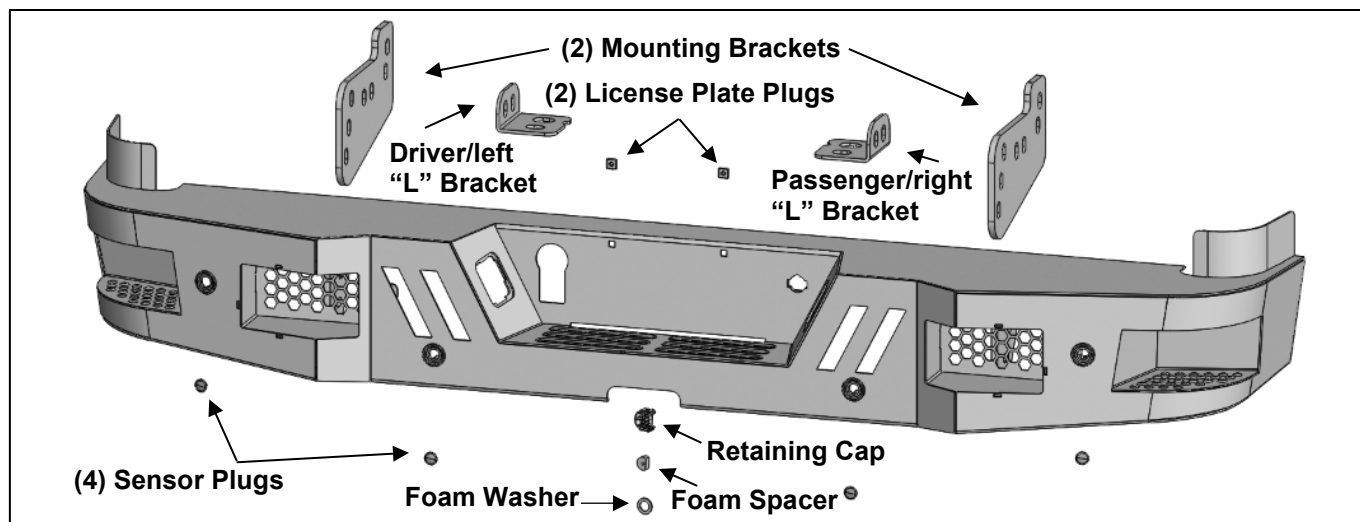


PARTS LIST:

Qty	Item Description	Qty	Item Description
1	HD1 Rear Bumper Assembly	8	4mm Self-tapping Screws
1	Driver/Left Side "L" Bracket	10	12-1.75mm x 45mm Hex Bolts
1	Passenger/Right Side "L" Bracket	20	12mm x 32mm OD x 3mm Flat Washers
2	Mounting Brackets	10	12mm Nylon Lock Nuts
2	Plastic Plugs for license plate mount	2	10-1.5mm x 40mm Hex Bolts
4	Sensor Hole Plugs	8	10mm x 30mm OD x 2.5mm Flat Washers
4	Retaining caps	2	10mm Nylon Lock Nuts
4	20mm x 10mm Foam Spacers	1	4mm Allen Wrench
4	15.5mm x 25mm x 2mm Foam Washers	10	Wire Ties
1	Sensor Covers Kit		

**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. Remove the license plate and bracket. On models with back up sensors, unplug the harness leading to the bumper and sensors. Move the wiring harness away from the bumper, **(Figure 1)**.
2. Place blocks or jack stands under the bumper to support it during mounting bolt removal. Once the bumper has been safely supported, remove the hex bolts attaching the bottom of the step area to the receiver hitch, **(Figure 2)**. Next, remove the (2) large hex nuts per side attaching the bumper to the brackets attached to the frame, **(Figure 3)**. **WARNING!** Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling.
3. Once the bumper has been moved away from the vehicle, remove the bumper brackets from the frame or hitch, **(Figures 4 & 5)**.
4. Determine year of vehicle:

2017—22 models:

- a. Do not remove the 90-degree support brackets attached to the top of the receiver hitch, **(Figure 6)**. Skip to **Step 5**.

2023—on models:

- a. Select the passenger/right "L" Support Bracket. Reuse the factory hex bolt from the bumper bracket **(Step 3)** to attach the Support Bracket to the top of the hitch, **(Figures 7 & 8)**.
- b. Insert (1) 10mm x 40mm Hex Bolt with (1) 10mm Flat Washer down through the smaller hole in the Support Bracket and hitch, **(Figure 9)**. Insert (2) 10mm Flat Washers into the end of the hitch for spacers. Secure the Bracket to the hitch with (1) 10mm Flat Washer and (1) 10mm Nylon Lock Nut. Fully tighten hardware.

- c. Repeat previous **Steps** to install the driver/left "L" Support Bracket.
5. Remove the wiring harness, sensors (if equipped), spare tire access lock, license plate lights and trailer harness plug from the bumper, **(Figure 10)**.
6. Determine if the vehicle is equipped front sensors:
- Models without bumper sensors:**
- a. From the front of the bumper, push the included Plastic Plugs into sensor mounts, **(Figure 11)**.
- Models with bumper mounted sensors:**
- a. Remove sensors and wiring harness from back of OE Bumper.
- b. Test fit sensor into sensor mount on HD1 Bumper. Trim off the plastic tabs on the sensor if necessary to fit snug inside of the sensor mount.
- c. Remove the silicone seal from the end of the sensor. Slide the included larger Foam Sensor Seal over front of sensor, **(Figure 12)**.
- d. Push the sensor in from the back of the Bumper until it is flush with the sensor mount and Bumper face. Push (1) Foam Spacer and snap (1) Retaining Cap onto sensor and mount to secure the sensor in place, **(Figure 13)**.
- e. Repeat previous **Steps** for all remaining sensors.
- f. Starting on the driver/left side, run the OE sensor wire harness through the bumper cutouts. Connect the sensors to the OE sensor wire harness.
- g. Use the provided Wire Ties to secure the Wiring Harnesses to the back of the Bumper.
7. **LED light installation at ends of bumper** (sold separately).
- a. Insert light into opening and up to mounting slot. Check for clearance between front and back of light. If necessary, remove screen from back of opening, **(Figure 14)**.
- b. Follow the light manufacturer's instructions to attach (1) light to the slot in the top of the light opening, **(Figure 14)**.
- c. Repeat the above **Steps** to install the remaining light.
- d. Follow light manufacturer's instructions to properly wire light once bumper has been installed.
8. Select the (2) factory license plate lights. Push the lights into the holes in the Bumper, **(Figure 15)**.
9. Install the trailer plug into the opening in the HD1 Bumper. Install the access hole lock for the spare tire. Reattach the bumper wire harness running to the license plate lights and trailer plug.
10. With assistance, position the mounting plates on the back of the HD Bumper Assembly up to the outsides 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.
11. Line up the (3) holes on the Mounting Brackets and Bumper Assembly flanges, then use (3) 12mm x 40mm Hex Bolts, (6) 12mm Flat Washers, and (3) 12mm Nylon Lock Nuts to attach on passenger/right side. Then repeat with driver/left side.
12. Line up the (4) holes in the passenger/right side mounting plate on the back of the Bumper with the (2) holes in the side of the frame and the (2) holes in the support bracket on the hitch. Reuse the factory double bolt plates and hardware to attach the passenger/right side of the Bumper to the frame and support bracket, **(Figure 17)**. Repeat this **Step** to attach the driver/left side of the Bumper to the frame.
- a. **IMPORTANT:** On 2023-on models, use the included (2) 12mm x 40mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts to attach the Bumper to the previously installed "L" Support Bracket, **(Figure 18)**. Reuse the factory bumper bracket hardware removed in **Step 3** to attach the Bumper to the side of the frame. Leave hardware loose. Repeat this **Step** to attach the driver/left side of the Bumper to the frame.
13. Slowly open the tail gate and check for clearance. Level and adjust the Bumper as necessary and fully tighten all hardware.
14. Reattach the bumper wire harness to the main harness.
15. Push the included (2) Plastic Plugs into the square holes in the Bumper. Reuse the factory hardware to attach the license plate, **(Figure 19)**.
16. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

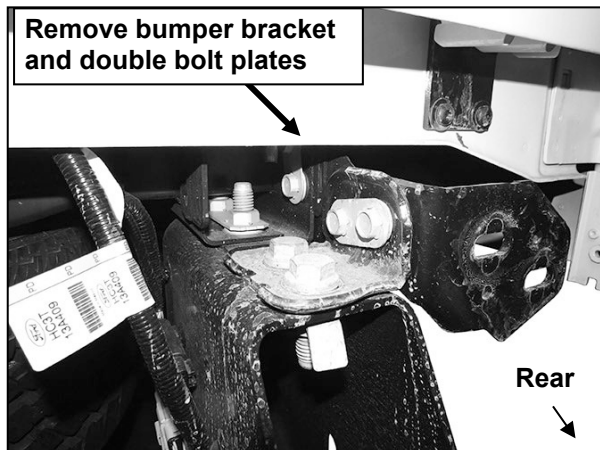
To protect your investment, Do not use any type of polish or wax that may contain abrasives that could damage the finish. Mild soap may be used to clean the HD1 Bumper assembly.

Passenger/right Side Installation Pictured


(Fig 1) Unplug and move all wiring harnesses away from bumper. Trailer plug pictured

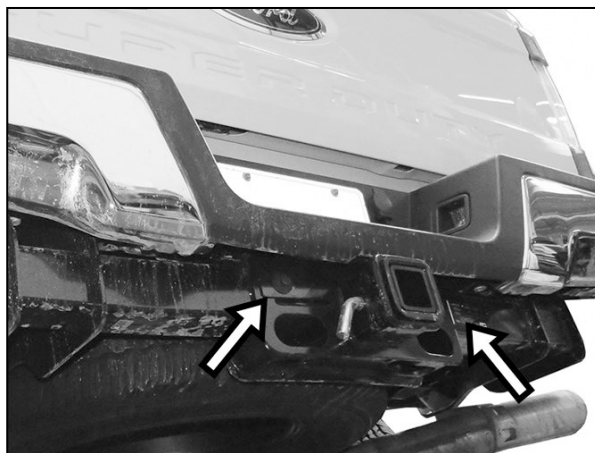


(Fig 3) Remove hex nuts to remove bumper assembly. 2017-22 model pictured

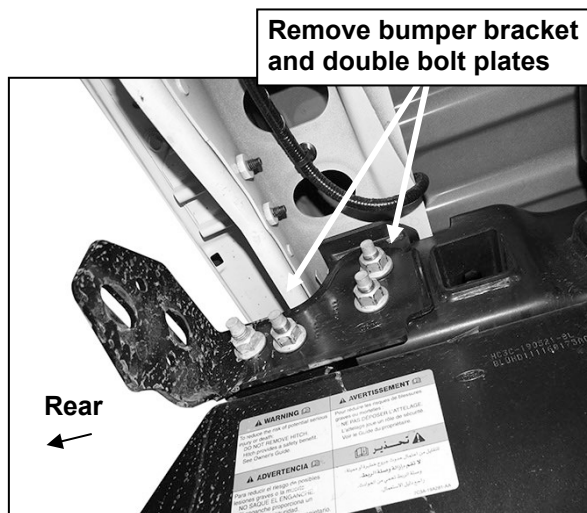


(Fig 5) Remove factory bumper brackets, do not remove 90-degree support bracket. 2017-22 model pictured

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

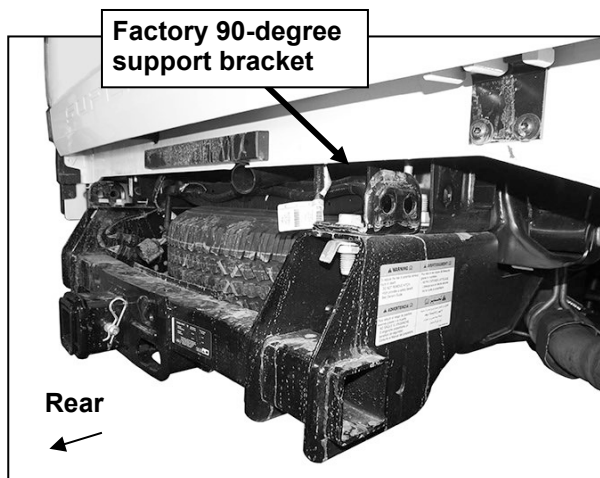


(Fig 2) Remove the (2) bolts attaching the bottom of the step to the receiver hitch if equipped. 2017-22 model pictured



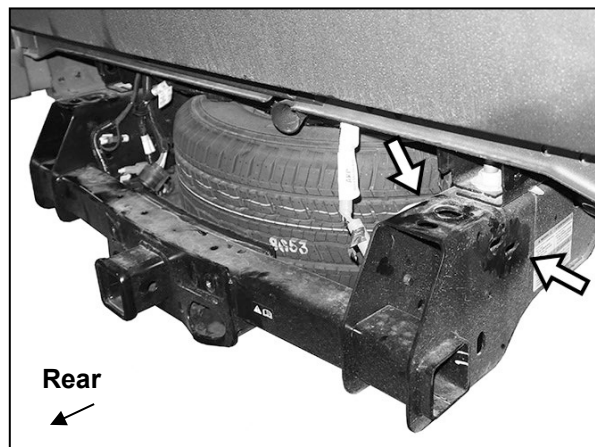
(Fig 4) Remove bumper bracket from frame. 2017-22 model pictured

Passenger/right Side Installation Pictured

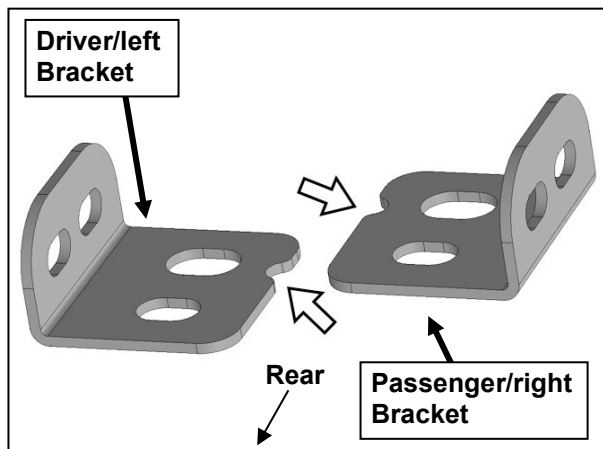


(Fig 6) Do not remove factory 90-degree support Brackets. 2017-22 model pictured

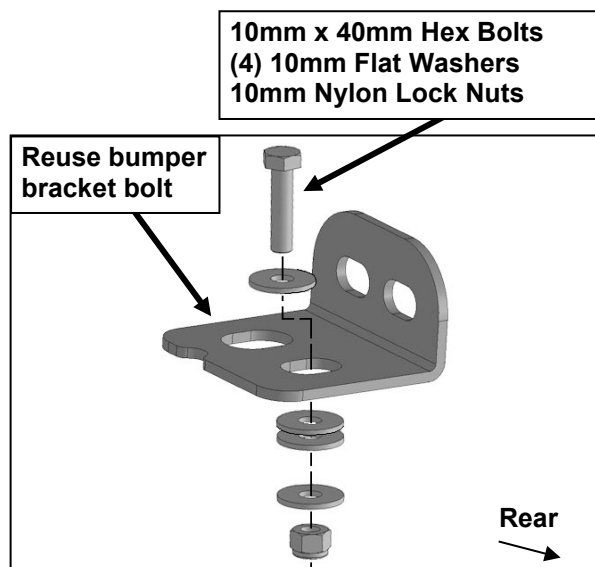
WARNING! Do not crawl under bumper unless it is properly supported on blocks or stands or the bumper may fall.



(Fig 7) 2023-on models with built in receiver hitch, attach the Support Bracket to the top of the frame and Mounting Bracket to side

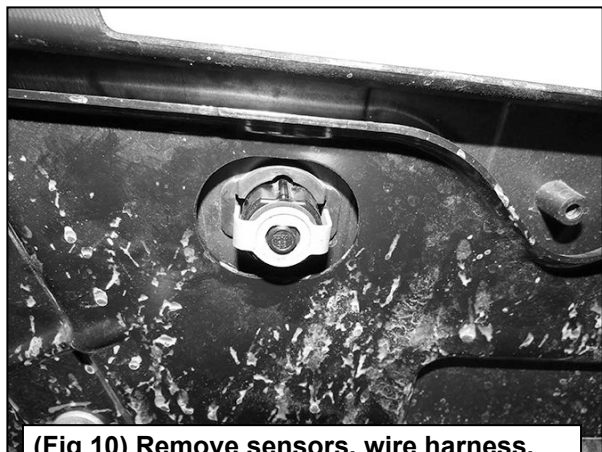


(Fig 8) 2023-on model "L" Support Brackets

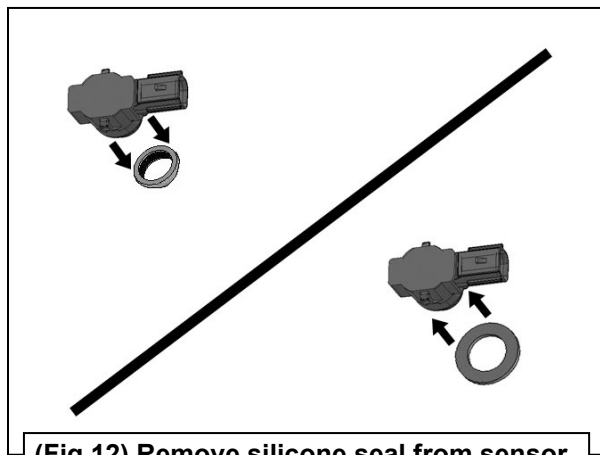


(Fig 9) 2023-on models with built in receiver hitch. Reuse the factory hardware to attach the front slot in the Bracket. Use the included 10mm hardware to attach the rear mounting slot in the Support Bracket

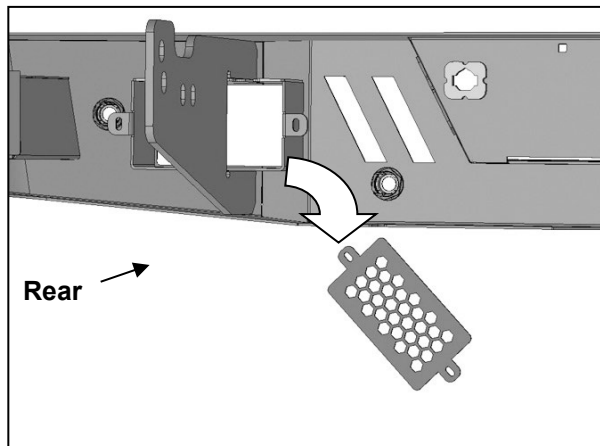
Passenger/right Side Installation Pictured



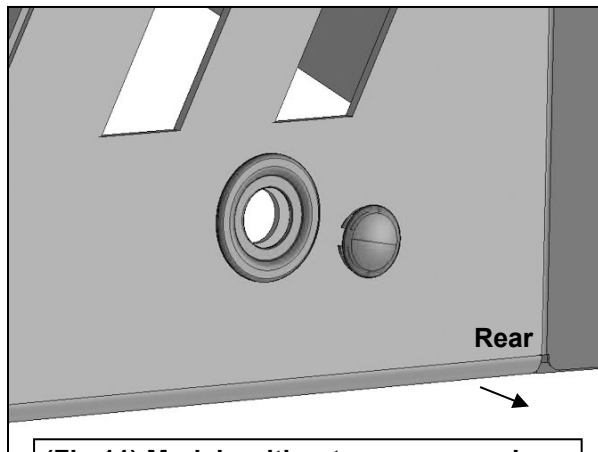
(Fig 10) Remove sensors, wire harness, license plate lights, trailer plug and spare tire access lock (pictured) if equipped



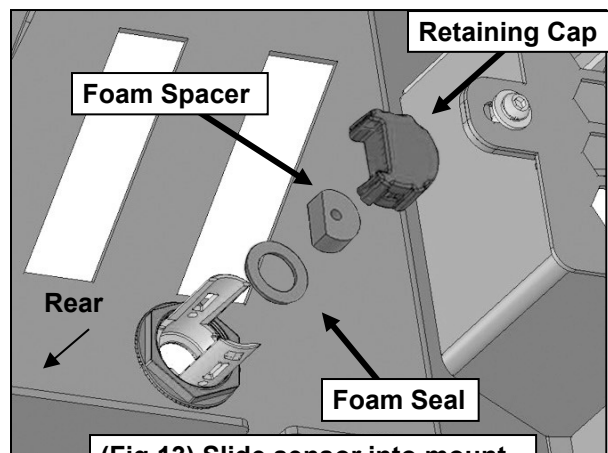
(Fig 12) Remove silicone seal from sensor. Slide large Seal over end of sensor (arrow)



(Fig 14) Remove screens from light mounts for additional clearance around lights

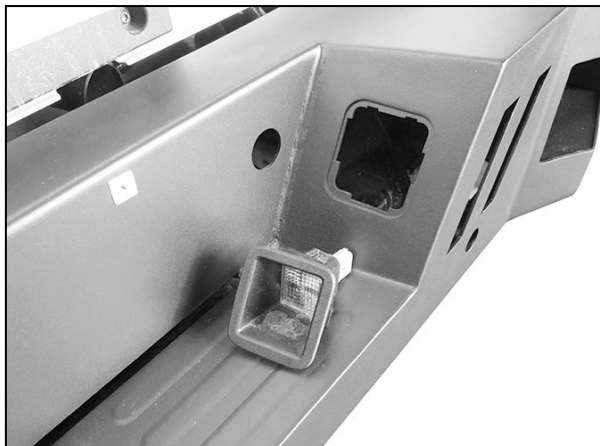


(Fig 11) Models without sensors, push sensor hole plugs into mounts



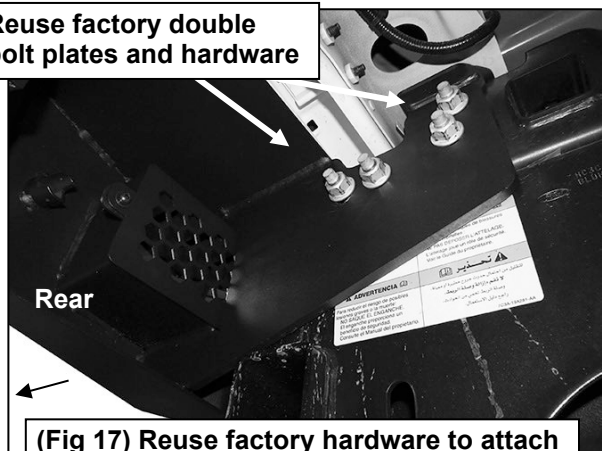
(Fig 13) Slide sensor into mount, insert Foam Spacer and snap Cap on to lock sensor in mount

Passenger/right Side Installation Pictured



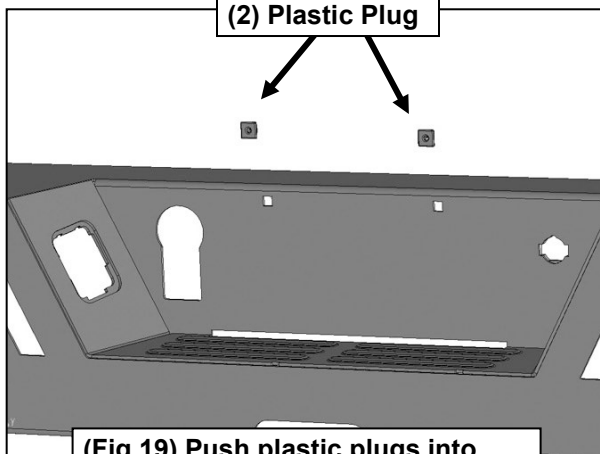
(Fig 15) Push license plate lights into openings and plug into bumper wiring harness

Reuse factory double
bolt plates and hardware



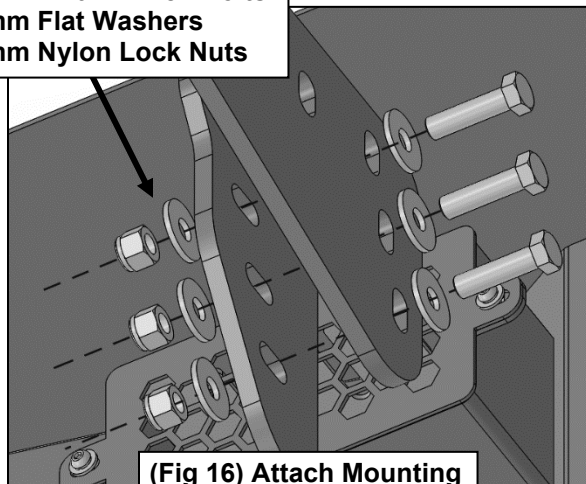
(Fig 17) Reuse factory hardware to attach mounting plate on back of Bumper to side of frame, (passenger/right side 2017-2022 model pictured)

(2) Plastic Plug



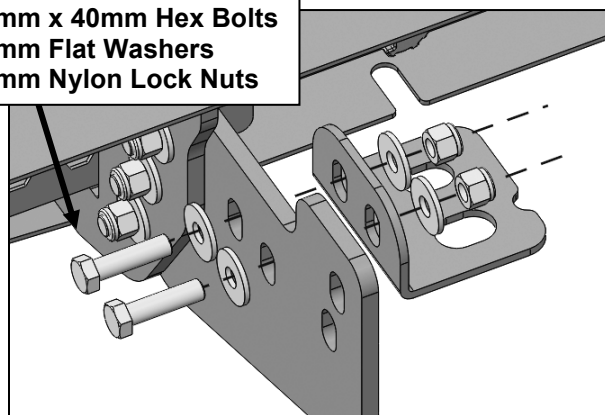
(Fig 19) Push plastic plugs into holes in Bumper for license plate

(3) 12mm x 40mm Hex Bolts
(6) 12mm Flat Washers
(3) 12mm Nylon Lock Nuts



(Fig 16) Attach Mounting Brackets to Bumper

(2) 12mm x 40mm Hex Bolts
(4) 12mm Flat Washers
(2) 12mm Nylon Lock Nuts



(Fig 18) 2023-on models. reuse the factory hardware to attach Bumper to side of frame. Use the included 12mm hardware to attach the Bumper to the "L" Support Brackets. (passenger/right side illustrated)



Complete Installation