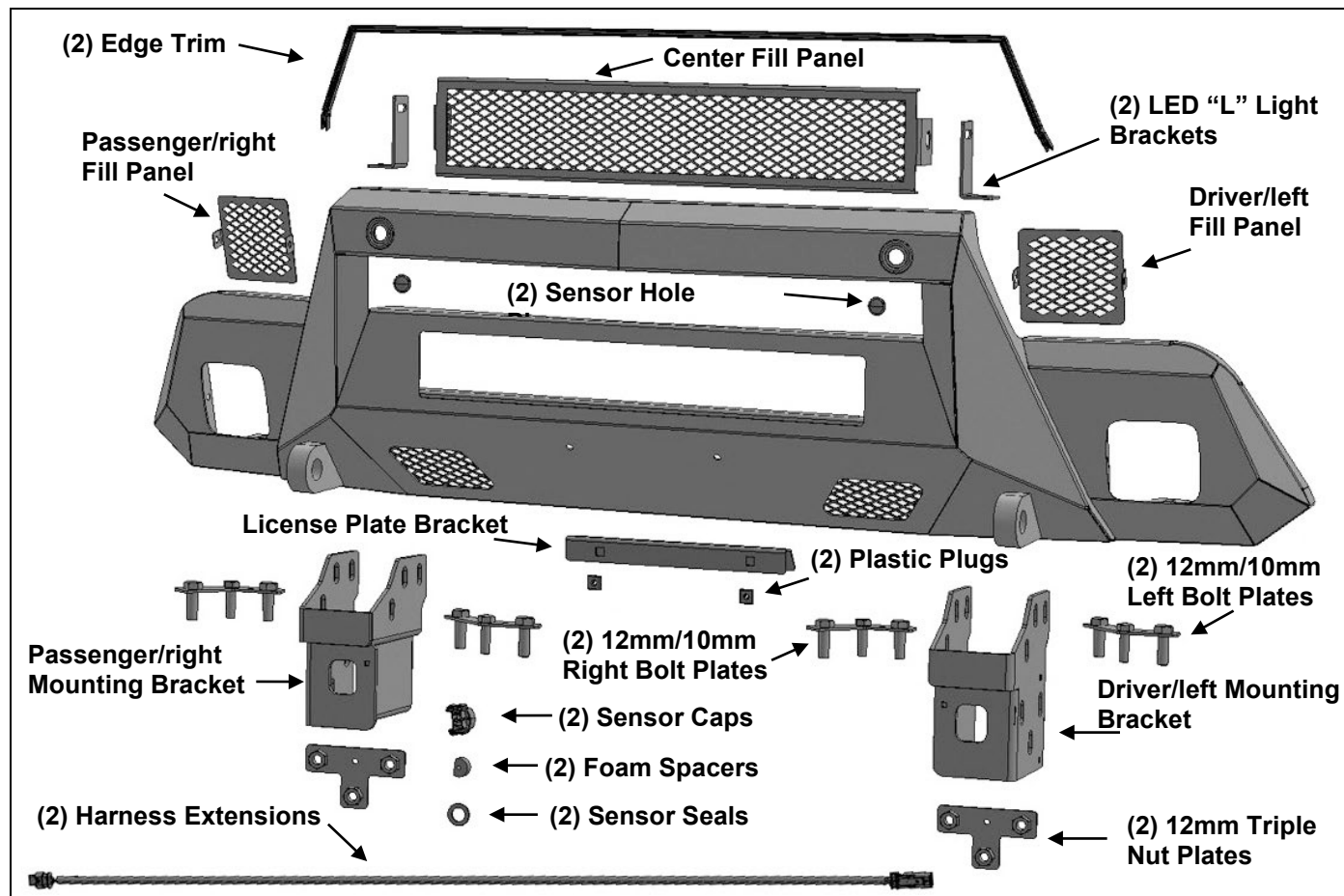


**PARTS LIST:**

|   |  |    |                                    |
|---|--|----|------------------------------------|
| 1 | CS1 LD Front Bumper Assembly                 | 6  | 12-1.75mm x 45mm Hex Bolts         |
| 1 | Driver/left Mounting Bracket Assembly        | 14 | 12mm x 37mm x 3mm Flat Washers     |
| 1 | Passenger/right Mounting Bracket Assembly    | 6  | 12mm Lock Washers                  |
| 1 | Center Fill Panel                            | 8  | 12mm Nylon Lock Nuts               |
| 1 | Driver/left Outer Fill Panel                 | 4  | 10mm x 30mm x 2.5mm Flat Washers   |
| 1 | Passenger/right Outer Fill Panel             | 4  | 10mm Nylon Lock Nuts               |
| 2 | LED "L" Light Brackets                       | 4  | 8-1.25mm x 25mm Hex Bolts          |
| 1 | License Plate Bracket                        | 2  | 8-1.25mm x 16mm Hex Bolts          |
| 2 | Plastic Plugs for License Plate              | 8  | 8mm x 24mm x 2mm Flat Washers      |
| 2 | Edge Trim (1100mm)                           | 4  | 8mm Lock Washers                   |
| 2 | 15.5mm x 25mm x 2mm Foam Seals               | 4  | 8mm Hex Nuts                       |
| 2 | 20mm x 10mm Foam Spacers                     | 4  | 6mm x 20mm Button Head Combo Bolts |
| 2 | Sensor Retaining Caps                        | 4  | 6mm Flange Nuts                    |
| 2 | Plastic Sensor Plugs                         | 2  | 6mm x 20mm Button Head Bolts       |
| 2 | Sensor Harness Extensions                    | 4  | 6mm x 18mm x 1.6 Flat Washers      |
| 1 | Sensor Cover Kit                             | 2  | 6mm Nylon Lock Nut                 |
| 2 | Driver/left Triple 12mm/10mm Bolt Plates     | 1  | 4mm Wrench                         |
| 2 | Passenger/right Triple 12mm/10mm Bolt Plates | 10 | Nylon Wire Ties                    |
| 2 | 12-1.75mm Triple Nut Plates                  |    |                                    |



**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. DRILLING MAY BE REQUIRED.**

1. Start installation at the driver/left wheel opening. Remove the screws/clips attaching the inner fender liner to the end of the bumper and fascia body panel, **(Figures 1 & 2)**. Open the hood and remove the bolts attaching the front end of the front fender to the end of the fascia, **(Figure 3)**. Repeat this **Step** to release the passenger/right end of the fascia panel. Pull the ends of the fascia out from below the headlights and from across the front of the vehicle, **(Figure 4)**.
2. Temporarily remove the hood release handle and plastic cover from the top of the grille and radiator, **(Figure 5)**. Reattach the hood release handle. Models with grille mounted camera, unplug camera if equipped. Next, remove the hardware attaching the grille to the radiator core support and along the bottom, **(Figure 6)**. Once all hardware has been removed, firmly pull the grille straight out from the vehicle to release the grille from the clips. Place grille on a clean, soft surface.
3. Remove the license plate and bracket. On models with factory fog lights and/or bumper sensors, unplug the wiring harness leading to the bumper. Unplug the harness leading to the block heater plug in the bumper if equipped. **NOTE:** Main wiring harness connector is located up and behind the passenger/right side of the bumper. Release clips attaching passenger/right fender liner to access plug for harness. Move harness away from bumper.
4. From behind the driver/left side of the bumper, remove the outer bumper support connected to the side of the frame and the outer end of the bumper, **(Figure 7)**.
5. Locate and remove the hex bolts attaching the bottom of the bumper to the bumper bracket attached to the end of the frame, **(Figure 8)**.
6. Repeat **Steps 4 & 5** to remove the passenger/right bumper support and lower bumper hardware.
7. Move back to the top of the bumper. Remove the cover from the top of the bumper, **(Figure 9)**. Locate the hex bolts attaching the top of the bumper bracket to the frame, **(Figure 10)**.
8. Place blocks or jack stands under the front bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the bumper bolts attaching the bumper assembly to the top of the bumper bracket, **(Figure 10)**. **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.
9. Remove both tow hooks, if equipped, **(Figure 11)**. Remove the lower frame extensions if equipped, **(Figure 12)**.
10. **IMPORTANT: Models equipped with intercooler, (Diesel and Gas Turbo Charged models), refer to instructions for installation of shutter relocation kit available separately.**
11. Select (1) Left and (1) Right 12mm/10mm Bolt Plate, **(Figure 13)**. **NOTE:** Bolt Plates look similar but are offset to line up with existing holes in the frame. Select the driver/left Frame Mounting Bracket, **(Figure 13)**. Slide the Mounting Bracket over the frame. Insert the Bolt Plates into the end of the frame, the Bracket and out through the sides of the frame, **(Figures 13 & 14)**. Secure the Bracket to the Bolt Plates with (4) 12mm Flat Washers, (4) 12mm Nylon lock Nuts, (2) 10mm Flat Washers, (2) 10mm Nylon lock Nuts, **(Figures 13—17)**. Do not tighten hardware at this time. Repeat this **Step** to attach the passenger/right Frame Mounting Bracket.
12. Move the factory bumper to a clean, soft surface. Remove the steel reinforcements from the back of the bumper cover, **(Figures 18 & 19)**. Next, remove the lower plastic cover from the bottom of the bumper, **(Figure 20)**.
13. Models with front parking sensors only, unplug and remove the (2) center sensors from the factory bumper. Plug the (2) Wire Harness Extensions into the factory wiring harness on the bumper.
14. Reattach the steel bumper reinforcements to the back of the factory bumper, **(Figure 21)**.
15. Reinstall the plastic grille, plug in the camera if equipped and reinstall top cover removed in **Step 1**. Reinstall the plastic fascia body panel and factory bumper, **(Figure 22)**. Reattach the fender liners and fender flares. Plug the bumper wiring harnesses into the main harness.
16. Push the included Edge Trim onto the top edge on the back of the CS1 Bumper, **(Figure 23)**. Also apply the Trim to the bottom of the upper opening in the CS1 Bumper. **NOTE:** Apply Edge Trim to any area of the CS1 that can come in contact with the factory plastic bumper cover. Cut Edge Trim to fit.

**17. Determine if the vehicle is equipped with front bumper sensors.****Models without bumper sensors:**

- a. From the front of the bumper, push the included (2) Plastic Plugs into the sensor mount holes, **(Figure 24)**.

**Models with bumper mounted sensors:**

- a. Remove the factory sealing washer from the sensor. Attach the provided Foam Sealing Washer to the front of the sensor, **(Figure 25)**.
- b. Push the sensor in from the back of the Bumper until it is flush with the outer Bumper. Place (1) Foam Spacer over the end of the sensor. Push the Retaining Cap onto the sensor mount and snap into place, **(Figure 26)**.
- c. Repeat the previous **Steps** for the remaining center sensor.
- d. Plug the (2) Wire Harnesses into the bumper wiring harness first, then plug the harnesses into the sensors during CS1 Bumper installation, (see **Step 19**).

**18. Determine if accessory lights, (not included), or Screen Fill Panels will be installed at this time.**

**IMPORTANT:** It may be easier to install Center Fill Panels and/or lights before installing Bumper.

**Center Mesh Panel installation (do not install light with Panel)**

- a. Select (1) "L" Bracket. Attach the Bracket to the slot on the back of the driver/left side of the CS1 Bumper with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 27)**. Repeat this **Step** to attach the remaining (1) "L" Bracket to the passenger/right side of the Bumper.
- b. Select the Center Mesh Panel. Attach the Mesh Panel to the (2) "L" Brackets with (2) 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figure 28)**. Level, adjust and center the Mesh Panel, then tighten hardware.

**Center LED light bar installation, (light bar not included).**

- a. Select (1) "L" Bracket. Attach the Bracket to the slot on the back of the driver/left side of the CS1 Bumper with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, **(Figure 27)**. Repeat this **Step** to attach the remaining (1) "L" Bracket to the passenger/right side of the Bumper.
- b. Attach a LED light bar to the (2) "L" Brackets with (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers, **(Figure 29)**. Level, adjust and center the lightbar and tighten hardware. (Lightbar not included).

**Outer Screen Fill Panel Installation (do not install fill panels if installing lights).**

- a. Select the driver/left Fill Panel, **(Figure 30)**.
- b. Attach Fill Panel to the mounting holes in the back of the CS1 Bumper with the included (2) 6mm Button Head Combo Bolts and (2) 6mm Flange Nuts, **(Figure 30)**. Fully tighten Fill Panel hardware at this time.
- c. Repeat previous **Steps** to install the passenger/right Fill Panel.

**Outer LED cube style light installation (light not included).**

- a. Attach lights to mounting tabs on back of the Bumper, **(Figure 30)**.

**19. With assistance, position the Bumper Assembly up to the inside of the Mounting Brackets. Models with parking sensors, plug the Wiring Harness Extensions on the CS1 Bumper into the factory bumper wiring harness. 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.****20. Line up the driver/left side mounting plate on the back of the Bumper with the (3) slots in the Mounting Bracket. Insert (1) 12mm Triple Nut Plate into the back of the Mounting Bracket, **(Figure 31)**. Attach the Bumper to the Bracket and Triple Nut Plate with the included (3) 12mm x 45mm Hex Bolts, (3) 12mm Lock Washers and (3) 12mm Flat Washers, **(Figures 31—33)**. Repeat this **Step** to attach the passenger/right side of the Bumper to the Bracket.****21. Level and adjust the Bumper and fully tighten all hardware.****22. On vehicles requiring front license plate, attach the License Plate Bracket to the holes in the Bumper with the included (2) 6mm x 20mm Button Head Bolts, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts, **(Figure 34)**. Insert (2) Plastic Plugs into the square holes in the Bracket. Reuse the factory screws to attach the license plate to the plastic plugs.****23. Do periodic inspections of 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.

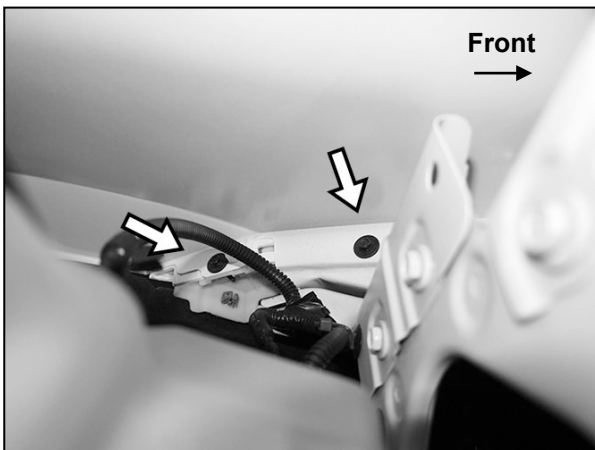
### Driver/left Side Installation Pictured



(Fig 1) Remove screws attaching driver/left fender liner to fascia body panel



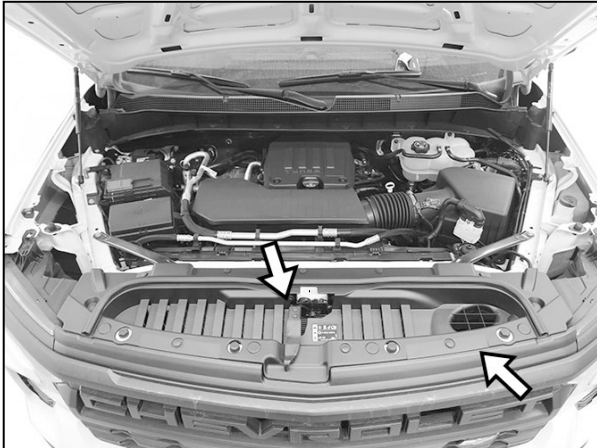
(Fig 2) Remove screws attaching driver/left fender liner to end of bumper



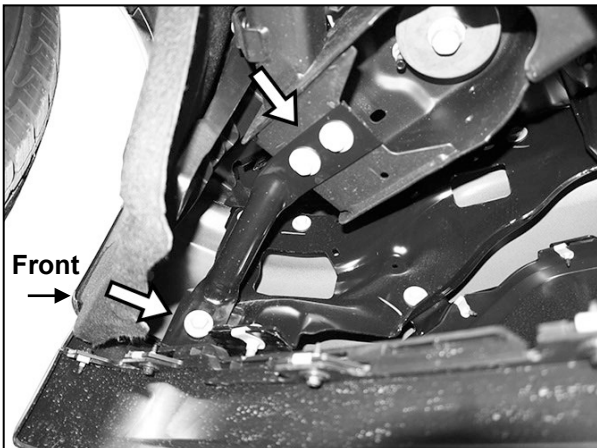
(Fig 3) Remove screws behind headlight attaching driver/left front end of fender to fascia body panel (arrows)



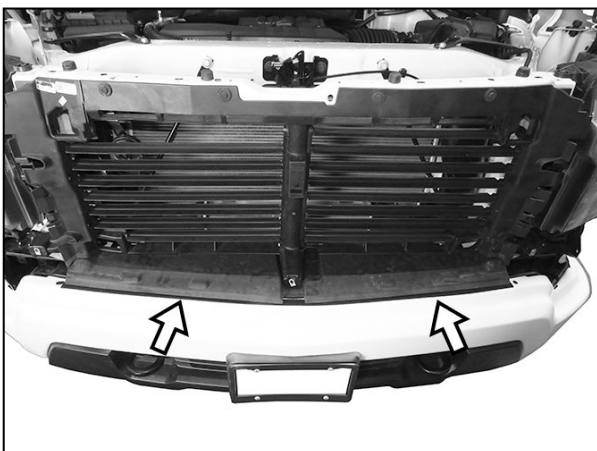
(Fig 4) Remove fascia body panel

**Driver/left Side Installation Pictured**

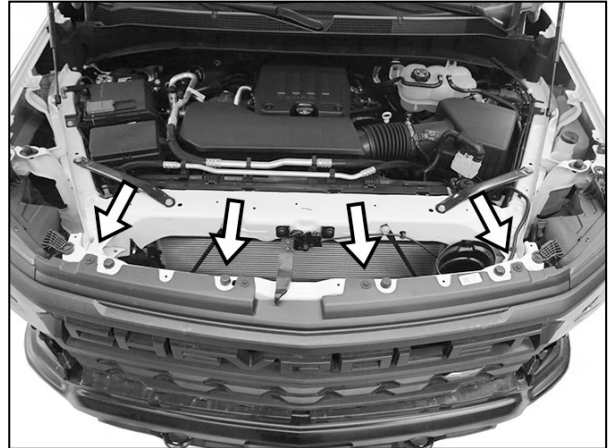
**(Fig 5) Remove hood release handle and plastic cover. Reattach hood release handle**



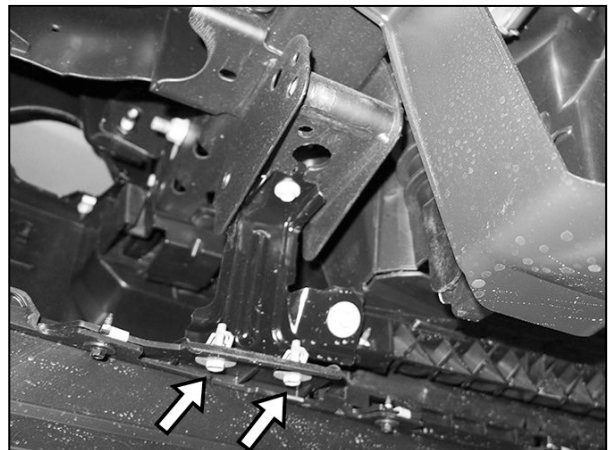
**(Fig 7) Remove outer bumper supports (arrows)**



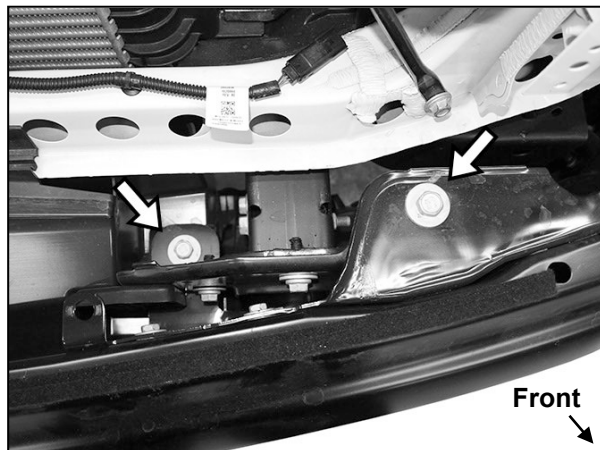
**(Fig 9) Remove cover from top of bumper (arrows)**



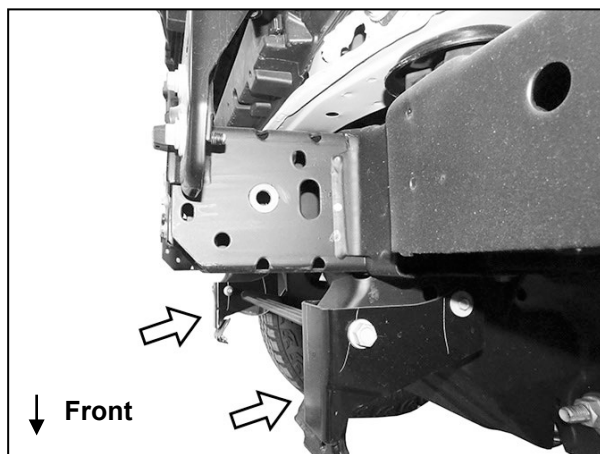
**(Fig 6) Remove hardware attaching grille. Firmly pull grille straight out from vehicle**



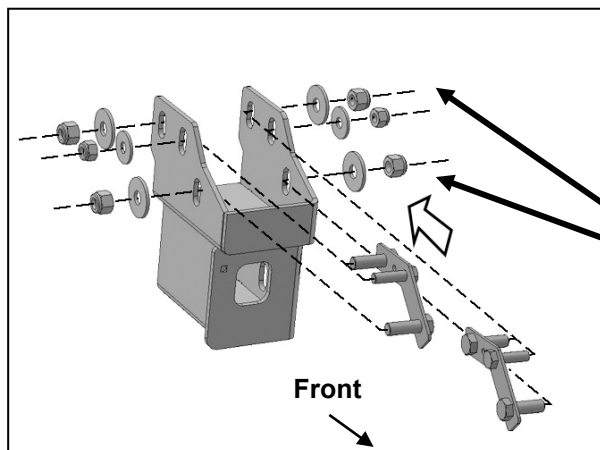
**(Fig 8) Remove bolts attaching bottom of bumper to brackets (arrows).**

**Driver/left Side Installation Pictured**

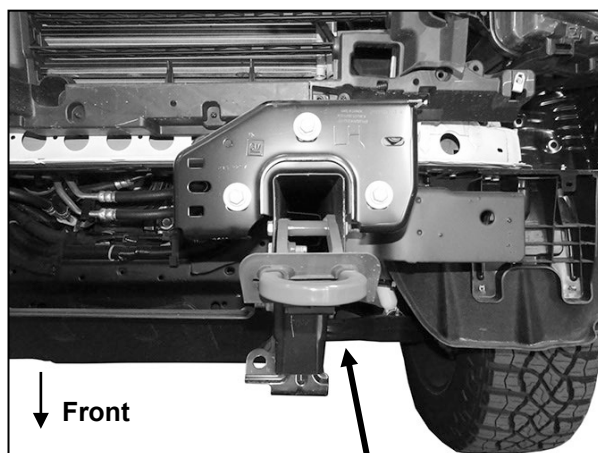
(Fig 10) Remove top bumper bolts to remove bumper, (arrows). Driver/left side pictured



(Fig 12) Remove lower frame extensions (arrows)

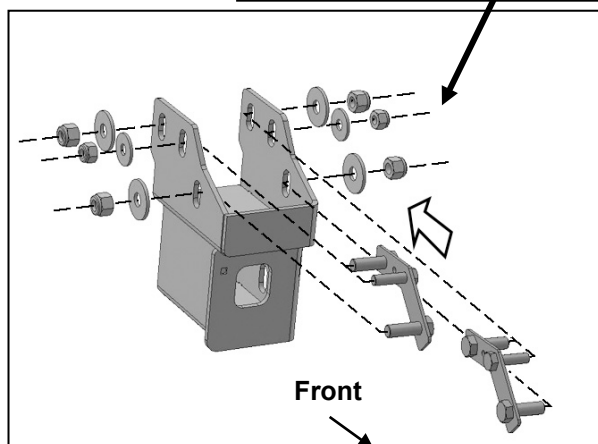


(Fig 14) Attach driver/left Bracket to (4) 12mm outer bolts in 12mm/10mm Bolt Plates



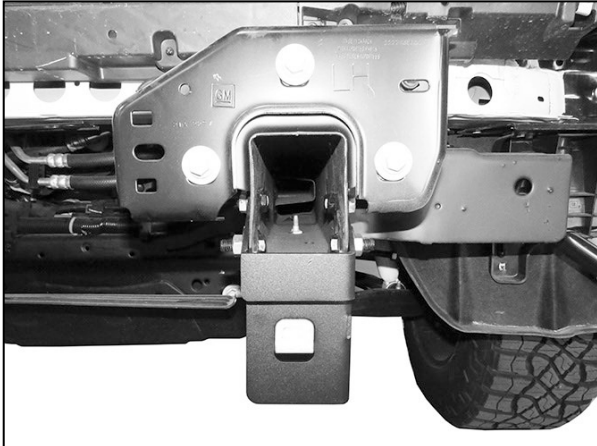
(Fig 11) Remove tow hooks from end of frame (driver/left side pictured)

**Center Bolts**  
(2) 10mm Flat Washers  
(2) 10mm Nylon Lock Nuts

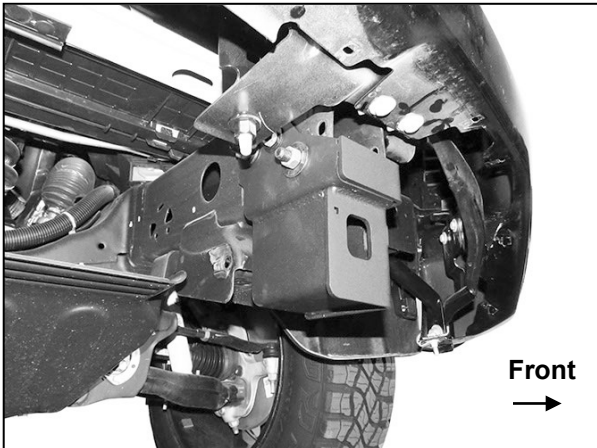


(Fig 13) Insert (1) Left and (1) Right 12mm/10mm Bolt Plate into end of frame and out through driver/left Mounting Bracket

**Outer Bolts**  
(4) 12mm Flat Washers  
(4) 12mm Nylon Lock Nuts

**Driver/left Side Installation Pictured**

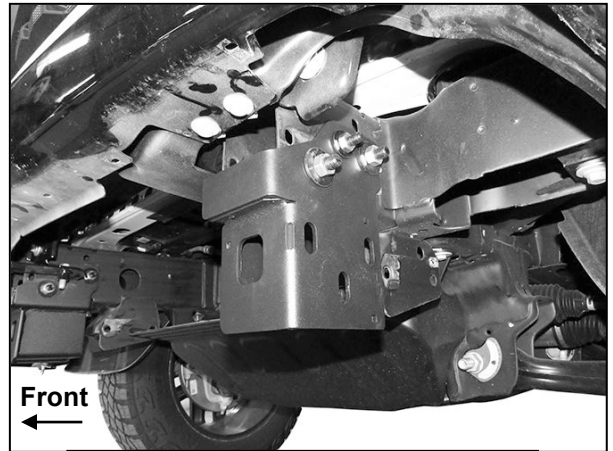
(Fig 15) Insert (1) Left and (1) Right 12mm/10mm Bolt Plate into end of frame and out through driver/left Mounting Bracket



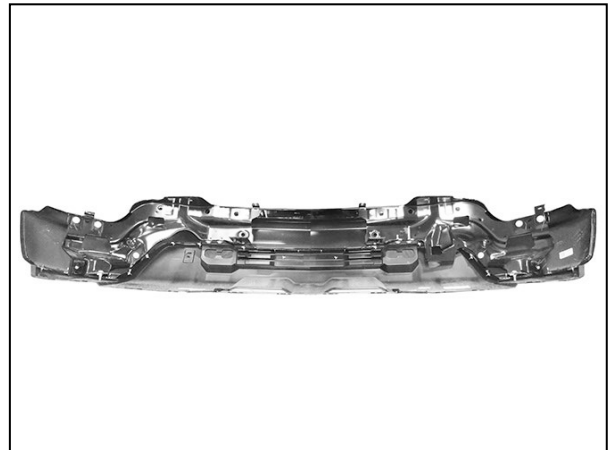
(Fig 17) Driver/left Bracket installed



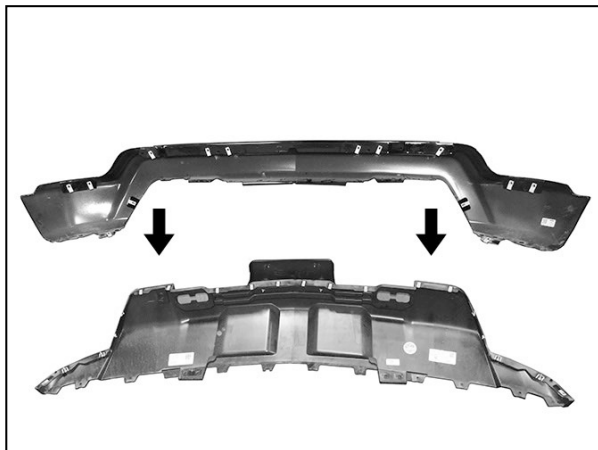
(Fig 19) Inner bumper bracket removed from the back of the bumper



(Fig 16) Driver/left Bracket installed



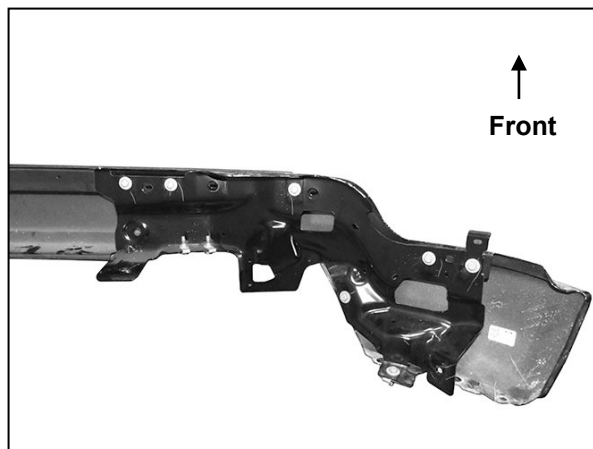
(Fig 18) Remove the inner bumper bracket from the back of the bumper

**Driver/left Side Installation Pictured**

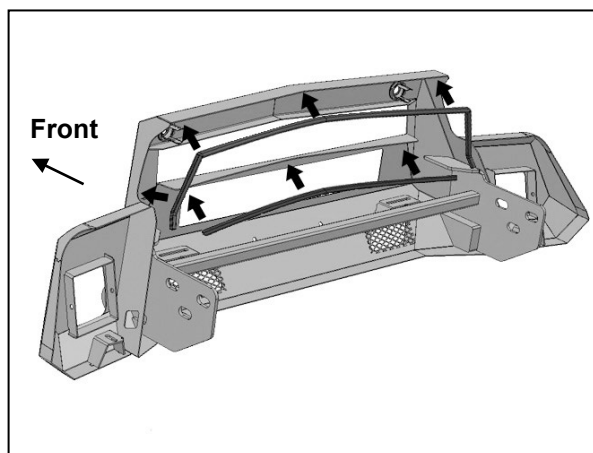
**(Fig 20) Remove lower bumper panel from the main upper bumper cover**



**(Fig 22) Test fit CS1 Bumper to vehicle and adjust Mounting Bracket locations. Fully tighten Bracket to frame hardware. Reinstall fascia body panel, grille and cover. Reattach inner fender liners. Models with parking sensors, plug included (2) Wire Harness Extensions into Bumper wire harness. Feed Harnesses out through holes for sensors**

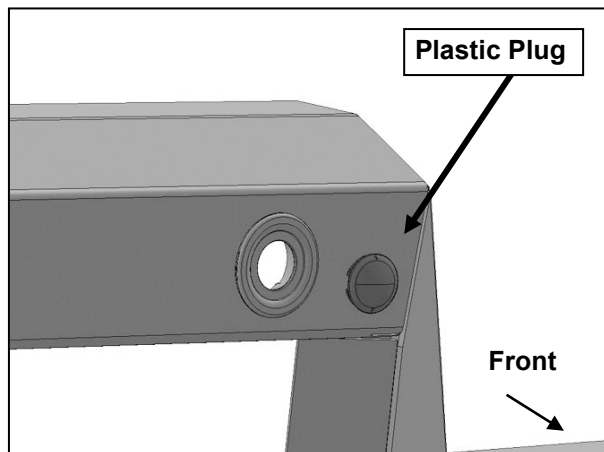


**(Fig 21) Reattach the factory bumper support bracket to the back of the factory bumper. Passenger/right side pictured**

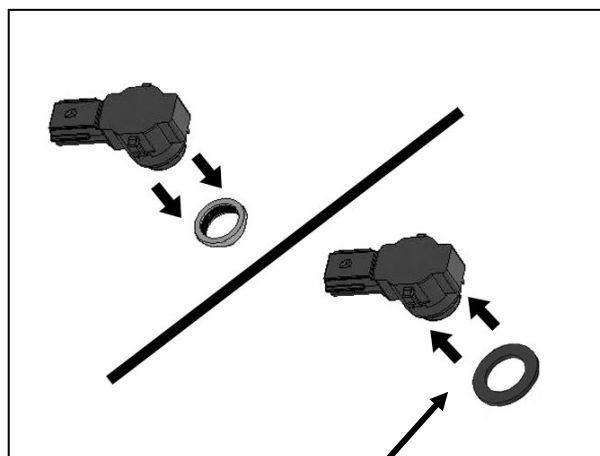


**(Fig 23) Push Edge Trim onto back edge of Bumper. Cut Trim to fit back of crossbar and upper hoop**

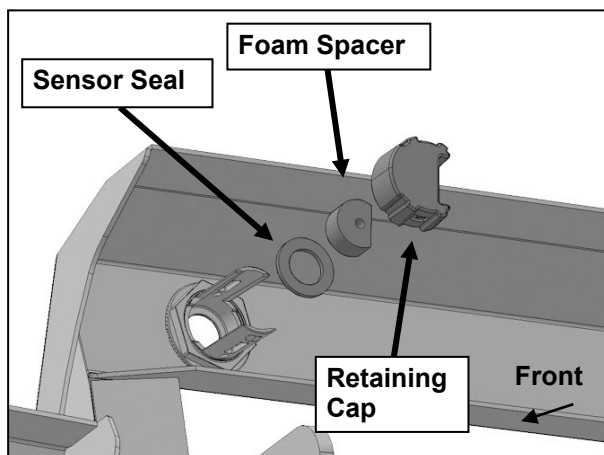


**Driver/left Side Installation Pictured**

(Fig 24) Models without front sensors, push sensor plugs into mounts

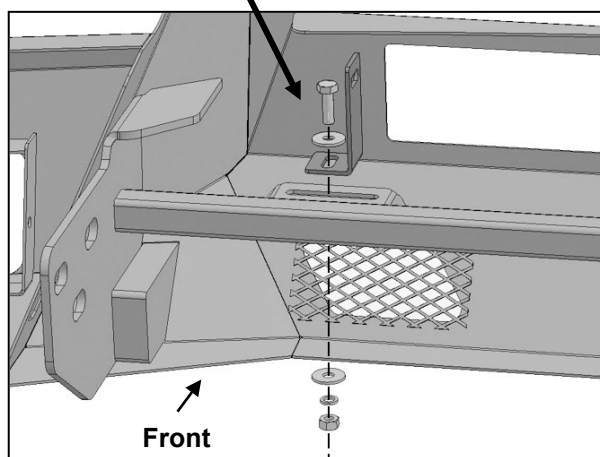


(Fig 25) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)

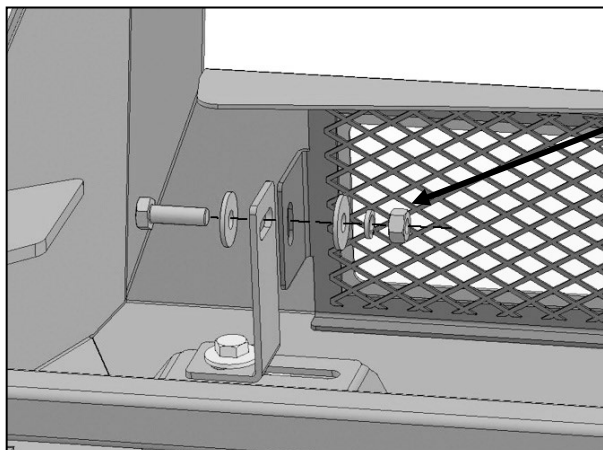


(Fig 26) Insert sensor assembly through the sensor mount on back of Bumper

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



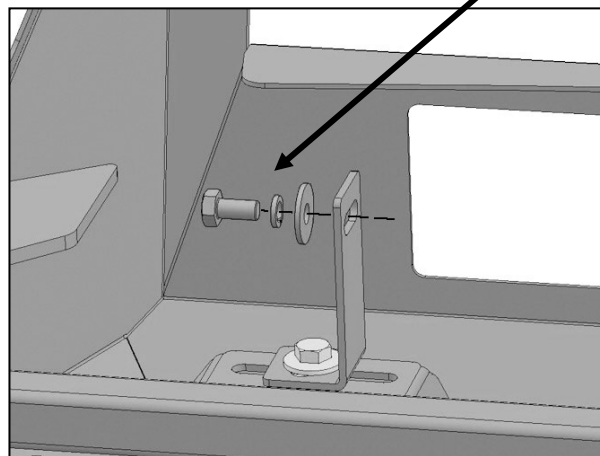
(Fig 27) Attach "L" Brackets to slots in mounts on back of Bumper

**Driver/left Side Installation Pictured**

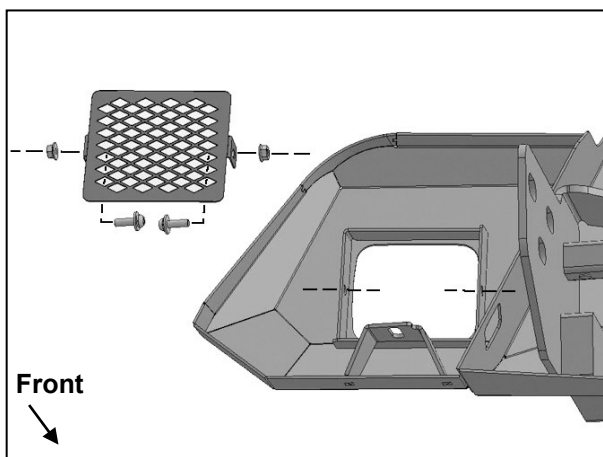
8mm x 25mm Hex Bolt  
(2) 8mm Flat Washers  
8mm Lock Washer  
8mm Hex Nut

(Fig 28) Attach Center Fill Screen to "L" Brackets. Do not install Fill Panel with light

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



(Fig 29) Typical center light installation

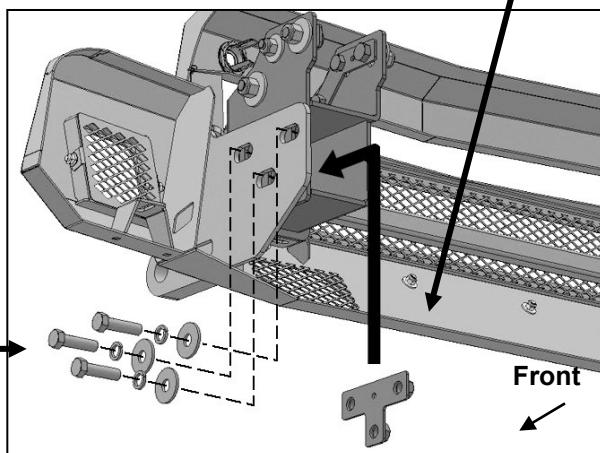


(Fig 30) Attach screens or lights to outer openings in Bumper (lights not included)

(3) 12mm x 45mm Hex Bolts  
(3) 12mm Lock Washers  
(3) 12mm Flat Washers

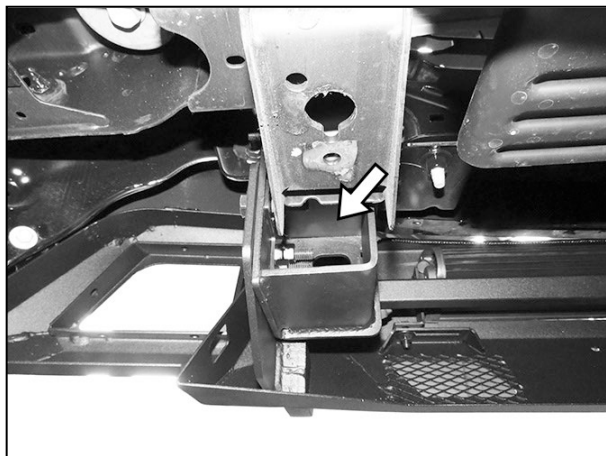
**WARNING!** Do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.

Front



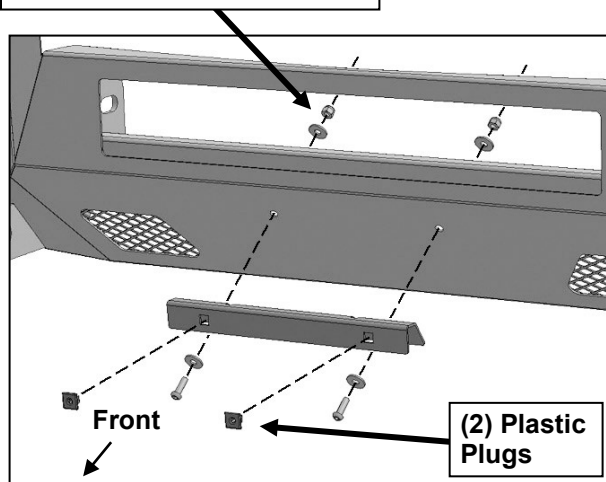
12mm Triple Nut Plate

(Fig 31) Insert Triple Nut Plates into back of Bumper Brackets. Attach the Bumper to the inside of the Frame Brackets

**Driver/left Side Installation Pictured**

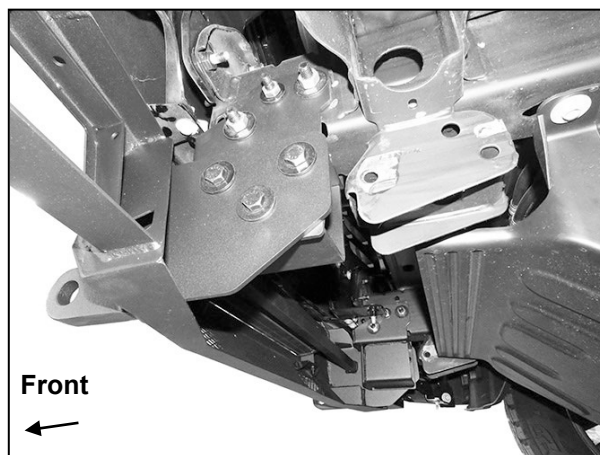
(Fig 32) Insert Triple Nut Plates into back of Bumper Brackets. Driver/left side pictured

- (2) 6mm Button Head Bolts
- (4) 6mm Flat Washers
- (2) 6mm Nylon Lock Nuts



(Fig 34) Attach License Plate Bracket to front of Bumper

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



(Fig 33) Driver/left side of Bumper attached to Bracket

