

## A Few Lamp Making Ideas for Wood Turners

- Wood
- Glue, clamps
- Laminating
- Preparing block for turning —
- Lathe set-up
- Turning
- Gouges, skew, etc.
- Aging the Lamp
- Finishing
- Initial Care

### Wood

- I use kiln dried 4/4 hardwood boards to make laminated blocks for lamp turning. I surface the boards until they are smooth. I don't plane them to a specific dimension because the thicker the board the better.
- If a board isn't wide enough for a block, I cut it in half and join the two pieces together rather than

joining two different boards. Doing that keeps the color and figure the same for that piece.

## Gluing

- I have used Titebond II for many years and I am satisfied with the results.
- You never can have enough clamps!

## Laminating

Laminating to produce blocks suitable for turning is necessary for the following reasons

- Large blocks of solid lumber 6x6, 8x8, or larger are required for lamp turning, but it is extremely difficult to prevent large blocks from checking (developing cracks) as they lose moisture and shrinking while drying. Checking is the result of the internal stresses that develop when the wood shrinks as it dries.
- Except for relatively small lamps, drilling the wire hole in the center of a lamp made of a solid block is

a difficult operation because a long drill tends to wander. With a laminated block, the wire-hole is easily made by cutting a 'slot' down the middle of the two center pieces of the block – I use a router table but a dado cutter in the table saw will do too.

- The block can be made to better match the eventual shape of the lamp and thus requires less wood and less turning time.
- Two or more wood types can be used for pleasing visual effect.
- See the photos below:



Style #12-18  
Red-Birch and Walnut



*Maple and Walnut Lamp*

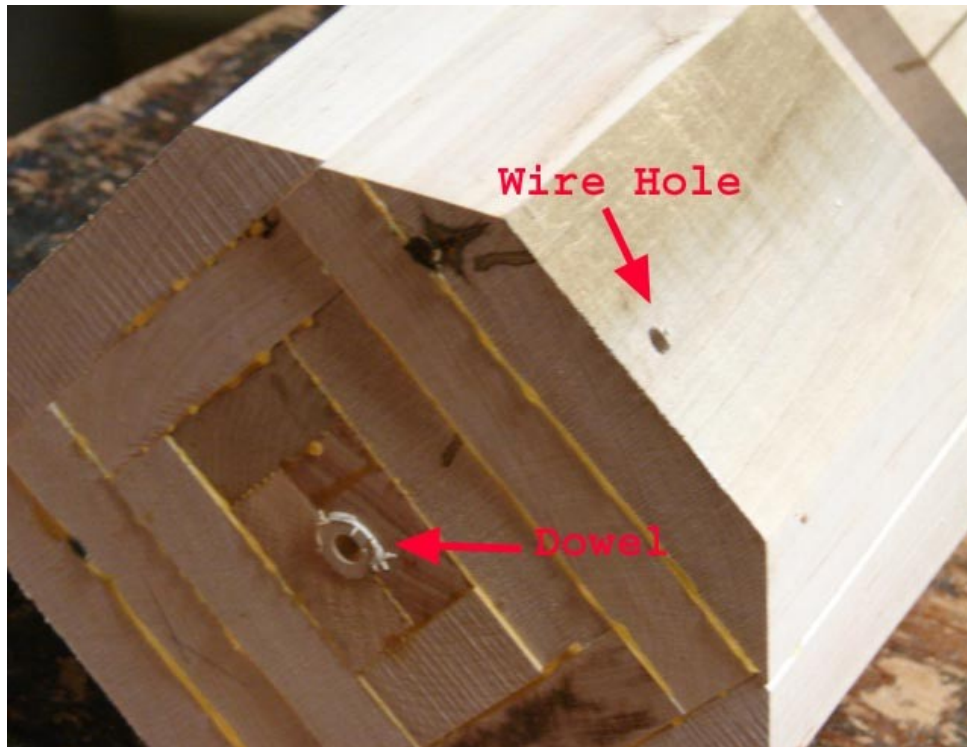
- Below is a photo showing the key steps used to make a pair of lamps similar to the one in the top photo.



- I use plastic spatulas to spread the glue
- *Making the laminated block is probably the most critical step in the whole operation because of the large number of joints all of which must be perfect. One bad joint and you have expensive firewood! So, check all surfaces to be glued before applying the glue.*

## Preparing the Block for Turning

- I enlarge the base end of the wire hole with a 5/8" drill bit and then drill 1/4" hole (for the lamp-cord) from one side into the enlarged wire hole. The depth of the 5/8" hole isn't critical, just deep enough so there is room for the lamp cord to make a 90 degree bend when it is installed.
- I plug the 5/8" hole with a dowel and cut it off flush with the bottom. See photo below.
- I use a 60-degree machine-lathe center in my lathe so I drill the center of the dowel for that type of center. I put a drop or two of machine oil on the center.
- I remove the corners from the block on the band-saw with the table tipped 45-degrees. Speeds-up the turning but not essential.



## Turning

- I power my lathe with a variable-speed DC motor so I adjust the speed to suit the operation.
- Since most of the cutting is across the grain when turning table lamps (the reverse of bowl turning) I use a bowl gouge for much of the work. I use the skew chisel for finishing the socket end and for making beads.
- I mount the block in the lathe with the bottom end on the tail-stock so the lamp's bottom can be

nicely surfaced.

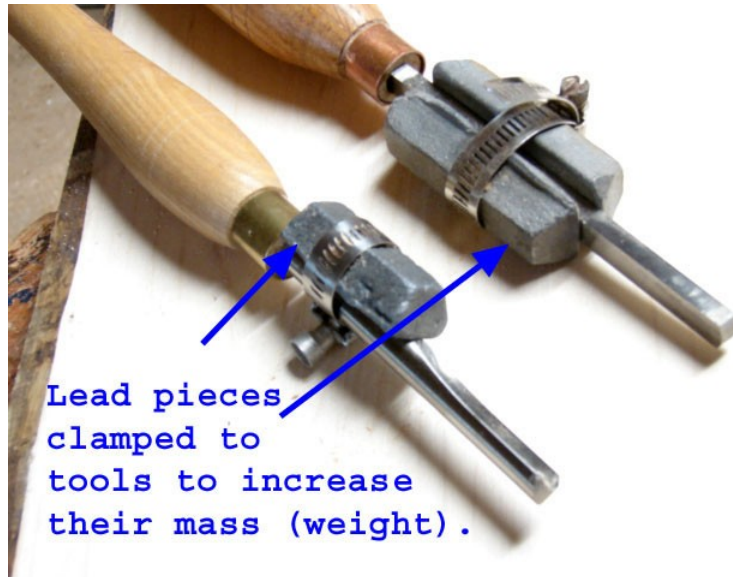


*Finishing the Base*

## About Tools

Turning large size square or octagonal blocks is

stressful to the turner's arm and hand because of the impact forces. To reduce the forces on the hand and arm, it is best to have as heavy a tool as possible. In place of a heavy roughing gouge I have clamped small pieces of lead to my tools as shown in the picture below.



Lead pieces  
clamped to  
tools to increase  
their mass (weight).

## Resting

- You should not finish the lamp immediately after it is turned. It should be allowed to sit on a shelf in the shop for a few weeks so the moisture introduced by the glue can dissipate or equalize in the wood. If that isn't done, then, in time, when the lamp is thoroughly dry, it will be possible to feel the joints when you run your finger across them. Wood workers refer to such joints as “proud” --- they stick out.

- The larger the lamp the longer the 'resting' time. I usually allow four to six weeks for lamps with a maximum diameter of 8-inches.
- However, DO NOT speed up the drying time. Don't do as I once did. I put the lamp in the hot summer sun. One of the joints opened up! Slowly does it...
- I usually sand the lamp with 60 or 80 grit and then put it aside to rest. I do the remaining sanding when the resting period is over.

## Finishing

- I begin sanding with 60 or 80 grit and finish with 280 grit. Typically, 60, 100, 120 or 150, 180, 240, 280 grit, and then No. 0 steel-wool.
- I then apply, with a piece of paper towel, polyurethane cut with thinner to the piece as it turns slowly in the lathe (so the sealer doesn't drip off). After 15 or 20 minutes I wipe off any sealer remaining on the surface.

- When the sealer is dry, I buff the lamp with No. 0000 steel-wool and then apply paste wax. I use BriWax, but any good paste wax will do.
- I cut the left-over wood at the socket end with a hand saw and then drill out the square wire-hole to accept the socket's threaded pipe. With a long rod, I knock the dowel out of in the wire-hole in the lamp bottom.

### Initial Care

- I tell my customers that they should keep their new lamp out of direct sunlight or near a source of heat for a couple of months after it is made. After that it can be handled as any piece of good furniture. The reason for my cautionary remark is that I want to insure that the lamp's moisture content is the same as its surroundings. Acquiring moisture isn't stressful to wood but losing moisture quickly is.

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To fellow wood turners, I hope this is helpful.

Andy Staiano

[www.lampmaker.net](http://www.lampmaker.net)

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