



SUBJECT:	HAND TOOL MAINTENANCE
GOAL:	Uniform maintenance of hand tools.
PURPOSE:	The purpose of this SOG is to identify and establish guidelines for hand tool maintenance, conditioning, and care.
DEFINITION:	Non-motorized tools that are normally used on an emergency scene.
SCOPE:	All District personnel.
PROCEDURE:	<p>Safety</p> <p>When maintaining tools the following safety precautions are to be followed:</p> <ul style="list-style-type: none">• All personnel shall wear appropriate PPE including eye protection, foot protection and gloves.• Understand the hazards of flying particles and filings. They may cause eye and tissue injuries. Use caution with wire wheels.• Read and follow the MSDS prior to using any paints, solvents, or other hazardous materials. Avoid breathing noxious fumes. Adequate ventilation is required.• For rags/towels that have been used with linseed oil, they must be stored in a fire safe container. In the absence of a fire safe container, spread out the rag/towel and let air dry. Do not bunch up and confine. This may cause a fire.• Avoid running or walking backwards with tools.• Avoid the sharp edges of tools. <p>General Considerations</p> <p>Hand tools are classified into three general groups:</p> <ul style="list-style-type: none">• Cutting tools (i.e. axes, pulaski, etc.)• Prying and digging tools (i.e. pry bars, shovels, etc.)• Mechanical tools (i.e. wrenches, screw drivers, etc.) <p>Anytime a tool is in need of repair or is no longer serviceable, a tag shall be attached to the tool and the following information will be written on the tag:</p> <ul style="list-style-type: none">• Problem identified• Date• Person who tagged it (in case follow-up questions are required) <p>The person who tagged the tool is responsible to notify both their company officer (who will attempt to replace the tool with a spare) and a tool committee member (by e-mail).</p>

Procedure

- 1) All tools should be washed with soap and water to remove soil and debris. Tools should be dried with a towel and allowed to adequately air dry prior to any maintenance.
- 2) To care for wooden handles, the head of the tool should be wrapped in a towel first, then placed in a vise. Examine for any major cracks in the wood and ensure that the handle is securely attached to the head. If major cracks are found or the handle is loose, tag the tool. The handle shall be sanded to remove any tar, paint, splinter, or rough edges. After sanding, a light coat of polyurethane shall be applied to the entire surface of the wood and allowed to dry for 24 hours.
- 3) To care for fiberglass handles, washing with soap and water is sufficient. Examine for major crack or splinters. If any are found, tag the tool and notify a tool committee member.
- 4) The following tools will have a wire/tape wrap on the handle for extra grip. The wrap consists of 10-gauge wire spaced 1.5 inches per turn and covered with hockey tape. The length of the wire wrap depends on the tool.
 - a) Axes will be wrapped approximately 7 inches down from the head of the axes and approximately 7 inches up from the handle.
 - b) Pike poles and rubbish hooks 6 feet and longer shall have a wrapped portion 4 feet in length starting approximately 2 feet from the handle.
- 5) To care for the heads of cutting tools, the tool shall be wrapped in a towel then placed in the vise with the cutting edge up. Using a file, the file shall be run across the cutting edge at a 30 degree angle (sufficient to create a sharp cutting edge). Only run the file in one direction (either left to right or right to left) using smooth long strokes. Upon completion of one side, reverse the tool and complete the other side. Once the tool is sharp, use steel wool or hand-held angle grinder across the remainder of the head to remove any rust, paint, tar, or other materials (do not use the wire wheel on the grinder). Finish the job by coating the head with a light coat of rust proof oil spray. A new coat should be applied weekly to prevent rusting during the rainy season.
- 6) The bodies of prying tools (not the heads) and the heads of digging tools shall be painted with rust proof oil spray.
- 7) Mechanical tools and chromed hand tools should be kept clean with soap and water and the ends coated with mineral or motor oil.
- 8) Assure the tool has the appropriate apparatus shop number applied.