



Slim Style Pen & Pencil Kits

Product #123052, 123053, 123059, 123060, 123080, 123087, 123320, 123325, 123330, 123335, 124637, 124638, 124644, 124645, 124651, 124658, 141655, 141656, 141657, 142414, 142415, 142416, 142505, 142506, 142507, 147074, 147075, 148778, 822947

1. Cutting Blanks

Cut wooden blanks to measure $\frac{1}{2}$ " x $\frac{1}{2}$ " x the length of the brass tube plus approximately $\frac{1}{4}$ ".

2. Drilling Blanks

Using a 7mm drill bit (123306), center and bore a hole through the complete length of the blank.

3. Gluing Blanks to Tubes

See General Instructions for details.

4. Sanding Blanks to Length

See General Instructions for details.

5. Mandrel Preparation

See General Instructions for details.

Slide a bushing (06R03) onto the mandrel. Slide the first blank onto the mandrel followed by another bushing, the second blank and the last bushing. Secure the blanks with the mandrel nut and washer.

6. Turning the Blanks

See General Instructions for details.

7. Finishing the Blanks

See General Instructions for details.

8. Pen Assembly

All parts should be press fit with a machinists type vise. Protect all plated metal parts from scratches by covering with a cloth or thin pad before placing in vise.

1. Gently press the pen clip/cap (1/5) into the upper barrel (3).

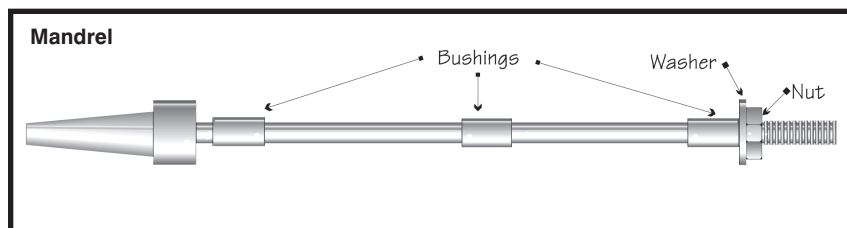
2. Install the tip (7) into the lower barrel (6).

3. Insert the pen twist mechanism (8) threaded end out into the lower barrel (6) until the small indentation is just covered. See "Special Instructions" for additional installation information.

4. Slide the brass ring (4) down the pen mechanism until it meets the lower barrel (6).

5. Insert and screw the pen mechanism (2) into place.

6. Press the upper barrel (3) down the pen mechanism until it is seated with the brass ring (4).





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9. Pencil Assembly

1. The brass insert (2) has a large diameter end and a small diameter end. The large diameter end must be pressed into the lower barrel (3). To identify the large diameter attempt to insert one end of the insert into the lower barrel. If the insert fits loosely into the lower barrel this is the small end. If the insert will not fit into the lower barrel, but will require a press fit, this is the large diameter end which must be pressed into the barrel.
2. Press the pencil clip (6) and the pencil cap (7) together.
3. Press the clip/cap assembly (6/7) into one end of the upper barrel (5).
4. Press the brass center ring into remaining lower (3) and upper barrel (5) openings.
5. Insert the pencil mechanism (8) through the open clip/cap end of the upper barrel (5) and finger tighten the tip (1) onto the threaded end of the pencil mechanism (8).
6. The lead is advanced by pushing and releasing the plunger.

Operation of Pencil - Each pencil has been factory tested. Lead (.5mm) has already been advanced into the mechanism and it is ready to use. Occasionally, the lead will only advance a few clicks. This is generally caused by broken lead. To replace the broken lead simply pull it out from the tip and click a new lead into place.

10. Special Instructions

Due to the variable length of replacement "Cross-type" pen refills, we recommend the following procedure be followed when assembling pens. To ensure a proper fit you may want to buy a Cross refill and use it as a guide while fitting parts together.

The fit of the twist mechanism is critical in determining the distance that the pen tip extends from the pen body. To ensure correct refill tip extension, the twist mechanism must be pressed into the lower barrel slightly past the small indentation (as opposed to just covering the indentation). When performing this step be sure that the twist mechanism is not seated too deeply or the refill tip will not retract fully into the pen body.

Remember, the twist mechanism placement is a trial and error process and should be tested as you proceed to ensure proper depth of seating. If you proceed slowly, utilizing the illustration (right) and/or replacement pen refills, your custom made pens will perform properly regardless of the pen refill utilized.

- Additional Parts:**
- 06R68** repl. pen tube set (5 pr.)
 - 06S76** 10 red refills
 - 06S77** 10 blue refills
 - 06R78** repl. pencil tube set (5pr.)

