

WR Salt Shaker & Pepper Mill Grinder Mechanism Turning Kit

Product: #163373

5/15/2020

Supplies Needed to Complete Kit:

- 1¹/₁₆" Forstner Bit
- 1¹/₂" Forstner Bit
- Forstner Bit Extensions (4" length needed for body blank)
- 3" x 3" Diameter Turning Stock
 - (1) Head 3" x 3" x 2" (Ends Squared)
 - (1) Base 3" x 3" x 3-3/4" (Ends Squared)
- Lathe
- Lathe Drill Chuck or Drill Press
- Jamb Chucks
- Turning Tools
- Sandpaper & Finish
- Eye & Ear Protection
- Dust Mask

Dimension Notes:

The dimensions shown below are the bore diameters for the wooden body and knob of the grinder and salt shaker. The outside dimensions will vary to suit your design, but the wall thickness should be at least ³/₁₆". The overall finished length, body and knob will need to be exactly 5³/₄".

Mark centers on both ends of each blank. Begin the boring process with the 1¹/₂" diameter forstner bit. Starting with the base blank, bore a 1¹/₂" diameter x 1/2" deep hole.

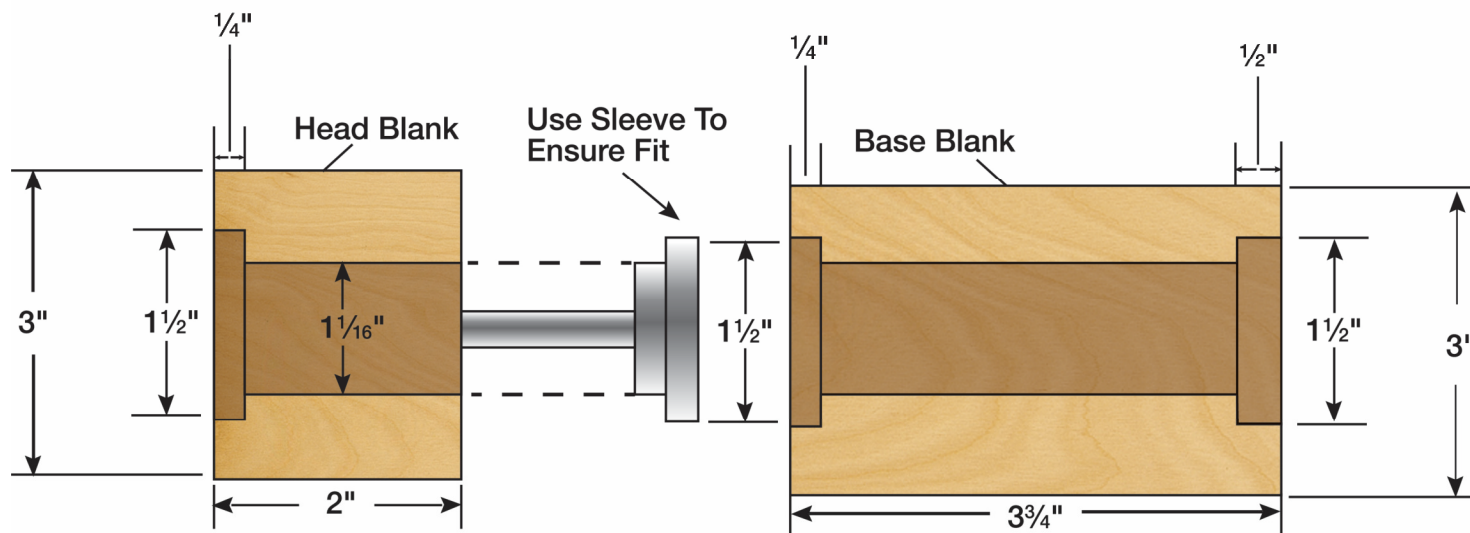
Rotate 180° and bore a 1¹/₂" diameter x 1/4" deep hole. Repeat the 1¹/₂" diameter x 1/4" deep hole on the top of the head blank. Centering the bit in the existing hole bore a 1¹/₁₆" diameter hole through the head and base blanks. It will be necessary to bore from both ends of the base blank if you do not have access to a forstner bit extension. Ensure that the ends of the blanks are 90° square to allow for the best possible alignment of the holes.



Turning/Shaping the Mill:

- Mount the base blank to the lathe between centers using a jamb chuck and 60° cone live center. Rough turn the blank round. Mark the layout for the base and turn to your desired profile. Sand and apply a finish of your choice.
- Repeat the same steps above for the head blank. Ensure that the profile is consistent with the base blank.

Boring The Blanks

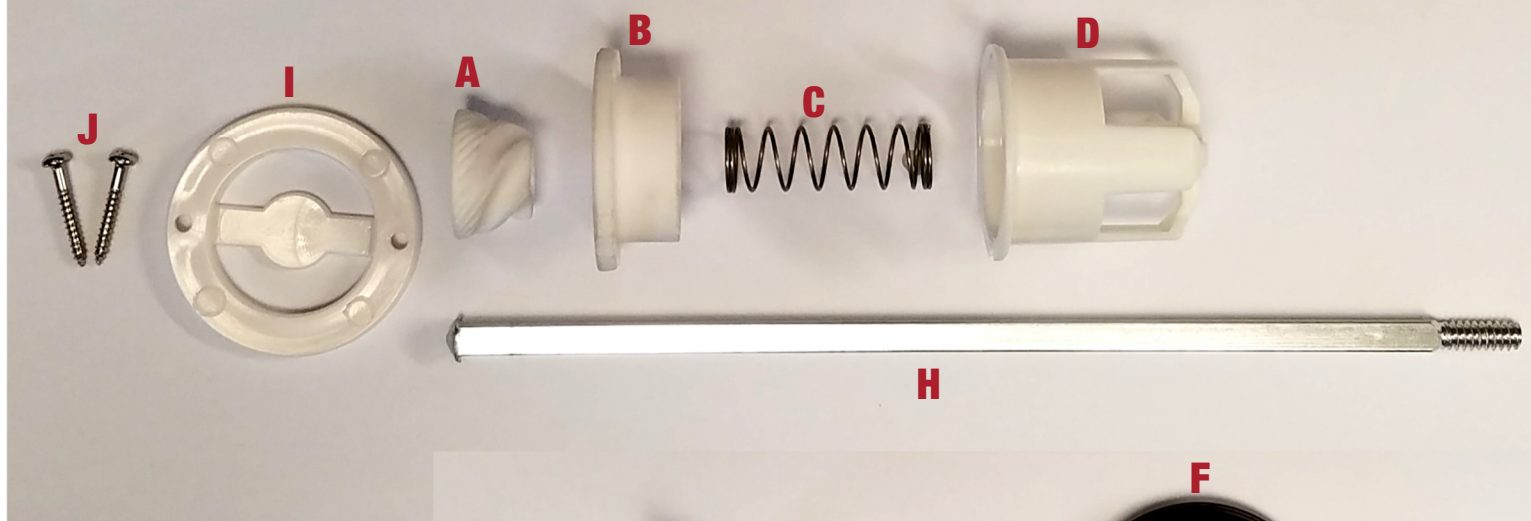


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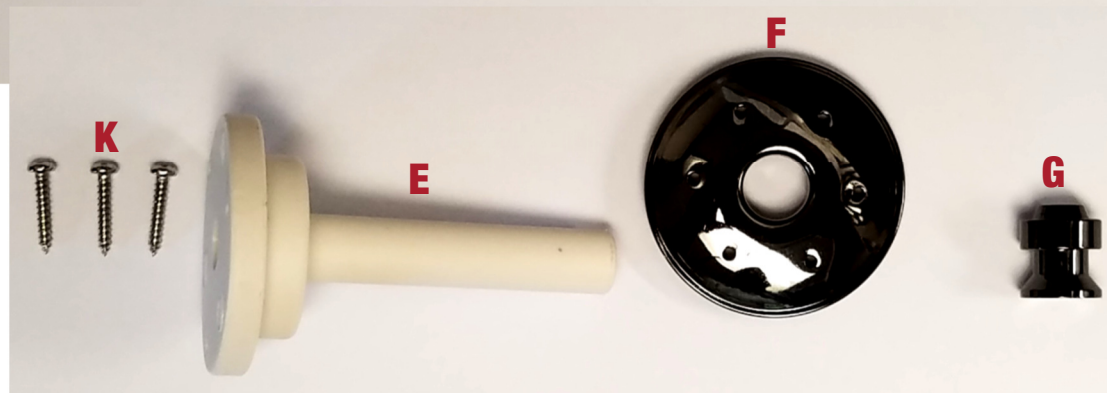
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Diagram B



Assembly:

- Layout parts as shown in Diagram B.
- Begin by sliding the Male Grinder (A), Female Grinder (B), Spring (C), Spring Retainer (D) onto Shaft (H).
- Insert the grinder assembly (A, B, C, D, and H) into the 1 1/2"-diameter x 1/2" deep end of the base blank. Ensure that the notches on the sides of the Female Grinder (B) and Spring Retainer (D) are aligned. Install the Retaining Ring (I) raised portion to the outside of the mechanism, again ensuring that the holes align with the notches in the Female Grinder (B) and the Spring Retainer (D).
- Mark the hole locations and drill (2) 1/16" diameter x 3/8" deep pilot holes. Attach the grinder assembly (A, B, C, D, H, and I) using the 5/64" x 43/64" long screws (J).
- Next test fit Grinder Adapter (E) long stem first into the 1 1/16" diameter hole of the head blank. It may be necessary to shorten the length of the stem. If trimming is necessary mark the height and cut to the appropriate length. Next, install the Grinder Adapter (E) and mark the hole locations and drill (3) 1/16" diameter x 3/8" deep pilot holes. Attach the Grinder Adapter (E) using the 5/64" x 43/64" long screws (K).
- Insert the head blank over Shaft (H), install Salt Shaker



Cap (F) over the shaft of the Grinder Adapter (E). Finish the assembly by threading Adjustment Knob (G) on the threaded portion of Shaft (H).

- For a finer grind turn the Adjustment Knob (G) clockwise; for a coarser grind, turn counter clockwise.
- To fill mechanism with pepper unthread Adjustment Knob (G), remove head blank and fill container with peppercorns. Replace head blank and install the Adjustment Knob (G). Use the Adjustment Knob (G) to adjust the grind.
- To fill Salt Shaker unthread Adjustment Knob (G), remove Shaker Cap (F) and fill container with granulated salt. Replace Salt Shaker Cap (F) and install the Adjustment Knob (G). Use the Adjustment Knob (G) to adjust the grind.