

Company Name

SAFE WORK PRACTICE

HAND TOOLS

SPECIAL EQUIPMENT REQUIRED

None

INTRODUCTION

Hand tools that are in poor condition or misused are a major cause of accidents in the workplace. Proper maintenance and necessary replacement of hand tools are critical to reducing accidents and injuries. All workers must ensure that tools are safe to use, in good repair, adequate for the work, and free of defects.

PRACTICES

1. Workers must inspect hand tools before use to ensure that they are in proper working order. Damaged or defective tools must be reported to the supervisor and must be repaired or removed from service.
2. Supervisors must periodically inspect shop tools to ensure that tools are in proper working condition and meet appropriate guidelines.
3. Tools and jigs especially designed for a specific purpose should be checked by a qualified person to ensure that there are no inherent or hidden safety hazards.
4. Proper and appropriate personal protective equipment must be worn when using all tools.
5. All tools must be cleaned and properly stored after use. Each tool must have its own storage area to prevent damage. This is particularly important with power tools.
6. Tools must not be used beyond their manufacturer's designed capacity since such use may create a personal hazard. Tools must be used solely for their intended purpose. The designed capacity of tools must not be exceeded by unauthorized attachments.
7. Power drills, disc sanders and grinders, (when used in the hand-held mode) must be operated with deadman controls that require constant hand pressure.
8. Face shields or goggles must be worn when operating a grinder.
9. Power saws, grinders, and other power tools must have proper guards in place at all times and must be properly grounded. Those with automatically adjusting guards must be inspected for proper movement.
10. All fuel-powered tools must be shut down while being refueled. Smoking is prohibited during refueling operations. Other nearby sources of ignition, such as cutting and welding, also must be halted during refueling operations.

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11. Chisels, screwdrivers, and pointed tools should never be carried in a pocket. They should be carried in a toolbox, cart, carrying belt, tool pouch, or in the hand with points and cutting edges away from the body.
12. Inspect and check the following common hand tools:
 - 12.1 Screwdrivers: Ensure that handles are smooth and clean and that bits are sharp and square. A sharp square-edged bit will not slip as easily as a dull rounded one and requires less pressure. When working around electrical-current-bearing equipment, use an insulated screw-driver as a secondary precaution.
 - 12.2. Hammers: Ensure that handles are unbroken and clean and that the face of the head is smooth and clean. Hammers are made in various types and sizes, with varying degrees of hardness and different configurations for specific purposes. Use the correct hammer for the correct purpose.
 - Ball-Peen Hammers are designed for striking chisels and punches and for riveting, shaping, and straightening unhardened metal.
 - Sledge hammers are designed for general sledging operations in striking wood, metal, concrete, or stone.



Always wear safety glasses when using a hammer. A hammer blow should always be struck squarely. Avoid glancing blows.

- 12.3. Punches are designed to mark metal and other materials that are softer than the point end, to drive and remove pins, and to align holes. Never use a punch with a mushroomed struck face or with a dull, chipped, or deformed point. Any bent, cracked, or chipped punch must be removed from service.
- 12.4. Cold chisels have a cutting edge for cutting, shaping, and removing metal softer than the cutting edge. Factors determining the selection of a cold chisel are the material to be cut, the size and shape of the tool, and the depth of the cut to be made. Ball chisels held by one person and struck by another require the use of tongs or a chisel holder to guide the chisel.
- 12.5. Ensure that file tangs are protected by handles and that teeth are sharp and clean. The correct way to hold a file is to grasp the handle firmly in one hand and use the thumb and forefinger of the other to guide the point. Push the file forward while bearing down on it. Release the pressure and bring the file back to its original position. Never use a file without a smooth, crack-free handle. Select the proper file for the work.
- 12.6. Knives: Ensure that the handle is guarded and that the blade is sharp. The cutting stroke should be away from the body. Avoid jerky motions. Keep knives and other sharp hand tools separated from other tools. With the knife's sharp edge turned away from the hand, wipe the blade with a towel or cloth. Do not substitute knives

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for can openers, screwdrivers, or ice picks.

- 12.7. Shovels: Keep shovel edges trimmed, and check handles for splinters. When not in use, hang up shovels, stand them against walls, or keep them in racks or boxes.
- 12.8. Wrenches (Spanners): Safe use of all wrenches requires that the user always be alert and prepared for the possibility that the wrench may slip, the fastener may suddenly turn free, or the wrench or fastener may break. The user must always inspect the wrench for flaws.
 - Open-end wrenches have strong jaws and are satisfactory for medium-duty turning.
 - Box and Socket Wrenches are necessary for a heavy pull. Never overload the capacity of a wrench by using a pipe extension on the handle or by striking the handle with a hammer. When possible, use penetrating oil to loosen tight nuts.
 - Socket wrenches should be kept clean of dirt and grime inside the socket to ensure that the tool fits securely on the bolt or nut.
 - Adjustable wrenches are generally recommended for light-duty work. Place the adjustable wrench on the nut with the open jaws facing the user; wrenches should be pulled, not pushed.
 - Both straight and chain pipe wrenches must have sharp jaws and be kept clean to prevent their slipping. The handle of every wrench is designed to be long enough for the maximum allowable safe pressure. Do not use handle extensions to gain extra turning power unless the wrench is so designed. Never use a pipe wrench on nuts or bolts.



Pliers may be used for gripping and cutting operations, but they are not a substitute for a wrench.
