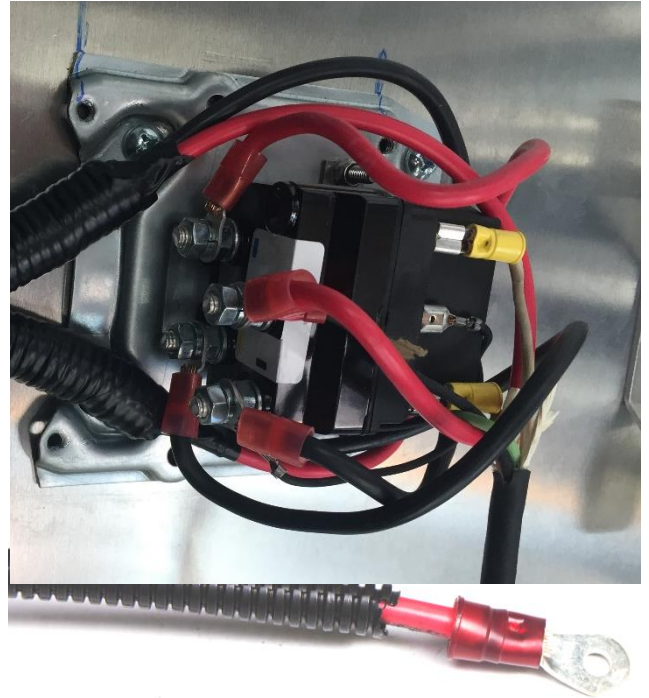


# 631340 - Hoist/Winch Electrical Installation

## 1) Mounting the Handheld Box

Remove the 4 screws holding the cover on the black handheld box. Using the 4 pan-head bolts, mount the box's base plate on the side you prefer the remote to be and near the door, but out of the way of being damaged. Mount on the partition for side door application or on the shelving end panel for rear door application.



## 2) Mounting the Motor

Determine the best orientation for the motor so it doesn't interfere with the body or walls. Use the 5/16" Grade 8 bolt (gold color) and Nyloc Nuts to attach the motor to the mounting plate.

## 3) Wiring the Handheld Box to the Motor

Lace the black and red wires (provided in the Handheld Box) inside 1/2" black flex. Leave about 6" exposed at one end. Crimp two 1/4" ring terminals onto these exposed ends.

Attach both ring terminals to the studs on the Relay (Yellow and Blue Indicator Colors). Route the other end of the wires to the motor using the clamps and screws provided to safely secure it to the walls. Leaving slack in the wires going to the motor to allow the boom to swing freely without pinching the wires, cut the excess wire at the motor and flex and crimp on a 1/4" ring terminal to each wire. Slide the black boot covers onto the wires and then fasten the ring terminals to the motor studs.

*Note: (These wires can be switched at the motor to change the direction of rotation to match the handheld.)*

## 4) Connecting the Ground Wire

Using the 10 ft. of 8 AWG black wire, crimp on a 1/4" ring terminal to one end and encase in the 1/4" black flex. At the handheld box, connect the ring terminal to a ground post as shown in the diagram. (Marked with a Black Indicator Color). This should have a thin black wire for the Remote already connected to it. Route the wire to either the battery or bolt to a spot on the frame with a 1/4" pan head bolt. Ensure there a good connection with metal-to-metal contact.

## 5) Connecting the Primary Wire

Take the 30 ft. 8 AWG red wire and encase it with the 1/4" black flex leaving about 6" of wire exposed on one end. Crimp on a 1/4" ring terminal to the exposed end and bolt it to the center post on the relay (red indicator Color). Route the wire to the battery using the shortest path you can. Using zip ties, secure the wire every 12"-18". Be sure the wire is not strapped to anything that moves, gets hot, or could potentially damage the wire. Also keep away anything that may get damaged should the primary wire ever short out, overheat, and/or melt.

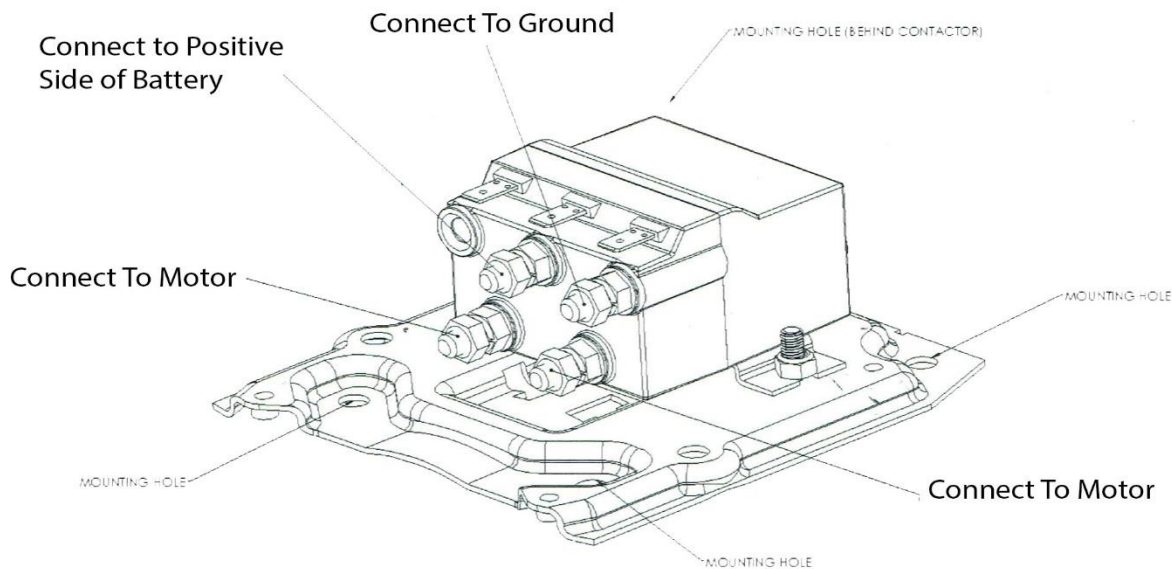
## 6) Connecting to the Battery

Trim the excess primary wire at the battery. Crimp on #10 ring terminal and connect to the silver stud on the reset breaker included with the motor kit. Fully wrap the reset breaker with electrical tape so no bare metal is showing. Double check the primary wire is routed correctly and attached to the correct post on



the relay before connecting to the battery. Make sure the connection is good before testing the system.

**CAUTION:** If the wire becomes hot/warm after you attach it to the battery, or the reset breaker trips, immediately disconnect and check the system for proper routing.



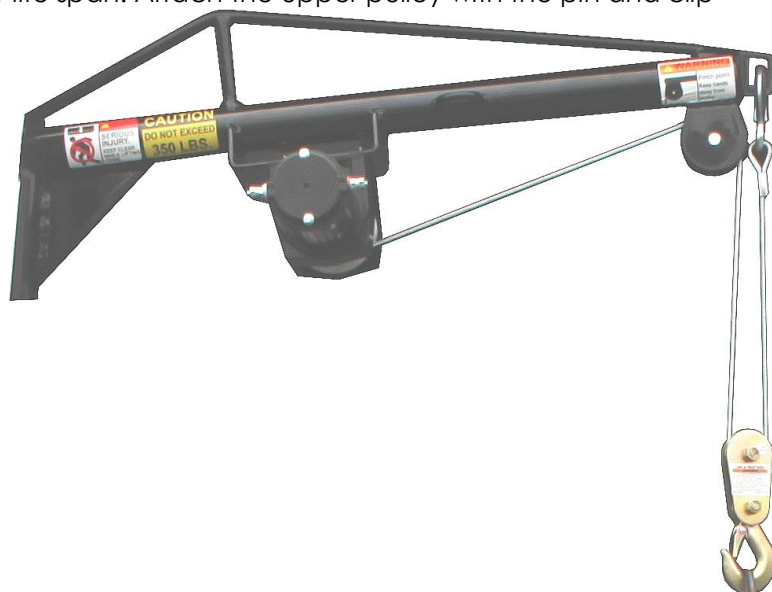
### 7) Mounting the Cord Hanger

Determine an accessible location for the handheld. Mount the bracket using the #10 pan head screws. Check that the rotation of the motor matches the indicators on the handheld. If it is reversed, switch the wires at the motor. Once everything is correct, re-attach the box cover and secure down any cord between the box and cord mount.



### 8) Routing the Cable (hoist only)

It is recommended that you unwind the Cable and cut it to 25ft and then rewind it. This reduces the stress on the motor and electrical components allowing a longer life span. Attach the upper pulley with the pin and clip along with the cable to the end of the boom. The pin must be rotated correctly to fit into the groove so that the clip will fit. Attach the block & tackle on the far end of the upper pulley and loop the hook attached to the cable on the tab at the end of the boom tube. Please note the hook needs to be first clipped on at the top and then rotated down into the correct position.



*Note: (Do not remove the block and pulley, this adds more load on the cable and may cause damage over time.)*

