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# **QMS<sup>®</sup> *magicolor*<sup>®</sup> 330**

## **Print System**

## **Operation**

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**1800504-001B**

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# Index





# 1

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## Introduction

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### **In This Chapter . . .**

- “About This Manual” on page 1-2

# Introduction

This manual provides information on installing consumables such as media and toner cartridges. You'll also find information on advanced printing features, printer care, print quality, and troubleshooting. Use this guide in conjunction with your other QMS *magicolor* 330 documentation.

## About This Manual

<b>1</b>	<b>Introduction</b>	Provides an overview of this guide.
<b>2</b>	<b>Everyday Operations</b>	Describes how to load paper, letterhead, oversized media, transparencies, envelopes, labels, and postcards; and how to replace the toner cartridges, fuser oil roller, OPC drum cartridge, and waste toner box.
<b>3</b>	<b>Advanced Printing Features</b>	Explains how to collate output, print a status page, cancel a print job, and end a print job.
<b>4</b>	<b>Color Printing</b>	Describes how to print documents in color.
<b>5</b>	<b>Printer Care</b>	Describes how to handle and clean the printer.
<b>6</b>	<b>CrownView Printer Web Page</b>	Contains information on how to access and use the printer's web page.
<b>7</b>	<b>Media Jams</b>	Explains how to locate and clear media jams.


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<b>8</b>	<b>Troubleshooting Printer Problems</b>	Lists printer status messages, outlines printer and print quality problems and solutions, and describes how to place a service call.
<b>9</b>	<b>Repacking the Printer</b>	Explains how to repack the printer in case you need to relocate or ship your printer after it's been installed.
<b>A</b>	<b>QMS Customer Support</b>	Provides product sales and support telephone numbers, and describes how to communicate with QMS through the Internet and Q-FAX.
<b>B</b>	<b>Configuration Menu</b>	Provides a view of the printer's configuration menu.

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## **Typographic Conventions**

The following typographic conventions are used in this manual:

Mixed-Case Courier	Text you type, and messages and information displayed on the screen
<i>Mixed-Case Italic Courier</i>	Variable text you type; replace the italicized word(s) with information specific to your printer or computer
UPPERCASE COURIER	Information displayed in the printer message window
<b>lowercase bold</b>	PostScript operators and DOS commands
<i>lowercase italic</i>	Variable information in text.
UPPERCASE	File and utility names
↵	Press the Enter key (PC) or Return key (Macintosh)
^	Press and hold down the Ctrl key (PC)
	In Adobe Acrobat PDF versions of the manual, click to play a QuickTime video clip of the procedure described in the text.

» **Note:** Notes contain tips, extra information, or important information that deserves emphasis or reiteration.

---

◆ **Caution:** Cautions present information that you need to know to avoid equipment damage, process failure, or extreme annoyance.

---

☠ **WARNING!** Warnings indicate the possibility of personal injury if a specific procedure is not performed exactly as described in the manual.

**ACHTUNG!** Bitte halten Sie sich exakt an die im Handbuch beschriebene Vorgehensweise, da sonst Verletzungsgefahr bestehen könnte.

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# 2

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## Everyday Operations

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### **In This Chapter . . .**

- “Using Media Cassettes” on page 2-2
- “Using the Multipurpose Tray” on page 2-8
- “Using Toner Cartridges” on page 2-18
- “Replacing a Toner Cartridge” on page 2-19

# Introduction

This chapter covers basic printer operation, such as using universal, oversized, and transparency/label media cassettes, using the multi-purpose tray, using media other than paper, using toner cartridges, and replacing a toner cartridge.

## Using Media Cassettes

### Avoiding Unsuitable Media

- 
- ◆ **Caution:** *Media with any of the following properties may cause media jams and should not be used.*
- 

#### Paper

- Paper adhered with static electricity
- Too thick or too thin paper
- Previously printed paper
- Folded, creased, or torn paper
- Damp or wet paper
- Curled paper
- Any specially coated paper not previously recommended by QMS
- Treated-surface colored paper
- Heat-sensitive paper
- Carbon paper
- Paper with staples, clips, ribbon, or tape attached
- Rough-surface paper, such as textured or fiberform paper
- Layered or adhesive paper

- Rough envelopes or envelopes with clips
  - Self-adhering envelopes
- » **Note:** *If acidic paper is used, characters may fade; in which case, change to a neutral paper.*

### **Other Media**

- Sheets adhered with static electricity
- Label sheets with the backing sheet exposed
- Any media that is affected by high fusing temperature (311° F/155° C)

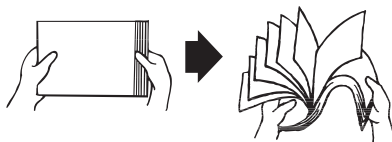
## **Preparing Paper**

- 1 **Take a stack of about 250 sheets (½ ream).**

◆ **Caution:** *Don't unwrap paper above the printer as this might cause paper particles to fall into the printer.*

---

- 2 **Fan paper to separate it and to help prevent static buildup that may cause double feeding.**



» **Note:** *Do not fan transparencies.*

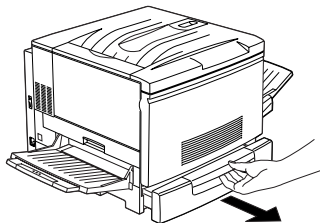
- 3 **Take off the top and bottom sheets.**

Residual glue buildup on these sheets may cause media jams.

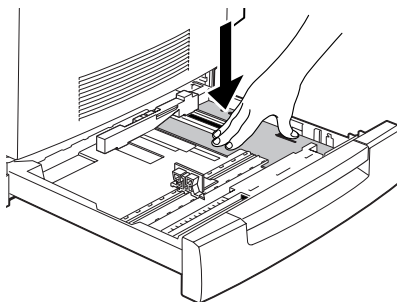
## **Loading the Universal Media Cassette**



- 1 Slide the media cassette open.**

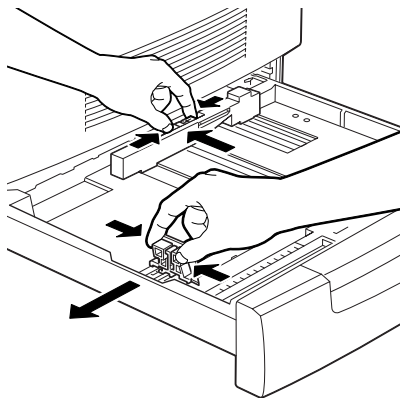


- 2 Press the metal plate until it latches.**



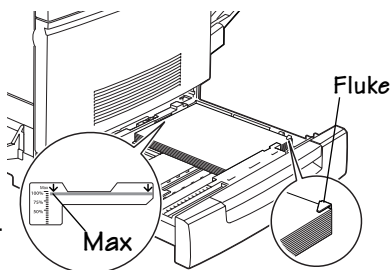
- 3 Adjust the media guides.**

Squeeze the guide clips, move the guides to the edges of the cassette, and release the clips.



- 4 **Align the four corners of the media stack, and insert it under the fluke at the front-right side, with the printing side facing down.**

The media stack will cover the arrow embossed on the lower-right corner of the media tray.



Do not load more sheets than the maximum specified.

- » **Note:** *Make sure the top sheet is under the fluke.*

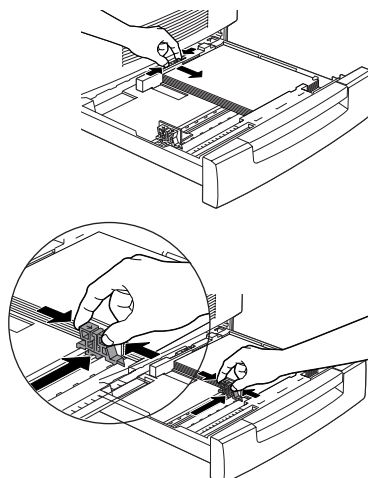
*Load letterhead and memo paper printing-side down with the top of the media (the letterhead or memo information) toward the back of the cassette.*

- 5 **Set both media guide clips.**

- » **Note:** *If a media guide clip is pressed too tightly against the media, it may cause a media jam.*

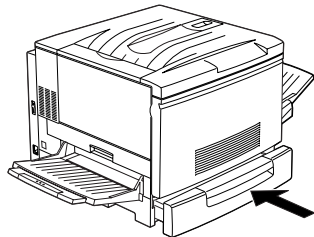
Check that the left media guide clip is inserted into the proper hole in the scale.

- » **Note:** *Be sure the paper corners are not bent upwards by the guides.*



- » **Note:** *Automatic media-size detection cannot be assured if the left guide clip is even slightly out of position. If this occurs, slide the media guide clip momentarily to the left edge, then reposition it according to the scale.*

- 6 Push the media cassette firmly into the printer.



## Using Letterhead and Memo Media from the Universal Media Cassette

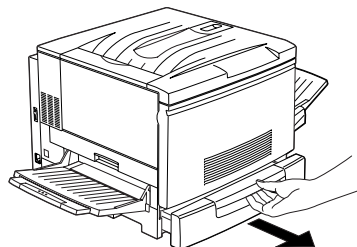
Formatting	Format the information to be printed on the letterhead/memo media within your application. Try printing your data on a plain sheet of paper first to check placement.	
Input	Source	Universal media cassette
	Capacity	Up to 250 sheets, depending on the thickness of the media
Output	Face-down tray	
Type	Refer to the specifications in chapter 2, "Print Media," in the <i>Reference</i> manual.	
Notes	<ul style="list-style-type: none"><li>■ Check your application documentation for other information about printing on letterhead and memo media.</li><li>■ Load letterhead and memo paper printing-side down with the top of the media (the letterhead or memo information) toward the back of the cassette.</li></ul>	

## Installing an Oversized or Transparency/Label Cassette

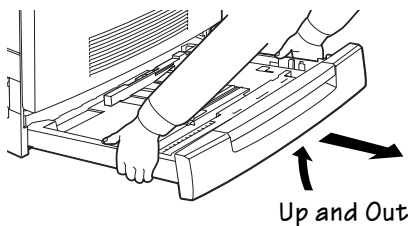
The optional oversized media cassette has a capacity of up to 250 sheets of oversized media (13 inches [330 mm] width x 18 inches [457 mm] length). The optional transparency/label media cassette has a capacity of up to 100 transparencies (depending on the thickness) or 100 label sheets.

- » **Note:** The optional oversized and transparency/label cassettes can be installed **only** in the standard upper cassette slot. These cassettes do not function in the optional large-capacity input feeder.

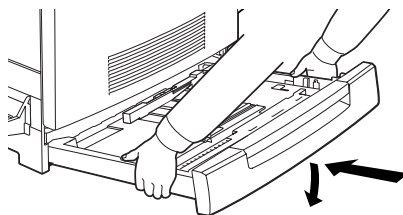
- 1 Pull the universal media cassette out as far as it will go.




- 2 Grasp the media cassette with both hands and pull outward while lifting up at the front.



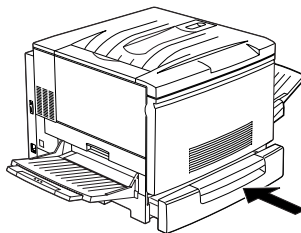
- 3 Holding the oversized or transparency/label media cassette with both hands, set it into the grooves in the media cassette holder inside the printer.



- 4  Load the media face down, with the top of the page toward the back of the printer.

## Using the Multipurpose Tray

- 5 Push the media cassette firmly into the printer.



- » **Note:** Oversized media, transparencies, or labels can also be fed through the multipurpose tray.

## Using the Multipurpose Tray

### Loading Media in the Multipurpose Tray

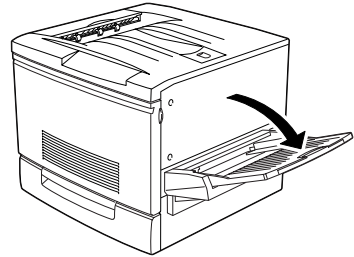
To avoid media jams

- Do not set different sizes of media in the multipurpose tray (MPT) at the same time.
- Do not add media to the tray before it empties.

The multipurpose tray feeds into the printer top sheet first.

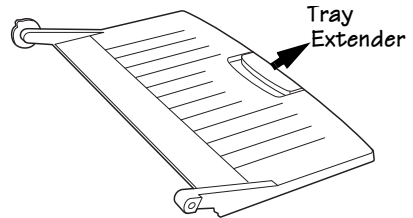
- 
- ◆ **Caution:** *To avoid damage, do not apply excessive force or place any object heavier than paper on the multipurpose tray.*
- 

- 1 If necessary, pull down the multipurpose tray.**



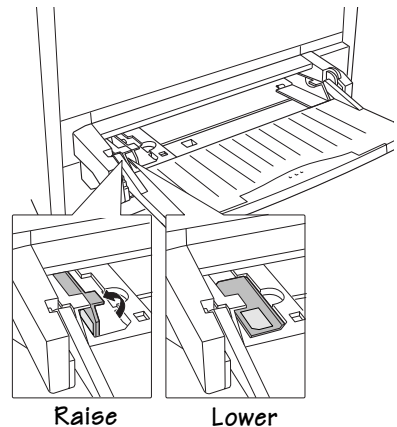
- 2 When printing on larger media sizes, pull out the tray extender.**

Otherwise, media may fall out of the tray, or may not be fed properly.



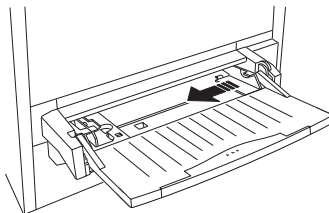
- 3 Raise the media guide on the tray when not using oversized media, and lower it when using oversized media.**

If the media guide is lowered when you're printing on regular-size media, the printing will be offset from the proper position.



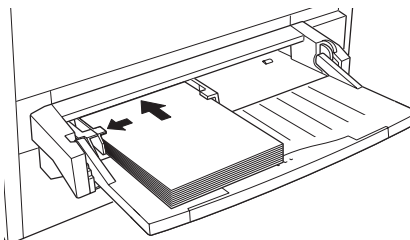
## Using the Multipurpose Tray

- 4 Set the media guide to the proper positions for the media being loaded, according to the guide scales.



- 5 Align the four corners of the stack, then insert the stack, printing side up, into the feeding slot until it gently touches.

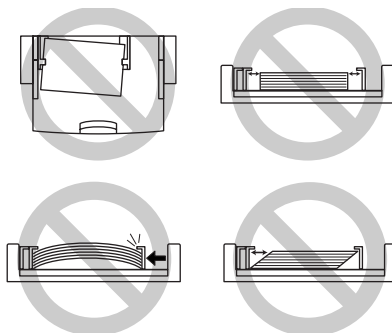
Do not load more sheets than the maximum (Max) specified.



- 6 When loading paper, be careful to avoid any space between the guides and the stack, and avoid warping the paper with excessive pressure.

Make sure the stack is straight.

» **Note:** If media is loaded improperly, the printing position will be shifted, causing incorrect printing.



## Using Letterhead and Memo Media from the Multipurpose Tray



<b>Formatting</b>	Format the information to be printed on the letterhead/memo media within your application. Try printing your data on a plain sheet of paper first to check placement.	
<b>Input</b>	<b>Source</b>	Multipurpose tray
	<b>Capacity</b>	Up to 150 sheets, depending on the thickness of the media
<b>Output</b>	Face-up tray	
<b>Type</b>	Refer to the specifications in chapter 2, "Print Media," in the <i>Reference</i> manual.	
<b>Note</b>	<ul style="list-style-type: none"> <li>■ Check your application documentation for other information about printing on letterhead and memo media.</li> <li>■ Load letterhead and memo paper printing-side up with the top of the media (the letterhead or memo information) toward the back of the printer.</li> </ul>	

## Using Media Other Than Paper

- 
- ◆ **Caution:** *Although the QMS magicolor 330 was designed for occasional 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 transparencies) may adversely affect print quality or reduce printer life.*
-

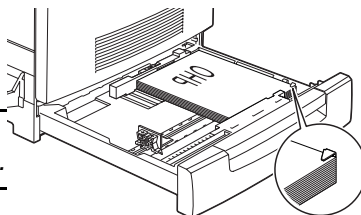
## **Using Transparencies (OHP)**

<b>Formatting</b>	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.	
<b>Input</b>	<b>Source</b>	Transparency/label cassette
	<b>Capacity</b>	Up to 100 transparencies, depending on the thickness
	<b>Source</b>	Multipurpose tray
	<b>Capacity</b>	Up to 75 transparencies, depending on the thickness  » <b>Note:</b> <i>If you have problems feeding sheets in the multipurpose tray, try loading only 5 to 10 transparencies at a time. Loading a large number of transparencies at a time may cause static buildup, thus causing feeding problems.</i>
<b>Output</b>	Face-up tray	
<b>Type</b>	Refer to the specifications in chapter 2, "Print Media," in the <i>Reference</i> manual.	
<b>Notes</b>	<ul style="list-style-type: none"><li>■ 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, refer to chapter 5, "Printer Care," for instructions on how to clean the printer.</li><li>■ Full-color transparencies have a front and back side. If they are set backwards or upside down, they may jam the printer.</li><li>■ Check your application documentation for other information about printing on transparencies.</li></ul>	

## **Loading and Printing Transparencies** **in the Media Cassette**

- 1 In the Operator Control/Media/For Upper Bin menu select Transparency.
- 2 In the Operator Control/Outputbin menu, select Face-Up.
- 3 Insert the sheets printing side down in the media cassette.

◆ **Caution:** *Do not fan transparencies before printing.*



- 4 Remove each transparency from the output tray as soon as it prints.

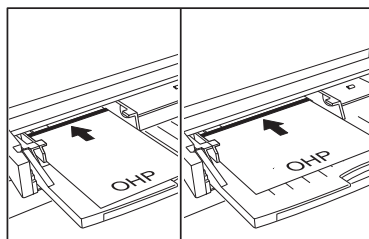
◆ **Caution:** *If transparencies are allowed to accumulate in the output tray, resulting static electricity may cause a media jam.*

## **Loading and Printing Transparencies** **in the Multipurpose Tray**

Transparencies can also be fed from the multipurpose tray.

- 1 In the Operator Control/Media/For MPT Bin menu select Transparency.
- 2 In the Operator Control/Outputbin menu, select Face-Up.
- 3 Insert sheets printing side up in the multipurpose tray until they lightly touch the feeding slot.

◆ **Caution:** *Do not fan transparencies before printing.*



- ◆ **Caution:** *If full-color transparencies are set backwards or upside down, they may jam in the printer.*
- 4 **Remove each transparency from the output tray as soon as it prints.**
- ◆ **Caution:** *If transparencies are allowed to accumulate in the output tray, resulting static electricity may cause a media jam.*

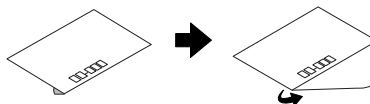
## Using Envelopes in the Multipurpose Tray

<b>Formatting</b>	Your printer receives the instructions to print on envelopes from your application.	
	<ul style="list-style-type: none"><li>■ When formatting data for envelopes, leave at least a 0.16" (4.06 mm) margin from the edges of the envelope.</li><li>■ See your application documentation for specific information on printing envelopes.</li></ul>	
<b>Input</b>	<b>Source</b>	Multipurpose tray
	<b>Capacity</b>	Up to 20, depending on the thickness of the envelopes (select Thick Stock in all cases).
<b>Output</b>	Face-up tray	
<b>Type</b>	Refer to the specifications in chapter 2, "Print Media," in the <i>Reference</i> manual.	
<b>Notes</b>	<ul style="list-style-type: none"><li>■ Use envelopes with a smooth exterior surface. Envelopes with a rough surface may jam in the media cassette.</li><li>■ 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.</li><li>■ You can print only on the front (address) side of the envelope.</li></ul>	

## **Loading and Printing Envelopes in the Multipurpose Tray**

- 1 In the Operator Control/Media/For MPT Tray select Thick Stock.
- 2 In the Operator Control/Outputbin menu select Face-Up.
- 3 Open the flaps.

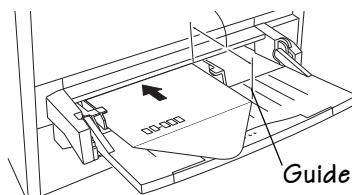
◆ **Caution:** *Do not seal envelopes before printing.*



- 4 Flex the envelope stack (including the edges) to remove any stiffness.

Tape must not be present on the adhesive part of the envelope.

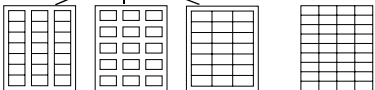
- 5 Place the envelopes on a flat surface, and flatten them by pressing down the corners.
- 6 Adjust the multipurpose tray media guide to the width of the envelopes.



- 7 Separate each envelope immediately (before it cools) after the envelope is delivered to the face-up tray.

» **Note:** *Because the envelopes pass through heated rollers, the gummed area on the flaps may seal to other flaps in the tray otherwise. Using envelopes with emulsion-based glue avoids this problem.*

**Using Labels**



<b>Formatting</b>	Format label data within your application. Try printing your data on a plain sheet of paper first to check placement.	
<b>Input</b>	<b>Source</b>	Multipurpose tray
	<b>Capacity</b>	Up to 100 label sheets, depending on the thickness
	<b>Source</b>	Transparency/label cassette
	<b>Capacity</b>	Up to 100 label sheets, depending on the thickness
<b>Output</b>	Face-up tray	
<b>Type</b>	Refer to the specifications in chapter 2, "Print Media," in the <i>Reference</i> manual.	
<b>Notes</b>	<div><div>■ Avoid using labels with exposed adhesive; it may stick to the toner cartridge or the fixing roller, causing labels to peel off and media jams to occur.</div><div>■ Check your application documentation for other information on printing labels.</div><div>■ Do not use label sheets where the backing is not fully covered by the labels (the shiny backing is exposed).</div></div> <div><div>Avoid</div><div>OK</div><div></div></div>	

**Loading and Printing Labels**

- 1

In the Operator Control/Media/For MPT Bin or Operator Control/Media/For Upper Bin menu, select Thick Stock.
- 2

In the Operator Control/Outputbin menu, select Face-up.
- 3

Load labels in the multipurpose tray  or transparency/label cassette  the same way you load paper.

» **Note:** If your label stock has a top-of-page, place the top-of-page toward the inside of the printer.

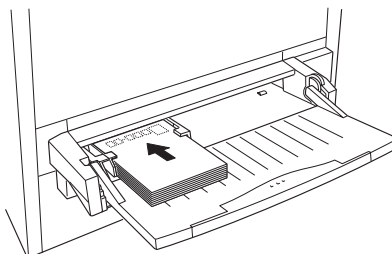
## Using Postcards

- ◆ **Caution:** *When you're printing on the back of a preprinted postcard, jams may occur if the postcard is even slightly bent.*

<b>Formatting</b>	Format postcard data within your application. Try printing your data on a plain sheet of paper first to check placement.	
<b>Input</b>	<b>Source</b>	Multipurpose tray
	<b>Capacity</b>	Up to 50, depending on the thickness of the postcards
<b>Output</b>	Face-up tray	
<b>Type</b>	Refer to the specifications in chapter 2, "Print Media," in the <i>Reference</i> manual.	
<b>Notes</b>	■ Check your application documentation for other information on printing postcards.	
	■ We do not recommend printing on multicolored postcards.	

## Loading and Printing Postcards

- 1 In the Operator Control/ Media/For MPT Bin menu, select **Thick Stock**.
- 2 In the Operator Control/ Outputbin menu, select **Face-up**.
- 3 Carefully flatten the postcards by hand before loading them in the printer.
- 4 Feed postcards short-edge first from the multipurpose tray.



# Using Toner Cartridges

## Toner Cartridge Life

A toner cartridge contains enough toner to print the following number of letter/A4-size pages:

Color	Rated life @ normal 5% page coverage
Black	4,500 pages
Yellow	6,000 pages
Magenta	5,700 pages
Cyan	6,000 pages

When toner runs low in a cartridge, `x TONER LOW` (where `x` is the toner color) displays in the message window. At this point, about 5% of the life of the cartridge remains.

## Toner Cartridge Storage

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◆ **Caution:** *Keep toner cartridges away from disk drives and floppy disks. The magnets in the cartridge can damage stored data.*

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- Keep toner cartridges in their packaging until you're ready to install them.
- Store toner cartridges 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 80% without condensation.
- Keep toner cartridges level during storage. Do not stand or store cartridge on their ends or turn upside down; the toner inside the cartridges may become caked or unequally distributed.
- Keep toner cartridges away from salty air environments and corrosive gases such as aerosols.

# Replacing a Toner Cartridge

## Overview

Your printer uses four toner cartridges: yellow, magenta, cyan, and black.

- » **Note:** *The toner is nontoxic. However, if you get any toner on your hands or clothes, wash it off promptly with cool water.*

Don't use a used/half empty toner cartridge; the "gas gauge" in the control panel message window and in CrownView will not reset properly.

### To replace a toner cartridge

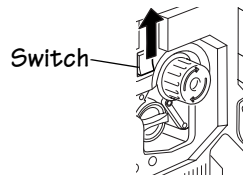
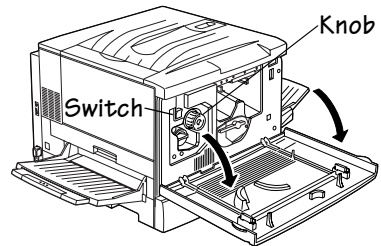
- 1 **Open the printer's front cover.**

If the empty toner cartridge is the color showing, skip to step 4.

If the toner cartridge you want to replace is not the one showing, go to step 2.

- 2 **Press and release the anti-rotation switch upward to unlock the toner knob.**

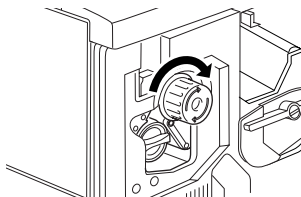
- » **Note:** *Remember to release the switch, or the toner cartridges will rotate too far.*




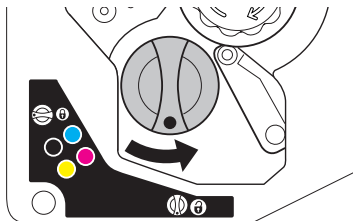
## Replacing a Toner Cartridge

- 3 Turn the knob as far as it will go clockwise to move to the next position.**

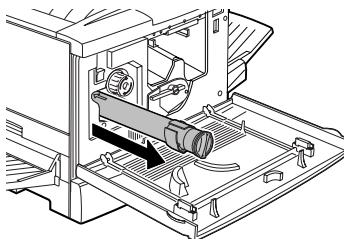
Continue doing steps 2 and 3 until the color to be replaced is showing.



- 4 Rotate the toner cartridge counterclockwise until the “●” mark on the cartridge is aligned with the printer’s Unlock  position.**



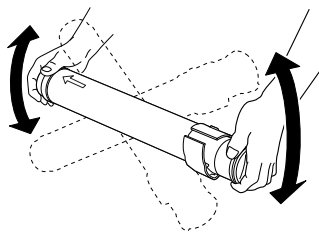
- 5 Remove and discard the empty toner cartridge.**



**Caution:** *Dispose of old toner cartridges in accordance with local regulations. Do not burn them.*

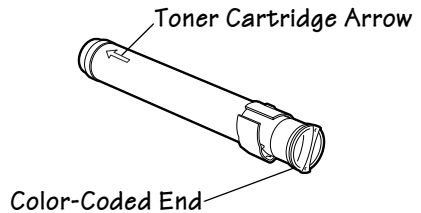
- 6 Remove the new toner cartridge from its box.**
- 7 Distribute the toner in the cartridge.**

Holding the cartridge with both hands, gently rock it from side-to-side seven or eight times.



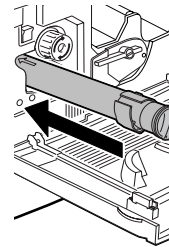
## Replacing a Toner Cartridge

- 8 Hold the cartridge so the arrow is at the top.




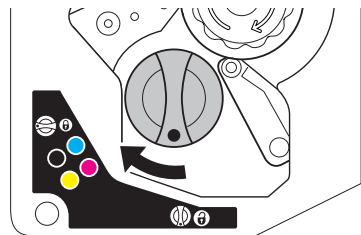
- ◆ **Caution:** Each toner cartridge has a color-coded end that corresponds to a colored cartridge slot. Always install the toner cartridge in the slot with an end of the same color. Each cartridge is physically (as well as visually) keyed to ensure correct installation.

- 9 Align the toner cartridge with the cartridge guides.
- 10 Carefully push the cartridge into the printer until it's firmly seated.



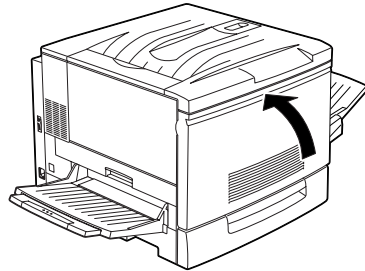
- ◆ **Caution:** If a toner cartridge doesn't slide in easily, don't force it. Check that you're installing the correct color toner cartridge into the correct slot.

- 11 Rotate the toner cartridge clockwise until the "●" mark on the cartridge is aligned with the Lock  position on the printer.



## Replacing a Toner Cartridge

- 12 If you need to replace more than one toner cartridge, go back to step 2.
- 13 Close the printer's cover.



- 14 In the Operator Control/Consumables/Item Replaced/x Toner menu (where x is the color toner you replaced) select Yes.

This resets the "gas gauge."



# 3

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## Advanced Printing Features

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### **In This Chapter . . .**

- “High-Resolution Printing” on page 3-2
- “High-Duty Printing” on page 3-4
- “Cassette Chaining” on page 3-5
- “Collating Output” on page 3-6
- “2-Sided Printing” on page 3-9
- “Printing on Standard and Custom Media Sizes” on page 3-10
- “Working with Status Pages” on page 3-11
- “Cancelling/Ending Print Jobs” on page 3-13

# Introduction

This chapter describes changing print resolution, chaining paper cassettes, collating output, printing a status page, cancelling a print job, and ending a print job.

## High-Resolution Printing

Your printer provides a print resolution for almost every application or budget. The printer supports each of the following resolutions.

<b>300x300 dpi</b>	Built into all <i>magicolor</i> 330 Print Systems, this resolution has the fastest processing time for producing draft-quality output. 300x300 dpi resolution is also required by some printer emulations.
<b>600x600 dpi</b>	The standard resolution in the <i>magicolor</i> 330 CX is the standard resolution for business documents. 600x600 dpi resolution provides excellent print quality for most business applications, such as letters, proposals, and presentations. With 600 dpi in both horizontal and vertical directions, it also provides the best quality line drawings for engineering applications.
<b>1200x1200 dpi</b>	For improved halftone quality in graphics and images, 1200x1200 dpi resolution is available for all media sizes on the <i>magicolor</i> 330 EX. The <i>magicolor</i> 330 CX is also capable of producing 1200x1200 dpi resolution through the installation of additional memory.

## How Much Memory Do You Need?

- » **Note:** If a certain resolution is chosen and the minimum amount of 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 image at 1200x1200 dpi resolution on legal media, but the printer has only 64 MB of RAM instead of the required 112 MB minimum, the file prints at 600x600 dpi.

### Minimum System Memory Requirements

Media Size	300x300/600x600		1200x1200	
	Mono	4-Color	Mono	4-Color
<b>Letter</b>	64 MB	64 MB	64 MB	88 MB
<b>Legal</b>	64 MB	64 MB	64 MB	112 MB
<b>11x17</b>	64 MB	64 MB	64 MB	160 MB
<b>Oversized</b>	64 MB	64 MB	64 MB	192 MB

- » **Note:** These values are for a printer without a hard disk. For a printer with a hard disk installed and disk swapping enabled, add an additional 4 MB of RAM for each media size.

You may also need additional memory (SIMMs) for the following:

- To print complex graphics or complex PostScript documents
- For increased collation performance
- For increased spooling performance

## Setting the Default Resolution

<b>Menu</b>	Administration/Engine/Def Resolution
<b>Choices</b>	300 dpi—300x300 dpi resolution 600 dpi—600x600 dpi resolution 1200 dpi—1200x1200 dpi resolution

<b>Default</b>	600 dpi or 1200 dpi—your printer's default is the highest resolution available for the amount of RAM installed in the printer (see "Minimum System Memory Requirements" on page 3-3 for more information).
<b>Notes</b>	<p>Whenever possible, set the print resolution through your application. If the print resolution can't be set through the application, you can set it through the configuration menu, the printer driver, or QMS Document Option Commands (DOCs).</p> <p>If you want the printer to use a lower default resolution when you restore defaults, set this option to your choice (and make any other necessary configuration settings), and then use the Administration/Miscellaneous/Save Defaults menu to save your custom defaults. See "Working with Custom Configurations" in chapter 4, "Printer Configuration," of the <i>Reference</i> for more information.</p> <p>In addition, after you lower the default resolution, you should reconfigure the printer memory (Administration/Memory/Quick Config menu) to distribute it better for that particular resolution. For example, if you set the default resolution to 600 dpi when your printer has enough memory to print at 1200 dpi, the frame buffer remains configured for 1200 dpi, which means that printer memory that could be better used somewhere else is being wasted.</p>

## High-Duty Printing

There is a optional high-duty fuser oil roller to support high-duty printing. You may need the high-duty oil roller for the following:

- To print a higher number of pages per day
  - For increased performance with high-capacity, continuous printing
- » **Note:** *The high-duty oil roller is rated at 20,000 pages with an average duty cycle of 500 pages/day. If you print less than this, we recommend that you use the standard oil roller.*

The optional high-duty oil roller is the same size as the standard fuser oil roller, so replacement follows the same steps. (Refer to chapter 5, "Printer Care," for illustrated instructions.)

- 1 **Open the left-side fuser.**
- 2 **Remove and discard the old fuser oil roller.**

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◆ **Caution:** *Oil on this roller will come off on your skin if touched directly. Shield this roller from dust and toner when removing or inserting into the fusing unit.*

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- 3 **Align the colored label on the fuser unit with the colored label on the high-duty oil roller.**
- 4 **Lower it into the fuser unit until it clicks.**
- 5 **Close the fuser unit.**

## Cassette Chaining

If you have an optional large-capacity input feeder, you may choose to have the printer automatically draw media from another cassette (inputbin) when the current cassette empties. This is called cassette chaining, and it provides a total media input capacity of 1,150 sheets.

- » **Note:** *Check the documentation to see if your application includes a specific procedure for using a multicassette printer.*

### Enabling/Disabling Cassette Chaining

There are four ways to enable/disable cassette chaining:

- Use your application (check to see if your application supports cassette chaining).
- Select an alternate cassette for chaining in the QMS Level 2 Windows printer driver.
- On a network, use CrownAdmin to select the media cassettes and/or the media source.

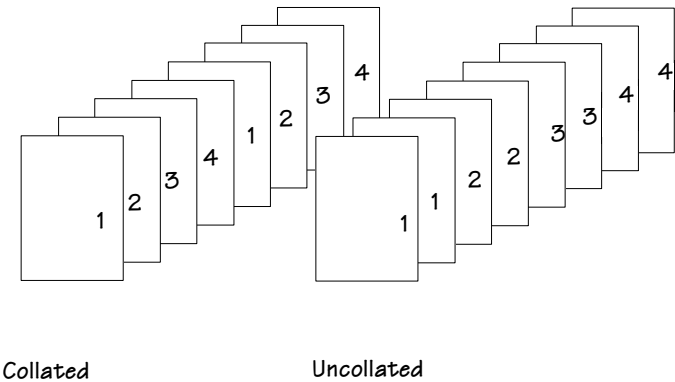
- Configure the printer through the configuration menu.

**Using the Configuration Menu**

<b>Menu</b>	Operator Control/Chain Inputbins
<b>Choices</b>	On—Switches to the next cassette with the same size and type of media when the default cassette is empty.  Off—Doesn't switch cassettes; uses only the default cassette.
<b>Default</b>	On
<b>Notes</b>	Use the Operator Control/Inputbin menu to set the default inputbin.

**Collating Output**

You can print multiple copies of documents either as complete sets in numeric order (collated) or as separate sheets. The following figure shows collated and uncollated stacking for two copies of a four-page file.



The main advantage of collation is convenience and the time savings derived from not having to separate and sort individual copies of a document. Each copy of the document exists as a whole.

## **Enabling/Disabling Collation**

There are three ways to enable/disable collation:

- Use your application. (Check the documentation to see if your application includes a specific procedure for collating pages.)
- Select collation in the printer driver.
- On a network, use CrownAdmin to select collation.
- Configure the printer through the configuration menu.

### **Using the Configuration Menu**

<b>Menu</b>	<b>Operator Control/Collation</b>
<b>Choices</b>	On, Off
<b>Default</b>	Off

## **Working with Chunk Collation**

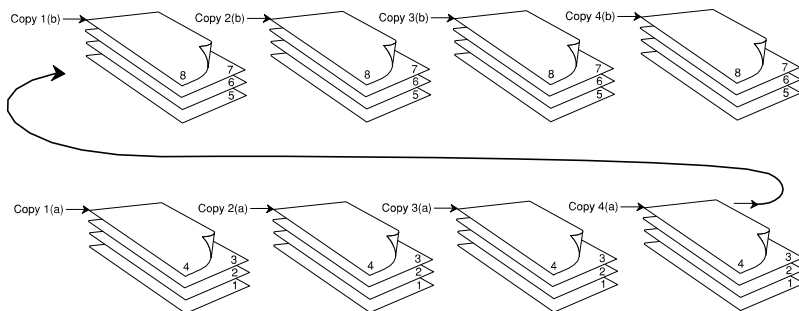
For a multiple-copy document with collation On, there must be enough Display List memory to hold the display list blocks for all pages in the collation range. (For more information on Display List blocks, see “Display List” in chapter 5, “Additional Technical Information,” in the *Reference* manual.) If there’s not enough memory, then a collation boundary is forced after the last compiled page of the collation range.

### **Chunk Collation**

This mechanism of introducing a forced boundary—or breaking a document down into several smaller, more manageable sets—is known as chunk collation. For example, in the following illustration, copies “a” and “b” of each set must be manually combined to create

## Collating Output

one collated document. The order of printing is copy 1(a), copy 2(a), copy 3(a), copy 4(a), copy 1(b), copy 2(b), copy 3(b), and copy 4(b).



- » **Note:** *If chunk collation occurs, you may want to enable header and trailer pages to help you determine the beginning and end of each collated sequence.*

## Improving Collation Performance

To avoid chunk collation, your printer must have sufficient memory to store an entire document before printing begins. Of course, this always depends on the size of your print job versus the amount of available memory in your printer. The QMS *magicolor* 330 CX with 64 MB or more of memory can fully collate most print jobs.

To improve collation performance, which allows you to collate longer and more complex print jobs on your printer, you can do one of the following:

- Add more printer memory, which automatically increases the display list client's memory settings.

- Take any memory not being used by other clients, and add it to the Administration/Memory/K Mem Display memory setting.
- ◆ **Caution:** *Use this option only if you're familiar with adjusting memory clients' values. (Refer to chapter 4, "Printer Configuration," in the Reference manual for information.) Incorrect use of this option could cause your system to operate incorrectly.*
- If your printer has a hard disk, set the Administration/Memory/Enable Disk Swap menu to On. This distributes any extra memory to all clients.
- Collate through your application.
- » **Note:** *Collating through your application is more time consuming than collating through the printer. The application sends the complete job the requested number of times rather than sending it once and holding data in printer memory.*

## 2-Sided Printing

While the QMS *magicolor* 330 doesn't have a duplexing option, you can duplex print manually: Print on one side of the paper, wait, re-insert the printed sheet(s) into the multipurpose tray (blank side up and the top of the page to the back of the printer), and then print the second side.

- » **Note:** *The jam rate will increase with 2-sided printing.*

For the best quality and longest machine life, we recommend that you observe the following guidelines:

- Feed the second side through the multipurpose tray.
- Use 24-110 lb (90-220 g/m<sup>2</sup>) paper.
- Print in full color mode only.

## Printing on Standard and Custom Media Sizes

- Print no more than 50 pages/day (1,000 pages/month) when using the standard fuser oil roller, and no more than 100 pages/day (2,000 pages/month) with the high-duty fuser oil roller.
- » **Note:** *Use of the high-duty fuser oil roller will reduce the chance of fuser offset of high-coverage areas.*
- Limit coverage to 150% or less per face (cumulative percentage of all four colors).
- Wait between printing the front side and the back side.
- » **Note:** *A rest period prior to printing the second side provides time for the paper to absorb residual fuser oil and moisture and results in improved paper feeding. The recommended length of this rest period varies depending on the media type. Some media may require a rest period of up to one hour for best print quality and performance.*

## Printing on Standard and Custom Media Sizes

The QMS *magicolor* 330 prints on a wide variety of media sizes. However, the input source/location varies.

Media	Media Size		Input Source
	Inches	Millimeters	
A3	11.7 x 16.5	297.18 x 419.10	M, U
A4	8.2 x 11.7	208.28 x 297.18	M, U
A5	5.8 x 8.3	147.32 x 210.82	M, U
B4	10.1 x 14.3	256.54 x 363.22	M, U
B5 (JIS)	7.2 x 10.1	182.88 x 256.54	M on all, plus U on non-US models*
C5 Envelope	6.4 x 9	162.00 x 229.00	M
Commercial #10 Envelope	4.1 x 9.5	104.14 x 241.3	M
Executive	7.25 x 10.5	184.15 x 266.70	M on all, plus U on US models*
International DL Envelope	4.3 x 8.7	109.22 x 220.98	M

Media	Media Size		Input Source
	Inches	Millimeters	
Label Sheet	8.5 x 11	215.90 x 279.40	M, T
Ledger	11 x 17	279.40 x 431.80	M, U
Legal	8.5 x 14	215.90 x 355.60	M, U
Letter	8.5 x 11	215.90 x 279.40	M, U
Monarch Envelope	7.50 x 3.87	190.5 x 98.40	M
Oversized	12 x 18	304.80 x 457.20	M, O, U
Oversized	13 x 18	330.20 x 457.20	M, O
Oversized	13 x 19	330.20 x 482.6	M
Postcard (Official Japanese —190 gm/m <sup>2</sup> )	3.94 x 5.27	100.07 x 133.85	M
Statement	5.5 x 8.5	139.70 x 215.90	M
A4 Transparency (OHP)	8.2 x 11.7	208.28 x 297.18	M, T
Letter-Size Transparency (OHP)	8.5 x 11	215.90 x 279.40	M, T

**Input Source:**

M = Multipurpose tray                      O = Oversized media cassette

T = Transparency/label cassette      U = Universal cassette

\* Selectable through the Administration/Engine/Printer Model menu

- » **Note:** *When working with oversized media (12" x 18", 13" x 18" and 13" x 19"), use the Quick Config method to select the desired resolution. (Refer to "Quick Configuration" in the Reference manual, page 4-67.)*

# Working with Status Pages

## Identifying a Status Page Type

<b>Menu</b>	Administration/Special Pages/Status Page Type
<b>Choices</b>	Standard, Advanced
<b>Default</b>	Standard

### Standard

This one-page document provides

- Printer identification (the printer's name, firmware information, and number of sheets/faces printed during the life of the printer)
- » **Note:** *The number of sheets/faces statistics differ from the number of sheets printed statistics in CrownView and the consumables statistics page (Operator Control/Consumables/Print Statistics), which refer to the number of sheets/faces printed to date during the current consumables tracking period (Administration/Consumables/Start Period menu).*
- Printer settings (printer setup options for paper handling)
- Current memory configuration (printer memory settings)
- Timeouts (printer timeout settings)
- Communication settings and input buffer sizes (host-printer communication settings, including spooling memory sizes)
- Tickmarks in the lower-left corner for image alignment

### Advanced

This multipage advanced status page provides

- All the information from the standard status page
- The configuration menu settings
- A full list of fonts and downloaded emulations

## Printing a Status Page

<b>Menu</b>	Administration/Special Pages/Print Status
<b>Choices</b>	No, Yes
<b>Default</b>	No

# Cancelling/Ending Print Jobs

The Cancel key has four functions:

- It cancels every job that has not yet been rasterized.
- » **Note:** *Because of the speed with which the printer rasterizes images, up to nine sheets may still print after the Cancel key has been pressed.*
- It cancels the oldest print job in the system (in other words, the current one).
- It cancels all jobs with a printing, interpreting, terminating, or spooled status.
- It allows you to send an end-of-job indicator to a currently compiling print job waiting on incoming data.

You don't have to press the Online key before using the Cancel key.

## Cancelling a Print Job

<b>Press this key...</b>	<b>to...</b>	<b>The message window reads...</b>
<b>Cancel</b>	Access the Job Cancel menu.	JOB CANCEL CANCEL JOB
<b>Cancel or Select</b>	Cancel the oldest job in the queue.	CANCEL JOB IS SELECTED

## **Cancelling all Print Jobs**

<b>Press this key...</b>	<b>to...</b>	<b>The message window reads...</b>
<b>Cancel</b>	Access the Job Cancel menu.	JOB CANCEL CANCEL JOB
<b>Next (twice)</b>	Advances to the Cancel All Jobs mode.	JOB CANCEL CANCEL ALL JOBS
<b>Cancel or Select</b>	Cancel all jobs with a printing, interpreting, spooled, or terminating status. The CANCEL ALL JOBS message displays until all print jobs are completely removed.	CANCEL ALL JOBS IS SELECTED

## **Ending a Print Job**

Use this procedure when the message window displays

WAITING ON INPUT  
END JOB?

<b>Press this key...</b>	<b>to...</b>	<b>The message window reads...</b>
<b>Cancel</b>	Access the Job Cancel menu.	JOB CANCEL CANCEL JOB
<b>Next (twice)</b>	Advance to the End Job mode.	JOB CANCEL END JOB
<b>Cancel or Select</b>	Select End Job.	END JOB IS SELECTED

- » **Note:** *This procedure does not end print jobs that are still receiving data. Its only purpose is to provide an end-of-job indicator for a print job that does not have one. You can identify an end-of-job indicator in the Administration/Communications/Parallel and Administration/Communications/Serial menu. (Refer to chapter 5, "Additional Technical Information," in the Reference manual for a complete discussion of End Job Mode.)*





# 4

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## Color Printing

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### **In This Chapter . . .**

- “QMS QCOLOR Technology” on page 4-2
- “Printer Drivers” on page 4-11
- “Downloading Custom Profiles” on page 4-24

# Introduction

Your QMS *magicolor* 330 Print System features advanced color laser technology that produces inexpensive and durable color prints at 300x300, 600x600, and 1200x1200 dpi on plain paper, envelopes, labels, and transparencies.

## Color Management and Control

Color management has always been a source of contention for graphic designers and publishers who rely on precise color to portray proofs and designs. These color experts want to predictably control and fine tune output color to suit personal and client needs. On the other hand, novice color users don't want to hassle with cumbersome color control devices just to get color output that matches what they see on their screen.

The QMS *magicolor* 330 Print System was designed with both sectors in mind—offering a host of color screening, matching, and calibration tools for both the beginner and professional color user.

## QMS QCOLOR Technology

Color management does not mean all devices will match exactly. It does ensure the closest possible color transformation. QMS QCOLOR technology offers four methods for color matching across devices:

- QMS QCOLOR automatic color correction
- Supplied ICC printer profiles
- Built-in color rendering dictionaries (CRDs)
- Supplied PANTONE®\* Color matching tables

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\*Pantone, Inc.'s check-standard trademark for color reproduction and color reproduction materials.

QMS QCOLOR technology takes the guesswork out of color reproduction by automatically optimizing color output. Now even a novice can produce professional quality, colorized documents without the use of sophisticated manual optimization techniques.

QMS QCOLOR is comprised primarily of these built-in and software-supported color control features:

- QMS QCOLOR automatic color correction (printer-resident ICC color matching)
- Built-in color rendering dictionaries
- Host-based ICC color matching profiles
- PANTONE®\* Color matching tables
- Color calibration
- Colorific monitor calibration
- QMS ColorDepth screening technology

To help you optimize color output, QMS developed QCOLOR, which provides automatic or custom color control. QCOLOR dynamically configures the QMS *magicolor* 330 for the best output quality based on the contents of the document and the media on which it will be printed. QCOLOR matching capabilities include automatic color correction, CIE-based (*Commission Internationale de l'Éclairage*, the International Commission on Illumination) color matching, PANTONE Color simulation, ICM (Image Color Matching) 2.0, and ColorSync 2.1 support by means of ICC (International Color Consortium) 3.2-compliant printer profiles.

## **QMS QCOLOR Automatic Color Correction**

QMS QCOLOR automatic color correction (printer-resident ICC color matching) is an ICC color management system built into the QMS *magicolor* 330. Its color matching method (CMM) functions similarly to ColorSync—color management software developed by Apple.

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\*Pantone, Inc.'s check-standard trademark for color reproduction and color reproduction materials.

QMS QCOLOR automatic color correction accepts source (monitor) and destination (printer or press) device profiles in the ICC format, then uses these profiles to perform color space transformations.

The QMS *magicolor* 330 ships with built-in profiles for matching common RGB types, such as sRGB, Trinitron, Prepress, and Apple. Press profiles such as SWOP, Eurocolor, InkJet Proofer, and Commercial are also included for simulating press output. ICC-compliant profiles for other monitors or output devices may be downloaded to disk for custom color matching.

The following is a summary of QMS QCOLOR automatic color correction features:

- **Ease of use across applications:** With QMS QCOLOR, it's as easy to get great color from a PowerPoint presentation as it is from a desktop publishing application, such as QuarkXPress. QMS QCOLOR's color matching methods are simple for both novice and professional color users to navigate.
- **Single-button control:** Whether accessing through the printer driver, or from the printer's front panel, QMS QCOLOR's single-button controls enable automatic correction of uncalibrated RGB or CMYK color files.
- **Printer-resident CMS:** Because QMS QCOLOR automatic color correction is built into the printer, it works well in all computing environments and with most design, publishing, and office applications.
- **Industry-standard profiles:** QCOLOR uses industry-standard ICC profiles for compatibility with popular input and output devices.
- **Supports host-based color management systems:** Easily disable QMS QCOLOR automatic color correction when using host-based ColorSync or ICM color matching.
- **Profiles for common monitors and output devices:** QMS QCOLOR offers default color matching for a variety of common monitors and printing presses.

- **Download device profiles:** For custom color matching, QCOLOR supports downloaded (to disk only) ICC profiles.
- **Support for Internet standard:** QMS QCOLOR uses sRGB for Internet-standard default color matching.
- **Individual page element correction:** QCOLOR separately color corrects (matches) graphics, text, and images on a single page using printer-resident CRDs.

## **The RGB Source Choices**

Listed below are the choices that you will have within your driver for selecting an RGB Source. Depending on the installed driver and the specific operating system, these choices appear in different places. Use RGB Source to indicate the type of computer monitor for color matching.

- sRGB (a proposed common standard color space based on the average performance of PC monitors)
- Trinitron G1.8 D50 (listed on the configuration menu as Trin G1.8 D50 or Sony Trinitron)—a widely available CRT found in many monitors
- Apple RGB (Apple 13" Monitor, the default Photoshop setting listed in the configuration menu as Apple 13)
- Prepress (the SMPTE-240M standard), also known as Adobe RGB
- Max Gamut (the greatest possible range of color variation)
- Printer Default (the RGB source set in the printer's configuration menu)

## **Simulation Choices**

You will need to set a simulation choice if you intend to utilize the built-in color management system on the *magicolor* 330. These choices allow the *magicolor* 330 to simulate a target device. The desired device could be another printer, a printing press, or a pre-determined printing standard. Listed below are the simulation choices available through the operator control panel or the software driver.

- SWOP (Specifications for Web Offset Publications)
- Eurocolor
- Commercial
- InkJet Proofer
- None (the default)

Depending on your color matching needs, custom ICC profiles can be downloaded to the *magicolor* 330. You will need to use the CrownAdmin software provided on the *QMS Software Utilities* CD-ROM. Refer to the CrownAdmin or printer driver's online help.

## **Color Matching with PostScript Level 2**

Your printer's PostScript Level 2 capabilities allow it to accept device-independent CIE color specification directly (in addition to CMYK or RGB color specifications). This means that if you have an application that supports PostScript Level 2 printing (such as Adobe PhotoShop) or if you use the QMS-developed driver for Windows or the *magicolor* 330 PPD for Macintosh, your printer will perform color matching automatically. These drivers work with the printer-resident color rendering dictionaries to match colors.

The advantages of Level 2 color matching are that it is portable, it is application- and printer-resident (there's nothing else to buy), and it is performed at the printer level (so it doesn't tie up your host). However, no on-screen preview of output is provided, and you are not warned if a color is out of printer's gamut (color range).

### **Built-in Color Rendering Dictionaries**

For those who rely on the PostScript page description language for CIE-based color space matching, the QMS *magicolor* 330 has three built-in Color Rendering Dictionaries (CRDs)—Business, Colorimetric, and Photographic to product printer-calibrated images.

The **Business CRD** simulates colors found on the typical RGB computer display and is intended for use with business graphics. This CRD is best utilized when printing transparencies or documents requiring a high level of color saturation.

The **Colorimetric CRD** can be used for very basic color matching and one-to-one conversion of CIE color to CMYK color. For those colors that cannot be produced on the printer, the closest color the printer can produce is substituted.

The **Photographic CRD** is used for optimizing the quality of photographic images. Colors that are out of the printer's gamut (color range) are replaced with the closest color in gamut. When this substitution is made, other specified colors, whether in the printer's gamut range or not, are adjusted equivalently so that the overall image appearance and contrast is maintained. This technique is known as gamut compression.

The **default CRD** is either the Business, Colorimetric, or Photographic. The printer's default CRD can be changed through the Macintosh and Windows drivers or, if your application requires you to use a non-QMS driver, you can change the CRD at the printer's control panel (Administration/Emulations/PostScript/Color Rendering menu). See chapter 4, "Printer Configuration," of the *Reference* manual for information on using the control panel.

## **Host-Based Color Matching**

For creative professionals opting to use a host-based color management system (CMS), QMS provides ICC printer profiles to define the printer's color space to the CMS. These profiles are compatible with all standard color management systems, including Apple ColorSync and Windows ICM.

A few well-known color management systems include Kodak CMS, Pantone POCE®, Apple ColorSync, Microsoft ICM, Color Solutions ColorBlind, and Linotype-Hell LinoColor. The following are shipped with your printer

- An Apple ColorSync/ICC device profile
- A Windows ICM device profile

Instructions for installation and use are included on the *QMS Software Utilities* CD-ROM or on the supplemental color disk provided with the printer.

Here is a list of some applications that support ICC profiles:

- Adobe PageMaker
- Adobe Photoshop
- ColorBlind Edit
- CorelDRAW 7 and 8
- LivePicture
- QuarkXPress

OS CMSs include

- ColorSync 2.5.x (Macintosh)
- ICM 2.0 (Windows)

Application-level CMSs include

- Kodak CMS
- ColorSolution ColorBlind Parachute
- Pantone POCE®

## **PANTONE®\* Color Matching Tables**

Another method of color matching supported by the QMS *magicolor* 330 via QMS QCOLOR technology is PANTONE.

PANTONE, a standard color system within the graphic arts and pre-press industry, specifies hundreds of spot colors, each identified by a unique number. Each PANTONE Color can be simulated on a printer with the appropriate combination of process (CMYK) colors.

Within a supporting application, the desired PANTONE Color number and the corresponding CMYK value are accessed from a look-up table for the printer. QMS provides PANTONE Color look-up (or

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\*Pantone, Inc.'s check-standard trademark for color reproduction and color reproduction materials.

matching) tables for supporting popular design and publishing applications:

Supported Design and Publishing Applications		
CorelDRAW	Illustrator	PageMaker
FreeHand	Micrografx Designer	Photoshop
		QuarkXPress

If a particular application does not support PANTONE®\* Colors, but does allow process color specification, the CMYK values may be entered directly. The QMS *magicolor* 330 ships with software on the *QMS Software Utilities* CD-ROM to print a complete set of PANTONE Charts with the appropriate CMYK values.

The advantages of using PANTONE as a color matching system is it is very easy to use, is widely supported, and is great for spot color. However, it is not as accurate as other methods of color matching, can't be used for photographs, and is limited to specific application software.

## Color Calibration

Another area of color control of particular concern to designers, publishers, and printers is color calibration. For these graphics professionals, it is important to maintain consistent and stable toner densities from day to day, and from one supply change to the next, to ensure predictable color.

QMS offers two methods for color-calibrating the QMS *magicolor* 330:

- Built-in automatic density control
- Optional instrument-based calibration software

The QMS *magicolor* 330 performs automatic density control by monitoring toner density and automatically adjusting levels to maintain

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\*Pantone, Inc.'s check-standard trademark for color reproduction and color reproduction materials.

original factory specifications. Automatic density adjustments are performed periodically by the printer.

Instrument-based calibration provides more precise control over toner density than the built-in automatic density control feature.

Owners of the QMS *magicolor* 330 can also purchase optional host-based software, Southwest Software's ColorEncore for *magicolor* printers, that requires the use of a densitometer (not included) to perform calibration.

Once installed, users simply print a target page from the software application and measure the page with the densitometer. The measurement results are used by the software application to return the QMS *magicolor* 330's primary toner densities to factory levels.

## **Colorific**

Colorific is monitor calibration software that ships with the *magicolor* 330. This software, which is available for both Windows and Macintosh operating systems, allows you to calibrate your monitor to a standard monitor profile that is supported by the CMM built into the *magicolor* 330. For best monitor to printer color matching, Colorific software must be used to calibrate the monitor. Once the monitor is calibrated, the printer's built-in ICC color matching, when set to sRGB source data, ensures that printed output matches the monitor. For more information concerning the use of the Colorific software, refer to the instructions that were provided on the *QMS Utilities* CD-ROM.

## **QMS ColorDepth Screening Technology**

Line screening and halftones are factors that highly influence color image rendering. In conventional printing, color images are composed of tightly arranged dots (or halftones) that are spaced in a regular pattern and appear solid to the eye. Tonal changes are made by changing the size, or amplitude, of each dot. This technique is known as Amplitude Modulation, or AM screening.

QMS QCOLOR provides a preset AM halftone setting, referred to as QMS ColorDepth. ColorDepth is designed to eliminate rosette and moiré patterns, (or steps) in color gradations by increasing the total

number of gray levels (color shades) available in the printer. It also resolves many problems associated with traditional color screening. QMS QCOLOR screening can provide the equivalent of approximately 120 shades per primary color at 600 dpi—for a total of 1.7 million colors. At 1200 dpi, ColorDepth provides approximately 200 shades per primary color for contone-quality images.

## **Printer Drivers**

Printer drivers offer a convenient, graphical interface for selecting document output attributes. QMS has developed its own series of drivers, compatible with several major operating systems, that make the full functionality of the QMS *magicolor* 330 available with a click of a mouse.

- QMS Level 2 PostScript driver for Windows 95/98
- QMS Level 2 PostScript driver for Windows 3.1/95
- QMS Level 2 PostScript driver for Windows NT 4.0

The QMS *magicolor* 330 also supports the following host operating environments by providing a Level 2 PPD (PostScript Printer Description) file to use in conjunction with the PostScript driver supplied by the operating system manufacturer:

- Microsoft Windows 95/98
- Microsoft Windows NT 3.51/4.0
- OS/2
- Macintosh System 7.5.x, and 8.x (LaserWriter 8.x).

### **Accessing Color Matching for Windows 95/98**

- 1 If you haven't already, install the QMS Level 2 Windows driver.**
- 2 Open or create the file you want to print.**

- 3 From the File menu, choose Print Setup or Print.
- 4 In the Print Setup dialog box, make sure QMS *magicolor 330* is selected, then choose the Options or Properties button.
- 5 On the Job tab (Windows 95) or Paper tab (Windows 98) you will be presented with two choices for Quick Color Setup.
- 6 Depending on your printing needs, select Automatic Color Control or Custom. If you select Custom, click on the Color tab to set your color configuration. These next sections explain some of the settings in the driver.

### Automatic Color Control

Automatic Color Control is the best option for most jobs, because it's designed to provide the best color output for a large variety of documents. However, if the automatic setting doesn't provide satisfactory color output for a particular page element or document type, then go to the Color tab where more specific settings can be made.

- » **Note:** *For the Windows 95/98 Level 2 driver, Automatic Color Control is the default setting in the driver. If you print using the default driver settings, both printer-resident ICC color matching and CRD color matching will be enabled. Select Automatic Color Control for color matching with Colorific software.*

### Custom

The Custom setting in the Quick Color Setup section under the Job tab can be used when a specific color configuration is needed. Under the Color tab, you will can enable different color matching options and save different settings for images, graphics, and text.

The Color tab lets the user select custom color configurations for the *magicolor 330*. Listed below are the user-selectable setting for the Color tab.

- Color Model
- Color Separations

- Use Internal ICC Color Matching: Configure
- Use CRD Color Matching: Configure

### Color Model

There are three color models the user can select from: full color, grayscale, and text/line art all black. Full Color is the default setting for the *magicolor* 330 and allows, as the name implies, full color printing. The Grayscale setting allows 8-bit black and white printing while the Text/Line Art All Black only produces 1-bit black and white images.

### Color Separations

This setting allows a full color job to be separated into four color process output. If a job is sent to the printer that contains CMYK information and this setting is on, the printer will separate the cyan, magenta, yellow and black pages. The default setting for Color Separations is off.

### Use Internal ICC Color Matching

If you want to utilize the *magicolor* 330's built-in ICC SWOP color matching, be sure that this is turned on. By default this setting is already on. Listed below are the user-selectable settings when you click on the Configure button next to Use Internal ICC Color Matching.

### RGB Source

The choices for RGB Source are Max Gamut, sRGB, Trinitron G1.8D50, Apple RGB, and Prepress.

When Internal ICC Color Matching is selected, the RGB Source has to be set from the above list or you have the option of creating your own custom RGB Source profile with the Colorific software that was included with your *magicolor* 330. See the Colorific read me file located on the *QMS Software Utilities* CD-ROM for more details on how to create and load a customer RGB Source profile.

- » **Note:** *The default setting for RGB Source is set to sRGB.*

### Simulation

The choices for Simulation are SWOP, Eurocolor, Commercial, CMYK Display, Inkjet Proofer, None, and Printer Default.

When Internal ICC Color Matching is selected, the Simulation can be set from the above list to allow the *magicolor* 330 to simulate another color output device's color space, such as SWOP or Eurocolor.

- » **Note:** *The default setting for Simulation is set to None which provides the optimum output quality of the magicolor 330.*

### Use CRD Color Matching

Another selectable option for the *magicolor* 330's built-in color matching is CRD Color Matching. By default this setting is already on. Listed below are the user-selectable settings when you click on the Configure button next to Use CRD Color Matching.

- Images
- Graphics
- Text

The halftone setting for Images, Graphics, and Text is enhanced. You will be able to select Business, Colorimetric, Default or the Photographic CRD for Images, Graphics, or Text. The default CRD for Images is Photographic, and for Graphics and Text the default CRD is Business.

### CRD Color Space

You are able to select a CRD Color Space within the Color tab. You will be able to select Max Gamut, sRGB, Trinitron G1.8D50, Apple RGB, or Prepress as a CRD Color Space. The default setting for CRD Color Space is sRGB.

You can also load custom CRD Color Space profiles from this option. The Read me file for Colorific and CrownAdmin explain how to load custom CRD color spaces.

## **Quick/Custom Configuration**

This setting will allow you to choose preset CRD configurations or you can set your own custom configurations which you have the option to save within the driver. Listed below are the user-selectable settings for the Quick/Custom Configuration for CRD Color Matching.

- Automatic Color Control
- Graphics
- Grayscale
- Photographic
- Text and Spot Color
- Color All Black

Notice when you choose different options (Graphics, Grayscale, Photographic, etc.) under Quick/Custom Configuration, the CRDs for Images, Graphics, and Text reflect the new settings.

If you configure different CRDs or a different color space, you will need to save those custom settings. Click Save and you will be prompted to name your new custom configuration. Be sure to set the Quick Color Setup under the Job tab to Custom so that your settings will take affect.

## **Accessing Color Matching for Microsoft Windows NT 4.0**

- 1 If you haven't already, install the QMS NT Windows driver.
- 2 Open or create the file you want to print.
- 3 From the File menu, choose Print Setup or Print. You can also right mouse click the driver and select Document Defaults.
- 4 You will be presented with two tabs, Page Setup and Advanced. Click on the Advanced tab to view the tree structure. Listed below are the color features available for the *magicolor 330*.

- Color Model
- Color Rendering Dictionaries
- ICC Color Matching

### Color Model

There are two color models the user can select from:

- Color
- Monochrome

Color is the default setting for the *magicolor* 330 and allows, as the name implies, full color printing. The Monochrome setting allows 8-bit black and white printing.

### Color Rendering Dictionaries

From the tree structure, you will be able to select a CRD. You may choose from Photographic, Business, and Colorimetric. This feature is on by default for the Windows NT driver. Listed below are the user-selectable settings from the tree structure for the Color Rendering Dictionaries.

- Images
- Line Art
- Text

The halftone setting for Images, Line Art and Text is enhanced. You will be able to select Business, Colorimetric, or the Photographic CRD for Images, Line Art or Text. The default CRD for Images and Line Art is Photographic and for Text the default CRD is Business.

### ICC Color Matching

If ICC Color Matching is selected you can set an ICC RGB Source and the ICC Simulation. ICC Color Matching is on by default for the Windows NT driver.

## **ICC RGB Source**

The choices are Max Gamut, sRGB, Trinitron G1.8D50, Apple RGB, Prepress, custom1, custom2, and custom3.

When Internal ICC Color Matching is selected, the RGB Source has to be set from the above list or you have the option of creating your own custom RGB Source profile with the Colorific software that was included with your *magicolor* 330. Please see the Colorific read me file located on the *QMS Software Utilities* CD-ROM for more details on how to create and load a customer RGB Source profile.

- » **Note:** *The default setting for RGB Source is set to sRGB*

## **Simulation**

The choices are SWOP, Eurocolor, Commercial, CMYK Display, Inkjet Proofer, None, Printer Default, custom1, custom2, and custom3.

When Internal ICC Color Matching is selected, the Simulation can be set from the above list to allow the *magicolor* 330 to simulate another color output device's color space, such as SWOP or Eurocolor.

- » **Note:** *The default setting for Simulation is set to None.*

## **Procedure for Creating and Saving a Custom Color Configuration for Microsoft NT 4.0**

Depending on what driver you have selected (third-party driver or the QMS driver), you will have different options for custom configuration that will appear in the driver's print window.

## **Accessing Color Matching for Microsoft Windows 3.1**

- 1 If you haven't already, install the QMS Level 2 Windows driver.
- 2 Open or create the file you want to print.
- 3 From the File menu, choose Print Setup.

Some applications may call this option something else, such as Page Setup.

- 4 **In the Print Setup dialog box, make sure the QMS *magicolor* 330 is selected, then choose the Options or Properties button.**

The QMS Level 2 Windows driver dialog box appears.

- 5 **On the Paper tab, select a Quick Color Setup setting:**

- **Automatic Color Control** (if you're printing a combination of document types)

Automatic Color Control is the best option for most jobs, because it's designed to provide the best color output for a large variety of documents. However, if the Automatic setting doesn't provide satisfactory color output for a particular page element or document type, then select a more specific QCOLOR setting (for example, Photographic for scanned photographic images).

- **Graphics** (if you're printing color graphics)
- **Grayscale** (if you're printing images with gray shades)
- **Photographic** (if you're printing photographic images)
- **Text and Spot Color** (if you're printing text or spot colors)
- **Third-Party Color Management** (if you want to allow your application to control color settings)

» **Note:** *Select this option to use the printer-resident ICC color matching instead of CRD color matching. Use the printer front panel to configure ICC color matching options.*

- **Customize** (if you want to customize the color settings by using the options on the Color tab)

- » **Note:** *Because QCOLOR automatically adjusts the settings on the Color Setup tab (Windows 3.1), you don't have to adjust them manually. However, if you want to customize them, you can get information about them and other options in the driver by choosing the Help button. Also, some applications (like PageMaker and Ventura Publisher) specify color outside the Windows driver, in which case the color settings in the QMS Level 2 Windows driver are ignored.*

**6 Choose the media type you're using.**

Use the printer driver's Paper tab and the printer's Operator Control/Media/For MPT Bin or Operator Control/Media/For Upper Bin menu.

**7 Choose any other printing options you want.**

Choose the Help button in the printer driver for detailed descriptions of the options.

**8 Choose OK until you return to the application.**

**9 From the File menu, choose Print.**

**10 In the Print dialog box, select any other options you want and then choose OK.**

**Procedure for Creating and Saving a Custom Color Configuration for Microsoft 3.1**

Depending on what driver you have selected (third-party driver or the QMS driver), you will have different options for custom configuration that will appear in the driver's print window.

**Accessing Color Matching for Macintosh**

You will find that the *magicolor* 330 provides an array of robust color matching options that allows the user to custom tailor a specific color matching setup for his or her particular needs. Below is the list of color matching options available for Macintosh.

- ColorSync Color Matching
- Printer-Resident ICC Color Matching

### ■ Postscript Level 2 Color Matching

Since the *magicolor* 330 offers multiple color matching options, remember that only one color management system can “drive” the printer at a time. Please read the following sections thoroughly to ensure that you understand how to activate and deactivate each one of these color matching options.

### **ColorSync Color Matching**

ColorSync is host-based color matching software that is provided by Apple. Current versions of the Macintosh system software install and support the ColorSync color matching software. To determine if you have this software installed on your Macintosh, check the Control Panels folder in the Apple menu. If you need to install ColorSync, locate your Macintosh System Software CD-ROM and run the Installer.

To invoke ColorSync color matching you will need to perform the following steps:

- 1 Make sure you've installed the *magicolor* 330 PPD and you have the *magicolor* 330 ICC profiles installed correctly on your Macintosh. If you have not, locate the *QMS Software Utilities* CD-ROM that shipped with your printer and install these first.**
- 2 Prepare your document for color printing and access the Print dialog box by selecting Print.. from the File menu. Once you are in the main print dialog box, select Color Matching from the General pop-up menu.**
- 3 You will be presented with three pop-up menus once you are in the Color Matching section. Listed below are the three menus.**
  - Print Color
  - Intent
  - Printer Profile
- 4 You will need to change the Print Color: pop-up menu from Color/Grayscale to ColorSync Color Matching. If this selec-**

tion is not made, you will not activate ColorSync, even though the software is installed on your Macintosh.

- 5 You will have multiple choices for the Intent: pop-up menu. If you are unsure of what to choose, leave this at the default setting, Auto Selection or refer back to the ColorSync documentation that was included with your Macintosh.
- 6 In the Printer Profile: pop-up menu, you will need to select *magicolor* 330 from the list of printers. If you do not see the *magicolor* 330 listed, then you do not have the ICC profiles installed correctly. With System 8.1, the ICC profiles are stored in the System Folder inside a folder titled, "ColorSync Profiles."
- 7 You must be sure to deactivate the *magicolor* 330's built-in color matching if you intend to use ColorSync. As stated at the beginning of this section, only one color management system can be active at a time. Access Printer Specific from the General pop-up menu in the print dialog box. Set ICC Color Matching: to Disable.

QMS recommends using ColorSync since most of the popular graphics applications on the market today support this method of color matching, and ColorSync is recognized as the standard for color matching on Macintosh computers.

### **Printer-Resident ICC Color Matching**

In addition to ColorSync, the *magicolor* 330 supports ICC color matching that is built into and performed on the printer. Printer resident matching is faster than host-based color matching (ColorSync) since the calculations for color matching take place on the printer and not the Macintosh.

To invoke the printer resident color matching you will need to perform the following steps:

- 1 **Make sure you've installed the *magicolor* 330 PPD and you have the *magicolor* 330 ICC profiles installed correctly on your Macintosh. If you have not, locate the *QMS Software***

**Utilities CD-ROM** that shipped with your printer and install these first.

- 2 Prepare your document for color printing and access the Print dialog box by selecting Print.. from the File menu. Once you are in the main print dialog box, select Color Matching from the General pop-up menu.**
- 3 You will be presented with three pop-up menus once you are in the Color Matching section. Listed below are the three menus.**
  - Print Color
  - Intent
  - Printer Profile
- 4 You will need to change the Print Color: pop-up menu from ColorSync Color Matching to Color/Grayscale. If this selection is not made, you will not activate the printer resident color matching.**
- 5 Select Printer Specific Options from the General pop-up menu. Set ICC Color Matching to Enabled. Listed below are the options you will need to set to use the printer resident color matching.**
  - ICC RGB Source
  - ICC Simulation

RGB Source allows you to pick the type of monitor you are using. Normally you will select Apple RGB since this is a common profile for most Macintosh monitors. The ICC Simulation choice will allow you to simulate another color output device's color space, such as SWOP or Eurocolor. Leave the ICC Simulation setting at None if you do not want to simulate another printer.

Prepress users are allowed to download their own custom ICC profiles via CrownAdmin software located on the *QMS Software Utilities* CD-ROM. These custom ICC profiles are activated by selecting Custom1, Custom2, and Custom3 from the ICC RGB Source or the

ICC Simulation pop-up menus. These are only available once profiles have been successfully downloaded to the printer.

## **Postscript Level 2 Color Matching**

The third and final color matching option for the *magicolor* 330 is obtained by utilizing the Postscript Level 2 functions available through the LaserWriter driver. Postscript Level 2 color matching allows the user to access the printer's Color Rendering Dictionaries, commonly known as CRDs. Listed below are the steps required to activate Postscript Level 2 color matching.

- 1 Make sure you've installed the *magicolor* 330 PPD and you have the *magicolor* 330 ICC profiles installed correctly on your Macintosh. If you have not, locate the *QMS Software Utilities* CD-ROM that shipped with your printer and install these first.**
- 2 Prepare your document for color printing and access the Print dialog box by selecting Print.. from the File menu. Once you are in the main print dialog box, select Color Matching from the General pop-up menu.**
- 3 You will be presented with three pop-up menus once you are in the Color Matching section. Listed below are the three menus.**
  - Print Color
  - Intent
  - Printer Profile
- 4 You will need to change the Print Color: pop-up menu from Color/Grayscale to Postscript Color Matching. If this selection is not made, you will not activate the CRDs that are built into the *magicolor* 330 for this type of color matching.**
- 5 In the Printer Profile: pop-up menu, you will need to select *magicolor* 330 from the list of printers. If you do not see the *magicolor* 330 listed, you do not have the ICC profiles installed correctly. With System 8.1, the ICC profiles are**

stored in the System Folder within a folder titled ColorSync Profiles.

- 6 **Select Printer Specific Options from the General pop-up menu. Set ICC Color Matching to Disabled. As stated before, only one method can be used for color matching. Listed below are the options you will need to set to use the Postscript Level 2 color matching.**

- Color Rendering Dictionaries
- CRD RGB Source

You have three CRD choices: Photographic, Business, and Colorimetric. Depending on your output need, select an appropriate CRD from this menu.

## Downloading Custom Profiles

With the introduction of the *magicolor* 330, we have also added a CRD RGB Source selection in the Printer Specific pop-up menu. The CRD RGB Source allows you to pick the type of monitor you are using. Again, you will select Apple RGB since this is a common profile for most Macintosh monitors. This feature will allow a more accurate screen to final output match when using this Postscript Level 2 Color Matching option.

As you have discovered, the *magicolor* 330 provides a variety of color matching options that allows you to custom tailor a specific color matching setup for your particular needs.

The *magicolor* 300 allows the downloading of custom ICC profiles that will be stored on the printer. These custom profiles can be accessed through a PPD or a QMS-supplied driver on a per-job basis. From the keypad, you can also set a custom profile as the default on the printer. To view the current profiles on the *magicolor* 330, access Special Pages under the Administration menu and select Yes under CMM Profile Page.

Listed below are the steps for downloading a custom ICC profile to the *magicolor* 330 printer. Your *magicolor* 330 must be an EX model or a *magicolor* 330 that has an internal hard drive. You can not download profiles to external hard drives.

- 1 After a custom ICC RGB Source or Simulation profile has been created, rename the profile so it can be recognized by the printer.**

This renaming is done, so the PPD for Macintosh, Windows 95 PPD, and Windows NT driver can correctly identify the profile.

You must name your custom ICC RGB Source profile either *custrgb1.icc*, *custrgb2.icc*, or *custrgb3.icc*. Listed below is an example of some custom ICC RGB Source profiles and how they would be renamed.

User-Defined Name	330 Naming for PPDs
CORLMTL.ICC	custrgb1.icc
MYPROF.ICC	custrgb2.icc
UMAXD50.ICC	custrgb3.icc

» **Note:** *If you do not rename your files correctly, the magicolor 330 PPDs can not select the custom profiles. However, you will still be able to download the profiles and use them as a default setting for the RGB Source and Simulation for ICC Color Matching.*

- 2 Once you have renamed your custom ICC RGB Source or Simulation, you will need to used CrownAdmin to download a profile to the *magicolor* 330.**
- 3 Locate your *QMS Software Utilities* CD-ROM and install CrownAdmin if necessary.**
- 4 Download the custom profile via CrownAdmin.**
  - Select PS Utilities... from the Printer menu.
  - Under the Download tab select Destination as Other.
  - Select the Local Files... button and specify the ICC profile to download.

## Downloading Custom Profiles

- Click Open.
- Select Remote Path... and go to USR.
- Click Select.

### 5 Verify the destination as **SYS:/USR/\*.\***.

You might need to type this information in, if it is not present.

### 6 Select Download to send the custom ICC RGB Source or Simulation profile to the *magicolor 330's* internal hard drive.

### 7 Verify the SProfile.ps file contains the correct file name.

You can use a text editor such as Notepad or SimpleText to change the file name listed in the SProfile.ps file.

### 8 Download the file SProfile.ps to register the profile.

- Select PS Utilities... from the Printer menu.
- Under the Download tab, select Destination as PostScript.
- Select the Local Files... button and specify the SProfile.ps.
- Click Open.
- Select Remote Path... and go to PostScript.
- Click Select.

To view the current profiles on the *magicolor 330* access Special Pages under the Administration menu and select Yes under CMM Profile Page.

To utilize your custom profiles, you will need to select Custom 1, Custom 2 or Custom 3 from the RGB Source or the Simulation pop-up menus located under Printer Specific Options in the Print dialog box for Macintosh. In Windows 95, you can utilize your profiles from the Color tab by selecting Configure for ICC Color Matching or selecting Document Defaults in the QMS Windows NT driver.

- » **Note:** *You can only download one custom profile at a time to the magicolor 330. After each download of a custom ICC profile, be sure to send the SProfile.ps file to ensure that the new custom profile is available for use or restart the magicolor 330.*





# 5

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## Printer Care

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### **In This Chapter . . .**

- “Handling the Printer” on page 5-2
- “Cleaning the Printer” on page 5-3
- “Maintenance Schedule” on page 5-9
- “Replacing the Fuser Oil Roller” on page 5-10
- “Replacing the OPC Drum Cartridge” on page 5-14
- “Replacing the Waste Toner Box” on page 5-16

# Introduction

This chapter describes how to handle and clean the printer.

Blurred or splotchy prints and paper jams can result from dusty printer parts. Regular cleaning takes only a few minutes and helps ensure print quality. Printer parts that require cleaning are the paper pickup rollers and the outside surface of the printer.

## Handling the Printer

Handle the printer with care to preserve its life. Abuse may cause damage. Keep the following guidelines in mind:


- Do not place anything on the top of the printer.
- Avoid spraying cleaning solution directly on the printer's surface; the spray could penetrate through the air vents of the printer and damage the internal circuits.
- Do not use any cleaning solution other than synthetic detergent.
- Be careful when cleaning the inside or removing paper jams, as the fuser assembly and other internal parts become very hot. Open the printer cover, and let the interior of the printer cool before handling the inside of the printer.
- Always close the printer covers gently. Never expose the printer to vibrations.
- If you use a dust cover over your printer, do not cover the printer immediately after using it. Turn the printer off and wait until it cools down.
- Do not leave the printer open for any length of time, especially in well-lit places; light may damage the OPC drum.
- Do not open the printer during printing.
- 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 trays at minimum level. If the media stacks too high, your printer may experience media jams and excessive media curl.
- Lift the printer from the bottom only, using the carrying grips under each side corner. Make sure four people are available to lift the printer when moving it.
- Keep the following in mind when storing the printer for an extended period:
  - Unplug the printer.
  - Remove the toner and OPC drums from inside the printer. After removing the cartridges, return them to their original packaging. If the original packaging is not available, protect the toner cartridges from spilling toner, and protect the OPC drum cartridge from damage and light.
  - See appendix B, “Technical Specifications,” in the *Reference* manual for storage specifications.

## Cleaning the Printer

Paper dust may accumulate inside the printer. This could affect the printer's performance. To prevent any potential problems associated with this, you should clean your printer on a regular basis. You need to clean both the inside and outside of the printer.

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 **WARNING!** *Turn off the printer, unplug the power cord, and disconnect all interface cables before cleaning.*

**ACHTUNG!** *Ziehen Sie den Netzstecker aus der Steckdose bevor Sie den Drucker reinigen.*

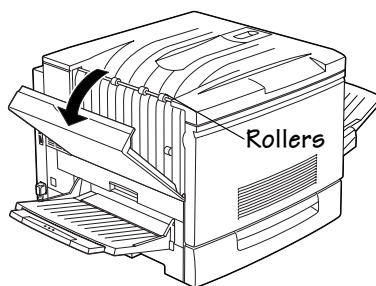
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### **Guidelines for Cleaning Inside the Printer**

- Either clean the printer before use, or allow a few minutes after unplugging it to allow the fuser unit to cool down.
  - Turn off the printer, unplug the power cord, and disconnect all interface cables before cleaning inside the printer.
  - 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 covers and the interior of the printer body.
  - Use only dry, lint-free cotton cloths or swabs.
  - Make sure any parts removed during cleaning are replaced before you plug in the power cord, reconnect the interface cables, and turn on the printer.
- » **Note:** *In compliance with UL guidelines, "The appliance inlet is considered to be the main disconnect device."*

### **Cleaning the Paper Exit Rollers**

- 1 Turn off and unplug the printer.
- 2 Open the printer's exit roller cover.



- 3 Using a clean, dry cotton cloth, clean the paper exit rollers while manually rotating each one.
- 4 Close the printer's exit roller cover.

## **Cleaning the OPC Drum Cartridge**



- 
- ◆ **Caution:** *Never touch the surface (blue part) of the drum.*

*Never hit or rub the drum surface: if the OPC drum is scratched, printing will be degraded.*

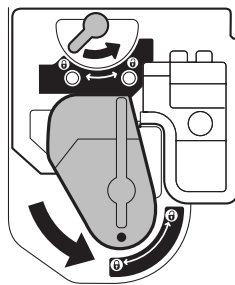
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The OPC drum is extremely sensitive to touch. Any body oil left on the surface of the drum will prevent toner from adhering to the drum which results in poor image quality. Any scratches will show in the image produced.

The OPC drum is also extremely sensitive to bright light and direct sunlight. Always leave it in its protective bag until you are ready to install it. Any exposure to light should be limited to two minutes.

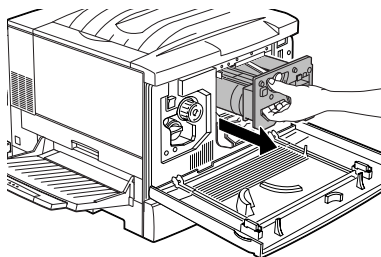
If you suspect the drum is damaged due to exposure to light, put the drum in a dark place to recover. Depending on the amount of exposure, recovery may take up to two hours. Recovery time is dependent on the amount of exposure sustained. However, recovery is not guaranteed.

- 1 Turn off and unplug the printer.**
- 2 Open the printer's front cover, and release the two OPC drum lock levers to the Unlock position.**



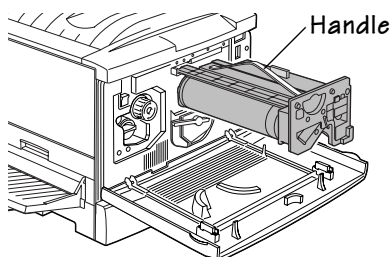
## **Cleaning the Printer**

- 3 Pull out the OPC drum cartridge.**



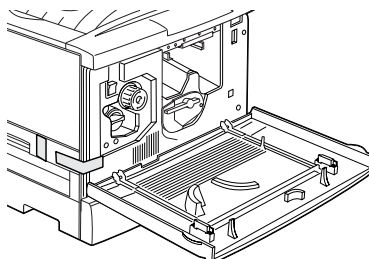
- 4 Grasp the handle to remove the OPC drum cartridge.**

Do not rest it with the blue part touching a surface.



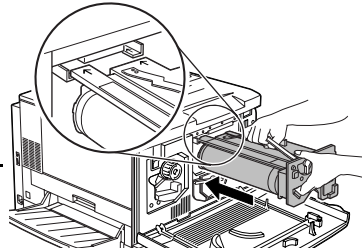
- 5 Using a dry cotton cloth, clean any toner buildup from around the OPC drum cartridge's cavity.**


- 6 Clean any paper dust and toner buildup found on the OPC drum cartridge other than on the blue drum part.**



- 7 Align the guide arrow on the OPC drum cartridge with the printer rail
- 8 Push it all the way into the printer.

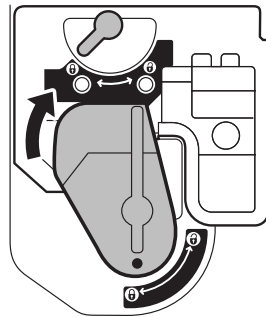
◆ **Caution:** If the guide on the OPC drum cartridge is not aligned with the rail, the cartridge may be damaged. Be careful to prevent the drum surface (the blue part) from touching other parts.



- 9 Secure the two levers in the Lock  position.

◆ **Caution:** Secure the smaller lever on top first, or they won't lock correctly.

- 10 Close the printer's front cover.



## Cleaning the Outside of The Printer

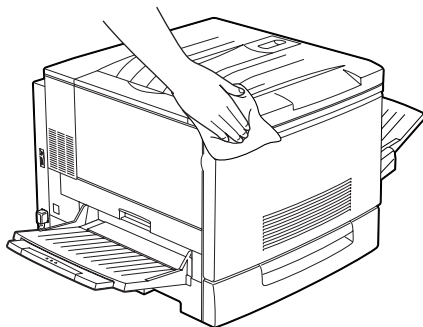
⚠ **WARNING!** Turn off the printer, unplug the power cord, and disconnect all interface cables before cleaning. Do not spill water or detergent into the printer; otherwise the printer will be damaged and an electric shock may occur.

**ACHTUNG!** Ziehen Sie den Netzstecker aus der Steckdose bevor Sie den Drucker reinigen. Verschütten Sie kein Wasser oder andere Flüssigkeiten auf dem Drucker, da das Gerät sonst beschädigt wird oder die Gefahr eines elektrischen Schlages besteht.

## Cleaning the Printer

To protect your printer and maintain its appearance, clean the exterior regularly.

- Use only a dry or slightly damp, lint-free, soft cloth moistened only with water or mild synthetic detergent.



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**Caution:** *Never use cleaning solutions that contain solvents, such as alcohol and benzene. Solvents may damage the printer's finish.*

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- Always test any cleaning solution 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.
- Never spray a cleaning solution directly on the printer as the cleaning solution will penetrate to the interior of the printer and cause damage.

# Maintenance Schedule

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 (usually 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.

<b>Periodic Maintenance Required</b>	<b>This item needs replacing after...</b>	<b>By...</b>
Fuser oil roller	Rated life: 20,000 pages. However, fuser oil roller life is media dependent: coarser paper requires more oil.  REPLACE FUSER OIL ROLLER displays in the message window.	User See "Replacing the Fuser Oil Roller" on page 5-10.
OPC drum cartridge	Rated life (planes* @ 5% coverage): Maximum life—50,000 planes*, usually occurs with continuous use; minimum life—20,000 planes, usually occurs with small job sizes (for 1–2 pages) although other factors also affect cartridge life.  REPLACE OPC DRUM displays in the message window.	User See "Replacing the OPC Drum Cartridge" on page 5-14.
Waste toner box	50,000 planes* at 5% coverage of each color  WASTE TONER FULL displays in the message window.	User See "Replacing the Waste Toner Box" on page 5-16.

## Replacing the Fuser Oil Roller

Periodic Maintenance Required	This item needs replacing after...	By...
Fuser unit	100,000 pages** maximum (at an equal mix of black and 4-color pages, all with 5% coverage of each color)  REPLACE FUSER displays in the message window.	QMS Authorized Service Provider
Belt cleaner	100,000 pages**  REPLACE BELT CLEANER displays in the message window.	QMS Authorized Service Provider
Bias transfer roller	100,000 pages**  REPLACE BTR2 displays in the message window.	QMS Authorized Service Provider
450,000-page preventive maintenance	450,000 pages**	QMS Authorized Service Provider

\* A **plane** is a single pass of the OPC drum (one toner color). For example, a one-color print job makes one pass (one plane), and a two-color print job makes two passes (two planes).

\*\* A single-sided **page** (also called a face) usually consists of four passes of the OPC drum, since most color print jobs use all four toner colors.

## Replacing the Fuser Oil Roller

Your printer uses a fuser oil roller to lubricate and wipe dust from the fuser unit and to apply the proper amount of fuser oil. At the default print density and with about 5% coverage, the fuser oil roller can be used to print about 20,000 Letter/A4-sized pages (when printing an average of 500 or fewer pages per day). For higher daily page rates, see chapter 3, “Advanced Printing Features,” for information on a high-duty fuser oil roller.

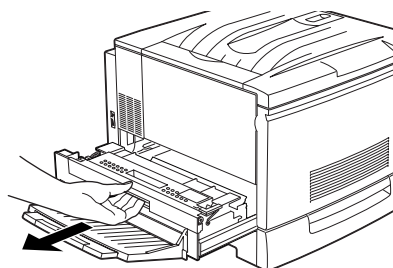
- 
- ◆ **Caution:** *The fuser unit is an integral part of the imaging process and is also expensive to replace. Fuser life will be shortened (or the fuser permanently damaged) if the oil roller is not changed when needed and installed properly. This type of damage is not covered under warranty or service contract.*
- 

- ⚠ **WARNING!** *The fuser unit can become extremely hot and cause severe burns. Make sure the unit is cool before handling it.*

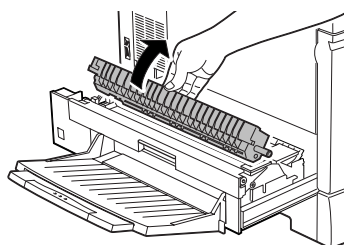
**ACHTUNG!** *Die Fixiereinheit kann sehr heiß werden, so daß Verbrennungsgefahr besteht. Bitte lassen Sie die Fixiereinheit einige Zeit abkühlen, bevor Sie diese berühren.*

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- 1 Turn off the printer.
- 2 Lower the face-up tray.
- 3 Open the fuser unit on the left side of the printer.

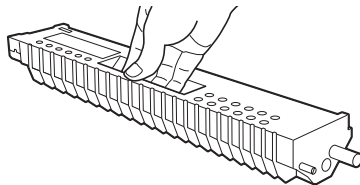


- 4 Remove the old fuser oil roller.



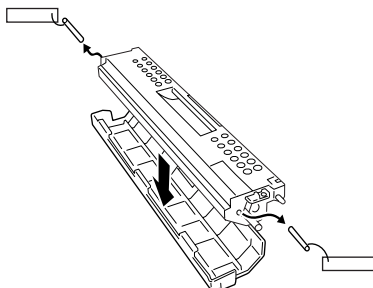
## Replacing the Fuser Oil Roller

- 5 Discard the old fuser oil roller.

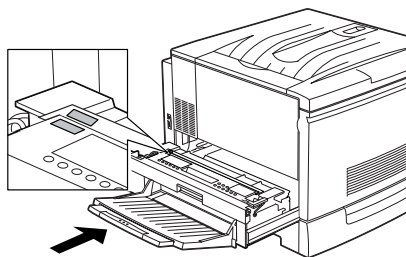


- 6 Unpack the new fuser oil roller, and remove the protective cover and pins.

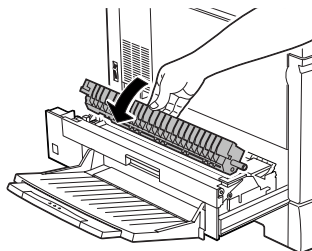
» **Note: Caution:** Oil on this roller will come off on your skin if touched directly. Shield this roller from dust and toner when removing or inserting into the fusing unit.



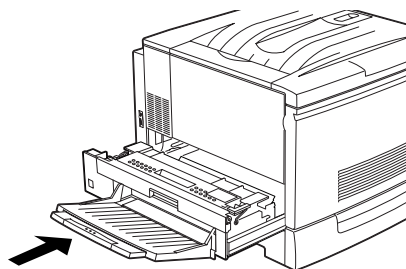
- 7 Match up the colored labels.



- 8 Carefully lower the fuser oil roller into the fuser unit until it clicks.



- 9 Slide the fuser unit firmly back into the printer.
- 10 Turn on the printer.



- 11 Reset the consumables usage monitoring system.

In the Operator Control/Consumables/Item Replaced/Fuser Oil Roller menu, choose Yes.

- » **Note:** *When you replace the fuser oil roller after a REPLACE FUSER OIL ROLLER message displays in the message window, the engine automatically recovers. However, you must manually reset the consumables usage monitoring system to ensure accurate consumables monitoring.*

To access consumables usage information, use the Operator Control/Consumables/Print Statistics menu or the CrownView printer web page.

## Storage

- Before use, store fuser oil roll cartridges away from direct sunlight
- Store at the temperature range between 32°F to 95°F (0°C to 35°C) and a relative humidity (noncondensating) of 15% to 80%
- Place the fuser oil roll cartridge only on a flat surface, and do not rest it against anything
- Keep out of reach of children

# Replacing the OPC Drum Cartridge

- 
- ◆ **Caution:** *Never touch the surface (blue part) of the drum.*


*Never hit or rub the drum surface: if the OPC drum is scratched, printing will be degraded.*

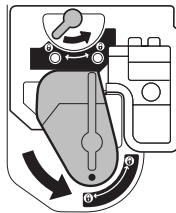
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The OPC drum is extremely sensitive to touch. Any body oil left on the surface of the drum will prevent toner from adhering to the drum which results in poor image quality. Any scratches will show in the image produced.

The OPC drum is also extremely sensitive to bright light and direct sunlight. Always leave it in its protective bag until you are ready to install it. Any exposure to light should be limited to two minutes.

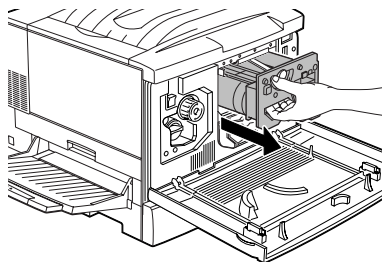
If you suspect the drum is damaged due to exposure to light, put the drum in a dark place to recover. Depending on the amount of exposure, recovery may take up to two hours. Recovery time is dependent on the amount of exposure sustained. However, recovery is not guaranteed.

- 1 **Turn off and unplug the printer.**
- 2 **Open the printer's front cover.**
- 3 **Release the two OPC drum lock levers to the Unlock  position.**

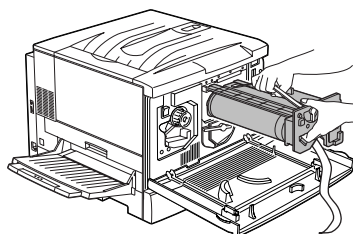


## Replacing the OPC Drum Cartridge

- 4 Pull out the OPC drum cartridge.

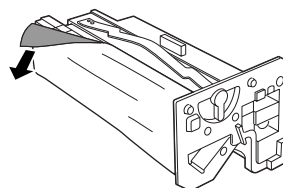


- 5 Grasp the handle to remove the OPC drum cartridge.



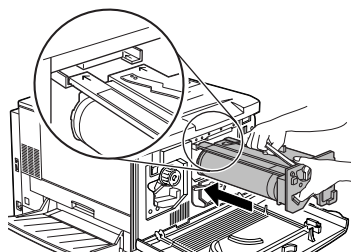
- 6 Carefully unpack the new OPC drum cartridge and pull off the protective cover.

» **Note:** A new waste toner box is already included in the OPC drum cartridge.




- 7 Align the guide arrow on the OPC drum cartridge with the printer rail.

- 8 Push the cartridge all the way into the printer.



◆ **Caution:** Failing to align the guide on the OPC drum cartridge with the rail may damage the cartridge.

## Replacing the Waste Toner Box

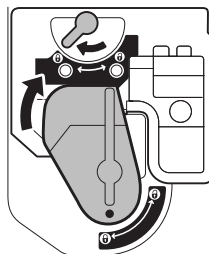
- 9 Secure the two levers in the Lock  position.



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**Caution:** *Secure the smaller lever on top first, or they won't lock correctly.*

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- 10 Close the printer's front cover.
- 11 In the Operator Control/Consumables/Item Replaced/OPC Drum menu choose Yes to reset the consumables monitoring system.



**Note:** *When you replace the OPC drum after a REPLACE OPC DRUM message displays in the message window, the engine automatically recovers. However, you must manually reset the consumables usage monitoring system to ensure accurate consumables monitoring.*

To access consumables usage information, use the Operator Control/Consumables/Print Statistics menu or the CrownView printer web page.

- 12 In the Operator Control/Consumables/Item Replaced/Waste Toner menu choose Yes to reset the consumables monitoring system.

## Replacing the Waste Toner Box

The waste toner box is part of the OPC drum cartridge. It is always replaced when the OPC drum cartridge is replaced. However, the waste toner box can also be replaced itself, and should be replaced whenever it becomes full.

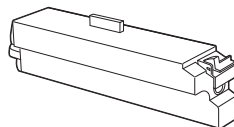
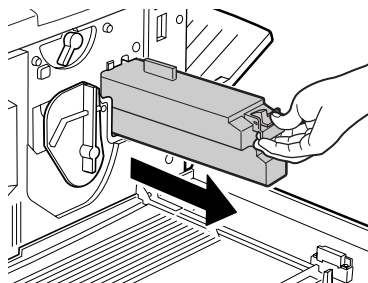
## Replacing the Waste Toner Box

- » **Note:** The “gas gauge” in the control panel shows the waste toner life, not degree of fullness. When that gauge is on empty, it is time to change the waste toner box.

- 1 Open the printer's front cover.
- 2 Remove and discard the full waste toner box.

- » **Note:** You do not have to remove the OPC drum cartridge to replace the waste toner box.

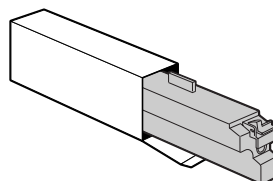
- 3 Squeeze the latch while pulling the box away from the OPC drum cartridge.
- 4 Dispose of the old waste toner box in accordance with safety laws and regulations in your area.



**WARNING!** Never burn a used waste toner box. Toner could explode and cause burns.

**ACHTUNG!** Verbrennen Sie nie einen benutzten Resttonerbehälter. Toner könnte explodieren und Verbrennungen verursachen.

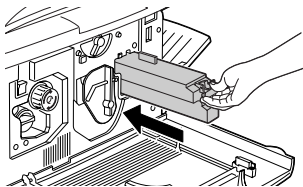
- 5 Remove the new waste toner box from its packaging.



## Replacing the Waste Toner Box

- 6 Push the new waste toner box firmly into the printer until it clicks.

Push in without pinching the handle knob.



- 7 Close the front cover.
- 8 In the Operator Control/Consumables/Item Replaced/Waste Toner Box menu choose Yes to reset the consumables monitoring system.

» **Note:** *When you replace the waste toner pack after a CHECK WASTE TONER message displays in the message window, the engine automatically recovers. However, you must manually reset the consumables usage monitoring system to ensure accurate consumables monitoring.*

To access consumables usage information, use the Operator Control/Consumables/Print Statistics menu or the CrownView printer web page.



# 6

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## **CrownView Printer Web Page**

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### **In This Chapter . . .**

- “Setting up the Printer Web Page” on page 6-2
- “Printer Home Page” on page 6-8
- “Web Page Help System” on page 6-31

# Introduction

QMS CrownView is a printer-based application using the World Wide Web portion of the Internet as a framework for the QMS *magicolor* 330 Print System. This feature allows you to monitor printer consumables as well as access information that is normally available only by printing a status page.

Inside your new QMS printer resides an HTTP (Hyper-Text Transfer Protocol) based web page that can be accessed from the most common web-browser software, Netscape Navigator and Microsoft Explorer. This web page gives you access to the most frequently accessed printer configurations and gives you instant access to printer status. Anyone on your company intranet can access the QMS printer through their web-browser software.

- » **Note:** *The sample windows and dialog boxes shown in this chapter are as they appear in Netscape Navigator and Internet Explorer, and coincide with the step-by-step instructions provided.*

This chapter provides you with details on

- Setting up and using the web page
- The different types of pages in the printer
- Accessing the QMS web site and performance support

## Setting up the Printer Web Page

Setting up the printer web page to run on your intranet involves two basic steps:

- Assigning a name to your printer
- Setting up the “no proxy” preferences in your browser software

## **Assigning a Printer Name**

The printer web page can be accessed only through the assigned name of the printer or the IP address. It is more convenient for you to use a name than the address. The default name for the printer is usually the model number of the printer, for example, QMS *magicolor* 330 Print System. Change the default name to one that is more easily remembered and typed.

## **Setting Up Your Browser Software**

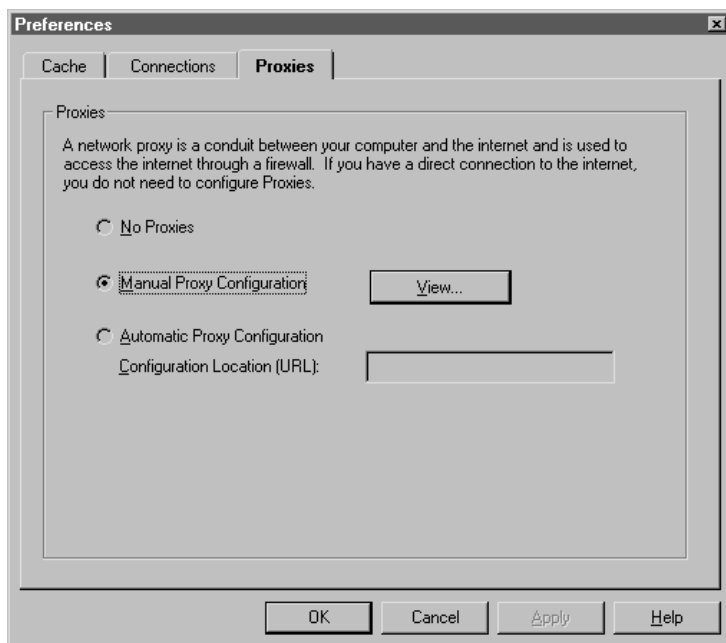
Since your printer will reside on your intranet and will not be accessible beyond the firewall of your network, you must set up the proper “preferences” in your browser software. Your printer name or IP address must be added to the “no proxy” list in the preferences dialog box of the browser.

» **Note:** *You need to do this procedure only once.*

### **For Netscape**

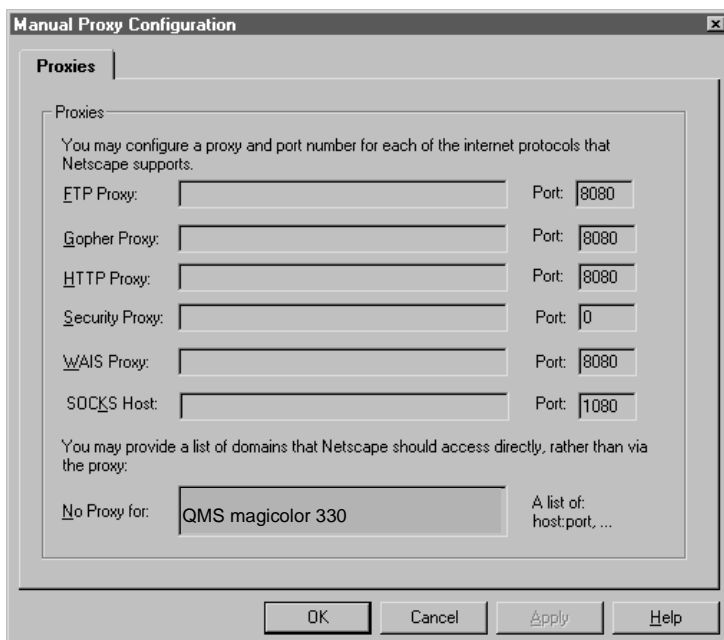
- 1 Start your web-browser.**
- 2 Access the Options menu and choose Network Preferences.**

- 3 Select the Proxies tab in the dialog box.



- 4 Select the Manual Proxy Configuration radio button and press the View... button.

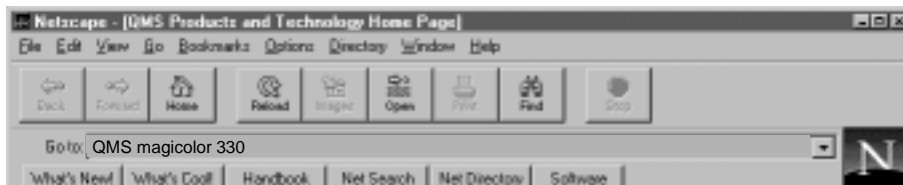
- 5 In the **No Proxy For:** text box, type a comma after the last entry and then type the printer name or the IP address of your QMS *magicolor 330*.



- » **Note:** The printer name is entered in the network protocol menu that you are using. The default name is the model number of the printer. See “Assigning a Printer Name” on 6-3 for more information on naming your printer.
- 6 **Choose OK.**

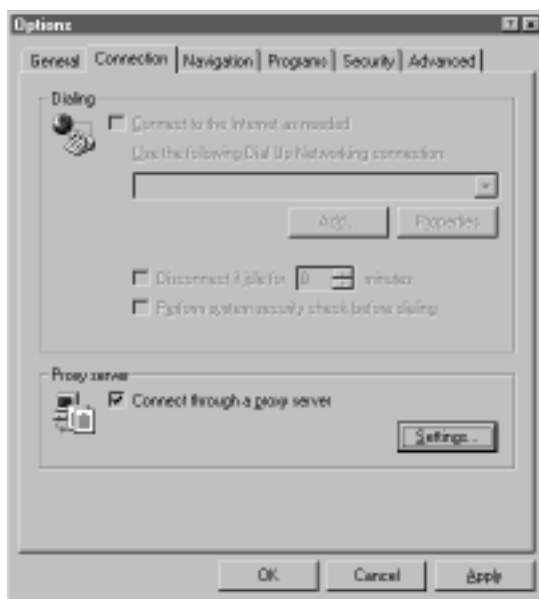
## Setting up the Printer Web Page

- 7 Enter the printer name or IP address in the Go to: URL address box to access the printer home page.



### For Internet Explorer

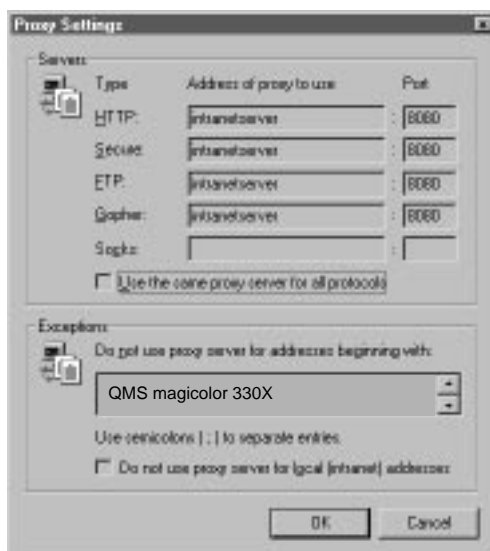
- 1 Start your web browser.
- 2 Access the View menu and choose Options.
- 3 Select the Connection tab on the dialog box.



- 4 Click the Settings button to display the Proxy Settings dialog box.

- 5 In the Exceptions text box, type a comma after the last entry and then type the printer name or the IP address.

» **Note:** The printer name and IP address are found in the host table. Click OK.

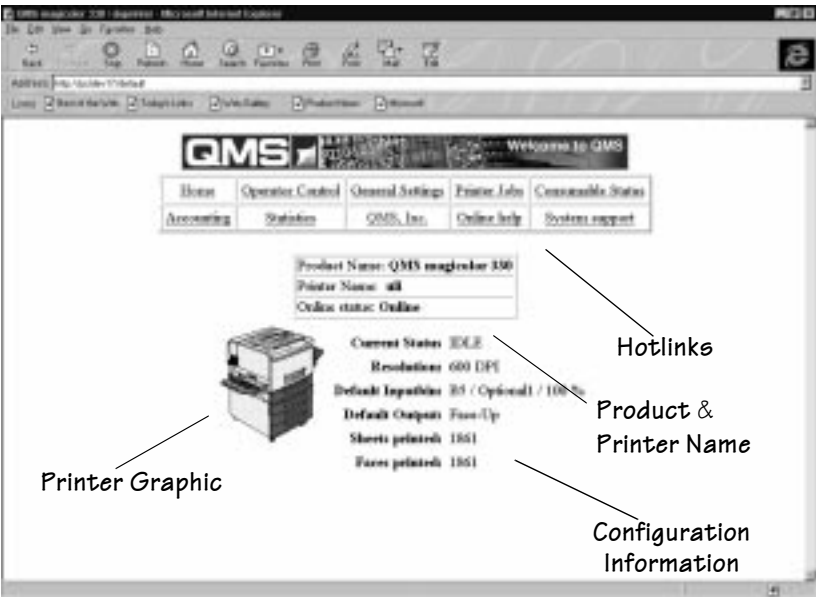


- 6 Enter the printer name in the URL Address box to access the printer home page.



# Printer Home Page

The Home Page is the starting point for all access to the printer web pages. On this page you will find hotlinks to all of the supporting web pages for your printer.



Product Name	Identifies the particular printer that you are browsing. This printer is pictured in the graphic with all installed paper handling options.
	<b>Configuration Menu:</b> No equivalent
Printer Name	Shows the name you have assigned to your printer. The default printer name is the same as the product name.
	<b>Configuration Menu:</b> Administration/Communications/Resident NIC/CrownNet/NetWare/Printer Name menu or the Administration/Communications/Resident NIC/CrownNet/LanManager/Printer Name menu

<b>Online Status</b>	Shows whether the printer is online or offline.
	<b>Configuration Menu:</b> No equivalent
<b>Current Status</b>	Echoes the status message in the printer control panel message window.
	<b>Configuration Menu:</b> No equivalent
<b>Resolution</b>	Identifies the resolution.
	<b>Configuration Menu:</b> Administration/Engine/Def Resolution
<b>Default Inputbin</b>	Identifies the default input cassette or tray, and media size.
	<b>Configuration Menu:</b> Operator Control/Inputbin
<b>Default Outputbin</b>	Identifies the location where printed media will be deposited.
	<b>Configuration Menu:</b> Operator Control/Outputbin
<b>Sheets Printed</b>	Lists the number of sheets of media printed to date during the current consumables tracking period (Administration/Consumables/Start Period menu).
	» <b>Note:</b> <i>This number differs from the number of sheets printed statistics on the printer's startup and status pages, which refer to the total number of sheets of media printed during the life of the printer.</i>
<b>Faces Printed</b>	<b>Configuration Menu:</b> No equivalent
	Lists the number of page faces printed to date.
	» <b>Note:</b> <i>This number differs from the number of faces printed statistics on the printer's startup and status pages, which refer to the total number of page faces printed during the life of the printer.</i>
	<b>Configuration Menu:</b> No equivalent

Hotlinks	Take you to other pages of status, configurations, or help information. Each of these hotlinks is fully explained in this chapter.
	<b>Configuration Menu:</b> No equivalent

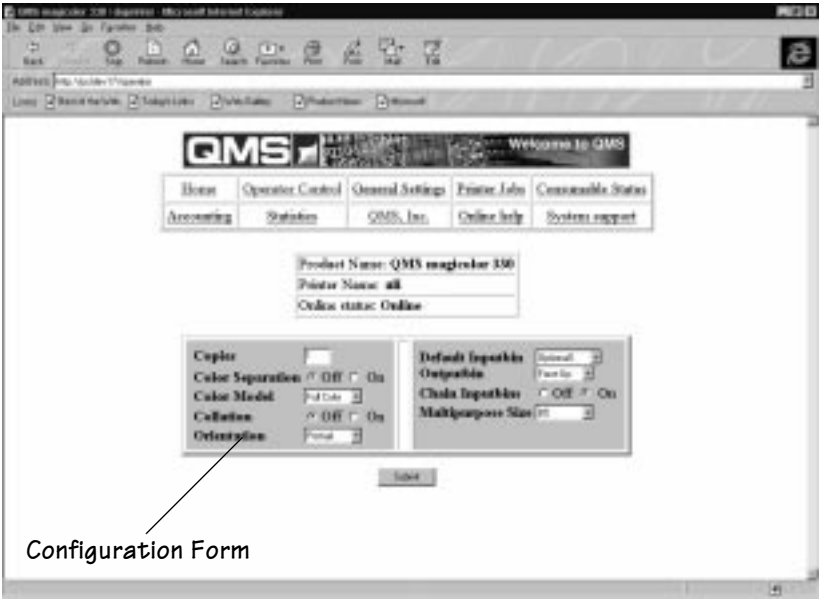
Home

The Home hotlink simply returns you to the printer home page when it is selected.

Operator Control

The Operator Control hotlink on the home page jumps to the Operator Control page. This page contains a form which allows you to configure settings in your printer.

After you make your choices, choose the Submit button to make them take effect.



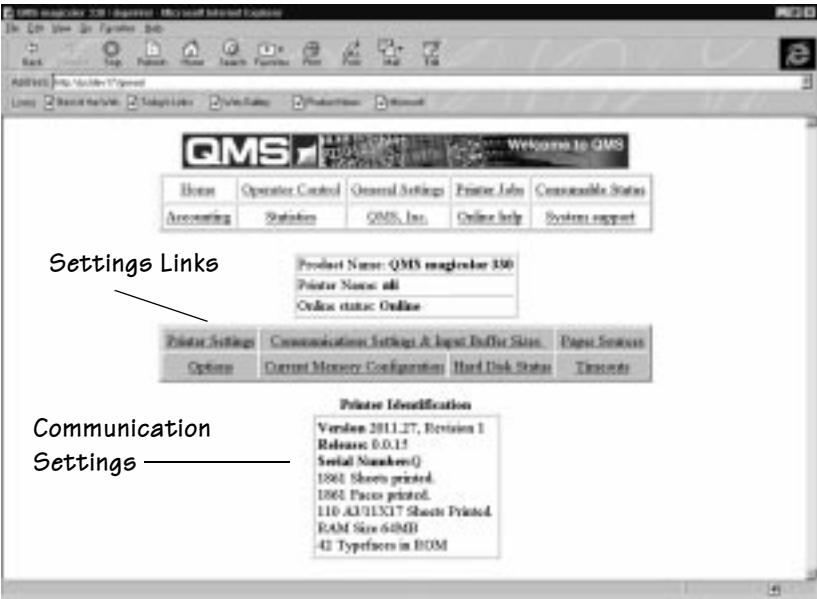
The Operator Control page contains the following options. For complete information on any options see chapter 4, “Printer Configuration,” of the *Reference* manual.

<b>Copies</b>	Allows you to enter the number of copies to print.
	<b>Configuration Menu:</b> Operator Control/Copies
<b>Color Separation</b>	Allows you to print color separations.
	<b>Configuration Menu:</b> Operator Control/Color Separation
<b>Color Matching</b>	Allows you to select ICC color matching options.
	<b>Configuration Menu:</b> Operator Control/Color Matching
<b>Color Model</b>	Allows you to select between full-color or monochrome mode.
	<b>Configuration Menu:</b> Operator Control/Color Model
<b>Collation</b>	Allows you to turn collation Off or On.
	<b>Configuration Menu:</b> Operator Control/Collation
<b>Orientation</b>	Allows you to select Portrait or Landscape orientation.
	<b>Configuration Menu:</b> Operator Control/Orientation
<b>Default Inputbin</b>	Allows you to choose the default as the input source.
	<b>Configuration Menu:</b> Operator Control/Inputbin
<b>Outputbin</b>	Identifies the location where printed media will be deposited.
	<b>Configuration Menu:</b> Operator Control/Outputbin

Chain Inputbins	Allows you to set input bin chaining to Off or On.vt
	<b>Configuration Menu:</b> Operator Control/ Chain Inputbins
Multipurpose Size	Allows you to specify the type of media in the multipurpose tray.
	<b>Configuration Menu:</b> Operator Control/ Multipurpose Sz

General Settings

The General Settings hotlink takes you to the General Settings page.



Version	Specifies the version you're using.
	<b>Configuration Menu:</b> No equivalents
Release	Specifies the release number of the printer.
	<b>Configuration Menu:</b> No equivalents

<b>Serial Number</b>	Specifies the serial number of the printer.
	<b>Configuration Menu:</b> No equivalents
<b>Sheets Printed</b>	Specifies the number of sheets printed.
	<b>Configuration Menu:</b> Operator Control/Consumables/Print Statistics
<b>Faces Printed</b>	Specifies the number of faces printed.
	<b>Configuration Menu:</b> <b>Configuration Menu:</b> Operator Control/Consumables/Print Statistics
<b>A3/11x17 Sheets Printed</b>	Specifies the number of A3/11x17 sheets printed.
	<b>Configuration Menu:</b> Operator Control/Consumables/Print Statistics
<b>RAM Size</b>	Specifies the RAM size.
	<b>Configuration Menu:</b> Administration/Memory/MB Presenter Menu
<b>Typefaces in RAM</b>	Specifies the number of typefaces in RAM.
	<b>Configuration Menu:</b> No equivalents

This page also provides hotlinks to several groups of printer configuration settings. Each is described in more detail in the following pages:

- “Printer Setting” on page 6-14
- “Communication Settings and Input Buffer Sizes” on page 6-15
- “Paper Sources” on page 6-16
- “Options” on page 6-17
- “Current Memory Configuration” on page 6-17
- “Hard Disk Status” on page 6-19
- “Timeouts” on page 6-20

You can view this information to see the status of the printer, but you can change it only by accessing the printer's configuration menu through the printer control panel, a remote or local console, or CrownAdmin.

## **Printer Setting**

This table provides you with data relative to the settings of the printer.

<b>Compatibility Level</b>	Identifies the PostScript emulation level.
	<b>Configuration Menu:</b> No equivalent
<b>Do Startup Page</b>	Identifies whether the printer startup page is turned on or off.
	<b>Configuration Menu:</b> Administration/Startup Options/Do Start Page
<b>Do Error Handler</b>	Identifies whether the PostScript Error Handler is on or off. Error Handler is a diagnostic tool that identifies PostScript errors encountered during a print job.
	<b>Configuration Menu:</b> Administration/Startup Options/Do Error Handler
<b>Do Sys/Start</b>	Identifies whether the printer controller checks the hard disk for a PostScript file named SYS\START and then executes the file. This file does not print.
	<b>Configuration Menu:</b> Administration/Startup Options/Do Sys Start
<b>Is Password 0?</b>	Identifies whether the Administration menu password is set. 0=Off
	<b>Configuration Menu:</b> Installation/Use Admin Pwd
<b>Default Chaining</b>	Identifies whether tray chaining is enabled or disabled. Tray chaining allows the printer to draw media from another input source with either the same or any size and type of media (dependent on the choice selected) automatically when the first input source empties.
	<b>Configuration Menu:</b> Operator Control/Chain Inputbins
<b>Default Paper Tray</b>	Tells you which input source is the default.
	<b>Configuration Menu:</b> Operator Control/Inputbin

<b>Default Output Tray</b>	Tells you which output location is the default.
	<b>Configuration Menu:</b> Operator Control/Outputbin
<b>Number of Paper Trays</b>	Tells you the number of media cassettes available on your printer in addition to the multipurpose tray.
	<b>Configuration Menu:</b> No equivalent.
<b>Page Stack Order</b>	Tells you how printed pages will be stacked in the output bin (face up or face down).
	<b>Configuration Menu:</b> No equivalent.
<b>Left Margin</b>	Identifies the amount (in .01" increments) the image is adjusted horizontally on the page.
	<b>Configuration Menu:</b> Administration/Engine/Image Alignment/Horiz Offset
<b>Top Margin</b>	Identifies the amount (in .01" increments) the image is adjusted vertically on the page.
	<b>Configuration Menu:</b> Administration/Engine/Image Alignment/Vertical Offset
<b>Resolution</b>	Identifies the printer resolution.
	<b>Configuration Menu:</b> Administration/Engine/Def. Resolution
<b>Multi-Res</b>	Identifies whether the printer provides QMS Multi-Res technology.
	<b>Configuration Menu:</b> No equivalent.

## **Communication Settings and Input Buffer Sizes**

This hotlink displays a screen that shows the communications settings of the printer.

<b>Serial RS-232C</b>	Identifies the settings for the serial interface.
	<b>Configuration Menu:</b> Administration/Communications/Serial
<b>Parallel</b>	Identifies the settings for the parallel interface.
	<b>Configuration Menu:</b> Administration/Communications/Parallel

<b>Optional NIC</b>	Identifies the settings for the optional network interface.
	<b>Configuration Menu:</b> Administration/Communications/Optional NIC
<b>Resident NIC</b>	Identifies the settings for the resident network (CrownNet Ethernet) interface.
	<b>Configuration Menu:</b> Administration/Communications/Resident NIC
<b>Shared Spooling Size</b>	Identifies the total amount of spooling space shared by the interfaces.
	<b>Configuration Menu:</b> No equivalent

## **Paper Sources**

This hotlink provides media source information.

<b>Upper</b>	Identifies the size and type of media currently installed in the upper tray.
	<b>Configuration Menus:</b> Operator Control/Media/For Upper Bin
<b>Optional1</b>	Identifies the size and type of media currently installed in the top cassette in the optional large-capacity input feeder.
	<b>Configuration Menu:</b> No equivalent.
<b>Optional2</b>	Identifies the size and type of media currently installed in the middle cassette in the optional large-capacity input feeder.
	<b>Configuration Menu:</b> No equivalent.
<b>Optional3</b>	Identifies the size and type of media currently installed in the bottom cassette in the optional large-capacity input feeder.
	<b>Configuration Menu:</b> No equivalent.

<b>Multipurpose</b>	Identifies the size and type of media currently installed in the multipurpose tray.
	<b>Configuration Menu:</b> Operator Control/ Multipurpose Sz, Operator Control/Media/For MPT Bin

## Options

<b>Disk(s)</b>	Identifies how many hard disks are attached to the printer and what their addresses are.
	<b>Configuration Menu:</b> No equivalent
<b>Emulations</b>	Identifies the installed emulations.
	<b>Configuration Menu:</b> No equivalent

## Current Memory Configuration

Memory configuration affects the number of jobs that can be accepted by the printer, the number of options available simultaneously, the number of downloadable fonts and emulations that can be stored, and overall printer performance.

<b>Host Input Spool</b>	Shows the size (in KB) of the Host Input field, also known as K Mem for Spool. This memory client stores incoming data from all the interfaces until the emulation can process the print job.
	<b>Configuration Menu:</b> Administration/Memory/ Manual Config/K Mem for Spool
<b>Display List</b>	Shows the size (in KB) of the Display List, also known as K Mem Display. This client stores compressed representations, or blocks, of the pages to be printed.
	<b>Configuration Menu:</b> Administration/Memory/ Manual/Config/K/Mem Display

<b>PostScript Font Cache</b>	Shows the size (in KB) of the Font Cache, also known as K Mem for PS Fonts. This memory client stores bitmapped representations of previously scaled PostScript fonts.
	<b>Configuration Menu:</b> Administration/Memory/ Manual Config/K Mem for PS Fonts
<b>PostScript HEAP</b>	Shows the size (in KB) of the Heap, also known as K Mem for PSHeap, PostScript VM, and Virtual Memory. This client holds downloaded fonts, PostScript operators, and forms.
	<b>Configuration Menu:</b> Administration/Memory/ Manual Config/K Mem for PSHeap
<b>Framebuffer</b>	Shows the size (in KB) of the Frame Buffer. This client holds rasterized or bitmapped images of page faces which are ready to be sent to the print engine.
	<b>Configuration Menu:</b> Administration/Memory/ Manual Config/Framebuffer
<b>Emulation</b>	Shows the size (in KB) of the Emulation client, also known as K Mem Emulation. This client is used to store any optional emulations, such as LN03 Plus.
	<b>Configuration Menu:</b> Administration/Memory/ Manual Config/K Mem Emulation
<b>Emulation Temporary</b>	Shows the size (in KB) of the Emulation Temporary client. This client is used by non-PostScript emulations for storing downloaded (soft) fonts, forms, or macros.
	<b>Configuration Menu:</b> Administration/Memory/ Manual Config/K Mem Emul. Temp

<b>DiskCache</b>	Shows the size (in KB) of the Disk Cache. This memory client stores frequently used data in system memory instead of continually storing and retrieving it from a hard disk.
	<b>Configuration Menu:</b> Administration/Memory/Manual Config/K Mem/Disk Cache
<b>System Use</b>	Shows the size (in KB) of the System Use. Also known as System Memory, this non-configurable client is the amount of RAM used to run the printer's operating system. It's never increased or decreased. The system memory subtracted from the total amount of RAM identifies the amount of RAM available for all the other memory clients.
	<b>Configuration Menu:</b> No equivalent
<b>Printer Memory</b>	Shows the size (in KB) of the total amount of RAM that your printer has.
	<b>Configuration Menu:</b> Administration/Memory/Manual Config/MB Printer Mem

## **Hard Disk Status**

This hotlink provides the status of the hard disk.

<b>Disk(s)</b>	Provides the name, size, and free space on all attached hard disks.
	<b>Configuration Menu:</b> No equivalent
<b>Total</b>	Identifies the total space and free space on all attached hard disks.
	<b>Configuration Menu:</b> No equivalent

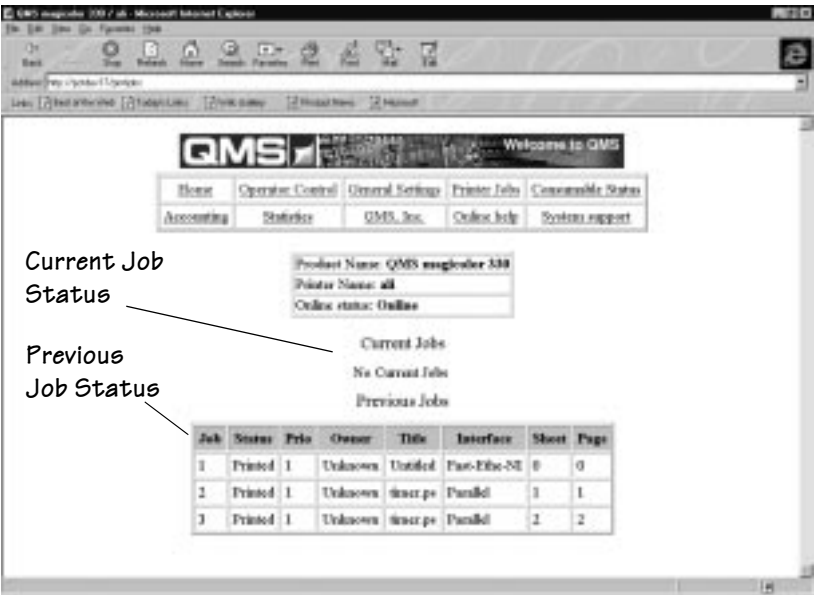
## **Timeouts**

This hotlink provides the status on established timeouts.

<b>Wait</b>	Shows the maximum number of seconds the PostScript emulation waits for incoming data.
	<b>Configuration Menu:</b> Administration/ Communications/Timeouts/PS Wait Timeout
<b>Job</b>	This shows the maximum number of seconds the printer processes a print job before it ends the job.
	<b>Configuration Menu:</b> Administration/ Communications/Timeouts/Job Timeout
<b>Emulation</b>	Shows the maximum number of seconds emulations other than PostScript wait for incoming data.
	<b>Configuration Menu:</b> Administration/ Communications/Timeouts/Emulation Timeout
<b>ESP</b>	Shows the maximum number of seconds the printer uses to match an emulation before printing the job in the default emulation.
	<b>Configuration Menu:</b> Administration/ Communications/Timeouts/ESP Timeout

**Printer Jobs**

The Printer Jobs hotlink on the home page jumps to the Printer Jobs page. This page contains information about the current jobs the printer is processing and information on the previous five jobs printed.



<b>Job</b>	Indicates the job number of the current print jobs and up to five previous print jobs.
	<b>Configuration Menu:</b> No equivalent.
<b>Status</b>	Indicates the status of each job. (Interpreting, Spooling, Spooled, Printing, Printed)
	<b>Configuration Menu:</b> No equivalent
<b>Prio[rity]</b>	Shows the priority of each job.
	<b>Configuration Menu:</b> No equivalent
<b>Owner</b>	Shows the name of the owner of each current job.
	<b>Configuration Menu:</b> No equivalent
<b>Title</b>	Shows the title of each job.
	<b>Configuration Menu:</b> No equivalent
<b>Interface</b>	Identifies the interface over which the job was sent to the printer.
	<b>Configuration Menu:</b> No equivalent
<b>Sheet</b>	Shows the number of physical sheets of media printed for each job.
	<b>Configuration Menu:</b> No equivalent.
<b>Page</b>	Indicates the number of pages printed for each job.
	<b>Configuration Menu:</b> No equivalent

## **Consumable Status**

The Consumable Status hotlink on the home page jumps to the Consumable Status page. This page contains information about the level of usage of all of the printers' consumables.

» **Note:** The scales are an estimate, reported as a percentage, and do not indicate the exact amount of consumables used. In addition, the 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 (usually 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.



Consumable Name	Identifies the consumable (for example, Black Toner or 20K PM Service).
	<b>Configuration Menus:</b> Operator Control/ Consumables and Administration/Consumables
Consumable Max Number	Shows the maximum capacity of the consumable (for example, 10000 planes or 120000 sheets).
	<b>Configuration Menus:</b> Operator Control/ Consumables and Administration/Consumables

<b>Consumable Usage Gauges</b>	Shows the remaining amount of the consumable (in percentages, not planes, faces, or sheets).
	<b>Configuration Menu:</b> Operator Control/ Consumables and Administration/Consumables

**Accounting**

The Accounting hotlink on the home page jumps to the Accounting page, which contains information about accounting configuration settings.



<b>Mode</b>	Shows whether accounting is enabled or disabled.
	<b>Configuration Menu:</b> Operator Control/ Accounting/Mode
<b>Disk Space</b>	Shows how much disk space is allocated to job accounting files.
	<b>Configuration Menu:</b> Operator Control/ Accounting/Disk Space

File Segment	Shows whether accounting information is stored in the printer in a single file or in multiple files.
	<b>Configuration Menu:</b> Operator Control/ Accounting/File Segment

Statistics

The Statistics hotlink on the home page jumps to the Statistics page, which provides printer usage statistics.



System Release	Identifies the release number of the printer's system code.
	<b>Configuration Menu:</b> No equivalent
Serial Number	Identifies the printer's serial number.
	<b>Configuration Menu:</b> No equivalent

<b>Consumables</b>	Shows the maximum life, percent remaining, and count remaining statistics for each of the toner cartridges, waste toner box, fuser oil roller, OPC drum cartridge, fuser unit, belt cleaner, and belt transfer roller.
	<b>Configuration Menu:</b> Operator Control/Consumables/Print Statistics
<b>Maintenance</b>	Shows the maximum life, percent remaining, and count remaining statistics for the 450K maintenance.
	<b>Configuration Menu:</b> Operator Control/Consumables/Print Statistics
<b>Sheets</b>	Shows the number of sheets of various media sizes and types printed during the lifetime of the printer, the current user-defined period, and the current service period.
	<b>Configuration Menu:</b> Operator Control/Consumables/Print Statistics
<b>Faces</b>	Shows the number of letter-sized monochrome and full-color faces printed at 5% coverage of each color during the lifetime of the printer, the current user-defined period, and the current service period.
	<b>Configuration Menu:</b> Operator Control/Consumables/Print Statistics
<b>Planes</b>	Shows the number of planes printed of each color as well as the total number of planes printed during the lifetime of the printer, the current user-defined period, and the current service period.
	<b>Configuration Menu:</b> Operator Control/Consumables/Print Statistics

<b>Coverage</b>	Shows the average letter-size page coverage of each color as well as the average total letter-sized page coverage of toner during the lifetime of the printer, the current user-defined period, and the current service period.
	<b>Configuration Menu:</b> Operator Control/ Consumables/Print Statistics

## **System Support Page**

The System Support hotlink on the home page jumps to the System Support page. This page can be used to set up internal support for the printer as well as to link to the QMS web site. Once you've made the necessary changes, choose the Submit button.

- » **Note:** *If the page refresh rate is set to too small a time interval, you may lose your changes before you choose the Submit button.*

QMS magicolor 330 Configuration - Microsoft Internet Explorer

File Edit View Go Favorites Help

Back Forward Home Search Favorites Print Exit Help

Address: http://localhost:8080/help

Links: Local Network Printer's Link Home Status Printer Jobs Microsoft

**QMS** Welcome to QMS

Home Operator Control General Settings Printer Jobs Consumable Status  
Accounting Statistics QMS, Inc. Online help System support

Product Name: QMS magicolor 330  
Printer Name: all  
Online status: Online

**System support**

Select the desired page refresh rate: ☐ OFF ☐ 15 Sec. ☐ 30 Sec. ☐ 60 Sec. ☐ 5 Min.

If you need assistance, contact:

Contact Number:

Printer help URL:

QMS Corporate URL:

For Product or Dealer Information:

SMTP Mail Server Address\*:

SMTP Sender's Domain\*:

Sender's address\*:

To\*:

CC (Separated by comma):

Subject:

When to send email on printer error: ☐ OFF ☐ 1 Min. ☐ 30 Min. ☐ 1 Hr. ☐ Text

Email sent via: Resident NIC

\* Indicates Required SMTP Parameter

Submit

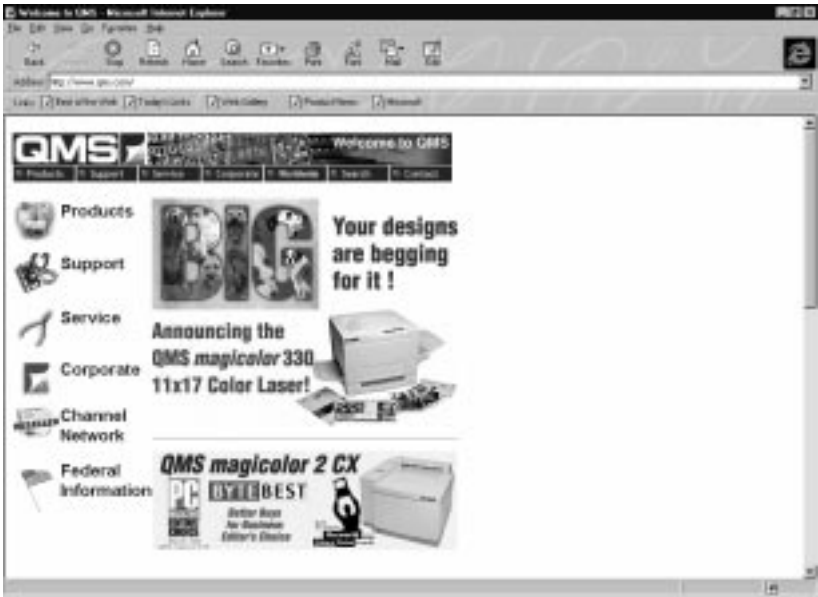
Select the desired page refresh rate	The rate at which information in the form is reset to the current printer settings.
If you need assistance, contact	A text box for entering the name of a local expert
	Configuration Menu: No equivalent
Contact Number	A text box for entering a local or QMS contact number
	Configuration Menu: No equivalent

<b>Printer Help URL</b>	A text box for entering a local or QMS printer help URL (web address)
	<b>Configuration Menu:</b> No equivalent
<b>QMS Corporate URL</b>	The QMS corporate URL (web address)
	<b>Configuration Menu:</b> No equivalent
<b>For Product or Dealer Information</b>	A text box for entering a local or QMS contact number.
	<b>Configuration Menu:</b> No equivalent
<b>SMTP Mail Server Address</b>	A text box for entering the SMTP mail server address for handling email from the printer.
	<b>Configuration Menu:</b> No equivalent
<b>SMTP Sender's Domain</b>	A text box for entering the domain name of the printer.
	<b>Configuration Menu:</b> No equivalent
<b>Sender's address</b>	A text box for entering the address of the printer on the network.
	<b>Configuration Menu:</b> No equivalent
<b>To</b>	A text box for entering the address of the recipient of email sent from the printer.
	<b>Configuration Menu:</b> No equivalent
<b>CC (Separated by commas)</b>	A text box for entering the addresses of copied recipients of email from the printer. Maximum of 8.
	<b>Configuration Menu:</b> No equivalent
<b>Subject</b>	A text box for entering the subject line of the email message generated by the printer.
	<b>Configuration Menu:</b> No equivalent
<b>When to send email on printer error</b>	Sets the delay for sending an email message after the printer error condition.
	<b>Configuration Menu:</b> No equivalent

Email sent via	Shows the network interface that sent the email message from the printer.
	<b>Configuration Menu:</b> No equivalent

**QMS, Inc. Page**

The QMS, Inc. hotlink on the home page jumps to the QMS web site configured on the System Support page (QMS Corporate URL). From the QMS web site you can access information about other QMS printers, contact information, a FAQ database, printer manuals, and online performance support.



## **Online Help Page**

The Online Help hotlink on the home page jumps to any help information that has been configured on the System Support page (Printer Help URL). You can configure this to jump to your own help web site set up on your local intranet or to the QMS online help system information for your QMS print system.

## **Web Page Help System**

Your printer web page is supported with help and support tools located at the QMS web site. If you typed in the QMS online performance support address on the System Support page (Printer Help URL), when you click on the Online Help button on the printer home page you'll be linked to an HTML page located at the QMS web site. From here you can link to a topic which applies to your specific problem. You can also access a list of current FAQs (Frequently Asked Questions) about your print system.





# 7

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## Media Jams

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### **In This Chapter . . .**

- “Automatic Jam Recovery” on page 7-2
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- “Understanding the Media Path” on page 7-3
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# Introduction

This chapter explains automatic jam recovery, discusses how to prevent media jams, and then provides detailed information on how to find and remove media jams.

## Automatic Jam Recovery

The QMS *magicolor* 330 Print System provides automatic jam recovery (when enabled through the Administration/Engine/Page Recovery menu). After you remove any jammed media, printing automatically resumes from the page the printer stopped at when the jam occurred.

- » **Note:** *For automatic jam recovery to work, it is necessary to leave the printer turned on when you remove the jammed media. After the jam is cleared, open and close the front cover before printing. Printing will not resume until you do this.*

## Preventing Media Jams

There are several things you can do to reduce the occurrence of media jams.

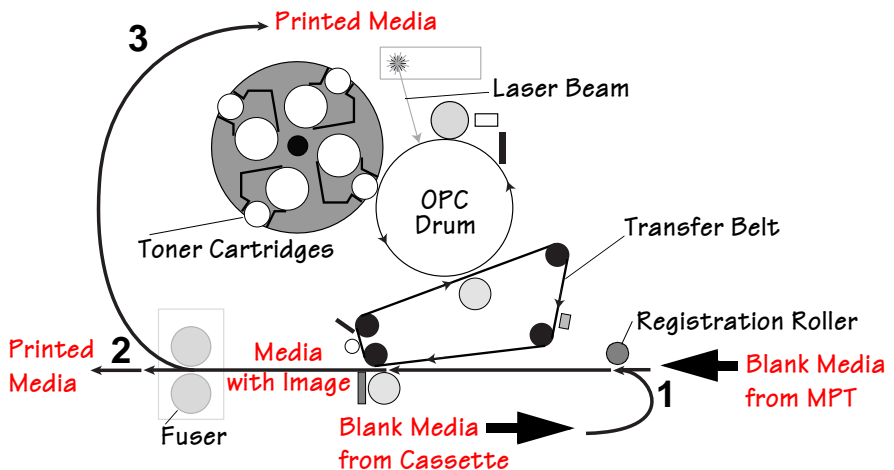
- Make sure your printer is on a hard, flat, level surface.
  - Use paper, envelopes, labels, and transparencies that match the printer specifications.
  - Make sure the media is not folded, wrinkled, or excessively curled.
  - Do not overfill the media cassette. The cassette has a fill-limit mark on the inside left side.
  - If you have problems with double feeding of paper, remove it from the cassette and fan the sheets. They may be sticking together.
- » **Note:** *Do not fan transparencies, since this causes static in them.*

- Store media in a dry location away from moisture and humidity.
- Make sure you've loaded the media correct side up:
  - Cassette: printing side down.
  - Multipurpose tray: printing side up.

Many manufacturers place an arrow on the end of the wrapper to indicate the printing side. If you can't determine which side of the media to print on, remove the media from the cassette, rotate the stack a half-turn, turn the stack over, and then place it back in the printer.

## Understanding the Media Path

Understanding the printer's media path will help you locate media jams. The media cassette is located at the bottom front of the printer. The media is picked from the cassette or multipurpose tray past the registration roller (possible jam area 1), passed under the transfer belt, passed through the fuser (possible jam area 2), and delivered via the media exit unit (possible jam area 3) to the output tray.



# **Understanding Media Jam Status Messages**

When a jam occurs, the printer icon on the control panel will light up an amber LED to show the location of the jam. In addition, the message window on the control panel displays an error message. Frequent jams in any area indicate that area should be checked, repaired, or cleaned. Repeated jams may also happen if you're using the wrong weight print media.

- 1 Registration jams occur in the area near the standard cassette, multipurpose tray, or optional large-capacity input feeder. A registration jam may be as simple as a sheet of media not being picked, or it may be that the media was picked but not fed properly. When this type of jam occurs, the message window displays PAPER JAM REGISTRATION.**
- 2 Fuser jams occur in the fuser area. When this type of jam occurs, the message window displays PAPER JAM FUSER.**
- 3 Exit jams occur as the media nears one of the printer's two exit areas (top or side output bin). When this type of jam occurs, the message window displays PAPER JAM EXIT.**

## **Removing Media Jams**

- To avoid damage to rollers, always remove jammed media gently.
- Always try to remove jammed media without tearing it. Any pieces of media left in the printer, whether large or small, can obstruct the media path and cause further jams.

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

If the automatic jam recovery is enabled (Administration/Engine/Page Recovery menu), once the jammed media is removed and the printer

is operational, the printer should resume printing the job from the page where the jam occurred.

### Clearing Media Jams

If media jams in the printer, clear the jammed media in the following order:

#### Registration Jams

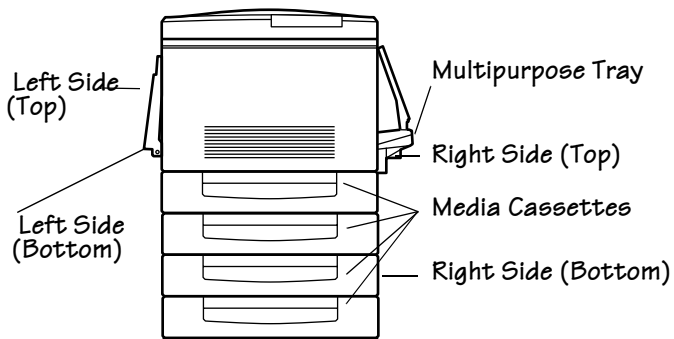
- Media cassettes
- Multipurpose tray
- Right side (top)
- Right side (bottom)

#### Fuser Jams

- Left side (bottom)

#### Exit Jams

- Left side (bottom)
- Left side (top)



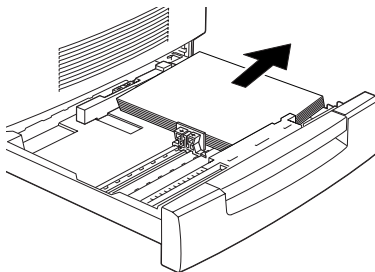
## **Registration Jams**

### **1 Jam in the Media Cassettes**

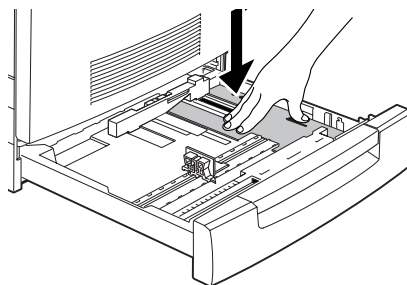


- a Slowly pull the media cassette out until it stops, and remove the jammed or creased media.

If the media is torn, make sure no pieces are left inside.



- b Press down on the metal plate at the bottom of the media cassette until it latches.
- c Put the media back in the cassette.

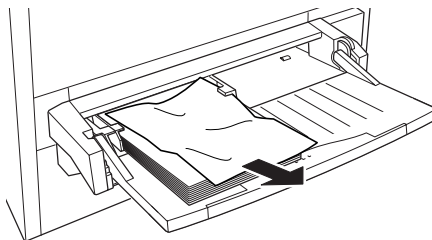


- d Slowly push the media cassette back into the printer.
- e If you have a large-capacity input feeder, check to see if you have to repeat steps a-d for any of those cassettes.

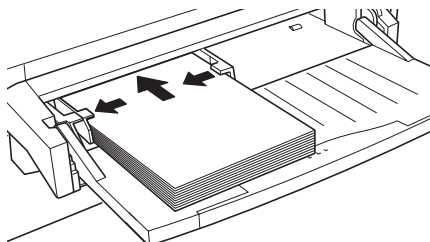
### **2 Jam in the Multipurpose Tray**

- a Remove the jammed or creased media from the multipurpose tray.

If the media is torn, make sure no pieces are left inside.



- b Put the media back in the tray.



### 3 Jam at the Right Side (Top)



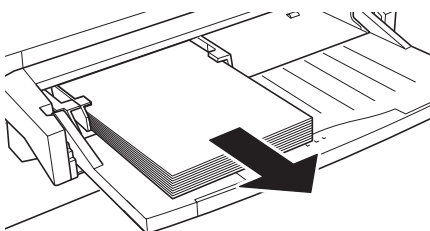
**WARNING!** *The fuser unit is hot! Do not remove a jam in this area until the fuser unit cools.*

**ACHTUNG!** *Die Fixiereinheit wird sehr heiß! Bitte achten Sie darauf, daß sie diese einige Zeit abkühlen lassen, bevor Sie einen Papierstau beseitigen.*



**Caution:** *Media that hasn't fully passed through the fuser contains unfused toner that can soil your hands, clothes, or anything else it gets on. If you accidentally get toner on your hands, wash them in cool water. 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, provided your clothing is washable.*

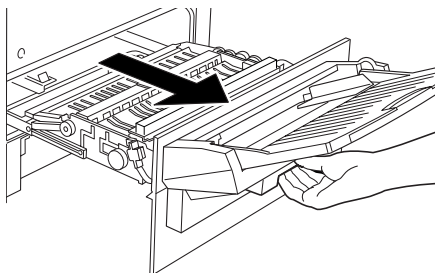
- a If media is loaded in the multipurpose tray, remove the media.



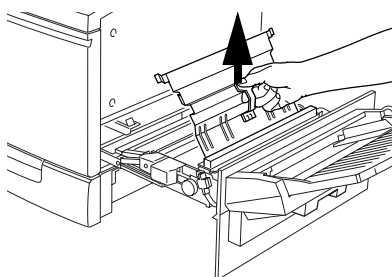
- b If the tray extender is open, close it.

## Removing Media Jams

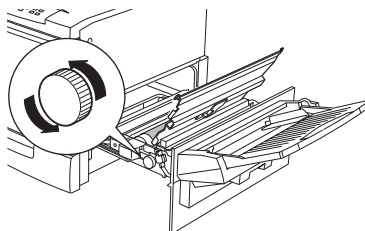
- c Pull out the multi-purpose tray unit as far as it will go.



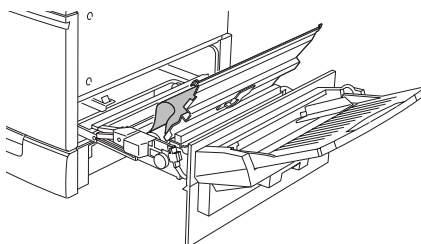
- d Open the cover by pulling up on the green handle.



- e Turn the green knob to move the jammed media.

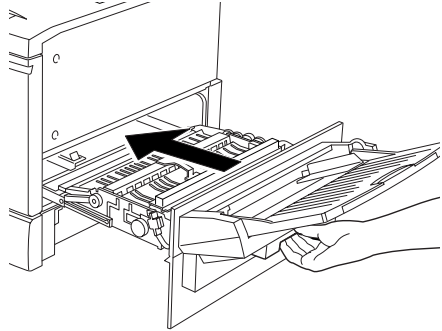


- f Pull the media out.  
If the media is torn,  
make sure no pieces  
are left inside.



## Removing Media Jams

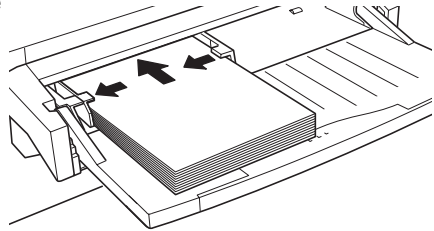
- g Lower the green cover.
- h Push the multi-purpose tray unit back into the printer.



- i Reload the media in the multipurpose tray.

»

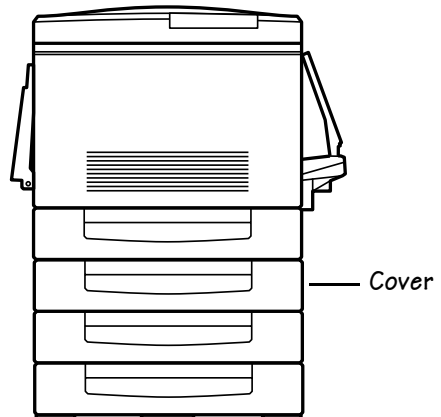
**Note:** Confirm that media is loaded in the proper direction—printing side up.



### 4 Jam at the Right Side (Bottom)



- a If you have an optional large-capacity input feeder, open the cover on the right side of the feeder.
- b Slowly remove the jammed or creased media.  
  
If the media is torn, make sure no pieces are left inside.
- c Close the cover.



## **Fuser Jams**

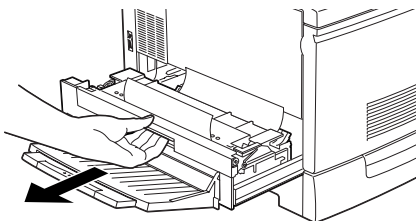
### **5 Jam at the Left Side (Bottom)**



- a Pull out the fuser unit as far as it will go.



**WARNING!** Avoid touching the fuser directly. It gets very hot, and you could get burned.

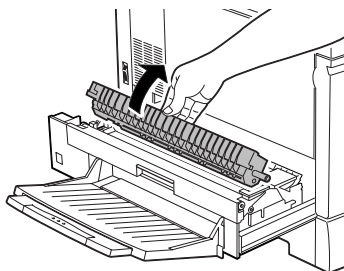


**ACHTUNG!** Vermeiden Sie direkte Berührungen mit der Fixiereinheit. Diese wird sehr heiß und Sie könnten sich verbrennen.

- b Remove the fuser oil roller.



**Caution:** Oil on this roller will come off on your skin if touched directly. Shield this roller from dust and toner when removing or inserting into the fusing unit.

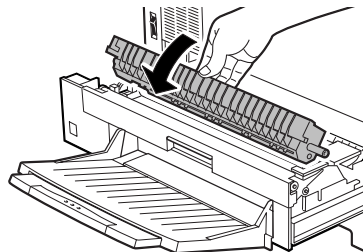


- c Remove the jammed media.

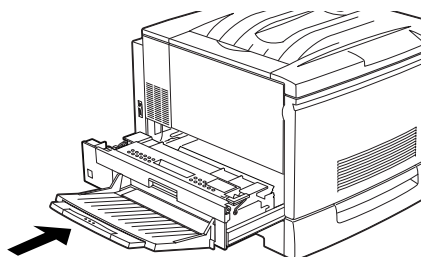
If the media is torn, make sure no pieces are left inside.

## Removing Media Jams

- d Return the fuser oil roller to the printer.



- e Push the fuser unit firmly back into the printer.

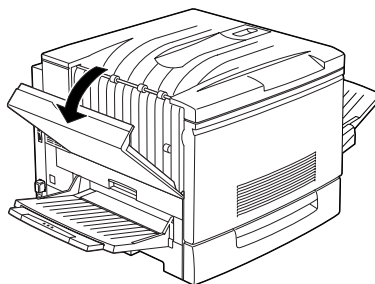


## Exit Jams

### 6 Jam at the Left Side (Top)



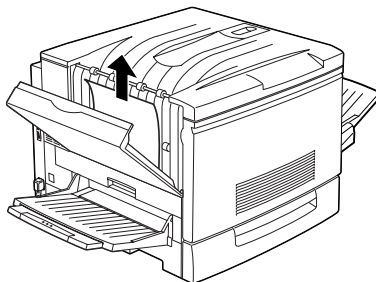
- a Open the upper-left cover.



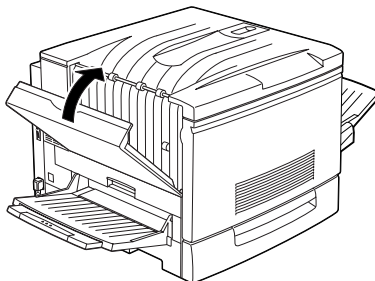
## Removing Media Jams

- b Remove the jammed media.

If the media is torn,  
make sure no pieces  
are left inside.



- c Close the upper-left cover.



# 8

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## Troubleshooting Printer Problems

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- “Testing PC-Printer Communication” on page 8-19
- “Testing Macintosh-Printer Communication” on page 8-23
- “Printer Problem Checklist” on page 8-24
- “OPC Drum Problems” on page 8-27
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- “CrownNet Problems” on page 8-30
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- “Print Quality Problems” on page 8-34
- “Image Defects” on page 8-35
- “Placing a Service Call” on page 8-44

# 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. You'll find in this chapter tables of common status messages, a problem checklist, and actions you should take when a specific problem occurs. There are step-by-step instructions for removing media jams from key locations along the media path, as well as descriptions of common print quality problems with corresponding solutions. You'll also find the information you'll need to have before placing a service call if one becomes necessary.

## Status and Service Messages

Status 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.

### Status Messages

» **Note:** *Status messages are not displayed while the printer is off line.*

This status message...	means...	Do this...
ACC ALREADY DISABLED	The accounting option selected is now in effect.	No action needed.
ACC ALREADY ENABLED	The accounting option selected is now in effect.	No action needed.
ACC DISABLED	The accounting option selected is now in effect.	No action needed.
ACC ENABLED	The accounting option selected is now in effect.	No action needed.

## Status and Service Messages

This status message...	means...	Do this...
ACC FILES GOT REMOVED	The accounting option is disabled and the accounting files are empty. After a reset, the files are removed. This prevents you from wasting disk space with empty accounting files.	No action needed.
ACC JOB FILE FULL  ACC PAPER FILE FULL	The job or paper file is full.	If you want accounting enabled, transfer the job accounting and paper accounting files to your host computer using ftp (if available) or CPA. Then reset the accounting files so that new jobs can be accepted. If you don't want to use accounting, you can disable it.
ACC FILE 95% FULL ACC FILE 90% FULL ACC FILE 85% FULL ACC FILE 80% FULL	The Job Accounting File is 80, 85, 90, or 95% full.	See ACC JOB FILE FULL message for action needed.
ACC FILES NOT EMPTY, CANNOT SHRINK, KEEPING OLD SIZE	The Job Accounting file can be reduced in size only after a reset when the file is empty.	No action needed.
x ACTIVE JOBS	The printer is on line. (x identifies the number of jobs in process.)	No action needed.

## Status and Service Messages

<b>This status message...</b>	<b>means...</b>	<b>Do this...</b>
ADJUST INPUTBIN TRAY	The specified tray or cassette is not inserted correctly.	Adjust the tray or cassette.
BELT CLEANER LIFE LOW	The belt cleaner will soon need to be replaced.	Either call your vendor now for service or wait until the REPLACE BELT CLEANER message displays.
BTR2 LIFE LOW	The bias transfer rollers will soon need to be replaced.	Either call your vendor now for service or wait until REPLACE BTR2 message displays.
CANCEL JOB	The Cancel key has been pressed, and one or more of the print jobs in the print queue are being canceled.	Press Select and the oldest job in the print queue (the one currently printing) will be canceled.
CANCEL ALL JOBS	The Cancel key has been pressed, and one or more of the print jobs in the print queue are being canceled.	Press Select for all jobs with a printing, interpreting, spooled, or terminating status to be completely removed from the system.
COPIER OPTION NOT INSTALLED	The Copy key was pressed while the printer was on-line, but the CrownCopy option is not installed.	If you want to copy, install a Crown-Copy scanner. Otherwise, no action is needed.
CREATED FILE	The accounting file has been created.	No action needed.

## Status and Service Messages

This status message...	means...	Do this...
CREATING XXXXXXXXXXXX FILE, PLEASE WAIT	The specified accounting file is created when accounting is enabled and the files are not in existence or these files are created following a Reset Accounting. (XXXXXXXXXXXX represents the Job Accounting or Paper Accounting file.)	Wait. No other action needed.
END JOB	The Cancel key has been pressed.	Press Select to provide an end-of-job indicator for a print job that does not have one.
ENERGY SAVER	The printer is in Energy Saver mode.	No action needed.
EXCESSIVE TONER COVERAGE	The print job has exceeded the coverage limit for the printer (280%).	Enable internal ICC color matching or use host-based color matching with QMS-supplied ICC profile.
EXIT COVER OPEN	The upper-left cover (the cover above the fuser unit through which you access the printer's controller board) is open.	Close the upper-left cover.
EXTENDED ACCOUNTING FILE SIZE	The size of the non-empty accounting file has been increased successfully.	No action needed.
FRONT COVER OPEN	The front cover is open.	Shut the front cover.

## Status and Service Messages

<b>This status message...</b>	<b>means...</b>	<b>Do this...</b>
FUSER MISSING	The fuser is not installed.	Install the fuser.
FUSER OIL LOW	The oil for the fuser unit is running low.	If you have a new fuser oil roller on hand, you may want to install it now. If you don't, order one now. A limited number of copies (about 100) will still print. However, when the oil runs out, the printer stops and the FUSER OIL EMPTY message appears.
FUSER UNIT MISSING	The fuser unit is not installed.	Install the fuser unit.
HCF COVER OPEN	The cover on the right side of the high-capacity input feeder is open.	Close the cover.
IDLE	The printer is on line, but no jobs are in process.	No action needed.
INCORRECT OPC DRUM 1	A non-QMS drum cartridge has been installed.	Install a QMS OPC drum cartridge.
INCORRECT OPC DRUM 2	The printer has detected a problem with the memory in the OPC drum cartridge.	Replace the OPC drum cartridge.
INCORRECT OPC DRUM ID	A non-QMS drum cartridge has been installed.	Install a QMS OPC drum cartridge.

## Status and Service Messages

This status message...	means...	Do this...
INITIALIZING	The printer is warming up and getting ready to go on line.	Wait. No other action needed.
INPUT IDLE PRINTING	The printer is on line and printing jobs already in the queue. No new jobs are arriving at the communication interfaces.	No action needed.
MP TRAY MISSING	The multipurpose tray is either misinstalled or not installed.	Adjust or insert the multipurpose tray.
MP TRAY OPEN	The multipurpose tray unit is open.	Close the multipurpose tray unit.
OPC COMM ERROR	The engine can't communicate with the memory in the OPC drum cartridge.	Replace the OPC drum cartridge. If the problem remains, call for service.
OPC COUNTER ERROR	The electronic counter that keeps track of drum rotations has malfunctioned.	Replace the OPC drum cartridge. If the problem remains, call for service.
OPC DRUM MISSING	The OPC drum cartridge is not installed.	Install the OPC drum cartridge.
OPC LIFE LOW	The OPC drum cartridge will soon need to be replaced.	Install a new OPC drum cartridge or wait until REPLACE OPC DRUM displays.

## Status and Service Messages

<b>This status message...</b>	<b>means...</b>	<b>Do this...</b>
OPC VERIFY ERROR	The engine can't communicate with the memory in the OPC drum cartridge.	Replace the OPC drum cartridge. If the problem remains, call for service.
OPTIONAL TRAY x LOW	The media is the specified cassette in the high-capacity input feeder is low.	Insert more media.
PAPER JAM EXIT	Media has jammed as it neared one of the printer's two exit areas (top or side output bin).	Remove the media jam.
PAPER JAM FUSER	Media has jammed in the fuser area.	Remove the media jam.
PAPER JAM REGISTRATION	Media has jammed in the area near the standard cassette, multipurpose tray, or optional large-capacity input feeder.	Remove the media jam.
PAPER SIZE MISMATCH	The media size specified in the print job is not in the tray selected.	Make sure the tray selected and the media size match.
PRINTING STATUS	A status page is printing	Wait until after the status page prints, and the message clears.
REPLACE FUSER OIL ROLLER	The fuser oil roller needs replacing.	Install a new fuser oil roller.
REPLACE OPC DRUM	The OPC drum cartridge needs to be replaced.	Install a new OPC drum cartridge.
RESETTING ACCOUNTING	The reset accounting operation is in process.	No action needed.

## Status and Service Messages

This status message...	means...	Do this...
SCAN ERROR	<p>There may be insufficient memory to scan the document from the scanner's automatic document feeder (ADF).</p> <p>There may be a media jam in the ADF.</p>	<p>Add a hard disk, enable disk swapping, and/or increase Display List memory. (Refer to the ADF scanning section in chapter 7, "Crown-Copy," of the <i>Options</i> manual.)</p> <p>Remove the media jam.</p>
SCANNER NOT CONNECTED	The Copy key has been pressed, but the scanner cannot be accessed.	Turn off the printer and scanner, turn on the scanner, wait 5 seconds, and then turn on the printer. If this doesn't work, make sure the printer and scanner are correctly connected.
SCANNING . . .	The CrownCopy scanner is scanning a document.	No action needed.
x TONER EMPTY	The specified color toner cartridge is empty.	Replace the toner cartridge.
x TONER LOW	The specified color toner is low. There is enough toner left to print 330 pages before the printer stops.	Redistribute the toner in the cartridge, or replace the cartridge.
x TONER MISSING	The specified color toner cartridge is not installed.	Install a toner cartridge.

## Status and Service Messages

This status message...	means...	Do this...
TOP STACK FULL	The top output bin is full.	Removed the printed jobs from the output bin.
UPPER TRAY LOW	The media is the standard (upper) is low.	Insert more media.
USED OPC END OF LIFE	The OPC drum cartridge installed in the printer has no useful life left.  » <b>Note:</b> <i>You'll see this message if you install a used OPC drum cartridge in the printer.</i>	Install a new OPC drum cartridge.
WAITING FOR IDLE	An active job is in process. Access to the menu is not allowed until the job is finished.	Wait until the print job is finished and the printer goes idle.
WAITING ON INPUT END JOB?	The compiler is waiting on incoming data for the first job in the queue. The job may not have an end-of-job indicator and therefore cannot end. The message clears if more input arrives from the port or if you press the Cancel key. No other jobs can be printed until this job has ended.	Wait until the job is finished and the printer goes idle to access the configuration menu.
WARMING UP	The printer is warming up.	Wait. No other action needed.
WASTE TONER BOX MISSING	The waste toner box is not installed.	Install the waste toner box.

## Status and Service Messages

This status message...	means...	Do this...
WASTE TONER NEARLY FULL	The waste toner box is almost full.	Install a new waste toner box or wait until WASTE TONER FULL displays.
WASTE TONER FULL	The waste toner box needs replacing.	Install a new waste toner box.

## Service Messages

This service message...	Means...
CALL FOR SERVICE AUTO DENSITY	<p>An error has been detected with the item indicated in the service message. Correction of these errors is performed by qualified QMS-authorized service provider only. Contact the vendor from who you purchased the printer. If you cannot get service from your vendor, see appendix A, "QMS Customer Support," for more information.</p> <p>» <b>Note:</b> 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.</p>
CALL FOR SERVICE BTR2 ERROR	
CALL FOR SERVICE ENGINE MEMORY	
CALL FOR SERVICE ENGINE NVR	
CALL FOR SERVICE ENVIRO SENSOR	
CALL FOR SERVICE FUSER LAMP	
CALL FOR SERVICE FUSER TEMP HIGH	
CALL FOR SERVICE FUSER TEMP LOW	
CALL FOR SERVICE FUSER WARM UP	
CALL FOR SERVICE HIGH DENSITY	
CALL FOR SERVICE LOW DENSITY	
CALL FOR SERVICE MAIN MOTOR	
CALL FOR SERVICE PAPER MOTOR	
CALL FOR SERVICE PCDC ERROR	
CALL FOR SERVICE ROS MOTOR	
CALL FOR SERVICE ROTARY SENSOR	
EXCESSIVE TONER COVERAGE	
MCU SYNC ERROR	
REPLACE BELT CLEANER	
REPLACE BTR2 [bias transfer rollers]	
REPLACE FUSER	
TRC ERROR	

## Color Matching Method Errors

The following error messages describe problems that may be encountered when working with color profiles. These messages are printed on a print job's trailer page (in the Administration/Special Pages/Trailer Page select either On Error or Error Only).

This message...	means...	Do this...
CMM Error 0 - Insufficient CMM memory.	Not enough memory has been allocated to the K Mem Clr Match memory client.	Increase the amount of memory assigned to the Administration/Memory/Manual Config/K Mem Clr Match memory client, or  Set the device link quality setting lower (Operator Control/Color Matching/Link Quality menu), or  Limit the number of color matching profiles used.

<b>This message...</b>	<b>means...</b>	<b>Do this...</b>
CMM Error 1 - Not enough profiles.	<p>An ICC profile file, specified for the color matching operation, was not found.</p> <p>This error occurs when you attempt to select a profile that has not been loaded.</p>	<p>If this error occurs while you're trying to access a user-installed profile, verify that it has been properly loaded onto the printer's hard disk and registered by the color matching system. Do this by examining the Operator Control/Color Matching/ICC Simulation or Operator Control/Color Matching/ICC RGB Source menu. The ICC description field of the desired profile should be visible in one of the menus, depending on the profile type. If the profile doesn't show up, repeat the profile download and registration sequence.</p>
CMM Error 2 - Bad input LUT entries.	<p>The input entries in the color look-up table are invalid.</p> <p>This error occurs if the color matching routines determine that the profiles used to generate a color matching device link are invalid.</p>	<p>If this error occurs while you're using custom profiles, ensure that the profile file has not been corrupted or damaged. Then repeat the profile download and registration sequence.</p> <p>If the problem persists, call for service.</p>
CMM Error 3 - Bad output LUT entries.	<p>The device link table created by the color matching routines is corrupted.</p>	<p>Call for service.</p>

## Color Matching Method Errors

This message...	means...	Do this...
CMM Error 4 - Missing profile tag.	The custom profile header information field has been corrupted.	If this error occurs while you're using custom profiles, ensure that the profile file has not been corrupted, damaged, or generated incorrectly. All color matching profiles must adhere to the ICC profile specification version 3.0.1, approved in August 1995. Then repeat the profile download and registration sequence.  If the problem persists, call for service.
CMM Error 5 - Too many input channels.	The number of input channels in the ICC profile is inconsistent with the device color space.	If you're using custom profiles, ensure that the profile file has not been corrupted, damaged, or generated incorrectly.
CMM Error 6 - Too many output channels.	The number of output channels in the ICC profile is inconsistent with the device color space.	If you're using custom profiles, ensure that the profile file has not been corrupted, damaged, or generated incorrectly.
CMM Error 7 - Error in reverse matrix compute.	The look-up tables (LUTs) in the ICC profile are corrupted.	If you're using custom profiles, ensure that the profile file has not been corrupted, damaged, or generated incorrectly.

## Color Matching Method Errors

This message...	means...	Do this...
CMM Error 8 - No device link loaded.	<p>Color conversion was attempted, but the required color matching generated device link profile could not be found.</p> <p>This error is typically preceded by CMM Error 0 - Insufficient CMM memory.</p>	Increase the amount of memory assigned to the Administration/Memory/Manual Config/K Mem Clr Match memory client.
CMM Error 9 - Unspecified color matching failure.	The color matching routines have detected an unknown error condition.	Call for service.
CMM Error 10 - CMM file processing error.	The color matching routines either could not find a requested profile file on the hard disk or the file has become corrupted.	Ensure that the required profiles have been loaded on the hard disk. If the problem persists, call for service.

# HP-GL Error Codes and PCL Error Codes

The following tables list error codes that could appear on the printer message window when running the HP-GL or PCL emulation.

HP-GL Error Codes	Description	PCL Error Codes	Description
0	Not enough memory for job.	0	Not enough memory for job.
1	Too many transformations.	1	State lost.
2	Math error.	2	Math error.
3	Job aborted.	3	Job aborted.
4	Instruction not recognized.	4	Out of memory for macros.
5	Wrong number of parameters.	5	Disk full. Cannot store fonts.
6	Out of range parameter, or illegal character.	6 - 13	Internal error 1 - 8.
7	Not used.		
8	Unknown character set.		
9	Position overflow.		
10	Buffer overflow.		
11	Not used.		

# Testing PC-Printer Communication

To test communication between your printer and your PC, first create a short file that ejects a page from the printer. Then send the file to the printer.

## Creating the Test File

To create the test file, type the following commands at the DOS prompt:

```
copy con printest.ps↵
showpage↵
^D^Z↵
```

(All commands above except the DOS **copy** command are case sensitive and must be typed exactly as shown.) Showpage is a PostScript command that prints a blank page. The ↵ symbol means to press the Enter key. To produce the ^D and ^Z, press and hold down the Ctrl key while you type the appropriate letters (d and z). These characters signify the end of the file and must always be included.

## Sending the Test File

### Parallel Communication

- 1 To send the PRINTEST.PS file (you just created) to the printer, type

```
copy /b printest.ps lpt#↵
```

where # is the port number (1 to 3).

- » **Note:** *If the PC has more than one parallel port, they're probably labeled. If not, check the PC documentation for the LPT port names.*

### 2 If the printer and PC are communicating, a blank page ejects from the printer.

If a blank page doesn't eject and you typed the file correctly, you may want to check your AUTOEXEC.BAT file to see if LPT1 (the parallel port) is being directed to COM1 (the serial port):

- a If the AUTOEXEC.BAT file contains the line

```
MODE LPT1:=COM1:
```

delete it.

- b Then type

```
MODE LPT1: , , P↵
```

The "P" represents infinite retry and it tells the PC to send print jobs until the printer accepts them.

- c Restart the PC and retry the communication test.

Refer to your DOS documentation for more information.

## Serial Communication

### 1 To send the PRINTTEST.PS file you just created to the printer, type

```
copy /b printtest.ps com#↵
```

where # is the port number (1 to 4).

- » **Note:** *If the PC has more than one serial port, they're probably labeled. If not, check the PC's documentation for the COM port names.*

### 2 If the printer and PC are communicating, a blank page ejects from the printer.

If a blank page doesn't eject and you typed the file correctly, you may want to check your AUTOEXEC.BAT file in DOS to make sure that the printer's serial port settings match those of the PC.

- a Look for a command line like this in your AUTOEXEC.BAT file:

```
MODE COM1:9600,N,8,1,P↵
```

In this example, the serial port settings are 9600 for baud rate, N (no) parity, 8 data bits, and 1 stop bit. The “P” stands for infinite retry.

» **Note:** *If the **mode** statement isn't in your AUTOEXEC.BAT file, you may temporarily set these parameters at the DOS prompt to continue this test by typing the **mode** statement as shown above. To make this setting permanent, you'll need to add this statement to your AUTOEXEC.BAT file.*

- b Restart the PC, and then check the startup page, which prints when you turn on the printer (unless you disabled it). This tells you the current serial port settings for the printer.
- c If the serial settings (baud rate, parity, data bits, and stop bits) shown on the startup page match those in your AUTOEXEC.BAT file, you need make no further changes. Go to the section “Special PC Concerns” later in this chapter.

If the printer's serial port settings are different from your PC's settings, use the printer control panel, as described in the following section, “Changing Serial Port Settings,” to make them match.

## **Changing Serial Port Settings**

Since your printer is configured at the factory for the most typical printing environments, the serial settings in your AUTOEXEC.BAT file and on the start-up page should be the same. However, if they differ, you must configure the printer to use the serial settings specified in the AUTOEXEC.BAT file. Use the information in the following table.

<b>Press this key...</b>	<b>to...</b>	<b>The message window reads...</b>
<b>Online/ Offline</b>	Turn off the Ready indicator and enable printer configuration.	IDLE
<b>Menu</b>	Access the configuration menu.	CONFIGURATION OPERATOR CONTROL

## Testing PC-Printer Communication

Press this key...	to...	The message window reads...
<b>Next</b>	Advance to the Administration menu.	CONFIGURATION ADMINISTRATION
<b>Select</b>	Access the Administration menu.	ADMINISTRATION COMMUNICATIONS
<b>Select</b>	Access the Communications menu.	COMMUNICATIONS TIMEOUTS
<b>Next</b>	Advance to the Serial menu.	COMMUNICATIONS SERIAL
<b>Select</b>	Access the Serial menu.	SERIAL MODE
<b>Next</b> (one or more times)	Advance to the Baud Rate menu.	SERIAL BAUD RATE
<b>Select</b>	Access the Baud Rate menu.	BAUD RATE *9600
<b>Next</b> (one or more times)	Advance to the correct baud rate.	BAUD RATE #
<b>Select</b>	Select the displayed baud rate.	# IS SELECTED
		SERIAL BAUD RATE
<b>Note</b>	<i>If you need to change other settings, press the Next key to access the appropriate menu option, and then return to the point where you press the Select key to access the Administration menu and select the new settings.</i>	
<b>Online/ Offline</b>	Access the Save Changes option.	SAVE CHANGES? *NO
<b>Next</b>	Advance to the Yes option.	SAVE CHANGES? YES

<b>Press this key...</b>	<b>to...</b>	<b>The message window reads...</b>
<b>Select</b>	Save changes.	IDLE
<b>Online/ Offline</b>	Put the printer back on line (the Ready indicator lights).	IDLE

### **Verifying the Serial Setting Changes**

- 1 Turn the printer off and on again to produce a startup page.**
- 2 Compare the serial port settings listed on the startup page to those in your AUTOEXEC.BAT file.**
- 3 Try the communication test again.**

If a blank page ejects from the printer, the printer and the PC are communicating. If a blank page doesn't eject and you typed the file correctly, refer to your DOS documentation for more information.

# **Testing Macintosh-Printer Communication**

## **Testing Macintosh Communication**

You can check communication between the printer selected in the Chooser and the Macintosh by sending a file to the printer from an application (see your application documentation for more information) or by printing a directory, as described here:

- 1 Display a disk or folder window.**
- 2 Set up page information.**
  - From the File menu choose Page Setup.
  - Select paper size, orientation, and other necessary options.
  - Choose OK.

## Printer Problem Checklist

### 3 Print a directory or a window.

- a From the File menu choose Print Directory or Print Window. A dialog box appears.
- b Select the printing options you want, and then choose OK.

A printout representing the current directory or window should print.

## Printer Problem Checklist

This section contains a list of possible printer problems and solutions. If you've just installed your printer, be sure you've followed the steps in chapter 2, "Setting Up Your Printer," in the *Getting Started* manual.

If a problem occurs with the printer, determine the cause and remedy according to the category of the problem, as follows:

- Power problems
- OPC drum problems
- Control panel problems
- Windows driver problems
- CrownNet problems
- Output problems
- Kanji option kit problems
- Print quality problems
- Paper transport problems
- Unusual sounds problems

If the symptom does not apply to one of the above categories, or if the problem cannot be resolved by the prescribed procedure, turn the printer off, unplug the power cord, and contact your vendor for assistance.

- 
- ⚡ **WARNING!** *Before performing any troubleshooting, be sure to turn the printer off and unplug it to prevent shock.*

**ACHTUNG!** *Bevor Sie im Gerät nach Fehlern suchen, vergewissern Sie sich, daß der Drucker ausgeschaltet und aus der Steckdose ausgesteckt ist.*

---

If there is no status message in the control panel message window, use the following steps to identify the source of your problem and to learn of possible solutions:

**1 Does the printer power light come on?**

**YES**—Go to question 2.

**NO**—Check the following:

- Is power supplied to the AC outlet?
- Is the power cord plugged securely into both the power outlet and the printer? Turn the power switch off, and plug in the power cord connection firmly; then turn the power switch on.

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

- Is the printer power switch in the On position ( I )?
- Is the power outlet working?
- Does the line AC voltage from the power outlet match the printer's power requirements? See appendix B, "Technical Specifications," in the *Reference* manual.

## Printer Problem Checklist

### 2 Is the power frequently interrupted?

**YES**—Go to question 3.

**NO**—Check the following:

- Is your power being interrupted from an outside source? Turn the printer off, disconnect the power cord from the outlet, and contact your utility supplier.
- Do you think it might be caused by a defective printer? Turn the printer off, disconnect the power cord from the outlet, and contact your vendor.

### 3 Can you print a status page?

**YES**—Go to question 4.

**NO**—Check the following:

- Is the printer off line before you try to enter the Administration/Special Pages/Print Status menu? It should be.
- Does the cassette have paper? If it is out of paper, the PAPER OUT message displays and the Error indicator lights.
- Are all the printer covers closed securely?
- Is there a media jam? If a paper jam message displays and the Error indicator lights, go to one of the following sections in this chapter on clearing a media jam.

### 4 Is the printer receiving data from the computer?

If the Data indicator blinks after a file is sent, the printer is receiving the data. If not, check the following:

- Is the printer on line? The online indicator should be on and the message window should display IDLE.
- Has the emulation been changed from ESP to an emulation that doesn't match the file you are sending. See chapter 4, "Printer Configuration," in the *Reference* manual.

- Print a status page from the control panel. If you are using the serial interface, is the baud rate (speed of data transmission) of the printer, the computer, and your software application the same? See chapter 4, "Printer Configuration," in the *Reference* manual.
- If you still cannot identify the problem, contact your vendor.

**5 Is the printer printing codes or not printing at all when in ESP mode?**

- Reconfigure the port to the specific printer emulation of the file you are trying to print. See chapter 4, "Printer Configuration," in the *Reference* manual for instructions.
- If a PostScript file prints PostScript statements while the printer is in ESP mode, increase the ESP timeout. See chapter 4, "Printer Configuration," in the *Reference* manual for instructions.
- If you continue to have problems with the ESP mode selecting the appropriate printer emulation, contact your vendor.

## **OPC Drum Problems**

The OPC drum is extremely sensitive to bright light and direct sunlight. Always leave it in its protective bag until you are ready to install it. Any exposure to light should be limited to two minutes. If you suspect the belt is damaged due to exposure to light, put the drum in a dark place to recover. Depending on the amount of exposure, recovery may take up to two hours. Recovery time is dependent on the amount of exposure sustained, and recovery is not guaranteed.

# **Control Panel Problems**

## **Data Indicator Stays Lit**

If the printer has warmed up and the Data indicator stays on, two problems may exist. If you are downloading additional typefaces, too many can overload the printer's memory, causing the printer to reset and lose information previously downloaded to RAM. Make sure you have enough printer memory.

On a LocalTalk network, Macintosh computers sometimes interfere with each other. If this happens often, reinstall the LaserWriter and Laser Prep files, which reset the printer. If neither of these is the problem, place a service call to your vendor.

## **No Advanced Status Page**

If your printer prints a standard status page even though you've configured the printer in the Administration/Special Pages/Status Page Type menu to print an advanced status page, your printer probably doesn't have enough free memory available. To print an advanced status page you may need to reduce the amount of memory assigned to one or more of the memory clients or add more memory (see the "Memory" section in chapter 5, "Additional Technical Information," in the *Reference* manual for information about memory clients).

## **No Startup Page**

If the Ready indicator is on, but no startup page prints, check the following:

### **1 Has the startup page been disabled?**

Use the control panel to make sure the startup page is enabled.

### **2 Did you wait long enough? From a cold start, the printer takes approximately 3 minutes to warm up.**

Be sure you wait long enough for a startup page before suspecting a problem.

- 3 Check that the paper cassettes are loaded with paper, in place and secure.**
- 4 Check for a media jam.**
- 5 Make sure a toner cartridge is installed.**

If you still have not solved the problem, you need to call your vendor for help. See "Placing a Service Call" on page 8-44 for information on how to contact your vendor.

## **Paper Jam Message Stays On**

If a PAPER JAM message stays on, open the printer and clear the jam. If the message is still there, try opening and closing the top of the printer again. See the preceding section on clearing media jams for more information. Make sure your printer is on a hard, flat, level surface.

## **Printer Resets**

Occasionally, Macintosh applications interfere with each other. Applications send a printer prep file to the printer at the beginning of each document. Other prep files cannot be sent without resetting the printer. Monitor your activities to see if there is a correlation between your use of a certain application and the printer resetting. If so, contact the application developer.

Downloading too many typefaces can overload the printer memory and cause the printer to reset to default. Additional memory (RAM), which can be used for font storage, is available and easily installed. Contact your vendor for information on RAM upgrades.

If the printer resets in other circumstances, you should call your vendor for service.

## **PostScript Errors**

If your printer is having trouble printing when using PostScript emulation, you should turn on the Error Handler in the control panel menu.

## Windows Driver Problems

Error Handler is a diagnostic tool that identifies PostScript errors encountered during a print job.

<b>Menu</b>	Administration/Startup Options/Do Error Handler
<b>Choices</b>	Yes—Load the Error Handler. No—Don't load the Error Handler.
<b>Default</b>	No
<b>Notes</b>	Refer to the <i>PostScript Language Reference Manual</i> (Adobe Systems Incorporated, Reading, PA: Addison-Wesley, 1990, ISBN 0-201-18127-4) for information on PostScript errors.  You must reboot the printer after turning on the error handler.

# Windows Driver Problems

## Printer Description Files

If you experience problems either when installing or using printer description files on a PC, see “Notes on Installing Printer Description Files” in chapter 3, “Connecting to a PC,” in the *Getting Started* manual.

# CrownNet Problems

If you have trouble installing and setting up your QMS CrownNet interface, check the following:

- If the printer requires a network interface card, is it correctly installed in the printer?
- Is the printer connected to the network?
- Is the printer plugged in, turned on, and correctly configured?

- Do the printer startup and status pages list the interface? Is the configuration information correct?
- Is the interface enabled?
- Is the appropriate protocol (or protocols) enabled?

Are all printer and protocol addresses configured correctly?

## **Output Problems**

### **1200x1200 dpi Printing Unavailable**

- The amount of RAM installed in your printer governs which resolutions can be used with each media size. If you have a QMS *magicolor* 330 Print System with
  - 64 MB RAM, you can print at 600x600 dpi resolution on all media sizes.
  - 192 MB RAM, you can print at 1200x1200 dpi resolution on all media sizes.

Check the startup page to make sure the printer has enough RAM installed. See chapter 2, “Memory and System Software,” in the *Options* manual for information on installing additional RAM.

- If you have enough RAM installed, and you have configured the printer from the control panel to print at 600x600 or 1200x1200 dpi resolution (Administration/Engine/Def Resolution menu) but the printer continues printing at a lower resolution, you may need additional memory allocated to the frame buffer.

To allocate the correct amount of memory, use the Memory/Quick Config menu to choose the correct resolution and paper size for your printing. See chapter 4, “Printer Configuration,” in the *Reference* manual for more information.

## **Blank Pages**

If a blank startup page ejects or blank pages come out during a printing job, try the following:

**1 Check the toner cartridges.**

The image does not print if the cartridges are empty.

**2 If the toner cartridges are not empty and blank pages are ejecting, take each cartridge out, rock it from side to side, and reinstall it in the printer.**

**3 If these solutions do not work, contact your vendor to purchase another toner cartridge.**

## **Not All Pages Print**

If the printer stops printing in the middle of your file, try the following:

**1 Check your cable.**

You could have the wrong kind of cable, or your printer may not be configured for the correct cable and port.

**2 Make sure no one pressed the Cancel key while your job was printing.**

**3 Check the message window to see if the cassette you are using is out of media.**

# **Kanji Option Kit Problems**

Use the information in this section to locate and solve problems that may arise when installing and using the Kanji SIMM kit.

## **Can't Download Kanji Fonts**

- Are you attempting to download Kanji TrueType fonts using the PS Executive Series Utilities?

This utility cannot be used to download Kanji TrueType fonts. See your Kanji TrueType font software documentation for information on how to download these fonts.

- Did the printer run out of memory while downloading Kanji fonts?

If you experience memory problems when downloading Kanji fonts, then you can do one of the following to increase printer memory:

- Add 4 MB more printer memory. See “SIMM,” later in this section for complete information.
- Decrease the number of fonts that you are downloading. When downloading a large number of fonts, packet them in smaller groups for downloading. (For example, instead of downloading 4 fonts at one time, download 2).

- Are you getting the following message:

The Resolution of this PostScript Device  
Exceeds the Maximum Resolution Specified in the  
Licensing Agreement.

It is possible to get this message when attempting to download Adobe Type Library or Morisawa Type Library Kanji fonts without first downloading the JFontPrep file.

If you get this message, you must download this file.

## **Can't Access Kanji Fonts**

- Does the startup page indicate that the Kanji internal IDE hard disk is on line?

When this disk is on line, Japanese fonts print in the lower half of the startup page. If not, check that the disk is installed correctly and that the disk is not damaged.

- Does your application support Japanese fonts?

You should be able to select these fonts if the application supports them.

## Print Quality Problems

- Did you inadvertently initialize or reformat the Kanji internal IDE hard disk?  
  
If so, contact your vendor. See appendix A, "QMS Customer Support," for product sales and service information.
- Did you correctly configure the printer?  
  
See the *Options* manual for complete printer configuration information.

## Can't Access the Kanji File Through Your Application

- If you are using Windows, ensure that the Japanese version of the Windows driver is installed?  
  
Double-click the Windows control panel icon, double-click Printers, choose your Windows driver, click Setup, and then click About. Check that you are using the QMS Windows 3.1J driver.
- If you are using a Macintosh, ensure that the system is KanjiTalk, and the appropriate Kanji screen fonts are installed.  
  
The two Morisawa screen fonts are included on your Macintosh system disk. The four Typebank screen fonts are included on the Macintosh bitmapped screen fonts disk that comes with the Kanji Option Kit.

# Print Quality Problems

Print quality problems are those related to the appearance of the pages you print. Print quality problems include white lines on the page, uneven blacks, and other print distortions.

First, refer to the appendix B, "Technical Specifications," in the *Reference* manual for recommended media types. If you are using recommended media and continue to have problems with the quality of your printed pages, try this quick-check procedure:

**1 Check that you are using the correct type media.**

See appendix B, "Technical Specifications," in the *Reference* for media specifications.

**2 Check that there is enough toner in the printer whether or not the x TONER LOW message is on.**

**3 If, after rocking the toner cartridge, the print quality does not improve and/or the x TONER LOW message remains on, replace the toner cartridge.**

Do not replace the toner cartridge with another used cartridge.

**4 Place a service call to your vendor.**

## **Image Defects**

The following list includes several image defects with possible solutions. Try the solutions in the sequence given. If the solutions listed don't solve the problem, place a service call to your vendor. See the next section in this chapter, "Placing a Service Call."

## **General**

Print quality problems are those related to the appearance of the pages you print. Print quality problems include white lines on the page, uneven colors, and other print distortions.

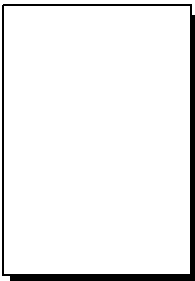
If you have problems with the quality of your printed pages, try the following:

- If the TONER OUT message is on and the printer continues to print, try distributing the toner to improve print quality. If the print quality does not improve, replace the toner cartridge.
- Place a service call to your vendor.

**Specific Print Quality Problems**

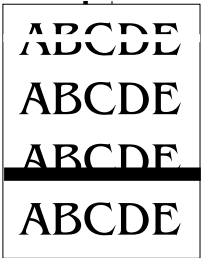
Listed below are several print quality problems with possible solutions. Try the solutions in the sequence given. If the solutions listed do not solve the problem, place a service call to your vendor.

**Blank Pages**



Cause	Solution
Two or more sheets may be feeding at once.	Remove the media stack, fan it, and replace.
The OPC drum cartridge is old or damaged.	Replace the OPC drum cartridge.
Toner in a toner cartridge is low.	Replace the toner cartridge.
The high-voltage power supply may be defective.	Contact your supplier.

**Colored Bands**



Cause	Solution
One or more toner cartridges may be defective.	Install new toner cartridge(s).

## **Irregular Print, Partial Blanks, Creased Paper**



Cause	Solution
The paper being used may have absorbed moisture (perhaps due to high humidity or having water spilled on the paper supply).	Toner does not adhere well to paper at the positions where it has become wet. Replace the paper in the tray or cassette with dry paper, and retest for irregular print.
Print media is outside of the recommended specifications.	Replace the print media with a recommended type.

## **Poor Color Matching**



Cause	Solution
ICC color matching disabled.	Enable ICC color matching in printer driver.
Colorific software not installed, or	Install Colorific and calibrate monitor.
Monitor not calibrated.	

## **Print Image Is Slanted**



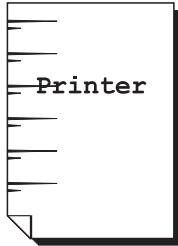
<b>Cause</b>	<b>Solution</b>
The paper cassette guide clips are not set to the correct positions.	Set the vertical and horizontal guide clips to their correct positions.

## **Printout Too Light**



<b>Cause</b>	<b>Solution</b>
Toner cartridge(s) is (are) defective or low.	Remove the toner cartridges and rock them as you would with a new cartridge. Then, reinstall the cartridges. If this doesn't help, the toner cartridge may be defective. Replace the toner cartridge.
Print media is outside of the recommended specifications.	Replace the print media with a recommended type.
Print media is moist.	Replace the print media.
The OPC drum cartridge is old or damaged.	Replace the OPC drum cartridge.

## Repeating Defects



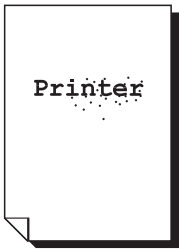
Cause	Solution
There is dirt in the media path.	Print several blank sheets.
The OPC drum cartridge is old or damaged.	Replace the OPC drum cartridge.

## Solid Color/Black Image



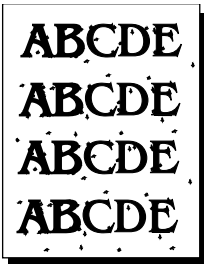
Cause	Solution
A toner cartridge may be defective.	Remove it and install a new toner cartridge.
Your OPC drum cartridge is old or damaged.	Replace the OPC drum cartridge.
The high-voltage power supply may be defective.	Contact your supplier.
Your printer may need a service check.	Contact your vendor.

**Stray Black Dots or White Dots (Dropouts)**



Cause	Solution
The toner cartridge may be old or defective.	Install a new toner cartridge, if needed.
The OPC drum cartridge is old or damaged.	Replace the OPC drum cartridge.

**Toner Smudges**



Cause	Solution
A toner cartridge is defective.	If the toner smudges are only on the front of the page, perform steps 1 and 2.  1 Distribute the toner.  2 Check to make sure the toner is not defective.  3 If steps 1 and 2 do not solve the problem, install a new toner cartridge.
The image transfer roller may be dirty.	If toner smudges are also on the back of the page, open the printer once and close it again to clean the roller.

## Uneven Print Density



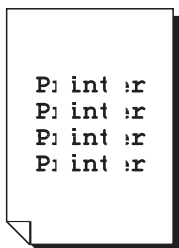
Cause	Solution
Toner is not distributed properly.	Remove the toner cartridge and rock it as you do before installing a new cartridge.  If that does not solve the problem, install a new toner cartridge.

## Toner Smears When Rubbed



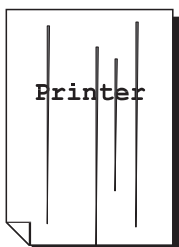
Cause	Solution
The print media is moist.	Replace the print media.
Print media is outside of the recommended specifications.	Replace the print media.

## **Vertical Blanks**



<b>Cause</b>	<b>Solution</b>
The OPC drum cartridge is not installed properly.	Reinstall the OPC drum cartridge.
The OPC drum cartridge is old or damaged.	Replace the OPC drum cartridge.

## **Vertical Streaking**



<b>Cause</b>	<b>Solution</b>
The laser lens may be dirty.	Clean the lens.
The toner cartridge may be old or defective.	Install a new toner cartridge, if needed.
The OPC drum cartridge is old or damaged.	Replace the OPC drum cartridge.

# Media Transport Problems

Problem	Cause	Solution
<b>Media slants when fed</b>	The media guides are not set correctly	Readjust the media guides.
<b>No media feed, or</b>	The printer is not on a hard, flat, level surface, or	Move the printer to a hard, flat, level surface, or
<b>Media jam, or</b>	A media cassette is not fully inserted, or	Push the media cassette all the way in, or
<b>Several sheets feed at once</b>	A foreign object is in the printer	Turn the power off and remove the foreign object. If it cannot be removed in one piece, contact your vendor.

# Unusual Sounds

Problem	Cause	Solution
Unusual sounds	The printer is not on a flat surface.	Move the printer to a flat surface.
	A media cassette is not fully inserted.	Push the media cassette all the way in.
	A foreign object is in the printer.	Turn the power off and remove the foreign object. If it cannot be removed in one piece, contact your vendor.

# Placing a Service Call

If you have a problem you cannot resolve, contact your vendor. Your vendor is best equipped to immediately handle any problem you may encounter.

If you have technical questions your vendor is unable to answer, contact the QMS Customer Response Center (see appendix A, "QMS Customer Support." If you've determined your printer needs to be examined by a QMS-authorized service provider, contact your vendor or QMS-authorized service provider for work inside the US, or one of the QMS international offices for work outside of the US. (National and international contacts are listed in appendix A, "QMS Customer Support.") Before calling, be sure you have the answers to these questions handy to help our technicians serve you more quickly:

- 1 What is your phone number, fax number, and shipping address?**

- 2 What is a description of the problem?**
- 3 What is your printer model and serial number?**
- 4 What kind of host computer do you have?**
- 5 What operating system do you have and what version?**
- 6 What interface are you using? If serial, what protocol (for example, XON/XOFF)?**
- 7 What application are you using and what version?**
- 8 What is the emulation of the file you're trying to print? In what emulation mode is the port?**
- 9 What is the firmware revision number for your printer? (It is listed on both the status and startup pages.)**
- 10 If you can print, have a status page available.**

Your service representative needs to know these things prior to helping you.





# 9

---

## Repacking the Printer

---

### In This Chapter . . .

- “Turn off the Power and Remove All Cables” on page 9-3
  - “Remove the Media” on page 9-3
  - “Remove the Media Trays” on page 9-4
  - “Remove the Toner Cartridges” on page 9-6
  - “Reset the Antirotation Spacer” on page 9-6
  - “Change the Waste Toner Box” on page 9-7
  - “Prepare the Fuser Unit” on page 9-7
  - “Remove the Large-Capacity Input Feeder (LCIF)” on page 9-9
  - “Repack the Printer” on page 9-10
-

# Introduction

## Important Repackaging Information

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

If you are sending in your *magicolor* 330 for maintenance or repair, you must notify QMS National Service to arrange for deinstall procedures.

- 
- ◆ **Caution:** *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, or repackaging the printer with the QMS replacement packaging kit.*
- 

If you need a replacement packaging kit, in the US call your vendor or QMS National Service at 1 (334) 633-4300 x2530 and request catalog number 2600439-300.

If you need to return the printer for service, in the US call QMS Customer Service at 1 (334) 633-4300 x1072 for an RMA (Return Merchandise Authorization) number. In other countries, refer to appendix A, "QMS Customer Support" on page 9-1"

## What's Involved?

Repacking your printer for shipment involves the following steps.

- 1 Turn off the power and remove all cables.**
- 2 Remove the media.**
- 3 Remove the media trays.**
- 4 Remove the toner cartridges.**
- 5 Reset the antirotation spacer.**

- 6 Change the waste toner box.
- 7 Prepare the fuser unit.
- 8 Remove the large-capacity input feeder (if attached).
- 9 Repack the printer.

## **Turn off the Power and Remove All Cables**

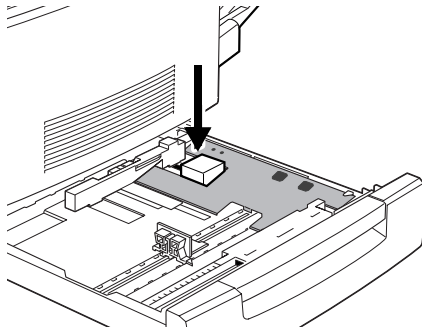
- 1 Turn the printer off.
- 2 Disconnect the power cord, interface cable, and all other cables.

## **Remove the Media**

- » **Note:** *If you're returning the printer for service, you don't need to return the power cable, interface cables, or media cassette(s).*
- 1 Open the media cassette.
  - 2 Remove the media from the cassette and store it in a dry, dust-free location.


## Remove the Media Trays

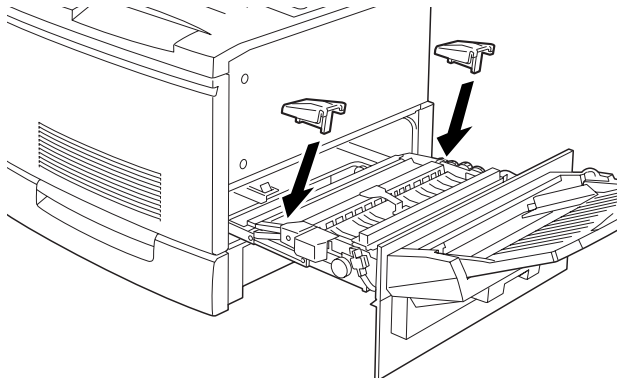
- 3 Set the spacer into the location shown below. 



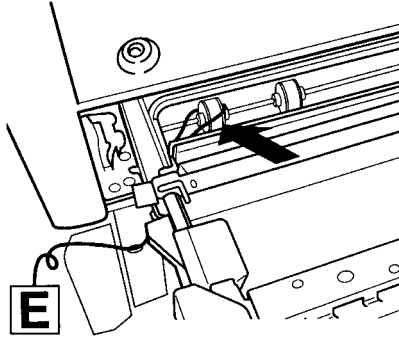
- 4 Push the media cassette securely into the printer.

## Remove the Media Trays

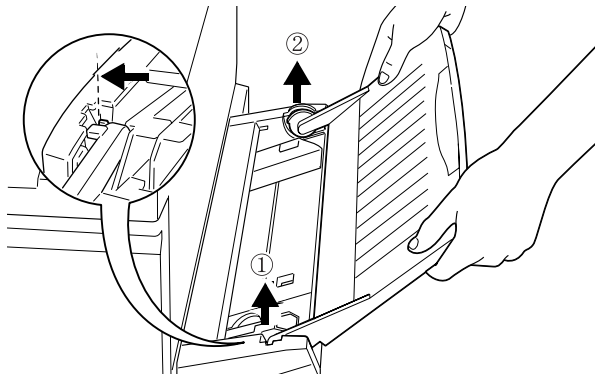
- 1 Remove the face-up tray from the left side of the printer.
- 2 Pull the multipurpose tray unit from the right side of the printer out as far as it will go.
- 3 Reset the protective pads. 



- 4 Reset the tie-wrap. 



- 5 Push the multipurpose tray unit back into the printer.
- 6 Press the end of the multipurpose tray's left connector arm inward, then move the arm away from the printer. ①



- 7 Disconnect the right connector arm and remove the tray entirely from the printer. ②
- a Press and release the antirotation switch to release the knob lock.

# Remove the Toner Cartridges

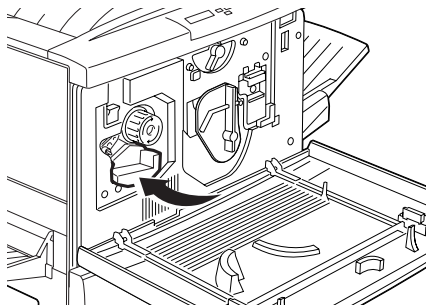
- 
- ◆ **Caution:** *When moving the printer, do not reinstall the toner cartridges that have been removed. Reuse will result in print defects and toner smears. Toner can spill inside the printer, resulting in malfunction.*
- 

- 1 **Open the printer's front cover.**
- 2 **Remove the four toner cartridges.**
  - a Press and release the antirotation switch to release the knob lock.
  - b Turn the knob clockwise as far as it will go to move the next toner cartridge to the cartridge opening.
  - c Turn the toner cartridge counterclockwise to unlock it.
  - d Remove the cartridge from the printer.

Once a toner cartridge has been removed from the printer, do not reinstall it. Repeat steps a and b, c, and d to remove all four toner cartridges.

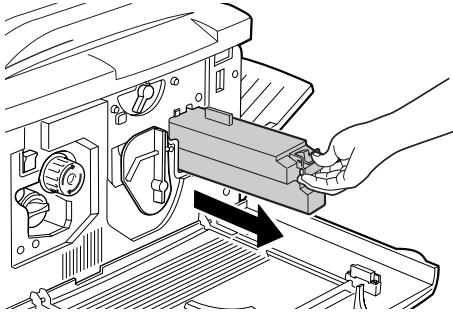
# Reset the Antirotation Spacer

Reset the antirotation spacer back into the toner cartridge window.



## **Change the Waste Toner Box**


- 1 With the printer's front cover still open, remove the waste toner box from the printer.



- 2 Dispose of the box in accordance with safety laws and regulations in your area.
- 3 Install a new waste toner box.

## **Prepare the Fuser Unit**

---

 **WARNING!** *The fuser unit can become extremely hot and cause severe burns. Make sure the unit is cool before handling it.*

**ACHTUNG!** *Die Fixiereinheit kann sehr heiß werden, so daß Verbrennungsgefahr besteht. Bitte lassen Sie die Fixiereinheit einige Zeit abkühlen, bevor Sie diese berühren.*

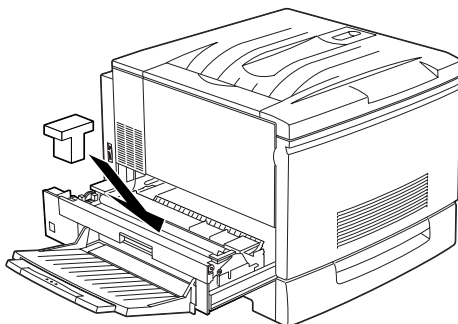
---

- 1 Slide out the printer's left-side fuser unit.
- 2 Remove the fuser oil roller.
- 3 Place the fuser oil roller in an oil-proof container, such as a plastic bag, and then in its original box until you're ready to reinstall it.

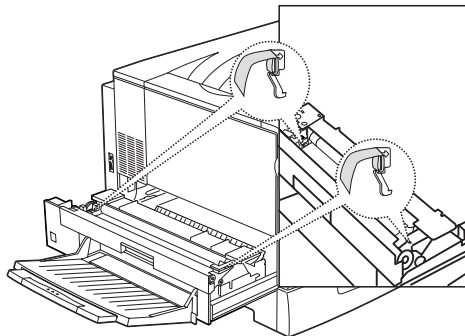
## Prepare the Fuser Unit

- 
- ◆ **Caution:** *To avoid oil spillage, store the fuser oil roller in a horizontal position.*
- 

- 4 Set the fuser roller spacer and fasten it with tape.





- 5 Set the fuser roller separators and fasten them with tape.

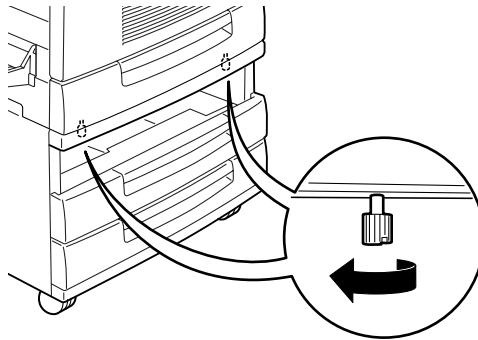



- 6 Push the fuser unit in until it clicks.

# Remove the Large-Capacity Input Feeder (LCIF)

» **Note:** *If you don't have a large-capacity input feeder installed, skip to the next section.*

- 1 **Open the cover at the rear left of the printer.** 
- 2 **Locate the connections, and then unplug them.**
- 3 **Replace the plastic cover.**
- 4 **Remove the top media cassette from the large-capacity input feeder.**
- 5  **Unscrew the thumbscrews that attach the LCIF (one on each side of the printer).**



- 6 **Remove any media from the cassettes and store it in a dry, dust-free location.**
- 7  **With four people, pick up the printer by its handholds, lift it from the large-capacity input feeder, and place it on a level surface.**



**WARNING!** *The printer weighs about 150 lbs (68 kg). Don't lift it by yourself.*

**ACHTUNG!** *Der Drucker wiegt ca 68 kg; bitte versuchen Sie niemals, das Gerät alleine anzuheben oder zu tragen.*


## Repack the Printer

- 8  Place the large-capacity input feeder in its original shipping carton for storage or shipment.

- 9 Seal the box.

» **Note:** *If you're returning the printer for service, you don't need to return the large-capacity input feeder.*

## Repack the Printer

- 1  With four people, lower the printer onto the base pallet of the shipping carton.

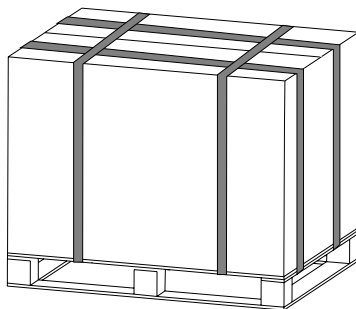
- 2 Replace the plastic bag over the printer. 

- 3 If you're also shipping the power cord, media trays, unopened consumables, and any manuals with the printer, place them on top of the printer.

Pack consumables, if any, according to instructions in this chapter.

» **Note:** *Don't ship the above items if you're returning the printer for service.*

- 4 Ensure that the carton top is securely strapped to the pallet with four straps.



- 5 Proceed with transport.

# A

---

## **QMS Customer Support**

---

### **In This Appendix . . .**

- “Sources of Support” on page A-2
- “QMS World-wide Offices” on page A-5

# Sources of Support

Several sources of help and information are available, depending on the type of help you need:

## **Your QMS Vendor**

Your local vendor (the one from whom you bought the printer) may be best equipped to help you. Your vendor has specially trained service technicians available to answer questions, and the equipment to analyze your printer problems.

## **Your Application Vendor**

Often, "printing" problems have more to do with the application being used than with the printer. In this case, the application manufacturer is the best source of help.

## **Q-FAX**

Q-FAX, a QMS information retrieval service, provides application notes, technical support notes on common printing problems, and information about printer specifications, options, accessories, consumables, and prices.

In the United States and Canada, call (800) 633-7213 to reach Q-FAX. In all other countries, call (334) 633-3850. Have your fax number handy when you call (or place the call from your fax machine's handset).

You can choose to have either a directory (a list of currently available documents) or a specific document sent to you. The first time you call, request the directory (press 2 on your phone or fax keypad when prompted). Then call back to request specific documents. You can order up to three documents per call.

## **Internet**

The QMS server provides access to technical reports, new product announcements, a trade show schedule, and other general information about QMS.

If you have access to the World Wide Web, you can view the QMS home page at <http://www.qms.com/>. The QMS ftp resource is <ftp.qms.com>.

## **QMS Customer Response Center (CRC)**

You can contact the QMS Customer Response Center (CRC) in three different ways:

- **Telephone**—You can call the CRC at (334) 633-4500 (US) Monday–Friday, 7:00 am–6:00 pm, Central Time.

» **Note:** *If you call for assistance, have the following information ready so our technicians can help you more quickly:*

- ☒ Your phone number, fax number, and shipping address
  - ☒ A description of the problem
  - ☒ The printer model and serial number
  - ☒ The type of host computer you're using
  - ☒ The type and version of operating system you're using
  - ☒ The interface you're using, and, if serial, the protocol (for example, XON/XOFF)
  - ☒ The application and version you're using
  - ☒ The emulation of the file you're trying to print (listed on both the status and startup pages)
  - ☒ Your printer firmware version (listed on the status/startup pages)
  - ☒ A status page, if you can print one
- **Fax**—You can fax questions to the CRC at (334) 633-3716 (US). Provide the same information as listed above, and indicate whether you would like a faxed or a phoned reply.
  - **Internet**—If you have access to the World Wide Web, you can access the CRC through the QMS home page at <http://www.qms.com/>

# **QMS World-wide Offices**

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## **QMS United States and Latin America**

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### **General Contact**

1 (334) 633-4300

Fax 1 (334) 633-4866

Email [info@qms.com](mailto:info@qms.com)

Internet <http://www.qms.com>

Information on QMS products, supplies, and accessories, and on the authorized QMS remarketer or service provider nearest you

1 (800) 523-2696

### **Customer Response Center (CRC)**

Technical Assistance

1 (334) 633-4500

7:00 am–6:00 pm Central Time

Fax 1 (334) 633-3716

Internet <http://www.qms.com>

### **Latin America Fax**

1 (334) 639-3347

### **National Service**

Service Information, Installation, and Maintenance Pricing

1 (800) 762-8894

On-Site Service and Depot Repair Information

1 (800) 858-1597

7:00 am–7:00 pm Central Time

Spare Parts Ordering and Information

1 (334) 633-4300 x2530

8:00 am–5:00 pm Central Time

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## **QMS Canada**

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### **General Contact**

1 (514) 340-0646

Fax 1 (514) 340-0401

Supplies and Accessories

1 (800) 268-0343 x223

### **National Service**

On-Site Service and Depot Repair Information

1 (800) 268-4969

8:30 am–7:00 pm Eastern Time

Spare Parts Ordering and Information

1 (905) 206-9234 x238

8:30 am–5:00 pm Eastern Time

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## **QMS in Japan**

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### **General Contact**

(+81)-3 3779-9600

Fax (+81)-3 3779-9650

Internet <http://www.qmsj.co.jp>

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## **QMS EMEA**

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### **QMS Australia**

Anitech  
Sydney Business & Tech. Centre  
52/2 Railway Parade  
2141 Lidcombe NSW  
Australia  
(+61) 2-9901 3235  
Fax (+61) 2-9901 3273  
Internet <http://www.qmsaus.com.au/>

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### **QMS Benelux**

**Belgium, Netherlands, and all  
unlisted countries**

Planetenbaan 60 'Corner Plaza'  
3606 AK Maarssen  
The Netherlands  
(+31) 346-551333  
Fax (+31) 346-550170  
Internet <http://www.qms.nl>

---

### **QMS France**

Vélizy Plus  
1 Bis, Rue du Petit Clamart  
78142 Vélizy Cedex  
France  
(+33) 1-410 79 393  
Fax (+33) 1-408 30 110

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### **QMS GmbH**

**Germany and  
Austria**

Gustav Heinemann Ring 212  
D-81739 Munich  
Germany  
(+49) 89 63 02 67 0  
Fax (+49) 89 63 02 67 67

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### **QMS Italy**

Via della Repubblica 56  
43100 Parma  
Italy  
(+39) 52-1231 998  
Fax (+39) 52-1232 902

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<b>QMS Nordic</b> <b>Sweden, Finland, Norway, and Denmark</b>	Arenavägen 41, 6th floor 121 77 Johanneshov Sweden (+46) 8-600 01 30 Fax (+46) 8-600 01 33
<b>QMS South Africa</b>	Saskay House Unit 24 Sunninghill Business Park Peltier Road, Sunninghill, Johannesburg Republic of South Africa (+27) 11-807 6957 Fax (+27) 11-807 6960
<b>QMS UK</b> <b>United Kingdom and Ireland</b>	Old Bridge House, The Hythe Staines, Middlesex TW18 3JF United Kingdom (+44) 1784-442255 Fax (+44) 1784-461641





# B

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## Configuration Menu

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### **In This Chapter . . .**

- “Introduction” on page B-2
- “Menu Chart Conventions” on page B-2
- “Administration Menu” on page B-3
- “Installation Menu” on page B-9
- “Operator Control Menu” on page B-10

# Introduction

Use this chapter as a quick reference for understanding and navigating the printer's configuration menu. The following menu charts are provided:

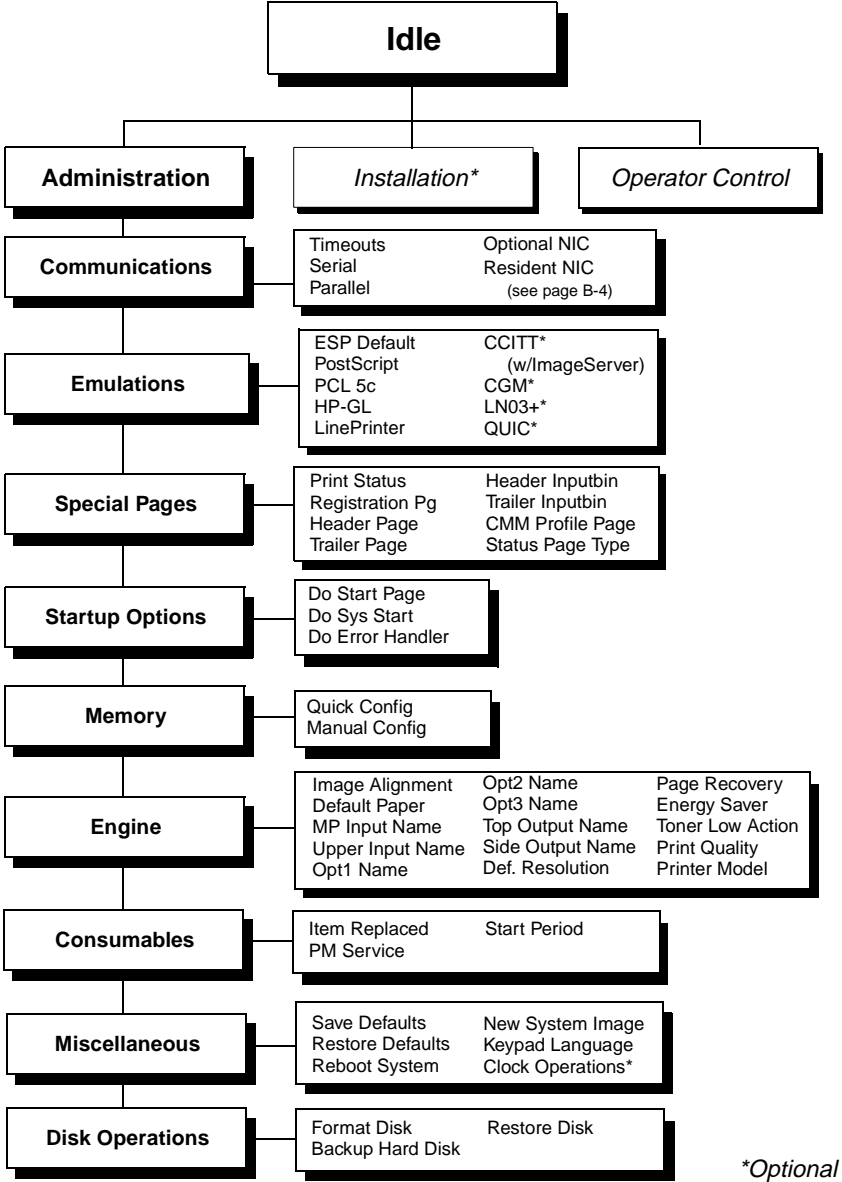
- **Administration menu** on page B-3
  - **Installation menu** on page B-9
  - **Operator Control menu** on page B-9
- » **Note:** *The Copier Menu is displayed in chapter 7, "CrownCopy," of the Options manual.*

## Menu Chart Conventions

The following conventions are used in the menu charts:

- Some menu choices are marked as optional or with a *w/item*, indicating that the selection appears in the menu only when the option is installed.
- These charts show only the top-level menus. See chapter 4, "Printer Configuration," in the *Reference* manual for detailed information on menu options.

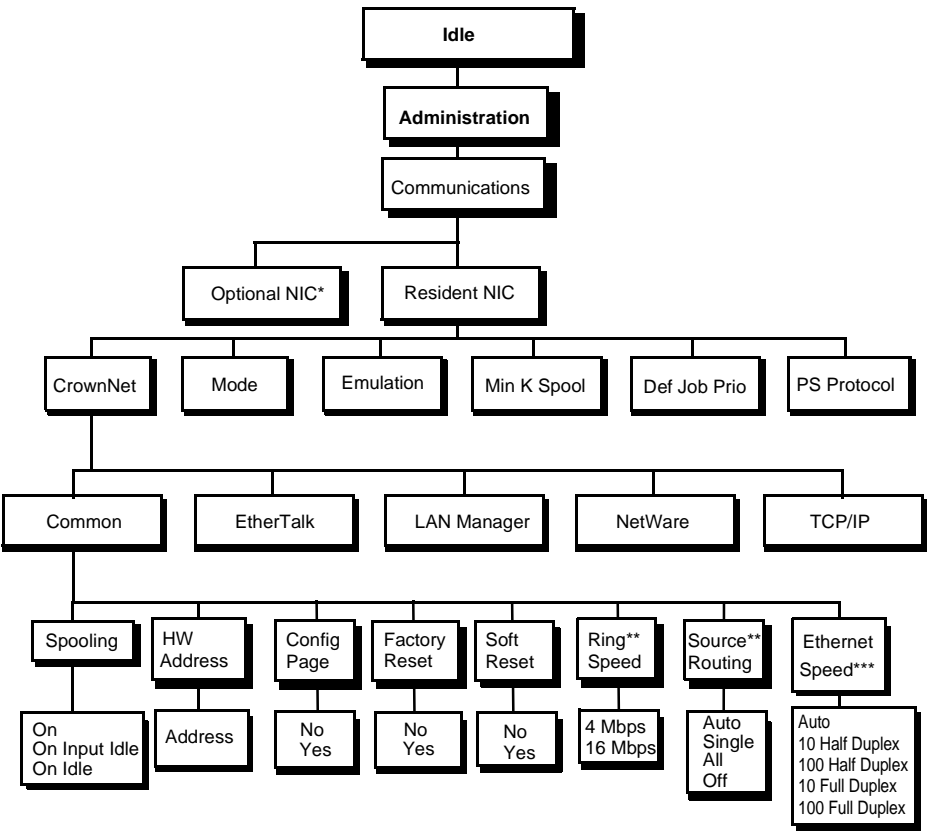
# Administration Menu



*\*Optional*

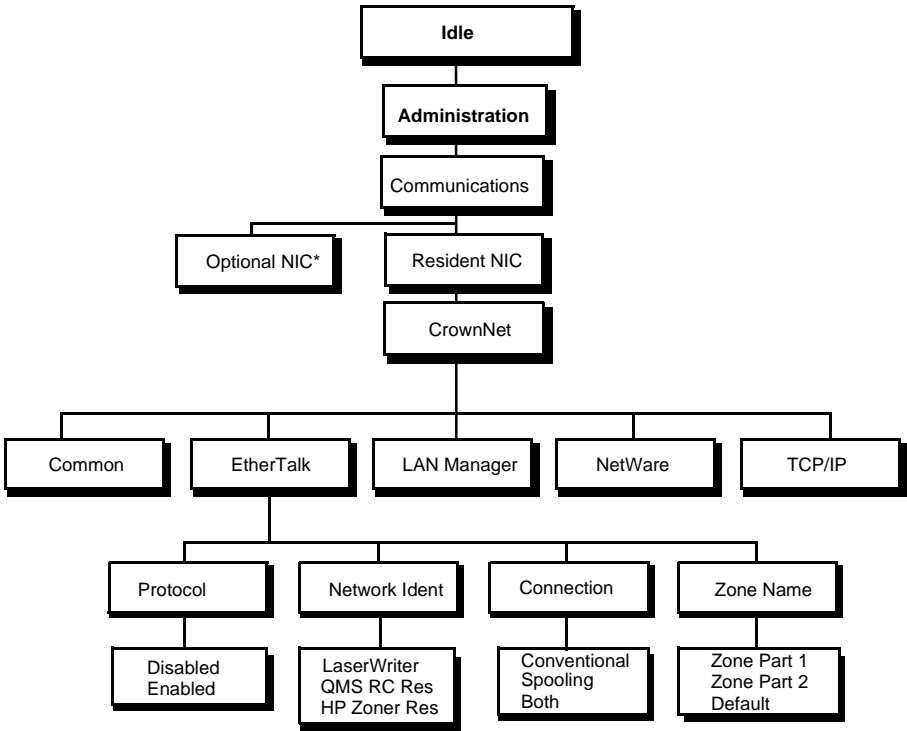
**Administration/Communications/Resident  
NIC/CrownNet Menu**

**Common Menu**



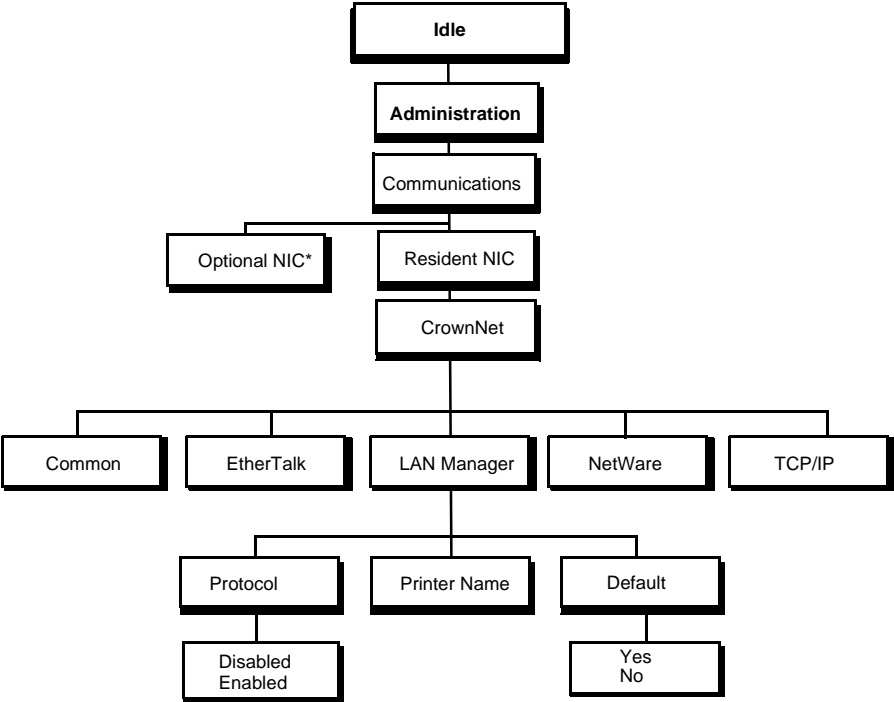
\* Optional  
\*\* Token-Ring only  
\*\*\* Fast Ethernet Only

**EtherTalk Menu**



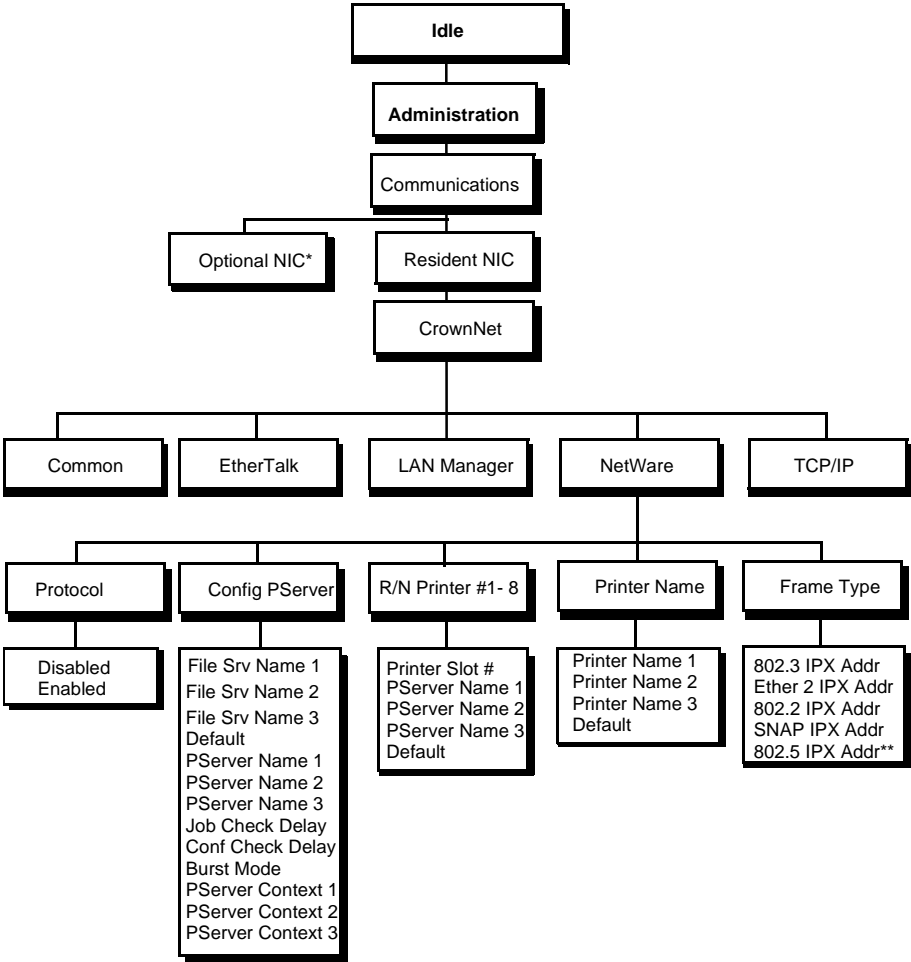
*\*Optional*

**LAN Manager Menu**



*\*Optional*

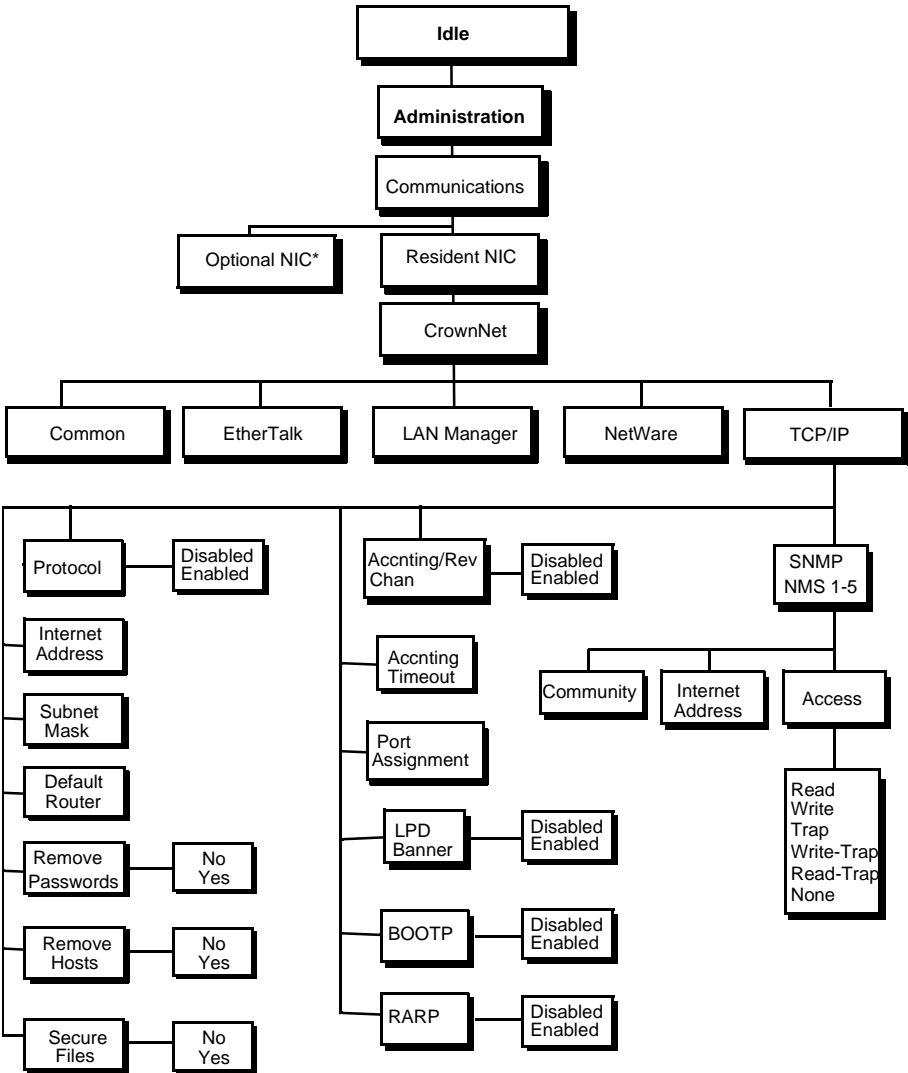
**NetWare Menu**



*\*Optional*

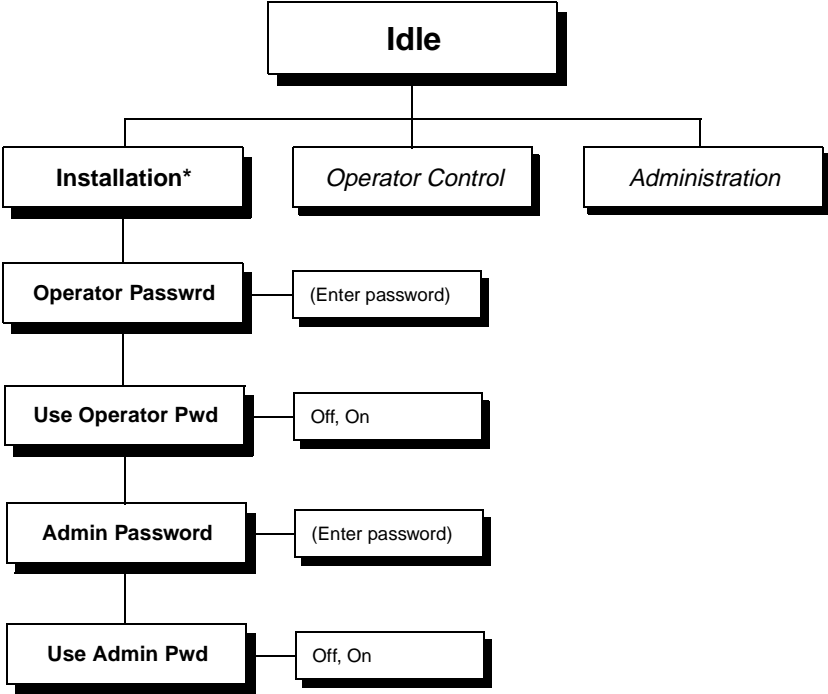
*\*\*Token-Ring only*

**TCP/IP Menu**



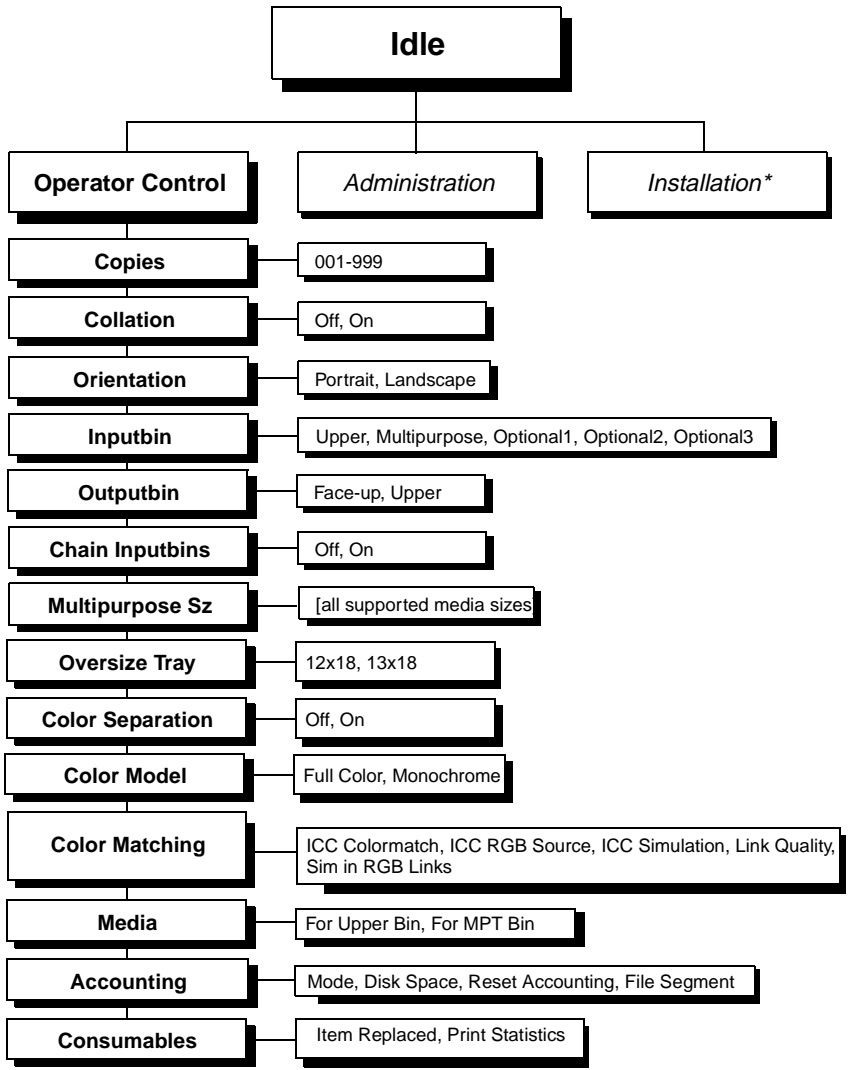
*\*Optional*

# Installation Menu



*\*Optional; available only with security key*

# Operator Control Menu



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