

**4** With a thin-kerf parting tool, cut through the ring. Remove the ring from the base and sand by hand any sharp or split edges of the center opening.

diameters and interior diameters depending on your bowl or platter work. For starters, make two discs with the same outside diameter as the base, two about 20 percent smaller, and two about 30 percent smaller.

To make a clamping ring, secure one of the discs to the template with a small brad (center to center). Drill through the template to produce at least one set of three bolt holes (all the same diameter), leaving at least 1" to the outside of the disc for rigidity.

You may need to clamp together the two pieces to avoid any movement. As an alternative, once one hole is drilled, place one bolt through both pieces to keep your alignment. Be sure to mark on this disc which hole (or set of holes) aligns with the "key" and which is the outside of the ring. You can place two or three sets of these holes on a ring, which gives it more versatility with different-shaped bowls.

Mount one of the discs to the base with the drilling template sandwiched between the disc and base. (The template protects the face of the base in a later step.) Use  $\frac{5}{16}$ " bolts, washers, and wing nuts. The bolts should be just long enough to accept the wing nut on the backside of the chuck.

Use a detail gouge or the long point of a skew to true up the outside edge of the ring. With a parting tool (a thin-kerf parting tool



**5** To pad a ring with clear plastic hosing, cut through the top of the natural curve of the hose. When cut like this, the natural spring of the hose will hold it inside the opening.

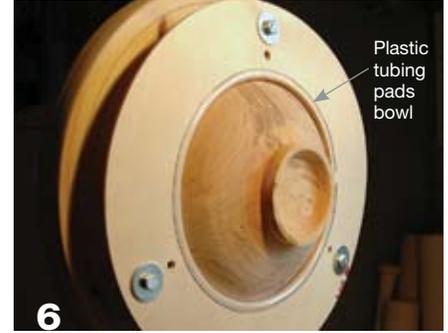
works especially well), cut through the ring and into the drilling template at a determined diameter (Photo 4). If room allows, position the tailstock with center against the center of the plywood, which stops it from becoming a flying disc when you punch through. Go slow with the final cut.

For the first run you may just want to make the openings in multiples of 1", perhaps starting with a 4" opening. The size of the chuck and the size of the bowls you routinely turn will ultimately be deciding factors.

Be sure and leave at least 1" of material from the opening to the drilled bolt holes in the ring. Do the same with the remaining rings by varying the hole size.

Remove the ring from the chuck. Hand-sand the opening and the outer rim to eliminate sharp edges.

There are several options for a pad in the inner opening. Two are a pliable strip of rubber glued at three points (usually between the bolt holes) and rubber tubing that is split open along its length and applied inside the opening. The strip of rubber can be anything from inner tube stock, to rubber gasket material, to  $\frac{1}{8}$ " router mat material. (Each disc needs three pieces approximately  $1\frac{1}{2}$ " wide by 3" in length.) For this example, I have used  $\frac{3}{8}$ " and  $\frac{1}{2}$ " ID clear plastic, soft tubing, and  $\frac{3}{8}$ " ID



**6** When the piece is centered and firmly mounted, turn to desired shape and details. Complete by sanding the turned areas. Stay well away from the bolt heads and the ring.

latex rubber hose. The hose diameter will be larger if you use thicker plywood for the rings. The strips require gluing, while the plastic split hose usually stays put due to its own springiness. (I glue the latex hose in place). If you use plastic, cut along the top of its natural curve (Photo 5).

### Put the chuck to use

With all of the parts constructed, you are ready to put a bowl into the chuck. The one big variable left is the height of your bowl. You will need to obtain  $\frac{5}{16}$ " bolts in sets of three and in various lengths. For really deep bowls or vessels you can use all-thread rod to create the required lengths of rods to hold the piece in the chuck. Although more difficult to find, carriage bolts 4" and longer are safer than hexhead bolts; you are less likely to be injured if you inadvertently touch the bolt head. Use wing nuts and washers to attach the bolts on the back of the base (with washers under the bolt head if not using carriage bolts).

With the chuck sitting flat on a bench, place the bowl with rim down onto the face of the base. Center the bowl using the cut grooves in the face as a guideline. A precise alignment comes later.

Determine which ring matches the bowl. Sometimes it is a question of where you want to grip the bowl as