

Hurricane Fire & Rescue

Hurricane, WV

Operation Guidelines

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Power Tools
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4

Purpose: When operating power equipment under emergency conditions, accident potential is high due to adverse operational conditions. A slight miscalculation or sudden unplanned move can result in a serious accident. Performance, skill, coupled with the use of common sense and the strict adherence to safety procedures can prevent accidents.

Scope: Operation personnel who utilize power tools.

Responsibility: All operation personnel who operate power tools or work in close proximity of power tools.

Personnel Protection

- A. Appropriate protective clothing shall be worn by personnel operating, and by personnel in close proximity to the operation of power saws.

Hearing protection shall be worn as outlined in SOG 313 (Hearing Protection)

The face shield or safety glasses/goggles shall be in position to provide eye protection.

- B. To prevent accidents caused by moving belts, gears, chains, blades, etc., it is imperative that the operator and guide have their clothing completely fastened.

Operating Procedures

- A. Starting procedures of power tools shall be in accordance with the manufacturer's recommendations.

- B. Carry the rescue saw with the engine stopped the blade frontward and muffler away from your body.
- C. Always carry the chain saw with the guide bar and saw chain to the rear.
- D. Keep both hands on the control handles when operating the saw. Use a firm grip with thumbs and fingers encircling the saw handles.
- E. Make sure of your footing before operating the saw.
- F. Whenever possible, a team of two persons shall perform cutting operations. The person operating the saw (**operator**) will be assisted and/or guided by the second person (**guide**).
- G. The saw shall always be shut down when unattended.
- H. Have a plan of action before putting the saw into operation; your plan should include:
 - 1. Location and sequence of cuts and openings.
 - 2. Wind direction. Consider its effect on exposures and personnel.
 - 3. Your plan should provide for at least two (2) means of egress if possible.
- I. When possible, a company officer/ safety officer should be present to supervise cutting operations and to assure compliance with safety procedures. The number of personnel should be limited to the minimal number required to sustain the operation. All other personnel shall be removed to a safe location until the operation is complete or assistance with the operation is needed.
- J. Always place the safety guard in the proper position to provide protection for the use intended before operating the saw.
- K. Power saw operations are safest when cutting on horizontal surfaces near ground level or vertical surfaces at waist level.

Operating a power saw above chest height is extremely hazardous and should not be attempted as a normal course of action. This type of operation shall be conducted only under the direct order and/or under the supervision of an officer. The company officer ordering this operation shall weigh the value gained against the extreme hazard to personnel.

- L. The use of a power saw from a ladder is not recommended if there are alternatives.
- M. Do not operate power saws in suspected flammable/explosive atmospheres.
- N. When operating closely to highly combustible or flammable materials, use care to prevent ignition.
- O. Side pressure or twisting of the blade when operating a rescue saw should be avoided. The saw should never be forced. If too much pressure is applied to the blade, the hazard of blade breakage (**carbide tipped**) or blade shattering (**aluminum oxide or silicon carbide discs**) is increased. A blade, which breaks or shatters during cutting operations, may cause serious injury to the operator or to others in the area.
- P. The saw cut should be only as deep as necessary. Deep cuts may weaken supporting beams and lead to collapse. The experienced operator will know when she/he has reached a beam by the sound and feel of the saw. A blade guard can be used to control the cutting depth of the blade (**rescue saw**).
- Q. If conditions permit scrape gravel and debris from the path to be cut, in order to reduce the danger of injury from flying chips and loose materials. (It also will show the operator, which way the rafters are running).
- R. When using the rescue saw to open metal buildings, doors, etc., where conditions permit, utilize methods to eliminate the hazards of sharp edges. The appropriate chain or blade should be selected for the type of material it is designed to cut. Consider making your cut in either a square design or a triangular design with the points bent inward.

Fueling and Maintenance Precautions

- A. Observe all safety regulations on the safe handling of fuel. When necessary to refuel, comply with the following:
 - 1. Use the appropriate fuel type for the power tool you are refueling.
 - 2. The saw should never be refueled while the engine is running.
 - 3. If fuel is spilled while refueling, wipe off saw before starting.
 - 4. Do not operate the saw if there is a fuel leak. Send it for servicing.
 - 5. Do not restart the saw in a small, enclosed space after refueling.

- B. Always keep equipment in good, clean, serviceable condition.
- C. Examine the rescue saw cutting wheel for nicks or defects at the beginning of each shift and after each use.
- D. Clean the wheel (**blade**) and both wheel washers when installing the wheel.
- E. Composite blades shall not be stored in apparatus compartments that contain hydrocarbon fuels. Care must be taken to assure that the abrasive saw blades do not become contaminated with petroleum-based products. Such contamination may dissolve the resin, which is used to bond the blade materials, causing the blade to shatter when used. New blades should be stored in plastic bags to insure cleanliness.

Hydraulic Rescue Tool

- A. Appropriate protective clothing shall be worn by those members operating, or in close proximity to the operation of the Hydraulic Rescue Tool.
- B. The hydraulic fluid used to operate the Hydraulic Tool can cause severe burns to the eyes. To provide eye protection in the event of a hose or coupling failure where fluid may be expelled; all members in the area of operation of a Hydraulic Tool shall place their face shield or appropriate eye protection in position to provide such protection.

NOTE: SHOULD FLUID GET INTO THE EYES, THE EYES SHOULD BE FLUSHED IMMEDIATELY WITH COPIOUS AMOUNTS OF WATER AND THE PERSON SHALL SEEK MEDICAL ASSISTANCE. AN INJURY FORM SHALL BE COMPLETED.

- C. Precautions shall be taken to protect the trapped and injured from further injuries during the operation (**i.e. sparks, propelled objects flying glass, etc.**), and a charged hose line in place.
- D. The Hydraulic Tool engine should be kept away from the injured and the work area. It must not be placed where it would provide a source of ignition for any flammable vapors in the air.