

## Metro Rollerball Pen Kits Assembly Instructions



### Required Accessories:

- 7mm Pen Mandrel
- 3 piece Bushing Set
- 12.6mm Drill Bit
- 10.6mm Drill Bit
- Universal Barrel Trimmer
- Sandpaper/Finish
- 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.

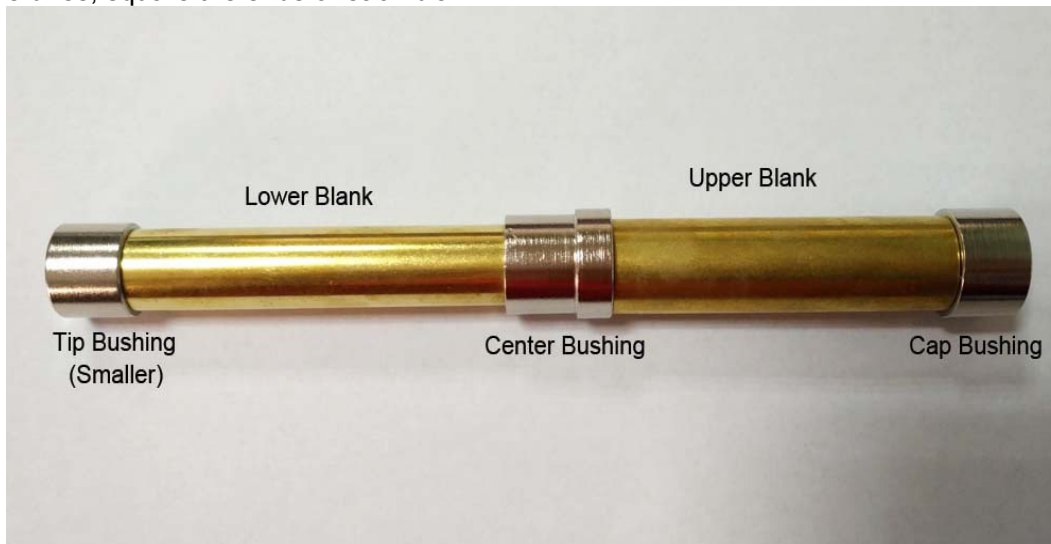
• Drill a centered hole lengthwise through each blank.

Upper blank (shorter tube)—drill a 12.6mm hole through.

Lower blank (longer tube)—drill a 10.6mm hole through.

• Glue each tube in the proper blank. Spread the glue over each tube. Insert the tube into the blank with a twisting motion to spread the glue evenly inside. Center each tube lengthwise inside the blank.

• When glue dries, square the ends of each blank.



### Turning the Blank

- Mount the bushings and blanks according to 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

NOTE: Line up the components according to the above diagram.

- Press the clip assembly to one end of the upper tube (shorter tube).
- Press the center band coupler, black end first, into the opposite end of the upper tube.
- Place the cap coupler into the end of the lower tube. Thread the cap into the cap coupler.
- Press the nib coupler into the opposite end of the lower tube.
- Insert the spring then the ink refill into the lower tube. Thread the nib into the nib coupler