

Choose the right Home Shop Tablesaw

Know your needs, and you'll find a tablesaw that makes the cut



No matter which tablesaw you ultimately choose, the selection process involves a number of trade-offs and compromises. For example, you'll usually get the best cut quality with a contractor-style saw that has a cast-iron top. However, this heavy model strains your ability to easily move the saw. Choosing a portable jobsite tablesaw that's light in weight improves portability, but its ripping and crosscutting capacities won't match those of the contractor saws.

As you look more closely at today's saws, you'll need to separate their features into two categories: those you absolutely must have, and those you can live without.

Tablesaws for most home workshops fall into two main categories: the contractor-style saw and the portable saw. Let's take a look at the major points of difference between the two styles.

TABLETOPS The top of the saw has a simple function: It supports the lumber while you're working. If you'll use your table-

saw to break down sheet goods, you'll want the largest surface possible.

Contractor-style saws typically have a cast-iron main table that's ground flat and true at the factory. In fact, many woodworkers use the table as a reliable reference to check parts as they make them and to test the accuracy of assemblies. Extension "wings"—the side tables—are usually stamped steel, with cast-iron as an extra-cost upgrade. Some manufacturers offer cast-iron wings with a web pattern that reduces weight and cost, but it's easy to accidentally catch a finger on the wing's openings.

With portable tablesaws, you'll usually find an aluminum top, and also discover that it's significantly smaller than the contractor version. Extension wings are non-existent. Even with the smaller table size, you should expect it to be flat.

LEGS This is an easy point of comparison. Contractor saws have legs, and portable saws don't.

The legs of a contractor saw are typically heavy-gauge sheet metal fastened

to the saw's body with bolts. To improve portability, you can add a mobile base that allows it to glide around your shop for storage between uses but also to stand still when you want to make a cut.

Some portable saws have optional mobile stands made to fit particular models, but you'll also find generic stands that adapt to many different portable saws. If you need to navigate stairs or rough construction sites, look for a fold-up stand with big pneumatic wheels.

POWER Portable saws use a universal motor—the kind used in drills and routers. Contractor saws feature an induction motor—the large type common on stationary power tools. It's mostly a matter of portability because a universal motor is physically smaller and significantly lighter than an induction motor of equal power. However, universal motors are noisier than induction motors.

The blade on a portable saw attaches directly to the motor shaft. The lower RPM of an induction motor requires a pulley and belt system to transfer the

Contractor-style vs. portable vs. cabinet-style

In this article, we focused on the differences between contractor-style and portable tablesaws. That's because those are types that you'll see in the vast majority of home shops. But there's one more main category of tablesaw, and that's a cabinet saw. This type is an industrial-grade machine that's capable of producing results of exceptional quality with an absolute minimum of maintenance.

A cabinet saw also carries an industrial-sized price tag, starting at about \$1,000 and quickly running to twice that amount and more. The key features of a cabinet saw: The motor mounts to the cabinet, not the underside of the table, simplifying alignment procedures; massive amounts of cast iron dampen vibration; and you can choose multi-horsepower motors (typically 220 volt).

power to the blade arbor. Although this adds some complexity and weight, the setup dampens vibration.

Induction motors on contractor saws typically have a long lifespan, but their easy installation makes replacement simple if needed. Universal motors typically don't last as long, replacements aren't as easily available, and they aren't cheap. Especially with a low-end portable saw, a burned-out motor could mean replacement of the entire saw.

RIP FENCE AND MITER GAUGE

Buy a portable saw, and you'll usually find that the factory-supplied miter gauge and rip fence are the ones that you'll use forever. Make sure that they are sturdy, easy to adjust, and will meet your needs because you may not be able to replace them with after-market upgrades.

There are many suppliers of fences and miter gauges for contractor's saws, and you can buy one with a quality rip fence or move up to a better fence later.

While we're on the subject of ripping (cutting with the grain) and crosscuts (slicing perpendicular to the grain), check the capacities of the saws you're considering. Not surprisingly, portable saws usually offer smaller capacities, although you may find that it's enough to meet your needs.

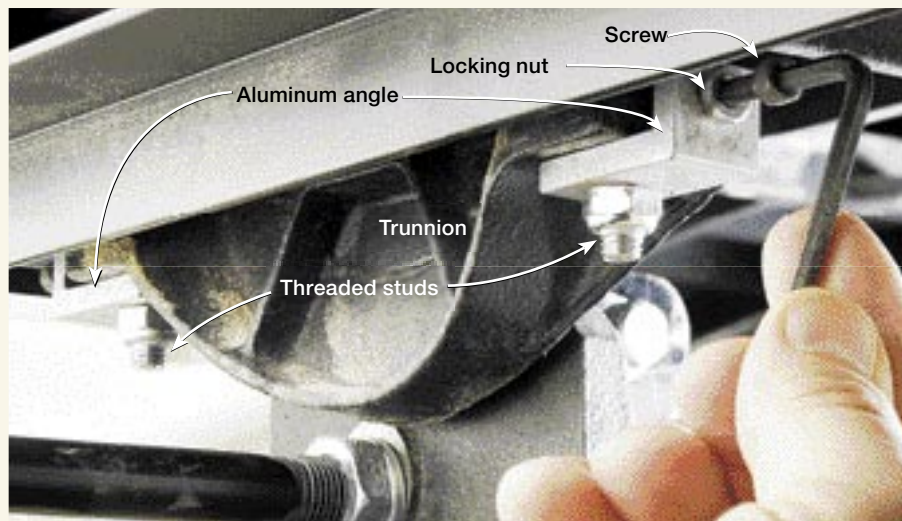
TUNE UP YOUR SAW The ability of your saw to cut accurately depends as much upon you as the factory. Go through the setup in the owner's manual to check all of the

PALS: A tablesaw owner's best friend

One of the most difficult adjustments to make on almost any contractor-style saw is aligning the blade parallel to the miter slot. The task involves lying under the saw and tapping the trunnions into alignment with a mallet—not a very fine adjustment. The easy-to-install Precision Alignment and Locking System (PALS) from In-Line Industries eliminates much of the woe.

PALS consists of a pair of threaded studs and aluminum angle that replace

your contractor-style saw's rear trunnion bolts. By turning a hexhead wrench in the angle-mounted socket-head cap screws, you can gently nudge the trunnion assembly into perfect alignment. Then, tighten the locking nut against the aluminum angle to help keep the trunnions aligned. PALS costs \$20. For more info, call or click: 800/533-6709 or in-lineindustries.com.



critical adjustments: Square the blade to the table, and make sure the blade and rip fence are parallel to the miter gauge slot. Stepping up to a premium blade also will boost quality. 🌲

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Contractor-style vs. portable: the differences that matter

	CONSTRUCTION	POWER TRAIN	RIPPING/ FENCE SYSTEM	CROSSCUTTING/ MITER GAUGE	PORTABILITY
CONTRACTOR- STYLE	Cast-iron main table with iron or steel extension wings. Typical table size including wings: 40×27" (L×W). Stable leg stand.	Induction motor; belt-driven blade arbor (with pulleys on motor and blade arbor).	30–36" capacity; front-locking T-square-style fence (typical) with permanent rails.	Cast-iron miter-gauge head. T-slot miter bar. Area in front of blade allows for crosscutting pieces up to 13" wide with miter-gauge head still on table.	200–400 lbs with no built-in mobility on most models. Requires a rather large footprint (13–14 sq. ft.) due to 6' length of fence rails.
PORTABLE	Cast-aluminum table with no extension wings. Typical table size: 29×20". Less-sturdy leg stand than contractor-style saw.	Universal motor; direct-drive arbor (blade arbor connects to motor shaft by gears).	24–25" rip capacity. Rails extend to accommodate maximum rips. Fence locks at front and rear. Scales can be confusing.	Plastic miter-gauge head. Narrow area between front of table and front of blade limits crosscuts to workpieces 5–8" wide with miter gauge still on table.	55–125 lbs with collapsible wheel stand (typical). Stored on end, requires 4–6 sq. ft. of floor space.
WHY IT MATTERS	The large surface of a contractor-style saw provides more workpiece support, especially helpful for cutting sheet goods.	Little difference in cutting power between the two motor types. Induction motors run cooler; belt drive reduces arbor play, improving cut quality.	Contractor-style saw fences allow wider rips. Portable-saw fence rails retract to take up less room in the shop.	If you frequently crosscut pieces wider than about 6", you'll be frustrated with a portable saw.	If space is at a premium, or you take your woodworking on the road, you can't beat a portable saw.