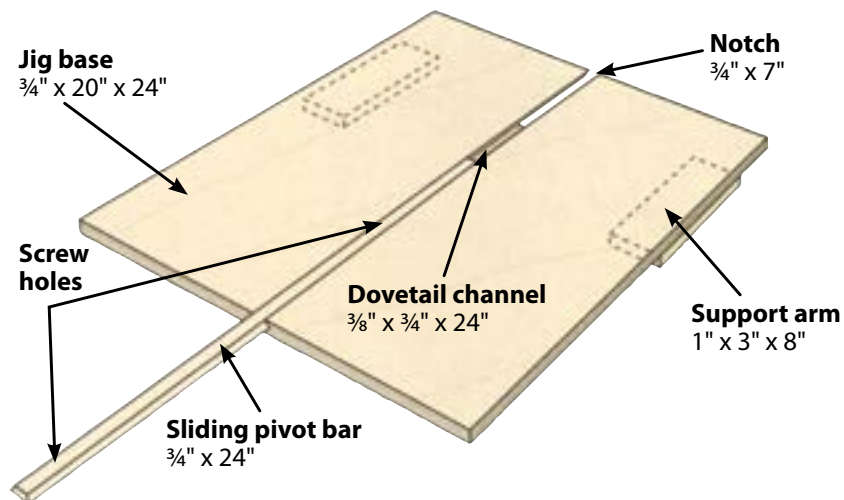


# Circle-Cutting Jig



To cut the circular top of a candle stand on your band saw, use the shop-built circle-cutting jig shown at right. Refer to the illustration for suggested dimensions.

Rout a  $\frac{3}{8}$ "-deep dovetail channel in the middle of the jig base, then use a table saw to rip a thin board with a bevel along both edges to produce a bar that slides smoothly in the channel. (Set the saw blade angle by measuring the angle of the channel edges.) Cut the notch on the band saw, then screw the support arms to the underside of the jig base, spacing them to hug the sides of the band saw table when the jig is in position. Drill two holes through the bottom of the dovetail channel in the jig base, 1" and 3" from the unnotched end; also bore two holes through the bar as shown.

To prepare the workpiece, mark the circumference and center of the circle on its underside. Then use the band saw to cut off the four corners of the panel to keep it from hitting the clamps that secure the jig. Next, make a release cut from the edge of the panel to

the marked circumference, then veer off to the edge. Screw the pivot bar to the center of the workpiece through one of the bar's holes, leaving the screw loose enough to pivot the panel.

Turn the workpiece over and mark the point where the blade contacted the circumference during the release cut. Clamp the jig base to the band saw table, making sure the support arms are butted against the table's edges. Slide the pivot bar into the channel in the base and pivot the panel until the marked contact point touches the blade. Screw through one of the holes in the jig base to lock the pivot bar in place (below, left). Turn on the saw and pivot the workpiece into the blade in a clock-wise direction (below, right), feeding the piece until the cut is completed.

