Standard-Size Refillable Cartridges for Brother LC101/103/105/107/109 and many others

1-888-4-INKOWL
1-888-446-5695

Save up to 90% on printing supplies.

Cartridge release button

Ink hole with plug

Air vent hole

Chip housing

Optical sensor plates
(only used in some circumstances, see section A)

Exit port
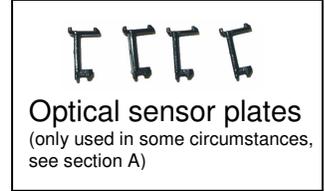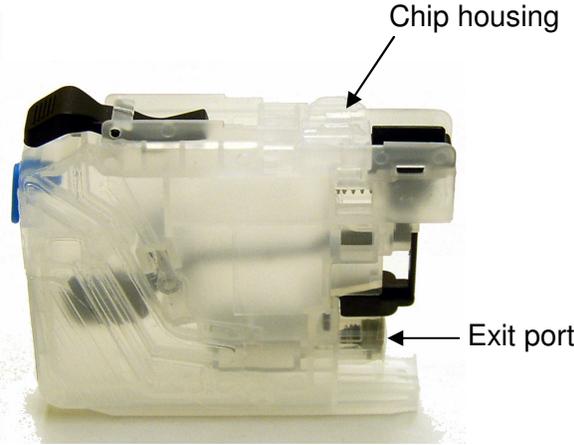
Package Contents

- 4 Refillable Cartridges with detachable chip housings
- 4 Optical Sensor Plates

Product Introduction

Thank you for purchasing our standard-size cartridge set for the Brother LC103 series. We are confident that this product will satisfy your printing needs.

In order for the refillable cartridges to be recognized by your printer, it is necessary to transfer the chips from the original cartridge of the appropriate color.

Feel free to either install the cartridges all at once as a set, or one by one as your original cartridges become empty.

Warning about Firmware Updates

Brother periodically releases updates to the printer's firmware. At the present time, firmware updates have not impacted our refillable cartridge systems using original chips (like this one). However, since firmware updates have impacted some of our other products for this printer series, we believe it would be prudent to avoid performing any such updates on your printer. If ever you are prompted to update the printer's firmware, we recommend declining.

To learn how to verify the version of your printer's firmware, see www.inkowl.com/?p=brotherfirmware.

Feel free to indicate your model number and firmware version here for future reference: _____

A. Installing the Optical Sensor Plates

It **may** be necessary to install one or more of the included optical sensor plates. Note that this step is not always required. Please check your four cartridges according to the instructions below to determine whether or not you need to complete this step.

1. Check the original cartridge you will be taking the chip from to confirm where it is a "Type 1" or a "Type 2" cartridge. "Type 1" cartridges have a small gap just above the ink exit port. "Type 2" cartridges do not.


Type 1 cartridge
Do not install an optical sensor plate
on the refillable cartridge of that color.

Type 2 cartridge
You will need to install an optical sensor
plate on the refillable cartridge of that color.

You must check all four colors to check which ones, if any, are Type 2. Then, you must install optical sensor plates on any colors that were Type 2.

To install the optical sensor plate:
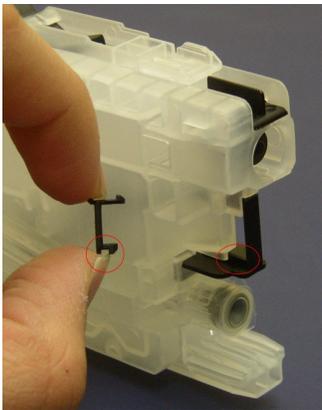
Observe the groove on the
sensor plate and the bar in the
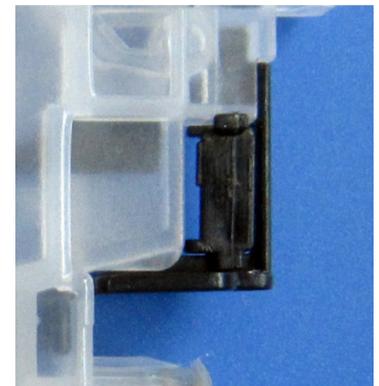gap on the refillable cartridge.

Insert the sensor plate, position it so
that the bar on the cartridge fills the
groove on the plate.

Push in the first locking tab.

Continue inserting the plate.

Final result.

At the end of this process, your set of refillable cartridges should match the set of original cartridges you will be taking the chips from in terms of whether or not there is a visible gap above the ink exit port.

B. Chip Transfer

These cartridges are designed to accommodate the chip from an original Brother cartridge. Be sure to transfer the correct color chip onto each cartridge.

2. Pry the chip off the original cartridge. You can optionally use a small flathead screwdriver to facilitate this process. See image 1.

3. Remove the chip housing from the cartridge and slide the chip in. Then, reinstall the chip housing. See images 2 and 3.
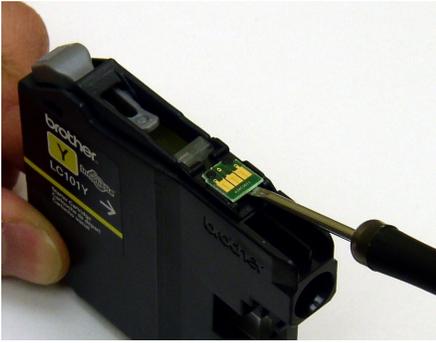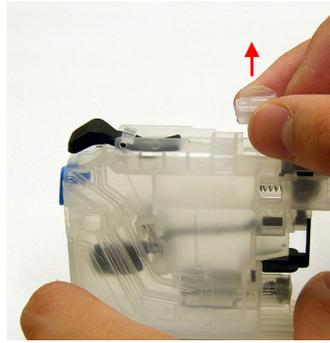

Image 1

Image 2

Image 3

C. Filling

4. Remove the ink plug and inject ink to capacity through the ink hole. The black cartridge holds about 20ml of ink. The color cartridges hold about 13ml of ink. **Do not inject ink through the air vent.** Try to insert the needle as vertically as possible so as to avoid piercing the membrane on the sides of the cartridge.

5. Once the cartridge is full, seal the ink hole with the plug.

6. Make sure that there is no tape or plug covering the air vent.

D. Installation

7. Install the cartridges normally making sure that the release buttons are in their correct upwards positions. Do not remove the clear membrane covering the ink exit port. During installation, the printer will pierce this membrane. You may need to apply some force to get the cartridge installed. This is normal.

8. If the printer prompts you to ask if you have installed new cartridges, press "Yes". If the printer "Cannot Detect" one or more colors, remove those cartridges, put them back in, and then close the cartridge cover. It may take more than one try to get the printer to accept all four cartridges.

    Note: A "Cannot Detect Ink Level" error (**?** symbol onscreen) is not the same as a "Cannot Detect" error. In the case of a "Cannot Detect Ink Level" error, simply press the "Exit" button on the printer.

E. Information about the ink levels:

Since original chips are being used, the ink level information displayed by the printer will not be accurate at all and should be disregarded. After a certain number of pages using the same chip, the printer will cease displaying an ink level altogether and instead display a "Cannot detect ink level" message with a **"?"** symbol on the ink level indicator. However, this error message will not stop you from printing.

Using our Brother LC103 chip resetter (sold separately), it is possible to reset your cartridge chips to full at any time allowing you to avoid any and all error messages.


The "Cannot Detect" message can occur because of a bad contact with a chip. It can also occur immediately upon installing a cartridge. Remove the cartridge, reinstall the cartridge, and close the cartridge cover. If the printer prompts you to ask if you have installed new cartridges, press "Yes".

The "X" ink level message occurs when the printer's physical ink sensor does not detect a sufficient amount of ink to safely print (approximately $^1/_4$-$^1/_3$ full). Remove the cartridge, refill it, reinstall, and close the cartridge cover. If the printer prompts you to ask if you have installed new cartridges, press "Yes".

The "?" ink level message can occur when the printer "believes" the cartridge should be empty based on the number of pages you've printed. However, this message will not stop you from printing. It should be ignored by pressing the "Exit" button on the printer.
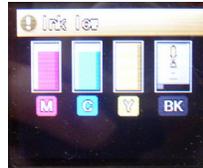
The "!" ink level message occurs when the printer's displayed ink level is almost at zero. However, since the displayed ink level is inaccurate when using refillable cartridges, this message should be ignored by pressing the "Exit" button on the printer.

F. Operation:

The cartridges' transparent design allows you to see how much ink you have inside. However, the printer will stop printing with the "Cannot print" message (see above) well before the cartridge runs completely dry. Therefore, there is no need to check on the cartridges at all.

If ever you notice the print quality becoming poor, you should perform a head cleaning:
- On the printer, touch **Settings** > **General Setup** > **Ink** > **Cleaning**
- To perform a test print, choose **Settings** > **General Setup** > **Ink** > **Test Print** > **Print Quality**
- If any dots are missing from the print quality check pattern, perform additional cleanings.

Note that this procedure may vary slightly by model. For more details, refer to your printer's user guide.