

All power tools can be dangerous if both general and tool specific safety instructions are not followed carefully. General safety instructions apply to all power tools, both corded and cordless.

## Start with a Safe Work Area



Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents.



Do not operate power tools in explosive atmospheres, near flammable liquids, gases, or dust. Power tools create sparks, which may ignite the dust or fumes.

- Keep bystanders, children, and visitors away when using a power tool. Distractions can cause you to lose control.



## Electricity can be Dangerous

Grounded tools (three pronged cords) must be plugged into a properly grounded installed outlet. Never remove or cut off the grounding prong or modify the plug in any way. Do not use any adapter plugs.



Double Insulated tools have a polarized plug (one blade is wider than the other.) This plug will fit into an outlet only one way. Do not change the plug in any way.



Do not use AC only rated tools with a DC power supply.



Store battery packs away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects. These things can make a connection from one terminal to the other, shorting the battery terminals together and causing burns or fire.



- When using a power tool, don't touch grounded surfaces such as pipes, radiators, ranges and refrigerators. There is a higher risk of electric shock if your body is grounded.

## GFCI

In damp locations, only plug your tool into a Ground Fault Circuit Interrupter (GFCI). If the work area does not have a permanent GFCI on the outlet, use a plug-in GFCI. Wear rubber gloves and footwear.



Don't use or leave power tools in the rain or wet conditions.



Do not abuse the cord, carry the tool by its cord, or pull the cord to unplug it. Keep the cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately.



Always hold the tool by the insulated gripping surfaces. Contact with hidden wiring or its own cord will make exposed metal parts of the tool "live" and shock the operator.

## Rules about Extension Cords

- When using a power tool outside, use an extension cord marked for outdoor use with "W-A" or "W". These cords are made for outdoor use.
- Extension cords with 3-prong grounding plugs must be plugged into 3-prong outlets when using grounded tools.
- Replace damaged or worn cords immediately.

**Amps** The wire gauge and length of the extension cord must be able to handle the amps of the tool. Find the Amps (A) on the tool's nameplate and use the chart to determine the necessary wire gauge for your extension cord length.

Nameplate Amps	Extension Cord Gauge			
	Cord Length in Feet			
	25'	50'	100'	150'
0-6	18	16	16	14
6-10	18	16	14	12
10-12	16	16	14	12
12-16	14	12	Not Recommended	

## Good Personal Safety is a Must

Following good safety practices when using all power tools is a must. Make a habit of including safety in all of your activities.



Always read and understand the tool's operator's manual, tool markings and the instructions packaged with the accessory before starting any work.

- Stay alert, watch what you are doing and use common sense when using a power tool.



Do not use tools when you are tired or under the influence of drugs, alcohol, or medication.

- Dress right. Do not wear gloves, loose clothes or jewelry. Contain long hair. Loose clothes, gloves, jewelry, or long hair can be caught in moving parts.
- Keep handles dry, clean and free from oil and grease.
- Be sure the power tool's switch is OFF before plugging it in or inserting a battery pack. Do not carry tools with your finger on the switch.



Remove adjusting keys and wrenches before turning the tool ON.

- Always keep a firm footing when using power tools. Be sure you have balance and control before you start the job.



Use safety equipment. Always wear eye protection. A dust mask, non-skid safety shoes, hard hat, or hearing protection must be used when needed. The reference to “safety goggles” or “safety glasses” in product specific sections provides potential options - always refer to the tool’s operator’s manual for the specific eye protection recommended, which should be marked as complying with current national standards.

- Unplug tool/remove battery before changing accessories.



Keep hands away from rotating or moving parts.

### Do the Job Safely

- Use the power tool accessories only for the jobs for which they were designed.



Secure and support the workpiece. Use clamps and a stable work surface. Do not hold the work by hand or against your body.

- Keep guards in place and working properly.
- Do not force the tool. Use the right tool for your job. It will do the job better and safer.
- Use only accessories recommended by the tool manufacturer. Accessories that may be suitable for one tool may become hazardous when used on another tool.



Do not touch the drill bit, blade, cutter or the workpiece immediately after operation; they may be very hot and may burn you.

- If a method of dust collection is available with the power tool, it should be used to reduce the risk of dust-related hazards.

### Maintenance Keeps Tools Working Safely and Effectively

- Do not use a tool if the switch does not turn it on and off. It must be repaired.



Look at the tool before using it. Are moving parts misaligned or binding? Is anything broken? Damaged tools must be fixed before using them. Develop a maintenance schedule for your tool.

- Maintain accessories carefully. Keep blades and bits sharp and clean.
- Take your tool to be serviced by qualified repair people. Service or maintenance performed by unqualified personnel could result in a risk of injury. For example: internal wires may be misplaced or pinched, safety guard return springs may be improperly mounted.
- When servicing a tool, use only identical replacement parts. Follow instructions regarding maintenance in the tool’s operator’s manual. Use of unauthorized parts or failure to follow the maintenance instructions may create a risk of electric shock or injury.
- Clean and lubricate a tool only as directed in its operator’s manuals. Certain cleaning agents such as gasoline, carbon tetrachloride, ammonia, etc. may damage plastic parts.
- Maintain labels and nameplates. These carry important information. If unreadable or missing, contact the manufacturer for a replacement.

### When Done, Store the Tools out of Harm’s Way



To avoid accidental starting, unplug the cord, remove batteries or lock off the switch when the tool is not being used, when changing accessories, and when adjusting or cleaning tools.

- Keep tools out of the reach of children and people unfamiliar with the tools.

## Reciprocating Saws

The reciprocating saw can be used to cut metal, pipe, wood, nail-embedded wood and other materials. By design, it is a simple tool to handle. Its few demands for safe use, however, are very important.

### Good Personal Safety is a Must

Following good safety practices when using reciprocating saws is a must. Make a habit of including safety in all your activities.



Always read and understand the tool's operator's manual, tool markings and the instructions packaged with the accessory before starting any work.



Always wear safety goggles or safety glasses with side shields complying with current national standards, and a full face shield when needed.



Use the appropriate mask or respirator in dusty work conditions.

Wear proper hearing protection, as needed.

Dress right. Do not wear gloves, loose clothes or jewelry. Contain long hair. Loose clothes, gloves, jewelry, or long hair can be caught in moving parts.

- Crowded, cluttered work areas that can cause tripping or loss of balance are particularly dangerous.

### Choose the Right Tool and Blade

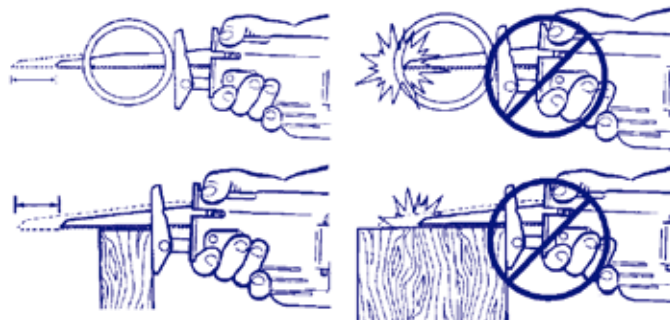
Choosing the correct tool and the proper accessory for your application can help to reduce the risk of serious injury. When used according to the manufacturer's instructions, the proper tool and accessory will do the job safer and faster.



Use sharp blades. Dull blades can produce excessive heat, make cutting difficult, result in forcing the saw, and possibly cause an accident.

- When changing blades, be sure the spindle and blade clamp areas are clean. Metal chips and sawdust may prevent the blade from being held securely.
- Blades can break. Use the blade and accessories recommended for the job being done. Check your operator's manual carefully about this.

- To minimize blade flexing and provide a smooth cut, use the shortest blade that will do the job but will extend beyond the workpiece throughout the stroke. Blades may shatter if they impact the work or shoe. Do not use the saw without the shoe for secure control and to avoid damage to the tool and blade.



- When cutting metal, choose a blade that will allow for at least three blade teeth to be in the material at all times. Less than three teeth will result in teeth snagging and breakage. However, using blades with too fine a tooth will slow your cut.



- Use clean saw blades. A buildup of pitch or sap on the surface of the saw blade increases blade thickness and blade friction.

### Know your Workpiece

Take time to review your work and make sure that all necessary precautions have been taken before making a cut. Reciprocating saws are used to cut a variety of materials, each having its own setup requirements.



Know what is behind a workpiece before you do the job. Do not cut into existing walls or other blind areas where electrical wiring, water, or gas pipes may exist. If this situation is unavoidable, disconnect all fuses/circuit breakers, and shut off any water and gas lines feeding this work site.

- Support large workpieces so they will not pinch the blade. Use a straight edge as a guide for ripping.
- Avoid cutting small workpieces that can't be properly secured, and workpieces on which the base of the saw (shoe) can not properly rest. Injury could result from small pieces being thrown at the operator if the blade pinches and binds.
- Be very cautious of stock which is pitchy, knotty

or warped. These are most likely to create pinching conditions.

- When possible, avoid cutting above shoulder height.



## Before Cutting...

Before cutting with a reciprocating saw, make sure the tool and its accessories are in proper working order. Failure to do so may increase your risk of injury, blade pinching, binding or stalling, and loss of control. These situations may result in an injury.

Unplug the saw before making any adjustments or changing the blade.



Check blades carefully before each use for proper alignment and possible defects. Never use a bent, broken or warped saw blade.

Make sure the blade has adequate blade set. Blade set provides clearance between the sides of the blade and the workpiece, thus minimizing binding.

### Blade Set



- Be sure the tool switch works properly. Do not use a tool if the switch does not turn it off when returned to the off position.
- When using a variable speed saw, use higher speeds for soft materials and lower speeds for harder materials to avoid blade damage.

## While Cutting ...

- Position yourself to maintain full control of the saw. When possible, avoid cutting above shoulder height.



Keep hands away from the blade and shoe.



Before starting, be sure the power cord and extension cord are out of the blade path and are long enough to freely complete the cut. A sudden jerk or pull on the cord can cause loss of control of the saw and a serious accident.



Clamp workpieces securely. Check frequently to be sure clamps remain secure. A moving workpiece can cause loss of control and result in injury.

- Never hold a workpiece in your hand or across your leg when sawing.
- NEVER overreach! For maximum control, hold the saw firmly with both hands after securing the workpiece.
- When you start your saw allow the blade to reach full speed before contacting the workpiece.
- Always hold the shoe of the saw firmly against the work to prevent operator injury and blade breakage. Striking the blade end against the workpiece can cause loss of control and damage to the saw.
- Be alert to the possibility of the blade binding.
- When making anything other than a through cut, allow the saw to come to a complete stop before removing the blade from the workpiece. This prevents blade breaking and possible loss of saw control.
- When plunge cutting, maintain firm contact between the saw's shoe and the workpiece. Lower the blade into the workpiece using the shoe as a pivot. Once the shoe is flat against the workpiece, begin the desired cut.
- Do not plunge cut into a metal workpiece. Instead, using a drill or chisel, make a pilot hole larger than the widest portion of the blade. Insert the blade, placing the shoe flat against the workpiece, and begin the desired cut.

## When Done...

- Switch off the tool after a cut is completed, and keep the saw away from your body until the blade stops. The blade may coast for a time, posing the risk of serious cuts.



Remember that the blade and blade clamp may be hot immediately after cutting. Avoid contact until they have cooled.



Unplug, clean and store the tool in a safe, dry place after use.