

Installation Instructions: Pre-Filled Epson 820 CFS



Provided:

- Continuous Flow Cartridge set with Tubes attached
- 2 MIS Short Bracket
- MIS Bridge Bracket for 820/C60 Printers
- MIS 6 Bottle Tray
- MIS Inkset and Drilled Caps 6

Needed:

- Ruler or tape measure
- Small thin screw driver, not phillips.
- Alcohol or Alcohol swabs

Installation Instructions:

Pre-Installation:

1. Unwrap the CFS cartridge and lay out the ribbon tubing flat. You do not want any major creases or bends in the tubing. Keep the large paper clip attached to the end of the tubing. If necessary, use some heat from a blow dryer if the tubing is deformed or just let it rest flat over night. Don't turn the cartridge upside down. Always keep the cartridge upright in its installed position.

2. Print the PURGE6.TIF image on the 820 using Photoshop, PaintShop Pro, or the graphics program of your choice. Print at 360 dpi, plain paper settings. The purge4 file can be found on the diskette in the CFS kit or on the bottom of our Archival webpage. The output should not have any banding or skipping on it. Print several copies (5 or 6). This is a good test of the printer. If you have skipping or white horizontal lines, then do 3 cleaning cycles and print another copy. If it does not clear up, do 3 more cleanings. Always check the nozzles before and after each cleaning. You must have a perfect nozzle pattern before you begin installing the CFS.

Do not proceed unless you have a perfect nozzle pattern

3. Push the paper feed button on the printer to move the cartridges to the cartridge change position. Remove the original cartridges from the printer and the cartridge hold down clamps. Use a small screw driver and twist it at the hinge point of the clamps. They will come right out with a twist of the screwdriver. Set them aside in a safe place, you may need them in the future.

With the power still on the printer, pull the power plug from the wall

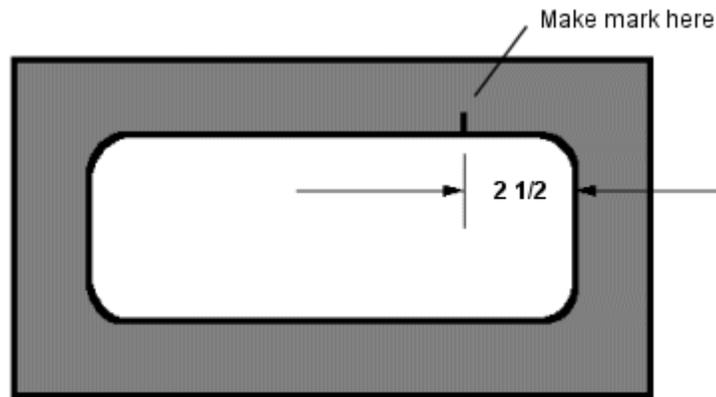
Cartridge Installation:

4. Check the CFS cartridge, there should be 4 Velcro strips on each cartridge. You may have to guide these pads into the cartridge holder, it is a tight fit. Push the cartridge all the way down, so printer posts puncture the seals on the bottom of the cartridge. Make sure they are down all the way and are making contact with the fingers that read the chip. If they are not seated all the way down, the chip may make partial contact causing electrical damage to the chip. Both the color and black cartridges should now be firmly in place. Keep the cartridges in the approximate center of the printer and let the tubing extend out the right side of the printer.

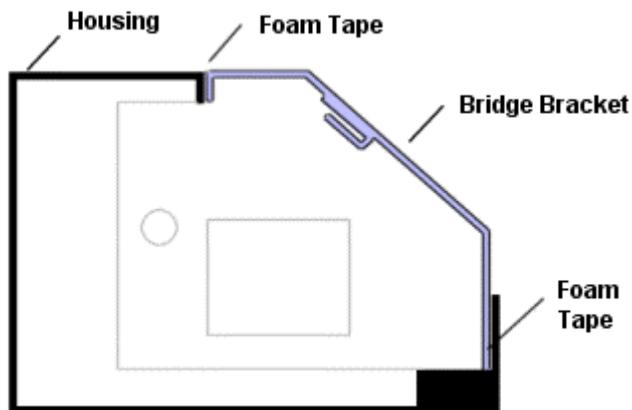
Bridge Bracket Installation:

5. The cartridge holder should move freely from side to side, power is off. Use some alcohol and a paper towel and clean the top front edge of the printer and the bottom inside edge. This is where the Bridge Bracket will attach with foam tape.
6. Use a pencil or pen and make a small mark on the top of the printer 2 1/2 inches from the right hand inside edge of the printer housing opening. The mark will be 2

$\frac{1}{2}$ inches to the left of the right edge of the opening of the housing. See diagram below.

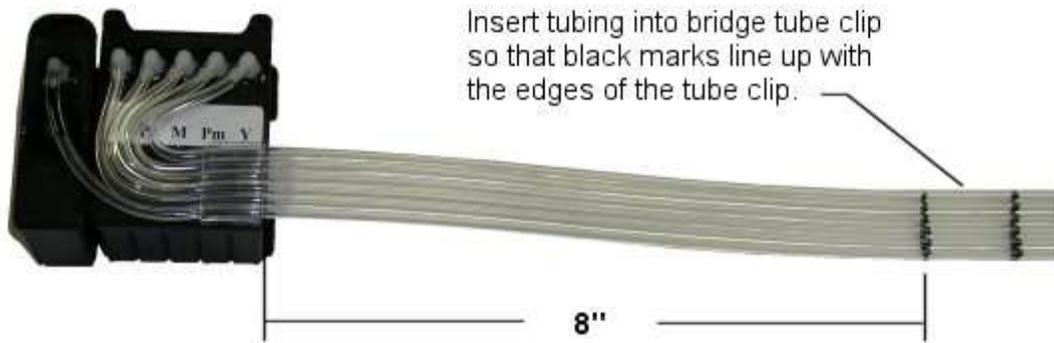


7. Find the clear acrylic Bridge Bracket (long bent piece with foam tape on each end). Peel the backing off of the foam tape, top and bottom. The top is the part with the short bend. Carefully line up the right edge of the Bridge Bracket with the mark you made in step 6. Press the top portion of the foam tape against the inside top vertical edge of the housing, and the bottom piece of foam tape against the inside of the lower part of the printer housing. See diagram below.

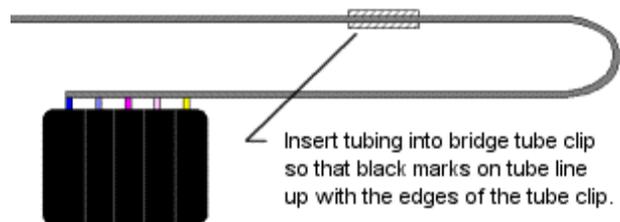


Tubing Installation:

8. Move the cartridges towards the left side of the printer, but don't push them under the housing. Get the end of the tubing that you left hanging off the right side of the printer. Loop it back towards the left side of the printer, under the Bridge Bracket. Put alcohol on the tube clip on the underside of the bridge bracket and on the tubes at the position that will interface with the bracket. Slide the tubing into the tube clip. Make sure it goes in all the way. Use more alcohol if needed. We have marked the position on the tubes where it goes into the bracket. Don't lose or wipe off these marks. (See photo below.)



Be sure you have the loop in the tubing as shown below. Without the loop back it will not work. When the tubes are securely installed in the bridge tube clip, the excess tubing should be hanging off the left side of the printer.



Slide the cartridges back and forth from left to right, and right to left, several times. Make sure the tubes are not too tight when the cartridge is in the far right and far left positions. The tubing will touch the housing when the carts are in the far right position, this is not a problem, don't worry about it. Make any needed adjustment in the tube position so the cartridges can move freely from full right to full left and back again. Power is still off.

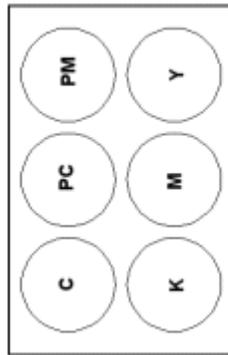
Install Tubes into Bottles:

9. We have provided extra tube length so you can install your ink bottles either behind the printer or on the left side. Set up the bottle tray one of the three ways shown below.

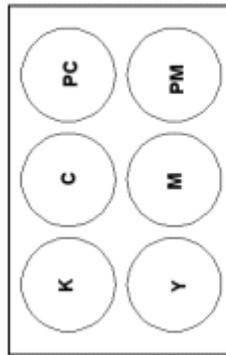
Use the extra clear acrylic tube clips to organize the tubes. Attach one or two of them to the edge of the printer. Use alcohol to get the tubing into the tube clip. Remove the large black paper clip from the ends of the tube. Once you have the tubes secure, un-web the individual tubes back to the tube clip you just installed. Cut off the end of the tubes where they are dented. Don't cut any more off than needed, 1" maximum.



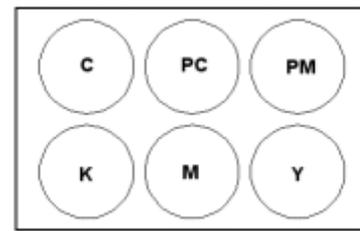
Trim each tube length so that the tube will make a turn into the bottle without rising up. There must be $3 \frac{3}{4}$ inch of tubing inside the bottle. When you cut the tube, cut on a 45 degree angle so the end of the tube is pointed. After you cut the tubes to length, use a black marker and make a mark on each tube $3 \frac{3}{4}$ inch from the end of the tube. Insert the tubes through the larger hole in the center of the cap until the black mark is just inside the cap. Don't cut the tubes too short.



side



back



back

Be sure to get the right color tube into the right ink bottle - follow tube from cart to bottle to be sure.

Maiden Voyage:

10. Okay, now everything is put together. Double check your cartridges, they may have become loose during the assembly steps above. Reseat them, make sure they are down all the way. Some black electrical tape to hold them down is not a bad idea. If they pop up slightly you will have red light problems. You may find a spring assembly in your kit. If you have it, install it to hold down the cartridges. We are experimenting with different methods to hold the cartridges down.

Never Lift Your Cartridges Up

Push the cartridges to the far right until they stop. Plug the printer in, and **turn on the power**. Watch for anything unusual. You are ready to start printing.

11. Run 3 cleaning cycles. Print a couple of copies of purger4.tif, found on the diskette. The inks should begin to climb up the tubes. They will not all rise at the same rate. If you have banding or incomplete printing, run cleaning cycles in groups of 3.

Always do a nozzle check before and after each cleaning. As soon as you have a good nozzle check, you are ready to start using the system. As you print, the inks will continue their climb until they reach the cartridge. Don't worry if the inks seem to be moving slowly, they will all get to the cartridge eventually. If you have trouble getting a good nozzle check, let the system rest for a few hours or overnight, then try again in the morning.

Auto Reset Chips or F-16 Resetter

There is no way to turn off the Epson ink monitoring system. As you print, the monitoring system counts the input to the cartridge and will eventually report that the cartridge is empty. Actually the CFS keeps the ink level in the cartridge constant so it will never be empty. However, the monitoring system thinks it is using up ink and will show you a graphic of what it thinks is the ink level.

If you purchased your CFS unit before 4/28/03, then it shipped with an F-16 chip resetter. After 4/28, the F-16 was replaced by Auto Reset chips. The F-16 will not work with the Silver 820 printers, sometimes called the 820S. If you have an 820 with the silver housing and an F-16 Chip Resetter, give us a call.

Using the Auto Reset Chips -

The Auto Reset Chips are installed on the front of the cartridges. There is nothing to install or assemble. To reset the chips to full, turn off the printer power for 10 seconds and then turn it back on. This resets the chips to full. When you make the first print, you will get a message saying that the chips are not authentic. Click on the YES button to continue. That is all there is to it. Get in the habit of shutting off your printer each or after you finish printing.

Using the F-16 Chip Resetter - (CFS unit sold before 4/28/03)

The job of the F-16 is to reset the ink level on the cartridge chips without having to lift up the carts. Your printer should be set up to run with the USB cable. This leaves the parallel port connector on the printer available. Power up the F-16 using the power supply provided. Connect the parallel cable between the printer and the F16. You should have 2 red lights on the F-16.

Make sure you have paper in your printer. With the printer on, and idle, press the Execute button on the F-

16. Don't hold it in, just press it once. You should get a print out saying the F-16 is now configured and only one light on the front of the F-16 should be on.

To reset your ink levels, press the Execute button again, don't hold it in. You should get a printout saying that the ink levels have been reset. You can reset ink levels anytime you wish. If you do get a red light on your printer, read the F-16 manual on how to reset when a printer red light is on. It is a little bit different procedure. We recommend that you keep your F-16 powered up and connected to the printer all the time. Then it will be ready when you need it.