

Ornament Globes

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Supplies needed:

Globe blank 2 ½" square and 3" long
Icicle and cap blank (contrasting color) 1" square and 7"-12" long
Epoxy glue
Small eyes

Tools needed:

Pencil
Ruler
Center finder
Spindle drive
Live center in the tail stock
4 jaw chuck (extended jaws are helpful)
Roughing gouge
Spindle gouge (or skew, bowl gouge, whatever your choice for rounding beads)
¼" parting tool
1/16" parting tool
3/8" drill bit (forstner bit is best)
2 ¼" gauge
1 3/8" gauge
Depth gauge
Sand paper grits through as fine a finish as you like
Finish of choice (which you will do later at home)

Step 1:



Mount the globe blank between centers for rounding.

Round to 2 ¼" diameter.

Step 2:



Turn a chuck compression tenon with a 5° dovetail taper.

Reverse the blank, mounted in a duckbill chuck (if you have one).

Turn the round.

Step3:



Turn a ½" wide 5° dovetail tenon on the free end. It is 1 3/8" diameter. Use the 1 3/8" tenon jig.

This will become the plug.

Step 4:



Mark off the 1 $\frac{3}{4}$ " globe height.

The CL (center line) is $\frac{7}{8}$ " from the tail stock end of the blank.

Mark off $\frac{7}{8}$ " on the other side of the CL.

Step 5:



Clear the waste from the chuck side of the globe.

Use the $\frac{1}{4}$ " parting tool to make the plunge cut.

Clear waste with the tool of your choice; skew or bowl gouge works well.

Step 6:



Roll a bead on either side of the CL.

Use the bead gauge for symmetry.

Step 7:



Re-mark the CL of the globe.

Using the ruler, make a horizontal aligning mark from the globe onto the plug.

Do NOT sand either the globe or the plug at this point. You need those marks!

Step 8:



Part off the plug with the thinnest parting tool you have; 1/16" works well. Leave a little ridge of the tenon on the globe

Hollow the globe with your new button scraper.

Use your depth gauge. Try to get the walls as thin as you dare without the outside meeting the inside. The thinner the walls, the lighter the ornament. Try for a little less than 1/8". Be careful.

Step 9:



Collect your epoxy glue and the marked plug.

Apply the glue and insert the plug aligning the horizontal marks.

Step 10:



Bring up the tail stock to clamp the plug.

Step 11:



Allow the glue to dry for 30 minutes before trimming.

Take a break. If you remove the globe from the chuck, you will not be able to re-true it. The walls are too thin.

Be patient, grasshopper!

Step 12:



Trim the plug, fairing it into the globe. Don't remove material from the globe. Remember, its walls are already thin!

Step 13:



Finish sand the globe.

Step 14:



Make the glue joint disappear.

Step 15:



Reduce the tenon on the headstock side to 3/8". I am using a 3/8" open-ended wrench as the sizing tool. This can be sharpened to provide the cutting tool as well.

Finish sand the rest of the globe.

Step 16:



This is my "finish of choice" for the globes. You may finish before you remove from the lathe with a wipe on or after you remove it with a spray on finish. the choice is yours.

Use a technique that will give you a blemish free, deep, glossy finish.

Step 17:



Drill the 3/8" hole through the globe. By using a forstner bit you get a clean hole through the globe with a controlled feed. The globe is "self parting" and sits on the drill bit when it comes free.

Step 18:



Clean up exit hole. I used a multi spur counter sink to clean up the fuzz and provide a slight chamfer.

