

# Hand & Power Tool Safety



## Safety Checklist

A hand tool is any tool that is powered manually, such as a saw, wrench or screwdriver.

**Did you know?** Hand tools that are damaged or broken present the greatest hazards. Inspect tools for wear and tear before you use them.

**More hand tool tips:**

- Make sure the blades of saws, knives, scissors and other cutting tools are sharp and free from notches or cracks.
- Discard or repair a wrench or other gripping tool that has loose, sprung jaws.
- Look out for mushroomed or flattened heads on impact tools, such as wedges and chisels.
- Check tools with wooden handles for splinters or cracks.
- Don't use iron tools around flammable substances — they can produce sparks.
- Wear safety goggles and gloves while using hand tools.



**Stay on your feet:** Keep the floor of your work area clean, dry and free of debris. A slip or trip while holding a tool can lead to serious injury.

## Be On Guard

Safety guards are there for a reason. Never remove guards or modify them in any way. If you must remove a guard to clean or service a power tool, disconnect the tool from its power source first, and replace the guard before restoring power. Larger power tools should be equipped with an emergency shut-off switch that stops the tool if the operator lets go of it.

### 5 Tool Rules

1. Keep all tools clean and in good repair.
2. Use the right tool for the job.
3. Inspect every tool for damage before you use it; do not use damaged tools.
4. Follow the manufacturer's instructions for using a tool correctly.
5. Wear the right personal protective equipment (PPE), such as goggles or gloves, for the tool you are using.

## GET THE JOB DONE SAFELY

Taking these general safety precautions can help you avoid injury while using tools.

**Avoid** wearing loose clothing, ties or jewelry when using tools with moving parts.

**Tie** back long hair and keep your hands away from pinch points and sharp or moving parts.

**Keep** your mind on your work, and take a break if you feel drowsy or unfocused.

**Don't** operate power tools if you are ill, taking a medication that causes drowsiness, are fatigued or have consumed alcohol.

**Save** the cigarettes for later. Smoking while using power tools poses a fire hazard.

**Work** with tools in a brightly lit, clean, dry area.

**Know** your tool. Follow manufacturer instructions, and attend any training or safety seminars your workplace provides.

## Power Up, Stay Safe

Power tools are powered by an energy source, such as electricity, compressed air or liquid fuel.

**Watch out:** Power tools can present a dual hazard — you could be injured by the tool itself or by an energy discharge from its power source. **Power tool smarts:**

- Never carry a tool by its cord or hose, and don't pull on the cord or hose to disconnect the power.
- Disconnect the tool from its energy source before cleaning it or changing blades, bits or other parts.
- Keep your fingers away from the power button when carrying the tool.
- Remove damaged or worn power tools from the work area and label them "Do not use."
- Keep power tool cords and hoses away from heat, oil, chemicals and sharp edges.
- Plug electrical tools into the right type of grounded, insulated outlet, and never tamper with the plug to make it fit a different outlet.
- Use tools only at the manufacturer's recommended operating speed, and never force a tool or apply too much pressure to it to rush the job.
- Know how to disconnect the power source from a tool, and do not walk away and leave a tool on.

**Hands free:** When using a tool, secure whatever you are working on in a clamp or vice so your hands are free to operate the tool safely.



## PROTECT YOURSELF FROM RSIs

RSIs occur when the same motion, such as gripping, twisting or vibrating, is performed over and over again. This repetitive motion stresses muscles, nerves and tendons in your neck, back, shoulders, hands and wrists. **Prevent RSIs by taking these precautions:**

- Use ergonomic tool grips that are comfortable for you to hold.
- Use power tools rather than hand tools when you can, and make sure they are as low vibration as possible.
- Arrange your workspace so you can easily reach the tools you need to perform a job, and change positions frequently while working to reduce repetitive motion and strain.

## Dust in the Air

Some tools, such as belt sanders, saws and grinding wheels, can produce another hazard besides just the operation of the tool itself: Dust created from grinding, cutting and sanding can be a hazard to lungs, eyes and skin. **What to do:**

- Wear tight-fitting safety glasses at all times.
- Protect your skin with a long-sleeved shirt and gloves.
- Use a filter-type respirator if working in dusty conditions.

### (UN)FRIENDLY

**JACK:** Jackhammers can cause repetitive stress injuries and fatigue from vibration, and injuries if they slip. Wear the right PPE, including a face shield, hearing protection and safety shoes. Installing heavy rubber grips on the jackhammer can help reduce vibration and improve grip.