ns Pens

## TURNING SUPPLIES. Fancy & Slimline Pencil Kits Assembly Instructions REQUIRED ACCESSORIES 7mm Mandrel.

3 Piece Bushing Set

7mm Drill Bit

7mm Barrel Trimmer

2 Part Epoxy Glue or Insta-Cure (cyanoacrylate).

### 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 centred 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.

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. Centre each tube lengthwise in the blank. Allow it to dry.

Step 4 - Square the Ends

Step 5 - Turning the blanks

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



Place spacer bushings on the mandrel. Next, place one of the pen bushings onto the mandrel. Next, slide on either 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 11/32" O.D.). As you approach the final size be careful since the wood is only about 1/32" thick.

Step 6 - Sanding the blanks.

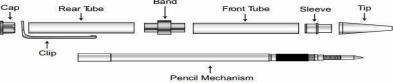
As with any sanding, progress through a range of lower to higher grits of sandpaper. Sand with blank spinning. Progress from 150 through to 600 grit paper. Different woods and acrylics require different methods to achieve better results.

#### 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.

Shake before using. Apply with a rag to the spinning barrel. Apply at least two coats. A variety of finishes and polishes are available. 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 centre 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. Then repeat step 7. Band



## Assembly

A. Press the sleeve, recessed end first into the end of the front barrel until it hits the shoulder.

**B.** Press the band into the opposite end of the barrel.

 $C. \label{eq:constraint}$  Press the rear barrel onto the band.

 $D. \ \mbox{Press cap into the clip then onto the rear tube (clip can be left off if desired).}$ 

E. Insert mechanism through the cap and out the opposite end. F. Screw the tip tightly onto the threaded end of the mechanism.

G. The pencil operates by pushing down on the plunger. This clicks the lead out. The eraser and extra lead are located under the gold cap on the mechanism. Use 0.7mm lead. Note: If lead does not advance properly or retracts when writing, gently pull exposed short piece of lead out of mechanism. Continue to pump pencil plunger until a new piece of lead is exposed.

# **CONTACT DETAILS:**

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