

## Hand and Power Tools Fact Sheet

Tools are manufactured with safety for the user in mind but they may pose hazards. Hand tools are categorized as

1. Non-powered and include adzes, axes, crow bars, pry bars, screw drivers, wrenches.
2. Power tools are classified by power source: electric, pneumatic, liquid fuel, hydraulic and powder-actuated.

### **Hand Tools**

#### **Hazards**

Hazards result from misuse and improper maintenance.

#### **Recommendations**

The employer is responsible for the safe condition of tools and equipment used by employees.

The employee is responsible for proper use and maintenance of the equipment.

Employers should teach employees that sharps (saw blades, knives) and other tools be directed away from aisles and other employees working nearby.

Knives and scissors must be sharp; dull tools can be more hazardous than sharp ones.

Floors should be kept as clean and dry as possible to prevent accidental slips with or around dangerous hand tools.

Only spark-resistant tools made from brass, plastic, aluminum, or wood should be used around flammable substances.

### **Power Tools**

#### **Hazards**

Power tools can be hazardous when not used properly.

#### **Recommendations**

- Never carry a tool by the cord or hose.
- Never yank the cord or hose to disconnect it from the receptacle.
- Keep cords and hoses away from heat, oil and sharp edges.
- Disconnect tools from the power source before servicing or changing accessories.
- Keep all observers at a safe distance away from the work site.
- Use both hands to operate the tool; secure work with clamps or a vise.
- Keep finger off the on switch button unless operating the tool.
- Follow manufacturer's instructions for lubrication and changing accessories.
- Keep good footing and maintain good balance when using a power tool.
- Wear proper clothing; avoid any clothing or accessory that could become caught in moving parts.
- Remove all damaged portable electric tools from use and tag "Do Not Use."

## **Guards**

Safety guards must never be removed when a power tool is in use.

## **Safety Switches**

Certain hand-held power tools require either a momentary contact “on-off” control switch, a positive “on-off” control switch, or a constant pressure switch.

## **Electric Tools**

- Tools must either have a 3-wire cord with ground and be grounded, or be double insulated, or be powered by a low-voltage isolation transformer.
- Only operate electric tools within their design limitations.
- Wear gloves and safety shoes or boots.
- Store tools in dry place.
- Do not use power tools in damp or wet sites.
- Light work areas well.

## **Jacks**

- All jacks must have a safety device that stops them from going up too high.
- Manufacturer’s load limit must be permanently marked in a prominent place and not be exceeded.
- Immediately block a lifted load once it reaches the proper height.
- Make sure the base rests on a firm, level surface, the jack is correctly center, the jack heads bears against a level surface, and the lift force is applied evenly.
- Lubricate regularly (with adequate antifreeze liquid if exposed to freezing temperatures).
- Inspect before each use.

## **Recommendations**

To avoid the hazards associated with using power tools, workers must learn to recognize the hazards associated with each type of tool used and the safety precautions necessary to prevent those hazards.

Make sure that you are instructed in the proper use of all tools and you understand the risks and the safety precautions involved.

If training someone, make sure that you are with him/her while he/she is using the tool until you, the trainer, are satisfied that the tool is being used properly and safely.

## **Source**

<http://nonprofitrisk.org/tools/workplace-safety/public-sector/topics/pop...>