



TRED

GUIDELINES FOR SAFE USE OF KINETIC RECOVERY ROPES

SERIOUSLY **ADVENTUROUS**

GENERAL INFORMATION

Recovery ropes use the kinetic energy generated during use to help in removing a stranded vehicle. The combination of the recovery vehicle pull and the tension in the rope creates a 'snatching' effect that can pull a vehicle free from being stuck or unable to move itself. When used in accordance with these guidelines, vehicles may be recovered with minimal risk of injury to people, or damage to vehicles or equipment.



WARNING

INCORRECT USE MAY RESULT IN INJURY OR DEATH!



Vehicle **OCCUPANTS** and **BYSTANDERS** have been **KILLED** by flying projectiles (such as tow balls) when recovery straps or ropes have been attached incorrectly. **NEVER** attach recovery straps or ropes to vehicle fittings such as tow balls, tow bars, tie-down points or tow hooks. **ONLY** attach recovery straps or ropes to an **APPROVED** recovery point/device that is suitably rated for use with the strap or rope. **BEFORE** attempting a vehicle recovery all passengers must exit the vehicles and stand as far away as possible.

KEY INFORMATION AND SAFETY RECOMMENDATIONS

- Check rope and packaging for Minimum Breaking Strength (MBS) of this rope.
- It is recommended that the Minimum Breaking Strength of the rope should be between two to three times the vehicle's Gross Vehicle (GVM).
- The rope must be suited to the GVM rating of the lighter of the two vehicles used in the recovery process.
- Never exceed the ropes Minimum Breaking Strength or the Working Load Limit (W.L.L.) of shackles.
- Never allow your rope to rub against sharp or hot surfaces.
- Consider completing a nationally recognised four-wheel drive training course or contact a reputable four-wheel drive club for more comprehensive advice on the proper selection and use of your recovery equipment.
- The motor vehicle recovery rope must not be used for lifting or standard towing.
- Check full length of rope for nicks and cuts before use to ensure the rope is not damaged and is in usable condition. If damaged, replace it.
- The rope's strength and stretch are reduced when the rope is saturated with water.
- Something like a recovery damper, heavy bag or blanket must be draped over the rope during use to reduce any unintentional rebound of the rope.
- Before attempting the vehicle recovery, passengers of the vehicles involved must:
 - exit the vehicles
 - stand as far away from the vehicles as possible
 - avoid standing in the path of the vehicle performing the recovery
- While the rope is being used, any people outside the vehicles involved in the recovery process must keep a safe distance (recommended distance is at least 1.5 times the length of the unstretched rope) from the point of recovery and NEVER in the line of recovery.

WARNING - Always follow product instructions. It is important to correctly attach the motor vehicle recovery rope to a motor vehicle. A standard tow ball or vehicle tie-down point is not designed for this purpose and may result in the rope or a vehicle component detaching from a motor vehicle and striking and seriously injuring or killing a person. Only attach the rope to a vehicle recovery point or device that is suitably rated for use with the rope. Incorrect use has previously resulted in serious injury and death.



IMPORTANT

- Never attempt to recover a vehicle without all the necessary equipment.
- Only use equipment that is properly rated for the particular situation. If in doubt, don't use it.
- Never exceed the Minimum Breaking Strength (MBS) of the rope or Working Load Limit (WLL) of shackles.

SELECTING THE RIGHT RECOVERY ROPE

It is very important to use the correct recovery rope. A rope with a 'too light' breaking strength may break under load. A rope with a 'too heavy' breaking strength may not be stretched properly and more stress will be placed on the recovery points, possibly causing damage or injury. The minimum breaking strength of the rope should be between two and three times the GVM of the 'lighter' of the two vehicles used in the recovery process. Please note that the recovery rope will be under greater load if the vehicle is bogged in mud, sand or heavily loaded. If the GVM is not stated on the identification plate of a vehicle or its registration certificate, it could be available from the owner's handbook or from the vehicle manufacturer.

KEEPING PEOPLE SAFE

Only the drivers of the stranded and recovery vehicle should be on those vehicles. Nobody else should be in or on those vehicles. Ensure bystanders stand at least 1.5 times the un-stretched rope length away, to the side of the line of recovery. NEVER stand between or in front of vehicles connected by a recovery rope when recovery is in process.

SETTING UP THE RECOVERY

Assess the situation of the stranded vehicle. If it has bottomed out, clear under the vehicle body so that it rests on its wheels. The recovery vehicle should be placed in line (no more than 10 degrees off the straight line) with the stranded vehicle, for either a forward or reverse recovery operation. Distance between vehicles should be two or three metres less than the un-stretched length of the recovery rope. Establish agreed signals between the vehicle drivers, by radio, hand signals or vehicle horn.

CONNECTING THE RECOVERY ROPE

Carefully inspect the recovery rope to determine that it is in good condition. If the rope is wet, dirty, cut or abraded it will not perform properly. A wet rope maybe 20% under strength. A damaged rope may break. Do not allow the rope to contact hot surfaces or sharp edges.

Roll the rope out between the vehicles, ensuring there are no twists or kinks and making sure to leave two to three metres slack between the vehicles. Joining ropes together for greater length should be avoided where ever possible. NEVER USE A METAL OBJECT TO JOIN ROPES - if the rope breaks it can become a missile and cause damage or injury.

Check your vehicle handbook for recovery point locations, or use correctly rated and fitted aftermarket recovery points. DO NOT CONNECT TO A TOW BALL OR TIE DOWN POINT. Connect the rope to a suitable recovery point. For any recovery point requiring the use of a shackle, use only load rated shackles. Load ratings are marked on shackles as W.L.L (Working Load Limit). Bow shackles are suitable for this purpose and should be correctly rated for the vehicle, rope and recovery. To correctly tighten shackle pins, screw the pin until it seats and then back it off a turn. Over tightening may lead to seized pins, due to the force exerted during recovery operations. Soft Shackles could also be considered as a safer, lighter solution. Ensure you select the right soft shackle for the recovery, and it is attached to the vehicle safely, avoiding any location that can cause damage. To reduce the risk of vehicle damage and personal injury, hang a suitable recovery damper blanket over the recovery rope approximately midway along its length to restrict the whipping action of a rope if it should break.

Place 2 metre "S" bend nearest to a recovery vehicle. This allows the driver of the recovered vehicle to see the strap taking up and minimises the strap dragging across the ground.

Finally, check all connections and clear bystanders to a safe distance of at least 1.5 times the un-stretched length of the rope, making sure they are to the side of the recovery operation and NEVER in the line of recovery.

REMEMBER!!!

1. **NEVER** use a tow ball as an attachment point.
2. **ALWAYS** use rated recovery points. Ensure you know BEFORE you go off road.
3. **ALWAYS** use a cable dampener on the strap.
4. **ALWAYS** ensure everybody except the driver is out of the vehicle and at a safe distance.
5. **ALWAYS**, where possible, use an equaliser strap.
6. **NEVER** use a bigger run-up. A two-metre 'Z' shaped run-up is all that is required. If the first pull doesn't work re-set repeat with a little more power and effort from the tow vehicle.

MAKING THE RECOVERY

- Before the recovery operation, drivers must agree on the point to which the stranded vehicle is to be recovered and the signal (radio, hand or horn blast) when that point is reached.
- With communications maintained between both vehicles, and the recovery rope secure, the recovery vehicle should gently accelerate, taking up the slack and proceeding at no faster than 10- 12kph. For the best results the stranded vehicle should be in first gear (or second low), and the driver should assist the recovery by trying to drive out approximately three seconds from when the recovery vehicle moves off.
- If the stranded vehicle is not recovered on the first attempt, check under the stranded vehicle for obstacles, rest the slack in the recovery rope and try a little more speed by the recovery vehicle. NOTE: Excessive speed or continual jerking action whilst using a recovery rope may result in damage to the recovery point, chassis and/or driveline of both vehicles.
- When the stranded vehicle has reached the agreed point the driver should advise and the recovery vehicle should stop first, followed by the stranded vehicle.
- When proper use of a recovery rope is unsuccessful, use an appropriate rated recovery winch.
- Do not attempt to remove the rope until both vehicles are stationary and secured.
- NOTE: recovery ropes require rest periods between use to return to their original length and capacity. Excessive recovery attempts over a short period of time can cause heat build-up and possible failure.

GENERAL CARE AND MAINTENANCE

- Never allow your rope to rub against sharp or hot surfaces.
- Clean your rope with warm water and a mild detergent. Allow a thorough drying before storage. Foreign material such as sand and grit can permanently damage the rope fibres.
- Check full length of rope for nicks and cuts before use. If damaged, replace it.
- Never use the rope as a lifting sling.
- Inspect shackles for damage before use. If the pin is hard to turn, the shackle has been overstressed and should be replaced.

CAUTION

Always follow the recovery rope guidelines for safe use.

CAUTION



Email: info@tredoutdoors.com

Phone: +61 7 3155 3694