

Portable 10-in. Tablesaws

These are the first five saws with safety features so well designed that you just might use them

BY KEVIN IRETON

If you ask me, “portable tablesaw” is an oxymoron. A good tablesaw is big, heavy, and stable. Portability favors small, lightweight, and collapsible. Hence, the better the tablesaw, the less portable it is. I don’t have the luxury of a shop, though, so I need the best tablesaw that I can still move up and down my cellar steps, and in and out of my truck, without help. I also want to traverse a finished house, through doorways and up stairs, without damaging anything.

For 20 years, I’ve used an 8-in. Makita tablesaw (2708) that I drop into a fold-up Rousseau stand (www.rousseauco.com), which comes with its own stout fence. I have an outfeed table (also from Rousseau) that gives me 18 in. by 45 in. of solid support for whatever I’m ripping. Yes, I have to make three trips to set up this rig, but all the parts are light and maneuverable. I’ve built kitchen cabinets with this saw, and I’ve used it to cut everything but firewood. This is the standard against which I judged the tools in this review. While I’m not sure I’d trade any of these saws for my old Makita, their new safety features would make that a tough decision.

New UL standard means better guards

I’ve already lost one fingertip to tablesaw kickback, and I don’t intend to lose another. The five saws I tested are the first portable models on the market to meet the new UL standard for blade-guard systems (“Improved safety features,” facing page). With their riving knives, antikickback pawls, and plastic guards, all these tools are safer than any portable tablesaw I’ve ever used.

Given how easily these safety features install and how well they work, I think there’s even a chance some of them will be used on a job site. Lots of different people use a tablesaw set up on a site, people who never read or even see the manual, so the safety system should be intuitive. As mandated by the UL standard, none of the saws requires tools to raise or lower the riving knife, or to remove and install the guards and pawls. But certain differences make some saws’ safety features easier to use than others (“How to evaluate the safety setup,” facing page).

Powerful motors

The 15-amp motors in these saws provide plenty of power. They all did an adequate job of ripping a pressure-treated 4x4.

Collapsible stands

These saws are designed to be portable, even on the rough terrain of a job site. Their designs vary enough that some models are easier than others to navigate through doorways and up or down stairs.

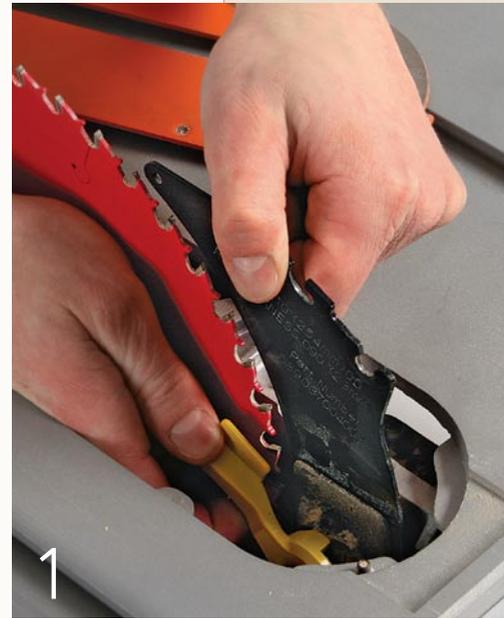


Improved safety features

To help reduce the number of tablesaw injuries related to kickback—when wood comes in contact with the teeth on the backside of the blade and is thrown forward—tool makers have teamed up with Underwriters Laboratories (UL) to create a new standard safety feature: riving knives.

The concept of a riving knife is the same as a splitter—keep wood from touching the back of the blade to prevent kickback—but the design is more functional (see “What’s the Difference?” p. 34). Adjustable enough to accommodate through-cuts (rips and crosscuts) as well as buried cuts (dadoes, rabbets), a riving knife rarely needs to be removed, which means the saw is safer during all cuts, not just some of them.

The UL standard requiring the addition of riving knives doesn’t apply to tools that were launched prior to 2008, so as long as manufacturers don’t make any noncosmetic changes to their tablesaws, they are allowed to continue selling their current models until the deadline in early 2014. But every tablesaw made after that date—whether a new release or design that has been in production for two decades—must have a riving knife to get the famous UL stamp.



HOW TO EVALUATE THE SAFETY SETUP

I asked five questions in evaluating the blade-guard systems:

- 1 How easily can I position the riving knife?
- 2 Can I see the blade clearly with the guards in place?
- 3 Does the guard lock up out of the way for measuring to the fence?
- 4 Can I remove and install the pawls and guards easily?
- 5 Is there a convenient place to store the pawls and guards when not in use?



The safety features on the DeWalt and Ridgid saws stood out in these areas, but the Bosch wasn't far behind. Given the new emphasis on safety, however, I was disappointed that none of these updated saws makes it easy to clamp a featherboard to the table to keep the stock firmly pressed to the fence and further reduce the chances of kickback. Twenty-five years ago, using a featherboard would have saved my fingertip.

Every tool reviewer has biases

I don't much care about power. Or rather, I don't care about the relative difference in power between these saws. All of them are powerful enough for my purposes. They all did an adequate job of ripping a pressure-treated 4x4—two of them, the Makita and the Ridgid, have the depth capacity to do it in a single pass—but that isn't something I need to do often.

I don't care about miter gauges, either; I do most of my crosscutting with a sliding miter saw. That said, I think a good miter gauge reflects well on a saw's overall quality, and the Ridgid has the best of the bunch.

I also don't care how well a portable tablesaw handles full sheets of plywood. I think it's safer and easier to lay plywood on a pair of sawhorses, cut it into manageable sizes with a circular saw, and then use the tablesaw for final cuts.

All the saws have 2-in. dust-collection ports and are loud enough to require hearing protection (the Ridgid is the loudest). All have nice paddle-style switches that are easy to operate. The switches on the Bosch and Makita were my favorites, but because the DeWalt and Ridgid saws are shorter, their switches were easier for me to hit with my knee, a useful feature if I ever get into trouble and want to



BOSCH 4100-09
www.boschtools.com
WEIGHT (with stand) 116 lb.
COST \$600 (\$680 with digital rip fence)

chance for flat tires. Nevertheless, the Bosch moved easily over rough terrain, as well as up and down stairs. However, the metal stand rides against the stair treads, so I would not roll this saw on a finished staircase. The gravity-rise stand is clever, is easy to operate, and works the smoothest of all the saws. But with the saw set up, I banged my shins on the lower crossbar, which extends well beyond the saw. The crossbar is an unfortunate trip hazard.

The model I tested came with the optional digital rip fence, which gives a readout of the distance between blade and fence. It's impressive in some ways—easy to recalibrate; can be set for 16ths, 32nds, 100ths, or millimeters; and seems very accurate—but it also gets in the way when extending the table. Worse, it can easily (and accidentally) be manipulated to give an inaccurate reading. At one point, I was looking at "32 $\frac{5}{16}$," which is a pretty neat trick on a saw with a 25-in. rip capacity. Given the additional cost (\$80), I wouldn't risk one of these on a job site with multiple users.

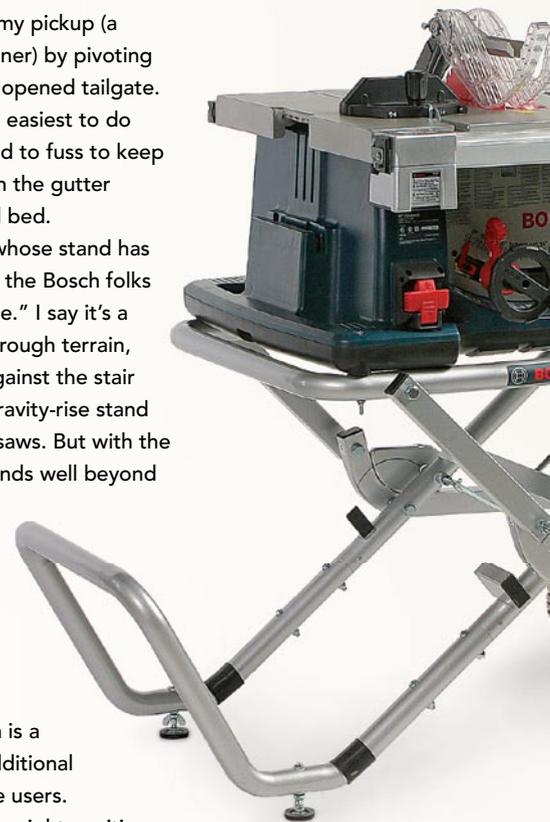
The riving knife is easy to position, and the guards lock in the upright position. When lowered, the Bosch guards provide the best visibility to the blade.

A BIG SAW THAT'S EASY TO SET UP

I tried lifting each saw into my pickup (a full-size Toyota with a bed liner) by pivoting the saw on the edge of the opened tailgate.

The Bosch was by far the easiest to do this with, though I still had to fuss to keep things from hanging up in the gutter between the tailgate and bed.

This is the only model whose stand has pneumatic wheels, which the Bosch folks say offer a "smoother ride." I say it's a



JET JBTS-10MJS
www.jettools.com
WEIGHT (with stand) 90 lb.
COST \$600

12 in., though, my reaction was, "Why bother?" It might be useful to a hobbyist woodworker, but on a job site most rip cuts will be a minimum of 8 ft., and many will be 16 ft. I wish the designers had skipped the outfeed support and put the extra money into the blade-guard setup. The lock knob on the riving knife is difficult to access and turn, and the wings on the knob are too short to provide effective leverage. Also, I don't think it's possible to adjust the riving knife without a second person—one below the saw with a socket wrench, the other above it with a straightedge. The side guards don't lock up out of the way, and visibility to the blade is poor. Finally, there isn't any onboard storage for the riving knife, blade guard, and antikick-back pawls. I'm doubtful they'll ever make it to a job site, let alone be used.

A DISAPPOINTMENT COMPARED TO THE REST

Perhaps if this had been the only model I tried, it would have impressed me, but lined up against the others, the Jet was a disappointment. The stand's crossbar hangs below the wheels and collects debris when rolled over rough ground. But worse than that, the same crossbar hangs up on stairs, making it hard to move the saw up or down and banging up the stairs in the process.

The Jet is the only saw that comes with an outfeed support. Since it extends only





Is there an issue with Bosch's motor?

I found six or eight complaints online about the motor on the Bosch saw. The number of complaints was not a lot compared to the positive comments, but it was more than I found about any other saw. Did this indicate a serious problem, or was it just a reflection of how many saws Bosch had sold?

I decided to visit a local repair shop. I told the owner I had heard rumors about the motors on the Bosch tablesaws burning out prematurely. He said, "They do," and invited me behind the counter into his workshop, where he had a Bosch tablesaw motor in pieces on his bench. "Cheap bearings," he said, and had me feel them for myself.

Not wanting to rely on a single source or limit my investigation to one part of the country, I called a repair shop in Albuquer-

que, N.M. The repairman there said he hadn't seen any problems with bad bearings on the Bosch. "The problem with the Bosch," he said, "is that sometimes the motor spins backward and you've got to replace the field."

Next, I called Brian Campbell, a Minnesota builder whose Bosch tablesaw had experienced both of these problems within three years. I had seen his post on "Breaktime," *Fine Homebuilding's* discussion forum (online at FineHomebuilding.com). He said the first repair, when the blade spun backward, was covered under warranty, but the second, when the bearings went, cost him "half the price of a new saw." Campbell sold the table-saw for the cost of the repair and bought a DeWalt.

Finally, I called Jason Feldner, Bosch's product manager for

the tablesaw. He said the problem with the field was due to a crossed wire and has been resolved. As for the bearing, he said the company now uses a different one.

I had no problems with the saw I tested, and I have no way of knowing how many saws were affected by these issues. In reporting on them here, I don't know if I'm justifiably warning consumers of a problem or worrying folks unnecessarily over problems that have been fixed. Based on my history with Jason and on Bosch's reputation as a company, I'm inclined to believe that the problems have been resolved and that I'm doing everyone a service by reporting that fact. While some affected saws may still be in circulation, he reports that the fixes were put in place by the end of 2007.



DEWALT DW744XRS

www.dewalt.com

WEIGHT (with stand) 96 lb.

COST \$630

All these saws come with plastic push sticks, but DeWalt's push stick stores on the back of the fence and could not be more convenient. The saw also has a rack-and-pinion fence, which I liked. You can still grab the fence and move it quickly toward or away from the blade, but turning a knurled knob gives you nice control for fine-tuning. Unfortunately, this saw is the only one I couldn't imagine how to outfit as a router table. Each of the other saws has a subtable that extends to the right for extra rip capacity. This opens up a space between the main table and the subtable where I could conceivably drop a router. The DeWalt gains the extra rip capacity with extended rails attached to the fence. These same rails, by the way, extend to the left when the fence is close to the blade, and if you're not careful to retract them, the saw will rest on those rails when you fold it for transport.

The guards on this saw lock upright for measuring to the blade and offer good visibility when in place. The riving knife locks with a knob rather than a lever, but the knob has three large wings that make it easy to turn.

THE SMALLEST SAW IS A GOOD CHOICE FOR REMODELERS

At just under 26 in., the DeWalt is the narrowest of the saws and the easiest to move through doorways. But it's too short for me to pivot on my tailgate, which means I have to lift the saw to get it into my truck. The only good news here is that this saw has quick-release clamps that free it easily from the stand (all the other saws are bolted). This saw is also the only one that doesn't rest on its wheels when set up, which makes it more stable but harder to move around.



shut off the saw while keeping both hands on the workpiece.

Four saws make the cut

With the exception of the Jet, which I found to be disappointing overall, there were things I liked and disliked about each of these models. The one you'd choose would depend on your particular needs (or biases).

If you already have a good shop-grade table saw but need a portable model for job-site use, get the DeWalt. It's the lightest saw and will take up the least room in your truck. If money is an issue, the Ridgid looks to be a great saw for the price. If you want a big saw that sets up easily, go for the Bosch. The real question is which saw would I buy if, God forbid, my old Makita were to die tomorrow? I'd probably get the Ridgid because it's the least expensive, then I'd buy a Rousseau stand and outfeed table with the money I saved. □

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THE ONLY MODEL WITH AN ELECTRIC BRAKE

I was able to load the Makita into my truck without too much trouble. But the crossbar on the stand banged into my legs while rolling, and the low handle meant that I had to lean way over when pulling the saw up a set of stairs.

At 4800 rpm, the Makita motor is the fastest, and it also has an electric brake that stops the blade quickly—a nice safety feature if, like me, you're sometimes tempted to reach for a cutoff sooner than you should.

This saw is the only one that requires a screwdriver to remove the throat plate. But the lever lock for the riving knife is on the outside, so you don't need to remove the throat plate to position the riving knife. The plastic side guards flip up out of the way for measuring, and when flipped down still allow good visibility to the blade. There is onboard storage for the guards and pawls, but it's just an open compartment. I could easily imagine them getting lost or damaged in transport.

I like that the blade's bevel angle adjusts with a wheel rather than swinging freely once you loosen the lock lever (the Jet and Ridgid also have this feature). On remodeling projects, I often have to fine-tune some weird angle, and wheel adjustment makes this easier.



MAKITA 2705X1
www.makita.com
WEIGHT (with stand) 130 lb.
COST \$670



A GREAT TOOL FOR THE PRICE

The Ridgid saw's stand has a pair of handles and is designed to be pushed like a hand truck. It's easy to move around, even up and down stairs. This stand is almost as smooth and easy to set up as Bosch's, but Ridgid positions its crossbar/kickstand off the floor, where it acts more like a safety barrier than a trip hazard. Where the other saws store their fences parallel to the blade, Ridgid turns the fence perpendicular so that it doesn't create a problem for narrow doorways.

I had some trouble getting this saw in and out of my truck, though. The tool has lots of things that hang up in the gutter between tailgate and bed, and the bolts holding the saw on the stand tore up the lip of the bed liner.

Like the DeWalt, this saw has a great blade-guard system. The riving-knife lever is bright yellow and is easy to locate under the throat plate. The guards offer good visibility and lock up nicely out of the way. They install and detach easily, and the onboard storage is a duplication of the riving knife.

The Ridgid saw has my favorite bevel adjustment. The lock is easy to access, above and out of the way of the other controls. There's a wheel you can turn for fine adjustments, or you can push in on the wheel and swing the blade quickly.

The fence has a gimmicky microadjust feature that doesn't work well. Tapping the fence left or right as necessary was easier. Also, if the subtable is extended and you slide the fence over toward the blade, the fence hits the main table. You have to lift the fence to get clearance, which is annoying. For safety reasons, Ridgid wants you to retract the subtable rather than slide the fence, but I have my doubts that carpenters want to do that.

RIDGID R4510
www.ridgid.com
WEIGHT (with stand) 100 lb.
COST \$500

