Latex 3-liter Ink Upgrade Kit

User's Guide

Edition 2

© 2015 Hewlett-Packard Development Company, L.P.

Legal notices

The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Table of contents

1 Introduction 1

Welcome to the 3-liter ink upgrade kit 1

Safety precautions 1

2 The ink system 3

Intermediate tanks 3

Large ink cartridges 4

Printheads 5

Maintenance cartridge 5

Check the status of the large ink cartridges 6

Ink system tips 7

Replace a large ink cartridge 8

Remove a large ink cartridge 8

Insert a large ink cartridge 8

Replace an intermediate tank 9

Refill an intermediate tank manually 12

Stop refilling an intermediate tank 13

Cannot insert an ink cartridge or intermediate tank 13

Front-panel error codes 13

3 Accessories 14

Order ink supplies 14

4 Printer specifications 16

Power specifications 16

1 Introduction

This guide is in addition to the *HP Latex 300 Printer Series User's Guide*, which covers the use of your printer in general. See that guide for any information not covered here. In case of any conflict, information in this guide replaces corresponding information in the printer guide. In particular, this guide gives the correct information about the ink system when this upgrade kit is installed.

Welcome to the 3-liter ink upgrade kit

This hardware accessory for the HP Latex 360 and 370 printers has been created to allow you to use high-volume ink supplies: only unaltered, genuine HP 871 3-liter ink cartridges in all colors are supported.

After this upgrade kit is installed, the 775 ml ink cartridges for your printer will be used as permanent intermediate tanks, while the primary ink supplies will be the 3-liter cartridges. Because of the intermediate tanks, you will be able to print continuously even while replacing a 3-liter cartridge.

IMPORTANT: This upgrade kit must be installed (and uninstalled if required) by an HP service representative.

Safety precautions

Before using your printer, read the following safety precautions to make sure you use the equipment safely.

You are expected to have the appropriate technical training and experience necessary to be aware of hazards to which you may be exposed in performing a task, and take appropriate measures to minimize the risks to yourself and to other people.

General safety guidelines

- Turn off the printer and call your service representative if there is an ink leakage.
- Do not tread on the ink supplies, which may cause ink to spill or leak.
- See the HP Latex 300 Printer Series documentation.

Warnings and cautions

The following symbols are used in this manual to ensure the proper use of the printer and to prevent the printer from being damaged. Follow the instructions marked with these symbols.

WARNING! Failure to follow the guidelines marked with this symbol could result in serious personal injury or death.

CAUTION: Failure to follow the guidelines marked with this symbol could result in minor personal injury or damage to the printer.

Warning labels

Label	Explanation
	Do not tread on ink supplies or tubes.

2 The ink system

The 3-liter ink upgrade kit changes the ink system of your HP Latex 360 or 370 printer.

Intermediate tanks

The 775 ml ink cartridges remain as permanent intermediate tanks for your printer.



The printer now has seven intermediate tanks: magenta, light magenta, black, yellow, light cyan, cyan, and optimizer.

CAUTION: Avoid touching pins, leads, and circuitry when handling ink cartridges because these elements are sensitive to electrostatic discharge, which can reduce the life expectancy of the cartridges. Such devices are called ESD-sensitive devices.

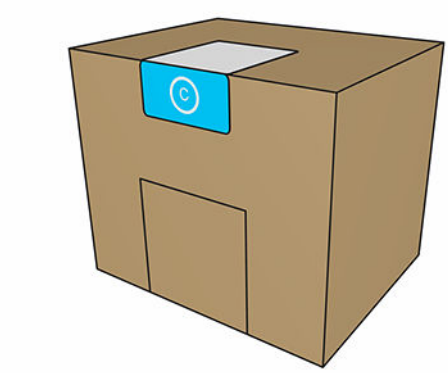
IMPORTANT: Once the ink upgrade kit has been installed, the intermediate tanks cannot be transferred to be used as ink cartridges in another printer without the upgrade kit.

NOTE: An intermediate tank must contain at least 500 ml of ink, otherwise it will be rejected.

The Quick Response (QR) code images in this user's guide, such as the following, link to further video explanation of the current topic.

Large ink cartridges

The printer's seven large ink cartridges provide magenta, light magenta, black, yellow, light cyan, cyan, and optimizer ink to the printheads. Ink cartridges store the ink and are connected through the intermediate tanks to the printheads, which deposit the ink on the substrate.



Each cartridge contains 3 liters of HP Latex ink, and consists of a bag within a recyclable cardboard box.

Check the regulatory and safety information label on the cartridge to ensure that no special ventilation is needed and no hazardous waste is created.

CAUTION: Observe precautions when handling ink cartridges because they are ESD-sensitive devices. Avoid touching pins, leads, and circuitry.

Excessive pressure on a cartridge can cause ink leaks. Avoid putting pressure on cartridges while they are connected to the printer. In particular:

- Always disconnect cartridges from the printer before handling them.
- Never place anything heavy—more than 1 kg (2.2 lb)—on top of a cartridge.
- Take care not to drop a cartridge.
- Do not try to force the last of the ink out of an almost-empty cartridge by pressing the ink bag inside the cartridge.

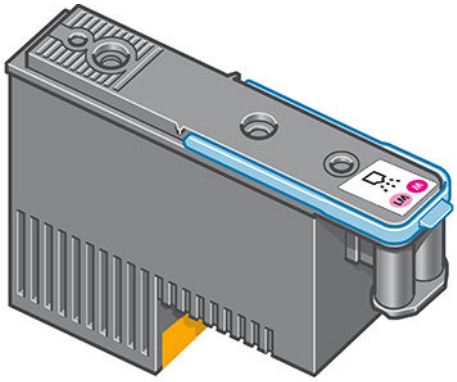
Ink cartridges require no maintenance or cleaning, but you must follow the instructions on the label before installation. High-quality printing results continue even when the ink levels are getting low.

CAUTION: Non-genuine or altered cartridges or intermediate tanks are not supported with the upgrade kit; if they are detected, printing is stopped. If you want to use such components, you must call an HP service representative to uninstall the upgrade kit.

NOTE: Your existing printheads and maintenance cartridges continue working as before. See the *HP Latex 300 Printer Series User's Guide*.

Printheads

The printheads deposit ink on the substrate. Each printhead, except the optimizer printhead, is connected to two ink cartridges.



The printheads are extremely durable and do **not** need to be replaced every time an ink cartridge is replaced. They provide excellent results even when the ink cartridges contain a low level of ink.

To maintain optimum print quality, the printheads are automatically tested at regular intervals, and automatically serviced when necessary. This takes a little time and can occasionally delay printing.

When a printhead eventually needs to be replaced, the front panel will display a message.

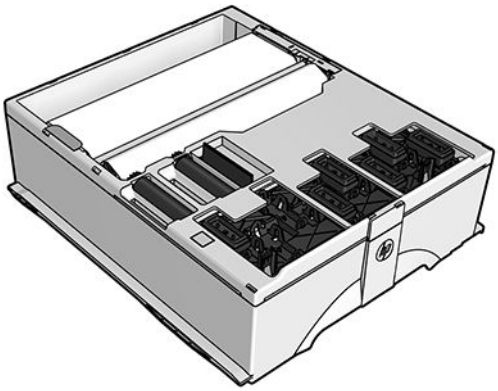
⚠ **CAUTION:** Avoid touching pins, leads, and circuitry when handling printheads because these elements are sensitive to electrostatic discharge. Such devices are called ESD-sensitive devices. Electrostatic discharges are one of the main hazards to electronics products. This type of damage can reduce the life expectancy of the device.

CAUTION: If you want to remove a printhead from the printer and preserve it for later use, reinstall the cap and plug, but never install a clear optimizer cap or white plug on a non-optimizer printhead. Optimizer printheads have clear caps and white plugs, while the other printheads have orange caps and plugs. Installing the wrong cap and plug can cause irrecoverable printhead damage.

Maintenance cartridge

The maintenance cartridge cleans and maintains the printheads, and seals the printheads when they are not in use to prevent them from drying out. It is also used to store waste ink.

IMPORTANT: Keep the maintenance cartridge horizontal when removing it, to avoid spilling ink.



The cartridge contains a roll of cloth, which is used to clean the printheads. You are notified when 92% of the roll has been used, after which the cartridge should continue to function for about another 140 m² (1500 ft²) of printed area. A new roll lasts for about 1850 m² (20000 ft²) of printed area.

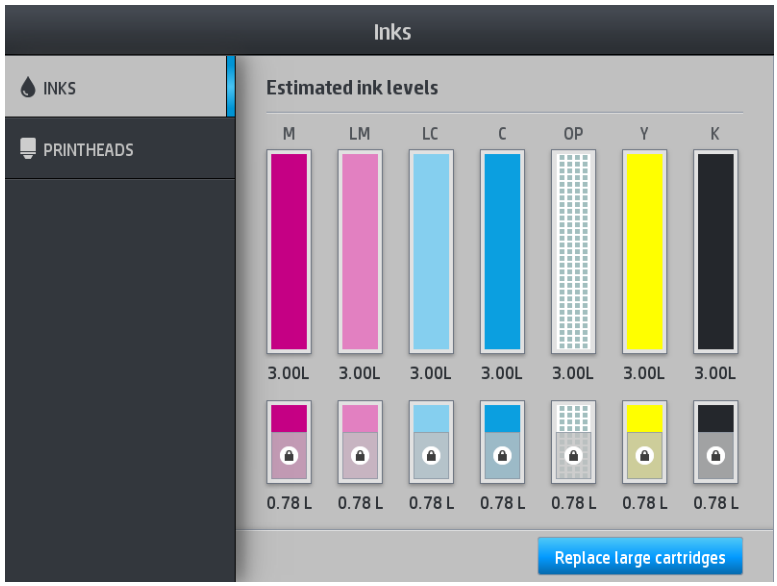
NOTE: These figures can vary considerably depending on the image density, the print mode, and the ambient temperature. The cloth will be exhausted much faster with a high-density print, many passes, and a hot environment.

NOTE: The maintenance cartridge is checked to detect end of roll when the printer is turned on and at the end of each print job.

The printer will refuse to start a print job if it detects the end of the cleaning roll. You should then replace the maintenance cartridge with a new one.

Check the status of the large ink cartridges

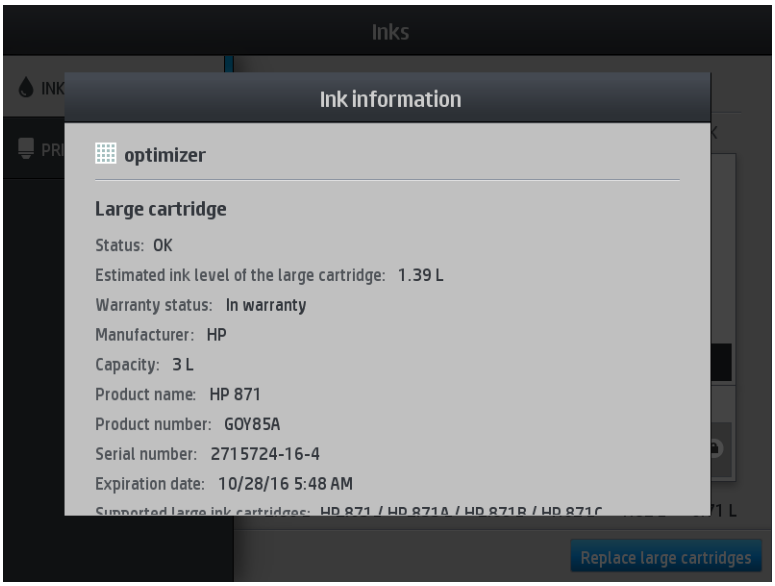
You can see the ink levels in your ink cartridges by pressing  on the front panel's home screen.



When grayed out, the 3-liter cartridge is refilling and cannot be used.

The area marked with a padlock cannot be normally be used, to preserve the ink in the intermediate tank. But you can use the **Stop refilling** option to unlock this ink. See Stop refilling an intermediate tank on page 13.

For more details about any particular ink cartridge or intermediate tank, press the corresponding rectangle. The following information is shown.



These are the possible large cartridge and intermediate tank status messages that you can see on the front panel:

- **OK:** The cartridge is working normally, with no known problems.
- **Missing:** There is no cartridge present, or it is not correctly connected to the printer.
- **Low:** The ink level is low.
- **Very low:** The ink level is very low.
- **Empty:** The cartridge is empty.
- **Reseat:** You are recommended to remove the cartridge and then reinsert it.
- **Replace:** You are recommended to replace the cartridge with a new cartridge.
- **Expired:** The cartridge's expiration date has passed.
- **Incorrect:** The cartridge is not compatible with this printer. The message includes a list of compatible cartridges.
- **Almost end of life:** The cartridge is near the end of its lifespan.
- **End of life:** The cartridge has reached the end of its lifespan, and should be changed whenever you have emptied it with **Stop refilling**.

Ink system tips

For best results, always follow these guidelines:

- Follow the instructions on the front panel during installation.
- Avoid unnecessary removal of the ink cartridges and intermediate tanks.
- The intermediate tanks should never be removed while the printer is printing. They should be removed only when the printer is ready for you to replace them. The front panel guides you through the replacement procedure.
- Avoid removing a cartridge while it is refilling an intermediate tank.

Make sure that you comply with all applicable laws and regulations when disposing of ink system consumables.

Replace a large ink cartridge

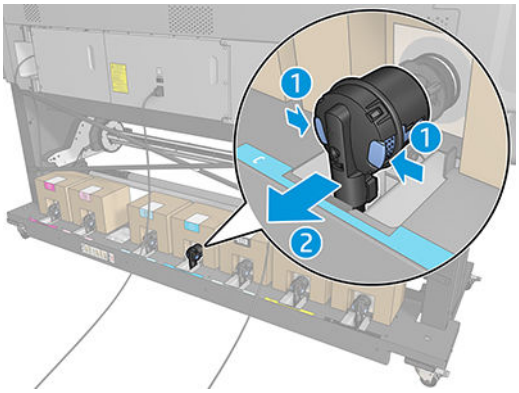
During the normal lifetime of a cartridge, no specific maintenance is required. You should replace a cartridge when it has reached its expiration date (18 months of life), or when the printer requests it. See the ink cartridge information on the front panel for the expiration date.

Remove a large ink cartridge

1. On the printer's front panel, press , then **Replace large cartridges**.

   Alternatively, press , then **Ink supplies** > **Replace large cartridges**.

2. Disconnect the cartridge connector by pressing the tabs on each side of it and pulling it gently away from the cartridge.

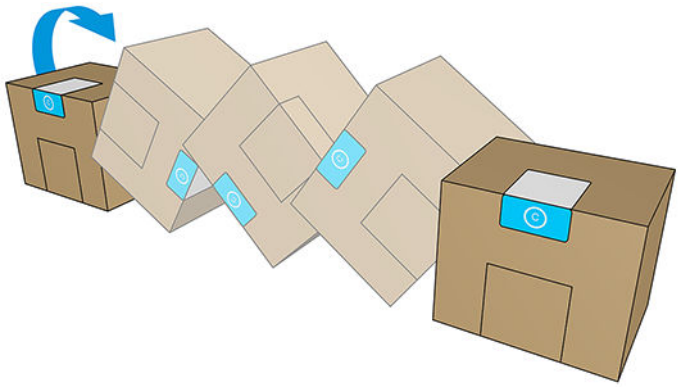


3. Remove the empty cartridge from the printer.

Insert a large ink cartridge

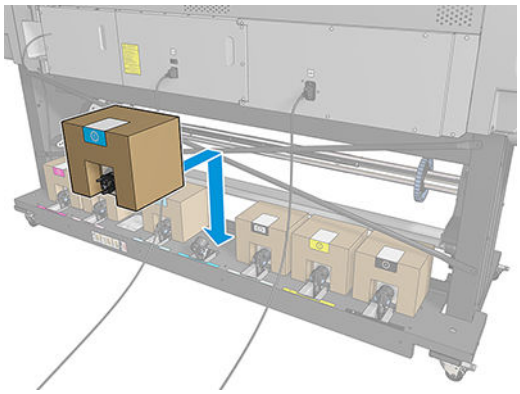
NOTE: The ink cartridge is supplied in an insulating bag; do not open it until you are ready to use the cartridge.

1. Check that the new cartridge is of the correct color.
2. Place the cartridge on a flat surface and turn it four times (rotating it through 360 degrees) as indicated on the label, to ensure that the ink is well mixed before use.



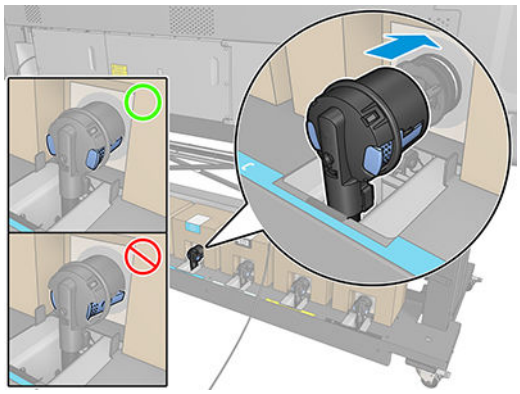
3. Tear off the square and fold it inside the handle.

4. Put the new cartridge into its correct place on the printer.



5. Check that the rubber part around the needle in the cartridge connector is clean. Clean gently with a cloth if necessary.

6. Connect the connector to the cartridge.



Replace an intermediate tank

Intermediate tanks should be replaced for the following reasons:

- The printer notifies you that the intermediate tank has reached the end of its life and will not be refilled. When it runs out of ink, it must be replaced.

NOTE: The pause to replace the tank may affect the print quality of the job.

- You want to continue printing without replacing an empty large ink cartridge. In this case, you must declare it in the front panel, and you will need to replace the intermediate tank with a new one when it, too, becomes empty. See Stop refilling an intermediate tank on page 13.

WARNING! Make sure that the printer wheels are locked (the brake lever is pressed down) to prevent the printer from moving.

CAUTION: The procedure to remove an intermediate tank must be initiated from the front panel. Do not remove an intermediate tank until the front panel prompts you. If you remove an intermediate tank incorrectly, the printer may subsequently reject that tank.

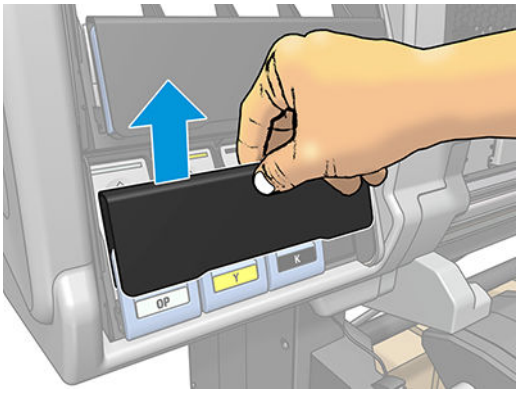
CAUTION: Remove an intermediate tank only if you are ready to insert another one.

CAUTION: Observe precautions when handling intermediate tanks because they are ESD-sensitive devices. Avoid touching pins, leads, or circuitry.

NOTE: You cannot replace an intermediate tank while it has a padlock icon displayed on the front panel. You must press **Replace intermediate tanks** as described below to remove the padlock.

Remove an intermediate tank

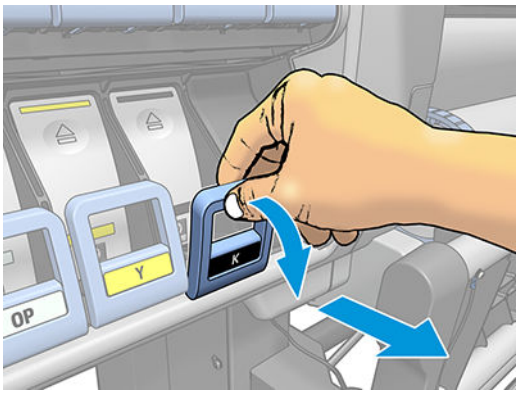
1. On the printer's front panel, press , then **Ink supplies** > **Replace intermediate tanks**.
2. Remove the locking piece.



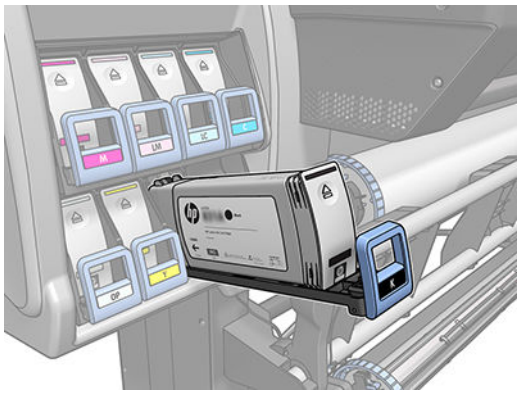
3. Grip the blue tab in front of the intermediate tank that you want to remove.



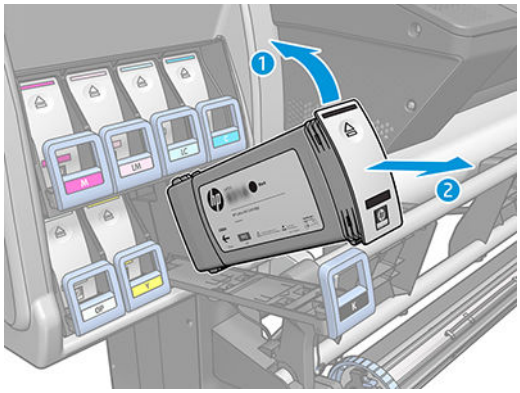
4. Pull the blue tab down and then pull it outwards, towards you.



5. The intermediate tank comes out, in its drawer.



6. Lift the intermediate tank out of its drawer.

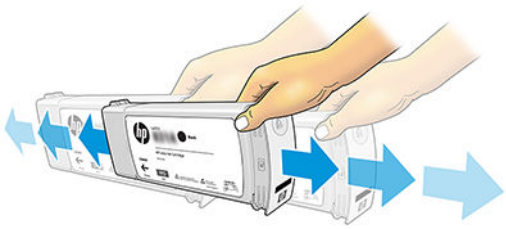


NOTE: Avoid touching the end of the intermediate tank that is inserted into the printer, because the connection might be coated with ink.

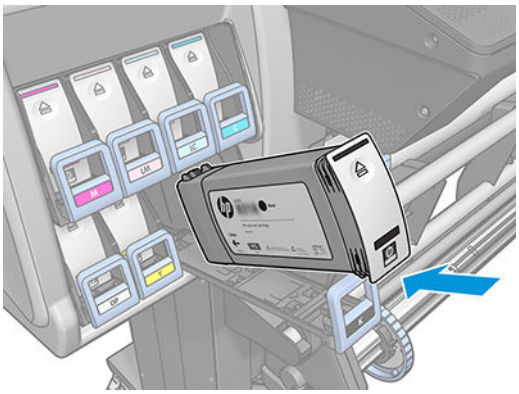
Insert an intermediate tank

Remember that you should insert an HP Latex 831 cartridge as an intermediate tank, unaltered and containing more than 500 ml of ink.

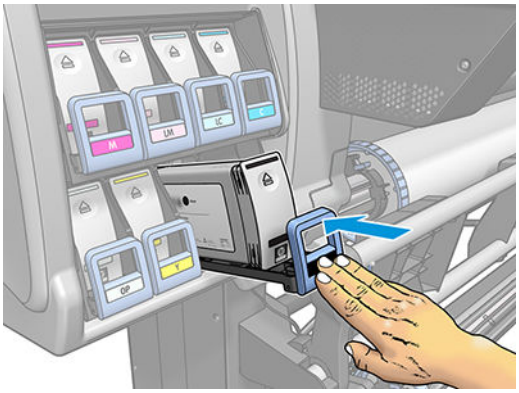
1. Pick up the new intermediate tank and find the label that identifies the ink color. Hold the tank so that you can see the label at the top of the side that is facing you.
2. Check that the colored label above the empty slot in the printer matches the color of the label on the intermediate tank.
3. Shake the intermediate tank vigorously for about 15 seconds.



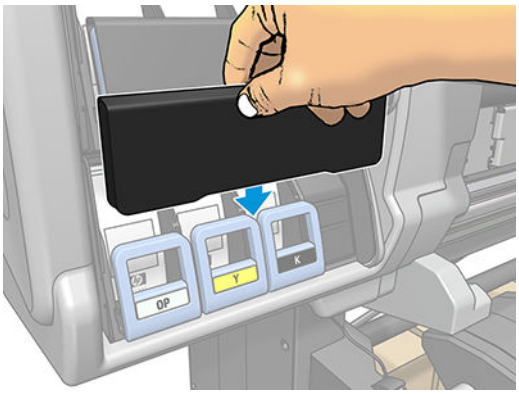
4. Insert the intermediate tank into the drawer.



5. Slide the drawer and intermediate tank into the slot until they lock into position.



6. Place the locking piece.



7. The front panel warns that intermediate tanks cannot be used in another printer. Acknowledge the warning.

Refill an intermediate tank manually

When you foresee that the ink in the intermediate tank will not be enough to complete the next job, and in consequence the job will be paused before completion to refill the tank, you can refill the intermediate tank manually by pressing , then **Refill manually**. All candidates for refill (containing less than about 600 ml of ink) are refilled.

Stop refilling an intermediate tank

If a large cartridge runs out of ink, and you want to continue printing using the remaining ink in the intermediate tank without replacing the large cartridge, press , then **Stop refilling intermediate tank** and select the color. The large cartridge will stop refilling the selected intermediate tank. Once the intermediate tank is completely empty, it must be replaced and cannot be used again.

NOTE: In this mode, the printer does not use the 3-liter cartridge at all.

The intermediate tank must be replaced by a genuine HP 831 cartridge of corresponding color, unaltered and containing more than 500 ml of ink. If this option is selected, the intermediate tank will be internally marked as 'stop refilling' and the status (see Check the status of the large ink cartridges on page 6) will be one of the following:

- Intermediate tanks won't be refillable anymore: You can continue printing while there is ink in the intermediate tank.
- Intermediate tank is empty: You need to replace the intermediate tank to continue printing as there is no ink.
- Intermediate tank error: An error has occurred and you need to replace the intermediate tank.

Cannot insert an ink cartridge or intermediate tank

1. Check that you have the correct type of cartridge or tank (model number).
2. Check that the colored label on the cartridge or tank is the same color as the label on the slot.
3. Check that the cartridge or tank is correctly oriented, the arrow on its front should face upwards.

CAUTION: Never clean inside the intermediate tank slots.

Front-panel error codes

The following additional error codes may appear:

- 26.1n:01 (where n is the ink cartridge number)

  An intermediate tank has been disconnected while refilling. Reconnect it.

- 47.0:01

  The HP Latex 3-liter Ink Upgrade Kit is not detected. If the cable is disconnected, reconnect it. Restart the printer.

3 Accessories

There are two alternative ways to order supplies or accessories:

- Visit http://www.hp.com/go/latex300/accessories on the Web. There you will also see the latest list of supplies and accessories for your printer.
- Contact HP Support and check that what you want is available in your area.

Order ink supplies

You can order the following ink supplies for your printer.

Table 3-1 Intermediate tanks

HP 831A 775 ml Black Latex Ink Cartridge
HP 831B 775 ml Black Latex Ink Cartridge
HP 831C 775 ml Black Latex Ink Cartridge
HP 831A 775 ml Cyan Latex Ink Cartridge
HP 831B 775 ml Cyan Latex Ink Cartridge
HP 831C 775 ml Cyan Latex Ink Cartridge
HP 831A 775 ml Magenta Latex Ink Cartridge
HP 831B 775 ml Magenta Latex Ink Cartridge
HP 831C 775 ml Magenta Latex Ink Cartridge
HP 831A 775 ml Yellow Latex Ink Cartridge
HP 831B 775 ml Yellow Latex Ink Cartridge
HP 831C 775 ml Yellow Latex Ink Cartridge
HP 831A 775 ml Light Cyan Latex Ink Cartridge
HP 831B 775 ml Light Cyan Latex Ink Cartridge
HP 831C 775 ml Light Cyan Latex Ink Cartridge
HP 831A 775 ml Light Magenta Latex Ink Cartridge
HP 831B 775 ml Light Magenta Latex Ink Cartridge
HP 831C 775 ml Light Magenta Latex Ink Cartridge
HP 831 775 ml Optimizer Latex Ink Cartridge

Table 3-2 High-volume ink supplies

Ink supply
HP 871A 3-liter Cyan Latex Ink Cartridge
HP 871B 3-liter Cyan Latex Ink Cartridge
HP 871C 3-liter Cyan Latex Ink Cartridge
HP 871A 3-liter Magenta Latex Ink Cartridge
HP 871B 3-liter Magenta Latex Ink Cartridge
HP 871C 3-liter Magenta Latex Ink Cartridge
HP 871A 3-liter Yellow Latex Ink Cartridge
HP 871B 3-liter Yellow Latex Ink Cartridge
HP 871C 3-liter Yellow Latex Ink Cartridge
HP 871A 3-liter Black Latex Ink Cartridge
HP 871B 3-liter Black Latex Ink Cartridge
HP 871C 3-liter Black Latex Ink Cartridge
HP 871A 3-liter Light Cyan Latex Ink Cartridge
HP 871B 3-liter Light Cyan Latex Ink Cartridge
HP 871C 3-liter Light Cyan Latex Ink Cartridge
HP 871A 3-liter Light Magenta Latex Ink Cartridge
HP 871B 3-liter Light Magenta Latex Ink Cartridge
HP 871C 3-liter Light Magenta Latex Ink Cartridge
HP 871 3-liter Latex Optimizer Cartridge

4 Printer specifications

Power specifications

DC voltage	24 V
Maximum load current	2.5 A

NOTE: Operated from host printer. Take-up reel accessory considered.