

Installation Instructions: Epson 960 CFS



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 Epson. Once a perfect nozzle pattern is achieved, then print 5 copies of the MIS purge6.tif image using the Plain Paper and 360 dpi settings on the printer. All 5 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 Purge6 image can be found on the diskette included with your system. If you have a Mac you can download it from our website or get it from the Helpdesk Download Library.

Materials -

- MIS CFS System, Ink and a working Epson 960 printer
- Ruler or measuring tape
- Pair of Scissors
- Alcohol and some paper towels
- Some paper to print on
- Flat head screw driver

Procedure -

1. If you purchased your system prefilled, then go to Step 2. If you purchased an empty CFS unit, then vacuum fill the cartridges with the ink that came with the system or the ink of your choice. Follow the instructions that are included with the vacuum pump or get them from the Knowledge Base. After filling the cartridges, attach a blue pinch clip on the very end of each tube. This will keep ink from leaking out of the tubes. When the filling is complete, go to Step 2.
2. On the printer, push the Ink button to move the cartridges to the Replace position. While in this position, pull the power plug out of the wall.

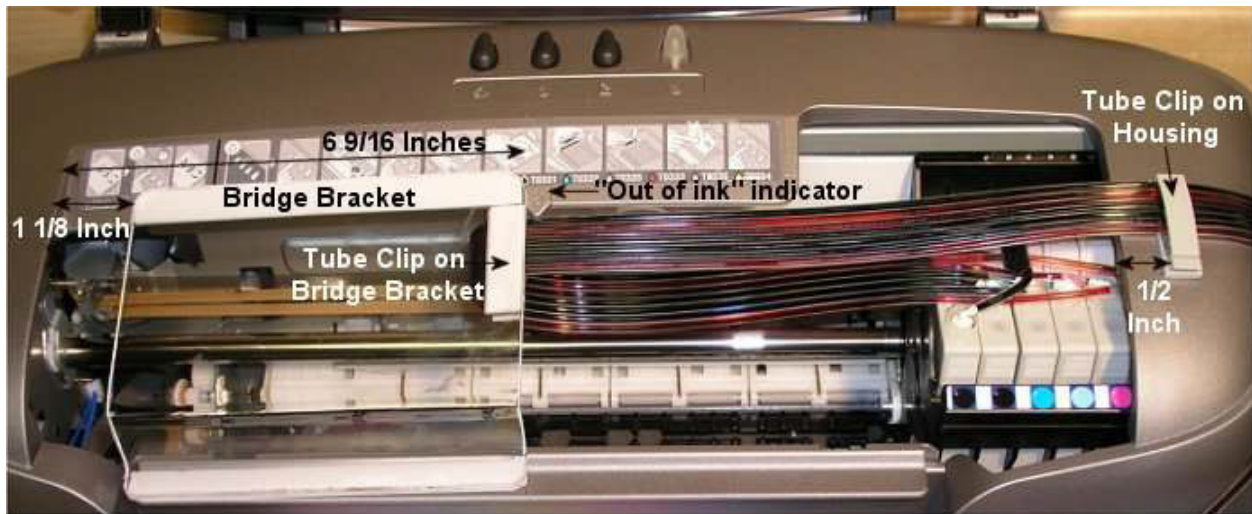


3. Remove the gray cartridge clamp next. Use a thin flat screw driver blade to remove the clamp. See photo below. Be sure not to break the clamp. You may need it some day. Place the screw driver between the gray clamp and black cartridge carriage. Gently press the gray clamp outward away from where it attaches to the carriage. You may need a small flash light to help you see what is happening where the clamp attaches. It will come out cleanly with no damage to either the clamp or the printer, so don't be over aggressive.



4. Install the bridge bracket as shown in the photos below. Clean and dry the printer housing with alcohol and place the bracket in the position shown. The upper right edge of the bridge bracket should be against the "out of ink" indicator (the raised pointer showing an ink drop with a line through it) on the edge of the housing. This is 6 9/16 inches to the left of the opening in the housing. See photo for placement.
5. Place the beige tube clip on the right hand side of the housing, lined up horizontally with the tube clip on the bridge bracket. It should be 1/2 inch to the right of the opening. Line the clip up with the clip on the bridge bracket, to create a straight line with the tubing. This placement is important and must be done correctly in order to align the tubing. Leave both tube clips open.

Caution: *the hinge on the tube clips is delicate, and can be broken easily, be careful.*



Bracket and Beige Tube Clip Positions

6. Remove the Epson cartridges and PARTIALLY install the CFS cartridges. Do not push the cartridges all the way down. We do not want the seals on the bottom to be punctured until the tubes have been installed in the bottles.
7. In order to do this, you must follow these steps to route the tubing.
 - Slide the cartridge carriage all the way to the right in its housing.
 - Lay the tubing across the printer so that the end with the blue clips is on the left.
 - With your left hand, hold the tubing at the right edge of the bridge bracket.
 - With your right hand, take the end with the blue clips, and lay them on the right side of the printer.
 - The tubing has black lines marking where it should be clipped into the beige tube clip on the bridge bracket.
 - Insert the tubing into the beige clip under the bridge bracket, center the clip between the two black lines, and close it.
 - The tubing should form a gentle curve, without kinking, but not sagging either.
 - The tubing ends with the blue clips should be to the right of the printer.
 - Place the tubing into the beige clip on the printer housing and close the clip.
 - Move the print carriage to the far left and back to the far right. This will not be easy as the cartridges are not yet seated in the carriage. The white fitting on the left black cartridges will not pass the beige clip on the bridge bracket with out some careful movement, so be aware of this. Make sure the tube tension does not restrict the movement of the carriage in any position. Do this a few times, observing the tubing and any restrictions you feel. If

necessary adjust the position of the tubing in the beige clips so the far right and far left positions can be reached without any problems.

8. Once the tubes are securely inserted into the Bridge Bracket and clipped into the right hand tube clip, un-web the tubes back from the blue clips back to the right hand side of the beige tube clip on the printer housing, so that each tube can be independently installed into each bottle. The tubes are easily un-webbed by just pulling them apart, no tools are required. Don't go too far. Make sure the beige tube clips is closed before doing this.

You can now align the bottles on the right hand side of the printers. Both black inks are identical. The order of the ink bottles from front to back are,

Light Magenta - Light Cyan - Black - Cyan - Magenta - Yellow - Black.



Bottle Positions



Velcro attachment

9. If your system was prefilled, cut off any excess tubing so the tubes make a gentle downward bend into the bottles. There should be 3 1/2 to 3 3/4 inches of tubing inside the bottle with out rising up. Cut the tubes just above the light blue pinch clips, save the blue tube clips in a safe place as you may need them later if you remove the CFS unit. You will lose about 1/2" of tubing, this is OK. Measure twice and cut once to be certain that cutting the tubing where you are intending to will leave enough tubing to put about 3 1/2 to 3 3/4 inches of tubing inside the bottle. You can place a mark on the tubing with a marker to indicate the point on the tube where tube will be inserted into the cap to. Cut the end of the tubes on a 45 degree angle so they are pointed. Don't waste any tube length in doing this.

If you ordered an empty system you will not have any pinch clips to cut off.

Now insert the tube into the bottle so the tube almost reaches the bottom of the bottle. There should be 3 1/2 to 3 3/4 inches of tubing inside the bottle when you are finished. Don't put the wrong color tube into the wrong ink bottle. Follow the tube back to the cartridge where the cartridge label identifies the ink in the chamber. Make sure the correct color tube is inserted into the correct color bottle, a mistake here is fatal to the cartridge system.

10. At this time, finish installing the CFS cartridges into the carriage. Press down firmly until the cartridges snap in place.

11. Make sure the cartridges are properly aligned and down all the way in the carriage. Push the cartridge carriage all the way to the right hand inside of the printer, until it stops.
12. Plug the printer back in and turn on the power. Run up to three 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. Running more than 4 consecutive cleaning cycles will make the nozzles start to disappear. If you are having problems, let the printer rest for a couple of hours so any ink foam in the print head can dissipate. Then try another cleaning cycle or two.

The Care and Feeding of a CFS -

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

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 Purge6 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 Purge6 pattern after every 3 cleaning cycles. This resets the printer firmware so that you get a medium, long, and short duration cleaning cycle. If you don't do this, you will only get short cleaning cycles after the 3rd one. Running several short cleaning cycles will cause nozzles to drop out. 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 Epson 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.

If an ink color does not print. Remove the tube from the bottle, lift the cartridge out, and suck out a little ink, not more than 2 cc, to eliminate any air locks that may be present.

Use the syringe and bottom fill adapter, then reinstall. If you have all colors printing but you are having problems getting a perfect nozzle pattern after several cleaning cycles, then let the printer rest overnight and try a few cleaning cycles in the morning. For additional technical assistance please read our CFS Troubleshooting Guide or visit our online HelpDesk