

# Christmas tree ornaments

Kurt Hertzog turns festive decorations

**While commonly done, ornament creation and display don't have to be reserved for the holiday season. Turning ornaments is a great project and skill-builder that can be undertaken throughout the year. Since we are close on the Christmas season it's time to get going on creating our ornament.**

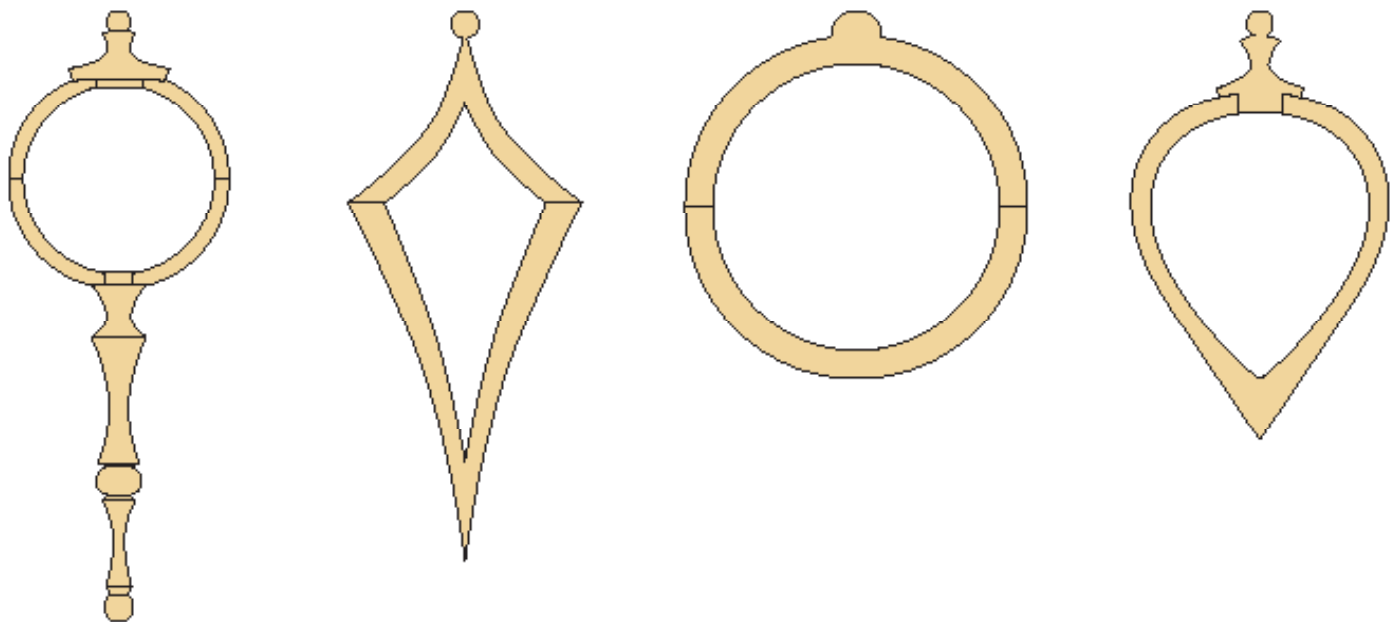
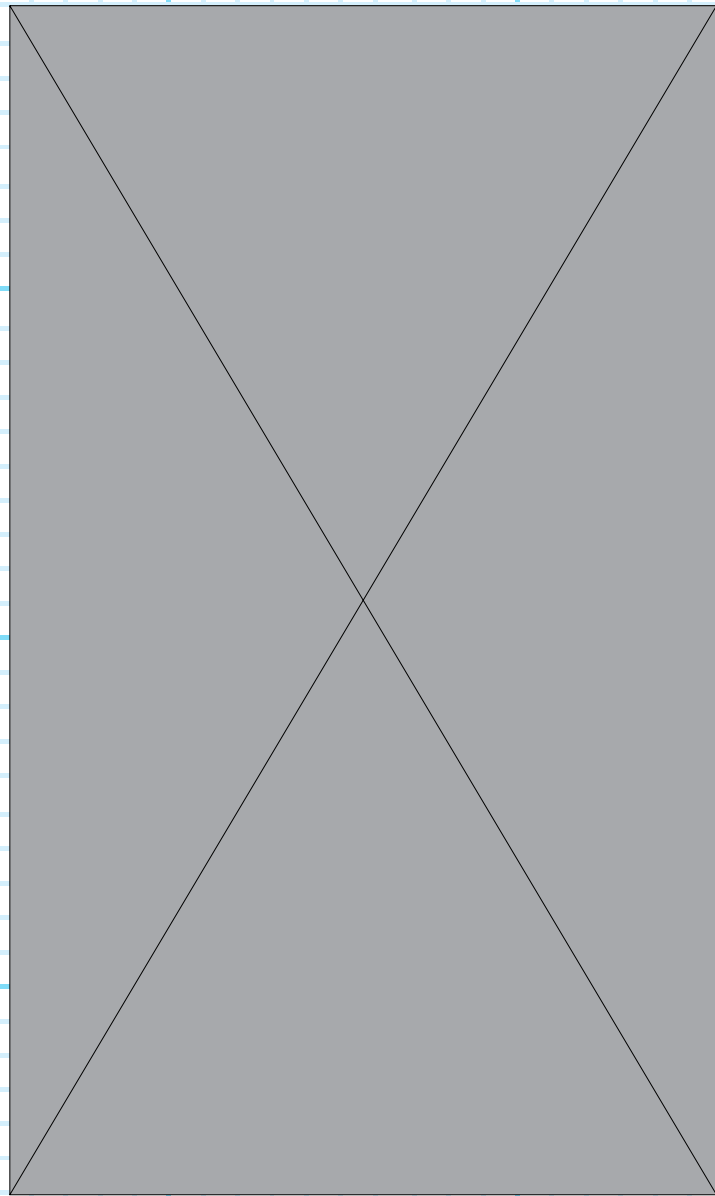
We'll turn an ornament that can be displayed either hanging from a holiday tree or from a stand displayed on the mantle. There are many designs that can be used for an ornament but we'll use the traditional short upper finial, ornament globe which is made in two parts, hollowed, then joined back together, and will have a longer lower finial.

The key to the entire process is to make the ornament light enough to hang from a tree. Too heavy and it will drag down the branch. If displayed from a stand, there is far more latitude on the total weight. The project we'll do is hollowed in a manner that turners of all skills should be able to accomplish. Of course, you could hollow the globe of the ornament through a small hole at one end. This is a bit more advanced and far more time-consuming, but you don't get the join showing, so feel free to tackle the ornament in that manner if you have the tools and skills to do so.



### TOOLS AND MATERIALS

- RPE& PPE
- Spindle roughing gouge
- Spindle gouge
- Narrow parting tool
- Ring tool, round nose scraper, or round carbide cutter tool for hollowing
- Small handsaw (optional)
- Chuck with mid-size jaws and spigot jaws
- Revolving tailstock centre
- Drive spur
- Drill chuck
- 7mm drill
- Brass screw eye
- Wood adhesive
- Abrasives from 150 to 320 grit
- Finish of your choice
- Timber of your choice,
- Body 100 x 100 x 200mm
- Finial and top 25 x 25 x 200mm





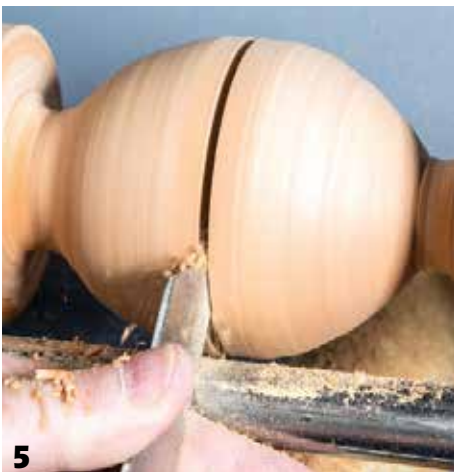
**1** Planning stock – upper, lower, body, and finial. Prepare stock based on your chosen diameter and finial length. Rather than waste material by using one piece, we'll use a smaller piece of the same species for the finial. A different species can be selected for the finial for contrast or turning characteristics. The grain on the finial stock needs to run true to allow for a delicate turning.

**2** Mount the body material between centres for roughing and creating tenons on both ends for mounting in the chuck later. Plan your overall length and shape. There is no rule that says the body of an ornament should be round – we'll make this one a bit egg-shaped. Use a spindle roughing gouge to turn a cylinder.



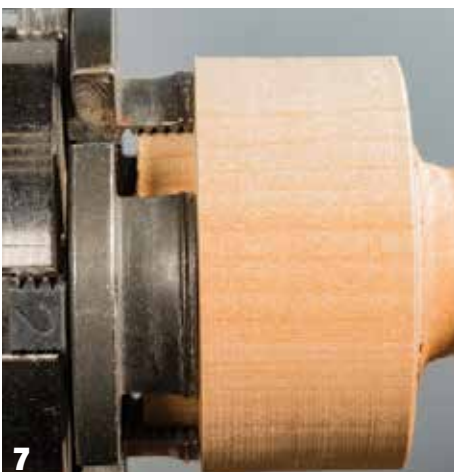
**3** Turn tenons on both ends for future use. Having a go/no-go gauge for your chuck speeds up the process. Callipers will work but a simple cardboard or paper gauge with minimum and maximum opening is worth making. It is a useful tool with no cost and it stores easily.

**4** Shape the body while between centres. Leave the length in your shape for the kerf loss separating the halves. Leave sufficient strength at the ends for the upcoming hollowing. We'll remove that material and contour that area to our design later.



**5** Once shaped, use a narrow parting tool to make the cut for separation. Use the parting tool in a side-by-side, stair step cut to create clearance and avoid pinching of the blade in the cut due to frictional heat build-up and binding. Reduce the thickness to allow for minimal saw cutting later. When you get close, but not quite parting through, stop the lathe.

**6** Reduce the tailstock revolving centre force, or remove the tailstock completely to ease the saw cutting separation. Now cut through the remaining material. Use any small saw that fits to slowly cut through the small remaining diameter. Support the turning with your hands to catch at separation.



**7** Mount the upper body end into the chuck using the spigot turned earlier. Good safety practice is to have the stock rest on the shoulder cut on the tenon with clearance between the wood and bottom of the chuck. Avoiding bottoming out ensures that the blank is running true, with the original between the centre's axis of rotation.

**8** Face off the end of the turning to true up the surface. Now hollow out the body to a reasonable wall thickness. To do this you can use a carbide cutting tool, ring tool, round-nose scraper, or back hollow with a spindle gouge. It is worth using the waste wood to practise cutting end grain using various methods. Never miss the opportunity to practise. The wall thickness chosen is up to you, but the thinner the walls the lighter the ornament. The final thickness is dictated by how the two parts are to be bonded together.

◀ **9** Use a flat surface to support your sandpaper as you sand the glue face. Using about 150 grit abrasive will create a face with some tooth for the adhesive to bite on to. Run the lathe slowly to let the abrasive do the work. Alternatively, cut a stepped recess to accept a tenon created on the other half of the body. This joint is more complex, but you can create thinner-walled ornaments using the interlocking alignment features and with the wall thickness needed for gluing.

**10** Drill a hole for the finial insertion and gluing. Using the same size for all of your ornaments will allow you to mix and match ornament bodies and finials for best appearance prior to committing to glue. I use 7mm but another size can be used provided your hole diameter and tenon are kept matched. You might choose a larger or smaller hole size based on a different sized ornament.

**11** Mount the other body half in the chuck, repeating the facing and hollowing to desired wall thickness as before. Sand off the face of this body half with the block and sandpaper to prepare for gluing. Stop the lathe to test fit the other half to check for a good interface. Make any adjustments needed to ensure the right fit is achieved.

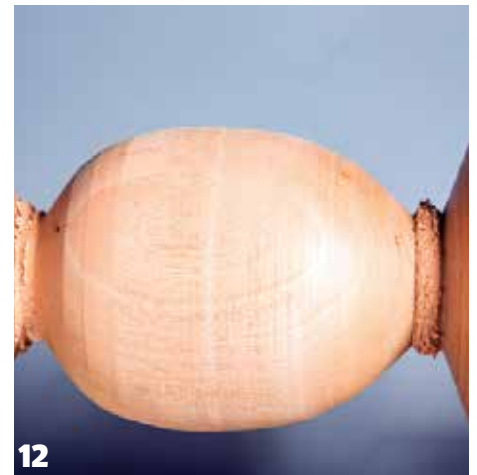
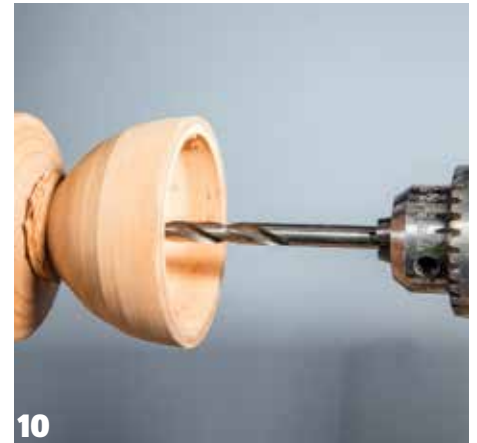
**12** Apply a small amount of the wood adhesive to the interface surfaces of both halves of the body. Using the tailstock centre for support, guidance, and clamp force, glue the two body halves together, orienting them for the best grain match. Using a PVA-type adhesive will allow you time to position or reposition the two halves to ensure best grain alignment prior to it setting. Use a water-dampened paper towel to remove any excess glue that is squeezed out. Leave the tailstock centre clamping until the glue has cured. If you decide to use cyanoacrylate adhesive, seal the wood all over with thinned-down sanding sealer to minimise staining.

**13** Shape as much of the body as possible while mounted between centres. Part off the tailstock centre end of the ornament body. Using a slow lathe speed, refine the shape as required and sand to a fine surface. Now, part off the body from the headstock end and hand sand as needed.

**14** Mount your finial stock in the chuck. Once mounted, run the lathe at a slow speed and engage the tailstock centre. This will allow the finial to turn on the clamped centre. Alternatively, you can turn the finial between centres.

**15** Round the lower finial blank. With the lathe off, use the final ornament body size and shape to plan for a pleasing finial length and design. A finial length of 1.5 to 2 times the body height is a good start point, but it is your ornament, so you choose.

**16** Shape the lower finial. Mark the key features then blend the various lower features to those key feature locations. Sharp tools and a light touch are the key to finials. The ultimate thinness or delicateness and the level of fine detail possible is dependent on the timber species used.





17



18



19



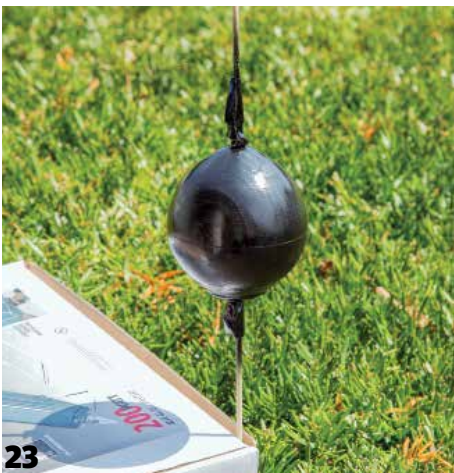
20



21



22



23



24

**17** Now complete the detailing of the lower finial, including turning the 7mm diameter tenon needed for attachment to the body. Sand the finial, working through the grits while running the lathe at slow speed. Do not use much pressure either – it is a delicate finial. A finish will be applied later.

**18** Part off the tailstock end of the finial using a sharp-detail gouge or skew chisel. The goal is to remove the small block of wood supporting that end without losing the delicate point. Lightly sand supporting with your fingers.

**19** Using the remaining finial stock in the chuck, turn the 7mm tenon to be used for gluing. Shape the finial as you wish saving room to part off the completed finial. Carefully sand in place or reverse chuck after parting off to complete your design and sanding.

**20** If needed, final sand the finials and ornament body readying for application of a finish. Finishing prior to assembly will keep the finish from softening any crisp details created at assembly points. A wipe-on finish such as polyurethane works well. Oil or lacquer finishes would work too.

**21** Wipe apply the polyurethane or finish of your choice to finish the ornament component, making sure you use the finish as per the manufacturers instructions. Now thread the screw eye into the upper finial. Go slowly and carefully, backing up on occasion as needed to avoid breaking the brass shaft. If the threading doesn't begin easily, you may need to create a starting point for the threaded screw eye. This can be done by carefully using the point of a pin or a sharp scratch awl. It will only take a very small indent to get the threading starting where you want it located.

**22** Here is a close-up of the body joint. The grain is reasonably aligned. You can disguise the joint by using a series of grooves cut into the surface, one of which is directly on the joint, or cut a series of beads. Again, the edge of one of these needs to be on the joint.

**23** If you have plain timber and want it to look more festive, you can paint the ornament body. This works wonderfully if the wood has no character. You can use dyes, paints, coloured lacquers and so on. Likewise you can paint the surface with a water or oil-based paint and then place artistic decoration over the top of the painted surface. This can include other painting, application of decals or foil, or glitter, to name just a few. I use a spray acrylic paint outdoors when painting. The ornament body is held on a wooded kebab skewer with painter's tape keeping it in place. Multiple coats are needed to completely cover any grain and provide a good base for additional decoration.

**24** Use a very small amount of adhesive on each of the tenons of both finials as you insert them. Orient them for best appearance. Cloth, string, yarn, wire, or monofilament attached to the screw eye will help you hang your ornament for display on your Christmas tree. ●