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.

PERSONNEL PROTECTION
Full protective clothing shall be worn by those members operating, and by those members in close proximity to the operation of power saws.

The face shield shall be in position to provide eye protection.

To prevent accidents caused by moving belts, gears, chains, blades, etc., it is imperative that operator and guide have their protective clothing completely buttoned up.

OPERATING PROCEDURES
Carry the rescue saw with the engine stopped, the blade frontward and muffler away from your body.

Always carry the chain saw with the engine stopped, the guide bar and saw chain to the rear and the muffler away from your body.

Keep both hands on the control handles when operating the saw. Use a firm grip with thumbs and fingers encircling the saw handles.

Make sure of your footing before operating the saw.

Whenever possible, a team of two firefighters shall perform cutting operations. The firefighter operating the saw (operator) will be assisted and/or guided by the second firefighter (guide). The guide may use the sling in which the saw is carried as a safety harness to guide and assist the operator. (See Illustrations "A" and "B", "Safety Harness")
The saw shall always be shut down when unattended.

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 the saw, exposures and personnel.
3. Your plan should provide for at least two (2) means of egress if possible.

Whenever possible, an 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.

Always place the safety guard in the proper position to provide protection for the use intended before operating the saw.

Power saw operations are safest when cutting on horizontal surfaces near ground level or on vertical surfaces near 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 officer ordering this operation shall weigh heavily the value gained against the extreme hazard to personnel.

The use of a power saw from ladders is not recommended if there are alternatives.
The carrying strap (safety harness) shall be used to carry a saw while climbing a ladder so that both hands are free to grab the ladder rungs.

Do not operate power saws in suspected flammable/explosive atmospheres.

When operating close to highly combustible materials, use care to prevent ignition from sparks.

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.

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 he has reached a beam by the sound and feel of the saw. The blade guard can be used to control the cutting depth of the blade (rescue saw).

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.)

When using the rescue saw to open metal buildings, doors, etc., where conditions permit utilize methods to eliminate the hazards of sharp edges. Consider making your cut in either an X design or a triangular design with the points bent inward. See illustration (c).

**FUELING AND MAINTENANCE PRECAUTIONS:**

Observe all safety regulations on the safe handling of fuel. When necessary to refuel, comply with the following:

1. The saw should never be refueled while the engine is running.
2. If fuel is spilled while refueling, wipe off saw before starting.
3. Do not operate the saw if there is a fuel leak, send it in for servicing.
4. Do not restart the saw in a small enclosed space after refueling.

Always keep equipment in good, clean, serviceable condition.

Examine the rescue saw cutting wheel for nicks or defects at the beginning of each shift and after each use.

Clean the wheel (blade) and both wheel washers when installing the wheel. Wheel blotters must be used between washers and wheel to compensate for irregularities in the wheel.

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, causing the blade to shatter when used. New blades should be stored in plastic bags to insure cleanliness.