

## "Funline" Pen Kit Assembly Instructions

### KIT FEATURES

- Available in gold, chrome, gold-satin, chrome-satin, copper or gun metal plate finishes.
- Simplified construction, uses same tube lengths for all kits. (2-1/32" long).
- Overall Length: Pen= 5-1/8"

### PREPARING THE BLANKS

#### Step 1 - Cut Wood Blanks

From 1/2" to 5/8" square stock, cut blanks to the length of the tube plus 1/16". Grain should run lengthwise.

#### Step 2 - Drill The Wood Blanks

Drill a 7mm centered hole lengthwise through each blank. Excessive pressure will cause the drill bit to wander and/or split the blank. Slow the feed rate and back the bit out repeatedly for chip removal.

### REQUIRED ACCESSORIES

- 7mm Long Mandrel.
- 3 Piece Bushing Set #PKM-BUSH3.
- 7mm Drill Bit #PK-7MM.
- 7mm Barrel Trimmer #PKTRIM7 (optional)
- 2 Part Epoxy Glue or Insta-Cure (cyanoacrylate).

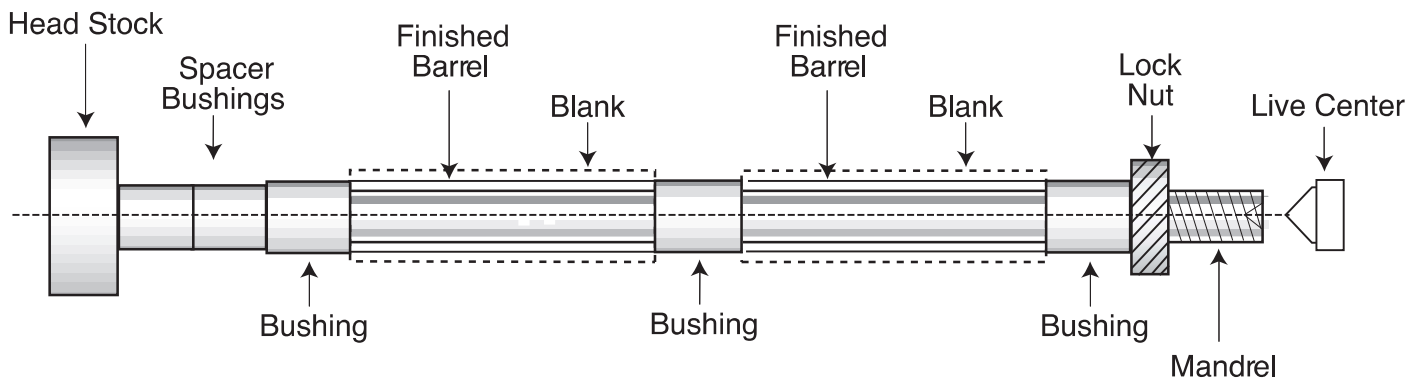
#### Step 3 - Glue The Tubes Into The Blanks

Use epoxy or a gap filling cyanoacrylate. Spread the glue on the tube. Insert into the blank with a twisting motion to spread the glue evenly inside. Center each tube lengthwise in the blank. Allow it to dry.

#### Step 4 - Square The Ends

With a 7mm barrel trimmer #PKTRIM7 or other sanding device, square the ends of the blanks 90 degrees flush to the ends of the brass tubes.

**Diagram A - Turning The Blanks**



### TURNING THE BLANKS

#### Step 5 - Turning the blanks

Place spacer bushings on the mandrel. Next, place one of the pen bushings onto the mandrel. Next, slide on either the blank, then another pen bushing.

Follow with the second blank then the last pen bushing.

Thread on the lock nut hand tight. Bring the tail stock snug with the mandrel (do not over tighten, it could damage the mandrel). Excessive pressure may also crack the wood or acrylic blanks if it is too tight.

Turn the blanks down to a diameter slightly larger than the bushings (about 1 1/32" O.D.). As you approach the final size be careful since the wood is only about 1/32" thick.

#### Step 6 - Sanding the blanks.

As with any sanding, progress through a range of lower to higher grits of sand paper. Sand with blank spinning. Progress from 150 through to 600 grit paper. Different woods and acrylics require different methods to achieve better results.

#### Step 7 - Finish

Try a finish of your choice but be careful if brushing on a polyurethane, etc. You can stick the tube, bushings, and mandrel together. PSI Shellawax PKSWAX works well on most woods.

Shake before using. Apply with a rag to the spinning barrel. Apply at least two coats. A variety of finishes and polishes are available (see PSI catalog).

#### Step 8 - Touch Up

With tubes off mandrel, lay them end to end to decide which sets will look best when assembled. Remember, they will be 5/32" apart (due to center ring) so minor differences won't show. If necessary, a light sanding of the ends on a block will square the ends and improve the fit during assembly. Repeat step 7.

**PEN ASSEMBLY**

• Use the PSI #PENPRESS2 (See PSI catalog) or a clamp or vise to press parts together.

• Front and rear tubes are identical on the pen kits and may be mixed and matched.

A. Press the tip into the front tube.

B. Press the twist mechanism (brass end first) into opposite end of same tube (usually to the indentation mark).

Be careful, don't press it too far in!

C. Slide band over the exposed mechanism.

D. Press cap into the clip then onto the rear tube (clip can be left off if desired).

E. Push the two halves together aligning grain as desired. Pen is operated by twisting the halves in opposite directions to extend or retract point.

Test the extension with the refill inserted. Uses PK-PEN5 or Cross® type refills.

**Diagram B - Assembly of Pen**

*Note: Line up parts according to layout below.*

