## Fillibelle Twist Pen Kit

## Kit Features:

- Easy to turn with two tube sizes
- Minimum parts - easy to assemble
- Available in multiple finishes
- Uses Cross® style refill
- Overall length: 5-3/4"


## Required Accessories:

- 7 mm Pen Mandrel
- Drill Bit(s) 7mm \#PK-7MM , 8mm \#PKPARK-8MM
- Bushing set (3 pc) \#PKFPENBU
- Barrel Trimming \#PKTRIMKIT 7mm and 8mm
- Live Tailstock Center
- 2 Part Epoxy Glue or Insta Cure (Cyanoacrylate) Glue
- Pen Blank: Minimum Size - 3/4" x 3-1/2" Long


DIAGRAM A / PARTS LAYOUT


## Preparing the Blank:

- Cut 2 blanks to the length of the tubes and add $1 / 16$ " for squaring off.
- Drill a 7 mm hole lengthwise through the lower blank. Drill a 8 mm hole lengthwise through the upper blank.
- Spread glue over the tubes, insert into 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 $7 \mathrm{~mm} \& 8 \mathrm{~mm}$ barrel trimmers, 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 to diagram B.
- 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 A
- Press the tip into the narrow end of the lower barrel
- Press the twist mechanism, brass end first into the opposite end of the barrel. Mark a line, $3 / 4$ " from the end and press the mechanism to the line. (see dia. A)*
- Press the wide end of the upper barrel into the extension of the band coupler.
- Press the cap nut. Recessed end in first into the opening at the opposite end of the barrel.
- Affix the cap nut into the hole in the clip and screw into the cap nut tight.
- The pen is ready to use. Twist the ends of the pen to advance or retract the refill.
* In order to asure proper refill tip extension It's good policy to press the mechanism in less than 3/4." Insert and advance the refill. If the tip doesn't extend far enough remove refill and press mechanism incrementally until the refill extends an appropriate distance out of the tip.


## Diagram C / Bushings \#PKFPENBU



Center Bushing
Cap Bushing

