



Your Low Cost Printing Solution Since 1994

Canon iP4000 CFS Installation Instructions Installation Procedure



Canon Pixma iP4000 with MIS CFS Installed

Prerequisite -

Before starting this installation, you **MUST** test your printer to make sure it is printing 100% correctly. The best way to do this is to first print a Nozzle pattern, using the printer utility software provided by Canon. Once a perfect nozzle pattern is achieved, print 5 copies of the MIS *purge4.tif* image using the Plain Paper and Standard Quality settings on the printer, and 5 copies of the MIS *purge4.tif* image using the Photo Paper and Standard Quality settings on the printer. All 10 pages must print without banding or skipping (white spaces). If your printer can not do this, **do not** install the CFS. Run some cleaning cycles or get new cartridges. Do not proceed until you can pass these tests.

The Purge4 image can be found on the diskette included with your system. If you have a Mac you can download it from our website. You can also get it from the Helpdesk Download Library.

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MIS Associates Inc 2901 Auburn Rd Auburn Hills, MI 48326 800-445-8296
<http://www.inksupply.com> Fax: 248-289-6013 Email: sales@inksupply.com

Tools & Materials Needed -

- MIS CFS System, ink, and a working Canon iP4000 printer
- Ruler or measuring tape
- Pair of scissors
- Alcohol and some paper towels
- Some paper to print on

Items In This Kit You Will Need To Save -

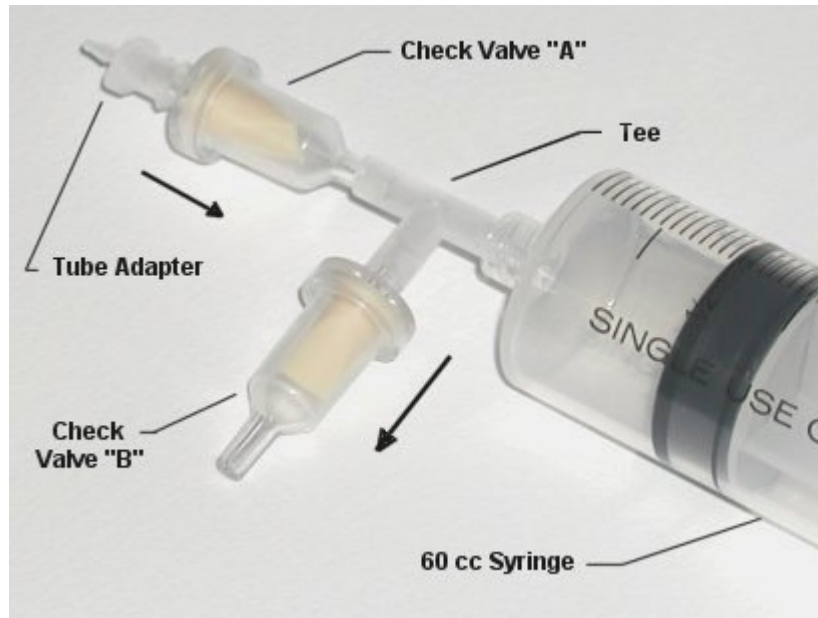
- MIS iP4000 PIXMA Installation Instructions
- Orange Cartridge Caps
- White Tube Plugs
- Vacuum Pump Kit and Instructions

1. If you purchased your system pre-filled, go to Step 2, else continue with Step 1.

Remove the caps from the ink bottles and replace them with the caps from the package supplied with your CFS system.



The vacuum pump must be assembled as shown in the below photo. Check valve direction is critical.



Before filling: If the orange caps are not installed on the cartridges, install the orange caps that originally came with the CFS over the cartridge ink supply ports.

- Make sure not to twist the tubing between the color cartridges and the clip on the black cartridge as this will cause issues with filling and installation.



- Attach the tube from the chamber that is going to be filled to the tube adapter on the vacuum pump.
- Pull back on the plunger, all the way. It takes a fair amount of force.
- Push the plunger back down to the bottom to expel air.
- Pull back on the plunger again, all the way and push down to expel air.
- After 3 or 4 pulls, the plunger should snap to the bottom if let go.
- Let the vacuum pump rest for about on minute. This is a leak test.

- After one minute, pull back on the plunger and let go. It should snap to the bottom on its own.
- If it does not go all the way down, then there may be a leak in one of the check valves or the CFS cart. Do not proceed until you can pass the leak test.
- Note, at no time does ink ever enter into the vacuum pump, only air.

With the vacuum pump fully pumped up and maximum vacuum achieved, do the following to fill cartridge.

- Grab the tube, about 1 inch up from the vacuum pump below the tube adapter fitting and fold it in half or pinch it.
- This traps the vacuum in the tube and CFS. Now remove the tube from the vacuum pump without letting the tube unfold. Keep pinching the tube. This is important.
- Plug the tube into the fitting on the top of the **correct ink bottle** for the position being filled.
- Release the fold in the. Ink should rush up the tube and into the cartridge.
- The ink level in the bottle should go down about 1/2 inch or more depending on cartridge size.
- After about 30 seconds the cartridge will be full.

When the process is complete, fill the next chamber following the same procedure, but with a different color. Needless to say, that if you put the wrong color ink in the wrong chamber you will ruin the CFS cartridge, and they will need to be replaced.

After all chambers have been filled, let the cartridge sit on your bench, in its installed position, for about 2 hours before installing into the printer. If you lose some of the ink from the lines after they are filled, this is not a problem. As long as there is ink in the cartridge, the lines can be full or empty, it does not matter.

When this is complete, go to Step 2.

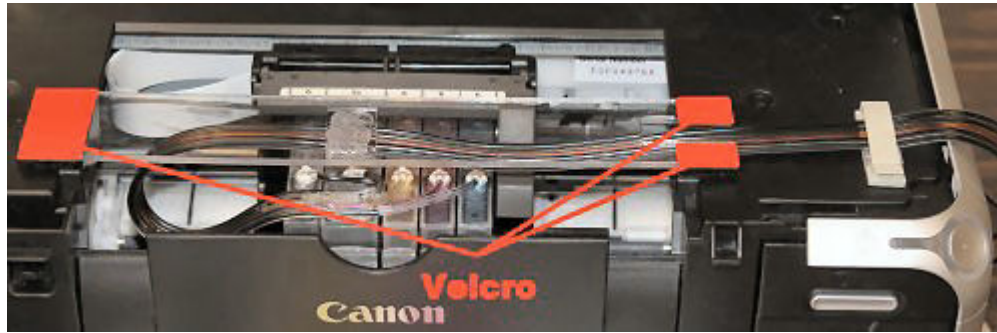
2. On the printer, with the power **on**, open the lid to move the cartridges to the **Cartridge Replacement** position. While in this position, **pull the power plug out of the wall** and disconnect the **USB Cable**. Next, remove the cartridges. The cartridges ride in a black cartridge carriage and are secured by a gray clamp. The clamp does not have to be lifted for removal of the cartridges, simply push in on each cartridge tab and remove them from the printer.



3. If you choose to use printer stands place the printer on the printer stands and position them so that the flat side of the stand with the cutout faces outward. The use of printer stands on Canon printers equipped with CFS systems, though optional, is recommended for users having issues with the rare issue ink draining into their printer.
4. Remove the orange caps and any other packaging material from the CFS cartridges. Save these orange caps as they are not available for sale separate from a CFS unit. PARTIALLY install the CFS cartridges by placing them in their installed position but do not push the cartridges all the way down. Make sure that the tubing between the color cartridges and the clip on top of the black cartridge is not twisted or pinched. Do not push the cartridges all the way down. We do not want the seals on the bottom to be push up until the tubes have been installed in the bottles. The tubing ends with the white plugs should be aligned to the right of the printer.

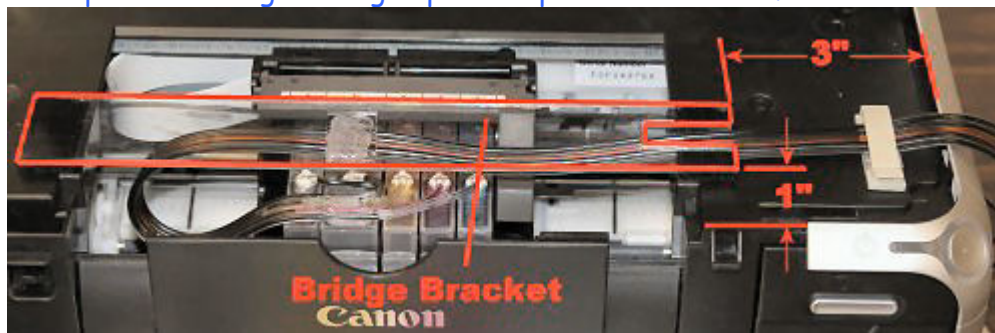
Next, clean and dry the printer housing with alcohol where the bridge bracket and beige clip are to be installed. Locate the Bridge Bracket from your package and install it as shown in the photo. Before peeling the protective tape from the velcro strips on the bridge bracket, place it in the location described below and as seen in the photo below. The Bridge Bracket mounts 1 inch from the front edge of the printer housing as shown in the picture. This area should have been cleaned with an alcohol pad.

Now peel the protective tape from the velcro strips on the both sides of the bracket. This position should leave about 3 inches on the right hand side of the bridge bracket and the right edge of the printer. See the photos below.



Location of velcro strips

5. Install the beige tubing clip as shown in the photo above. Clean and dry the printer housing with alcohol and place the beige tubing clip in the position as shown.



Bridge Bracket and beige clip installation

The clip installs on the right side of the printer housing 2 inches to the right of the bridge bracket. It should align with the clip on the bridge bracket so that the tubes run parallel with the print carriage between the clip on the Bridge Bracket and the clip you are installing on the printer housing. See photo above. Affix the clip so that it opens from the front side of the printer. This placement is critical and must be done correctly in order to align the tubing.

6. The tubing ends with the white plugs should now be on the right hand side of the printer. You can now place the tubing into the beige clip and close it.

The tubes should be positioned in the Bridge Bracket clip first. The tubing should be marked where it will be placed clip. This position should allow enough length of tubing so that the cartridge carriage can slide the full length of the printer from right to left and back again without pulling the tubes and without being restricted by the tubes when they are placed in the clip on the Bridge Bracket. The clip will need to be pried open and the tubing inserted so as not to damage the tubing. Checking this process will be a bit difficult as the cartridges should not yet be fully locked into the carriage.

7. Once the tubes are securely inserted into the middle clip on the Bridge Bracket, you can allow the remaining tube length to feed to the right hand housing beige clip, and clamp the tubing. This will leave the remaining tube length at the right side of the printer ready to be trimmed

for insertion into the bottles.

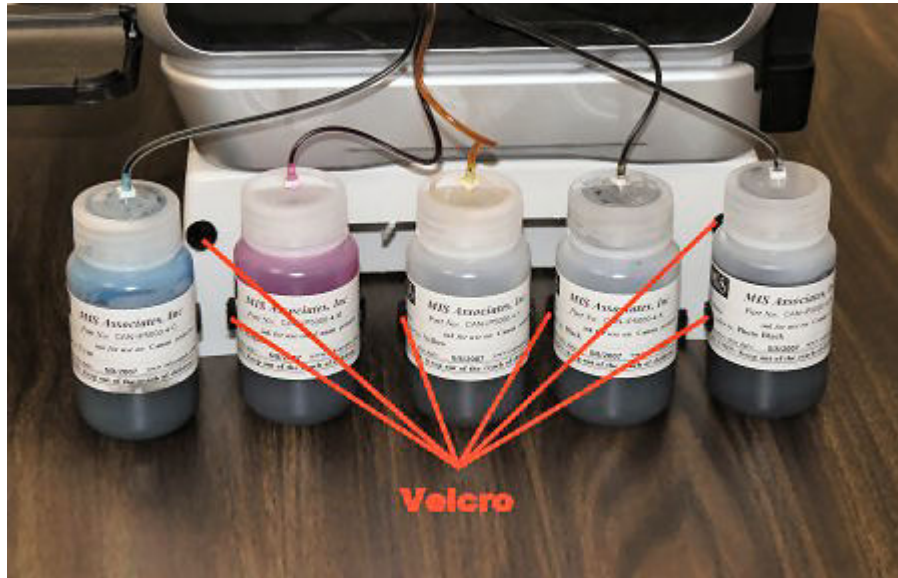
8. The tubing between the Bridge Bracket and the cartridges will need to be lubricated with the provided silicone pad. Remove the Bridge Bracket from the printer, leaving the tubes attached. Starting 1 inch from the cartridges, simply rub the pad the full length, top and bottom, of the tubing section between the Bridge Bracket and 1 inch from the cartridges. Do **NOT** remove the cartridges to apply the silicone lubricant. Reinstall the Bridge Bracket by pressing it back down onto the velcro strips.
9. Un-web the tubes from the right end beginning at the white plug up to the right hand side of the printer housing, so that each tube can be independently installed into its bottle. The tubes are easily un-webbed by just pulling them apart, no tools are required. Don't go too far.

You can now align the bottles on the right hand side of the printer. The order of the ink bottles from front to back are,

Cyan - Magenta - Yellow - Black - Photo Black

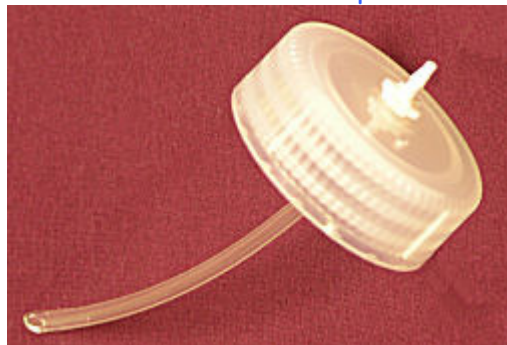


Bottle Positions



Velcro attachment

10. Installing the tubing on the bottles is easy. In the CFS kit you received a set of bottle caps with tubes attached. Remove the caps that came on the ink bottles and replace them with the caps that have the tubes installed. Be careful not to spill the ink.



If your system was pre-filled, cut the tubes just above the white plugs, save the plugs in a safe place as you may need them later if you should ever remove the CFS unit. When you clip the tubing you **Must** clip it at the very edge of the white plug making sure not to lose any length of tubing. If you ordered an empty system you should have vacuum filled your cartridges by now, and your tubes will already be installed on the bottles.

Now push the tube onto the fitting on top of you ink bottle so the tube reaches the bottom of the fitting. **Do not put the wrong color tube on the wrong ink bottle.** Follow the tube back to the cartridge where the cartridge label identifies the ink in the chamber.

Repeat this process for each of the colors.

11. You can now press the cartridges down into the correct positions. You may hear them click

into place, it is okay if you do not hear the click. Just be certain they are securely seated making certain the cartridges are properly aligned and down all the way in the carriage. Clamp the CFS system in place by locking the gray print head clamp down. Push the cartridge carriage **all the way to the right hand inside of the printer.**

12. Close the printer's lid ensuring the tubes are not pinched between the lid and the housing (the Bridge Bracket is designed to hold the lid slightly open to prevent this). Plug the printer back in and **turn on the power.** Run a few cleaning cycles until you have a perfect nozzle pattern. The printer is now ready to use. If you have problems getting a perfect nozzle pattern, let the printer rest overnight, and try again in the morning.

Note: If for any reason you must remove the CFS after installation you **MUST** replace the white tube plugs as well as the orange seal caps to prevent the CFS from draining and creating a mess.

The Care and Feeding of a CFS -

There are a couple of things you should know that will keep your system running trouble free.

Every time the Canon iP4000 CFS system is removed from the printer the prime (ink in the tubes) will drain back to the bottles. After a few installations and removals the ink in the cartridge reservoirs will deplete making it necessary to Vacuum Fill the CFS using the Vacuum Pump Kit [CFS-VP](#).

These systems work best if they are used frequently, daily is best, but every few days is more important. If you are an infrequent printer or only print once or twice a week, then you should install our AUTOPRINT program (download it for free from our [CFS page](#)). Autoprint will make a printout using our Purge4 image everyday as long as you leave your computer and printer turned on.

If you have to do cleaning cycles, do them in groups of 3 and be certain to print something, we recommend a copy of the Purge4 pattern after every 3 cleaning cycles. The Canon software will allow you to run cleaning cycles on the color cartridges or black cartridge individually. If only one of the cartridges is problematic limit the cleaning cycles to include the fewest number of cartridges possible. If you are still having problems after about 3 or 4 sets of 3 cleanings, then let the printer rest for a few hours or overnight and try again later. This has worked on many Canon printers in the past. It gives the air bubbles in the ink a chance to rise to the surface and get out of the printhead.

Don't let your ink bottles get empty. Refill them when they are at the 1/4 full level. Before pouring new ink into your bottle, transfer the ink that is left into a clean glass or jar. Then

wash out the CFS ink bottle with soap and water. Then refill with leftover ink and new ink. This keeps algae from building up on the walls of the bottle and causing premature ink failure. An easier method is to order a spare set of empty bottles, and keep them on hand, clean and ready to use.

For additional technical assistance please read our [CFS Troubleshooting Guide](#) or visit our online [HelpDesk](#)