

# Vehicle Recovery Guideline

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# About Energy Safety Canada

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## ACKNOWLEDGEMENT

Energy Safety Canada gratefully acknowledges the many individuals who volunteered their time and effort to complete this document.

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# 1.0 Introduction

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This document was written to provide operators of light and medium duty vehicles with guidelines to avoid injury and damage when recovering vehicles.

## 1.1 SCOPE AND LIMITATIONS

The information in this guideline is for the recovery of light to medium duty vehicles only. It does not cover towing or hauling vehicles for any duration.

Each company must consider the level of risk it is willing to incur when developing a company-specific policy and procedure.

The recommendations in this document were created to prevent the most common mistakes in attempting vehicle recovery. Companies are free to adapt or further develop these recommendations as they wish in their own vehicle recovery policies and procedures.

## 1.2 REVISION PROCESS

The *Vehicle Recovery Guideline* was developed in consultation with industry. Energy Safety Canada (ESC) acts as an administrator and publisher.

Each guideline is reviewed on a three-year cycle. Technical issues or changes may prompt a re-evaluation and review of this guideline in whole or in part. For details on the guideline creation and revision process, visit [EnergySafetyCanada.com](https://www.energysafetycanada.com).

EDITION	RELEASE DATE	REMARKS AND CHANGES
1.0	January 2010	<ul style="list-style-type: none"><li>Initial release - Enform <i>Vehicle Recovery and Towing Program Development Guideline</i></li></ul>
2.0	October 2018	<ul style="list-style-type: none"><li>Updated to ESC branding</li><li>Removed reference to multiple recovery strap utilization</li><li>Amended visuals with hazardous connection points</li></ul>
3.0	November 2022	<ul style="list-style-type: none"><li>Updated to the latest ESC template</li><li>Updated terminology</li><li>Added visual reference for kinetic energy containment</li><li>Reviewed contents for application and use</li></ul>
4.0	May 2023	<ul style="list-style-type: none"><li>Updated to the latest template</li><li>Updated layout for readability</li><li>Added visual reference for kinetic energy containment diffusers</li><li>Reviewed contents for application and use</li></ul>

## 2.0 Vehicle Recovery Guidelines Considerations

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### 2.1 GENERAL HAZARD AWARENESS

Vehicle recovery involves large forces and weights when winching or using recovery straps, and is inherently dangerous.

Due to the nature of recovery operations, weights and forces must be estimated and therefore are subject to significant error. Extreme caution must be taken, as exceeding manufacturer specifications may lead to catastrophic failure.

### 2.2 PROGRAM CONSIDERATIONS

Unless you are using a recognized tow truck company and operator, vehicle recovery carries risk. When developing a company-specific policy and/or procedure, each company must consider the level of risk it is willing to incur. The recommendations in this document are intended to prevent the most common mistakes. Companies are free to adapt or further develop these in their own vehicle recovery policies and procedures.

Companies developing a vehicle recovery policy and/or procedure may wish to consider the following:

- Specify that towing a disabled vehicle any distance is beyond the scope of vehicle recovery. This guideline presumes the stuck vehicle can assist with the recovery and will be fully capable of driving once pulled out. However, it may be prudent to allow a disabled vehicle to be moved a very short distance out of a high-traffic area.
- Include terrain-specific requirements. For example, steep terrain creates additional hazards, including the recovering vehicle losing traction and sliding downhill, and the increased load of pulling a vehicle uphill.
- Companies with a fleet of vehicles should:
  - Ensure that the strength rating of vehicle anchor points and hitch receivers are communicated to vehicle drivers.
  - Provide illustrations of correct towing procedures based on the vehicles in their fleet.
- Include information about audits and a time frame for periodic inspections of all vehicle recovery equipment as well as training and competence reviews for personnel.
- Companies that provide recovery straps to their drivers may also specify a policy on re-use of all equipment based on the manufacturer criteria. Straps degrade if they are not cleaned or if they don't have an appropriate interval to recover from being stretched.
- Training may be deemed a prerequisite to enacting a vehicle recovery. In the case of vehicle winches, this guideline presumes training is a prerequisite.

## 3.0 Equipment

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The following items should be in a vehicle recovery kit:

- Vehicle recovery instructions and safety checklists
- Recovery strap/rope
  - Straps/ropes must have manufacturer's labels visible and feature its Minimum Breaking Strength (MBS). MBS must be two to three times the vehicle weight plus loads.
- Recovery hitch or engineered tow point (one for each vehicle)
  - Rated for the weight of the vehicle plus loads
- Kinetic energy containment device or damper blanket
- Shovel
- Traffic cones or reflector flares for traffic control
- Heavy leather gloves
- High-visibility clothing
- Web sling(s) (tree saver strap)
- Snatch block(s)
- High-strength shackle(s) (for winching only)

### 3.1 COMMERCIALLY AVAILABLE VEHICLE RECOVERY KITS

There are commercially available vehicle recovery kits. The example below in Figure 1 includes a hitch for each vehicle, high visibility recovery strap, pre-job checklist and carry bag. This example has original equipment manufacturer certification for shock loading. Also available are dampeners that will capture a recovery strap, tow rope or winch line should they fail during a recovery operation.



Figure 1.0: Vehicle recovery kit

### 3.2 KNOW EQUIPMENT LIMITATIONS AND HAZARDOUS CONNECTIONS

When using equipment in vehicle recovery it is important to understand the equipment limitations and potential hazardous connections as listed in Table 1.

#### IMPORTANT

When using equipment in vehicle recovery, ensure manufacturer instructions are followed for each component of the recovery system.




Manufacturer instructions must be provided to the user of this equipment.

The user must read and understand the instructions before using the equipment. Further training may be needed to ensure competency prior to use.

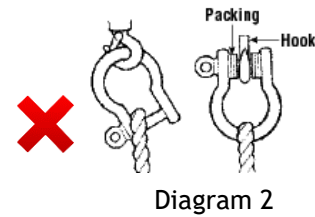
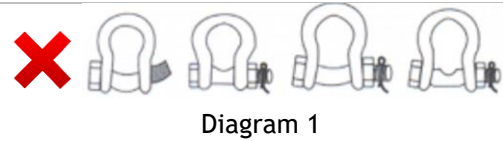
Manufacturer instructions for proper use and maintenance of the equipment must be followed.

Failure to follow the manufacturer instructions, alterations to or misuse of the equipment can result in serious injury or death.

Table 1: Equipment Considerations and Images

EQUIPMENT CONSIDERATIONS	EQUIPMENT IMAGE
<p><b>Recovery Strap</b></p> <ul style="list-style-type: none"><li>• Designed to pull out stuck vehicles</li><li>• Available in various widths and strength ratings</li><li>• Stretch to capacity and pull the vehicle out</li><li>• Only for use in vehicle recovery, never towing</li><li>• Typically stretches 8-15%</li></ul>	 <p>The image shows a white webbing recovery strap with yellow reinforced ends. A yellow label is attached to the strap, providing technical specifications in both English and French. The English text reads: 'BREAKING STRENGTH RESISTANCE A LA RUPTURE 18,000 LB./LIVRE (8164 KG)'. The French text reads: 'MAXIMUM VEHICLE WEIGHT POIDS MAXIMUM DE VEHICULE 9000 LB./LIVRE (4082 KG)'. The strap is coiled and laid out on a white background.</p>
<p><b>Recovery Rope</b></p> <ul style="list-style-type: none"><li>• Designed to pull out stuck vehicles</li><li>• Available in various diameters and strength ratings</li><li>• Stretch to capacity and pull the vehicle out</li><li>• Only for use in vehicle recovery, never towing</li><li>• May stretch up to 30%</li></ul>	 <p>The image shows a thick, black braided recovery rope coiled into a circular shape. It has two orange handles with black grips at the ends. The rope is set against a plain white background.</p>
<p><b>Shackles</b></p> <ul style="list-style-type: none"><li>• To be used for winching and static pulling only</li><li>• Not to be used with a recovery strap (unless it is specifically engineered for that use)</li><li>• Ensure shackles used are manufactured for vehicle recovery only. <b>Once used for pulling, they must only be used for pulling – never for lifting or hoisting.</b> On sites where towing shackles and hoisting shackles are both present, recommended practice is to label shackles according to their function.</li></ul>	 <p>The image shows a silver metal shackle, likely made of steel, with a red label on its curved end. It has a pin and a nut on the other side. The shackle is shown against a plain white background.</p>

- Available in various strengths and working load limit (WLL)
- Not designed to be shock loaded or side loaded (re-certification is required if shock loaded)
- Bent shackle or pins indicate overloading and the entire shackle must be replaced (see Diagram 1, right)
- Do not pull at an angle as the strength of the shackle is severely compromised (see Diagram 2, right)
- Do not replace the shackle pin with a bolt or other pin
- Packing or centralizers should be used



### Shackle Bracket (shown with shackle)

- For winching and static pulling only
- Not designed to be shock loaded or sideloaded (re-certification is required if shock loaded)
- Ensure compatibility of equipment (e.g., ¾ and one-ton trucks may come with a 2.5” receiver. In this case, a 2” receiver adapter must be used in conjunction with 2” shackle bracket)



### Connection Pins

- Never use connection pins to anchor recovery straps
- Only use to secure hitches



### Sling with Tail Chains

- Never to be used for vehicle recovery
- Under force, hooks and chains become projectiles



### Pintle Hitches

- Never to be used for vehicle recovery
- Only designed for pulling trailers and equipment
- Not intended for shock loads or side loads
- Gates may fail, becoming dangerous projectiles





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### Chains

- Never to be used for vehicle recovery
- For hoisting or load securement only
- With shock loading, links break and hooks fail



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### Trailer Balls

- Never to be used for vehicle recovery
- Designed for downward tongue load, towing only
- Cannot withstand shock load
- Trailer ball can snap off, becoming a projectile



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### Tow Ropes/Straps with Hooks

- Never to be used for vehicle recovery
- Metal objects can become projectiles



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### Front or Rear Mounted Tow Hooks

- May not be rated for the gross vehicle weight (GVW) or recovery forces
- Check original equipment manufacturer (OEM) specifications for usage and ratings



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### Web-sling (tree-saver strap)

- Should not double over on itself, as this greatly reduces the rating
- Only use to anchor
- Derates as the sling load angle increases
- Polyester slings have a tracer thread down the centre for identification
- Should be rated for towing/recovery purposes



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## Snatch Block

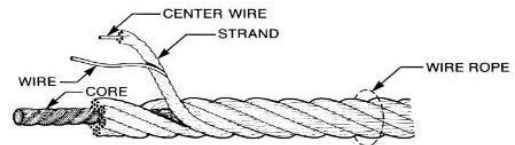
- Used only for winching
- Intended both for mechanical advantage and changing direction
- A snatch block reduces the capacity of the wire rope. Review the D/d ratio<sup>1</sup> for the wire rope size and sheave pitch diameter for derating



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## Wire Rope/Steel Cable (winch line)

- Constructed of core, strands and wire
- When supplied with the winch, wire rope generally does not have a design factor or safety factor applied, so the rating is the MBS for new and maintained wire rope
- All wire rope/steel cable recovery equipment must be compatible for use with thimbles, sockets, hooks, snatch block, etc.
- Must be inspected for kinks, crushing, broken strands, deformation or bird caging
- Never shock load wire rope
- Requires a minimum of five wraps on the drum to anchor the cable to the winch



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## Synthetic Rope (winch line)

- Lightweight, constructed of braided synthetic materials
- When supplied with the winch, a synthetic rope generally does not have a design factor or safety factor applied, so the rating is the MBS for new and maintained synthetic rope
- Synthetic rope must be compatible for use with thimbles, sockets, hooks, snatch block etc.
- Must be inspected for compression, abrasion, heat stress, and cuts
- Typically has higher MBS than similarly sized wire rope
- Prone to abrasion and UV degradation
- Never shock load a synthetic rope
- Requires a minimum of five wraps on the drum to anchor the cable to the winch



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<sup>1</sup> The D/d ratio is the ratio of the diameter around which the sling is bent, divided by the body diameter of the sling.

### 3.3 ENERGY RELEASES AND DANGER ZONES

It may take considerable energy to recover a vehicle and there is a risk of energy release, which can lead to projectiles that can harm people or damage equipment as shown in Figure 2.

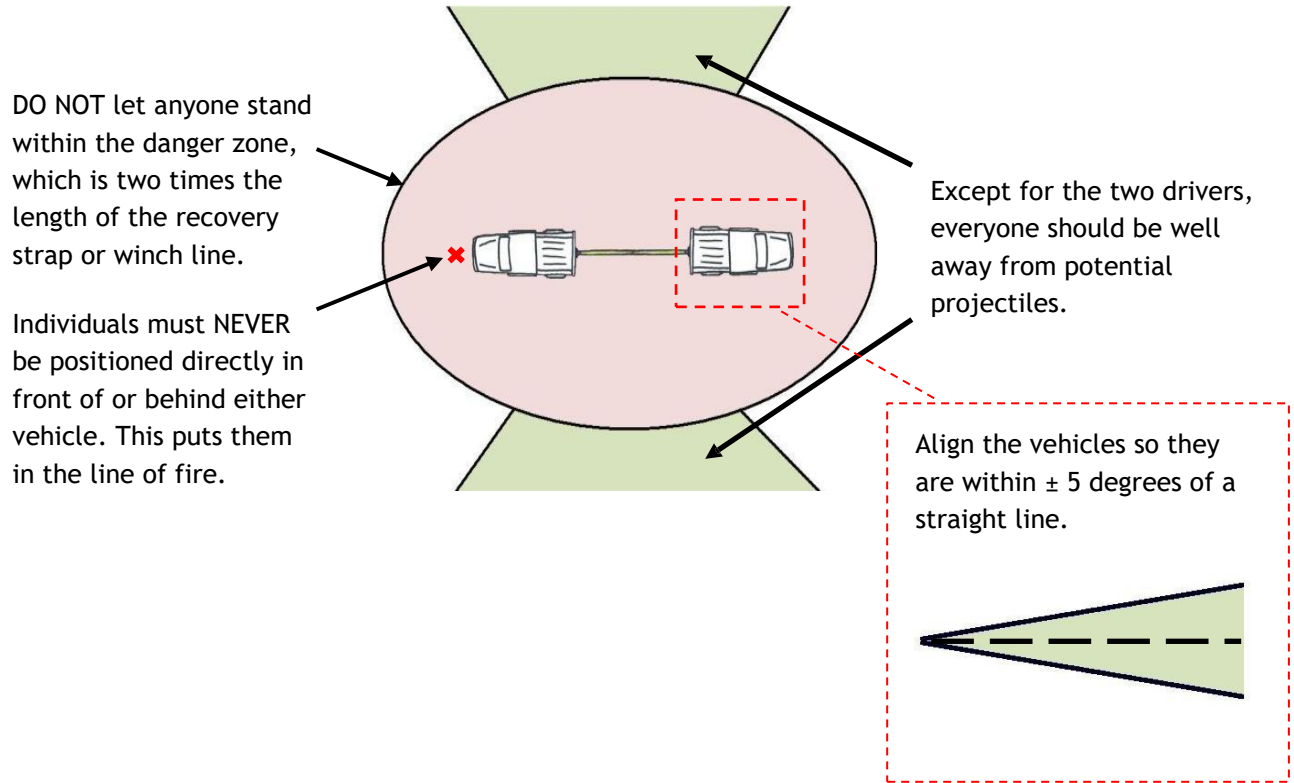






Figure 2.0: Energy releases and danger zones

### 3.4 UNDERSTANDING WEIGHTS AND ENVIRONMENT

It is important to understand the vehicle weights and potential environmental limitations as described in Table 2.

Table 2: Equipment Weight and Environment Considerations

WEIGHT AND ENVIRONMENT CONSIDERATIONS	EQUIPMENT
<ul style="list-style-type: none"> <li>Only pull with a vehicle roughly the same size or larger than the stuck vehicle.</li> <li>DO NOT use a lighter vehicle to pull out a much heavier vehicle.</li> </ul>	
<ul style="list-style-type: none"> <li>Check the GVW on the plate on the driver door and add the weight of the cargo/load.</li> </ul>	
<ul style="list-style-type: none"> <li>Consider that additional force may be required to overcome terrain (e.g., mud, snow, inclines).</li> </ul>	
<ul style="list-style-type: none"> <li>Clear snow or debris from the engine exhaust; multiple deaths have been caused by carbon monoxide poisoning due to covered exhaust pipes.</li> </ul>	

## 4.0 Recovery Step Considerations

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This section will provide general step-by-step guidance in vehicle recovery. Every situation is unique, and one needs to assess each circumstance differently. Below are two examples of typical steps for a vehicle recovery using recovery straps and vehicle-mounted winches.

### 4.1 VEHICLE RECOVERY WITH A RECOVERY STRAP

Below is a step-by-step process for recovering a vehicle with a recovery strap. See **Appendix A** for a field checklist.

1. Stop to consider the task at hand and assess the hazards. If there are doubts about the ability to safely recover the vehicle, call a recognized towing company.
2. If the vehicle recovery is on or near a roadway, implement a traffic warning or traffic control system (e.g., traffic cones, reflector flares).
3. Use the correct equipment – a recovery strap is essential.
  - The recovery strap should be at least 6 m (20 ft.) in length with loops (not hooks) and in good working condition (inspect to ensure no cuts or broken stitches).
4. Determine the weight, including loads, of both vehicles.
  - The vehicle performing the recovery should be of equal or, ideally, greater weight than the vehicle being recovered.
5. Ensure the recovery strap has a minimum breaking strength (MBS) greater than the force required for recovery – generally two to three times the total weight of the stuck vehicle, however each situation must be evaluated individually.
  - If the MBS is too low, the strap may snap under high tension.
  - If the MBS is too high, it will not function optimally. Straps are most effective when elasticity enhances the pull.
  - Consider terrain type, grade and degree of rolling resistance.
  - Recovery straps are generally constructed so each inch of width adds approximately 4,500 kg (10,000 lb.) of MBS. E.g., a 3-inch-wide strap would usually have a rating of about 13,500 kg (30,000 lb.).
  - Vehicle should be within  $\pm 5$  degrees of a straight line; side loading may lead to vehicle damage or put the vehicle and people in the line of fire.
6. Check that engineered recovery points and all equipment in the recovery system are rated to loads that exceed the recovery strap MBS. The recovery strap must always be the weakest link and fail first.
7. Clear out mud, sand or snow from under the stuck vehicle and in front of the tires in the direction of the pull.
8. Position the pulling vehicle in line with the stuck vehicle – the pulling vehicle facing forward and, ideally, the stuck vehicle being pulled from the front.
  - Ensure there is a clear path forward for both vehicles, free of any obstacles for as far as needed to recover the vehicle safely.

9. Lay out the recovery strap between the two vehicles and connect the strap to an engineered recovery point.
  - Never tie the strap onto the vehicle, slip it over a ball hitch, or attach it to anything other than an engineered or frame-mounted recovery point.
  - Ensure there are no twists, coils or knots in the strap prior to use.
10. Use a form of kinetic energy containment or damper blanket as shown in Figure 3. Damper blankets are used in case recovery equipment (such as straps or shackles) fail, lessening the possibility of them becoming a projectile. Unrestrained or damaged equipment can result in serious injury or death. When using damper blankets, follow manufacturer specifications.
  - Be aware that objects draped over the recovery strap to dampen recoil may become projectiles.



Figure 3.0: Kinetic energy containment in use



Figure 3.1: Attachment of a kinetic energy containment diffuser around frame with a soft shackle. Image courtesy of Cenovus.



Figure 3.2: Attachment of a kinetic energy containment diffuser to hitch safety chain hole with a soft shackle. Image courtesy of Cenovus.



Figure 3.3: Kinetic energy containment diffuser using a tow strap. Image courtesy of Cenovus.



Figure 3.4: Kinetic energy containment diffuser using tow ropes. Image courtesy of Cenovus.



Figure 3.5: Kinetic energy containment diffuser used with winch lines. Image courtesy of Cenovus.

11. Agree on the method of communication between the two drivers.
  - 2-way radios are preferred.
  - ESC's [Workers' Guide to Hand Signals for Directing Vehicles](#) provides a common system of signals. ESC also offers several [downloadable hand signal resources](#), including a wallet card, video and poster.
12. Ensure any bystanders are at least two times the length of the recovery strap away from both vehicles. The recovery strap and lurching vehicles present a hazard.



13. The pulling vehicle accelerates slowly; do not exceed the speed specified by the manufacturer for strap. Once the recovery strap is under tension, the stuck vehicle accelerates in low gear and its tires should rotate, but not spin excessively.
  - Steady pulling is most effective, never resort to jerking or a long run.
  - Maintain tension throughout the pull, do not allow slack in the strap until the vehicle is recovered.
  - After three attempts to pull the vehicle loose, call a recognized tow truck for recovery.
14. Do not remove straps until both vehicles are stopped, secured, and there is no tension in the system.
  - Clean and dry the recovery strap after use; dirt and moisture weaken the strap.
  - Store in a clean, dry place.

**If at any point there are concerns about the ability to recover the vehicle safely, call a recognized tow truck company.**

#### **4.2 VEHICLE RECOVERY WITH A VEHICLE-MOUNTED WINCH**

Below is a step-by-step description of the process for recovering a vehicle with a winch. See **Appendix B** for a field checklist.

1. Stop to consider the task at hand and assess the hazards.
  - If there are doubts about the ability to safely recover the vehicle, call a recognized tow truck company.
2. Only those with proper training on the safe and correct use of a vehicle-mounted winch should use it for recovery.
3. Wear heavy leather gloves when working with a winch cable to prevent injuring hands with metal slivers. Always keep body, hair, clothing and jewelry clear of winch cable, fairlead and hook when operating winch.
4. Inspect the winch cable, anchor points, equipment and all connections.
5. Winches are designed to pull straight angles unless equipped with fairleads.
  - Fairleads can be used to prevent the winch line from becoming damaged or frayed while the winch is in use.
  - Fairleads come in all shapes and sizes.
6. If one vehicle is winching out another:
  - Ensure both vehicles are in Neutral (not Park).
  - Check the recovering vehicle has its parking brake engaged and, if selectable, with the transfer case in 4-wheel drive.
  - Consider anchoring the recovery vehicle to a stationary object, like a tree or another vehicle, with a web-sling (tree saver strap) or tow strap.
  - Never connect vehicles with a winch line and use the recovery vehicle to pull.
7. If performing self-recovery:
  - Ensure connection to a solid anchor point with web-sling and shackle configuration rated to exceed the winch capacity.
  - Never wrap the winch cable around and hook it back on itself, this compromises the line strength.
  - Never use a recovery strap for winching.
8. Use a form of kinetic energy containment to dampen recoil and contain a broken winch line.

- Be aware that objects draped over the winch line to dampen recoil may become projectiles.
9. If winch controls permit, work out of the recoil line of fire.
  10. With a front-mounted winch, raise the recovery vehicle hood, particularly if the driver needs to be in the vehicle during winching.
  11. A snatch block can be used in winch recoveries where a standard straight-line pull won't be enough to recover a stuck vehicle or overcome an obstacle. Using a snatch block from a shorter distance will double the pulling power. Ensure the attachment points are suitable for the load and manufacturer specifications.

**IMPORTANT:**

- **Never use a recovery strap as a winch extension strap; it is not designed for a constant load.**
- **If at any point there are concerns about the ability to recover the vehicle safely, call a recognized tow truck company.**

## 5.0 Terminology

TERM	DEFINITION
<b>Clevis/Shackle</b>	U-shaped fastener with holes that accept a clevis pin.
<b>Design factor</b>	Denoting a product's theoretical reserve capability generally expressed as a ratio (e.g., 5 to 1).
<b>Gross vehicle weight (GVW)</b>	The total weight of the vehicle, cargo and passengers.
<b>Kinetic energy containment device</b>	A means to direct a snapped winch line or recovery strap away from people or equipment.
<b>Fairlead</b>	A fairlead is used to prevent the winch line from becoming damaged or frayed while a winch is in use.
<b>Light to Medium duty vehicle</b>	A vehicle with a gross weight of 4535 kg or less (< 10,000 lbs.)
<b>Minimum breaking strength (MBS)</b>	The minimum amount of force required to break an object. Also referred to as tensile strength or breaking strength.
<b>Recognized Towing Company</b>	An establishment primarily engaged in towing motor vehicles. Light and heavy towing services, local and long distance, for the general public, commercial, transportation and other sectors, are all included. These establishments may offer incidental services, such as tire repair, battery boosting and other emergency road services.
<b>Recovery strap/rope</b>	Synthetic material designed to stretch and contract without jarring or shock loading.
<b>Safe working load (SWL)</b>	See Working load limit.
<b>Safety factor</b>	See Design factor.
<b>Shackle</b>	A common type of clevis.
<b>Shock loading</b>	Occurs with the rapid movement of a static load or when an operator rapidly takes up slack.
<b>Snatch block</b>	A single or double sheave block where one or both cheek plates can be opened, allowing the block to be reeved without having to use a free rope end.
<b>Static loading</b>	Application of constant force to a load.

TERM	DEFINITION
<b>Synthetic rope</b>	Rope made from synthetic fibers, which can have different properties than wire rope.
<b>Wire rope</b>	Constructed from metal wire strands twisted into the shape of a helix, wire rope comes in many material and structural combinations, which affects performance and characteristics.
<b>Working load limit (WLL)</b>	The maximum load that a product is authorized by the manufacturer to support in a particular service, calculated by dividing the MBS by a design factor.

## 6.0 References

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### Alberta

- [Alberta Occupational Health and Safety Act, Regulation and Code](#)
- [Alberta Traffic Safety Act](#)
- [Off-Highway Vehicle Regulation, Alta. Reg. 319/2002](#)
- [Use of Highway and Rules of the Road Regulation 304/2002](#)

### British Columbia

- [British Columbia Occupational Health and Safety Regulation](#)
- [Worker's Compensation Act, Part 3 - Occupational Health and Safety](#)

### Saskatchewan

- [The Occupational Health and Safety Act, 1993](#)
- [The Occupational Health and Safety Regulations, 1996](#)

### Energy Safety Canada

- [Workers' Guide to Hand Signals for Directing Vehicles](#)

### Other Resources:

- [CCOHS - Handling Shackles](#)
- [Warn Basic Guide to Winching](#)
- [Lift-It Sling Load Angle Chart](#)

## Appendix A: Checklist for Using a Recovery Strap

Pre-job checklist if using a recovery strap for vehicle recovery. Answering “no” to any of the following requires the user to call a recognized towing company.

Do both parties involved have permission from their respective companies to perform a vehicle recovery?	Yes	No
Have I verified the gross vehicle weight, including loads of both vehicles?	Yes	No
Is the total weight of the recovery vehicle close to or greater than the total weight of the stuck vehicle?	Yes	No
Is the recovery strap minimum breaking strength (MBS) two to three times the total weight of the stuck vehicle?	Yes	No
Is the recovery strap in good working condition (inspect to ensure no visible tears or other damage)?	Yes	No
Is there an engineered attachment point on both vehicles?	Yes	No
Do all connection points have a working load limit (WLL) greater than that of the recovery strap?	Yes	No
Is there kinetic energy containment to dampen recoil and capture a failed recovery strap?	Yes	No
Can the recovery vehicle line up with the stuck vehicle?	Yes	No
Is the recovery route free of any obstacles or hazards (e.g., trees or boulders)?	Yes	No
Is there a need for a traffic control system?	Yes	No
Is there clear communication (radio or signals) between the two drivers?	Yes	No
Do both drivers understand the procedure for the recovery attempt?	Yes	No
Do bystanders know the dangers and are they outside a perimeter two times the distance of the recovery strap?	Yes	No
Do all involved understand that after three failed attempts, a tow truck must be called in?	Yes	No
Do all involved understand the hazards of a recovery attempt, especially the danger of recoil should any components fail?	Yes	No
Are there other possible hazards presented by the situation?	Yes	No
Are the risks to personal safety and equipment damage assessed to be at an acceptable level?	Yes	No

## Appendix B: Checklist for Using a Winch for Vehicle Recovery

Pre-job checklist if using a winch for vehicle recovery. Answering “no” to any of the following requires the user to call a recognized tow truck company.

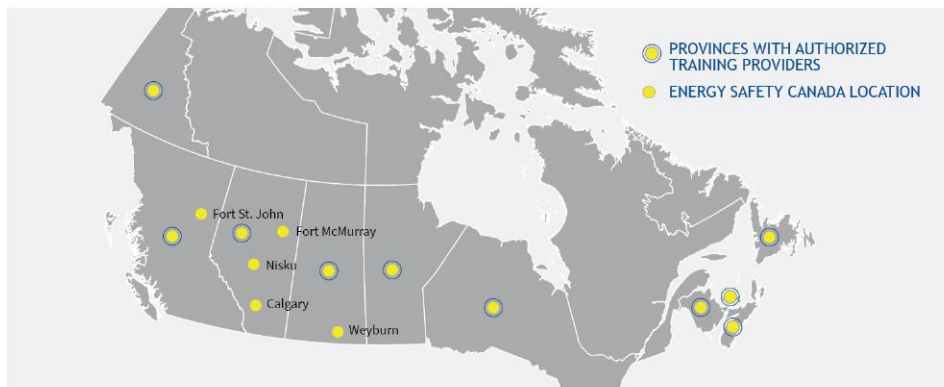
If multiple parties are involved, do they all have permission from their respective companies to perform a vehicle recovery?	Yes	No
Are all involved trained in the safe and correct use of the winch equipment to be used for the recovery?	Yes	No
If one vehicle is winching out another, is the total weight of the recovery vehicle equal to or greater than the total weight of the stuck vehicle including the load?	Yes	No
Are the winch motor and cable rated greater than the total weight of the stuck vehicle? If not, can a snatch block be used to achieve a greater rating?	Yes	No
Are heavy leather gloves available for handling the winch line?	Yes	No
Are the winch and cable in good condition?	Yes	No
Do the engineered connection points have a working load limit (WLL) greater than that of the winch line?	Yes	No
If attaching to an anchor point, is there a tree-saver strap and connection with an adequate load rating to attach the winch cable?	Yes	No
Does the anchor point allow for winching the stuck vehicle out in a relatively straight line?	Yes	No
Is there a need for a traffic control system?	Yes	No
Is there clear communication (radio or signals) between the two drivers?	Yes	No
Do bystanders know the dangers and are they outside a perimeter two times the distance of the winch line?	Yes	No
Do all involved understand the hazards of a recovery attempt, especially the danger of recoil should any components fail?	Yes	No
Is there kinetic energy containment to dampen recoil and direct the energy down or into the ground in the event of a broken winch line?	Yes	No
Are there other possible hazards presented by the situation?	Yes	No
Have the risks to personal safety and equipment damage been assessed and deemed to be at an acceptable level?	Yes	No

# SAFETY DOESN'T CLOCK IN AND IT DOESN'T PUNCH OUT. IT'S 24/7.

## ENERGY SAFETY CANADA'S SERVICES:

- Virtual training
- Data reports
- Safety services
- Certificate of Recognition
- Company consultations

## LOCATED WHERE YOU ARE:



**Phone:**  
1 800 667 5557



**Email:**  
Safety@Energy  
SafetyCanada.com



**Web:**  
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Canada.com