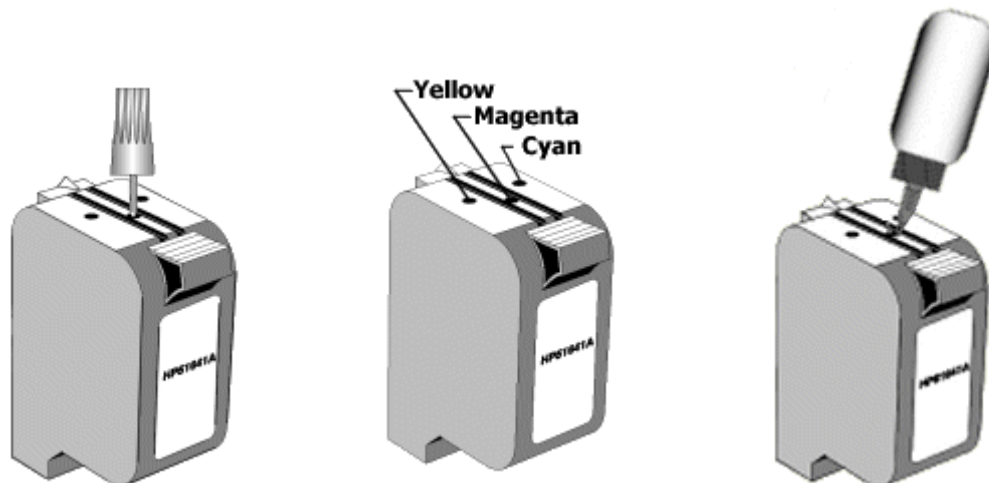


## Refill Instructions: HP 7xx, 8xx, 9xx, 10xx, 11xx Printers



### Procedure:

1. Test your cartridge by running a clean cycle from the "Print Services" menu. If all colors are present, you have an excellent chance for a successful refill. If one or more of the colors are missing the refill may or may not work. If you have problems here, read the troubleshooting section at the end. If it is working OK, Remove cartridge from printer.
2. Using the yellow drill in your refill kit, make a hole in each chamber as shown on the left. You will find that there is a perforated area that marks where the holes should be placed. This is, by the way, the vent system for the cartridge. All sponge filled cartridges must be vented to atmosphere.
3. Remove the safety cap from the syringe and attach the 4 inch long needle to the end. It is a twist lock attachment. Remove the top from the ink bottle and draw about 5 cc of ink into the syringe. Wrap paper towel around the tip of the needle and point the syringe up. Press the plunger, **gently**, to remove any trapped air from the syringe. Be careful or you will squirt ink on the ceiling.
4. Using a tooth pick or the 4" needle. Push it into each chamber and pull it out, so that you know for sure which color ink goes in which chamber. Magenta is in the

middle, yellow and cyan on the ends. Set the cartridge, head down, on thick paper towel or newspaper before filling. Keep the head in contact with the paper while filling to avoid a drop from forming on the head. This is to prevent the adjacent empty chambers from wicking up the wrong color ink by capillary action.

5. Fill the cartridge through the holes created in step 2 above, as shown on the left. Push the needle as deep as possible into the sponge and point it at the head. It must reach the bottom of the cartridge. Gauge the depth required by holding the needle on the outside of the cartridge. Then mark the spot on the needle with some tape. When it is in all the way, pull back about 1/8". **SLOWLY** inject the ink. About one minute to inject 5 cc of ink is as fast as you should go. If you can not get your needle all the way to the bottom, then try drilling a new entry hole behind the one you are using, so you can come in at a different angle. **DO NOT OVER FILL**. If the cartridge was empty, it requires only about 5 cc of ink, maximum, maybe a little less. Too much ink causes dripping and performance problems.
6. Let the cartridge stand, suspended, upright for about 1 minute, keep it in contact with a paper towel to let any excess ink drain from the cartridge. At this point you should see ink of each color on the paper towel. If one or more are missing it will not print correctly. Don't put the cartridge back into the printer if it is dripping.
  - a. If you have our Cartridge Primer, use it at this point. Draw out about 1.5 cc of ink. This will remove any foamy ink near the print head.
7. Gently blot the print head with paper towel and reinstall in printer. **DO NOT COVER OR TAPE OVER THE FILL HOLES**, leave them open.
8. Run a couple of cleaning cycles and some test prints. If everything looks OK, you are done. If it is not OK, follow the trouble shooting tips below.

### Troubleshooting:

#### **Colors Missing at Step 1:**

If one or more colors are missing before you started this procedure, most likely the inkjets are plugged. Your chance of success is reduced to about 50%. It all depends how long you have been out of ink. If it is just a matter of minutes, you will probably be OK. If it has been empty for hours or days, your best bet is a new cartridge. This cartridge self-destructs if left empty for longer than about 30 minutes. Successful refillers learn to top it off **before** it goes empty. If you wish to proceed, read the next trouble shooting step.

#### **Colors Missing after Step 6:**

If there is no color present on your paper towel after putting ink in each chamber, then one of two things is wrong.

- **Clogged Jets** - The very small inkjet holes, where the ink comes out can easily clog. Ink starts to dry from the outside air and the inside air, as soon as the chamber is empty. The dried ink blocks the holes. There is a kitchen remedy using hot water. Boil some water in a tea kettle or microwave and pour it into a shallow container, like a saucer or the bottom of a paper cup. You only need about 1/8" to 1/4" of water. Hold just the print head in the hot water until the water becomes cool. Then immediately take your cartridge to the printer and run the cleaning cycles. You may have to repeat this 3 or 4 times. The hot water will soften up the dried ink and the cleaning cycles will force it out of the inkjet holes. If this does not work after about 4 attempts, try adding a little household ammonia to the hot water.
- **Air Pockets** - Air pockets are hard to correct. If you did not get your needle all the way to the bottom in Step 6, chances are you have created an air pocket at the bottom of the sponge. If there is an air pocket, many times you will get ink coming out on the paper towel, but the cartridge will not print. The remedy is to go back in with the 4 inch long needle, this time get all the way down to the bottom and put in another 2 cc of ink. Then fold a paper towel into a small square, and attach it to the print head with a rubber band. Let it sit like this for a couple of hours. The paper towel should become saturated. After a couple of hours, remove the paper towel, then add 2 more cc of ink. Take it to the printer, run the series of cleaning cycles and see if it prints. If it does not, put the folded towel on it again and wait another few hours. Try it again. If nothing is coming out it is time for a new cartridge, you are spending too much time on it.
- If you have our [Cartridge Primer](#), use it at this point. Draw out about 1.5 cc of ink. This will remove any air or foamy ink near the print head. See a [photo](#) of the insides of this cartridge.

### **Plenty of Ink - No Print**

This is an overfill condition. Too much ink in the sponge will cause it to leak very slowly. A film of ink builds up on the print head and during normal operation the jets of ink can not get through the film of ink, or they get through but have weird colors.

The remedy is similar to the air pocket remedy. fold a paper towel into a small square, and attach it to the print head with a rubber band. Let it sit like this for a couple of hours.

The paper towel should become saturated. After a couple of hours, remove the paper towel, install the cartridge in the printer and run the cleaning cycles.

If you have our [Cartridge Primer](#), use it at this point. Draw out about 1.5 cc of ink. This will remove the excess ink.

### **Color Contamination**

In Step 5, if you did not keep the print head in contact with some paper while putting the

ink in, it will create color contamination. When a drop of ink forms on the print head, the adjacent chamber sucks it in by capillary action. This causes minor color contamination. The remedy is to run about 10 pages of each color. Make them solid pages, 8x10. This will get the ink flowing and hopefully purge out the ink that has minor contamination. If 10 pages doesn't do it, try 20 each color.

Again, if you have our Cartridge Primer, use it at this point. Draw out about 1.5 cc of ink. This will remove any local contamination. However, if the contamination has been present for an hour or more, this will not help.

### **The Best Solution**

The best way to avoid all of these problems is to fill **BEFORE** the cartridge goes empty. You will have to develop a feel for when it is time to top off the colors. Keeping track of how much paper you have consumed is one method, filling once per week or month is another, or go by the weight of the cartridge. If you know the empty and full weight, you can calculate how empty it is. When topping off don't use the full 5 cc of ink, use about 2 or 3. You can do it with out removing it from the printer if you know you won't be over filling.