

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.

## Shapers and Router Tables

Shapers and router tables are used to create decorative surfaces in wood and wood like materials.

### Good Personal Safety is a Must

Following good safety practices when using a shaper or router table 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.
- 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 job 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 only the cutter recommended by the tool manufacturer. This is extremely important for your personal safety.
- Always keep cutters sharp and clean of rust and pitch to avoid excessive blade friction.
- Do not attempt to sharpen cutters while they are installed in the cutter head unless a proper sharpening attachment is provided.

### Know your Workpiece

Take time to review your workpiece and make sure that all necessary precautions have been taken before shaping.



Examine the workpiece carefully before cutting. Do not shape chipboard, panel board or any stock containing nails, paint or varnish.

- Shaping narrow materials can be hazardous. Always use fixtures, featherboards, push blocks and/or other jigs to hold down the workpiece.
- Never make freehand cuts. Holding the work piece by hand is unstable and may lead to loss of control.
- Be cautious of knots in wood. Knots can be thrown out of the workpiece or cause kickback.
- Properly support long lengths of material to maintain control. Use work supports or stands as needed.

### Before Shaping...

Before working with a shaper or router table, make sure the tool and its accessories are in proper working order. Failure to do so may increase your risk of injury.

- Obtain advice from a qualified person if you are not thoroughly familiar with the operation of this tool.
- Do not operate the tool until it is completely assembled and installed according to the manufacturer instructions.
- Check that all guards are in place and return quickly to normal rest positions. If a guard seems slow to return or "hangs up", have it adjusted, repaired or replaced immediately. Never use a tool without a properly operating guard.
- Always use the guard as recommended by the tool manufacturer.
- Set up and secure cutters and worktables according to the operator's manual.
- Make sure cutters are securely locked in the cutter head and that the unused portion of the cutters are covered by the guard before tool use.

- Maintain proper adjustments for infeed and out-feed tables.
- Adjust the fence halves so the cutter opening is more than is required to clear the cutter blade.
- Lock the fence into position after making fence adjustments.

### While Shaping...

- Avoid awkward operations and hand positions where a sudden slip could cause a hand to move into the cutter knives.
- Keep your hands, fingers and body away from the cutting area. Contact with a knife will cause serious injury.
- Never feed the workpiece in the direction of cutting blade rotation. Otherwise, the cutter blade can grab and pull the workpiece.



Always use a miter gauge and clamp for “end shaping” to maintain safe control of the work piece.

- Keep the exhaust port pointed away from yourself.
- Don't reach into the exhaust chute to unclog chips. Stop the tool and unplug it from the power source. After making sure that blade has stopped, clear the chute with something other than your bare hand.
- Never reach under the table while the tool is running to avoid personal injury.
- Always be sure that the tool is switched off and unplugged before making any adjustments.

### When Done...

- When done, lock the switch in the “off” position to prevent unauthorized use.

### Always Remember...

- Store cutters with care. Do not drop them or subject them to excessive heat, cold or humidity.