Push Button Peppermill
Instructions

Version 1.0

Safety First

Disconnect saw from power source before fitting or removing insert.

Always wear proper ear protection when working with machinery.

Use caution when handling sharp objects (saw blades, router bits, drill bits and so on). Use protective gloves whenever possible.

Always wear proper eye protection when working with machinery and tools.

Always wear proper respiratory protection when working near airborne dust particles.

Please read and fully understand any and all safety materials that came with your power tools or machinery before operation. Always follow all safety guidelines set in place by the power tool or machine manufacturer.

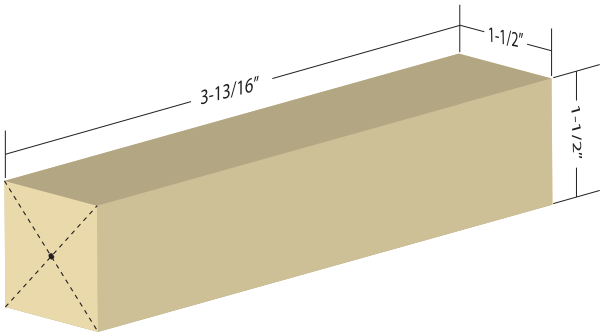
Supplies Needed for Project

All sold separately

- 25 mm Forstner Bit
- Forstner Bit Extension
- 1½" x 1½" x $3^{13}/_{16}$" Blank
- 5 Minute Epoxy
- Sandpaper

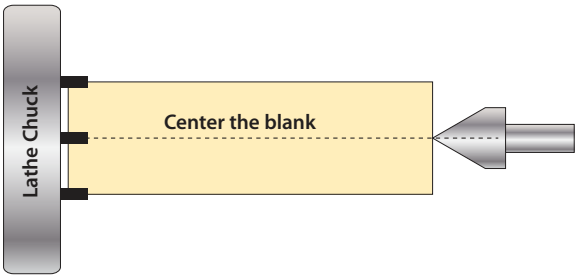
Preparing The Peppermill Blank

Choose a wood blank or a blank made from an acrylic material and cut it to 1½" x 1½" x $3^{13}/_{16}$". Mark the center of the blank on both ends.

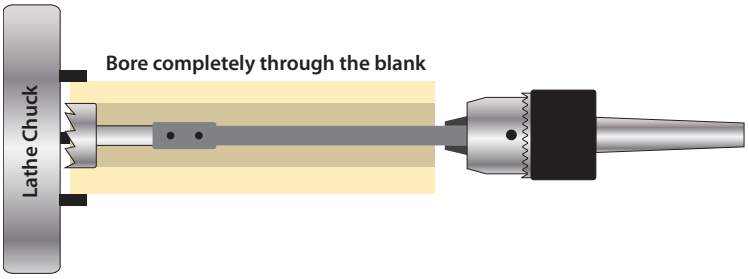


Mounting The Blank

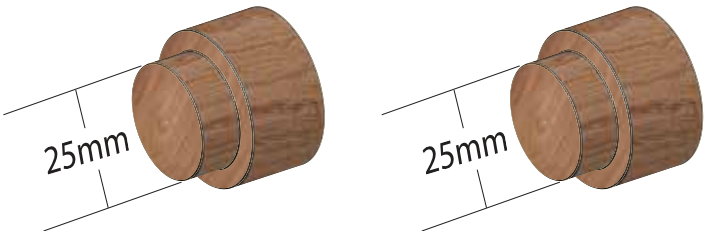
Using a 4 Jaw Chuck that has been properly mounted to your lathe, mount the blank to the chuck, then using a 60° Live Center, center the blank and secure the blank in the 4 jaw chuck.



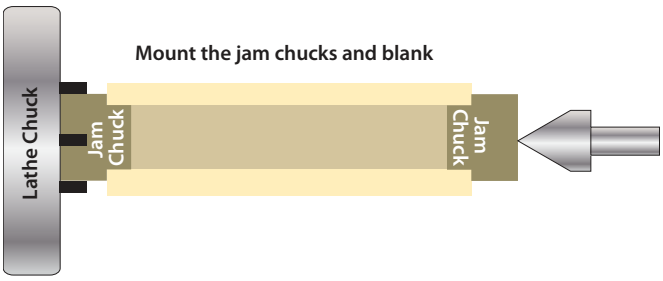
Remove the live center from the tailstock and replace it with a drill chuck. Install a 25mm forstner bit with forsnter bit extension into the drill chuck and bore all the way through the blank. Be sure that when you are drilling the hole that you do NOT contact your chuck as you come through the end of the blank. *Note: We recommend using a 25mm forsnter bit, however you may choose use a 1" diamter bit. If you choose to use a 1" bit, you may need to apply extra epoxy for a snug fit.*



Using 2" x 2" x 2½" stock, make two jam chucks as shown below. The jam chucks will be used to hold the drilled blank in place while turning. As you are turning the jam chucks, periodically check the fit with the drilled blank. The fit should be nice and snug.

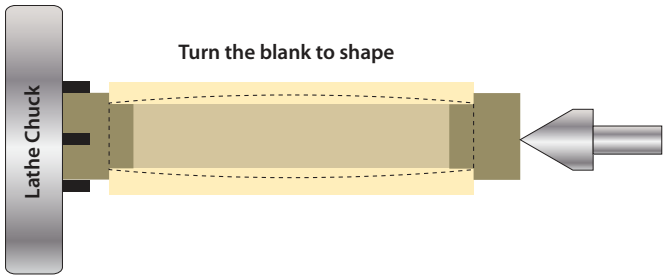


Mount the jam chucks and drilled blank to the 4 way chuck and use a 60° Live Center to center and support the blank on the tailstock end.

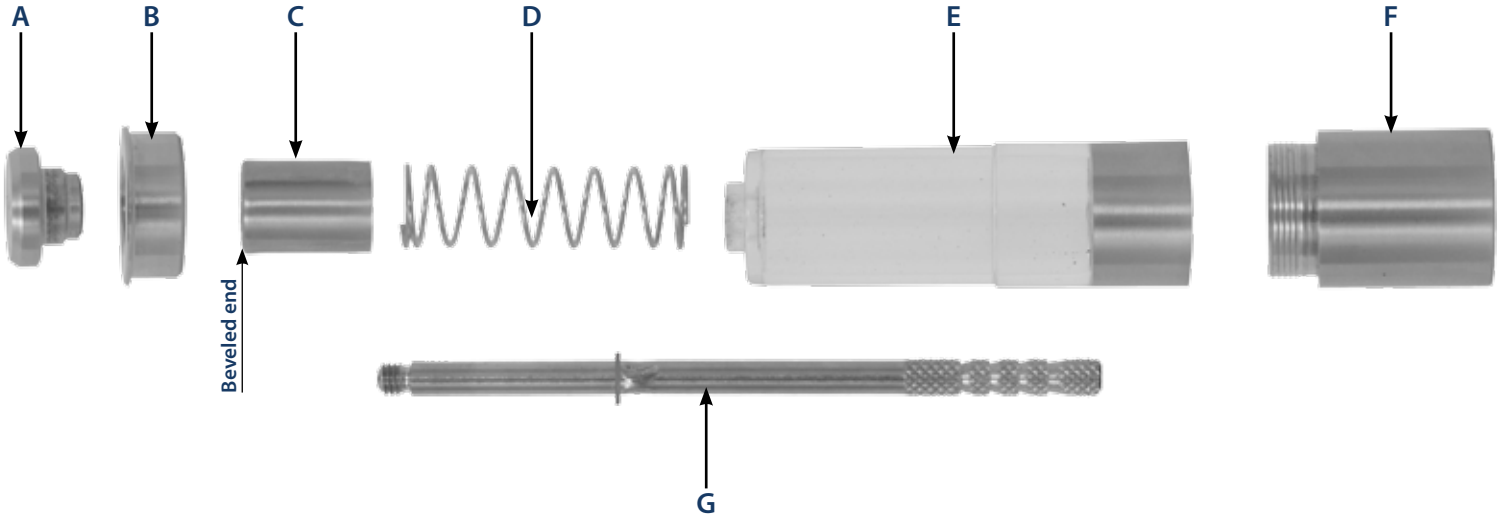


Turning The Blank to Shape

With the pepper mill blank mounted, start rough turning the blank to round using a spindle gouge or a roughing gouge. Once you have your blank completely turned round, you can then start to turn the blank to the profile of your choosing. If you choose to have your profile flush with the grinder hardware, your finished diameter should be approximately 15/64". Sand your turning to 320 grit and apply a finish of your choosing.



Assembly



1. Unthread the Base **(F)** and set off to the side.
2. The push button assembly is comprised of the Push Button **(A)**, Trim Ring **(B)**, Trim Collar **(C)** and the Spring **(D)**. Unthread this assembly by holding the Rod (G) and rotating the Push Button **(A)** counter clockwise - remove the trim ring (B). Set the assembly off to the side.
3. Slide out the Grinding Rod **(G)** from the storage container **(E)**.
4. Prepare the epoxy as per the epoxy instructions. Place a small amount of epoxy to the rim of the storage container **(E)** on the stainless steel end. Next, slide the lower end of your turned work piece over the top of the storage container until it sits flush. Next, on the Trim Ring **(B)**, apply a small amount of epoxy (use more epoxy if you used a 1" forsnter bit) around the outside of the Trim Ring and insert into the other end of your Turned Piece. Make sure you clean up any excess epoxy before allowing it to dry. Allow the epoxy time to completely cure before moving on to the next step.
5. Now that the epoxy is completely cured, insert the Grinding Rod **(G)** with the threaded end going in first through the bottom of your turned work-piece. Thread the base **(F)** into place.
6. Re-assemble the Push Button Assembly **(A,B,C and D)**. To do this, thread the assembly onto the threaded end of the Grinding Rod **(G).** Note: Make sure that the Beveled End of the Spring Assembly Sleeve **(C)** is facing up towards the Push Button **(A)** when Assembling.

Easy to Fill and Refill