

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.

## Radial Arm Saws

Radial arm saws, because of their versatility, are widely used in home, professional, and vocational work shops. They demand a thorough understanding by the operator of all procedures.

### Good Personal Safety is a Must

Following good safety practices when using a radial arm saw 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.
- Do not use the tool until it is completely assembled and installed according to the manufacturer's instructions. Check adjustments often.
- Never operate a radial arm saw with tools, debris or loose objects on the table.
- Never alter a guard or use the tool with a guard missing. Be sure all guards are in place and working properly before each use. Do not defeat guards.

### Choose the Right Tool and Accessory

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, clean blades. A sharp blade will tend to cut its way out of a pinching condition. A buildup of pitch or sap on the surface of the saw blade increases blade thickness and friction.

- Use the correct blade for your tool. The saw blade should never extend beyond the saw table in any operation you perform.
- Never use a bent, broken or warped saw blade. Throw it away immediately and get a new one.
- Only use accessories specifically recommended in the tool operator's manual.

**RPM** Make sure the speed marked on the blade is at least as high as the no load RPM marked on the tool.

- Some accessories, such as a dado or molding head, require special safety precautions and equipment. Refer to the tool's operator's manual and instructions that come with the accessory.



Do not use grinding or wire brush wheels on your radial arm saw. Radial arm saws are not equipped with the proper guards to use grinding wheels or wire brush wheels.

### Know your Workpiece

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

- Do not cut wet wood. It produces higher friction against the blade. The blade will also tend to load up with wet sawdust increasing the risk of kickback.
- Cut only wood, wood-like, or plastic materials. Do not cut metal.
- Do not cut more than one piece at a time.



Be very cautious of stock which is pitchy, knotty or warped. These are most likely to create pinching conditions and possible kickback.

### Before Cutting...

Before using a radial arm saw, make sure the tool and its accessories are in proper working order. Failure to do so may increase your risk of injury and may result in kickback, blade pinching, binding or stalling, and loss of control. These situations may cause the workpiece and/or the motor and carriage to jump and can result in an injury.



Always unplug the tool before installing, adjusting, and changing any accessory.

Do not set up the work with the blade rotating. Turn off and unplug the tool before making adjustments.

- 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 is installed to rotate in the correct direction.

- Make sure the blade has adequate blade set. Blade set provides clearance between the sides of the blade and the workpiece, thus minimizing the probability of binding. Some saw blades have hollow ground sides instead of blade set to provide clearance.

#### Blade Set



- Check for proper blade guard operation before each cut. The guards should return to their normal position quickly. If a guard seems slow to return or “hangs up”, repair or adjust it immediately.
- 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 ripping, make sure the blade is exactly parallel to the fence. If the fence closes in toward the rear of the blade, it will tend to wedge the wood against the blade and may cause kickback.
- Anti-kickback devices should be positioned to just clear the workpiece.
- When ripping, the upper guard must be positioned to hold down the workpiece on the table. Make certain that the anti-kickback device fingers are sharp, free-moving and adjusted to stop kickback and assure proper operation. See your operator’s manual.



- Keep your radial arm saw in correct adjustment and alignment. Use only sharp accessories that were designed for your saw. Follow your operator’s manual carefully.

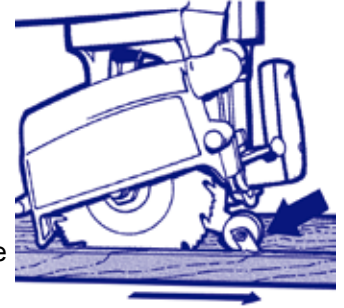
### While Cutting ...



Concentrate on what you are doing and be aware of kickback (a sudden reaction when a workpiece binds between the saw blade and the fence during a ripping operation). Kickback can cause the workpiece to be thrown back toward the operator. Kickback is the result of tool misuse and/or incorrect operating procedures or conditions. Take these specific precautions to help prevent kickback when using any type of radial arm saw:

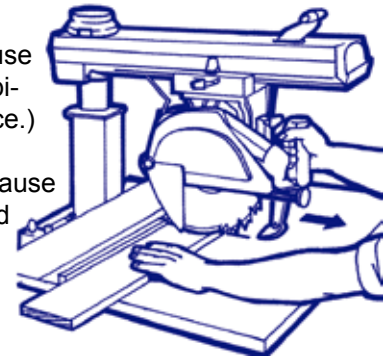
- Feeding a workpiece in the wrong direction when ripping is extremely dangerous. Follow the instructions provided with and on the saw very carefully.
- Do not release your feed pressure on a workpiece when ripping until it clears the blade.
- If a guard jams, shut off tool power and allow the blade to stop before freeing the guard.

- Position the workpiece so the cut off piece falls away from the table.
- Anti-kickback devices may not work when cutting smooth, hard surfaces. Always cut with the smooth, hard surface down, on the table.



- A spreader should always be used when rip cutting. The spreader must be precisely lined up with the blade.
- For ripping short or narrow stock, always use a pushstick between the blade and the fence. Do not rip a workpiece that is shorter than the diameter of the saw blade.

- Do not cut free-hand (failing to use the fence to stabilize the workpiece.) Free-handing a workpiece can cause crooked cuts and potential kickback.



- Always hold the workpiece firmly against the fence when crosscutting. Pull the saw toward you and through the workpiece just far enough to complete the cut.
- When you start your saw allow the blade to reach full speed before contacting the workpiece.
- Avoid standing or permitting others to stand directly behind the workpiece when making a ripping cut.



Never reach near, along side, or around the saw blade. This is particularly dangerous.

Never place arms, hands or fingers in the path of the blade. This is especially dangerous during a crosscutting job.

- Hold onto the saw handle until the blade comes to a complete stop.

### When Done...



When a crosscut job is complete, return the carriage to the full rear position behind the fence.

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