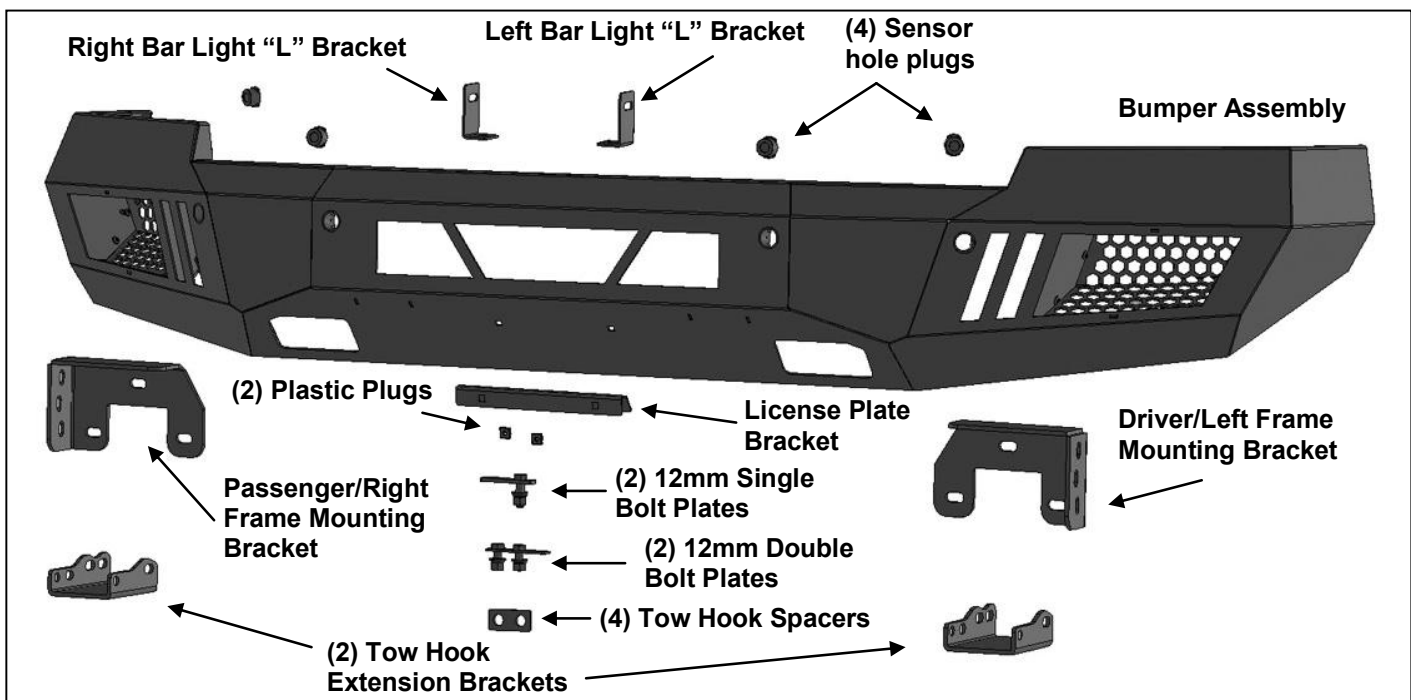


#### PARTS LIST:

1	LD1 Front Bumper Assembly	6	10-1.5mm x 35mm Hex Bolts
1	Driver/left Frame Mounting Bracket	12	10mm x 27mm OD x 3mm Flat Washers
1	Passenger/right Frame Mounting Bracket	6	10mm Lock Washers
2	Tow Hook Extension Brackets	6	10mm Hex Nuts
4	Spacers (tow hooks)	2	8mm x 16mm Hex Bolts
1	License Plate Bracket	2	8mm x 25mm Hex Bolts
2	Plastic Plugs for License Plate	2	8mm Hex Nut
4	Sensor Plugs	4	8mm Lock Washer
1	Driver/left "L" Bracket (center LED light)	6	8mm x 24mm x 2mm Flat Washers
1	Passenger/right "L" Bracket (center LED light)	2	6mm x 20mm Button Head Bolts
2	12mm x 30mm Double Bolt Plates	4	6mm x 18mm x 1.6 Flat Washers
2	12mm x 35mm Single Bolt Plates	2	6mm Nylon Lock Nuts
6	12mm x 24mm OD x 2.5mm Flat Washers	1	6mm Wrench
6	12mm Lock Washers	4	4mm x 10mm Socket Head Screws
6	12mm Hex Nuts	1	4mm Wrench
		10	Nylon Wire Ties



#### PROCEDURE:

**REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. ASSISTANCE IS HIGHLY RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE.**

1. Remove the license plate and bracket. On models with factory fog lights and/or bumper sensors, unplug the wiring harness leading to the bumper, (**Figure 1**). Move harness away from bumper.
2. Next, locate and remove the screws attaching the ends of the plastic body panel, (facia), to the fenders. **NOTE:** Facia body panel fills the area between the headlights and the top of the bumper. From behind the bumper, release the clips attaching the facia body panel to the bottom of the grille and remove the panel. (**Figure 2**).
3. Open the hood and remove the cover between the top of the radiator and the grille, (**Figure 3**). Remove the bolts attaching the top and bottom of the grille and remove the grille.

4. From behind the bumper, remove the outer bumper supports on each side of the frame.
5. Place blocks or jack stands under the front bumper to support it during mounting bolt removal. Once the bumper has been safely supported, from above, remove the (4) large factory bumper bolts, (two per side), attaching the bumper assembly to the frame bracket bolted to the end of the frame, **(Figure 4)**. **WARNING!** Assistance is required to hold the bumper in place during bolt removal to prevent the bumper from falling. Carefully slide the bumper assembly with brackets off of the ends of the frame.
6. Once bumper has been removed, also remove the plastic brackets from the bottom of the headlight assemblies, **(Figure 5)**. Reinstall the grille and top cover removed in **Steps 2 & 3**.
7. Remove both bumper brackets and tow hooks from the ends of the frame, **(Figure 6)**.
8. Select the driver side Frame Mounting Bracket. Reuse the factory bumper bolts to attach the Frame Bracket to the threaded bumper mount, **(Figure 7)**. Do not fully tighten hardware at this time.
9. Repeat **Step 8** to install the passenger side Frame Bracket.

**On models without tow hooks, skip to Step 13.**

10. Next, select (1) Single Bolt Plate and (1) Double Bolt Plate, **(Figure 8)**. Insert the Bolt Plates into the open end of the frame, with the long end on the plate in first toward the back. Select (1) Tow Hook Extension Bracket. Slide the Bracket over the end of the frame. Line up the slots in the Bracket with the factory tow hook mounting holes. Secure the Bracket to the Bolt Plates with (3) 12mm Flat Washers, (3) 12mm Lock Washers and (3) 12mm Hex Nuts, **(Figure 9)**. Leave loose at this time.
11. Select (1) tow hook. Place the tow hook on top of the Extension Bracket. Slide (1) Spacer Plate between each side of the tow hook and the Bracket. Reuse the factory hardware to attach the tow hook to the Extension Bracket, **(Figure 10)**. Push the tow hook, spacers and Extension Bracket in and fully tighten tow hook and extension bracket hardware only. Do not fully tighten Frame Bracket hardware at this time.
12. Repeat **Steps 10 & 11** to install the passenger side Extension Bracket and tow hook if equipped.
13. With assistance, position the Bumper Assembly up to and over the Frame Brackets. Temporarily support the weight of the Bumper. **WARNING:** To avoid possible injury or damage to the vehicle, do not proceed until the Bumper is fully and safely supported.
14. Line up the (3) holes in the driver side mounting plate on the back of the Bumper with the (3) slots in the Frame Bracket. Attach the Bumper to the Bracket with the included (3) 10mm x 35mm Hex Bolts, (6) 10mm Flat Washers, (3) 10mm Lock Washers and (3) 10mm Hex Nuts, **(Figures 11 & 12)**. Do not fully tighten hardware at this time. Repeat this **Step** to attach the passenger side of the Bumper to the Frame Bracket.
15. Level and adjust the bumper and fully tighten all hardware.

**Models without bumper sensors:**

- a. Select the included (4) Rubber Plugs.
- b. From behind bumper, push plugs into sensor mounting holes, **(Figure 13)**.

**Models with bumper mounted sensors:**

- a. Push the sensor into the mounting socket in the back of the bumper.
- b. Secure each sensor to the socket with (2) 4mm x 10mm Button Head Screws, **(Figure 13)**. **IMPORTANT:** Sensors fit snug in sockets. The 4mm Screws are used to apply slight pressure to lock the sensors in place. Tighten both screws evenly until they touch the sensor body only. Do not overtighten screws or damage to sensors will result.

16. If front license plate is required, attach the License Plate Bracket to the holes in the bumper with the included (2) 6mm x 20mm Button Head Screws, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts. Insert (2) Plastic Plugs into the square holes in the Bracket. Reuse the factory screws to attach the license plate to the plastic plugs, **(Figure 14)**.
17. **Center LED light installation** as supplied with bumper or sold separately.
  - a. Select the L/R "L" Brackets, **(Figure 15)**. Attach the Brackets to the top of the (2) mounting tabs welded onto the back of the bumper with the included 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts. Leave loose at this time.
  - b. Attach the LED light assembly to the "L" Brackets with the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers. Do not fully tighten hardware at this time. **IMPORTANT:** "L" Brackets are designed for 8mm light mounting hardware only. Modify "L" Brackets

if necessary or use brackets supplied by your light manufacturer if possible to install hardware larger than 8mm.

c. Follow light manufacturer's instructions to properly wire the light.

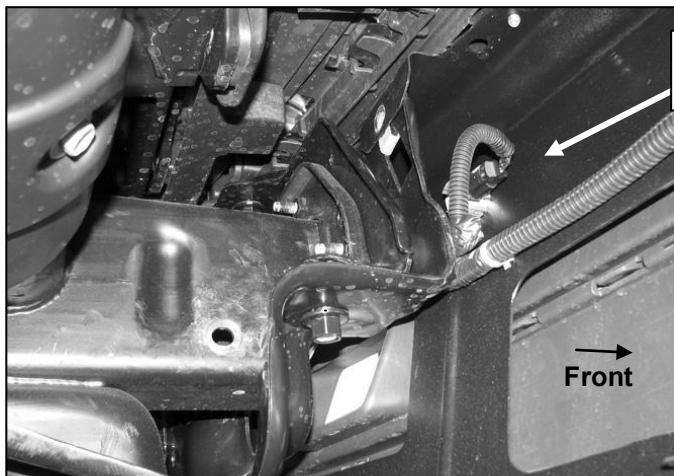
**18. LED light installation at ends of bumper** as supplied with bumper or sold separately.

- a. Insert light into opening and up to mounting slots. Check for clearance between front and back of light. If necessary, remove the screen from the back of the opening, **(Figure 16)**.
- b. Follow the light manufacturer's instructions to attach (1) light to the center slot or (2) lights to the inner and outer slots in the top of the light opening. **IMPORTANT:** On two light systems with (1) flood and (1) spot light per side, attach the flood light to the outer and the spot light to the inner slot.
- c. Repeat the above steps for passenger side light installation.
- d. Follow light manufacturer's instructions to properly wire the light.

**19. Do periodic inspections** to the installation to make sure that all hardware is secure and tight.

**To protect your investment**, wax this product after installing. Regular waxing is recommended to add a protective layer over the finish. Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Front Bumper assembly.

### Driver Side Installation Pictured



Unplug sensors and fog lights if equipped

(Fig 1) Unplug sensors, fog lights and move wiring harness away from bumper before removal



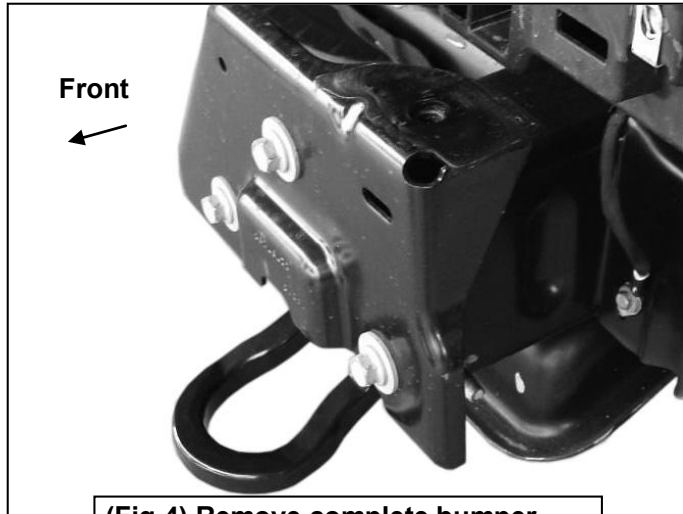
(Fig 2) From behind bumper, release clips along the center and the hardware at the fenders attaching the plastic fascia panel (arrow) to top of bumper. Remove fascia panel to access bumper hardware



(Fig 3) Remove plastic cover from top of radiator (arrow). Temporarily remove grille

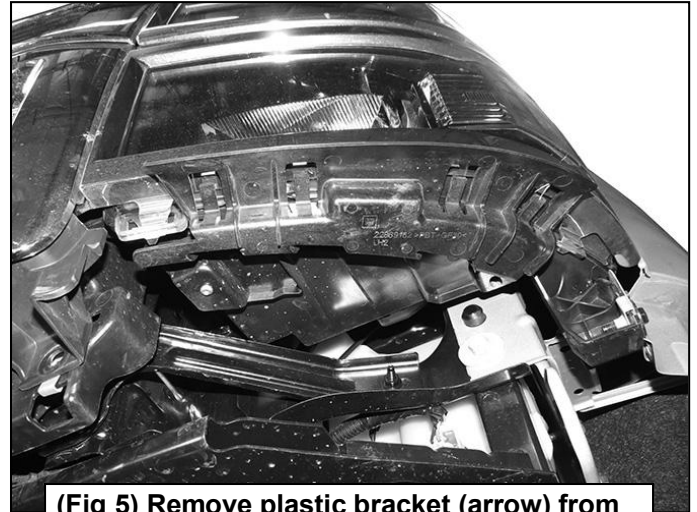


### Driver Side Installation Pictured

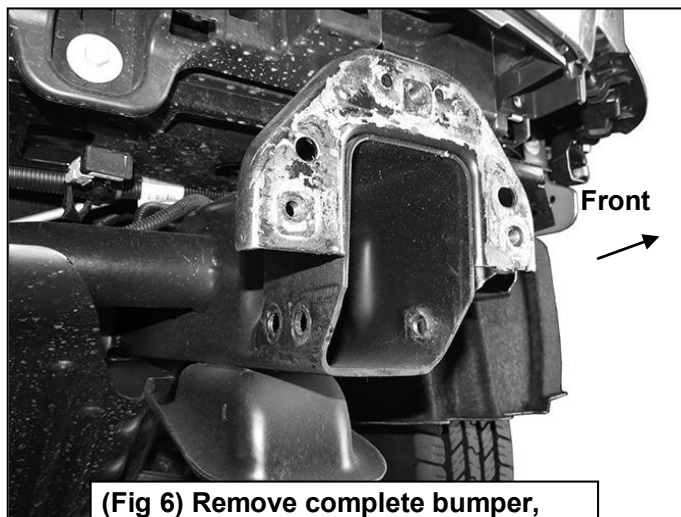


(Fig 4) Remove complete bumper, inner bumper bracket and tow hooks

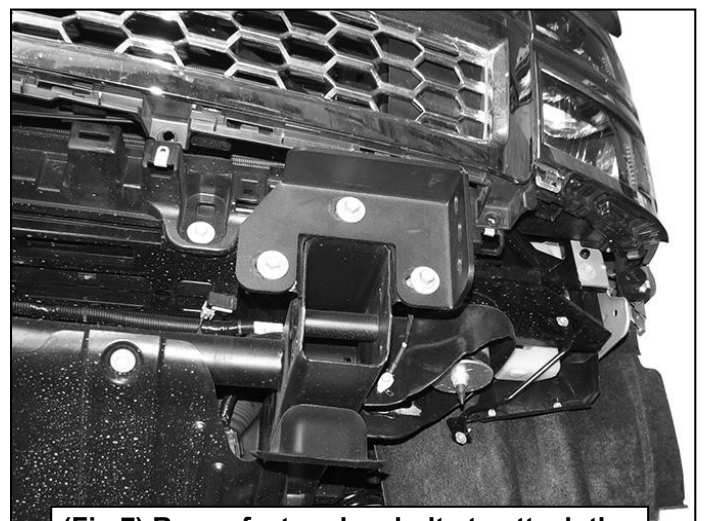
**WARNING!** Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.



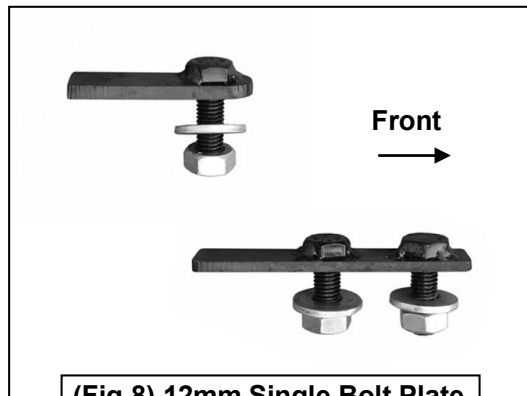
(Fig 5) Remove plastic bracket (arrow) from bottom of headlight (driver/left side pictured)



(Fig 6) Remove complete bumper, inner bumper bracket and tow hooks



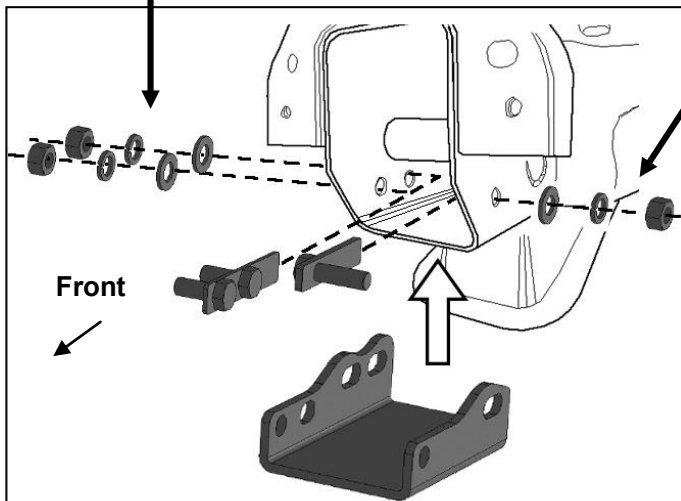
(Fig 7) Reuse factory hex bolts to attach the driver/left Frame Bracket to frame mount



(Fig 8) 12mm Single Bolt Plate and 12mm Double Bolt Plate

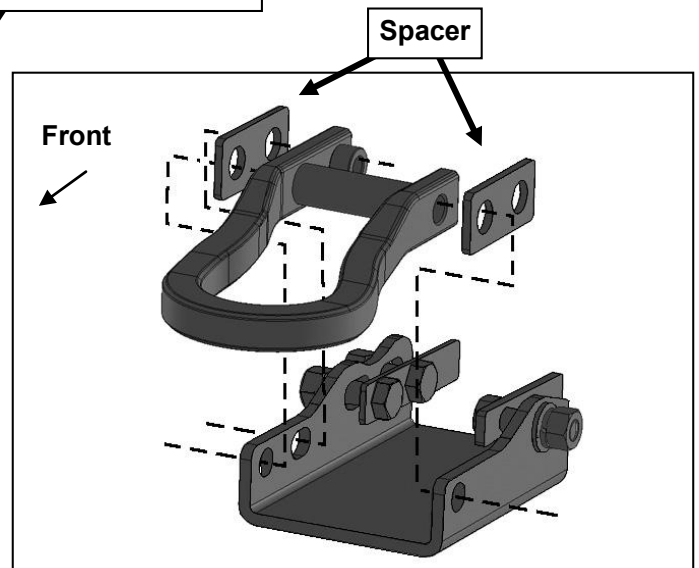
### Driver Side Installation Pictured

- Double Bolt Plate
- (2) 12mm Flat Washers
- (2) 12mm Lock Washers
- (2) 12mm Hex Nuts



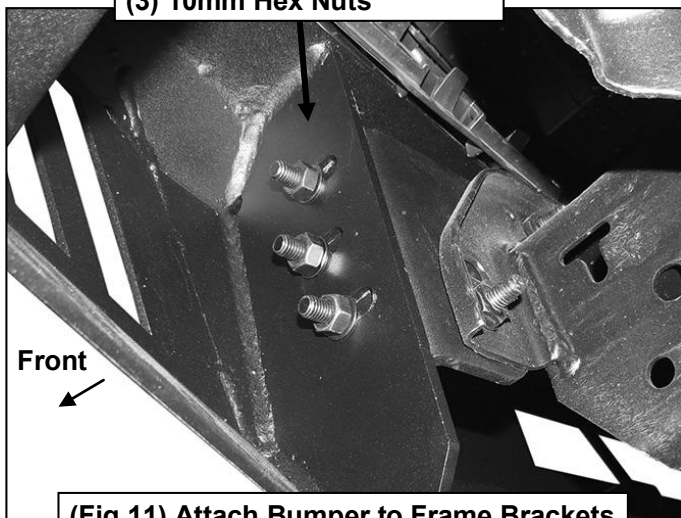
(Fig 9) Insert long end on Bolt Plates into open end of frame first then attach the Tow Hook Bracket (if equipped) to the frame and Bolt Plates

- Single Bolt Plate
- 12mm Flat Washer
- 12mm Lock Washer
- 12mm Hex Nut



(Fig 10) Slide Spacer between each side of tow hook. Attach tow hook to Bracket with factory hardware.

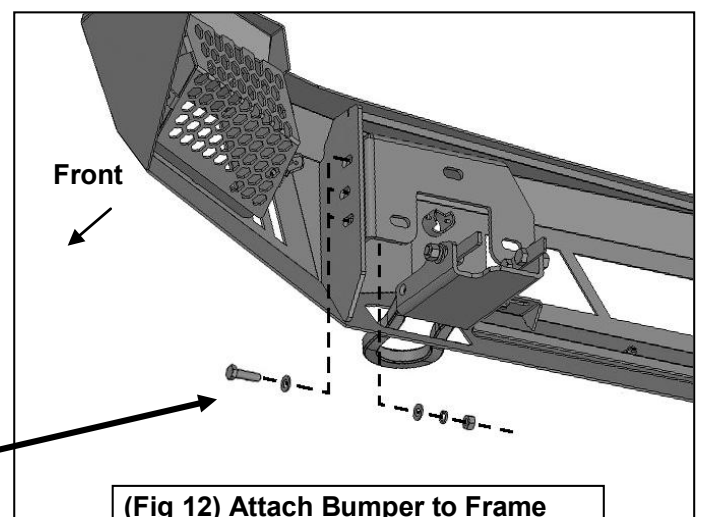
- (3) 10mm x 35mm Hex Bolts
- (6) 10mm Flat Washers
- (3) 10mm Lock Washers
- (3) 10mm Hex Nuts



(Fig 11) Attach Bumper to Frame Brackets

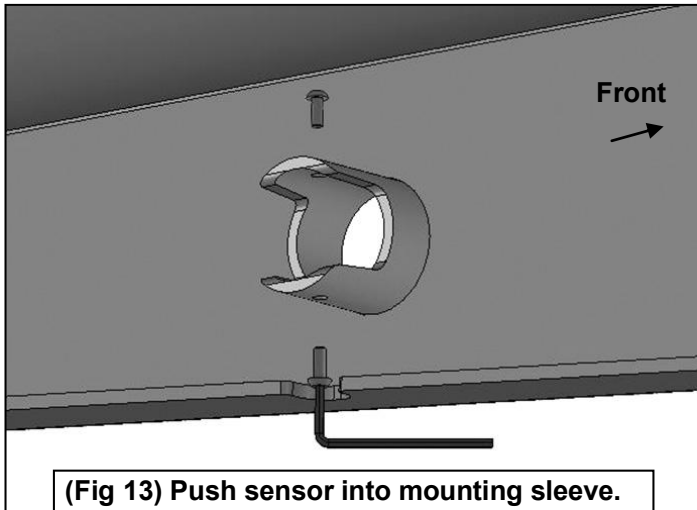
**WARNING!** Do not crawl under bumper unless the bumper is properly supported on blocks or stands or the bumper may fall.

- (3) 10mm x 35mm Hex Bolts
- (6) 10mm Flat Washers
- (3) 10mm Lock Washers
- (3) 10mm Hex Nuts



(Fig 12) Attach Bumper to Frame Brackets. Driver/left side illustrated

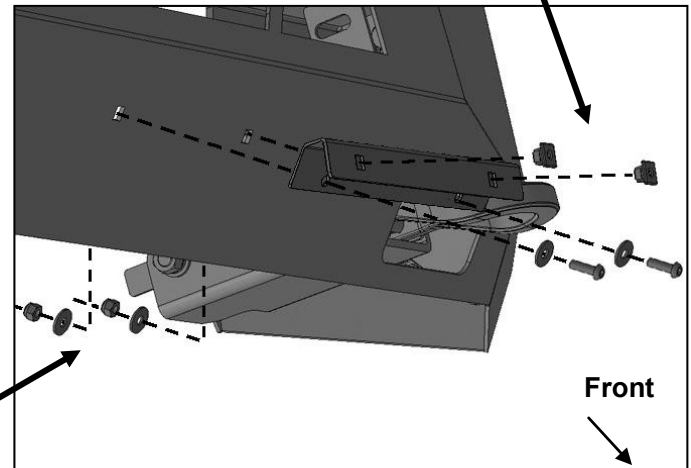
### Driver Side Installation Pictured



(Fig 13) Push sensor into mounting sleeve. Use 4mm Screws to lock sensor in place.

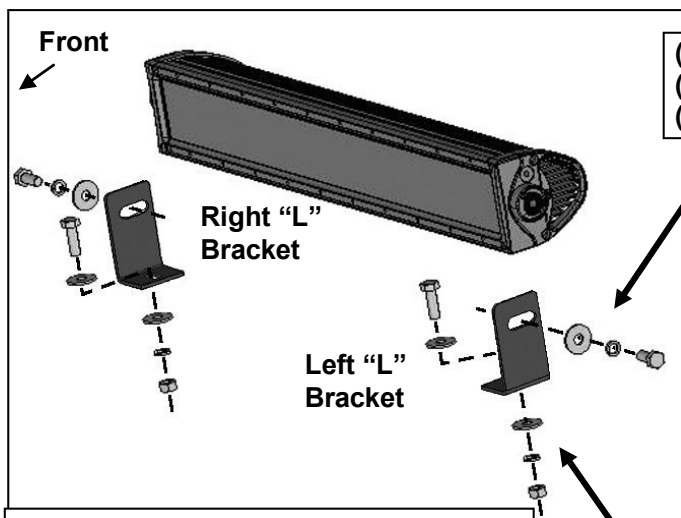
**IMPORTANT:** Sensors fit snug in sockets. The 4mm Screws are only used to apply slight pressure to lock the sensors in place. Tighten both screws evenly until they touch the sensor body only. Do not overtighten screws or damage to sensors will result.

(2) Nylon Nuts



(2) 6mm x 20mm Button Head Screws  
(4) 6mm Flat Washers  
(2) 6mm Nylon Lock Nuts

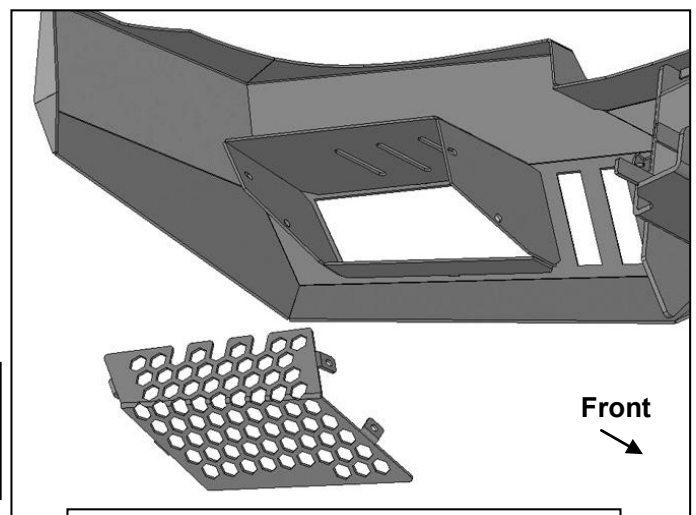
(Fig 14) Attach License Plate Bracket to Bumper



(2) 8mm x 16mm Hex Bolts  
(2) 8mm Lock Washers  
(2) 8mm Flat Washers

(Fig 15) Typical center light installation

(2) 8mm x 25mm Hex Bolts  
(4) 8mm Flat Washers  
(2) 8mm Lock Washers  
(2) 8mm Hex Nuts



(Fig 16) Remove screens if necessary for clearance/access to outer light mounts



**WARRANTY POLICY & PROCEDURE**

Contact your Body Armor 4x4 Distributor or Body Armor 4x4 directly regarding any issue prior to removing product from vehicle. If it appears said product is warrantable, you will be given a Return Authorization Number (RA #) and asked to return said product freight pre- paid. The RA # must appear on the outside of the carton/box of any returned product. Unauthorized returns will be refused. RA # must be given by Body Armor 4x4 in advance of return.

**BODY ARMOR LIMITED LIFETIME WARRANTY**

Body Armor 4x4 (BA) warrants to the original purchaser that these products will be free from defects in material and workmanship prior to shipping and/or installation for the life of the product. This non-transferable limited lifetime warranty does not cover damage or impairment in any part due to misuse, improper installation, accident or contact with on-road or off-road hazards, product modification, improper or inadequate cleaning and/or maintenance. All other warranties and representations express or implied are hereby disclaimed, including fitness for merchantability and buyer's intended use or purpose.

BA products are built and sold for highway and off-road use. The original purchaser assumes all risks as to the selection, suitability and performance of all goods and products purchased.

BA's sole and exclusive obligation under this warranty shall be to repair or replace the item(s) and their discretion and BA will not issue any credit or refund to the consumer. Proof of purchase is required on all warranty claims. BA may require pictures to diagnose the warranty claim and may require the product(s) be returned if determined by BA to be necessary. If a return is required then a RGA number will be issued by BA. Any item arriving to BA without a valid

RGA number will be refused and sent back. Upon evaluating the RGA and no valid warranty claim is made, the RGA will be returned to the consumer at their expense or disposed by BA after 60 days. BA will not be responsible for incidental charges such as removal, installation, shipping costs or lost during transit. Any items that are ordered in error, refused or cancelled are not considered a valid warranty claim and cannot be returned to BA.

**WARRANTY PROCESS**

Contact an authorized BA dealer to initiate warranty process. Authorized dealers must contact BA to assist in evaluating the warranty claims. Valid warranties will have a RGA issued. Once issued the dealer will request the product be returned to BA facilities. Products purchased through an authorized BA dealer will be refunded and/or credited by that BA dealer.

Warranty contact: [orders@bodyarmor4x4.com](mailto:orders@bodyarmor4x4.com)

Return address: Body Armor 4x4, 1050 N. Vineyard Ave. Ontario CA, 91764, P: 951-808-0750

**FINISH WARRANTY**

The finish is warranted to be free of defects for a period of 3 years from date of purchase. Product(s) that have been abused, altered, incorrectly installed or used in competition are void of said warranty. Surface rust, pitting or discoloration is a direct result of improper maintenance is not covered by this warranty. It is the responsibility of the owner to preserve and maintain the finish of their product(s). In areas where high concentrations of road salts and other corrosive agents are used, rust or damage to the finish may occur if BA product(s) are not properly maintained. Lack of proper maintenance in these areas may void the finish warranty. See below for routine maintenance tips and recommendations.

**PRODUCT CARE AND MAINTENANCE**

Textured coat finished should be cleaned ONLY with a mild soap on a damp sponge.

BA recommends wiping down the product with a light coat of lubricate (i.e. WD40) periodically to maintain its luster.

DO NOT apply polish or wax that requires buffing for removal as this may damage the finish.

DO NOT coat the product with any type of shine such as Tire Shine or glossy aerosol or gel. This can cause discoloration, staining or bubbling.