



INSTALLATION INSTRUCTIONS WINCH MOUNTING KIT

Part Number: 79900

Application: Kubota RTV 1100

Your safety, and the safety of others, is very important. To help you make informed decisions about safety, we have provided installation and operating instructions and other information on labels and in this guide. This information alerts you to potential hazards that could hurt you or others. It is not possible to warn you about all potential hazards associated with this product, you must use your own good judgment.

CARELESS INSTALLATION AND OPERATION CAN RESULT IN SERIOUS INJURY OR EQUIPMENT DAMAGE. READ AND UNDERSTAND ALL SAFETY PRECAUTIONS AND OPERATING INSTRUCTIONS BEFORE INSTALLING AND OPERATING THIS PRODUCT.

This guide identifies potential hazards and has important safety messages that help you and others avoid personal injury or death. **WARNING** and **CAUTION** are signal words that identify the level of hazard. These signal words mean:

▲WARNING signals a hazard that *could* cause serious injury or death, if you do not follow recommendations. **▲CAUTION** signals a hazard that *may* cause minor to moderate injury, if you do not follow recommendations.

This guide uses **NOTICE** to call attention to important mechanical information, and **Note** to emphasize general information worthy of special attention.

▲ WARNING

INJURY HAZARD

Failure to observe these instructions could lead to severe injury or death.

- ❑ **Always** use extreme caution when drilling on any vehicle. Make sure that all fuel lines, brake lines, electrical wires, and other objects are not punctured or damaged when / if drilling on the vehicle. Thoroughly inspect the area to be drilled (on both sides of material) prior to drilling, and relocate any objects that may be damaged. Failure to inspect the area to be drilled may result in vehicle damage, electrical shock, fire or personal injury.
- ❑ **Always** wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.
- ❑ **Always** use extreme caution when cutting and trimming during fitting.
- ❑ **Always** remove jewelry and wear eye protection.
- ❑ **Never** lean over battery while making connections.
- ❑ **Never route electrical cables:**
 - Across any sharp edges.
 - Through or near moving parts.
 - Near parts that become hot.
- ❑ **Always** insulate and protect all exposed wiring and electrical terminals.
- ❑ **Always** install terminal boots as directed in installation instructions.
- ❑ **Always** use appropriate and adequate care in lifting components into place.
- ❑ **Always** insure components will remain secure during installation and operation.
- ❑ **Always** tighten all nuts and bolts securely, per the installation and operation.
- ❑ **Always** perform regular inspections and maintenance on the winch, winch mount and related hardware.
- ❑ **Never** operate this **WARN** product with damaged or missing parts.

⚠ Caution
Moving Parts Entanglement Hazard
Failure to observe these instructions could lead to minor or moderate injury.
<input type="checkbox"/> Always take time to fully read and understand the installation and Operations Guide included with this product. <input type="checkbox"/> Never operate this product if you are under 16 years of age. <input type="checkbox"/> Never operate this product when under the influence of drugs, alcohol or medications.
Read installation and operating instructions thoroughly.

Notice
Equipment Damage
<input type="checkbox"/> Always refer to the Installation and Specification Guide, supplied in the winch kit, for all wiring schematics and specific details on how to wire this WARN product to your vehicle.
Read installation and operating instructions thoroughly.

I. BEFORE YOU BEGIN

Before you begin disconnect the positive battery lead from the battery.

II. TABLE OF CONTENTS

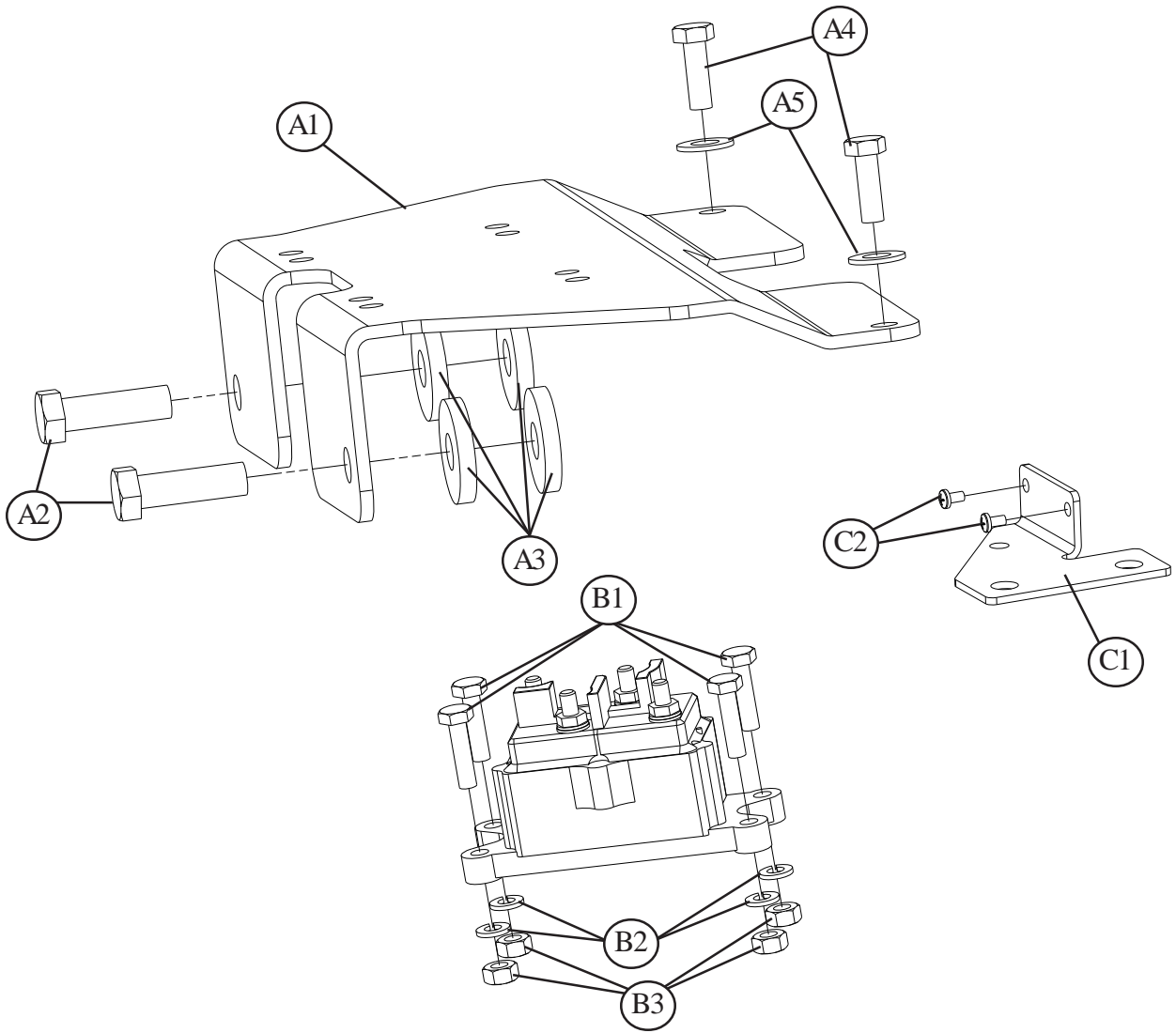
Torque Specifications	page 2
Tools Required	page 2
Parts List	page 3
Installation	page 4-9
Maintenance/Care	page 10

III. TORQUE SPECIFICATIONS

1/4, 6MM	8 lb. ft. (10.8 N-m)
5/16, 8MM	17 lb. ft. (12.5 N-m)
3/8, 10MM	30 lb. ft. (40.7 N-m)
7/16, 11MM	50 lb. ft. (67.8 N-m)
1/2, 12MM	75 lb. ft. (101.7 N-m)

IV. TOOLS REQUIRED

- 12mm, 13mm, 17mm, Socket
- 5mm Allen Wrench
- Phillips head screw driver
- Socket Driver



V. PARTS LIST

<u>No.</u>	<u>Part Number</u>	<u>Qty</u>	<u>Description</u>
A1	80052	1	Bracket, Winch, Kubota RTV1100
A2	11484	2	M12-1.25x40mm Hex Head Capscrew
A3	3693	4	Spacer
A4	22508	2	M8-1.25x25mm Hex Head Capscrew
A5	11524	2	3/8 Flat Washer
B1	31804	4	1/4-20X1 Hex Head Capscrew
B2	1321	4	1/4 Lock Washer
B3	1322	4	1/4-20 Hex Nut
C1	75761	1	Bracket, Switch, Kubota RTV 1100
C2	70235	2	6-32 x 1/4 Phillips Panhead Screw

VI. INSTALLATION

1. Remove front grill from vehicle to allow winch mount to be installed. First, remove screws on both sides on back side of grill as shown in Figure 1, using a Phillips screwdriver.

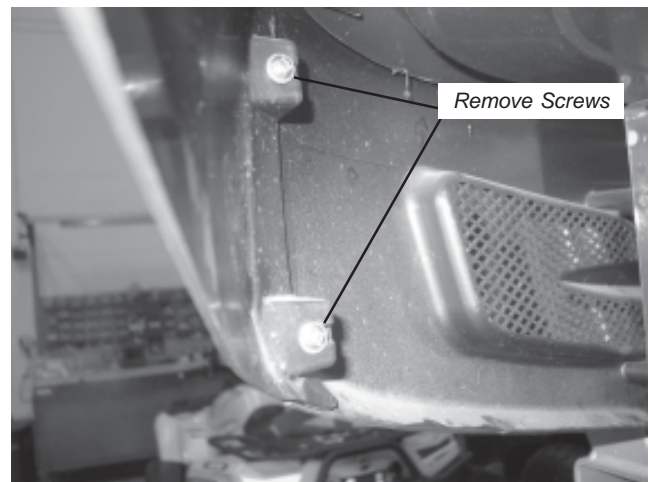


Figure 1

2. Remove two hex head capscrews, on rear inner side of grill on both sides, using a 12mm socket as shown in Figure 2.

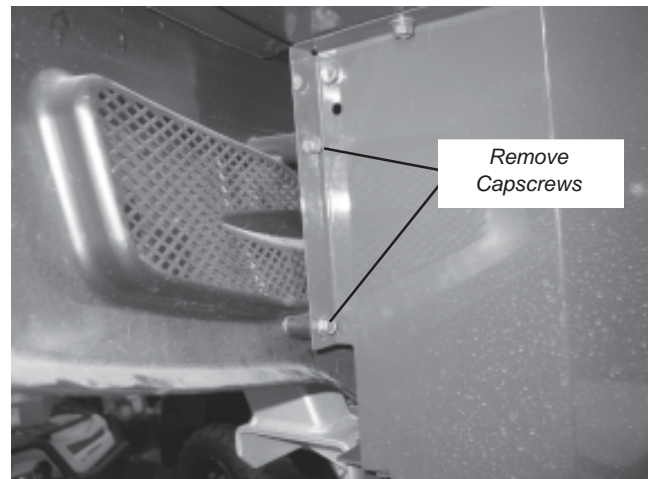


Figure 2

3. Remove two Allen panhead screws on top side of grill using a 5mm Allen wrench, as shown in Figure 3.

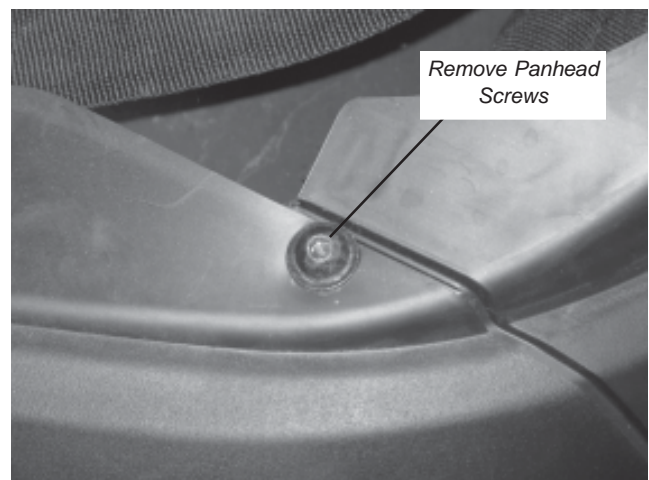


Figure 3

INSTALLATION CONT.

4. Remove two hood latch locknuts, using a 13mm socket, as shown in Figure 4. Remove hood latch mechanism from vehicle and carefully lift grill upward and away from vehicle.

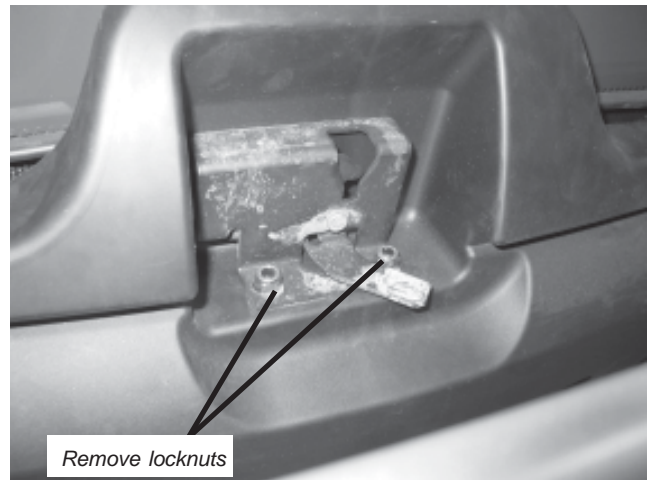


Figure 4

5. After grill is removed, as shown in Figure 5, the front frame mount capscrews can be removed using a 13mm socket.

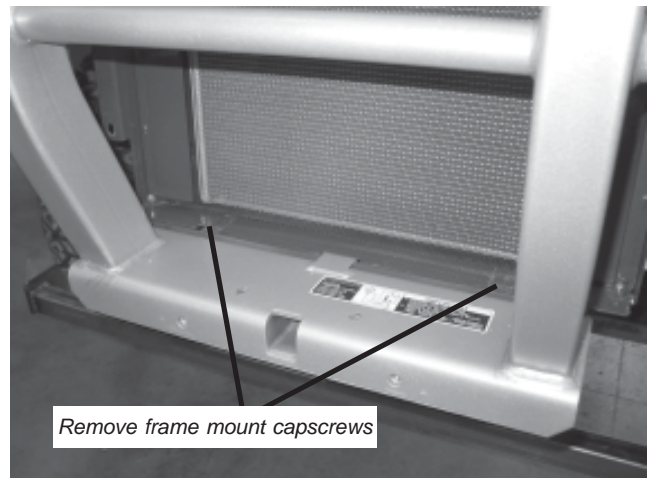


Figure 5

6. Assemble fairlead to fairlead mounting plate and then attach winch to the vehicle mounting plate, as shown in Figure 6, using hardware supplied with winch kit and torque to 17 lb. ft. (12.5N-m).

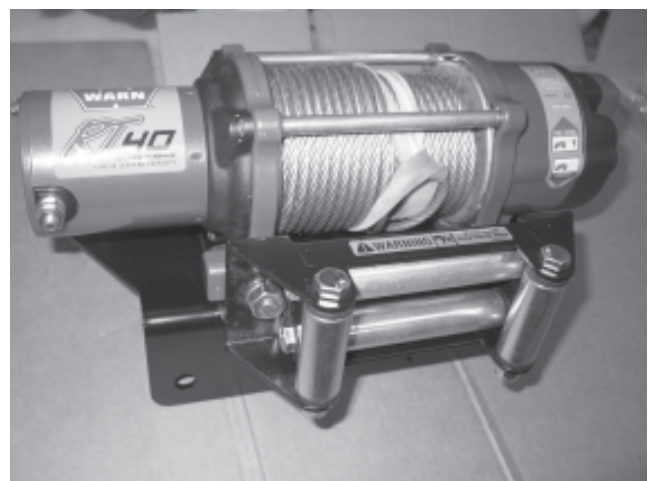


Figure 6

INSTALLATION CONT.

7. Set winch mount plate assembly on top of bumper as shown in Figure 7. Insert two spacers between mounting plate and bumper on each side and install M12-1.25 capscrews with 17mm socket. Torque to 75 lb. ft. (101.7 N-m).

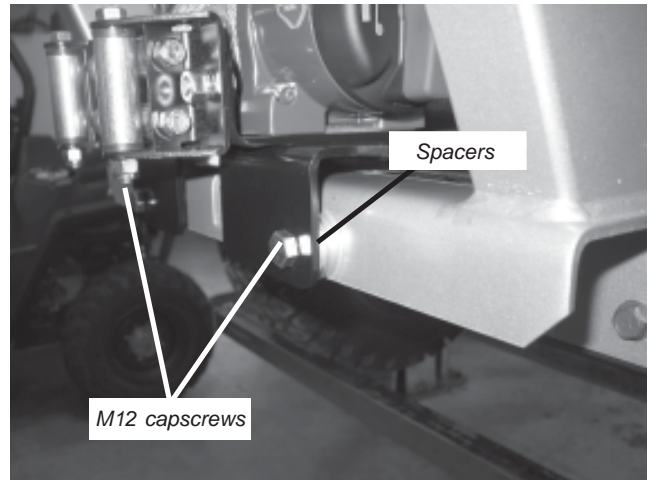


Figure 7

8. Install M8-1.25 capscrews and washers at rear of mounting plate into frame using a 13mm socket, as shown in Figure 8. Torque to 17 lb. ft. (12.5 N-m).

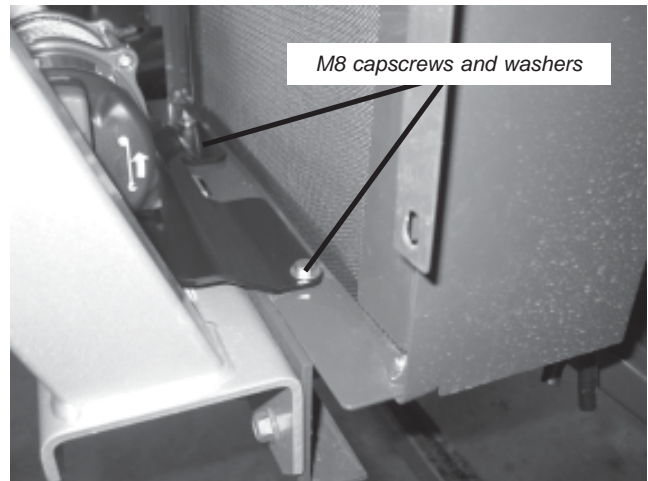


Figure 8

9. Reinstall front grill and hood latch mechanism using original hardware and tighten in place. Figure 9 shows a completed installation of an RT/XT40 winch with front grill in place.



Figure 9

INSTALLATION CONT.

- 10.** Open the hood and position the contactor on passenger side of vehicle as far forward as possible, as shown in Figure 10. Mark the contactor's hole positions, remove contactor and drill four 5/16" holes. After drilling mount contactor with hardware from winch kit. Using protective terminal boots, not shown, connect red wire to yellow terminal, black wire to blue terminal, yellow wire to red terminal and blue wire to black terminal.

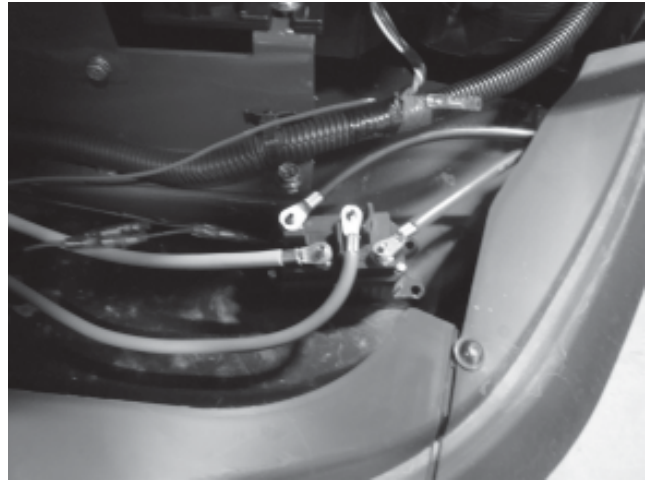


Figure 10

- 11.** From under the hood, route the red and black winch wires down the back side of the grill and secure them to the winch using protective terminals. Note the color or numerically marked terminals on the winch (red wire to yellow terminal or #1, black wire to blue terminal or #2). Use nuts from winch kit to secure wires to terminals. Refer to Figure 11.



Figure 11

- 12.** Route the yellow and blue wires from the contactor along the main wire harness from the hood compartment through the main wire harness grommet into the cab, as shown in Figure 12.

NOTE: you will need to slice the rubber grommet to allow adequate clearance for the winch wires to pass through.



Figure 12

INSTALLATION CONT.

- 13.** Continue routing the blue and yellow wires along the main wire harness, as shown in Figure 13. Once inside the cab, go across the underside of the dash to center of vehicle, and then down towards floorboard.



Figure 13

- 14.** Remove floormat and continue routing blue and yellow wires along the trough in the floor as shown in Figure 14. Pivot seat forward and remove under seat storage container allowing access to battery.

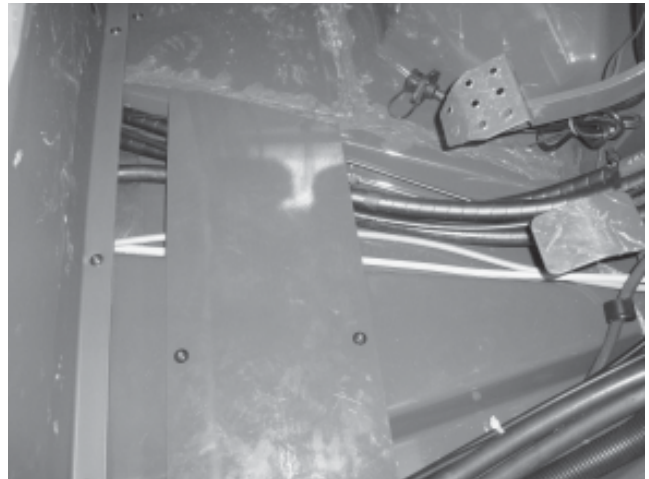


Figure 14

- 15.** Push wires under front seat support and route up to battery terminals, as shown in Figure 15. The yellow wire should be connected to positive terminal and blue wire to negative terminal.

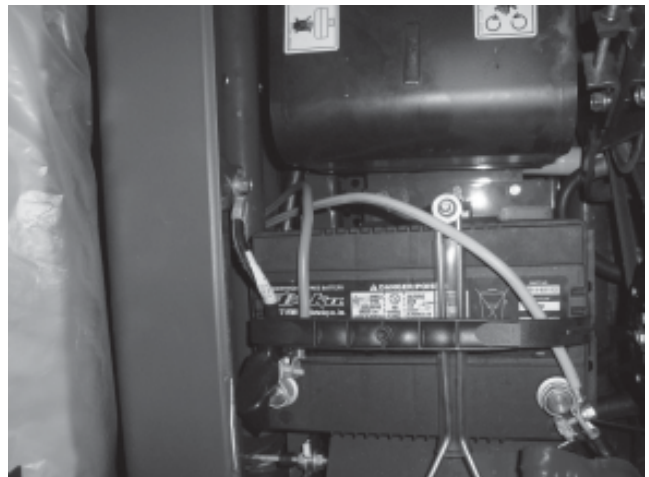


Figure 15

INSTALLATION CONT.

16. Position the remote socket in the vehicle dash in a suitable location. Mounting instructions are shown in the installation guide provided with winch kit. Once installed, route the wires under the dash and through grommet used previously for winch cables, to the contactor under the hood. Plug the bullet connectors of the remote socket into the contactor. Use electric splice supplied with winch kit to connect red ignition key wire to vehicle ignition, marked with blue tape.



Figure 16

17. Install the mini-rocker switch and bracket under the dash on left side of vehicle, as shown in Figure 17. Bracket and mounting hardware are supplied with mounting kit.



Figure 17

18. Route the mini-rocker switch wiring under dash across vehicle to grommet. Push through grommet and connect bullet connectors to pigtail of remote socket. Red ignition key wire of mini-rocker wiring, as shown in Figure 18, can be spliced into remote socket red ignition key wire using an electric splice provided with winch kit. Use cable ties provided with winch kit to secure wires when routing is complete.

⚠ WARNING

READ THE VEHICLE'S OPERATOR MANUAL, WINCH OPERATOR MANUAL, AND ALL WARNING LABELS PRIOR TO OPERATION OF UTV AND WINCH.

THE WINCH MOUNTING PLATE AND WIRING INSTALLATION IS NOW COMPLETE. PROCEED TO SECTION TITLED "MAINTENANCE/CARE".

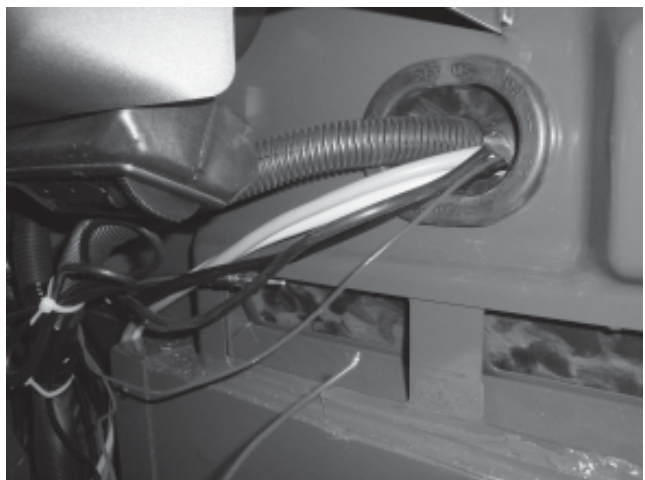


Figure 18

⚠ WARNING

FAILURE TO SECURELY TIGHTEN ALL BOLTS ON THE WINCH PLATE, WINCH, AND FAIRLEAD CAN RESULT IN PRODUCT FAILURE WHICH MAY RESULT IN VEHICLE DAMAGE AND OPERATOR INJURY OR DEATH. DOUBLE CHECK THAT ALL BOLTS ARE SECURELY TIGHTENED PRIOR TO USE.

VII. MAINTENANCE/CARE

- 1. Inspect all parts on the winch, winch mount, and related hardware prior to each use. Replace all hardware that appears rusted or deformed.**
- 2. Inspect all nuts and bolts on the winch, winch mount, and related hardware prior to each use. Tighten all nuts that appear to be loose. Stripped, fractured, or bent bolts or nuts need to be replaced.**
- 3. Check all cables prior to use. Replace cables that look worn or frayed.**
- 4. Check all moving or rotating parts. Remove debris that may inhibit the part from moving freely.**

⚠ WARNING

PERFORM REGULAR INSPECTIONS ON THE WINCH, WINCH MOUNT, AND RELATED HARDWARE. NEVER OPERATE THE WINCH WITH DAMAGED OR MISSING PARTS. FAILURE TO FOLLOW THIS WARNING MAY CAUSE VEHICLE DAMAGE AND OPERATOR INJURY OR DEATH.