



Mini European Style Pens

Product #125612

General Instructions

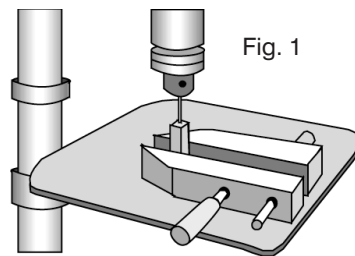
Whether you're a novice turner or a pro, you'll find these projects are all quick and easy to make. Using cut-offs and shorts, the type everyone saves but doesn't know what to do with, you'll find yourself making handsome, custom woodturning projects which are great for gifts or for sale. The following is general in nature, please refer to the instruction sheet on the opposite side for specific dimensions and sizes for your project.

1. Cutting Blanks

Cut wooden blanks to the size specified in the enclosed instructions. For your safety, be sure that the blanks are solid and have no holes, checks or other defects.

2. Drilling Blanks

Center and bore a hole through your stock as specified in the Project Instructions on the opposite side. The center of the blank can be located at the intersection of diagonal lines, drawn from opposite corners. All holes are easily drilled using a clamp and a drill press (**FIG. 1**). Before you start to drill be sure that your blank is at 90° to the drill press table. You may also chuck and drill the stock on your lathe.

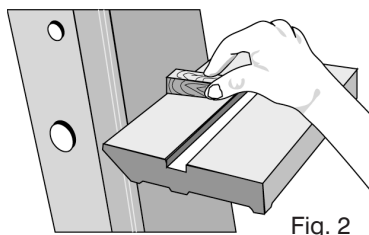


3. Gluing Blanks to Tubes

Rough the brass tube's surface with a fine grit sandpaper and use a quick drying CA type glue to secure the brass tubes into the blanks. Rotate the tube as you insert it to ensure maximum surface coverage of glue. If you find that CA glue is not providing adequate bonding, an alternative is any two part epoxy type glue.

4. Sanding Blanks to Length

Using a belt or disc sander, square the ends of the brass tube/wood blank. The blank should be flush with the brass tube on both ends. Care should be taken to not sand into the tubes (**FIG. 2**). If any excess glue remains inside the tubes it should be gently scraped out.



5. Mandrel Preparation

Woodcraft's new Pen and Pencil Maker's Mandrel system allows you to turn a variety of small projects without requiring the purchase of a unique, special mandrel each time. The only item you will need to purchase to turn new projects is the specially designed bushing set for the project of your choice. The mandrel is provided with either a #1 Morse Taper (141468) or a #2 Morse Taper (141469). If you prefer to use the mandrel in a three jaw chuck, simply loosen the Morse Taper set screw and slide the Morse Taper off of the shaft. Now the mandrel shaft may be mounted directly in your three jaw chuck. With the bushing sets specified on the project instruction sheet, mount your wood blanks and bushings as depicted for each project. With the mandrel mounted in your lathe, slide a bushing onto the mandrel, followed by a wood blank and a second bushing or spacer as required, followed by the second wood blank if required. With the wood blanks installed on the mandrel, secure the wood blank/bushing assembly using the washer and retaining nut provided. Bring up a live center in the tailstock to support the threaded end of the mandrel. Do not over tighten the tailstock or the mandrel will flex and bend causing oval shaped turnings.

6. Turning Blanks

Place your tool rest parallel and as close as possible to the blank. Rotate the blank by hand to ensure it will not touch the tool rest when the lathe is turned on. Using a turning speed of approximately 1,000 RPM begin turning the blank to a diameter slightly larger than the bushings. You can work the stock down to just short of the desired design or diameter by carefully scraping or sanding.

7. Finishing the Blanks

Blanks can be finished like any other wood project. Using a fine grit sandpaper, sand the blank until it is flush with the bushing for parallel sided projects or until the desired profile is obtained for custom projects. Use a wood filler, if desired, to fill any grain openings in the blank. Final sanding with a wet/dry paper will create a blank which is glass smooth. *Tip: We have found that use of Micro Mesh sanding paper (11L61) after wet/dry sanding creates a perfect, glass smooth finish.*

8. Assembly

All parts should fit together as depicted in the parts diagram for each project. In some cases a pen press or machinists vise will be needed to completely press the parts together. Protect all plated parts from scratching by covering them with a cloth or thin pad before placing them in a vise. Proceed carefully, many of the kit components are delicate and uneven or excessive pressure will cause permanent damage.



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1. Cutting Blanks

Cut 2 blanks $\frac{5}{8}$ " x $\frac{5}{8}$ " by approximately $2\frac{5}{8}$ " and $2\frac{1}{8}$ " in length.

2. Drilling Blanks

Using a 7mm brad point or pen maker's bit drill a hole lengthwise through the center of each blank. See General Instructions for details.

3. Gluing Blanks to Tubes

See General Instructions for details.

4. Sanding Blanks to Length

See General Instructions for details.

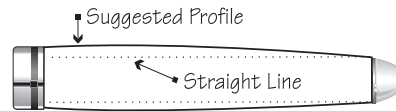
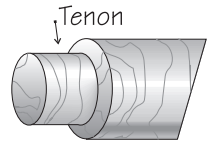
5. Mandrel Preparation

Mount the blank and bushings on the lathe mandrel. Place the large diameter bushing (.337") on the mandrel followed by the short wood/tube blank (D). Seat the center ring (E) on the small diameter of the step bushing and slide the bushing/center ring combination on the mandrel. The flat end of the center ring should face the short blank. Next place the longer blank (I) and small diameter bushing (.331") on the mandrel. Secure the bushing/blank assembly on the mandrel using the washer and retaining nut.

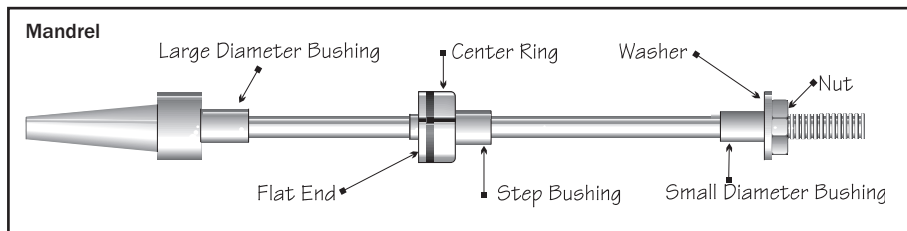
In this configuration the blank nearest the headstock is the pen top and the blank nearest the tailstock is the pen bottom.

6. Turning the Blanks

Prepare as described in the General Instructions. Turn a tenon (a small projection of wood) to accept the center ring. The tenon is turned on the center bushing end of the short blank (D). Proceed carefully and check your progress by test fitting the center ring frequently onto the tenon. Upon completion the tenon will be approximately $\frac{11}{32}$ " in diameter (.345") and $\frac{3}{32}$ " in length to produce a snug fit for the center ring. With the tenon complete and the center ring in place on the tenon, turn the short blank (D), pen top, to size using the center ring and large diameter bushing as guides. Be careful to avoid damaging the center ring when turning this end of the blank. Turn the long blank (I), pen bottom, to size using the center bushing and small diameter bushing as a guide.



Note: Both blanks have a slight taper profile, with the end dimensions defined by the bushing/center ring.





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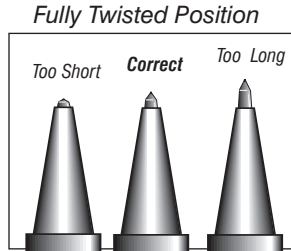
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7. Finishing the Blanks

See General Instructions for details.

8. Assembly

1. Press Tip (J) into small diameter end of the long blank (pen bottom).
2. Press the Twist Mechanism (G), brass end first, into the opposite end of the long blank. The twist mechanism should be pressed into the tube so that approximately 1" of the chrome portion extends from the blank. Care should be taken so the mechanism is not pressed too far into the blank. If pressed too far, the pen tip will not retract fully into the pen nib. While pressing the twist mechanism into place, test the position of the mechanism by inserting threading the Ink Refill (H) into the mechanism and rotate the mechanism extending the pen tip. Note the location of the refill tip with respect to



the pen nib. Proper placement of the twist mechanism will result in tip/nib position as shown in the illustration. Remember this is a trial and error process.

3. Slip the Gold Ring (F) over the ink refill and twist mechanism, seating it against the square end of the blank.
4. Using a drop of CA glue, secure the Center Ring (E) onto the tenon of the pen top. Ensure the square end of the center ring seats against the shoulder of the blank.
5. Place the stud on the Gold Cap (A) through the center hole of the Pen Clip (B) and screw the stud into the Cap Bushing (C). Press this assembly into the short blank opposite the center ring.
6. Complete the pen by pushing the pen top and bottom assemblies together. At this time the Gold Ring (F) will be pressed into the center ring. It does not have to be glued in place.

Additional Parts:

125619 replacement brass tubes - 5 pair.

