Turning the Pedestal Box

1 – Start with a block of wood 3X3X4 where the grain is running in the long direction. Cherry, maple, or any good hardwood will suffice.

2 – At the bandsaw, cut off ¾ - 1". This is for the lid. The remainder is for the body of the box.

3 – Place the 2 sections together so that the grain is aligned. Note where the joint is and make a witness mark.

4 – Holding both sections together, place between centers and tighten the tailstock so that the 2 pieces are held firmly between the centers.

5 - Use the spindle roughing gouge and turn into a cylinder about 2 ¾" diameter. Put a tenon on each end of the cylinder that is suitable for your chuck.

6 – Remove both pieces from the lathe. Take the piece that is going to be the body of the box and mount in the chuck. True up the face, being careful to remove only a minimal amount of wood. This helps preserve grain alignment later on. Shape the upper portion of the box. This will be the top portion of the tulip shape and will help judge where to cut the mortise in the next step.

7 – Make a mortise in the top of the box body. Begin about 1/8" from the outer edge. Use a parting tool or small square scraper that is held parallel to the lathe bed so that it enters the wood very perpendicular to the top face of the box and at center height. Cut the mortise about 1/8 to 3/16" deep. Remove the wood inside the mortise.

8 – Remove the box body from the chuck for now. Place the lid in the chuck using the tenon turned earlier. True up the face, being careful to remove only a minimal amount of wood. This helps preserve grain alignment later on.

9 – Carefully measure the diameter of the mortise in the box body. Use calipers. Transfer the measurement to the face of the lid. Part down to the line carefully. The goal is to tightly fit the lid into the mortise on the box body so that the top of the lid can be turned and finished. Go slowly, keep sneaking up on it. Test the fit often. Patience and more patience. Once you have a tight, but not too tight fit, we'll move on.

10 – Hollow out a little bit of the inside of the lid. About ¼" deep. Leave a flat shoulder on the outer perimeter, about 1/8" wide. Drill a ¼" hole all the way through the lid. Sand the inside of the lid. Remove the lid from the chuck and rechuck the body of the box.

11 – Insert the lid into the mortise in the box body. Do not hammer it on if it's too tight. Take off a tiny bit more. It needs to be a tight fit, but not so tight that it will never come out. If it's too loose when you're done, wet the edges of the lid and the inside of the mortise and place a paper towel or tissue between the 2 parts. That should hold the lid securely. Bring the tailstock in to secure the jamb fit.

12 – Form an ogee shape on the top of the lid. Work towards the live center leaving the tailstock engaged as long as possible. When you have to remove the tailstock, take very light cuts. Don't be aggressive – you have a friction fit holding the lid. Finish shaping the lid and sand it.

13 – Remove the lid – it's done. To remove the lid, use your compressed air hose. Aim the hose into the ¼" hole and shoot the air. This should pop out the lid. Put the lid aside. On the box body, take a few thousandths off the mortise walls to relieve the fit of the lid. Use a square negative rake scraper or sand it. Just a few thousandths. You don't want a sloppy fitting lid.

14 – Shape the remainder of the tulip profile on body of the box. Don't go too skinny in diameter as you approach the bottom because we still have to hollow out the inside. Just get the general shape so that you can hollow the inside without weakening the piece. When you're happy with the rough shape, carefully hollow out the inside. Do not touch the inside of the mortise. Leave a 1/8" shoulder area perpendicular to the mortise walls. Strive for even wall thickness. There are many ways to hollow the box – scrapers, spindle gouge, hollowing tools, Hunter tool, etc. Sand the inside – be careful not to sand over the mortise.

15 – Finish shaping the body. If desired, add a bead between the tulip and the pedestal base. The base should have an ogee profile to match the lid of the box. Sand the exterior of the body. Now we have to reverse the hold so that we can finish the bottom. Use soft jaws in your chuck to hold the top of the body. Do not tighten too much – just enough to hold it. Or make a jamb fitting – use a piece of scrap wood and turn a mortise into it that will fit the top of the box tightly. Either way is fine, but if you use a chuck, be careful that the jaws don't mar the finished surface of the box. Finish the bottom of the box body. If desired, add a few concentric circles to the bottom of the base using a point tool.

16 – Turn a small knob using any wood of your choice. I prefer a contrasting wood but it's your choice. The knob should have a short ¼" tenon that will fit the hole in the top of the lid. Sand the knob and glue into the lid.

17 – Turn a small plug to cover the hole in the bottom of the lid. This should also have a short ¼" tenon that will fit into the hole in the underside of the lid. Sand and glue into place.

18 – Apply finish of your choice. My preference is Minwax Antique Oil, but you can use whatever you're most familiar with. Enjoy your pedestal box!