

Turning a Teapot (ver 1.0)

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This handout addresses the turning of a teapot form from two halves. Each half is a mirror image if it's mate with the interior turned and carved first. After the halves are glued together, the teapot exterior is turned in a manner very similar to turning a sphere (using a multi-axis technique).

The following step-by-step procedure does not show lathe components in the illustrations. The simple convention is implied where the headstock and chuck or drive spur is on the left and the tailstock with live center is on the right.

Additional images will be added in a future version. Additional topics will include the use of veneers and magnets to secure the lid, making a finial, and adding feet.

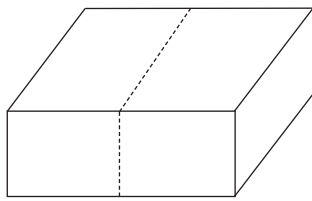


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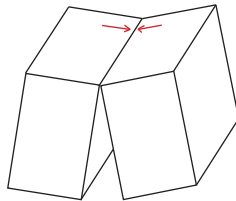
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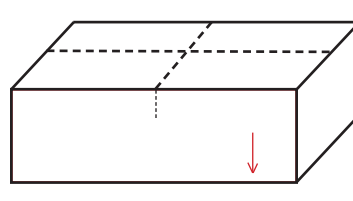
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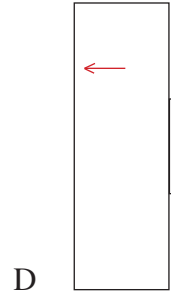
A



B



C



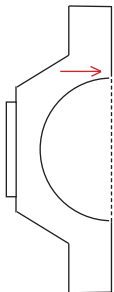
D

A) Use a block of wood roughly 6" x 6" x 2". Cut the block in half through the thinnest part.

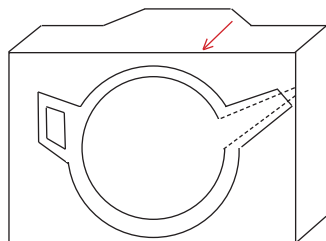
B) "Fold" the cut halves so that the figure and wood grain are mirror imaged on the cut surfaces. Mark the cut faces with a red arrow to indicate where the mirrored figure/grain meet.

C) With the red arrow pointing down, mark the center of each half.

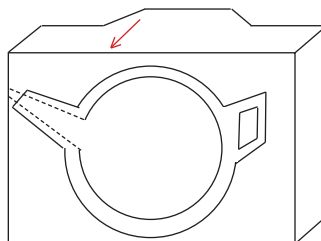
D) Secured between a drive spur and a live center, turn a 2" tenon centered in center of each half (where you just marked).



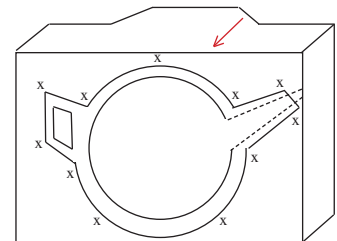
E



F



G



H

E) Place the tenon in a chuck and hollow out a 3" diameter half-sphere in each half wood blank. Sand half-sphere to 400 grit. Remove some excess wood adjacent to the tenon.

F) Draw the outline of the teapot shape and the interior of the spout from the half-sphere recess to the edge of the wood blank. Carve the spout recess with a half-circular cross-section.

G) Using a sheet of paper and a pencil create a rubbing of the half-sphere and spout recess. Reverse the paper rubbing and transfer the spout recess outline to the other half wood blank. One approach is to position the paper exactly over the half-sphere recess and use a needle to mark the spout recess outline. Carve the spout.

H) Using a small carving burr or drill, make tiny divots (x's) just outside your teapot profile drawing in one of the half blocks. These will let you know when you are to stop turning wood away in later steps.



Image of project at step I.

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I) Use a bandsaw to remove excess wood around the teapot outline (see photo on previous page).

J) Using Titebond (original) glue, join the two halves on the lathe with the spout opening aligned. Clamp the spout and handle firmly together. The two glue faces must be perfectly flat. Use a large belt or disc sander to remove any tiny ripples on the glue faces prior to gluing. The previous steps will assure that the interior half-spheres align perfectly. Titebond is used instead of epoxy to give the best joint appearance. Never use CA glue. Allow the glue-up to set overnight.

K) Supporting the block with a chuck and live center, remove the wood from the teapot exterior until you uncover the “x” divots placed in step H. Now you know you have about 3/8” to 1/2” of wood remaining as a rough wall thickness.

L) Reverse the block and repeat the turning process.

M) Turn the block 90 degrees and secure between a drive spur and a live center., Create a small tenon and remove additional wood to create a spherical “top” surface for the teapot.

N) Reverse the block and repeat the turning process.

Using a 3” firm sanding pad in a drill press, start with 80 grit and smooth all surfaces. Be sure to leave the “foot” tenon in place.

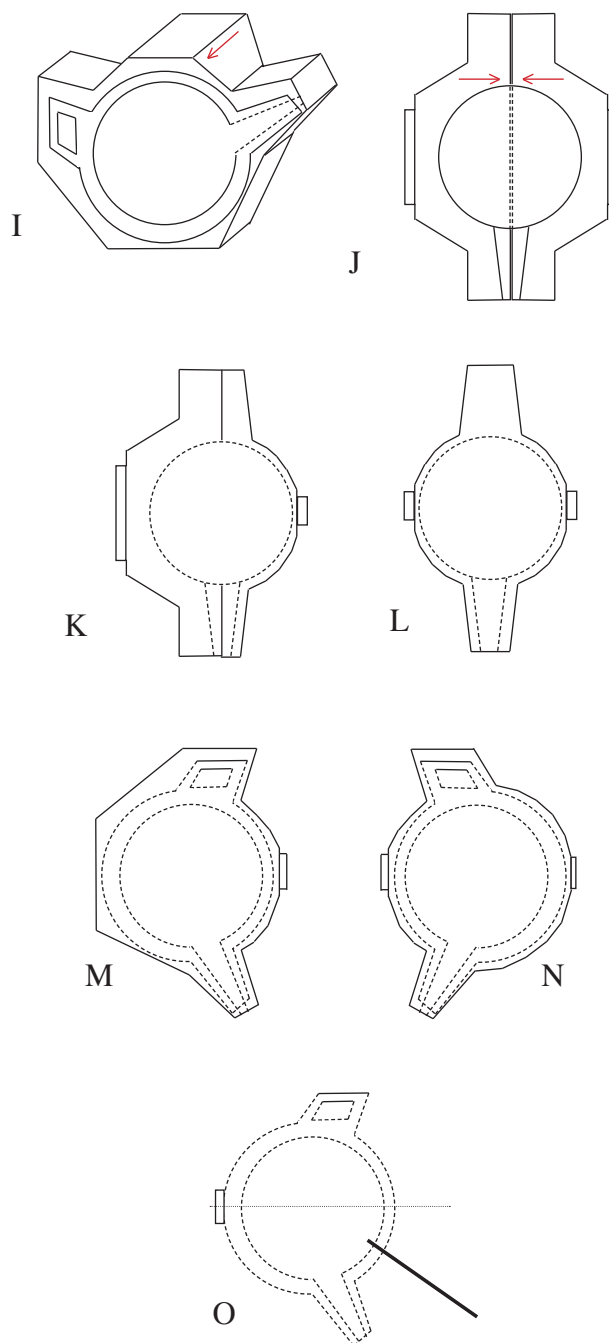
Once the shape is nearly completed, use a rotary carver to shape the handle. Finish all surfaces to 400+ grit.

O) With the sanded teapot secured on the lathe between the chuck and a live center, use a very thin parting tool (1/32”) to cut through the teapot body to make a lid. Be very careful - it may require a fine handsaw to complete this cut if the lid is lightly offcenter from the lathe.

Touch-up interior (it should be nearly finished)



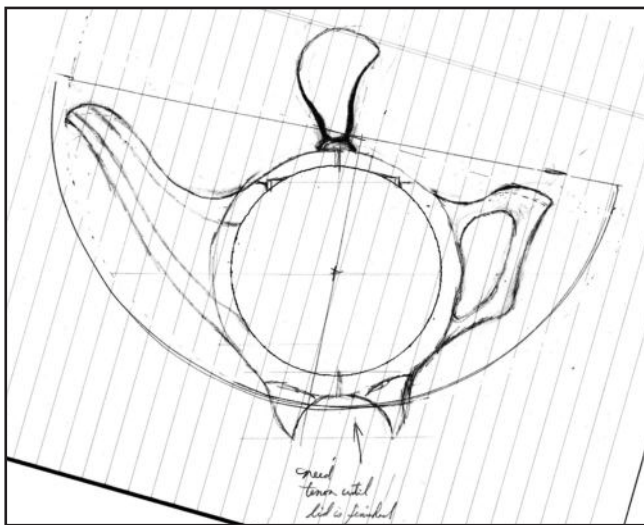
Image of project at step J.



Turning a Teapot (pg 4)

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Teapot Images. Note how the profile of the spout and handle are similar due to the turning process.



An example of a teapot design that will be transferred to one-half of a turning round.



"June Dawn", 2007.



"Morning Tea", 2008, Kamm Collection



"Spring Breeze", 2008, AAW Collection



"Time Well Spent", 2008, Kamm Collection



"Morning Song", 2009, Kamm Collection

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As an alternative technique to using two halves, some woodturners make the vessel, spout, and handle as separate parts and create an assembly. I prefer the form that has a continuous flow between these three elements. In a different version I turn the teapot interior and drill the spout opening. The top outline of the teapot is cut with a bandsaw then shaped using abrasives. This technique was used in making the 11-teapot stack below.



"Infini-Tea!", 2008, Kamm Collection