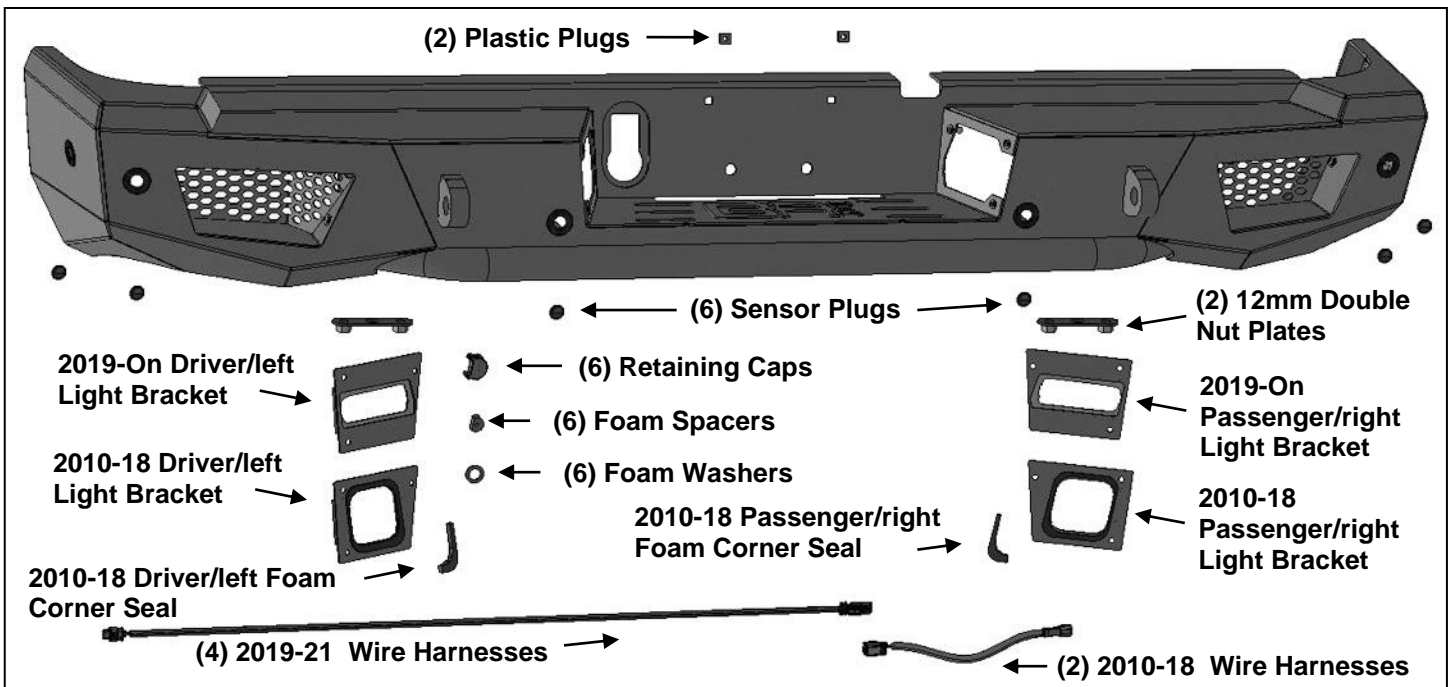


## Ambush Rear Bumper for 2010-2021 Ram 2500/3500HD PART #DG-3163

### PARTS LIST:

1	Ambush Rear Bumper Assembly	12	12mm x 37mm x 3mm Flat Washers
1	Driver/Left 2019+ Lic. Light Bracket	4	12mm Lock Washers
1	Passenger/Right 2019+ Lic. Light Bracket	4	12mm Nylon Lock Nuts
1	Driver/Left 2010-18 Lic. Light Bracket	4	8-1.25mm x 40mm Hex Bolts
1	Passenger/Right 2010-18 Lic. Light Bracket	4	8mm x 36mm x 2.5mm Flat Washers
1	Driver/Left 2010-18 Adhesive Foam Seal	4	8mm Lock Washers
1	Passenger/Right 2010-18 Adhesive Foam Seal	6	6-1.00mm x 20mm Button Head Combo Bolts
6	Sensor Retaining Caps	2	6mm x 15mm Self Tapping Screws
6	20mm x 10mm Foam Spacers	2	4mm x 10mm Button Head Bolts
6	15.5mm x 25mm x 2mm Foam Washers	4	4mm x 12mm x 1mm Flat Washers
6	Sensor Hole Plugs	2	4mm Lock Washers
2	Harnesses Extensions (2010-18)	2	4mm Hex Nuts
4	Harnesses Extensions (2019-21)	12	4mm x 15mm Self Tapping Screws
1	Sensor Cover Kit	1	4mm Wrench
2	Plastic Plugs for license plate mount	1	2.5mm Wrench
2	12mm Double Nut Plates	10	Nylon Wire Ties
8	12-1.75mm x 35mm Hex Bolts		



### PROCEDURE:

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

1. Start installation by unplugging all wiring harnesses leading to the bumper, (Figure 1). Move the wiring harnesses away from the bumper. Remove the license plate. Remove the (2) hex bolts located behind

the plate attaching the center of the bumper to the receiver hitch, if equipped.

2. Place blocks or jack stands under the bumper to support it during bumper bolt removal. Once the bumper has been safely supported, remove the factory bumper bolts and slide the rear bumper off of the end of the frame, **(Figures 2—5)**. Models equipped with support plates on end of frame, remove plates, **(Figure 4)**. **WARNING!** Assistance is required to hold the bumper in place during hardware removal and to prevent the bumper from falling. Move the bumper to a clean stable work surface.
3. Remove all sensors as equipped, wiring harness and outer tow harness plug from the factory bumper, **(Figure 6)**. Label sensors with location for reinstallation. Move factory wiring harness to the Ambush Bumper.
4. Determine if the vehicle is equipped with sensors.

#### **Models without bumper sensors:**

- a. From the front of the Bumper, push the included Plastic Plugs into sensor mounts, **(Figure 7)**.

#### **Models with bumper mounted parking sensors (NOTE) Models with (4) sensors, use included Plastic Plugs to fill unused outer sensor holes:**

- a. Select the outer sensor, **(Figure 8)**.
- b. Remove the silicone seal from the end of the sensor. Slide the larger Foam Sensor Seal over front of sensor, **(Figure 9)**.
- c. Insert sensor with Seal into sensor mount, **(Figure 10)**. Place (1) Foam Spacer onto the end of the sensor.
- d. Push Sensor Retaining Cap into sensor mount and lock into mounting holes, **(Figure 10)**.
- e. Repeat previous Steps to install remaining sensors.
- f. Plug factory wiring harness into sensors. **NOTE:** Use the included Wiring Harness Extensions as necessary to extend the reach of the harness to the sensors. **IMPORTANT:** kit includes **(2) 2009-18 1500 harnesses and (4) 2019-21 25-3500 harnesses**, use correct harness as needed.

#### **Models with TPMS (tire pressure monitoring system).**

- a. Remove the sensor from the back of the bumper, **(Figure 11)**. **NOTE:** It may be necessary to partially disassemble the factory bumper to remove the sensor.
  - b. Attach the sensor to tabs on back of bumper with included (2) 4mm Button Head Screws, (4) 4mm Flat Washers, (2) 4mm Lock Washers and (2) 4mm Hex Nuts, **(Figure 12)**. Do Not Overtighten 4mm hardware or damage to sensor could result.
  - c. Once installed, plug wiring harness into TPMS sensor.
5. Remove screens from light housings for more room around lights as needed, **(Figure 131)**. **NOTE:** Lights available separately.
  6. Remove the factory license plate lights from the OE bumper. Determine correct procedure for your model/year:

#### **2010-18 models with square license plate lights.**

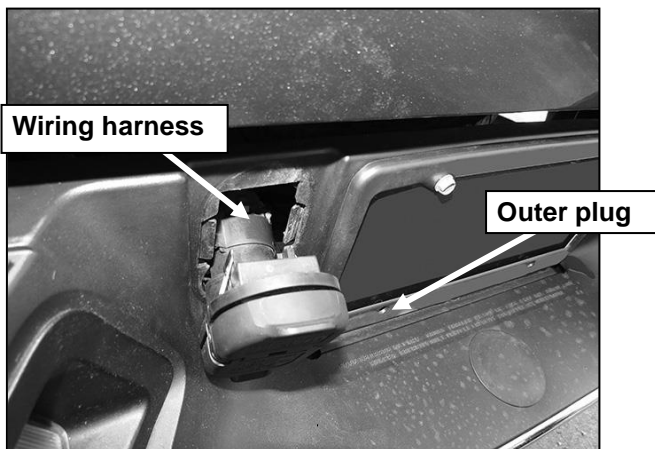
- a. Select the driver/left Foam Filler Seal. Remove the backing and apply the Filler Seal to the back of the bottom inner corner of the license plate light, **(Figure 14)**.
- b. Insert the light into the Bracket. Reuse the factory metal clip to attach the light to the Bracket, **(Figure 15)**.
- c. Attach the Bracket and light assembly to the opening in the driver/left side of the Bumper with the included (3) 6mm Button Head Combo Bolts, **(Figure 16)**.
- d. Repeat the previous **Steps** to attach the passenger/right license plate light and Bracket.
- e. Plug wiring harness into license plate lights.

#### **2019-21 models with rectangular license plate lights.**

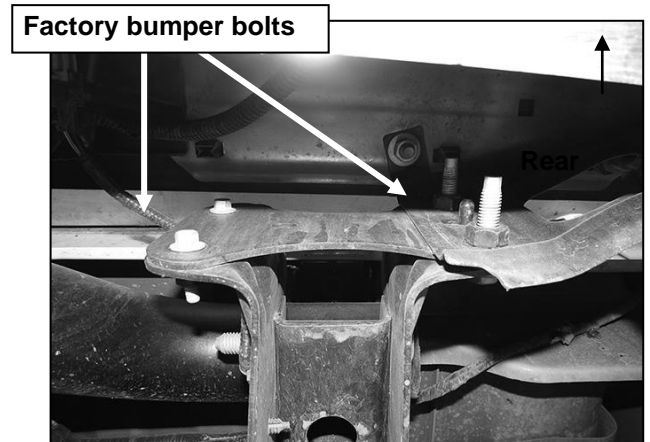
- a. Insert the driver/left license plate light through the Bracket, **(Figure 17)**.
- b. Attach the driver/left 2019-21 Bracket and light to the opening in the driver/left side of the Bumper with the included (3) 6mm Button Head Combo Bolts, **(Figure 18)**.
- c. Reuse the factory bolt to attach the inner mount on the light to the tab on the back of the Bumper, **(Figures 17 & 19)**.

- d. Repeat the previous **Steps** to attach the passenger/right license plate light.
  - e. Plug wiring harness into lights.
  - 7. With assistance, position the Bumper Assembly up to the bumper brackets on the end of the frame. Temporarily support the weight of the Bumper Assembly. **WARNING:** To avoid possible injury or damage to the vehicle, do not proceed until the Bumper is fully and safely supported.
  - 8. Line up the (2) outer holes in the passenger/right frame mounting bracket with the (2) holes in the plate on the back of the Bumper. Attach the Bumper to the frame bracket with (1) 12mm Double Nut Plate, (2) 12mm Hex Bolts, (2) 12mm Lock Washers and (2) 12mm Flat Washers, (**Figure 20**). Leave hardware loose at this time. Repeat to attach the driver/left side of the Bumper to the frame bracket.
  - 9. Line up the (2) inner holes on the passenger/right frame bracket, (if equipped), with the mounting plate on the Bumper. Select the correct installation. **NOTE:** Depending on model year, the frame bracket may be equipped with outer mounting holes only. Adjust installation accordingly, (**Figures 2—5**).
- Models with open holes in frame bracket:**
- a. Use (2) 12mm x 35mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts to attach the passenger/right side of the Bumper to the frame bracket, (**Figure 21 & 23**). Repeat this **Step** to attach the driver/left side of the Bumper to the frame bracket. Leave hardware loose.
- Models with 8mm hex nuts welded onto the back of the frame bracket:**
- a. Use (2) 8mm x 40mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers to attach the passenger/right side of the Bumper to the frame bracket, (**Figures 22 & 23**). Repeat this **Step** to attach the driver/left side of the Bumper to the frame bracket. Do not fully tighten hardware.
- 10. Slowly open the tailgate and check for clearance. Level and adjust the Bumper and fully tighten all hardware.
  - 11. Snap the plug for the trailer harness into the opening in the HD Bumper. If necessary, use a flat blade screwdriver to carefully pry the metal clips out to grab the edge of the openings in the Bumper. Reattach the wiring harness to the back of the plug.
  - 12. Select the included (2) push-in Plastic Plugs. Push the Plugs into the square holes in the Bumper. Use the included (2) 6mm Self Tapping Screws to attach the license plate to the Bumper, (**Figure 24**).
  - 13. Use the included Wire Ties to secure the wiring harnesses to the bumper and frame.
  - 14. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

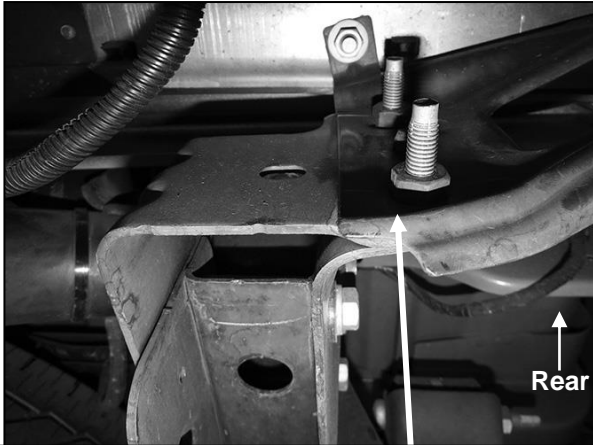
**To protect your investment,** Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the Ambush Bumper assembly.



(Fig 1) Unplug harness from back of trailer connector then remove outer plug

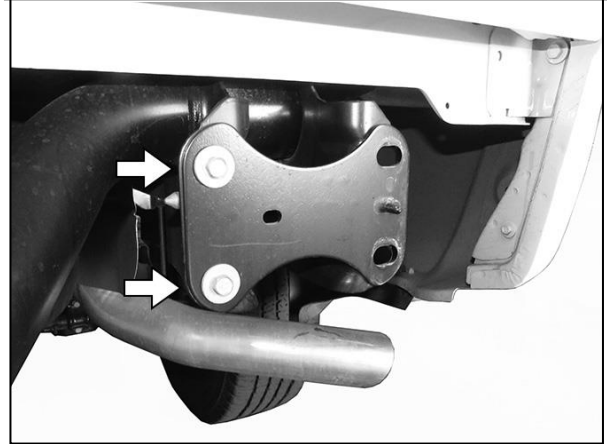


(Fig 2) Example of factory bumper bracket with 8mm hex nuts (left) welded onto back of bracket



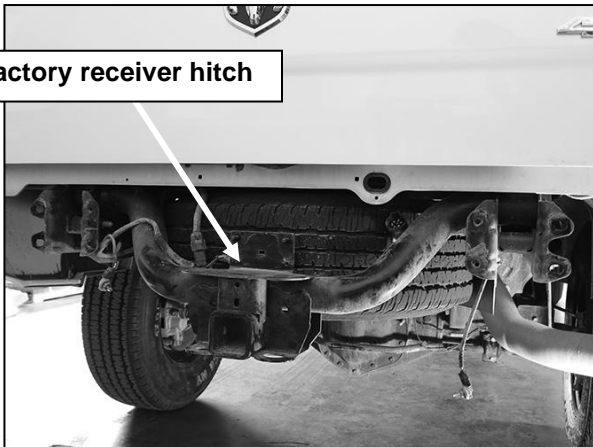
(Fig 3) Example of factory bumper bracket with (2) hex bolts only (right) pictured from below bumper

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

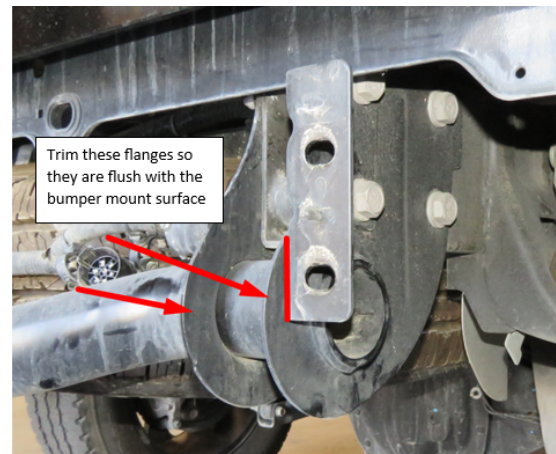


(Fig 4) Models with bracket reinforcement plate (arrows), remove plate from end of frame

Factory receiver hitch

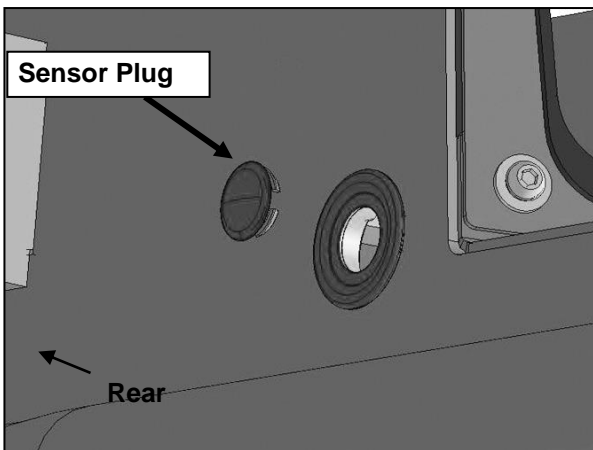


(Fig 5) Bumper completely removed

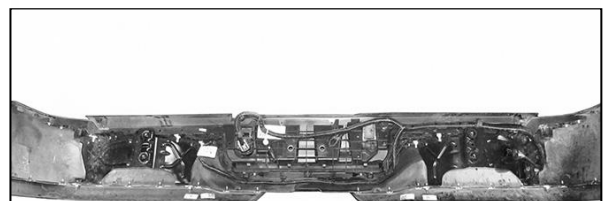


(Fig 5A) 2022+ Ram 3500 Models will require modification to hitch. Trimming must be made on ears of hitch (does not effect functionality and safety of hitch).

Sensor Plug



(Fig 7) Push sensor plug into mount



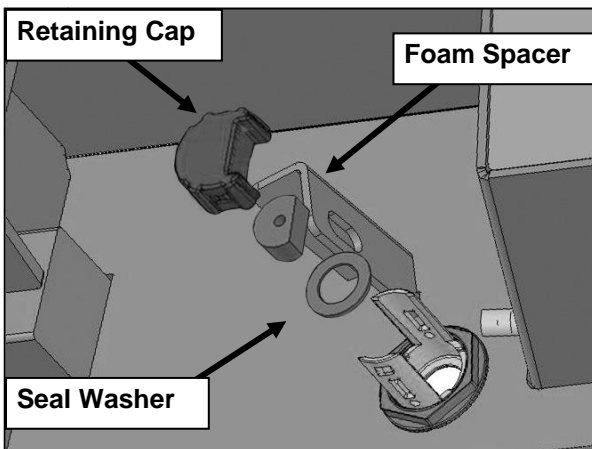
(Fig 6) Disassemble bumper to remove license plate lights, wiring harness and all sensors as equipped.



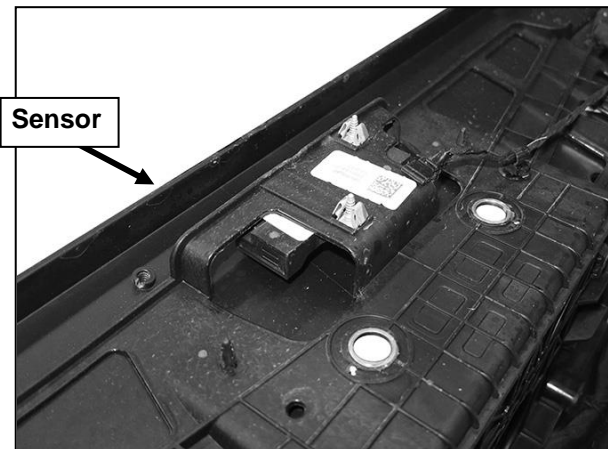
(Fig 8) Unplug the sensor first then remove the sensor from the mounting sleeve



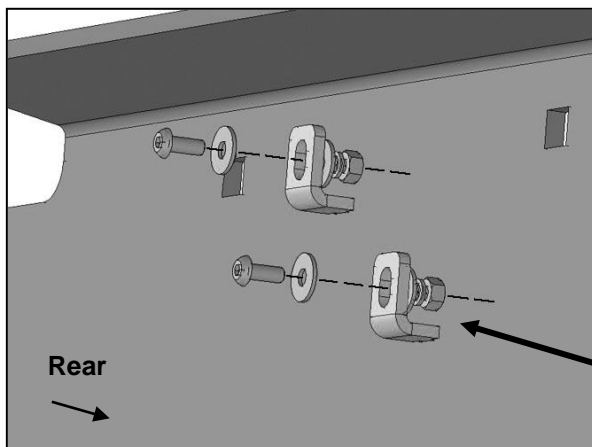
(Fig 9) Remove the seal from the end of the sensor. Install larger Foam Washer (Fig 10)



(Fig 10) Push sensor into sensor mount on the back of the Bumper

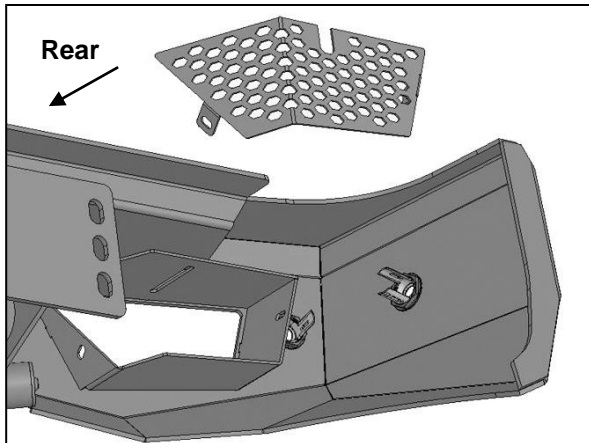


(Fig 11) Remove tire pressure monitoring sensor (TPMS) from back of bumper, if equipped

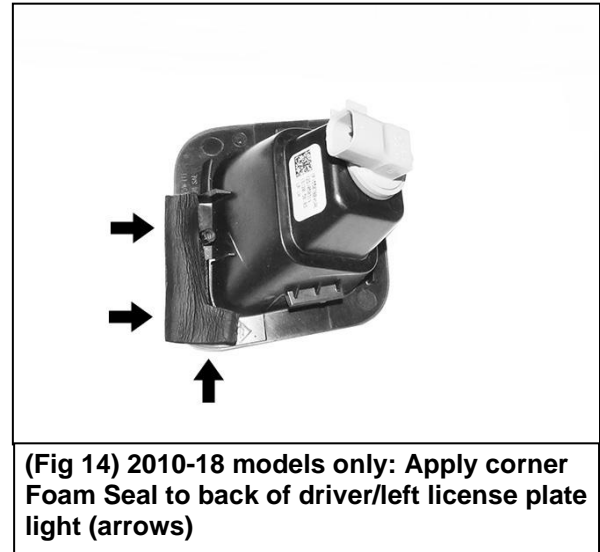


(Fig 12) Attach tire pressure monitoring sensor, if equipped, to tabs on back of bumper

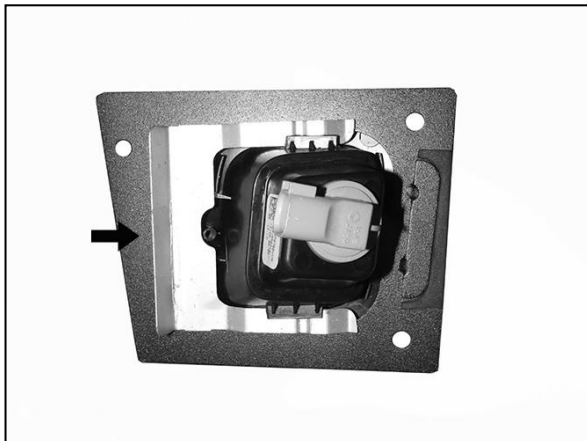
- (2) 4mm Button Head Bolts
- (4) 4mm Flat Washers
- (2) 4mm Lock Washers
- (2) 4mm Hex Nuts



(Fig 13) Remove screens as necessary for additional clearance around or access to lights



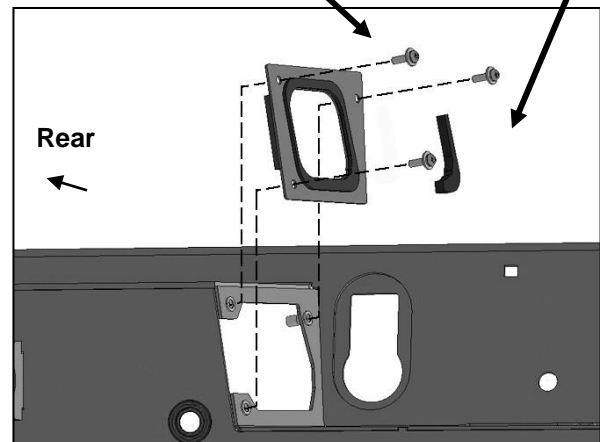
(Fig 14) 2010-18 models only: Apply corner Foam Seal to back of driver/left license plate light (arrows)



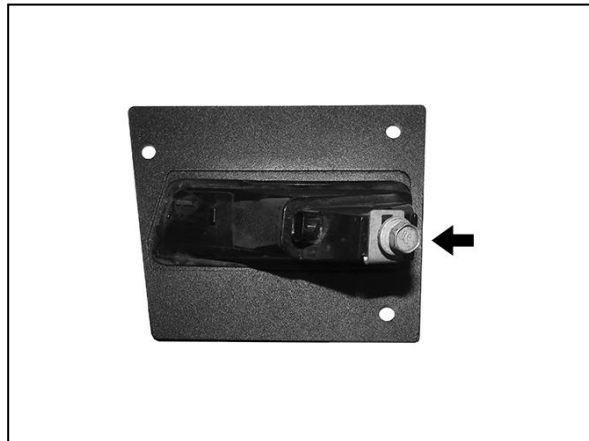
(Fig 15) 2010-18 models only: Insert driver/left license plate light into Bracket. Reuse OE clip to attach light to Bracket (arrow)

(3) 6mm x 20mm Button Head Combo Bolts

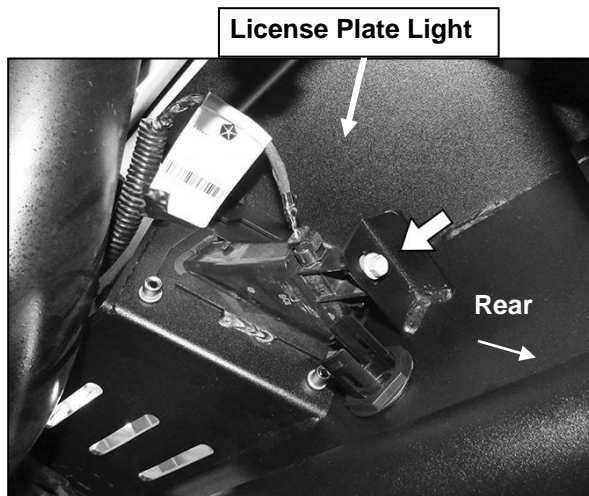
Foam Corner Seal



(Fig 16) 2010-18 models only: Attach Bracket with light to Bumper. NOTE: Apply Foam Corner Seal between back of license plate light and Bracket



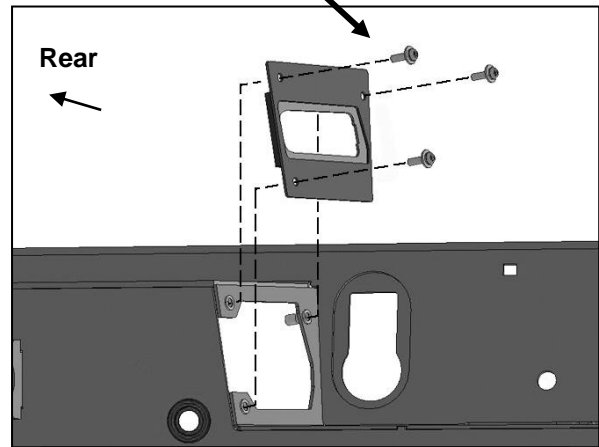
(Fig 17) 2019-On models only: Insert driver/left side light through Bracket. Reuse factory hex bolt (arrow) to attach light to tab on back of Bumper (Figure 19)



(Fig 19) 2019-On models only: Insert driver/left side light through Bracket. Reuse factory hex bolt (arrow) to attach light to tab on back of Bumper (Figure 17)

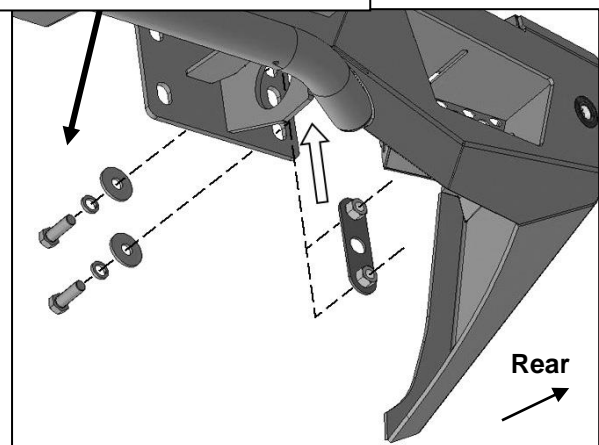
**WARNING!** Do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.

(3) 6mm x 20mm Button Head Combo Bolts

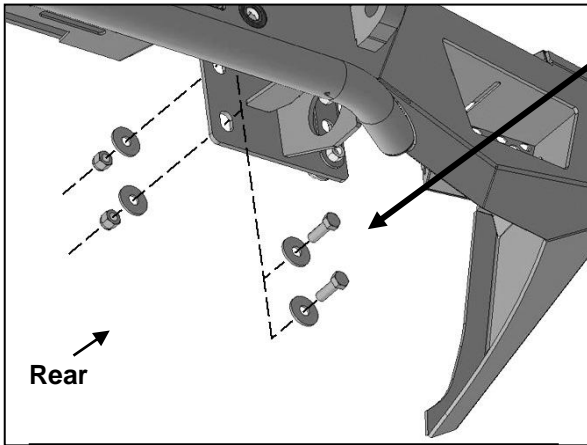


(Fig 18) 2019-On models only: Attach driver/left Bracket with light to Bumper

Outer mounting hardware  
 (2) 12mm x 35mm Hex Bolts  
 (2) 12mm Lock Washers  
 (2) 12mm Flat Washers  
 12mm Double Nut Plate

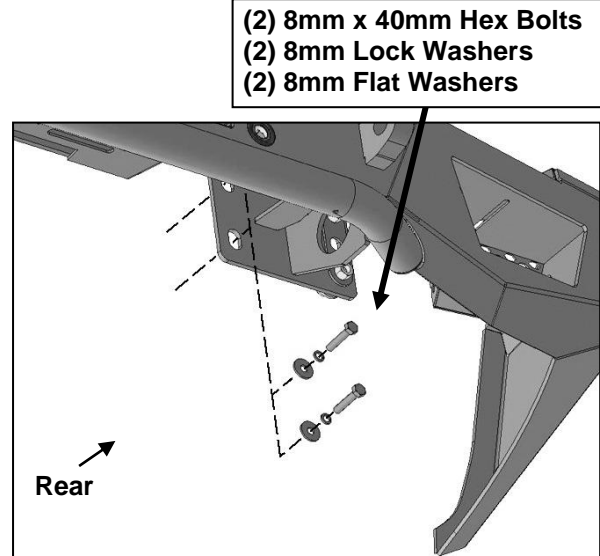


(Fig 20) Attach passenger/right side of Bumper to outer holes in end of frame



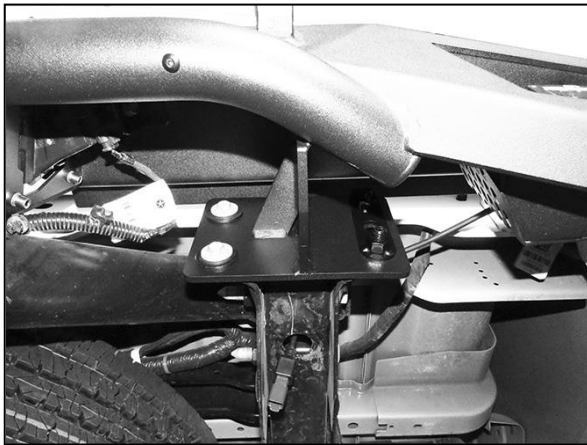
- (2) 12mm x 35mm Hex Bolts
- (4) 12mm Flat Washers
- (2) 12mm Nylon Lock Nuts

(Fig 21) Attach passenger/right side of Bumper to inner holes if equipped

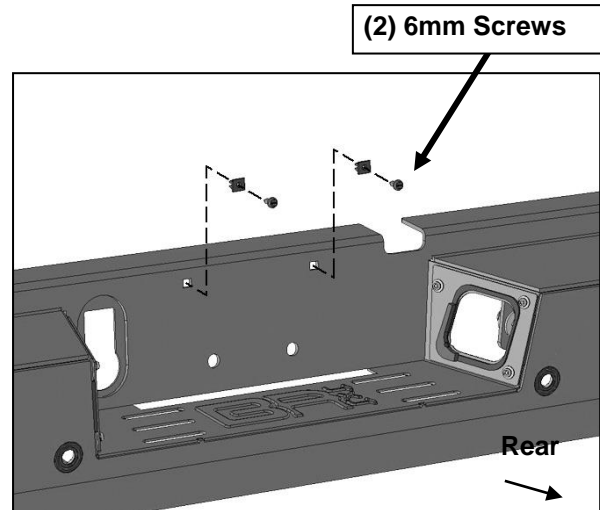


- (2) 8mm x 40mm Hex Bolts
- (2) 8mm Lock Washers
- (2) 8mm Flat Washers

(Fig 22) Attach passenger/right side of Bumper to inner threaded holes if equipped as also pictured in Figures 4 & 23



(Fig 23) Passenger/right side of Bumper



- (2) 6mm Screws

(Fig 24) Push Plastic Plugs into square holes for license plate



Complete Installation  
(Lights not included)