

# Xiamen Rizheng Industry Co.,Ltd

## Treasure Ball Pen Kits Assembly Instructions

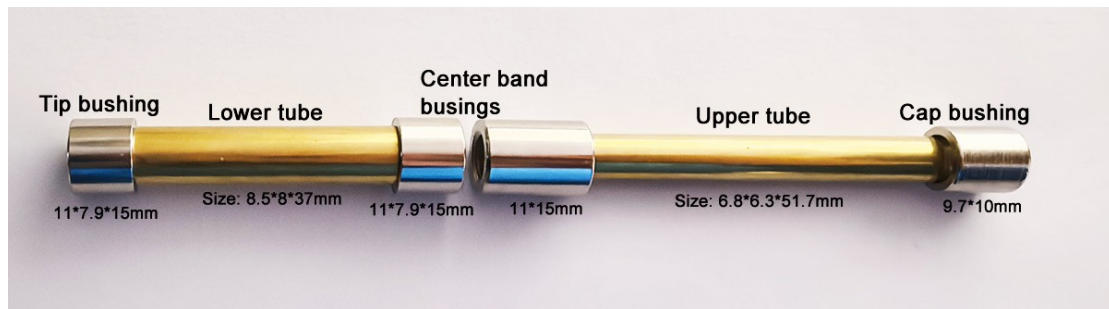
### Required Accessories

- 7mm pen mandrel
- 4-piece Bushing Set RZ-BP669#-BU
- 8.7mm drill bit(RZ-DB11/32), 7mm drill bit(RZ-DB007)
- Barrel Trimmer
- Live Tailstock Center
- Glue (Thick CA or Epoxy)



### Preparing the Blank

- Prepare a master blank of at least 3/4" square. Cut two sections to the length of each tube. (Add 1/16" for trimming). Mark the center of each blank.
- Drill a centered hole lengthwise through each blank.  
Upper blank (longer tube)—drill a 7mm hole through.  
Lower blank (shorter tube)—drill a 8.7mm hole through.
- Spread glue over the tubes, 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 ends of the blank. Use a 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.

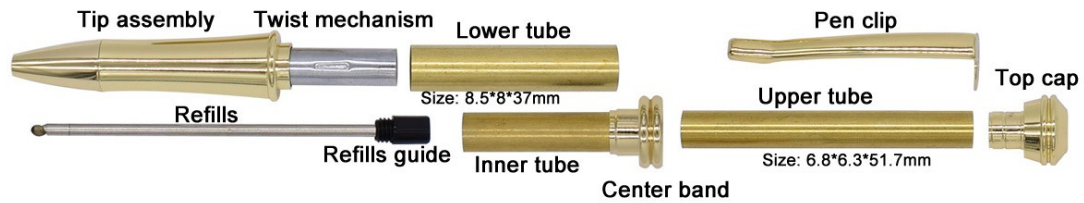


### Turning the Blank

- Mount the bushings and blank 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 A



### Assembly

NOTE: Layout Finished parts according to Diagram A.

- Press the center band with inner tube into the end of the lower tube.
- Insert the pen clip to the top cap, then press the top cap into one end of upper tube.
- Press the opposite end of the upper tube into the center band assembly.
- Screw the Refill into the twist mechanism by hand.
- Push the two halves of the pen, tip assembly and center band assembly, including the upper assembly.
- The pen operates by twisting the center band to advance or retract the refill for writing.