

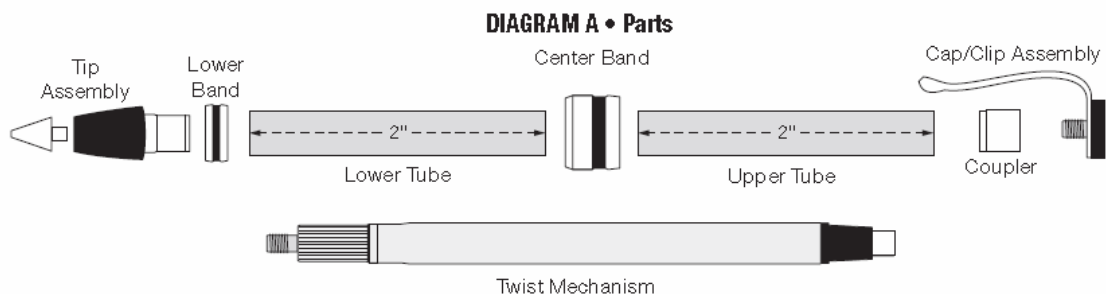
Classic Twist Pencil Kits Assembly Instructions

REQUIRED ACCESSORIES

- 7mm Pen Mandrel
- 3-piece Bushing Set RZ-PCL21#-BU
- 8mm Drill Bit RZ-DB008
- Universal Barrel Trimmer
- 2-part epoxy glue or insta-cure glue (cyanoacrylate).

PREPARING THE BLANKS

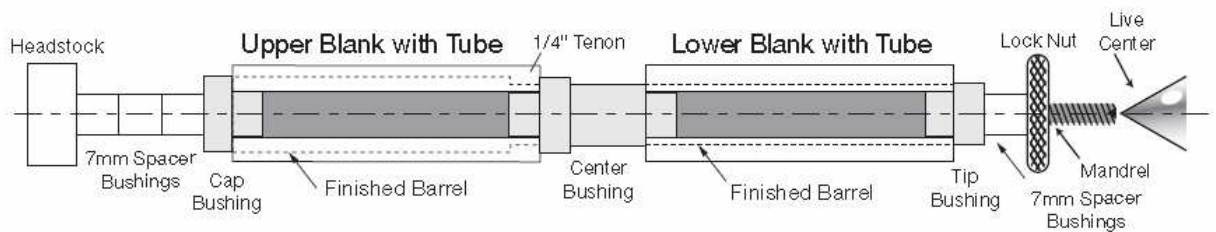
- From 5/8" or larger square stock, cut blanks to the length of each tube plus 1/16" on each end for trimming.
- Drill carefully since excessive pressure may cause the drill bit to wander and/or split the blank. Slow the feed rate and back the bit out repeatedly for chip removal. Use an 8mm HSS drill bit.
- Apply epoxy or a gap filling cyanoacrylate (super glue), to the tube and insert into the blank with a twisting motion. This will spread the glue evenly. Center the tube within the blank and allow to dry.
- Use a barrel trimmer to square the ends of the blank to the brass tube.



TURNING THE BLANKS

- Mount the wide bushing, one wood blank (cap) and center bushing on the mandrel as indicated in **Diagram B**.
- **NOTE:** The center bushing has two shouldered diameters made to match the wide and narrow bushings. The second wood blank should be mounted next to the center bushing, and the third (narrow) bushing mounted last. (*See Diagram B*) Make sure that the center bushing is positioned properly to turn the cap and body to different diameters matching the outside dimensions of the bushings. The cap is the wider, and the body is narrower. For the best results, the blanks must be turned to the exact diameter of the bushings. After final turning and before finishing, a tenon must be cut in the upper barrel to accommodate the center band.

DIAGRAM B • Turning the blanks

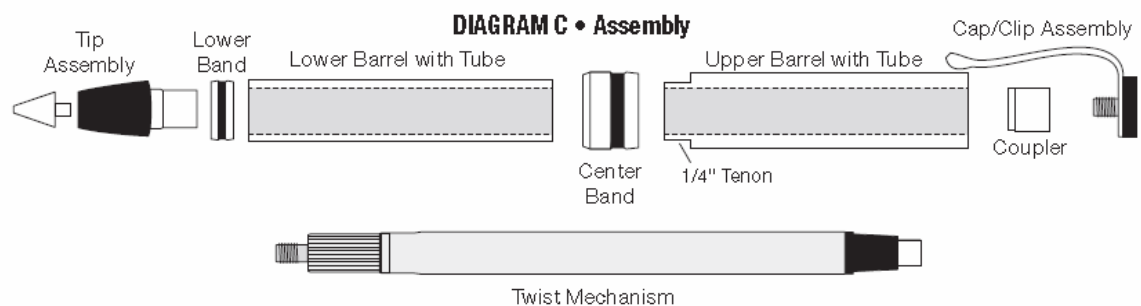


- The diameter of the tenon should match the narrow diameter of the center bushing. To ease the turning of the tenon, slide the center bushing off the mandrel and turn it around 180 degrees. Next, slide the center band onto the bushing (flat end towards the wood) and replace it on the mandrel as indicated in **Diagram B**.

- The length of the tenon can be approximately 1/4" which is about 5/32" less than the width of the center band. This is done to allow the pen body to inset into the center band when closed. When ready for the final cut, slide the center band from the bushing onto the tenon to test for fit. The proper diameter for the pen cap body should be the same as the outside diameter of the center band. When the proper fit is obtained, move the band away from the wood and finish the blank. You may then permanently mount the band by adhering with a drop of glue.

- **NOTE:** When turning this blank near the center bushing, use a small piece of tape to secure the center band to the bushing so it does not spin and possibly hit your turning tool.

- Sand both blanks and then finish the blanks with your choice of polish and wax.



Assembly:

- Line up the pen parts according to the **Diagram C**.
- Thread the cap into the hole in the clip and tighten with the cap nut, leaving the tapered end exposed.
- Press the cap/clip assembly into the short pen blank opposite the tenon.
- Slide the front ring on the nose piece and insert into the front tube and press together.

- Insert twist mechanism into the pencil body and secure by screwing the tip in place.
- Glue the center band onto the tenon you cut in the pen cap body making sure you place the squared end against the wood.
- Push the two pencil halves together aligning the grain as desired. The pencil is operated by twisting the halves in opposite directions to extend or retract the lead point.