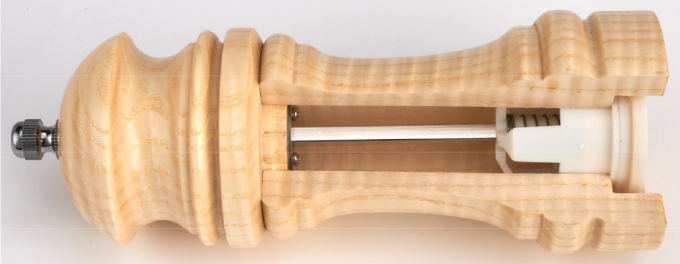
AXMINSTER woodturning



Supplies Needed to Complete Kit:

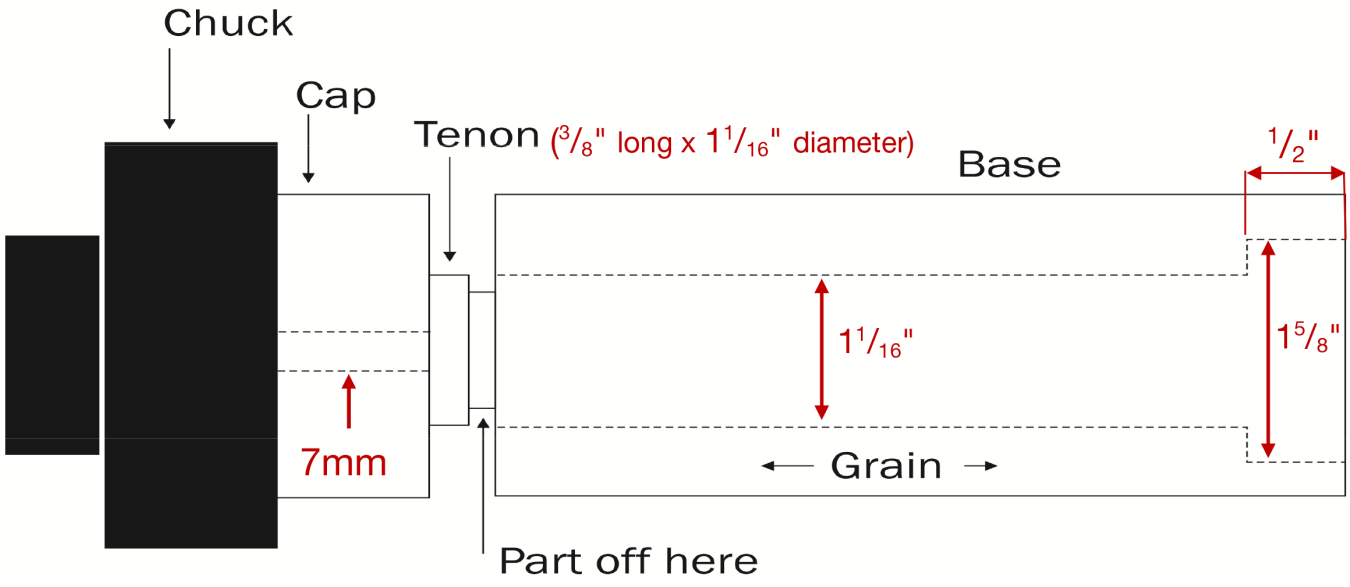
- ❑ 7mm Brad-Point Bit
- ❑ 1 1/16" Forstner Bit
- ❑ 1 5/8" Forstner Bit
- ❑ Forstner Bit Extensions (4" & 6" lengths needed for taller mills)
- ❑ 3" x 3" Turning Stock 1 1/2" Longer Than The Selected Mechanism (Ends Squared)
- ❑ Lathe
- ❑ Jamb Chucks
- ❑ Turning Tools
- ❑ Drill Press
- ❑ Sandpaper
- ❑ Eye & Ear Protection
- ❑ Dust Mask

Dimension Notes:

The dimensions shown below are the bore diameters for the wooden body and cap of the grinder. The outside dimensions will vary to suit your design, but the wall thickness should be at least 3/16". The overall length, body and cap will vary, depending on the length of the grinder mechanism chosen, but the bore dimensions will remain the same. The finished length of the base and cap must be 1/8" (± 1/16") longer than the shaft of the mechanism. In other words, a 6" mechanism will fit in a body with an overall length (base/cap) of 6 1/8". When determining the length of your blank, be sure to allow extra length for tenons, part offs, and material to be held by the turning chuck jaws.

Turning/Shaping the Mill:

- ❑ Mark centers and mount the turning stock to the lathe between centers; rough turn the blank round. Mark the layout for the base and cap, remembering to account for the 3/8" tenon that will be created on the cap as shown below.
- ❑ Turn a large diameter tenon on one end large enough to grip in your 4-jaw chuck on what will be the cap.
- ❑ Next turn the 3/8"-long x 1 1/16"-diameter tenon, and part off the cap from the base. Ensure that the ends are square.
- ❑ Mount the base between centers using a 4-jaw chuck and live center.
- ❑ Bore a 1 5/8"-diameter hole, 1/2" deep.



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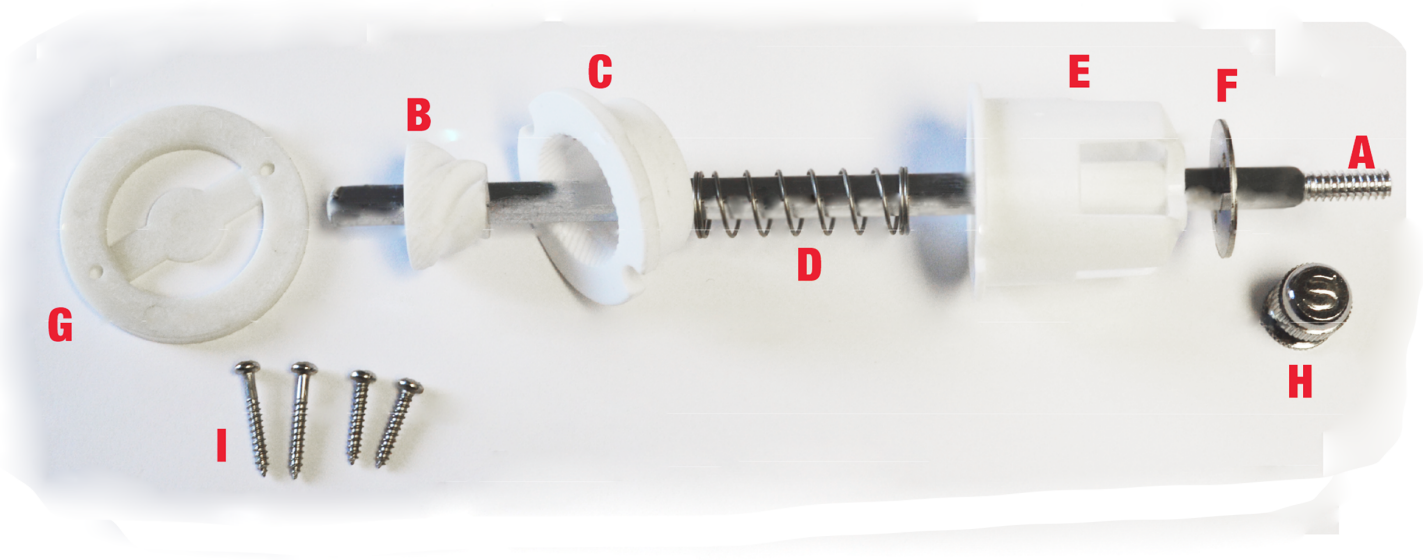

❑ Next, bore a $1^{1}/_{16}$"-diameter hole through the remaining portion of the base. Once completed, remove the base from the lathe.

❑ Chuck the cap portion in the 4-jaw chuck using the large tenon created earlier.

❑ Bore a 7mm hole the entire length of the cap.

❑ Move the tailstock with live center up, and positioned into the 7mm hole.

❑ Begin turning the cap into the desired profile, making any needed modifications to the tenon that will ultimately fit into the $1^{1}/_{16}$"-diameter hole of the base. When the desired profile has been achieved, sand and apply a finish of your choice.

❑ Part off the cap, sand and apply finish.

❑ Using either pre-made jamb chucks (158353) from Woodcraft or ones that you create yourself, mount the body between centers using the 4-jaw chuck and live center.

❑ Turn the body to your desired profile. Once the desired profile has been achieved, sand and apply a finish of your choice.

Assembly:

❑ Slide Plate (F) onto Shaft (A). Insert threaded end of the shaft first through the 7mm hole in the cap (tenon end). Using the shaft will help align the Plate (F) for installation. Once the plate is centered, mark centers for the pilot holes. Once marked, drill and install Plate (F) onto the cap using the two shorter screws. Once installed remove Shaft (A).

❑ Next, slide the Ceramic Male Grinder (B), Ceramic Female Grinder (C), Spring (D), Spring Retainer (E) onto Shaft (A) as shown above.

❑ Insert the grinder assembly (A, B, C, D, and E) into the $1^{5}/_{8}$"-diameter end of the body. Ensure that the notches on the sides of the Ceramic Female Grinder (C) and Spring Retainer (E) are aligned. Install the Retaining Ring (G) flat side out over the mechanism, again ensuring that the holes align with the notches in the Ceramic Female Grinder (C) and the Spring Retainer (E).

❑ Mark the locations of the pilot holes, and drill and install the grinder assembly (A, B, C, D, E, and G) using the two longer screws.

❑ Install the cap over the threads of the shaft, and thread the Adjustment Knob (H) onto the shaft.

❑ For a finer grind turn the Adjustment Knob (H) clockwise; for a coarser grind, turn counter clockwise.