

Trim Routers

Trim routers aren't just for laminate anymore. They're great for all-around use in th shop.

When it comes to buying power tools, it's all too easy to think that bigger is better. Especially if you're adding to your existing tools or replacing an old one. But is bigger really better?

Not always. There's one tool that I use all the time. It isn't big and it's not flashy or loud. In fact, it's a tool most woodworkers wouldn't associate with woodworking at all.

The tool I'm talking about is a trim router, or laminate trimmer, like the one shown in the photo above.

In my shop, I spend a lot of time routing small roundovers, chamfers, and doing other small detail work on projects. So wielding a large, heavy router all the time doesn't make much sense.

As you can see in the margin



photo on page 2, a trim router shares features similar to a full-size router. But unlike a typical router that weighs in at 8 lbs. or so, a trim router tops out at about half that.

And since a trim router is smaller and weighs less, it's easy to hold and use with one hand. That's something I wouldn't try with my full-size router.

Worried about power? Don't be. Although most trim routers put out less than 1 hp., they still have more than enough power to handle basic chores. And the smaller motor runs quieter, so it's less annoying when you have to use it for extended periods. (I still wear my ear protection any time I'm routing.)

Price & Availability – Another nice thing about trim routers is their price. Many of the basic models run just over \$100.

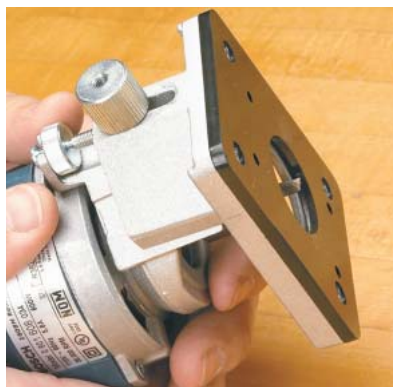
But before you head to the store to pick one up, you'll want to consider a few features that can make or break a trim router.

Height Adjustment – As with any router, you'll spend a fair amount of time adjusting the height of the bit. So it's a good idea to decide what's important — speed or accuracy.

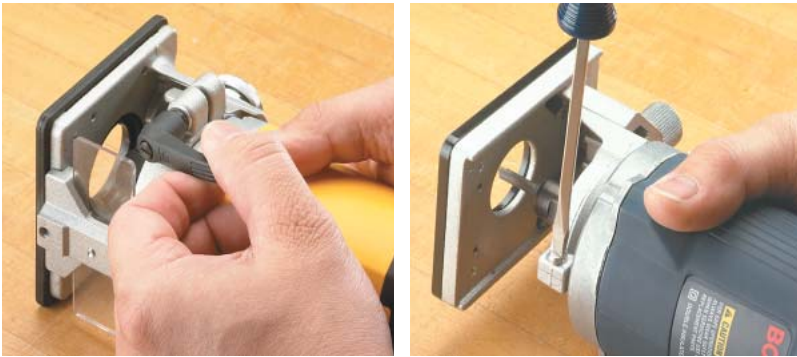
With trim routers, you're not likely to get both in the same package. In most trim routers, what you'll find is an accurate height adjustment that's controlled by a thumbscrew (see far left photo).

After loosening the lock knob, you turn a thumbscrew to raise or lower the motor housing. It's somewhat slow if you need to make a large change, but you can't beat the accuracy.

On the other hand, some trim routers feature a quick-release lever like the one shown in the near left photo. After releasing the lever, you simply slide the motor housing in or out to get the desired bit setting. It's



▲ **Height Adjustment.** You'll spend a lot of time adjusting the height of the bit. So you need to decide if you want the accuracy of a thumbscrew adjustment (left photo) or the speed of a quick-release lever (right photo).



▲ **Removing the Base.** Getting clear access to the bit or collet almost always requires removal of the base. A tool-free, quick-release lever minimizes the hassle, unlike a trim router that requires a screwdriver.

quick, but you do sacrifice the fine control you get with a thumbscrew.

Base Removal – Adjusting the height of the bit is one thing. But the ease with which you can change bits is also important. Especially if you swap router bits in and out fairly often.

It's easier to change the router bit if you remove the base. And you can't even change the bit in some trim routers unless the base is removed.

Since you're not worried about accuracy here, getting the base on and off quickly is best. And as you might expect, a quick-release lever, like the one shown in the left photo above, is the simplest way to do this.

If you don't change bits all that often, a base that requires a tool (like the screwdriver shown in the right photo above) works fine. But it can be a hassle at times.

Changing Bits – Once the base is off, changing a bit is pretty similar to a full-size router. Everything's just a little smaller.

Here again, there are a few different ways to change the bit. But typically they all revolve around two basic systems — a single wrench along with a spindle lock, or two matching wrenches.

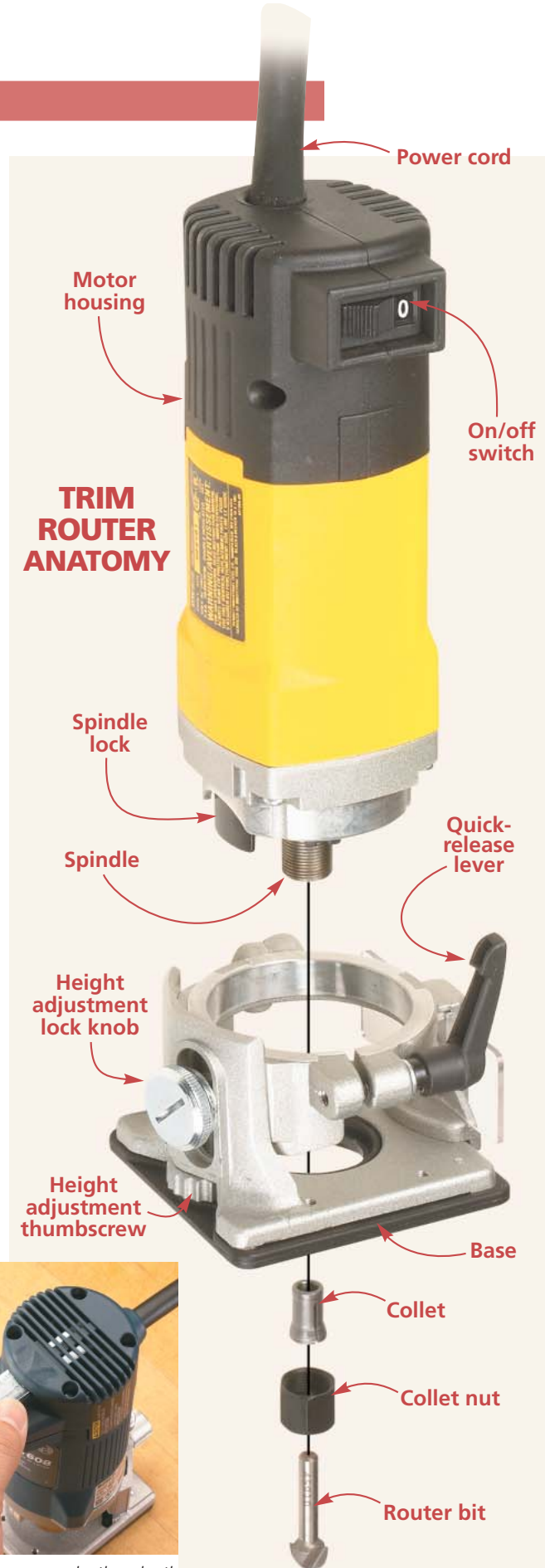
The nice thing about a spindle lock is there's only one wrench to keep track of, as you can see in the left photo below. But when it comes to changing the bit, the small size of a trim router is a disadvantage — there just isn't much to hold on to for leverage.

That's why I prefer a two-wrench system for changing bits. (You can see an example of this in the center photo below.) I find it easier to get the leverage I need with two wrenches.

A variation of the two-wrench system is shown in the photo at the lower right. You still use one of the wrenches on the collet, but the second wrench slips into the top of the trim router like a key and holds the shaft to prevent it from spinning.



▲ **Bit Changes.** Like some full-size routers, trim routers that use a single wrench with a spindle lock are common (left photo). But trim routers with dual wrenches can be easier to use, whether both wrenches are used at the collet (center photo) or one slips into the top of the router (right photo).



In the Shop

Once you have a trim router in your shop, you'll find yourself reaching for it for all sorts of routing tasks. As a matter of fact, I use mine with just about any 1/4"-dia. shank router bit that will fit through the opening in the base of my trim router.

Cuts – Round-over, V-groove, small cove, straight, and beading bits are all fair game. The only thing to keep in mind is that a trim router isn't designed for deep, heavy cuts. So it's best to make multiple passes when using some router bits.

Alternate Base – One unique thing about the *Makita* trim router shown in the left photo above is the tilting base that comes standard with the tool. It also has an attachment that serves as an edge guide, hand grip, and dust chute. Fitted with the tilting base, it allows you to use a straight bit to rout a chamfer as shown in the photo.

Edge Guide – Routing a profile along the edge of a workpiece or



▲ **Base Attachment.** The attachment shown on the *Makita* trim router works with the tilting base to rout chamfers with a straight bit.



▲ **Edge Guide.** Most trim routers come with an edge guide accessory that makes it easy to trim edging flush without using a flush trim bit.

project is easy with router bits that have bearings. But that doesn't mean you can't use other types of router bits in a trim router.

To use a bit without a bearing, you can set up your own straightedge, or use the edge guide accessory that comes with most trim routers. You can see one in the right photo above being used with a straight bit to trim

solid wood edging flush with a plywood shelf.

Hinge Mortising – Finally, one of the uses I find a trim router perfect for is routing mortises for hinges. Its small size and great visibility make the task quick, easy, and accurate.

To find out more about how I rout hinge mortises, check out the article on page 4. 🛠️

Trim Router Accessory Bases

Something you'll notice as you shop around for a trim router is the different bases that are available for each one (see photos). In most cases, these bases come packaged as a kit with the router.

Offset & Underscribe Bases – Two of the optional bases you'll run across come in handy if you do a lot of laminate work. The offset trimmer base lets you rout to within 3/4" of a wall or corner. It works great when you're doing in-place laminating for countertops, or need to scribe along the back edge for a perfect fit. And if you do a lot of laminate work where you need to form "seamless" butt joints, the underscribe trimmer base is the perfect accessory.

Tilting Base – For me, the tilting base, shown in the photo at far right, is the option I find most useful. It's designed to trim laminate flush right into a corner, wall, or vertical surface.



Offset Trimmer Base

Note: A hidden rubber belt drives the router bit

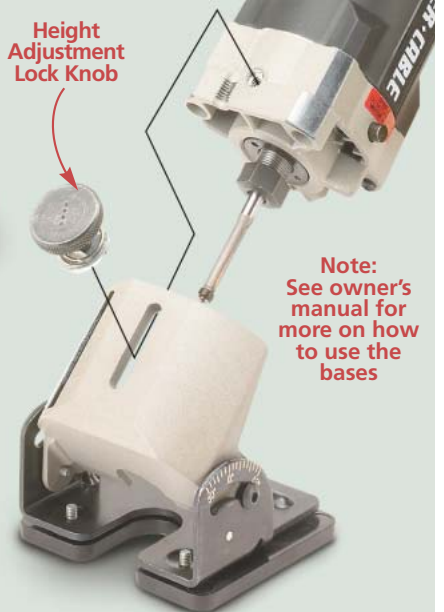


Underscribe Trimmer Base

But in my shop, the tilting base sees a different use. And that's to "create" new router bit profiles. When the base tilts, it changes the orientation of the bit relative to the workpiece. This means you can form different profiles with the same bit.

As I mentioned, most of these bases come packaged as a kit. But some manufacturers offer the bases individually. Unless you plan on going into the countertop fabrication business, stick with the basic trim router and just add the tilting base.

Height Adjustment Lock Knob



Note: See owner's manual for more on how to use the bases

▲ **Tilting Base.** A tilt base allows you to angle the bit, to either rout into a corner or turn an ordinary bit into a new profile.

Routing a Hinge Mortise

One of the things I use my trim router for most often is routing out the mortise for a hinge. Sure, you can use a full-size router, or even chisel it out by hand, but I find a trim router to be faster and more accurate.

Layout – Regardless of the tool you use to remove the waste, the first step is the same — lay out the location of the mortise, as shown in Step 1.

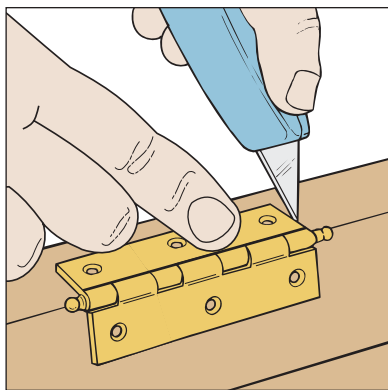
Route – Once that's complete, you're ready to remove the waste (Step 2). The key to this is the depth of cut. What you're looking for here is that the depth of the mortise provides the desired clearance between the

door and the cabinet. In most cases, the depth of each mortise will match the thickness of the hinge leaf.

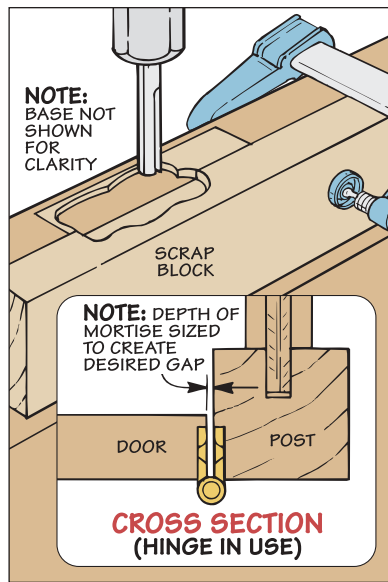
After routing away most of the waste you can clean up the edges with a chisel, as in Step 3. Then rout the mortise for the other half of the hinge and clean it up (Steps 4 and 5).



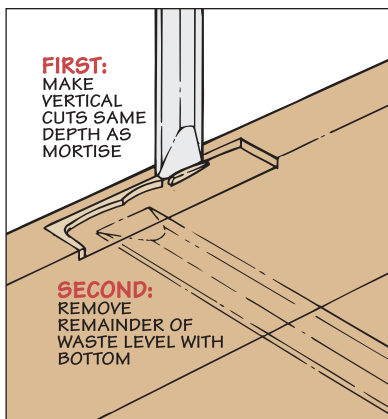
▲ **Mortising a Hinge.** The small size and excellent visibility of a trim router make it the perfect choice for routing the mortise for a hinge.



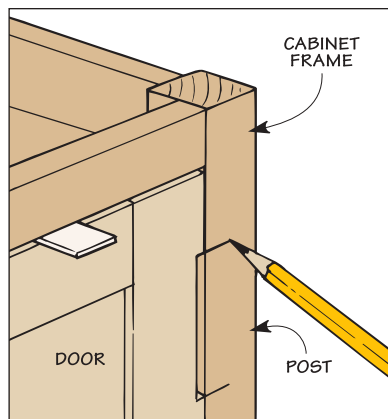
1 To locate and size the mortise, lay the hinge in place and then score around the outside edges with a sharp utility knife.



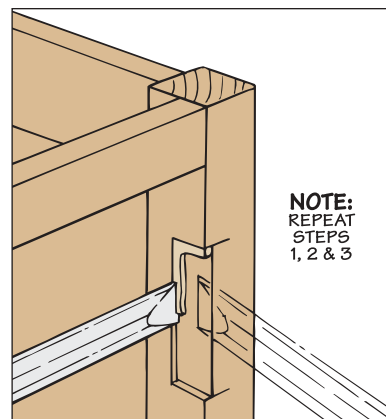
2 A support block helps prevent chipout along the edges of the mortise as you use a trim router to remove most of the waste.



3 All that's left to do on the door is clean up the mortise with a chisel. The score marks made earlier help guide the chisel.



4 To locate the mortise on the cabinet, wedge the door in position and then transfer the location from the door to the cabinet post.



5 Here again, a trim router makes quick work of removing most of the waste. Then you can simply clean up the mortise with a chisel.