



Woodchuckers

50 Venture Dr #4, Scarborough, ON M1B 3L6 416 - 241-8654



Pepper / Salt Mill Instructions



From Setup To Sanding:

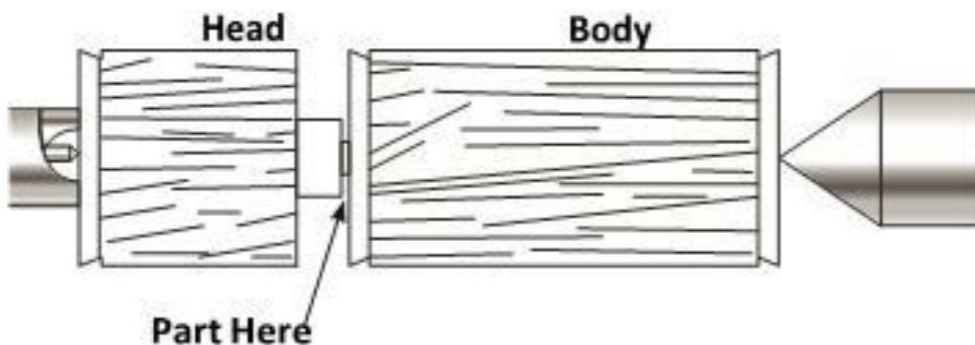
These are the supplies we suggest you have on hand to complete the peeper/salt mill using the Chief Speciality Kit

Tools

- Roughing Gouge
- Spindle gouge
- Skew
- Parting Tool
- Wood blank (3"x [1 ½" longer than the kit; for a 10" kit, you want a 11 ½" blank])
- Forstner bits (1 5/8", 1 1/16")
- 9/32" Drill bit
- Jacobs Chuck (holds the drill bits)
- Four Jaw chuck
- Sandpaper/Micro-Mesh
- Eye & Ear Protection
- Dust Mask

Setting Up the Blank:

Mark the center on both ends of the blank. Make an indentation at these center marks using a punch. Mount the stock between Centers and using the spindle roughing gouge, turn away the edges to make the blank a uniform diameter..

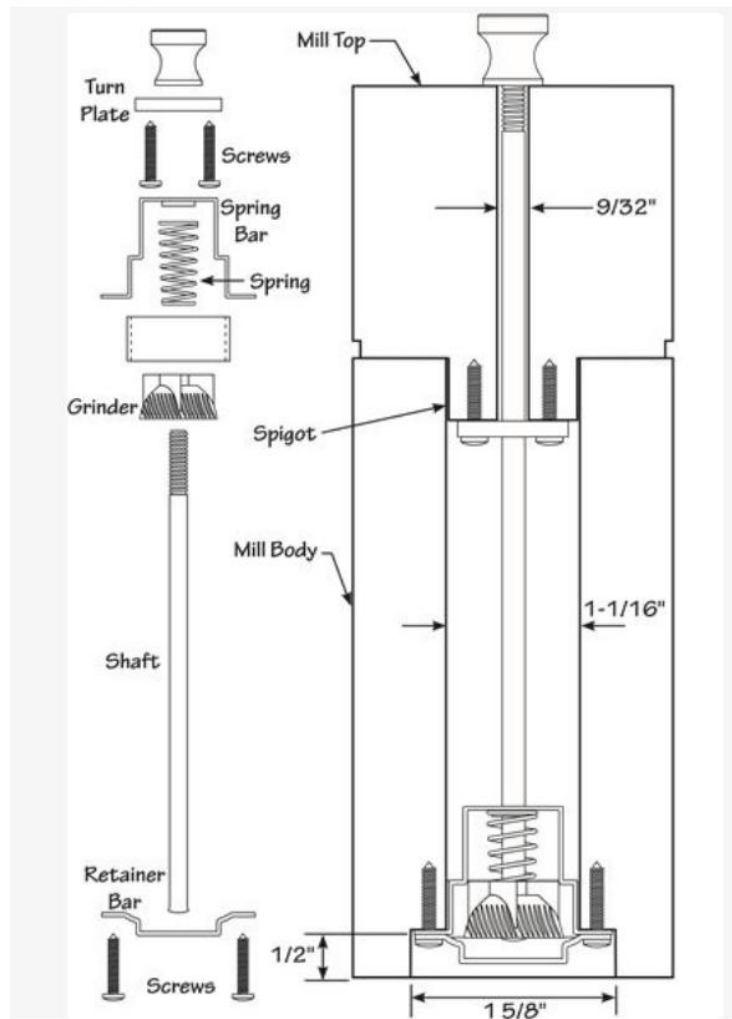


At this point, we will need to decide how to layout the design of the peppermill for maximum visual effect. The mill will be divided in a 70% / 30% manner, where the body will be ~70% of the blank and the head will be ~30%. If you want a particular feature (curl, bark inclusion, eyes, etc.) at one end or another, orient the placement accordingly.

Using the parting tool, we will part the blank in a number of places. First, part the first $\frac{1}{4}$ " on either end of the blank to create tenons for chucking the blank. Second, create a part that starts at $\sim 3\frac{1}{4}$ " from the chosen head of the mill blank. This part will need to be $1\frac{1}{16}$ " in diameter and $\frac{1}{2}$ " long. Directly below this part, create a $\frac{1}{8}$ " wide part that will be used to separate the head from the bottom. Carefully part the blank at this point. Make sure to support the blank as the part separates. One way to make the part is to cut it almost all the way through with the lathe. Stop the lathe and finish the cut with a small saw.

Drill the Top

Remove the blank and the centers from the lathe. Install the four jaw chuck and the Jacobs Chuck in the tail stock. Mount the head using the $\frac{1}{4}$ " tenon created in the previous step. Clean up the ends of the spigot and the bottom edge of the head. Now, install the $\frac{9}{32}$ " drill bit in the Jacobs Chuck and drill a hole through the center of the head. Careful to stop drilling as soon as the hole is through the center. For all drilling operations, reduce the lathe speed below 300 rpms.



Drill the Body

Remove the head and replace with the body with the bottom end exposed to the tail stock. Clean up the exposed end of the blank while removing a minimal amount of stock. Mount the 1-5/8" Forstner bit in the Jacobs Chuck and drill to 1/2" depth.

Now, replace that bit with the 1-1/16" Forstner and begin drilling through the blank. This drilling operation should be conducted very methodically and slowly. Drill 1", then retract the drill bit and clean out the shavings. Repeat this operation until the hole is roughly half way through the blank.

Remove the body and turn it around to mount from the other tenon. Continue the drilling operation until you drill through the center. Turn off the tenon from the end. Remove the body in preparation for the next operation.

Shaping the Peppermill

Replace the body with the rear tenon in the chuck. Insert the head spigot into the body and close the tail stock with the bull nose center in the drilled hole. Shape the peppermill as you like. Be sure to remember, the wall thickness as you create your shape. As you shape the mill's head, remove the tenon as much as possible. When you have the shape you desire, remove the mill. Re-chuck the body by opening the chuck jaws inside the body. Turn away the exposed tenon.

Create a waste block that will accept the mill head spigot. The waste block will have a hole that is tight enough to accept the spigot without turning and yet loose enough to press the spigot into the block. Mount the head and turn the exposed end to its final shape and length.

Finishing the Peppermill

Sand the blank thoroughly to 600 grit. Take care to sand with the grain to ensure that no sanding marks will show through the finish. Apply finish as desired. The finish should be able to stand up to frequent handling. Once the finish has been applied to your liking, you can use a small amount of beeswax on the spigot to insure smooth operation.

You are now ready to assemble the peppermill using the kit instructions. Follow the instructions closely as the spring can be incorrectly installed and will limit the function of the mill.

