

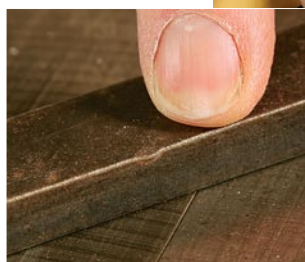
## Miter-gauge basics

HOW TO GET THE MOST FROM THIS STANDARD TABLESAW ACCESSORY

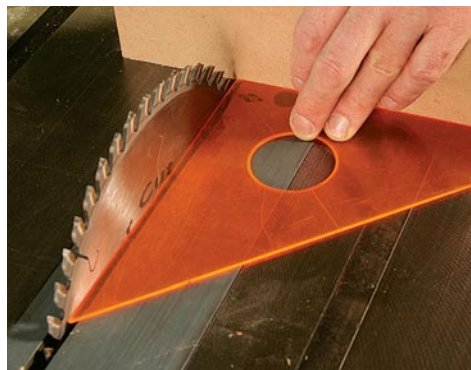
BY STEVE LATTA

**Setup** Don't assume the stock miter gauge is ready to use as is. It needs some help.

**Check the sliding action first.** If there's too much side-to-side play,peen the bar to dimple a corner and widen it slightly.



**Attach an auxiliary fence.** This is a must because it supports longer pieces and reduces tearout. Latta uses 3/4-in. thick, 3-in.-wide MDF.



**Set the gauge for a square cut.** If the blade and slot are parallel, you can use a known 90° reference to orient the gauge to the blade.



**Check the results.** After setting the gauge to 90°, make a test cut. The cut surface should be square to the edge you held against the fence.



**N**ot long after you set up your first table saw, you'll find yourself reaching for one of woodworking's most common and useful accessories—the miter gauge.

Standard equipment with every table saw, a miter gauge is the tool many beginners use to make their first crosscuts.

With a miter gauge, you can accurately cut workpieces to length with square ends and make a variety of angled cuts, including those for mitered corners. As you progress in your woodworking, you'll probably add a crosscut sled to your tool kit (see Fundamentals: "Build a simple crosscut sled for the table saw," *FWW* #188), but you won't outgrow the miter gauge.

### Setting up the gauge

The miter gauge consists of a bar and an adjustable head with a knob to lock the adjustment. The bar fits in the slots in the saw table that run parallel to the blade. Look for a sturdy aluminum headstock and an unobtrusive locking knob with a secure and comfortable grip.

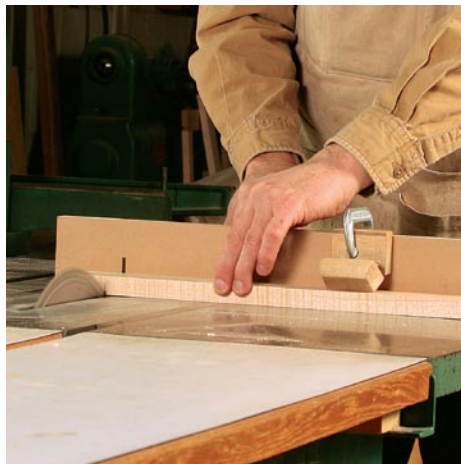
Attaching an auxiliary fence will help brace the stock against the blade's tendency to push

## Stop blocks

The stop block is an age-old way to cut multiple workpieces to the same length without measuring again and again.



**A hinged block is nice.** It lets you trim both ends of a board without changing the setting.



**Using the hinge.** With the block flipped up, trim one end square (above). Then butt the square end against the block and cut to length (right). Cutting multiples will be quick and accurate.

back toward the user and cause it to pivot on the corner of the gauge. The fence should be tall enough to retain its strength when the blade passes through it. Extending the fence 1½ in. or so past the blade will help you safely push short cutoffs beyond the blade.

The preset angle stops on most miter gauges are rarely accurate. To set for 90°, put the gauge in the slot upside down and, with the lock knob loosened, slide the head up flat against the rip fence rail and tighten the knob. If the saw is properly set up, that should do it. Check it once with a drafting triangle to make sure it is accurate.

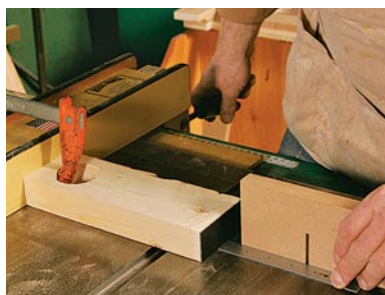
### Making a basic crosscut

To make a 90° crosscut, simply hold the stock against the miter-gauge fence and push the gauge through the cut. To avoid pinning the stock to the table and to keep your hands a safe distance from the blade, apply downward pressure only over the gauge's steel bar. After completing the cut, be sure to move the stock off the gauge and away from the blade before sliding the miter gauge back. This avoids the chance that the blade will catch, and throw, the workpiece during the return stroke.

You can work to a simple pencil mark, but a stop block makes it easy to crosscut multiple pieces to the same length. My block is hinged and designed to work with my 3-in.-tall auxiliary fence. A small piece of ¼-in. plywood fastened at the top of the block keeps it about ⅛ in. off



**For longer work, a longer stop block.** A hooked block, held in place with a pair of clamps, works for even the longest workpieces.



**For short cutoffs, a standoff fence.** If you use the rip fence as a stop, short pieces can get trapped between the fence and blade. So butt the workpiece against a standoff stop, clamped to the rip fence well in front of the blade.



## Two gauges can be better than one



**Two gauges run side by side.** One sits in each slot; together they support a long fence.



**Cut accurate dados.** The twin-gauge setup works well for making cuts across the middle of a long workpiece. Used miter gauges are inexpensive and easy to find at flea markets or online.

the saw table. This gap prevents dust buildup, which can hinder accuracy. The plywood also keeps the stop perpendicular to the table. If a stop block is clamped at an angle, there will be discrepancies in length between pieces of different thickness. When crosscutting, hold the workpiece tight against the fence and stop block.

### A second gauge adds versatility

I always have one or two extra miter gauges around the shop. They are handy for dedicating to a specific task or for using in tandem to support a long fence for crosscutting longer workpieces. A crosscut sled is better, but this arrangement is a good substitute. A twin-gauge setup also supports an L-shaped fence for making specialized cuts such as dentil molding, finger joints, and knuckle joints.

### A tip for angled cuts

When setting up for an angled cut, it's important to set the gauge so that the leading end of its fence points toward the blade. If the trailing end of the fence is closest, the force of the cut tends to pull the stock into the body of the blade. This leads to burn and tearout when the blade exits.

And if a stop block were used, the angle would tend to pull the stock away from the block. Also, the auxiliary fence should stop at the blade so the scrap from the cut does not get pushed onto the back of the blade. □



**Add an L-shaped fence for small work.** The fence helps prevent tearout in small work like this dentil molding. The sawkerf in the fence also helps locate cuts in the workpiece. To make the fence, screw a 2-in.-wide strip of ½-in. MDF to the bottom edge of a ¾-in. piece.

## Make precise miters



**Setting up an angled cut.** Use a pair of drafting triangles to set the gauge for a 45° cut. Also be sure the triangle is against the body of the blade and not a tooth, and set the gauge so the leading end of its fence points toward the blade.

