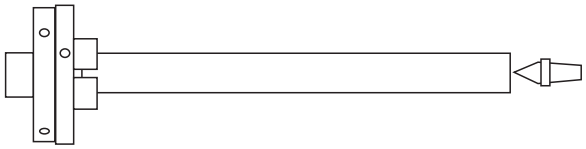
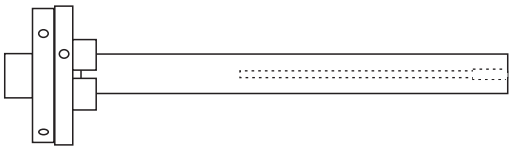
Pen with Cap

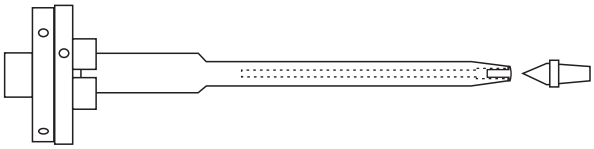
Demonstrated by Bryan Mawhinney



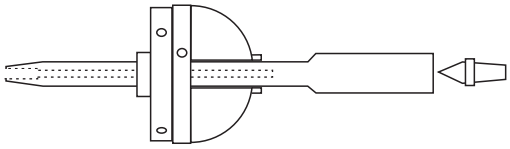
Start with a blank that is at least 200 long and 20 x 20mm. The tailstock end of this blank should be nicely finished as it will not be available for finishing later. It is best to hold this in a 25mm chuck with the tail brought up for security. Or you can hold it in the center of a larger chuck. Round off 130mm of this length. Remove the tailstock.



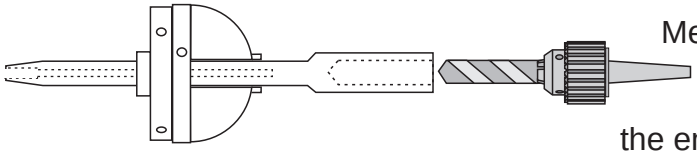
Use the dent made by the tailstock to start drilling a 3.5mm hole 130mm into the wood. Hold this long drill by hand and align it with the tailstock and bed to get the hole straight and level. Do this gently, withdrawing the drill after each 2 or 3 mm. Then drill a 4mm hole into the first 10mm of the wood. In soft wood the 3.5mm drill may have already made the start of the hole this large.



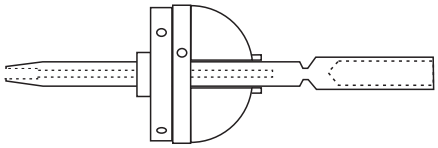
To reduce possible splitting of the wood insert the rivet part of a 4mm dia pop rivet in the drilled hole and bring the tail up again. Shape the pen barrel to be straight, even thickness and sanded.



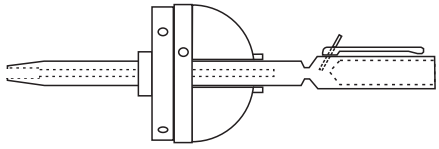
Turn the pen around and mount it in pin jaws or a dome chuck. Wrap the shaft of the pen with thick tape, card or thin plastic to reduce marking by the chuck jaws. Turn the exposed end to be round.



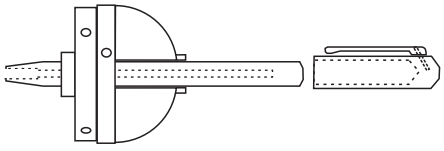
Measure the diameter of both ends of the pen. Drill a hole that is very slightly smaller than the pen diameter 45mm into the end of the wood.



Turn the exposed, cap, end of the pen to a thinner wall. Start a parting cut to remove it from the pen. Sand and finish this area.



Hand carve a pen clip. Glue it to the pen cap. Then drill a hole the size of a toothpick and glue a toothpick into that hole. Cut and sand off the excess. Now complete parting off the cap.



Test fit the cap to each end of the pen. Sand the pen until the cap fits. Now finish all the pen surface.

