



LEAST RESISTANCE TRAINING CONCEPTS

PROCEDURE GUIDE No. 20-48

WINCHING OPERATIONS AND CHAINS

Issue Date: 1-18-2020, Updated 10-14-2022



This Procedure Guide supersedes all previous guides in order to comply with the latest Lyon County, state and national training and operations standards.

Discussion:

Power winches and chains are occasionally used for anchor points and to drag heavy objects. Following safe practices can be critical to operational safety and effectiveness.

Responder Qualifications:

Responders shall possess Technical Large Animal Rescue – Operations, and preferably, Low Angle Rope Rescue certificates.

1. Safety Policy:

- 1.1 Safety is the overarching priority in all responses. No procedure or protocol provided in any Procedure Guide shall supersede the use of sound judgment as may be appropriate to maximize incident safety.
- 1.2 All responders shall wear appropriate helmets at all times, wear gloves when handling ropes and cables, and wear ANSI Class-II or Class-III vests or jackets whenever operating on or near any active traffic lanes.
- 1.3 A qualified Safety Officer shall be designated for all technical rescue responses.
- 1.4 In circumstances where responders cannot reliably communicate by direct voice, portable radios shall be utilized.
- 1.5 Responders shall utilize standard TLAR techniques and practices, including all applicable safety checks of any equipment that will carry any load.

2 Equipment Utilized:

- 2.1 Any time a power winching system is used to lift or haul a human or livestock load, only rated equipment shall be used.
 - 2.11 Power winches used within their rated loads
 - 2.12 Cable rated for the load rating of the winch
 - 2.13 Grab hooks rated for the load rating of the winch
 - 2.14 Receiver pin rated for the load rating of the winch (for speed-mount winches.)
 - 2.15 Properly rated shackles or screw links, NO carabiners

3 Winch Vehicle / Anchor Points:

- 3.1 The winch vehicle shall be properly secured by setting parking brakes and chocking tires.
- 3.2 When conditions suggest that the winch vehicle may shift or creep, it shall be secured to another vehicle or an appropriate anchor point.
- 3.3 When vehicles are used as anchor points, the hood shall be raised and keys removed and given to the Safety Officer.

4 Winch Safety:

- 4.1 Winch cables can snap back with great force if a grab hook or the cable fails. Furthermore, when grab hooks fail, they fly back in the direction of the cable and can fly back with sufficient force to break concrete.
 - 4.1.1 Grab hooks shall be attached so that the backs of the hooks face down.
 - 4.1.2 A coat or tarp shall be secured to the winch cable at least half-way to the load to mitigate fly-back.
 - 4.1.3 The winching vehicle's hood shall be raised to prevent fly back from striking the windshield.
 - 4.1.4 The winch operator shall stand behind a vehicle door whenever practicable.

5 Paying out the Entire Cable:

- 5.1 When the entire length of cable is required, at least two full wraps shall remain on the drum before winching any load.

6 Guiding the Cable onto the Drum:

- 6.1 There may be instances when it is necessary to guide the cable onto the drum to prevent bunching.
 - 6.1.1 Only the person guiding the cable will be near the cable and drum.
 - 6.1.2 The person guiding the cable shall wear gloves at all times.

7 Returning to Service:

- 7.1 The winch cable shall be properly rewound on the drum to prevent kinks and binding, and shall be paid out and properly rewound before returning to service.
- 7.2 In the event the winch cannot be rewound in the field, it shall be rewound upon return to quarters.

NOTE: All personnel should review *Emergency Winch Procedures*
http://www.whmentors.org/evac/winch_pro01.html