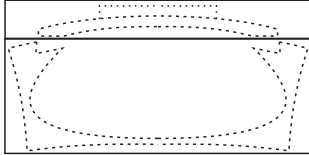


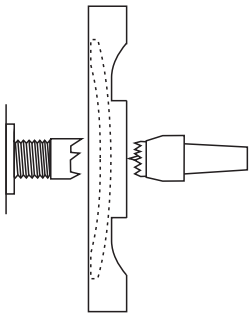
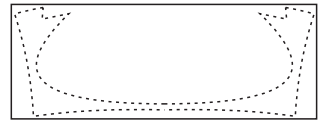
Manhole Cover Box

Adapted from a project by Keith Gotschall in
American Woodturner June 2021

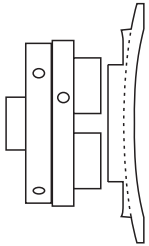
The idea is that the lid opens by finger pressure at the edge of the lid. Start with a block about 120 square and 60mm thick. For the best grain match between lid and base cut a 15mm thick slice for the lid off the top of the block with a fine bandsaw blade.



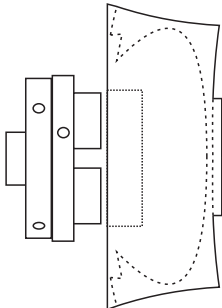
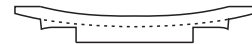
Set the piece for the bottom part of the box aside.



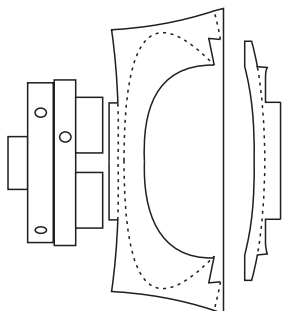
Mount the piece for the lid between centres. On the side that is to be the top, cut a spigot for the chuck you plan to use.



Mount this wood in a chuck. Cut it round and 95mm diameter. Dress the face nice and flat. Keep the outer 12mm wide band of the underside of the lid flat. In the centre cut a slight concave to be the underside of the lid. Turn the toolrest round to the headstock side of the wood. Cut a little of the outer edge of the lid to the intended finished thickness. Sand and finish all the underside of the lid and the edges. Remove this wood from the chuck.

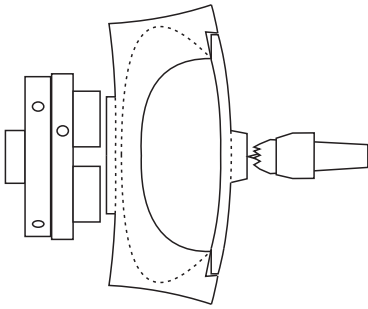


Mount the bottom part of the box on a chuck using a drilled dovetail cavity or screw chuck. Turn the wood round and to about 115mm diameter. Cut the sides to a shape of your choice. Cut a chuck spigot on the bottom if the box.

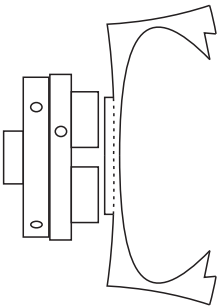


Turn the wood over and mount it in a chuck. Mark the diameter that will be cut to accept the lid. Mark another line 10mm inside that for the ledge the lid will rest on. Start hollowing inside the 10mm line. Cut straight in to at least 10mm deep to define the extent of the platform the lid will rest on. Now cut the 10mm wide ledges that the lid will rest on to a depth that puts the lid a little below the surface of the outer edges of the box. Slope the ledges the lid will rest on by about 8 degrees - higher at the inner edge. The lid must not be a tight fit.

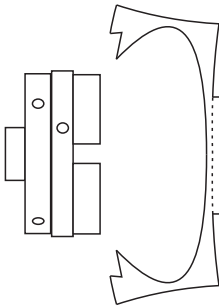
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Hold the lid in place with the tailstock. Cut the edge of the box body to match the slope of the lid. Then continue that cut as far as possible on the lid. You can tape the edges of the lid in place and remove the tailstock to allow finishing of the centre. Or take the lid off and hold it with a vacuum chuck or other device to finish the centre. Set the finished lid aside.



Complete hollowing and sanding the inside of the box. Finish all the accessible outside.



Turn the body of the box over and mount it on a larger chuck with the jaws in expansion mode. Or mount it on a jam chuck using a piece of waste wood. Remove the spigot from the base of the box. Sand and finish the base.

