

FlexPower® Electric Conversion Kit

MODEL: SK0349



Introduction

The ShoreStation FlexPower® Electric conversion Kit allows existing ShoreStation lift owners to convert their older DC or AC powered lift to the latest FlexPower Electric motor and control system. ShoreStation strongly recommends that this conversion be performed by a qualified technician.



Safety Instructions

DO NOT INSTALL OR USE THIS PRODUCT WITHOUT FIRST STUDYING MANUAL AND UNDERSTANDING THE INFORMATION CONTAINED IN IT.

- Remove all jewelry and any conductive items from your body before working with DC system.
- Remove the load from the lift and completely lower the lift platform before performing the upgrade.
- Disconnect all power from the lift and dock before performing the upgrade.
- Never modify the components of the lift without prior written authorization from ShoreStation
- This motor system is designed to be assembled only to ShoreStation Electric winches. If you are unsure what winch system you have, contact your nearest ShoreStation dealer for assistance.
- Never allow children to operate or play around boat lift.
- Never lift your boat with people in it.

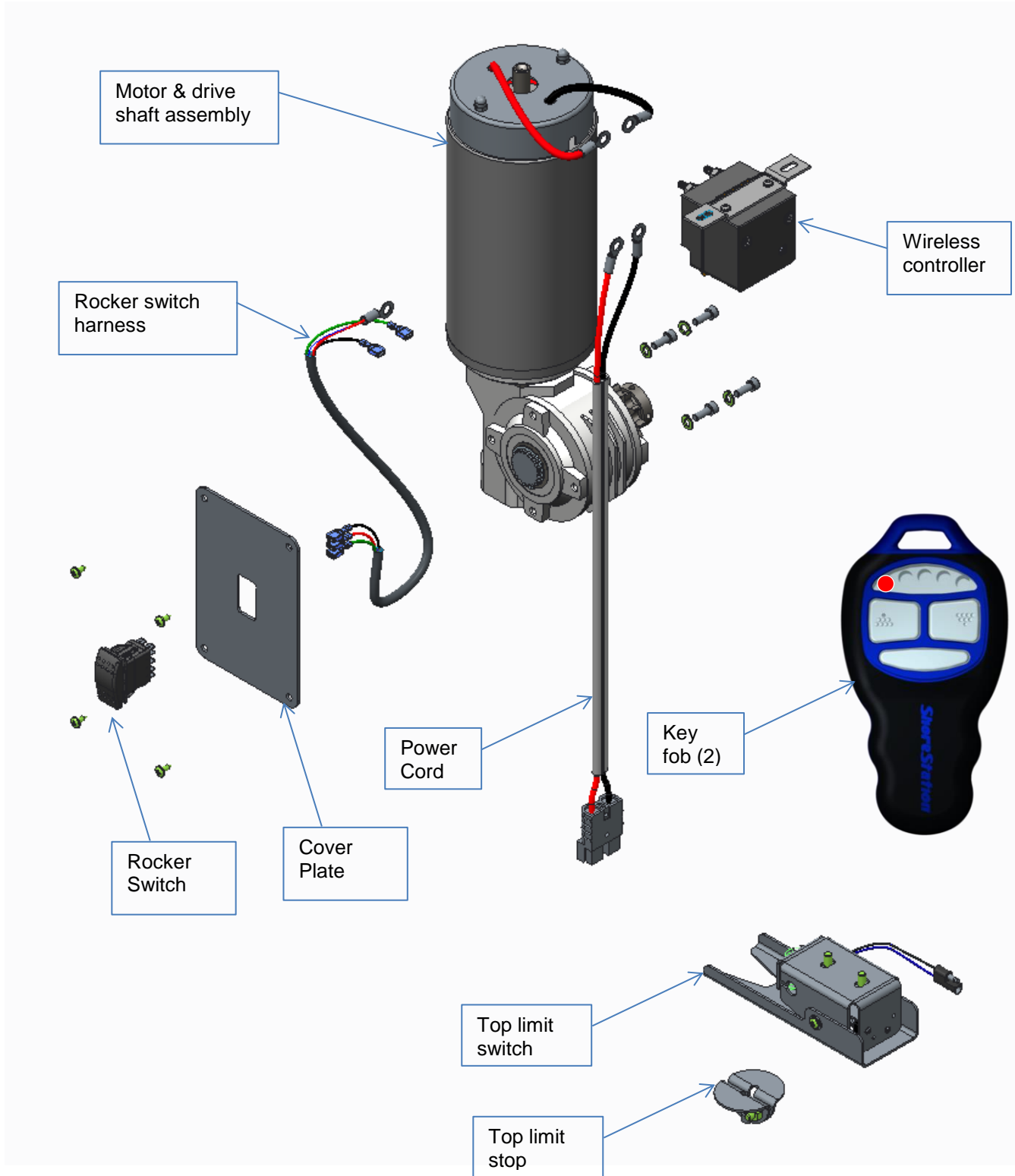
Specifications

Supply Voltage	12 or 24V DC
Key fob battery	23A 12V (requires 2)
Operation	2 Wireless Key Fobs Direct Operation Switch

Receiver Modes		Function
Mode 1	Lift Up/Down	
Mode 2	Not used	
Mode 3	Not used	
Mode 4	Not used	
Mode 5	Not used	

This kit contains the components required to replace the motor, control, and limit switch components from an older model ShoreStation electric winch. **Note: The ShoreStation® FlexPower® Electric system is a DC based winch system and requires one or more deep cycle marine batteries. Battery boxes and charging components may be required to complete your installation. FlexPower Winches must have a constant charging sources such as a Solar Panel or Battery Charger.** Contact your ShoreStation dealer for any additional components.

Contents



Preparation

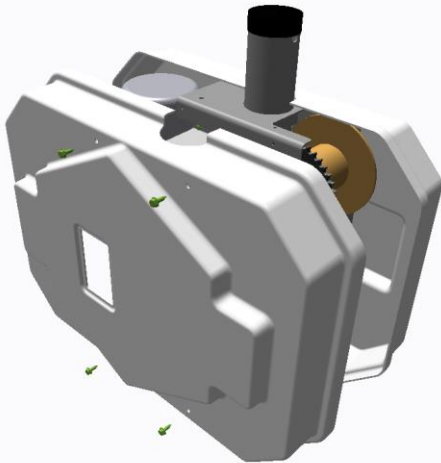
Prepare for the conversion process by removing the boat from the lift and lowering the platform to its lowest level so the winch cable goes slack. The motor acts as the brake for the winch and will allow it to free-wheel if any load is on the platform when it is removed.

Disconnect any power from the winch and dock after lowering the platform and removing the boat. Inspect the winch

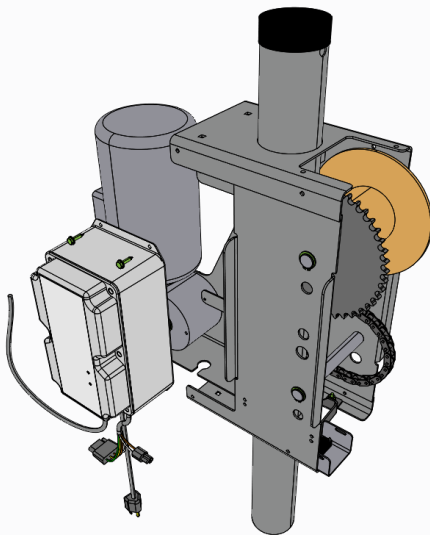
⚠ WARNING

DISCONNECT POWER FROM THE WINCH SYSTEM AND DOCK BEFORE DISASSEMBLY OF THE WINCH

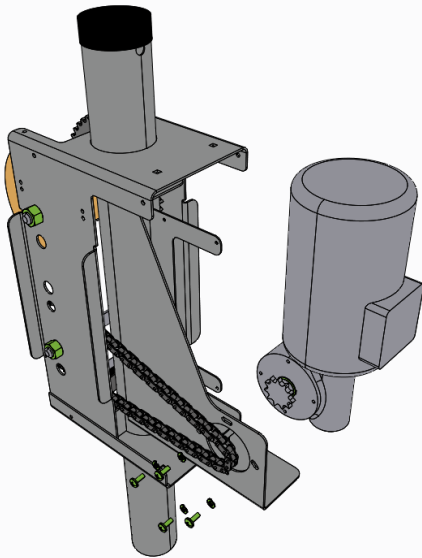
Assembly Instructions



Remove the front and rear enclosures from the winch assembly. The enclosures will be reused after the motor and controller has been replaced.



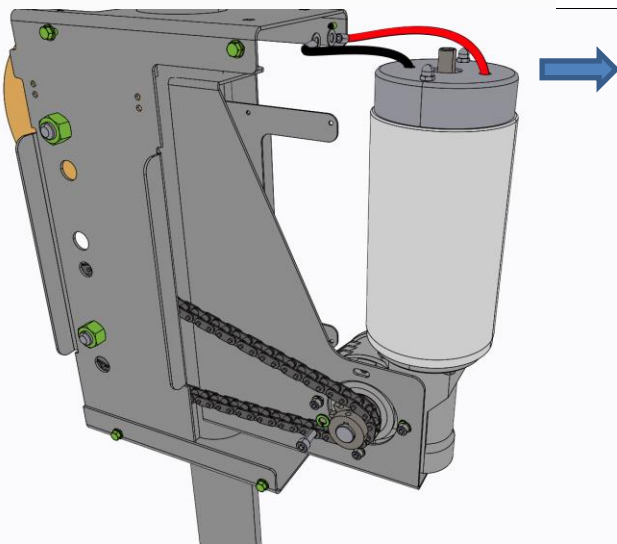
Remove the control box from the winch and unplug all harness connections to the limit switches, batteries, etc. The controller will still be connected to the motor.



Remove the motor by removing the four screws mounting it to the winch. Slide the motor forward to remove the chain from the drive shaft sprocket.

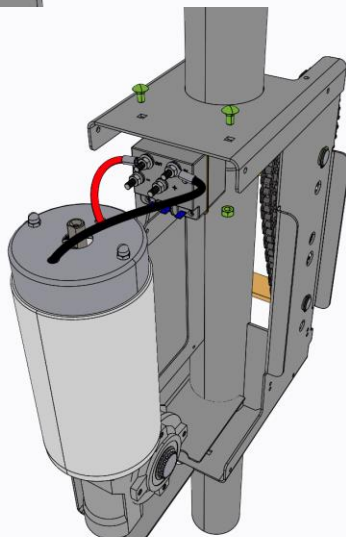
Remove the top limit switch assembly that is clamped to the corner post below the winch lift tube.

The winch is now ready to install the new motor and control system.



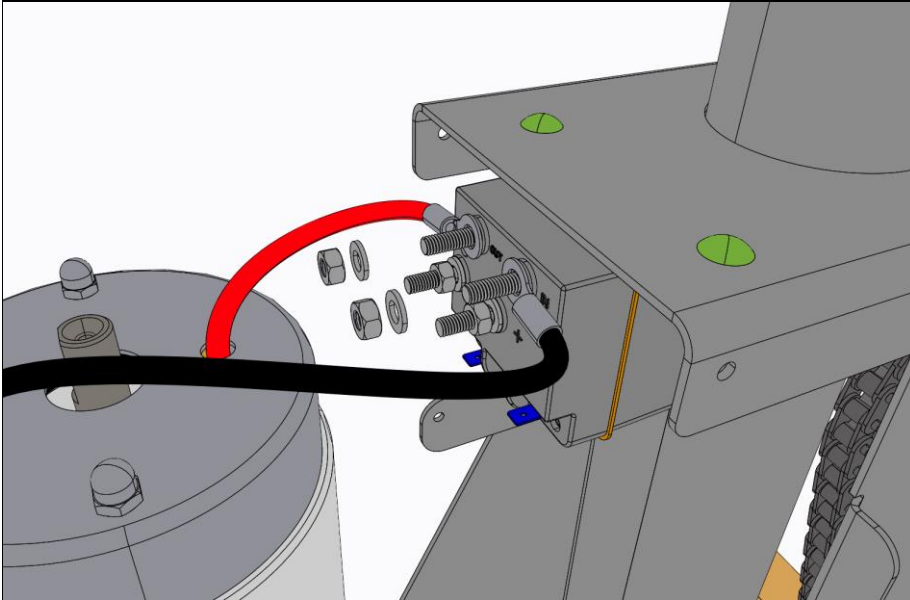
Mount the motor to the winch case using the four cap screws and lock washers provided.

Pull the motor back to tension the chain while tightening the fasteners.

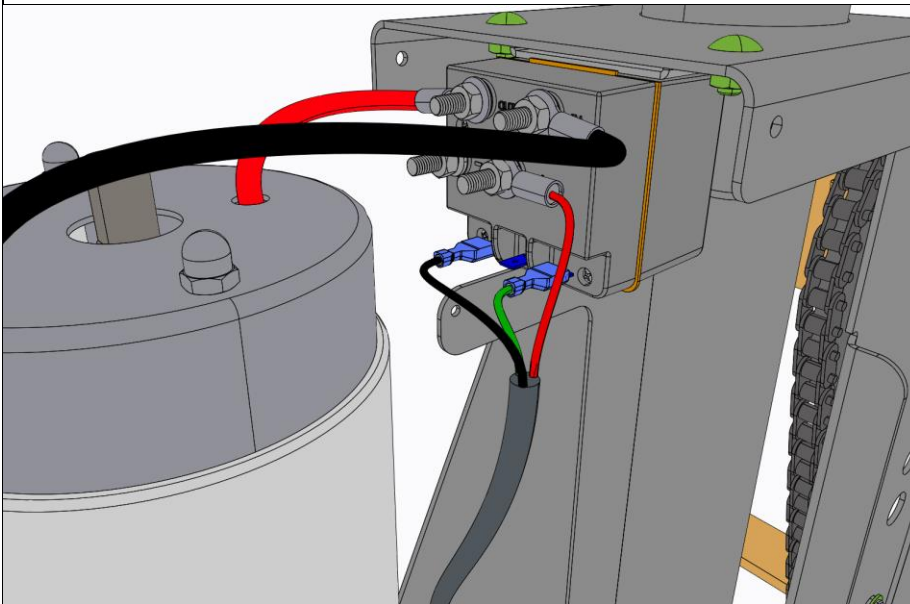


Mount the controller to the winch case as shown. Older winch cases may not have mount holes for the controller in the case. Use the controller base as a template to mark hole locations and drill two 5/16 diameter holes into the case as shown.

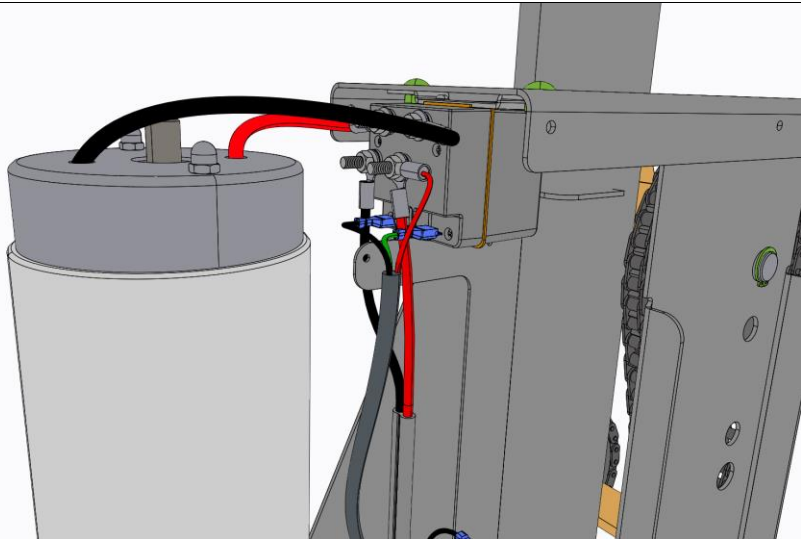
Fasten the controller using the two 1/4 carriage bolts and nuts provided.



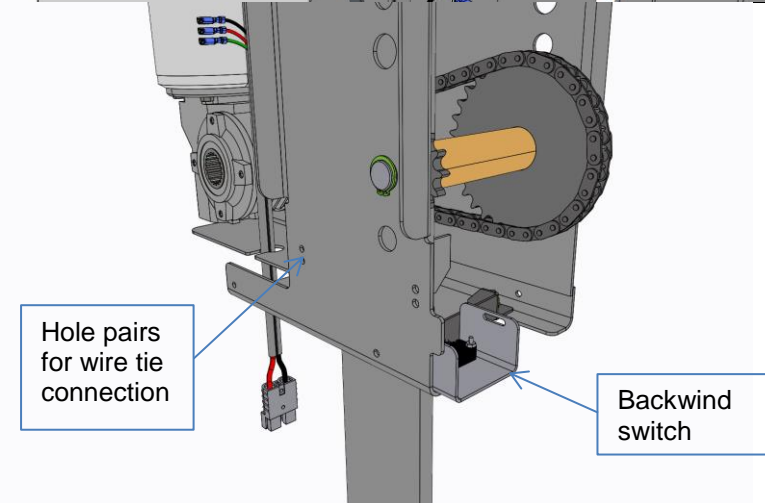
Connect the black motor lead to the controller post marked "IN" and the red lead to the post marked "OUT" and tighten.



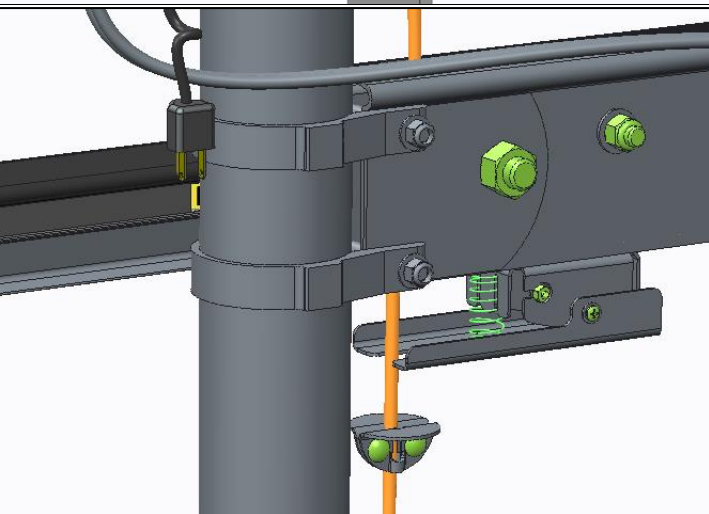
Connect the rocker harness to the relay. The red ring connector connects to the post marked "+". The green connector connects to the right tab and the black to the left tab as shown.



Connect the power cord to the + & - posts. The red connects to the post marked "+", the black to the post marked "-". Tighten all post connections.



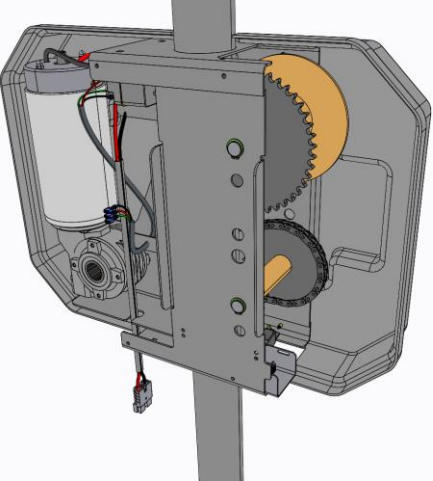
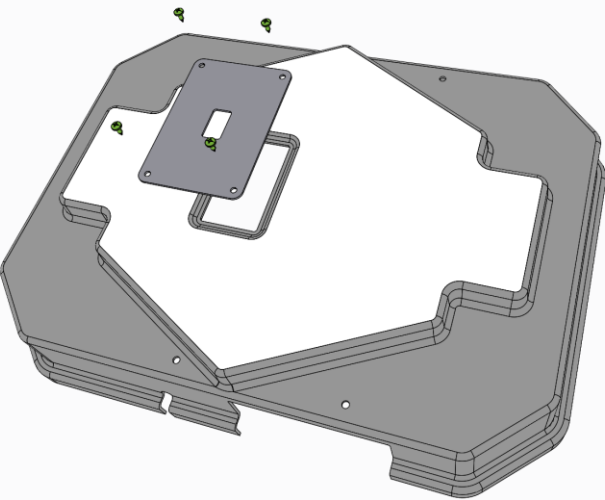
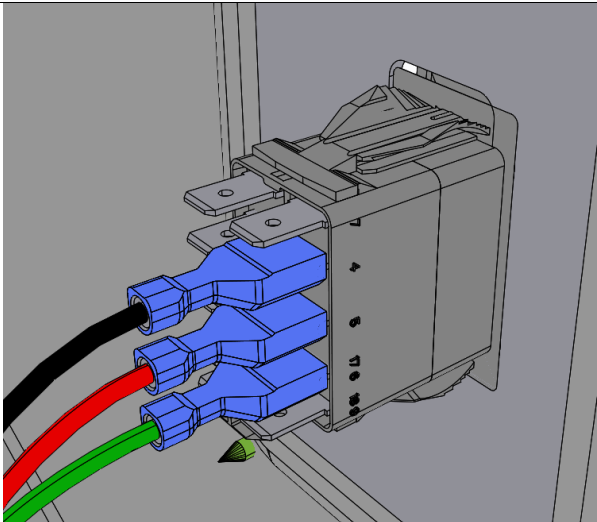
Connect the backwind switch to the short limit harness from the controller. Use the wire ties to fasten the harness. Be sure no part of the harness can contact the moving components of the winch.



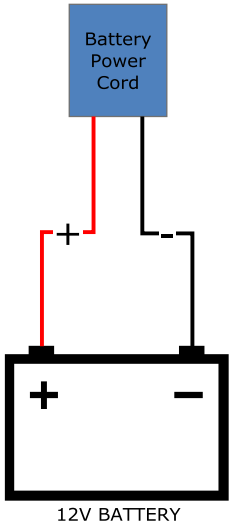
Mount the top limit switch provided to the bottom of the lift tube. Drill two .20" (#7 drill) holes 1 1/2" apart and 5 1/2" from the end of the lift tube. The holes should be centered on the tube width. Mount the top limit switch with the two 1/4" hex head screws provided.

Mount the limit stop to the cable using the carriage bolts and nuts provided. The stop assembly should be placed on the cable so the switch is bumped before over-wincing the lift.

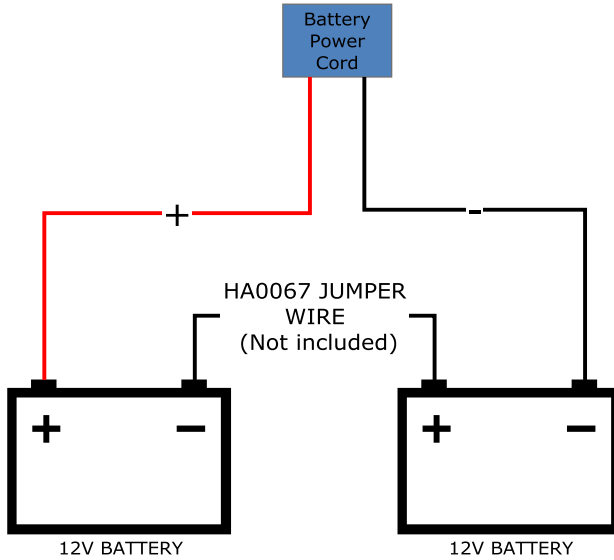
Connect the long limit harness

	<p>from the controller to the limit switch assembly.</p>
	<p>Re-attach the rear cover to the winch.</p>
	<p>Mount the cover plate to the front cover using the 4 phillips pan head screws provided. The plate should cover the controller opening.</p>
	<p>Snap the rocker switch into the cover plat and connect the rocker switch harness as follows:</p> <ul style="list-style-type: none"> Black – Tab 4 Red – Tab 5 Green – Tab 6 <p>Mount the front enclosure to the winch.</p>

12V Setup



24V Setup



Connect the battery power cord to the battery. The winch system can be powered using a single 12V battery or a 24V (two 12V series) setup. A group 24 or larger deep cycle battery should be used with this winch system.

The 24V setup requires the HA0067 jumper wire (not included).

Refer the instructions provided with your battery mounting tray & box for assembly instructions.

After connecting the battery, connect the battery power cord to the winch power cord. Test the rocker and wireless control functions.

Refer to the quick start instructions for the wireless key fobs for instructions on unlocking an operating.

Connect your charging device to the battery setup. Be sure your charging system is correctly matched to the voltage of the system. 24V chargers must be used only on 24V setups, 12V chargers on 12V setups.

Troubleshooting

Problem	Possible Issue	Possible Resolution
The lift does not turn on	Dead Battery	Check the lift battery with a battery tester.
	Disconnected battery	Check all battery connections to make sure all connections are tight.
	Locked key fob	The 5 mode lights will flash when a button is pressed if the key fob is locked. If it is locked, refer to the 'Unlocking Key Fob' instructions to unlock.
	Dead key fob battery	The key fob batteries may be discharged. If no lights flash on the remote when a button is pressed, try a different key fob or replace the key fob batteries.
	Fob needs programming	Make sure the remote key fob is programmed for the receiver. Refer to the <i>Replacement Key Fob</i> instructions.
The lift runs slowly	Overloaded lift	Make sure your load is within the rated capacity of the lift.
	Low battery	The lift battery may be low or unable to charge sufficiently. Charge or replace the lift battery
	Bound lift	Make sure the lift platform can move up and down freely. Refer to the assembly instructions for the lift for proper guide ring adjustment. Make sure the lift is level
The lift runs down, but not up	Stuck or faulty limit switch	The lift will not run up if the top limit switch is unplugged or stuck open. Check your limit switch connections and make sure it is operating correctly.
The lift runs up, but not down	Stuck or faulty backwind sensor switch	The lift will not run up if the top limit switch is stuck closed. Check your limit switch operation and make sure it is operating correctly.

The lift runs the wrong direction	Back-wound winch	Make sure the winch line is not winding incorrectly on the drum. The winch line should wind clockwise around the drum as it faces you.
	Reversed motor polarity	The motor output shaft and winch drum should turn clockwise when the lift is run up. Counterclockwise when running down. If the motor runs opposite of this, the red and black motor leads may be reversed on the 'In' and 'Out' relay connection.

If the problems stated above do not describe the issues you are experiencing, contact ShoreStation at (800) 859-3028.