



Ripping on the tablesaw

HOW TO BE ACCURATE AND STAY SAFE

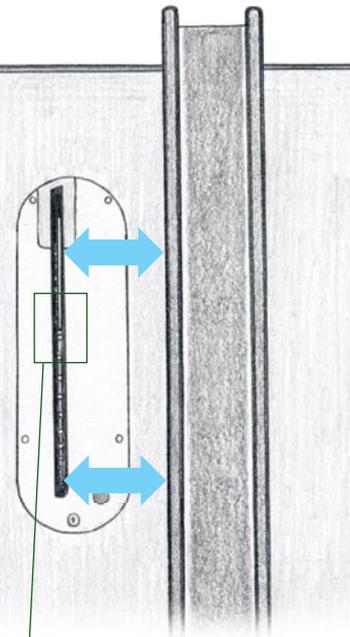
BY PAUL ANTHONY



IS YOUR SAW READY?

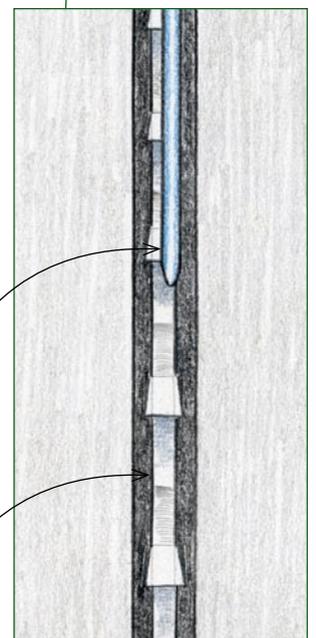
SET THE FENCE

Measure from the blade to the fence at both the front and back of the blade to ensure the blade and fence are parallel. A fence that toes in toward the blade can cause rough cuts, burning, or even violent kickback.



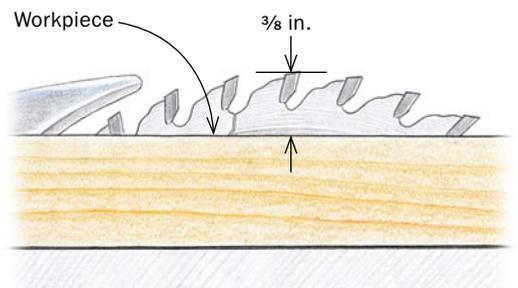
ALIGN THE SPLITTER

The blade and splitter should be flush on the side that faces the fence. Raise the blade to full height and use a straightedge to align them.



ADJUST THE BLADE HEIGHT

Set the blade to about $\frac{3}{8}$ in. above the surface of the workpiece.



The tablesaw is a wonderful tool for cutting parts to size, and ripping is its most common task. “Ripping” means sawing wood parallel to its grain—usually when cutting boards to narrower widths. You can do the job with a bandsaw or a portable circular saw, but a tablesaw is much more efficient. It is powerful, and the rip fence allows you to cut identical multiples. The large surface also makes handling stock of all sizes much easier.

This article will tell you how to safely and accurately use the tablesaw to rip solid lumber as well as sheet stock.

To do the work safely, you need to follow the proper steps and use the

right accessories, including—most importantly—a splitter. A riving knife is a more sophisticated splitter, and works even better.

Prep the saw

Most tablesaw accidents result from violent kickback during ripping, but a properly aligned splitter will prevent kickback by keeping the workpiece from contacting the rising rear teeth of the blade and being thrown back at you. Also, when possible, use a blade guard to prevent hand-to-blade contact and keep sawdust out of your face.

Safety and quality of cut also depend greatly on a straight fence that’s set parallel to the blade. Even a premium

Crooked edge spells danger

fence goes out of alignment after a while, so make sure to check it for parallel occasionally by measuring from the blade to the locked fence at both the front and the rear of the blade. Some woodworkers cock the outfeed end of the fence away from the blade by $\frac{1}{32}$ in. or so, which is fine.

Finally, an outfeed table is an absolute necessity, even when ripping short pieces. Without one, your work just falls to the floor, possibly damaging edges and corners. Outfeed support is critical when ripping long stock, which may otherwise start to tip off the saw table before the cut is complete, forcing you to bear down on the trailing end of the board right at the spinning blade.

You might also want to set up infeed support, especially for long, heavy boards or sheet goods.

Prep the stock

To rip safely, the edge that contacts the rip fence must be straight, and the face that bears against the table should be flat. That way, the board doesn't pinch against the blade or rock as you're feeding it.

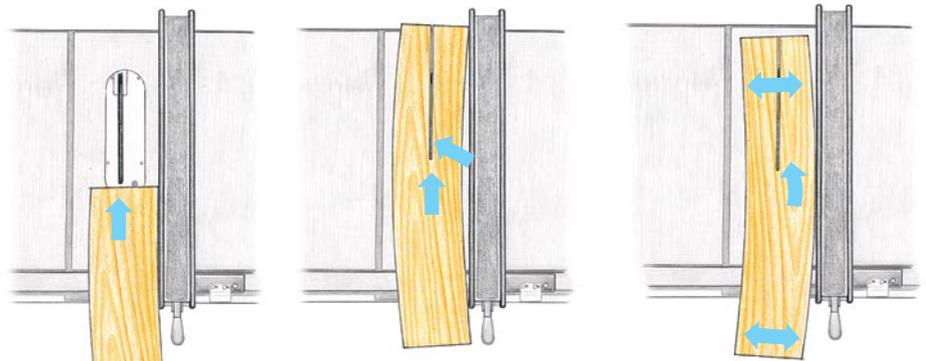
So the first step is to create a straight edge. If the edge is already reasonably straight, the quickest approach is to run it across the jointer. If the edge is severely crooked or is a waney, "live" edge, you'll need to saw it.

You can trim the edge straight on the tablesaw by temporarily tacking a straightedge guide board to the workpiece and running that edge against the fence. Alternatively, strike a cut line on the board and saw to it using a bandsaw, which poses no danger of kickback. After bandsawing, joint the edge straight.

Ideally, your stock should be jointed and planed to final thickness before ripping. In the process, you create the flat face for safe feeding. But this isn't always possible. For example, a board that's too wide for your jointer may have to be ripped into narrower widths first.

Let it rip

With one edge of the board jointed straight (and a push stick at hand) you're ready to make the cut. The exact way you



Running a concave edge against the fence can cause the board to push against the blade, inviting kickback.

A convex edge is no better; it allows a board to rock, also making kickback more likely.

TWO GOOD SOLUTIONS



Mild curve? Joint it. With relatively straight stock, a pass or two over the jointer should yield an edge straight enough to run against the tablesaw fence.



Serious curve? Saw it. Tack a straightedge guide board to the workpiece (above left). The guide runs against the fence so the saw can make a straight cut (below left). Anthony keeps several lengths of $\frac{3}{4}$ -in. plywood on hand for this. He puts the nails into a waste area of the board.



A dance with 3 steps

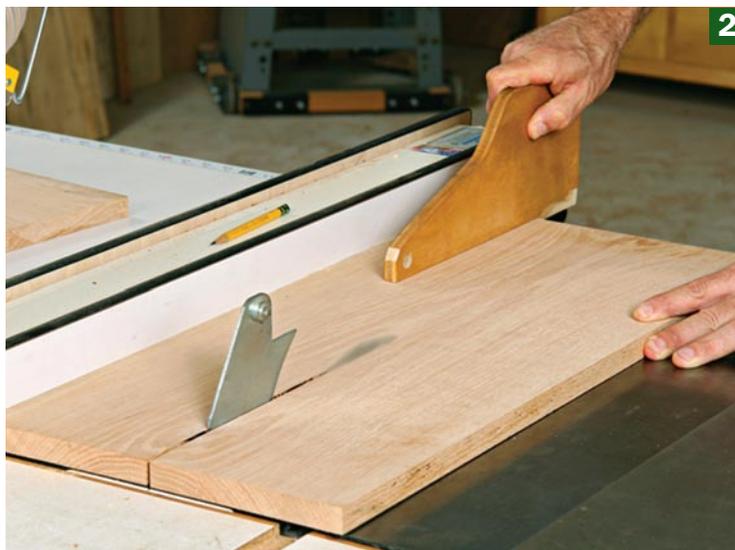
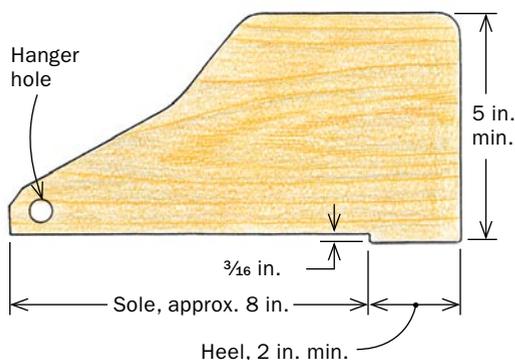
Take a balanced stance. Stand slightly to the left of the workpiece, facing the fence with your legs roughly parallel to the blade. The idea is to remain solidly grounded and well balanced throughout the cutting process.



1 Start the cut. Push the stock with your right hand on the board's trailing end. Use your left hand to press the board downward and against the fence at the same time. If the leading edge isn't on the table, the blade can slap it down ferociously.

SHOPMADE PUSH STICK

A shoe-style push stick like this offers the best control. The long sole holds the workpiece down and also helps you keep it against the fence to prevent kickback. The heel hooks over the end for feed force.



2 Reach for the push stick. When the board's trailing end is on the table, pick up the push stick and use it to continue feeding the stock. Feed the stock as quickly as you can to prevent burning. There's no reason to go slow unless the saw is bogging down.

handle the workpiece will depend on the material itself, how long, thick, or heavy it is, and how wide a rip you're making.

Turn on the saw first, then lay the board on the table against the fence with the leading end a couple of inches from the blade. Use your left hand to press the board downward and against the fence at the same time. With your right hand on the trailing end, push the board steadily forward into the spinning blade. When the trailing end of the board is completely on the table, pick up the push stick with your right hand and use it to continue feeding the stock. As the cut nears completion, remove your left hand from the board for safety's sake,

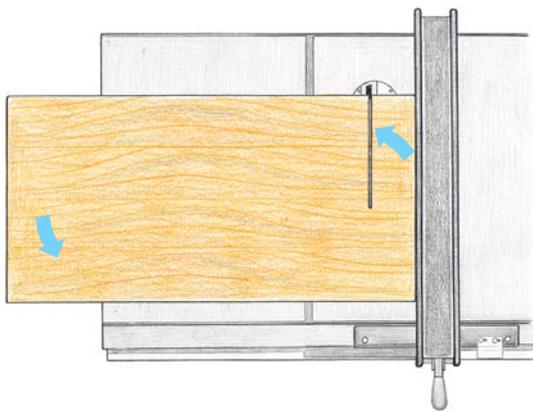


3 Follow through with one hand. As the cut nears completion, take your left hand off the board. Keep pushing with the stick until the right-hand piece is past the splitter. Throughout the cut, be sure to keep the board against the fence.

How to rip sheet goods

WHAT NOT TO DO

If a panel is wider than it is long, don't try to run it against the rip fence. It is too easy to rotate the panel, sending it dangerously onto the back of the blade. Use some other method for a cut like this.



continuing forward with the push stick until the right hand is past the splitter.

Get some support

The key to ripping large sheets of MDF or plywood is proper support. Best is a large outfeed table that extends at least 50 in. beyond the splitter. You might also want infeed support for heavier panels.

For easiest handling, begin with the cut closest to the center. Lock the rip fence in position. Instead of hoisting the panel onto the saw and infeed support at the same time, place the panel on the saw (with blade lowered and splitter removed), then drag it onto the infeed support.

With the blade raised and the splitter reinstalled, turn on the saw and stand at the left rear corner of the panel. Keep your eyes glued to the fence, push the panel forward with your right hand, and apply enough sideways pressure with your left to keep the panel against the fence. Push until the saw table is carrying the full weight of the sheet. Let the panel sit for a moment, move around to its rear edge, and place your hands so that each one is centered between the blade and the panel edge. Maintain your focus on the fence. Push straight forward until the cut is complete. □

Paul Anthony is a woodworker and the author of Taunton's Complete Illustrated Guide to Tablesaws (The Taunton Press, 2009).



1 Lift the sheet onto the table. It's easiest to place a large panel on the saw first (with the blade lowered and the splitter removed), and then drag it onto the infeed support, in this case a router table that's the same height as the saw table.



2 Stand at the rear corner. Position yourself at the left rear of the panel, with your right hand on the trailing edge and your left as far forward as is comfortably possible. Keep a wide, balanced stance.



3 Focus your attention on the fence. Push the panel straight forward with your right hand, and apply enough sideways pressure with your left hand to keep the panel against the fence.



4 Finish the cut at the rear. Once the saw table is carrying the full weight of the sheet, move around to the rear and place your hands so that each is centered between the blade and the panel edge.

