

Electric Winch Maintenance

Winches are notorious for not working when they are needed. To ensure they do work properly, regular maintenance is required.

BEFORE EVERY 4WD TRIP

- Check that all the electrical connections are clean and tight. Check the electrical cables for signs of chaffing.
- Check the mounting bolts are in place and tight.
- Put the winch into free-spool and pull the cable/rope out at least 10 metres.
- Check that the winch controller solenoid is working and responding to commands in both directions by winding cable/rope in and out under power.
- Winch the cable/rope back in with some tension on it. This will help keep all the parts moving and is the most vital part of any winch maintenance routine.
- If you have a wireless controller, check you have a spare set of batteries in your vehicle.
- Check that you have spare fuses for the power supply cable from your battery.
- Check the condition of your tree trunk protector, dampener, shackles etc.

AFTER EVERY 4WD TRIP

- After each trip, whether the winch has been used or not, check for damage, and remove any mud or other debris around the winch area.
- If doing lots of deep water crossings its good practice to give the winch a good run out and back in to heat up and help get rid of any moisture that may have gotten in.
- Check that the rollers on the fairlead turn or check the hawse is free of any gouges or burrs.
- Pull the cable out down to the last layer (keep 5 -8 wraps on the drum).
- Check the cable for damage (e.g., chaffing, kinks, deformity, broken strands) while it is out. Replace the cable if it is damaged beyond safe use.
- If the winch and cable require cleaning, use a hose and sponge or brush. Never directly pressure wash it because this can force grit into the winch and cable/rope strands. Dyneema rope can be pulled out and washed in a bucket. Fibre strands can be manipulated by hand to help remove embedded grit. Ensure the cable/rope is dry before rewinding under tension.

EVERY 12 MONTHS

This is to be done in addition to your regular pre-trip maintenance schedule.

- Check that all the electrical connections are clean and tight. If there is any corrosion on the terminals clean it off and spray on some terminal protectant. Have a proper look and not just the quick visual like you would with the pre/post trip maintenance. If any of the terminals are loose, tighten them up as this could potentially cause motor failure.
- If your vehicle battery is a few years old, make sure to get it tested to ensure it is still in top working condition. If you operate the winch with an inadequate battery, you could damage your winch and void the warranty.
- Check gearbox lubricant for contamination.
- Have the winch inspected and serviced by a winch specialist.
- Make sure Dyneema winch rope is protected from direct sunlight, fuel and oils because these degrade the fibres.

Remember to always refer to the owner's manual for your specific winch – some have special requirements e.g., seals to be replaced to maintain I.P. rating.

J. Kent – adapted from an article by Brock Smith. Port Hunter 4x4 Club