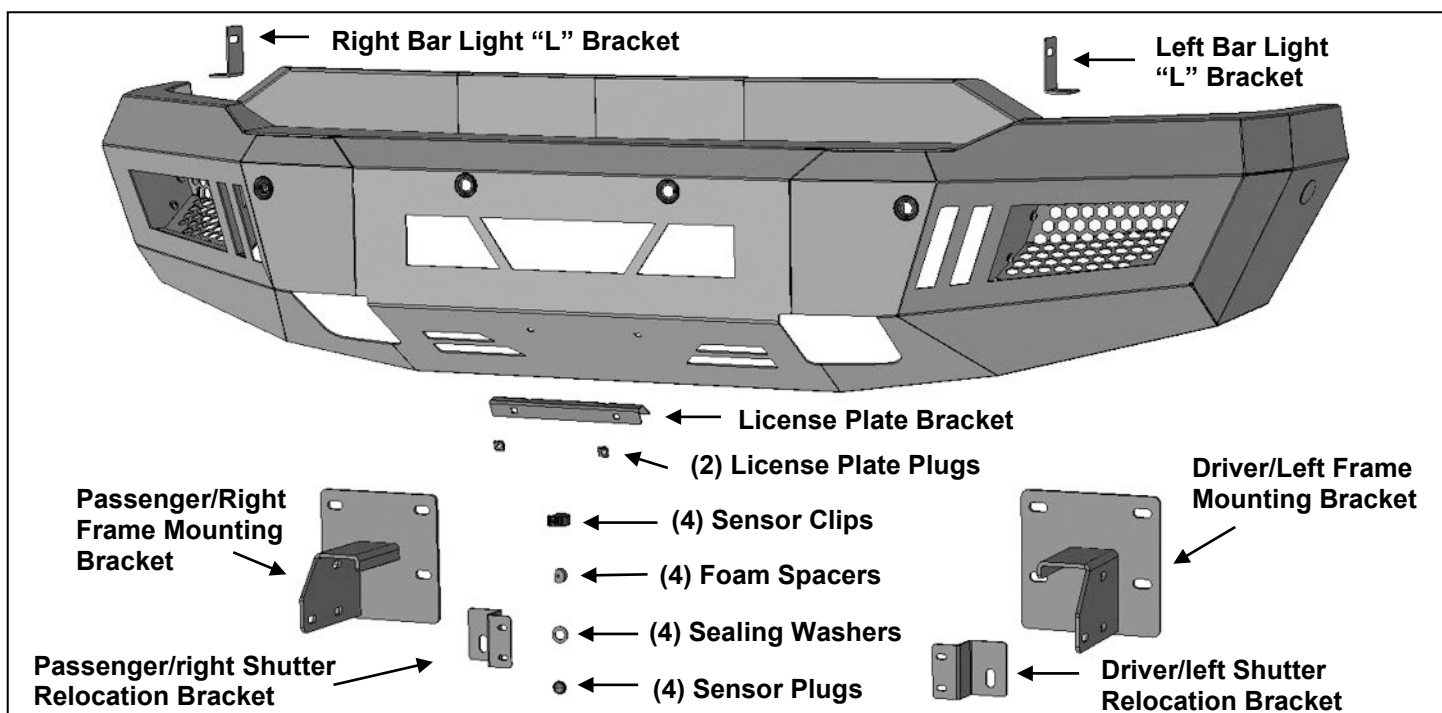


**PARTS LIST:**

1	LD-1 Front Bumper	6	10-1.5mm x 35mm Hex Bolts
1	Driver/left Mounting Bracket	12	10mm x 27mm x 3mm Flat Washers
1	Passenger/right Mounting Bracket	6	10mm Lock Washers
1	Driver/left Shutter Relocation Bracket	6	10mm Hex Nuts
1	Passenger/right Shutter Relocation Bracket	2	8-1.25mm x 25mm Hex Bolts
1	Driver/left "L" LED Light Mounting Bracket	2	8-1.25mm x 16mm Hex Bolts
1	Passenger/right "L" LED Light Mounting Bracket	6	8mm x 24mm x 2mm Flat Washers
1	License Plate Bracket	4	8mm Lock Washers
2	Plastic Plugs for License Plate	2	8mm Hex Nuts
4	Sensor Plugs	2	6-1.0mm x 20mm Button Head Bolts
4	Retaining Caps	4	6-1.0mm x 20mm Hex Bolts
4	Sealing Washers	8	6mm x 18mm x 1.6mm Flat Washers
4	20mm x 10mm Foam Spacers	4	6mm x 12mm x 1.6mm Flat Washers
1	Sensor Cover Kit	6	6mm Nylon Lock Nuts
10	Wire Ties	8	4mm Self Tapping Screws
		1	4mm Wrench

**PROCEDURE:**

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

1. Start installation at the driver/left wheel opening. Remove the hardware attaching the fender liner to the front of the fender and the end of the plastic body panel, **(Figure 1)**. Carefully pull the fender flare out to release the clips attaching it to the body panel, (fascia), and end of the fender, **(Figure 2)**.  
**IMPORTANT:** Only release the forward end of the flare, it is not necessary to remove the flare. Remove the screws attaching the end of the fascia panel to the front fender, **(Figure 3)**. Repeat this **Step** to release the passenger/right end of the fascia from the fender.
2. Pull along the center to release the remainder of the clips and remove the fascia, **(Figure 4)**.
3. Open the hood and remove the hood release handle. Remove the plastic cover from the top of the radiator and the grille, **(Figure 4)**. Reinstall hood release handle. Remove the hardware attaching the grille and pull it straight out from the vehicle. On models with grille mounted camera, unplug harness leading to the camera and remove the grille, **(Figures 5 & 7)**.

4. Unplug all wiring harnesses leading to the front bumper, **(Figure 6)**. Remove the license plate and bracket if equipped, **(Figure 7)**. Move all harnesses away from bumper.
5. Remove the outer bumper supports from both ends of the bumper, **(Figure 8)**.
6. 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 the bumper, remove the (2) factory upper and lower bumper bolts from each side, **(Figure 9)**. **WARNING!** Assistance is required to hold the bumper in place during bolt removal to prevent the bumper from falling. Remove the bumper assembly.
7. Remove the factory bumper brackets from the end of frame, **(Figure 10 & 11)**. On models with lower radiator shutter assembly, unplug and remove the assembly, **(Figure 10)**.
8. Select the driver/left Frame Mounting Bracket, **(Figure 12)**. Reuse the factory hardware to attach the Bracket to the frame, **(Figures 12 & 13)**. Repeat this **Step** to install the passenger/right Bracket.
9. On models equipped with lower radiator shutter system, remove shutter assembly from outer plastic housing, **(Figure 14)**. Select the driver/left Relocation Bracket. Use the previously installed bottom, inner factory bolt to attach the Bracket to the front of the Frame Bracket, **(Figure 15)**. Repeat this **Step** to attach the passenger/right Bracket to the passenger/right Frame Bracket. Attach the shutter assembly to the front of the Relocation Brackets with the included (4) 6mm x 20mm Hex Bolts, (8) 6mm x 18mm STD Flat Washers and (4) 6mm Nylon Lock Nuts, **(Figure 15)**. Do not overtighten the 6mm hardware or damage to the shutter assembly may result. Plug wiring harness into shutter assembly
10. Reinstall fascia, grille and top cover removed in **Step 3**.
11. **Center LED light installation** (sold separately).
  - a. Select the L/R "L" Brackets, **(Figure 16)**. 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, **(Figure 16)**. 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 the light manufacturer if possible, to install hardware larger than 8mm.
  - c. Follow light manufacturer's instructions to properly wire the light.
12. **LED light installation at ends of bumper** (sold separately).
  - a. Insert light into opening and up to mounting slots in the top of the driver/left light opening.
  - b. Check for clearance between front and back of light. If necessary, remove the screen from the back of the opening, **(Figure 17)**.
  - c. 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 to the inner slot.
  - d. Repeat the above steps for passenger/right side light installation.
  - e. Follow light manufacturer's instructions to properly wire the light.
13. Carefully remove all sensors and the wiring harness from the back of the OE bumper, **(Figure 18)**. Note location of each sensor for correct reinstallation.

**Models without bumper sensors:**

- a. Insert (1) Plug into the outer hole in the Sensor Mount, **(Figure 19)**.
- b. Repeat to plug remaining (3) mounting holes in Bumper. Continue to **Step 13**.

**Models with bumper mounted sensors:**

- a. Select the driver/left outer sensor. Remove the seal from the end of the sensor, **(Figure 20)**. Replace the seal with the included larger Foam Seal.
- b. Push the sensor into the Mount from the back until it is flush with the front of the Mount.
- c. Push (1) Foam Spacer onto the back end of the sensor, **(Figure 21)**.
- d. Snap (1) Sensor Retaining Cap onto the Sensor Mount, **(Figure 21)**.
- e. Repeat the previous Steps to install the remaining sensors in order from factory bumper.
- f. Install the factory bumper wiring harness for sensors and fog lights as equipped. Run wiring harness over/through Brackets to reach sensors.

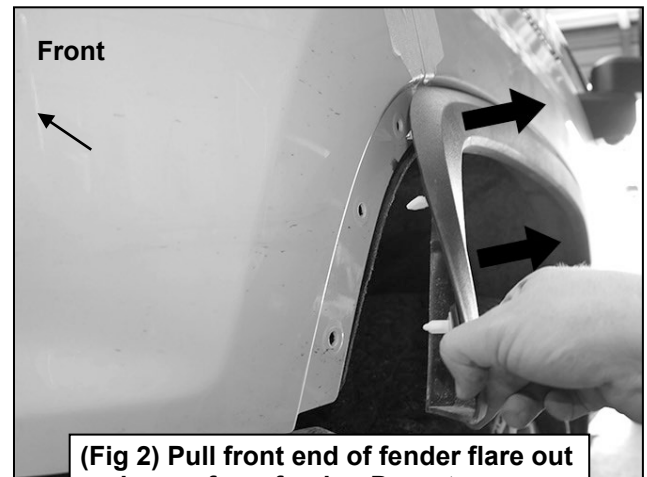
14. With assistance, position the Bumper Assembly up to the outside of the Brackets. Temporarily support the weight of the Bumper. **WARNING:** To avoid possible injury or damage to the vehicle, do not proceed until the Bumper is fully and safely supported.
15. Line up the (3) holes in the driver/left side 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 22 & 23)**. Do not fully tighten hardware at this time. Repeat this Step to attach the passenger/right side of Bumper to the Frame Bracket.
16. Level and adjust the Bumper and fully tighten all hardware.
17. 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 x 12mm Small Flat Washers and (2) 6mm Nylon Lock Nuts, **(Figure 24)**. Insert (2) Plastic Plugs into the square holes in the Bracket. Reuse the factory screws to attach the license plate to the Plastic Plugs.
18. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

**To protect your investment,** 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.

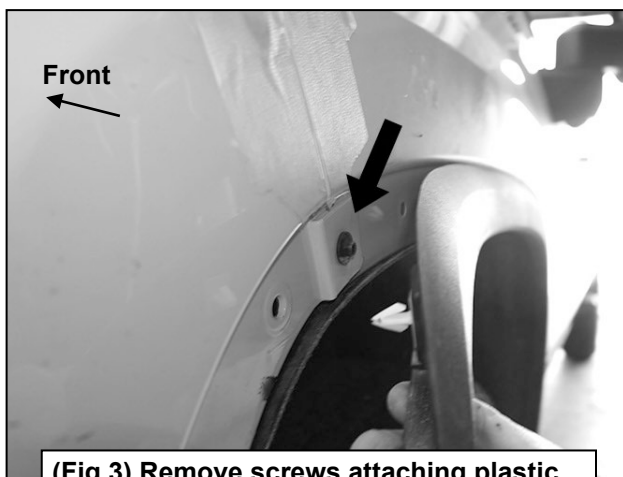
### Driver/left Side Installation Pictured



**(Fig 1) Release hardware attaching fender liner from plastic panel (fascia-see arrows)**



**(Fig 2) Pull front end of fender flare out and away from fender. Do not remove flare, only release the front section**

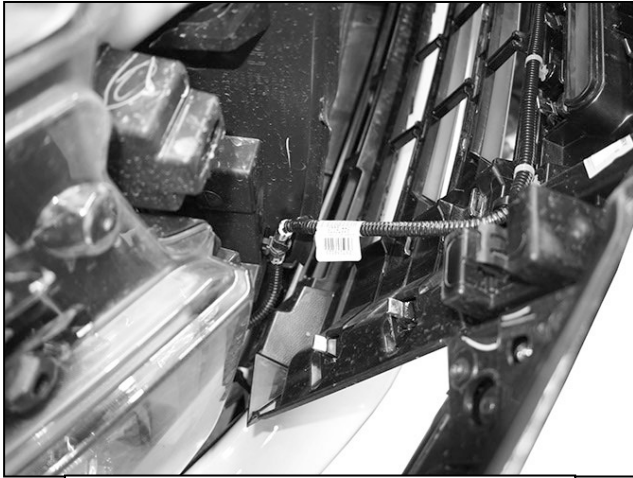


**(Fig 3) Remove screws attaching plastic fascia panel to front end of fender (arrow)**

**Remove plastic cover from top of grille**



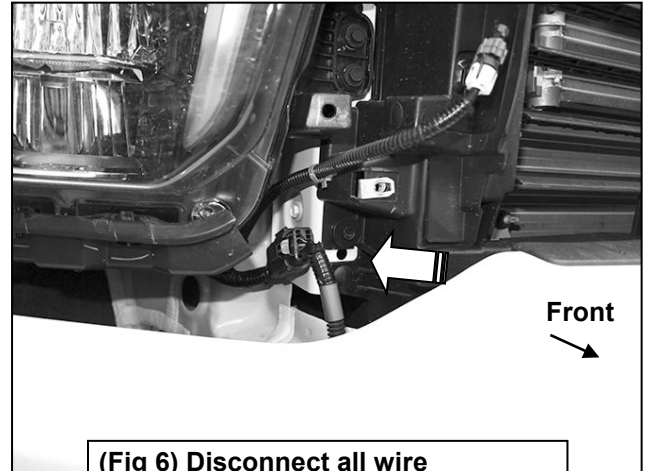
**(Fig 4) Remove plastic fascia from top of bumper**

**Driver/left Side Installation Pictured**

**(Fig 5) Disconnect harness to camera (if equipped) and remove grille**

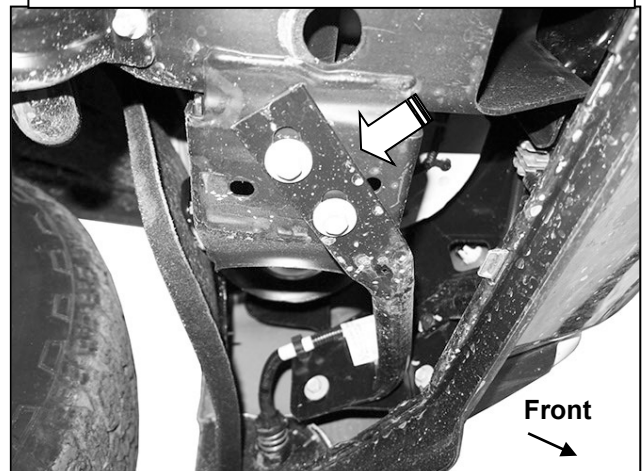


**(Fig 7) Grille and fascia removed**

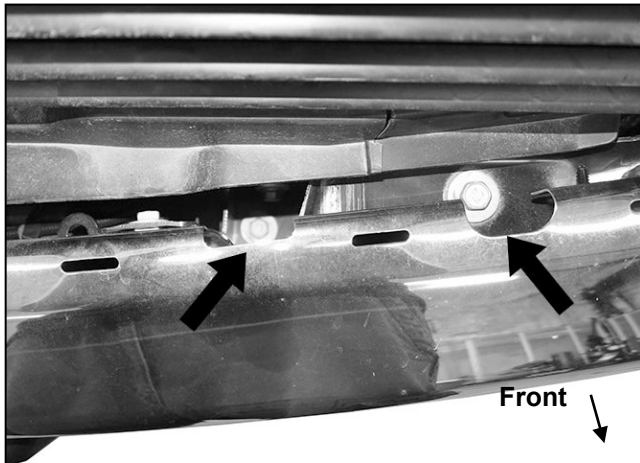


**(Fig 6) Disconnect all wire harnesses leading to front bumper**

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

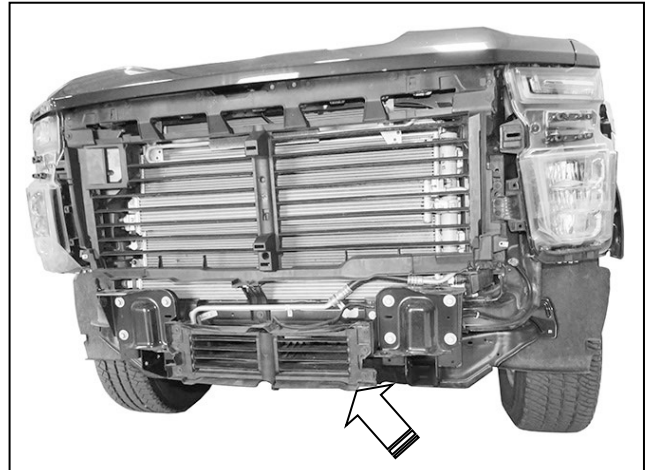


**(Fig 8) Remove outer bumper supports attached to bottom of frame (driver/left pictured)**

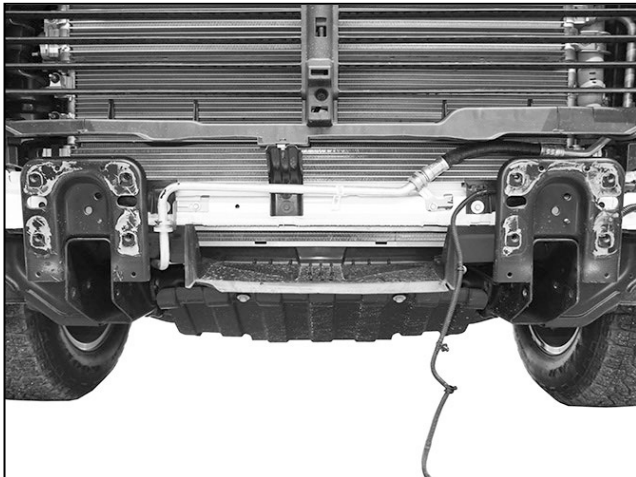
**Driver/left Side Installation Pictured**

(Fig 9) From above, remove the hex bolts attaching the driver/left side of bumper to the frame, (arrows)

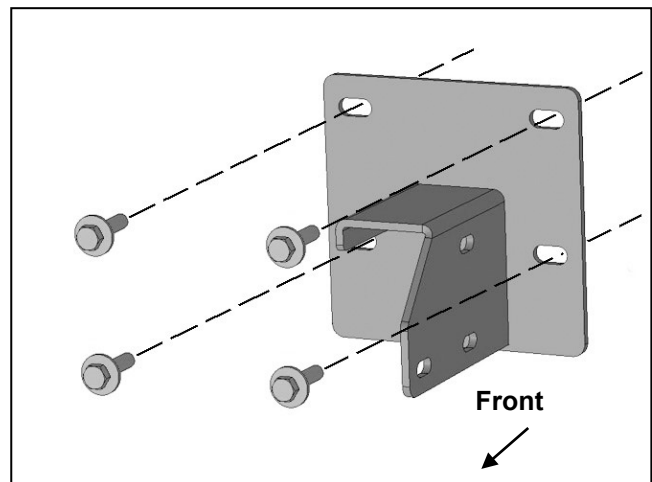
**WARNING!** Do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.



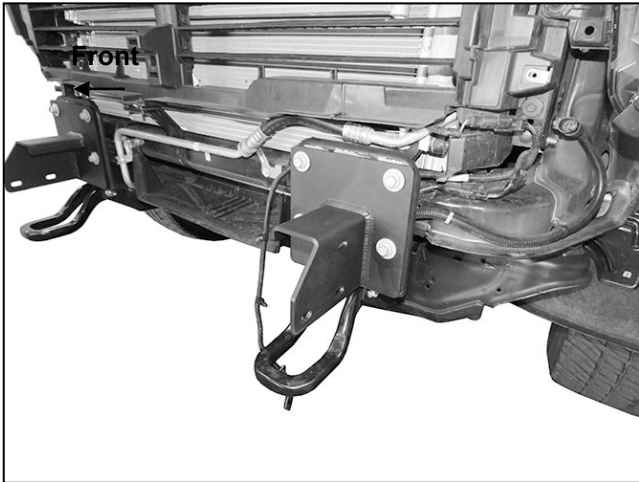
(Fig 10) Remove bumper brackets and shutter assembly (arrow) if equipped



(Fig 11) Attach Frame Brackets to end of frame

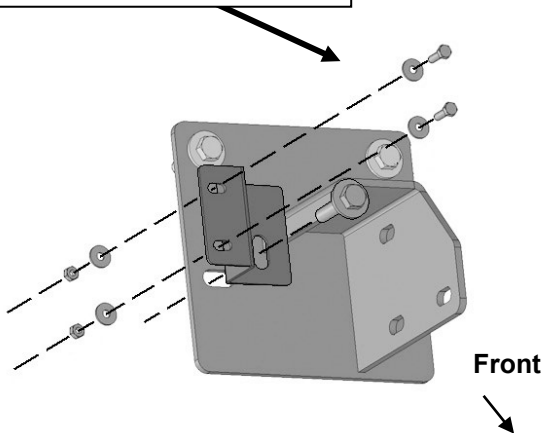


(Fig 12) Reuse factory hardware to attach Driver/left Frame Bracket to end of frame

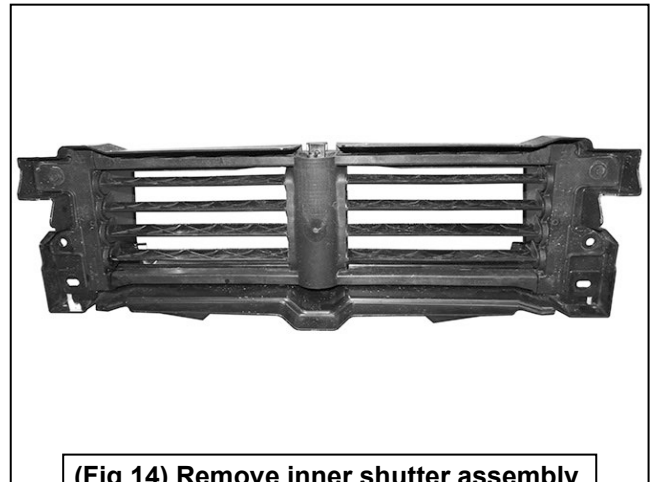
**Driver/left Side Installation Pictured**

**(Fig 13) Attach Driver/left Frame Bracket to end of frame**

- (2) 6mm x 20mm Hex Bolts
- (4) 6mm x 18mm STD Flat Washers
- (2) 6mm Nylon Lock Nuts



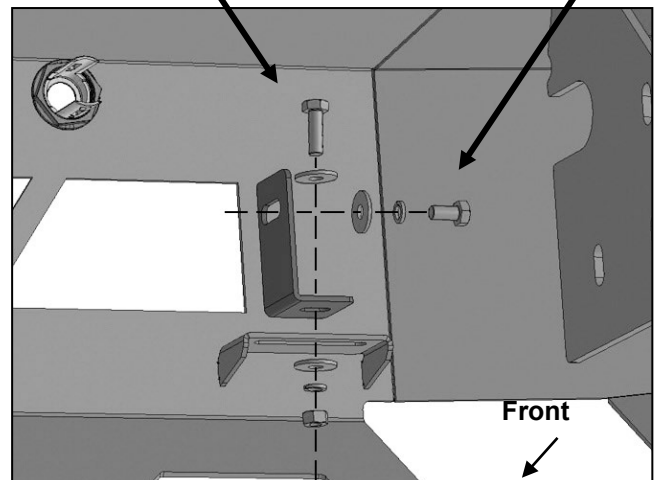
**(Fig 15) Attach Relocation Brackets to front of Frame Brackets. Attach shutter assembly, (if equipped), to front of Relocation Brackets**



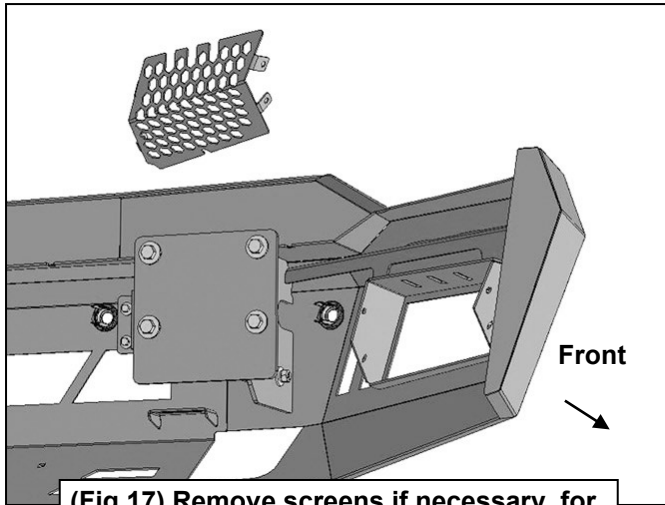
**(Fig 14) Remove inner shutter assembly from plastic outer housing (if equipped)**

- 8mm x 25mm Hex Bolt
- (2) 8mm Flat Washers
- 8mm Lock Washer
- 8mm Hex Nut

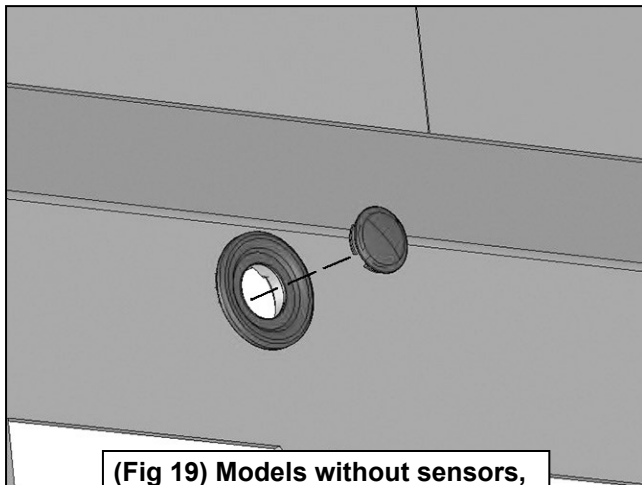
- 8mm x 16mm Hex Bolt
- 8mm Lock Washer
- 8mm Flat Washer



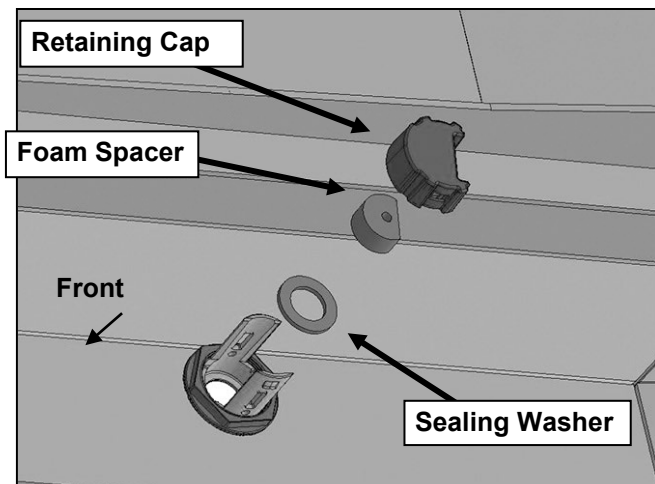
**(Fig 16) Universal LED Brackets (light not included)**

**Driver/left Side Installation Pictured**

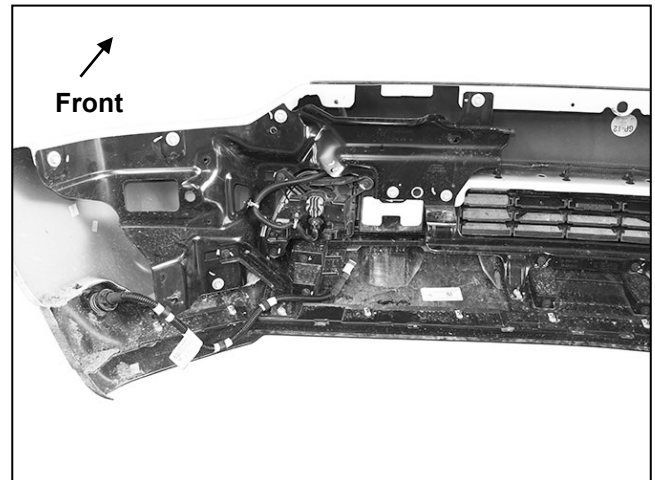
(Fig 17) Remove screens if necessary, for clearance/access to outer light mounts



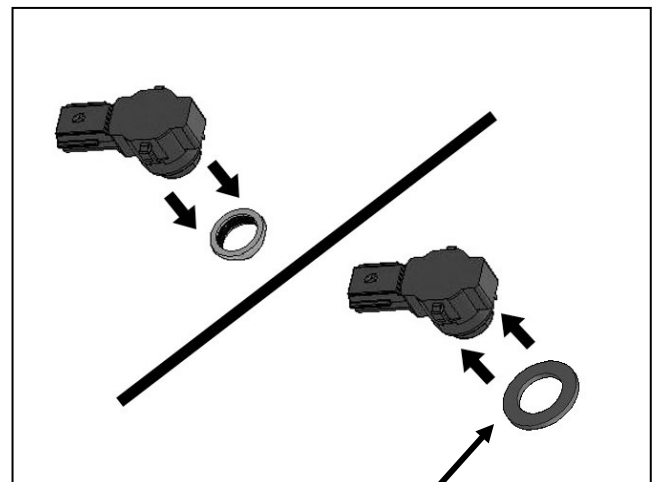
(Fig 19) Models without sensors, push Plug into sensor mount



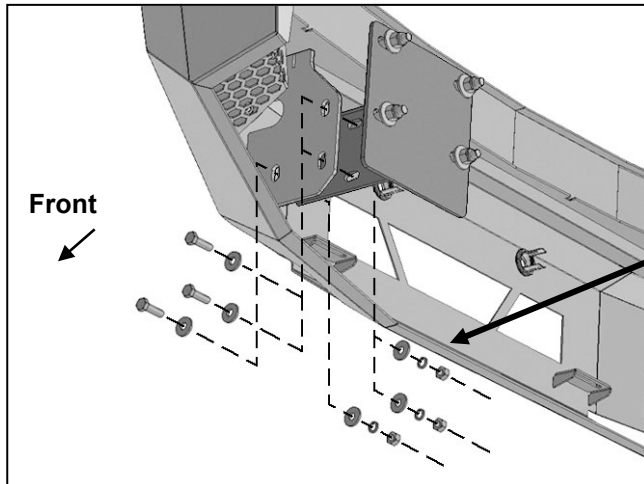
(Fig 21) Insert sensor into Mount on back of Bumper



(Fig 18) Disassemble bumper and remove sensors and wiring harness as equipped

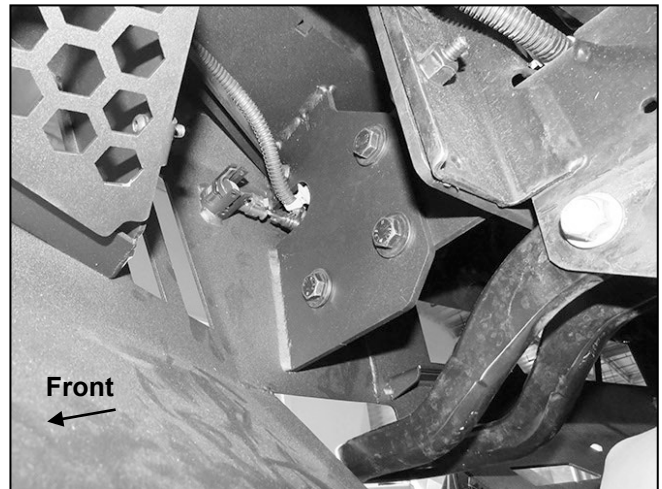


(Fig 20) Remove seal from sensor. Slide Foam Sealing Washer over end of sensor (arrow)

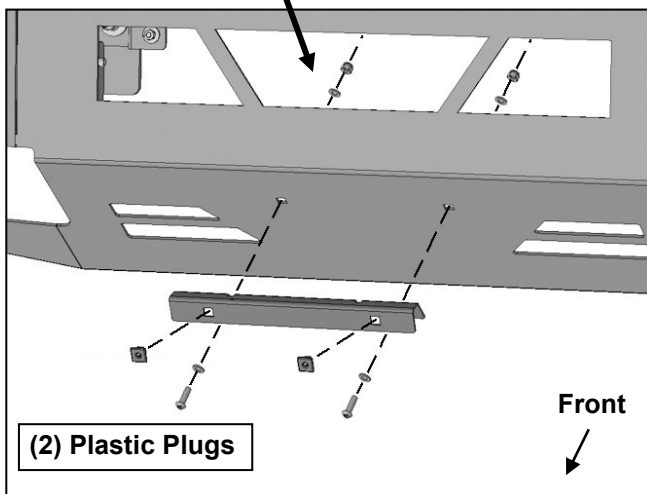
**Driver/left Side Installation Pictured****(Fig 22) Attach the Bumper to Frame Brackets**

**WARNING!** Do not crawl under bumper unless it 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 23) Driver/left side of Bumper installed**

- (2) 6mm x 20mm Button Head Bolts
- (4) 6mm x 12mm Small Flat Washers
- (2) 6mm Nylon Lock Nuts



- (2) Plastic Plugs

**(Fig 24) Attach license plate to Plastic Plugs**

**Complete Installation  
(lights not included)**