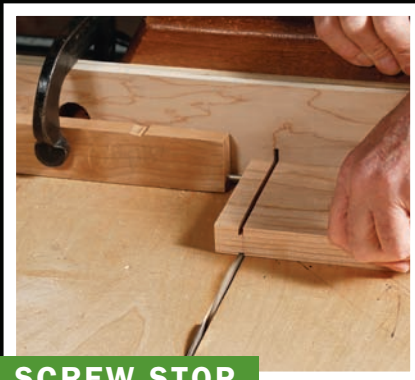


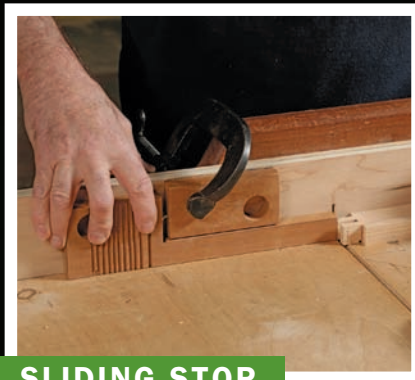
3 Handy Stop Blocks



FLIP STOP



SCREW STOP



SLIDING STOP

Increase the precision of crosscuts and tablesawn joinery

BY BOB VAN DYKE

We've all heard the old adage "Measure twice, cut once," but when it comes to cutting parts to length on the tablesaw, it's better to measure once, then use a stop block. Stops ensure that identical parts end up at identical lengths, and that corresponding joinery ends up in the right spots. Instead of measuring individual parts, you measure once to locate the stop block and then use the block as a registration point when cutting the parts to size.

I use three stops pretty much every day at the tablesaw. The one that gets the heaviest use is a flip stop made from two blocks of wood and a quality butt hinge. It's perfect for cutting multiple parts to final length. For tenons and notches, I use an adjustable

stop made from a block of wood with a screw in the end. It's great because you can turn the screw to make fine adjustments to the stop. The third stop, which I picked up from my friend, *FWW* contributing editor Steve Latta, is a two-part stop. It has a sliding arm that can be pulled out of the way before you make the cut. It's ideal for cutting anything less than 3 in. long. I'll show you how to set up and use these blocks. They're so simple to make and use, you'll find yourself reaching for them all the time, and you'll see an improvement in the accuracy of your work as a result.

Bob Van Dyke, director of the Connecticut Valley School of Woodworking, will be a featured presenter at Fine Woodworking Live 2017 this April.



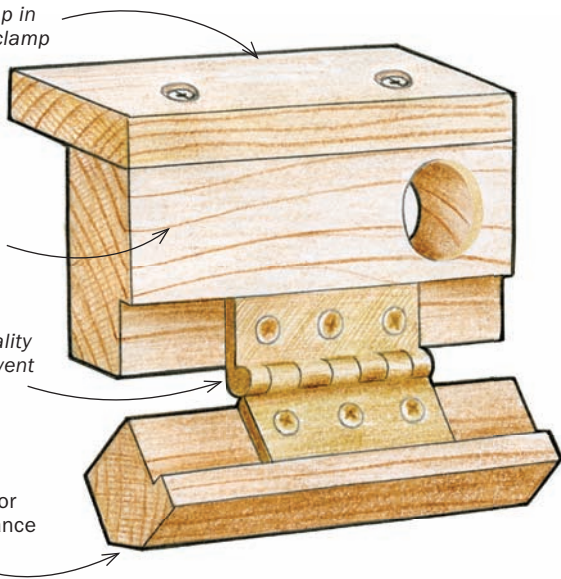
Flip stop is the perfect crosscut companion

Lip holds stop in place while clamp is tightened.

Stop body

Use high-quality hinge to prevent slop.

Flip section, chamfered for swing clearance



Measure from the kerf. For this to work, the kerf must be zero-clearance. To set the length of cut, Van Dyke props up the rule so that it's high enough to butt against the stop's swinging block.

My favorite stop is the flip stop, which I first saw years ago in a *FWW* article by Tage Frid. It works so well because you can clamp it to a sled's fence or to a miter gauge and both square the first end and cut the part to length without the stop getting in the way. First you set the stop to cut the part to length. Then simply slide the part under the stop and make the first squaring cut. Pull the part out, let the stop flip down, and then put the square end against the stop to cut it to length.

There are two advantages to the flip stop that make it way better than a simple block of wood clamped to the fence. First, because the stop swings above the surface, sawdust won't build up between it and the workpiece. Also, because the first cut is made with the workpiece slid under the flip section, it is impossible to cut the part too short. With a block clamped to the fence, you are forced to square the first end holding the workpiece on the opposite side of the sled, and then slide the squared end down to the stop. Trust me, with that technique it's easy to cut the part too short when squaring the first end.

I use the flip stop every day in my shop, and I often use two at once so that I can cut more than one part to length without moving the stop.



Go under the stop to square one end. As long as the workpiece is even a hair under the stop, you know that you're not cutting it too short.



Drop the stop. Set the freshly cut square end against the swinging block, and cut the part to length. For a second part the same length, slide the offcut down to the stop and cut again.

LONG PARTS NEED A LONG FENCE

Some furniture parts, such as aprons or legs, can be quite long, and the everyday fence on your sled might be too short to clamp on a stop. The solution? Screw a longer fence to the sled so that you can still use a flip stop.



TWO STOPS ARE BETTER THAN ONE

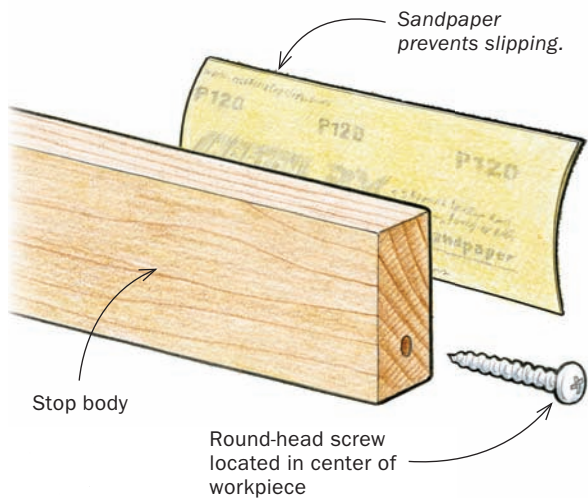
When you need to make multiples of more than one part—such as the rails and stiles for a set of cabinet doors—you'll get through the cuts more quickly and accurately if you use two stops instead of moving one stop. Use one for the longer part, and another for the shorter one.



Go under to get around. Because the flip section of the stop swings up and out of the way, you can slide long workpieces under it to make use of a second stop. This allows you to cut multiple parts to length without having to move a stop.



Pinpoint accuracy with an adjustable stop



Get in the ballpark. After aligning a layout line on the workpiece with the sled's zero-clearance kerf, Van Dyke clamps the stop to the fence. The screw's head is against the end of the workpiece.

You can make any stop block micro-adjustable simply by driving a screw into the end of the block. The screw adds amazing precision when cutting joinery like tenon shoulders. Use a round-head screw so that there is a single point of contact, even if the screw isn't driven in straight. It should be about $\frac{3}{8}$ in. above the block's bottom edge, creating a space for sawdust. Without the screw, sawdust tends to get trapped between the stop and the workpiece. And because you can drive the screw farther in and back it out, you can easily dial in the stop without unclamping it from the fence.

The exact location of the screw is usually not important, but I try to install it so that the crown of the head is near the center of the workpiece's thickness. Also, I attach some sandpaper to the back of the stop to prevent it from slipping when clamping it to the fence. And the best way to adjust the screw is with a small ratcheting driver equipped with a screw bit.

This is a tremendously versatile and accurate stop. Through the years, I've accumulated a box of them, and I think you will, too.



Adjust and cut. Make a test cut to check the stop's placement, then turn the screw in or out as needed to bring the workpiece's layout line in perfect alignment with the blade (left). Set the part against the screw and make the cut. Here, Van Dyke is cutting a tenon shoulder (right).

DOUBLE UP FOR NOTCHES

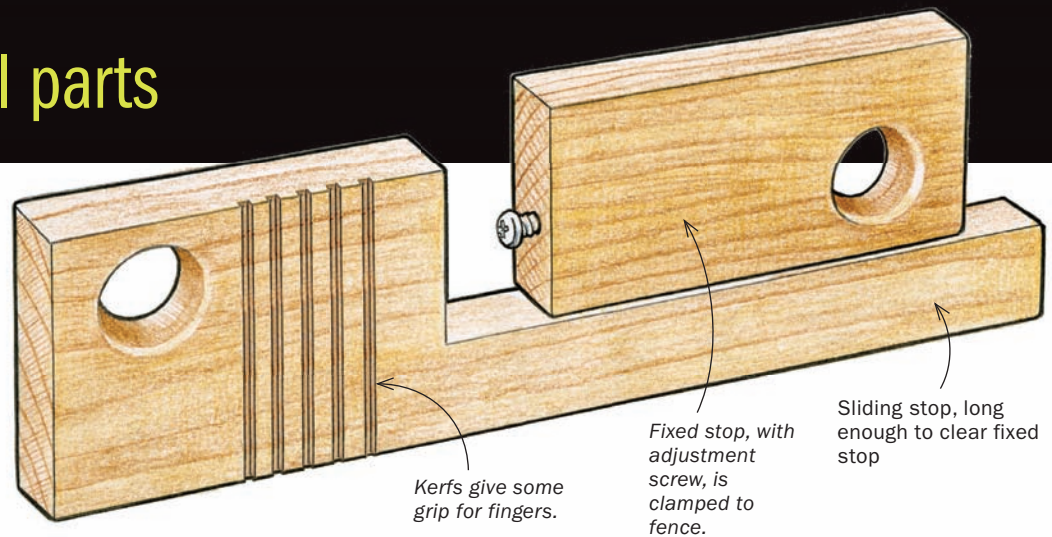
Setting stops precisely to cut the two ends of a notch can be tough, but the small adjustments afforded by the screw make the job much easier.



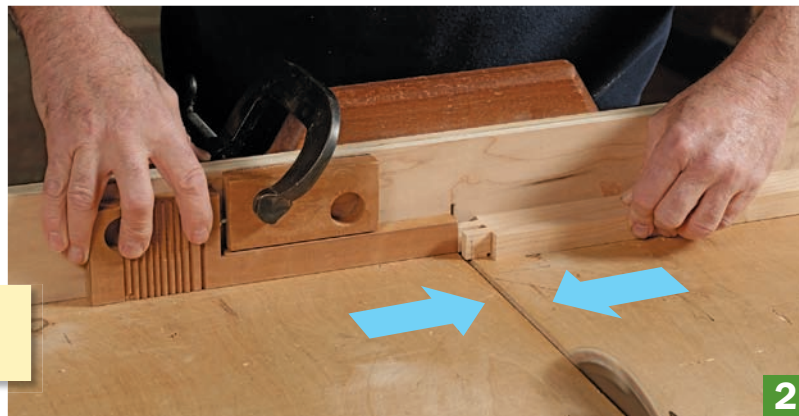
A stop for small parts

Use this sliding stop to cut parts that are too short to cut safely with any standard stop. Very short pieces can't be held safely between the stop and blade, but if they can't be held securely, you run the risk of kickback. This stop overcomes that problem because it slides out of the way after it locates and registers the workpiece in the correct location for the cut. It's perfect for trimming a small amount from a workpiece, like when shortening a tenon, where the offcut would get caught between the blade and a standard stop.

There are two parts to this stop. The fixed stop, which is a variation on the adjustable screw stop, is clamped to the sled's fence with the screw on the back end. The sliding stop is shaped like an L. The long leg slides under the fixed stop. It extends out past the stop, toward the blade. The short leg stands up and hits the screw head.



Using a sliding stop. Start by clamping the fixed stop to the fence. Place a rule or other removable spacer between the fixed stop and sliding stop to create a space that lets you move the sliding stop in and out smoothly (1). The screw on the block allows fine adjustments. To make a cut, bring the sliding stop against the fixed stop and push the workpiece against it (2). Then pull back the sliding stop holding the workpiece in place with the opposite hand (3). Because the offcut isn't trapped between the blade and stop, it won't get thrown by the blade during the cut (4).



Online Extra

To watch Van Dyke use stop blocks and explain why you should, too, go to FineWoodworking.com/260.