

CLEANING YOUR AIRBRUSH

Keeping your airbrush clean is important. Satisfactory performance will not be achieved if you neglect the basic principles of keeping dirt out of the internals.

The airbrush that I use for the majority of workshops and demonstrations is the Iwata Revolution CR, which is a top (gravity) feed, dual action middle of the range machine with a nozzle size of .5mm.

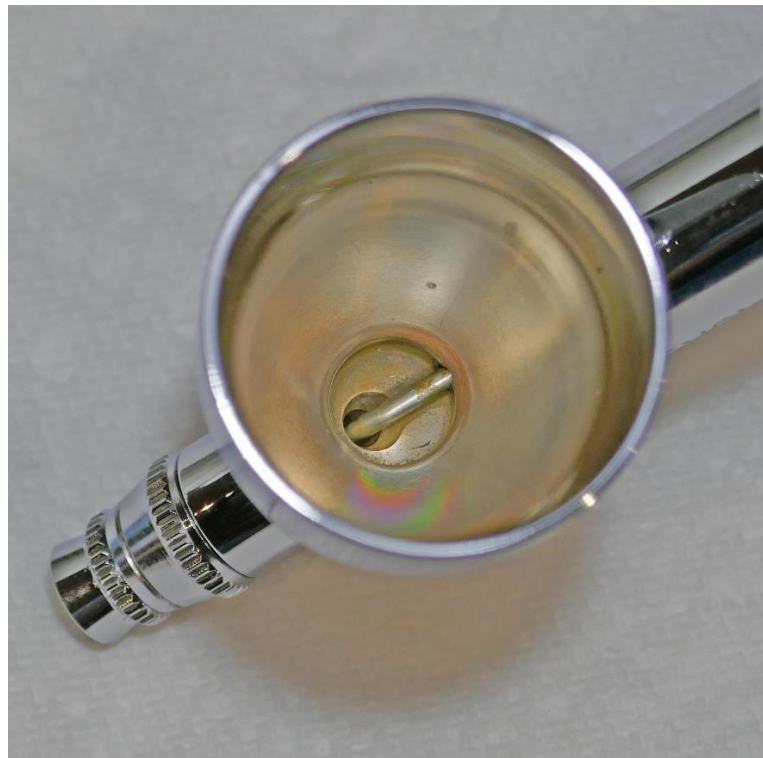
At the end of every workshop the airbrushes that have been used are cleaned, either by the participant if they are sufficiently confident, or by the tutor. All airbrushes are inspected the following day just to be sure that they can be stored until the next event. Sometimes, though, one will slip through the net, and this is the account of its proper cleaning.



If you look closely at the needle cap you will see paint residue around the inside of the rim. This is an indication that cleaning has not been as thorough as it ought to have been. Any paint that can be seen from the outside casts doubt over the cleanliness of the inside.



Further inspection shows that there is paint residue inside the colour cup as well, so this airbrush is going to have to be stripped down and properly cleaned before it can be used again.

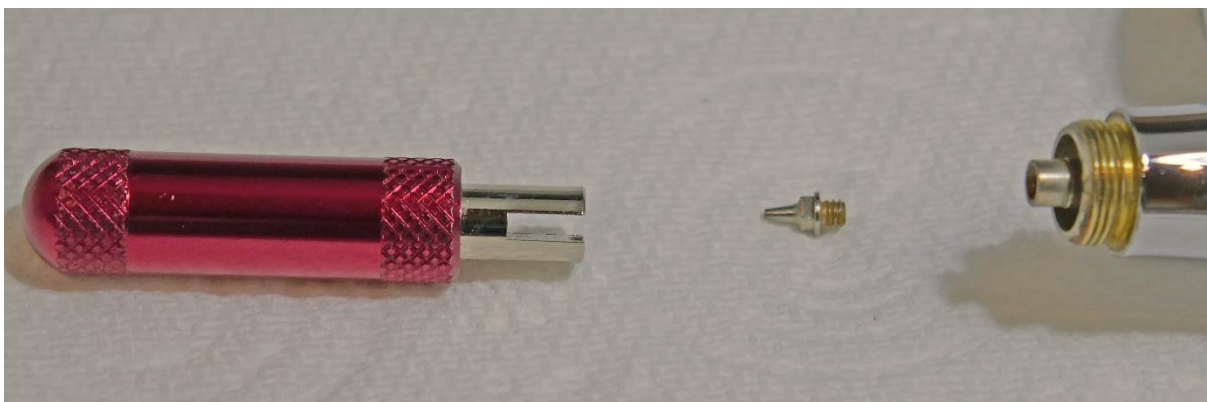


The 'front end' is dismantled and the component parts laid out for inspection. Most dual-action airbrushes consist of these parts in one form or another. From left to right, top to bottom:

1. Needle cap
2. Nozzle cap
3. Nozzle still attached to
4. Body
5. Handle
6. Needle
7. Needle Chucking Nut



You can see that the needle has hardened paint deposits on it and this alone would have prevented proper operation of the airbrush if left in place. In this instance the needle has been withdrawn through the rear of the body to avoid the (possibly) unnecessary removal of the nozzle. If there is hardened paint on the needle, though, it is quite likely that there will be some on the inside of the nozzle, too. To minimise damage to these nozzles (replacement cost is £15 minimum) I use a specifically designed tool.



You can see the hardened paint on the thread of the nozzle, so can be sure the same exists on the inside as well.

What is needed to clean up this mess, then? The tools that I use are pictured below, clockwise from the top:

1. Liquid Reamer aerosol. Removes hardened acrylic and enamel paints.
2. Glass dish. Not affected by solvents.
3. Disposable pipette.
4. Wire cleaning brushes.
5. Cocktail sticks, preferably wooden.
6. Cheap short-bristled brush.



The liquid reamer is used inside the spray booth with the extractor fan running. I always use the can with the plastic tube securely attached to the nozzle, because this contains the aerosol spray to a manageable area. The glass dish is used to collect the reamer solvent as it drips off the components.

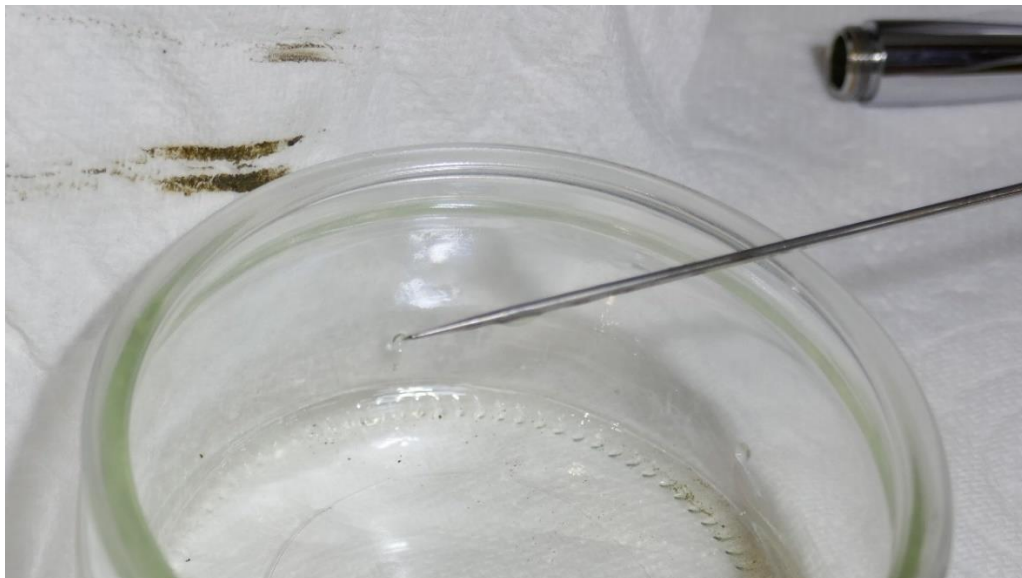
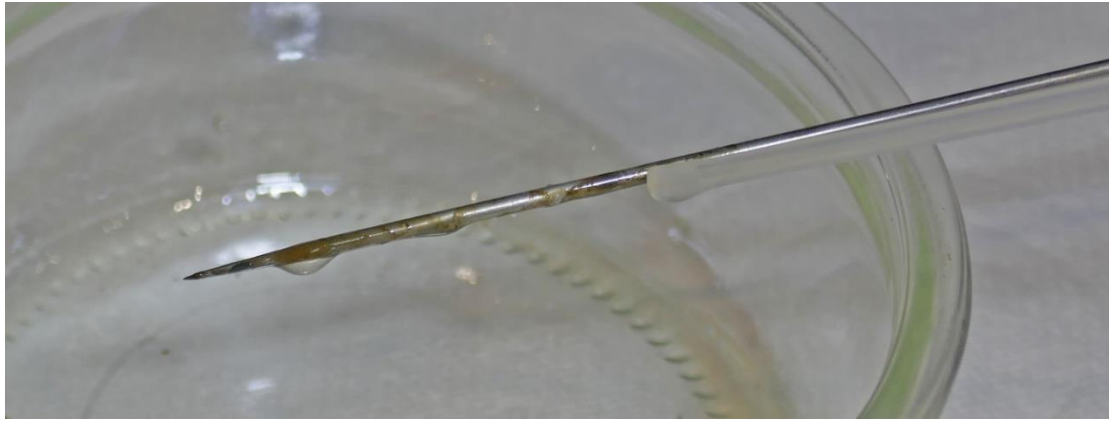
The first item to tackle is the colour cup. The process involves spraying liquid reamer into the bottom of the cup (to minimise the spray going where you don't want it to) and working it into all the edges and corners with a cocktail stick. The pointed end of a wooden cocktail stick is small enough to get into corners and hard enough to allow an amount of pressure to be applied, but not so hard that it will damage the surface of the airbrush. I avoid the temptation to use the wire brushes for this task – they will damage the surface.



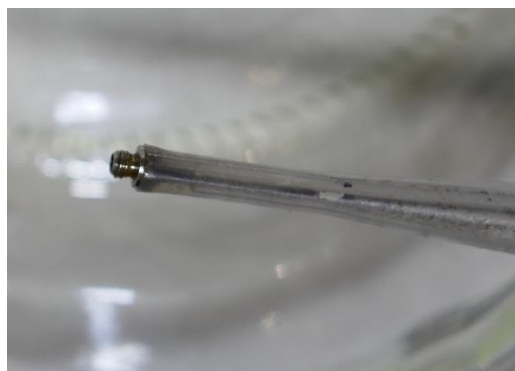
I have dislodged the paint, wiped the cup out with a paper towel and then repeated the process, continuing this routine until the paper towel no longer collects dirt and discolouration. The small cheap brush can be used to help this process as well. The reason for using a small cheap brush is because the bristles are large and therefore easily seen and removed if they fall out inside the airbrush.



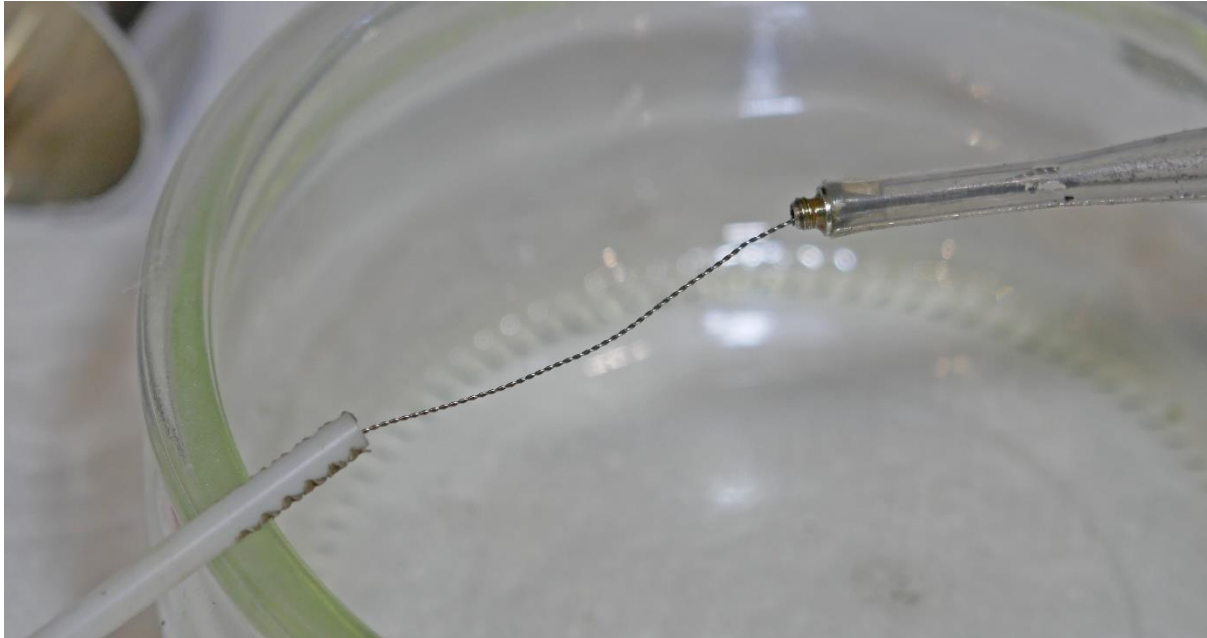
The needle is tackled next, by spraying with the liquid reamer and allowing the fluid to run along towards the tip. It is left for a moment to soften the paint and then is wiped carefully to remove the grot. I have found that the safest way (for fingers and needle) to do this is to wipe the needle along the towel from blunt end to sharp end, repeated until there is no trace of discolouration on the paper towel.



The nozzle is very small and pings very easily. To avoid losing nozzles in the carpet and having to pay large sums of money to replace them, I handle them by using the disposable pipette, which has an opening just the right size to grip the business end.



Using a small piece of twisted wire (0.3mm diameter) I gently wipe the interior of the nozzle and suck and blow liquid reamer through it using the pipette dunked in the glass dish. This latter now has a sizeable deposit of fluid in it. The sharp ends of the wire have been rounded by filing them with a fine needle file.



The final task is to use a wire brush to clean out the interior of the body from the paint cup to the nozzle. The wire brush to be used is whichever one is closest to the diameter of the body and, in this case, is the next to smallest one. I take care inserting the brush from the nozzle and, at the same time, look down into the colour cup to ensure that the tip of the wire brush does not damage the base of the cup.



The final task is to run some thinners through the airbrush before placing it back in its case. In this case the cleaning fluid I have been using is liquid reamer so the thinners are white spirit. If I had been using acrylic paint before the cleaning and had not let it harden then I would have run acrylic thinners through the brush and not white spirit.

If you have any questions about airbrush cleaning then feel free to ask them by using the contact page on the Missenden Abbey Railway Modellers' webpage [here](#) .

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September 2020