

FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 (970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

QUICK ACCESS KIT (1.1)

Developed by Firefighter Ty Drage January 2011

• NFPA 1670 – Standard on Operations and Training for Technical Search and Rescue Incidents

TASK SKILL DESCRIPTION AND DETAIL

Every front-line engine is supplied with a Quick Access Kit. The Quick Access Kit is intended to provide personnel with the ability to quickly and safely access emergency scenes that are below grade and accessible by Class 4 or safer terrain. The Quick Access Kit is set up to provide equipment for two rescuers to make rapid patient contact and begin triage and treatment while a technical rope hauling system is established to facilitate safe patient removal. All LFR companies must be proficient in the rapid and effective use of the Quick Access Kit.

Class 1 terrain	Walking or hiking, on- or off-trail, through terrain where no hands are needed to balance. Good footing is abundant. A litter could be carried by hand through this terrain. A fall here could result in scrapes or perhaps a twisted ankle.
Class 2 terrain	Off-trail hiking or simple scrambling with possible or occasional use of the hands. Angle often steeper than commonly found on a trail. Footing is usually good with some area of loose rock or soil. Litter is usually still carried with no assistance from a rope but may need to be passed along to surmount certain terrain features. A fall here may result in bruises, scrapes or perhaps extreme injuries.
Class 3 terrain	Scrambling on steeper and broken terrain. Hands may often come into play and footing may be less secure. A single line is used on the litter with the bearers not attached to the litter. The line is used to capture the progress of the litter and to prevent a fall, not to catch a fall. Falls on this terrain could produce significant injury.
Class 4 terrain	Difficult and steeper terrain where the climber typically uses both his hands and feet to make upward progress. Unassisted climbing with a litter is impractical. A rope is used for lowering and hauling, and to prevent or catch a fall. Falls on this terrain will probably produce serious injury and may be fatal.
Class 5 terrain	Difficult and steep (vertical or beyond vertical) terrain where the climber uses both his hands and feet to make upward progress. A rope is used for lowering and hauling, and to prevent or catch a fall. Falls on this terrain will definitely produce serious injury and often can be fatal.



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537

(970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

The Quick Access Kit

The Quick Access Kit consists of the following items:

- Harness (2 each)
- Omega locking carabiner (2 each)
- Rescue 8 (2 each)
- Light D aluminum locking carabiner (2 each)
- Prusik cord (2 each)
- Red one-inch webbing (20 feet)
- Rescue strap
- 150-foot length of rescue rope



Personal Protective Equipment

As with all fire service operations, the proper use of personal protective equipment is of paramount importance. The following items of PPE must be worn during any rope rescue operations, including use of the Quick Access Kit:

- Helmet
- Gloves
- Eye Protection
- Harness with locking carabiner





FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 (970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144



Figure 1 - Properly worn harness with all of the straps snug to the body



Figure 2 - The waist strap buckle must be "double backed" as shown





FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 FAX (970) 962-2912 • TDD (970) 663-5144

(970) 962-2471 •



Figure 3 - The carabiner must be attached through both the leg loop and the waist strap (see yellow arrows)



Figure 4 - All carabiners must be of the locking type, and they must be locked



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street . Loveland, Colorado 80537

(970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

The most important part of any rope rescue operation is the selection as well as the use of a safe and effective anchor point. LFR personnel must locate a suitable anchor when deploying the Quick Access Kit. This may be a stationary object such as a utility pole, guard rail, large tree, etc. If such an object cannot be located on scene, a fire department apparatus may also be used. Typically there are two (2) primary anchor points on each apparatus. Neither point is better than the other and every apparatus will have different features that make one anchor point preferable over the other.

Anchor Point #1

Tie the red webbing together using a water knot and pass the webbing through one set of holes in the rear wheels, around the back of wheel, and then back through another set of holes in the same wheel. This allows the wheel to serve as an anchor point (see Figure 5).



Figure 5 - Anchoring with webbing through the apparatus wheel.

FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537 (970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

When using the webbing as an anchor point, be sure to connect the ends of the webbing with a water knot to form an attachment loop for your carabiner and rope. An overhand knot should be placed in the webbing to make the anchor more redundant. Attach the rescue rope to the looped ends with a figure 8 on a bight and a locking carabiner.



Figure 6 - Shortening the anchor strap

Anchor Point #2

Pass one end of the anchor strap through a tow loop beneath the apparatus. Bring the loop ends of the anchor strap together to form your anchor point. Attach the rescue rope to the looped ends with a figure 8 on a bight and a locking carabiner.



Figure 7 - Using the anchor point beneath the apparatus



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street • Loveland, Colorado 80537

(970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

Task #1 - Descending (First option)

There are two methods by which a rescuer can descend the rope. The first method available is if the slope is fairly gradual and capable of being walked, but steep enough or slick enough that there is a risk of the rescuer slipping. For this method, the rescuer wraps the rescue rope with a Prusik cord and attaches the Prusik to his harness with a locking carabiner. The rescuer may then descend either facing forward or backward and walk down the slope.



The rescuer must keep one hand on the Prusik knot at all times to prevent it from binding on the rescue rope. Should the rescuer slip and drop his hand from the Prusik, the knot will immediately arrest his fall.



If the rescuer's hand comes off the Prusik knot, the knot will immediately stop his downward progress.



FIRE AND RESCUE DEPARTMENT

410 E. Fifth Street . Loveland, Colorado 80537

(970) 962-2471 • FAX (970) 962-2912 • TDD (970) 663-5144

Task #1 – Descending (Second option)

If the slope is too steep to be safely walked and requires that the rescuer lower himself while attached to the rescue rope, a Rescue 8 should be used. Thread the rescue rope through the Rescue 8 so that the rescuer is able to use their preferred hand as the brake hand. Attach the Rescue 8 to the rescuer's harness with another locking carabiner.



Figure 8: This rope is set up for the rescuer to use his right hand as the brake hand

Task #2 - Ascending

If a rescuer needs to ascend a slope that was descended by walking with a Prusik knot, that rescuer should be able to use the same system to ascend the slope alone and unassisted. Ascending a slope with a patient in a litter will only be accomplished with the use of a rigged system and will not be addressed in this section.