Saw Stop Table Saw Tutorial

Safety

A table saw is a dangerous tool and there are hazards inherent with using this saw. Use common sense when operating the saw and use the saw only as instructed. You are responsible for your own safety!

1. Read and understand all manuals and safety warnings before operating this saw. Failure to follow instructions or heed warnings may result in electric shock, fire, serious personal injury or property damage. Refer to manuals and safety warnings whenever necessary. The manuals are found in the storage compartment of the saw or on the n3d.nd.edu website.

2. Safety glasses and hearing protection must be worn when operating this machine.

3. Check to make sure the saw is in proper working order before using the saw. For example, check the alignment of moving parts, look to see whether moving parts are binding or rubbing, check to see whether parts are broken, make sure the blade does not have missing teeth, make sure accessories are properly mounted in the saw, and check any other conditions that may affect the operation of the saw.

4. Reduce the risk of unintentional starting by making sure the power switch is in the OFF position before plugging in the saw.

5. Make all adjustments and line up your piece when the blade is at a complete stop.

6. Always keep the guard in place while the machine is running.

7. Always adjust the saw blade to a quarter of an inch above your piece of lumber.

8. Keep hands out of the line of the saw blade. Never reach around or over the saw. Do not overreach or stretch to get something when using the saw. Keep proper footing and balance at all times.

9. Stand to the side of the blade, never directly behind it.

10. The table saw is primarily used for rip cutting. Always use a fence when rip cutting. Attempting to use the saw for rip cutting without the fence could result in serious personal injury. Make sure the rip fence and/or auxiliary fence are parallel to the blade.

11. Always use the miter gauge when making cross cuts. Do not use a rip fence or auxiliary fence when making cross cuts.

12. Do not perform any operation freehand. Freehand is not using a fence (for rip cuts) or a miter gauge (for cross-cuts) to guide the work piece as it is being cut. Always maintain firm control over the material being cut. Use a push stick when required. Use a push stick, or a push block and auxiliary fence, if your hand will come within 6 inches or less of the blade. Get an off-bearer to help support large pieces.

13. Kickback occurs when a work piece contacts the downstream edge of the blade as it is being cut and is propelled back towards the user at high velocity. To avoid kickback:

   a. When rip cutting, always apply the feed force to the workpiece between the blade and the fence or auxiliary fence.
   b. Do not try to rip cut a workpiece that is warped or twisted, or that does not have a straight edge to guide along the fence or auxiliary fence. Never saw a workpiece that is too large to be controlled.
   c. Always continue to push the workpiece until it is completely past the saw blade and anti-kickback pawls.

14. Keep the top of the saw clean and free from clutter. Cluttered areas invite accidents.

15. Don't force the tool; it will do the job better and safer at the rate for which it was designed. For example, do not try to cut wood faster than the motor can handle.

16. Use the right tool. Do not try to force the saw to do something it was not designed to do. Don't force a tool or attachment to do a job for which it was not designed. Use the right blade for the job.

17. Never leave the saw running unattended. Wait until the blade comes to a complete stop and then turn the main power switch to OFF and unplug the power cord when you are finished using the saw.

18. When finished, clean up the entire area; the saw, the tables, and the floor.
Cut ONLY non-conductive materials:
• Dry Wood
• Dry Plywood or OSB
• Dry Pressure-Treated Wood
• MDF

DO NOT cut:
• Green or Very Wet Wood
• Wet Pressure-Treated Wood
• Aluminum and other Metals
• Mirror
• Round Stock

Adjusting the Blade Elevation and Tilt
1. Rotate elevation handwheel clockwise to raise blade or counter-clockwise to lower blade.
2. Blade tilt angle is indicated by position of red pointer over tilt scale.
3. Change tilt angle by squeezing backplate against handwheel and moving handwheel to the side. Release backplate to lock blade in place. This adjusts tilt angle in single degree increments.
4. Adjust tilt angle in fractional degree increments by rotating Tilt Adjust knob.

Fence
1. Use fence to guide material during rip cuts. The width of cut is shown by red indicator line over ruler. Use upper scale with rails retracted, use lower scale with rails extended.
2. To adjust fence, push lever down and slide fence until indicator line reads desired width of cut. Push down opposite end of lever to lock fence in place.
3. Extend rails for rip cuts wider than 12”. Flip handle up and slide right to extend fence rails.
4. Flip handle down to lock rails. Rails must be fully extended to flip handle down.
5. Extend support shelf when needed to support material. Retract shelf when fence is over table or extension wing.

To cut, set blade height to desired cut depth. Place material flat on table and push slowly and smoothly into blade.

Starting
1. Switch power on
2. Wait... powering up
3. Ready
4. Pull paddle out to spin blade

Stopping
1. Push paddle in
2. Wait... blade coasting down
3. Ready
4. Switch power off
Cross-Cutting Operation
Cross-cutting (cutting perpendicular to the grain of the workpiece) is performed using the miter gauge. To lessen the risk of kickback, the rip fence should be removed or positioned so that it does not contact the workpiece during cross-cutting. The miter angle is indicated by the scale below the pointer. Adjust the miter gauge to your desired miter angle by loosening the lock knob and pivoting the miter gauge head until the pointer is above the desired angle. Tighten the lock knob before making the cut.

Rip Cutting Operation
Rip cutting or cutting with the grain of the workpiece must be performed with a fence to support and guide the workpiece. The miter gauge should not be used when making rip cuts and the blade guard should be used for all through cuts. Ensure the motor is off and the blade is completely stopped. Tilt blade to the desired angle and adjust the blade elevation to about 1/4 inch higher than the workpiece. Position the fence for the desired rip width and lock the fence in place. Position the work-piece flat on the table and flush against the side of the fence. Turn on the motor. Use both hands to push the workpiece smoothly toward the blade. If your hand closest to the fence also comes within 6 inches of the blade, remove that hand and use a push stick to finish the cut. A push stick is a tool that is used to push the work piece forward to make a cut while allowing the user to keep their hands away from the blade.

Auxiliary Fence Operation
If your cut requires the fence to be positioned too close to the blade to use a push stick, use an auxiliary fence and a push block to make the cut. In this case, clamp the auxiliary fence to the fence and slide the workpiece along the auxiliary fence. When your hand comes within 6 inches of the blade, remove your hand from the workpiece and finish the cut using the push block.