SWP Purpose

Extracting vehicles (trucks, quads, motorbikes) can be a hazardous task, creating risk of injury to driver and bystanders/assistants. Environmental degradation (rutting, spills, vegetation damage) can also result, as well as damage to the vehicles themselves. This safe work practice (SWP) is intended to guide workers in safe vehicle extraction procedures.

Scope

This SWP applies to any worker who is involved in vehicle extraction, either as driver or assistant.

Responsibilities

Responsibilities apply to the Trip Manager/Volunteer Lead, all workers, and the Health and Safety Committee.

It is the responsibility of the Trip Manager/Volunteer Lead to

- Communicate to workers the importance of taking due care and following correct steps in vehicle extractions.
- Reinforce to workers that any recommended controls must be applied consistently
- Require that this SWP be implemented for all vehicles/equipment.
- **Ensure an Annual maintenance and inspection is completed for extraction and winching equipment by Equipment Maintenance Manager**

It is the responsibility of the Workers to

- Know the proper approach and steps to vehicle extraction.
- Ensure recommended controls are implemented and used appropriately.
- Immediately report any infractions or incidents to the Crew Lead.

It is the responsibility of the Safety Committee to

- Maintain this Safe Work Practice
- Perform periodic audits to assess that these requirements/SWP are being acted upon.
- Reinforce that recommended controls are to be implemented and used appropriately.

Hazards

Hazards relative to winching vehicles may be due to environmental conditions such as terrain, slope, vegetation, temperature/weather conditions, daylight – or lack thereof - and the cause of the issue itself – i.e. mud, snow.

Hazards may also be caused by a lack of appropriate tools, such as jacks, straps, winch cables, etc.

Hazards due to worker behavior include fatigue, distractions within or around the vehicle, psychological factors such as stress, lack of familiarity with the vehicle or the task. Safe lifting should be practiced during this task. Frustration often causes poor decision making in these types of scenarios.

Controls

Controls may include elimination/substitution, engineering, warnings, administrative, and/or PPE.

- Be sure to use appropriate equipment. Every piece of equipment used in a recovery operation MUST be capable of SAFELY handling the loads that will be imposed.
- **Winch and Extraction Equipment maintenance and inspection done.**
- Inspect equipment prior to use and, preferably, prior to leaving the trailhead. Any equipment that is damaged or in poor condition should be removed from use and tagged for repair or replacement.
- Pay particular attention to the winch cable. Look for localized damage and wear, especially at wire rope attachments. Inspect all parts that come in contact with the wire rope. Look for kinks, broken wires, abrasions, lack of lubrication, rust damage, crushing, reduction of diameter, stretch or other obvious damage. If any of these conditions exists or if there is any other apparent damage to the wire rope, retire the cable. When inspecting winch cable, durable work gloves shall be worn.
- NEVER overload a wire rope. This means NEVER use the rope where the load applied is greater than the working load.
- NEVER 'SHOCK LOAD' a wire rope. A sudden application of force or load can cause both visible external damage and internal damage. There is no practical way to estimate the force applied by shock loading a rope. The sudden release of a load can also damage a wire rope.
- Lubricant is applied to the wires and strands of a wire rope when manufactured. This lubricant is depleted when the rope is in service and should be replaced periodically.
- When in doubt about the extent of the damage, retire the wire rope in question immediately.
- Hooks should also be inspected regularly, or the safety of you and those around you during recovery.
- Hook visual inspection should be conducted before each use, looking for:
    - Cracks, nicks, gouges
    - Deformation
    - Damage from chemicals
    - Damage or malfunction of the throat latch, if provided.
- If any of these conditions are found, the hook should be retired and replaced.
- Place a blanket across a loaded winch cable to mitigate the cable's chances of flinging uncontrollably if the cable should snap.

Training

Workers must be adequately trained. On the job/scenario or demo-based training is useful. If a worker is involved in an accident, training should be reviewed.

Resources, References, Definitions

Revision History

Revision	Date	Description of Change	Personnel Involved
REV 0	Feb -2020	New SWP	D Yanchula
REV 1	May 2020	Gloves when inspecting cable	D Borthwick, J Gruttz
Rev 2	Feb 2023	Changes in BOLD	D Yanchula