

VWC TABLE SAW STANDARD OPERATING PROCEDURES

(04/2024 r8)

Rationale

- Table saws are used on virtually every project and are likely the most dangerous machine in our shops when used incorrectly.
- Standard “Best Practices”, also known as “Standard Operating Procedures”, helps align our certification, education, safety, maintenance, and monitor programs; enabling monitors and other members to recognize unsafe table saw activities; and helps to eliminate the unintended transference of unsafe personal habits to other members.
- A detailed educational process will accompany the institution of the Standard Operating Procedures, and membership is required to learn and use the VWC methods of operating our table saws.

Table Saw Standard Operating Procedures

General table Saw Safety:

- Turn off the electrical power at the disconnect when changing the table saw set up. For example, changing blades, removing blade guard to use sleds, installing riving knife, etc.
- Never start the saw when the workpiece is touching the blade.
- Never align your hands or fingers directly behind the blade while cutting. There is no protection from the blade should your hands, fingers, or workpiece move unexpectedly.
- Never reach over the blade while the blade is spinning.
- Never pull the workpiece or offcut past the blade from behind the blade. The workpiece should only be pushed from the front to the back of the table saw. Monitors or people assisting should only help after the workpiece has cleared the blade.
- Avoid standing directly behind the workpiece to avoid being hit by material should kickback occur.
- When rip cutting, stand on the side of the blade opposite the fence if possible.
- When cross cutting, stand on the same side of the blade as the miter gauge.
- When using a sled or dado blade, stand on the side of the blade that is consistent with the type of cut being performed (rip or cross cut).
- Do not stand in such a way that you are uncomfortably leaning over to push the workpiece through the blade. Standing behind the blade is less dangerous than uncomfortably leaning.
- All metals are not allowed to be cut on VWC table saws. Projects with partial epoxy or resin components are allowed.

Specific Standard Table Saw Operations:

1. Blade Guard Assembly:
 - a. The Blade Guard Assembly consists of four components: The plastic guard, the splitter, the blade guard, and the anti-kickback pawls.
 - b. The blade guard protects users from accidentally contacting the spinning blade.
 - c. The splitter prevents the cut lumber from pinching after the cut AND prevents kickbacks that result from the cut lumber contacting the back of the spinning blade.

- d. The anti-kickback pawls prevent the lumber from being flung back towards the user.
 - e. **Best Practice:** Use the blade guard assembly whenever possible. Users need an exemption from a shop leader before removing the assembly, except for dado cuts and when using the crosscut sled.
 - f. **NOTE:** The difference between a splitter and a riving knife is the splitter is stationary, and the riving knife moves up, down, and sideways when the blade is adjusted.
2. Avoid Kickbacks: this happens when a workpiece gets pinched between the fence and the blade.
 - a. At a minimum, always use a riving knife except for dado cuts.
 - b. Whenever possible, use a blade guard assembly with anti-kickback pawls.
 - c. Never use the rip fence by itself as a stop block for repeating cuts. See #11 below for details on using stop blocks.
3. Push Sticks:
 - a. Only use a push stick that applies down pressure on the workpiece as you push it forward.
 - b. Only use push sticks supplied (or approved) by the VWC.
 - c. Only apply the push stick after the workpiece is all the way on the saw's table.
 - d. Keep your push stick to the right of the fence where it's easy to grab.
 - e. Only push between the blade and the rip fence.
 - f. Once a push stick is chewed or cut, throw it away.
4. Feather boards when ripping lumber:
 - a. Always use a VWC supplied feather board to hold lumber against the rip fence.
 - b. Never use your hand as a feather board.
 - c. Never use a handheld stick as a feather board.
 - d. Feather boards are only used before the blade.
5. Cutting lumber that is not jointed and planed straight:
 - a. Cutting rough sawn lumber on the table saw is not allowed. Instead use radial arm saw for crosscuts, and bandsaw for rip cuts instead.
 - b. Only lumber with one side jointed flat and one edge jointed 90 degrees can be cut on the table saw. The jointed flat side goes down on the table, and the jointed edge goes against the rip fence.
 - c. Any rough sawn lumber too wide to flatten on the jointer should be rip cut on the band saw first before flattening...do not use the table saw.
 - d. **NOTE:** No cupped, bowed, twisted lumber. Jointed lumber only on table saw.
6. Cutting Freehand and using Drop Cuts/Plunge Cuts on the table saw:
 - a. Never attempt either one...period! No exceptions, ever!
7. Cutting Thin Strips:
 - a. Two different jigs are available for cutting thin strips on the table saw.
 - b. Always use one of them depending on the width you are cutting. Ask for help setting them up if you are not sure how to use them.
 - c. **BEST PRACTICE:** Use the bandsaw instead, cutting the strips a little proud. Then use the thickness sander to smooth and fine tune dimensions.
8. Saw Blade tooth height:

- a. The whole carbide tip portion of the blade is to be just above the wood surface. Usually this means the top of blade will be 1/8 to 1/4" above the wood surface, and this is also the height for non-carbide tip blades.
 - b. **Best Practice:** The lower the blade the less flesh it can cut.
9. Standing in the correct position:
 - a. If possible, avoid standing directly behind the blade.
 - b. **Best Practice:** Stand on the left side of the blade, using your right hand on the push stick. This promotes pushing wood into the fence.
 - c. Left handed members can move the rip fence to the left side of the blade if they wish to use their left hand for rip cuts with the blade a 90 degrees. This also promotes pushing the wood into the fence. You cannot do this for bevel (angled) cuts because the blade would lean towards the rip fence.
 - d. Do not stand so you are uncomfortably leaning over to push the wood through the saw. It is better to stand behind the blade than lean uncomfortably.
10. Cutting workpieces wider than they are long:
 - a. Never rip workpieces wider than they are long...in other words: never rip the short side of a board.
 - b. Use sled or miter gauge for workpieces wider than they are long.
11. Using a stop block for repetitive cuts:
 - a. Never use the fence alone as a stop block for repetitive cuts. Doing so allows the cut off workpiece to become pinched between the blade and the fence.
 - b. Always use a block of wood clamped on the fence as a stop block. This allows the cut off workpiece room to be free and not get pinched between the blade and the fence.
 - c. Stop blocks with clamps are provided in the table saw drawers. Apply the stop block to the rip fence well before the blade.
12. Using a thin kerf saw blade:
 - a. The VWC recognizes thin kerf saw blades have a purpose in our shop.
 - b. Thin kerf riving knives are supplied by the VWC. Note they are identified by their special color.
 - c. **Best Practice:** You are required to use a thin kerf riving knife if you use a thin kerf saw blade.
 - d. NOTE: The standard blade guard assembly cannot be used with thin kerf saw blades.
13. Miter and Bevel cuts:
 - a. On VWC table saws the blade only tips to the left. This means the rip fence will always be on the right side of the blade.
 - b. When using a miter gauge for miter or bevel cuts on VWC table saws, the miter gauge is always on the right side of the blade and the blade tips away from the miter gauge.
 - c. Use a wooden sacrificial rip fence board if necessary to avoid damaging the manufacture supplied rip fence and blade.
 - d. Use a tall auxiliary rip fence to support taller workpieces being mitered or beveled.
 - e. **Best Practice:** Ask for help if you are at all unsure of how to make the cut.
14. Taper cuts:
 - a. Taper cuts are infrequently made using a table saw.
 - b. **Best Practice:** Ask for help setting up for taper cuts.

