



Scarborough Fire Department

Scarborough, Maine



Standard Operating Guidelines

Book:	Emergency Operations
Chapter:	Rescue Operations
Subject:	3620 - Extrication Team
Revision Date:	4/26/10
Approved by:	<i>B. Michael Thurlow</i>

PURPOSE

To establish guidelines for the safe and effective response to motor vehicle extrication calls, and calls requiring the extrication of patients from machinery, or other equipment.

SCOPE

To increase the safety and awareness of extrication team personnel while performing extrication evolutions while maintaining an appreciation for the best patient outcome.

POLICY

The Scarborough Fire Department recognizes that we are called to respond to a number of motor vehicle accidents that require extrication of patients each year. The following procedures have been established to provide a safe, standardized, and effective process for removing those patients from vehicles or other pieces of machinery or equipment, so they can be transported to a medical facility for evaluation and treatment.

MEMBERSHIP

A. Extrication Team Membership

1. Members shall be nominated by their respective Captains to the Fire Chief for approval.
2. The Chief shall select a sufficient number of personnel from each district to assure adequate coverage
3. To remain an active member of the Extrication Team, each member must attend at least eight hours of the annual refresher training or make other arrangements to prove competency to the satisfaction of the Fire Chief.
4. The Fire Chief and extrication team coordinator shall review the team roster annually for currency and only those members who meet these requirements will be eligible for the team stipend.

PROCEDURE

B. Upon arrival

1. The Incident Commander (IC) shall determine, and report to dispatch as soon as possible, if the incident is a “Working Extrication” or a “Routine Simple Extrication”, i.e. (door pop or single extrication evolution that can be handled by the local engine company). If the extrication involves the need for multiple extrication evolutions, or could potentially overwhelm the local engine company’s capabilities the IC shall report a “Working Extrication” and the dispatcher shall activate the “all-call” tone and dispatch the members of the extrication team.
2. Notify dispatch of:
 - a. Number of patients and are any of them are trapped.
 - b. Number and types of vehicles involved.
 - c. Condition of vehicle if other then on its wheels (on its roof, on its side, under another vehicle, etc.).
 - d. Any other hazards such as wires down, vehicle in water, etc.
 - e. Try to determine the actual vehicle year, make & model from the PD officers or request dispatch run the vehicle registration numbers to obtain that information.
3. Determine specific rescue or extrication problems involved and request additional resources that may be necessary to mitigate the situation.
4. If the extrication involves an energized piece of equipment or machinery lock-out and tag-out the controls as specified in SOP # 3610.

C. Control

1. Routine or Simple Extrication:

The IC will conduct operations with the crew at hand from the local engine company. If needed, the IC shall assign a member of the team to serve as the Extrication Officer (EO). In the absence of a team member the IC shall assign a qualified member of the local engine company to serve as the EO.
2. Working Extrication:

All working extrications require an Extrication Team response and dispatch shall make notification as indicated in section A) 1. The IC shall assign a safety officer and a member of the team to serve as the EO. Depending on the severity of the situation the Incident Command system shall be expanded to include whatever sectors, divisions, and branches, are necessary to successful mitigate the accident.

- a. The Incident Commander, EMS sector, safety officer, and the Extrication Officer will coordinate together to develop a strategy and incident action plan that will provide a safe environment for patients and responders. The Incident Commander has the responsibility of the total incident.
- b. The IC, EO, Safety Officer, and EMS officer will be designated with a reflective identification (ID) vest.
- c. The Emergency Medical Services (EMS) patient care provider will make themselves known to and coordinate with the EO, the specific tactics to be used during the extrication to maximize patient outcome and minimize any negative impact on patient care and patient protection. The EMS patient care provider should minimize the number of actual patient care providers in the inner working circle to provide for good patient care and efficient extrication operations.
- d. The Extrication Officer will be responsible to the Incident Commander for:
 1. The tactics employed in the inner working circle.
 2. Limit the number of personnel operating in the working circle.
- e. The Incident Commander may assign additional sectors as needed i.e. (staging, tool, standby crew, etc.) They should also consider requesting a mutual aid heavy rescue for additional tools and as a back up for serious extrications.
- f. Any request for additional equipment and/or personnel will be requested through the Incident Commander.
- g. The Incident Commander shall assure dispatch logs the times of major elements of the call i.e.: extrication completed, arrival of additional resources, etc.

D. Operations

1. All Extrication Team members shall stage at Squad 7 for assignment, if not otherwise committed and/or assigned by your own company officer. You must be relieved by your own company officer for team duties.
2. Full turnout gear including eye protection is required by all responders.
3. An action circle shall be established by painting a line on the ground around the vehicle(s) to delineate the boundary of the limited access area. Only personnel assigned specific tasks by the EO are allowed inside the action circle.
4. Vehicle stabilization must be established before any extrication is started. Stabilization must be maintained until all operations are completed.
5. Automotive Batteries
 - a. Disconnect both automotive battery cables, negative side first.
 - b. For vehicles powered by propane gas, the propane tank needs to be located and the gas turned off before disconnecting any batteries.
 - c. Do not attempt to disconnect the high voltage battery of Hybrid Cars. The regular automotive battery should be disconnected.

6. Patients are to be properly protected during extrication operations. This may involve the use of aluminum blankets, short boards, duct taping sharp edges, use of fire hose protectors, goggles or any other appropriate means of protection from tools, glass, sharp edges, and other potential sources of injury.
7. On Maine Turnpike calls, team members are to report to the proper toll plaza, and not go onto the Turnpike by foot or in personal vehicles.
8. Team members should use universal precautions and be observant for any body fluids at the scene. If those hazards are present follow the Bloodborne Pathogen Policy guidelines.
9. If commercial trucks are involved, check placarding and take necessary precautions. Consider the potential for a hazardous materials incident.
10. Team members are to use face to face communications as much as possible to keep radio traffic to a minimum.
11. Team members of the district the incident is in will sign their own company's payroll sheet. Out of district members will sign the squad's payroll sheet. All Team members shall sign the roster book for attendance purposes.
12. If the patient is "pinned" by the wreckage, **complete roof removal should be considered** as an early evolution to allow for full access and treatment.
13. The specific vehicle information shall be obtained from the HOLMATRO Guide /CD prior to initiating any extrication procedures.
14. Prior to any pillars being removed, the "P.I.C." method should be employed (**Pry** interior trim and kick panels, **Inspect** for hazards, air bags and trigger devices, and then mark the location for the **Cut**).
15. Glass removal procedures shall be performed as to minimize dangers to personnel and patients. Use of an axe to remove windshields shall be prohibited.

SAFETY

- A. All personnel should be in full protective clothing including eye protection.
- B. Position apparatus uphill and upwind from the accident scene if possible. Apparatus should be parked on an angle toward the curb between rescuers and oncoming traffic with parking brake set and wheels turned toward the curb. Traffic cones should also be placed between traffic and the apparatus.
- C. While awaiting arrival of police units, it may be necessary to assign a member to direct traffic on busy highways for the safety of personnel working at the scene.
- D. A charged hose line should be in position and charged any time a victim is trapped in a vehicle.
- E. Battery cables should be disconnected negative side first.
NOTE: Some vehicles have more than one battery.
DO NOT DISCONNECT the high voltage batteries of hybrid vehicles.
DO NOT DISCONNECT battery cables if flammable vapors are present.
- F. Prior to rescue personnel entering the vehicle:
 - 1. Confirm the scene is safe from overhead wires, flammable liquids, etc.
 - 2. Patient care is the first priority, but only if it can be done safely.
 - 3. Stabilize the vehicle(s) using cribbing, chock blocks, ropes, winches, vehicle emergency brake, etc.
 - 4. If the steering wheel air bag is not deployed an air bag safety cover must be installed.
 - 5. Use extreme caution when working around any and all air bag locations.
 - 6. Use caution when approaching front or rear loaded bumpers.
- G. Stop all fuel leaks if possible and prevent the use of traffic flares if a fire hazard exists.
- H. Overturned vehicles should not be "righted" until all patients have been removed.
- I. If equipment or machinery involved in the extrication confirm that it is locked-out and tagged as outlined in SOP # 3610 prior to starting the extrication.
- J. Rehab must be considered for all members involved in a prolonged extrication.

FUEL SPILLS

- A. Stop fuel leaks if possible and prevent ignition utilizing hose lines to safeguard patients as well as rescue personnel.
- B. If unable to stop leak by crimping fuel lines, it may be possible to fill the fuel tank with water to the level of the leak so only water runs out.
- C. Class B foam shall be used to cover significant flammable liquid spills to protect the patient and responders working in the area.

RESPONSIBILITIES

- A. It is the responsibility of all members that perform extrication to adhere to this policy.
- B. It is the responsibility of the Scarborough Fire Department to train and equip it's personnel on current extrication practices.
- C. It is the responsibility of all members to comply with the requirements listed in the various regulations outlined in the "References" section.

REFERENCES

- A. OSHA 29 CFR 1910.132–1910.140, Personal Protection Equipment
- B. OSHA 29 CFR 1910.130, Occupational Exposure to Bloodborne Pathogens
- C. NFPA 1500, Standard on Fire Department Occupational Safety and Health Program
- D. ANSI Z87.1 Eye Protection Standard
- E. Holmatro's "Rescuer's Guide to Vehicle Safety Systems"
- F. Scarborough Fire SOP # 3610 – Lock Out /Tag Out