



247INK TECHNICAL SHEET

EPSON ~ Frequently asked questions concerning cartridges

The things that EPSON don't tell you!

With the exception of the C70/80/82, the ink in the cartridges is retained because the cartridge has an internal sponge.

VERY IMPORTANT ~ Never leave your Epson Stylus printer without an installed cartridge (even an empty one) for more than a few minutes ~ ideally you should change the cartridge immediately with **NO DELAY** because the ink ~ either the original or compatible, will begin to thicken/gel very quickly to the consistency of honey, which will require multiple cleaning routines to clear. The higher the resolution of your printer the quicker this process will occur.

If your cartridge is not printing, or printing poorly, the most common problem is that you have an air bubble in the exit tube of your cartridge. Remember that the absence of ink is the same as an air bubble. You can confirm that this is the problem if the print head cleaning routine actually makes the problem worse. For cartridges without chips attached to them it is rarely/never the cartridge that is at fault as they are just simple tanks with sponges and ink in them. Therefore to solve this problem that usually occurs after printing 1 or 2 good pages (What is happening is that a small air bubble expands under the vacuum of printing to form a large air bubble, which blocks the flow of ink to the print head) you need to let the printer sit without printing for several minutes, while tapping on the top of the cartridge. This may get the air bubble to move to the top of the cartridge but it may not. If it does not, remove the cartridge and try again. This time though carefully squeeze the cartridge to get a very small amount of ink (a drop!) that should be put directly into the point where the cartridge is plugged into. But be very careful not to squeeze too hard!

If your cartridge contains a printer chip and is not working after having tried the above then there is either a problem with the chip or a software conflict. If you have touched the contacts on the chip (even slightly) the cartridge will not work. If you have not touched the contacts, then switch off your PC and re-install the cartridges into the printer without using the software installation routine. In other words, install the cartridges with the computer turned off. Only switch it on after the printer is ready to print. In most instances this will sort the problem that arises from inconsistencies in the Epson printer driver software.

Colour and/or black sections are missing from my print.

We manufactured ENHANCED QUALITY™ Inkjet cartridges. Occasionally when installing them for the first time you get a chemical interaction between them and lower grade cartridges. If the printer is printing blank pages, make sure you are using the correct printer driver (you can get the latest drivers from www.epson.com) and make sure the paper size is correctly selected in the driver (A4 for Europe Letter for USA). If the printer is printing black only, the "Ink" option in the printer driver may be set to "Black" instead of "Colour" or a setting in the software (such as MS Word) may be set to print black only. Also, the print head nozzles may be clogged. From the Utility section found in the EPSON printer driver, clean the print heads by performing a head cleaning followed by printing a nozzle check pattern. A head cleaning and nozzle check **MUST** be performed as a cycle, if not the process has no real effect. After printing a nozzle check, examine the printed pattern. Each coloured section should be solid, with no gaps or lines. If there are stripes or gaps, continue with another cycle. Perform 4-6 cycles if necessary.

Vertical banding is appearing and vertical lines are simply not lining up.

This section is taken straight from the EPSON manual ~ If your printouts contain misaligned vertical lines, you may need to align the print head. Your printer must be connected to a local port, not on a network, to use the Print Head Alignment utility. Follow the steps, which are located in the printer utilities menu:

1. Turn on the printer. Then load plain, A4 paper.
2. Follow the directions for your operating system.

Why does my printer print out blank pages?

Many of the answers for this can be found in your Epson printer manual however assuming that your printer is correctly set up on your system as the default printer utilizing the latest printer driver and you have selected the correct paper size such as A4 (many software packages default to LETTER which sometimes throws the printer into a spin (Also check orientation, printable area etc) then having discounted all of the



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print head nozzles may be clogged. Perform a nozzle check and clean the print head if necessary (see above for details).

The Quality of my printing is “Not Good”.

If you are using coated inkjet paper, check that the printable side of the paper is face up, and check the type of paper being used. For the best quality output always use ENHANCED QUALITY™ Inkjet Paper. If your output is faint, check the printer driver to make sure you have selected a print resolution other than Economy. Make sure the Media Type setting matches the paper or media loaded ~ if you are printing a high resolution photograph onto sub standard non-photo paper the quality will always be poor. Also, the Colour Adjustment Mode options may be set incorrectly for your document type Very Important ~ Verify that you are using the correct printer driver for your printer model e.g. the driver for the C42 is NOT the same as that for the C40.

The colours of my images on my screen are different from the output from my printer.

The screen/monitor produces colours in different ways. A monitor displays colour by transmitting Red, Green and Blue (RGB) light into your eyes. A printer uses existing light to reflect Cyan, Magenta, Yellow and Black (CMYK) light into your eyes. It is virtually impossible to match these two different color types, transmissive and reflective, perfectly. Also, due to its transmissive nature, the monitor is able to display a much wider range of colours than a reflective product.

My image has horizontal banding.

Make sure you are using the correct paper type. Verify the printable side of the paper is face up in the sheet feeder. Select your paper type in the printer driver menu and let the driver automatically set the print settings. Make sure the paper thickness lever is in the correct position for your paper type. Make sure your ink cartridges are not outdated. They should be replaced six months after installing them in the printer to ensure the ink is fresh whether they are empty or not ~ this is a recommendation of EPSON. If you are still having problems then send our Technical Support Department an email to support@247ink.com quoting your invoice number, date of purchase, what printer you have and what the problem is.

Cleaning clogs

1. How to tell what the Nozzle test really showing you
2. How to tell the difference between a air pocket and a true clog

If you get a lot of random skips when doing a nozzle test you more that likely do not have a true clog you really have a few **air bubbles** in the print heads. Just doing clean cycle after clean cycle is not the best way to purge out the bubbles ~ you are far better off just letting the printer sit overnight or printing random test and a few pages of colour blocks.

If you still get random skips then it is time to re-seat the cartridge all you do is lift the blue cartridge locks and push them down. This will burp out those air pockets that



Black / Cyan / Magenta / Yellow / Light Cyan / Light Magenta nozzle pattern

have been known to lock up a print head. In the worst case you can remove the cartridge and knock it on the table top yes ink will spill out but this is what you want to see ~ ink spilling out of those feed holes. Now once you do this the ink counter or ink low lights will not work so you have to keep a close eye on the printer when you see the ink stop flowing stop the printer!!! These print heads do not like to be run dry!! Now if you always have the same nozzle that skips then you may have a real clog. So now you need a 247ink Cleaning Kit. The kit really does blow out just about the worst clogs. This kit is inexpensive and can be used a number of times if this is a persistent problem with your printer and it will not hurt you or your printer.

The cleaning pads are those foam pads located under the print heads when they are in the parked position (power off). The pads are coloured with guess what ~ the ink you are using!!! They are about 1/2 x 1 inch and they are under the carriage or print heads when they are parked! But please be careful. *Do not touch*



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those cleaning pads ~ they are spring mounted and they can be knocked out of position very easy! Once you have knocked them out of position it is time to send in your printer to Epson (Very expensive!!)

After trying cleaning cycles (Epson recommend up to 6 but sometimes up to 9 is better ~ make sure that they are full cycles ~ cleaning cycle PLUS printouts) you can try carefully dripping only 5 or so drops of 247ink Cleaning Fluid on the cleaning pads. Just drop about 5 to 6 drops (no more!!) of on the pads and then make sure you turn off the printer this will force the pads up to the print heads and the 247ink Cleaning Fluid will do its thing very quickly! About 1 hour works most of the time - overnight on the clogs from hell!!

You can also drop 247ink Cleaning Fluid on the ink inlets in the carriage, but try the pad thing first. After you tried the pads thing 2 times; you can drop 247ink Cleaning Fluid directly on the spikes in the bottom of the carriage. These will be seen when you take out the cartridge. You must remove the cartridges to see the spikes. Here is what you do:

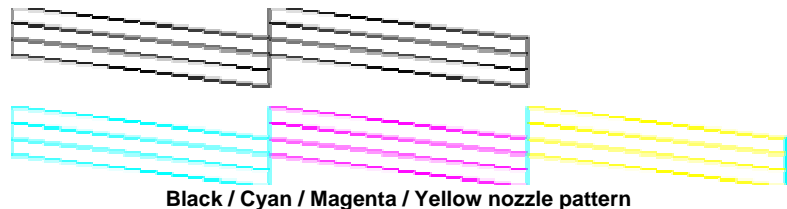
1. Make sure that you turn off the printer before you drip on the spikes!
2. Do not drop more than 7 drops!
3. Wait at least 10 minutes and drop 5 more drops on the spike, You also should put 2 drops on the other "good ink feed spikes" to prevent them from drying out (it happened to me!)

After this, install the cartridge making sure that when you install the cartridge the ink out light goes out!

You may have to run up to 2 to 4 clean cycles (Full cycles with print outs), this is normal in your situation Just make sure that you do not exit the clean menu and continue doing cleaning and nozzle checks

You must stay in the utility menu for the printer to use increased suction, you must also run a nozzle check between cleaning cycles, or the printer won't actually clean its self, just spin the roller. Each time you repeat a cleaning cycle without exiting the menu, the printer will use increased suction (contrary to popular belief, the print heads aren't actually spraying ink out during the cleaning cycle, rather ink is being sucked through the heads by a pump).

This works very well and should be tried before you go trying 247ink Cleaning Fluid! This not only will clean the heads but this will align the heads, it is a procedure I use for both cleaning & head alignment. Compare the test prints as you go to see if you are making any progress. Follow these closely:



Black / Cyan / Magenta / Yellow nozzle pattern

1. While the printer is on hold down the button with the ink drop icons on it for 5 seconds. This will do a clean cycle by the printer. Do this a couple times.
2. Now shut off the printer and while holding down the paper advance button, turn on the printer (don't release the paper advance for at least 5 seconds) this will print a nozzle check pattern.

If you have a clog or head out of line, repeat the first procedure AT LEAST 3-4 times. Then repeat the second. If the heads are REALLY BAD you may have to keep going, as long as you can see that the heads are being moved or the test pattern changes with these cycles.