

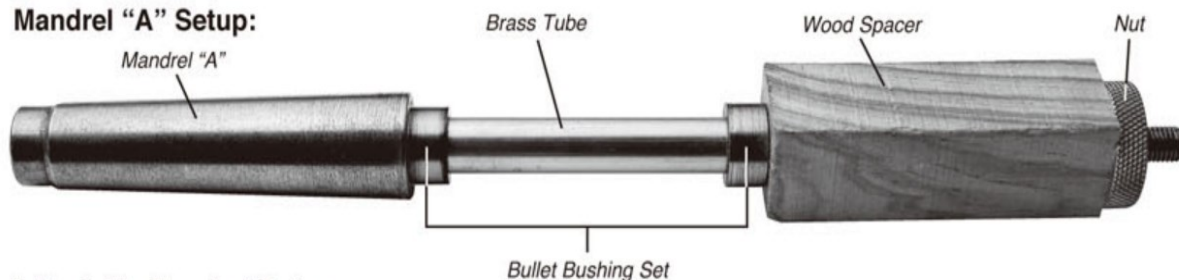
PEN KITS ASSEMBLY INSTRUCTIONS

BULLET TWIST PENS

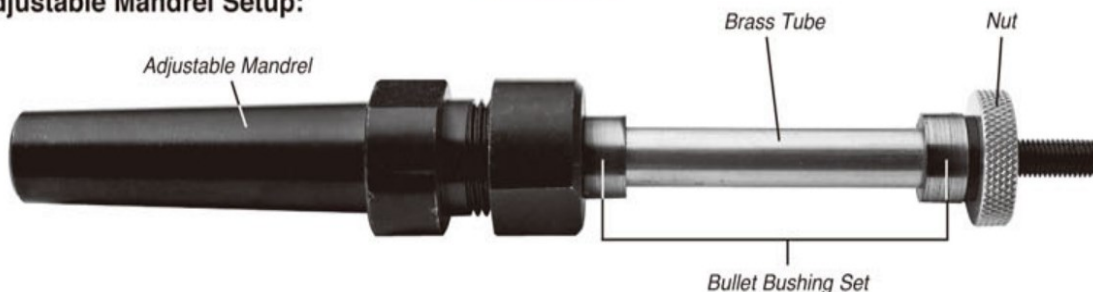
Blank Preparation

1. Cut the blank about 1/8" longer than the Brass Tube to allow for "blow-out" or hole elongation.
2. Drill the blank with a 10mm drill bit at a speed of 900 to 1200 RPM.
3. Polish the Brass Tube with 220 grit sandpaper to remove oxidation and roughen the tube. This can be done by hand or by chucking it in a drill press or portable hand drill.
4. Prepare to glue with medium CA (cyanoacrylate) glue or two-part fast drying epoxy.
5. Apply the glue to the outside of the tube with a liberal amount around the tube end that is inserted first. Do not apply glue to the inside of the blank, as this will cause the glue to get inside the Brass Tube and ruin the tube.
6. Insert the tube with a twisting motion into the blank until the tube is equidistant between both ends of the blank. Wipe off any excess glue on the ends of the blank. Allow the glue to dry.
7. Using a barrel trimmer, disk, or belt sander, trim the ends of the blank until you can just see the bright brass ends of the tube. The face of the ends must be perpendicular to the Brass Tube and parallel with each other. It is imperative to match the length of the trimmed blank to the original length of the Brass Tube and that the inside of the Brass Tube is clean and free of any glue.

Mandrel "A" Setup:



Adjustable Mandrel Setup:

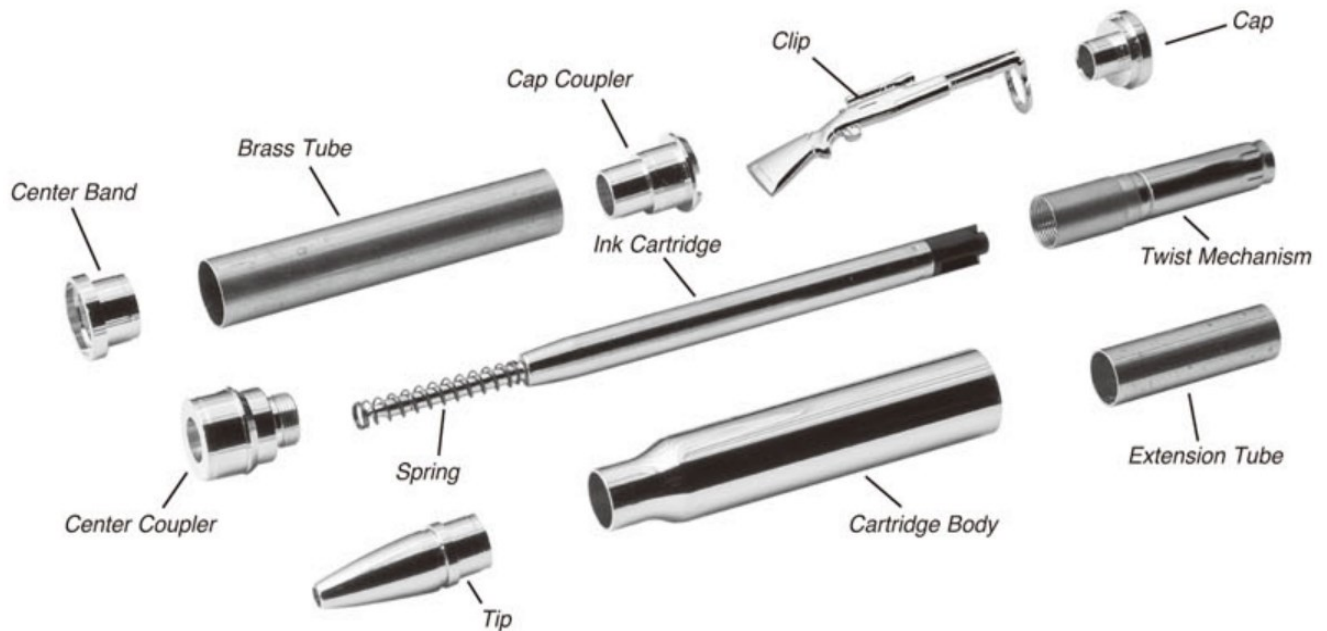


Turning the Blank

1. Assemble the blank on the mandrel with the bushings placed as shown in the picture above. Each bushing has a step that is designed to be inserted into the Brass Tube for stability while turning, as the inner diameter of the tube is larger than the mandrel. Note that all of the bushings are the same size. **Note:** Either Wood Spacers or extra Bushings may be used to fill the extra space on the mandrel.
2. Tighten the tailstock and then tighten the mandrel nut that holds the blank. Do not over-tighten the tailstock or mandrel nut as this may cause the mandrel to flex, causing the blank to go out of round.
3. Turn the blank to the desired shape, making sure that the surfaces next to the bushings are turned to the same diameter as the bushings.
4. After turning, sand the surfaces in progressive steps of 220, 400, 600, and 1000 grit. If a higher finish is desired, micromesh sandpaper may be used.
5. Apply the finish of choice and polish.
6. Remove the blank from the mandrel.

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Twist bullet pen Assembly



Assembly

Read the assembly instructions completely before assembly.

1. Press the Center Coupler, threaded end out, into the large end of the Cartridge Body until you have reached the flange.
2. Press the Tip into the small end of the Cartridge Body until you have reached the flange.
3. Install the spring onto the Ink Cartridge and insert the Ink Cartridge into the Cartridge Body through the Center Coupler. Thread the Twist Mechanism onto the Center Coupler.
4. Press the Center Band into the Brass Tube.
5. Press the Extension Tube onto the small end of the Cap Coupler.
6. By hand, gently push the Cap Coupler into the other end of the Brass Tube and rotate until the notch is located along the side of the blank where you would like the Clip to be located. Finish pressing the Cap Coupler into the Brass Tube.
7. Slide Clip onto the stepped end of the Cap. Align the Clip with the notch in the Cap Coupler and press on the Cap.