jammed in the printer.	Recheck the media path and make sure you have removed all of the media jams.
Duplex option jams.	The wrong media is being used.	Use only supported media. See "Media Specifications" on page 11.
		Only plain paper, 16–24 lb (60–90 g/m ²) can be autoduplexed if the optional duplex unit is installed and the media type is set properly in the driver. Only plain paper, 16–24 lb (60–90 g/m ²) can be autoduplexed. See "Media Specifications" on page 11 for supported sizes.
		Make sure that you have not mixed media types in Tray 1.
		Do not duplex custom-sized media, envelopes, labels, thick stock, or transparencies.
	Media may still be jammed.	Recheck the media path inside the duplex unit and make sure that you have removed all of the jammed media.

Symptom	Cause	Solution
Media is jamming.	The media is not correctly positioned in the tray.	Remove the jammed media and reposition the media properly in the tray.
	The number of sheets in the tray exceeds the maximum allowed.	Remove the excess media and reload the correct number of sheets in the tray.
	The media guides are not correctly adjusted to the media size.	Adjust the regulation guides in the tray to match the size of the media.
	The media in the optional tray is not under the media separating tabs.	Remove the media and reload it so that the right-front and right-rear corners are under the media-separating tabs.
	Warped or wrinkled media is loaded in the tray.	Remove the media, smooth it out, and reload it. If it still jams, do not use that media.
	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
	Custom-sized media, envelopes, labels, postcards, thick stock, or transparencies are loaded in Tray 2.	Special media must be loaded in Tray 1 only.
	The recommended transparency (OHP) or label paper is facing the wrong way in Tray 1.	Load the transparencies or labels according to the manufacturer's instructions.
	Envelopes are facing the wrong way in Tray 1.	
If the flaps are on the short edge, set the envelopes in Tray 1 so that the flaps are on the printer side.		

Symptom	Cause	Solution
Media is jamming.	Multiple sheets of transparency (OHP) media are collecting static electricity in the tray.	Remove the OHP media and load it in the tray one sheet at a time. Do not fan transparencies before loading them.
	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
	Unsupported media (wrong size, thickness, type, etc.) is being used.	Use media that is covered by the printer warranty.
	Media supply roller is dirty.	Clean the media supply roller. For more details, refer to "Media Rollers" on page 67.

Solving Other Problems

Symptom	Cause	Solution
Printer power is not on.	The power cord is not correctly plugged into the outlet.	Turn the power switch off (O position), then remove the power cord from the outlet and plug it back in.
	Something is wrong with the outlet connected to the printer.	Plug another electrical appliance into the outlet and see whether it operates properly.
	The power switch is not correctly turned on (I position).	Set the power switch to the off (O) position, then set it back to the on (I) position.
	The printer is connected to an outlet with a voltage or frequency that does not match the printer specifications.	Use a power source with the specifications listed in appendix A, "Technical Specifications."
Data was sent to the printer, but it doesn't print.	An error message is displayed in the message window.	Handle according to the message displayed.
The control panel displays TONER LOW much sooner than expected	A high-capacity toner cartridge was loaded, but the toner size was set at standard capacity.	In the ENGINE/CHANGE TONER SZ menu, select the capacity listed on the toner cartridge label.
	The toner cartridge is defective.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
You can't print a configuration page.	The media tray is empty.	Check that the media trays are loaded with media, in place, and secure.
	The printer's doors aren't closed securely.	Make sure the doors are closed securely. <i>Close all doors gently to avoid jarring the printer.</i> Make sure the waste toner bottle is installed correctly.
	There is a media jam.	Check for a media jam.

Symptom	Cause	Solution
Printing takes too much time.	The printer is set to a slow printing mode (for example, thick stock or transparency).	It takes more time to print with special media. When using regular paper, make sure that the media type is set properly in the driver.
	The printer is set to power saving mode.	It takes time for printing to start in power saving mode. If you do not want to use this mode, disable it.
	The job is very complex.	Wait. No action needed.
	The printer memory is insufficient.	Add more memory.
Blank pages come out during a printing job.	One or more of the toner cartridges are defective or empty.	Check the toner cartridges. The image does not print if the cartridges are empty.
	The wrong media is being used.	Check that the media type set in the driver matches the media loaded in the printer.
Printer returned to IDLE before the menu was changed.	The printer was in the menu structure without a selection being made within two minutes.	When in the menu structure, select your choice before two minutes elapse.
Not all pages print.	The printer has the wrong kind of cable, or the printer is not configured for the correct cable and port.	Check your cable.
	The Cancel key was pressed.	Make sure no one pressed the Cancel key while your job was printing.
	The media tray is empty.	Check that the media trays are loaded with media, in place, and secure.
	A document is printed with an overlay file which has been created by a non-magicolor 2300 DL driver.	Print the overlay file using a magicolor 2300 DL driver from the magicolor 2300 DL <i>Utilities and Documentation</i> CD-ROM.

Symptom	Cause	Solution
Printer resets or turns off frequently.	The power cord is not properly connected to the AC outlet.	Turn off the unit, confirm that the power cord is properly connected to the AC outlet, and turn the unit back on.
	A system error occurred.	Contact Technical Support with the error information. See the <i>Service & Support Guide</i> for a list of sources of service and support in the Americas. The most up-to-date worldwide information can be found at www.minolta-qms.com .
You are experiencing problems duplexing.	Media or settings are not correct.	For autoduplexing, make sure that you have a duplex option installed.
		Make sure that you are using correct media. <ul style="list-style-type: none"> ■ See the table on page 11 for supported media. ■ Do not duplex custom-sized media, envelopes, labels, postcards, thick stock, or transparencies. ■ Make sure that you have not mixed media types in Tray 1.
		Make sure that your document has more than one page.
		Use the printer driver to make sure that the duplex unit is in the "Installed Options" list on the Config Page.
		In the printer driver (Properties/Setup/Duplex/Booklet), choose "Short Edge Binding" (flipped as on a clipboard) or "Long Edge Binding" (flipped as in a loose-leaf notebook).
		For N-up on duplexed pages, choose Collate only in the driver's Paper Tab. Do not set collation in the application.
With N-up on multiple copies, the output is incorrect.	Both the driver and the application have been set for collation.	For N-up on multiple copies, choose Collate only in the driver's Paper Tab. Do not set collation in the application.

Symptom	Cause	Solution
Booklet Left and Right Binding output is incorrect.	Both the driver and the application have been set for collation.	For Booklet Left Binding and Booklet Right Binding, choose Collate only in the driver's Paper Tab. Do not set collation in the application.
The printer pauses approximately 90 seconds.	<p>The printer pauses for the color calibration procedure (also known as the Auto-Image Density Control [AIDC] cycle).</p> <p><i>This process is provided to make sure reliable printer operation with optimum output quality. If you open the door before the display reads IDLE/MAGICOLOR 2300DL, the printer stops and repeats the calibration cycle.</i></p>	Wait while your printer automatically pauses to do an AIDC calibration cycle after 200 1-sided pages of a continuous print run.
The printer pauses approximately 150 seconds.	<p>The printer pauses for the color calibration procedure (also known as the Auto-Image Density Control [AIDC] cycle).</p> <p><i>This process is provided to make sure reliable printer operation with optimum output quality. If you open the door before the display reads IDLE/MAGICOLOR 2300DL, the printer stops and repeats the calibration cycle.</i></p>	Wait while your printer automatically pauses to do an AIDC calibration cycle after rebooting your printer when there has been an environmental change such as in temperature or humidity.
		Wait while your printer automatically pauses to do an AIDC calibration cycle after "waking up" from ENERGY SAVER with more than 1,000 pages since the last AIDC cycle.
		Wait while your printer automatically pauses to do an AIDC calibration cycle after the installation of a new toner cartridge or OPC drum.

Symptom	Cause	Solution
You hear unusual noises.	The printer is not level.	Put the printer on a flat, hard, level surface not to exceed $\pm 1^\circ$ slant in any direction.
	The media tray is not installed correctly.	Remove the media tray that you are printing from and reinsert it completely into the printer.
	There is a foreign object stuck inside the printer.	Turn off the printer and remove the object. If you cannot remove it, contact Technical Support.
The web-based utility cannot be accessed.	The PageScope Light Administrator's password is incorrect.	The PageScope Light Administrator password has a 1-character minimum and a 4-character maximum.
Media is wrinkled. 	The media is moist from humidity or having water spilled on the paper supply.	Remove the moist media and replace it with new, dry media.
	The transfer roller or fuser unit may be defective.	Check them for damage. If necessary, contact Technical Support with the error information. Go to www.minolta-qms.com/support/ or see the <i>Service & Support Guide</i> for support telephone numbers.
	Unsupported media is being used.	Use MINOLTA-QMS-approved media. Refer to "Media Types" on page 12. Check www.minolta-qms.com/products/ for currently approved media.

Solving Problems with Printing Quality

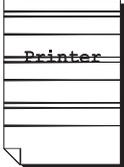
Symptom	Cause	Solution
<p>Nothing is printed, or there are blank spots on the printed page.</p> 	One or more of the toner cartridges are damaged.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	The printer driver is not set correctly.	Select the proper setting in the printer driver to switch from transparency (OHP) film to plain paper.
	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If it is damaged, replace the OPC drum cartridge and waste toner bottle.
	The media is moist from humidity.	Adjust the humidity for paper storage. Remove the moist media and replace it with new, dry media.
	The media set in the printer driver mismatches the media loaded in the printer.	Load the correct media in the printer.
	The power source does not match the printer specifications.	Use a power source with the proper specifications.
	Several sheets are being fed at the same time.	Remove the media from the tray and check for static electricity. Fan plain paper or other media (but not transparencies), and replace it in the tray.
	Media is not set properly in the media tray(s).	Remove the media, tap it to straighten it out, return it to the media tray, and realign the media guides.
	The printer is not sitting on a level surface.	Relocate the printer on a flat, hard, stable, level surface that is large enough to hold the printer.

Symptom	Cause	Solution
Entire sheet is printed in black or color. 	One or more of the toner cartridges are defective.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If it is damaged, replace the OPC drum cartridge and waste toner bottle.
Image is too light; there is low image density. 	Laser lens cover is dirty.	Clean the laser lens cover and perform an AIDC calibration cycle through the Engine/Service/Power On Test menu. Wait until the test is finished and IDLE/MAGICOLOR 2300DL is displayed.
	The media is moist from humidity.	Remove the moist media and replace with new, dry media.
	There is not much toner left in the cartridge.	Replace the toner cartridge (Engine/Replace Toner menu). If the new cartridge capacity is different, select the toner cartridge capacity in the Engine/Change Toner Sz menu.
	One or more of the toner cartridges are defective.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	Media type may be set incorrectly.	When printing envelopes, labels, postcards, thick stock, or transparencies specify the appropriate media type in the printer driver.
Image is too dark. 	One or more of the toner cartridges are defective.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If it is damaged, replace the OPC drum cartridge and waste toner bottle.

Symptom	Cause	Solution
Image is blurred; background is lightly stained; there is insufficient gloss of the printed image. 	One or more of the toner cartridges are defective.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	The OPC drum may be misinstalled or defective.	Reinstall the OPC drum cartridge. If it is damaged, replace the OPC drum cartridge and waste toner bottle.
The print or color density may be uneven. 	One or more of the toner cartridges may be near empty or damaged.	Install new toner cartridges (Engine/Replace Toner menu).
	The OPC drum may have been misinstalled or is defective.	Reinstall the OPC drum cartridge. If it is damaged, replace the OPC drum cartridge and waste toner bottle.
	The printer is not on a level enough surface.	Level the printer (not exceeding $\pm 1^\circ$ slant at any point around the machine).
Irregular print or mottled image appears. 	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
	Humidity may be too high.	Adjust the humidity in the paper storage area.
	Media with specifications not covered by the printer warranty is being used.	Use media that is covered by the printer warranty.
	One or more of the toner cartridges are defective.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	The OPC drum cartridge is damaged.	Remove the OPC drum cartridge and check for damage. If it is damaged, replace the OPC drum cartridge and waste toner bottle.

Symptom	Cause	Solution
<p data-bbox="232 119 374 295">There is insufficient fusing or the image comes off when rubbed.</p> 	<p data-bbox="383 119 616 177">The media is moist from humidity.</p>	<p data-bbox="624 119 1042 177">Remove the moist media and replace it with new, dry media.</p>
	<p data-bbox="383 189 616 336">Media with specifications not covered by the printer warranty is being used.</p>	<p data-bbox="624 189 1042 247">Use media that is covered by the printer warranty.</p>
	<p data-bbox="383 349 616 406">The media type may be incorrectly set.</p>	<p data-bbox="624 349 1042 489">When printing envelopes, labels, postcards, thick stock, or transparencies the appropriate media type must be specified in the printer driver.</p>
<p data-bbox="232 505 374 646">There are toner smudges or residual images.</p> 	<p data-bbox="383 505 616 617">One or more of the toner cartridges are misinstalled or defective.</p>	<p data-bbox="624 505 1042 563">If the toner smudges are on only the front of the page:</p> <p data-bbox="624 576 1042 662">Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).</p>

Symptom	Cause	Solution
<p>There are toner smudges on the back side of the page (whether or not it has been duplexed).</p> 	The paper transport rollers may be dirty.	<p>Clean the paper transport, pressure, and fuser oil rollers.</p> <p>If you think the transport roller should be replaced, contact Technical Support with the error information. See the <i>Service & Support Guide</i> for a list of sources of service and support in the Americas. The most up-to-date worldwide information can be found at www.minolta-qms.com.</p>
	The media path is dirty with toner.	Print several blank sheets and the excess toner should disappear.
	One or more of the toner cartridges are defective.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	The OPC drum cartridge is defective.	Remove the OPC drum cartridge and check for damage. If it is damaged, replace the OPC drum cartridge and waste toner bottle.
<p>Abnormal areas (white, black, or color) appear in a regular pattern.</p> 	The laser lens cover may be dirty.	Check to see if the laser lens cover is dirty. If necessary, clean it with a clean soft cloth.
	The toner cartridge is damaged.	Remove the toner cartridge with the color causing the abnormal image. Replace it with a new toner cartridge.
	The OPC drum cartridge is damaged.	Replace the OPC drum cartridge and waste toner bottle.
<p>Image defects.</p> 	The laser lens cover is dirty.	Clean the laser lens cover with a soft, dry cloth.
	The toner cartridge is leaking.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	The toner cartridge is damaged.	Remove the toner cartridge with the color causing the abnormal image. Replace it with a new toner cartridge.
	The OPC drum cartridge is damaged.	Replace the OPC drum cartridge and waste toner bottle.

Symptom	Cause	Solution
Lateral lines or bands appear on image. 	The printer is not on a level enough surface.	Level the printer (not exceeding $\pm 1^\circ$ slant).
	The media path is dirty with toner.	Print several sheets and the excess toner should disappear.
	One or more of the toner cartridges are defective.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	The OPC drum surface is scratched or damaged.	Remove the OPC drum cartridge and check the green photosensitive surface for scratches. If it is damaged, replace the OPC drum cartridge and waste toner bottle.
Colors look drastically wrong.	One or more of the toner cartridges are malfunctioning or expired.	Remove the toner cartridges and verify that the toner is distributed evenly on the cartridge roller, and reinstall the toner cartridges.
	One or more of the toner cartridges are low or out.	Check the control panel for an <i>X</i> TONER LOW or <i>X</i> TONER REPLACE message. If necessary, replace the specified toner cartridge.
Colors are not registering properly; colors are mixed or have page-to-page variation.	The front door may not be properly closed.	Make sure that the printer's front door is closed.
	The OPC drum cartridge is not correctly seated.	Remove the OPC drum cartridge and reinstall it.
	One or more of the toner cartridges are defective.	Remove the toner cartridge and check for damage. If it is damaged, replace it (Engine/Replace Toner menu).
	The media is moist from humidity.	Remove the moist media and replace it with new, dry media.
Line art does not print in color.	The line art setting for 2400 x 600 dpi requires Color Matching to be turned off.	In the driver, go to Properties/Quality and choose Off in the Color Matching area.
		If you want color, lower the resolution to 1200 x 600 or 600 x 600.

Symptom	Cause	Solution
<p>The color has a poor reproduction or has poor color density.</p> 	<p>The paper image transfer is defective.</p>	<p>Check the OPC drum cartridge. If necessary, replace the entire drum cartridge.</p>
	<p>The Auto-Image Density Control (AIDC) detection sensor is dirty.</p>	<p>Clean the laser lens cover and perform an AIDC calibration cycle through the Engine/Service/Power On Test menu. Wait until the test is finished and IDLE/MAGICOLOR 2300DL is displayed.</p> <p>If the problem persists, contact Technical Support. See the <i>Service & Support Guide</i> for a list of sources of service and support in the Americas. The most up-to-date worldwide information can be found at www.minolta-qms.com.</p>

If the problem is not resolved, even after all of the above have been performed, contact Technical Support with the error information. Go to www.minolta-qms.com/support/ or see the *Service & Support Guide* for support telephone numbers.

Status, Error, and Service Messages

Status, error, and service messages are displayed in the control panel message window. They provide information about your printer and help you locate many problems. When the condition associated with a displayed message has changed, the message is cleared from the window.

Standard Status Messages

This message...	means...	do this...
CALIBRATING	After 200 1-sided pages of a continuous print run, after replacing consumables, and after rebooting your printer after environmental changes, your printer automatically pauses to do an Auto-Image Density Control (AIDC) cycle. <i>This process is provided to make sure reliable printer operation with optimum output quality.</i>	No action needed.
CANCELLING JOB	The job is being cancelled.	
ENERGY SAVER	The printer is in energy saver mode to reduce power consumption during periods of inactivity. When a print job is received, the printer returns to normal power within 180 seconds.	
IDLE MAGICOLOR 2300DL	The printer is on and ready to receive data.	
PRINTING	The printer is printing.	
PROCESSING	The printer is processing data.	
WARMING UP	The printer is warming up.	

Error Messages

This message...	means...	do this...
NO TONER UNIT X	The <i>COLOR</i> toner cartridge is not installed properly.	Install the indicated toner cartridge.
COVER OPEN TRAY 2	The right door of Tray 2 is open.	Close the side cover.
DRAWER OPEN TRAY 2	The media tray is not fully inserted into Tray 2.	Insert the media tray into the media feed unit.
DRUM CARTRIDGE NOT ATTACHED	The OPC drum cartridge is not installed.	Install the drum cartridge.
DUPLEX UNIT NOT ATTACHED	Duplex printing was specified with the printer driver, but the duplex unit is not attached to the printer.	Stop the print job, and then either change the printer driver setting or attach the duplex unit to the printer.
ERROR MEMORY OVER FLOW	The printer has received more data than can be processed by its internal memory.	Turn the printer off, and then, after a few seconds, turn it on again. Decrease the amount of data to be printed (for example, by decreasing the resolution), and then try printing again. Otherwise, install an optional memory module.
ERROR VIDEO UNDER RUN	The amount of data to be printed exceeds the printer's internal data transmission speed.	Turn the printer off, and then, after a few seconds, turn it on again. Decrease the amount of data to be printed (for example, by decreasing the resolution), and then try printing again.

This message...	means...	do this...
MEDIA JAM DUPLEX UPPER	Media has jammed in the duplex unit.	Locate and remove the jam.
MEDIA JAM EXIT	Media has jammed between the print engine and the output tray. A media jam has been detected between the fuser and output tray rollers located near the top cover. Exit jams occur in the media eject area.	
MEDIA JAM FUSER	Media has jammed leaving the fuser area.	
MEDIA JAM TRANSFER ROLLER	Media jams occur in the transfer roller area. This type of jam means that the media did not make it to the paper exit area.	
MEDIA JAM TRAY X	Media has jammed while being pulled from the specified tray (X).	
X TONER LOW	The X (color) toner is low and should be replaced within 200 pages at 5% coverage of letter/A4 pages.	
DRUM LOW	The OPC drum cartridge is nearing end of life and should be replaced or the quality eventually fades.	Replace the OPC drum cartridge and waste toner bottle.

This message...	means...	do this...
PRINTER COVER OPEN	Printer's front door is open and must be closed.	Close the front door.
PUT X IN TRAY Y SIZE	Put X (paper or media type) in Tray Y (Tray 1 or 2 as specified).	Install the correct media size or type into the tray specified.
PUT X IN TRAY Y	Put X (paper or media type) in Tray Y (Tray 1 or 2 as specified).	Install the correct media type into the tray specified.
SIZE MISMATCH	The media size set with the printer driver is different from the size of media loaded.	Install the correct media size.
SIZE/TYPE ERROR	The media size or type set with the printer driver is different from the type of media loaded into Tray 1.	Install the correct media size or type.
SIZE/TYPE ERROR DUPLEX	The media size or type set with the printer driver is different from the type being duplexed.	Use the correct media size or type when duplexing.
TONER EMPTY COLOR	The <i>COLOR</i> (specified color) toner cartridge is empty.	Replace the toner cartridge. (Engine/ Replace Toner)
TRAY X EMPTY	Tray X (Tray 1 or 2) was specified with the printer driver for printing, but Tray X is empty.	Install media into the tray specified.
TRAY 2 NOT ATTACHED	Tray 2 was specified with the printer driver for printing, but Tray 2 is not attached to the printer.	Stop the print job, and then either change the printer driver setting or attach Tray 2 to the printer.
TRAY 2 LOW	Tray 2 is almost out of media.	Prepare more media to replenish the tray.
WASTE: NEAR FULL	The waste toner bottle is nearly full.	Install a new waste toner bottle.

This message...	means...	do this...
WASTE TONER BOX FULL	The waste toner in the waste toner bottle is full.	Prepare a new OPC drum cartridge, and then replace the drum cartridge and the waste toner bottle.
WASTE TONER BOX NOT ATTACHED	The waste toner bottle is not installed.	Install the waste toner bottle.

Service Messages

A service message sometimes occurs as a result of an unusual combination of events, not because of an actual problem. When the printer stops and a service message displays in the message window, turn the printer off and then back on. This often clears the service message indicator, and printer operation resumes. Always try this before making a service call.

Service calls should be placed to the vendor from whom you purchased the printer. If you cannot get service from your vendor, see the *Service & Support Guide* for a list of sources of service and support in the Americas. The most up-to-date worldwide information can be found at www.minolta-qms.com.

This service message...	means...	do this...
ERROR AIDC SENSOR	AIDC sensor error.	Contact Technical Support with the error information.
ERROR COMMUNICATION	A communication error occurred in the parallel, USB or Ethernet interface.	Check that the interface cable is properly connected to the printer. If the error continues to appear even though the cables are correctly connected, contact Technical Support.
ERROR CONTROLLER	Controller internal error.	Contact Technical Support with the error information.
ERROR DIMM	SDRAM DIMM error.	Contact Technical Support with the error information.
ERROR RAM	RAM writing/reading error.	Contact Technical Support with the error information.
ERROR ROM	ROM error.	

This service message...	means...	do this...
ILLEGAL ERROR DUPLEX	You do not have a duplex option installed	Install a duplex option.
	Incorrect paper size/ type is duplexed.	Duplex only supported media size/type.
FATAL ERROR CODE:XX	An error has been detected with the item indicated "XX" in the service message.	<p>Reboot the printer. This often clears the service message indicator, and printer operation can resume.</p> <p>If the problem persists, contact Technical Support. See the <i>Service & Support Guide</i> for a list of sources of service and support in the Americas. The most up-to-date worldwide information can be found at www.minolta-qms.com.</p>

Additional Assistance

If you've followed all of the instructions in this guide and still have problems you can't solve, check our Answer Base at www.minolta-qms.com/support for a solution.

See the *Service & Support Guide* for a list of sources of service and support in the Americas.

The most up-to-date worldwide information can be found at www.minolta-qms.com.

***Installing
Accessories***

9

Introduction

Attention

It's very important to protect the printer controller board and any associated daughterboard or module from electrostatic damage while performing any task involving the controller board.

Attention

Use of accessories not manufactured/supported by MINOLTA-QMS is not supported by your printer and will void your warranty.

This chapter provides information about the following accessories. Contact your local vendor or www.minolta-qms.com for compatibility and purchase information.

Dual In-Line Memory Modules (DIMMs)	128 or 256 MB PC-100- or PC-133-Compliant SDRAM DIMM, up to a maximum of 288 MB
Duplex Option	Automatic duplexing
Lower Feeder Unit	500-sheet media tray included

Check www.minolta-qms.com for availability of additional accessories.

BuzzBox	Parallel (US only)
Wireless Interface	Supported by external wireless communications adapter

Attention

Installing accessories always requires that the printer and accessories are turned off and unplugged during installation.

Antistatic Protection

Attention

It's very important to protect the printer controller board and any associated daughterboard or module from electrostatic damage while performing any task involving the controller board.

If an antistatic wrist strap is provided in your printer option kit, attach one end of it to your wrist and the other end to any convenient electrical ground (for example, the bare metal chassis of equipment, as on the back of a computer, that is plugged in but turned off). Never attach the wrist strap to any piece of equipment with an electrical current present. Turn off all power switches first. Plastic, rubber, wood, painted metal surfaces, and telephones are not acceptable grounding points. The printer isn't an acceptable grounding point either because it must be unplugged before you perform this task.

If you don't have an antistatic wrist strap, discharge your body's static electric charge by touching a grounded surface before you handle any printer boards or components and before removing the controller board. Also avoid walking around after grounding yourself.

Dual In-Line Memory Module (DIMM)

Dual in-line memory modules (or DIMMs) are compact circuit boards with surface-mount memory chips.

Your printer comes with 32 MB SDRAM printer memory on board. However, you can upgrade to a maximum of 288 MB of RAM through the installation of additional DIMM. Additional memory must be 128 or 256 MB, PC-100- or PC-133-Compliant SDRAM DIMM. Your printer comes with one free DIMM slot.



You may also need additional memory (DIMM) for larger than letter/A4 media, for complex graphics, and for duplex printing.

How Much Memory Do You Need?

The amount of RAM installed in your printer governs which resolutions can be used with each media size.

If a certain resolution is chosen and enough memory is not installed in the printer, the file is printed using the next lower resolution that can handle the job. For example, if you attempt to print a 4-color simplex high-coverage image at 1200 x 600 dpi resolution on legal media, but the printer has only 32 MB of RAM instead of the required 64 MB minimum, the file prints at 600 x 600 dpi.

Your printer will print all print jobs at the highest resolution that the installed memory will support.

Basic Functionality

The printer is capable of printing 4-color standard business documents (simplex and duplex) at 2400 x 600 dpi resolution with the base 32 MB on-board memory.

Improved Performance or High Coverage

The table below summarizes the amount of system memory (MB) required to achieve printing at levels of high coverage (such as full-page-size photographs).

In general, performance improves with increased memory size.

Print Type	600 x 600				1200 x 600				1200 x 600 Line Art				2400 x 600			
	Mono-chrome		4-Color		Mono-chrome		4-Color		Mono-chrome		4-Color		Mono-chrome		4-Color	
	S	D	S	D	S	D	S	D	S	D	S	D	S	D	S	D
Letter, A4	32	32	32	128	32	32	64	128	32	32	64	128	32	64	64	256
Legal	32	32	32	128	32	32	64	128	32	32	64	128	32	64	64	256
Notes	S = Simplex; D = Duplex															

Print Type	2400 x 600 Line Art			
	Mono-chrome		4-Color	
	S	D	S	D
Letter, A4	32	64	64	256
Legal	32	64	64	256
Notes				

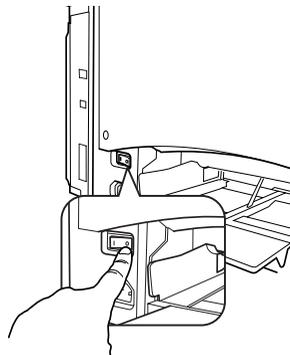
- Check the configuration page from the control panel (Special Pages/Print Config Page menu) to make sure the printer has enough RAM installed.

Installing a DIMM

Attention

It's very important to protect the printer controller board and any associated circuit boards from electrostatic damage. Before performing this procedure, review the antistatic caution on page 111. In addition, always handle circuit boards by the edges only.

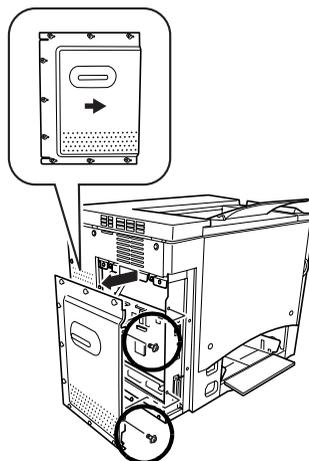
- 1 Turn off the printer and disconnect the power cord and interface cable.



- 2 Using a screwdriver, loosen the nine screws. (Do not remove them from the printer.)
- 3 Remove two screws shown in the illustration. Slide the panel slightly to the right and lift it off the printer.

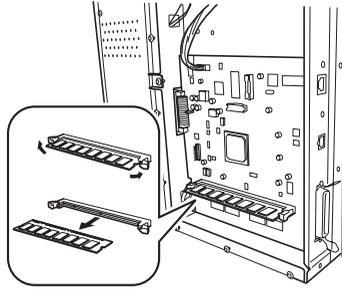


If you want to install more memory, you have to exchange the DIMM for DIMM with a larger memory capacity.



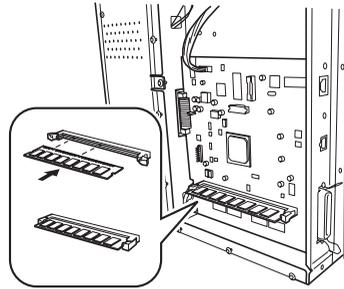
4 Next, remove a DIMM that's installed in your printer.

- a** Using both thumbs, pull the latches (one on each side of the DIMM connector) outward.
- b** Lift the DIMM straight out of the DIMM connector.



5 Insert the new DIMM straight down into the DIMM connector until the latches snap into the locked position.

Observe the keyed side of the DIMM to align it with the connector. If you cannot snap the DIMM into place, do not force it. Reposition it, making sure that the bottom of the DIMM is seated completely in the connector. When seated, the DIMM stands upright, firmly in place.



6 Reinstall the left side panel using the two screws to secure it in place.

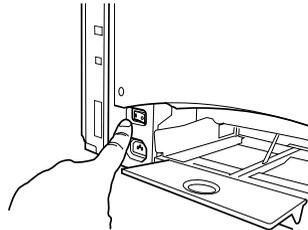
7 Align the panel and tighten the nine screws.

8 Reconnect all interface cables.

9 Reconnect the power cord, and turn on the printer.



In compliance with UL guidelines, "The appliance inlet is considered to be the main disconnect device."



- 10 Print a configuration page (Menu/Special Pages/Print Config Page menu) from the printer controller and verify that the total size of the RAM installed in your printer is listed.

```
Configuration Page
MINOLTA-QMS magicolor 2300 DL

Consumables Usage      Max Life      Remaining
Black Toner:           4500          94%
Cyan Toner:            4500          96%
Magenta Toner:         4500          94%
Yellow Toner:          4500          96%
Drum Unit:             45000         96%

Counter
Total Faces Printed:  2211

Options
Tray 2:               Not installed
Duplex Unit:          Not installed

Memory
On Board Memory:     32 MBytes ←
DIMM:                0 MBytes

Firmware Version
Controller:           02.15S
Engine:               4131.50F1.5051

Network Settings
DHCP:                 Off
BOOTP:                Off
HTTP:                 On
SNMP:                 On
IP Address:           161.33.131.107
Subnet Mask:          0.0.0
Gateway Address:      161.33.128.2
Hardware Address:     00:20:6B:70:00:09

Engine Settings
Panel Language:       English
Energy Saver:         15 minutes
Auto Continue:        On

1/0/0/0/0/0/0/0/0/3/0/0
```

Duplex Option

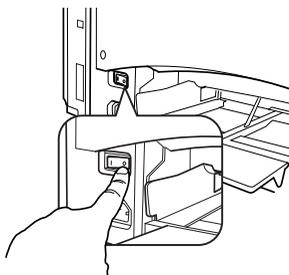
Duplex (2-sided) printing can be done automatically with a duplex option and enough memory installed. See “Duplexing” on page 24.

Kit Contents

- Duplex option
- Two thumbscrews

Installing the Duplex Option

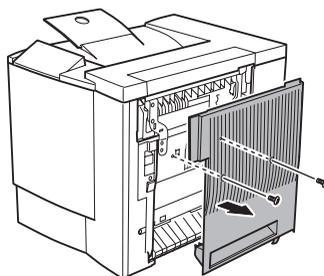
- 1 Turn off the printer, and unplug the power cord and interface cable.



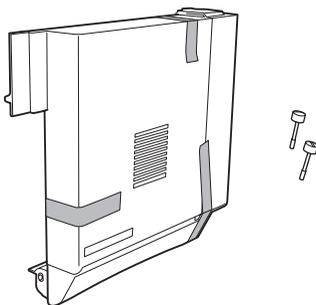
- 2 Remove the cover from the right side of the printer. Use a Phillips screwdriver to remove the two screws securing the right cover.



Keep the removed cover and screws in a safe place for future use.



- 3 Remove the duplex option from the shipping carton.



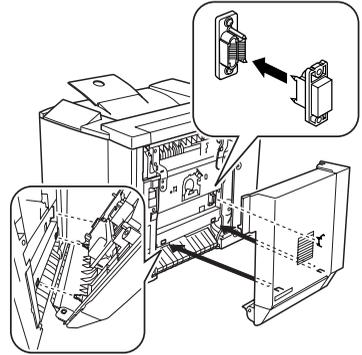
- 4 Remove any tape from the duplex unit.



*We **strongly** suggest that you save the packing materials in case you ever need to move or ship the printer.*

5 Attach the duplex option to the printer.

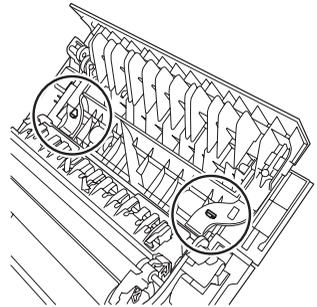
- a Hook the two tabs at the bottom of the duplex option onto the notches on the right side of the printer.



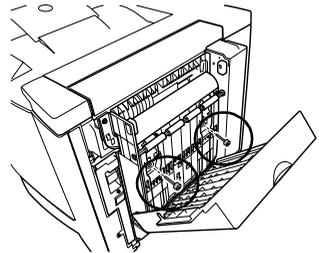
- b Push the duplex option toward the printer until it clicks on the top.
- c While still supporting the duplex unit, carefully open the right-side door, and then check that the tabs on the duplex unit are correctly hooked onto the printer.

Attention

If the duplex option is released before it is secured with the screws, it may fall and break. Be sure to keep the duplex option supported until the screws are tightened.



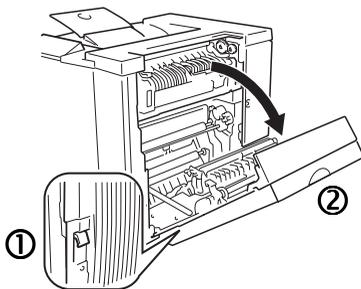
- d Open the duplex option's cover and tighten the two thumbscrews on the duplex option to secure the unit to the printer.



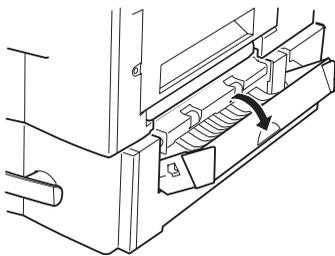
- e Close the duplex option's cover.

6 Attach the support wire for the duplex option to the printer.

- a** Pull the right-side door release lever, and open the right-side door.



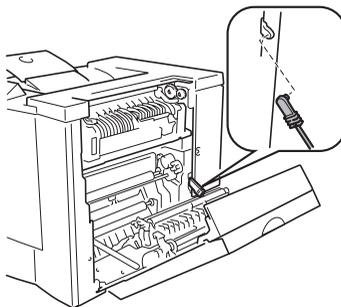
If you have lower feeder unit attached, you first need to open the lower right-side door.



- b** Pull the tab for the support wire on the right side of the duplex option, and then hook the wire onto the hook of the printer.

- c** Close the right-side door(s).

7 Reconnect interface cable.



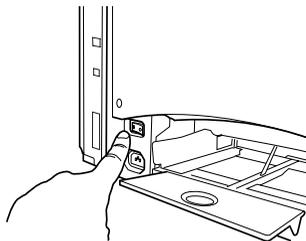
8 Reconnect the power cord, and turn on the printer.



In compliance with UL guidelines, "The appliance inlet is considered to be the main disconnect device."

9 Check the configuration page from the control panel (Special Pages/Print Config Page menu) to verify the duplex option installation.

10 Configure your driver for the new duplex option (see Chapter 4).

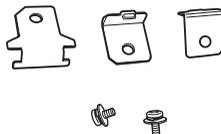
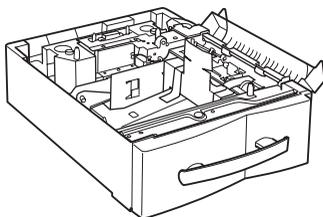


Optional Lower Feeder Unit and Tray 2

The optional lower feeder unit under the printer increases your printer's media feed capacity by 500 letter/A4 sheets through Tray 2.

Kit Contents

- Lower feeder unit with a media tray (500-sheet capacity)
- Three metal brackets
 - Two front brackets
 - One rear bracket
- Two securing screws

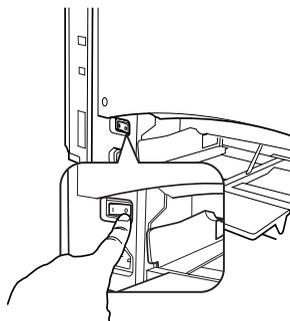


Installing the Lower Feeder Unit

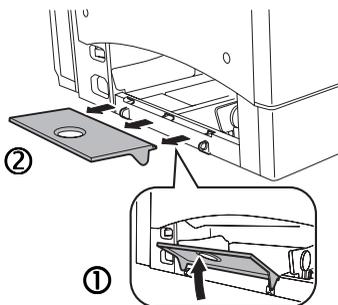
Attention

Since consumables are installed in the printer, be sure to keep the printer level when moving it in order to prevent accidental spills.

- 1 Turn off the printer, and unplug the power cord and interface cable.



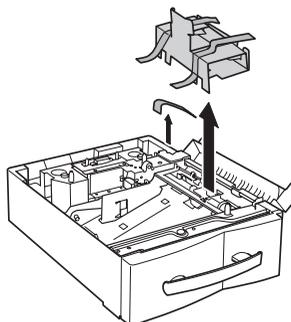
- 2** Remove the media support from Tray 1.
Lift the support slightly and snap it gently out of the printer.



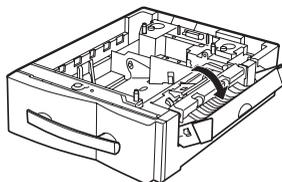
- 3** Remove the lower feeder unit from the shipping carton, and place it on a table or flat surface near the printer.
- 4** Remove any tape and packing material from the lower feeder unit.



We strongly suggest that you save the packing materials in case you ever need to move or ship the printer.



- 5** Open the right door of the lower feeder unit.



Attention

Be sure that the right door of the lower feeder unit is open when the lower feeder unit is attached to the printer; otherwise, the printer may fall off or the lower feeder unit may be damaged.

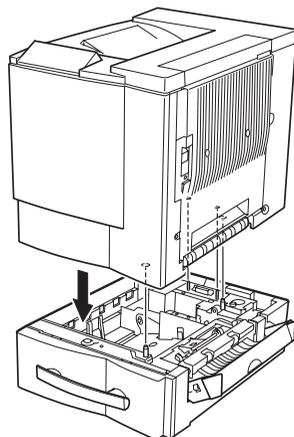
- 6** With another person's help, place the printer onto the lower feeder unit.

WARNING!

Your printer weighs approximately 62 lbs (28 kg) fully assembled. Be sure to have help when lifting and moving it.

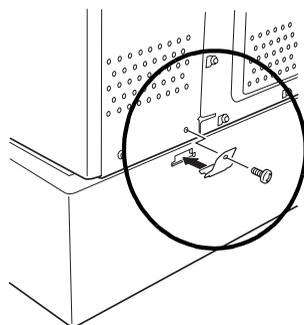
- 7** Align the positioning pins on the lower feeder unit with the holes in the bottom of the printer to stack them correctly.

If the left and back sides of the printer and the lower feeder unit are aligned, the positioning pins will correctly fit into place



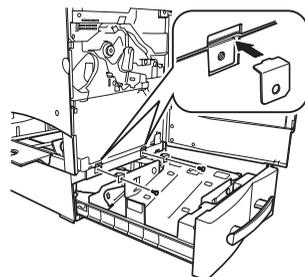
- 8** Attach the rear bracket.

- a** Remove the screw on the back of the printer.
- b** Hook the tabs on the bracket into the mounting holes in the lower feeder unit, and then align the screw hole in the bracket with the screw hole in the printer.
- c** Using a screwdriver, tighten the screw to secure the bracket.



- 9** Attach the front brackets.

- a** Pull open the front door of the printer, and then pull out the lower tray.
- b** Hook the tab on the two brackets into the mounting holes in the printer, and then align the screw holes in the brackets with the screw holes in the lower feeder unit.
- c** Using a screwdriver, tighten the screws enclosed with the lower feeder unit to secure the brackets.

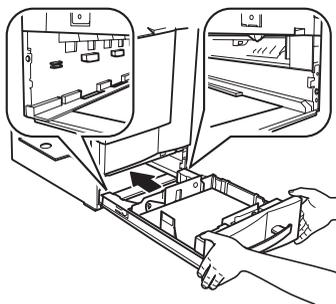


- 10 Close the right-side doors.

Attention

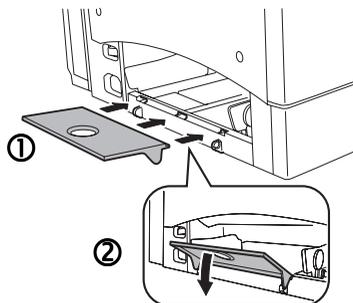
If the lower feeder unit is installed, the right-side door of the printer opens at the same time that the right door of the lower feeder unit is opened. Be sure to close the right door of the lower feeder unit when closing the right-side door of the printer.

- 11 Slide the tray back into the printer.



- 12 Reattach the media support.

- 13 Reconnect interface cable.



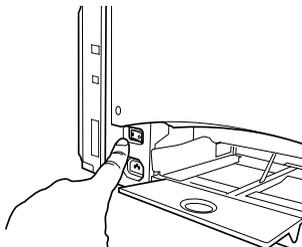
- 14 Reconnect the power cord, and turn on the printer.



In compliance with UL guidelines, "The appliance inlet is considered to be the main disconnect device."

- 15 Check the configuration page from the control panel (Special Pages/ Print Config Page menu) to verify the lower feeder unit installation.

- 16 Configure your driver for the new lower feeder unit (see Chapter 4).



*Repacking the
Printer*

10

Attention

Failure to follow these instructions could result in voiding your warranty.

Storing the Printer

Unplug the printer when storing it for an extended period. Protect it from extremes in temperature and humidity, and from dust.

Relocating Your Printer

Occasionally, you may have to move your printer to a different location, either nearby or to a distant location. To avoid damage to your printer, we advise you to follow the next instructions very carefully.

- 1 Turn off your printer.
- 2 Remove the power cord and all interface cables.
- 3 If you are moving to a distant location, follow the instructions for repacking the printer (see page 125).
- 4 Relocate the printer.

Attention

Your printer weighs approximately 62 lbs (28 kg). Be sure to have help when lifting and moving it.

- 5 Unpack and set up the printer in its new location.
Use the unpacking and setup instructions in the Installation Guide.
- 6 Reconnect the power cord and all interface cables.



*We **strongly** suggest that you save the packaging materials in case you ever need to move or ship the printer, and that you order the MINOLTA-QMS 2300 Series Repacking Kit 2600733-100.*

You can also refer to the *Service & Support Guide* for sources of service and support in many areas of the world. The most up-to-date worldwide information can be found at www.minolta-qms.com.

Repacking the Printer

Attention

Failure to follow these instructions could result in voiding your warranty.

If you need to relocate or ship your printer after it's been installed, follow the procedures in this chapter to prevent damage to the printer and to keep your warranty valid.

Attention

MINOLTA-QMS cannot be held responsible for damage to your printer during shipment that results from the improper packaging of your printer.

You must use the instructions given in this section before repacking the printer in its original shipping carton with the original packing materials. If you do not have your original packaging, you must order a MINOLTA-QMS 2300 DL Replacement Packaging Kit 260723-100.

If you're relocating or returning the printer, you must also request a MINOLTA-QMS 2300 Series Repacking Kit 2600733-100.

These supplies must be replaced prior to shipping the printer. If you need replacement packaging, in the Americas, call MINOLTA-QMS Spares at (251) 633-4300 extension 2530 and request the kit(s) above. For locations outside the Americas, refer to www.minolta-qms.com.

If you have been instructed to return the printer to MINOLTA-QMS by a customer support representative in the Americas, be sure to write the RMA (Return Merchandise Authorization) number you received on the outside of the carton and on the outside of the consumables box before shipping the printer. If the RMA number is not *prominently* visible on the outside of the return inventory, we will not accept receipt.

You can also have a MINOLTA-QMS authorized service provider uninstall and repack your printer. For prices and availability, call 1 (877) 778-2657 in the Americas or see www.minolta-qms.com worldwide.

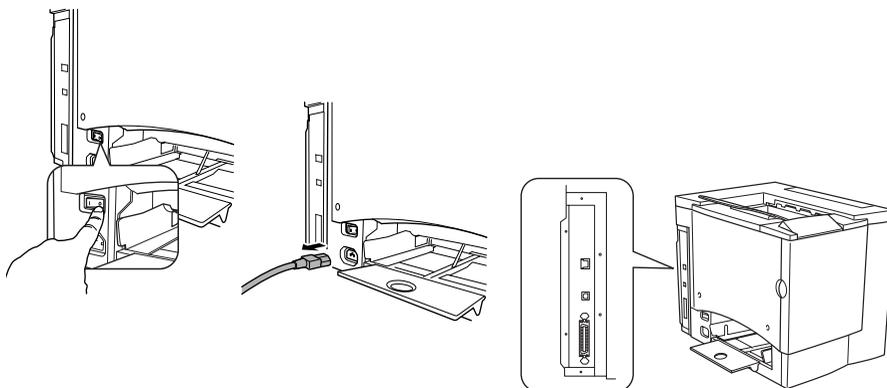
What's Involved?

Repacking your printer for shipment involves the following steps. Each is described in more detail in the following sections.

Obtain Proper Packaging:	
Original packaging or replacement packaging (MINOLTA-QMS 2300 DL Replacement Packaging Kit 2600723-100)	page 125
Repacking kit (MINOLTA-QMS 2300 Series Repacking Kit 2600733-100)	

Prepare the Printer for Shipment:	
A. Turn off the printer, unplug the power cord, and remove the interface cables.	page 126
B. Remove the media and the tray 1 media support.	page 127
C. Remove the duplex option and lower feeder unit, if attached, and repack them separately.	page 127
D. Remove the waste toner bottle, plug the openings, and dispose of it according to your local regulations.	page 130
E. Remove the OPC drum cartridge and repack it.	page 130
F. Remove the transfer belt and repack it.	page 132
G. Repack the printer for shipment.	page 133
H. Repack the OPC drum cartridge and transfer belt for shipment.	page 134

A. Turn off the Printer, Unplug the Power Cord, and Remove the Interface Cables

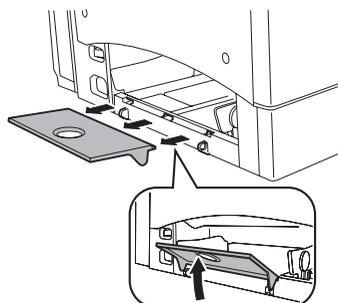


B. Remove the Media and the Tray 1 Media Support

- 1 Remove the media.

Place it in its original packaging and store in a cool, dark place on a level surface. Avoid moisture, excess humidity, direct sunlight, excess heat (above 95° F/35° C), and dust.

- 2 Lift the media support from the three holes in Tray 1 and remove the media support.



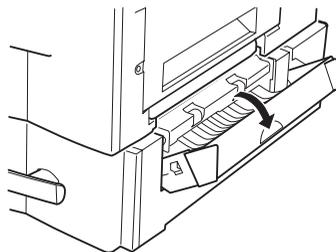
C. Remove the Options (if Attached)

Duplex Option

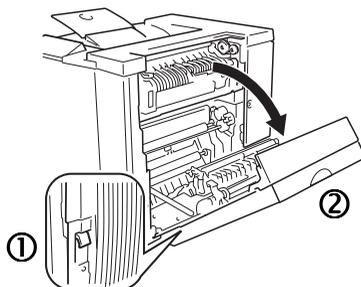


If you don't have a duplex option installed, skip to the next section.

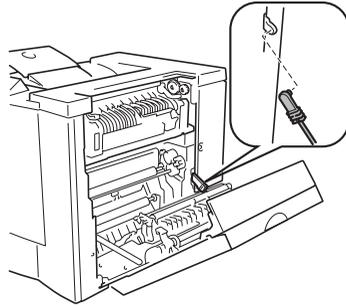
- 1 If you have a lower feeder unit attached, you first need to open the lower right-side door.



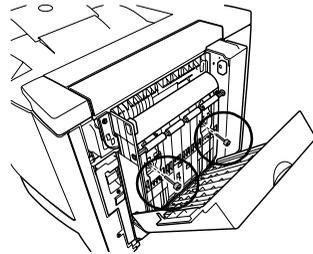
- 2 Pull the right-side door release lever, and open the right-side door.



- 3 Unhook the support wire.
- 4 Close the right-side door.



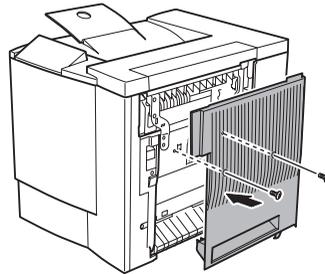
- 5 Open the duplex option's cover and loosen the two thumbscrews until the duplex option moves freely away from the right side of the printer.
- 6 Lift duplex option up and away from the printer.



- 7 Install the original right-side cover that came with the printer with two screws.
- 8 Repack the duplex option in its original shipping carton for storage or shipment.



If you're returning the printer for service, you don't need to return the duplex option, unless the problem is with the duplex option.



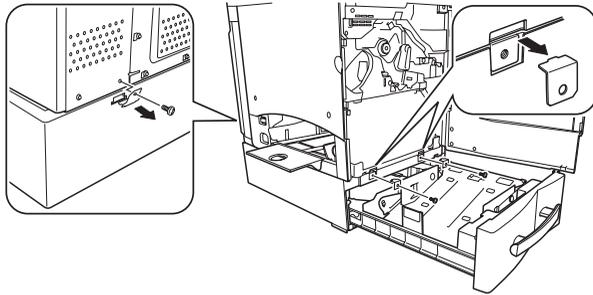
Lower Feeder Unit



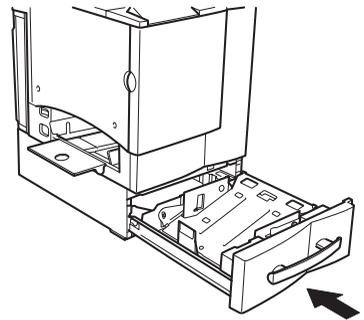
If you don't have a lower feeder unit installed, skip to the next section.

- 1 Slide tray 2 out of the printer and remove the media.

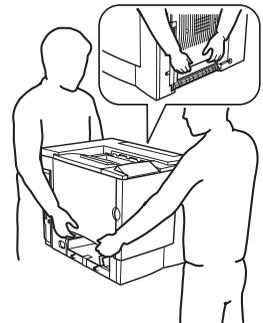
- 2 Remove the brackets (two at the front and one at the back) used to attach the lower feeder unit to the printer.



- 3 Slide the tray back into the printer.



- 4 With the help of another person, lift the printer by its carrying grips, and place it on a flat surface.



WARNING!

Your printer weighs approximately 62 lbs (28 kg). Be sure to have help when lifting and moving it.

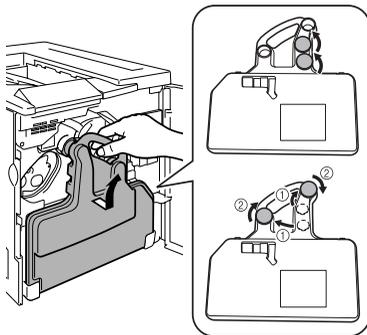
- 5 Repack the lower feeder unit in its original shipping carton for storage or shipment.



If you're returning the printer for service, you don't need to return the lower feeder unit unless instructed to do so.

D. Remove the Waste Toner Bottle, Plug the Openings, and Dispose of It According to Your Local Regulations

- 1 Open the printer's front door, grasp the waste toner bottle's handle, and pull the waste toner bottle outward and upward.
- 2 Carefully remove the waste toner bottle.
Keep the waste toner bottle upright while the openings are not covered, so the toner does not spill.
- 3 Place the removed waste toner bottle, with the openings facing up, on a stable surface (not the printer).
- 4 Remove the two caps by turning them ① counterclockwise.
- 5 Secure the two caps onto the two openings by turning them ② clockwise.
- 6 Dispose of the used waste toner bottle.



WARNING!

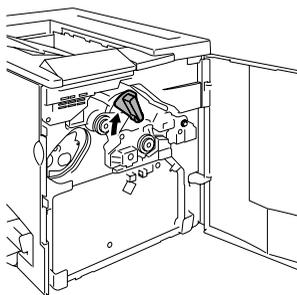
Dispose of the used waste toner bottle properly according to your local regulations (do not dispose of it by burning).

E. Remove the OPC Drum Cartridge

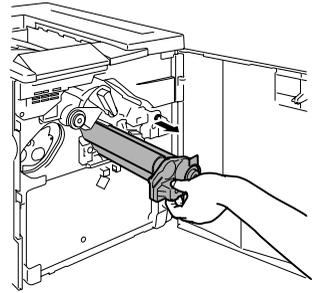
- 1 Rotate the transfer belt release lever clockwise to the top (11 o'clock) position.



This releases the pressure on the transfer belt unit.



- 2 Grasp the release lever on the OPC drum cartridge, and then pull the cartridge straight out about 6 inches (152 mm).



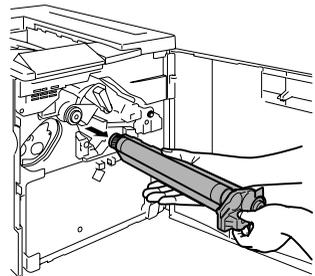
⚠ Attention

The OPC drum is extremely sensitive to bright light and direct sunlight. Any exposure to light should be avoided, or permanent damage could result.

Any damage resulting from mishandling of the OPC drum will void the warranty of the OPC drum.

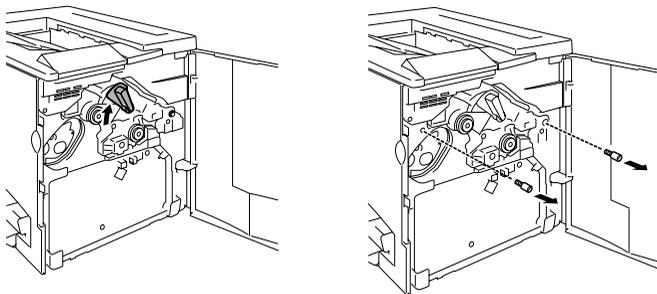
Also, handle the cartridge carefully by its sides so you don't touch the surface (the green part) of the drum. The drum is also extremely sensitive to hand oils and scratches, both of which reduce print quality.

- 3 Support the bottom of the drum with your hand, then carefully pull the cartridge toward you and remove it.
- 4 Place the OPC drum cartridge in the protective bag supplied in the repacking kit (*MINOLTA-QMS 2300 Series Repacking Kit 2600733-100*).

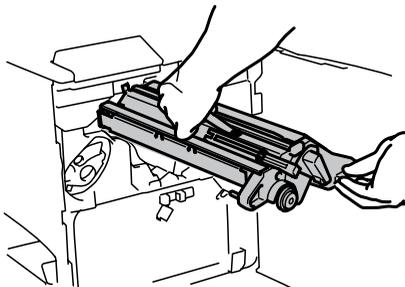


F. Remove the Transfer Belt

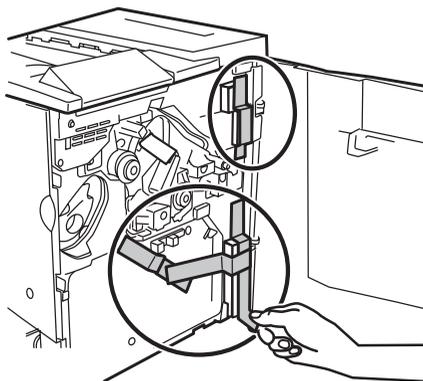
- 1 With the front door open and transfer belt release lever at its top (11 o'clock) position, unscrew the two thumbscrews.



- 2 Grasp the transfer belt and pull it straight out.
- 3 Place the transfer belt and thumbscrews in the protective bag supplied in the repacking kit (*MINOLTA-QMS 2300 Series Repacking Kit 2600733-100*).



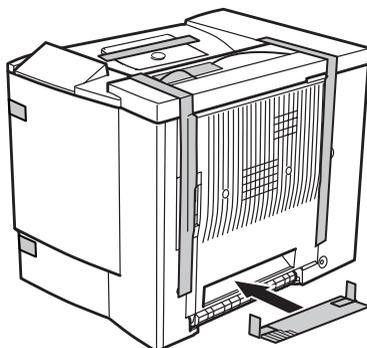
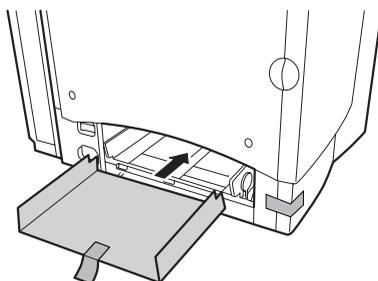
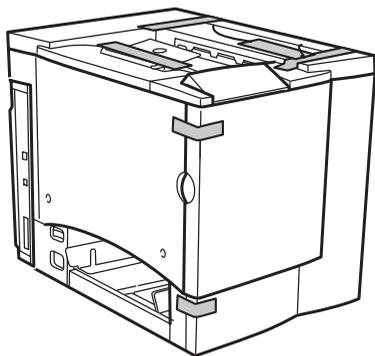
- 4 Replace the packaging and tape, then close the front door.



G. Repack the Printer for Shipment

Use your own original packaging or order MINOLTA-QMS 2300 DL Replacement Packaging Kit 2600723-100.

- 1 Replace the tape and packaging.



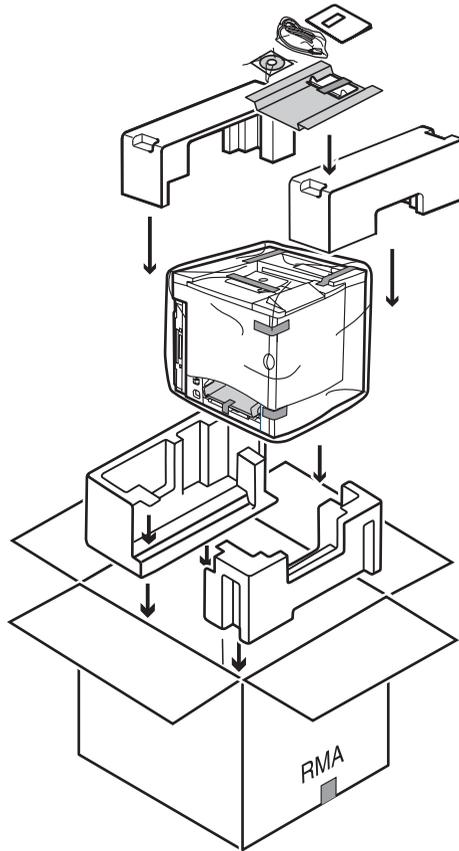
- 2 Place the lower cushions into the shipping carton.
- 3 Place the printer's plastic bag over the printer.
- 4 Pack the printer for shipment as shown.
- 5 If you're also shipping the power cord and any manuals with the printer, place them in the shipping carton.



Don't ship these items if you're returning the printer for service.

- 6 Securely tape the top flaps of the shipping carton closed.
- 7 Ship the printer.

If you return the printer for service in the Americas, be sure to write the RMA (Return Merchandise Authorization) number you received from your customer support representative on the outside of the carton before shipping the printer.



H. Repack the OPC Drum and Transfer Belt Unit for Shipment

- 1 Order the MINOLTA-QMS 2300 Series Repacking Kit 2600733-100.

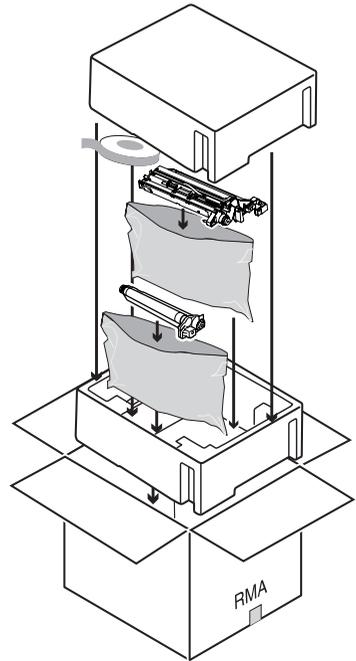
- 2 Place the OPC drum and transfer belt unit (in their protective bags) in the appropriate position in the box supplied in the repacking kit.



Also pack the supplied roll of tape in this box.

If you return the printer for service in the Americas, be sure to also write the RMA (Return Merchandise Authorization) number you received from your customer support representative on the outside of the box before shipping the consumables.

- 3 Securely tape the top flaps of the box closed.



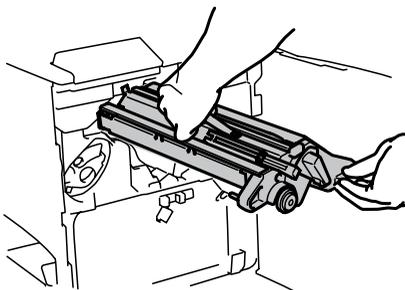
Reinstalling the Printer

If you are shipping the printer to another location, follow steps A–I below to reinstall the printer once received.

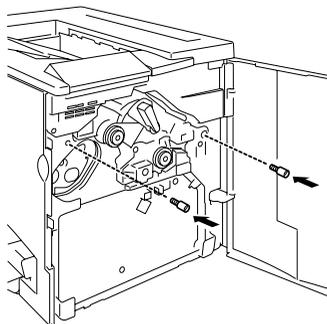
A. Unpack the printer carton.	Refer to the <i>magicolor 2300 DL Installation and User's Guides</i> .
B. Rotate the transfer belt release lever and reinstall the transfer belt unit.	See "Reinstalling a Transfer Belt Unit" on page 136.
C. Install the OPC and return the transfer belt release lever to its correct position (7 o'clock).*	Refer to the <i>magicolor 2300 DL Installation and User's Guides</i> .
D. Install a new waste toner bottle.	*The printer must complete a 150-second calibration cycle after a consumable has been replaced. If you open the door before the message window reads <i>IDLE / MAGICOLOR 2300DL</i> , the printer stops and repeats the calibration cycle
E. Replace the toner cartridges.*	
F. Install the tray 1 media support and load the media.	
G. Reconnect the power cord and cables.	
H. Install the options.	
I. Turn the printer on.	

Reinstalling a Transfer Belt Unit

- 1 With the front door open, remove the transfer belt unit from its protective bag and reinsert it.

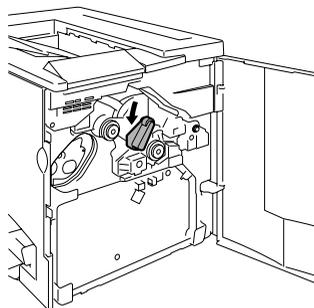


- 2 Replace the two thumbscrews.



- 3 Rotate the transfer belt release lever counterclockwise to its correct (7:00 o'clock) position.

- 4 Close the front door.



***Technical
Specifications***

A

Requirements

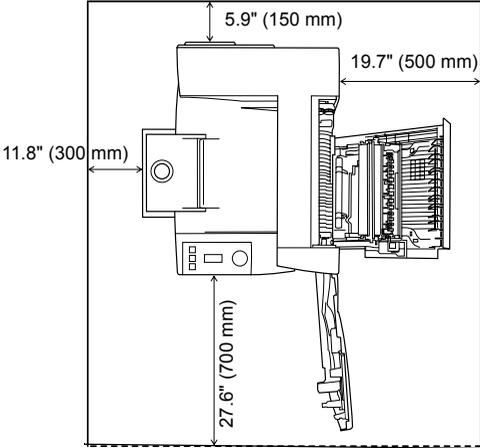
Space Requirements

The illustration below shows the amount of space required for operating the printer, replacing supplies, and removing media jams.

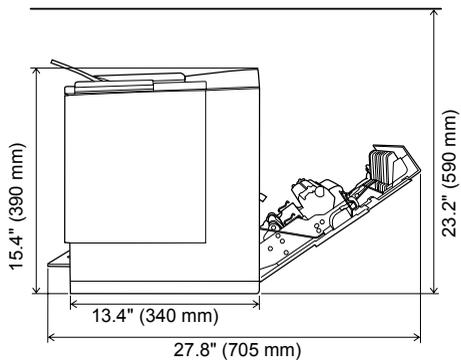


Allow enough space around the printer to allow adequate ventilation and easy servicing. For best output quality and longest consumables life, install the printer on a hard, flat, level (within $\pm 1^\circ$ slant) surface.

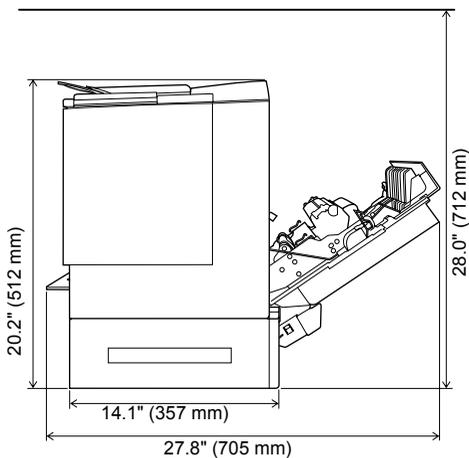
Top View



Side View



Printer with Accessories Side View



If you have added the optional lower feeder unit, the printer's height will increase by approximately 5" (125.5 mm).

Location Requirements

- On a surface capable of supporting the printer, accessories, consumables, and media.

Component	Weight
Printer	55 lbs (25 kg)
Consumables (such as toner cartridge, OPC drum cartridge)	6.2 lbs (2.8 kg) (total)
Media	5.2 lbs (1.9 kg) per ream of 20 lb bond (75 g/m ²) paper
Lower feeder unit (with tray 2)	11.24 lbs (5.1 kg)
Duplex option	3.97 lbs (1.8 kg)

With these characteristics...	But away from...
On a hard, flat, stable, level ($\pm 1^\circ$ or less slant at any point around the machine).	Direct sunlight. Heating and cooling sources, extreme temperature or humidity changes, wind, and dust. Open flames or items that can easily burn.
Close to an easily accessible grounded power supply (on an exclusively dedicated power outlet) that meets printer specifications. Near your computer. At the length 6.5' (2 m) or less for an IEEE 1284 bidirectional parallel connection.	A connection to the same electrical circuit as high-current machines. Noise-generating equipment, such as a copier or air conditioner, and strong magnetic or electromagnetic fields, such as a refrigerator.
With enough space to allow adequate ventilation and easy servicing.	Water, water pipes, liquid (drink) containers, and corrosive chemicals or vapors, such as ammonia.
With an ambient temperature range of 50°–95° F (10°–35° C) and temperature gradient of 50 F° (10° C) per hour or less.	Small, loose metal parts, such as paper clips and staples.
With relative humidity range of 15%–85% (noncondensing) and humidity gradient of 20% per hour or less.	Excessive vibration.
At an altitude of 0–8,202' (0–2,500m).	



A surface can be tested for levelness with a standard round pencil. If the pencil rolls, the surface is not level. Clear the area of any obstruction or items such as cables that might prevent the printer from sitting directly on the flat, level surface.

WARNING!

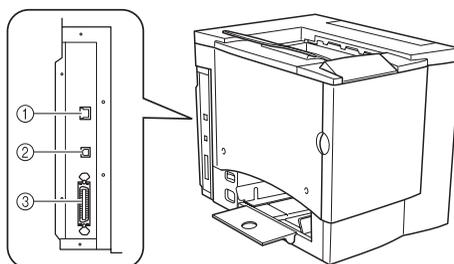
Obstructing the ventilation grilles could present a fire hazard.

- Do not tilt the printer more than 1° when moving it.
- If the printer is located in a cold room that is rapidly heated, or if the printer is moved from a cold place to a warm, humid place, condensation may occur within the printer, degrading print quality. If this occurs, allow the printer to adapt to the environment for about one hour before use.
- If using a humidifier or water vaporizer in the room with the printer, use only purified or distilled water. Impurities in the water may be released into the air, where they can accumulate inside the printer and cause degraded printer output.

⚠ Attention

For products installed outside North America, do not connect the groundwire to gas or water pipes or grounding for telephones.

Interface Panel



① Ethernet Port

Use a twisted-pair (RJ45) Ethernet cable when connecting the Ethernet port on the printer to a 10BaseT/100BaseTX network connection.

② USB (version 1.1) Port

Use a USB cable (Type B) when connecting the USB port on the printer to the USB port on your computer.

③ Parallel Port

Use a Centronics IEEE 1284 bidirectional parallel cable when connecting the parallel port on the printer to the parallel port on your computer.

Power Requirements

WARNING!

Connect the power plug to an outlet with the same rated voltage as the printer. No other devices should be connected to this outlet, as overheating could cause fire or electric shock. The printer draws 13 A at 100 V, 11 A at 120 V, or 7 A at 220–240 V. Your printer requires a properly grounded AC outlet. The grounding terminal on the power cable should be connected to a good earth ground to prevent electric shock and fire.



In compliance with UL guidelines, “The appliance inlet is considered to be the main disconnect device.”

Input Power	Japan	100 VAC; 50/60 Hz \pm 3%
	North America	120 VAC; 50/60 Hz \pm 3%
	Europe	220–240 VAC; 50/60 Hz \pm 3%
	Latin America	115/120 VAC; 50/60 Hz \pm 3% 220–240 VAC; 50/60 Hz \pm 3%
	Notes: Amperage capacity is at least 1.2 times that used by the printer.	
Voltage Fluctuation Rate and Rated Line Voltage	Japan	100 VAC \pm 10%
	North America	120 VAC \pm 10%
	Europe	220–240 VAC \pm 10%
	Latin America	120 VAC \pm 10% 220–240 VAC \pm 10%
	Notes: 10% of the rated line voltage for proper operation.	
Frequency Variation Rate	Within 50–60 \pm 3 Hz	
Maximum Electrical Current	Required during operation is 8 amps for a 100 V or a 120 V system and 4 amps for a 220–240 V system.	
Noise-generating Equipment	Should not be connected to the same electrical outlet as the printer.	
Grounding	Your printer requires a properly grounded AC outlet.	

ENERGY STAR Compliance

The magicolor 2300 DL basic configuration is compliant with US Environmental Protection Agency (EPA) ENERGY STAR regulations. After a user- configurable period of inactivity, the printer changes to a low-power state (the engine remains on, but the fuser turns off). When a print job is received, the printer returns to normal power.



Engine and Controller Specifications

Engine

Engine		Minolta NC-L6001
Duty cycle	Simplex letter/A4 pages per month	1,000 average prints and up to 35,000 maximum prints per month*
Notes	The duty cycle is affected by the media type and percent coverage. *Continued usage at this rate will reduce the life of the printer.	

Print Speed—Simplex

The following table defines the maximum print speed in pages per minute (ppm).

Page size	Monochrome ppm	4-color ppm
Letter/A4 or smaller	16	4
Legal/Folio	8	2.02
Transparency Film (Letter/A4)	2.5	1.6
Label/Thick (Letter/A4)	3.3	2.0

Print Speed—Autoduplex

The following table defines the maximum print speed in pages per minute (ppm).

Page size	Monochrome ppm	4-color ppm
A4	10	4
Legal	3.24	1
Letter	10	4

General

Printer type	Desktop, non-impact, color printer
Print method	<p>Scanner: Semiconductor laser with rotating mirror</p> <p>Recorder: Black writing electrophotographic</p> <p>Process: Cyan, magenta, yellow, and black toner image transfer to print media</p> <p>Fuser: Heated rollers</p>
Native resolution	600 x 600
Available resolution	1200 x 600, 2400 x 600 dpi
Toner	<p>Type: Dry, single component</p> <p>Packaging: User-replaceable toner cartridges</p>
Warm-up time	Maximum: 100 V/120 V/220 to 240 V: 180 seconds or less
Input sources	<p>Standard: 200-sheet multipurpose tray</p> <p>Optional: 500-sheet media feed unit</p>
Output	200-sheet (Letter/A4) output tray on top of printer
Media sizes and weights	See “Using Media” on page 9.
Media type	Cut-sheet
Notes	The maximum media weight supported for duplex printing is 24 lb bond (90 g/m ²).

Controller

CPU	Power PC 405 Core (200 MHz)
Resident emulations	<p>Zj stream</p> <p>ASCII printing—simple text data with several control commands</p>
Fonts	1 fixed pitch, fixed size font for the configuration printing and the banner printing of Windows server.
Standard interfaces	<p>Ethernet—10BaseT/100BaseTX</p> <p>Parallel—Centronics/IEEE 1284 bidirectional</p> <p>USB—USB (version 1.1) Type B connector</p>

RAM	Type: PC-100- or PC-133-Compliant SDRAM DIMMs Base system RAM: 32 MB Total RAM: Upgradable to 288 MB
Optional RAM	128 and 256 MB DIMMs <i>For information about DIMMs recommended for your printer, see the magicolor 2300 DL Answer Base through the Internet at www.minolta-qms.com/support/, or contact Technical Support. See the Service & Support Guide for a list of sources of service and support in the Americas. The most up-to-date worldwide information can be found at www.minolta-qms.com.</i>

Electrical

Voltage and Power

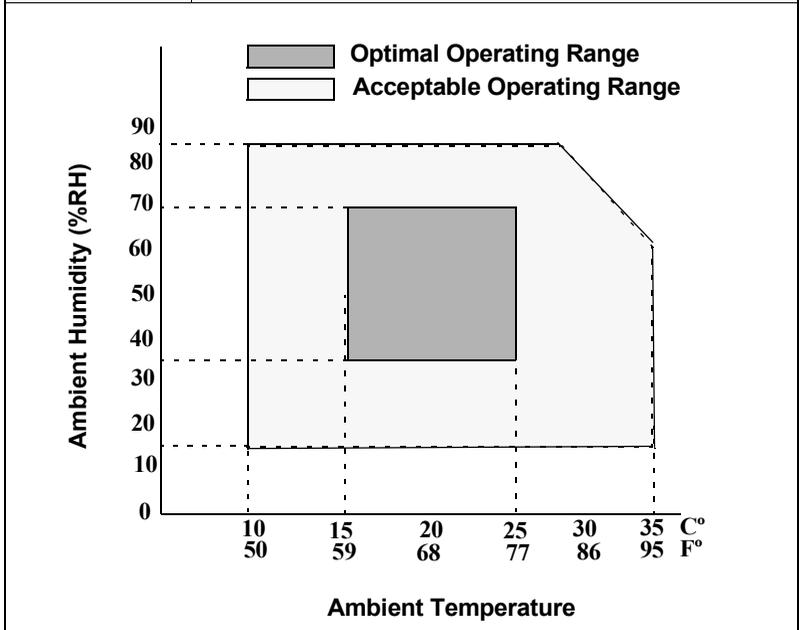
Voltage and frequency	Japan: 100 volts $\pm 10\%$ at 50/60 Hz ± 3 Hz US: 120 volts $\pm 10\%$ at 50/60 Hz ± 3 Hz International: 220–240 volts $+10/-15\%$ at 50 Hz ± 3 Hz		
Phase	Single		
Power consumption	Mode	Average	Maximum
	Black monochrome printing	600 W or less	1100 W or less
	Color printing	450 W or less	
	Standby	250 W or less	
Power saver	30 W or less		
Certification	ENERGY STAR compliant		

Current

Mode	Average
Operation (100 V)	13.0 A or less
Operation (120 V)	11.0 A or less
Operation (220–240 V)	7.0 A or less
Rush Current	50 A or less (0-Peak)

Environmental

Acoustic noise data	Printing: Less than 54 dB (A) Standby: Less than 39 dB (A)
Noise Declaration for Germany	Maschinenlärminformationsverordnung 3. FSGV, 18.01.1991: Der höchste Schalldruckpegel beträgt 70 dB (A) oder weniger gemäß EN 27779.
Relative humidity	Operating: 15–85% RH (noncondensing) Transportation/Storage: 30–85% RH (noncondensing) Humidity Gradient: 20% per hour or less
Temperature range	Operating: 50–95° F (10–35° C) Transportation/Storage: 32–95° F (0–35° C) Temperature Gradient: 50° F (10° C) per hour or less
Altitude	Operating: 0–8,202' (0–2,500 m) Limit of Low Pressure: 74.1 kPa Transportation/Storage: Air pressure: 74.0–101.3 kPa
Inclination	Operating: ±1° or less slant at any point around the machine



Hazardous Chemical Substance Reporting

Material Safety Data Sheets (MSDS)	Title 29 CFR Ch. XVII, Part 1920.1200
EINECS/ELINCS (EU)	

Physical

	Main Body	Main Body with Lower Feeder Unit	Main Body with Lower Feeder Unit and Duplex Option
Dimensions	W: 14.02 in. (356 mm) H: 15.43 in. (392 mm) D: 19.69 in. (500 mm)	W: 14.17 in. (360 mm) H: 20.20 in. (513 mm) D: 19.69 in. (500 mm)	W: 15.98 in. (406 mm) H: 20.20 in. (513 mm) D: 19.69 in. (500 mm)

Weight	Main Body (including consumables, excluding media)	62 lbs (28 kg)
	Lower feeder unit Duplex option	11.24 lbs (5.1 kg) 3.97 lbs (1.8 kg)

Consumable Life Expectancies

The stated life expectancy of each consumable is based on printing under specific operating conditions, such as media type, page size, content of material printed, and page coverage (usually 5% coverage of letter/A4-size media). The actual life expectancy will vary (or be reduced) depending on these and other printing variables, including continuous (optimal consumable life) or intermittent (for example, one-page jobs) printing, ambient temperature, and humidity.

Use of consumables not manufactured by MINOLTA-QMS or use of nonsupported print media may cause damage to your printer and will void your warranty. If MINOLTA-QMS printer failure or damage is found to be directly attributable to the use of non-MINOLTA-QMS consumables and/or accessories, MINOLTA-QMS will not repair the printer free of charge. In this case, standard time and material charges will be applied to service your printer for that particular failure or damage.

Plain Paper

Consumables	This item needs replacing after...
OPC Drum Cartridge	Up to 45,000 continuous monochrome or 11,250 continuous four-color pages, or 10,000 intermittent (one-page jobs) monochrome or 7,500 intermittent color pages.
Toner Cartridge	Standard capacity: Approximately 1,500 single-sided pages per cartridge—yellow, magenta, cyan at 5% coverage of each color.
	High capacity: Approximately 4,500 single-sided pages per cartridge—black, yellow, magenta, cyan at 5% coverage of each color.
Waste Toner Bottle	Approximately 25,000 continuous monochrome or 21,600 intermittent (one-page jobs) monochrome, or 6,250 continuous or intermittent color pages (based on the standard mode with 5% toner coverage of letter/A4 media).

Special Media

Consumables	This item needs replacing by user after...
OPC Drum Cartridge	Up to 15,000 continuous monochrome or 7,500 continuous color pages, or 5,000 intermittent (one-page jobs) monochrome or 4,100 intermittent color pages.

Toner Cartridge (pages per cartridge at 5% coverage of each color)	Standard capacity (black): Approximately 1,500 continuous single-sided pages or 1,000 intermittent single-sided pages (if monochrome black printing only).
	Standard capacity (yellow, magenta, cyan): Approximately 1,500 continuous or intermittent single-sided pages.
	High capacity (black): Approximately 4,500 continuous single-sided pages or 3,200 intermittent single-sided pages (if monochrome black printing only).
	High capacity (yellow, magenta, cyan): Approximately 4,500 continuous or intermittent single-sided pages.
Waste Toner Box	Approximately 25,000 continuous or 14,400 intermittent (one-page jobs) monochrome pages or 6,250 continuous or intermittent color pages.

Contact your local vendor or www.minolta-qms.com for purchase information, parts numbers, and pricing. To order approved media, go to www.q-shop.com. If you have any questions, refer to www.minolta-qms.com/support, then click on the Answer Base.

Regulatory Compliance

CE Marking (Declaration of Conformity) For European Users

This product complies with the following EU directives: 89/336/EEC, 73/23/EEC, and 93/68 EEC directives. This declaration is valid for the areas of the European Union.

This device must be used with shielded interface cables. The use of non-shielded cable is likely to result in interference with radio communications, and is prohibited under EU directives.

Electro-Magnetic Interference For All Users (Except for American and Canadian Users) Users



This is a Class B product. In a domestic environment, this product may cause radio interferences in which case the user may be required to take adequate measures.

Interference-causing Equipment Standard (ICES-003 ISSUE 3) For Canada Users

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device must be used with shielded interface cables. The use of non-shielded cable is likely to result in interference with radio communications, and is prohibited under ICES-003.

cTick Mark	ACA (Australia) AS/NZS 3548	Class B ITE (Radio Communications Act of 1992)
Electromagnetic Emissions (EMI)	China GB 9254 FCC (USA) Title 47 CFR Ch.1, Part 15, Subpart B Industry Canada (Canada) ICES-003 Issue 3 International (EU) EU Directive 89/336/EEC EN 55022 (CISPR Pub. 22) EN 61000-3-2 EN 61000-3-3 Japan (VCCI) VCCI V-3/01.04 Harmonic Current Measure Guideline (2001) of JBMA	Class B Class B Digital Device Class B Digital Device Class B ITE Harmonic Current Emissions Voltage Fluctuations and Flicker Class B ITE Class A
Energy Saver	ENERGY STAR (USA, EU, and Japan)	ENERGY STAR Compliant in basic configuration
Immunity Requirements (EU)	International (EU) EN 55024	Immunity Characteristics

Product Safety	UL (USA) cUL (Canada) International (EU) China	UL 60950 CAN/CSA C22.2 60950 EU Directive 73/23/EEC, EN 60950 and IEC 60950 GB 4943
Laser Safety	CDRH (USA) International (EU)	Title 21 CFR Ch. I, Subchapter J EN 60825-1 and IEC 60825-1

FCC Compliance Statement For American Users

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Operation of this equipment in a residential area is likely to cause harmful interference, in which case, the user will be required to correct the interference at his own expense.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device must be used with shielded interface cables. The use of non-shielded cable is likely to result in interference with radio communications, and is prohibited under FCC rules.

Attention

Any modifications or changes to this product not expressly approved in writing by the manufacturer responsible for compliance to Federal Regulations could void the user's authority to operate this product within the Laws and Regulations of the Federal Communications Commission.

Safety Information

Toner
 WARNING
 Do not throw the toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.
CAUTION: Keep out of reach of children.

Laser Safety

This printer is a page printer which operates by means of a laser. There is no possibility of danger from the laser, provided the printer is operated according to the instructions in this manual.

Since radiation emitted by the laser is completely confined within protective housings and external covers, the laser beam cannot escape from the machine during any phase of user operation.

This printer is certified as a Class 1 laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. This means that the printer does not produce hazardous laser radiation.

Internal Laser Radiation

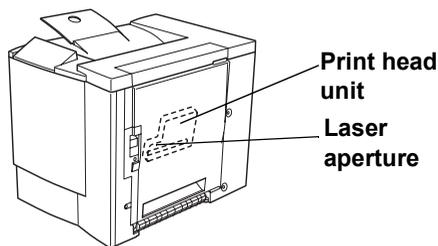
Maximum Average Radiant Power: 4.68 μ W at the surface of the OPC drum

Wavelength: 770–795 nm

This product employs a Class IIIb Laser Diode that has an invisible laser beam. The Laser Diode and Scanning Polygon Mirror are incorporated in the print head unit. The print head is in the interior of the printer in front of the toner cartridge. The laser beam is emitted from the print head unit, and then is radiated through the laser aperture to the interior of the printer.

⚠ WARNING

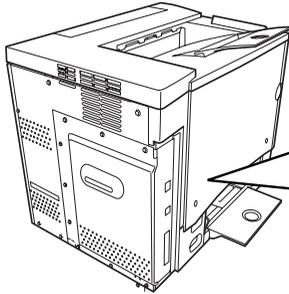
The internal components of the print head unit are NOT A FIELD SERVICEABLE ITEM. Therefore, the print head unit should not be opened under any circumstances.



Laser Caution For United States Users—CDRH Regulations

This printer is certified as a Class I laser product under the Regulation Performance Standard according to the Food, Drug, and Cosmetic Act of 1990. Compliance is mandatory for laser products marketed in the United States, and is reported to the Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration (FDA) of the Department of Health and Human Services (DHHS). This means that the product does not produce hazardous laser radiation. The label shown below indicates compliance with the CDRH regulations and must be attached to laser products marketed in the United States.

Laser Safety Label—CDRH Requirement



<p>商品名/型番 製造番号 定電圧 100V～60-60Hz 13A</p>	<p>警告 レーザー光線を直接照射しないでください。レーザー光線は目や皮膚を傷めます。直射光線に注意してください。</p> <p>クラス1レーザ製品</p>	<p>MINOLTA-QMS, INC. ASSEMBLED IN CHINA</p>
<p>MODEL NO. SERIAL NO./NAME 220V-240V 50-60Hz 7A</p>	<p>警告 レーザー光線を直接照射しないでください。レーザー光線は目や皮膚を傷めます。直射光線に注意してください。</p> <p>クラス1レーザ製品</p>	<p>ONLY CONNECT THIS EQUIPMENT TO AN EARTHED SOCKET OUTLET. APPROPRIATE WIRING AVAILABLE. THE JORDAN UTILITY MARK DENOTES APPROPRIATE WIRING. APPROPRIATE WIRING AVAILABLE. THE JORDAN UTILITY MARK DENOTES APPROPRIATE WIRING.</p> <p>MINOLTA-QMS, INC. One Magway Plaza, Mahwah, NJ 07430 MANUFACTURER (D) ASSEMBLED IN CHINA / 中国製</p>
<p>MODEL NO. SERIAL NO. CLASS 1 LASER PRODUCT CLASS 1 LASER PRODUCT PRODUCT LABEL CLASS 1 LASER PRODUCT</p> <p>This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.</p> <p>This Class 1 laser is approved for use in accordance with IEC 60825-1. For appropriate handling, see the Class 1 laser compliance in www.9801-663 for details.</p>	<p>警告 レーザー光線を直接照射しないでください。レーザー光線は目や皮膚を傷めます。直射光線に注意してください。</p> <p>クラス1レーザ製品</p>	<p>1996 E36879</p> <p>UL US LISTED THIS PRODUCT COMPLIES WITH 21 CFR CHAPTER 1, SUBCHAPTER C</p> <p>MINOLTA-QMS, INC. One Magway Plaza, Mahwah, NJ 07430 MANUFACTURER (D) ASSEMBLED IN CHINA</p>

⚠ WARNING

CAUTION: Use of controls, adjustments, or performance other than those specified in this manual may result in hazardous radiation exposure.

This is a semiconductor laser. The maximum power of the laser diode is 5 mW, and the wavelength is 770–795 nm.

International Notices—Power Cord

The following power cord requirements are in effect for your 220 V printer.

Minimum: 0.75 mm²

Minimum: H05 VV - F

The male plug is certified in the country in which the equipment is to be installed, and the female plug is an IEC 60320 connector.

International Notices—Voltage

Attention Norwegian users: This equipment is designed to operate within an IT power system where the line-to-line voltage does not exceed 240 V.

For Norway Users

ADVERSEL

Dersom apparatet brukes på annen måte enn spesifisert i denne bruksanvisning, kan brukeren utsettes for usynlig laserstråling som overskrider grensen for laser klass 1.

Dette er halvleder laser. Maksimal effekt till laserdiode er 5 mW og bølgelengde er 770–795 nm.

For Finland, Sweden Users

LOUKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

VAROITUS!

Laitteen käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

Tämä on puolijohdelaser. Laserdiodin suurin teho on 5 mW ja aallonpituus on 770–795 nm.

WARNING!

Om apparaten används på annat sätt än i denna bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

Det här är en halvledarlaser. Den maximala effekten för laserdioden är 5 mW och våglängden är 770–795 nm.

VARO!

Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

WARNING!

Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

Ozone Release

During printer operation, a small quantity of ozone is released. This amount is not large enough to harm anyone adversely. However, be sure the room where the printer is being used has adequate ventilation, especially if you are printing a high volume of materials, or if the machine is being used continuously over a long period.

Dégagement d'ozone

L'imprimante dégage une faible quantité d'ozone durant son utilisation. Cette quantité n'est pas suffisamment importante pour être dangereuse. Cependant, veillez à ce que la pièce dans laquelle la machine soit adéquatement ventilée, surtout en cas d'impression de gros volumes ou en cas d'utilisation continue pendant un laps de temps très long.

This section contains detailed instructions on the operation and maintenance of this machine. To achieve optimum utility of this device, all operators should carefully read and follow the instructions in this manual. Please keep this manual in a handy place near the machine.

Please read the next section before using this device. It contains important information related to user safety and preventing equipment problems.

Make sure you observe all of the precautions listed in this manual.



Note that some parts of the contents of this section may not correspond with the purchased product.

Warning and Precaution Symbols

<p> WARNING or WARNING!</p>	Ignoring this warning could cause serious injury or even death.
<p> or  Attention</p>	Ignoring this caution could cause injury or damage to property.

Meaning of Symbols

	A triangle indicates a danger against which you should take precaution.
	This symbol warns against burns.
	A diagonal line indicates a prohibited course of action.
	This symbol warns against dismantling the device.
	A black circle indicates an imperative course of action.
	This symbol indicates you must unplug the device.

⚠ WARNING

	<ul style="list-style-type: none">• Do not modify this product, as a fire, electrical shock, or breakdown could result. If the product employs a laser, the laser beam source could cause blindness.• Do not attempt to remove the covers and panels which have been fixed to the product. Some products have a high-voltage part or a laser beam source inside that could cause an electrical shock or blindness.
	<ul style="list-style-type: none">• Only use the power cord supplied in the package. Failure to use this cord could result in a fire or electrical shock.• Use only the specified power source voltage. Failure to do that could result in a fire or electrical shock.• Do not use a multiple outlet adapter to connect any other appliances or machines. Use of a power outlet for more than the marked current value could result in a fire or electrical shock.
	<p>Do not unplug and plug in the power cord with a wet hand, as an electrical shock could result.</p>
	<p>Plug the power cord all the way into the power outlet. Failure to do this could result in a fire or electrical shock.</p>
	<ul style="list-style-type: none">• Do not scratch, abrade, place a heavy object on, heat, twist, bend, pull on, or damage the power cord. Use of a damaged power cord (exposed core wire, broken wire, etc.) could result in a fire or breakdown. Should any of these conditions be found, immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative.• In principle, do not use an extension cord. Use of an extension cord could cause a fire or electrical shock. Contact your authorized service representative if an extension cord is required.
	<p>Do not place a flower vase or other container that contains water, or metal clips or other small metallic objects on this product. Spilled water or metallic objects dropped inside the product could result in a fire, electrical shock, or breakdown. Should a piece of metal, water, or any other similar foreign matter get inside the product, immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative.</p>
	<ul style="list-style-type: none">• If this product becomes inordinately hot or emits smoke, or unusual odor or noise, immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative. If you keep on using it as is, a fire or electrical shock could result.• If this product has been dropped or its cover damaged, immediately turn OFF the power switch, unplug the power cord from the power outlet, and then call your authorized service representative. If you keep on using it as is, a fire or electrical shock could result.
	<p>Do not throw the toner cartridge or toner into an open flame. The hot toner may scatter and cause burns or other damage.</p>
	<p>Connect the power cord to an electrical outlet that is equipped with a grounding terminal.</p>



- Do not use flammable sprays, liquids, or gases near this product, as a fire could result.
- Do not leave a toner cartridge or OPC drum cartridge in a place within easy reach of children.
Licking or ingesting any of these things could injure your health.
- Do not let any object plug the ventilation holes of this product. Heat could accumulate inside the product, resulting in a fire or malfunction.
- Do not install this product at a site that is exposed to direct sunlight, or near an air conditioner or heating apparatus. The resultant temperature changes inside the product could cause a malfunction, fire, or electrical shock.
- Do not place the product in a dusty place, or a site exposed to soot or steam, near a kitchen table, bath, or a humidifier. A fire, electrical shock, or breakdown could result.
- Do not place this product on an unstable or tilted bench, or in a location subject to a lot of vibration and shock. It could drop or fall, causing personal injury or mechanical breakdown.
- After installing this product, mount it on a secure base. If the unit moves or falls, it may cause personal injury.
- Do not store toner units and OPC drum units near a floppy disk or watch that are susceptible to magnetism. They could cause these products to malfunction.



The inside of this product has areas subject to high temperature, which may cause burns. When checking the inside of the unit for malfunctions such as a paper misfeed, do not touch the locations (around the fusing unit, etc.) which are indicated by a "Caution! High Temperature!" warning label.



Do not place any objects around the power plug as the power plug may be difficult to pull out when an emergency occurs.



- The socket-outlet shall be installed near the machine and shall be easily accessible as the power plug may be difficult to pull out when an emergency occurs.
- Always use this product in a well ventilated location. Operating the product in a poorly ventilated room for an extended period of time could injure your health. Ventilate the room at regular intervals.
- Whenever moving this product, be sure to disconnect the power cord and other cables. Failure to do this could damage the cord or cable, resulting in a fire, electrical shock, or breakdown.
- When moving this product, always hold it by the locations specified in the user manual or other documents. If the unit falls it may cause severe personal injury. The product may also be damaged or malfunction.
- Remove the power plug from the outlet more than one time a year and clean the area between the plug terminals. Dust that accumulates between the plug terminals may cause a fire.
- When unplugging the power cord, be sure to hold onto the plug. Pulling on the power cord could damage the cord, resulting in a fire or electrical shock.

Working Safely with Your Laser Printer

WARNING!

Working improperly with the printer can result in health hazards, electric shocks, and even fires. Before you unpack the laser printer, you should make yourself familiar with this information on your safety and operating safety.

Power Supply/Cord/Plug
Do This...
Make sure that the power supply to the unit has the correct voltage. <i>Otherwise the result could be a fire or an electric shock.</i>
Make sure that the power cord is: <ul style="list-style-type: none">■ Switched off immediately and unplugged if the power supply cord is damaged. <i>Failure to do so could result in a fire or an electric shock.</i>■ Correctly plugged into the socket and that the socket is visible at all times and is readily accessible.■ Not underneath the printer or another machine as this can result in damage to that cord. <i>The result could be a fire or improper functioning of the unit in question.</i>■ Removed from the socket if the machine will not be in use for an extended period of time.
Use only extension cords that are designed for at least the maximum power rating of the machine. <i>Extension cords with lower ratings can result in the unit overheating and can even lead to a fire.</i>
DO NOT...
Pull on the cord to pull the power plug out of the socket as this may damage the cord. <i>The result could be an electric shock or a fire.</i>
<ul style="list-style-type: none">■ Remove from the power cord from the socket with wet hands as this may result in an electric shock.■ Place any heavy objects on the power cord.■ Do not pull or kink the cord as this can result in damage to the cord. The result could be an electric shock or a fire.■ Leave the power cord plugged into the socket when you move the printer. <i>Otherwise you may damage the cord. The result could be a short-circuit or a fire.</i>
Do not switch off the unit while printing is in progress.

Printer Body
Do This...
Perform only the procedures that are described in this manual. Using the machine improperly can result in a fire or an electric shock.
Notes on your safety and operating safety
Working improperly with the printer can result in health hazards, electric shocks and even fires. Before you unpack the laser printer, you should make yourself familiar with this information on your safety and operating safety.
If the machine becomes unusually hot, or if you notice smoke or an unusual odor coming from the machine, switch it off immediately and remove the power cord from the socket.
DO NOT...
Do not place: <ul style="list-style-type: none"> ■ Heavy objects on the machine. ■ Magnetic objects near the machine. ■ Coffee cups, drinks, bottles, or other containers with liquids in them on the machine. <i>If liquid enters the machine the result could be an electric shock or a fire. If liquid does get into the machine, switch it off immediately, disconnect the power cord.</i> Paper clips, staples, or other small metal objects into openings on the machine. <i>The result could be an electric shock or a fire. If metal pieces are fed into the machine, switch it off immediately, disconnect the power cord.</i>
Do not open any covers on the machine while printing is in progress.
Do not use any flammable sprays, liquids or gases in the vicinity of the machine.
Do not remove any safety devices and do not alter the construction of the machine. The unit is equipped with high-voltage components. Using the machine improperly can result in a fire or an electric shock.

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