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## **Sherpa 4x4 Winch Troubleshooting - Control Box and Hand Controller**

This guide can be used to help determine faults with your Sherpa 4x4 winch. The guide aims to allow users to determine if a problem is with the winch motor or isolated to the control box or hand controller. This test will energise the winch directly and bypass the control box and hand controller.

## What you will need;

- Winch
- Charged 12V Battery
- 3 x jumper wires (car jumper leads can work well)

In the photo below, the black earth cable supplied with the winch was used as one of the jumper wires. The other two jumper wires were medium gauge copper wire.



Figure 1: Components required to perform first test

Caution!! You are about to energise the winch. Ensure you are performing the test on a stable flat surface and all fingers and loose clothing are clear of the winch.

Caution!! Due to the high inrush current to start the winch, sparking will occur when touching wires to the battery, take care not to burn your fingers. Light gauge wire may become hot quickly.

What to do (Refer photo below):

Consider disengaging the winch gearbox to prevent the drum from rotating for this test.

Connect the negative battery terminal to the black lug at the end of the winch motor. Connect a jumper wire between two terminals.

Connect a jumper wire from the remaining winch terminal to the battery positive terminal.

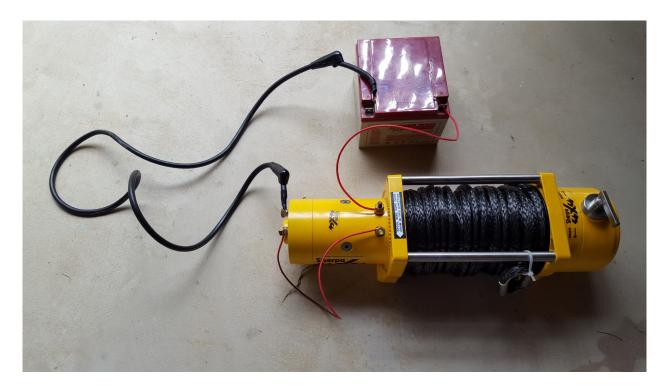
The winch should operate.



For winches with the larger 8.9hp motor, the black earth cable connection is underneath the motor.



By reversing the jumper wires (see below) the winch will change rotation. Note: swapping the battery terminal connections will not reverse the winch direction. The black negative cable does not require changing between tests.



If the winch has successfully operated in both directions, you can be assured any fault is isolated to your control box or hand controller.