



## Solid Brass Tubeless Pen Kits - Fitting Guide

Product codes: SBFC (Fountain Pen Kit)

Tools required: 6.5 / 8.5 / 9mm drill bit



Please read this guide fully before attempting to make your pen.

The SBFC tubeless pen kits are different to many kits you may have seen before but are relatively straightforward to make. They are a single-ended kit that is a substantial size and offer more versatility than tube kits where you are often limited to certain diameters and lengths.

There is, as is often the case, more than one way to complete the kits but here we will show you what we believe is the most straightforward way using a few standard sized drill bits and a 4 jaw lathe chuck with no jaw attachments fitted.

They do not require a mandrel or any bushings as the parts are made from solid brass. The turning is done with the pen body connector attached.

**Fountain pen kit:** drill 8.5mmØ to a depth of at least 65mm, then 9mmØ to a depth of 18mm for the pen body connector.

1] Ensuring you have a blank with completely flat end drill the above holes to the correct dimensions.

2] Once drilled and cleaned of dust/shavings insert and glue the pen body connector, ensuring a good fit to the blank. Do not use too much glue, the 9mm hole will provide a tight fit anyway.

3] Once the glue is dry and the pen blank secure mount the 4 jaw chuck on the lathe and secure the brass pen body connector thread end in the chuck. Make sure that the brass part is completely flush and level in the chuck, tighten to secure the whole piece firmly in place. The brass thread that is secured has flat threads so are not damaged when tightened. Do not over-tighten or you may damage the connector.

4] Once you are happy with the security of the piece, bring up the tail-stock for support to find the natural centre and turn to roughly the shape required. We mark on the tool rest the point that has been drilled up to - to ensure we don't turn into the centre void. Please bear in mind that these kits are quite large with the outer diameter at 13mm – much wider than most pen kits. Turn to the diameter of the brass part – try not to turn the metal away but if you do there is no plating to be damaged – the finish of your pen can also cover the brass part too.

5] When you have turned to nearly the desired size and shape, remove the tail-stock and finish the pen end – do not apply too much pressure at this point or you risk knocking the kit off-centre or out of the chuck.

6] You are then ready to sand and finish with your desired finish.

7] You can then assemble the other parts of the kit – finished!

#### ADDENDUM:

If you have pin jaws for your chuck you can put electricians tape on each one as a protector and hold the entire assembly (cap,nib& connector) in the jaws and turn after drilling.

It is also possible to drill blanks fully out with a 9mm drill and use the drill as a mandrel mounted in the headstock – please use extra care if using this method as drill bits are not designed as mandrels.

We hope you enjoy making the kits and thank you for your purchase.