

# ITEM #PKGRIND 4

## ANTIQUUE STYLE PEPPERMILL MECHANISM

### INSTRUCTIONS

#### **KIT INCLUDES:**

- Adjustable mechanism – grounds can be made course to fine
- 2 mounting screws

This grinder base can be made either with a turned wood base, or as a square wooden box.

#### **TOOLS REQUIRED:**

- For a round base – wood lathe/drive center, live center, lathe tools, drill bits
- For a box design – Standard woodshop tools as needed

#### **FOR A TURNED BASE:**

We suggest starting with a wood block 2" to 2-1/2" square x 4" long.

**To mount the mechanism recessed in the base:** Start with the raw square block. Mark the center of one of the flat ends. Draw a circle: 1-11/16" diameter. Drill 4 holes 5/16" diameter by 1/4" deep evenly spaced along the circle (90 degrees apart). Mount the block onto a 4-jaw chuck on the lathe, drilled holes side toward the tailstock. Turn a recess in the wood 1-11/16" diameter by 1/4" deep. Test the fit with the base of the mechanism. You can also mount the mechanism directly on the top end surface without recessing. Drill a 7/8" or 1" diameter hole through lengthwise. (Use a forstner bit with a 4-Jaw chuck to hold the workpiece while drilling the hole on your lathe).

#### **TURNING THE BLANK WITH A JAM CHUCK:**

We suggest that you make a jam chuck: Use scrap wood, about 1-1/2" square x 4" long. Mark the centers at the flat ends and drill a small center hole in each end. Hammer a 4-prong drive center in one of the center holes and insert this into the morse taper in your lathe spindle. Slide the tailstock snug with the live center in the other center hole. Turn the wood to a round cylinder, about 1-1/2" in diameter. Next, cut a tenon in the center about 2" long and the same diameter as the center hole (7/8" or 1") leaving both ends with the same 1" shoulder. Use a caliper to insure a tight fit.

Cut the cylinder in half making two identical jam chucks. Insert each half into the block to be turned. (see the diagram) Remount this assembly between the drive center in the headstock, and the live center in the tailstock, then tighten. Turn the block to your own unique design.

#### **MOUNTING THE MECHANISM ONTO A BOX**

Design a box to be about 2" square x 4" long. Be sure to have a minimum 1" opening inside. Finish the wood as desired, and mount the mechanism to the top.



*Mounting the workpiece for turning*

