2-Piece Hollow Form Turning Guide

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Materials and Blank Preparation

1. Select either:
   One turning block at least **3 in. thick** and **7 × 7 in. square**, or
   Two pieces approximately **1-1/2 in. thick** and **7 × 7 in. square** with book-matched grain.

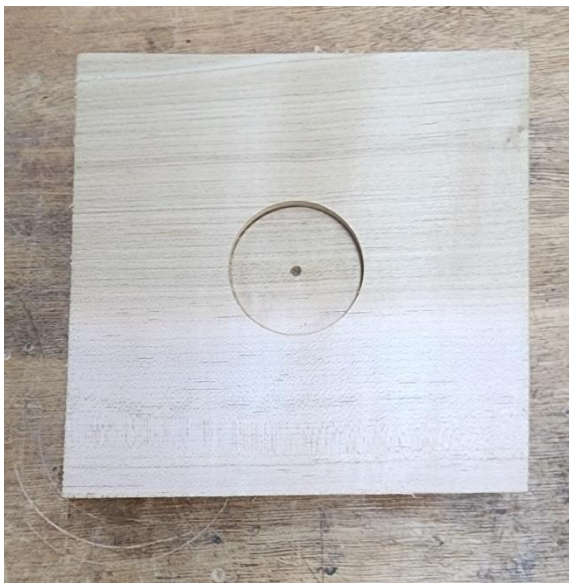
   If using one block, saw in half to create two pieces approximately **1-1/2 in. x 7 in. x 7 in**.
2. Mark the center on the interior face of each piece.
3. Draw the largest possible circle on each piece.

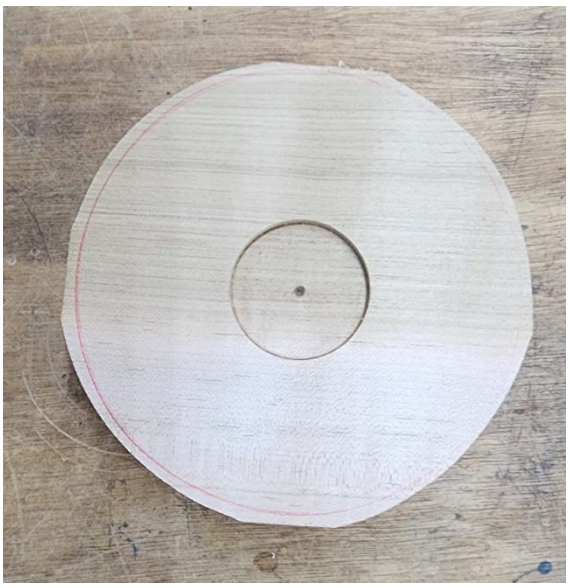
If Using Separate Blocks

1. Match the grain patterns as closely as possible.
2. Determine the interior faces.
3. Mark the center on each interior face.
4. Draw the largest possible circle.

Cutting the Blanks

1. Use a bandsaw to cut circles from the blocks.
2. Drill a recess 2.125 in. diameter, 1/4 in. deep. Use the previously marked center point.





Turn the Top Half

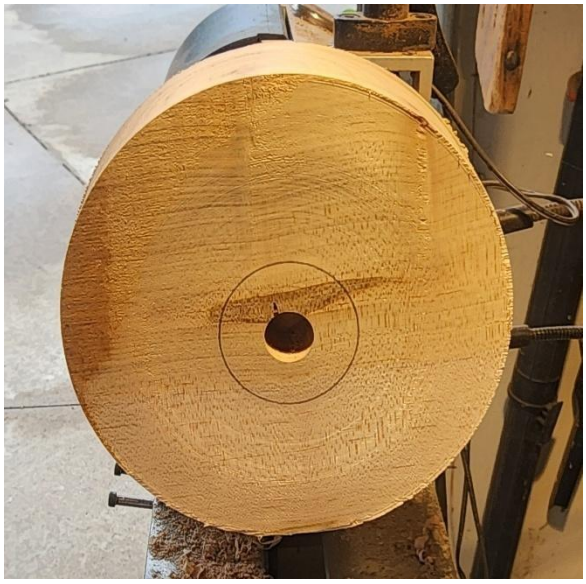
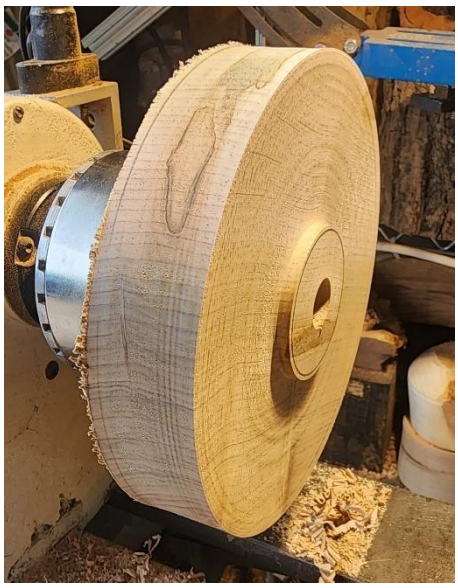
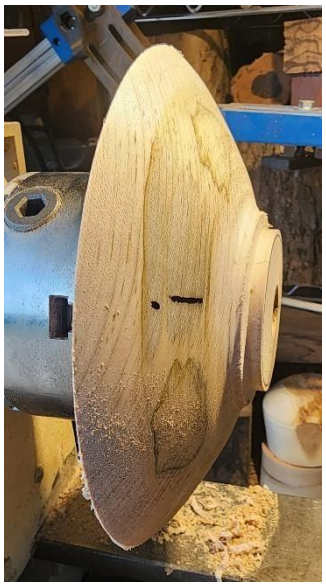
1. Chuck the blank using the drilled recess. Ensure the blank runs true.
2. Turn and true the outside diameter to maximum size.
3. Mark a line approximately 1/4 in. from the headstock side.
4. Face the piece from center outward to approximately 3.00 in. diameter
5. Drill using a hole using a 3/4 in. Forstner bit to a depth of 1 in.

Form the Tenon

1. Mark another circle approximately 2.750 in. diameter.
2. Use a push or pull cut to face the bottom until the 2.750 in. diameter becomes a tenon approximately 1/4 in. long.

Rough Shaping

1. Rough shape the top radius from the **2.750 in. diameter** to the rim mark.
2. Leave at least **1/4 in.** flat surface at the bottom of the tenon. This provides a register surface for chuck jaws during reversal.
3. Final shaping will occur after both halves are glued together.

Reverse the Piece

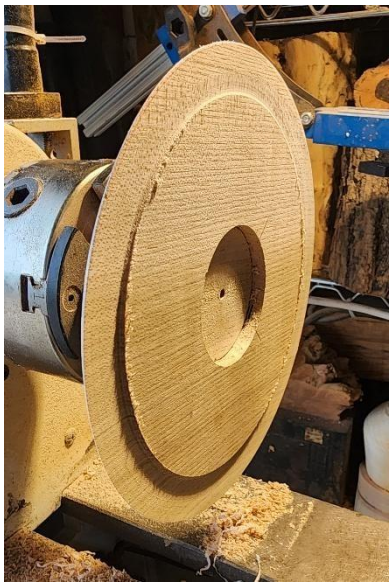
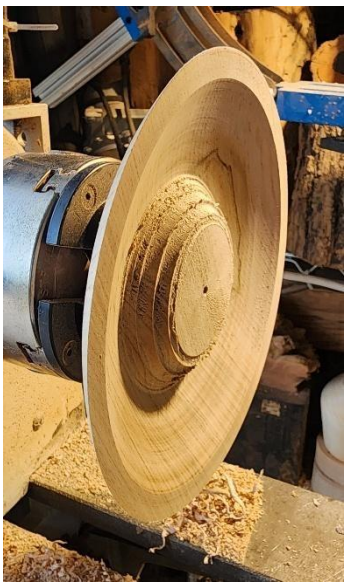
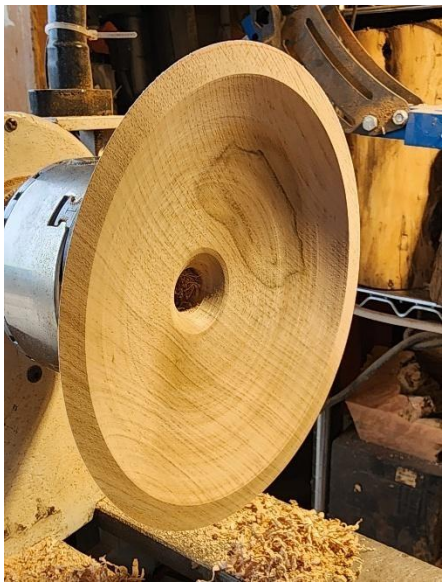
1. Remove the piece from the chuck.
2. Re-chuck using the tenon.

Prepare the Glue Surface

1. Face the top from the rim inward approximately **1/2 in.** Create a crisp sharp edge at the rim. This will become the future glue surface.

Flatten the Glue Surface

1. Face the interior below the newly turned 1/2 in. area.
2. Check flatness using a straightedge.
3. Sand the surface flat with a sanding stick and remove all tool marks.

Hollow the Top Half

1. Begin hollowing from the glue surface working in approximately 1” increments.
2. Match the interior curve to the exterior profile as you hollow.
3. The drilled hole will appear during hollowing.
4. After hollowing is complete turn a radius from the interior toward approximately halfway up the drilled hole.

Turn the Bottom Half

Mount the Blank

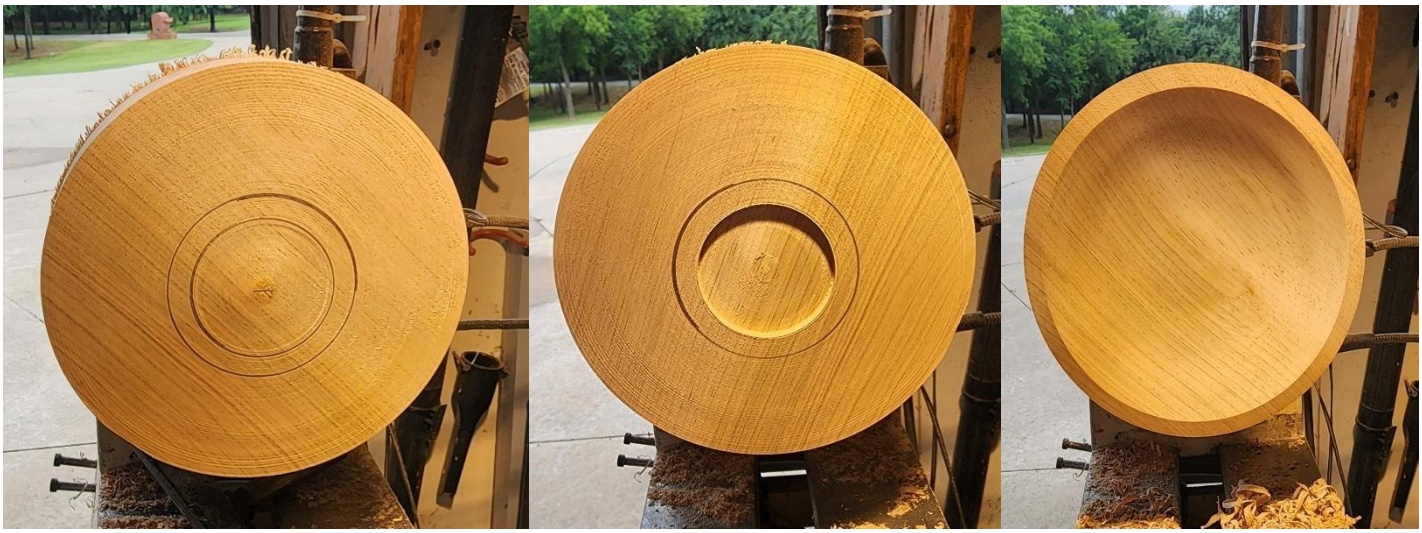
1. Chuck the bottom piece using the drilled recess.
2. Slowly start the lathe and verify the blank runs true.
3. Adjust as necessary.

Shape the Exterior

1. Using a spindle roughing gouge or bowl gouge true the outside diameter to maximum size. Make sure not to turn the bottom smaller than the top half maximum diameter, match as close as possible.

Create the Chuck Recess

1. Using a bowl gouge true the face of the block using either a pull cut or push cut.
2. Mark a circle approximately **2.125 in. diameter**.
3. Use a parting tool to create a recess at the line and across the bottom approximately **1/4 in. deep**.



Rough Shape the Radius

1. Mark the outer diameter approximately **1/4 in. from the face** (chuck side).
2. Begin turning a large radius from the tailstock side face.
3. Continue until the 2.750” diameter mark meets the 1/4 in. rim mark.
4. Refine the radius until the rim width is approximately 1/8” wide.

Surface Preparation

1. Use a flat scraper as needed.
2. Sand the exterior in preparation for finishing.

Reverse the Piece

Reverse the piece and chuck on the bottom recess.

Prepare the Glue Surface

1. Face the bottom from the rim inward approximately **1/2 in.**
2. Create a crisp, sharp edge at the rim. This surface will become the future glue joint.

Flatten the Glue Surface

1. Face the interior just below the newly turned **1/2 inch** area.
2. Ensure a straightedge can rest across the entire surface.
3. Check for flatness.
4. Use a sanding block to remove tool marks and ensure complete flatness

Hollow the Bottom Half

1. Hollow in approximately in **1” increments**.
2. Match the interior curve to the exterior profile.
3. Sand and finish the interior if desired.
4. Avoid applying finish to the glue surface.

Joining the Two Halves

Dry Fitting

1. Use a cone center in the tailstock to dry fit the upper half to the bottom half.
2. Apply only light tailstock pressure. Excess pressure may deform the pieces.

Aligning the Grain

1. Match the grain patterns.
2. Make alignment marks on both halves.

Gluing

1. Apply a thin coat of glue to both glue surfaces.
2. Align the reference marks.
3. Use light pressure from the cone center to hold alignment.
4. Avoid excessive tailstock pressure.

Glue Cure Time

- Allow at least **20 minutes** if using speed-set glue.
- Otherwise follow the glue manufacturer's instructions.

Final Turning and Finishing

1. Leave the live center in place while finishing the turning.
2. Finish turning the top of the vessel.
3. Leave approximately **1/4 in. rim** around the opening.
4. Radius the glue joint.
5. Sand the newly turned surfaces.
6. Finish-sand the entire vessel, including top, bottom, and opening.

7. Apply the desired finish.
8. Remove from the chuck.
9. Sign your work.