
HP Ink Supplies Troubleshooting

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What are HP Ink Supplies?

For each of the six colors used in the Printer, there are three separate components. The Printhead and the Printhead Cleaner are supplied together, the Ink Cartridge is supplied separately. All of these components are called the HP Ink Supplies. They are coded with an HP selection number to help you re-order the correct replacement supplies. The Printhead and the Printhead Cleaner are supplied together, and the Ink Cartridge is supplied separately. These consumables are designed with a lock-out feature that will allow only one color to be inserted into a given slot.

- **No.81** - HP Selection Number for Dye Ink Supplies.
- **No.83** - HP Selection Number for UV Ink Supplies.

Ink Cartridges

The HP Ink Cartridges for the HP DesignJet 5000 and 5500 Series Printers require no maintenance or cleaning. As long as each Ink Cartridge is inserted correctly into its slot, the ink will flow to the Printheads.

The front panel displays the status of the Ink Cartridges. With the front panel, detailed information can be checked on the Ink Cartridges.

Printheads and Printhead Cleaners

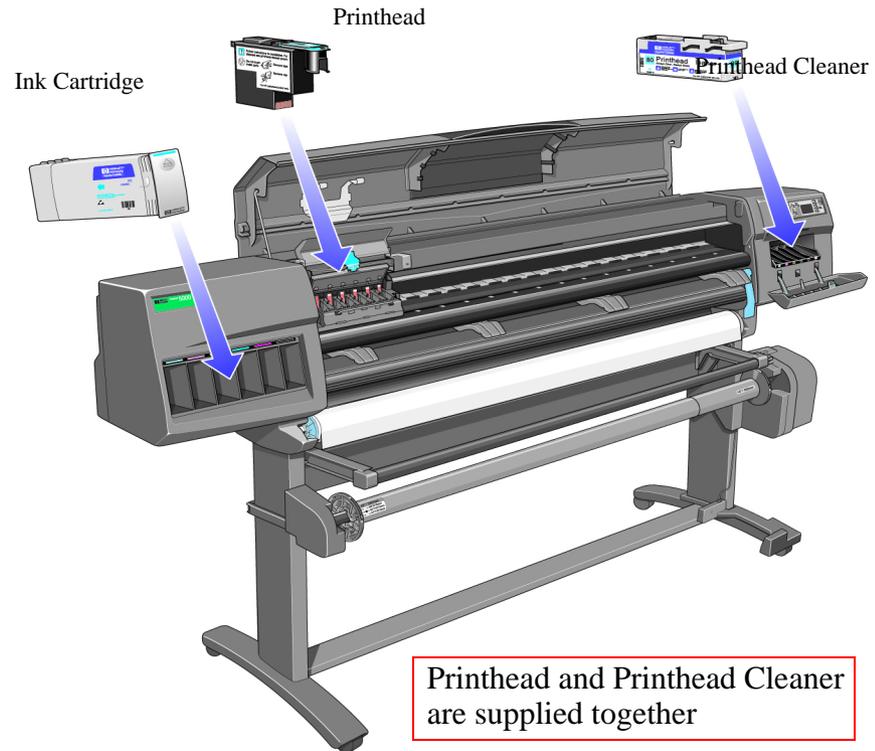
The HP Printheads for the HP DesignJet 5000 and 5500 series are extremely durable and do not need to be replaced every time an Ink Cartridge is replaced. They are independent of the Ink Cartridges and will continue giving excellent image quality results even if the Ink Cartridges are low on ink. See page 3-5, *When Should You Replace the HP Ink Supplies?*

If you notice a decline in print quality such as lines or dots missing from text / graphics, go to page 6-1, *Print Quality* .

The HP Printhead Cleaners keep the Printheads in good condition and they prevent them from being damaged when the Printer is not active. They service the Printheads, making sure they are always ready to be used.

Identifying the Components

The following illustration will help you identify the components of the HP Ink Supplies.



General Information About HP Ink Supplies

For optimum results from the Printer and modular ink delivery system always follow these guidelines when handling the HP Ink Supplies:

- Always install the Ink Cartridges, Printheads and Printhead Cleaners before the expiration date, which is on the packaging.
- Install a new Printhead Cleaner every time you change a Printhead.
- Allow the Printer and Printhead Cleaners to automatically clean the Printheads.
- Ink Cartridges, Printheads and Printhead Cleaners are designed with lock-outs that only allow their installation in their color-coded slots; they must not be forced.
- Follow the instructions on the Front Panel of the Printer during installation.

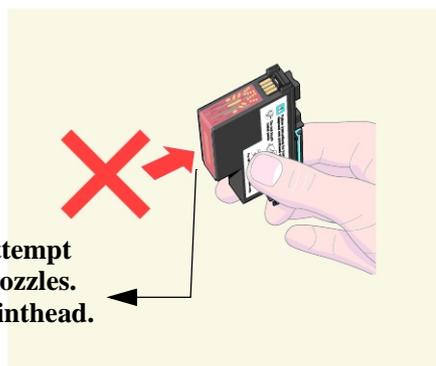
- Avoid unnecessary removal of the Ink Cartridges and Printheads.
- When turning off the Printer always use the soft-power Off button on the Front Panel. The Printheads are then stored correctly which prevents them from drying out.
- The Ink Cartridges should never be removed while the Printer is printing. They should only be removed when the Printer is ready for you to replace them. The Front Panel will guide you through the removal and installation procedure. See page 3-5, *When Should You Replace the HP Ink Supplies?*

Some General Precautions When Handling HP Ink Supplies

CAUTION



Do not touch, wipe or attempt to clean the Printhead nozzles. This can damage the Printhead.



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Handle the HP Ink supplies with care. In particular the Printhead, which is a high precision device and must be handled carefully.

- Do not touch the Printhead nozzles.
- Do not put the Printhead down on the nozzles.
- Do not be rough when handling the Printheads. Always set them down gently.
- Do not drop the Printheads.
- Proper handling will assure optimum performance throughout the Printhead life.
- The Printhead Cleaner should always be handled and stored upright to avoid a potential spillage of ink.
- Do not touch the end of the Ink Cartridge which is inserted into the Printer as there may be a small amount of ink on the connection.
- Avoid storing partially used Ink Cartridges on their ends.

Priming a Brand New Ink System

When the customer first receives the Printer, it is supplied with a set of six Setup Printheads pre-installed in the Carriage Assembly. These Setup Printheads are used for the priming of the tubes in the modular ink delivery system. The customer must not remove the setup Printheads from the Carriage Assembly without following the procedures in the *Setup Guide*.

When the Printer is powered ON for the first time, the Printer will automatically perform the priming process. Without the priming process, the customer will NOT be able to use the Printer.

Why does the Printer require priming:

- The Tubes System is empty when the customer receives the Printer.
- The Tubes System has to be pressurized and filled with ink, ejecting any air bubbles.

CAUTION

If the Printing Printheads are installed in the Carriage during the priming process, they will be rejected and the front panel will show the "(XX11)Replace" message (Refer to 3-12, *Error Status Messages*).

When Should You Replace the HP Ink Supplies?

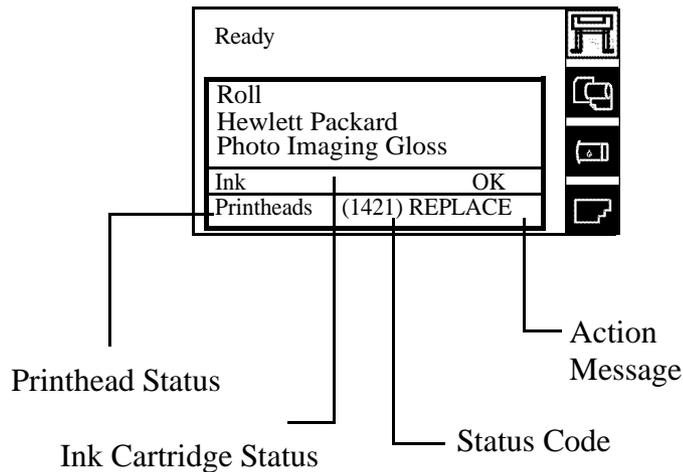
When to change the HP Ink supplies is mostly determined by you with guidance from the front panel. In conjunction with the messages displayed in the front panel and the message explanations in this chapter, you will be able to choose for yourself when is the right time to change the HP Ink supplies.

The Printer will also display the ink level and will tell you when the ink supply is low, very low or empty. This means you have constantly updated information about the HP Ink supplies.

Printhead life is anticipated to be 700ml or twelve months in the Printer, whichever occurs first, provided that the Printhead is used under normal operating conditions (using HP Ink Cartridges only) and its “install before date” has not lapsed. However results vary depending on the print quality setting being used.

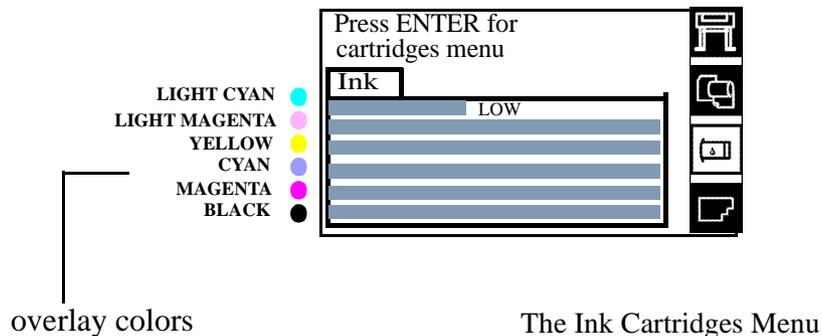
The Front Panel Display

The front panel display has a dedicated area to report the status of your HP Ink supplies. Status messages consist of a code and an action message



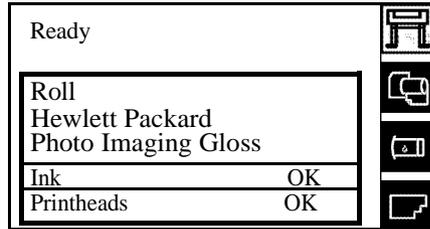
- **Ink** displays information on the Ink Cartridges.
- **Printheads** displays information on the Printheads and the Printhead Cleaners
- The **Status code** indicates the exact nature of the HP Supplies problem (see 3-10, *Status Codes and Messages*).
- The **Action Message** provides instructions to return to normal status i.e. OK (see 3-10, *Status Codes and Messages*).

To view information for a specific Ink Cartridge color or Printhead you must access the cartridge and Printhead menus (See 3-7, *Obtaining Ink Cartridge Information* and 3-8, *Obtaining Printhead Information*). The overlay indicates the color related to the Ink Cartridge and Printhead menu information.

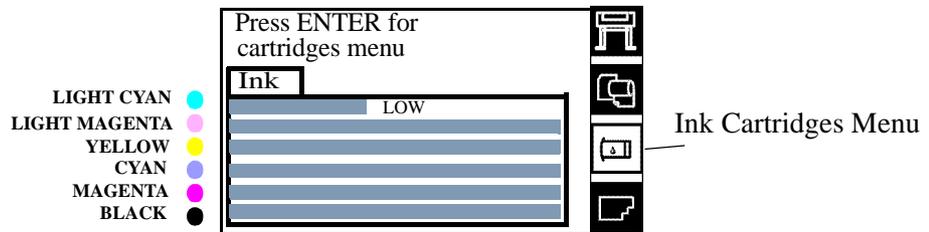


Obtaining Ink Cartridge Information

1. To get information on the Ink Cartridges press the **Top** key on the front panel to go to the main menu.



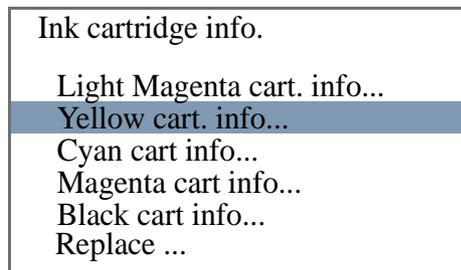
2. Press the \uparrow or \downarrow key to select the cartridges icon and view status bars indicating ink levels in the Ink Cartridges.



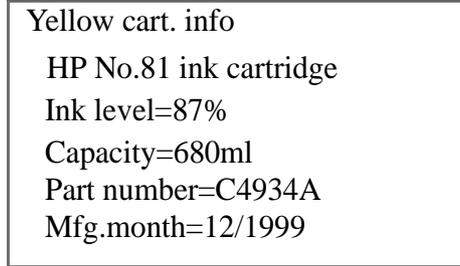
The front panel displays six horizontal bars. These bars represent how much ink is remaining in the Ink Cartridges: as ink is used up the bars get shorter in length. The Ink Cartridge color on the overlay indicates the Ink Cartridge color related to each bar.

Press the **Enter** key to view the Ink Cartridges menu.

3. Press the \uparrow or \downarrow key until the front panel highlights the color that you want to see information on. Press the **Enter** key.



- The front panel displays information on the selected Ink Cartridge.

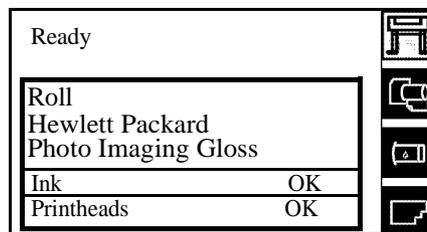


The information supplied is:

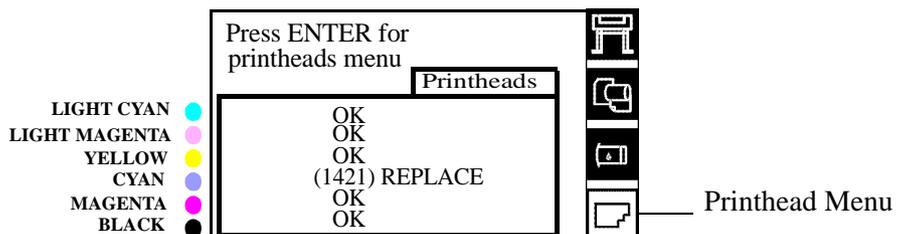
- The make of the Ink Cartridge (**No.81** for Dye and **No.83** for UV Ink). Unknown Ink Cartridge may mean the use of refilled Ink Cartridges.
- The percentage of how much ink is remaining.
- Original capacity of the Ink Cartridge in milliliters.
- Re-order part number of the Ink Cartridge.
- The month and year that the Ink Cartridge was manufactured.

Obtaining Printhead Information

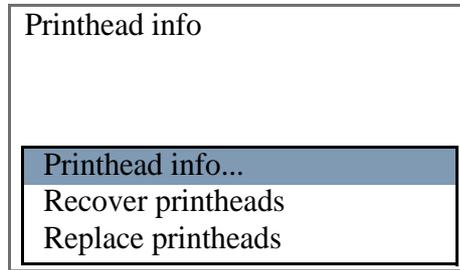
- To get information on your Printheads, press the **Top** key on the front panel to go to the main menu.



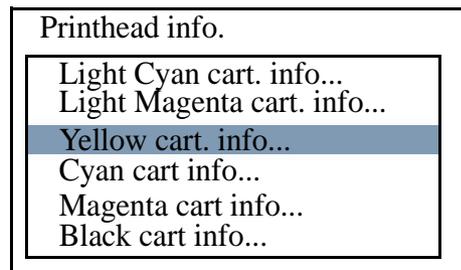
- Press the \uparrow or \downarrow key to select the Printheads icon and view information on the Printheads.



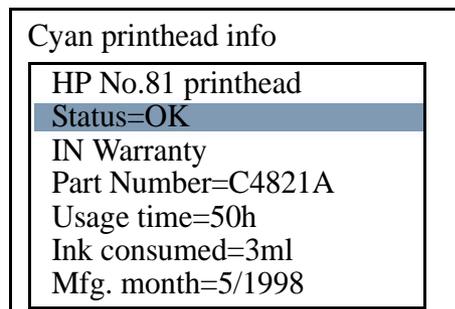
- Press \uparrow or \downarrow key until the front panel highlights “Printhead info”. Press **Enter** to view the Printheads information.



- Press the \uparrow or \downarrow key until the front panel highlights the color that you want to see information on. Press the **Enter** key.



- The front panel displays information on the selected Printhead.



The information supplied is:

- The make of the Printheads (**No.81** for Dye and **No.83** for UV Ink).
- The current status of the Printhead.
- The Printhead warranty status.
- Re-order part number of the Printhead.
- The time (hours) the Printhead has been operating in the Printer.
- How much ink has been consumed by the Printhead. **Note:** It is possible for a Printhead to consume more than one Ink Cartridge.
- The year and the month that the Printhead was manufactured.

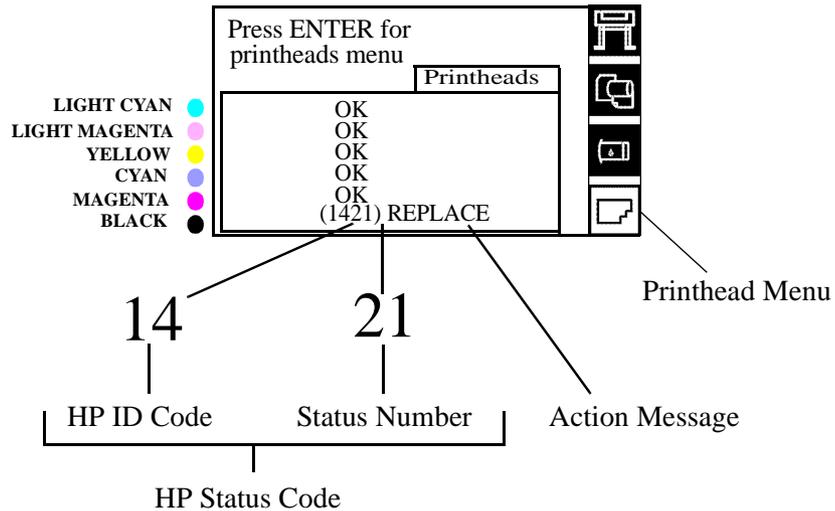
Status Codes and Messages

NOTE

Most problems with Ink Supplies will be solved by the user simply following the instructions in the action message.

PHONE SUPPORT

If a problem persists, a Call Agent can try and troubleshoot Consumables problems by requesting the HP Status code from the Customer via the phone. Using this process, it can be determined whether the Printer requires any on-site maintenance.



The HP Status Code is made up of 4 digits: the first two digits are the HP ID Code that identify the consumable and its color. The last two digits are the status number indicating the nature of the problem.

The tables in the next few pages describe the messages and status codes for HP Ink Supplies.

Status Messages

These messages provide only an action message for the user to perform. For information on accessing detailed information on consumables refer to 3-7, *Obtaining Ink Cartridge Information* and 3-8, *Obtaining Printhead Information* .

Status	Description	Procedure
OK	The ink consumable is working correctly	None
Insert	There is no consumable installed	Insert the correct consumable. In the case of the Printhead, if the correct consumable is inserted, check the Carriage Tube Connector is correctly connected to the Carriage.
Setup	The setup message is displayed when new tubes have been installed into the Printer and you have installed the correct setup Printheads.	When the setting up of the tube system is complete, the front panel will display a message (XX04)Replace asking you to remove them and replace them with 'normal Printheads'.
Low	Ink Cartridge Level has reached it's low limit (100 ml.). This is an early warning.	New supplies should be obtained ready to replace the particular color
Very Low	Ink Cartridge Level has reached it's very low limit (50 ml.)	Overnight printing should not be attempted. Priming of the Ink Tubes should not be attempted. A new Ink Cartridge is strongly recommended to prevent the Printer from interrupting a print.
Empty	Ink Cartridge is empty. The Printer stops.	A new Ink Cartridge is required. Check image quality of prints in progress.

Error Status Messages

Error status messages consist of the HP Status Code and the action message. The following tables group error messages according to the consumable, the action message (i.e. all **Replace** errors are grouped together), and then the status number i.e. last two digits.

The first digit in the HP ID code (see table below), identifies the consumable and/or provides specific consumables information.

Status Code First Digit	Part / Information
0	HP No.81 Printhead in warranty
1	HP No.81 Printhead out of warranty
2	HP No.83 Printhead in warranty
3	HP No.83 Printhead out of warranty
4	Setup Printhead
5	Printhead Smartchip error
A	HP No.81 Printhead Cleaner
B	HP No.83 Printhead Cleaner
*	Printhead Cleaner Detection Error
6	HP No.81 Ink Cartridge
7	HP No.83 Ink Cartridge
8	Ink Cartridge Unknown

The second digit identifies the color (see table below), for the Printhead, Printhead Cleaner or cartridge.

Status Code Second Digit	Color
5	Light Cyan
4	Light Magenta
3	Yellow
2	Cyan
1	Magenta
0	Black

Printhead Errors

NOTE

If you think your Printer is requesting you to replace your Printheads too frequently you can check Printhead nozzle status by printing the Diagnostic Print ⇒ Refer to 6, *Print Quality*.

NOTE

Do not touch, wipe or attempt to clean the Printhead nozzles. This can damage the Printhead and reduce print quality (See Page 9-6 for Maintenance Procedures).

NOTE

When replacing Printheads:

- Ensure that you have the correct Printhead.
- Ensure that the Printhead is the correct color for that slot.
- Ensure that the protective cap is removed from the Printhead.
- Check the empty slots to see if they need cleaning. In extreme circumstances, when a Printhead is inserted, it is possible that the Printer will not recognize it due to the build-up of ink on the electrical connection between the Printhead and the Printhead carriage. To clean the build-up of ink, use the User Maintenance Kit.

NOTE

If all 6 Printheads present the same error message, check the following:

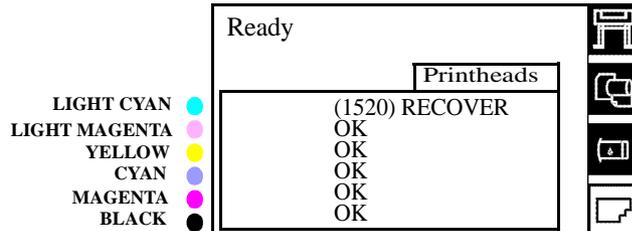
- All Printheads installed are NOT wrong type i.e. wrong model, Setup Printheads instead of normal etc.
- If you replace or reseal Printheads one at a time and the error persists for all Printheads, this indicates a hardware failure. Do the following:
 - 1 Check that the Carriage Tube Connector is correctly connected to the Carriage.
 - 2 Check that the Trailing Cable connections between the Carriage Assembly and the Main PCA and if the cable is damaged, replace it ⇒ Page 8-36.
 - 3 Replace the Carriage Assembly ⇒ Page 8-46.
 - 4 Replace the Main PCA ⇒ Page 8-81.

Status Numbers	Error Description	Procedure
XX02 Reseat XX06 Reseat XX08 Reseat	Continuity problem between the Printhead and the Carriage Assembly.	Try the following (verify if the message returns to OK after each one). 1. Reseat the Printhead.
XX10 Reseat	Electrical failure.	2. Remove the Printhead and clean the interconnect, refer to 9-6, <i>Carriage Interconnect Wiper</i> . 3. Replace the failing Printhead. 4. Check the Carriage Tube Connector is correctly connected to the Carriage. 5. Check Trailing Cable connections between the Carriage Assembly and the Main PCA and replace the Trailing Cable if damaged ⇒ Page 8-36. 6. Replace the Carriage Assembly ⇒ Page 8-46.
XX03 Replace	Printhead smartchip failure.	Replace Printheads.
XX04 Replace	Setup Printhead installed.	Install normal Printheads.
XX05 Replace	Used setup Printheads installed.	If priming Tubes install new Setup Printheads otherwise install normal Printheads.
XX09 Replace	Electrical failure.	1. Replace the Printhead(s). 2. Check Trailing Cable connections between the Carriage Assembly and the Main PCA and replace the Trailing Cable if damaged ⇒ Page 8-36. 3. Replace the Carriage Assembly ⇒ Page 8-46. 4. Replace the Main PCA ⇒ Page 8-81.
XX11 Replace	Incorrect type of Printhead installed.	If Tubes system is priming: install Setup Printhead(s) Ensure that you have genuine HP Printheads installed.
XX12 Replace	Printhead does not match the rest of the ink consumables.	Ensure that all the ink consumables are HP.
XX13 Replace	Printhead smart chip failure.	Replace the Printhead(s).
XX14 Replace	The Printhead has an internal electrical failure.	1. Replace the Printhead(s).
XX15 Replace		2. Replace the Carriage Assembly ⇒ Page 8-46.
XX16 Replace	The Printer was printing: Printhead short	Select YES to replace Printheads or NO to finish print job without the failed Printhead (print quality is affected). You must replace the Printhead after the print job.
XX17 Replace		
XX18 Replace	The Printhead smartchip detects an unapproved manufacturer.	Install genuine HP Printheads.
XX20 Recover	The Printhead has detected nozzle failure.	1. You can continue using the Printhead unless the (XX21)Replace message is displayed (the affect on print quality depends on the print mode). 2. Perform the Recovery procedure ⇒ Page 6-15.
XX21 Replace	The Printhead has detected a significant number of bad nozzles that affects print quality.	Select YES to replace Printheads or NO to finish the print job without the failed Printhead (print quality may be affected). The message will be displayed for every print job until you replace the Printhead. 1. Attempt the Recovery procedure ⇒ Page 6-15. 2. If the message persists replace the Printhead(s).

Printhead Information

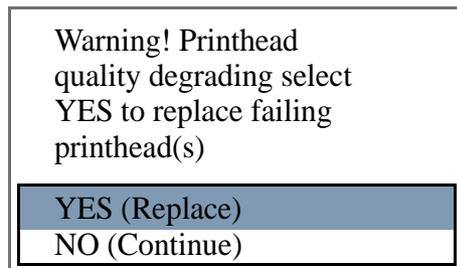
Printhead Recovery Procedure

The Printer regularly performs a series of controls on the health of the Printheads and when they start to degrade the Printer will prompt the user to recover the Printhead [(XX20)Recover].



At this stage, the customer should obtain new Printheads. Depending on the print mode being used (Max. Quality, Productivity or Max. Speed) the Printer may still be able to print with an acceptable print quality. Refer to Page 6-15 for details on performing Printhead recovery.

If the Printer is printing a job and the Printhead health degrades to a significant degree [(XX16) and (XX17)REPLACE], the front panel will display a warning.



Press the ↓ or ↑ down key to select **YES** or **NO** and press the **Enter** key. If you select **YES** the print job will be cancelled and Printhead replacement will be started. If you select **NO**, the Printer will finish the current print job.

NOTE This message will be displayed each time you send a print job to the Printer until you replace the failing Printhead(s).

WARNING If you select **NO** the Printer finishes the current print job **WITHOUT** using the failed Printhead i.e. without using that color.

Ink Cartridge Errors

NOTE

When replacing Ink Cartridges:

- Use the **Replace** item in the **Ink Cartridges** menu. This will release all air from the Ink Cartridge and avoid problems in its removal.
- Ensure that you have the correct Ink Cartridge.
- Ensure that the Ink Cartridge is the correct color for that slot.
- Ensure that the Ink Cartridge is the correct orientation, with the color coded label at the top.

NOTE

If all 6 Ink Cartridges present the same error message, check the following:

- All Ink Cartridges installed are **NOT** of the wrong type i.e. wrong model.
- If you replace or reseal Ink Cartridges one at a time and the error persists for all cartridges, this indicates a hardware problem. Do the following:
 - 1 Check ISS cable connections on the rear of the Ink Supply Station and the ISS PCA.
 - 2 Remove the Backplate and check that the connections on the floaters are clean and check that the floaters move freely.
 - 3 Replace the Ink Tubes System ⇒ Page 8-64.
 - 4 Replace the ISS PCA ⇒ Page 8-91.

	Status Numbers	Error Description	Procedure
Ink Cartridge Information	XX03 Replace	<p>The Ink Cartridge has a leak which prevents the ink pumping to the Printer.</p> <p>WARNING: If the Ink Bag in the Ink Cartridge is leaking, the Tubes may be damaged.</p>	<ol style="list-style-type: none"> 1. Remove the Ink Cartridge immediately. 2. Open the Door at the rear of the Left Cover and check the Air Tubes for Ink and do the following: 3. If there is no ink in the Air Tubes: <ol style="list-style-type: none"> a) Replace the Ink Cartridge and, if the XX03Replace error reappears for any Ink Cartridge, go to step 5. 4. If there is ink in the Air Tubes: <ol style="list-style-type: none"> a) Remove all the Ink Cartridges to allow the ink to drain from the Tubes. b) Replace the faulty Ink Cartridge and reinsert the other Ink Cartridges. <p>If the XX03Replace error reappears for any Ink Cartridge, do the following:</p> <ol style="list-style-type: none"> 5. Remove the Ink Cartridge and check for ink on the Air Connector on the rear of the Ink Cartridge. 6. If there is ink present, do the following: <ol style="list-style-type: none"> a) Press the sides of the Ink Cartridge to see if ink is leaking from the Air Connector and replace the Ink Cartridge if it is faulty. b) If the Ink Cartridge is not faulty, replace the Ink Tubes System ⇒ Page 8-64. 7. If there is no ink present, do the following: <ol style="list-style-type: none"> a) Verify ISS cable connections. b) Remove the Backplate and check that the slots and connections on the floaters are clean. c) Replace the Ink Tubes System ⇒ Page 8-64. d) Replace the ISS PCA ⇒ Page 8-91.
	XX04 Replace	Smart chip error. You can not continue to use this Ink Cartridge.	<ol style="list-style-type: none"> 1. Remove the Ink Cartridge and reinstall. 2. Replace the Ink Cartridge
	XX05 Replace	Incorrect Ink Cartridge	Check correct Ink Cartridge is installed. Replace with approved Ink Cartridge.
	XX06 Replace	The Printer detects that the Ink Cartridge does not match the rest of the Ink System already installed.	Ensure that the Printheads and the Ink Cartridges are genuine HP.
	XX08 Unknown	The Ink Cartridge smart chip indicates that the Ink Cartridge installed is not supported by HP.	<ol style="list-style-type: none"> 1. Press Enter to continue or: 2. Replace with a genuine HP Ink Cartridge. <i>This error only appears in Refill situations.</i>
	XX02 Reseat	Continuity problem between Ink Cartridge and Ink Supply Station.	<ol style="list-style-type: none"> 1. Remove the Ink Cartridge and reinsert. 2. Replace the Ink Cartridge. 3. Remove the Ink Supply Station and check contacts on floaters.

Printhead Cleaner Errors (First Digit = A, B or *)

NOTE

When replacing Printhead Cleaners:

- **Ensure that you have the correct Printhead Cleaner.**
- **Ensure that the Printhead Cleaner is the correct color for that slot.**
- **Ensure that the Printhead Cleaner is the correct orientation.**

NOTE

If all 6 Printhead Cleaners present the same error message, check the following:

- **All Printhead Cleaners installed are NOT wrong type i.e. wrong model, unapproved etc.**
- **Replace Printhead Cleaners when Printheads are replaced.**

NOTE

The message status for Printhead Cleaners will not change until the door is closed; there is no sensor detecting removal and insertion.

	Status Numbers	Printhead Cleaner Error Description	Procedure
Printhead Cleaner Information	*X03 Replace	There is a Printhead Cleaner detection failure (you may continue to use the Printhead Cleaner)	Try the following: 1. Ensure that genuine HP Printhead Cleaners are installed. 2. Reseat the Printhead Cleaner. 3. Check the lens is clean and perform Lens Maintenance if required ⇒ Page 9-5. 4. Replace the Printhead Cleaner.
	XX05 Replace	The Printhead detects that the Printhead Cleaner does not match the rest of the ink system already installed.	Ensure that you have replaced the Printhead Cleaner together with the Printhead.
	XX06 Replace	The Printer detects an incorrect Printhead Cleaner	Ensure that genuine HP Printhead Cleaners are installed.

Replace Message "xx15 Replace" and "xx16 Replace"

In certain circumstances (e.g. Printhead crash without Printer shutdown), the message "xx15 Replace" or "xx16 Replace" may appear on the front panel. This is due to a temporal disconnection between the Printhead and the flex circuit in the Carriage Assembly.

- **Clean the Printheads and the Carriage interconnects (refer to page 9-6, *Carriage Interconnect Wiper*) and reseat the failing Printheads.**
- **Check that the crane (the part of the Tubes System that is connected to the front of the Carriage) is completely clipped to the front of the Carriage.**

Replace Message "xx16 Replace" for ALL Printheads During Replacement

During Printhead replacement, the message "xx16 Replace" can appear for ALL the Printheads due to a firmware bug.

- Clean the Printheads and the Carriage interconnects (refer to page 9-6, *Carriage Interconnect Wiper*) and reseal the failing Printheads.

Refill Information (DesignJet 5500 Series Only)

Ink-Level Sensing (ILS) Out of Control

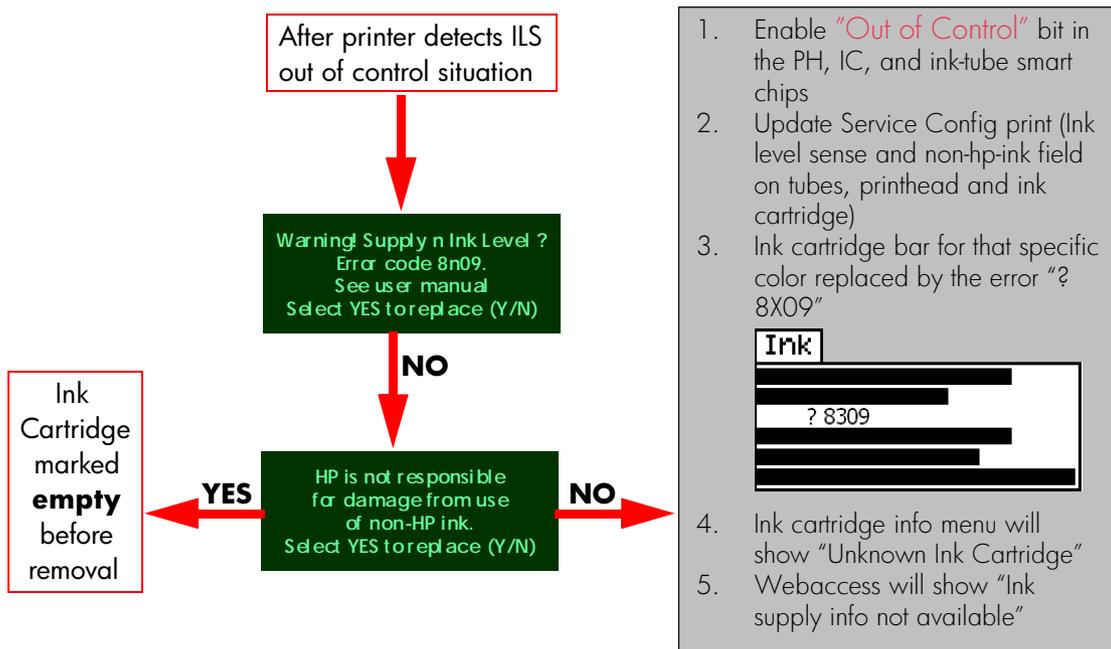
Two situations exist that could trigger an ILS Out of Control:

- HP Ink Cartridges deliver more ink than the expected 680cc
 - Ink Cartridges refilled with non-hp ink.
 - ILS coils become stuck (rare).
- Non-hp hardware detected in the Ink Delivery System.

Each one of these situations could potentially damage the printer's Ink-Tube System and Printheads. However, since we cannot tell for sure if damage to the printer will occur we cannot prevent a customer from printing. What we can do is warn the customer of possible damage, but not stop the printing altogether.

Ink Cartridge Delivers Too Much Ink

The following information explains the front panel message flow:



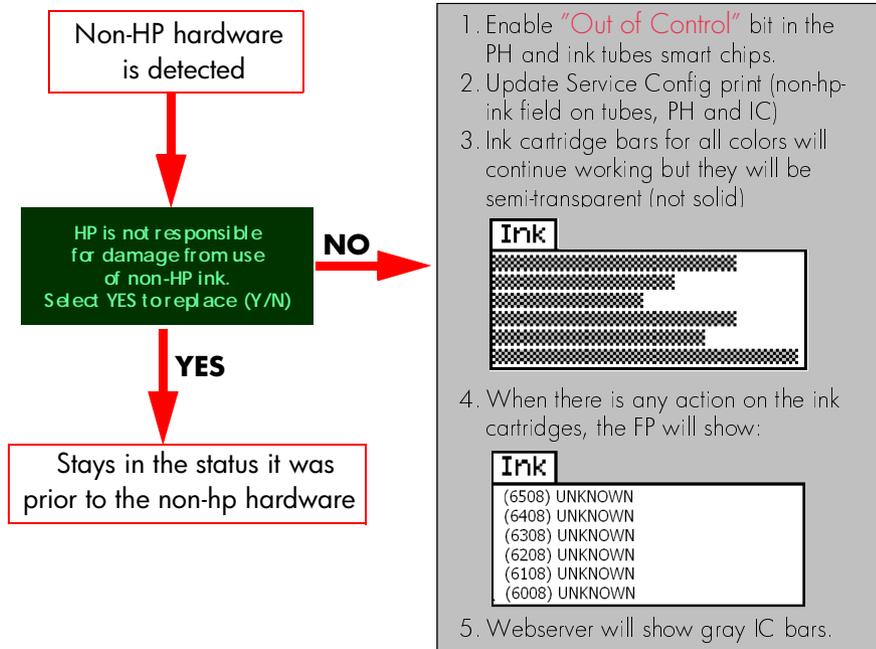
Error Message	Warning!... supply ink level? (Error code 8x09) See user manual
Description	<p>If you choose to continue printing with this ink supply you will not have an ink level indicator. You may not know when the ink supply is running low or empty. Printing with an empty ink supply may seriously damage your printhead, ink tubes, and printer. See below for a complete listing of features that will not be available with continued use of this ink supply. Any damage resulting from use of this supply or non-Hewlett-Packard ink is not covered under your printer warranty.</p> <p>The following features will not be available as a result of using this supply.</p> <ul style="list-style-type: none"> ■ In the Ink Cartridge menu: <ul style="list-style-type: none"> – Ink level indicator – Percentage of ink remaining ■ In WebAccess: <ul style="list-style-type: none"> – Ink Cartridges status – Ink Level
Recovery Action	Select "Yes" to replace the Ink Cartridge with a genuine HP No. 81/83 Ink Cartridge, or "No" to continue.

Risks with the Ink Cartridge Delivering Too Much Ink

- Meeting Point Refills: If the customer refills within the ink meeting point zone, then the ink cartridge will operate “normally.” If the customer refills after the meeting point, then an ink cartridge error will appear. Therefore, no major issues in regards to printer damage are anticipated.
- Frozen Coils Refills: The major risk of hardware failure in these kind of systems is printhead dry fire and probable empty ink tubes. Since the coil signal is blocked, the ILS will never detect an out of ink situation which could allow the printer to print without ink.
- In either case customers loose the unattendedness of the printer since they have to perform frequent ink cartridges refills to avoid the previously mentioned issues.
- Image quality, printhead performance, ink/media compatibility cannot be guaranteed with the use of non-hp ink. Customer acceptance depends on their preferences.

Non-HP Hardware Detected in the Ink Delivery System

The following information explains the front panel message flow:



Error Message	XX08 Unknown
Description	Use genuine HP components for excellent image quality from your printer. If you choose to continue printing with this ink supply you may not have a properly functioning or reliable ink level indicator. The solid bar showing the ink level will be replaced by a patterned bar. You may not know when the ink supply is running low or empty. Printing with an empty ink supply may seriously damage your printhead, ink tubes, and printer. Any damage resulting from use of this supply or non-HP ink is not covered under your printer warranty.
Recovery Action	Select "Yes" to replace the Ink Cartridge with a genuine HP No. 81/83 Ink Cartridge, or "No" to continue.

Risks with Using Non-HP Hardware

The risks in using non-hp hardware refill systems are:

- Printhead dry fire.
- Probable empty ink tubes.

These issues can be caused by:

- Cartridge not refilled to 100%. A customer could perform a counter reset when the cartridge was not refilled to 100%. If so, the printer thinks the IC is 100% full when, in fact, it could be 80% full. When the ink is depleted, the printer may continue printing without ink.
- Uninstalling non-hp hardware. While the non-hp hardware is installed, the ink cartridge smartchip is not updated. Therefore, an IC can be marked at 80% full when, in fact, it's only 70% full. If the non-hp hardware is uninstalled the printer thinks there is more ink available than there really is. Thus, the printer may continue to print without ink.
- Not performing the reset process. If customer is not performing the reset, the initial status of the quantity of ink will not be 100% when it really is 100%.

ILS Out of Control Detection

- Current Printhead kit info

```

Cyan (IN WTY)
Printhead status: OK
Cleaner status: OK
Cleaner replaced: YES
Product number: C4951A-HP No 81
Serial number: 31589
Expiration date: 10/2002
Used with non HP ink: NO
Number of insertions: 0
Ink used (wty spent): 219 ml (31.29 %)
Usage time (h): 6166
Number of primes: 0
    
```

Changes to YES

The printhead loaded in the printer is or was using non-hp ink

- Current Ink cartridge info

```

Cyan (IN WTY)
Status: OK
Product number: C4931A-HP No 81
Serial number: 2804892
Expiration date: 11/2003
Manufacturer: Genuine HP
Number of insertions: 20
Ink level: 83 %
Used with non HP ink: NO
    
```

Changes to YES

The ink cartridge loaded in the printer is using non-hp ink

- Printer History

```

Cyan
DYE PH/IC consumed: 0 PH / 0 IC
UV PH/IC consumed: 0 PH / 0 IC
DYE ink consumed: 22.79 ml
UV ink consumed: 16.97 ml
Non HP ink tubes: NO
    
```

Changes to YES

The ink-tube system loaded in the printer is or was using non-hp ink

Not on the case of non-hp hw installed

ILS Out of Control Warranty Statement

- Printhead and cleaner warranty: Until the “end of warranty” date printed on the product is reached, or 700 cc of HP ink is delivered through the printhead, whichever occurs first.
- Ink Cartridge warranty: Until the genuine HP ink is depleted as indicated by the printer, or the “end of warranty” date printed on the product is reached, whichever occurs first.
- For HP printer products, the use of a refilled or non-original HP consumable product (ink, printhead or ink cartridge) does not affect either the warranty to the customer or any HP support contract with the customer. However, if printer failure or damage is attributable to the use of a non-HP or refilled ink cartridge, HP will charge its standard time and materials charges to service the printer for the particular failure or damage.

