

## Wiring

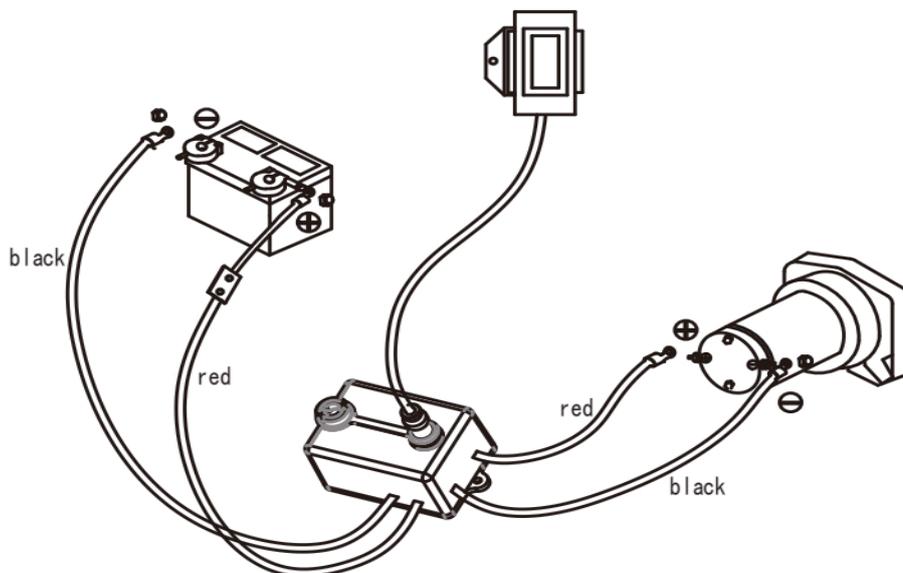
To prevent serious injury from explosion, due to sparking at the battery connection, disconnect the battery cables before making other wiring connections.

To prevent serious injury from leaking battery acid, do not use a dirty, corroded or leaking battery. Only use a 12V automotive (or equivalent) battery, in good condition.

1. Plan a route for the wiring from the point of the vehicle where the winch will be mounted, or used, to the battery. This route must be secure out of the way of moving parts, road debris, or any possibility of being damaged by operation or maintenance of the vehicle. For example, you may wish to route the wires under the vehicle, attaching it to the frame using suitable fasteners. Do not attach the wires to the exhaust system, drive shaft, emergency brake cable, fuel line, or any other components which may create damage of the wiring through heat or motion, or create a fire hazard.
2. If you drill through the bumper or any part of the body to route the wires, be sure to install a rubber grommet in the hole to prevent fraying of the wires at that point.
3. Route the cables from the solenoid to the battery and from the solenoid to the winch, following the precautions discussed earlier. See Figure E.
4. Attach the wire from the solenoid to the terminals on the winch.
5. Attach the circuit breaker to the positive terminal on the battery.
6. Attach the red battery cable to the circuit breaker.
7. Attach the black battery cable directly to the negative terminal of the battery.

### Note:

The attachment of the motor cables determines the operation of the remote's button. After the unit is mounted and powered, check the direction of the Power In and Power Out on the remote button. If you wish to change the direction on the remote, disconnect the battery cables from the battery, switch the motor cable connections on the motor assembly, then reconnect the battery cables.



**Figure E: Wiring Connection**

## Preparing the Wire Rope

1. The wire rope must be properly coiled under tension, to be able to support a load without damage.
2. Uncoil the wire rope, expect 5 full warps.
3. Recoil the rope back into the winch under at least 500 lb. of tension.

## Before Each Use

### ⊠WARNING

- ⊠ Inspect winch rope, hook, and slings before operating winch. Frayed, kinked or damaged winch rope must be replaced immediately. Damaged components must be replaced before operation.
- ⊠ Wrap the wire rope under 500 lbs. of tension before use. Otherwise, the wire rope may bind during operation.
- ⊠ Ventilate area well before and while working on battery. Explosive hydrogen gas can accumulate and explode when ignited by a spark or open flame.
- ⊠ Remove all jewelry and metallic objects before working near battery.

## Operating Instructions

### ⊠WARNING

- Read the entire Important Safety Information section at the beginning of this manual, including all text under subheadings before set up or use of this electric winch.
- The instructions that follow are basic guidelines only and cannot cover all situations encountered during use. The operator and assistants must carefully plan usage to prevent accidents.

## Clutch Operation

1. The position of the pin in the shaft determines whether the clutch is engaged.
2. Change the clutch position. See Figure F.
  - a. Pull the clutch knob out.
  - b. Turn it 90° while it is extended, then release it.

