

Introduction

Miter saws can be dangerous if not used properly.

Read the owner's manual carefully.

Make sure you know and understand the instructions before attempting to use any tool or machine.

Learn the applications and limitations before use.

Refer to Woodworking Machines - General Safety Tips for more information.

Understanding Cross Cutting, Bevel and Miter Joints

Cross Cutting vs Rip Cutting

In simple terms a rip cut is one that is made parallel to the grain and is usually done with a table saw, a band saw or a hand rip saw.

Cross cutting actually shears the fibers of the wood and is usually done with a miter saw or a chop saw.

Bevel Cut

In the simplest of terms, it is nothing more than an angled cut through a piece of wood. The angle is what makes it a bevel.

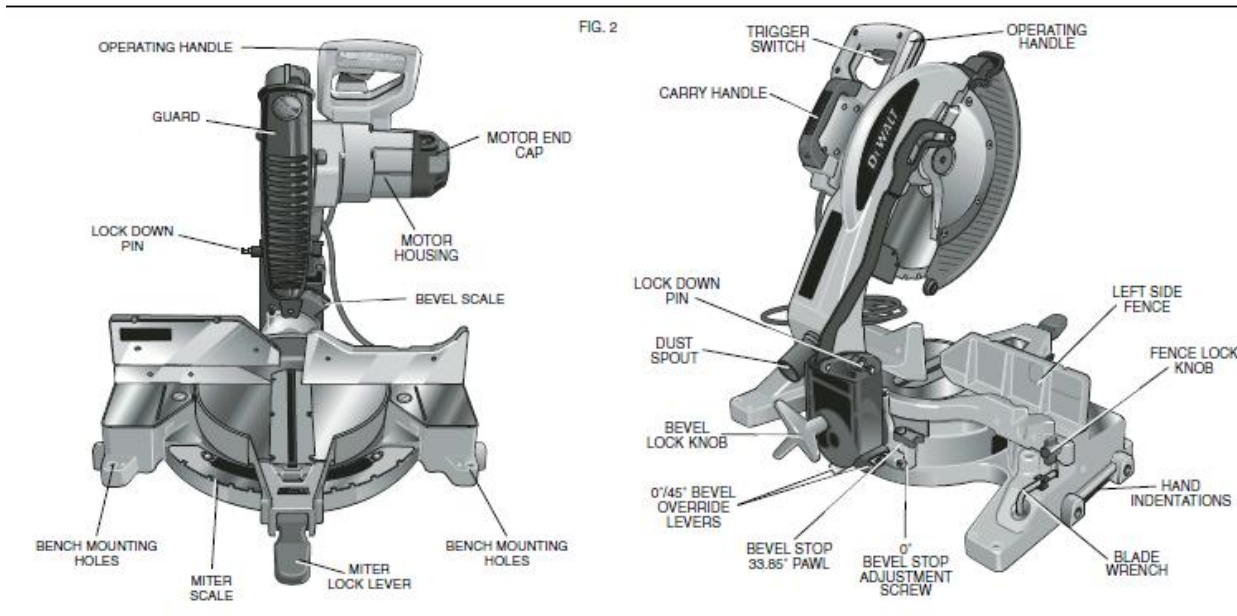
Miter Joint

This is where two pieces of wood are joined together at an angle, and then form a right angle as shown below. They are used in things like picture frames and door frames.

What Safety Precautions should you follow when using a Miter Saw?

- Wear safety glasses or goggles, or a face shield (with safety glasses or goggles).
 - If work is dusty, use a respirator or dust mask.
 - Wear appropriate hearing protection.
 - Wear protective footwear when required.
 - Attach the saw firmly on a workbench or other rigid frame and operate saw at waist height. The saw can also be taken to remote locations by mounting it on a piece of plywood 13 mm (1/2 in.) or thicker. This must be clamped to a waist high work surface on the job site with large "C" clamps.
 - Keep one hand on the trigger switch and handle and use the other hand to hold the stock against the fence.
 - Keep hands out of the path of the blade.
 - Keep guards in place and in working order.
 - Remove adjusting keys and wrenches.
 - Use a crosscut or combination blade.
 - Ensure that the blade rotates in the correct direction.
 - Ensure that the blade and arbor collars are secure and clean. Recessed sides of collars should be against blade.
 - Keep blade tight, clean, sharp and properly set so that it cuts freely and easily.
 - Allow motor to reach full speed before cutting.
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- Follow instructions for lubricating and changing accessories.
 - Keep the work area clean. Cluttered areas and benches invite accidents.

- Keep the work area well lit.
- Reduce the risk of unintentional startup. Make sure saw switch is in OFF position before plugging in.
- Unplug tools before servicing and when not in use.
- Check for damage. Repair or replace damaged parts.
- Keep motor air slots clean and free of chips.
- Use only the accessories designed for the specific saw and job.



What should you avoid when using a miter saw?

- Do not operate the saw on ground.
- Do not cut pieces smaller than 20 cm (8 in.) in length.
- Do not cut "free hand." The stock should lie solidly on the table against the fence.
- Do not reach around or behind the saw blade.
- Do not take your hand away from the trigger switch and handle until the blade is fully covered by the lower blade guard.
- Do not overreach. Keep proper footing and balance at all times.
- Do not force the saw. The saw cuts better and more safely at the rate for which it was designed.
- Do not leave the saw until it has stopped completely. Turn the power off and unplug the saw.
- Do not use electric tools in damp or wet locations.
- Do not operate electric tools near flammable liquids or in gaseous or explosive atmospheres. Sparks may ignite fumes.