



Canon InkJet Cartridge Refill Instructions

(For #3238 Kit)

Specific Cartridges:

BCI-3/6, PGI-5/220/225, CLI-8/221/226
Series



5869 Terminal Ave. | Colorado Springs, CO 80915
719-578-0506 | www.rjettek.com

IS-3238-V3.0

Content of Kit:

- (6) - Caps, Small Orange (#1813-OR)
- (6) - Caps, Large Orange (#1814-OR)
- (20) - Covers, Black Plug (#1911)
- (20) - Labels, Red “Pull”, Adhesive (#4753)
- (4) - Needles, 18 Gauge x 1.5” (#1904S)
- (20) - Plugs, Injection (#1916)
- (20) - Plug Covers (#1911) - (these are the round black labels)
- (3) - Syringes, 20cc (#1953)
- (1) - Syringe, 30cc (#1951)

Additional Items Available from R-JetTek

- Anti-Static Bag (#1900)
- Ball Plug Remover (#1110) – use this to remove OEM nylon Ball Plugs.
- Ball Plug Remover Set (#7067) – use these to remove the Injection Plugs.
- Box, Cartridge (#4942)
- Cartridge Labels (#4761 thru 4776)
- Chip Resetter, Canon 5/8/220/221/225/226 (#3205-USB)
- Impulse Sealer (#2118), for sealing cartridges in bags
- Inks (see list of available inks on the chart below)
- Scale, Compact Digital (#7075)
- Yellow Rinse Solution (#JIR99)

Ink Chart

The inks listed below are available at R-JetTek

Cartridge #	Color	Ink
BCI-3eBk	Black	BKP44
BCI-3ePBk	Photo Black	BK20
BCI-3eC	Cyan	C47
BCI-3eM	Magenta	M45
BCI-3eY	Yellow	Y44
BCI-3ePC	Photo Cyan	CL48
BCI-3ePM	Photo Magenta	ML46
BCI-6Bk	Black	BK68
BCI-6C	Cyan	C51
BCI-6M	Magenta	M49
BCI-6Y	Yellow	Y47
BCI-6PC	Photo Cyan	CL52
BCI-6PM	Photo Magenta	ML50
BCI-6R	Red	R10
BCI-6G	Green	G10

Cartridge #	Color	Ink
PGI-5 Bk	Black	BKP44
CLI-8 PBk	Photo Black	B797
CLI-8 C	Cyan	C122
CLI-8 M	Magenta	M122
CLI-8 Y	Yellow	Y122
CLI-8 PC	Photo Cyan	CL125
CLI-8 PM	Photo Magenta	ML125
CLI-8 R	Red	R122
CLI-8 G	Green	G122

Cartridge #	Color	Ink
PGI-220	Black	BKP44
CLI-221	Photo Black	BK124
CLI-221	Cyan	C144
CLI-221	Magenta	M144
CLI-221	Yellow	Y144
CLI-221	Grey	BK123
PGI-225	Black	BKP44
CLI-226	Photo Black	BK124
CLI-226	Cyan	C144
CLI-226	Magenta	M144
CLI-226	Yellow	Y144
CLI-226	Grey	BK123

Approximate Weights and Fill Volumes

Cartridge #	Color	Empty Wt	Ink Amount	Full Wt
BCI-3e	Black	20	27	47
BCI-3e	Color	14	14	28
BCI-6	Black	14	14	28
BCI-6	Color	14	14	28
PGI-5	Black	20	27	47
CLI-8	Color	14	13	27
PGI-220	Black	16	19	35
CLI-221	Color	11	9	20
PGI-225	Black	16	19	35
CLI-226	Color	11	9	35

Important Notice - Read though all of the instructions thoroughly before starting the filling process.

Canon Tank Cartridge Refill Process

1. Weigh the cartridge to assess whether or not the cartridge is empty (see the weight chart on page 3). **Important Note:** Always start with an empty cartridge. If already empty go to Step 3.
2. Use a 3200 rpm centrifuge to extract any liquid remaining in the cartridge for at least 10 minutes, by placing the cartridge flat with the Exit Port facing out.

Cleaning: If the cartridge needs cleaning internally it is recommended to soak the cartridge for about 10-15 minutes. Place the cartridges in a plastic tub with the Exit/Egress Port facing down on a few layers of paper towels that are saturated with diluted JIR99 Yellow Rinse Solution. Then centrifuge for at least 10 minutes with the cartridge lying flat and the Exit Port facing out. Air dry overnight, and then the cartridge will be ready to fill.

3. If you are replacing the OEM label with a “Remanufactured” Label then use a heat gun, or equivalent to help loosen the adhesive, and pull to remove the label. If not, use a razor blade to cut away the label above the Fill Port. [Figure 1 and 2](#)
4. Remove the Ball Plug using a pick tool, or use the Ball Plug Removal tool (#1110). Do this by pressing the screw end of the tool into the center of the ball plug with a little pressure, and turning clockwise to thread the screw in. Then when you have threaded the screw in about 3 or 4 rotations pull back on the tool to extract the ball plug (see [Figure 3 and 4](#)). **Caution:** Be careful not to damage the sides of the hole while doing this, because this could cause a leak.
5. Insert the Injection Plug (this replaces the ball plug) into the Fill Port (#1916). The top of the plug should be level with the top surface of the cartridge. [Figure 5 and 1](#)

Note: This plug requires the use of an 18 gauge sharp needle (#1904S) or smaller. The purpose of this plug is to seal the port. Also, when the needle is inserted this helps control the flow of ink from the tank into the sponge while removing the air from the cartridge.

6. Fill syringe with correct amount of ink for the cartridge to be filled, and attach the needle. **Note:** The fill amounts are listed on the Weight Chart on page 3.
7. Carefully push the needle about 1/2” through the plug. Hold the cartridge with the Exit Port up and SLOWLY inject ink until reservoir is almost full. [Figure 6](#)

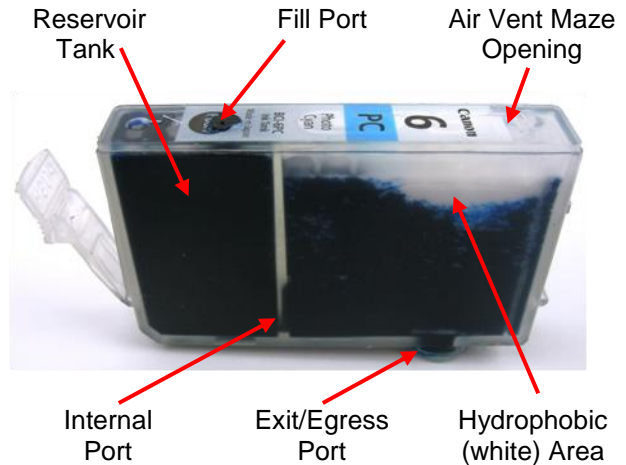


Figure 1

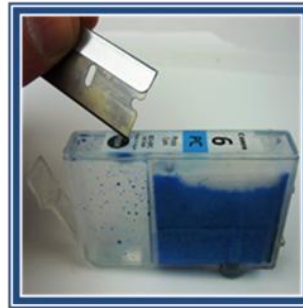


Figure 2

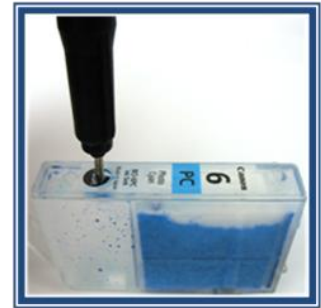


Figure 3



Figure 4



Figure 5

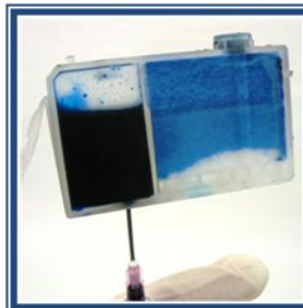


Figure 6

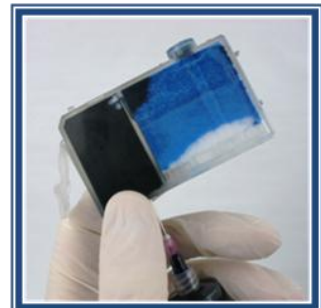


Figure 7

8. Tilt the cartridge so the remaining air can exit out of the tank through the Internal Port, and into the sponge, as you fill the remaining space in the reservoir with ink. [Figure 7](#)
9. Rotate the cartridge 90° and continue to fill slowly so the ink begins to fill into the sponge. [Figure 8](#)
10. Rotate 90° again, so that the cartridge is now upright. Continue filling **slowly** until the syringe is empty (see [Figure 9 and 10](#)). **Caution:** Always fill by the amount given on the weight chart, because overfilling a cartridge may cause it to leak.

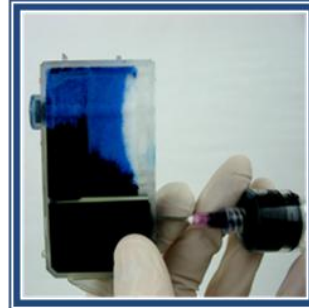


Figure 8

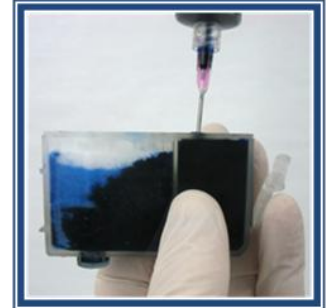


Figure 9

Note: When a cartridge is filled correctly it will maintain the hydrophobic (white) area at the top of the sponge (see [Figure 1](#)). This will assist in the proper function of the cartridge once installed in the printer.

11. Let the cartridge rest for a little while, and then clean as needed.

Note: Seal the cartridge before resetting the chip and packaging. Make sure that you press to fit each sealing label, especially where there are uneven surfaces.

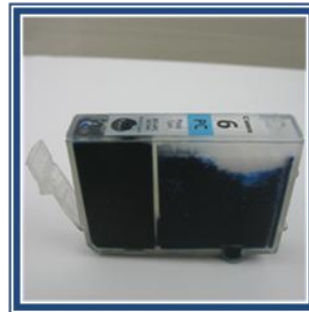


Figure 10



Figure 11

12. Seal the Fill Port using the Plug Cover (#1911, the round black label). [Figure 11](#) (red arrow)
13. Seal the Air Vent Maze Opening using Red “Pull” Label (#4753). See [Figure 1 and 11](#) (green arrow). **Caution:** You must cover the entire opening with a little overlap. Also, press to fit the label to all uneven surfaces.
14. Seal the Exit/Egress Port using either the Small Orange Cap (#1813-OR), or the Large Orange Cap (#1814-OR). [Figure 11](#)
15. If the cartridge has a chip you can reset it using the Canon Chip Resetter (#3205-USB), which will reset the 5, 8, 220, 221, 225, and 226 series cartridges. [Figure 12](#)



Figure 12



Figure 13

Caution: To prevent damage to the chip follow common ESD safety procedures. For detail ESD information on the web go to:

en.wikipedia.org/wiki/Electrostatic_discharge

16. Place the cartridge into an Anti-Static Bag (#1900) for all cartridges with chips, and Poly Bags if the cartridges are without chips. [Figure 13](#)
17. Seal the bag using the Impulse Sealer (#2118). [Figure 14](#)
18. Place the bagged cartridge into a plain white box (#4942). Create your own label to place on the outside of the box. [Figure 15](#)



Figure 14



Figure 15