

## Screwdrivers



- Keep tips clean and square-edged
- Reshape minor wear with a file
- The tip should fit snugly in the screw
- Dispose of any screwdriver with a broken or loose handle, bent blade or twisted tip
- Use ONLY insulated screwdrivers for electrical work
- Check insulation for cracks
- Always make a pilot hole for a screw.
- Carry screwdrivers in a toolbelt, not a pocket
- Never use as a punch, wedge, pinch or pry bar

## Vises

- Fasten securely to a sturdy, immobile workbench or similar base
- When sawing material held in a vise, make the cut as close to the jaws as possible
- Support the free end of long pieces

## Clamp



- Do not over tighten a clamp
- If there is a swivel it must turn freely
- Store clamps on a rack, not in a drawer

## Impact Tools



### Hammers

- Fit handles securely to the head
- Ensure handles are smooth, free of oil, and shaped to fit the hand
- Dress hammer heads whenever they start to mushroom
- Wear safety glasses when using a hammer
- Never hit two hammer heads together
- Do not use a claw hammer to strike another tool; use a ball peen hammer
- Do not use a sledge hammer with a split handle or chipped head
- While using axes, spades, etc. wear safety shoes and clothing

### Side Cutting Pliers

- Use insulated pliers for electrical work
- Jaw serrations should be sharp enough to hold wires securely

## Extension Cords

- Use only three-prong, grounding-type plugs and three pole receptacles that accept the tool's plug
- Do not use an undersized cord, it will overheat and can cause damage to the tool motor
- Consider the type of tool used and the length of extension needed.
- If you are unsure about the gauge of wire to use, contact your supervisor or EHS staff for assistance
- Use only UL approved extension cords
- Inspect and document all extension cords in accordance with WAC 296-45



# Hand Tool Safety



For additional information contact:

Environmental Health and Safety

650-3064

Environmental Studies 72, Mail Stop 9070

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## Tool Use

The safest tool is the one made for the job, and used as designed

Tools are only to be used in ways intended by the manufacturer

Creative use or mis-use of tools often leads to injury or damaged tools. For example:

An adjustable wrench can tighten a nut, but it would be better to use a box-end wrench or a socket wrench of the proper size

Ergonomically designed tools provide the best fit

### Employees are Responsible for:

- Selecting the proper tool for the job
- Checking to ensure the tool is in good working condition
- Using tools correctly
- Using specified personal protective equipment
- Cleaning and storing the tool properly

### Supervisors are Responsible for:

- Orienting employees to their job and tools
- Providing adequate training for the use of any tools used by an employee
- Ensuring that the correct tool is available and used
- Ensuring the appropriate personal protective equipment is specified and available

## Safe Work Practices

### Cutting Tools

- When using cutting tools, the direction of force should be away from the body
- Use the tool as it is designed
- All cutting tools must have a handle or holding device
- Personal protective equipment such as safety glasses and hearing protection may be required for power cutting tools
- *Refer to the Hazard Assessment Certification in Section 5 of the WWU Safety Information Book*
- For hacksaws, correctly place blades in the frame and select the proper blade for the cutting job
- Adjust the tension of the blade and make sure the teeth are pointing forward

- Use guide blocks to guide material across the cutting surface
- Use cut-resistant gloves and safety glasses (see the hazard assessment certification in Section 5 of the Safety Information Book)
- Replace guards when they are damaged
- Use retractable-blade utility knives
- Open blade knives must have sheaves provided

### Torsion Tools -Wrenches

- Use a short, steady pull and never push
- Check for secure footing and have plenty of finger clearance
- Never hammer or strike a wrench
- Do not use extensions on handles for additional leverage

### Socket Wrenches

- Use in place of an adjustable wrench or open-ended wrench, as they are safer and protect the bolt head or nut

### Adjustable Wrenches

- Use mainly for nuts and bolts that do not fit a standard wrench

- Always apply pressure to the fixed-jaw side of the wrench and pull the wrench toward you

### Pipe Wrenches

- Use only straight and chain-tong wrenches with sharp jaws
- Keep straight and chain-tong wrenches clean to prevent slipping
- Do not use a pipe wrench on nuts or bolts
- Do not hammer a pipe wrench unless it is specifically designed for such use

### Torque Wrenches

- Have a documented annual calibration test performed or ask your supervisor to arrange
- Keep nut and bolt threads clean
- Never exceed the scale range to prevent damage

