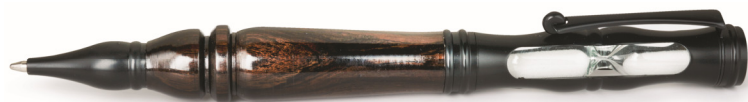


## Hourglass Twist Pen Kit

Product : #163364, #163365, #163366, #163367 8/23/2017



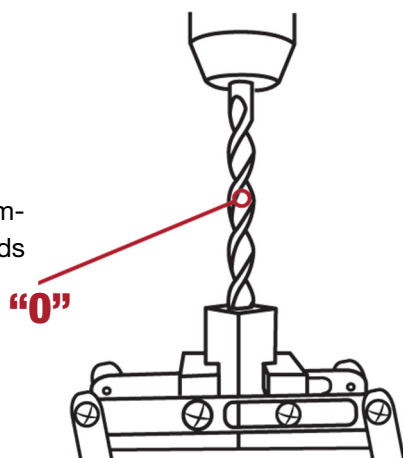
### From Setup To Sanding:

These are the supplies we suggest you have on hand to complete this pen kit:

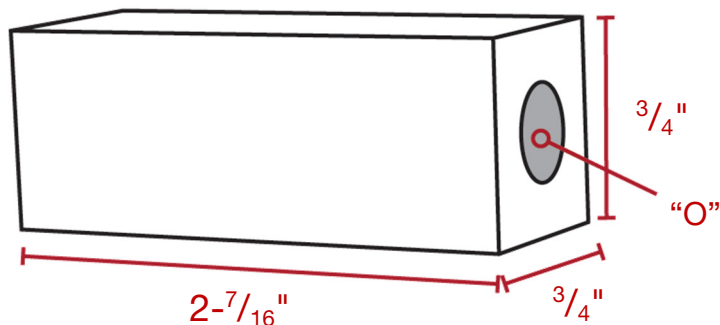
- Letter "O" Pen Maker's Bit
- $\frac{3}{4}$ " x  $\frac{3}{4}$ " x  $2\text{-}\frac{7}{16}$ " Pen Blank
- Pen Mandrel
- Hourglass Pen Kit Bushings (163368)
- Thick CA or 5 Minute Epoxy
- Drill or Drill Press
- Sandpaper/Micro-Mesh
- Barrel Trimmer
- Pen Press
- Eye & Ear Protection
- Dust Mask

### Cutting & Drilling Blanks:

Note: Additional length has been added to the overall length of the blank to accommodate for squaring the ends of the blank.



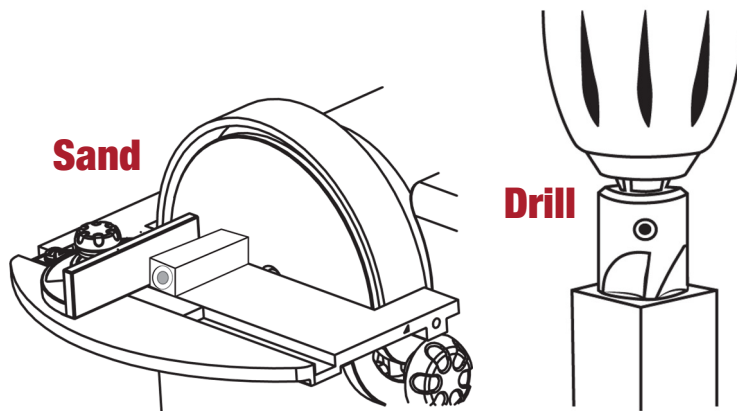
### Gluing Blanks to Tubes:



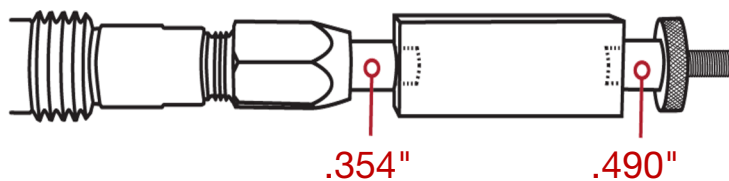
Rough the entire surface of the tube using 180-grit paper. Next, using either a thick CA or 5 Minute Epoxy, apply adhesive to both the tube and the inside of the blank. To secure the brass tube be sure to rotate the tube as you insert it into the blank. This will help ensure even coverage of the adhesive and a much more secure bond.

### Squaring the Blank to Length:

When squaring the blanks work only the brass. Removing brass will affect the overall length of the blank which is critical to the proper operation of the pen.



### Mandrel Preparation:



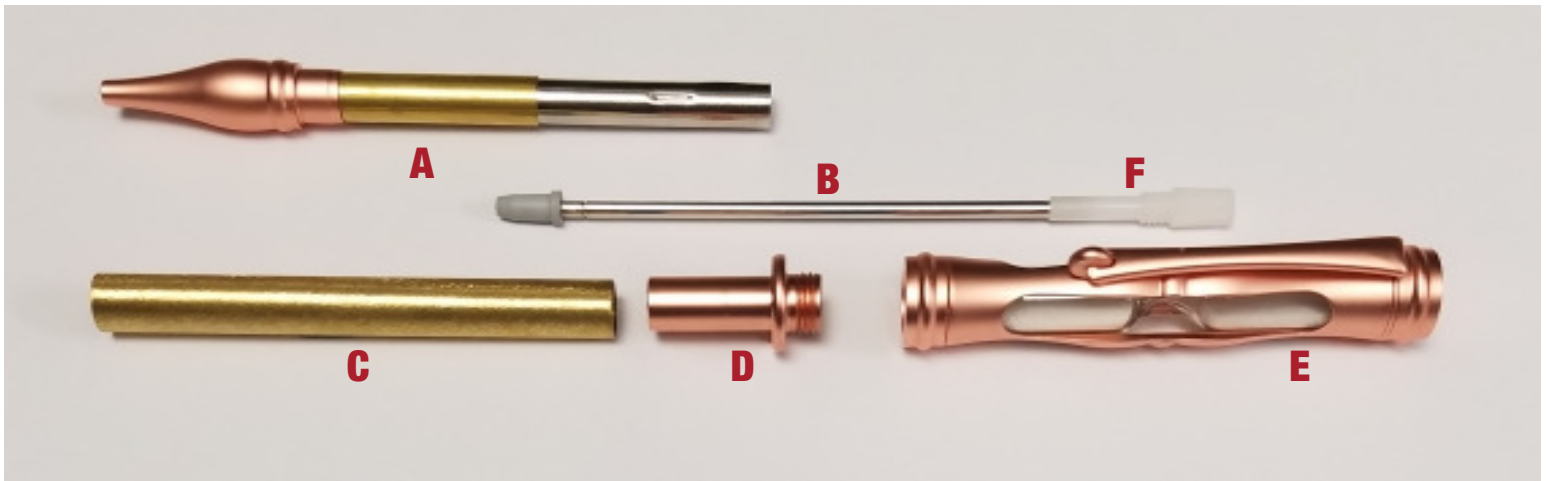
### Turning & Finishing the Blanks:

Turn the blank to your desired profile, leaving the blank slightly proud of the bushings. With the lathe spinning, begin sanding with 120-grit paper, progress through the finer grits, finishing at 320-grit. Once finished with sanding, apply a finish of your choice.

**Hourglass Twist Pen Kit**

Product : #163364, #163365, #163366, #163367

8/23/201

**Assembly:**

- Slide smaller diameter end of Finished Barrel (C) first onto the twist mechanism shaft and press onto Nib Assembly (A).
- Remove protective tip from the Ink Refill (B). Next, by hand gently press Ink Refill Adapter (F) on to ensure that it is properly seated. Thread Ink Refill (B) into the Nib Assembly (A). It may be necessary to use a small Philips screwdriver to finish threading the Ink Refill into position. **Take care not to overtighten.**
- Next thread Twist Mechanism Adapter (D) into the Hourglass Cap (E).
- By hand press the Cap Assembly (D, E) into the Finished Barrel Assembly (A, C, B, F). This will complete the assembly process.

To advance the ink refill rotate the twist mechanism clockwise. To retract the ink refill rotate the twist mechanism counter clockwise.