

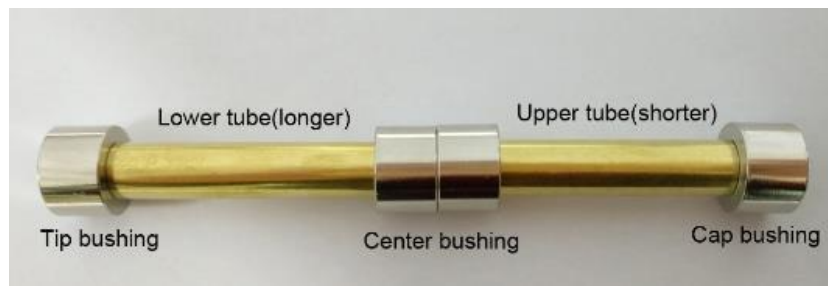
# SKULL AND CROSS BONES TWIST PEN

## Required Accessories

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

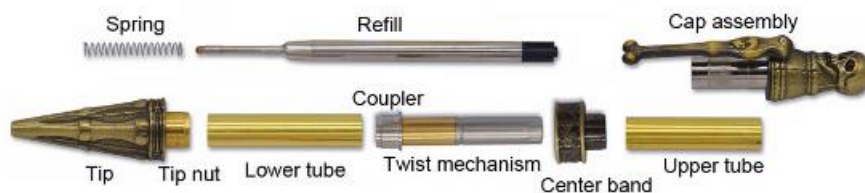
## Preparing the Blank

- 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 nut, recessed end in first into either end of the lower barrel (longer).
- Press the coupler, recessed end in first into the opposite end of the lower barrel.

NOTE: Do not press directly over the threads, instead cut a pen blank to about 5/8" long.

- Drill a 8mm hole through the blank. Affix the blank over the thread and press the coupler in.
- Remove the protector off the refill, insert the spring over and drop into the opening at the coupler.
- Screw the twist mechanism over the refill end.
- Press the band, recessed end in first into either end of the upper barrel.
- Press the cap assembly into the opposite end of the upper barrel. (Note: alignment of band, clip and cap)
- Engage both ends to close the gap in the center.
- The pen operates by twisting the ends to extend or retract the refill.