

Notes on Turning Clocks



Introduction:

Everyone needs a clock or two and what better way to practice your faceplate turning than by turning a clock for yourself or as a gift. The design possibilities are limitless. The clock can be turned from an odd shaped piece of wood that may or may not have some sort of sentimental value. As the clock pictured was turned from an Oak Tree that went down during hurricane Fran next to my brothers office. It just happens to be turned from the log that through his back out. You can experiment with the clock dial numbering system or just keep it simple and turn four buttons to represent 12, 3, 6 & 9. You could make or purchase numbers, roman numerals, or even purchase a manufactured clock face. For the time piece/clock works I buy the battery operated ones from one of the turning catalogs such as Packard Woodworks, Crafty Supply's USA, Woodcraft or Klockits Catalog. The clock works come in a variety of sizes to fit most turned dials. Some of the kits have chimes and some have a second hand that clicks as it counts out the seconds and some run silently. I suggest buying the clock kit first than adjusting your design so that the clock kit will fit your clock.

Tools & Materials:

Face Shield

- 3/8" Side Ground Bowl Gouge
- 3/8" Traditional ground Bowl Gouge
- 3/4" Roundnose Scraper
- 1/4" Parting Tool
- 1/4" Point Tool/Skew
- 2 7/8" , 3" or larger Forstner Drill Bit
- 3/8" Drill Bit

Four Jaw Chuck (I prefer the Talon Chuck by Oneway Manufacturing)

Clock Kit complete with appropriately sized hands for the diameter of the clock you are going to turn. Be sure that the length of the post for the hands is sized to fit the final thickness of your clock design

Mounting Hook one that either attaches to the clock kit or one that attaches to the turning Suitable Wood Blank to turn 1 1/4" or 3/4" thick by 6" plus in diameter

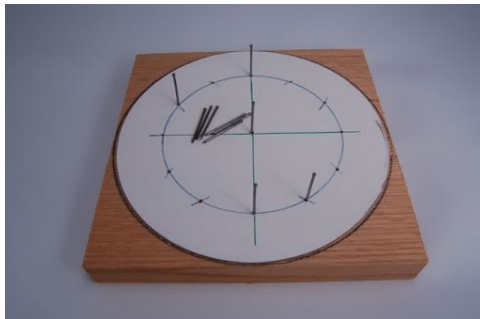
Turned Wooden Dowels for marking numbers or actual clock Numbers/Roman numerals for clock face say 1/4" & 3/8" or turn your own dowels.

Procedure:

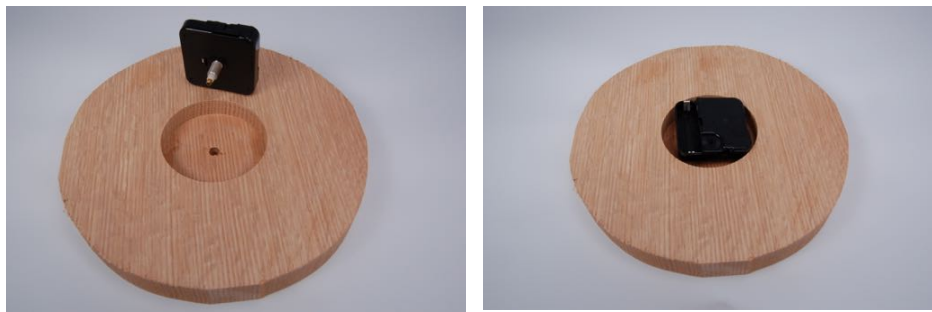
1. I like to run my clock blanks through my planer before I cut them to size. That way I can see which side has the prettiest grain features and they will be easier to pre-drill on the drill press.
2. After planing I then cut the blanks into squares and mark the centers on both sides.
3. Using a large compass or bar compass draw a circle representing the outer diameter of the finished clock.
4. I made a template to mark for the hours.

Note: You can purchase a ready made template from one of the clock kit suppliers.

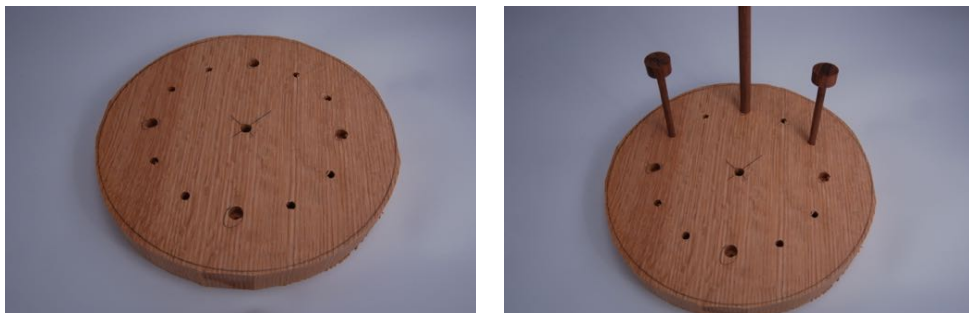
To make the template I use a piece of poster board or thin plastic sheeting cut into a square. I then mark for the center by using a straight edge from one corner to the other corner, thus making a perpendicular set of lines across in the center which will represent 12, 3, 6, 9. Then using the compass set to the radius of the circle I sweep an arch from 12 to 1 then 12 to 11 then I set the point on the compass at the 3 o'clock position and mark an arch representing 2 then swing to the other side and make a mark representing 4, proceed around the ring repeating this process for 5, 7 and 8, 10. I then got to the drill press and drill an 1/8" hole at each mark so that I can use a pencil or a scratch awl to make a dimple to mark for the hours. To mark the holes I use a nail to set the template in the center dimple and then another nail at the 12 o'clock position to lock the template in place so that I can mark the other hours. Once the hours are marked I circle the dimples at 12, 3, 6, 9 so that I can drill a larger hole for those hours usually 3/8" diameter hole and for the hours 1,2,4,5,7,8,10,11 I use a 1/4" drill bit for the hole for the template and then draw a circle representing the ring for the hours 12 through 11.



5. I then use a forstner bit to drill the hole in the back for mounting the clock kit. Usually the instructions for the clock kit will suggest the proper size to drill the hole. The kits that I use require a 2 7/8" to 3" diameter hole for mounting the clock kit. I like to use a Colt Forstner bit for this procedure, as I find they cut easily and cleanly. I generally drill the holes while the blank is still square so that I can hold on to it better when drilling. The depth of the hole is determined by the thickness of the clock kit and the method to be used for mounting the clock. My thin kits use a 5/8" deep hole. If using the mounting hook that comes with the kit the depth of the hole will be determined by the hook. If using another method for mounting the finished clock on the wall or a stand the hole can be as deep as you want.



6. Once the mounting hole has been drilled I then drill the hole for the post that holds the hands in the center of the mounting hole using the dimple that I made on the front of the clock that was used to set the position of the clock hours. as my center. Once again the size of the drill bit to use will be determined by the instructions that come with the clock kit for the post that pokes through the clock face.
7. After everything is marked and drilled , I then use the bandsaw to cut the blank into a circle.
8. Now it is time to glue some dowels into the holes that were drilled for the hours and cut them off flush to the face of the clock.



9. Next I mount the clock using the hole for the clock works 3" diameter hole in the back by using the #2 jaws for my Oneway Talon in expansion mode.



10. Now turn your clock.

11. Once the clock is turned and sanded and your favorite finish applied it is time to put it all together.



12. Slide the clock shaft through the center hole and then place the brass washer on the face side and insert the clock hands. Lastly insert the battery and set the time.

