



General Power Tool Safety Warnings

⚠ WARNING:

- Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.
- Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) **Keep work area clean and well lit.** *Cluttered or dark areas invite accidents.*
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** *Power tools create sparks which may ignite the dust or fumes.*
- c) **Keep children and bystanders away while operating a power tool.** *Distractions can cause you to lose control.*

2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** *Unmodified plugs and matching outlets will reduce risk of electric shock.*
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is earthed or grounded.*
- c) **Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** *Use of a cord suitable for outdoor use reduces the risk of electric shock.*
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** *Use of an RCD reduces the risk of electric shock.*

3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
- b) **Use personal protective equipment. Always wear eye protection.** *Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
- c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** *Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.*

- d) **Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
- e) **Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
- f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewellery or long hair can be caught in moving parts.*
- g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of dust collection can reduce dust-related hazards.*

4) Power tool use and care

- a) **Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
- b) **Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
- c) **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
- d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*
- e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation.** *If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.*
- f) **Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*
- g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

5) Battery tool use and care

- a) **Recharge only with the charger specified by the manufacturer.** *A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.*
- b) **Use power tools only with specifically designated battery packs.** *Use of any other battery packs may create a risk of injury and fire.*
- c) **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** *Shorting the battery terminal together may cause burns or a fire.*

d) **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

6) Service

a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

Additional Safety Rules

1) Entanglement hazards

- a) **Keep away from rotating drive.** Choking, scalping and / or lacerations can occur if loose clothing, gloves, jewellery, neck ware and hair are not kept away from tool and accessories.
- b) **Do not wear loose-fitting gloves or gloves with cut or frayed fingers.** Gloves can become entangled with the rotating drive, causing severed or broken fingers.

Drivers and wrenches safety warning

- a) Rotating drive sockets and drive extensions can easily entangle rubber-coated or metal-reinforced gloves.
- b) Never hold the drive, socket or drive extension
- c) **Do not use in a worn condition.** The clutch may not operate, resulting in sudden rotation of the tool handle.
NOTE For tools without clutches, the above warning may be omitted

2) Operating hazards

- a) **Operators and maintenance personnel must be physically able to handle the bulk, weight and power of the tool.**
- b) **Hold the tool correctly: be ready to counteract normal or sudden movements.** Have both hands available.
- c) **Always support the tool's handle securely, in the direction opposite to the spindle rotation, to reduce the effect of sudden torque reaction during final tightening and initial loosening.**

Drivers and wrenches safety warning

- a) **Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring.** Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- b) **Wear ear protectors.** Exposure to noise can cause hearing loss.
- c) **Immediately after adjusting the clutch, check for correct operation.** NOTE For tools without clutches, the above warning may be omitted.
- d) **Do not use in a worn condition.** The clutch may not operate, resulting in sudden rotation of the tool handle. NOTE For tools without clutches, the above warning may be omitted.
- e) **If possible, use a suspension arm to absorb the reaction torque. If that is not possible, side handles are recommended for straight-case and pistol-grip tools; reaction bars are recommended for angle nutrunners.** In any case, it is recommended to use a means to absorb the reaction torque above 4 Nm (3 lbf.ft) for straight-case tools, above 10 Nm (7.5 lbf.ft) for pistol-grip tools, and above 60 Nm (44 lbf.ft) for angle nutrunners

Impact drill / drivers Safety Warning

- a) **Wear ear protectors when impact drilling.** Exposure to noise can cause hearing loss.

- b) **Use auxiliary handle(s), if supplied with the tool.** Loss of control can cause personal injury.
- c) **Hold power tool by insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring.** Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- d) **Hold power tool by insulated gripping surfaces, when performing an operation where the fastener may contact hidden wiring.** Fasteners contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.
- e) **You can be cut or burned if you come into contact with the drill bit, chips or work surface.** Avoid contact and wear suitable gloves to protect hands.
- f) **Use intermittent drill pressure to avoid long shaved chips.**
- g) **The drill bit can suddenly bind and cause the work piece or tool to rotate, causing arm or shoulder injuries.** Reduce downward pressure at breakthrough.

3) Projectile hazards

- a) **Always wear impact-resistant eye and face protection when involved with or near the operation, repair or maintenance of the tool or changing accessories on the tool.**
- b) **Be sure all others in the area are wearing impact-resistant eye and face protection.** Even small projectiles can injure eyes and cause blindness.
- c) **Assemblies requiring a specific torque must be checked using a torque meter.** Socalled "click" torque wrenches do not check for potentially dangerous over-torqued conditions. Serious injury can result from over-torqued or under-torqued fasteners, which can break, or loosen and separate. Released assemblies can become
- d) **This tool and its accessories must not be modified in any way.**
- e) **Do not use hand sockets.** Use only power or impact sockets in good condition.

4) Repetitive motion hazards

- a) **When using a power tool to perform work-related activities, the operator might experience discomfort in the hands, arms, shoulders, neck, or other parts of the body.**
- b) **Adopt a comfortable posture whilst maintaining secure footing and avoiding awkward or offbalance postures.** Changing posture during extended tasks can help avoid discomfort and fatigue.
- c) **Do not ignore symptoms such as persistent or recurring discomfort, pain, throbbing, aching, tingling, numbness, burning sensation, or stiffness.** Stop using the tool, tell your employer and consult a physician.

5) Noise and Vibration hazards

- a) **High sound levels can cause permanent hearing loss and other problems such as tinnitus.** Use hearing protection as recommended by your employer or occupational health and safety regulations.
- b) **Exposure to vibration can cause disabling damage to the nerves and blood supply of the hands and arms.** Wear warm clothing and keep your hands warm and dry. If numbness, tingling, pain or whitening of the skin occurs, stop using tool, tell your employer and consult a physician.
- c) **Hold the tool in a light but safe grip because the risk from vibration is generally greater when the grip force is higher.** Where possible use a suspension arm or fit a sidehandle.

d) To prevent unnecessary increases in noise and vibration levels:

- Operate and maintain the tool, and select, maintain and replace the accessories and consumables, in accordance with this instruction manual;
- Do not allow the drill bit to chatter on the workpiece;
- Do not use worn or ill-fitting screwdriver bits.

6) Workplace hazards

- a) Slip/Trip/Fall is a major cause of serious injury or death. Cluttered areas and benches invite injuries.
- b) Do not use in confined spaces. Beware of crushing hands between tool and workpiece, especially when unscrewing.
- c) Ensure that the workpiece is securely fixed.
- d) Avoid inhaling dust or fumes or handling debris from the work process which can cause ill health (for example, cancer, birth defects, asthma and/or dermatitis). Use dust extraction and wear respiratory protective equipment when working with materials which produce airborne particles.
- e) Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:
- Lead from lead based paints
 - Crystalline silica bricks and cement and other masonry products
 - Arsenic and chromium from chemically-treated rubber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

f) High sound levels can cause permanent hearing loss.

Use hearing protection as recommended by your employer or occupational health and safety regulations

g) Repetitive work motions, awkward positions and exposure to vibration can be harmful to hands and arms. If numbness, tingling, pain or whitening of the skin occurs, stop using tool and consult a physician.

h) Proceed with care in unfamiliar surroundings. Be aware of potential hazards created by your work activity. This tool is not insulated from coming into contact with electric power sources.

Our goal is to produce tools that help you work safely and efficiently. The most important safety device for this or any tool is YOU. Your care and good judgment are the best protection against injury. All possible hazards cannot be covered here, but we have tried to highlight some of the important ones. Only qualified and trained operators should install, adjust or use this power tool.



WARNING

To reduce risk of injury, everyone using, installing, repairing, maintaining, changing accessories on, or working near this tool must read and understand these instructions before performing any such task.