

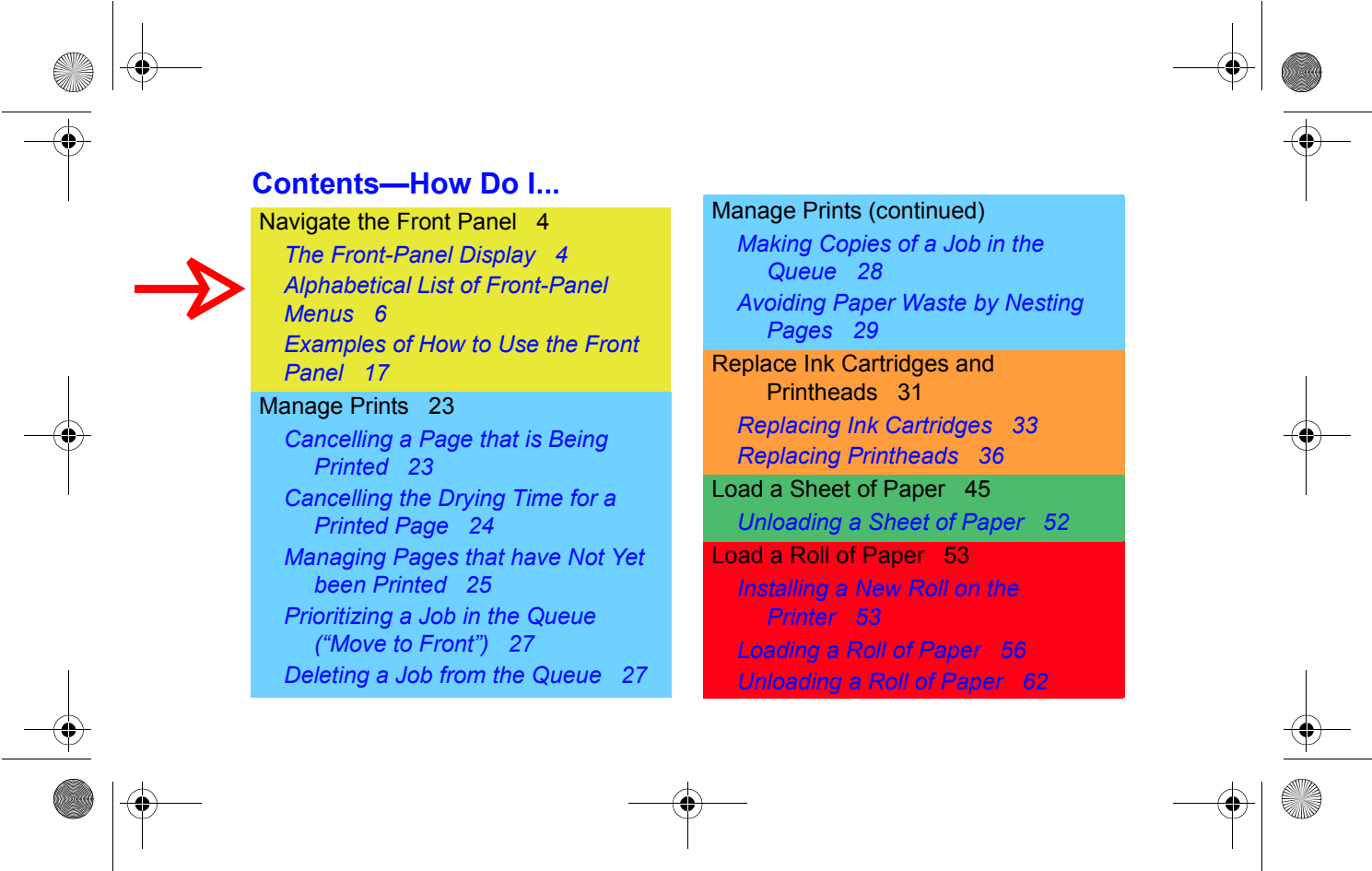
i pocket guide

?

how do I...

hp designjet 500 series printers
hp designjet 800 series printers





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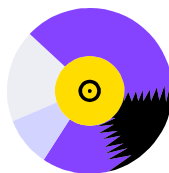
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More Information...

You can find more about the following topics in the *User's Reference Guide*, which is on the *Using Your Printer* CD:

- Paper types; more about loading
- Ink supplies
- Page formatting
- Printer configuration
- Care of your printer
- Accessories
- More about solving problems
- General index; Glossary of terms.

Many of the procedures in the *User's Reference Guide* are animated.



You may also find other information about HP DesignJet printers, associated software and support on the HP web-sites at:

www.hp.com/go/designjet

or

www.designjet-online.com.

See the other side of this *Pocket Guide* for information about troubleshooting problems.

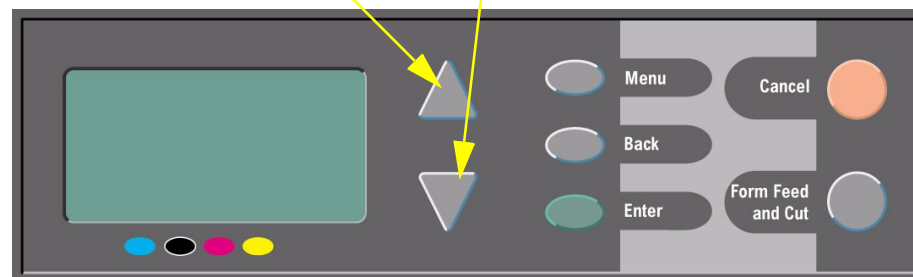
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Hewlett-Packard Company,
Inkjet Commercial Division,
Avda. Graells, 501,
08190 Sant Cugat del Vallès,
Barcelona, Spain

The Front-Panel Display

The panel on the front of your printer is the principal way of changing the printer's behavior, apart from controls provided by the software you use.

Up (Δ) and Down (∇) keys



Display area

Action keys





4 The Front-Panel Display

Display-Area Keys

- **Up** (Δ) and **Down** (∇) let you navigate through the items in a menu list. If there are more options than can be shown on the front panel, a vertical scroll bar appears on the right side of the panel. If further choices can be made for a menu item, the symbol "►" appears to its right. A selected setting is shown by a tick ("√").
- **Menu** takes you to the main screen. It cancels any choices that have not yet been selected by pressing **Enter**.
- **Back** takes you to the previous screen, also cancelling any choices not yet selected with **Enter**.
- **Enter** selects the item in the menu list and makes it current. If there are further

selections to be made, **Enter** takes you to them, shown by the arrows (→) in the table that starts on page 6.

Display-Area Screen: Menu Icons

There are four main front-panel menus, each with a different icon highlighted. You can always reach a main menu by pressing Menu and then scrolling (Δ or ∇).		Paper
		Ink
		Job management
		Set-up

Action Keys


- **Cancel** cancels the current operation (printing or preparing for printing).
- **Form Feed and Cut** causes a sheet to be ejected or the roll to be advanced and cut.

The Front-Panel Display 5

navigate the front panel

Alphabetical List of Front-Panel Menus


On pages 7 through 16 are the printer's front-panel menus, listed **alphabetically**. The key to the list is on the right.


 In the *User's Reference Guide* (on the *Using Your Printer* CD) they are listed according to the structure of the menus.

For examples of how to use the menus, see page 17.

Note: PostScript functions in the HP DesignJet 500PS printer are available through the supplied PostScript driver, and are *not* available from the printer's front panel.

Key to the List of Front-Panel Menus

 There is more in this *Pocket Guide* on the page indicated in **black** or in **red** if it is on the reverse ("The Problem Is...").











 There is more in the *User's Reference Guide*, some sections with animations.









Only available when PostScript or HP-GL/2 is available on the printer (HP DesignJet 500 [with HP-GL/2 Accessory card], 800 and 800PS printers).

Only available when PostScript is available on the printer (HP DesignJet 800PS printer).

Only available when HP-GL/2 is available on the printer (HP DesignJet 500 [with HP-GL/2 Accessory card], 800 and 800PS printers).











6 Alphabetical List of Front-Panel Menus











	→	Advance calibration	
	→	Align printheads	
	→	Altitude	
	→ Page format→ Size→	ANSI sizes	
	→ I/O setup→ Card ID→	Appletalk (depends on card)	
	→ Page format→ Size→	ARCH sizes	
	→ PS settings→ Encoding→	ASCII	
	→ Drying time→	Automatic	

	→ Graphic language→	Automatic [HP DesignJet 800 series printers only]
	→ Page format→ Size→	Automatic
	→ PS settings→ Encoding→	Automatic
	→ Print quality→	Best
	→ Advanced options→	Best quality settings
	→ PS settings→ Encoding→	Binary
	→ Color settings→ Color/Monochrome→	True Black
	→ Front Panel→	Buzzer (on/off)









Alphabetical List of Front-Panel Menus 7









navigate the front panel

	→ Color calibration→	Calibrate now
	→	Color calibration
	→	Calibration (paper advance) 
	→ Graphic Language→	CALS/G4 [HP DesignJet 800 series printers only]
	→ Queue/copies→ # Jobname→	Cancel  (print in progress or waiting) [HP DesignJet 800 series printers only]
	→ I/O setup→	Card ID
	→ I/O setup→	Card setup
	→ Information→	Ink cartridges

	→	Replace Ink cartridges 
	→ Color settings→	CMYK
	→ Color settings→	Color/ Monochrome
	→	Color calibration
	→	Color settings (RGB, CMYK, etc.)
	→ Color settings→ Rendering intent→	Colorimetric
	→ Front Panel→	Contrast
	→ Queue/copies→ # Jobname→	Reprints/ copies  [HP DesignJet 800 series printers only]









8 Alphabetical List of Front-Panel Menus











	→	Cutter (on/off)	
	→	Defects in images (Troubleshooting)	15
	→ HP-GL/2 settings→	Define palette	
	→ Queue/copies→ # Jobname→	Delete (print already printed)	27
	[HP DesignJet 800 series printers only]		
	→ Advanced options→ Best quality settings→	Maximum detail	
	→ Color settings→ CMYK→	DIC	
	→ I/O setup→ Card ID→	DNS name (depends on card)	
	→ Advanced options→ Optimize for→	Drawings/text	

	→	Drying time (none, automatic, manual)	17
	→ PS settings→	Encoding (ASCII, Binary, Automatic)	
	→ Log→	Errors	
	→ Color settings→ CMYK→	Euroscale	
	→ Page format→ Size→	Extra print sizes	
	→ Advance calibration	Restore factory settings	
	→ Print quality→	Fast	
	→ Advanced options→	Fast quality settings [HP DesignJet 800 series printers only]	









Alphabetical List of Front-Panel Menus 9











navigate the front panel

	→ PS settings→ PS Scale→	Fit to page
	→	Front Panel (language, buzzer, contrast)
	→	Graphic language (PS, HP-GL/2, CALS/G4, Automatic) [HP DesignJet 800 series printers only]
	→ Color settings→ Color/Monochrome→	Grayscale
	→	Help
	→ Graphic Language→	HP-GL/2 [HP DesignJet 800 series printers only]
	→	HP-GL/2 settings
	→ I/O setup→ Card ID→	HW address (depends on card)

	→	I/O setup
	→ I/O setup→	I/O timeout
	→	Image quality (Troubleshooting) 
	→ Advanced options→ Optimize for→	Images
	→	Information (ink cartridges, printheads)
	→	Printer Information
	→ Information→	Ink cartridges
		Replace Ink cartridges 










10 Alphabetical List of Front-Panel Menus










		Ink menu
	→ Information→ Ink cartridges→	Ink levels
	→ Page format→ Size→	Inked area
	→ I/O setup→ Card ID→	IP address (depends on card)
	→ Page format→ Size→	ISO sizes
	→ Page format→ Size→	JIS sizes
		Job management
	Queue/copies→	Job name (and number of copies) [printers with formatter card only]

	→	Graphic Language [HP DesignJet 800 series printers only]
	→ Front Panel→	Language (national)
	→	Load roll  56
	→	Load sheet  45
	→	Log (printheads, errors)
	→ Drying time→	Manual  17
	→	Select paper (Media) type










Alphabetical List of Front-Panel Menus 11










navigate the front panel

	→ HP-GL/2 settings→	Merge (on/off)	
	→ Page format→	Mirroring	
	→ Color settings→	Color/ Monochrome	
	→ Queue/copies→ # Jobname→ [HP DesignJet 800 series printers only]	Move print to top	
	→ Color settings→ CMYK→	Native CMYK	
	→ Color settings→ RGB→	Native RGB	
	→ Nest settings→ [HP DesignJet 800 series only]	Nest (on/off)	

	→ Nest settings→	Nest wait time	
	[HP DesignJet 800 series printers only]		
	→ Print quality→	Normal	
	→ Advanced options→	Optimize for (drawings/text/images)	
	→ Page format→ Size→	Oversize prints	
	→	Page format	
	→ HP-GL/2 settings→	Palette (define, select)	
		Paper (load, type)	
	→ Page format→	Paper size	










12 Alphabetical List of Front-Panel Menus














	→	Select paper type
	→ Advance calibration→	Pattern (create, measure) 
	→ HP-GL/2 settings→ Define palette→...	Pen width, color
	→ Color settings→ Rendering intent→	Perceptual
	→ Graphic Language→	PostScript [HP DesignJet 800PS printers only]
	→ Queue/copies→ # Jobname→	Print cancel 
	→ Page format→	Print (paper) size

	→	Print quality (best, normal, draft; also Set-Up→Advanced Options)
	→	Print quality (poor) (Troubleshooting) 
	→ Page format→ Size→	Printed area – see Inked area
	→	Printer information
	→ Information→	Printheads
	→	Printheads (align, replace) 
	→ PS settings→ (PostScript)	PS scale









Alphabetical List of Front-Panel Menus 13










navigate the front panel

	→	Print Quality (best, normal, draft)	
	→	Quality of images (Troubleshooting)	 15
	→	Queue (on/off) [HP DesignJet 800 series printers only]	 25
	→	Queue/ copies [HP DesignJet 800 series printers only]	 25
	→ Advanced options→ Fast quality settings→	Reduced speed [HP DesignJet 800 series printers only]	
	→ Color settings→	Rendering intent	

	→	Replace ink cartridges	 36 
	→	Replace printheads	 36 
	→ Queue/copies→ # Jobname→	Reprints/ copies	 28
	→ I/O setup→ Card setup→ Advanced→	Reset card	
	→ Color settings→	RGB	
	→	Roll (load, unload)	 56 

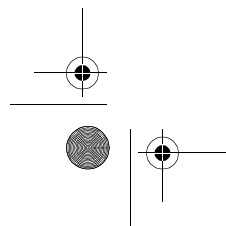
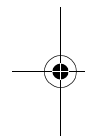
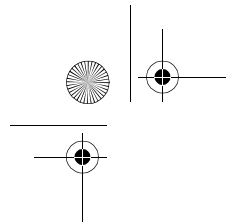
14 Alphabetical List of Front-Panel Menus







	→ Page format→	Rotate (0°, 90°, 180°, 270°)
	→ Color settings→ Rendering intent→	Saturation
	→ PS settings→ (PostScript)	PS Scale
	→	Select paper type
	→	Sheet (load, unload) 
	→ Page format→	Size (of paper)
	→ Page format→ Size→	Software (Automatic)

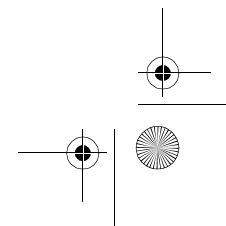
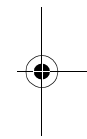
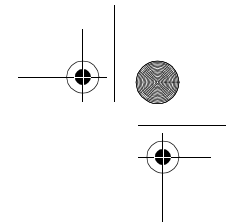
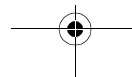
	→ Advanced options→ Fast quality settings→Reduced speed [HP DesignJet 800 series printers only]
	→ Color settings→ RGB→ sRGB
	→ Color settings→ CMYK→ SWOP
	→ Advanced options→ Optimize for→ Drawings/ Text
	→ I/O setup→ I/O Timeout
	→ Color settings→ CMYK→ TOYO
	→ Troubleshooting (image quality) 
	→ Select paper type

Alphabetical List of Front-Panel Menus 15

navigate the front panel



	→	Unload roll	
	→	Unload sheet	
	→ Nest settings→	Wait time	



16 Alphabetical List of Front-Panel Menus

Examples of How to Use the Front Panel

The keys you should press on the front panel are highlighted here in yellow.


Setting the Ink-Drying Time to Two Minutes


- 1 From the table on page 9, the menu structure is shown as:

 → **Drying time**

- 2 Starting from the main **Paper** menu, press the **Down** key (▽) once...

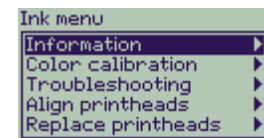


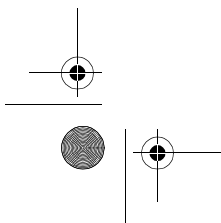
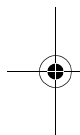
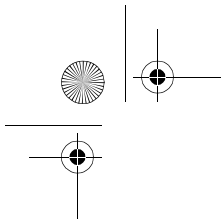
...until the **Ink** menu () is highlighted

() ; then press the **Enter** key...



...to enter the **Ink** menu:





The scroll bar at the right indicates that the list of available options is longer than can be displayed at a time.

- 3 Press the **Down** key (▽) several times until **Drying time** is highlighted.



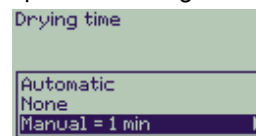
The number of times you have to press the **Down** key depends on:

- which model of printer—HP DesignJet 500 or 800 series,
- whether you have an accessory card installed on an HP DesignJet 500 series printer,
- which options were recently used.

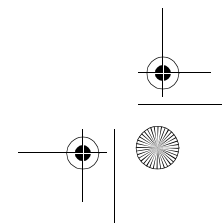
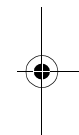
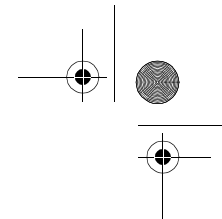
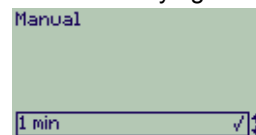
18 Examples of How to Use the Front Panel

- 4 Then press **Enter**.

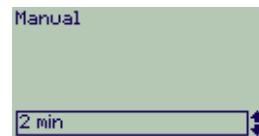
- 5 Press **Down** (▽) twice to highlight **Manual**, and then press **Enter** again...



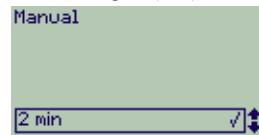
...to select **Manual** drying time:



- 6 Press the **Up** key (Δ) to change the drying time selection from **1 to 2 minutes**. Then press **Enter** to set the two-minute drying time.



If the front-panel Buzzer is set On, there will be a short 'beep' to confirm the change. The value will be confirmed by a tick mark at the right ("✓").



- 7 Finally, press the **Menu** key to return to the main menu.





navigate the front panel

Printing Three Additional Copies of a Job that has Already been Printed

This applies to HP DesignJet 800 and 800PS printers only; see page 22 for the HP DesignJet 500 Series with an Accessory card.

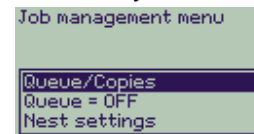
- 1 From the table on page 8, the menu structure is shown as:

 → **Queue/Copies**

- 2 Starting from the main **Paper** menu, press the **Down** key (▽) twice until **Job management** () is highlighted () and then press **Enter** to enter the **Job management** menu.



Ensure that the highlighting is on **Queue/copies**, by pressing the **Up** (Δ) or **Down** key (▽) if necessary.



- 3 Press **Enter** to enter the **Queue/copies** menu.



You will see a list of jobs that are in the print queue. Jobs that have already been printed have negative numbers; jobs that

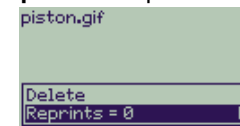
are waiting to be printed have positive numbers.

Suppose the list of jobs are as shown in the diagram. The job that is currently being printed is number 0, whose job name is "Job #7".

- 4 Suppose that the job you want to print again is number -2, "piston.gif". Press **Up** (Δ) or **Down** (∇) sufficient times to highlight it; and then press **Enter** to select this job.



- 5 The options available for the job are listed; select **Reprints** and press **Enter** again.



- 6 Press the **Up** key (Δ) to select **three** reprints, and then press **Enter** to set the number of reprints to 3;



the earlier screen is shown, with available options.

The reprint is automatically moved to the front of the queue.

Examples of How to Use the Front Panel 21

navigate the front panel

- 7 Finally, press the **Menu** key to return to the top-level menu.



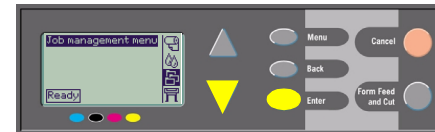
See page 25 for more about **Queueing** and **Nesting** prints.

You can navigate to any of the settings in the table that starts on page 6 in a similar way.

Reprints with the HP DesignJet 500 Series Printers

You must have an accessory card installed in an HP DesignJet 500 Series printer to obtain extra copies; proceed as follows:

- 1 With **Job management** highlighted (⏏), press **Enter**.



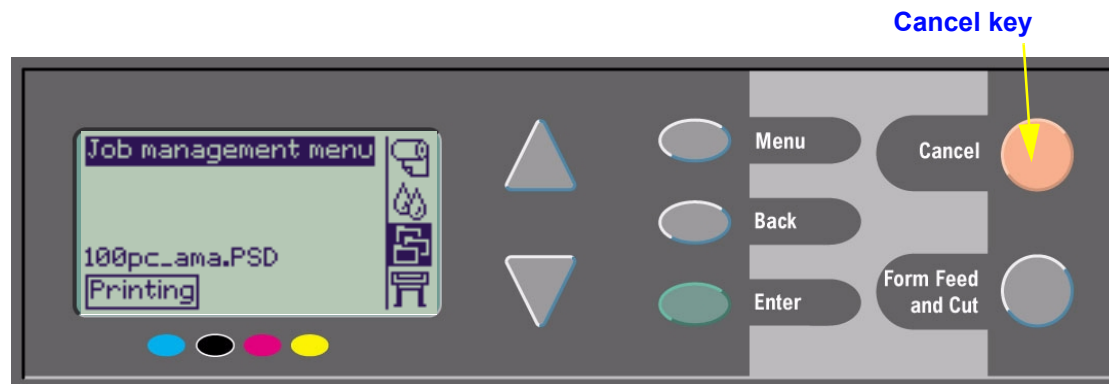
- 2 You will either see the message **Queue is empty**, or the name of your job. In the latter case, press **Enter** to see the options available (including **Reprints**), and continue as in Step 5 on page 21.

22 Examples of How to Use the Front Panel

Cancelling a Page that is Being Printed

- 1 Press the **Cancel** key on the front panel.
The printer advances the paper as though the print were finished.

A multi-page job or a big file may take longer to stop printing than other files.



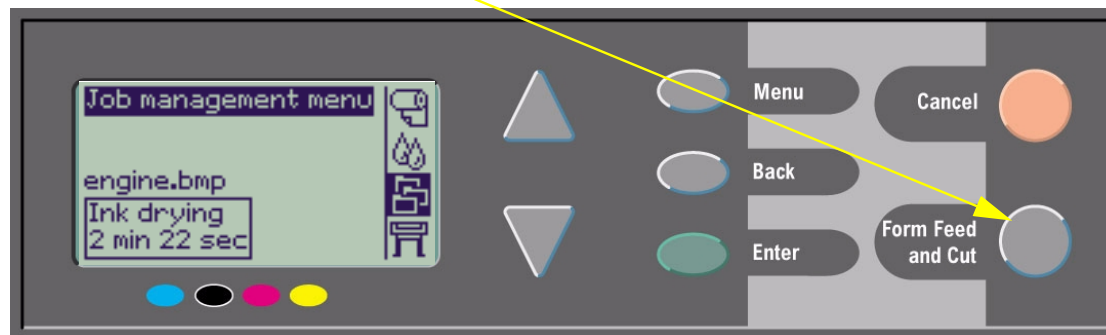
Cancelling a Page that is Being Printed 23

manage prints

Cancelling the Drying Time for a Printed Page

Use caution when performing this procedure as an image which has had insufficient time to dry could get damaged.

- 1 Press the **Form Feed and Cut** key on the front panel.
- 2 The printer will release the paper and it will fall into the paper bin.



24 Cancelling the Drying Time for a Printed Page

Managing Pages that have Not Yet been Printed

Queueing and nesting are only available on the HP DesignJet 800 Series. (On the 500 Series, you can obtain reprints if an accessory card is installed; see page 22).

Change the **Queueing** setting by selecting **Queue On** or **Off** from the **Job Management** (🖨️) menu.

To change the **Nesting** setting, see page 30, *Turning Nesting On and Off*.

If the printer is turned off with unprinted files in the queue, the files are lost and must be resent.

With Queueing Turned ON

When Queueing is On and the printer receives print files, the files are stored in the queue in the

order they are received. If Nesting is Off, the files are printed as soon as possible, in the order they are received. If Nesting is On, files are printed when the time-out period expires or there are enough files to fill a page width. You can reprint files which have already been printed. See also page 29, *Avoiding Paper Waste by Nesting Pages*.

- You can send pages to the printer without waiting for the current page to finish printing.
- Pages are stored in the queue in the order they are received.
- You can manipulate the pages in the queue, for example prioritizing them and reprinting them.
- You can use nesting, the printer's paper-

- saving feature (see page 29).
- While one page is printing, the printer will accept and start processing the next file.

With Queueing Turned OFF

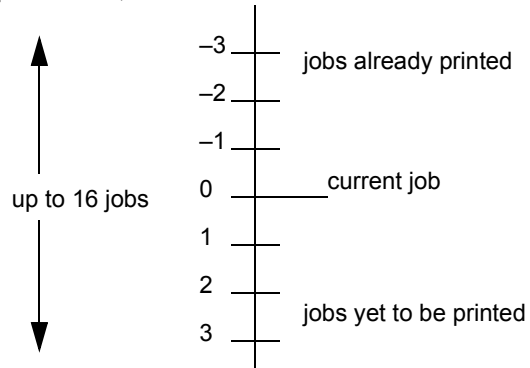
If Queueing is Off and the printer receives files, they are printed as they are received, and are not stored in the queue. Nesting settings have no effect.

- Files are printed as they are received, and are not stored in the queue.
- The printer will not accept another file sent from the computer until the current page has finished printing and the printer is ready.
- You cannot use nesting.

If you turn queueing off while pages are still in the queue, they will be printed and (if nesting is on) nested, until the queue is empty.

Position in Queue

The job currently being printed is in position 0. The next job to be printed is in position 1, the one after in position 2, and so on. The previous job printed is in position -1, the one before that in position -2, and so on.



26 Managing Pages that have Not Yet been Printed

Prioritizing a Job in the Queue ("Move to Front")

To make any job in the queue the next one to be printed, select it and choose **Move to front**.

If nesting is turned on (see page 29, *Avoiding Paper Waste by Nesting Pages*) the prioritized job may still be nested with others. If you really want this job to be printed next and on its own on the roll, then first turn **Nesting Off** and then use **Move to front** to move it to the top of the queue.

Deleting a Job from the Queue

Under normal circumstances, there is no need to delete a job from the queue after printing it, as it will just "fall off the end" of the queue as more files are sent. However, if you have sent a file in error and want to avoid any chance of it being reprinted, you can delete it by selecting it and choosing **Cancel**.

To remove a job that has not yet been printed, simply identify it by its position in the queue (see page 26, *Position in Queue*) and delete it, by choosing **Cancel** and pressing the **Enter** key.

If the job is currently being printed (its queue position is 0), and you want both to cancel the job and to delete it from the queue, first press the **Cancel** key and then cancel it from the queue.


manage prints

Making Copies of a Job in the Queue

Has the job already been printed?	What to do
Yes	Use Reprints (see right)
No	Use Copies (see right)

In all cases, the job must still be in the queue.

Copies and Reprints

Having selected the job and chosen **Copies** or **Reprints** (from the **Job Management** () menu), use the scrolling keys to specify the number of copies required, and press **Enter**. The number you enter is the actual number of pages to be printed; for example, choosing 2 for a page not yet printed means you will get the one original and one additional; choosing 2 for a page already printed once will result in a total of three (the original one and two more). The maximum number you can specify is 99.

- The setting you specify in this option overrides any value set by your software.
- If **Rotate** was on when you sent the file, every copy will be rotated also.

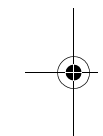
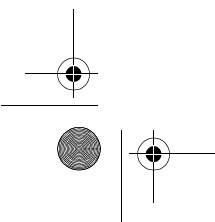


Avoiding Paper Waste by Nesting Pages

Nesting can only be used with roll paper.

Nesting means placing pages side-by-side on the paper (rather than one after the other), to avoid wasting paper.

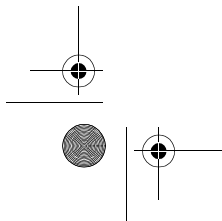
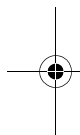
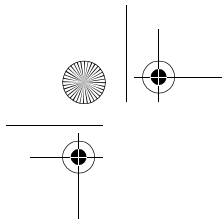
The Printer Tries to Nest Pages When...

- The printer is loaded with roll paper rather than sheet paper; and
 - In the front-panel menus, Queue is On (the default). See page 25, *Managing Pages that have Not Yet been Printed*; and
 - In the front-panel menus, Nest is On (that is, set to a value from 1 to 99 minutes). See page 30, *Turning Nesting On and Off*.
- 
- 

To be in the Same Nest, Pages Must Satisfy All the Following Conditions...

- All must be **Color** or all **Grayscale**. Grayscale may include a color page rendered in grayscale.
- All must be at the same dots-per-inch setting.
- All have the same print quality setting (**Best**, **Normal**, **Draft**).
- All have the same **Margin** sizes.
- All must be **HP-GL/2** prints or all **PostScript**.
- All must have the same **Page accuracy**.

Nesting does not cause any automatic rotation of pages.

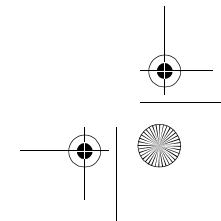
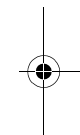
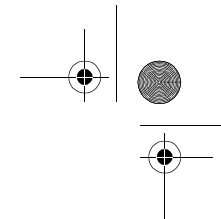


Turning Nesting On and Off

Nest Setting Selected	Printer's Response
Off	The printer will not nest pages.
99, ... 2, 1 The number represents the number of minutes that the printer waits, after receiving a file, before it starts printing.	Choose one of these values if you want to use the least amount of paper. The printer will search all through the queue for suitable pages. It will nest the pages according to an algorithm that, for most combinations of page sizes, saves the most paper. The resulting nesting pattern may still vary, depending on the size of the first page.

Which Pages cannot be Rotated?

Apart from obvious physical limitations on the roll, any **HP-GL/2** page containing *raster data* will not be rotated.



Ink Cartridges and Printheads

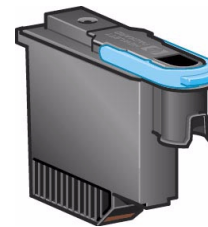
The **ink cartridges** are the reservoirs that contain the four colored inks that are used for printing. They are located under the cover on the right side of the printer, towards the back (see next page).

An Ink Cartridge



The **printheads** are the components that place minute droplets of ink onto the paper. They are located under the main window at the top of the printer.

A Printhead



Note: Setup printheads are special nonprinting components required only before installing the printer.

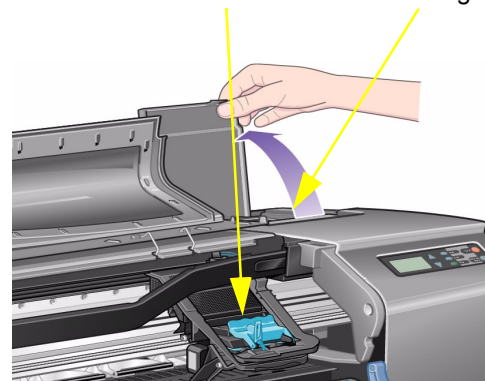
Ink Cartridges: Your printer uses **HP No. 10** Black and **HP No. 82** Cyan, Magenta and Yellow
Printheads: Your printer uses **HP No. 11** Black, Cyan, Magenta and Yellow

Ink Cartridges and Printheads 31

replace ink cartridges and printheads

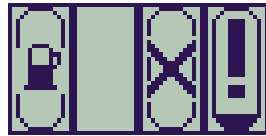
The frequency with which you need to change ink cartridges depends on the workload of your HP DesignJet printer. Printheads should not need replacing so often, only when problems of image quality occur. If you find problems with the image quality, follow the procedure on page 16 in *The Problem Is...Image Quality* in this *Pocket Guide*.

Location of Printheads and Ink Cartridges



Replacing Ink Cartridges

If the printer detects that an ink cartridge needs replacing, you will see a message with four icons (explained below), referring from left to right to the Cyan (●), Black (●), Magenta (●) and Yellow (●) cartridges.



The icons may be any of the following:



The cartridge is **OK**; the approximate level of the ink is indicated—a full cartridge has the whole interior black;



Flashing; the cartridge is **missing**, and the correct one must be inserted as indicated in subsequent steps;



Flashing exclamation mark; the cartridge is **low on ink**, and needs replacing at the earliest opportunity; the ink level may show up to $\frac{1}{8}$ full, and for some CAD drawings this can be adequate for an appreciable time;

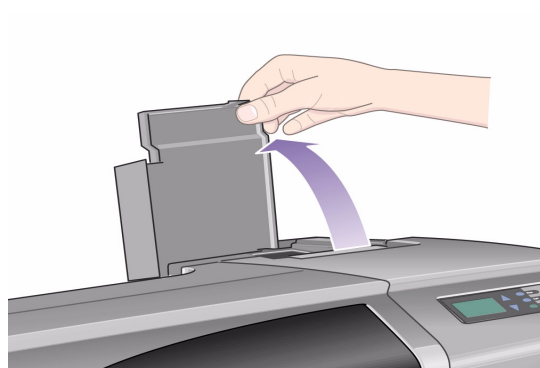


Flashing pump; the cartridge is **out of ink**, and must be replaced before any further printing can be done;

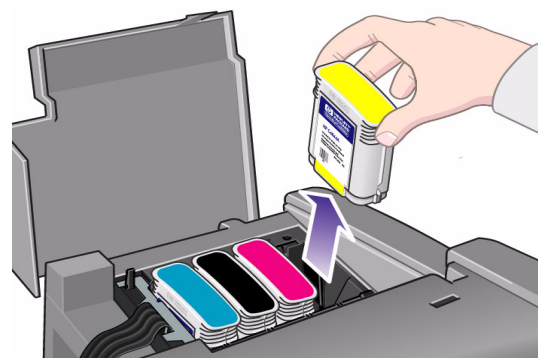


Flashing cross; the **wrong** cartridge is installed, and must be replaced before any further printing can be done.

1 To replace a cartridge*, first open the ink cartridge cover.



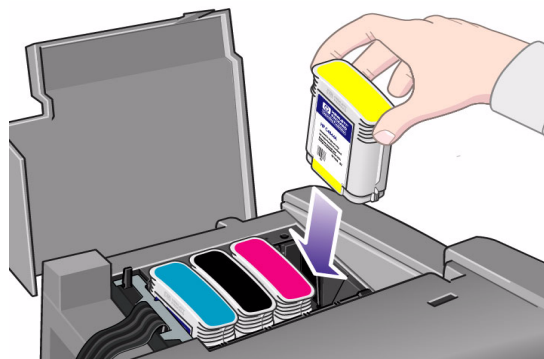
2 Then remove the ink cartridge.



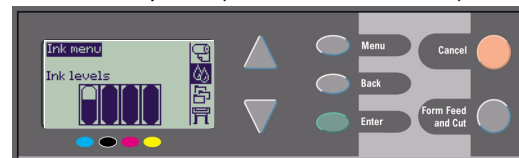
* *Don't* replace cartridges during printing.

34 Replacing Ink Cartridges

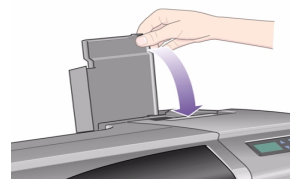
- 3 Insert the ink cartridge into its correct position, pushing it down until it clicks into place. Colored labels on the ink cartridges must correspond with the same colored labels on the printer. Arrows on the cartridges point towards the front of the printer.



- 4 When all cartridges have been successfully installed the icons will stop flashing; press **Enter** on the front panel (or await the time-out).



- 5 Finally close the ink cartridge cover. You will see the front-panel message "HP ink cartridges successfully installed"



Replacing Ink Cartridges 35

replace ink cartridges and printheads

Replacing Printheads

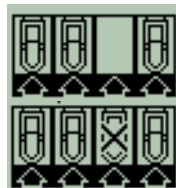
If there is an error with one or more printheads, the printhead status is shown by four icons, referring from left to right to the Cyan (●), Black (●), Magenta (●) and Yellow (●) printheads.

In this example, three of the printheads are OK but the magenta one is missing (the icon flashes).

In the second example, the magenta printhead is faulty (the cross flashes).

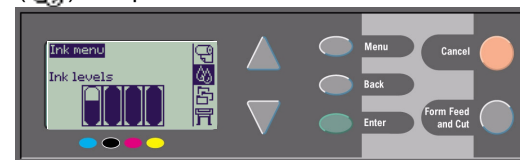
If you identified a printhead as being faulty during the **Troubleshooting** routine (see page 16 on the reverse of this *Pocket Guide*), the icon shows a flashing exclamation mark.

If the printer is unable to determine which of several printheads are faulty, the front panel shows three or four flashing question marks.

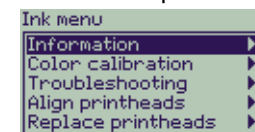


Printhead Status

- 1 To determine the status of the printheads, from the main front-panel menu, select **Ink System** (🖨️) and press **Enter**.



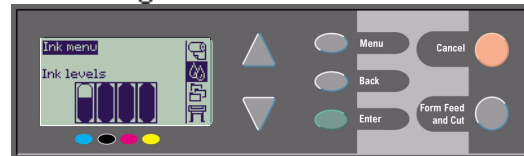
- 2 Select **Information** and press **Enter**.



- 3 Select **Printheads** and press **Enter**. You can then call up the information about any of the printheads by selecting it and pressing **Enter**.

Follow these Steps to Replace Printheads

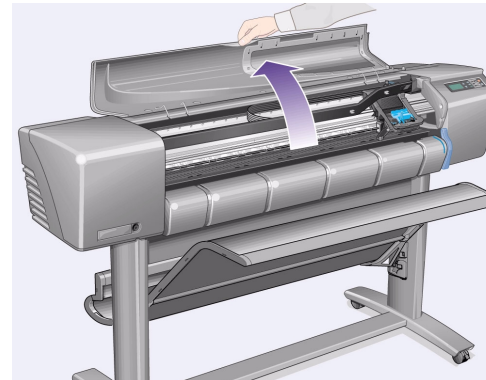
- 1 From the main front-panel menu, select **Ink System** (🔧) and press **Enter**.



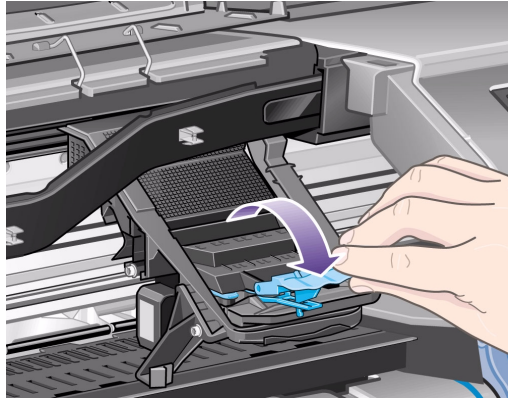
- 2 Select **Replace Printheads** and press **Enter**.



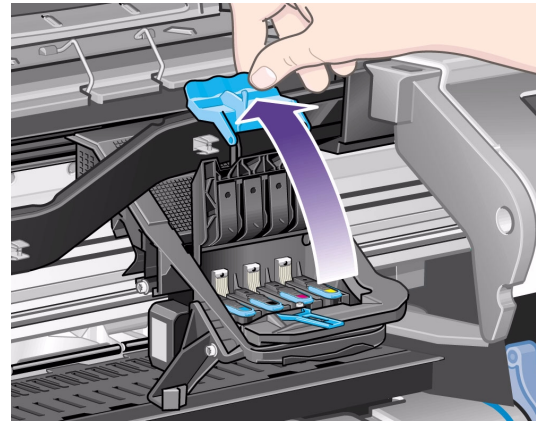
- 3 Wait for the front panel to display "Open window to replace printheads". Then open the window and locate the carriage assembly.



- 4 Release the latch on the printhead cover. You may need to hold this latch up out of the way during the next steps.

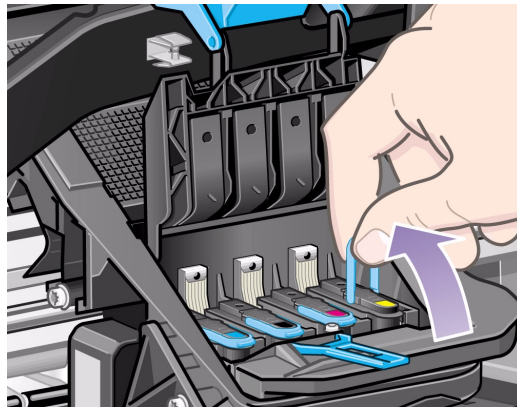


- 5 Lift up the printhead cover; this will give you access to the printheads.

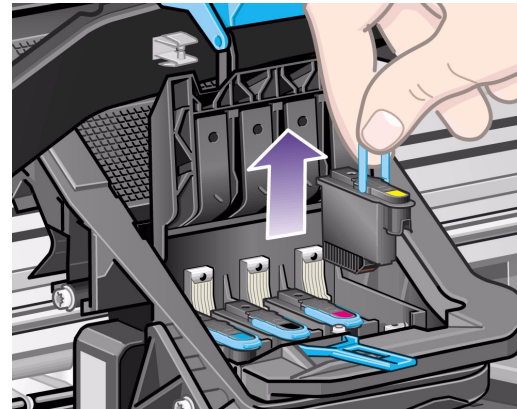


38 Replacing Printheads

- 6 To remove a printhead, lift up the blue handle.



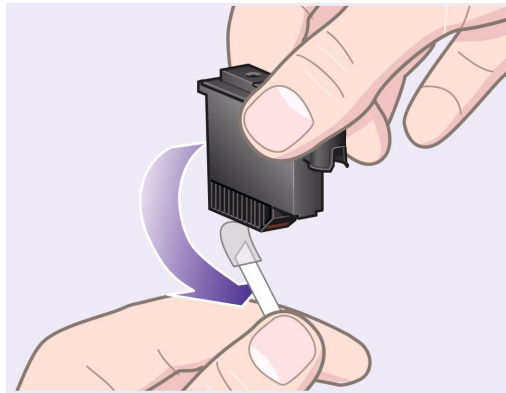
- 7 With controlled force, pull the blue handle upwards until the printhead is released from the carriage assembly.



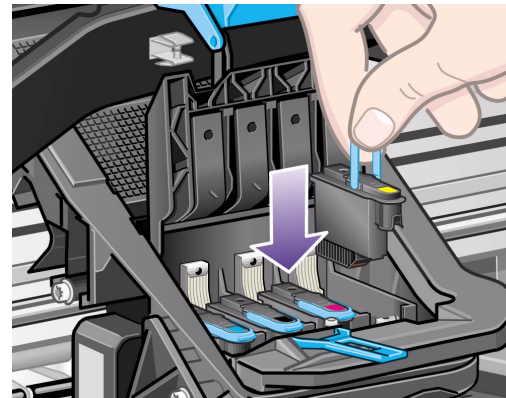
Replacing Printheads 39

replace ink cartridges and printheads

- 8 Remove the tape from the new printheads.

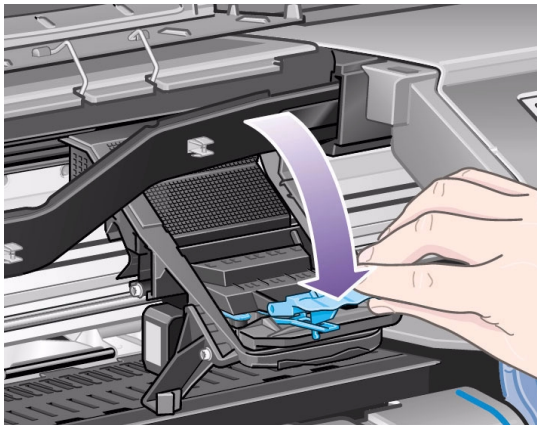


- 9 Insert a new printhead, ensuring that the colored label on the printhead corresponds to that on the printhead slot.

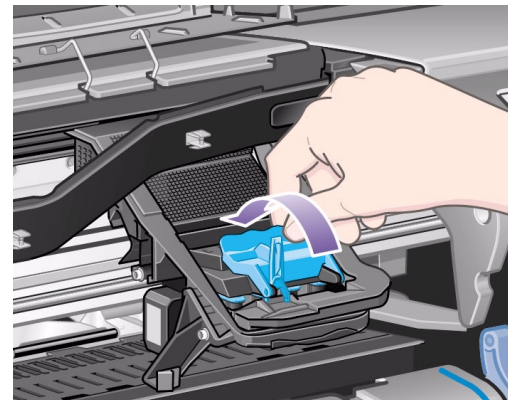


40 Replacing Printheads

- 10** When you have replaced all printheads that need replacing, pull the printhead cover down over the printheads.



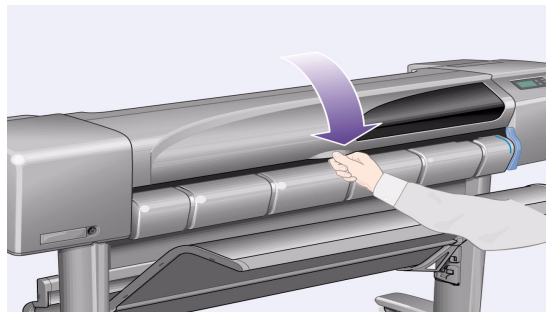
- 11** Close the latch on the printhead cover by catching the hook over the latch and moving the handle towards the back.



Replacing Printheads 41

replace ink cartridges and printheads


12 Finally close the window.

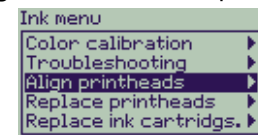


After the replacement of the printheads, the printer checks that they are all functioning correctly; this may take several minutes.. You will see the front-panel message “HP No. 11 printheads successfully installed”. Then the printhead alignment procedure starts, see the next section.

Aligning Printheads

The printhead alignment procedure requires paper to be loaded, and will take several minutes to perform. You can start the procedure yourself, for example, after clearing a paper jam, as follows:

- 1** From the main front-panel menu, select **Ink System** () and press **Enter**.
- 2** Select **Align Printheads** and press **Enter**.



- 3** Choose either **Standard** (which will take about 4½ minutes, and which is recommended for normal use) or **Special** (which takes about

42 Replacing Printheads

11 minutes and can correct problems that occur with alignment across the width of the paper); press **Enter**.



Standard alignment requires paper of at least A4/ Letter-size, loaded in landscape mode.

Special alignment requires paper of at least A3/ B-size, loaded in landscape mode. Two separate prints are made.

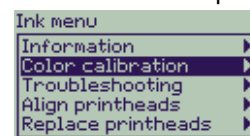
Not all paper types are supported for alignment; the printer will tell you if you load the wrong type. Among those supported are: Bright White Inkjet Paper, Coated Paper, Heavy Coated Paper and Plain paper.

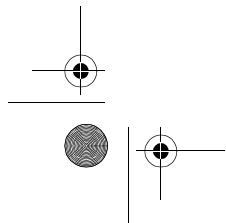
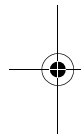
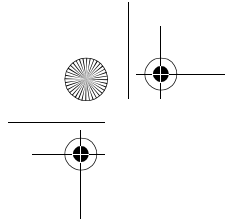
Color Calibration

Color calibration is the process of matching the ink with the paper. When new printheads have been installed, we recommend you use the **Color Calibration** routine to ensure that the quality of your images is optimized.

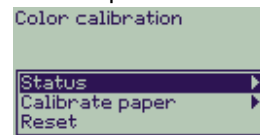
You can discover what paper the ink system is currently calibrated for, as follows:

- 1 From the main front-panel menu, select **Ink System** (💧) and press **Enter**.
- 2 Select **Color calibration** and press **Enter**.

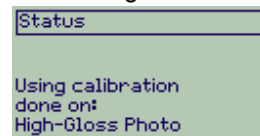




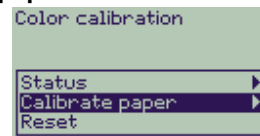
- 3 Choose **Status** and press **Enter**.



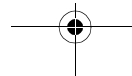
You will see something like the following:



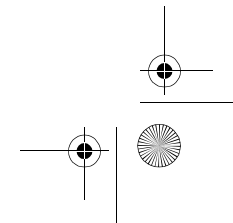
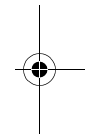
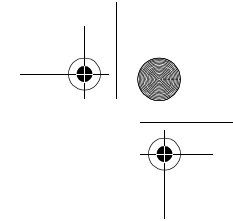
- 4 If the paper loaded is not as shown, choose **Calibrate paper**.



44 Replacing Printheads

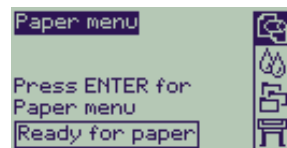


- 5 The printer will print and use a small calibration pattern to ensure an optimal match between the paper and the ink.

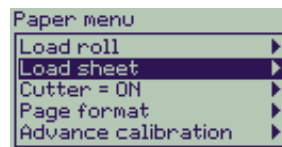


Loading a Sheet of Paper

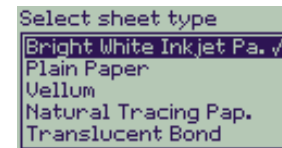
- 1 Using the **Menu** and the Δ or ∇ keys, select the **Paper** menu; the following message will appear:



- 2 Press **Enter**. The following prompt will appear:

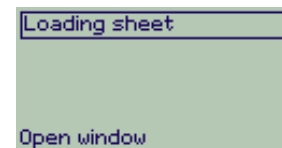


- 3 Use the Δ or ∇ key to select **Load sheet** and press the **Enter** key. The following message will appear, with a list of paper types:



- 4 Select the type of paper you are loading (using the Δ and ∇ keys) and press **Enter**. The default selection is whatever you used last time.

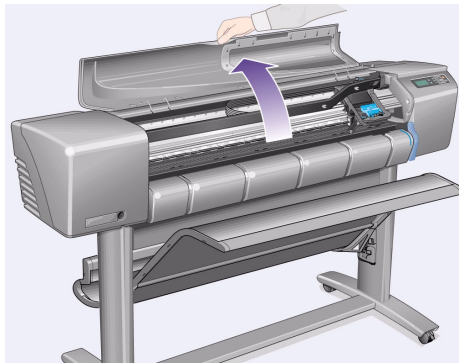
- 5 The front panel displays:



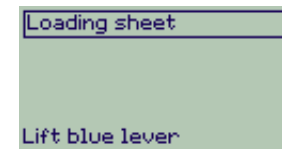
Loading a Sheet of Paper 45

load a sheet of paper

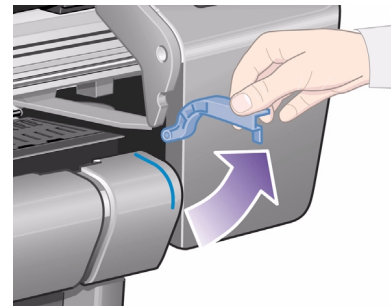
Open the window; the vacuum—which will hold the paper in place—comes on.



6 The front panel displays:

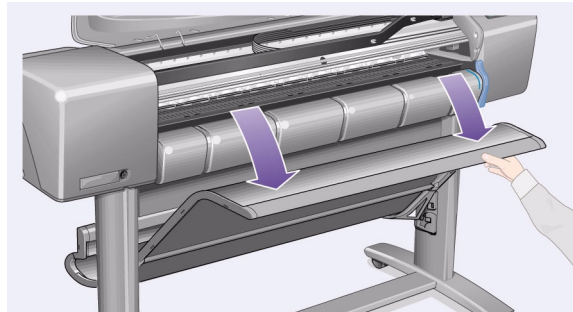


Lift the blue lever up to lift the rollers.



46 Loading a Sheet of Paper

- 7 If you are using large sheets of paper, make sure that the bin is in its unfolded position by pulling it out if necessary, so that the sheet can rest inside it.



- 8 The front panel displays:

Loading sheet

1. Place sheet on platen
2. Align paper with blue lines
3. Lower blue lever

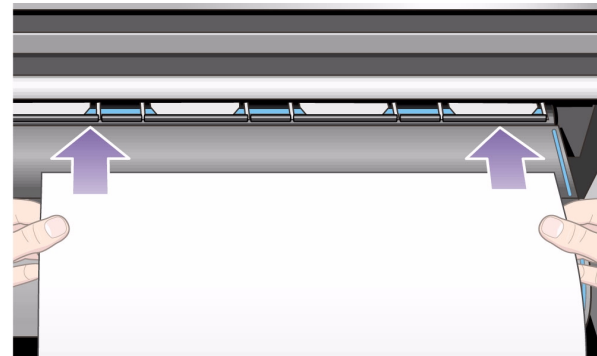
Loading a Sheet of Paper 47

load a sheet of paper

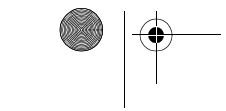
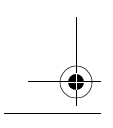
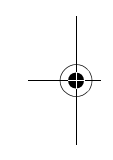
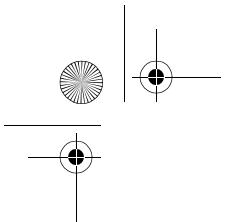
Hold the paper as shown in the following diagram;
load the sheet of paper by performing these steps.



8a Place the sheet of paper onto the platen. Make sure
it is perfectly flat and the front edge of the paper is
straight. Air suction holds the paper onto the printer
throughout the next few steps.



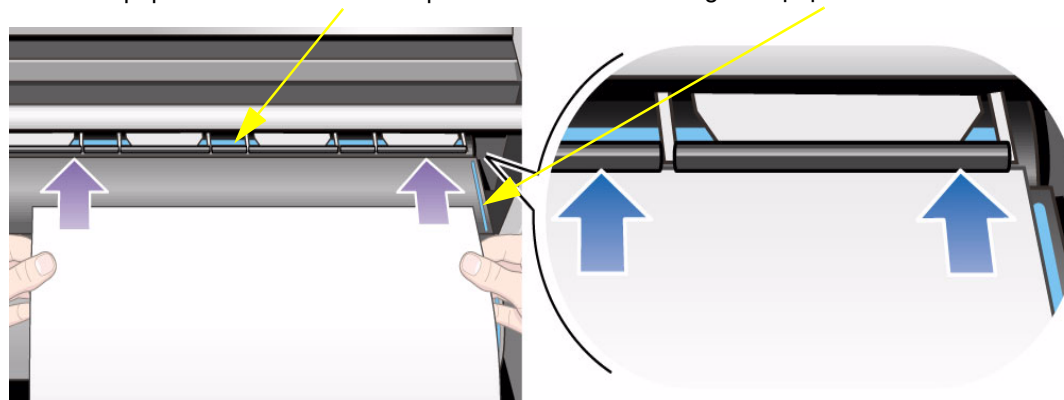
48 Loading a Sheet of Paper



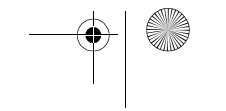
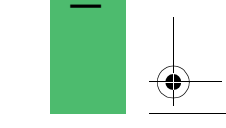
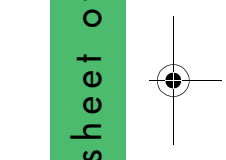
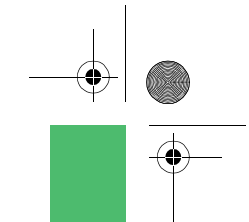
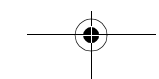
8b Follow the instructions in the diagram below to load the paper.

Push the paper under these rollers up to the blue line

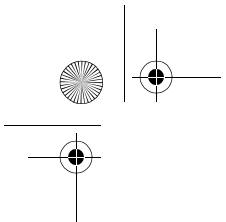
Align the paper with this blue line



Loading a Sheet of Paper 49



load a sheet of paper



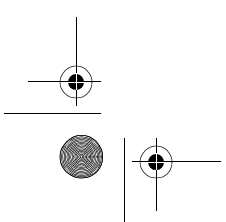
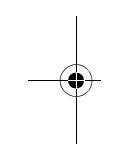
8c Lower the blue lever.

9 The front panel displays:

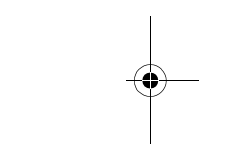
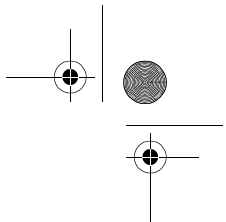
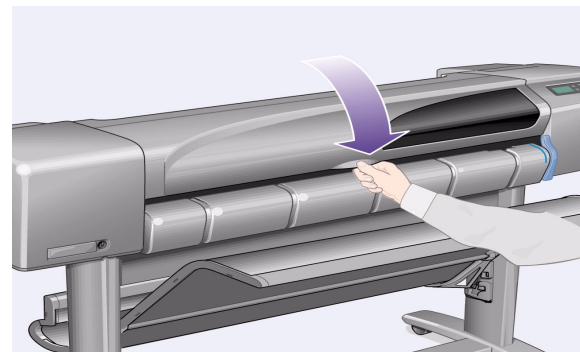
Loading sheet
Feeding sheet.
Please wait

10 The front panel displays:

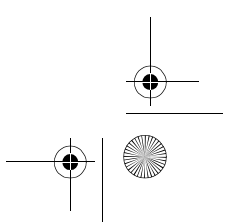
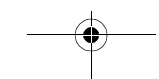
Loading sheet
Close window



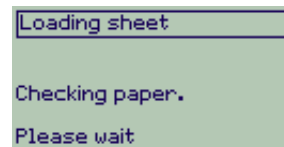
Close the window.



50 Loading a Sheet of Paper



11 The front panel displays:



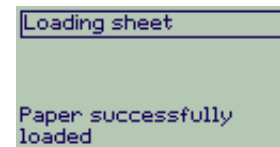
The printer now:

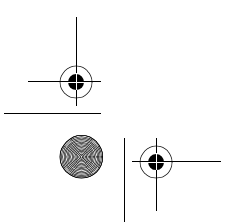
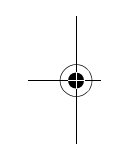
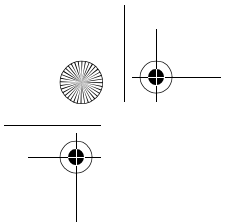
- loads the sheet
- checks the alignment of the paper.

If the sheet is correctly aligned, the printer accepts the single sheet and gives a “beep”.

If it is not correctly aligned, the sheet is ejected; the front panel displays help instructions.

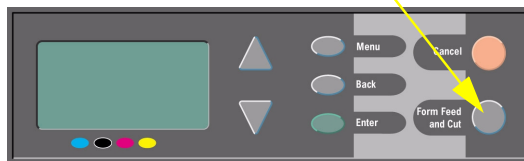
12 When the front panel displays the following, the printer is ready to print. If the print is large, open the paper bin.



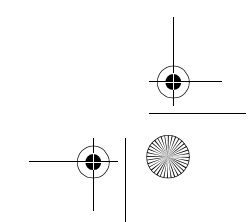
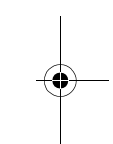
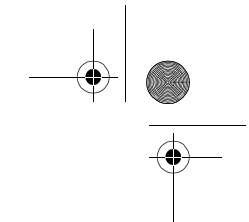
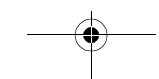


Unloading a Sheet of Paper

To unload a sheet, press the **Form Feed and Cut** key on the front panel.

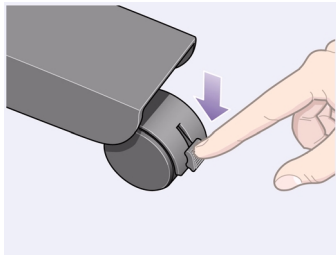


Use caution when performing this procedure as an image which has had insufficient time to dry could get damaged.

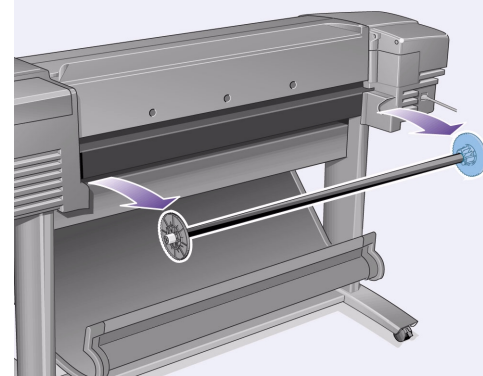


Installing a New Roll on the Printer

- 1 If your printer has legs, make sure the printer wheels are locked (the brake lever is pressed down) to prevent the printer from moving.



- 2 At the back of the printer, remove the empty spindle by pulling firmly on each end as indicated below.



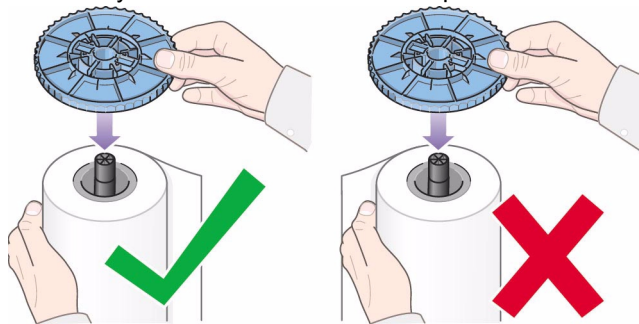
The spindle has a stop at each end to keep the roll in position. The stop that is colored blue can be removed to mount a new roll; it slides along the spindle to hold rolls of different widths.

Installing a New Roll on the Printer 53

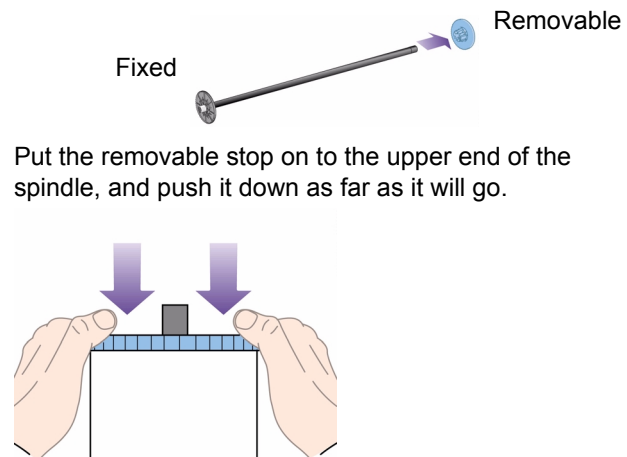
load a roll of paper

3 Remove the blue colored stop from the end of the spindle, and stand the spindle vertically, with the fixed stop on the floor (see right).

4 Slide the new roll of paper on to the spindle. Make sure the orientation of the paper is loaded exactly as shown. If it is not, remove the roll, turn it through 180 degrees vertically and slide it back on to the spindle.

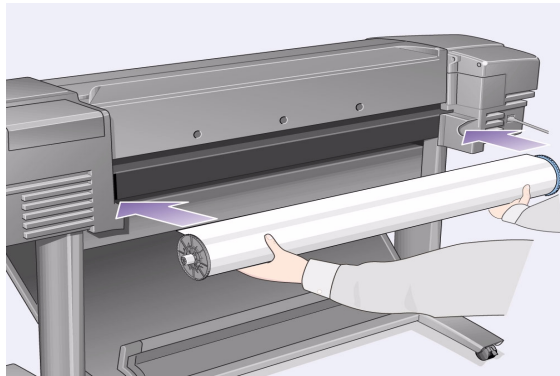


5 Put the removable stop on to the upper end of the spindle, and push it down as far as it will go.



54 Installing a New Roll on the Printer

- 6 With the blue colored roll stop on the right (as seen from the back of the printer), slide the spindle into the printer left and then right, as shown by the arrows. The paper should be oriented on the roll exactly as shown below.

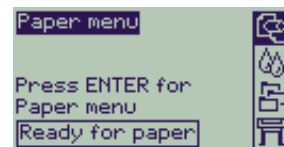


Installing a New Roll on the Printer 55

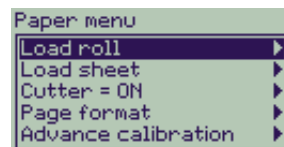
load a roll of paper

Loading a Roll of Paper

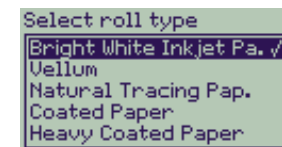
- 1 Using the **Menu** and the Δ or ∇ keys, select the **Paper** menu; the following message will appear:



- 2 Press **Enter**. The following message will appear:

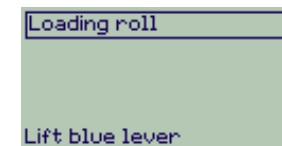


- 3 Select **Roll load** and press **Enter**. The following message will appear, with a list of paper types. The default selection is whatever you used last time.

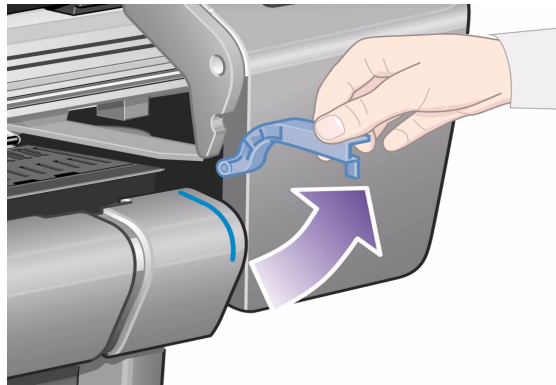


- 4 Select the type of paper (using the Δ and ∇ keys) and press **Enter**.

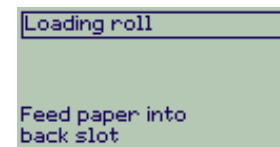
- 5 The front panel displays:



Lift the blue paper-load lever.



6 The front panel displays:

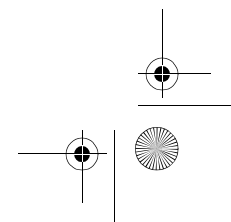
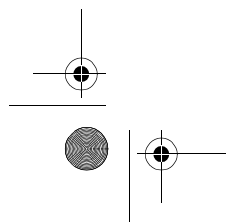
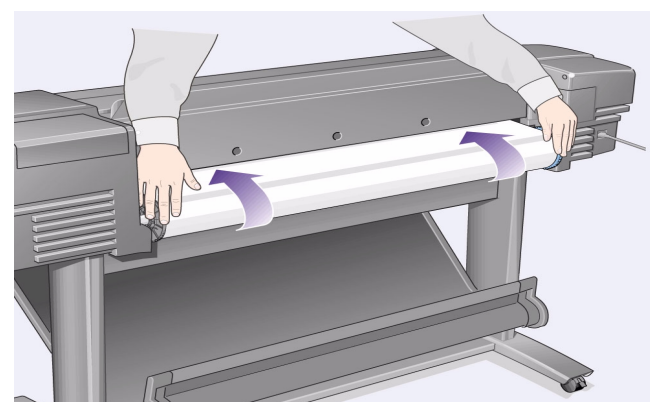
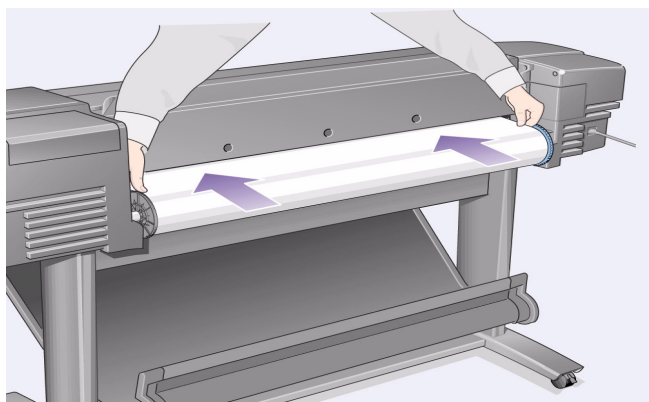
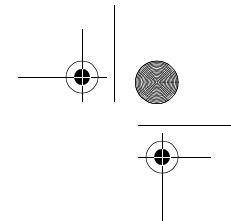
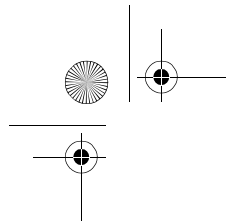


From the front of the printer, lean over the top and feed the paper towards you into the slot at the back of the printer, as shown on the next page. (You may find it easier if the media bin is pushed back out of the way.)

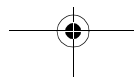
Try to avoid touching the paper in the middle (keep your fingers as close as possible to each edge). Handle film and glossy paper by the edges or wear cotton gloves. Skin oils can interact with the ink and cause it to smear.

Loading a Roll of Paper 57

load a roll of paper



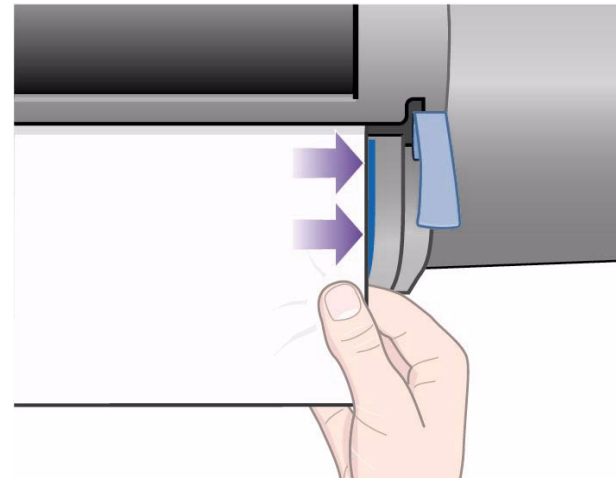
58 Loading a Roll of Paper



7 The front panel displays:

Loading roll
1. Feed paper through to
front of printer
2. Align paper with
blue line
3. Lower blue lever

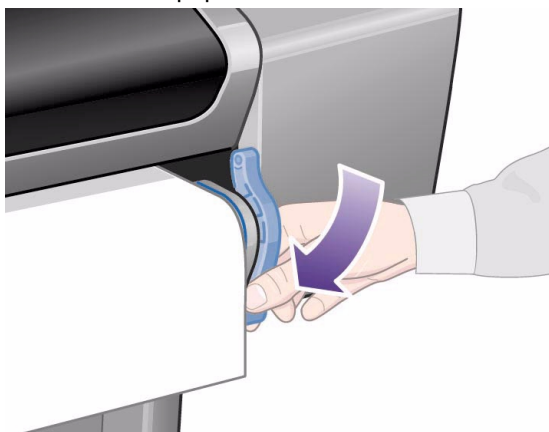
At the front of the printer, align the paper against the blue line as shown here:



Loading a Roll of Paper 59

load a roll of paper

Lower the blue paper-load lever.



8 The front panel displays:

Loading roll
Checking paper.
Please wait

The printer checks the alignment of the paper.
If it is not correctly aligned, the front panel displays help instructions.

9 The printer trims the edge of the roll...

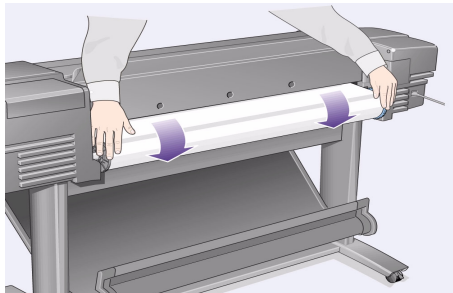
Loading roll
Trimming roll edge.
Please wait

60 Loading a Roll of Paper

10 ...and then displays:

Loading roll
Wind any excess paper
onto roll at the
back of the printer.
Press ENTER to continue

If there is an excess of loose paper, wrap it back onto the roll by turning the roll; then press **Enter**.



11 When the front panel displays the following, the printer is ready to print. If the print is large, open the paper bin.

Loading roll
Paper successfully
loaded

Loading a Roll of Paper 61

load a roll of paper



Unloading a Roll of Paper

To cut the roll, press the **Form Feed and Cut** key on the front panel. Use caution when performing this procedure as an image which has had insufficient time to dry could get damaged.

To unload a roll from the printer: select **Unload roll** from the front-panel **Paper menu**; lift the blue paper lever; pull the paper through to the back of the machine until it is free; wind the paper back onto the roll; then lower the blue lever.

pocket guide


the problem is...

hp designjet 500 series printers
hp designjet 800 series printers



C7769-90011

printed in the European Union

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Unexpected Output	11
Image Quality	15
<i>The Troubleshooting Procedure</i>	16
<i>Advance Calibration Routine</i>	22
Front-Panel Error Messages	25

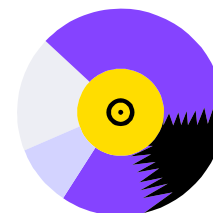
You may also find other information about HP DesignJet printers, associated software and support on the HP web-sites at:

www.hp.com/go/designjet

or

www.designjet-online.com.

See the on-line *User's Reference Guide*, which is on the *Using Your Printer* CD, for further information about using your HP DesignJet 500 or 800 Series printer.

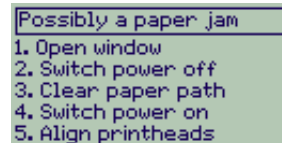


The other side of this *Pocket Guide* contains information about how to:

- [Navigate the Front Panel](#) (page 4)
- [Manage Prints](#) (page 23)
- [Replace Ink Cartridges and Printheads](#) (page 31)
- [Load/Unload Sheet Media](#) (page 45)
- [Load/Unload Roll Media](#) (page 53)

Removing Jammed Paper

If the front panel displays:



there is probably paper jammed in the printer. Paper jams can have various causes:

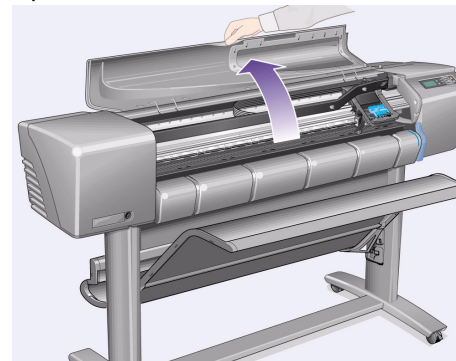
- The paper is too thick or too thin for the printer, or is otherwise not supported
- The paper is creased or misaligned or is bubbled
- Too much ink is being placed on the paper causing it to cockle or bubble
- The end of the roll of paper is glued to the

core and won't advance further

- Pieces of paper or paper powder are clogging up the cutter guide or other moving parts.

To remove jammed paper:

- 1 Open the window.



Removing Jammed Paper 3

paper jam

- 2 Switch the printer off at the front.



- 3 If necessary, carefully move the printhead carriage out of the way—if possible all the way to the enclosed area on the left or the right. Which way you are able to move it depends on where the paper is jammed.

CAUTION When moving the printhead carriage, touch only the black plastic parts.

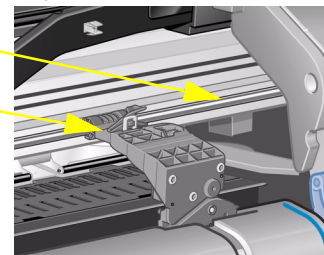
- 4 If necessary, carefully move the paper cutter out of the way to the left, or to the right depending on where the paper is

jammed (though if moved right it may block the paper path).

CAUTION The cutter is easily moved by holding it as close as possible to the guide running across the width of the printer. Be careful not to touch the metal slider bar that runs across the printer.

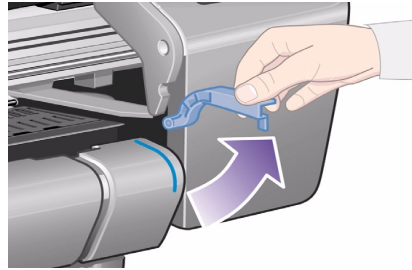
Slider bar

Guide



4 Removing Jammed Paper

- 5 If necessary, lift the blue paper lever, to release any trapped paper. Remember to lower it again when you have finished.



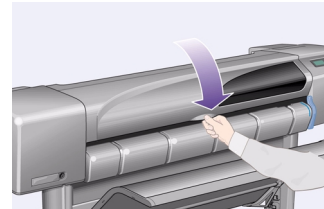
- 6 Carefully remove any of the jammed paper which you can easily lift up and out from the top of the printer.
- 7 Carefully pull the rest of the roll or sheet down and out of the printer. You may need to cut the edge of the roll with scissors.

Removing Jammed Paper 5

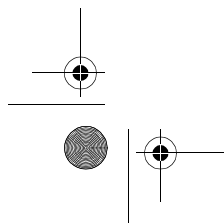
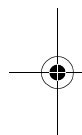
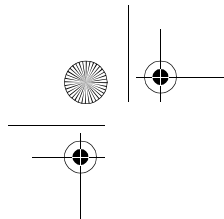
- 8 Check that the printing zone, including the cutter guide, the paper path, and the area where the printhead carriage is parked, is clear and clean; remove any paper powder by brushing it away or with a vacuum cleaner.

CAUTION The area where the printhead carriage is parked can get quite dirty; be careful not to get ink on your hands.

- 9 Close the window and switch on the printer.



paper jam





10 Wait for the printer to finish initializing.


11 Press the **Form Feed and Cut** key on the front panel to eject any small pieces of paper that are still in the paper path.

12 Reload the paper as normal. If you are using roll paper you may need to trim the edge first, to ensure that it is straight.

Note If there is still paper left in the paper path, try loading a sheet of stiff or rigid paper into the printer, such as heavy coated or matte film; this will help to force out any paper jammed in the paper path.

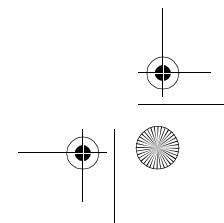
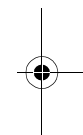
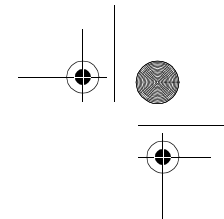
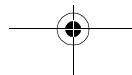
13  If the cutter seems to be causing the problem, check in the *User's Reference Guide* on the *Using Your Printer* CD that the type of paper is supported by the

printer. Try disabling the cutter from the front panel; use  → **Cutter** → **Off**.

14 You are strongly recommended to use the **Align Printheads** procedure (see page 42 on the reverse of this *Pocket Guide*) after clearing a paper jam, as the problem may have caused the printheads to be misaligned. (Select  → **Align Printheads** → **Standard** alignment.)

*Note that you do not have to interpret the patterns printed by the **Printhead Alignment** routine.*


6 Removing Jammed Paper





No Output or Slow Output

If the printer won't print, or its output appears to be too slow, there may be a communications problem. Some symptoms of this type of problem are:

- The front-panel display does not show evidence of any activity in the **Job Management** [] menu.
- Your computer displays an error message when you are trying to print.
- Your computer or printer "hangs" (stays idle) while communication is taking place.
- Your printed output shows random or inexplicable errors (misplaced lines, partial graphics etc.)

Items to start checking are:

- Have you selected the correct interface port in your software?
- Does the printer work correctly when receiving files from other software?
- If the printer is connected to a network, try using it when connected directly to your computer.
- If the printer is connected to your computer through any other intermediate devices, such as switch boxes, buffer boxes, cable adapters, cable converters, and so on, try using it connected directly to your computer.
- Try another interface cable.



No Output or Slow Output 7



no output or slow output



If the Printer does not Print




- You may have a power problem. If there is no activity at all from the printer, and nothing on the front panel, check the power button light, that the power cable is connected correctly, and that there is power available at the socket.
 - If you are using a Macintosh and the print job does not print, ensure the printer language is set to **Postscript** or **Automatic**. See the  → **Graphic Language** setting on the front panel.
 - You may have a problem with your application driver. Is your software configured for this printer? For general advice, see the *Setup Poster*. For advice specific to your software, see the documentation supplied with the driver.
- If you have connected your computer to the printer's parallel port and tried to print a binary-encoded PostScript file it will not print. The parallel port will only accept ASCII-encoded PostScript print files. The front panel will display the message "Error processing job. Flushing rest of job". Connect your computer to the HP JetDirect Print Server and send the print file again.
 - The file may be too large for the printer's memory. This is the case if the front panel displays "Out of memory. Data was lost". Look on your computer screen for any error message; some drivers allow you to choose a different printing mode—try to resend the file.
 -  If you continue to have problems, see the "Solutions" section of the *User's Reference Guide*.

8 No Output or Slow Output







If the Printer Seems Too Slow

- Did you specify **Best** print quality level on the front panel? Best quality prints are produced more slowly. See  → **Print quality**.
Did you additionally specify **Maximum detail** on the front panel? This option means that best quality prints are produced even more slowly. See  → **Advanced options** → **Best quality settings** → **Maximum detail**.
(Note that these settings are usually controlled by the driver or software you are using.)
- Did you specify the right media type when loading the media? See  → **Select paper type**.
- The printhead may need replacing. See *page 36* on the reverse of this *Pocket Guide*.

No Output or Slow Output 9

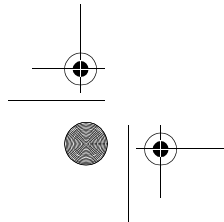
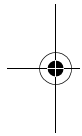
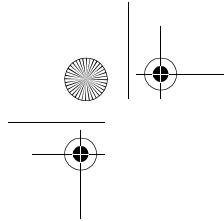
- Did you specify a **Manual** drying time in the front panel?
Try  → **Drying time** → **Automatic**.
- If the printer is in **Normal** mode and the file it is printing contains high-density inked areas the printer will need to slow down to compensate.

If the Printer Waits Too Long to Print a Nest

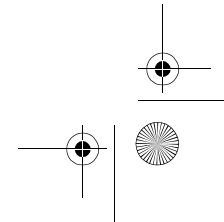
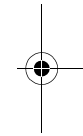
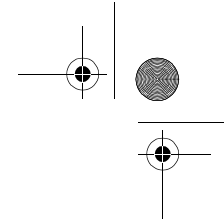
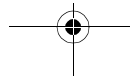
- Change the **Nest** wait setting.
See  → **Nest** → **Nest wait**.

no output or slow output








10 No Output or Slow Output




Unexpected or Wrong Output

- Check that the **Processing HP-GL/2** or **Processing PS** messages in the front panel are as you expect them to be.
- Ensure that your printer understands the graphic language you use. See  → **Graph. Lang.**

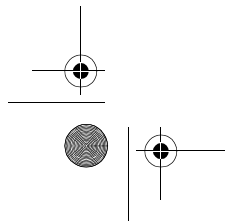
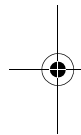
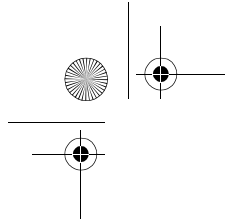
Typical problems are:


- The print is completely blank
 - Try changing the  → **Graph. Lang** setting.
- The output contains only a partial print
 - Don't press **Cancel** or **Form Feed and Cut** before all the data is received by the printer;
 - Try increasing the  → **I/O Setup** → **I/O Timeout** setting or any timeout setting in your network software;
- The image is clipped
 - Try installing extra memory in your printer—extra memory is installed on the formatter (accessory) card, for PostScript or HP-GL/2, that is installed at the back of the printer;
 - Check the interface cable between your computer and the printer;
 - Check the software settings for the page size.

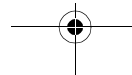
- The image is clipped
 - Check the printing area in your software and that on the printer; don't forget any margins;
 - Check the media orientation assumed by your software; check the  → **Page format** → **Rotate** option;
 - Try installing extra memory in your printer's formatter card (see above).





Unexpected or Wrong Output 11

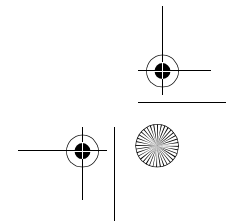
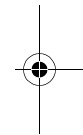
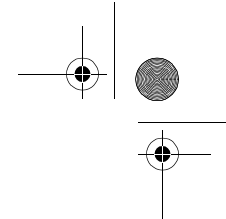
unexpected or wrong output








- A long-axis print is clipped
 - Does your software support long-axis prints?
 - Have you specified an appropriate media size in your software?
 - Unless it is a PostScript file, make sure that  → **Page format** → **Size** → **Inked area** is set.
- An HP-GL job prints incorrectly or not at all
 - HP-GL is not supported by these printers.
- The entire image is in one quadrant of the correct printing area
 - Is the page size configured in the software too small?
 - Are you sure that your software doesn't believe the image to be in one quadrant of the page?



- Try changing the language setting.
See  → **Graph. Lang.**
- The image is unexpectedly rotated
 - Check the  → **Page format** → **Rotate** option.
- The print is a mirror image of your image
 - Check the  → **Page format** → **Mirroring** setting.
- The print is distorted or unintelligible
 - Check and if necessary replace the interface cable between your computer and the printer;
 - Try changing the language setting.
See  → **Graph. Lang.**
 - Refer to the vendor's user documentation for details of other software or drivers.

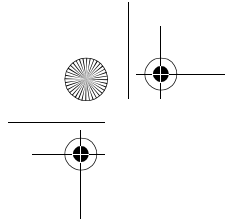


12 Unexpected or Wrong Output

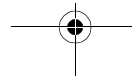
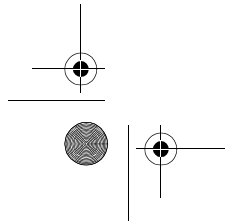
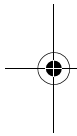
- One image overlays another on the same sheet
 - Try reducing the  → **I/O Setup** → **I/O Timeout** setting. (This normally does not apply to HP-GL/2 printing.)
- Pen settings seem to have no effect
 - Have you changed them in  → **HP-GL/2 settings** → **Define palette?** Check that the palette is selected in  → **HP-GL/2 settings** → **Palette**.
 - Do you expect software-driven pen settings? Check that  → **HP-GL/2 settings** → **Palette** is set to **Software**.
 - Have you changed the setting in the front panel but this has been ignored because the driver setting has not been changed.
- The printer produces a black-and-white print when you expected a color print
 - Check the front-panel Color/monochrome setting, and the equivalent setting in your software. See  → **Color settings** → **Color / monochrome** → **Color / Grayscale / True black**.
- Page format or Rotate does not work
 - These options are available only on the HP DesignJet 800 Series, or if you have an HP-GL/2 accessory card installed in your HP DesignJet 500 Series printer;
 - Try installing extra memory in your printer's formatter card (see page 11);
 - The printer cannot rotate raster images.

Unexpected or Wrong Output 13

unexpected or wrong output



- The print is not the one you were expecting
 - You may have printed an internal print (for example, a printhead alignment print).
- There is a further list of problems and how to fix them in the on-line *User's Reference Guide*, on the *Using Your Printer* CD.



14 Unexpected or Wrong Output

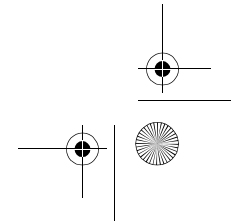
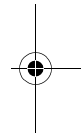
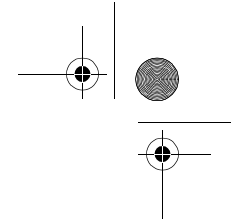
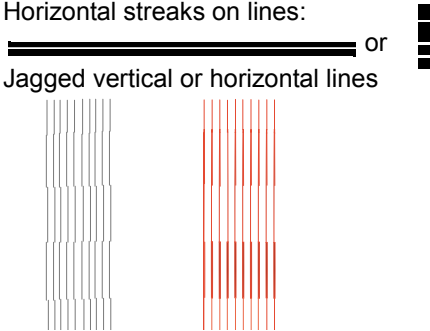


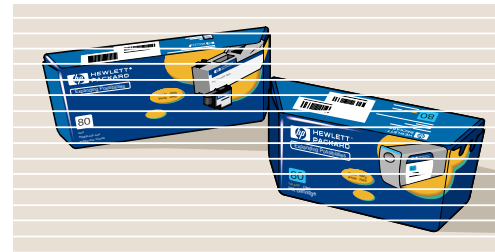
Image Quality Problems

Follow these guidelines if there are problems with the quality of your prints. The sort of problems you might notice are:

- Horizontal streaks on lines:
- Jagged vertical or horizontal lines



- Horizontal banding or horizontal white streaks



However, if a message, like “Problems detected in INK CARTRIDGES” appears in the front panel of your printer, follow the instructions given for that message in the “Front-Panel Error Messages” section starting on page 25 of this *Pocket Guide*.


The following guide applies to situations where *you* (and not the printer) perceive a problem with image quality.

Note: It is important that the paper loaded for the troubleshooting procedure is exactly the same type (for example, glossy paper) as the one you used when you encountered image quality problems. If you use a different kind of paper, you stand less likelihood of resolving the problem. However, you must use a roll of paper (not a sheet) for this procedure.

Pages 20 and 21 show the overall flow in the Troubleshooting procedure, and indicate the main actions that take place.

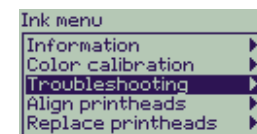
The Troubleshooting Procedure

Run the **Troubleshooting** procedure as follows:

- 1 From the main front-panel menu, select the **Ink menu** () and press **Enter**.



- 2 Select **Troubleshooting** and press **Enter**.
- 3 The printer first checks to see whether the printheads are aligned. Misalignment of the printheads is a common cause of image quality problems. If they are not aligned, you are prompted

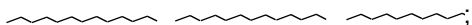


to accept their alignment now. This procedure requires a few centimeters of paper loaded and takes several minutes to perform. (*Note that you do not have to interpret the patterns printed by the **Printhead Alignment** routine.*) See page 42 on the reverse of this *Pocket Guide*.

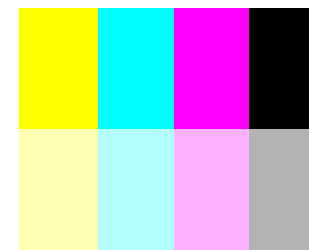
- 4 If the printheads do not seem to require alignment, the printer prints **Diagnostic Print A**, several blocks of color and a block of thin black broken lines (the lines are actually very much closer than those represented here).

- 5 Examine the broken lines in Diagnostic Print A carefully and indicate whether there are problems with them.

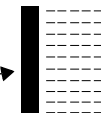
The sorts of problems to look for here are:

- Jaggedness or serrations in the thin lines, like this: ;

Diagnostic Print A

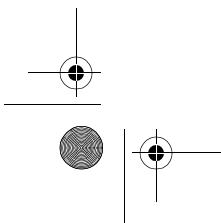
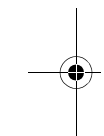
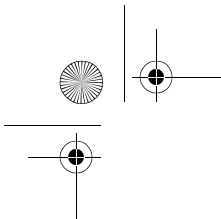


(Ignore this black bar) →



the thin lines should be straight, though not necessarily perfectly aligned.

The irregularities that are significant extend along



the whole of the length of the lines. Shorter irregularities, arranged in columns, can be ignored at this stage.

- 6 Examine the blocks of color in Diagnostic Print A carefully and indicate whether there are problems with them. The sorts of problems to look for here are:

- White streaks or bands in the solid blocks.



- 7 If you indicate that there is a problem with the dashed lines in Diagnostic Print A, you are prompted to use the **Advance Calibration** routine; your printer will be at step 3 of the routine on page 22 (if you don't want to continue with calibration, press the **Cancel** key).
- 8 If there are problems in the blocks of color in Diagnostic Print A, for example white streaks or bands, the printer will try to clean the printheads that

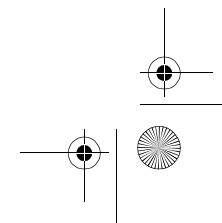
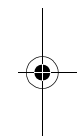
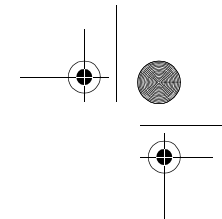
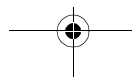
have the problem. A printhead can be cleaned up to three times this way; after that it cannot be cleaned and you will be told; the **Troubleshooting** routine will finish. In that case we recommend that you try to reprint your print, and then, if necessary, start the **Troubleshooting** routine again.

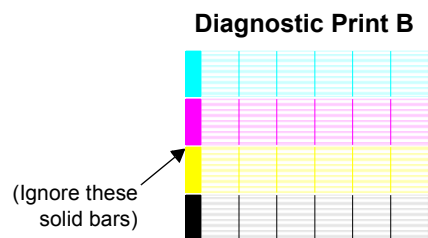
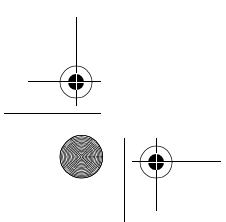
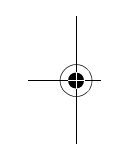
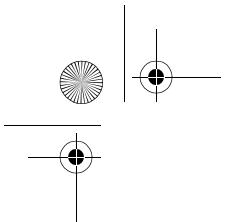
After cleaning the printheads, the printer reprints the blocks of color (but not the black lines) in Diagnostic Print A, and asks you to examine it again (as in step 5 on page 17).

- 9 If there are no problems the first time you print Diagnostic Print A, the printer prints **Diagnostic Print B**.

- 10 For each color in the pattern in **Diagnostic Print B**, you are asked about the quality—look for missing lines. If you answer that a color is defective, the printer tries to clean that printhead.

18 The Troubleshooting Procedure



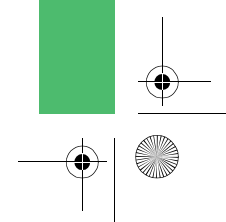
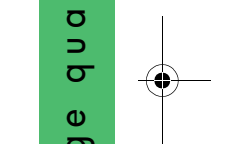
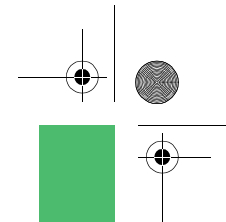


If the printhead cleaning process completes, **Diagnostic Print B** is printed again and you are asked the same questions again.

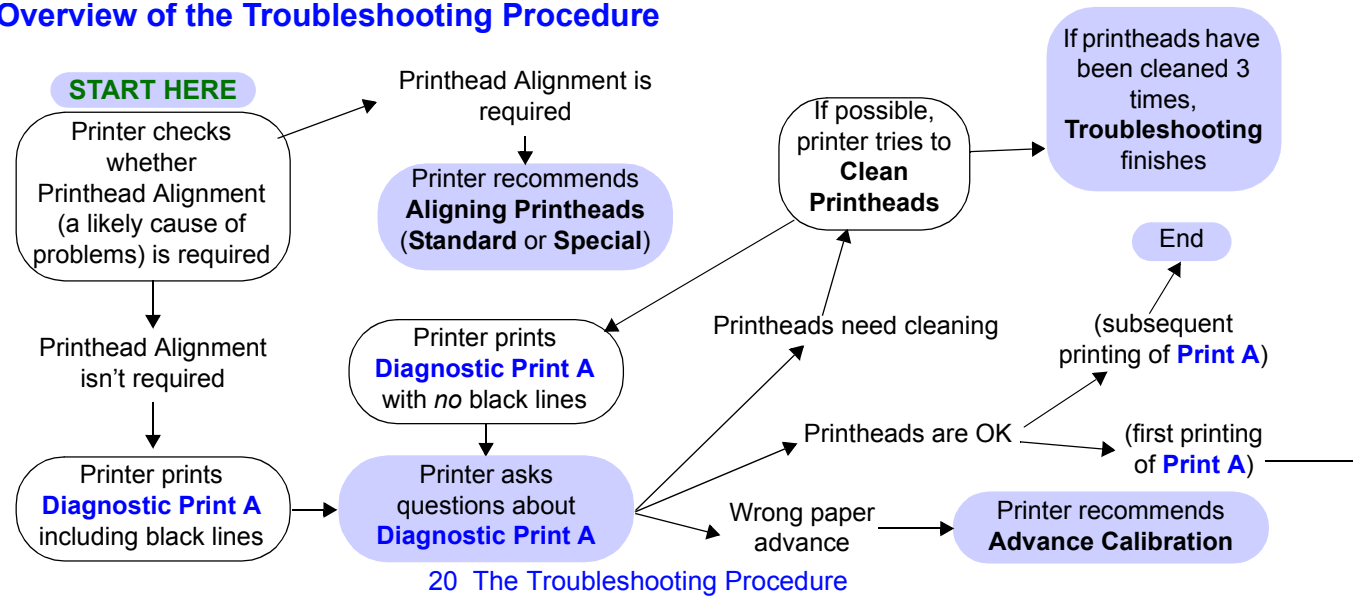
- 11** Afterwards, if problems with images remain, use the **Troubleshooting** procedure again.

If none of the patterns or blocks in the two **Diagnostic Prints** shows any problem, it could be that your image quality problem is caused by a wrong setting in your software, or perhaps the job should have been printed with the **Print quality** set to **Best** instead of **Normal** or **Draft**.

If the **Troubleshooting** routine didn't indicate that printhead alignment was necessary, you can select **Align printheads** in the Ink menu to try to solve any further image quality problems.



Overview of the Troubleshooting Procedure



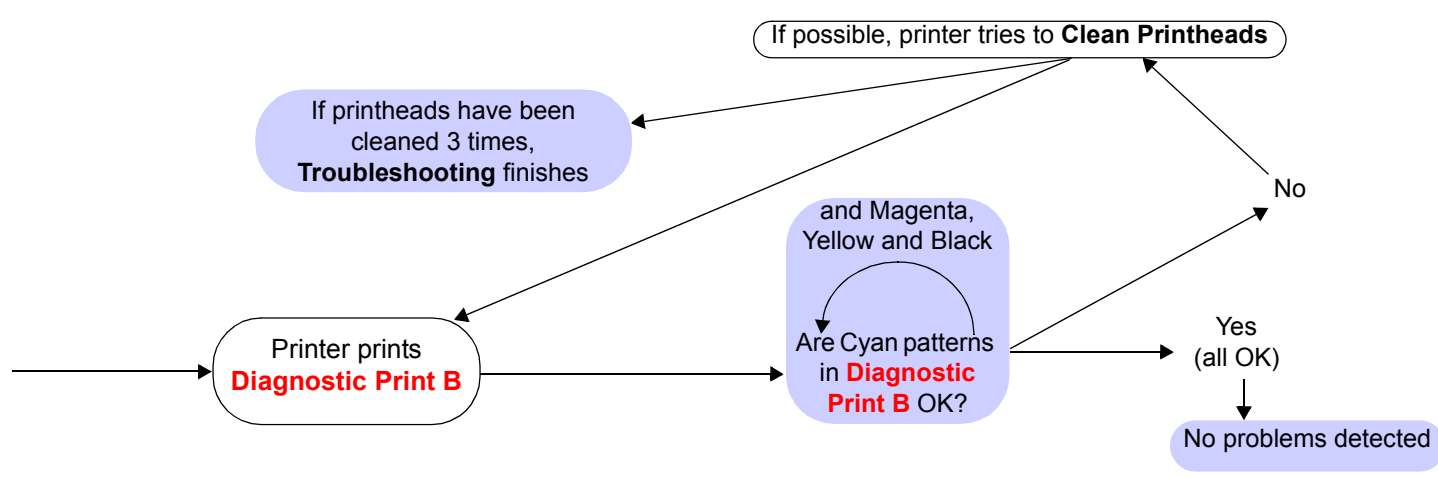
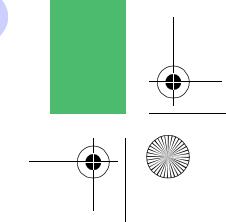
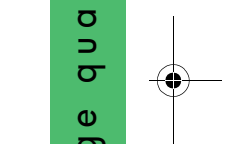
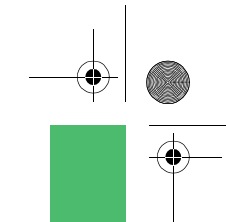
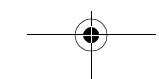
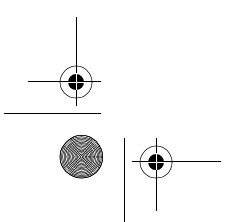
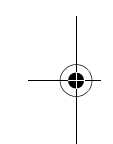
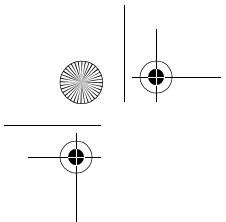


image quality

Advance Calibration Routine

It is important that the paper loaded for this calibration is exactly that used for normal printing, both in quality (for example, glossy paper) and in width (for example, A0 or 36-inch). Either roll or sheet paper can be used.

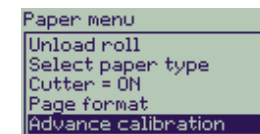
The routine prints a pattern and then cuts the roll or ejects the sheet; it requires paper that is at least 65 cm long and at least 50 cm wide. You must then reload that piece of paper *as a sheet*, so that the printer can accurately measure the pattern, and make whatever adjustments are appropriate to the amount it advances between printing swaths of data. (See page 45, “Load a Sheet of Paper” on the reverse of this *Pocket Guide*.)

The pattern printed is solely for the use of the printer; you are not expected to relate any of its characteristics to the quality of your images.

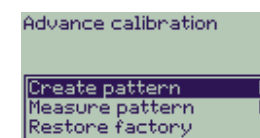
- 1 From the main front-panel menu, with the correct paper loaded, select the **Paper** menu (📄) and press **Enter**.

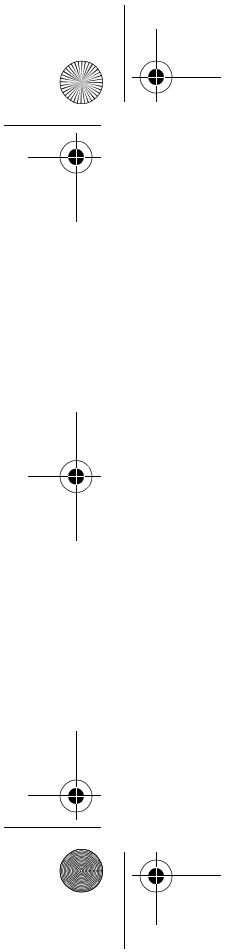


- 2 Select **Advance calibration** and press **Enter**.

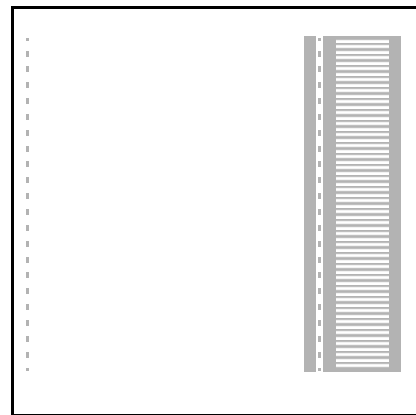


- 3 Select **Create pattern** and press **Enter**. The printer prints its calibration pattern (as represented opposite) and cuts or ejects the paper.



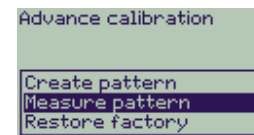


Direction of paper while printing
(creating pattern)—step 3



Direction of paper when loading
(measuring pattern)—step 5

- 4 Load the sheet printed side up with the dotted line at the top (that is, rotated 90°).
- 5 Now select **Measure pattern** and press **Enter**.
The printer reads the calibration pattern and makes the appropriate internal adjustments.



Advance Calibration Routine 23

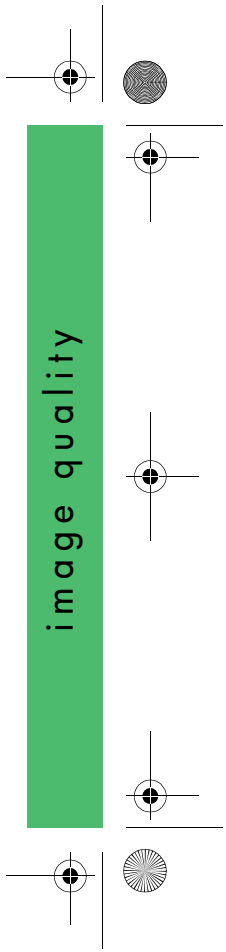
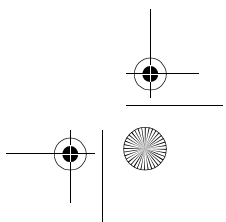
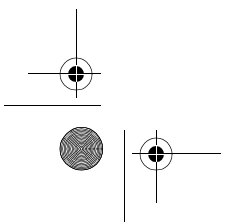
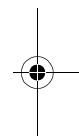
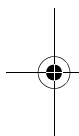
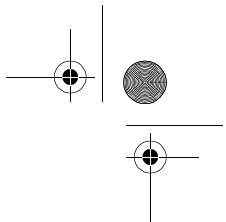
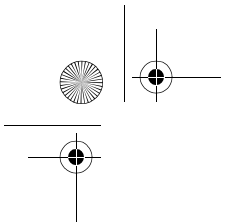
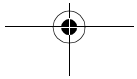



image quality




24 Advance Calibration Routine



Front-Panel Error Messages



This is a list of the error messages in the front-panel display. If an action is needed, it is shown in *italics* in the **Explanation and Action** column. The messages are listed in alphabetical order. Other front-panel messages, such as prompts, are included in the descriptions of the relevant procedures elsewhere in this *Pocket Guide* (in the *How Do I...* part) or in the *User's Reference Guide* (indicated by the symbol ) , which you can find on the *Using Your Printer* CD.

Message	Explanation and Action
Alignment error Press ENTER to continue	The printer was aligning its printheads, but encountered an error. Alignment has stopped. <i>Press the Enter key.</i>
Alignment error due to printheads. Press ENTER to see faulty printheads	The printer was aligning its printheads, but encountered an error due to some printheads not printing properly. Alignment has stopped. <i>Press the Enter key.</i>

Message	Explanation and Action
Cartridges will expire in days: nn	One or more of the cartridges are about to expire. nn is the number of days until expiry date of the cartridge that will expire first. The cartridges that are about to expire are indicated below this message. <i>For details of the replacement procedure, see page 33 on the reverse of this Pocket Guide.</i>
Color calibration error Press ENTER to continue	The printer was performing a calibration of its color system, but encountered an error. <i>Press the Enter key.</i>
Error Select Replace Printheads 	The printer has detected that one or more of the printheads is missing or has an error, as indicated by flashing crosses. The four icons refer from left to right to the Cyan (●), Black (●), Magenta (●) and Yellow (●) printheads. <i>For an explanation of the replacement procedure, see page 36 on the reverse of this Pocket Guide.</i>



26 Front-Panel Error Messages

Message	Explanation and Action
Error processing job. Flushing rest of job	The file format is wrong and the printer cannot process the job. <i>Check the graphic language setting on the front panel (select Graphic Language in the Set-up menu. Check that the format of the file is correct, for example, that a PostScript file is encoded in ASCII, not in binary.</i>
HP is not responsible for damage from use of non-HP ink. Replace Continue	The printer has determined that one or more of the ink cartridges is not an HP product. Your product warranty only applies when you use HP ink. Any damage caused to your printer resulting from the use of non-HP ink cartridges is not the responsibility of Hewlett-Packard. <i>If you want to replace the non-HP ink cartridges, select Replace and press the Enter key. Otherwise, select Continue and press Enter to continue.</i>

Message	Explanation and Action
<p>HP is not responsible for damage from use of non-HP printheads.</p> <p>Replace Continue</p>	<p>The printer has determined that one or more of the printheads is not an HP product. Your product warranty only applies when you use HP printheads. Any damage caused to your printer resulting from the use of non-HP printheads is not the responsibility of Hewlett-Packard.</p> <p><i>If you want to replace the non-HP printheads, select Replace and press the Enter key. Otherwise, select Continue and press Enter to continue.</i></p>
<p>Ink cartridge replacement required</p> 	<p>The printer has detected that one or more of the ink cartridges is missing or has an error, as indicated by flashing crosses. The four icons refer from left to right to the Cyan (●), Black (●), Magenta (●) and Yellow (●) cartridges.</p> <p><i>For an explanation of the icons and details of the replacement procedure, see page 33 on the reverse of this Pocket Guide.</i></p> 







28 Front-Panel Error Messages

Message	Explanation and Action
INK CARTRIDGES need to be functional. Replace before replacing printheads	You have attempted to replace printheads, but the printer has detected that there are ink cartridges that are wrong. The ink cartridges must be replaced before the printheads can be replaced. <i>First replace the faulty, empty or missing ink cartridges and then replace the printheads. See “Replacing Ink Cartridges” on page 33 and “Replacing Printheads” on page 36 on the reverse of this Pocket Guide.</i>
Install missing cartridges and replace empty cartridges before replacing printheads	You are replacing printheads, but the printer has detected that some cartridges are empty and some are missing. The empty cartridges must be replaced and the missing ones inserted before the printheads are replaced. <i>Follow the procedure for replacing empty cartridges, described on page 36 on the reverse of this Pocket Guide. Press the Enter or Cancel key to continue.</i>



Message	Explanation and Action
Install missing cartridges before replacing printheads	<p>You are replacing printheads, but the printer has detected that one or more cartridges are missing. The missing cartridges must be installed before the printheads are replaced.</p> <p><i>Follow the procedure for inserting cartridges, described on page 33 on the reverse of this Pocket Guide. Press the Enter or Cancel key to continue.</i></p> 
Normal printheads found Open window and replace with SETUP printheads	<p>This message is displayed when normal printheads are detected during installation and the printer requires them to be replaced with the setup printheads.</p> <p><i>Remove the normal printheads and install the setup printheads. The procedure is described on page 33 on the reverse of this Pocket Guide.</i></p> 

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Message	Explanation and Action
Open window and check printhead cover is properly closed	<p>You have replaced one or more printheads and the printer's check has found that the printhead cover is not securely closed.</p> <p><i>Open the window and check the printhead cover. The procedure is described on page 36 on the reverse of this Pocket Guide.</i></p> <p>Note: This message may also appear following a paper jam, as the printer cannot detect the exact reason for the problem. In this case you may have to resort to powering off the printer or even removing the power cable from the machine, in order to recover from the problem. See "Removing Jammed Paper" on page 3.</p>
Open window and check proper installation of setup printheads	<p>During system start-up, which occurs when you first install the printer, you need to install the setup printheads. These special printheads cannot be used for printing, but must be used when the printer has been powered off. The printer has detected that the setup printheads have not been installed correctly.</p> <p><i>Open the window and follow subsequent instructions to reinstall or relocate the setup printheads. Contact HP for advice if the setup printheads are missing or cannot be installed correctly.</i></p>

Message	Explanation and Action
Option not available now	You have selected an option in the menu that is not available at the moment. (The printer may be busy, out of ink, out of paper, etc.)
Out of memory. Data was lost	The file is too large to be processed by the printer. <i>Simplify the print and try resending the job. Try setting the Print Quality (in the Set-up menu) to Fast or Normal instead of Best. If the problem persists, you may have to add more memory to the formatter card that is installed in the back of the printer.</i>
Out of paper	The printer ran out of paper while printing the calibration pattern. <i>Load a sheet or roll that is at least 65 cm (25 inches) long and 50 cm (20 inches) wide.</i>














32 Front-Panel Error Messages
































Message	Explanation and Action
Paper advance calibration is recommended. Load paper and select Paper advance calibration. Press ENTER to finish	You are recommended to perform the Advance calibration routine, to ensure the optimum print quality. <i>Load a sheet or roll of paper and then select Advance calibration from the Paper menu. See “Advance Calibration Routine” on page 22.</i>
Paper advance calibration is recommended. Press ENTER to calibrate	You are recommended to perform the Advance calibration routine, to ensure the optimum print quality. <i>Press the Enter key to create the calibration pattern. See “Advance Calibration Routine” on page 22.</i>
Paper loaded with too much skew Press ENTER to retry Press CANCEL to abort	During the loading of paper, the printer has detected that the paper is skewed too much, that is, it has not been loaded straight enough. (‘Skew’ is the angle between the actual paper edge and the correct line.) Either: Press the Enter key to restart the loading procedure; Or: Press the Cancel key to cancel paper loading.

Message	Explanation and Action
Paper mispositioned	The paper is not properly positioned in the printer. Either it is out of the load line margins or it has moved too much from its previous position. <i>Reload the paper following the normal procedure, to solve this problem. See “Loading a Sheet of Paper” on page 45 and “Loading a Roll of Paper” on page 56 on the reverse of this Pocket Guide.</i>
Paper not found Press ENTER to retry Press CANCEL to abort	During the loading of paper, the printer has detected that no paper has been loaded. <i>Either:</i> Press the <i>Enter</i> key to restart the loading procedure; <i>Or:</i> Press the <i>Cancel</i> key to cancel paper loading.
Paper not present. Load paper to print calibration pattern	The paper axis calibration routine has been triggered with out having paper loaded. <i>Load paper; see “Advance Calibration Routine” on page 22 for details of the routine.</i>


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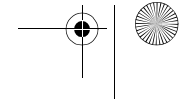
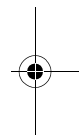
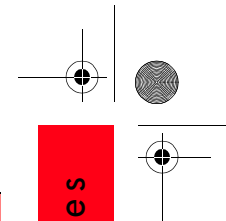
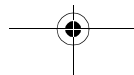
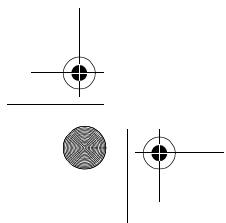
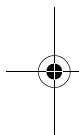
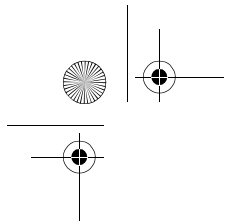
Message	Explanation and Action
Paper too big Press ENTER to retry Press CANCEL to abort	While loading paper into the printer (roll or sheet), the printer has found that it is either too wide or too long (only for sheet) to be loaded properly. <i>Press the Enter key to load smaller paper, or the Cancel key to stop the load.</i>
Paper too big to scan the pattern after printing it	During the paper loading for the Calibration routine, the printer has detected that the paper will not be loadable later when it will be needed for scanning. The minimum size required for the print is 65 cm (25 inches) long and 50 cm (20 inches) wide. <i>Load a smaller sheet that satisfies this minimum requirement.</i>
Paper too small Press ENTER to retry Press CANCEL to abort	While loading paper into the printer (roll or sheet), the printer has found that it is either too narrow or too short (only for sheet) to be loaded properly. <i>Press the Enter key to load larger paper, or the Cancel key to stop the load process.</i>
Paper too small for a diagnostic print	The Troubleshooting utility has found that the single sheet loaded in the printer is too small for a Diagnostic Print . <i>Load a roll of paper, or a sheet that is A3-size or larger.</i>

Message	Explanation and Action
Paper too small to align	<p>The paper loaded is not big enough to contain the alignment pattern.</p> <p><i>Unload the paper (select Unload roll or Unload sheet from the Ink menu) and then load paper that is large enough—at least A4/Letter-size in landscape mode for Standard alignment, or A3/B size in landscape mode for Special alignment.</i></p>
Paper too small to print the pattern	<p>The paper loaded is not big enough to contain the paper axis calibration pattern. Load a roll or sheet that is at least 65 cm (25 inches) long and 50 cm (20 inches) wide.</p>
Pattern not found Reload it again, please	<p>The printer is trying to perform a scan of the calibration pattern, but the pattern was not found.</p> <p><i>Reload the sheet that was printed by the Create pattern part of the calibration routine.</i></p>

Message	Explanation and Action
<p>Possibly a paper jam</p> <ol style="list-style-type: none"> 1. Open window 2. Switch power off 3. Clear paper path 4. Switch power on 5. Align printheads 	<p>There may be paper jammed in the printer. (The printer has detected that a motor is blocked and the likely cause is a paper jam; however, it may be due to some other cause.)</p> <p><i>Follow these steps to check the paper path, as described in “Removing Jammed Paper” on page 3. When the jammed paper has been cleared, you are strongly recommended to align the printheads, as they are quite likely to have become misaligned as a result of the paper jam.</i></p>
<p>Printhead replacement not available now. Cancel print jobs before replacement</p>	<p>You have requested the printer to replace one or more printheads, but the printer is busy printing a job and cannot honor the request now.</p> <p>Either: press the Cancel key to cancel the job that is currently printing, and then again select Replace Printheads (from the Ink system menu).</p> <p>Or: wait until the job has finished printing (and there are no more jobs in the print queue), and then again select Replace Printheads (from the Ink system menu).</p>

Message	Explanation and Action
Printhead warning Poor print quality 	<p>A problem has occurred with one or more printheads. The printheads are still functional. The problem was detected either during printhead alignment or during troubleshooting. If you have completed the routine, the system was unable to clean the printheads fully.</p> <p><i>You should use the Troubleshooting routine (see page 16) to correct any image quality problems that may be apparent; alternatively, you should replace the printheads (see page 36 on the reverse of this Pocket Guide).</i></p>
PRINTHEADS not functional Replace printheads Cancel print	<p>The printer is attempting to print a job, but finds that there is a problem with the printheads. You may either replace the printheads at this stage or cancel the print. <i>Select the required option and press the Enter key. If you decide to replace them, you will be told which ones are failing or missing.</i></p>



Message	Explanation and Action
Printheads require alignment. Load paper and select Align printheads. Press ENTER to finish	The printer has detected that the printheads need to be aligned. <i>Press the Enter key to continue. Load a sheet or roll of paper, and select Align printheads from the Ink menu. See “Aligning Printheads” on page 42 on the reverse of this Pocket Guide.</i>
Printheads require alignment. Press ENTER to align	The printer has detected that the printheads need to be aligned. <i>Press the Enter key to align them. See “Aligning Printheads” on page 42 on the reverse of this Pocket Guide.</i>
Problem found during calibration	A general problem was found during the Advance calibration routine. <i>Respond to any other messages that appear on the front panel, indicating ink or paper problems, and then retry the Advance calibration routine.</i>

front-panel error messages







Message	Explanation and Action
Problems detected in INK CARTRIDGES. Continue process and replace them. Press ENTER to continue	There is an error with the ink cartridges during the preparation of the ink system. <i>Press the Enter key and then follow the instructions to replace the faulty ink cartridges.</i>
Reload paper	There is an error in the paper, as shown in another message. <i>Use the normal procedure to reload the paper, as described on the other side of this Pocket Guide.</i>
Replace empty cartridges before replacing printheads	You have requested the printer to permit the replacement of printheads, but the printer has detected that one or more cartridges are empty. The empty cartridges must be replaced before the printheads are replaced. <i>Press the Enter key and follow the procedure for replacing empty cartridges, described on page 33 on the reverse of this Pocket Guide.</i>



Message	Explanation and Action
Right edge of roll too far from load line Press ENTER to retry Press CANCEL to abort	The paper is out of the load line margins—too far from the line where it should be loaded. Either: Press the Enter key to restart the loading procedure; Or: Press the Cancel key to cancel paper loading.
Right edge of sheet too far from load line Press ENTER to retry Press CANCEL to abort	During the loading of a sheet of paper, the printer has detected that the paper is too far to the left; it should be aligned close to the blue line painted on the right side of the platen. Either: Press the Enter key to restart the loading procedure; Or: Press the Cancel key to cancel paper loading.
Roll edge not found Please check roll edges are non-clear Press ENTER to retry Press CANCEL to abort	During the loading of a roll, the printer cannot detect the side edge of the paper. A possible cause is that the media is transparent (clear); only non-clear media are supported. Either: Press the Enter key to restart the loading procedure; Or: Press the Cancel key to cancel paper loading.

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Message	Explanation and Action
Roll right edge too far from load line Press ENTER to retry Press CANCEL to abort	During the loading of a roll of paper, the printer has detected that the paper is too far to the left; it should be aligned with the blue line painted on the right side of the platen. Either: Press the Enter key to restart the loading procedure; Or: Press the Cancel key to cancel paper loading.
Sheet edge not found Please check sheet edges are non-clear Press ENTER to retry Press CANCEL to abort	During the loading of a sheet, the printer cannot detect the side edge of the paper. A possible cause is that the media is transparent (clear); only non-clear media are supported. Either: Press the Enter key to restart the loading procedure; Or: Press the Cancel key to cancel paper loading.
Sheet not loaded Load sheet with printed pattern	The printer is trying to perform a scan of the calibration pattern, but no sheet was found. <i>Load the sheet that was printed by the Create pattern part of the calibration routine.</i>

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













Message	Explanation and Action
Sheet too long Please check it is not a roll Press ENTER to retry Press CANCEL to abort	You have requested the printer to load a sheet of paper, but the sheet appears to be too long. <i>Check that the paper is not a roll.</i> Either: Press the Enter key to try to load the sheet again; Or: Press the Cancel key to stop the process. If the paper is on a roll, follow the instructions on page 56 on the reverse of this Pocket Guide.
Troubleshooting finished Resume normal printing If problem persists select Troubleshooting again Press ENTER to continue	The printer has finished the Troubleshooting routine and will not at this stage perform further cleaning on the printheads because this could damage the other ones. However, according to the evaluation you have given, the printheads require cleaning because there are defects in the Diagnostic Print. <i>Press the Enter key. Then resume your normal printing activities. If the problem recurs, try using the Troubleshooting routine again, or select Replace Printheads from the front panel (in the Ink System menu) to replace the printheads that are faulty.</i>

Message	Explanation and Action
Troubleshooting requires paper for a diagnostic print.	The Troubleshooting utility has found that there is no paper loaded in the printer. <i>Load a roll of paper.</i>
Unable to initialize ink system. Call HP representative.	The system cannot successfully complete the startup. <i>Call HP for service.</i>
Unable to prepare ink system. Open window to check SETUP printheads	During ink system start-up, the purge of the ink system has failed and the system is asking you if the preparation has completed. <i>Check the setup printheads and then follow the instructions in the front panel and respond to further questions.</i>
Unknown ink cartridges. Press ENTER to continue.	The ink cartridges are not recognized by the printer as ink cartridges approved by HP, and there is at least one that is new. <i>Press the Enter key.</i>

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















Message	Explanation and Action
Unknown paper format Reload paper	The format (roll or sheet) of the paper loaded in the printer is unknown. <i>Reload the paper following the normal procedure, to solve this problem. See “Loading a Sheet of Paper” on page 45 or “Loading a Roll of Paper” on page 56 on the reverse of this Pocket Guide.</i>
Unknown paper type Select paper type	The type of the paper loaded in the printer is unknown to the printer. <i>Select a known paper type from the printer menu.</i>
Unknown printheads. Press ENTER to continue.	The printheads are not recognized by the printer as printheads approved by HP, though the printer can still use them. <i>Press the Enter key.</i>
Warning: color calibration not done on this paper type	The printer has detected that the color calibrations have not been performed on this paper type, and the system is configured to do them. <i>To calibrate color for the current paper type, select Ink menu → Color calibration → Calibrate paper.</i>

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front-panel error messages

Message	Explanation and Action
Warning! Machine calibrations need to be performed. Refer to guide for instructions.	The color calibrations for the paper that is loaded have been lost. <i>Follow the procedure described in “Advance Calibration Routine” on page 22.</i>
Warning: printheads not aligned	The printer has detected that the printheads have not been aligned since the last replacement. <i>You should align the printheads by selecting Align printheads from the Ink menu.</i>