QMS® 2060 Print System Operation

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1

Introduction

In This Chapter . . .

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 2060 Print System documentation.

This chapter gives you a brief overview of this manual.

About This Manual

1	**Introduction**	Provides an overview of this guide.
2	**Consumables**	Describes the media that's best suited for your printer; how to load paper, labels, transparencies, envelopes; and how to replace the toner cartridge.
3	**Advanced Printing Features**	Explains how to print duplex, chain cassettes, collate output, print a status page, cancel a print job, and end a print job.
4	**Printer Care**	Describes how to handle and clean the printer.
5	**Print Quality**	Gives information on how to improve print quality through adjustment of printer resolution.

6	**Troubleshooting Printer Problems**	Provides media jam prevention tips, explains how to locate and clear media jams, lists printer status messages, outlines printer and print quality problems and solutions, and describes how to place a service call.
7	**CrownView Printer Web Page**	Contains information on how to access and use the printer's web page.
A	**QMS Customer Support**	Provides product sales and support telephone numbers and describes how to communicate with QMS through the QMS Bulletin Board, CompuServe, the Internet, and Q-FAX.

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
`Mixed-Case Italic Courier`	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
lowercase bold	PostScript operators and DOS commands
lowercase italic	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)

» **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

Consumables

In This Chapter . . .

- ■ "Feeding Media" on page 2-2
- ■ "Preventing Media Jams" on page 2-3
- ■ "Loading the Media Cassette" on page 2-4
- ■ "Loading the Multipurpose Tray" on page 2-12

Introduction

This chapter covers basic printer operation, such as preventing media jams; loading media; transparencies, labels and envelopes; replacing toner cartridges; and using various kinds of print media.

Feeding Media

There are two ways of feeding media into your printer:

■ Automatic (from the cassettes)

■ Manual feed (from the multipurpose tray)

Automatic

The printer automatically pulls media from the cassette(s) at the front of the printer. The cassette(s) handle media as light as 16 lbs (60 g/m^2) or as heavy as 24 lbs (90 g/m^2).

See "Loading the Media Cassette" on page 2-4 for details on how to load the cassette.

Manual Feed

Manual feed is the method of feeding single sheets or small increments of media from the multipurpose tray only. Media weight can range from 16 to 42 lbs (20 to 157 g/m^2).

Manual feed is very useful for

■ Envelopes

■ Labels

■ Letterhead and memo paper

■ Odd-sized media (cut sheets)

■ Postcards

- 13x22 Broadsheet

- 13x26

- Heavy-weight labels and envelopes

The multipurpose tray is also especially useful if you want to print on a single sheet of letterhead or colored media without changing the media in the media cassettes.

Preventing Media Jams

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

- Use paper, envelopes, labels, postcards, transparencies that match the printer specifications. (See the "Consumable Supplies" section of appendix B, "Technical Specifications," in the *Reference*, for more complete information.)

- Make sure the media is not folded or wrinkled.

- Do not overfill the multipurpose tray or the cassettes. The multipurpose tray holds about 150 sheets of 20 lb (75 g/m^2) paper, 5 transparencies, 10 envelopes, 10 sheets of letterhead or thick paper, or 10 labels; the universal cassette holds up to 250 sheets of paper, and the 500-sheet cassette holds up to 500 sheets of paper.

- If you have problems with double feeding, remove the media from the tray or cassette and fan the edges. The sheets may be sticking together.

» **Note:** *Do not fan transparencies since this causes static.*

- Store print media away from moisture and humidity. The recommended relative humidity is 15%-85% with no condensation.

■ Place media correctly in the tray or cassette. Many manufacturers place an arrow on the end of the wrapper indicating the side of the media to use for printing. If you cannot 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 cassette.

■ If none of the above relieves media jamming, notify your vendor.

Loading the Media Cassette

The QMS 2060 Print System comes standard with either a 500-sheet letter/A4 cassette or a 250-sheet cassette, depending on the model ordered. See the "Consumable Supplies," section of appendix B in the *Reference* manual for cassette media capacity information. These cassettes are interchangeable and therefore can be either in the upper or lower position. The printer automatically pulls media from the cassette.

Basically, loading media in either cassette involves the following steps:

■ Prepare the paper

■ Load the cassette

Each of these steps is described in detail later in this procedure. There is a section for loading a 500-sheet cassette and one for loading a 250-sheet cassette.

Prepare the Paper

▲ **Caution:** *Ensure that the media size matches the cassette size (for example, letter/A4 media must be loaded only when the letter/A4 cassette is inserted or the universal cassette is set to letter/A4 size). Since the media cassette sends a media size signal to the printer controller, using a wrong size media will cause your image to be positioned incorrectly on the page or clipped.*

1   **Unwrap the paper, pull the stack out, and then with one hand at each end of the stack, lift and hold it in a curved position.**

»   **Note:** *Paper is packed in reams of 500 sheets. Do not unpack the paper above the printer as this might cause particles to fall into the printer components. Note the arrows on the wrapper. They show which side of the paper should be on the top when it is loaded in the cassette.*

2   **Grip each end of the stack firmly.**

3   **Straighten the stack, and then roll the fanned sheets from side to side to get air through the sheets and prevent static buildup.**

4   **Take off the top and bottom sheets**

The top and bottom sheets sometimes have residual glue buildup that could cause the printer to jam.

Loading the 500-sheet Cassette

Load media in the 500-sheet cassette as follows. For 250-sheet cassette instructions, see the next section.

»   **Note:** *Reload media cassettes only when the printer is not actively printing.*

1   Pull out and remove the cassette.
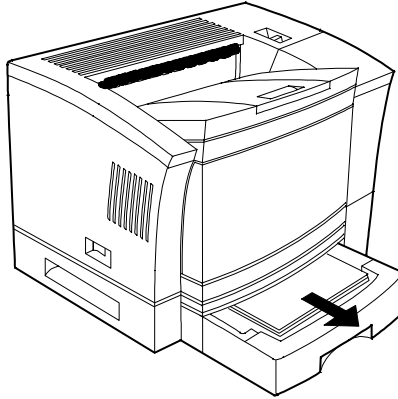
2   Position the cassette.

The cassette has a spring in the bottom that provides some resistance when print media is placed on it. Lay the cassette flat on a hard surface and, using your left hand, push down on the plate in the cassette until it locks.
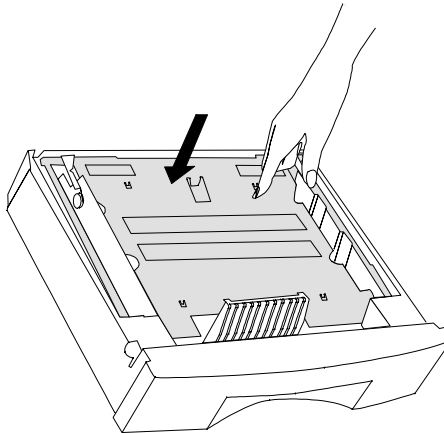
3   **Load media in the 500-sheet cassette in increments so that the 500 sheets fit in the cassette and the media stack is properly leveled out.**

Load the media so the front end of the stack comes against the front of the cassette in three steps as follows:

a   Up to the bottom limit mark.

b   Halfway to the top limit mark.

c   Up to the top limit mark.
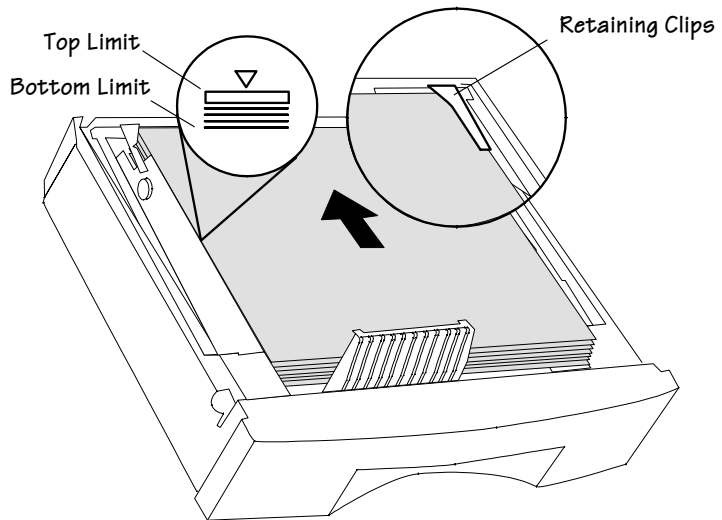
Top Limit

Bottom Limit

Retaining Clips

4   **Ensure that the media stack lies flat, does not exceed the top limit mark, and is positioned under the retaining clips.**

5 **Slide the cassette back into the upper cassette feeder until it's firmly seated.**
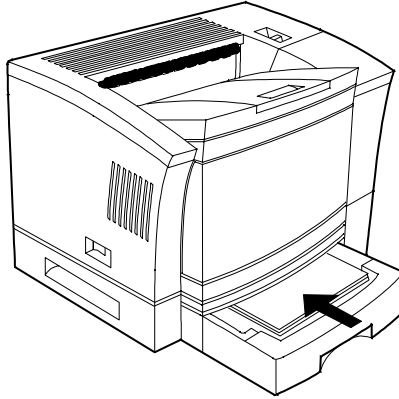
6 **Adjust the media tray to fit the media size.**
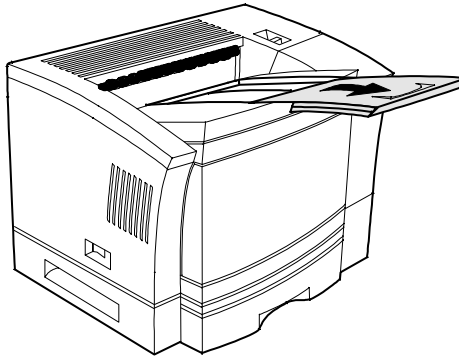
» **Note:** *When printing different-sized media, set the media tray to the largest media size. If the media tray is set to a smaller media size, large-size paper will curl, block the opening (when delivered to the tray), and cause a media jam.*

Load the 250-Sheet Cassette

Load media in the 250-sheet universal cassette as follows. For 500-sheet cassette instructions, see the previous section.

» **Note:** *Reload media cassettes only when the printer is not actively printing.*

1   Pull out and remove the cassette.
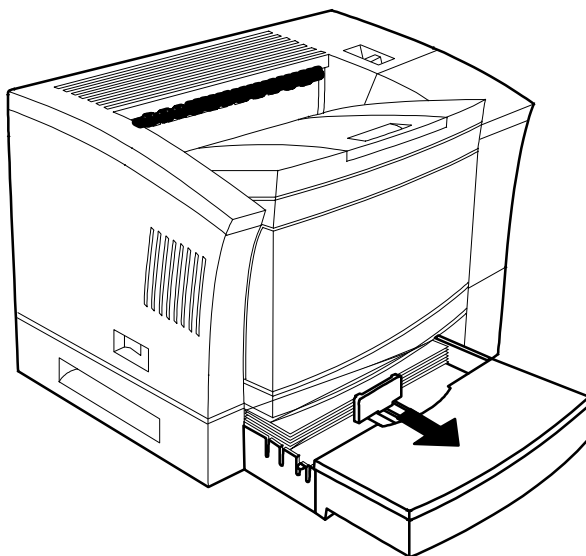
2   Open the cassette cover.
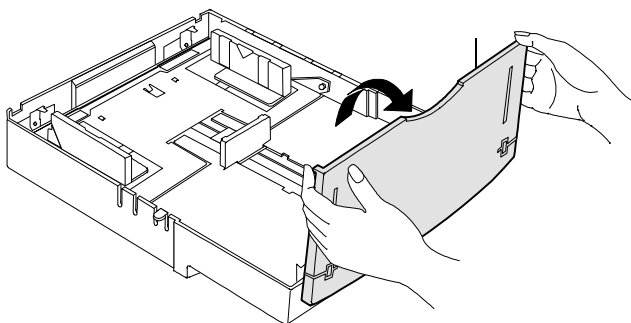
3   Position the cassette.

The cassette has a spring in the bottom that provides some resistance when print media is placed on it. Lay the cassette flat on a hard surface and, using your left hand, push down on the plate in the cassette until it locks.
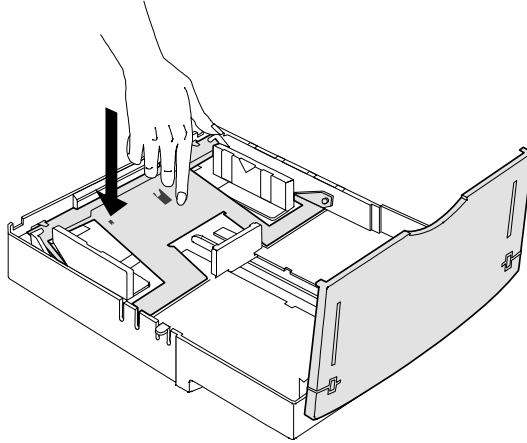
4   Adjust the media guides to fit the media size.
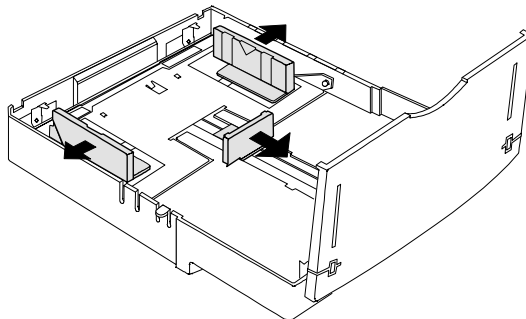
5   **Load media face-up in the universal cassette.**
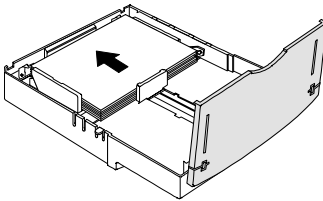
Long-edge First   Short-edge First
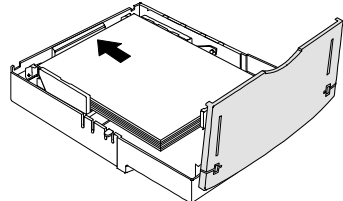
»   **Note:** *See the "Print Media" section of appendix B, "Technical
        Specifications," in the Reference manual for media size feed-
        edge information.*

6   **Ensure that the media stack lies flat, does not exceed the top
    limit mark, and is positioned under the retaining clips.**

Retaining Clips
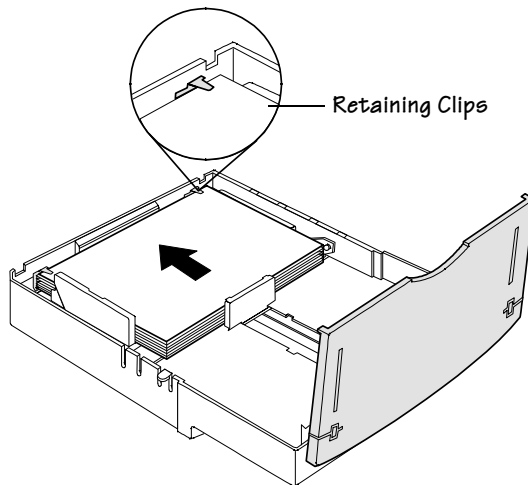
7   Slide the cassette back into the printer until it is firmly seated.
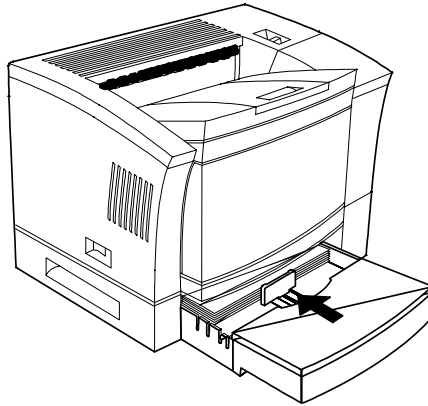
Loading the Multipurpose Tray

This section explains how to load media in the multipurpose tray. For tips on how to get the best possible printing results, see "Envelopes: Special Considerations," "Labels: Special Considerations," and "Transparencies: Special Considerations," at the end of this section.

» **Note:** *A* `MEDIA SIZE MISMATCH` *error can be caused if the media in the multipurpose tray is not the media size selected for the multipurpose tray (inputbin 1). If the printer supports the media size you want, insert the correct size media in the multipurpose tray. If the printer does not support the media size you want, set Operator Control/Multipurpose Sz to Universal to clear the error. See "Media Size" in chapter 4, "Printer Configuration," of the Reference for more information on multipurpose size.*

1   Open the multipurpose tray.
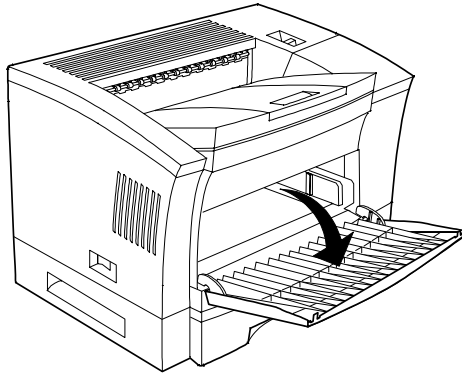
2   Adjust the media guides on the multipurpose tray to match the width of the media you're using.
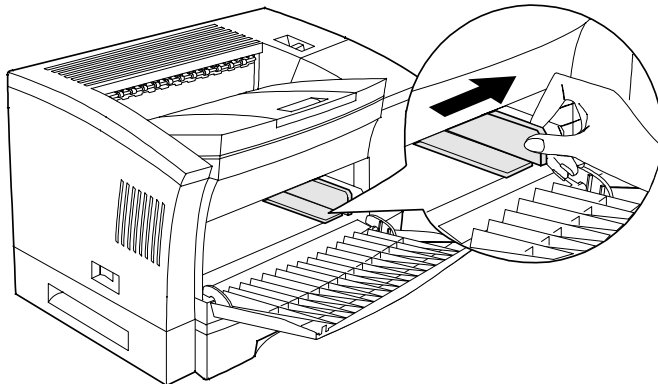
3   Align the media, and insert it print side up between the media guides, sliding it as far as it will go in the printer.

Make sure it doesn't exceed the limit mark and it fits firmly between the media guides.The multipurpose tray holds about 150 sheets of 16 to 42 lbs (20 to 157 g/m^2) paper (plain or recycled), 5 transparencies, 10 envelopes, 10 labels, or 10 sheets of letter-head or thick paper.

See chapter 2, "Print Media," of the *Reference* for information on feed edge.
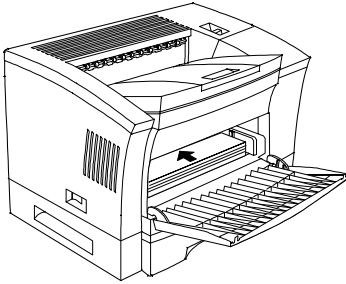
Long-edge First   Short-edge First
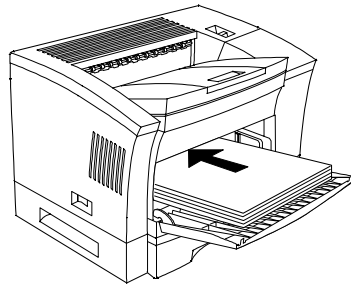
4 **Check the media guides to make sure that they touch the sides of the print media.**

5 **For smaller-size media it may be possible to close the multi-purpose tray cover. For large size media, leave the tray cover open.**

» **Note:** *Do not load additional media until all the sheets in the multipurpose tray have been fed through the printer.*

6 **Adjust the media tray for proper media delivery.**
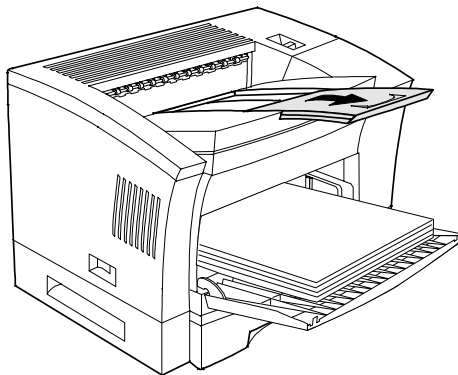
» **Note:** *When printing different-sized media, set the media tray to
the largest media size. If the media tray is set to a smaller media
size, large-size paper will curl, block the opening (when delivered
to the output tray), and cause a media jam.*

Envelopes: Special Considerations

The QMS 2060 Print System supports envelope printing from the
multipurpose tray (up to 10 envelopes at a time):

■ Use landscape orientation to create the envelope text in your
application.

—When formatting data for envelopes, leave a 0.16" (4.06 mm)
margin from the edges of the envelope.

■ Before printing envelopes

—Disable the duplexer if it's installed.

—Remember that you can print only on the address side of the
envelope.

—Make sure that the media guides are set to the height of the
envelope. (Media jams or misfeeds may occur if they are too
loose or too tight.)

■ Keep the following conditions in mind when choosing an enve-
lope:

—It must not contain any fasteners, clasps, windows, or peel-off
strips otherwise the printer may be seriously damaged.

—Its edges must be square and it must not be wrinkled, torn, or
curled.

■ Use common office envelopes with diagonal joints, ordinary gummed flaps, and sharp folds and edges. The following sizes are supported:

—Commercial 10

—International DL

—Monarch

—International C5

■ Don't use

—Envelopes with flaps that are the full width of the envelope if the flap is glued to something other than the mating surface.

—Envelopes with transparent windows.

—Envelopes with fasteners.

Some parts of the envelope consist of three layers of paper—the front, back, and flap. Print in these layered regions may be lost or faded.

See your application documentation for specific information on printing envelopes, and see chapter 4, "Printer Configuration," of the *Reference* for information on how to set the envelope size.

Loading Envelopes in the Multipurpose Tray

1   Place the envelopes on a flat surface and flatten them by
    pressing down the corners in the directions shown.
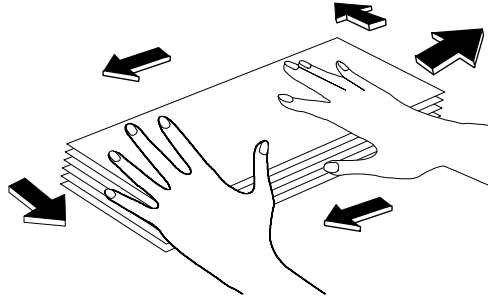
2   Flex the envelope stack (including the edges) to remove any
    stiffness.

3   Correct any dog-eared corners, then tap the envelopes on a
    flat surface to align.
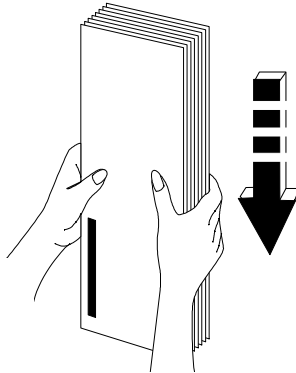
4   Open the multipurpose tray.

5 **Adjust the media guides to the width of the envelopes.**
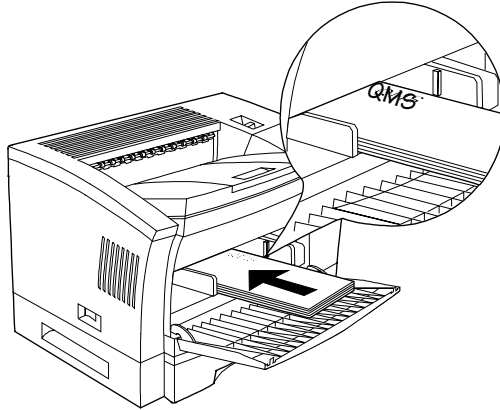
Make sure the guides are not too tight, so the envelopes will not buckle. Also, make sure the envelope size and type meet the specifications listed on page 2-15 of this manual and in appendix

6 **Slide the envelope stack into the printer as far as it will go, with the print side facing up and the flap on your right.**

7 Open the flap immediately after it passes through the printer, before the seal cools.

Because envelopes pass through heated rollers, the gummed area on the flap may seal. You may then reseal it in the usual manner. The use of envelopes with emulsion-based glue avoids this problem.

Labels: Special Considerations

Your printer supports label printing from the multipurpose tray (up to 10 sheets at a time). Adhesive label stock has pressure-sensitive (peel and stick) adhesive backing. A label consists of a face sheet, the adhesive, and the carrier sheet. The face sheet printing surface must adhere to the plain paper specifications described in appendix B, "Technical Specifications," of the *Reference*.

The label printing surface must cover the entire carrier sheet, and no adhesive should come through on the surface. The adhesive and carrier sheet must withstand the fusing temperature (200°C/392° F).

Avery 5160 stock is qualified for use in this printer.

Keep the following in mind when printing labels:

■ Avoid using labels with exposed adhesive; it may stick to the toner cartridge or the fixing roller, causing labels to peel off and printer jams to occur.

■ Format label data in your application. Try printing your data on a plain sheet of media first to check placement. This reduces the number of label sheets you use.

■ Before printing labels, disable the duplexer if it's installed, and check the manual feed guides to make sure they're not too tight and buckling the labels.

Loading Labels in the Multipurpose Tray

Load the labels lengthwise (long edge first), face up, and with the top of the page toward the right hand side of the printer.

See your application documentation for specific information on printing labels.

Letterhead and Memo Media: Special Considerations

Your printer supports the printing of letterhead or memo paper in two ways:

■ From the multipurpose tray (up to 10 sheets)

■ From a cassette (standard or optional—up to 400 sheets)

Keep in mind the following:

■ The letterhead and memo paper must adhere to the media specifications described in appendix B, "Technical Specifications," of the *Reference*.

■ Format the information that is to print on letterhead or memo paper from within your application. Try printing the formatted information on a plain sheet of paper first to check placement.

See your application documentation for specific information on printing.

Loading Letterhead and Memo Media

Load the letterhead or memo media in the multipurpose tray or the cassette the same as specified for other media in the "Loading the 500-sheet Cassette" on page 2-5 and the "Load the 250-Sheet Cassette" on page 2-9, with the following exceptions:

■ Adjust the multipurpose tray media guides to fit the letterhead or memo media size.

■ Insert the letterhead or memo media long-edge first, face up, with the top of the page facing towards the right hand side of the printer.

Odd-size Media: Special Considerations

Odd-size media is printed from the multipurpose tray. Keep in mind the following considerations:

- Use only 16 to 42 lbs (20 to 157 g/m^2) odd-size paper recommended for laser printers.

- Do not use perforated paper (including 3-hole-punched paper).

Transparencies: Special Considerations

Your printer supports the printing of transparencies:

- From the multipurpose tray (up to 10 sheets)

The transparencies must adhere to the media specifications described in appendix B, "Technical Specifications" of the *Reference* manual.

Format the information that is to print on the transparencies from within your application. Try printing the formatted information on a plain sheet of paper first to check placement.

See your application documentation for specific information on printing.

Printing Transparencies

Load the transparencies in the multipurpose tray the same as specified for other media in earlier in this chapter, with the following exceptions:

- Adjust the multipurpose tray guides to fit the transparency size.

- Insert the transparencies long-edge first, printing side up, with the top of the page to the right hand side of the tray. The correct print side is usually marked on the transparency package.

- Load up to 10 transparencies at a time in the multipurpose tray. Loading a larger number of transparencies at a time may cause static buildup.

■ Keep the paper path clean. Transparencies are especially sensi-tive to a dirty paper path. If there are shadows on either the top or the bottom of the sheets, refer to chapter 4, "Printer Mainte-nance," for instructions on how to clean the printer.

■ Remove each transparency from the output tray before the next sheet is printed to prevent jams or misfeeds.

Postcards

Your printer supports printing thick paper 24 to 42 lbs (90 to 157 g/m^2) only from the multipurpose tray (up to 10 sheets at a time).

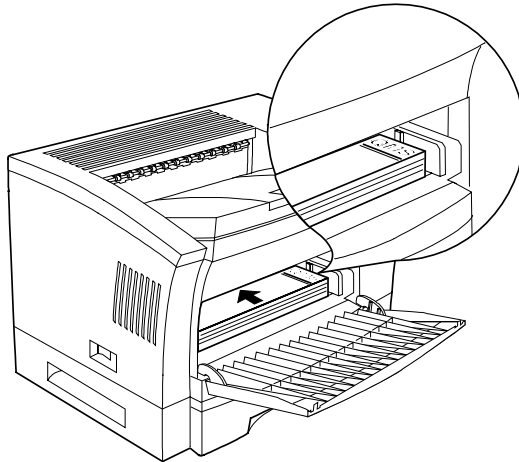This media must adhere to the media specifications described in appendix B, "Technical Specifications" of the *Reference*.

Format the information that is to print on the media from within your application. Try printing the formatted information on a plain sheet of paper first to check placement.

See your application documentation for specific information on printing.

Printing on Postcard Stock

Load this media in the multipurpose tray the same as specified for other media in the "Loading the Multipurpose Tray" section, earlier in this chapter, with the following exception:

■ Adjust the multipurpose tray guides to fit the postcard size.

■ Insert the media short edge first with the printing surface face up.

Using Toner Cartridges

Characters and images are created in your laser printer through a process that applies toner (made of carbon particles) to the page in the printer's fusing unit. When an image is formed, a positive electri-cal charge is applied to transfer the image to the page. The toner car-tridge contains the toner and the photosensitive drum needed to operate the laser printer. The photosensitive drum has characteristics similar to those of photographic film.

Toner Cartridge Life

The toner cartridge contains enough toner to print about 10,000 letter/A4-size pages at normal (5%) page coverage. If the printer is run entirely in Conserve Toner mode (Administration/Engine/Conserve Toner menu), a toner cartridge lasts for over 35,000 letter/A4-size pages at normal (5%) page coverage.

Extending Toner Cartridge Life

Redistributing Toner

When the toner supply is low, TONER LOW displays in the printer's message window, and parts of the page usually start printing lighter than normal.

Sometimes, you can increase the life of the toner cartridge by taking it out of the printer and redistributing the toner—hold the cartridge with both hands and then gently rock it from side-to-side (as you do for a new cartridge) five or six times. If the TONER LOW message remains in the message window, you must replace the toner cartridge, as described later in this chapter.

Conserving Toner

To help you lower your printing costs, your printer provides an option called Conserve Toner, which simulates draft-quality printing. The printer reduces the amount of toner used during printing by screening the black dots in a 1:3.5 ratio. In other words, 1 black dot prints for every 3.5 black dots that would print in normal printing mode.

The Conserve Toner option can be enabled and disabled through your printer driver or through the Administration/Engine/Print Quality menu.

» **Note:** *The Conserve Toner option is designed for draft printing only. Turn off Conserve Toner when printing proof or final copies of documents to avoid any possible distortion of patterns, halftone, and images.*

Toner Cartridge Handling

The cartridge contains the toner and laser-sensitive drum needed to operate the laser printer.

■ The cartridge has a wide opening for the laser beam guided via the reflecting mirror. Be careful not to drop any foreign objects, such as clips or pins into the cartridge, when handling and installing the cartridge.

■ The drum is extremely sensitive to light and may deteriorate if exposed to bright light; don't open or touch the drum protective shutter.

Toner Cartridge Storage

The toner cartridge

■ Should be kept in its protective bag until you're ready to install it.

■ Is sensitive to bright light. Don't store it in direct sunlight or room light (more than 1500 lux). Store it flat in a cool, dry location away from sunlight. The maximum storage temperature is 95° F (35° C) and the maximum storage humidity is 80% without condensation.

■ Should be kept level during storage. Don't stand or store the cartridge on its end or turn upside down; the toner inside the cartridge may become caked or unequally distributed.

■ Should be kept away from salty air environments, corrosive gases such as aerosols, and extreme heat or humidity.

■ Should be kept away from monitors, disk drives, and floppy disks. The magnets in the cartridge can damage stored data.

Refilled Toner Cartridges

Refilled toner cartridges may produce variations in toner quality and reliability, thus reducing the print quality of your documents. In addition, toner leaks, which are common with some refilled cartridges, affect your warranty.

Replacing a Toner Cartridge

You may purchase additional cartridges from your QMS vendor. See the "Print Engine Specifications" section of appendix B, "Technical Specifications," in the *Reference* for more information on toner cartridges.

Removing an Empty Toner Cartridge

1   Press the upper unit lock release button and open the top cover.
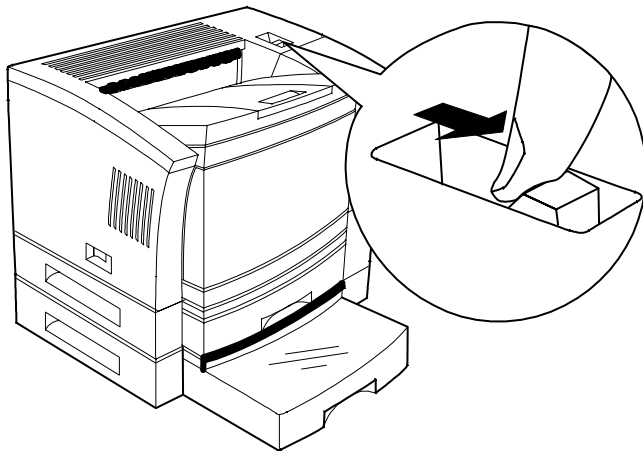
2   Remove the empty toner cartridge.

While grasping the grip area of the empty toner cartridge, remove the cartridge by pulling it up and then towards you.
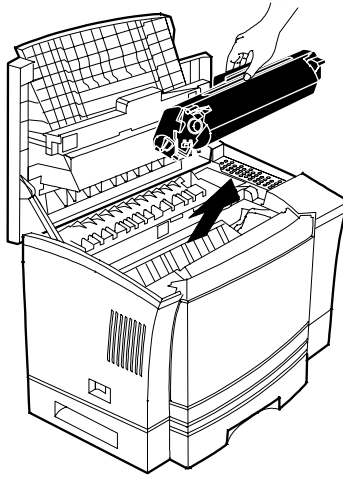
» **Note:** *Put the old toner cartridge in a trash receptacle. Do not dispose of it by burning.*

▲ **Caution:** *Remember that each time you replace the toner cartridge, you should remove any residual toner powder from inside the printer. (See "Cleaning and Handling the Printer," later in this manual.)*

Installing a New Toner Cartridge

» **Note:** *The toner cartridge is sensitive to bright light. Do not remove the cartridge from its protective bag until you are ready to install it. Store the cartridge in an environment that is not subject to extreme heat or humidity, salty air, or corrosive gases, such as aerosols. Keep the toner cartridge away from your computer. The magnets in the cartridge can damage data, particularly on your floppy disks.*

**1   Lift the toner cartridge out of its shipping carton, open the
protective bag, and remove the cartridge.**

»   **Note:** *After taking the toner cartridge from its protective bag, do
not open the cover or touch the OPC drum of the toner cartridge
because it may deteriorate the drum and reduce print quality.*

2   Distribute the toner in the cartridge.

Hold the cartridge with both hands, and gently rock it from side-
to-side five or six times to distribute the toner.
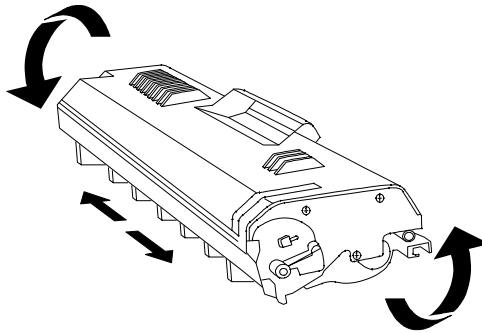
3   Remove the tape seal.

Holding the cartridge in place with your left hand, use your right
hand to grasp the tab on the right side of the toner cartridge.

Pull the plastic strip straight out. If the strip breaks, grasp the
clear part of the tape seal and pull it straight out. Discard both the
strip and the tape seal.
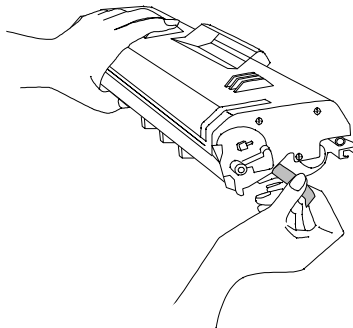
4   Slide the toner cartridge in the printer.

Hold the grooved area on the toner cartridge with your right hand, then with the arrow on the toner cartridge facing away from you angle the cartridge down into the printer.

Place the cartridge on the rails inside the upper unit of the printer, and gently slide it straight down until it is firmly seated.
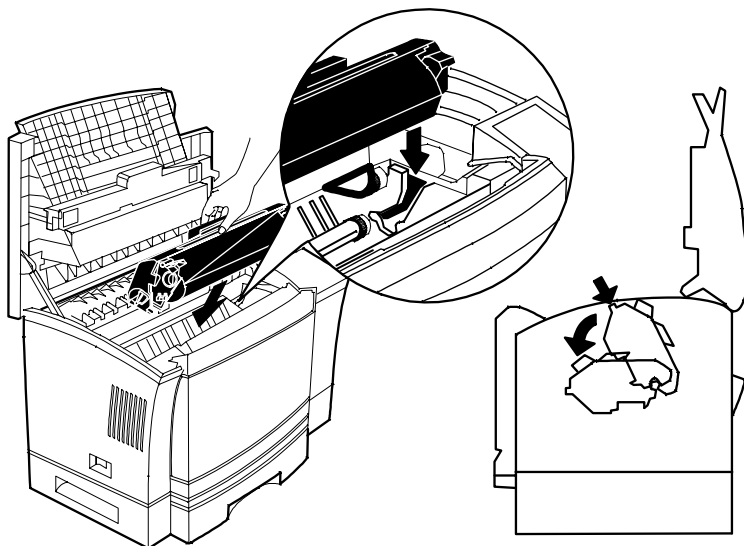
5   Close the printer's top cover.

❖

3

Advanced Printing Features

In This Chapter . . .

Introduction

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

High-Resolution Printing

The QMS 2060 Print System supports three print resolutions: 300x300, 600x600, and with an optional daughterboard 1200x1200 dpi (dots per inch). For printed pages that don't require optimum print quality, such as rough drafts, memos, or text-only pages without graphics (dependent on shading details), you may choose to set the printer at 600 dpi. Printing at 600 dpi reduces the amount of processing time the printer requires before printing the page. For pages that demand high-quality output, especially those containing detailed graphics or varying background shades, you'll want to set the printer resolution to a higher resolution.

» **Note:** *To print at 1200x1200 dpi you need to install an optional 1200x1200 dpi resolution daughterboard, and you may also need to add more memory. (See the following section for memory details.)*

Setting the Resolution

You can set the default resolution of your printer through the Administration/Engine/Def Resolution menu.

Menu	Administration/Engine/Def Resolution
Choices	300 dpi—300x300 dpi resolution. 600 dpi—600x600 dpi resolution. » **Note:** *If you have the optional 1200x1200 dpi Multi-Res daughterboard installed, the 1200 dpi option also appears.*
Default	600 dpi

Your printer offers greatly improved print quality at 600 and 1200 dpi. To take best advantage of these higher resolutions use

■ The resident PostScript and PCL 5e typefaces

■ The QMS printer drivers designed for your printer

» **Note:** *Whenever possible, set the print resolution through your application. If the print resolution can't be set through the application, set it through the printer control panel, through the printer driver, or through QMS Document Option Commands.*

Smoothing

» **Note:** *This technique requires that the Multi-Res board be installed on your system.*

Your QMS 2060 Print System offers a smoothing option under the Administration/Engine/Print Quality menu. See chapter 4, "Printer Configuration," of *Reference* for details on this QMS edge-smoothing technique. This technique alters the size and position of dots that lie on the outer edges of an object by reducing the width of the laser pulse to a fraction of the full pulse width. It smooths jagged edges in text, lines, and graphics and generally improves their print quality.

» **Note:** *When you're printing halftones, smoothing is not recommended because it may introduce artifacts in the halftone or scanned image.*

How Much Memory Do You Need?

The QMS 2060 BX Print System comes standard with 16 MB of memory, the QMS 2060 GX and IS Print Systems come standard with 32 MB of memory, and the QMS 2060 EX and FX Print Systems come standard with 48 MB of memory.

The following tables list the minimum framebuffer and total system memory requirements for each resolution/media combination.

» **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. For example if you have the QMS 2060 BX printer and you choose 600 dpi resolution, 11x17 media, and duplex (optional duplexer required), but the printer has only the standard memory instead of the required 20 MB minimum, the file prints at 300x300 dpi.*

Minimum Framebuffer Memory Requirements (in KB)

Media Size	300x300 dpi		600x600 dpi		1200x1200 dpi	
	Simplex	Duplex	Simplex	Duplex	Simplex	Duplex
8.5x13	1213	2427	4855	9711	19423	38847
11x17	2092	4184	8288	11940	32992	47640
12x19	2608	n/a	10332	n/a	41228	n/a
13x22	3148	n/a	12584	n/a	50328	n/a
13x26	3720	n/a	14872	n/a	59476	n/a
A3	2152	4304	8564	11940	34100	47640
A4	1004	2008	3980	7960	15880	15880
A5	496	992	1956	3912	7736	15472
B4	1528	3056	6072	7960	24148	31760
B5	760	1520	2984	5968	11832	25474
C5	631.3	n/a	2525.3	n/a	10101	n/a
COM-10	430.5	n/a	1722	n/a	6888	n/a
DL	411	n/a	1644	n/a	6576	n/a
Envelope	745.7	n/a	2982.7	n/a	11930.8	n/a
Executive	792	1582	3128	6256	12444	15880
Legal	1316	2632	5252	10504	20936	41872
Letter	1004	2008	3980	7960	15880	15880
Monarch	319.3	n/a	1277.2	n/a	5108.6	n/a
Postcard	246.3	n/a	985.2	n/a	3940.8	n/a
Statement	480	960	1876	3752	7468	14936
Universal	2740	n/a	10912	n/a	43552	n/a

Minimum System Memory Requirements

» **Note:** *This table lists the values for a system without a hard disk. For a system with a hard disk installed and disk swapping enabled, add an additional 4 MB RAM for each media size.*

Media Size	300x300 dpi		600x600 dpi		1200x1200 dpi	
	Simplex	Duplex	Simplex	Duplex	Simplex	Duplex
8.5x13	16	16	16	16	28	44
11x17	16	16	16	20	40	52
12x19	16	n/a	16	n/a	48	n/a
13x22	16	n/a	24	n/a	60	n/a
13x26	16	n/a	24	n/a	72	n/a
A3	16	16	16	24	40	52
A4	16	16	16	16	24	24
A5	16	16	16	16	16	20
B4	16	16	16	16	40	56
B5	16	16	16	16	20	32
C5	16	n/a	16	n/a	24	n/a
COM-10	16	n/a	16	n/a	16	n/a
DL	16	n/a	16	n/a	16	n/a
Envelope	16	n/a	16	n/a	24	n/a
Executive	16	16	16	16	20	32
Legal	16	16	16	16	28	44
Letter	16	16	16	16	24	40
Monarch	16	n/a	16	n/a	16	n/a
Postcard	16	n/a	16	n/a	16	n/a
Statement	16	16	16	16	16	20
Universal	16	n/a	16	n/a	48	n/a

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

■ To print complex graphics or complex PostScript documents

■ For increased collation performance

■ For increased spooling performance

See the "Single In Line Memory Modules" section of chapter 2, in the *Options,* guide for more information on installing SIMMs.

Printing Duplex

The QMS 2060 Print System supports duplex printing in two ways: cassette and multipurpose tray. It allows you to print on both sides of the page

■ From the cassette(s) on any supported size media (with an optional duplexer installed).

» **Note:** *Odd-size paper cannot be used in automatic duplex printing as it will cause media jams.*

■ From the multipurpose tray on any supported size media by manually inserting the media in the tray.

» **Note:** *Duplexing may lower the print quality, cause media jams, or cause media to curl or wrinkle. With the minimum system memory available, graphics-intensive duplex printing at 600 dpi or 1200 dpi with error recovery on reduces engine speed. Duplex printing is not possible on envelopes, labels, and transparencies.*

There are two types of two-sided printing: duplex and tumble duplex. This illustration shows the difference between these two types, using three-hole-punched paper as an example.

Portrait   Landscape

Side 1   Side 2   Side 1   Side 2

Duplex

Portrait   Landscape

Side 1   Side 2   Side 1   Side 2

Tumble Duplex
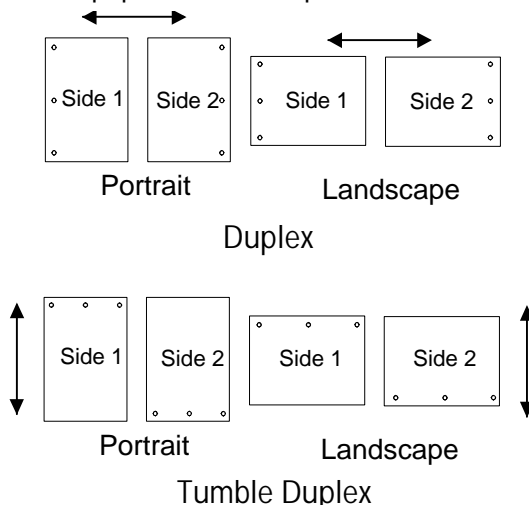
Automatic via a Cassette

Once the duplex printing option is installed on your printer, the Duplex option appears in the Operator Control menu. See chapter 4, "Printer Configuration," in the *Reference* guide for more information on this option. Use your application to choose duplexing on a per job basis or the control panel to set duplexing as the default for all print jobs.

»   **Note:** *Odd-size paper cannot be used in automatic duplex printing.*

▲   **Caution:** *Due to the curved path of the duplexer, only paper between 17 and 28 lbs (63.92 g/m^2 and 67.68 g/m^2) should be used. Envelopes, transparencies, and labels can't be used when duplexing.*

Manual Feed via the Multipurpose Tray

For duplex printing from the multipurpose tray without a duplexer, follow this procedure:

1 **Access the Configuration menu and set the printer to Operator Control/Input Bin/Multipurpose.**

2 **Print on one side of the media.**

3 **Insert the media in the multipurpose tray with the side you want to print next facing up, and the leading edge going into the printer first.**
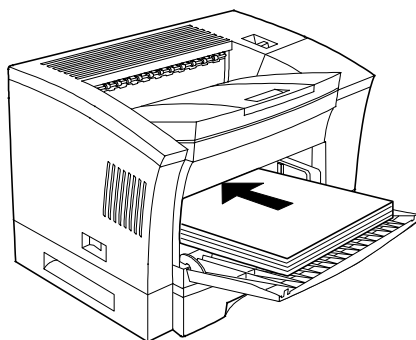
⚠️ **Caution:** *Straighten the leading-edge of the media if it's curled because curling can cause print media jams and wrinkles. Also, make sure that the media guides are set to the width of the media. Printing problems may occur if the media guides are set too loose or too tight.*

High-Resolution and Duplex Printing

If your printer has a duplexing option, you may print on any of the media sizes at 600x600 dpi. However, printing duplex via the cassettes at 1200x1200 dpi resolution may require additional memory. (See the "Minimum System Memory Requirements" table on page 3-6 for each resolution/media size memory requirement).

Duplex Printing Tips

■ Select paper with high opacity for duplex printing. Opacity refers to how much paper blocks out what is written on the opposite side of the page or how much light passes through the paper. Paper with high opacity has low transparency. If paper has low opacity (high transparency), then the printed data from one side of the page will show through to the other side. For best results, test a small quantity to make sure the opacity is acceptable.

■ For duplex printing on pre-printed letterheads, place the sheet face-down with the bottom of the page inserted first. In the duplex mode, the printer prints side two first, then side one.

Cassette Chaining

You may choose to have the printer automatically draw from another input source when the current source empties. Here are four ways to chain input sources:

■ Your application may include a specific procedure for using a dual-cassette printer. Check your documentation.

■ The QMS Level 2 Windows printer driver allows you to select an alternate cassette for chaining.

■ **On a network**, use Remote Console via QMS CrownAdmin to select the media sources.

■ Configure the printer through its control panel. The following section has more information.

Using the Configuration Menu

The Chain Inputbins option in the Operator Control menu allows you to "chain" inputbins (tray and cassettes) so that when the first inputbin empties, the printer automatically draws paper from another inputbin.

Menu	Operator Control/Chain Inputbins
Choices	On—Switches to the next inputbin with the same size and type of media when the default inputbin is empty. Off—Doesn't switch inputbins; uses only the default inputbin. On Any—Switches to the next inputbin, regardless of the size and type of media installed, when the default input bin is empty.
Default	On
Notes	Use the Operator Control/Inputbin menu to set the default inputbin. Make sure that the two cassettes installed in your printer are set to the same size media.

Collating Output

Collation is the printing of sets of multiple copies of a document in numeric order. The QMS 2060 Print System is collation capable. It can deliver multiple copies of your document in collated or uncollated order to the output tray. The following illustration shows the collated and uncollated stacking for two copies of a four-page file.

Collated   Uncollated
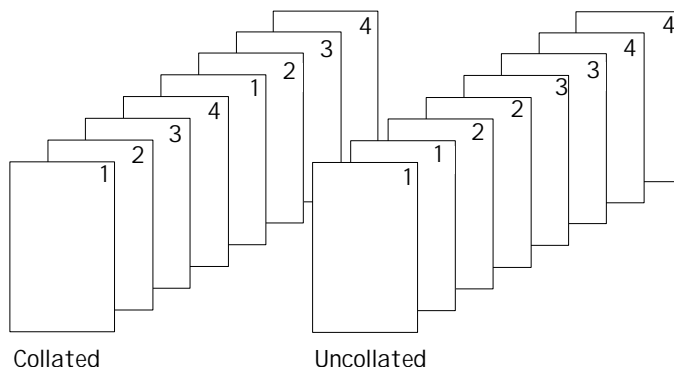
To greatly improve collation performance, which allows you to collate longer and more complex print jobs on the QMS 2060 Print system, you can do one of the following:

■   Add more printer memory, which automatically increases the Display List client's memory setting. See chapter 2, "Memory and System Software," of the *Options* for information on how to install additional memory.

■   Take any memory not being used by other clients and add it to Administration/Memory/K Mem Display.

▲   **Caution:** *This option should be used only by individuals who are familiar with adjusting memory settings. Incorrect use of this option could cause your system to operate incorrectly.*

■   If your printer has an optional hard disk and if Administration/ Memory/Enable Disk Swap is set to On, then any extra memory is distributed to all memory 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.*

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. (See "Display List" in the "Memory" section in chapter 5 of the *Reference manual* for detailed information on display list blocks.) If there is not enough memory, then a chunk collation boundary is forced after the last compiled page of the collation range.

Chunk Collation

The mechanism of introducing a forced boundary in a collated job is known as chunk collation. Chunk collation breaks a document into several smaller, more manageable sets by gathering the pages into "chunks." When each set is printed, it frees up memory resources to compile subsequent pages of the document. For example, in the following illustration, copies "a" and "b" of each set must be manually combined to create 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).
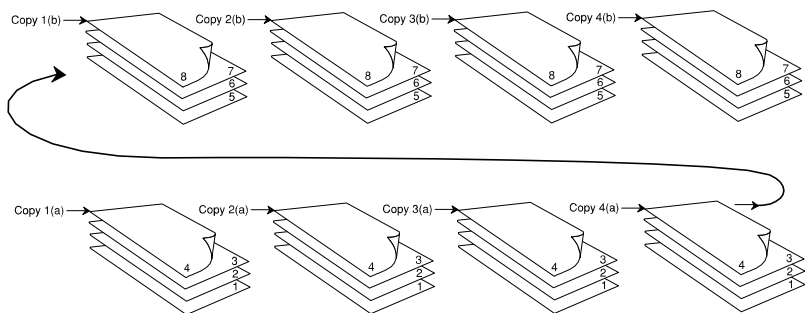
» **Note:** *The order of output on your QMS 2060 Print System is from first to last page in the output tray. You can add additional memory to the printer to avoid chunk collation. See appendix A, "QMS Customer Support," for sales and support telephone numbers.*

Advantages of Collation

The main advantages of collation are user convenience and the time savings derived from not having to separate and sort individual copies of a print job. Each copy of the print job exists as a whole set unless chunk collation has occurred.

If chunk collation does occur, it may be best to use a header and trailer page to determine the beginning and end of each collation sequence. (See chapter 4, "Printer Configuration," of the *Reference* for information on using header and trailer pages.)

Working with Status Pages

Printing a status page is a two-step procedure: Identify the type of status page you want to print, and then print it.

Identifying a Status Page Type

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

Standard

This one-page document provides

- Printer identification (the printer's name, firmware information, and number of sheets printed)

- Printer settings (printer set-up 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 document, which can be five or more pages long, 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

After you have identified the type of status page to print, send it to the printer by pressing the Print Status key on the control panel.

Cancelling/Ending Print Jobs

The Cancel key has three functions:

■ It cancels the oldest print job in the system.

■ 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. There are no equivalent functions in the configuration menu.

Cancelling a Print Job

Press the control panel keys in the order shown in the following instructions to cancel a print job.

Press this key...	to...	For 1.5 seconds, the message window reads...	and then it reads...
Cancel	Access the Job Cancel menu.	JOB CANCEL	CANCEL JOB
Cancel or Select	Cancel the oldest job in the queue.		CANCEL JOB IS SELECTED

» **Note:** *Shaded table cells indicate that the message scrolls.*

Cancelling all Print Jobs

Press the control panel keys in the order shown in the following instructions to cancel all print jobs.

▲ **Caution***: Keep in mind that **all** jobs with a printing, interpreting, or terminating status are cancelled.*

Press this key...	to...	For 1.5 seconds, the message window reads...	and then it reads...
Cancel	Access the Job Cancel menu.	JOB CANCEL	CANCEL JOB
Next (twice)	Advances to the Cancel All Jobs mode.	JOB CANCEL	CANCEL ALL JOBS

Press this key...	to...	For 1.5 seconds, the message window reads...	and then it reads...
Cancel or Select	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`

» **Note:** *Shaded table cells indicate that the message scrolls.*

Ending a Print Job

» **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. (See chapter 4, "Printer Configuration," in the Reference for more information). Also see chapter 5, "Additional Technical Information," in the Reference for a complete discussion of End Job Mode.*

When the message window displays

```
WAITING ON INPUT
END JOB?
```

press the control panel keys in the order shown in the following instructions to end a print job.

Press this key...	to...	For 1.5 seconds, the message window reads...	and then it reads...
Cancel	Access the Job Cancel menu.	JOB CANCEL	CANCEL JOB
Next (twice)	Advance to the End Job mode.	JOB CANCEL	END JOB
Cancel or Select	Select End Job.		END JOB IS SELECTED
» **Note:** *Shaded table cells indicate that the message scrolls.*			

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4

Printer Care

In This Chapter . . .

- ■ "Handling the Printer" on page 4-2
- ■ "Cleaning the Printer" on page 4-4

Introduction

This chapter describes how to handle and clean the printer.

Blurred or splotchy prints and media 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 pick-up 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.

■ Do not place anything on the multipurpose tray except the media being used for printing.

■ 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.

■ Be careful when cleaning the inside or removing paper jams, as the fixing assembly and other internal parts become very hot. Leave the printer cover open before handling the inside of the printer.

■ Do not close the covers abruptly, or expose the printer to vibrations.

■ Do not cover the printer immediately after using it. Turn it off and wait until it cools down.

■ Do not leave the printer open for any length of time, especially in well-lit places; light may damage the toner cartridge.

■ Do not open the printer during printing and do not tap paper stacks on the printer.

■ Do not tilt, lubricate, or disassemble the printer.

■ Do not touch the electrical contacts, gears, or laser beam devices. Doing so may damage the printer and cause the print quality to deteriorate.

■ Keep media in the output tray at minimum level. If the media stacks too high, your printer may experience media jams and excessive media curl.

■ Lift the printer from the bottom only, using the grips. Make sure two people are available to lift the printer when moving it.

☙ **WARNING!** *Remember that the media feeder on the bottom of the printer stack is not attached to the printer. Make sure you lift the printer by the carrying grips on the bottom-most unit in the stack. If the top unit is lifted alone, the bottom unit could fall off, causing bodily injury or damage to the printer. If you need to lift just the top unit, use the grips and make sure it detaches completely from the cassette below before moving it to the side.*

ACHTUNG! *Bitte beachten Sie, daß die Papierzuführungen unterhalb des Druckers nicht fest mit dem Drucker verbunden sind. Wenn Sie das gasamte Gerät hochheben wollen, greifen Sie deshalb in die Griffmulden der untersten Papierzuführung. Wenn Sie nur den Drucker hochheben, kann es sein, daß die Papierzuführung sich löst und herunterfällt. Dabei können Sie sich verletzen und der Drucker kann beschädigt werden. Deshalb versichern Sie sich, daß die Papierzuführung nicht mehr mit dem Drucker verbunden ist bevor Sie diesen Drucker an einen anderen Platz stellen. Benutzen Sie unbedingt die Griffmulden am Drucker, wenn Sie ihn transportieren wollen.*

■ Keep the following in mind when storing the printer for an extended period:

—Unplug the printer.

—Remove the toner cartridge from inside the printer. After removing the cartridge from the printer, return it to the protective bag in which it was originally packaged or wrap it in a thick cloth to protect it from direct sunlight or any other bright light.

—See the "Environmental Requirements" section of appendix B, "Technical Specifications," in the *Reference* guide, for storage specifications.

Cleaning the Printer

Fine particles of dust from the paper may accumulate inside the printer. Because this could affect the printer's performance, the printer should be cleaned on a regular basis to prevent potential malfunctions.

Cleaning Guidelines

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

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

In addition to unplugging the printer, follow these guidelines when cleaning the printer:

■ Clean the printer before use or allow a few minutes after unplugging it so that the fusing unit can cool down.

■ Do not leave moisture inside the printer. Allow all parts to dry thoroughly before closing the printer cover (ethyl alcohol will evaporate rapidly.

■ Use a soft, lint-free cloth.

Cleaning the Outside of the Printer

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

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

To protect and maintain the appearance of your printer, wipe the cover and external parts with a soft cloth moistened with water or mild detergent.
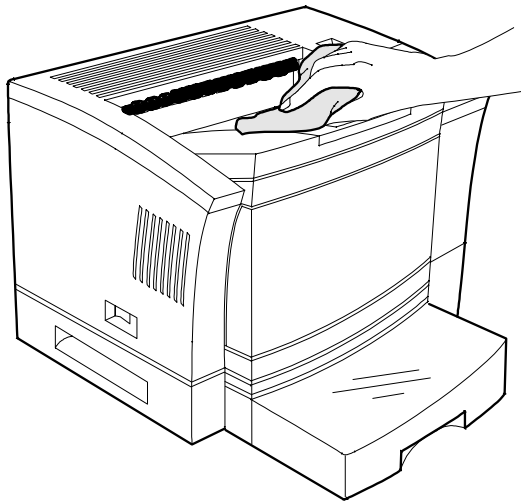
☙ **WARNING!** *Do not spill water or detergent into the printer; otherwise the printer will be damaged and an electric shock may occur.*

ACHTUNG! *Verschütten Sie kein Wasser oder andere Flüssigkeiten auf dem Drucker, da das Gerät sonst beschädigt wird oder die Gefahr eines elektrischen Schlages besteht.*

▲ **Caution:** *Avoid using solvents, such as alcohol and benzene, or sprays as they may damage the finish.*

Cleaning the Inside of the Printer

☙ **WARNING!** *Unplug the printer's power cord before cleaning the printer and ensure that the fusing unit has cooled down.*

ACHTUNG! *Entferne Sie den Netzstecker und lassen Sie die Heizung abkühlen, bevor Sie den Drucker reinigen.*

To maintain clear, crisp print quality, clean the paper pick-up rollers beneath the toner cartridge and in the media cassettes and the window glass of the print head unit:

■ Every time the toner cartridge is changed.

■ Whenever print quality becomes unsatisfactory.
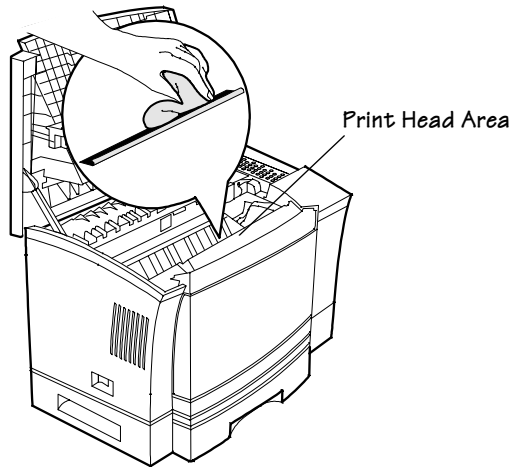
Procedure

1 Remove the toner cartridge.

This procedure is described in the "Replacing a Toner Cartridge" section of chapter 2 of this manual.

» **Note:** *If you plan to reinstall the toner cartridge, put it back in its bag or a desk drawer, or cover it with a thick cloth while cleaning the interior of the printer. The toner cartridge can be damaged by exposure to light.*

2   Clean the window glass of the print head using a soft cloth.

You can see the window glass if you face the printer from its rear. If the glass is especially dirty, use a cloth dampened with ethyl alcohol.

Print Head Area

3   Replace the toner cartridge.

This procedure is described in chapter 2, "Consumables," of this manual.

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5

Print Quality

In This Chapter . . .

- "About Halftones" on page 5-2
- "About Print Density" on page 5-3
- "About Print Resolution" on page 5-3

Introduction

Density, gamma correction, and print resolution are some of the factors that affect print quality. High-resolution technology, while more complex, gives you more flexibility to control the print quality factors. This chapter will aid you in setting your printer up for maximum performance. For a more detailed explanation of factors that affect your printer's output, refer to chapter 5, "Additional Technical Information," in your *Reference* guide.

About Halftones

The ability of the printer to produce halftones allows you to add scanned images or halftone graphics to your documents.

Your printer provides three different halftones—basic, advanced, and standard—under the Administration/Emulations/PostScript/Halftone Type menu. The default halftone type is basic, which has been optimized for performance and quality. The number of gray levels varies when the halftone type and printer resolution are changed. See chapter 5, "Additional Technical Information," in the *Reference* manual for more detailed information on halftones and how to change their characteristics via the printer configuration menu.

About Print Density

Print density is the amount of toner placed on each dot, making the print appear lighter or darker. The higher the density, the darker the print looks and the higher the contrast is on the page. Toner density can be used to change contrast on scanned images or to customize smoothing.

» **Note:** *If the print density is too light, make sure that the Administration/Engine/Print Quality/Normal option is turned on before making any adjustments. The Conserve Toner option saves toner by simulating draft-quality printing. (See chapter 4, "Printer Configuration," of the Reference for more information.)*

Adjust the print density using the Administration/Engine/Toner Density setting.

Menu	Administration/Engine/Toner Density
Choices	0-7 0—Lightest setting 7—Darkest setting
Default	4

About Print Resolution

Another way to sharpen the images printed on your pages is through setting the print resolution. Your printer is capable of printing at 300x300, 600x600, and (with an optional 1200x1200 dpi Multi-Res daughterboard) 1200x1200 dpi. This choice of resolutions allows you to customize the quality of your output according to its use.

» **Note:** *Printing at 600x600 dpi resolution on certain media sizes requires additional memory. To print at 1200x1200 dpi you need to install an optional 1200x1200 dpi Multi-Res daughterboard, and you may also need to add more memory. See the "High Resolution Printing" section in chapter 3, "Advanced Printing Features," of this manual for memory and high resolution printing details. See the Options manual for more information on the 1200 x 1200 dpi Multi-Res daughterboard.*

Setting the Resolution

You can set the default resolution of your printer through the Administration/Engine/Def Resolution menu.

Menu	Administration/Engine/Def Resolution
Choices	300 dpi—300x300 dpi resolution. 600 dpi—600x600 dpi resolution. »**Note:** *If you have the optional 1200x1200 dpi resolution daughterboard installed, the 1200 dpi option also appears.*
Default	600 dpi

❖

6

Troubleshooting Printer Problems

In This Chapter . . .

Introduction

This chapter provides information to aid you in resolving printer prob-
lems 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 what information you'll need to have before
placing a service call if one becomes necessary.

Status Messages

Status messages in the message window 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 are not displayed while the printer is off line.

When the printer needs operator assistance, the message window
displays one of the following messages. Shaded table cells indicate
that the message scrolls.

This status message...	means...	Do this...
» **Note:** *Shaded table cells indicate that the message scrolls*		
ACC ALREADY DISABLED	The accounting has already been disabled.	No action needed.
ACC ALREADY ENABLED	The accounting has already been disabled.	No action needed.
ACC DISABLED	The accounting is now disabled.	No action needed.

This status message...	means...	Do this...
» **Note:** *Shaded table cells indicate that the message scrolls*		
`ACC ENABLED`	The accounting is now enabled.	No action needed.
`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 XXXXXXXX FILE FULL`	The specified file is full. (*XXXXXXXX* represents the specified accounting file—Job Accounting file or Paper Accounting file.)	If you want accounting enabled, copy these files to floppy disk(s) or transfer them to your host computer using ftp (if available). 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 IS XXX % FULL`	The Job Accounting File is 80% or more full (*XXX* represents the percentage full in increments of 5%.	See `ACC XXXXXXXX FILE FULL` error for recovery information.

This status message...	means...	Do this...
» **Note:** *Shaded table cells indicate that the message scrolls*		
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 necessary.
x ACTIVE JOBS	The printer is on line. (*x* identifies the number of jobs in process.)	No action necessary.
ADJUST *INPUTBIN* BIN	The specified input bin (cassette) is not inserted correctly.	Adjust the cassette, or multipurpose tray.
INPUTBIN BIN JAM	Media has jammed while being pulled from the specified input bin.	Clear jam from the specified input bin.
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 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.
CREATED FILE	The accounting file is being created.	No action necessary.

This status message...	means...	Do this...
» **Note:** *Shaded table cells indicate that the message scrolls*		
CREATING *XXXXXXXXXXX* 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. (*XXXXXXXXXXX* represents the Job Accounting or Paper Accounting file.	No action necessary.
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.
CLOSE ENGINE DOOR(S)	One or more of the front or side covers is open and must be closed.	Close the front or side covers.
DUPLEXER ABSENT	The optional duplexer unit is not installed.	No action necessary.
DUPLEXER JAM	Media has jammed while passing through the duplexer.	Locate and clear the media jam. (See "Clearing a Media Jam Inside the Printer," on page 6-20)

This status message...	means...	Do this...
» **Note:** *Shaded table cells indicate that the message scrolls*		
`EXTENDED ACCOUNTING FILE SIZE`	The size of the non-empty accounting file has been increased successfully.	No action necessary.
`IDLE`	The printer is on line, but no jobs are in process.	No action necessary.
`ILLEGAL DUPLEX PRINTING`	Envelope printing was selected for the input bin and the duplexer as the output bin. The printer does not support duplexing envelopes.	Access Operator Control/Duplex via the control panel and set Duplex to Off.
`ILLEGAL MANUAL FEED PRINTING`	Media was inserted in the manual feed slot before the paper tray lifting mechanism was in the ready position.	Remove the media and reinsert it.
`INITIALIZING`	The printer is getting ready to go on line.	No action necessary.
`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 necessary.
`OUTPUTBIN` *`OUTPUTBIN`* `JAM`	Media has jammed between the print engine and the specified output bin (tray).	Locate and remove the jam. See "Clearing Cassette Area Jams," on page 6-24

This status message...	means...	Do this...
» **Note:** *Shaded table cells indicate that the message scrolls*		
PRINTING STATUS	A status page is printing	Wait for the status page to print, and the message to clear.
PUT *SIZE* PAPER IN *INPUTBIN* BIN	That Operator Control/ Chain Inputbins is set to Off and that the displayed cassette or tray is empty. In the case of a cassette, *SIZE* is the media size detected by the engine. In the case of the tray, *SIZE* is the media size of the tray configured in the Operator Control/ Multipurpose Sz menu. *INPUTBIN* is the empty cassette or tray (the default input bin set in the Administration/Engine/ Inputbin # menu).	Refill the empty cassette with the specified media size.
PUT *SIZE* PAPER IN *ANY* BIN	That Operator Control/ Chain Inputbins is set to On and that a chained inputbin is empty.	Refill the empty inputbin with the specified paper size.
RESETTING ACCOUNTING	The reset accounting operation is in process.	No action necessary.
TEST PRINT	A test print page is printing.	No action necessary.

This status message...	means...	Do this...
» **Note:** *Shaded table cells indicate that the message scrolls*		
TONER OUT	The toner cartridge is not installed.	Install a toner cartridge. Refer to chapter 2, "Consumables," for details.
TONER LOW	The toner is low. There is enough toner to print about 100 pages.	Replace the toner cartridge. Refer to chapter 2, "Consumables," for details.
TRANSPORT JAM	Media has jammed while passing through the engine.	Locate and remove the jam. See "Clearing Cassette Area Jams," on page 6-24 for details.
WAITING FOR IDLE	An active job is in process. Access to the menu is not allowed until the job is finished.	No action necessary.

This status message...	means...	Do this...
» **Note:** *Shaded table cells indicate that the message scrolls*		
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 until the IDLE message displays before printing.

Service Messages

The following service messages may appear in the message window:

This message...	means...
» **Note:** *Shaded table cells indicate that the message scrolls.*	
CALL FOR SERVICE ENGINE ERROR 1	An error has been detected with the fuser unit. Contact your QMS vendor.

This message...	means...
» **Note:** *Shaded table cells indicate that the message scrolls.*	
`CALL FOR SERVICE ENGINE ERROR 10`	An error has been detected with the main motor. Contact your QMS vendor.
`CALL FOR SERVICE ENGINE ERROR 11`	An error has been detected with the scanner motor. Contact your QMS vendor.
`CALL FOR SERVICE ENGINE ERROR 12`	An error has been detected with the fan motor. Contact your QMS vendor.
`CALL FOR SERVICE ENGINE ERROR 20`	An error has been detected with the beam. Contact your QMS vendor.
`CALL FOR SERVICE ENGINE ERROR 30`	An error has been detected with the duplexer. Contact your QMS vendor.

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

Service calls should be placed to the vendor from whom you purchased the printer. If you cannot get service from your vendor, see appendix A, "QMS Customer Support," for more information.

HP-GL 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
0	Not enough memory for job.
1	Too many transformations.
2	Math error.
3	Job aborted.
4	Instruction not recognized.
5	Wrong number of parameters.
6	Out of range parameter, or illegal character.
7	Not used.
8	Unknown character set.
9	Position overflow.
10	Buffer overflow.

PCL Error Codes	Description
0	Not enough memory for job.
1	State lost.
2	Math error.
3	Job aborted.
4	Out of memory for macros.
5	Disk full. Cannot store fonts.
6 - 13	Internal error 1 - 8.

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

```
print printest.ps↵
```

2 If you're prompted for the name of the list device, type

```
lpt1↵
```

or type the name of the PC's parallel port to which the printer is connected (for example, `lpt2` or `lpt3`).

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

3　**If the printer and PC are communicating, a blank page ejects
from the printer. Skip ahead to "PC Printing Software" to fin-
ish connecting 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

»　**Note:** *The serial interface is an option which must be purchased
through your QMS vendor. See appendix A, "QMS Customer
Support," for a list of locations and telephone numbers.*

1　**To send the PRINTEST.PS file you just created to the printer,
type**

```
print printest.ps↵
```

2　**If you're prompted for the name of the list device, type**

```
com1↵
```

or type the name of the PC's serial port to which the printer is
connected (for example, `com2, com3,` or `com4`).

»　**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.*

---

3 **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 start-up 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 start-up page match those in your
AUTOEXEC.BAT file, you need make no further changes.

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

Changing Serial 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.

Press the following control panel keys in the order shown

Press this key...	to...	For 1.5 seconds, the message window reads...	and then it reads...
Online/ Offline	Turn off the Ready indicator and enable printer configuration.		IDLE
Menu	Access the configuration menu.	CONFIGURATION	OPERATOR CONTROL
Next	Advance to the Administration menu.		ADMINISTRATION
Select	Access the Administration menu.		COMMUNICATIONS
Select	Access the Communications menu.		TIMEOUTS
Next	Advance to the Serial menu.		SERIAL
Select	Access the Serial menu.		MODE

Press this key...	to...	For 1.5 seconds, the message window reads...	and then it reads...
Next (one or more times)	Advance to the Baud Rate menu.		BAUD RATE
Select	Access the Baud Rate menu.		*9600
Next (one or more times)	Advance to the correct baud rate.		#
Select	Select the displayed baud rate.	# IS SELECTED	BAUD RATE

» **Note:** *If you need to change other settings, press the Next key to access the appropriate menu option, then return to the point where you press the Select key to access the Administration menu and select the new settings.*

Online/ Offline	Access the Save Changes option.		BAUD RATE
Next	Advance to the Yes option.		YES
Select	Save changes.		IDLE
Online/ Offline	Put the printer back on line (the Ready indicator lights).		IDLE

Verifying the Serial Setting Changes

1   **Turn the printer on and off again.**

2   **Compare the serial port settings listed on the start-up 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 does not eject and you typed the file correctly,
refer to your DOS documentation for more information.

Printer Problem Checklist

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

If there is no display message, 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 number 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? Check the power cord connection.

- ■   Is the printer power switch in the On position?

- ■   Does the line voltage from the power outlet match the
  printer's power requirements? See appendix B, "Techni-
  cal Specifications," in your *Reference* guide.

2   Can you print a status page?

YES - Go to question 3.

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.

3   Is the printer receiving data from the computer?

YES - The data light blinks after a file is sent.

NO - 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* guide.

- 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 "Changing Serial Settings" on page 6-13.

- If you still cannot identify the problem, contact your QMS vendor.

4 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* guide for instructions.

- If a PostScript file prints PostScript emulation statements while in ESP mode, increase the ESP timeout. See chapter 4, "Printer Configuration," in your *Reference* guide.

- If you continue to have problems with the ESP mode selecting the appropriate printer emulation, contact your QMS vendor.

Media Jams

Automatic Jam Recovery

With most printers, if a jam occurs, you must remove the jammed media and then reprint the job. However, the QMS 2060 Print System provides automatic jam recovery (when enabled through the Administration/Engine/Page Recovery menu). If a media jam occurs, remove the jammed media, and 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 while you remove the jammed media. After the jam is cleared, open and close the top door before printing. Printing will not resume until you do this.*

Locating Print Media Jams

When print media jams occur, a PAPER JAM message displays in the message window. Frequent jams in any area indicate that area should be checked, repaired, or cleaned. Repeated jams may also happen if you are using the wrong weight print media. (See appendix B, "Technical Specifications," in the *Reference* guide for print media specifications.)

Print media jams can occur in any of the following areas:

■ Inside upper unit

■ Standard or optional cassette unit

■ Multipurpose tray

■ Output tray

Jams can occur in more than one location at a time, so be sure to check all these locations.

» **Note:** *After clearing the jam, always open and close the top cover once before printing. Printing will not resume until you do this.*

When printing from a cassette, check for the media jam in the cassette area.

When printing from the multipurpose tray, check for the media jam in the multipurpose tray area.

Clearing a Media Jam Inside the Printer

☀ **WARNING!** *The fixing assembly and print delivery guide become extremely hot when the printer is used. Personal injury could result if you touch those areas.*

ACHTUNG! *Die Fixiereinheit und die Papierführung werden sehr heiß, wenn der Drucker in Betrieb ist; bei Berührung dieser Partien besteht Verletzungsgefahr!*

1   Open the top cover.

»   **Note:** *Push the print tray into the printer before opening the upper unit.*
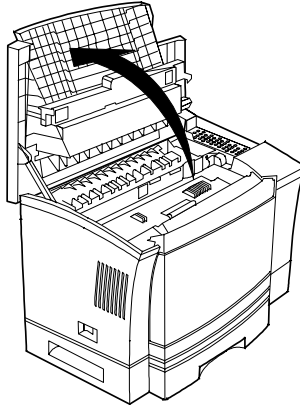
2   Remove the toner cartridge.
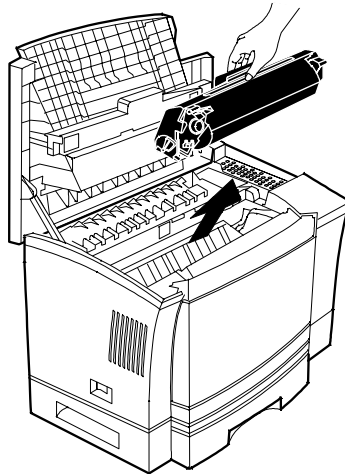
»   **Note:** *This releases internal gear pressure and allows the paper to move through the print engine.*

3   **If the edge of the media hasn't been fed in the fusing unit, open the front transport guide and pull the jammed media upward and then out.**

Front Transport
Guide
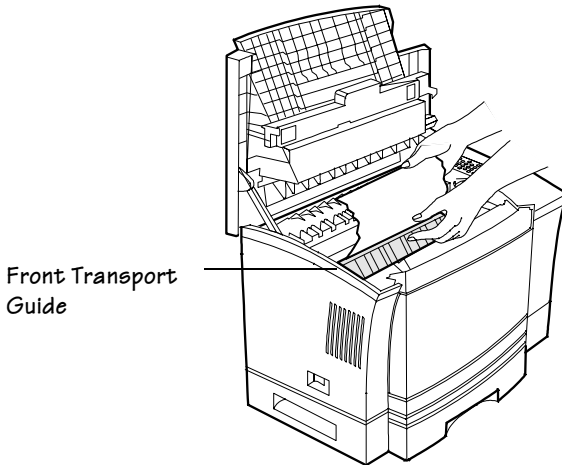
4   **If the edge of the media has been fed into the fusing unit, pull the jammed paper forward and out.**
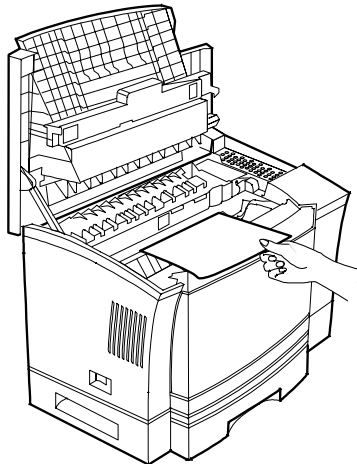
»   **Note:** *Toner may get on your hands, because the image transferred to the media is not fixed. Also, pull the paper forward and out, not down and out.*

5   Reinstall the toner cartridge.
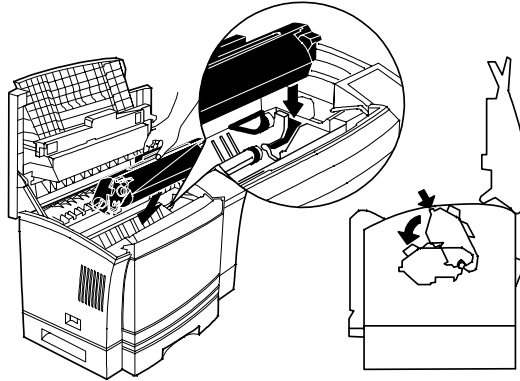
6   Close the top cover.
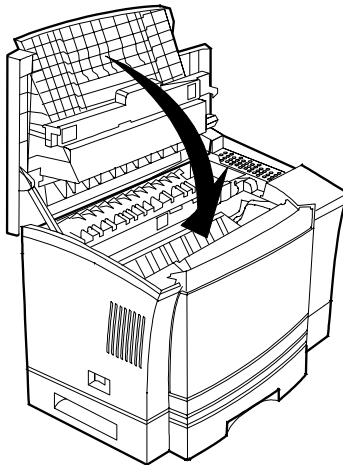
Clearing Cassette Area Jams

1   **Open the top cover.**

»   **Note:** *Push the media tray into the printer before opening the upper unit.*
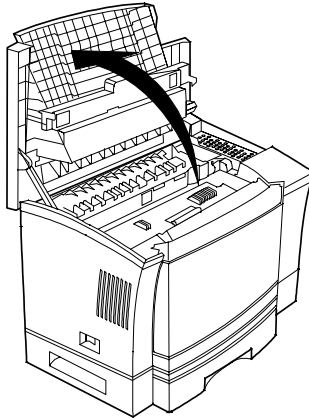
2   **Remove the toner cartridge.**
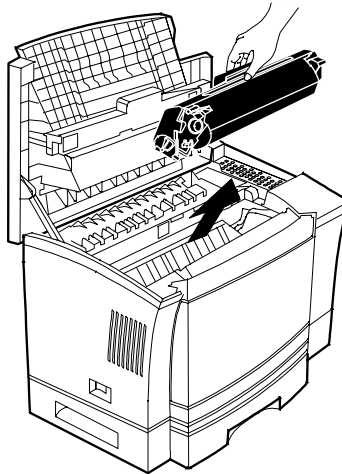
3   **Determine which cassette is currently being used and remove it.**

4   **Check the cassette pick-up roller area, and remove any jammed print media that remains outside the main unit.**

▲   **Caution**: *If the media has already started through the engine, do not pull it back out through the cassette or multipurpose tray area. This may damage the engine. Refer to "Clearing a Media Jam Inside the Printer" on page 6-20.*

5   **Reinstall the toner cartridge.**
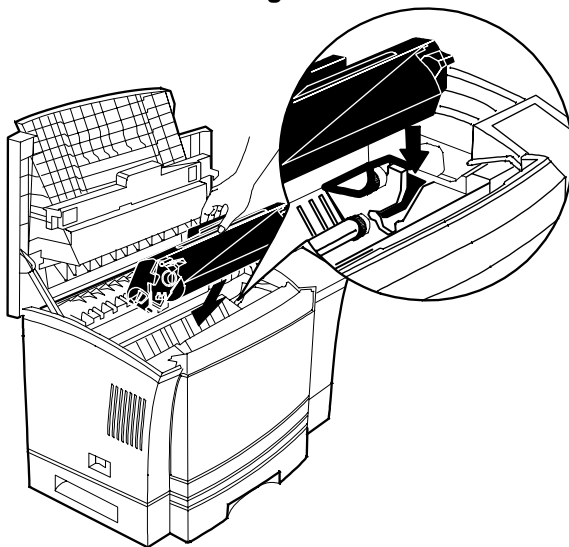
6   **Close the top cover.**

7   **Reinsert the cassette.**

Clearing Multipurpose Tray Area Jams

1   **Remove all media from the multipurpose tray.**

2   **Close the multipurpose tray.**

3 **Open the top cover.**

» **Note:** *Leaving print media in the multipurpose tray can cause the print media position to shift during removal of the jam. This may result in a media feed failure and another jam when printing is restarted.*
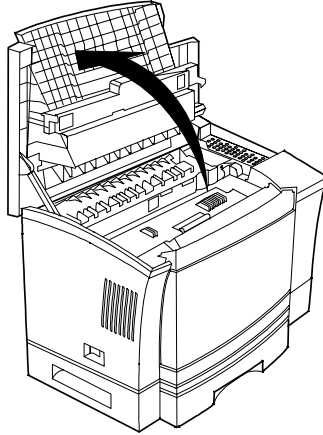
4 **Remove the toner cartridge.**
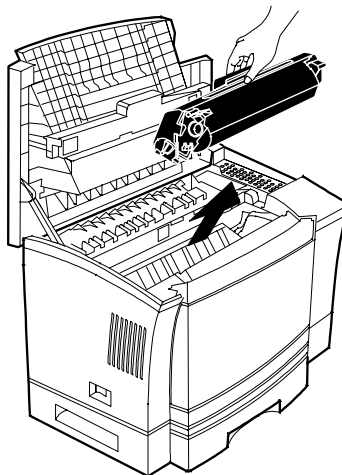
5   Open the multipurpose tray and pull out the jammed media.

▲   **Caution***: If the media has already started through the engine, do not pull it back out through the cassette or multipurpose tray area. This may damage the engine. Refer to "Clearing a Media Jam Inside the Printer," on page 6-20.*

6   Close the multipurpose tray.

7   Reinstall the toner cartridge.
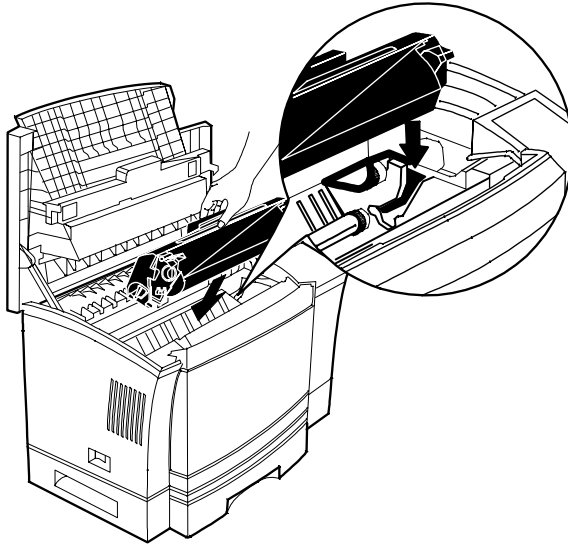
8   **Close the top cover.**
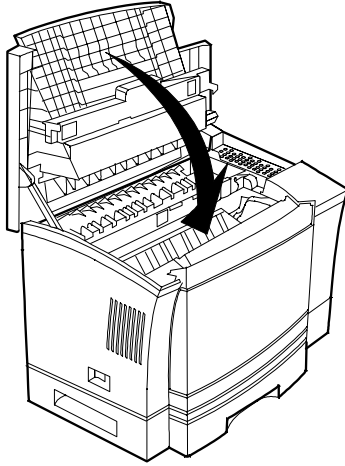
9   **Open the multipurpose tray.**

10   **Refill the multipurpose tray.**

Clearing a Duplexer Media Jam

1 **Open the duplex cover and pull out the jammed paper.**
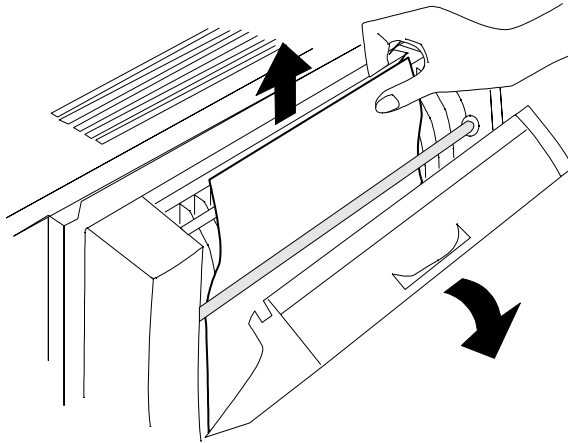
2 **Close the duplex cover.**

3 **Open the maintenance cover and remove the jammed paper.**
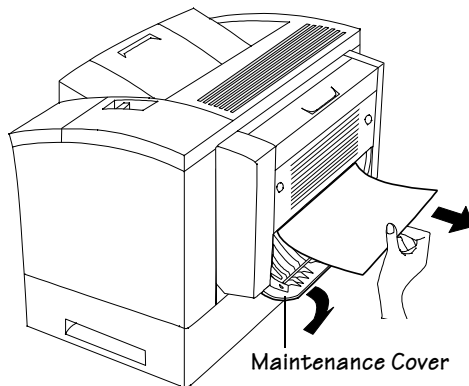
Maintenance Cover

4 **Close the maintenance cover.**

Clearing CrownCopy ADF Paper Jams

Use the following procedure to remove a paper jam in the automatic document feeder:

1 Push the button near the front left side of the scanner.

The ADF module lifts a little.
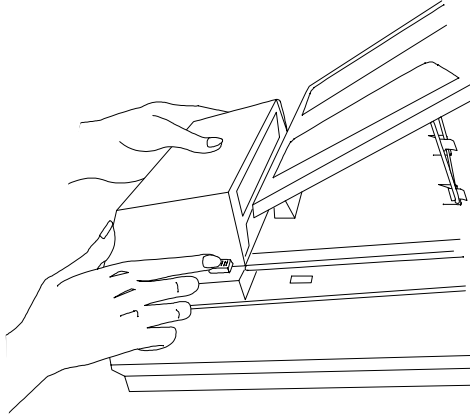
2 Lift the right side of the ADF module as far as possible, and then slowly remove the jammed paper.
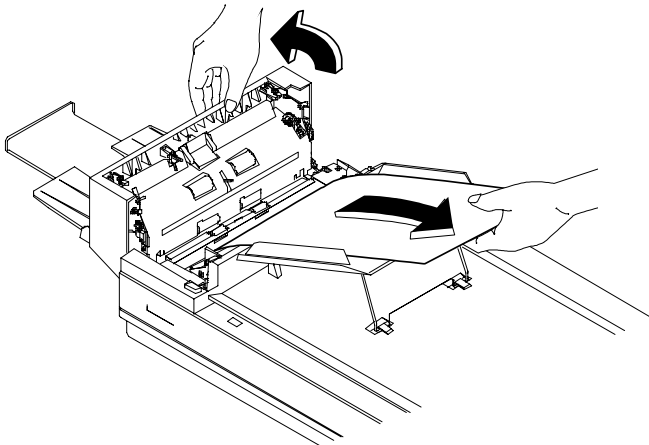
3 Push the ADF module securely back into place.

Troubleshooting CrownCopy

Understanding the LEDs

The scanner has three LEDs—Power (amber), Ready (green), and Jam (red). Alone and in combination they indicate the scanner's status.

If these LEDs are...			they indicate...	Do this...
Power	Ready	Jam		
Off	Off	Off	Not ready to copy.	Ensure that the power cord is firmly plugged into the power supply and the scanner and that the scanner is turned on.
On	Off	Off	The scanner has been turned on.	Wait for the Ready LED to light.
On	On	Off	Ready to copy.	Copy.
On	On	On	Paper jam.	Remove the paper jam. See the previous section, "Removing ADF Paper Jams."
On	Off	Blinking	ADF cover open.	See the previous section, "Removing ADF Paper Jams," for information on opening and closing the ADF cover. If necessary, turn the scanner off and on again.
On	Blinking	Off	The scanner may be hung.	Turn the scanner off and then on again several times.
			If the problem still exists, the lamp is either burnt out or too dark due to aging.	Replace the lamp. See chapter 5, the "Replacing the Lamp" section, of the *Options* manual for instructions.
On	Blinking	Blinking	A service problem.	Check that the shipping bracket was removed. If this does not solve your problem, contact your vendor.

Solving Other Problems

Symptom	Solution
Documents don't feed smoothly into the ADF.	■ Clean the ADF (see chapter 5, the "Cleaning the Automatic Document Feeder" section, of the *Options* manual).
Edges of the copy are cut off	■ Make sure you're centering documents at the top of the scanner glass and that the scan size setting is correct. Also keep in mind that the printer's maximum imageable area is 8.16" x 10.66"/207.26 x 270.93 mm for letter-size media and 7.93" x 11.36"/201.46 x 288.54 mm for A4.
Image quality of copies is not optimal.	■ Clean the scanner glass: dampen a lint-free cloth with alcohol or a mild detergent and wipe the glass clean.
	■ Clean the ADF (see chapter 5, the "Cleaning the Automatic Document Feeder" section, of the *Options* manual).
	■ If you're scanning any halftoned original, some printed materials, such as magazines, cause moiré patterns. To remove these patterns, change the scan resolution (choose Copier/Copy Mode/Custom Gray, and then Copier/Copy Mode/Custom Config/Scan Resolution/200 or 300) and try again.
Ready and Jam LEDs are blinking	■ The scanner has been turned on before the shipping bracket was removed. Use the instructions in chapter 5, the "Installing CrownCopy" section, of the *Options* manual for removing the shipping bracket.
Scanner lamp flickers, is dim or fails to come on	■ The scanner lamp is failing or has failed and needs to be replaced. (See chapter 5, the "Replacing the Lamp" section, of the *Options* manual for instructions on how to change the lamp.)
Several pages feed into the ADF at the same time	■ Clean the ADF (see chapter 5, the "Cleaning the Automatic Document Feeder" section, of the *Options* manual).

Symptom	Solution
Multiple copies of a multipage document in the ADF are incomplete.	■ Increase the Display List memory client. » **Note:** *Refer to the "Memory" section of chapter 5, "Additional Technical Information," of the Reference manual for more information.*
Printer is too slow	■ Change the default resolution to a lower setting. For optimum performance, change the default resolution to 600 dpi. For high-speed copying, set the default resolution to 300 dpi.
`Copy Key Not Installed` displays in the printer message window	■ Check to see if the copy key is installed correctly on the printer.
`Copier Not Connected` displays in the printer message window	■ Check to see if the scanner's Ready LED is on. ■ Check for the SCSI cable connection on both ends. ■ Check to see if there is a terminator at the end of the SCSI chain. ■ Make sure the SCSI port is set to 5. ■ If the scanner's Paper Jam LED is on, turn both the scanner and printer off and back on again.
`Scan Error` displays in the printer message window	■ Check to see if the scanner's Ready LED is on. ■ Check to see if there is a paper jam in the ADF. If so, clear the jam and turn the scanner off and back on. ■ If the scanner's Paper Jam LED is on, turn the scanner off and back on again.
`Not Enough Mem` displays in the printer message window	■ Check to see if the scanner's minimum memory requirement is met. ■ Change the printer's default resolution to a lower setting. ■ Increase the printer's Display List memory ■ Reduce the complexity of the copy request (for example, collation, duplexing, number of copies). ■ Install more memory.

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 QMS 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," of the *Reference* guide for information about memory clients).

No Start-up Page

If the Ready indicator is on, but no start-up page prints, check the following:

1   Has the start-up page been disabled?

Use the control panel to make sure the start-up page is on.

2   Turn the printer off. From a cold start, the printer takes approximately 1 to 2 minutes to warm up.

Be sure you wait long enough for a start-up page before suspecting a problem.

3   **Check to be sure the paper cassettes are loaded with paper,
    in place and secure.**

4   **Open the top cover of the printer and 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 QMS
vendor for help. Go to the last section of this chapter, "Placing a Ser-
vice Call."

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 "Media Jams" section on page 6-19 for informa-
tion on clearing media jams.

Printer Resets

Occasionally, Macintosh applications interfere with each other. Appli-
cations 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, con-
tact 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 QMS vendor for information on RAM upgrades. See
chapter 2, "Memory and System Software," in your *Options* guide.

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

PostScript Errors

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

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

Menu	Administration/Startup Options/Do Error Handler
Choices	Yes—Load the Error Handler. No—Don't load the Error Handler.
Default	No
Notes	Refer to the *PostScript Language Reference Manual* (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 the "Notes on Installing Printer Description Files" section of 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 start-up 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

600x600, 1200x1200 dpi Printing Unavailable

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

  See the "High-Resolution Printing" section in chapter 3, "Advanced Printing Features," for specific requirements. Then check a start-up page to make sure the printer has enough RAM installed. Also, see the *Options* guide for more information on memory upgrades (SIMMs—single-in-line memory modules).

- 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 and choose the correct resolution and paper size for your printing. See chapter 4, "Printer Configuration," in the *Reference* for more information.

Blank Pages

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

1   Check the toner cartridge.

The image does not print if the cartridge is empty.

2   Be sure you have removed the sealing tape.

3   If the toner cartridge is not empty, the sealing tape has been removed, and blank pages are ejecting, take the cartridge out, roll it from side to side, and reinstall the cartridge in the printer.

4   If these solutions do not work, contact your QMS 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 needs more media.

Printer Will Not Duplex

If the error message DUPLEXER ABSENT appears in the message window, make sure you have the optional duplexer correctly installed. See chapter 7, "Document Finishing Options," in the *Options* guide for information on installing the duplexer. If you have correctly installed the duplexing unit and configured the printer from the front panel to duplex (Operator Control/Def. Duplex), but the printer continues printing simplex, you may need additional memory allocated to the frame

buffer. See chapter 3, "Advanced Printer Features," in this guide for additional information on memory required for duplexing.

Paper Jams Always Occur

1   Check that the media does not exceed the media limit mark.

Make sure that the stack does not exceed the paper limit mark on the media cassette.

2   Check that the paper stack is correctly aligned.

Make sure that the stack is correctly aligned in the media cassette or in the multipurpose tray.

3   Check that the correct paper type is used.

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

4   If your printing from the multipurpose tray, check that Operator Control/Multipurpose Size menu is set to the size paper being used.

5   Check the printer for residual jammed media.

6   Remove any jammed media remaining inside the printer by checking the locations in "Media Jams" on page 6-19.

Kanji Option Kit Problems

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

  - 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 Licens-
  ing 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.

Can't Access Kanji Fonts

- Does the start-up page indicate that the QMS Kanji external hard disk is on line?

  When this disk is on line, Japanese fonts print in the lower half of the start-up 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.

■ Did you inadvertently initialize or reformat the internal Kanji IDE hard disk?

If so, contact your QMS vendor. See appendix A, "QMS Customer Support," for product sales and service information.

■ Did you correctly configure the printer?

See the chapter 4, "Software," of 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. (See chapter 4, "Software," of the *Options* manual.)

Print Quality Problems

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 QMS vendor. See "Placing a Service Call," on page 6-52

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 blacks, and other print distortions.

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.

If the TONER LOW message appears in the message window, remove the toner cartridge and gently rock it from side to side to redistribute the toner. Then reinsert the cartridge and try printing again.

3 If the message remains on, replace the toner cartridge.

4 If this does not solve the problem, place a service call to your QMS vendor.

Specific

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 QMS vendor.

Black Image (Entire Page)
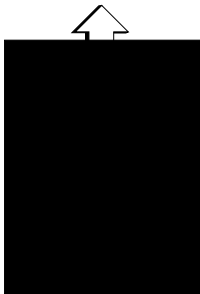
1 The toner cartridge may be defective. Remove it and install a new toner cartridge, if needed.

2 Your printer may need a service check. Contact your QMS vendor.

Printout Too Dark

ABCDE
ABCDE
ABCDE
ABCDE
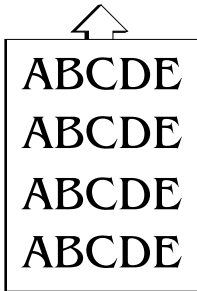
1   Install a new toner cartridge.

2   Change the toner density. If the halftone is too dark, try selecting a different screen angle. Or try toner conserve mode, Administration/Engine/Print Quality/Conserve Toner.

Toner Smudges

ABCDE
ABCDE
ABCDE
ABCDE
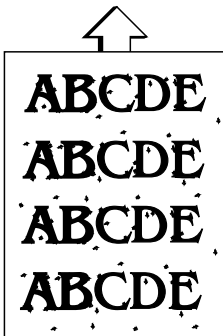
If the toner smudges are only on the front of the page.

1   Distribute the toner.

2   Check to make sure the toner is not defective.

3   Install a new toner cartridge.

If toner smudges are also on the back of the page, the image transfer roller may be dirty. Open the printer once and close it again to clean the roller.

Printout Too Light

ABCDE
ABCDE
ABCDE
ABCDE
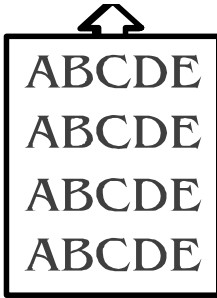
1   Check that Conserve Toner is set to Off in the Administration/ Engine/Conserve Toner menu.

2   Remove the toner cartridge and rock it as you would when install- ing a new cartridge. This redistrib- utes toner inside the cartridge. Then, reinstall the cartridge.

3   The toner cartridge may be defec- tive. Install a new toner cartridge.

Blurred Background

ABCDE
ABCDE
ABCDE
ABCDE
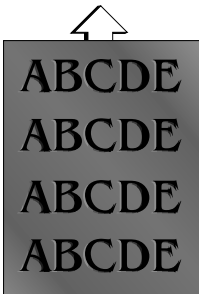
1   The toner cartridge may be defec- tive. Install a new toner cartridge, if needed.

Offset (Double) Image
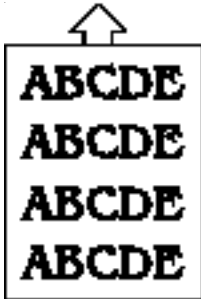
```
ABCDE
ABCDE
ABCDE
ABCDE
```

1   The photoconductive drum inside the toner cartridge may be dirty. Open the printer once and close it again to clean the drum.

Uneven Print Density

```
ABCDE
ABCDE
ABCDE
ABCDE
```
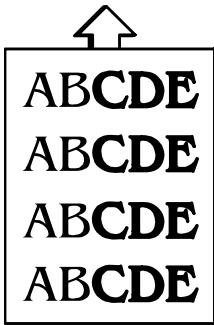
1   Remove the toner cartridge and rock it as you do before installing a new cartridge. This redistributes toner inside the cartridge. Reinstall the cartridge.

2   If step 1 does not solve the problem, install a new toner cartridge.

Irregular Print

AECDE
ABC CE
APCDE
ABCDE
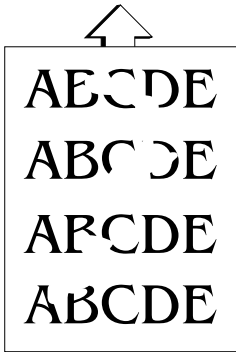
1   The paper being used may have absorbed moisture (perhaps due to high humidity or having water spilled on the paper supply). Toner does not adhere well to paper at the positions where it has become wet. Replace the paper in the tray or cassette with dry paper, and retest for irregular print.

White (or Black) Stripes

ABCDE
ABCDE
ABCDE
ABCDE
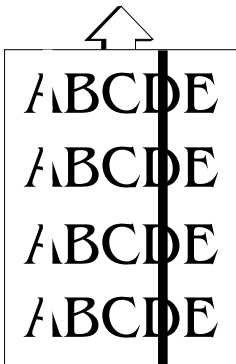
1   The window glass of the Print Head may be dirty. Clean the glass as described in chapter 4, "Printer Care," of this manual.

2   The toner cartridge may be defective. Install a new toner cartridge, if needed.

White (or Black) Bands

ABCDE

ABCDE

ABCDE

ABCDE
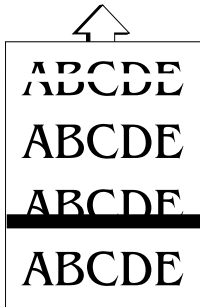
1   The toner cartridge may be defective. Install a new toner cartridge, if needed.

Repeated Flaws
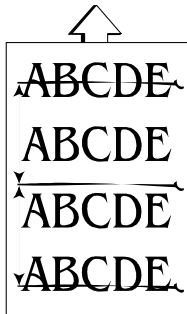
ABCDE

ABCDE

ABCDE

ABCDE

1   The photoconductive drum inside the toner cartridge may be dirty. Open the printer once and close it again to clean the drum.

2   The photoconductive drum inside the toner cartridge may have a scratch on it. Install a new toner cartridge and test the print again.

3   The toner cartridge may have been exposed to too much light from external sources. Install a new toner cartridge and test the print again.

Placing a Service Call

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

If you have technical questions your vendor is unable to answer, you can call or fax questions to the QMS Customer Response Center (CRC). (See appendix A, "QMS Customer Support" for information on contacting the CRC). If you've determined your printer needs to be examined by a QMS service technician, contact QMS National Service 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 printer model and serial number?

2   What kind of host computer do you have?

3   What operating system do you have and what version?

4   What interface are you using? If serial, what protocol?

5   What application are you using?

6   What is the emulation of the file you're trying to print? In what emulation mode is the port?

7   What is the firmware revision number for your printer? (It is listed on both the status and start-up pages.)

8   If you can print, have a status page available.

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

❖

7

CrownView Printer Web Page

In This Chapter . . .

- "Setting up the Printer Web Page" on page 7-3
- "Setting Up Your Browser Software" on page 7-3
- "Printer Home Page" on page 7-8
- "Web Page Help System" on page 7-26

Introduction

QMS CrownView is a printer-based application using the World Wide Web portion of the Internet as a framework for the QMS 2060 Print System. This feature allows you to monitor printer consumables as well as access information that is not 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 Internet 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 Microsoft 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 *2060* Print System. Change the default name to one that is more easily remembered and typed.

You can change the printer name through the Administration/Communications/Network*x*/CrownNet/NetWare/Printer Name menu or the Administration/Communications/Network*x*/CrownNet/LanManager/ Printer Name menu. (See the *QMS CrownNet Setup Guide* for more information.)

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 Navigator

1 **Start your web browser.**

2 **Access the Options menu and choose Network Preferences.**

---

3   Select the Proxies tab in the dialog box.
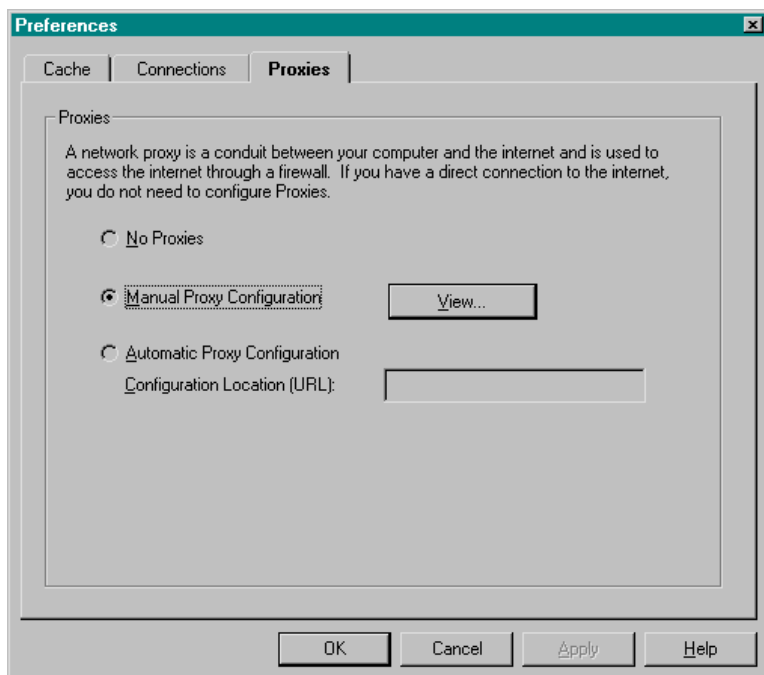
4   Select the Manual Proxy Configuration radio button and press the View... button.

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 2060.**
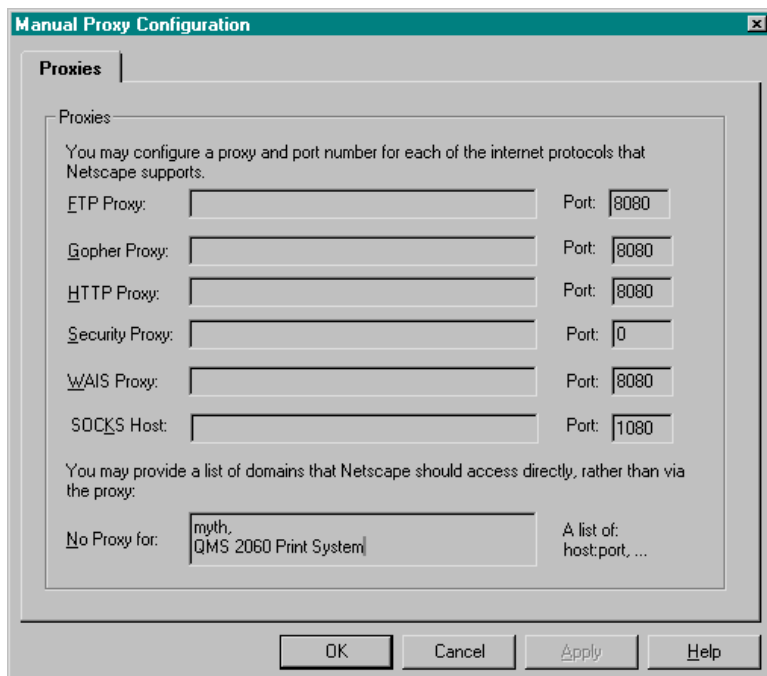
» **Note:** *The printer name is entered in the network protocol menu that you are using. The default name is the model number of the printer. See your CrownNet documentation for more information on naming your printer.*

6 **Choose OK.**

7 **Enter the printer name or IP address in the Go to: URL
address box to access the printer home page.**
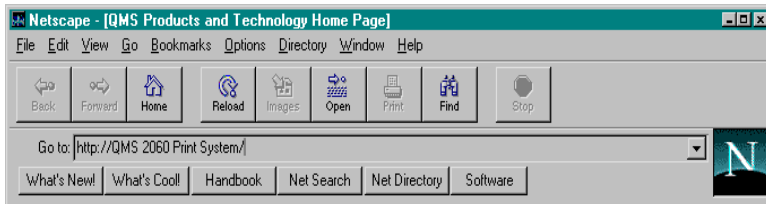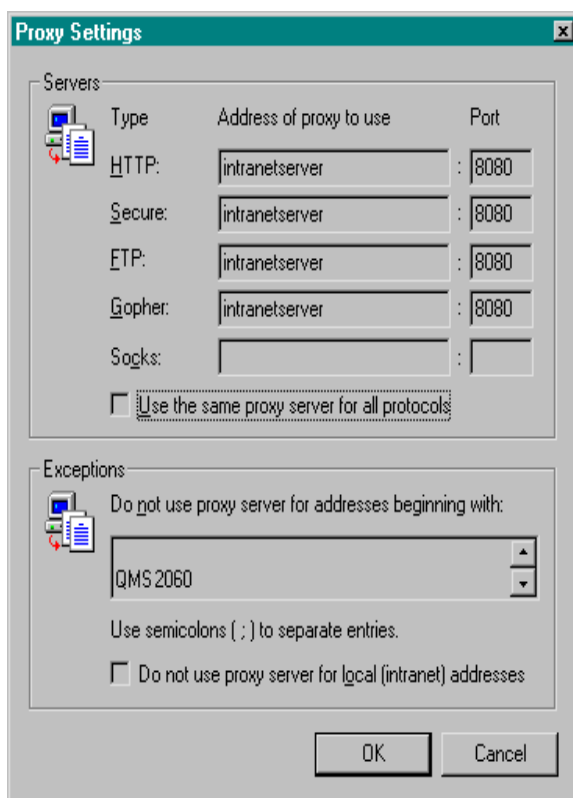
For Internet Explorer

1 **Start your web browser.**

2 **Access the View menu and choose Options.**

3 **Select the Connection tab on the dialog box.**
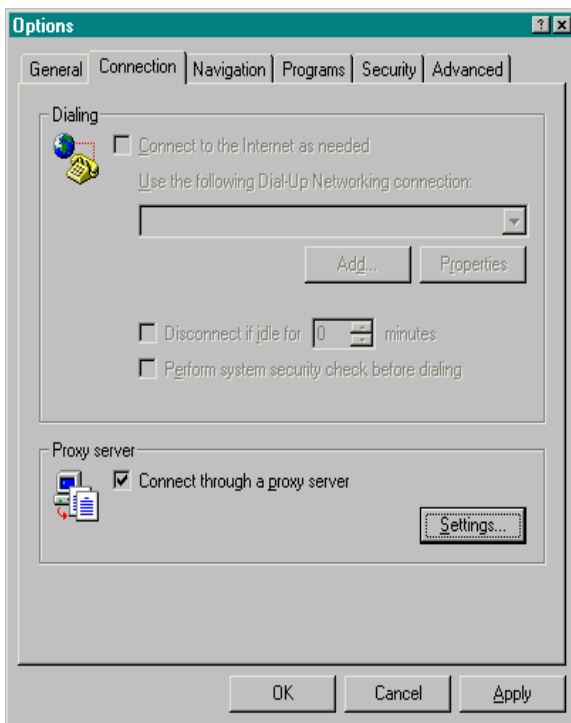
4 **Click the Settings button to display the Proxy Settings dialog box.**

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 is entered in the network protocol menu that you are using. The default name is the model number of the printer. See your CrownNet documentation for information on changing the printer name.*

6 **Click OK.**

**7   Now you should be able to enter the printer name in the URL
address box to access the printer home page.**
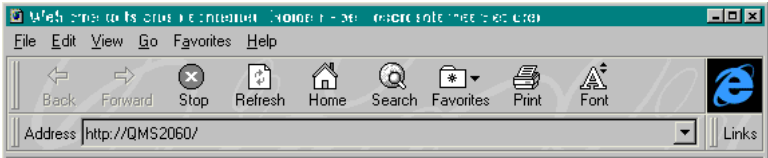
Printer Home Page

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.
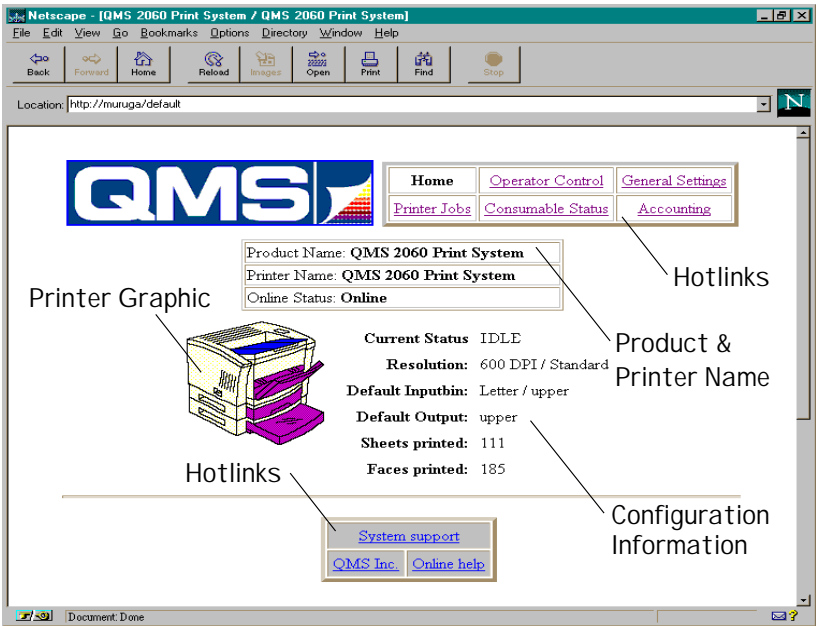
The printer home page provides the following information.

Product Name	Identifies the particular printer that you are browsing. This printer is pictured in the graphic with all installed paper handling options.
	Configuration Menu: No equivalent
Online Status	Shows whether the printer is on line or off line.
	Configuration Menu: No equivalent
Current Status	Echoes the status message in the printer control panel message window.
	Configuration Menu: No equivalent
Resolution	Identifies the resolution and halftone.
	Configuration Menu: Administration/Engine/Def Resolution
Default Inputbin	Identifies the input cassette or tray, the media size, and the percent filled with media.
	Configuration Menu: Operator Control/Inputbin
Default Output	Identifies the output tray.
	Configuration Menu: Operator Control/Outputbin
Sheets Printed	Lists the number of sheets of media printed to date.
	Configuration Menu: No equivalent
Faces Printed	Lists the number of page faces printed to date.
	Configuration Menu: No equivalent
Hotlinks	Take you to other pages of status, configurations, or help information. Each of these hotlinks is fully explained in this chapter.
	Configuration Menu: 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.

» **Note:** *The Operator Control page is password protected. If a password is enabled for the Operator Control menu (Installation/Use Operator Pwd menu), you must enter the password before you can view this page.*

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

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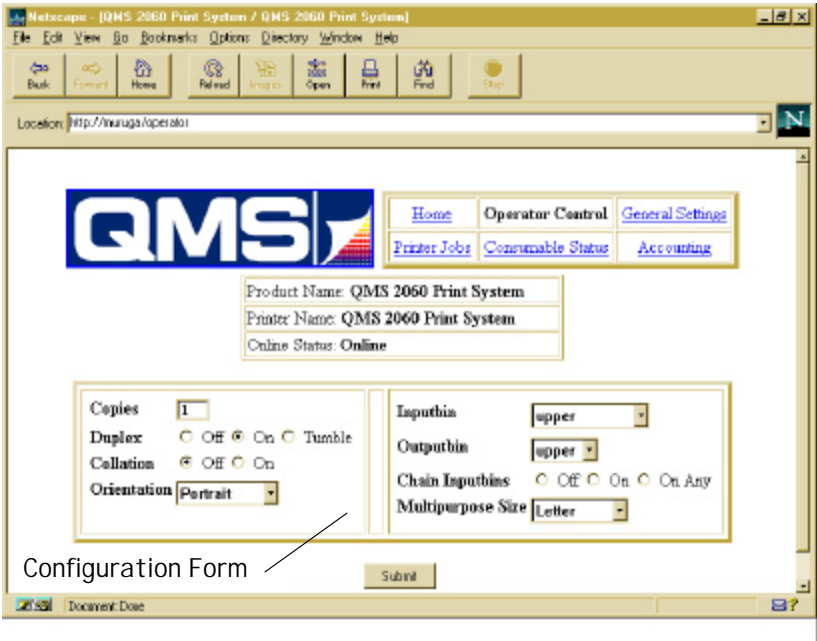
The Operator Control page contains the following options. For complete information on any options see chapter 4, "Printer Configuration," of the *Reference* manual.

Copies	Allows you to enter the number of copies to print.
	Configuration Menu: Operator Control/Copies
Duplex	Allows you to set duplexing (if installed) to Off, On, or Tumble.
	Configuration Menu: Operator Control/Duplex
Collation	Allows you to turn collation Off or On.
	Configuration Menu: Operator Control/Collation
Orientation	Allows you to select Portrait or Landscape orientation.
	Configuration Menu: Operator Control/ Orientation
Inputbin	Allows you to choose Multipurpose, Upper, Lower, Optional as the input source.
	Configuration Menu: Operator Control/Inputbin
Outputbin	Allows you to choose the output location.
	Configuration Menu: Operator Control/Outputbin
Chain Inputbins	Allows you to set input bin chaining to Off, On, or On Any.
	Configuration Menu: Operator Control/Chain Inputbins
Multipurpose Size	Provides a menu to select the size media in the multipurpose tray.
	Configuration Menu: Operator Control/ Multipurpose Size

General Settings

The General Settings hotlink takes you to the General Settings page.
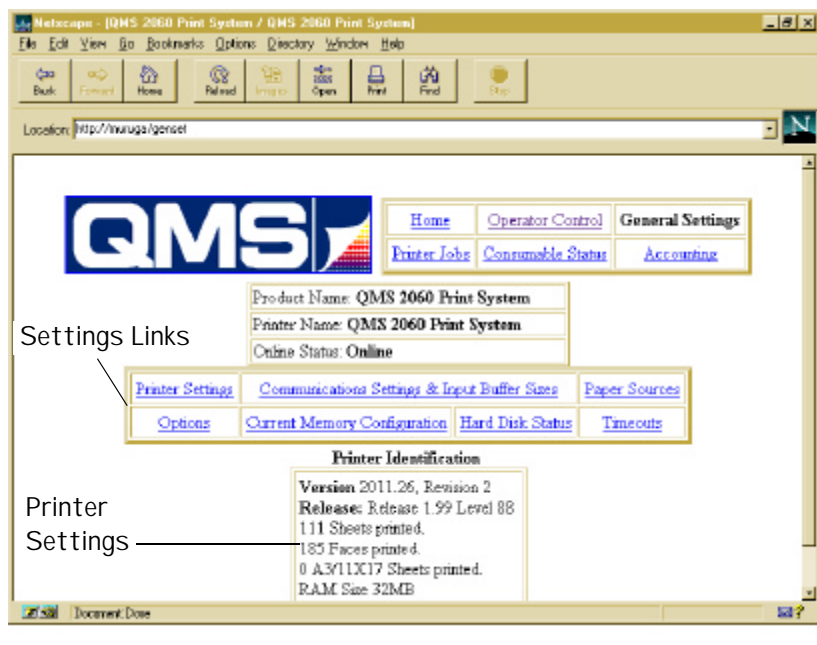
This page links to different groups of printer configuration settings:

- Printer settings

- Communications settings and input buffer sizes

- Paper sources

- Options available with the printer (such as duplexer or emulation)

- Current memory configuration

- Internal hard disk status

- Timeouts

This information can be viewed to show you the status of the printer, but it cannot be changed. To change these settings you must access

the printer's configuration through the control panel of the printer, a
remote or local console, or CrownAdmin 3.

Printer Setting

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

Compatibility Level	Identifies the PostScript emulation level.
	Configuration Menu: No equivalent
Do Start-up Page	Identifies whether the printer start-up page is turned on or off.
	Configuration Menu: Administration**/**Startup Options/Do Start Page
Do Error Handler	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.
	Configuration Menu: Administration**/**Startup Options/Do Error Handler
Do Sys/Start	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.
	Configuration Menu: Administration**/**Startup Options/Do Sys Start
Is Password 0?	Identifies whether the Administration menu password is set. 0=Off
	Configuration Menu: Installation**/**Use Admin Pwd
Duplex	Identifies whether the duplex option (if available) is enabled.
	Configuration Menu: Operator Control/Duplex

Tumble Duplex	Identifies whether duplex print jobs are to print so they can be bound at the top edge (flip-chart style).
	Configuration Menu: Operator Control/Duplex/ Tumble Duplex
Default Chaining	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.
	Configuration Menu: Operator Control/Chain Inputbins
Default Paper Tray	Tells you which input source is the default.
	Configuration Menu: Operator Control/Inputbin
Default Output Tray	Tells you which output tray is the default
	Configuration Menu: Operator Control/Outputbin
Number of Paper Trays	Tells you the number of input sources available.
	Configuration Menu: No equivalent.
Left Margin	Identifies the amount (in .01" increments) the image is adjusted horizontally on the page.
	Configuration Menu: Administration**/**Engine/ Image Alignment/Horiz Offset
Top Margin	Identifies the amount (in .01" increments) the image is adjusted vertically on the page.
	Configuration Menu: Administration**/**Engine/ Image Alignment/Vertical Offset
Resolution	Identifies the printer resolution.
	Configuration Menu: Administration/Engine/Def. Resolution
Multi-Res	Identifies whether the 1200x1200 dpi Multi-Res board is installed.
	Configuration Menu: No equivalent

Communication Settings & Input Buffer Sizes

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

Serial IF	Identifies the settings for the optional serial interface.
	Configuration Menu: Administration/ Communications/Serial
Parallel IF	Identifies the settings for the parallel interface.
	Configuration Menu: Administration/ Communications/Parallel
IF1 IF String	Identifies the settings for the optional Network1 interface.
	Configuration Menu: Administration/ Communications/Network1
IF 2 IF String	Identifies the settings for the Network2 (CrownNet) interface.
	Configuration Menu: Administration/ Communications/Network2

Paper Sources

This hotlink provides paper source information.

Multipurpose	Identifies the size paper currently installed in the multipurpose tray.
	Configuration Menu: No equivalent
Upper	Identifies the size paper currently installed in the upper tray.
	Configuration Menu: No equivalent
Optional	Identifies the size paper currently installed in the optional high-capacity input paper deck.
	Configuration Menu: No equivalent

Options

Duplexer Installed	Tells you if the duplexer is installed.
	Configuration Menu: No equivalent.
Disk(s)	Tells you how many hard disks are attached to the printer and what their addresses are.
	Configuration Menu: No equivalent
Emulation(s)	Lists the emulation(s) installed and the version number.
	Configuration Menu: Operator Control/General Settings/Options/ImageServer

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.

Host Input Spool	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.
	Configuration Menu: Administration/Memory/ Manual Config/K Mem for Spool
Display List	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.
	Configuration Menu: Administration/Memory/ Manual/Config/K/Mem Display

PostScript Font Cache	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.
	Configuration Menu: Administration**/**Memory/ Manual Config/K Mem for PS Fonts
PostScript Heap	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, Post-Script operators, and forms.
	Configuration Menu: Administration/Memory/ Manual Config/K Menu for PSHeap
Framebuffer	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.
	Configuration Menu: Administration/Memory/ Manual Config/Framebuffer
Emulation	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 or QUIC II.
	Configuration Menu: Administration/Memory/ Manual Config/K Mem Emulation
Emulation Temporary	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.
	Configuration Menu: Administration/Memory/ Manual Config/K Mem Emulation Temp

Disk Cache	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.
	Configuration Menu: Administration/Memory/ Manual Config/K Mem Disk Cache
System Use	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.
	Configuration Menu: No equivalent
Printer Memory	Shows the size (in KB) of the total amount of RAM that your printer has.
	Configuration Menu: Administration/Memory/ Manual Config/MB Printer Mem

Hard Disk Status

This hotlink provides the status of the hard disk.

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

Timeouts

This hotlink provides the status on established timeouts.

Wait	Shows the maximum number of seconds the PostScript emulation waits for incoming data.
	Configuration Menu: Administration/ Communications/Timeouts/PS Wait TImeout
Job	This shows the maximum number of seconds the printer processes a print job before it ends the job.
	Configuration Menu: Administration/ Communications/Timeouts/Job Timeout
Emulation	Shows the maximum number of seconds emulations other than PostScript wait for incoming data.
	Configuration Menu: Administration/ Communications/Timeouts/Emulation Timeout
ESP	Shows the maximum number of seconds the printer uses to match an emulation before printing the job in the default emulation.
	Configuration Menu: 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.
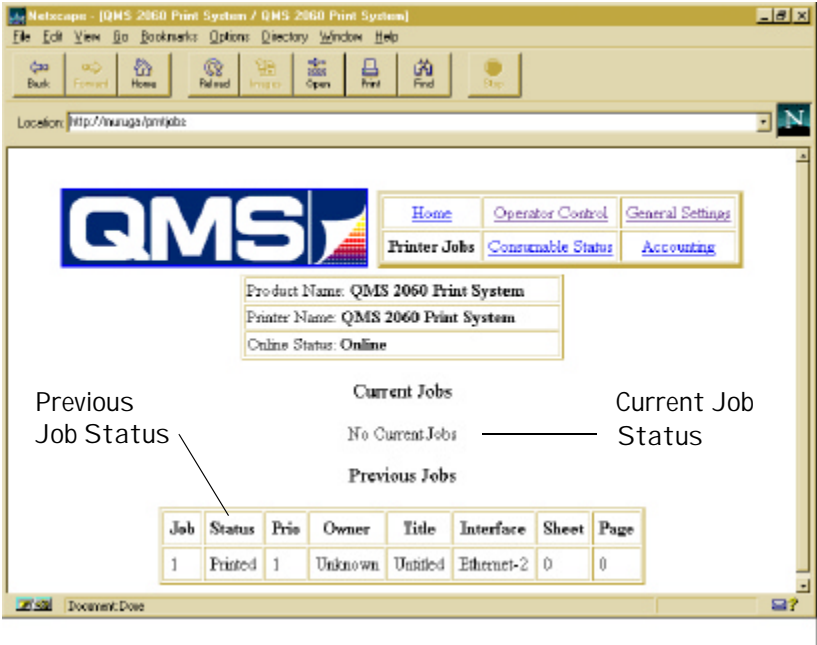
Job	Indicates the job number of the current print jobs and up to five previous print jobs.
	Configuration Menu: No equivalent.
Status	Indicates the status of each job. (Interpreting, Spooling, Spooled, Printing, Printed)
	Configuration Menu: No equivalent
Prio[rity]	Shows the priority of each job.
	Configuration Menu: No equivalent
Owner	Shows the name of the owner of each current job.
	Configuration Menu: No equivalent

Title	Shows the title of each job.
	Configuration Menu: No equivalent
Interface	Identifies the interface over which the job was sent to the printer.
	Configuration Menu: No equivalent
Sheet	Shows the number physical sheets of media printed for each job.
	Configuration Menu:
Page	Indicates the number of pages printed for each job.
	Configuration Menu: No equivalent

Consumable Status

The Consumable Status hotlink on the home page jumps to the Consumable Status page. However, the status of consumables is not monitored on this printer.

Accounting

The Accounting hotlink on the home page jumps to the Accounting
page. This page contains information about the accounting settings.

» **Note:** *Accounting is available only if a hard disk is installed.*
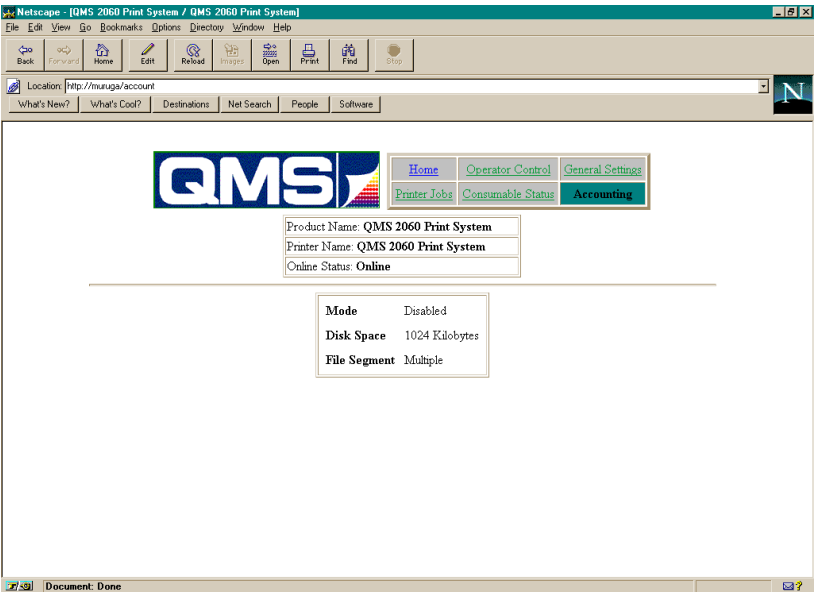
Mode	Allows you to Disable or Enable print job accounting.
	Configuration Menu: Operator Control/ Accounting/Mode
Disk Space	Allows you to set the available disk space for job accounting.
	Configuration Menu: Operator Control/Disk Space
File Segment	Allows you to specify whether accounting information is stored in the printer in single or multiple files.
	Configuration Menu: Operator Control/ Accounting/File Segment

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.

Support Form
Data

Once you've made the appropriate changes, choose Submit.

» **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.*

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

Printer Help URL	A text box for entering the Printer Help URL (web address).	
	Configuration Menu: No equivalent	
Contact Number	A text box for entering a local or QMS contact number.	
	Configuration Menu: No equivalent	
QMS Corporate URL	The QMS corporate URL (web address).	
	Configuration Menu: No equivalent	
To order supplies and accessories	A text box for entering a local or QMS contact number.	
	Configuration Menu: 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.
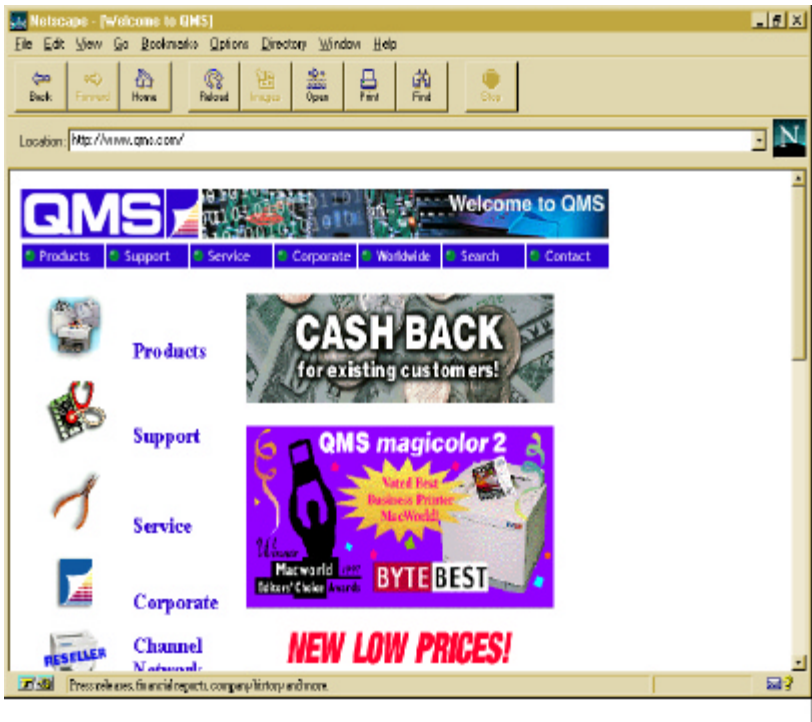
Local Online Help Page

The Local 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. You can also configure this to jump to the QMS online performance support 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. When you click on the Help button on the printer home page you will be linked to an HTML page located at the QMS web site. From here you can link to topic which applies to your specific problem. You can also access a list of current FAQs (Frequently Asked Questions) about your print system.

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QMS Customer Support

In This Chapter . . .

- "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.

The QMS Corporate Bulletin Board System

The QMS Corporate Bulletin Board System (BBS) contains technical
support notes, application notes, drivers, patches, and utilities, and
you may leave technical questions not requiring an immediate
response on electronic mail for the Sysop (System Operator).

The bulletin board [(334) 633-3632] operates at 1200, 2400, 9600,
and 14400 baud, 8 data bits, no parity, 1 stop bit, with XMODEM,
YMODEM, and ZMODEM capabilities. Contact QMS Customer
Response Center (CRC) for more information about the bulletin
board.

CompuServe

Through CompuServe, you ask general (non-technical) questions,
share information with other users, and access printing information
and programs. When you use CompuServe, type `go qmsprint↵` to
go directly to the forum where QMS is located. The QMS library sec-
tion contains application notes, printer drivers, utilities, technical infor-
mation, and announcement files.

Internet

The QMS server provides access to technical reports, new product
announcements, a trade show schedule, and other general informa-
tion 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

☑ 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 you're using

☑ Your printer firmware version (listed on the status/start-up
pages)

■ **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

QMS United States and Latin America

General Contact
1 (334) 633-4300
Fax 1 (334) 633-4866
Email 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
Bulletin Board Service
1 (334) 633-3632

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

QMS Canada

General Contact
1 (514) 333-5940
Fax 1 (514) 333-5949
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

Bulletin Board Service
1 (905) 206-0084

QMS in Japan

General Contact
(+81)-3 3779-9600
Fax (+81)-3 3779-9650
Internet http://www.qmsj.co.jp

QMS in Latin America

General Contact
Cra 43 DD#8-42
Officina 201
Medellin, Colombia
(+57) (4) 312 13 70
Fax (+57) (4) 268 92 97

QMS EMEA

QMS Australia	Anitech Sydney Business & Tech. Centre 52/2 Railway Parade 2141 Lidcombe NSW Australia (+61) 2–9901 3235 Fax (+61) 2–9901 3273
QMS Benelux **Belgium, Nether-lands, 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
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

QMS Italy	Via della Repubblica 56 43100 Parma Italy (+39) 52–1231 998 Fax (+39) 52–1232 902
QMS Nordic **Sweden, Finland, Norway, and Denmark**	Arenavägen 41, 6th floor 121 77 Johanneshov Sweden (+46) 8–600 01 30 Fax (+46) 8–600 01 33
QMS South Africa	Saskay House Unit 24 Sunninghill Business Park Peltier Road, Sunninghill, Johannesburg Republic of South Africa (+27) 11–807 6957 Fax (+27) 11–807 6960
QMS UK **United Kingdom and Ireland**	Old Bridge House, The Hythe Staines, Middlesex TW18 3JF United Kingdom (+44) 1784–442255 Fax (+44) 1784–461641

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