

Installation Instructions: Epson 1200 CFS



Procedure:

1. Fill Cartridges with Ink

Get a place to work where you can spill a little ink and not ruin anything. Spread some newspapers down and have plenty of paper towels handy. Make sure you have good lighting.

Materials:

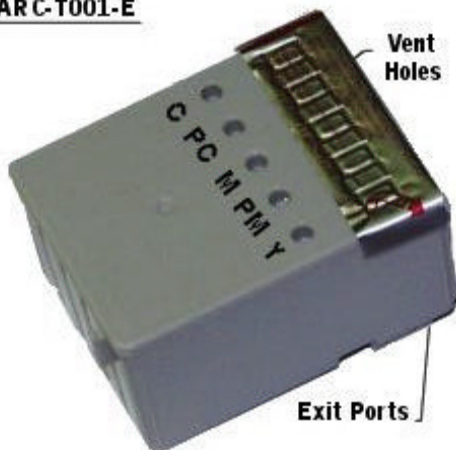
- Continuous Flow Cartridges, with tubes attached
- 6 MIS-Syringe (10 cc)
- 6 Bottom Fill Adapters (MIS-BADPT)
- 6 Bottles of ink, one of each color (CMYK)
- 6 Rivets (MIS-Rivet)

Follow the table below for determining how much ink to inject into each chamber. The instructions for each color are identical, just the volume of ink injected is different.

Color	Volume (cc)
Black	16
Cyan	10
Photo Cyan	10
Magenta	10
Photo Magenta	10
Yellow	10

See the photo below to determine which color goes into which chamber. You must not make a mistake on this, it is vital to be correct. Use a felt tip pen and label each chamber with the correct letters.... **K, C, PC, M, PM, Y**.

ARC-T001-E



ARC-S 020093-E



Follow these steps for each chamber, starting with Black.....

- Use the Bottom Fill Adapter and puncture the clear seal over the exit port for the color you are about to inject. Only puncture the one you are going to put ink into.
- Unwrap the syringe, remove the protective cap, and attach a green needle to the end of the syringe. Twist it on with your fingers, so it is tight.
- Make sure the syringe plunger is down all the way, then insert the tip of the needle into the ink and pull ink into the syringe. Pull in a 1/2 to 1 cc more than is shown in the table above. (For the black you will have to do this in two steps, 10 cc , and 6 cc more).
- Hold the syringe, needle pointed up, and remove the needle and attach the Bottom Fill Adapter.



- E) While holding the syringe vertical, pointed up, wrap some paper towel around the tip of the Bottom Fill Adapter, and carefully push on the syringe to remove any air trapped in the top of the syringe. If you push too hard, ink will shoot up to the ceiling, be very gentle.
- F) Now that the air is gone, adjust the volume of ink in the syringe so that you have the amount shown in the above table. Hold the syringe tip over the open ink bottle and push the syringe plunger until you have the bottom of the rubber plunger at the right mark.
- G) Hold the cartridge being filled at eye level, keeping the cartridge orientated in its normal position. Insert the tip of the Bottom Fill Adapter into the exit port on the bottom of the cartridge. Don't turn the cartridge upside down. Push the tip firmly into the exit port and slowly inject the ink into the cartridge.



45°



Level

Keep the cartridge at a 45 degree angle, front down, for the first half of the ink injection. Then, for the second half, keep the cartridge level. Never turn cartridge upside down.

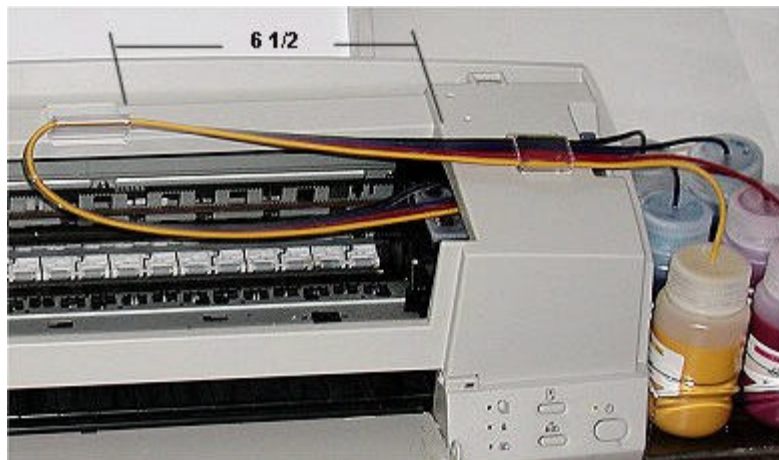
- H) Put the cartridge down on your work surface or bench, and insert a Rivet into the **exit port** you just filled. Don't turn the cartridge upside down. Make sure the Rivet is all the way in, so the head is touching the cartridge. Use a paper towel and wipe any excess ink off the bottom of the cartridge. The Rivet will prevent leakage and cross contamination from other inks.
- I) Now go to the next color and repeat this process until all 4 of the chambers are full.

Take the filled cartridges and tubing to a place near your printer and set them on a flat surface. Put a pencil or some sheets of paper under the end of the cartridge so that it is perfectly level. Make sure the end of the tubes are open and not kinked or twisted.

You are done for today. Let the freshly filled cartridges age overnight. You can continue in the morning or later in the day with the next step in the process. This is important, don't try to rush it. The ink needs about 8 hours to get fully absorbed by the sponge. Any bubbles or gases will come to the surface and disappear.

2. Cartridge Installation -

Lift the printer cover. Clean the housing surface just above the print head with alcohol. Do this over the entire length of the housing. Wipe dry with a paper towel or clean cloth. Attach the medium tubing bracket to the housing 6.5" from the right inside edge of the printer as shown below. Keep it close as possible to the front of the printer without having the adhesive pad hang over the edge.



3. Remove the cartridge clamps next. Remove both the black clamp and the color clamp. With the power on and with the printer idle, hold the paper feed button. The cartridges will slide to the left, to the cartridge removal position. Use your screw driver to remove the clamps. Put the screw driver blade in between the blue

and black plastic parts where the clamps are hinged, and twist. The clamps will pop right off.

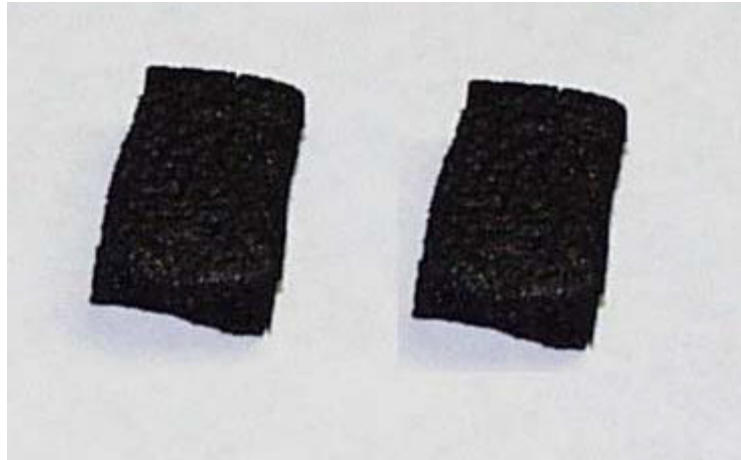
4. Remove the old cartridges, insert the new CFS color cartridge. **Don't forget to remove the rivets.** There should be 2 felt pads on each cartridge. Push the cartridge all the way down. Make sure it is seated at the bottom of the cartridge holder.
5. Put a little alcohol on the tubes at the position that will interface with the bracket. Do not rotate the tubing. Slide the tubing into the medium bracket. This is the bracket you already installed. With the cartridges still in the left hand position, make sure there is a little slack in the tubing, not a lot but just enough. If you can't get the tubing into the bracket, use a little more alcohol on the tubing.
6. Clean the housing with alcohol, then install the second bracket on the right hand edge of the housing inline with the tubing, so the tubes run in straight line. Put the tubing into this second bracket. Now you are ready to insert the tubes into the bottles. The position of the bracket opening is not important.
7. Set up the bottle tray next to the right hand side of the printer. Trim the tubing length so that the tubes will make a turn into the bottle with out **rising up**. There must be $3 \frac{3}{4}$ inch of tubing inside the bottle. The bottles are arranged in order.... Y-PM, M-PC, K-C from front to back. You just want to have a neat orderly tube arrangement. 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.



8. Install the Switch Activators

These two pieces of rigid foam are the Switch Activators (see photo). Push them down into the front of the cartridge holder, where the end of the clamp previously went, until the lights go out. They must be inserted deep to activate the switch. They are tight

enough to stay in place by themselves, no tape is necessary. **Caution:** do not push to hard or the light will come back on. Use just enough force to get them to the bottom of the cavity.



Now the tubes are all attached and inserted into the bottles. Press the paper feed button and the cartridges will move to the right and do a cleaning cycle. Make sure the tubes are not restricting the motion of the cartridges. Add more slack if they are. When the cleaning cycle is done, you are ready to start printing.

Run 3 cleaning cycles by using the printer property utilities. Print a couple of copies of purger6.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 up to 3 more cleaning cycles and nozzle checks. 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.

All the inks should reach the cartridge before the ink monitoring system reports that the cartridge is empty. You must reset the printer when the out of ink light comes on or the ink level gets low. To reset the printer, press and hold the paper feed button until the cartridges travel to the cartridge removal position. Do not lift the cartridges. Remove the two pieces of rigid foam (Switch Activators) and reinset them as you did before. This will make the printer believe that you have just installed a new set of cartridges. Again, don't press down too hard on the Switch Activators. Press the paper feed button and the cartridges will move to the right and preform a cleaning cycle. The ink status report (see printer properties - utilities) will now report that the cartridges are full.

Do not lift the cartridges out of the cartridge holder for any reason. This will cause air to be introduced into the cartridge and print quality will be degraded. Reset by lifting the switch activators.

Here are some tips to make using your new system trouble free.

- Use an ink pen, and mark a vertical line on the tubing right next to the medium bracket. If the tube slips, you will know how much and where to reposition it. If you feel the tubing is too loose, wrap some black electrical tape around it and put it back into the bracket. This will tighten up the fit between the bracket and the tube.
- If you get ink on your printer, a paper towel with warm water on it will take it right off. But, don't wait too long or it will be hard to get off. To get ink off your hands, use a wet towel or rag and a small amount of bleach. Be careful not to burn yourself with the bleach.
- When the day is done, check your tubes. The ink should be close to the cartridges. The next morning, the ink will have retracted a little bit, as much as 4 inches back from the cartridges. This is normal. When you start to print again the ink will be drawn into the cartridges and it will function normally. Do not worry about this, ignore it. The system is designed to have air at the top of the cartridge to prevent siphoning and spitting. This air will expand and contract with temperature and pressure changes.
- In the morning, if you see the ink has retracted all the way back to the bottles, on any of the tubes, **this is a problem**. It means there is an air leak. There is no fix for this, other than a new cartridge set. We will replace the cartridges at no cost if this occurs.
- Don't let your printer set for long periods of time without printing something. The ink in the print heads can dry, especially if you are in a hot dry climate.
- For additional information, check our CFS page on the website... www.inksupply.com