



# *Power Tool Safety*

*Miter Saw and Belt / Disk  
Sander*

## COMPOUND MITER SAW:

A saw that allows you to make cuts at various angles. The blade is also able to pivot in various directions to allow for more complex cuts.



- Safety glasses, hearing protection and dust mask must be worn at all times.
- Always unplug the saw before making any adjustments, such as changing out the blade.
- Hands and fingers must be kept at least 6 inches away from the rotating blade.
- The shortest board that you should make a cut on is 8 inches.
- The board that you are cutting should be held firmly on the table and against the fence. Sometimes you may cut an oversized board that is longer than 6 feet, get assistance in holding the board for the cut.
- The miter saw is designed to make accurate crosscuts.

- When using the miter saw outside, ensure to connect the saw to a ground fault circuit interrupter (GFCI outlet)
- The base of the saw around the blade is called the cutting zone. Only remove scrap pieces from the cutting zone when the saw is OFF and while your hand is not on the Power switch.
- Whenever you are done using the miter saw, the blade should be positioned in the down position and locked to ensure that it won't accidentally come up.

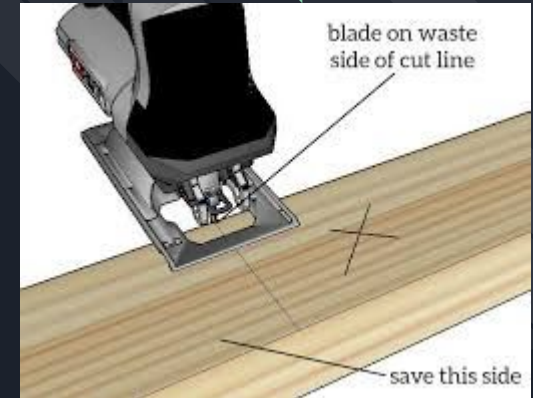
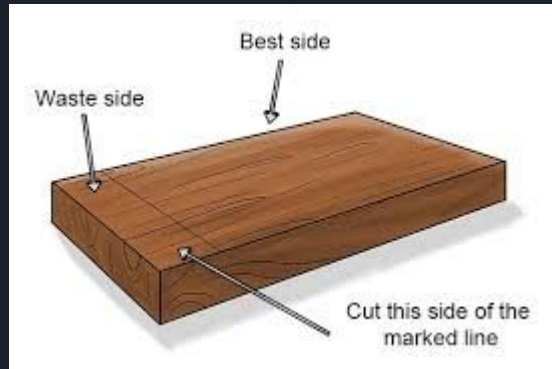



LOCKED POSITION & DOWN POSITION



UNLOCKED AND UP POSITION

- After you complete a cut but the saw is still rotating; hold the blade in the down position until the blade has come to a complete stop.
- Always make a trial cut on scrap lumber if you are the first to use the saw for the day. The purpose of a trial cut is to ensure that the saw is cutting properly and accurately. Use a scrap piece so that you are not ruining your material if it isn't accurate.
- NEVER cut warped or bowed stock materials with the miter saw
- The purpose of a "stop" when making multiple cuts with the miter saw, is to improve cutting accuracy and reduce the time required to make the cuts.
- When making cuts, remember to take into account the  $\frac{1}{8}$ " width of the blade. After you mark your board, line the blade on the "waste" side of the board.



- 
- If a kickback were to occur while you are operating the saw, you should hold the saw firmly in the down position and release the On/Off switch.
  - When making a cut with the miter saw, use the arm follows the following steps:
    1. Pulls out
    2. Push down
    3. Push forward
  - Review the safety video link below that also gives instruction on the use of the miter saw.

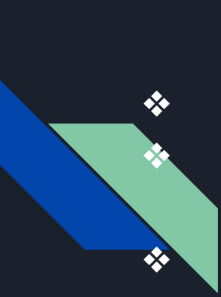
[Dewalt Miter Saw How to Use and Safety](#)

## BELT AND DISC SANDER:

This tool is a combination of a belt sander and a disc sander. A disc sander is primarily used for making outside curves and shaping. A belt sander is used to sand down and smoothen the material.



- ❖ Safety glasses and a dust mask must be worn at all times.
- ❖ Always unplug the sander before making any adjustments, such as changing out the sanding belt or disc.
- ❖ Hands and fingers must be kept at least 6 inches away from the rotating sand paper.
- ❖ Always use the best grit sandpaper for the job.

- 
- ❖ After turning the power Off, stay by it until the belt and disc stop moving.
  - ❖ Student may work with one person at each sander. So one student may work on the belt sander, while another students works on the disc sander.
  - ❖ You should always keep your fingers at least 2 inches away from the moving belts.
  - ❖ Keep a slow and steady pace when sanding or shaping the material. Using excess pressure to remove more wood or to make it go faster is not recommended.
  - ❖ When sanding you should always hold your material firmly on the table with both hands.
  - ❖ The distance between the table and the abrasive surface should be no more than  $\frac{1}{8}$ ".
  - ❖ Never sand anything with an irregular shape. You may not be able to hold it firmly.
  - ❖ When sanding an object on the disc sander, you should hold your work against the side of the disc where the motion is downward, which is the left side of the disc.
  - ❖ Whenever possible, sand with the grain of the wood.

Please review the link below for a how to use and safety of the Belt and Disc Sander

[Belt and Disc Sander Safety Video](#)