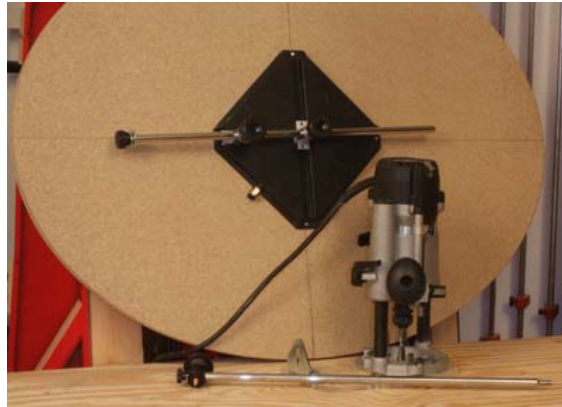




## *Circle & Ellipse Router Jig Instructions*

### *Ellipse*

Start by marking the center of your circle or ellipse on the back side of your workpiece. Add full-length lines across the center of the short and long axis. These layout lines make it easy to position the Circle & Ellipse Router Jig (#100-149) perfectly. Measure from the center point and add marks at the short and long axis sizes desired. The Circle & Ellipse Router Jig can make circles from 22-3/4" to 89-1/4" in diameter or ellipses from 22-3/4" x 26-5/8" to 89-1/2" x 80-1/2". The arm comes in two pieces so you can configure the Circle & Ellipse Router Jig to best fit your project.



Place the Circle & Ellipse Router Jig base in the center of your layout with each of its corners on a layout line. Use the screw holes in the corners of the base as "sighting windows" to get the jig perfectly centered in your layout. Now secure the base with a short screw in each corner. If you cannot use screws for some reason we offer the optional vacuum Venturi (#VEN-001) that generates up to 500 lbs of force.

### *Circles*



Remove one pivot from the Circle & Ellipse Router Jig and place the remaining one at center of the base and install the setscrews in

the pivot base and run them down into the dimples in the tracks at the center point. The remaining instructions are the same as for cutting an ellipse.

## *Ellipses*

Install the pencil attachment and place the pencil point on one of your layout points. Adjust the pivot in the slot running 90-degrees to that layout line and tighten that pivot screw to lock the rod. Move the pencil to the other layout mark and adjust the pivot in the slot 90-degrees to that line and lock it in place. The pivots can be located anywhere in the base as long as they remain in the slots as the arm is moved in a full circle.



When satisfied with the pivot positions, adjust the pencil so its tip is against the workpiece and draw a full layout circle or ellipse. This lets you be sure that the part can be cut from your blank plus the line is used later to adjust your router for the cut and to trim away excess waste.

Using a jigsaw trim away most of the waste, staying roughly half the diameter of the bit to be used away from your layout line. Removing the waste reduces the load on your router and bit plus prevents heavy pieces of waste from falling away and pinching the bit.

Install the bit to be used and adjust the pivot points so that the edge of the bit is on the outside edge of your layout line. Move the router around the full circle/ellipse to be sure that the bit follows the layout line.

## *Cut the Circle/Ellipse*



Start the router and carefully plunge the bit down so that it cuts the full thickness of the wood. Slowly feed the router in a counterclockwise direction. It is important to maintain a firm grip on the router and to avoid using overly fast feed rates. Take your time and let the bit do its job.

When you complete the circle/ellipse you can make a second pass around the workpiece just to be sure. Stop the router, remove the Circle & Ellipse Router Jig and your circle/ellipse is

ready for sanding or edge treatments!