



INSTALLATION INSTRUCTIONS

Winch Wiring Extension Kit

Part Number: 112311

GENERAL SAFETY PRECAUTIONS

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

IMPACT AND MOVING PARTS ENTANGLEMENT HAZARD

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

- **Always** Know Your Winch. Take time to fully read the Instructions and/or Operations Guide, and/or Basic Guide to Winching Techniques, in order to understand your winch and its operations.
- **Never** work under vehicle before properly securing vehicle.
- **Always** use appropriate and adequate care in lifting components into place.
- **Never** use a jack to support the vehicle.
- **Always** use jack stands in pairs to support the vehicle.
- **Always** use jacks or jack stands only on a hard, stable, and level surface.
- **Never** exceed the rated capacity of a jack or jack stands.
- **Always** verify that the parking brake is set, the transmission is in park (automatic) or reverse (manual) and the rear wheels are blocked before working on vehicle.
- **Never** work under vehicle before properly securing vehicle.
- **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.
- **Always** replace all worn or damaged parts before operating.
- **Never** operate this WARN product with damaged or missing parts.
- **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** use extreme caution when cutting and trimming during fitting.
- **Always** wear safety glasses when installing this kit. A drilling operation will cause flying metal chips. Flying chips can cause eye injury.
- **Always** remove jewelry and wear eye protection.
- **Never** lean over battery while making connections.
- **Never** route electrical cables across any sharp edge, through or near moving parts, near parts that become hot.

Read installation and operating instructions thoroughly.

WARN INDUSTRIES, INC. 12900 S.E. Capps Road,
Clackamas, OR USA 97015-8903, 1-503-722-1200, FAX: 1-503-722-3000
Customer Service: 1-800-543-9276
Dealer Locator Service: 1-800-910-1122
International Sales/Customer Service: 1-503-722-3008
International Fax: 1-503-722-3005

⚠ CAUTION

MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor or moderate injury

- Part edges may be sharp!
- **Always** use proper posture / lifting technique or get lifting assistance while handling and installing product.

Read installation and operating instructions thoroughly.

NOTICE

EQUIPMENT DAMAGE

- **Never** tow vehicle by attaching a tow bar to the eyelets on the bumper.
- Do not attach tow bars directly to the bumper. Damage to bumper may occur. WARN bumpers are not designed to be used for flat towing. Consult with the manufacturer of your tow bar system for the proper vehicle tow bar brackets.

Read installation and operating instructions thoroughly.

TABLE OF CONTENTS

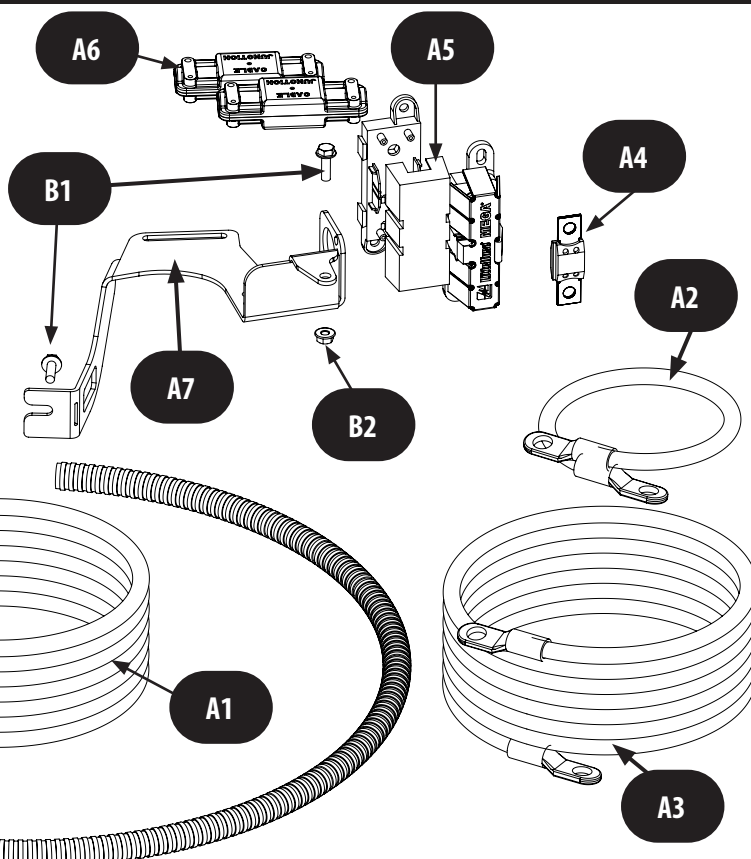
Tools Required.....	page 2
Parts List.....	page 3
Torque Specifications.....	page 3
Installation	page 4-8
Maintenance/Care.....	page 8

TOOLS REQUIRED

- Standard wrenches and sockets
- Metric wrenches and sockets
- Ratchet
- Plastic pry tool

PARTS LIST

ITEM	QTY	NAME	PN
A1	1	RED LONG CABLE	112320
A2	1	RED SHORT JUMPER CABLE	112322
A3	1	BLACK LONG CABLE	112321
A4	1	FUSE	108195
A5	1	FUSE HOLDER	108194
A6	2	JUNCTION BOX	80790
A7	1	WIRING MOUNT BRACKET	112313
A8	1	CORRUGATED TUBING	79211
A9	12	CABLE TIE (Not shown)	13231
B1	2	M6-1.0 X 20MM FLANGE BOLT	79077
B2	1	M6-1.0 NUT	79154



TORQUE SPECIFICATIONS

Please use the recommended torque specifications when assembling this product unless otherwise specified in the instructions.

FASTENER SIZE	FASTENER TORQUE		FASTENER SIZE	FASTENER TORQUE	
	lb-ft	(N.m)		lb-ft	(N.m)
1/4"	8	(11)	M4	(2)	3
5/16"	17	(23)	M5	(4.5)	6
3/8"	30	(40)	M6	(7.5)	10
7/16"	48	(66)	M8	(18)	25
1/2"	74	(100)	M10	(37)	50
9/16"	106	(144)			
5/8"	148	(200)			
3/4"	269	(364)			

BEFORE YOU BEGIN



This product may interfere with driver assist systems such as adaptive cruise control and parking assist systems that have sensors or cameras installed in the bumpers or front grill area. If your vehicle is equipped with any of these systems or features, consult your vehicle owner's manual before installing this product. These systems may need to be disabled as a result of installing this product.

Your Warn winch must be connected to the vehicle's battery. Warn does not recommend attaching to the jump-starting terminal in the fuse box and ground in the engine compartment on hybrid models if your battery is in the rear cargo compartment. Please use the Warn winch wiring extension kit for your vehicle.

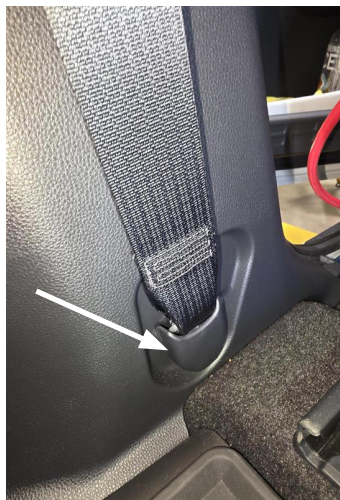
INSTALLATION INSTRUCTIONS

1. From the rear cargo area (driver's side), locate the vehicle's battery and disconnect the power and ground cables.



2. On the interior driver side of the vehicle, use a panel pry tool to remove the front and rear lower seat belt bolt cover.

Once trim piece is removed, remove the bolt and tuck the seat belts out of the way.



INSTALLATION INSTRUCTIONS

3. Remove the front interior scuff plate trim.
4. Continuing in the interior driver side, use a panel pry tool and remove the kick panel trim.



5. Remove the rear scuff plate trim.
6. Remove the lower pillar trim.



7. Partially remove the rear interior wheel well trim.



8. Remove the storage tray/cup holder panel.
NOTE: This doesn't need to be fully removed, just enough to be able to feed wire through.



9. Remove the clip from the air duct that is under the storage tray/cup holder for more access into that space



WARNING Always use extreme caution when cutting on any vehicle. Make sure that all electrical wires, and other objects are not punctured or damaged when cutting on the vehicle. Thoroughly inspect the area before cutting and relocate any objects that could be damaged. Failure to inspect the area to be cut may result in vehicle damage, electrical shock, fire or personal injury.

10. From inside the engine compartment on the driver side, locate the rubber grommet on the fire wall.

Ensure all wires are safely out of the way and carefully cut a small hole in the grommet to allow the new wire to be threaded through.

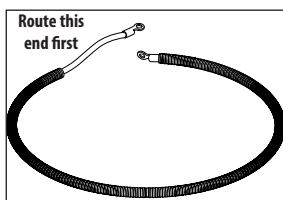
INSTALLATION INSTRUCTIONS



11. Locate the long red power cable (A1) and protective corrugated tubing (A8) included in your extension kit.
12. Install the plastic tubing around the power cable with the tubing beginning at one of the ring terminals. **NOTE: Use electrical tape on the ends of the sheath to hold it in place.**

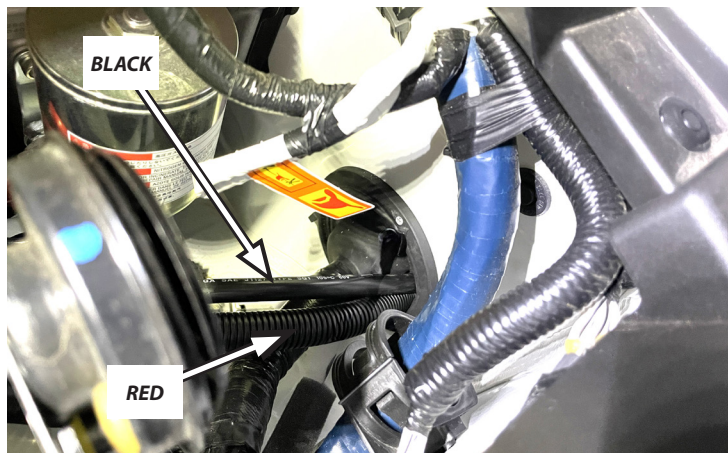


13. Starting with the ring terminal side of the red cable that is not up against the protective tubing, route it through the hole created in the rubber grommet. Be careful not to push the grommet in or dislodge it from its position.



NOTE: Ensure that the ring terminal with the protective plastic tubing next to it will be in the engine compartment and that the plastic tubing around the red cable passes through the grommet and fire wall. The plastic tubing should only go about 6 inches into the interior cabin.

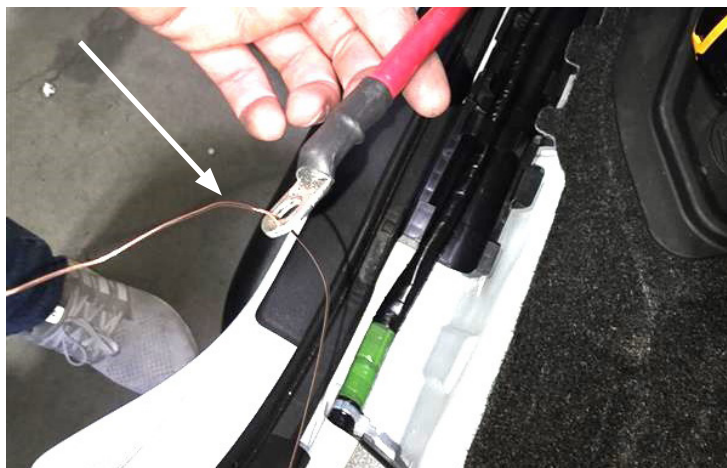
14. Locate the black cable (A3) and carefully route it through the hole you cut in the grommet.



15. Continue to route the cables toward the battery and along the edge of the vehicle so the cables tuck under the harness and interior trim pieces removed in the earlier steps. **TIP: Attaching a piece of wire or rope to the ring terminal end of the cables will help you pull the cables along.**



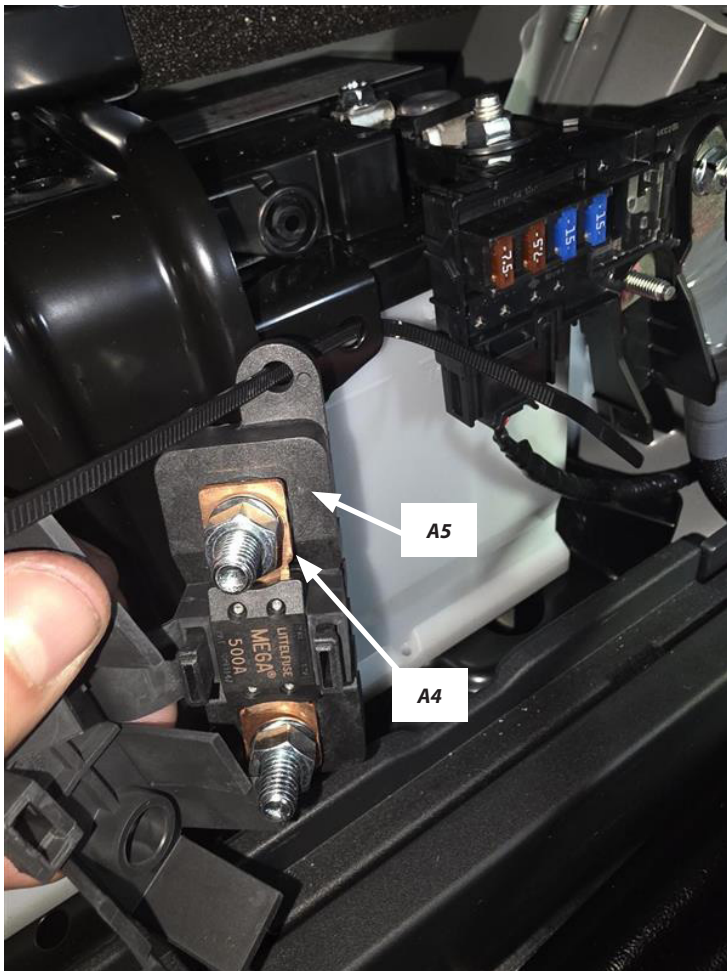
16. Using a piece of wire or rope attached to the ring terminal end of the cables, carefully feed the cables under the interior wheel well trim until you can see your piece of wire/rope near the battery side and then finish pulling the cables to the battery.



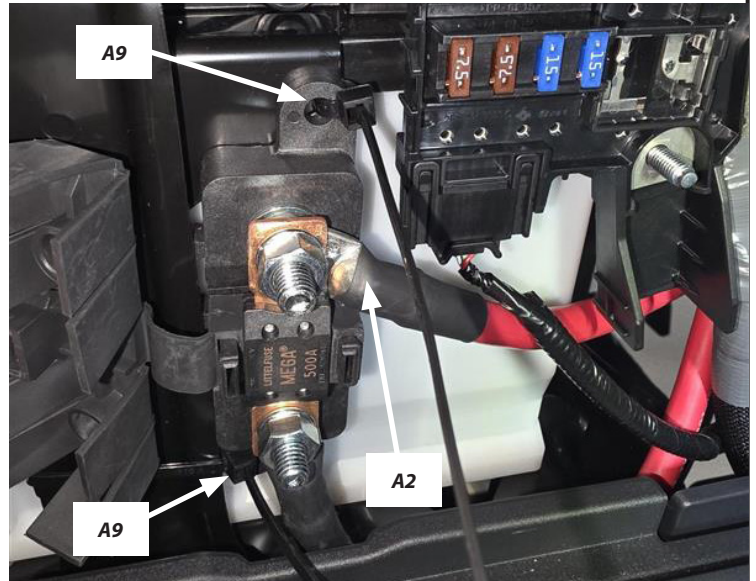
INSTALLATION INSTRUCTIONS



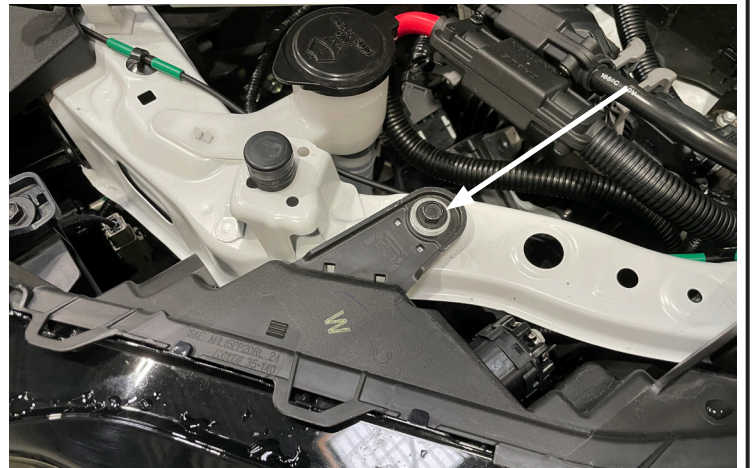
17. Locate the fuse (A4) and attach to the fuse holder (A5).



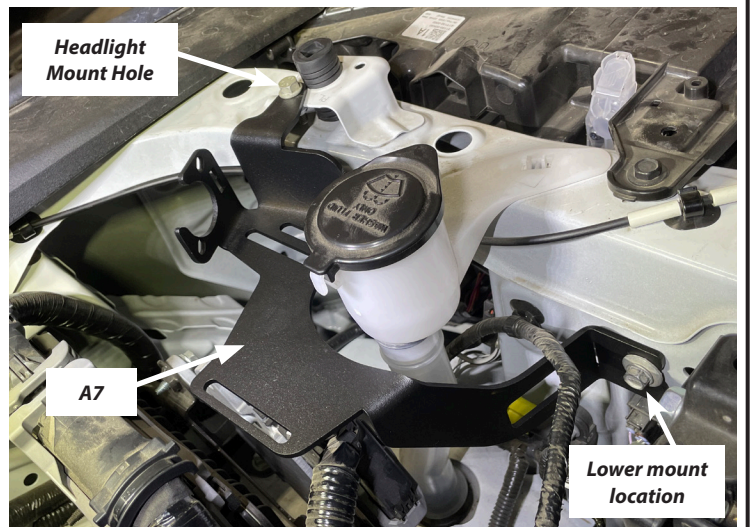
18. Using two cable ties (A9), secure the fuse assembly to the battery holder bracket.
19. Attach the power (red) cable, that you routed through the interior cabin, to the bottom fuse terminal post.
20. Attach the shorter red power jumper cable (A2) to the top fuse terminal post. **Do not connect to the battery at this time.**



21. From inside the engine compartment and on the driver side, remove the upper headlight bolt.

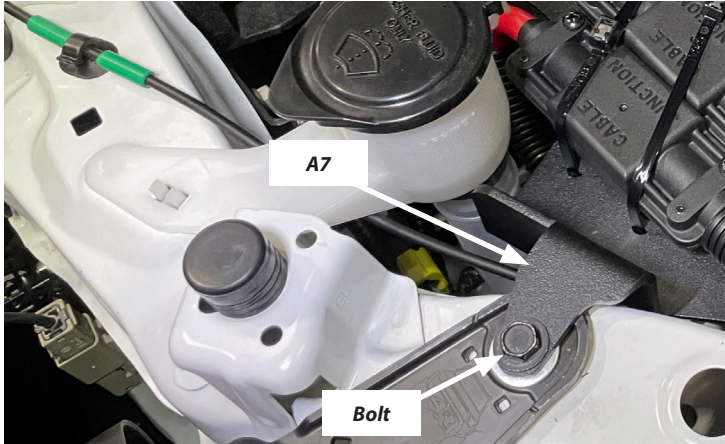


22. Locate the wiring mount bracket (A7). Position the wiring mount bracket in place, lining up the bracket's upper tab mounting hole with the headlight bracket mount bolt hole.

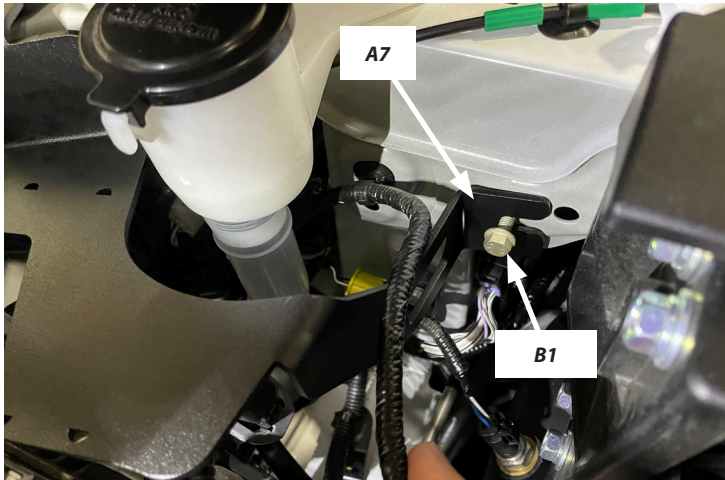


INSTALLATION INSTRUCTIONS

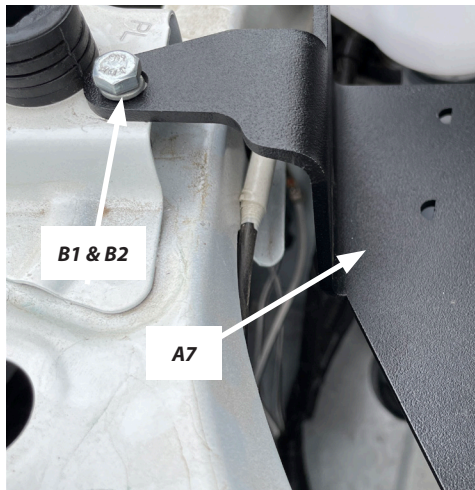
23. Secure the upper tab of the wiring mount bracket using the stock bolt just removed.



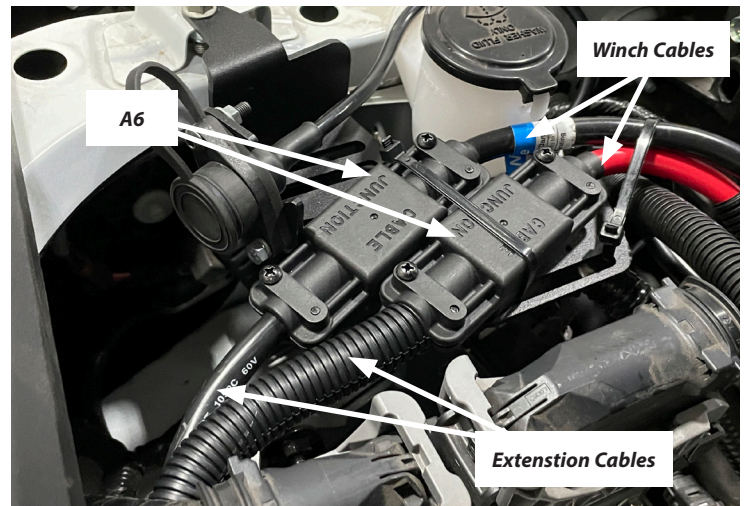
24. Secure the lower bracket tab to the vehicle with one M6 bolt (B1).



NOTE: Land Cruisers will use the supplied M6 bolt (B1) and nut (B2) to secure the upper tab on bracket.

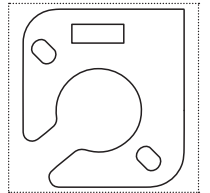


25. Locate the two junction boxes (A6).
26. Install the winch power and ground cables to your extension power and ground cables using the junction boxes.
27. Secure the junction boxes onto the bracket, using cable ties.

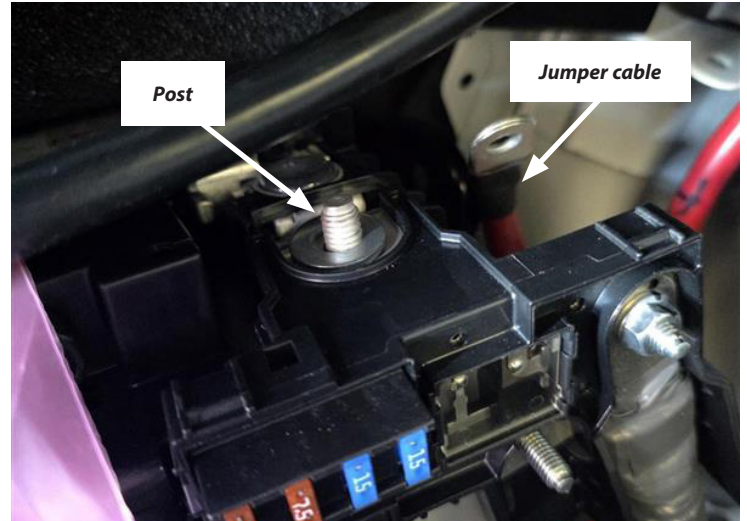


28. Tidy up all wires using the remaining cable ties to ensure they are out of the way from all moving objects.

NOTE: If using a remote plug extension kit, install it into the bracket flange with the remote plug cutout.



29. Install the red jumper cable (A2) ring terminal over the battery **positive** post, followed by the OEM power cable and fully tighten.



30. Reinstall the OEM ground to the battery.
31. With the battery and wiring extensions fully connected, reinstall the interior trim pieces in the reverse order in which they were removed.
32. Reinstall the seat belts using the original hardware and cover trims.

INSTALLATION INSTRUCTIONS

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.

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.

