

Student Handout

Manual and power tool safety

The tools of the trade for automotive mechanics have the potential to cause serious injury, particularly if they're poorly maintained or used without due caution.

Examples of hazards

- poorly maintained hand tools – for example, chisels and wedges with mushroomed heads, split or cracked handles, chipped or broken drill bits
- poorly maintained power tools – for example, frayed cords, broken or inoperative guards, defective on/off switch, or tool blade cracked
- wrong parts used - for example, grinder wheel
- tools used without training or personal protective equipment

Safety tips

- Never use a power tool unless you have been trained and authorized to do so. Follow safe work procedures.
- Inspect all tools prior to use. Only use tools that are in good operating condition. Check out any unusual vibrations or noises before using powered equipment. Check all power cords daily for tears or cuts in the insulation, loose connections (plug to wire and wire to tool) and poor ground connections. Report all defective tools to your teacher or supervisor, and mark them "Not to be used".
- Wear hearing protection and tie back long hair when operating power tools.
- Before starting, check to ensure that all guards and safety devices are in place and functioning properly, and check that the power switch is in the off position before plugging it in. Only the operator should turn the tool on.



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- ❑ Stay with running power tools. Do not walk away from a machine you have been using until it comes to a complete stop—it takes only a few seconds for a power tool to 'wind down' after it has been shut off.
- ❑ Whatever tool you are using, make sure it will cut, drill or grind only what you want to cut, drill or grind.
- ❑ Keep your hands away from the spinning drill bits, grinding disks or other moving parts.
- ❑ Make sure the cutting part of a tool will not come in contact with the power cord.
- ❑ Maintain a firm grip on power tools at all times when in use.
- ❑ Turn off power tools before making adjustments. Always unplug or lockout the tool before making any adjustments or changing settings where there is a danger of being injured in the event of a start-up of the tool.

