Legacy "Salt & Pepper Mill" Project Kit

Assembly Instructions

## **Description:**

The Legacy "Salt & Pepper Mill Kit" is one of our more complicated projects. It is a great item in the kitchen and is very popular as a gift or craft show item. The kit features a ceramic mill and an easy adjustment for fine to coarse grind. They are available in four different sizes: 6", 8", 9" or 12" tall.

The Salt & Pepper Mill kit is turned between centers. There are many different ways to turn and complete this project. We are only showing one method. You should be able to find many other methods on YouTube and elsewhere. This instruction sheet shows important dimensions which are required for this kit, regardless of the turning method you use.

We offer a full line of bushings, drill bits and turning tools on our website www.thewoodturningstore.com

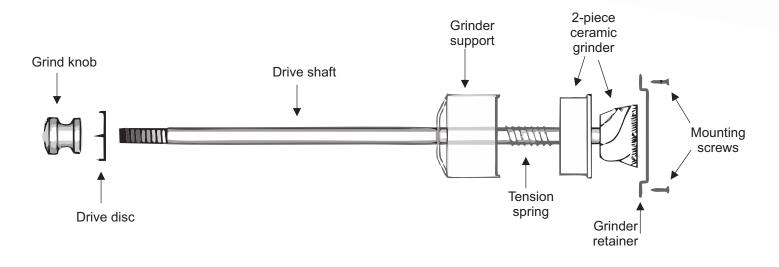
# **Getting Started:**

You will need the following accessories to make this project kit. Many of these accessories can be used with other pen and project kits. (Accessories are available at www.thewoodturningstore.com)

- 1 wood blank: Head 2 1/2" x 2 1/16"; Base 2 1/2" x (4 3/8" or 6 3/8" or 7 1/2" or 10 1/2"), depending on the size of your kit
- · Woodturning Chuck, Drill Chuck or other method to hold the base
- 1" Jam Chuck (for this method)
- 1 1/2" and 1 1/16" Forstner Bit
- 9" Forstner Bit Extension
- 60° Live Center
- Glue (CA, epoxy or polyurethane [Gorilla])
- Lathe, turning tools, sandpaper, pen finish
- Other items may be needed as desired

# Parts of the Salt & Pepper Mill Project Kit:



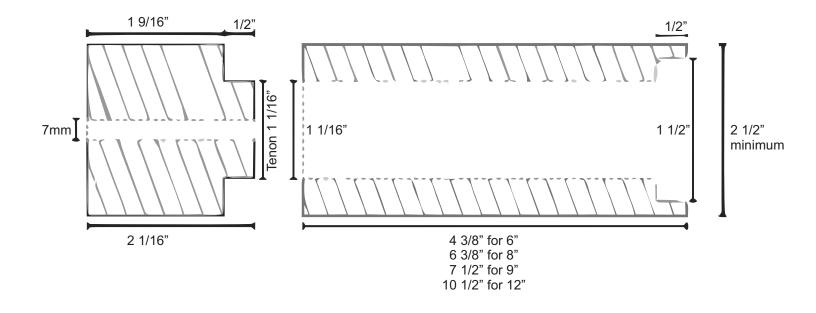


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#### Preparing the Blank for Turning:

- Start with your wood blank and cut it in two pieces (if you are starting with one piece) so you have a head blank (2 1/16" long) and base blank (4 3/8" long for 6" mill | 6 3/8" long for 8" mill | 7 1/2" long for 9" mill | 10 1/2" long for 12" mill).
- · Head blank:
- Mark the center of the blank on both ends. Using a 7mm twist drill, drill a hole through the blank. Be careful to drill slowly to avoid chipping and tearing the material. Also, it is highly recommended that you clamp the blank in a vise and use a drill press for the most accurate and straight hole. You could also mount the blank in a lathe chuck and drill the hole using your lathe. We recommend using Hurricane M42 Cobalt 135 degree Split Point drill bits.
- Base blank:
- Mark the center of the blank in both ends. Using a 1 ½" forstner bit, drill a ½" deep hole. This will
  be the bottom of the mill. You may want to hold the blank in a woodturning chuck and drill on your
  lathe.
- Follow with a 1 1/16" forstner bit. Using the point of the previous hole as a guide, drill through the whole blank. For better results, it is recommended to drill the hole from both ends of the blank but not necessary.
- Your blanks are now ready to be mounted on the lathe.

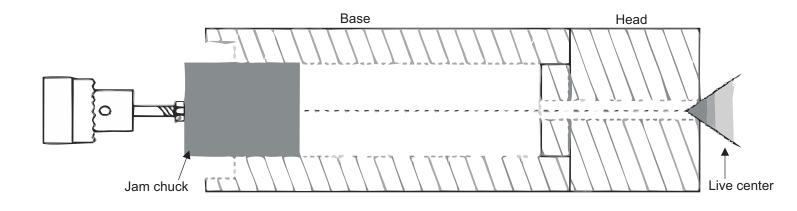


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#### Turning the blanks on the lathe

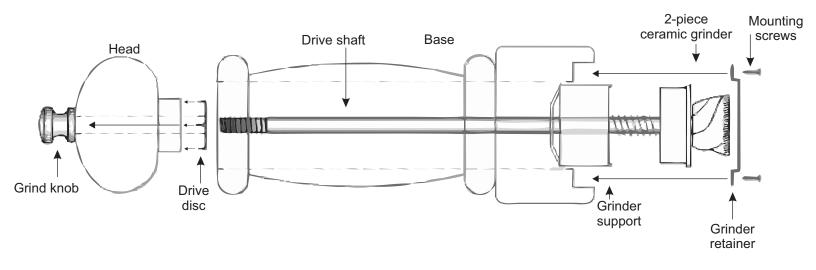
- First start with the head blank. Mount the blank on the lathe between centers. Turn a 1/2" long tenon (1 1/16" in diameter) to fit into the hole in the base blank.
- Insert the tenon of the mill head blank into the 1 1/16" hole of the mill base blank. Set up as shown in the diagram below. Turn both blanks at once.
- You will now need to choose a method to drive the wood base for turning. You can make a
  wooden jam chuck to fit in to the base tenon. You could also use one of the many types of
  expanding woodturning chuck jaws. Choose your drive method and mount it onto the head stock
  of the lathe. Insert the live center into the lathe's tail stock. We will continue with the jam chuck
  method.
- Mount the wood assembly, recessed end first, over the jam chuck . Bring the tail stock with the live center forward into the 7mm hole. Lock in place.
- Make sure that your assembly is tight between centers and it is safe to turn. *Caution: Please note that the tenon of the head blank must fit the base blank hole tightly. A loose fit may cause the final mill to be off center or vibrate when turning causing undesirable result or possible injury.*
- Using turning tools, turn the blanks to your desired shape.
- You may want to completely sand and finish you grinder at this point.



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### Assembly of the Finished Project Kit:



- Now that you have turned and finished the blanks, you are ready to assemble your grinder kit.
- Before you assemble the parts together, lay out your blanks with the parts so you can visualize how to assemble it. Make sure the orientation of the blanks is correct.
- Mount the drive disc on the tenon (head blank).
- Insert the grinder support in the bottom of the base.
- Place the drive shaft with the 2-piece grinder through the base and the head.
- Secure the grinder retainer with the 2 mounting screws.
- Screw the grind knob onto the drive shaft.
- Your project is complete.
- Loosen the grinder knob for a courser grind.