

Slimline & Streamline Pencil Kit Instructions

**Steve's
Woodcraft**

Required Accessories

- 7mm Pen Mandrel
- Bushing set (varies for Slimline or Streamline)
- 7mm drill bit
- Glue
- 2cm*2cm*13cm long blank



Preparing the Blanks

1. Use a 15mm square stock, cut blanks to the length of the tube, adding 1.5mm for trimming. Grains should run lengthwise.
2. Drill a 7mm 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.
3. Glue the tube into the blank. Coat the outside of the tube with glue and insert the tube into the blank with a twisting motion to spread the glue until flush. Allow it to dry.
4. Square the ends of the blanks to the tubes.
5. 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.



Turning the Blanks

1. Slide 7mm spacer bushings onto the mandrel shaft, followed by the end bushing. Slide on one blank. Next, add the centre bushing. Place the upper blank followed by the end bushing. Add additional spacer bushings as necessary to reach the mandrel threads.
Note: The streamline pen has a larger centre bushing.
2. Thread on the locknut hand tight. Bring the tailstock in snug to the mandrel, lock in place. Tighten the lock nut for turning. DO NOT over tighten the locknut - it could damage the mandrel.
3. Turn the barrels close to the bushing diameter with sharp tools; sand the barrels to match the bushing diameter.
4. 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.
5. Finish the wood with your choice of polish.

Assembly

1. Arrange the parts per the diagram below. If some of the parts are screwed together, separate them first.
2. Press the sleeve, recessed end first into the end of one barrel until it hits the shoulder.
3. Press the band into the opposite end of the barrel.
4. Press the other barrel onto the other end of the centre band.
5. Slide the clip onto the cap and then press into the top of the pen (clip can be left off if desired).
6. Insert the pencil mechanism through the cap and out the opposite end.
7. Screw the tip tightly onto the threaded end of the mechanism.
8. If separate, slide the plunger on to the end of the pencil mechanism (over the eraser).
9. The pencil operates by pushing down on the plunger. This clicks the lead out. The eraser and extra lead is 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.

