# Doggie Ball Pen Kits Assembly Instructions

### **Required Accessories**

- 7mm pen mandrel
- 2 piece Bushing Set RZ-BP349#-BU
- Drill Bit 3/8" RZ-DB3/8
- Barrel Trimmer use 3/8"
   Shaft
- 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 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.

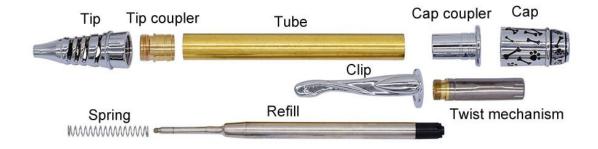


# **Turning the Blank**

- 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.

#### **DIAGRAM B**



## Pen Assembly:

- Line up finished parts according to the diagram above.
- Press the tip coupler into barrel, then screw the tip.
- Press the cap coupler with the clip into the other end of the barrel.
- Insert the refill with the spring into the barrel.
- Screw the twist mechanism into the clip assembly until it stops.
- Push cap onto twist mechanism by hand.
- Pen operates by twisting the cap to extend or retract the refill.