

# Windsor Salt/Pepper Mill With EZ Mechanism

## Kit Features

- Available in 5in. and 7in. heights
- Attractive Antique Styling
- Easy to Turn with two holes
- Minimal Parts--easy to assemble with E-Z Assemble Grinder Capsule
- Available in Brass and Copper finishes

## Required Accessories

- 1in. Jam Chuck #CJAM1
- Headstock Mounted Drill Chuck #TM42
- 60° Live Tailstock Center (#LCENTLT2)
- Drill Bits: 1-1/16" #FB1-116, 1-1/2" #FB150
- Bit extender #FEX or #FEX9 (see below)
- 2 part Epoxy (CA not recommended)
- Blank Minimum Size: 2" x 2" x 3-7/8" (for 5"), 2" x 2" x 6" (for 7")

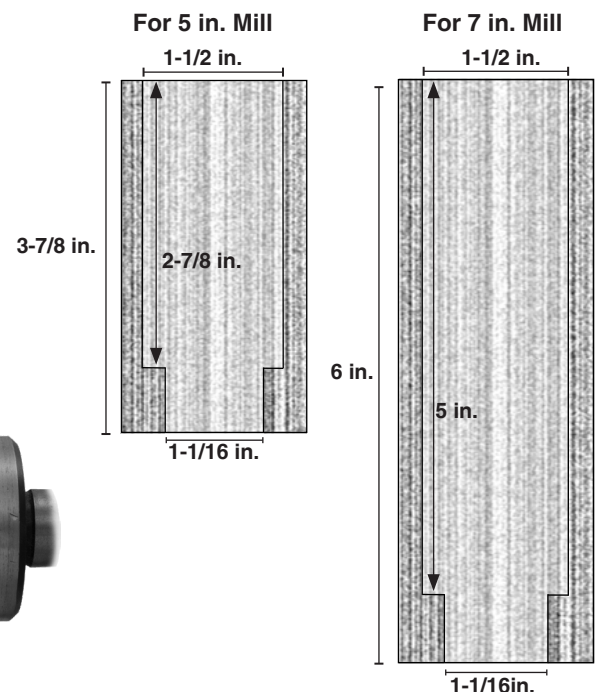
## Preparing the Blank:

- Cut blank to the length required for the size of the mill, this will ensure the final assembly will be correct. See Diagram B.
- A bit extender is required for both styles. #FEX9 will work for both 5" and 7" styles. #FEX will only work for 5" style.
- It is recommended that you drill from only one end, starting at what will be the bottom of the mill. Draw diagonal lines from corner to corner on that end of the blank. This will be the bottom of the mill.
- Note: If you want a longer narrower outside profile make the 1-1/16" hole longer by reducing the depth of the 1-1/2 in. hole. 1-1/2 in. hole must be at least 1-7/16 in. deep to correctly seat the grinding capsule.
- Start with the 1-1/2" drill bit. Drill down the center of the blank until you reach a depth of at least 1 inch away from the other end. Tip: Wrap bit shaft with tape to mark that point so you drill to the correct depth.
- Switch to the 1-1/16" bit. Use pilot point to find the center of the hole already drilled and drill straight through to the end of the blank.
- Insert Handle from Mill into smaller opening and trace the edge to mark the final diameter for the top of the blank.

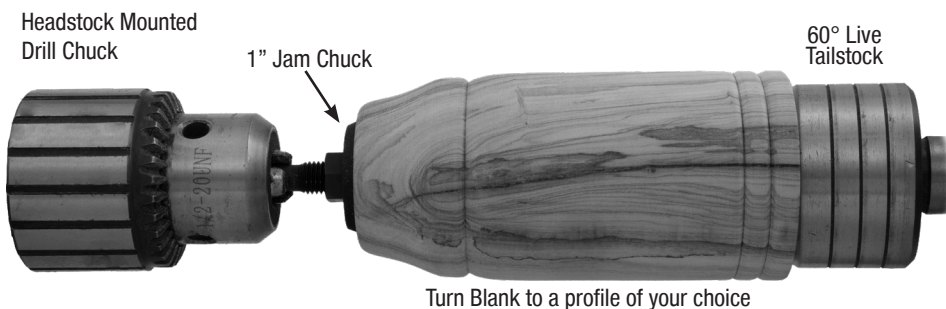


## Diagram B / Drilling the Blank

Shown upside down to illustrate drilling



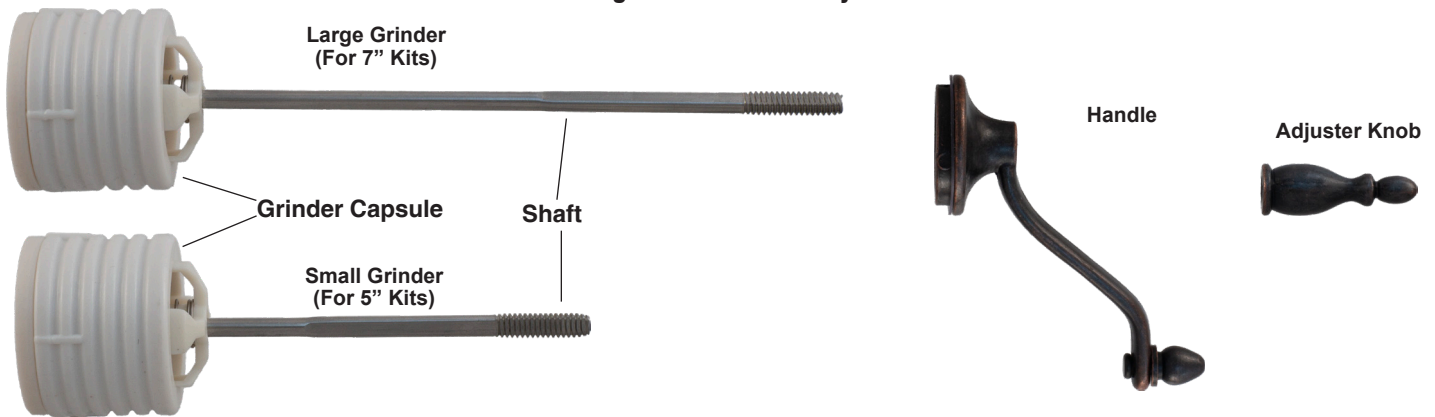
## DIAGRAM C / TURNING THE BLANK



## Turning the Blank See Diagram C.:

- Attach Headstock Mounted Drill Chuck (#TM42) onto lathe
- Insert 1" Jam Chuck into 1-1/16" hole and turn nut to expand chuck in the hole until it fits firmly. Mount Jam Chuck post into Drill chuck jaws and tighten.
- Slide the 60° Live Tailstock into larger opening on opposite side of the blank.
- Lock Tailstock and hand tighten the quill so it fits firmly against the rim of the larger hole. **Do not over-tighten, it could split the blank.**
- Using sharp tools, turn the blank down until it is able to be shaped to a profile of your choice. Remember not to make the bottom end too small or you could breach the sidewall. Remember the depth of the smaller hole at the top so that you do not narrow the blank too much.
- Turn the top so it will blend with the Handle on final assembly.
- Sand the blank gradually increasing sandpaper grits.
- Finish the barrel using your choice of polish. Allow sufficient time for the polish to cure—refer to polish manufacturer's instructions.

## Diagram D / Parts Layout

**Assembly:**

- Before gluing, it is recommended to test fit all the components to make sure they will fit easily.
- For correct placement and good function, the bottom of the Grinder should be approximately 1/4" from the bottom of the hole. To accomplish this, a jig can be made that will raise the grinder the correct distance. A nut or washers can also be used to raise the Grinder the correct amount. It does not have to be exact.
- Dry fit the grinder in the blank along with jig to raise it. Once the grinder is raised, check the height is correct by placing the handle over the grinder shaft. Around 4 - 5 threads should be visible above the center of the handle. Add or retract support if more or less exposed threading is needed. This will provide a stable connection and adjustability.
- Once you are satisfied about fit and placement, mix a moderate amount of two part epoxy and apply it to the inside of the hole and on the outside of the grinder capsule. Make sure there is good coverage in the grooves of the capsule so it does not slip.
- Slide Grinder into Blank and make sure it is raised into the correct position. Allow the Epoxy to fully cure before final assembly and use.
- Once Epoxy is cured, Mill is ready to use. Pour an amount of pepper corns or rock salt (avoid sea salt) into the opening in the top. Place Handle over Grinder Shaft and thread Adjuster Knob onto Shaft. Grind will be coarse if Knob is just put on finger tight. Coarseness of the grind can be made finer by tightening the Knob further.
- Grinder can be refilled by unthreading the knob and pulling off handle.

