# INSTALLATION INSTRUCTIONS
## Ascent HD

**Part Number: 110629, 110630, 110631**
**Application: 2023 Ford F250 & 350**

## 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** 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.**

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## ⚠ 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*

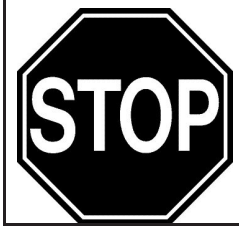
**EQUIPMENT DAMAGE**

- **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.**

## BEFORE YOU BEGIN

## *NOTICE*




**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.**

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## TOOLS REQUIRED

- Panel Pry Tool
- Drill
- 5/16" Drill Bit
- E6 Torx Socket
- 1/8" Allen Wrench
- 8mm Socket Wrench
- 11mm Socket Wrench
- 15mm Socket Wrench
- 18mm Socket Wrench
- 7/16" Socket Wrench
- 7/16" Combination Wrench
- 3/4" Combination Wrench
- 3/4 Deep Socket Wrench

## 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)* | | | |

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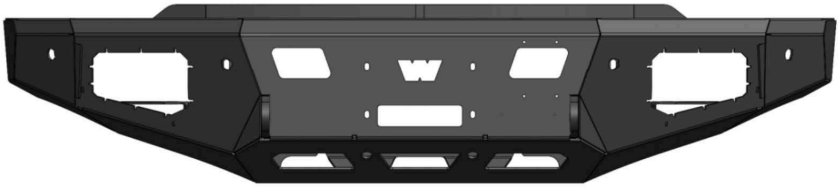
## INCLUDED PARTS

| PART NO. | DESCRIPTION | QTY |
|---|---|---|
| 23101 | ASCENT HD FRONT BUMPER | 1 |
| 23102 | DRIVER SIDE MOUNTING BRACKET | 1 |
| 23103 | PASSENGER MOUNTING BRACKET | 1 |
| 23113 | ADAPTIVE CRUISE CONTROL BRACKET | 2 |
| 94888 | DRIVER SIDE LIGHT INSERT | 1 |
| 94889 | PASSENGER LIGHT INSERT | 1 |
| 61784 | PLASTIC SHEET | 1 |
| 20296 | 1/2" BOLT STRIP | 4 |
| 61632 | EPOXY PACK | 2 |

## HARDWARE KIT

| PART NO. | DESCRIPTION | QTY |
|---|---|---|
| 50246-HW | 10-24 x 3/4" BUTTON HEAD SCREW, STAINLESS STEEL | 20 |
| 50246-HW | ½”-13 YELLOW ZINC HEX NUT, GRADE 8 | 8 |
| 50246-HW | ½” YELLOW ZINC FLAT WASHER, GRADE 8 | 8 |
| 50246-HW | ½” YELLOW ZINC LOCK WASHER, GRADE 8 | 8 |
| 50246-HW | 10-24 HEX NUT, STAINLESS STEEL | 20 |
| 50246-HW | 10 SPLIT LOCK WASHER, STAINLESS STEEL | 20 |
| 50246-HW | 10 FLAT WASHER, STAINLESS STEEL | 20 |
| 50246-HW | M14-2 50MM HEX HEAD BOLT, ZINC | 4 |
| 50246-HW | M14-2 HEX NUT, ZINC | 4 |
| 50246-HW | M14 FLAT WASHER, ZINC | 8 |
| 50246-HW | M14 SPLIT LOCK WASHER, ZINC | 4 |
| 50441-HW | M6 BLACK BUTTON HEAD SCREW | 4 |
| 50441-HW | M6 FLANGE HEX NUT | 4 |
| 50441-HW | 11/4" PLASTIC PLUG | 4 |



23101

23102

23103

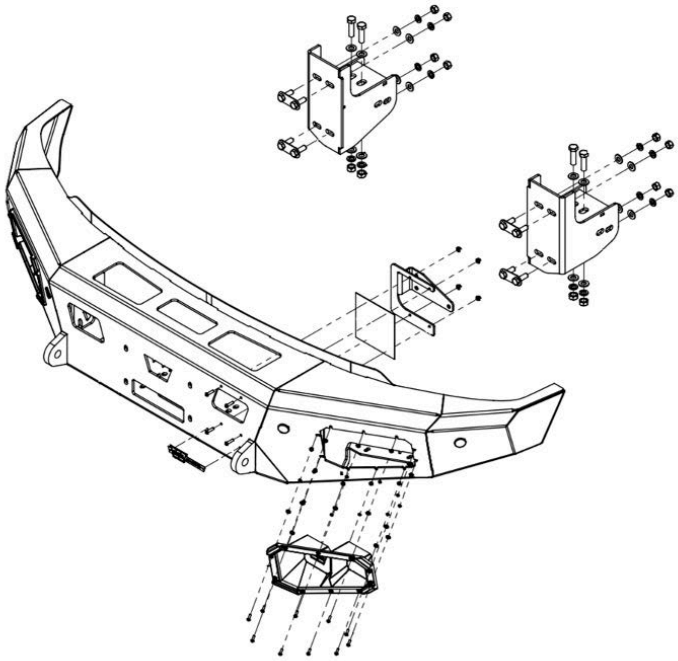
23113

61784

20296

94889

94888



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1. Remove the plastic tow hook covers by pulling them to release the clips. Figure 1.

Figure 1.

2. Disconnect the bumper electrical harness connected to the inside of the driver side frame rail. Figure 2.

Figure 2

3. If applicable, remove the adaptive cruise control (ACC) sensor from its mounting bracket. Figure 3.

Figure 3.

4. If applicable, disconnect the electrical connector from the ACC sensor. Figure 4.

Figure 4.

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5. Using an E6 torx socket remove the three (3) studs that attach the ACC bracket to the vehicle. Figure 5.

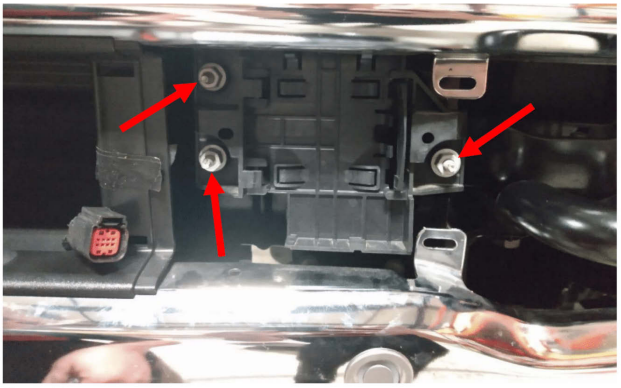

Figure 5.

6. Using an 18mm socket wrench, remove the eight (8) bolts that attach the bumper to the tow hook brackets. Figure 6.

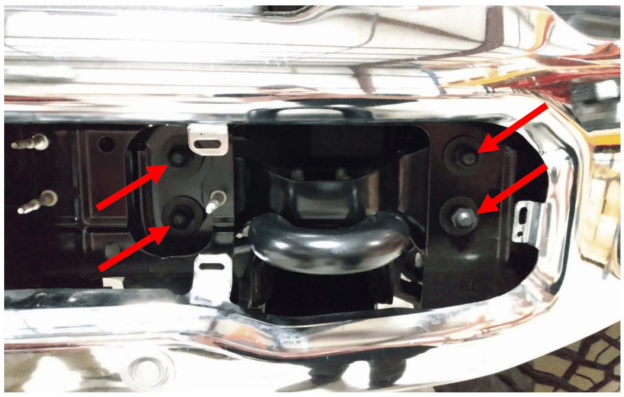

Figure 6.

7. Using a 15mm socket wrench, remove the two (2) bolts per side that attach the bumper reinforcement bracket to the frame. Figure 7.

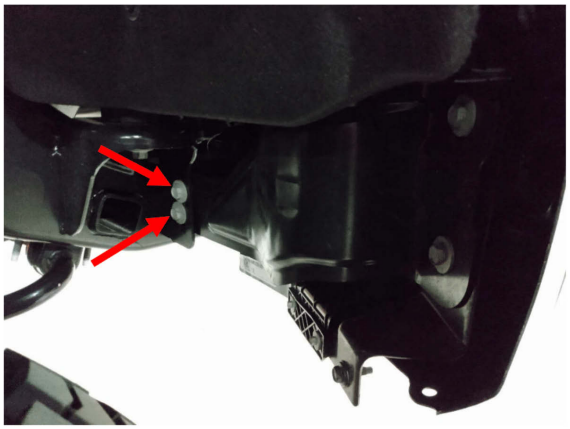

Figure 7.

8. Using a body panel pry tool, remove the two (2) push pins attaching the shroud to the grille. The bumper can now be removed from the vehicle. Figure 8.

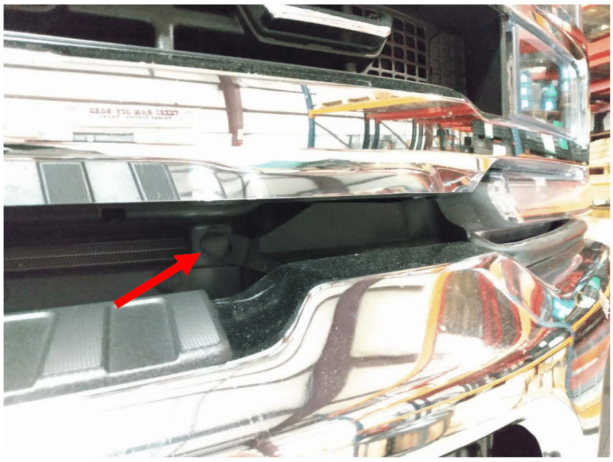

Figure 8.

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9. Using an 18mm socket wrench, remove the eight (8) bolts attaching the tow hooks to the frame and remove the tow hooks. Figure 9.

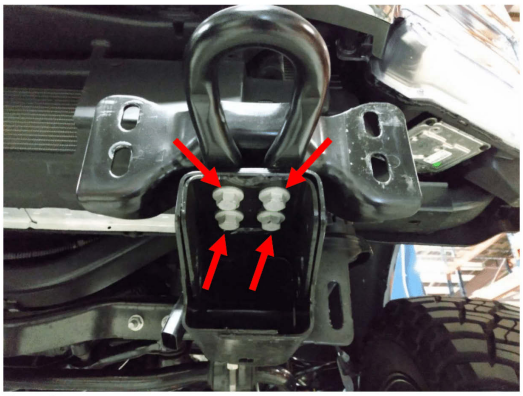

Figure 9.

10. Using an 18mm socket wrench, remove the eight (8) nuts attaching the underrun guards to the bottom of each frame rail. Set aside hardware for later use. Figure 10.

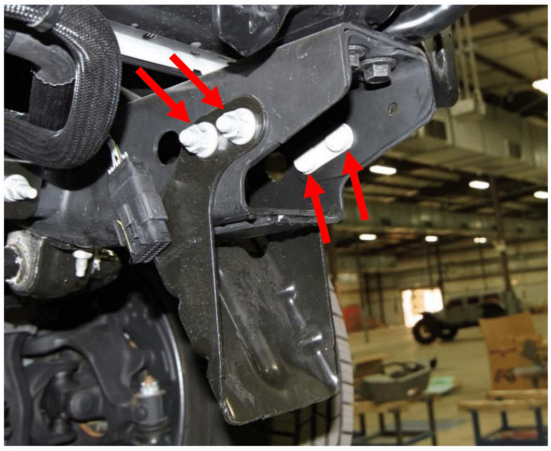

Figure 10.

11. Using an 8mm socket wrench, remove the four (4) screws in each fog light bracket to remove them from the bumper. Figure 11.

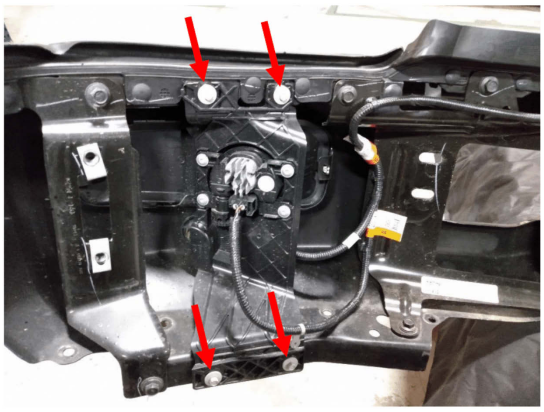

Figure 11.

12. Using a panel pry tool, remove the push pin clip. Figure 12.

Figure 12.

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13. Install the Adaptive Cruise Control (ACC) sensor into the ACC bracket (23113) using the OE AACC ball joint bolts. Make sure the face of the ACC is parallel to the mountain bracket once installed, do this by adjusting the sensor ball joint bolts. Figure 13.

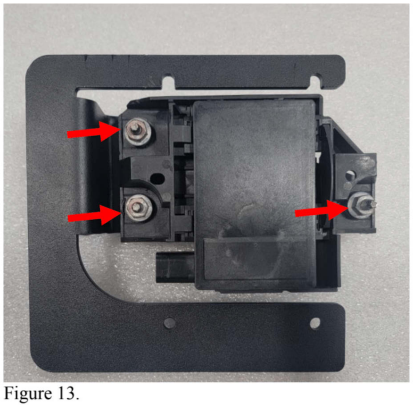

Figure 13.

14. Take the plastic sheet (61784) and hold it in the bumper mark drilling holes for mounting. Make sure to comletely cover the sensor hole opening with the plastic sheet before making the drilling locations. Figure 14.

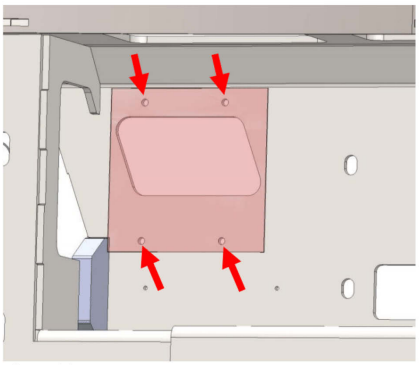

Figure 14.

15. Using a 5/16" drill bit to drill the 4x holes in the plastic sensor cover sheet. Figure 15.

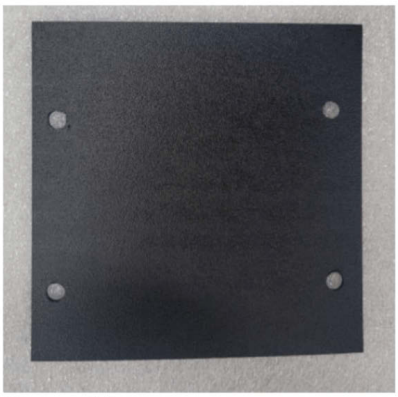

Figure 15.

16. Install the ACC sensor assembly completed in step 13 into the bumper using the provided 4x M6 black button head screw with flanged hex nuts. Sandwhich the plastic sensor cover sheet (61784) between the bumper and the ACC sensor assembly. Figure 16.

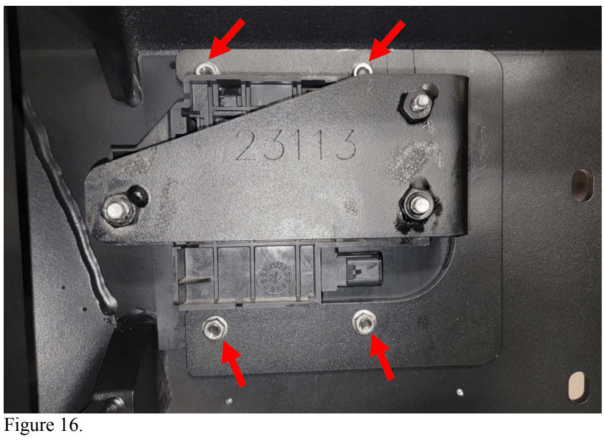


Figure 16.

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17. Reinstall the parking sensor housing into the new bumper in the same position and orientation in which they were removed from the OEM bumper. Use the provided epoxy and popsicle stick to adhere the housing to the bumper. NOTE: If bumper is not equipped with sensors, use the provided 1-1/4" plastic plugs to fill the sensor holes. Figure 17.

Figure 17.

18. Carefully place the sensors into the housings once the epoxy has dried and feed the wiring harness through the bumper making sure to have the plug on the driver side. Plug in the ACC sensor. Figure 18.

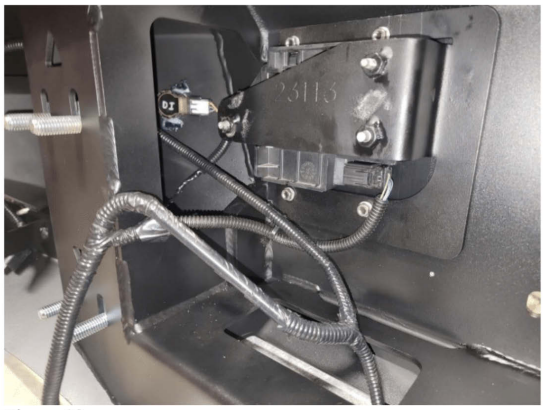

Figure 18.

19. Install the two light boxes (94888 and 94889) into the bumper ib tge RH and LH side resepectivly. Use the provided #10-24 bolts, flat and lock with nuts to attach them to the bumper and tighten them with the 10mm socket wrench and 3mm allen wrench (50246-HW). Figure 19.

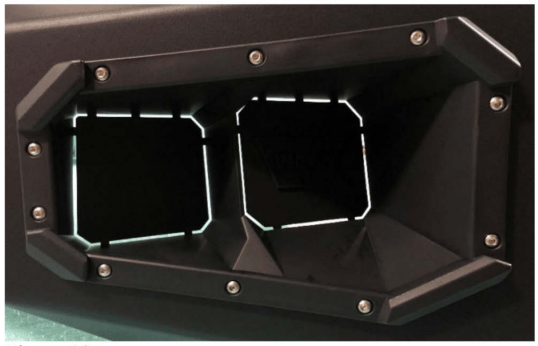

Figure 19.

20. Install the driver side and passenger side mountaing brackets (23102 and 23103) using the OE bolt strips along with the provided M14 hex head bolts, washers and nuts. Figure 20.

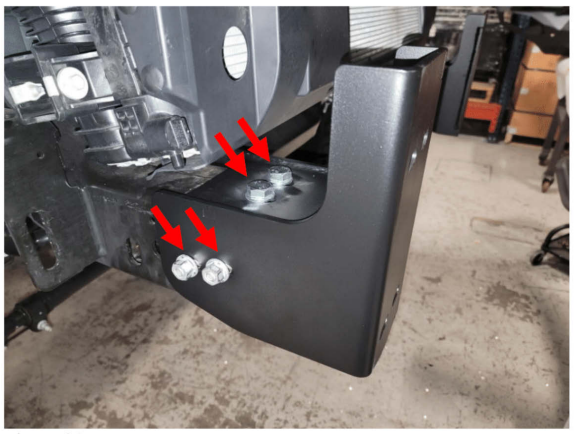

Figure 20.

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21. Place the 4x 1/2" bolt strips in the bumper with assistance, hold the bumper up to the brackets and fasten it in place with the provided 1/2" washers and hex nuts. Figure 21.

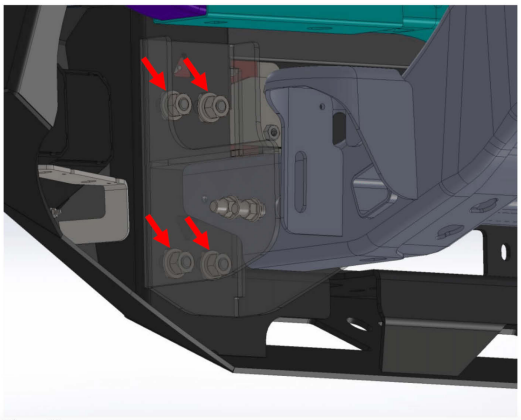

Figure 21.

22. Fully tighten all mountain hardware and plug in the wiring harness.

## 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.**

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