

Space-Saving Router Table

It's the old tablesaw extension trick, but done right this time

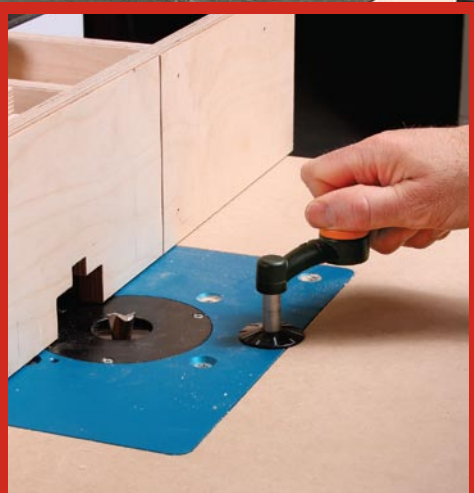
BY JOHN WHITE



Versatile fence



Great dust collection



Up-top adjustability





I've seen many tablesaw extension wings turned into router tables, and it's not a bad idea on paper. You get an indispensable woodworking machine without consuming an extra inch of shop space. And, you can take advantage of the solid, accurate fence already in place on the saw (or so you think).

But it's not enough to simply drop a router plate into the melamine extension wing. For one thing, the rip fence is not ready for routing. Not only is it too short for vertical jobs like sliding dovetails, but the bit must be buried in the fence for most tasks, and screwing a couple of scraps to the back of the rip fence just doesn't cut it. Dust collection also is a problem, because there's no efficient way to collect from above the table. And single-layer tables eventually begin to sag under the weight of the router.

This router table solves all of those problems and a few more. First, it has a simple but effective fence that is tall enough for vertical routing. There is a replaceable insert, so you can bury bits in the fence and get zero-clearance routing when you need it. The fence clamps to the tablesaw's rip fence, so adjustments are easy. Plus, it's a snap to put on and take off. Above-the-table dust collection is integrated into the fence—and it really works. Finally, a rigid plywood frame under the table eliminates sag.

The router matters, too

I chose the Triton TRC001 router, because it specializes in table-routing and has impressed editors in past tool reviews. It allows above-the-table bit changes and height adjustments, which will save you hours of hassle. It also has great dust collection of its own, so you can catch dust from beneath the table, too, making most jobs practically dust-free. To avoid the hassle of attaching the router directly to the table, I used a predrilled router plate from Rockler (rockler.com, \$60). I used Baltic-birch plywood for the table's support frame and fence because

JUST SCREWS AND PLYWOOD

Use lightweight MDF for a flat, smooth top and plywood for everything else, assembling the pieces with drywall screws. A dust box beneath the table connects to one in the fence, so you can attach a shop vacuum below but collect dust from above, too. Replaceable inserts and faces will add years to the fence's service.

Rib, 3½ in. tall by 9 in. long

Tool storage, 5½ in. square, with dadoes for the height-adjustment and collet wrenches

Dust-box cover, 5½ in. wide by 10¾ in. long

Fence face, 5½ in. tall by 10½ in. long

Replaceable insert, 5½ in. tall by 10 in. long

Slot for clamp bar, ¾ in. wide by ¼ in. deep

Bit opening, 2 in. tall by 3 in. long

Sub-fence (front and back), 3½ in. tall by 29 in. long

Dust-port cover

Router plate

Top, made from ¾-in.-thick lightweight MDF, sized to fit between fence rails

Dust port, 2 in. wide by 3 in. long

Flange, 1½ in. wide

Opening for router plate, 8¾ in. wide by 11¾ in. long

9¾ in.

Screws allow leveling of router plate.

Flange for router plate, 2¼ in. wide by 10 in. long

Frame, ⅝ in. narrower and ⅜ in. shorter than top

Opening for shop-vacuum hose, 2½ in. dia.

1¼-in. offset

Frame part, 2½ in. tall

Allen-head screws level the table.

Opening for hose from router, 1½ in. dia.

Dust-box bottom, 6¼ in. wide by 7½ in. long

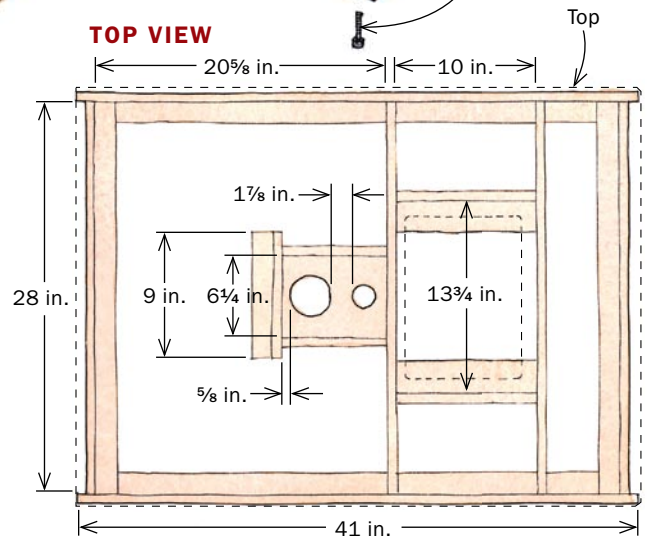
Note: Frame members are fastened with 2-in. drywall screws; flanges, top, and dust-box bottom are attached with 1¼-in. drywall screws.

Hose from router to dust box

Plywood shelves bolted to rails

Screws driven through frame flanges attach the top.

TOP VIEW



it is stable and holds screws very well, and I used lightweight MDF for the top because it routs well and makes a smooth, durable work surface. One sheet of each is more than enough to make the entire table.

Make the table first

The table has two parts: a large top and its underlying frame with integrated dust collection and support for the router plate. Make the frame and then the top.

The frame is a simple affair. Strips of plywood—all ripped to the same width—are

butt-joined and held together with 2-in.-long drywall screws. The joint is strong and no glue is needed. After assembling the basic frame, attach the flanges. Use 1¼-in. drywall screws, driven in from the outside of the frame, and pre-drill clearance holes and countersinks. Finally, assemble the frame for the dust-collection box. The box's bottom gets two holes: one for the hose that runs to your shop vacuum and one for the hose that runs from the router to the box. Running both hoses into this box means that a single

shop vacuum can collect dust from above the table (through a port routed in the top) and below it without joining three different hoses to one another.

You'll need to rout two openings in the table, one for the router plate and one for the dust port, but neither is difficult. Begin by laying out their locations on the underside. For the dust port, simply attach template strips on your layout lines, rough-cut the opening, and rout it flush to the strips. The opening for the router plate must be more precise, but I have a great trick for

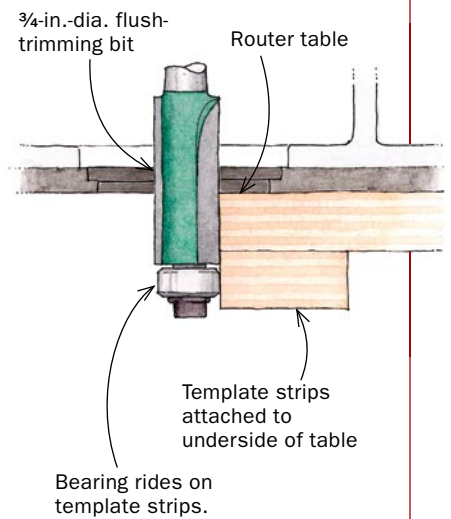
MAKE AN ACCURATE OPENING FOR THE ROUTER PLATE



Build a routing template around the plate. Press the plate firmly against two sides, but use business cards between the plate and the other two sides. The extra space makes it easier to get the plate in and out.

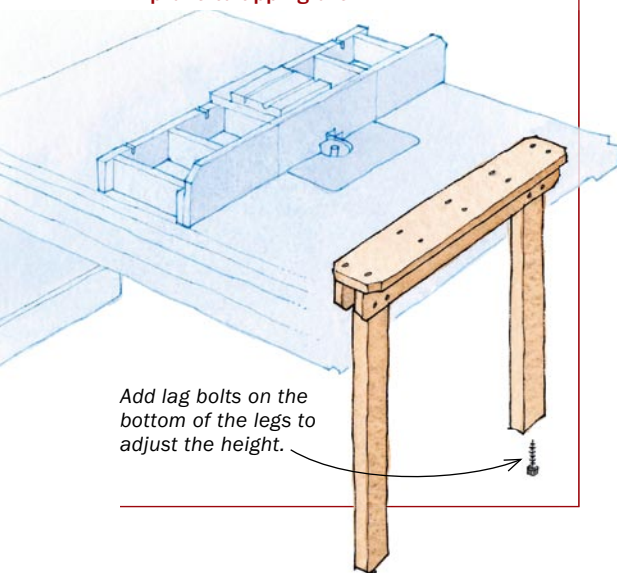


Rout the opening flush to the template. Cut away most of the waste with a jigsaw, leaving about ¼ in. to be removed by a bottom-bearing, flush-trimming bit. Use a ¾-in.-dia. bit so that the corner radius matches the radius on the plate's corners.



ADD LEGS FOR SUPPORT

If your extension table doesn't have legs already, you might need to add some. The table's cantilevered weight could be enough to make your saw prone to tipping over.



HAVE A SMALLER TABLESAW EXTENSION?

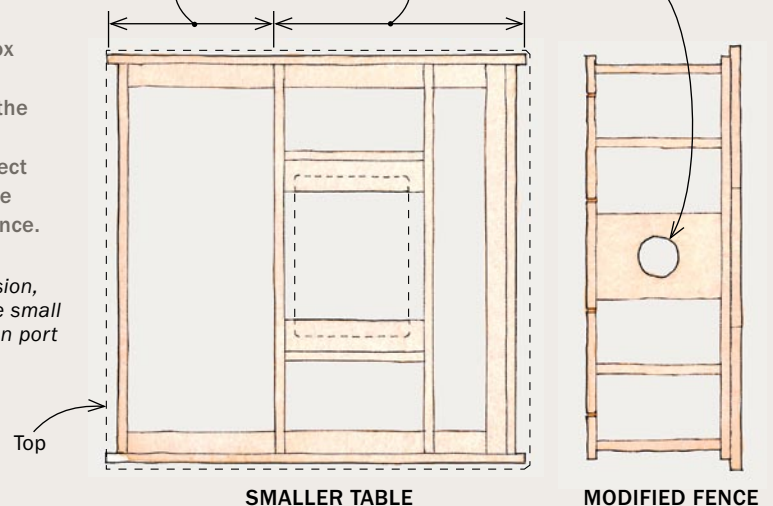
If your saw has 30-in. rails, there won't be enough room to fit a dust-collection box behind the opening for the router plate. Instead, collect dust from the top of the fence.

*For this version, don't rout the small dust-collection port in the table.

Shrink the area behind the plate so that the table fits the shorter rails.

Keep dimensions from the router plate forward the same as for the larger table.

Drill a hole in the dust-collection box cover for the shop-vacuum hose.





MAKE THE FRAME AND ATTACH THE TOP

Solid assembly. The flanges serve double duty here. Not only do you screw through them, but they also provide a good bearing surface for the top, which helps to keep it flat.

that (see p. 53). After both openings are routed, attach the frame to the top.

Make the fence and install the table

The fence is assembled just like the frame, with butt joints and screws. Before you screw it together, cut a bit opening in the front sub-fence and slots for the clamp bars in the rear one. The fence faces are screwed to the sub-fence with 1¼-in. drywall screws, six per face. The replaceable insert fits between the two faces and is screwed in place. To create suction at the bit opening, attach a cover over the center bay created by the ribs, which sits over the dust port. Finally, cut two dados in a square of plywood—for storing the wrenches—and screw it to the cover.

To ease installation, I bolted plywood shelves to the underside of the fence rails. Next, I drove four Allen-head screws up through the shelves—one for each corner of the table—and set the table in place. I then laid a 6-ft. level across the saw's table and the router table and adjusted the screws until they were level. I leveled the router plate in a similar way, resting its corners on the heads of drywall screws driven into plywood flanges at either end of the opening in the table. After attaching the plate to your router and dropping it in place, attach the dust-collection hoses, clamp the fence to the saw's rip fence, and you're ready to do great work and do it faster. □

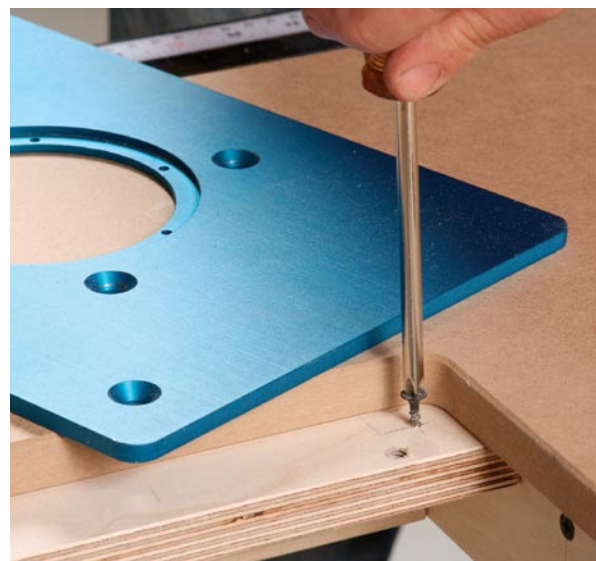
John White is a former shop manager at FWW.



Plywood shelves support the table. Use nuts and bolts to attach the plywood shelves to the fence rails (left). Lower the table into place (right). It rests on the plywood shelves and gravity holds it in place.



A screw in each corner fine-tunes the height. A long level lets you know when you've got it right. White filed a notch in the tip of an extra screw to cut threads in the plywood.

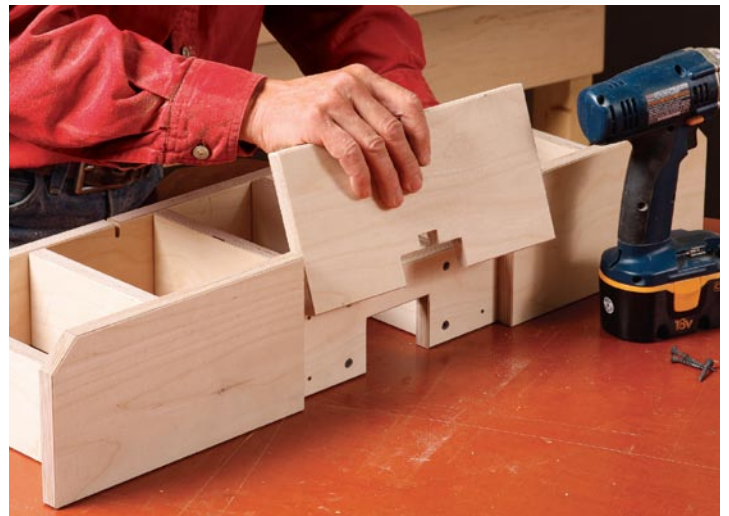


Same trick for the router plate. To level the router plate, White uses a drywall screw in each corner. The drywall screw will thread its own hole.

ASSEMBLE THE FENCE



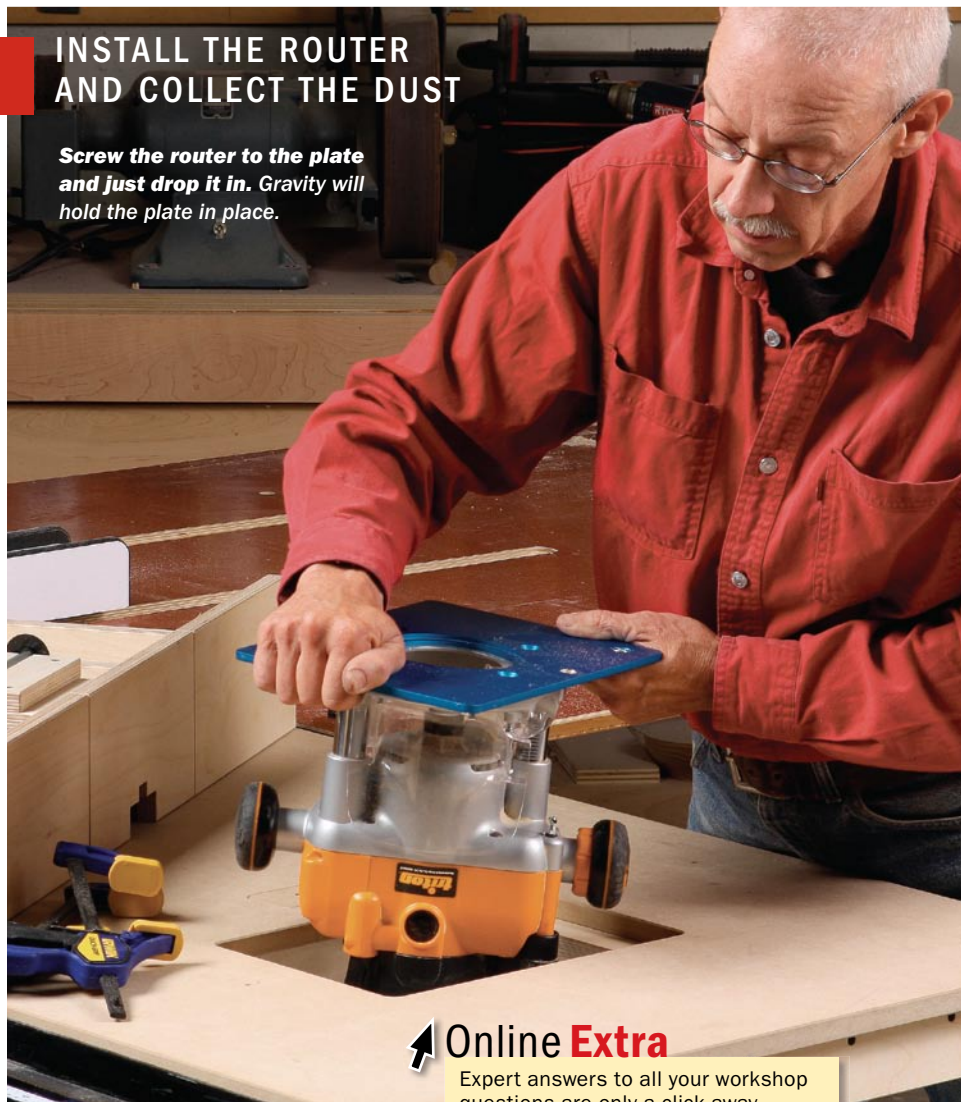
Ribs make the fence rigid. Clamp a plywood spacer next to the rib so that it remains vertical as you screw it in place.



Insert is replaceable. Four screws hold it in place from behind. Make one for each of your most common bits to eliminate tearout. The tall fences on both sides can be replaced, too.

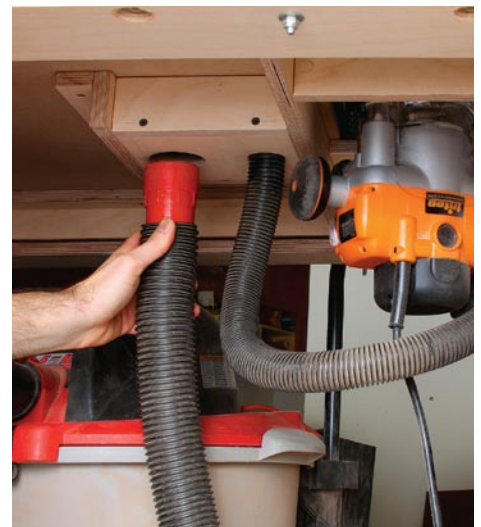
INSTALL THE ROUTER AND COLLECT THE DUST

Screw the router to the plate and just drop it in. Gravity will hold the plate in place.



Online Extra

Expert answers to all your workshop questions are only a click away. Ask shop guru John White at FineWoodworking.com/extras.



Hook up the dust collection. A shop vacuum is strong enough to collect dust from above the table and from the router at the same time, leaving very little behind.

DUST COLLECTION

