

4WD Industry Council created these guidelines for informational purposes, these guidelines may not address all circumstances and are not intended to replace the current mandatory labelling requirement or use and safety information provided by the manufacturer of the product but to assist the reader to consider safety when using the product and to support the safety of the Australian 4WD community. This guideline document can be reproduced but not amended. October 2020. © Australian Automotive Aftermarket Association.



# **General Information**

Recovery Straps are a heavy-duty nylon strap that can stretch and spring back to original length. The combination of the recovery vehicle pull and the tension in the strap creates a 'snatching' effect that can pull a stranded vehicle free from being bogged or unable to move under its own power. When used in accordance with these guidelines, vehicles may be recovered with minimal injury risk to people or damage to vehicle equipment.

#### **Key Information and Safety Recommendations**

- Check the strap and its packaging for the stated Minimum Breaking Strength (MBS) of this Strap.
- It is recommended that the minimum breaking strength of the strap should be between 2 and 3 times the vehicle's gross vehicle mass (GVM); and
- The strap must be suited to the GVM of the lighter of the two vehicles used in the recovery process.
- Persons intending to use the strap should consider completing a nationally recognised four wheel drive training course or contact a four wheel drive club for comprehensive advice on the proper selection and use of the strap.
- The strap must not be used for lifting or conventional towing.
- Persons intending to use the strap must ensure that the strap is not damaged and is in usable condition.
- The strap's strength and stretch are reduced when the strap is saturated.
- Something like a recovery dampener, heavy bag or blanket must be draped over the strap during use to reduce any unintentional rebound of the strap.

- While the strap is being used, persons situated outside the motor vehicles involved in the recovery process must -
  - (A) be kept at a safe distance (recommended as at least 1.5 times the length of the unstretched strap) from either of the vehicles involved in the recovery process; and
  - (B) never situate themselves within the path of the vehicle performing the recovery.
  - WARNING Always follow product instructions. It is
    important to correctly attach the motor vehicle recovery
    strap to a motor vehicle. A standard tow ball, or vehicle
    tie-down point is not designed for this purpose and may
    result in the strap or a vehicle component detaching from a
    motor vehicle and striking and seriously injuring or killing a
    person. Only attach the strap to a vehicle recovery point or
    device that is suitably rated for use with the strap. 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 strap or the Working Load Limit (WLL) of shackles.



### **Selecting the Right Recovery Strap**

It is very important a correctly rated strap is used. A strap with a 'too light' breaking strength may break under load. A strap with 'too heavy' a breaking strength may not stretch properly, and more stress will be placed on the recovery points, possibly causing damage or injury. The Minimum Breaking Strength (MBS) of the strap should be between 2 and 3 times the Gross Vehicle Mass (GVM) of the 'lighter'

of the two vehicles used in the recovery process. Be aware that the Recovery Strap 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.



#### **Setting Up the Recovery**

Assess the circumstances of the stranded vehicle. If it has bottomed out, clear under the vehicle body so it rests on its wheels. The recovery vehicle should be placed in line (no more than 10o off the straight line) with the stranded vehicle, for either a forward or reverse recovery operation.

Distance between vehicles should be 2-3 metres less than the unstretched length of the Recovery Strap. Establish agreed signals between the vehicle drivers, by radio (preferably), hand signals or vehicle horn.



#### **Connecting the Recovery Strap**

Carefully inspect the Recovery Strap to determine that it is in good condition. If the strap is wet, dirty, cut or chaffed, it will not perform properly. A wet strap may be 20% under strength, a damaged strap may break. Do not allow the strap to contact hot surfaces or sharp edges.

Roll the strap out between the vehicles, and make sure there are no twists and leave about 2-3 metres slack between the vehicles. The joining of straps should be avoided wherever possible (Retailers carry varying lengths of strap). NEVER USE A METAL OBJECT to join straps – if the strap 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 and shackles. Recovery points are different to vehicle tie down points. Recovery points are specifically designed to be used for towing and have a greater capacity to withstand stress, whereas tie down points are simply for holding the vehicle in place when stationary. DO NOT CONNECT TO A

TOW BALL, TIE DOWN POINT, OR DIRECTLY TO THE VEHICLE BULL BAR OR TOW BAR. Using a load rated shackle, connect Recovery Strap either directly to vehicle's documented recovery point or to a correctly rated aftermarket recovery point ONLY.

Load ratings are marked on shackles as WLL (Working Load Limit). Bow Shackles are suitable for this purpose and should be rated at least 3.25t. To correctly tighten shackle pins, screw the pin until it seats then back off about ½ to 1 turn. Over tightening may lead to seized pins, due to the force exerted during recovery operations. To reduce the risk of vehicle damage and personal injury, hang a suitable recovery dampener blanket, over the Recovery Strap, approximately midway to restrict the whipping action of a strap should it break.

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



### **KEEPING PEOPLE SAFE**

Only the drivers of the stranded and recovery vehicle should be in those vehicles. Nobody else should be in or on those vehicles. Ensure bystanders stay at least 1.5 times the un-stretched strap length away, to the side of the line of recovery. NEVER stand between vehicles connected by a Recovery Strap or step over a Recovery Strap once connected – always walk around.





### **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 signal or horn blast) when that point is reached.
- 2. With communications maintained between both vehicles, and Recovery Strap secure, the recovery vehicle should gently accelerate, taking up the slack and proceeding at no faster than 10-12kph. For best results the stranded vehicle should be in 1st gear (or 2nd Low), and the driver should assist the recovery by trying to drive out approximately 3 seconds from when the recovery vehicle moves off.
- 3. If the vehicle is not recovered on the first attempt, check under the stranded vehicle, again, for obstacles, reset the slack in the Recovery Strap and try a little more speed by the recovery vehicle. NOTE: Excessive

- speed or continual jerking action whilst using a Recovery Strap may result in damage to the recovery point, chassis and drive line of both vehicles.
- 4. When the stranded vehicle reaches the agreed point the driver should advise and the recovery vehicle should stop, then the stranded vehicle should stop.
- 5. Where proper use of a Recovery Strap is unsuccessful, use an appropriate sized recovery winch.
- 6. Do not attempt to remove the strap until both vehicles are stationary and secured.
- 7. NOTE: Recovery Straps require rest periods between use to return to their original length and capacity. Excessive pulls over a short period of time can cause heat build-up and possible failure.



### **General Care and Maintenance**

- Never allow your strap to rub against sharp or hot surfaces.
- Avoid twists and kinks. After washing, and when dry; always coil your strap for storage.
- Clean your strap with warm water and a mild detergent, allowing thorough drying before storage. Foreign material such as sand and grit can permanently damage the strap fibres.
- Check full length of straps for nicks and cuts before and after use. If damaged, replace it.
- Never use the strap as a lifting sling.
- Inspect shackles for damage; if pins are hard to turn, shackle has been overstressed. Replace it.



#### 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-wide 'Z' shaped run-up is all that is required. If the first pull doesn't work, re-set and repeat with a little more power and effort from the tow vehicle.





## Always like this









#### **Never like this**





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