Xiamen Rizheng Industry Co.,Ltd

Mars Twist Pen Kits Assembly Instructions

Required Accessories

- 7mm pen mandrel
- 2-piece Bushing Set RZ-BP302#-BU
- 3/8" drill bit RZ-DB3/8
- Barrel trimmer
- · Live Tailstock Center
- Glue (Thick CA or Epoxy)

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 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 crits.
- Finish the barrel with your choice of polish. Allow sufficient time for the polish to cure.

Diagram A





Diagram B



Assembly

- Arrange parts according to Diagram A.
- Press the Coupler into one end of the Long tube. Make sure to keep them at the same level (see Diagram B).
- Screw the Cap with the Clip into the Coupler.
- Unscrew the twist mechanism from the short tube, then press one end of the short tube (without thread inside) into the tip.
- Slide the Refill with Spring into the end of Tip through the Short tube.
- Next screw the Twist mechanism into the other end (with thread inside) of the Short tube.
- By hand, push the Clip/Cap assembly over the Tip assembly.

To advance the Refill hold onto the Tip of the pen and rotate the Clip/Cap Assembly clockwise, to retract the Refill hold onto the Tip of the pen and rotate the Clip/Cap Assembly counter clockwise.