



## Assembly Instructions for Engraved Bullet Pen Kits

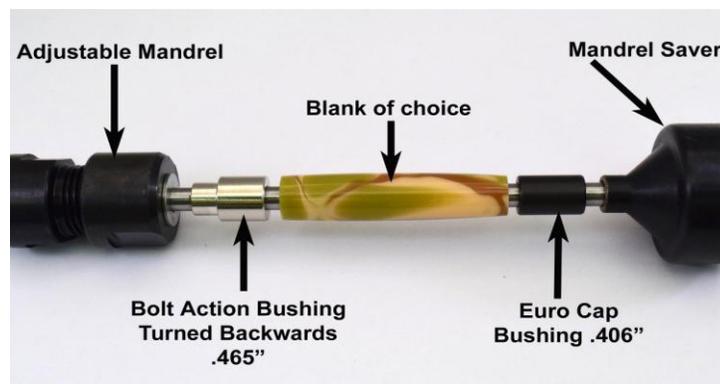
### Pen Blank Preparation:

1. The lower barrel is engraved and already assembled for you.
2. Place the upper pen tube on the top of a pen blank of your choice and mark the blank so that it is at least 1/8" longer than the pen tube. This will allow for trimming the upper blank at a later stage.
3. Mark the center of the upper blank and secure it in a drilling vice if using a drill press. If drilling on a lathe (my method of choice) then secure the blank in a drilling chuck. Spray the 7mm drill bit with BladeCote (or some drill bit lubricant) and drill the upper blank clearing the chips frequently.
4. Rough up the pen tube with 80 grit sandpaper so the glue will adhere better. Glue the upper pen tube into the pen blank using either 5 minute epoxy or medium CA glue and allow the glue to thoroughly dry.
5. If using a barrel trimmer to square the ends of the tubes, lightly take off the excess material until the brass tube is just starting to shine. If you are using a squaring jig and a disc sander (my method of choice) make sure that you do not remove too much of the brass tube. **NOTE: if too much of the brass tube is removed, this may result in an improper fit when you assemble the pen!**

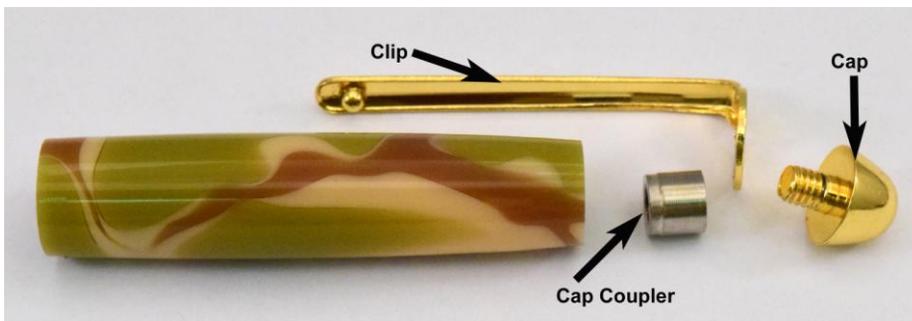


6. The bushings used for this kit are a bolt action bushing (.465") turned backwards and a euro cap bushing (.406").

7. Place the bolt action bushing (.465") backwards onto the mandrel, then the blank, then the euro cap bushing (.406") as displayed below:



8. The above diagram in step seven (7) shows turning the top barrel. The bolt action bushing is placed backwards to match the diameter on the lower barrel's cartridge. By turning one barrel at a time you will get closer to the head stock and get a more concentric turn. Also do not over tighten or put too much pressure on the tailstock or mandrel nut, (if not using a mandrel saver) this may cause the mandrel to flex, producing an egg shaped pen barrel.
9. Turn the upper barrel down to the bushings carefully or stop turning just proud of the bushings and then sand down to the bushings. Make sure you get all the dust off your blank and then apply the finish of your choice.
10. **Upper Barrel Assembly:** follow the assembly instructions by laying out the pen parts for the upper barrel according to the image below. Make sure that when you line up your finished upper barrel, it is in the proper orientation as you turned it on the mandrel. *Hint: I mark the inside of the pen tube which is the top or the center with a marker on the inside of the pen tube.*



11. Start the assembly process by pressing the cap coupler completely into the top of the upper barrel using a pen press. Slide the clip over the cap screw and then twist the cap into the upper barrel.



12. **Lower barrel Assembly:** The lower barrel is already assembled – just push the upper barrel onto the lower barrel.

13. Enjoy your finished pen!

