SawStop Cabinet Saw Safety Rules



The cabinet saw has a circular, vertical rotating blade that rises above a support table and is used to cut wood in a straight line. It can be used to cut with the grain (ripping) or across the grain (cross cutting) or at any angle. The cabinet saw cannot safely cut curves and only straight line cutting is permitted in the VWWV Workshop. When ripping, the work is guided by a rip fence, which determines the width of the cut. When cross cutting, the workpiece is supported by the fence of the sliding table, a miter gauge or a cross cut sled.

The saw is equipped with a "flesh sensor" that is able to detect when the blade comes in contact with a hand. If this occurs, the blade safety system is activated. A brake is driven into the saw blade which stops it in milliseconds, and the blade is withdrawn under the table. In most cases, the result of touching a rotating blade is no more than a small cut. However, all electrical and mechanical systems can fail and therefore the safety system should not be relied on.

The blade safety system will detect contact of the blade with wet wood or metal and think that the blade has contacted flesh. As a result, the safety system will be activated. When the safety system activates, the brake cartridge and the saw blade are damaged beyond repair and need to be replaced. This expense is well worth it if it saves a finger but is a waste of the Club's resources if this occurs because of trying to cut wet wood or there is an accidental contact of the blade with metal (e.g. the rip fence, the fence of the sliding table, a scale, etc.). The saw operator shall pay the cost of replacing the brake cartridge and saw blade if the brake system activates because of contacting the rotating blade with metal or using it on wet wood.

Saw Safety Rules:

- 1. Follow the 3" rule; always keep your fingers at least 3" from the blade.
- 2. Don't cut stock that is not flat on the bottom without a jig that will hold the work in a stable position.
- 3. Keep a balanced stance at the saw.
- 4. Never clear small pieces with your hand while the blade is moving.
- 5. Use the guards provided whenever possible.
- 6. If additional guards are needed, discuss this with the Shop Leader and make arrangements to get them.
- 7. Never touch the blade when it is rotating, even if the saw is turned off.
- 8. Never contact the blade with any metal object when it is rotating, even if it is turned off.

Start with a Risk Assessment to ensure a safe work area:

- 1. A three foot perimeter around the saw should be kept clear of people, debris and sawdust that might impair traction or footing to avoid slips and falls.
- 2. Safety glasses with side shields, or a face shield and safety glasses, hearing protection must be worn.
- 3. The saw's dust collection system is good but not adequate. You must wear a dust respirator when using these saws.
- 4. Remove loose fitting clothing, jewelry, and tie back long hair.
- 5. Give the work your undivided attention.
- 6. Do not cut pressure treated, wet, or reclaimed wood on this saw.

Operational Safety Rules:

- 1. Approach your work in the CLUB Shop and on the saw with a safe attitude! Make sure that the blade is installed on the arbor so that the teeth point towards the front of the saw.
- 2. Adjust the height of the blade so that it is no more than ¹/₄" (or the bottom of the tooth gullet) above the thickness of the workpiece.
- 3. Never adjust the rip fence position with the saw running.
- 4. Never adjust the sliding table fence while the saw is running.
- 5. Unlock and adjust the position of the blade cover so that it is about 1/4" above the workpiece to be cut.
- 6. When ripping, adjust the blade cover so that right-hand side of the cover is about ¹/₄" to ¹/₂" from the blade to maximize the amount of space available for your hand or Grr-Rip Block[®].
- 7. When cross cutting, adjust the left-hand side of the blade cover so that it is about $\frac{1}{4}$ " to $\frac{1}{2}$ " to the left of the blade to provide clearance for the sliding table fence.
- 8. When ripping, never stand directly in front of the blade. If there was a kick-back, you would be in the "line of fire". The recommended position is to stand to the left of the saw blade.
- 9. When ripping stock less than 3" wide, use a pair of Grr-Rippers[®]. Position the non-slip pads so that they form a tunnel that the blade passes through. Adjust the balance support so that the Grr-Ripper[®] is stable. Use a leap-frogging technique when the boards are longer than about 24".
- 10. Use your right hand to push the workpiece forward when ripping stock wider than 3", or use a Grr-Rip Block[®].
- 11. Cut at a moderate feed rate. Feeding too fast may cause the workpiece to have tearout or excessive machine marks. Feeding too slow will cause the blade to heat up and burn the workpiece.
- 12. Never use a Teflon coated blade or a blade with any type of coating. The coating acts as an insulator and will prevent the saw from being able to detect contact of the blade with your body.
- 13. Never use a thin-kerf blade. They are not strong enough to withstand the braking forces and may prevent the brake from stopping the blade in a flesh-sensing situation.
- 14. Use a 40 tooth blade for workpieces up to 1-1/4" thick. For thicker stock, use a 30 tooth blade to prevent overloading the saw's motor and ensuring a clean cut. The 30 tooth blade can better handle the large amount of sawdust that is created from sawing thick stock.
- 15. If the work is too large for one person to handle, get help holding the stock or use an infeed support.
- 16. Ensure that the base cabinet door is closed when the saw is running. This door is interlocked so that the saw will not start if it is open and the saw will stop if it is opened while the saw is running.
- 17. Ensure that the Onida dust collector or the dedicated dust collector is running and that the blast gate to the saw is open before starting the saw. Close the blast gate when you are finished using the saw and turn off the Onida dust collector or the dedicated dust collector if no one else is using it.

- 18. Lockout the Saw using the Club's Lockout Procedure before changing the blade, the blade brake or performing any other maintenance operation. All blade and brake changes must be done under the direction of the Shop Leader. Notify the Shop Leader immediately if a blade brake is activated.
- 19. When using a 10" diameter blade, you must use the brake cartridge that is specified for a 10" blade.
- 20. When using an 8" dado set or an 8" finger joint blade set, you must use the brake cartridge that is specified for an 8" blade.
- 21. The North SawStop uses an earlier version of blade brakes than the South SawStop. These blade brakes are not interchangeable. The North SawStop blade brakes are in a clear plastic housing and the South SawStop blade breaks are in a blue plastic housing.