



European Style Pencils

Product #123480, 124969, 142411, 142412, 142413

General Instructions

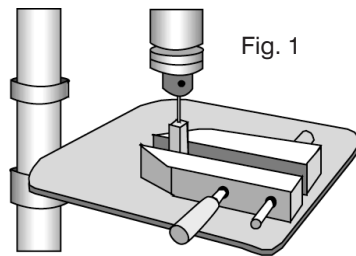
Whether you're a novice turner or a pro, you'll find these projects are all quick and easy to make. Using cut-offs and shorts, the type everyone saves but doesn't know what to do with, you'll find yourself making handsome, custom woodturning projects which are great for gifts or for sale. The following 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.

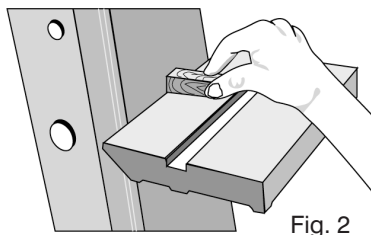


3. Gluing Blanks to Tubes

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 two 3/4" x 3/4" wood blanks, one 2 3/8" long for the pencil bottom and one 2 1/4" long for the pencil top.

2. Drilling Blanks

Drill an 1 1/32" hole lengthwise through the center of each blank.

3. Gluing Blanks to Barrels

See General Instructions for details.

4. Sanding Blanks to Length

See General Instructions for details.

5. Mandrel Preparation

See General Instructions for details.

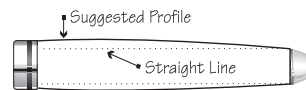
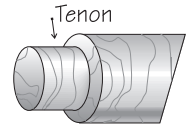
The European Pencil bushing set is made up of four pieces, short and long single lip end bushings, a double lip center bushing, and a "no lip" center ring bushing. These bushings must be placed on the mandrel in the order specified to turn blanks to the proper sizes. See Pencil Mandrel Illustration for detail.

Place the short (.70" or 45/64" overall length) single lip end bushing on the mandrel so that the lip faces the tailstock, followed by the long pencil bottom blank (A). Next place the center ring bushing on the double lip center bushing and place this bushing combination on the mandrel. Place the short pencil top blank (B) on next, followed by the long (.95" or 61/64" overall length) single lip end bushing so that the lip faces the headstock. Secure the bushing/blank assembly on the mandrel using the washer and retaining nut.

6. Turning the Blanks

See General Instructions for details.

1. Turn a tenon (a projection of wood) on the center ring bushing end of the pencil top, short blank (B) to accept the center ring bushing. Proceed carefully and check your progress by test fitting the center ring bushing frequently onto the tenon. The European Style Pencil center ring (C) will ultimately be glued into place on this tenon. For a snug fit with the European Style Pencil center ring (C), the tenon should be approx. 1 3/32" (10.5mm) in diameter and 3/16" (5mm) in length.
2. With the tenon complete and the center ring bushing in place on the tenon, turn the short blank (B) pencil top to size using the center ring bushing and long single lip bushing as guides.
3. Turn the long bottom blank (A) to size using the double lip bushing and the short, single lip bushing as guides.

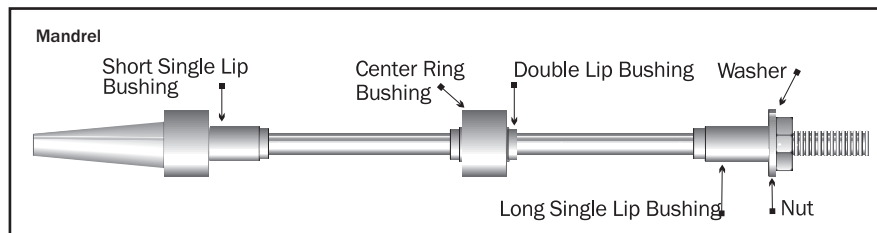


Note: Both blanks have a taper profile, with end dimensions defined by the respective bushings/center ring bushing.

7. Finishing the Blanks

See General Instructions for details.

After the blanks have been turned to size, remove the center ring bushing from the short blank tenon, replace the blanks, lipped bushings, washer and retaining nut and sand/finish both blanks.





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8. Assembly

See General Instructions.

1. Press the tip (D) into one end of the of the long bottom blank (A). Press the cartridge holder (E) into the opposite end of the long bottom blank. Press the beveled end in first so that the threaded portion of the cartridge holder extends from the blank assembly.
2. Insert the pencil cartridge (F) into the cartridge holder and thread the transmission/eraser (G) into the threaded end of the cartridge holder.
3. Using a drop or two of CA glue, secure the center ring (C) into place on the tenon of the short top blank (B).
4. Place the stud on the cap (H) through the clip (I) and screw the stud into the brass bushing/sleeve (J). Press this assembly into the short top blank opposite the center ring.
5. To complete the European Style Pencil, push the top and bottom assemblies together.

9. Pencil Operation

1. The European Style Pencil utilizes an auto return twist mechanism. To advance the lead twist the pencil top clockwise while holding the pencil bottom stationery (or twist the bottom counter-clockwise while holding the top stationery) until it stops. Release the top and the mechanism automatically returns to the neutral position.
2. To fully retract the lead twist the top or bottom and hold in the "twist position". Press the lead back into the pencil tip and release top/bottom for return to the neutral position.
3. If you find that the pencil does not freely return to the neutral position when released, there may be some glue on the inside brass tube of the pen top which is rubbing on the pencil transmission/eraser. Remove all glue/debris that may be rubbing on the transmission. We found that wrapping a piece of 100 grit sandpaper around an 1/8" dowel allowed us to easily clean out glue and debris.

Additional Parts:

- 123917** replacement tube set (5 pair)
125967 replacement erasers (10)

