



www.easyrefills.com.au
sales@easyrefills.com.au
1300 730 018

Types of Cartridges and General Refilling Hints

(for specific refilling instructions for you cartridge see the kit instructions for your printer)

Refilling inkjet cartridges is not difficult for most people. You could think of the cartridge as a plastic box filled with a sponge (or in some cases a plastic bag) and ink. Keep in mind though – some cartridges are not refillable. You can always check by visiting our website at www.easyrefills.com.au and searching for your printer make and model. If the listing comes up with Refill Kits then you know you can refill your cartridge. If Refill Kits does not come up then it is more than likely that the cartridge cannot be refilled. If in doubt call our friendly staff on 1300 730 018 and they will be more than happy to check for you.

Refilling is both economical and environmentally friendly. So, we need to get the ink into the cartridge in a way that it won't leak too fast (causing a mess) or too slow (causing no printing).

Some cartridges already have a hole to fill through, but others require you to drill a small hole.

Here are a few helpful hints for successful refilling if you are new to the opportunity:

1. Always work over a sink covered with newspaper! (What will we do when everyone reads their daily paper online?) Refilling always has the potential to make a mess, but the first time will be the worst. By the time you have refilled a couple times you will be an old hand and know the tricks to successful (unmessy) refilling.
2. Always wear old clothes when refilling! Ink is similar to beetroot - it has a magnetic attraction for new clothes and carpet.
3. Keep the ink in a dark dry place and out of the reach of children.
The ink is not considered a toxic substance and is mainly water, with a bit of ethylene glycol and sometimes a small percentage of alcohol. It doesn't taste very good and if taken in sufficient quantities may cause some gastric distress (vomiting and/or diarrhoea). Don't induce vomiting. Give several glasses of water to dilute the ink.
Remember, the inks are about as toxic as dishwashing liquid and if you drink enough, you can get sick. Perhaps the most common and worst problem – MESS - you will avoid by keeping the ink out of the reach of children.
4. When you decide that refilling is for you and you place an order, your kit will come with full Instructions and all the tools and equipment required for your particular cartridge. Depending on your cartridge your kit might include:
 - Drill
 - Plugs
 - Allen Key
 - Grub Screws

You can always view the refill instructions for your kit by downloading them and reading just to make sure refilling is for you.

Read through the instructions carefully. Don't be discouraged. The first time will be the most daunting and after that you will be happily saving money and helping the environment.

Types of Cartridges

Cartridges can be classified as:

- *Sponge-filled & Vacuum Retained*
- *Uni-colour or Multi-colour;*
- *Reservoir-only*

Sponge-filled Cartridges

Sponge-filled cartridges are the most common. These cartridges have two chambers, one with a sponge and one is empty. Filling these cartridges means saturating the sponge so that it can seep through to the printhead.

With all cartridges, but particularly with the sponge-filled, it is important to fill slowly so that all the air in the sponge is chased out as the ink goes in. Fast refilling can create air pockets inside the sponge and this will result in the cartridge printing for a while (say half a page) and then stopping.

Another issue is when air bubbles form between the sponge and the printhead. The symptom here is that the cartridge has difficulty printing as soon as it is installed.

For both problems, the key is to get rid of the air. There are several suggestions:

1. Inject ink from the bottom of the sponge and slowly fill the cartridge in this manner. The idea is that the air will rise to the top.
2. Tap the side of the cartridge repeatedly for several minutes. This is known as 'burping', and is an attempt to move the air bubbles to the top.
3. Let the cartridge sit for a night or a weekend. In many cases, the air will release itself.

Remember, the best cure for air blocks is prevention.
ALWAYS FILL VERY SLOWLY.

Vacuum Retained Cartridges

Vacuum-retained cartridges are a bit more complex in design, but are not much more difficult to refill. These cartridges are most commonly made by Hewlett-Packard.

Refilling these cartridges usually involves an air-tight seal somewhere in the process. Depending upon the cartridge, it may need a grub screw or other device.

The important things to remember about these cartridges:

1. Always squeeze the cartridge before sealing. This creates a vacuum.
2. The vacuum will stabilise by leaking a few drops of ink. Be prepared for this by protecting your work area with paper and having a paper towel handy. If the dripping continues, then you didn't get the seal tight enough.

Uni-Colour Cartridges

Uni-colour cartridges have one chamber.

Multi-Colour Cartridges

Multi-colour cartridges have multiple chambers which each hold a different colour ink. The printer software decides on what combination of dots of Magenta, Cyan, Black, and Yellow to create the colour you require. Here are some of the things to be aware of:

1. Multi-colour cartridges rarely run out of ink in each chamber at the same time, however, we recommend you refill all colours at the one time. Special care must be taken to get the right colours in the right chambers. If you aren't sure use a toothpick to check which colour is in which chamber. Be careful when filling multi-colour cartridges to avoid printhead based contamination.

If a large drop of ink comes out the bottom of the cartridge when refilling, some of the ink may be absorbed back up into the cartridge into another colour chamber. When you print, your colours will be 'dirty'.

The solution is to keep the cartridge on a paper towel while filling. If you still get the cross-contamination, you may need to flush out that chamber with more ink, or print several pages using that colour.

Reservoir-Only Cartridges

Reservoir only cartridges contain an ink reservoir. These cartridges can be refilled many times.

Combination Reservoir/Printhead Cartridges

Combination Reservoir/Printhead cartridges contain both an ink reservoir and have a printhead built-in to the cartridge. These cartridges will eventually wear out the printhead through simple erosion, but should give good printing for 3 to 12 refills in most cases.

Don't let your cartridges dry out

The number one refilling problem is a dried out cartridge. If your cartridge is left empty for more than one hour, the ink will dry and clog the micro holes at the outlet of the printhead. When refilled, your cartridge may produce a sub-standard print quality such as streaks or dull output. If your cartridge has been empty for a few days and not properly stored, we suggest that you dip the cartridge printhead in warm water for 10-20 minutes, then wipe dry with paper towel. Go to your printer's Maintenance Tab and run a Head Clean and Nozzle Check to test the print quality. If not successful, buy a new cartridge. You could place your empty cartridge into a zip lock bag with a damp cloth to keep the cartridge moist until you can refill it. Tape can also be used to seal the bottom of printhead.

Ideally, you should refill and reuse your cartridges. However, if this is not possible, the best way to keep your printer running is to have a spare filled cartridge. When the one in the printer runs out of ink, put in the filled spare. Then refill the empty as soon as possible. Store in a zip lock bag with a damp cloth until you are ready to use.

If you do a lot of printing, you can 'top off' your cartridge. By knowing how many pages your full cartridge can print gives you a mental signal to 'top off' when you reach the 3/4 empty point. Some of the cartridges are "see through" so you can fill them when they are not quite empty

Burnt out Cartridges

Some inkjet cartridges have electrical resistors that control the current to each outlet jet. In other printers this will be in the printer and even more important to maintain. These resistors must stay fixed in terms of their resistance or ohms. When they get over heated the resistance changes. After many over-heatings, the resistance value may not be in the acceptable range and this will lead to low quality output, either colour distortion or weak printing or both.

The ink in the cartridge keeps these resistors cool and prevents over heating, like oil in an engine.

However, when the cartridge is empty and the printer continues to try to print, over heating occurs. If you continue to try to print, each time the cartridge will suffer damage and eventually burn out. This is why cartridges have a limited life in terms of how many times they can be refilled. The life of the cartridge is diminished for each overheating occurrence.

The solution is a new cartridge, but to extend the life of the cartridge, refill your cartridge at the first sign of low ink or do the "top off" procedure above.

P O Box 1905 Noosaville BC Queensland
ABN: 46 250 547 859