



Loong pen kits Assembly Instructions

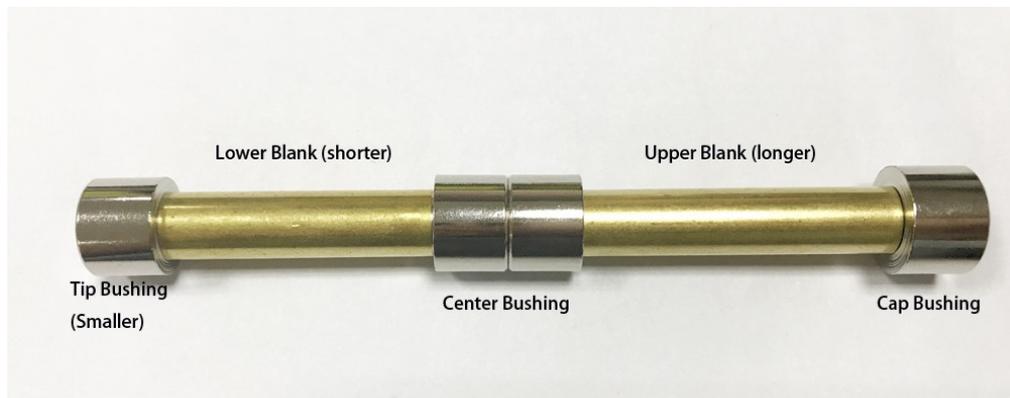
Required Accessories

- 7mm pen mandrel
- 4 piece Bushing Set RZ-BP231#-BU
- Drill Bit 3/8" RZ-DB3/8
- Barrel Trimmer use 3/8" Shaft
- Live Tailstock Center
- Glue (Thick CA or Epoxy)
- Pen Blank: Minimum Size- 3/4" x 3-1/2"



Preparing the Blank

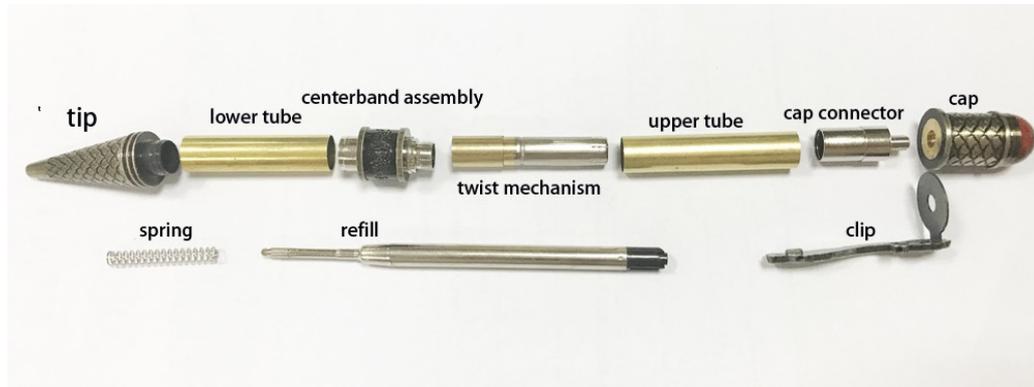
- Cut 2 blanks to the length of the tube(s) and add 1/16" for squaring off.
- Drill 3/8" holes lengthwise through the blanks.
- Spread glue over the tube(s), insert the blank with a twisting motion to spread the glue evenly inside.
- Center the tubes lengthwise inside the blanks.
- When the glue is dry, square the ends of the blanks. Use a 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). 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.



Assembly

- Layout parts according to diagram above
 - Press the tip into either end of the lower barrel.
 - Press the center band assembly into the opposite end of the barrel.
- WARNING:** It is not advised to press directly over the threads, instead use a pen blank. Cut a section 5/8" long. Drill an 8mm hole through. Affix this blank over the threads and press the band and coupler in.
- Affix the spring over the refill and drop into the opening at the band. Screw on the mechanism over.
 - Press the cap connector into the larger diameter end of the upper barrel, flush with the shoulder.
 - Affix the clip into the threaded stem. Screw on the cap.
 - Engage both ends to close the gap. Twist the upper cap so the clip aligns with the band as shown in the photo of the finished pen.
 - The pen operates by twisting the ends to advance or retract the refill.
 - Replace the refill by unscrewing the upper barrel from the mechanism & exposing the top of the refill to replace

About the center band

The two insides of the center band are different. So this make the center band has upper side and lower side. There is a groove inside the upper side for the twist mechanism.

