

Vehicle winches

QFleet driver safety fact sheet

Using winches for vehicle recovery

Vehicle recovery is a high risk activity. The risk can be reduced with some prior training, planning and preparation, and a disciplined approach to the recovery task.

There is very little legislation covering the safe use of vehicle mounted winches. However, when the vehicle and winch are being used for work related purposes the *Work Health and Safety Act* outlines employer and employee responsibilities to ensure a safe workplace and process.

Winches are normally fitted to vehicles to provide a self-recovery capability and to provide the ability to recover another vehicle, or to move heavy objects. A winch will be rarely suitable for recovery use without some additional equipment including a snatch block, 'D' shackles, a short length of appropriately sized chain, a tree trunk protector and a shovel.

Operator training

A winch which is not used correctly is a significant safety risk. It is vitally important that the operators of vehicles that are equipped with winches are properly trained in their safe operation and use. Regular training and practice in winch use will ensure safer and more competent use during an emergency situation.

General safety precautions

The following general safety precautions will reduce the risk of incidents when using winches for vehicle recovery.

- Staff must be trained to know and understand the use of the winch and how to perform safe winching operations.
- Sturdy gloves must be worn to protect hands from injury, particularly when handling the winch rope.
- Winches should never be submerged in water. If a winch is submerged it must be inspected and serviced by a technician immediately to prevent corrosion damage and to ensure its ongoing safety and reliability.
- A winch requires regular use and testing to ensure that it remains serviceable.
- The winch rope and its fittings must be checked regularly for obvious damage and damaged, frayed and kinked winch rope should be replaced immediately.
- The winch rope should be neatly rewound onto the winch drum after use.
- Never use a winch as a hoist.
- Do not use the winch rope as a tow rope.
- Do not use the winch rope to secure cargo to a vehicle.

Safety precautions for preparing a recovery task

The following safety precautions must be implemented when preparing a recovery task:

- Practice and become familiar with the winch before needing to use it.
- Do not rush; take the time to plan and prepare carefully.

- Estimate the load to be winched and ensure it does not exceed the winch capacity.
- Use the correct equipment in the correct manner and do not take any shortcuts.
- Recheck the condition of the winch rope and any other equipment being used for serviceability and any obvious damage.
- Ensure that the winch controls (remote pendant) are not plugged into the winch while setting up.
- Do not exceed the rated safety capacity of the winch rope. Use a double line (2:1) recovery layout if required.
- Avoid anchoring the cable back onto the winch vehicle when using a 2:1 layout. This will halve the winching forces transmitted to the winch vehicle.
- If the winch rope must be anchored back onto the winch vehicle when using a 2:1 layout, do not attach it to the winch frame as this will double the forces acting on the frame. Attach it to the vehicle chassis.
- Do not attach a winch rope to a vehicle's tow ball, axles or suspension.
- Wear leather gloves when handling winch rope. Do not allow the winch rope to slide through the gloves.
- Use the hook strap supplied with the winch to pull the winch rope from the drum.
- Endeavour to set up the winch rope so that it is retrieved at a 90 degree angle to the winch drum. This will ensure that it is rewound onto the winch drum evenly and will avoid damage and delays should over stacking and binding occur.
- Do not hook the winch rope back onto itself. Use a choker chain or sling instead.
- Remove any obstructions which may interfere with the safe winching operation
- Ensure that any anchors used are strong enough to hold the load.
- Place a bag or a blanket over the winch rope to minimise cable whiplash damage in the event it should break. In the absence of a bag or a blanket, consider using a heavy jacket or leafy branches.

- Have only one person in control of both the winch rope and winch controls (remote pendant).
- Establish a no-go safety zone for assistants and onlookers.
- Always act and think safely.

Safety precautions for winching during a recovery task

- Keep the remote pendant lead clear of the winch drum and the winch rope.
- To avoid damage when using the remote pendant from the driver's seat, route the remote lead through the open driver's window and not through the door seals.
- Always stand clear of the winch rope and ensure onlookers keep well clear during the winching operation.
- Consider opening the vehicle's bonnet to provide the operator additional protection if the winch rope breaks.
- Do not touch or cross a winch rope which attached or is in tension.
- Ensure no one is standing behind a vehicle that is being winched up a hill.
- Avoid continuous winching which imparts significant side loads onto the winch.
- Never engage or disengage the winch clutch if the winch rope is under tension or if the winch drum is turning.
- Keep hands and loose clothing clear of the winch rope and fairlead rollers during winching.
- Never winch when there are less than 5 wraps of winch rope on the winch drum or a full drum width coverage when a synthetic rope is used.

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