

## 2500 lb. CAPACITY WINCH KIT – 17153 (full size) / 17530 (crew cab)

**SPECIAL REQUIREMENTS: Requires the use of a front receiver hitch and auxiliary accessory distribution block.**

### TOOLS REQUIRED

Pliers	Needle Nose pliers
Phillips screw driver	1/2 wrench or socket (2)
5/16 wrench or socket	wire crimper
wire cutter/stripper	13mm wrench or socket (2)
9/16 wrench or socket (2)	5/32 allen key
10mm wrench or socket (2)	

### ESTIMATED INSTALLATION TIME

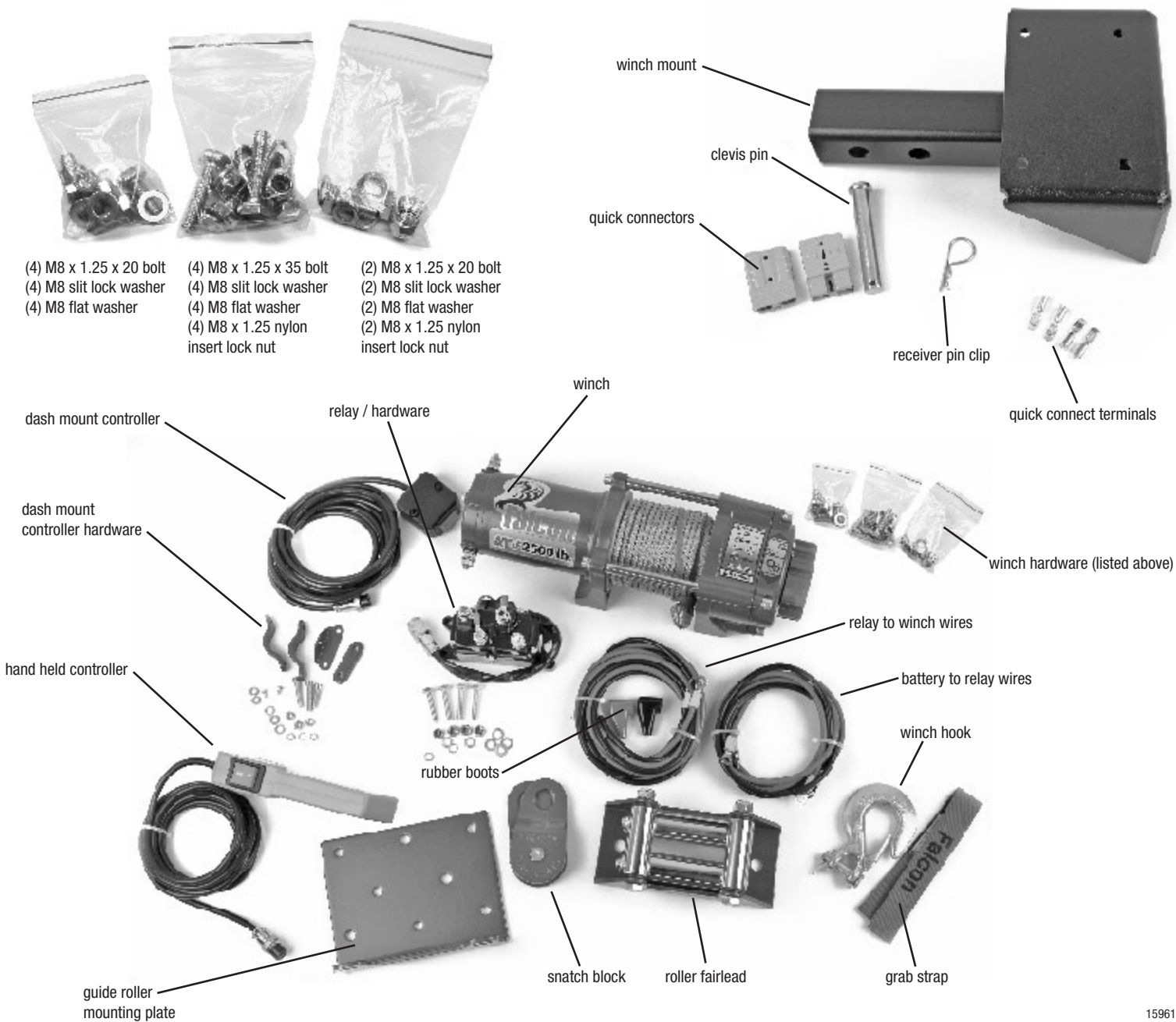
**60 - 90 minutes**

### RECOMMENDED SKILL LEVEL

**Intermediate**

Before you begin, check the contents of the kit against the parts list below. Immediately contact American LandMaster with any questions or discrepancies. American LandMaster cannot assume responsibility for any damage or injury resulting from incorrectly installed parts. American LandMaster suggests that accessory kits be installed by an authorized American LandMaster dealer or service center.

### PARTS LIST FOR AMERICAN LANDMASTER INSTALLATION (parts not shown actual size)





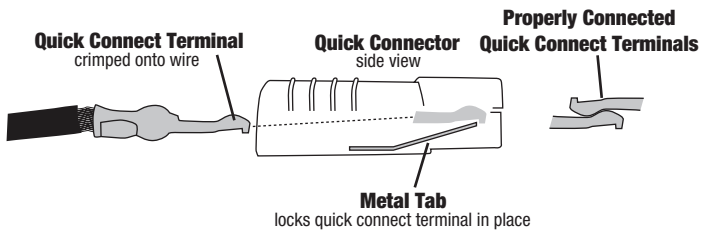
## STEP 1 INSTALL ROLLER FAIRLEAD

Install the roller fairlead to the mounting plate using two M8x20 cap screws, flat washers, lock washers and hex nuts.



## STEP 2 WINCH ON WINCH PLATE

Place the winch upside down on a flat surface and align the holes in the mounting with plate with the holes in the bottom of the winch. Carefully place the winch mount on top of the mounting plate to ensure your bolt holes remain aligned. Bolt the mount, mounting plate, and winch together using the M8x15 cap screws and lock washers. These bolts thread directly into the bottom of the winch. Tighten these bolts securely, but do not overtighten.



## STEP 3 MAKE QUICK CONNECTS

Locate the 4 foot red and black cables from your installation kit. Using a wire cutter, cut both cables 1 foot from one end of each cable. You will now have two 3-foot cables with a ring terminal on one end, and two 1-foot cables with a ring terminal on one end. These cables will be your quick disconnect. Strip all four bare wire ends and crimp the quick connect terminals onto each wire. Install the wire with terminal into the plastic quick connector housing, paying special attention to ensure that the black wires are on the (-) side and the red wires on the (+) of each connector housing. Connect the ring terminal end of the short wires to the winch motor terminals, black on (-), red on (+). Set the winch aside for now.





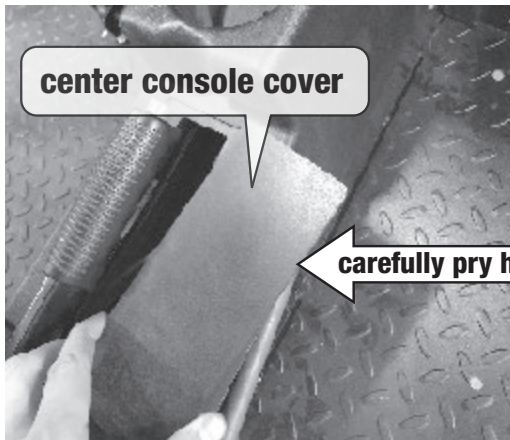
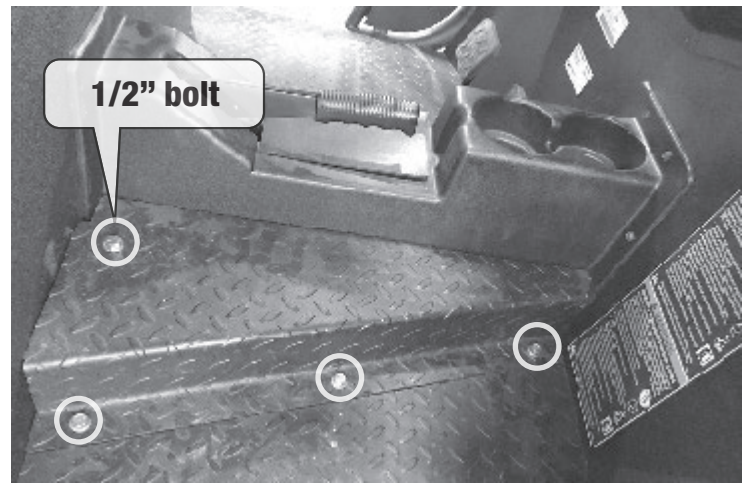
#### STEP 4 REMOVE HOOD

Remove the hood by removing the four bolts (one on either side above front tire, and two on either side of hood logo) using 1/2 socket and wrench.

#### STEP 5 REMOVE PROP SHAFT COVER

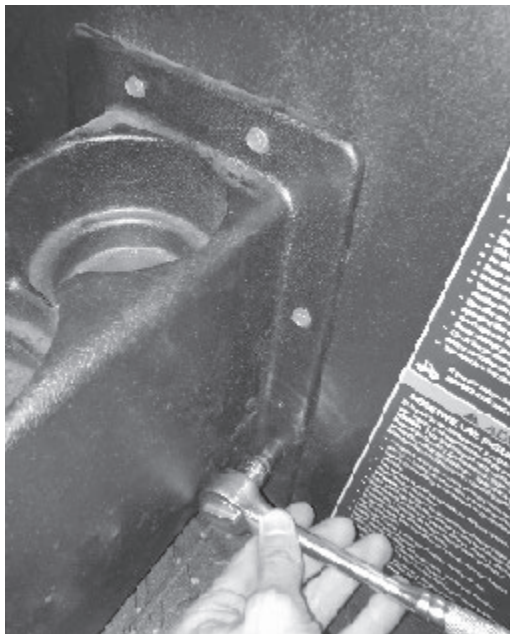
If 4WD (if not, skip to step 3) use a 1/2 socket and wrench to remove the prop shaft cover.

If your unit is a crew, at this time use the same tools to remove the rear seat console.



#### STEP 6 REMOVE CONSOLE

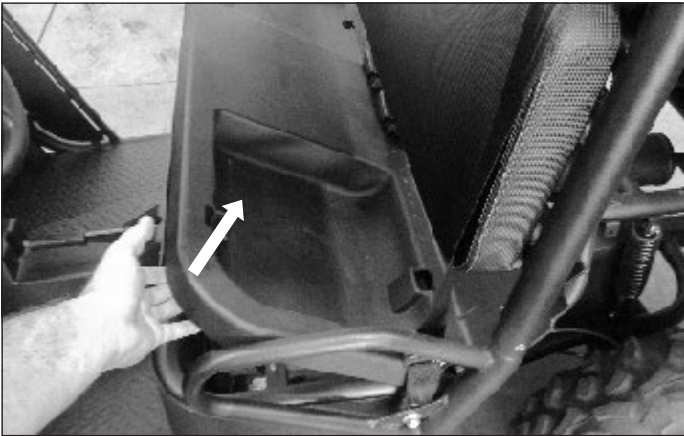
Remove the center console cover by using a pry tool or screw driver, then remove the console using a 5/16 socket.





## STEP 7 REMOVE SEAT AND SEAT TRAY

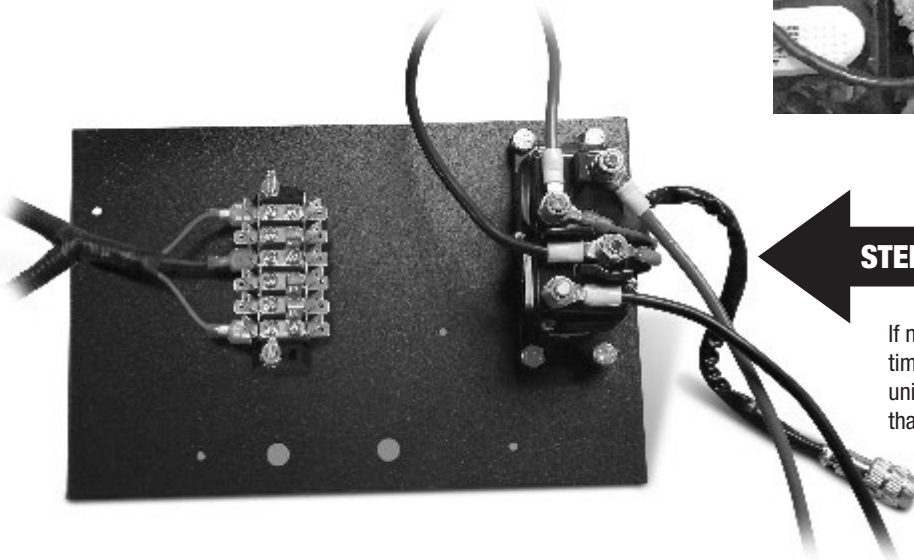
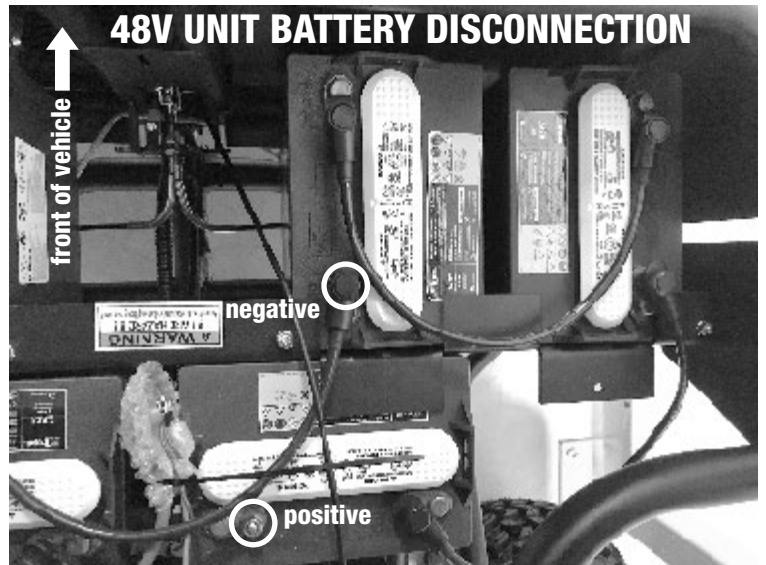
Remove the seat cushion by lifting the rear of the seat, pivoting the seat on the front of the seat surround. Once the seat is in the vertical position, lift it clear of the surround. With the seat removed, you may now lift the front edge of the under-seat tray, and removing it.



## STEP 8 DISCONNECT BATTERY

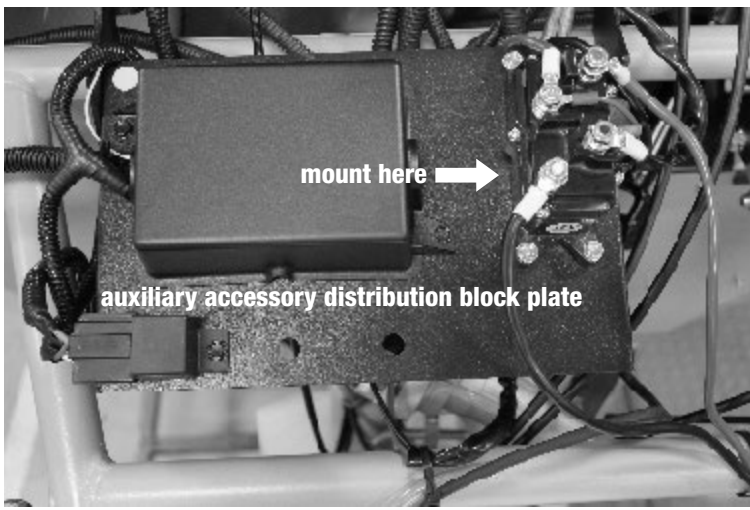
Disconnect the battery wires using a 7/16 wrench and socket.

## 48V UNIT BATTERY DISCONNECTION



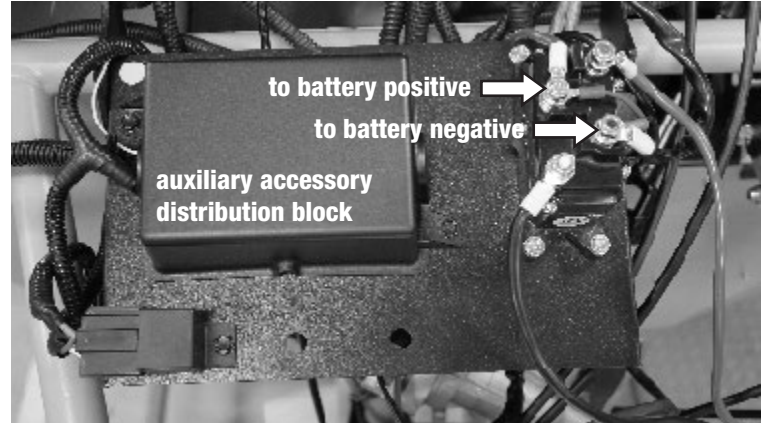
## STEP 9 AUX BLOCK AND / OR FRONT RECEIVER

If not already equipped, install the auxiliary distribution block at this time. Follow the instructions included in kit 17233. Additionally, if the unit is not already equipped with the required front receiver, install that now following the instructions included in that kit.



## STEP 10 MOUNT RELAY TO AUX BLOCK PLATE

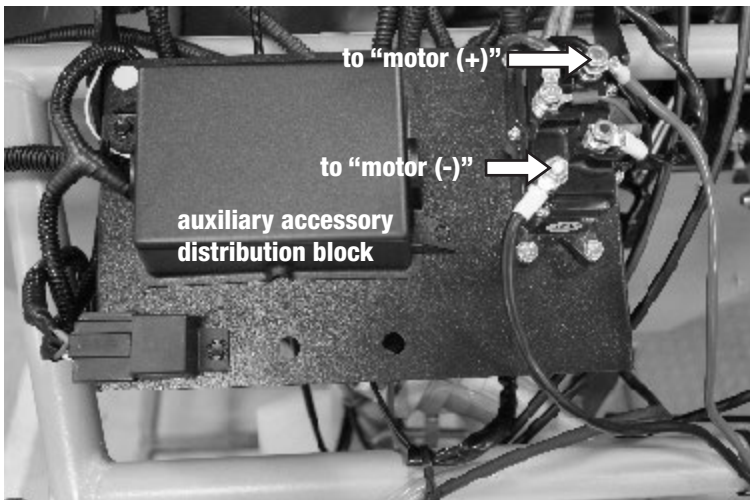
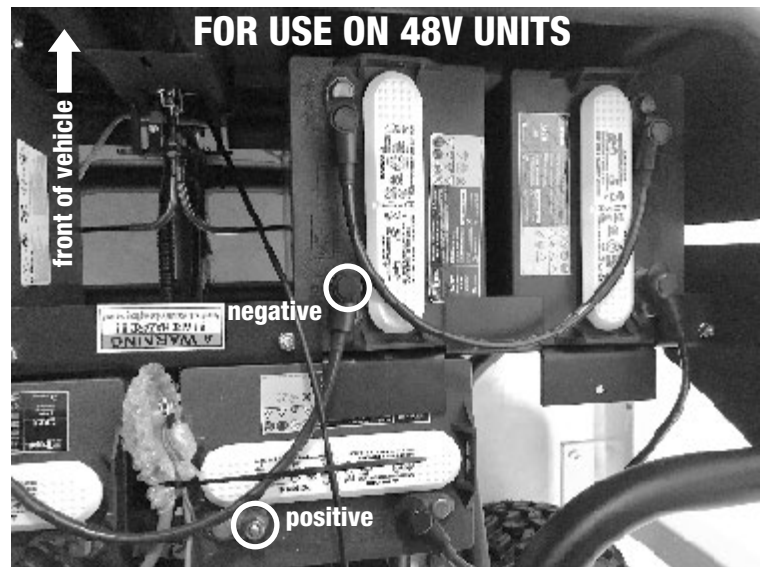
Using the supplied screws, mount the winch relay to the auxiliary accessory block in the specified location. Tighten mounting screws.



## STEP 11 POWER THE RELAY

Attach the 6-foot battery cables (10-foot for Crew units) to the relay terminals. Connect the red cable to 'battery (+)' and the black wire to 'battery (-)'. Route the cables down through the console of the unit and through to the battery. Connect the red wire to the (+) and the black to (-). Secure the cables to the console support on the driver's side of the console to ensure the cables cannot become entangled in the prop shaft (4WD units). Any excess cable should be coiled up and zip tied in the dash compartment.

**FOR USE ON 48V UNITS:** Connect negative wire to circled negative connection shown, and hook the positive up to the positive connection shown. **MUST be hooked up to 3 batteries in series.** Each battery is 8 volts - three in series will provide the winch with 24 volts and allow it to operate correctly.



## STEP 12 CONNECT QUICK CONNECT TO RELAY

Connect the ring terminal ends of the 3-foot quick connect cable to the relay terminal. Connect the red cable to 'motor (+)' and the black cable to 'motor (-)'. Secure the cables to the frame tubes with zip ties as you route the quick connect to the front of the vehicle, placing the quick connect in a location easy to access from the front of the unit.



hand held controller



dash mount controller

## STEP 13 CHOOSE / INSTALL WINCH CONTROLS

Your winch comes with two controller options. A switch that can be mounted into the dash, or a handheld joystick style controller that be operated from outside the unit. Choose your preferred controller style of controller, install and connect to the relay.

**Hand held Controller** - Drill a hole through the back of your glovebox that is large enough for the 4-pin connector to be threaded through. Run the connector through and attach to the relay. The joystick can be stored in the glovebox when not in use.

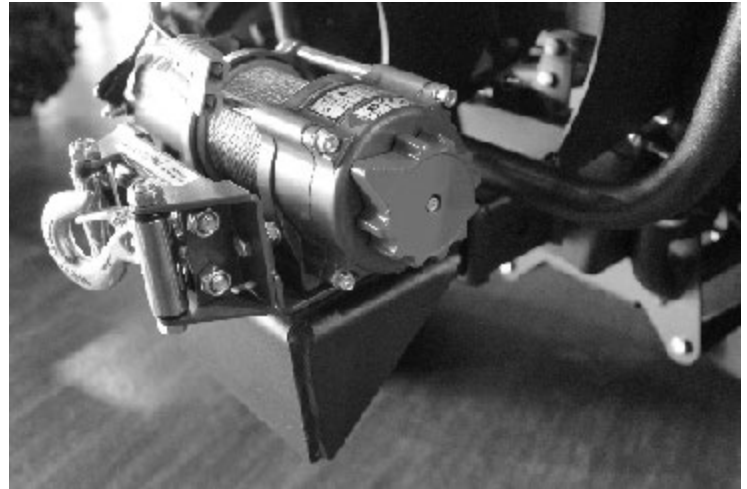
**Dash Mount Controller** - Use **template 1** at left to cut the switch location out in the dash. The recommended location is shown at left. To install, the switch must be disassembled and the back of the switch waterproofed with electrical tape.



dash mount switch waterproofed with electrical tape

## STEP 14 INSTALL WINCH INTO RECEIVER

Install the winch into the receiver and plug in the quick connection. Use your controller to verify that the motor engages before progressing with the installation.



## STEP 15 INSTALL HOOK AND STRAP

Use needle nose pliers to remove the cotter pin from the clevis on the winch hook, and remove the pin from the hook. Ensure the clutch control knob on the winch is in the ON position, and remove the rubber band from the spool, being sure to keep tension on the spool to prevent cable from unraveling from the spool. Carefully turn the control knob to OFF position and feed just enough cable through the fairlead to attached the hook. Immediately return the winch control knob to the ON position, keeping tension on the cable to prevent unspooling. Install the clevis pin through the hook and cable loop, and re-install the cotter pin. Use your controller to reel the cable back in and tight on the winch.

**Re-install the seat tray, seat, console, prop shaft cover, and hood.**

## Basic Operation

### Check your vehicle:

- Examine the winch cable. Do not use the winch if the cable is frayed, kinked or damaged.
- Check the Winch electrical connections to ensure that they are tight and clean.
- Put the vehicle transmission in **NEUTRAL** and apply the parking brake.

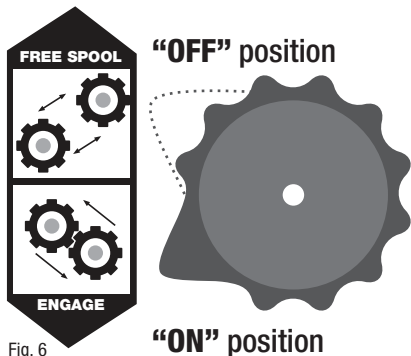


Fig. 6

### Prepare the Winch:

- If the vehicle with the winch is to remain in place during the winch operation, engage the parking brake and chock the wheels (chocks sold separately).
- Use the hook strap to pull out the wire cable by moving the Clutch Control Knob to the “OFF” (Free Spool) position as shown in see figure 6.

### WARNING

Leave at least 5 full turns of wire cable on the drum.

### CAUTION

Do not wrap the winch cable around the object and hook onto the cable itself. This will damage the winch cable and object being pulled (see figure 7).

### Attach Winch to the Object:

- Attach to the object by using a pulling point, tow strap or chain.
- Attachment point must be centered in the loop of hook and the safety clasp must be fully closed (see figure 8).
- **DO NOT use a recovery strap while winching.** They are designed to stretch and can suddenly whip back towards the operator during a winching operation.
- Place a rug or carpet over the winch cable span (approx. 6' from the hook) to help absorb the force released if the cable breaks (see figure 9).
- Move the Clutch Control Knob to the “Engaged” position and use either the stationary or handheld controller to operate the winch.

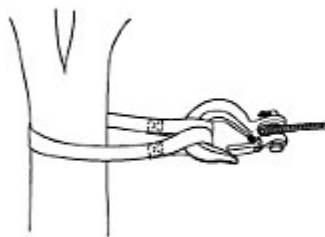


Fig. 7

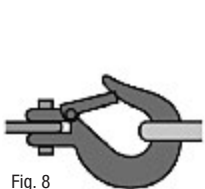


Fig. 8



Fig. 9

### WARNING

Winch cable may slip or break causing serious injury or death

- Briefly operate the controller that is being used (stationary or handheld) to ensure that the winch works properly.
  - **IN** - button should retract the winch cable
  - **OUT** - button should extend the winch cable
- If operation is reversed, the power connections to the winch may be connected backwards. Correct the wiring before continuing with operation.
- Standing aside the vehicle, retract the winch cable and winch the item as desired.

### CAUTION

Do not retract the hook all the way back into the winch roller guides as this will damage the roller and could lodge the hook in the winch

## Additional Winch Information

- When finished pulling the load, secure the load and add slack to the wire cable by reversing the direction which will release tension and allow easy disconnection from the hook.

### CAUTION

Constant duty loading of the winch will overheat the winch motor and may cause damage to both the winch and the battery.

- **Duty Cycle: 5%** - This winch is designed for intermittent use. The duty cycle is the amount of time the winch can operate at its maximum capacity for a 15 minute period of time.
  - 45 Seconds at max rated load
  - 14 minute rest between winching at rated load
- Double line rigging can be utilized to reduce the winch load. An appropriate pulley block is included for this technique.

### CAUTION

Overwinding the winch cable into the roller guides can jam the winch causing it to not release with the twist knob.

### WARNING

THE FOLLOWING MAY CAUSE SERIOUS INJURY OR DEATH!

- Wear ANSI approved safety gear including gloves, goggles and shoes.
- Entanglement may occur. Do not wear loose clothing or jewelry, as they may get caught in moving parts. Restrain long hair.
- Do not lift items vertically.
- Do not use to lift or move people.
- Do not use vehicle to pull on the winch cable and assist the winch.
- Disconnect battery cables before working on or near the winch cable, drum, roller guides, or wire connections to prevent accidental starting.
- Inspect the winch before each use. Cracks, bent parts, frayed or kinked winch cable will weaken the integrity of the winch and may cause sudden failure. A winch with damaged components or questionable winch cable must not be used.
- Do not exceed the rated load capacity of the winch.
- Be aware of dynamic loading! Sudden load movement may briefly create excess load causing product failure.
- Do not release the clutch under load.
- Do not place fingers through the hook. Fingers may get caught and entangled in winch roller guide. Use supplied strap to hold hook.
- Stay clear of the winch cable when under load. Standing in the direct line of the winch cable or behind the winch while operating may cause serious injury or death if the winch cable were to break or slip.
- Do not use a recovery strap to winch. Recovery straps are designed to stretch and may suddenly break and spring back towards the operator.
- Secure the load after moving. **This winch is not equipped with a locking mechanism.**
- Keep at least 5 full turns of winch cable on the drum. Connection to the drum is not intended to sustain a full load.
- People with pacemakers should consult their doctor or physician before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.

Contact American LandMaster Customer Service for questions or problems that may arise with the assembly and starting of this unit at 800-643-7332 or at [americanlandmaster.com](http://americanlandmaster.com).