

fast, foolproof

Router Setup Tips

Try these time-saving short cuts for accurate and hassle-free bit setting.



■ The most critical setup in most routing tasks is to accurately set the bit height. It sounds simple enough. But depending on the type of bit and what task you're doing (joinery or profiles), setting the bit can be tricky. Over the years, I've picked up a few short cuts that make this task faster, easier, and more accurate.

PROFILE BITS

One of the main jobs I call on my router to do is create a profile on

the edge of a workpiece. Depending on the profile, it can be a tedious, trial-and-error process to zero in on the correct height.

Chamfers. Chamfer bits are notorious for being tough to set to a precise height. That's because there really aren't any corners to use as a reference point. So getting an exact size usually involves a number of test cuts.

Once I get the bit set, I rout the profile in a small block and label it. So the next time I need to set the

bit, I can use the block as a guide, as shown in the photo above. Even if the chamfer size I need doesn't quite match the ones routed on the block, the block can still get me in the ballpark more quickly.

Roundover Bits. Another type of profile bit that can cause a headache is a roundover. The problem here is that if the bit is set too high, you end up with a slight ridge line that's tough to remove without affecting the profile.

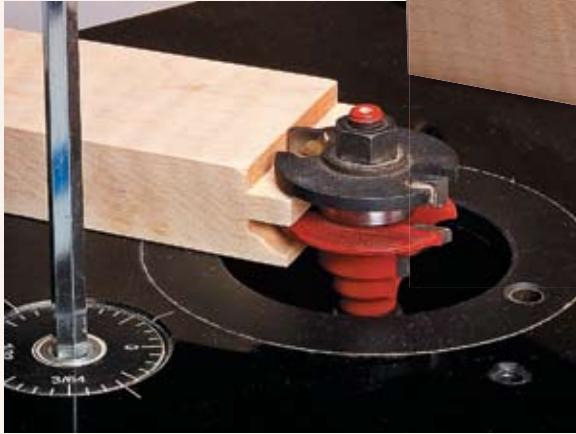
A quick and easy tip for setting the bit height is shown in the first photo at left. Raise the bit until the outside edge just touches a ruler held across the bit opening.

After making a test cut to confirm the setting, rout the profile in a set-up block (left margin) dedicated to all your roundover bits.

▼ **Roundover Guide.** This guide block ensures accurate setup for roundover bits.



◀ **Router Table.** Use a metal ruler to set the bit height (left) and the fence (right) when using profile bits in the router table.



◀ **Stile & Rail Bits.** Use the mating profiles of these set-up blocks to save time when setting the bit height in your router table.

In the Router Table. There's one other trick I use at the router table when I'm working with profile bits. Even though the bits have bearings, I like to use the fence to provide greater control of the workpiece. For this to work, the fence has to be flush with the bearing on the bit. The second photo at the bottom of page 2 shows how to do this quickly and easily with a straightedge.

JOINERY

Joinery is the other main task I use my router for. And setting bits for joinery has its own set of challenges like cutting interlocking joints and routing precise depths. Thankfully, there are some simple tips for getting top-notch cuts.

Specialized Bits. Some joinery bits like dovetail bits, drawer joint bits, or the stile and rail bits shown above require specific setups for an accurate fit. And this can involve a

lot of fussing around. If you don't use these bits often, spending some time getting the bit set right may not be a big deal. But if they were easy to set up, you may find yourself using them more often.

The way to simplify the process is to make a gauge block, as shown in the photos above. It's as simple as routing the profile in a piece of scrap after the bit is set correctly. The next time you need the bit, use the gauge block for your setup, make a test cut, and you're ready to go.

Straight Bits. Dados, grooves, slots, rabbets, mortises — it's safe to say straight bits are essential for cutting joinery. And while it's pretty common to use a square to set the height of a bit, it's not necessarily quick or precise.

Don't Measure. One of the easiest ways around this is to skip the measuring. Instead, use a workpiece or piece of hardware as a set-up guide. You can see one example of this in



the photo above. When routing a hinge mortise, instead of measuring the thickness of the hinge and then setting the bit to that mark, you can use a pair of hinges as a fast and simple set-up gauge.

Stepped Set-Up Gauge. Speaking of set-up gauges, you can see a shop-built version in the lower left photo. The advantage of a set-up gauge over a ruler is that the bit contacts the top of a screw for a positive setting. Another advantage is that you can use the gauge to step the bit up for multiple passes.

The gauge is made from a few small pieces of MDF. Each of the screws is set to a different height. Brass screws prevent chipping the carbide cutting edges.

By leaving your ruler in the drawer and using these tips, you can make setting the bit height on your router quicker and more accurate. And you'll be one big step closer to getting a perfect cut. 🛠️

▲ Hinge Mortises.

Rest the router on the hinge leaves and lower the bit until it touches the workpiece for foolproof results.



Set-Up Gauge. Brass screws let you dial in precise bit settings in seconds.