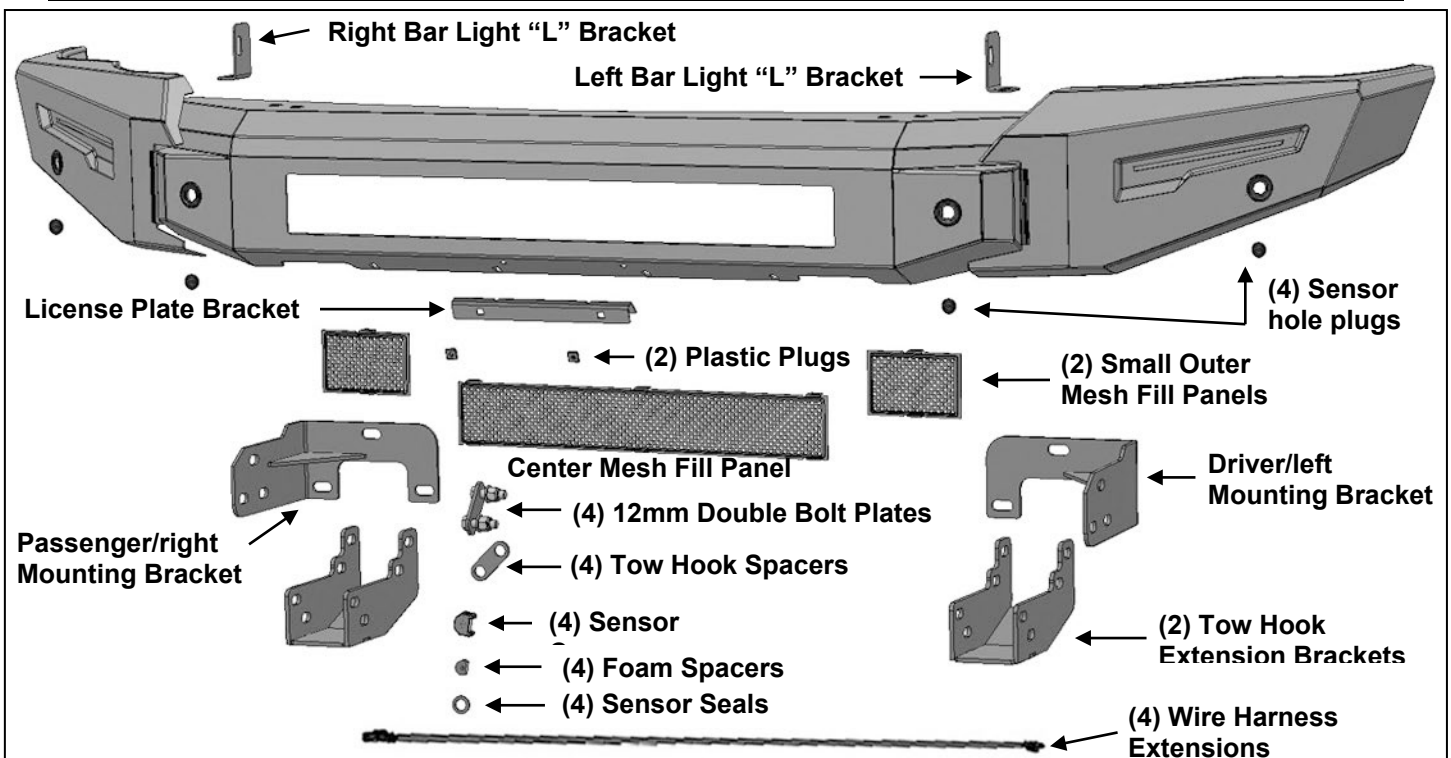


## PARTS LIST:

1	MD1 Front Bumper Assembly	2	12mm Lock Washers
1	Driver/left Mounting Bracket	10	12mm Nylon Lock Nuts
1	Passenger/right Mounting Bracket	6	10-1.5mm x 35mm Hex Bolts
2	Tow Hook Extension Brackets	4	10-1.5mm x 30mm Hex Bolts
4	Spacers (tow hooks)	12	10mm x 27mm x 3mm Flat Washers
1	Driver/left "L" Bracket (center LED light)	4	10mm x 20mm x 2mm Flat Washers
1	Passenger/right "L" Bracket (center LED light)	10	10mm Lock Washers
2	Small Outer Mesh Plates	6	10mm Hex Nuts
1	Long Center Mesh Plate	2	8mm x 25mm Hex Bolts
4	Sensor Holes Plugs	2	8mm x 16mm Hex Bolts
4	Sensor Retaining Caps	6	8mm x 24mm x 2mm Flat Washers
4	20mm x 10mm Foam Pads	4	8mm Lock Washers
4	15.5mm x 25mm x 2mm Sensor Seals	2	8mm Hex Nuts
4	Wire Harness Extensions	10	6mm x 20mm Button Head Combo Bolts
1	LED Wiring Harness Kit	2	6mm x 20mm Button Head Bolts
1	License Plate Bracket	4	6mm x 18mm x 1.6mm Flat Washers
2	Plastic Plugs for License Plate	10	6mm Flange Nuts
4	12mm x 40mm Double Bolt Plates	2	6mm Nylon Lock Nuts
2	12-1.75mm x 120mm Hex Bolts	10	Nylon Wire Ties
2	12-1.75mm x 45mm Hex Bolts	8	4mm Self Tapping Screws
14	12mm x 24mm x 2.5mm Flat Washers	1	4mm Hex Wrench



## 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. 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 to remove, **(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.
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. On **diesel models**, unplug the harness leading to the block heater plug in the bumper. **NOTE:** Main wiring harness connector is located up and behind the passenger/right side of the bumper. Release the clips attaching passenger/right fender liner and pull back 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 brackets, **(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 bumper brackets and tow hooks, if equipped, from the end of the frame, **(Figure 11)**.
10. Select the driver/left Frame Mounting Bracket, **(Figure 12)**. Reuse the (3) factory bumper bracket hex bolts to attach the Bracket to the end of the frame, **(Figures 12 & 14)**. Do not fully tighten hardware. Repeat this **Step** to attach the passenger/right Frame Mounting Bracket.
11. Determine if vehicle is equipped with tow hooks.  
**Models without tow hooks, skip ahead to Step 12.**  
**Models with tow hooks:**
  - a. Models with tow hooks, select (1) Tow Hook Extension Bracket and (2) Double Bolt Plates, **(Figure 13)**. Slide the Bracket over the end of the frame. Line up the slots in the Bracket with the factory tow hook mounting holes.
  - b. Insert the Bolt Plates into the open end of the frame and out through the holes in the side and Bracket. Secure the Bracket to the Bolt Plates with (4) 12mm Flat Washers and (4) 12mm Nylon Lock Nuts, **(Figures 13 & 14)**. Do not fully tighten at this time.
  - c. 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. **(Figure 15)**. Insert (1) 12mm x 120mm Hex Bolt, (2) 12mm Flat Washers and (1) 12mm Nylon Lock Nut through the Bracket, Spacers and tow hook. Insert (1) 12mm x 45mm Hex Bolt, (1) 12mm Lock Washer and (1) 12mm Flat Washer through the Bracket, Spacer and into the tow hook. **(Figures 16 & 17)**. Fully tighten tow hook and Extension Bracket hardware only. Do not tighten Frame Bracket hardware at this time.
  - d. Repeat previous **Steps** to install the remaining Extension Bracket and tow hook.
12. Reinstall the plastic grille, plug in camera if equipped and reinstall the top cover removed in **Step 1**. Reinstall the plastic fascia body panel, **(Figure 18)**. Reattach the fender liners.
13. Carefully unwrap the Bumper assembly. Pull outward to unfold the passenger/right outer wing until fully extended, **(Figure 19)**. Anchor the Wing to the back of the Bumper with the included (2) 10mm x 30mm Hex Bolts, (2) 10mm Lock Washers and (2) 10mm x 20mm Small Flat Washers, **(Figure 20)**.

Leave hardware loose at this time. Repeat this **Step** to unfold and attach the remaining Wing to the Bumper. **IMPORTANT:** There is a small amount of adjustment in the Wings that can increase or decrease the final width of the Bumper. Loosen the (2) pivot bolts and the (2) anchor bolts and pull each Wing outward as far as possible to start, (**Figure 20**). Snug but do not fully tighten at this time.

14. Determine if accessory lights, (not included), or Screen Fill Panels will be installed at this time. **NOTE:** It may be easier to install Center Fill Panels and/or lights before installing Bumper.

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

- a. Select desired long center or small outer Screen Fill Panels, (**Figure 21**).
- b. Attach Screen Fill Panels as needed with the included 6mm Button Head Combo Bolts and 6mm Flange Nuts, (**Figure 21**). Fully tighten Fill Panel hardware at this time. Repeat to install all Panels as desired.

**Inner center LED bar style light installation** (light not included).

- a. Select the driver/left "L" Light Bar Bracket, (**Figure 22**). **NOTE:** "L" Brackets are offset to adjust for different widths of LED Bar Lights and can be installed on either side as needed.
- b. Attach the "L" Bracket to the slot on the back of the Bumper with (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut, (**Figure 22**). Repeat this **Step** to install the remaining "L" Bracket on the other side of the Bumper. **IMPORTANT:** The Bumper features slots designed for most 20" and 30" bar style lights. Attach the Brackets to the correct slots in the Bumper. If necessary, hold the light up to the slots to help determine correct slots.
- c. Attach the light to the "L" Brackets with the hardware included with the light or the supplied (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers, (**Figure 22**). Do not fully tighten hardware at this time.

15. Determine if vehicle is equipped with parking sensors. **NOTE:** Sensors and wiring harness must be installed in Bumper before installing Bumper Assembly.

**Models without bumper sensors:**

- a. From the front of the bumper, push the included Plastic Plugs into sensor mounting holes, (**Figure 23**).

**Models with bumper mounted sensors:**

- a. Remove the sensors and wiring harness from the factory bumper.
- b. Select the driver/left outer sensor. Remove the factory sealing washer from the sensor. Attach the provided Foam Sealing Washer to the front of the sensor, (**Figure 24**).
- c. 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 25**).
- d. Repeat the previous **Steps** for the remaining sensors.
- e. Attach factory wiring harness to Bumper and plug into sensors. **IMPORTANT:** (4) Harness Extensions have been included to extend the ends of the factory harness to the sensors. Use as necessary.

16. With assistance, position the Bumper Assembly up to the frame. 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.
17. Line up the (3) slots in the driver/left side mounting plate on the back of the Bumper with the (3) slots in the Frame Mounting Bracket. Attach the Bumper to the Bracket with the included (3) 10mm x 35mm Hex Bolts, (6) 10mm x 27mm Large Flat Washers, (3) 10mm Lock Washers and (3) 10mm Hex Nuts, (**Figures 26 & 27**). Repeat this **Step** to attach the passenger/right side of the Bumper to the Bracket.
18. Plug the Bumper wiring harness into the main vehicle harness.
19. Level and adjust the Bumper and fully tighten all hardware. **IMPORTANT:** Adjust wings on Bumper as needed and fully tighten all wing pivot and mounting hardware. If necessary, temporarily remove Bumper to fully tighten inner 10mm wing anchor hardware.
20. 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. 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 28).

21. 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.

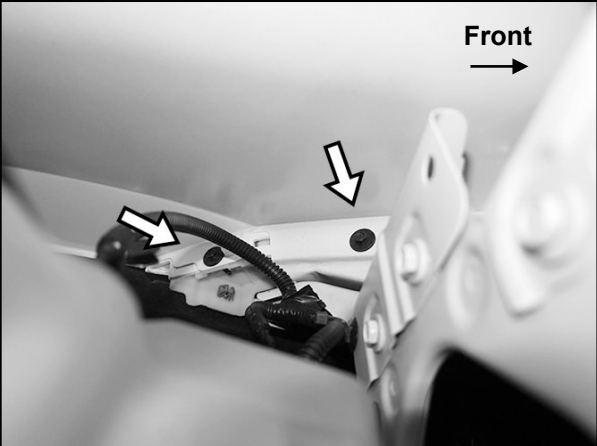
**Driver/left Side Installation Pictured**



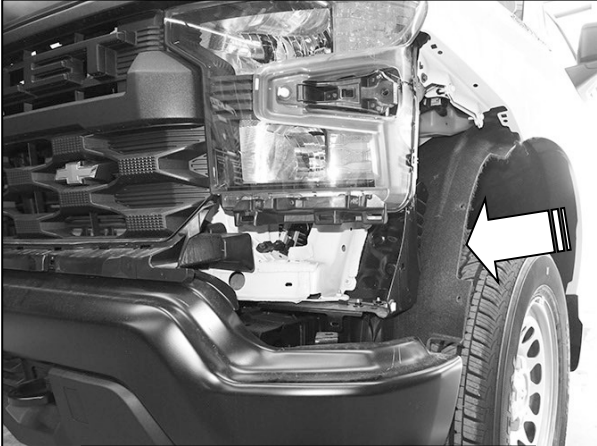
(Fig 1) Remove screws attaching driver/left fender liner to fascia body panel



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

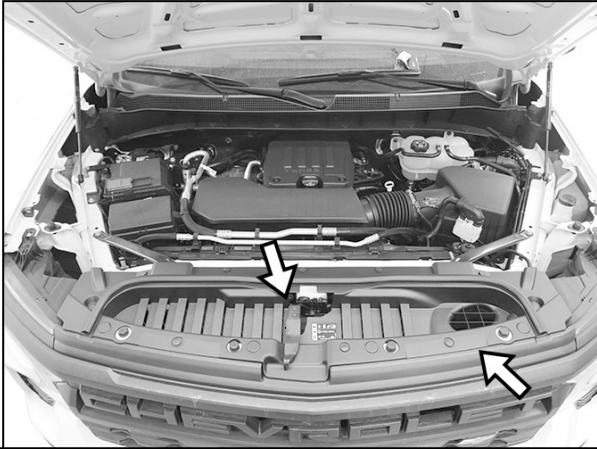


(Fig 3) Remove screws behind headlight attaching driver/left front end of fender to fascia body panel (arrows)



(Fig 4) Remove fascia body panel

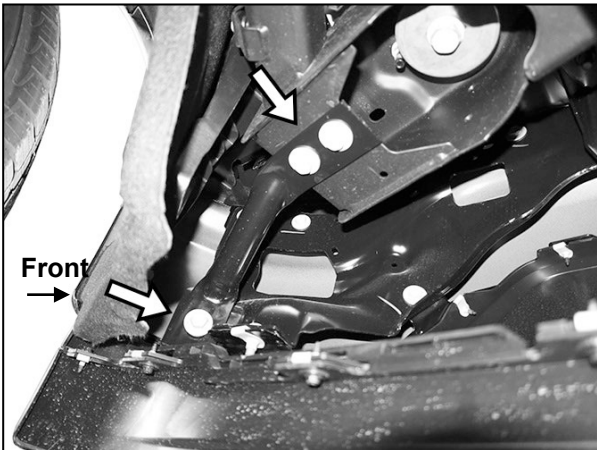
**Driver/left Side Installation Pictured**



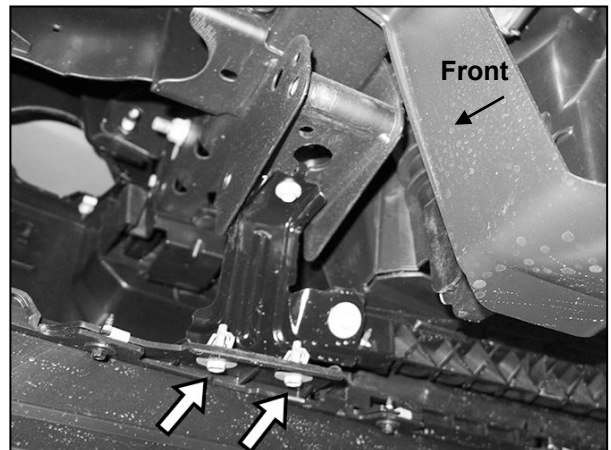
**(Fig 5) Remove hood release handle and cover**



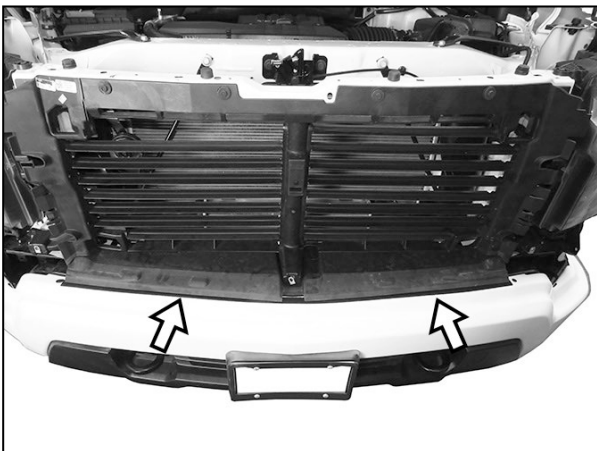
**(Fig 6) Remove hardware attaching top and bottom of grille. Firmly pull grille straight out from vehicle**



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

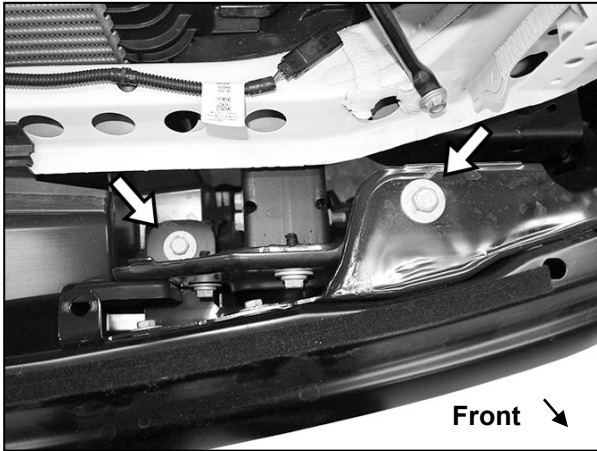


**(Fig 8) Remove bolts attaching bottom of bumper to brackets (arrows). Driver/left side pictured**



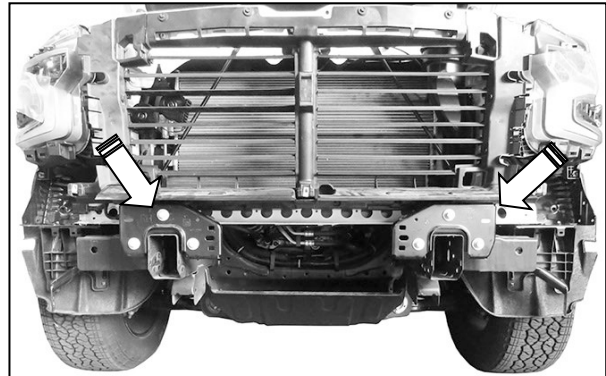
**(Fig 9) Remove cover from top of bumper (arrows)**

### Driver/left Side Installation Pictured

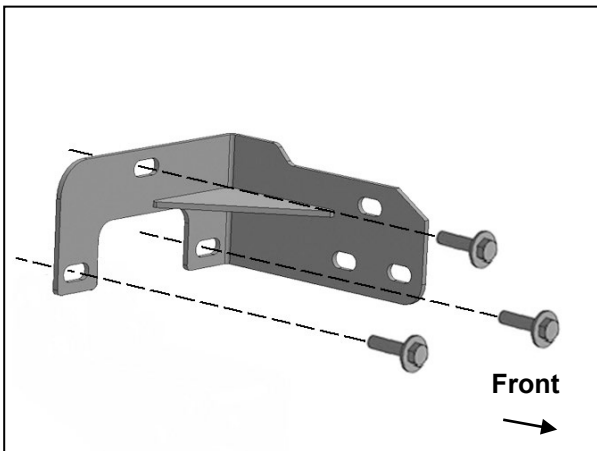


(Fig 10) From above the bumper, remove driver/left top bumper bolts (arrows)

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

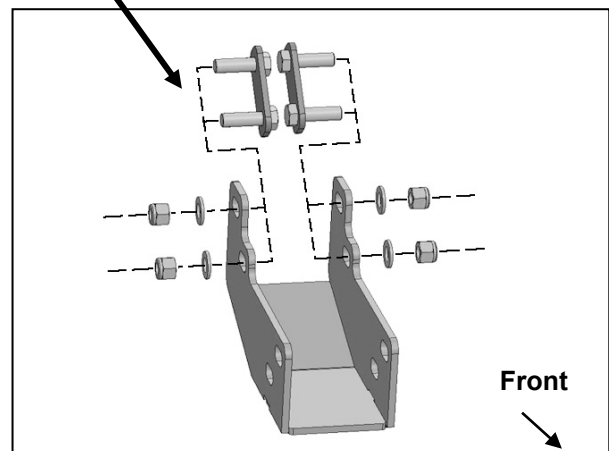


(Fig 11) Remove Bumper. Remove factory bumper brackets (arrows) and tow hooks if equipped



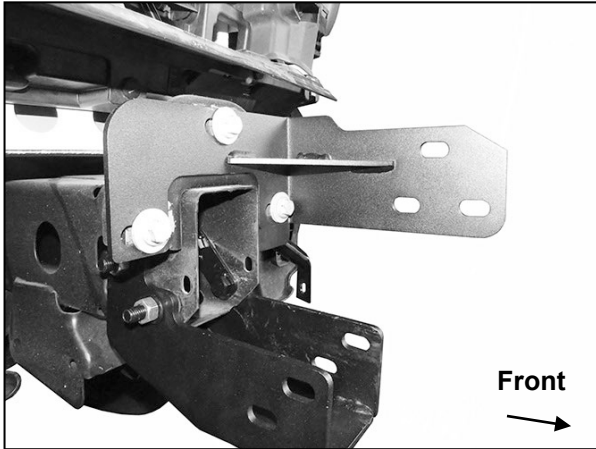
(Fig 12) Reuse the bumper bracket hardware to attach the Mounting Bracket to the end of the frame

- (2) Double Bolt Plates
- (4) 12mm Flat Washers
- (4) 12mm Nylon Lock Nuts



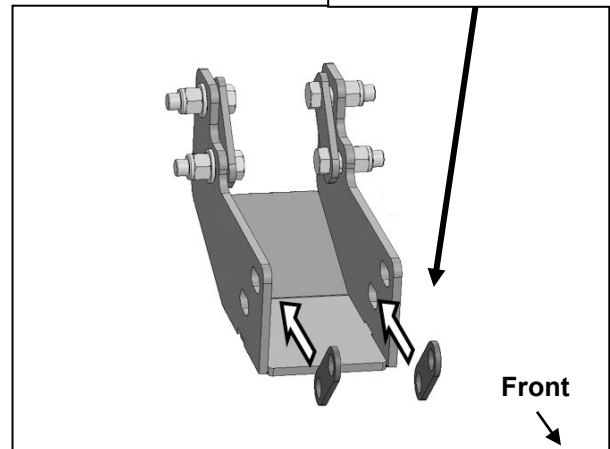
(Fig 13) Attach Tow Hook Extension Bracket to bottom of frame

### Driver/left Side Installation Pictured



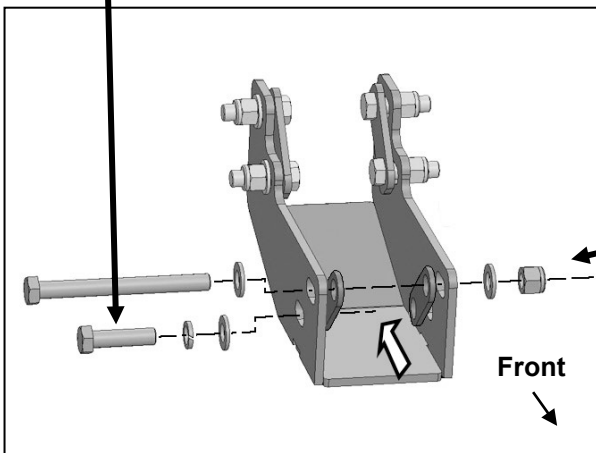
(Fig 14) Driver/left side Frame Mounting Bracket and Tow Hook Relocation Bracket

Insert Spacers  
between sides of tow  
hook and Bracket



(Fig 15) Slide Spacers between tow hook and inside of Tow Hook Extension Bracket

12mm x 45mm Hex Bolt  
12mm Lock Washer  
12mm Flat Washer



(Fig 16) Attach tow hook to Extension Bracket and Spacers

12mm x 120mm Hex Bolt  
(2) 12mm Flat Washers  
12mm Nylon Lock Nut



(Fig 17) Passenger/right side tow hook attached to Extension Bracket

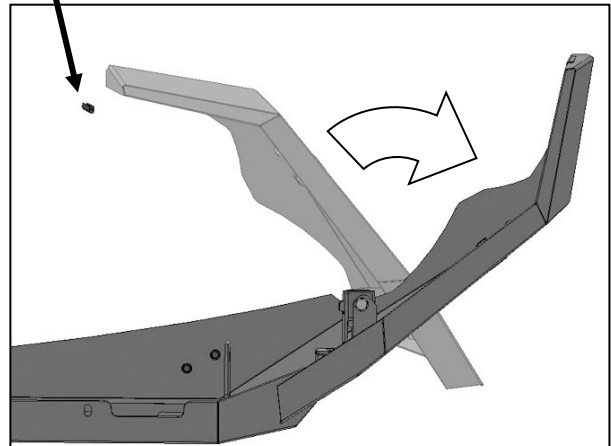
### Driver/left Side Installation Pictured



(Fig 18) Reinstall fascia body panel, grille and cover. Reattach inner fender liners

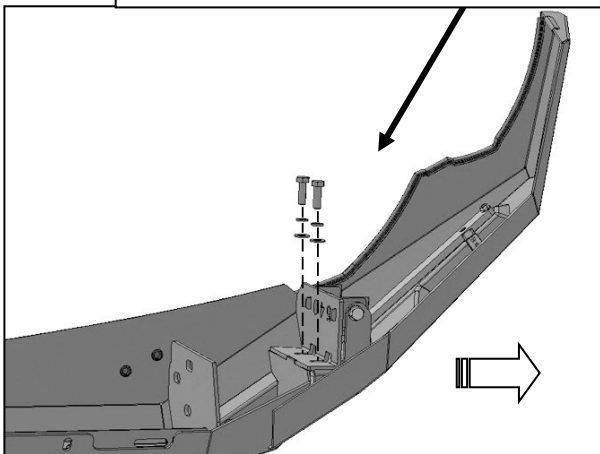
**WARNING!** Do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.

Remove rubber packing strips from bumper wings



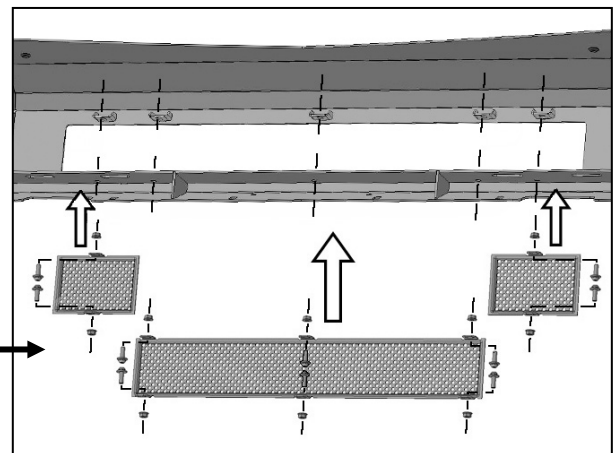
(Fig 19) Unfold outer Wings from center Bumper. Passenger/right side illustrated from below

- (2) 10mm x 30mm Hex Bolts
- (2) 10mm Lock Washers
- (2) 10mm x 20mm Small Flat Washers



(Fig 20) Anchor outer Wings to back of center Bumper. Loosen hardware and pull Wing outward to widen overall Bumper

- (10) 6mm Combo Bolts
- (10) 6mm Flange Nuts



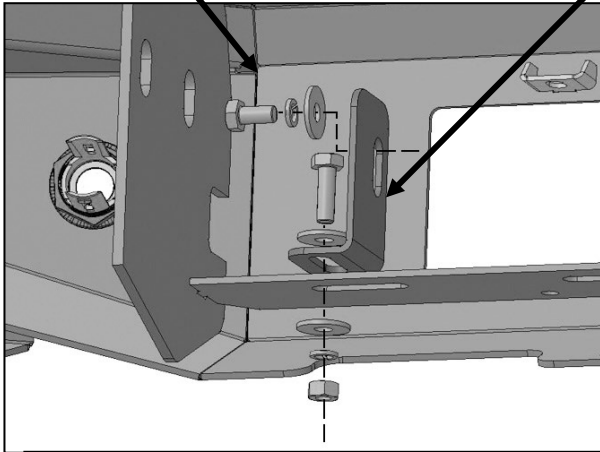
(Fig 21) Attach Inner and Center Mesh Plates to tabs on the back of the bumper as desired

### Driver/left Side Installation Pictured

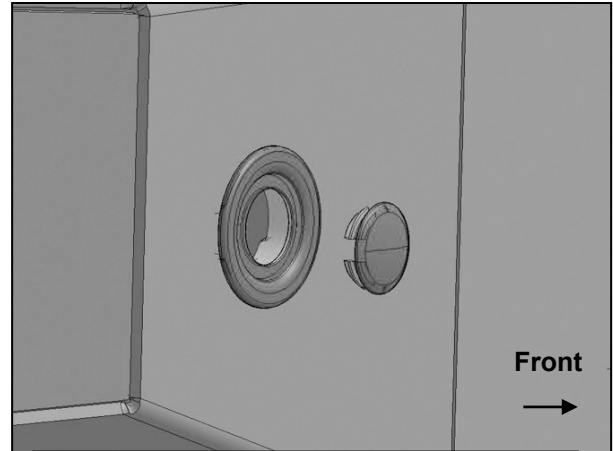


8mm x 16mm Hex Bolt  
8mm Lock Washer  
8mm Flat Washer

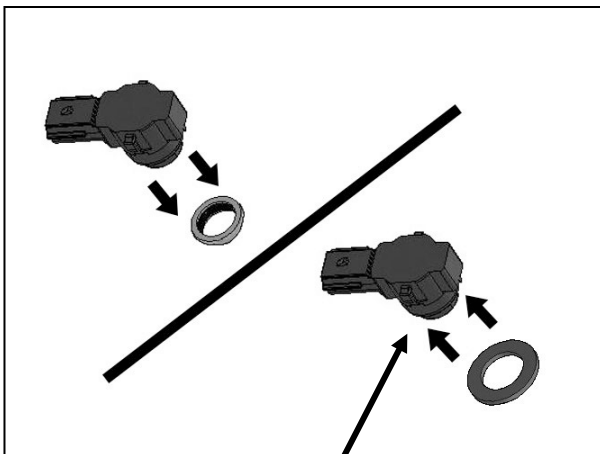
8mm x 25mm Hex Bolt  
(2) 8mm Flat Washers  
8mm Lock Washer  
8mm Hex Nut



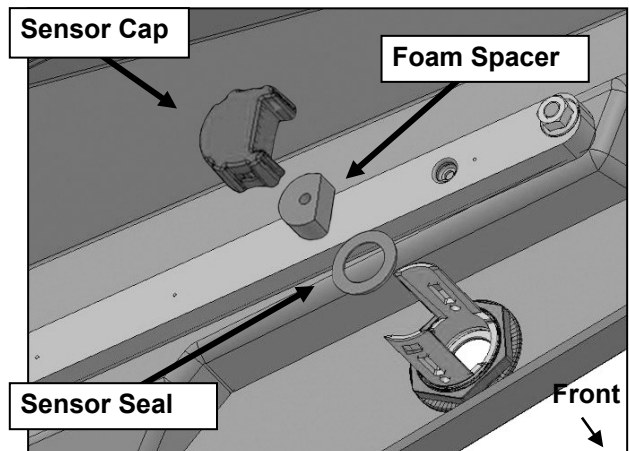
(Fig 22) Passenger/right side "L" Bracket attached to the back of the Bumper. NOTE: Attach the "L" Bracket to the proper slot for the length of LED light



(Fig 23) Models without sensors, push Plastic Plugs into the sensor mounts

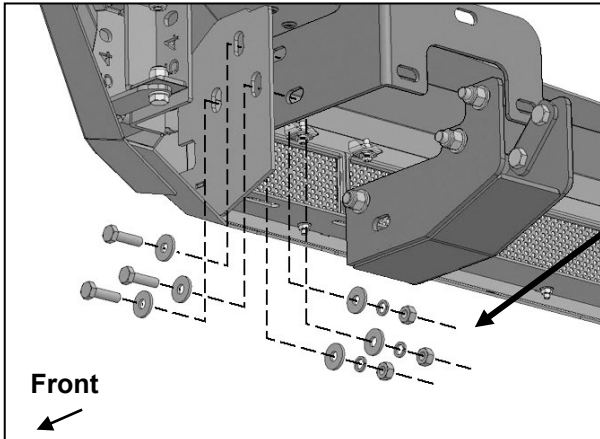


(Fig 24) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)



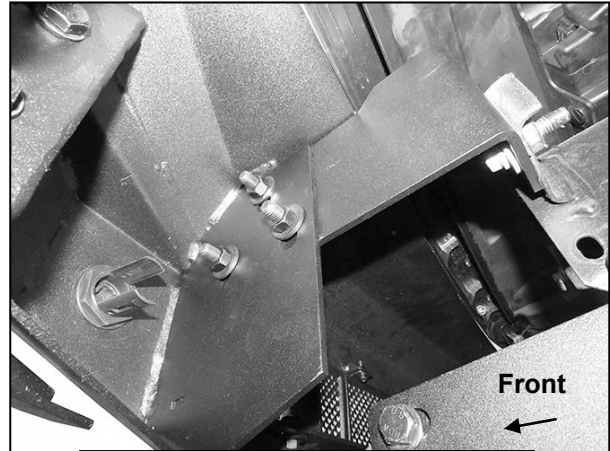
(Fig 25) Slide sensor into mount, insert Foam Spacer and snap Cap on to lock sensor in place

### Driver/left Side Installation Pictured

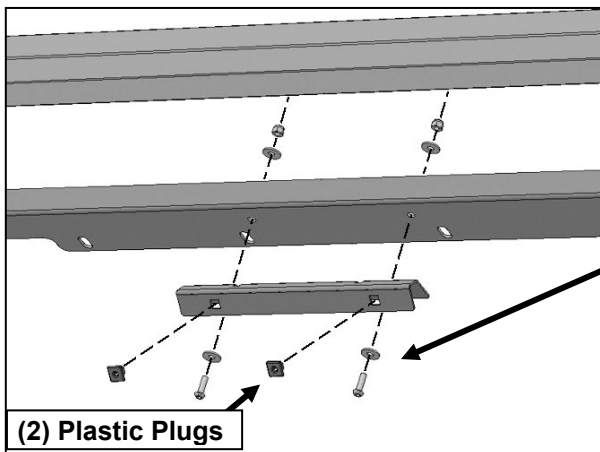


- (3) 10mm x 35mm Hex Bolts
- (6) 10mm x 27mm Large Flat Washers
- (3) 10mm Lock Washers
- (3) 10mm Hex Nuts

(Fig 26) Attach the Bumper to Frame Bracket



(Fig 27) Driver/left side of Bumper attached to Bracket



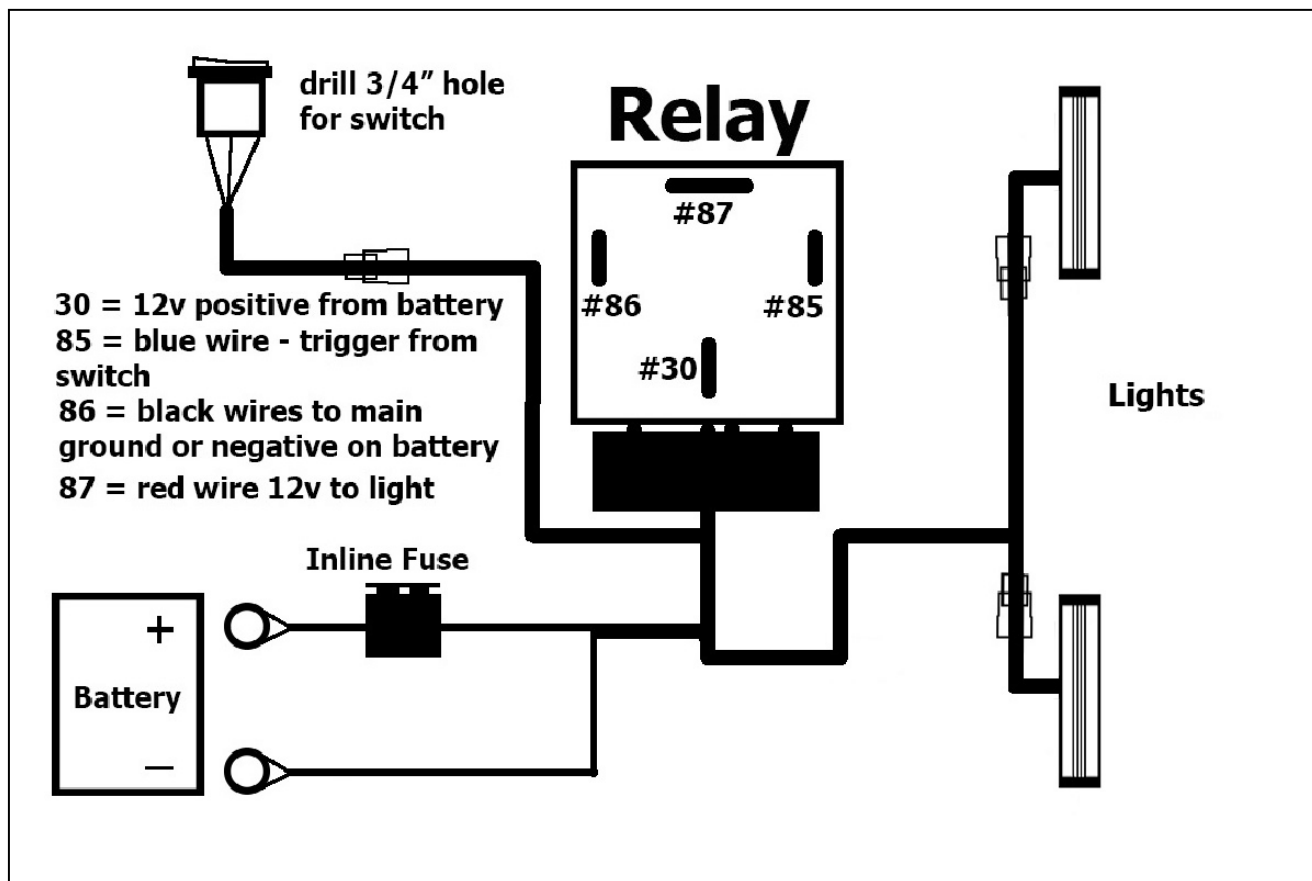
- (2) 6mm x 20mm Button Head Bolts
- (4) 6mm Flat Washers
- (2) 6mm Nylon Lock Nuts

(2) Plastic Plugs

(Fig 28) Attach License Plate Bracket to Bumper



Complete Installation (Bull Nose hoop light mount not included)



#### GENERAL LIGHT WIRING PROCEDURE:

1. REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY. DRILLING IS REQUIRED. ELECTRICAL KNOWLEDGE IS HIGHLY RECOMMENDED.
2. Open hood and disconnect battery.
3. Unwrap preassembled wiring harness. Disconnect the plug in the harness leading to the lighted switch. Locate suitable mounting location for switch. Drill 3/4" hole in panel to mount switch.  
**IMPORTANT:** Do not drill any holes in panel until back of location is properly checked for clearance. Use of safety goggles is required.
4. Run switch harness through firewall on vehicle. Drill hole through firewall as required for harness plug. Highly recommend use of rubber grommet (not included) to protect harness. Feed switch harness plug through hole in firewall. Seal firewall with silicone as necessary.
5. Attach Relay and main harness to suitable location near battery (firewall or inner fender for example). Do not connect to battery at this time.
6. Attach switch plug to switch harness and tie harness away from anything that could damage harness.
7. Run the prewired light harness down to each light. Plug harness into prewired plug on each light. Tie wiring harness away from anything that could damage harness.
8. Attach the fused red positive and black negative wires on the main harness to the battery.  
**NOTE:** Attach black negative wire to negative terminal on battery or suitable chassis ground.
9. Reattach battery cables to battery. Installation is complete.
10. Do periodic inspections of the installation to make sure that all hardware is secure and tight and all wiring harnesses are properly secured and free from excessive movement.