

Xiamen Rizheng Industry Co.,Ltd

Gear Pencil Kits Assembly Instructions

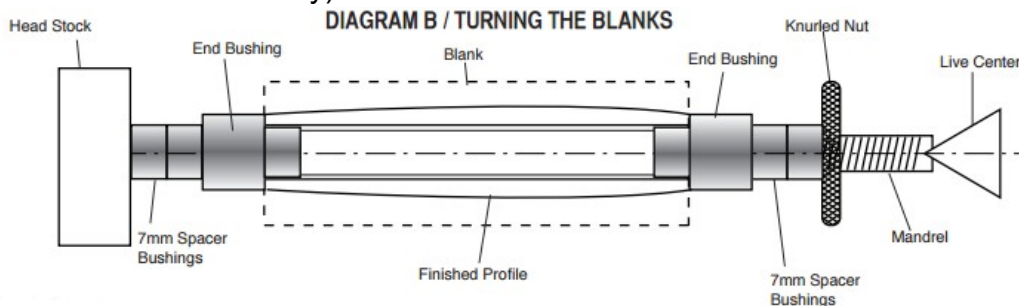
Required Accessories:

- 7mm Pen Mandrel
- Drill Bit: 3/8" RZ-DB3/8
- Bushing set(2 pc) RZ-BPCL131#-BU
- Barrel Trimming set RZ-PM013
- Live Tailstock Center
- 2 Part Epoxy Glue



Preparing the Blank:

- Cut 1 blank to the length of the tube and add 1/16" for squaring off.
- Drill a 3/8" hole lengthwise through the blank.
- Spread glue over the tube, insert the blank with a twisting motion to spread the glue evenly inside.
- Center the tube lengthwise inside the blank.
- When the glue is dry, square the end of the blank. Use a 3/8" 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).

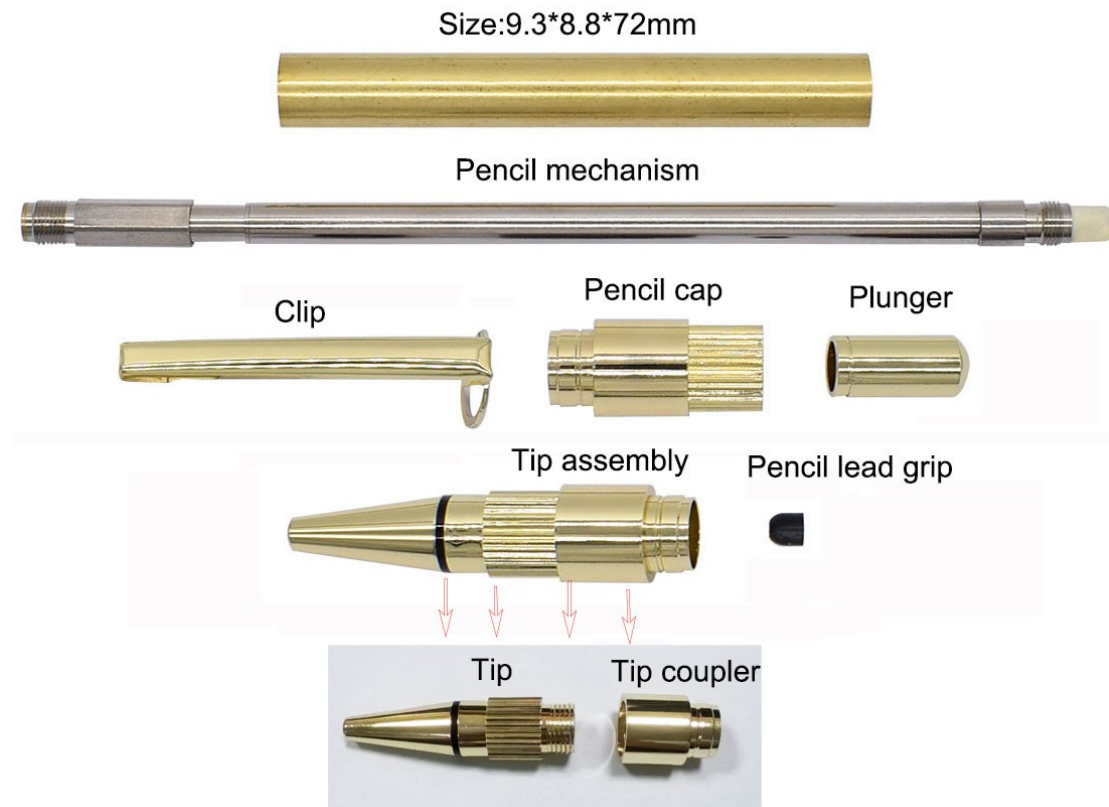


Turning the Blank

- Mount the bushings and blanks according to diagram B.
- 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. Refer to polish instructions.

Diagram A



Assembly

Layout parts according to diagram A

- Unscrew the tip assembly to tip and tip coupler.
- Press the tip coupler, recessed end in first into either end of the barrel.
- Cross pencil cap into the clip, then press into the opposite end of barrel.
- Insert pencil mechanism through the cap and out the opposite end.
- Put the pencil lead grip into the tip (smaller end first). Screw the tip tightly onto the threaded end of the mechanism, into the tip coupler.
- The pencil operates by pushing down on the plunger. This clicks the lead out. Use 2mm lead.

PS: the pencil lead grip is used to stop the lead out too fast.