Tablesaw Tune-up Tips

Go beyond what's covered in your owner's manual for easy assembly and spot-on accuracy.

Whether you're preparing to buy a new tablesaw or putting off some much-needed maintenance on your existing saw, it's critical to get your machine dialed-in so your cuts will be flawless. *WOOD*® magazine tool-testing expert Bob Baker put together and fine-tuned the nine 3-hp cabinet tablesaws reviewed on *page 49*. In doing so, he mastered the process and developed a shop full of shortcuts and tips to help you assemble a new saw or simply give your old one some overdue TLC. Although many of the photos in this article show Bob setting up a 220-volt cabinet saw, nearly all the steps apply to lesser-powered 110-volt contractor-style and hybrid saws as well, with some tips specific for each of those types.

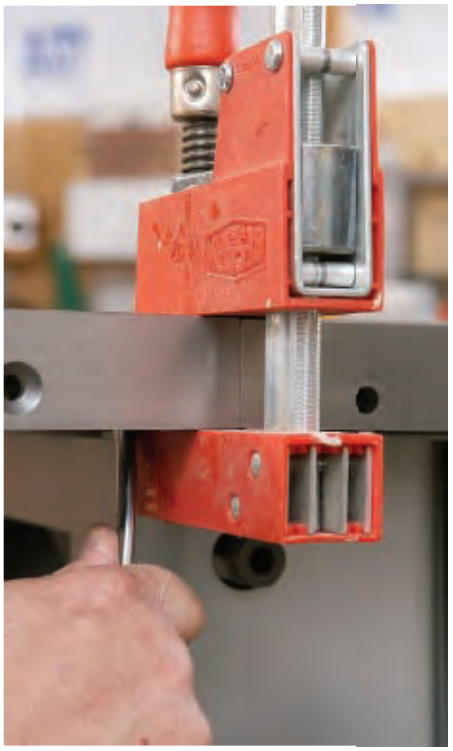
Install the wings flush to the tabletop in 6 simple steps

1. Clamp two straight boards about 3' long to one of the cast-iron extension wings. Extend the boards over the main tabletop.

2. Holding the wing loosely aligned front to back with the table edges, clamp the boards tightly to the main tabletop.

3. Now perfect the edge alignment by tapping the wing laterally with a rubber mallet until the mounting holes align.

4. Insert the mounting bolts and hand-tighten them. If you need to raise the wing slightly, use a scrap board on your leg for leverage.



5. Clamping securely across the seam holds the tops flush. Tighten the bolts when the wing aligns perfectly flush with the main table.

6. To remove sagging, changing a clamp to spreader mode lets you microadjust the wing height. Parallel-jaw clamps work great for this.

If your saw has one, add the extension table and level it with the top

LEFT: To save bending down, assemble the extension table, support legs, and frame on your saw's tabletop.
CENTER: Align the mating table surfaces by clamping directly on the seam or using a board with a straightedge and clamps. Bolt them together. Some extension tables bolt only to the fence rails, not the extension wing. For those, install the fence rails first, and then mount the extension table.
RIGHT: Finally, using a long straightedge that reaches from the extension table corners to the cast-iron top, raise or lower the adjustable feet to level the table surface. Tighten the table-mounting nuts when the two surfaces are level.

Align long, beefy rip-fence rails easily with a couple of tricks

OPTION 1: Use two adjustable-height work supports to hold a rail in position while you insert bolts and set the correct height using the template that came with the saw.

OPTION 2: If you don't have adjustable work supports, simply let one rail end rest on the floor while you loosely secure the other with a bolt; then do the other end.

8 setup steps to ensure absolute accuracy and clean cuts

1. Using a dial indicator, align your saw's miter slots parallel to the blade, checking the same tooth at the front and back of the blade. Strive to get any discrepancy within .002".

2. If you don't have a dial indicator, you can also do this step with a combination square. Set the blade to touch a tooth in front, lock it, and then check the same tooth at the rear.

3. Once you've aligned the top to the blade, tighten the mounting bolts securely. On cabinet saws the top mounts to the cabinet, providing easy access for adjustments.

4. On contractor-style and most hybrid saws, the top attaches directly to the trunnions that hold the blade assembly. To align the blade, loosen the trunnion-mounting bolts and tap the trunnions side-to-side, then retighten.

5. Now align the rip fence so it's parallel to the miter slots, again within .002". If it's not exactly parallel, any slight discrepancy should toe away from the blade at the outfeed end to avoid pinching boards during rip cuts.

6. Adjust the fence by tightening or loosening the setscrews in the fence's T-square bracket. This also affects how tightly the fence locks and slides on the rail, so plan on trial-and-error fitting to find the sweet spot.

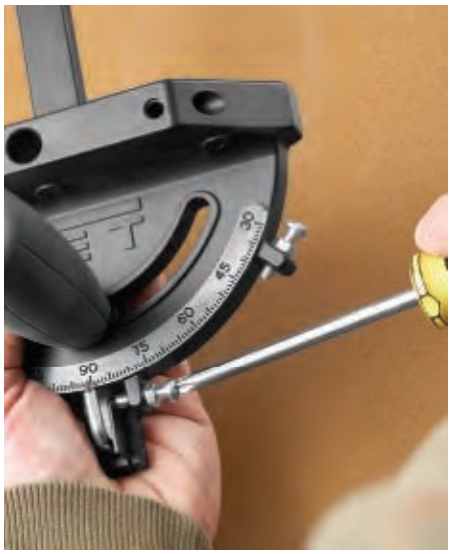
7. Align the riving knife or splitter with the blade. Hold the rule against the plate of the blade so it doesn't touch any teeth. Do this for both sides of the blade.

8. If the riving knife isn't aligned with the blade, adjust its fit by placing thin shims in front of or behind the knife as needed. If you ever remove the riving knife, make note of the shims so you can replace them later.

Dial-in the bevel stops and miter gauge for repeatable, reliable settings

1. Use a drafting square to check the blade bevel-angle settings for the 0° and 45° stops. Adjust the bevel stops as needed.

2. Verify the angle settings on your miter gauge, particularly those with stops, against the sawblade plate.



3. Adjust any inaccurate miter-gauge angle stops using a screwdriver, and verify the settings to the blade again.

4. If your miter gauge bar fits too tightly in the slot, rub one edge along 150-grit, self-adhesive sandpaper, applied to your saw's tabletop, until it glides smoothly.

5. If your miter gauge bar fits too loosely in the slot and doesn't have adjustment screws, add dimples every 4–6" by peening it with a hammer and punch.

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