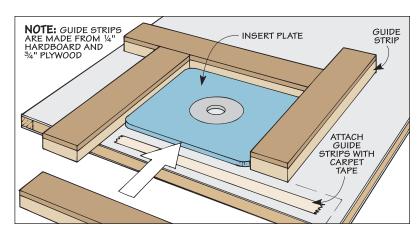# installing a
Router Plate

Whenever it comes to installing a router plate, the challenge is always in sizing the opening to match the plate exactly. For the router table in issue No. 85, I purchased a template that matched the router plate I used. But you can get the same results by making your own "template." And you can use this method to create an opening for any size or type of plate.

Guide Strips. The template is made up of a set of four strips that guide a pattern bit to create the opening for the router plate. (Most pattern bits will require strips that are 1" thick.) But what makes the method almost foolproof is that you use the actual router plate to position the guide strips (Step 1). So you're practically guaranteed to get a perfect fit.

Cut Opening. Once you have the guide strips located, you're ready to cut the opening by following Steps 2 through 5. Essentially, you drill a hole in each corner of the opening, make a pass with the router around the perimeter, and then cut out the waste inside the opening with a jig saw.
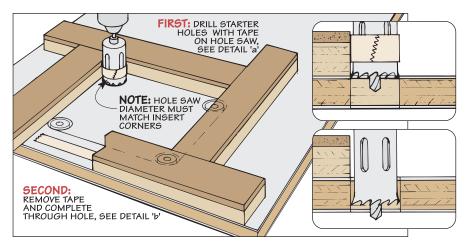
Step 1

To locate the guide strips, use the insert plate as a template. Start by fastening one strip in place with carpet tape so it's parallel with one edge of where the plate is to be located. After positioning the plate along this strip so it's in its final location, you can "wrap" the plate with the remaining guide strips.
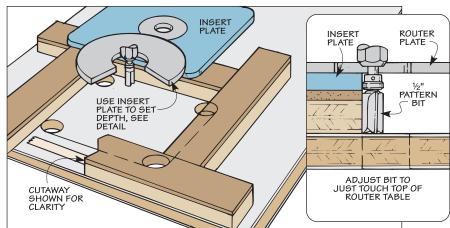
NOTE: GUIDE STRIPS ARE MADE FROM ¼" HARDBOARD AND ¾" PLYWOOD

INSERT PLATE

GUIDE STRIP

ATTACH GUIDE STRIPS WITH CARPET TAPE

Step 2

To provide a starting point for the bit and create relief holes for dust, drill a $1\frac{1}{2}$"-dia. hole in each corner. A hole saw works great for this, but you'll need to wrap the body with masking tape to compensate for the set of the teeth, as you can see in detail 'a.' Once the teeth cut through the laminate, remove the tape and complete the hole.

FIRST: DRILL STARTER HOLES WITH TAPE ON HOLE SAW, SEE DETAIL 'a'

NOTE: HOLE SAW DIAMETER MUST MATCH INSERT CORNERS

SECOND: REMOVE TAPE AND COMPLETE THROUGH HOLE, SEE DETAIL 'b'
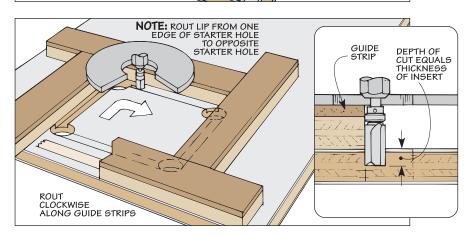
Step 3

Before routing the lip, set the bit depth to match the exact thickness of the insert plate. To do this, mount the pattern bit in the router. Then place the insert plate on top of a guide strip. Set the router on the plate and lower the bit until it barely touches the top (see detail).

INSERT PLATE

USE INSERT PLATE TO SET DEPTH, SEE DETAIL

CUTAWAY SHOWN FOR CLARITY

INSERT PLATE

ROUTER PLATE

$\frac{1}{2}$" PATTERN BIT

ADJUST BIT TO JUST TOUCH TOP OF ROUTER TABLE

Step 4

At this point, set the bit into the opening in one of the corners so the router is resting on the guide strips. Then use the strips to guide the bearing on the bit (see detail) as you rout around the inside of the strips in a clockwise direction. Note: To maintain the radius in the corners, rout only to the edge of starter holes.

NOTE: ROUT LIP FROM ONE EDGE OF STARTER HOLE TO OPPOSITE STARTER HOLE

ROUT CLOCKWISE ALONG GUIDE STRIPS

GUIDE STRIP

DEPTH OF CUT EQUALS THICKNESS OF INSERT

Step 5

Once the lip has been routed, you're ready to remove the waste. A jig saw makes quick work of this. All you need to do is follow the inside edge of the groove formed when you routed the lip (see detail). A little sanding will clean up the rough edges.

NOTE: USE STARTER HOLES TO REMOVE WASTE WITH JIG SAW

WASTE

TABLE TOP

CUT ALONG INSIDE EDGE OF GROOVE

LIP