



Cyclotron Pen Kits Assembly Instructions

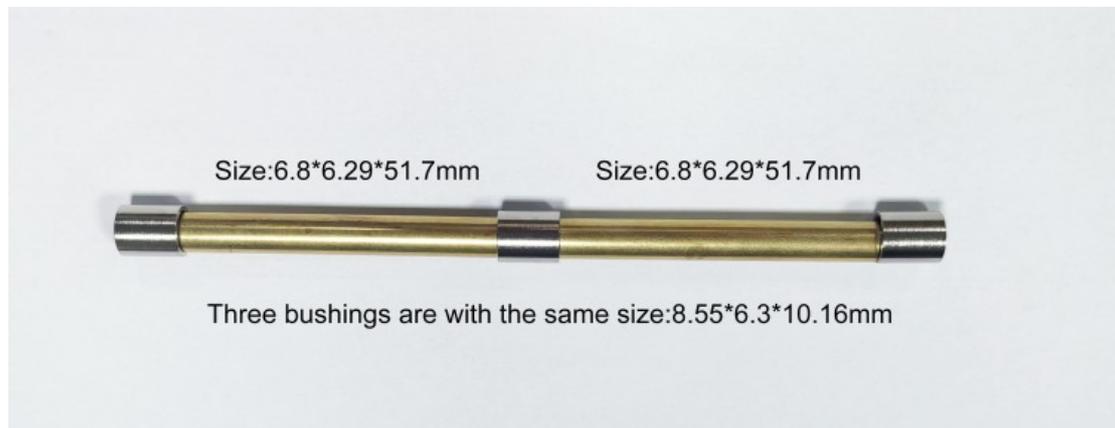
Required Accessories

- 7mm pen mandrel
- 3 piece Bushing Set RZ-BP3#-BU
- 7mm Drill Bit RZ-DB007
- Barrel Trimmer Shaft RZ-PM011
- Glue (Thick CA or Epoxy)



Preparing the Blank

- Cut one blank to the length of the tube(s) and add 1/16" for squaring off.
- Drill 7mm holes lengthwise through the blanks.
- Spread glue over the tube(s), insert the blank with a twisting motion to spread the glue evenly inside.
- Center the tubes lengthwise inside the blanks.
- When the glue is dry, square the ends of the blanks. Use a 6.18mm barrel trimmer, or a universal pen blank squaring jig with a power disc sander. Take the excess material down flush with the ends of the brass tube. (do not trim beyond the length of the tube since this may interfere with operation of the mechanism and assembly). Use a barrel trimmer to clean the inside of the tube.

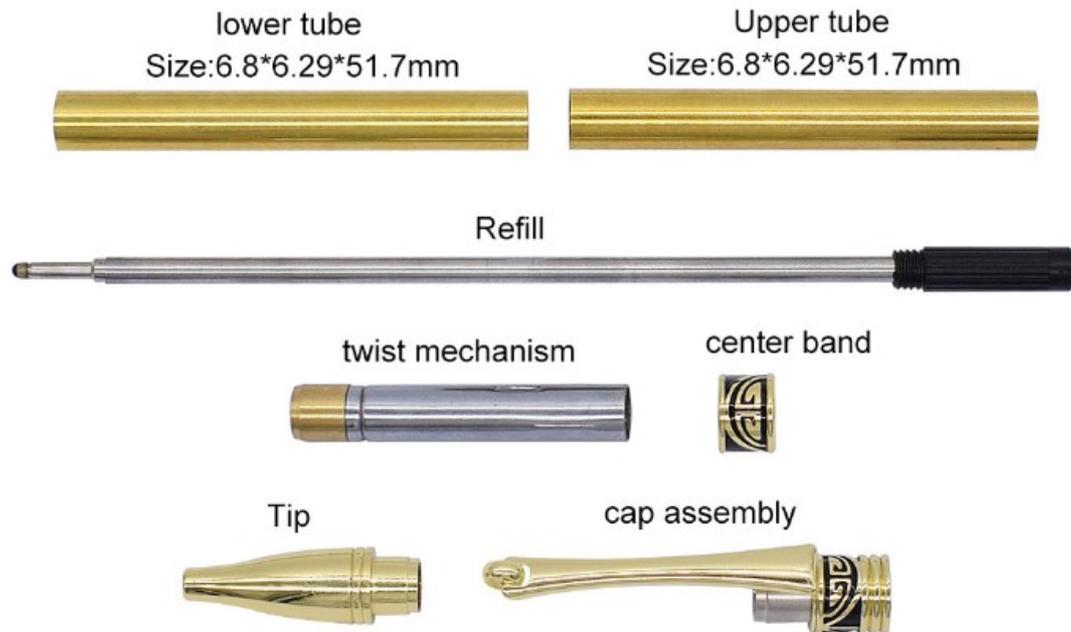


Turning the Blank

- Mount the bushings and blanks according the diagram above.
- Thread on the knurled nut and hand tighten to hold all components in place.
- Slide the tailstock up snugly against the mandrel shaft inserting the live center point into the mandrel dimple, lock in place.
- Hand tighten the quill adjustment to firm up the mandrel. (DO NOT overtighten, it could damage the mandrel).

- Using sharp tools, turn the blank down close to the bushing diameter. Turn the barrel (straight or to a profile of your choice)
- Sand the blank down to be flush with the bushings gradually increasing the sandpaper grits.
- Finish the barrel with your choice of polish. Allow sufficient time for the polish to cure.

DIAGRAM B



Pen Assembly:

- Line up finished parts according to the diagram above.
- Press the tip into the lower tube.
- Press the twist mechanism into opposite end of the same tube. Don't press too far in.
- Slide the band over the exposed mechanism.
- Unscrew cap assembly to coupler, cap and clip.
- Press the coupler into the upper tube
- Cross cap into the clip, then screw to the coupler.
- Screw the refill to the twist mechanism.
- Push the two halves together aligning grain as desired. Pen is operated by twisting the halves in opposite directions to extend or retract point.