

## **Occupational Safety and Health, SOG 212**

### **OPERATING HYDRAULIC-POWERED RESCUE TOOLS**

1. Scope. This standard mandates safety guidelines to be followed while operating a hydraulic-powered rescue tool. It was promulgated to:
  - A. Prevent accidents, injuries, and deaths that might result from the misuse or improper operation of hydraulic-powered rescue tools.
  - B. Prevent damage to hydraulic-powered rescue tools that might result from misuse or abuse.
2. General.
  - A. Members that respond to fire and rescue incidents are responsible for knowing how to properly and safely operate hydraulic-powered rescue tools.
  - B. Officers shall train the members under their command to properly and safely operate the hydraulic-powered rescue tools assigned to their apparatus.
  - C. A safety officer shall immediately stop any unsafe or improper operation of a hydraulic-powered rescue tool and make the adjustments and corrections necessary to safely accomplish the assignment.
  - D. Firefighters shall inspect the hydraulic-powered rescue tools assigned to their apparatus after every use to ensure that they are functioning properly. Tools found to be unsafe or malfunctioning shall be removed from service and be properly red-tagged.
  - E. Firefighters shall check the fuel level in each tool to ensure that each is properly fueled. The spare fuel container carried on the apparatus shall also be kept full at all times.
3. Operating Procedure.
  - A. Before operating a tool, always inspect the tips to make sure that the appropriate tips are being used and that the retainer pins, if used, are in place.

- B. Place the power unit as level as possible, connect the hoses, but do not start the power unit until the tool operator gives the command to do so.
- C. Remember that it takes two people to operate the tool: one person to operate the tool and another person to operate the power unit.
- D. To start the power unit, place one foot on the bottom of the roll cage to help stabilize the unit. Hold the cage with one hand and pull the recoil starter cord with the other. Take care not to pull the cord out too far. The start-up sequence is as follows:
  - (1) Move the choke to the closed position.
  - (2) Pull the recoil starter until the engine pops.
  - (3) Move the choke to run.
  - (4) Pull the recoil starter cord.
  - (5) Repeat the sequence if the engine fails to start.
- E. To stop the power unit, use your hand to engage the kill switch. Do not use your foot.
- F. When refueling the tool, always use the appropriate fuel type and take care not to spill fuel on a hot surface. Note: The pitch of the power unit will normally change prior to running out of fuel.
- G. Safety precautions:
  - (1) Full protective clothing, including ear protection, shall be worn while using a hydraulic-powered rescue tool during actual rescues as well as training exercises.
  - (2) Approved safety shoes or boots, and any other item of protective clothing that is appropriate shall be worn while operating a tool for the purpose of inspection or maintenance.
  - (3) Always work on the outside of the tool. Never insert your hands or other parts of your body between the jaws or tips of the tool.

- (4) Cover and protect the victim, and always explain to him what you're doing, if possible.
- (5) When bleeding or disconnecting a hose, place a rag over the coupling to prevent fluid from spraying on anyone (when possible).
- (6) If fluid comes in contact with any exposed skin area, be sure to wash it off immediately.
- (7) If a fluid spill does occur, immediately clean any floor area or painted surface to prevent a fall or damage.
- (8) Always remember to make the required hose connections prior to starting a power unit. Hose should be laid out in such a manner as to prevent damage from sharp objects, vehicles, etc.
- (9) Likewise, always stop a power unit prior to disconnecting a hose.
- (10) Do not use the shears to cut a steering column or any piece of metal with a free end, since it may become a projectile. Shears are designed to create a compression fracture rather than to cut. Always remember to cut at a right angle.
- (11) At a motor vehicle accident, always have a charged 1 1/2" attack line to protect against the possibility of a fire.
- (12) Rotate personnel to avoid fatigue.
- (13) Rest the tool on your thigh and always maintain body balance.
- (14) Guide and hold the tool; do not force it. Don't strain against the tool; rather work with it.
- (15) Always respect the tool. It is a machine and has no conscience.