

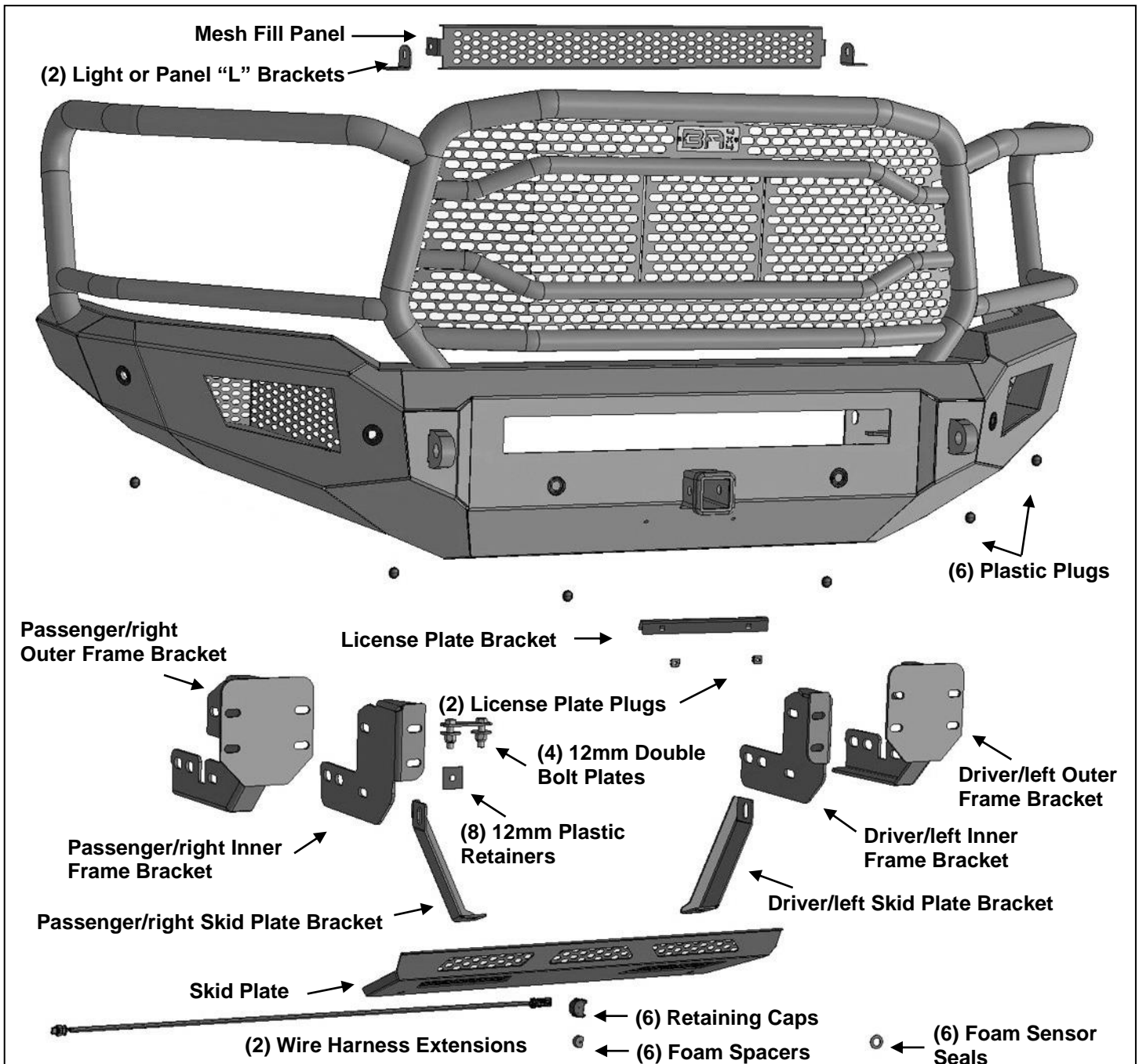


INSTALLATION INSTRUCTIONS

2019-2022 RAM 2500/3500 AMBUSH XT SERIES FRONT BUMPER (NON-WINCH) PART #DG-20339

PARTS LIST:

1	Ambush HD Front Bumper Assembly	4	12-1.75mm x 110mm Hex Bolts
1	Center Mesh Fill Panel	4	12-1.75mm x 100mm Hex Bolts
1	Driver/left Outer Frame Bracket	4	12mm x 29mm x 5mm Flat Washer Spacers
1	Passenger/right Outer Frame Bracket	20	12mm x 37mm x 3mm Flat washers
1	Driver/left Inner Frame Bracket	16	12mm Lock Washers
1	Passenger/right Inner Frame Bracket	16	12-1.75mm Hex Nuts
1	Driver/left Skid Plate Bracket	2	8-1.25mm x 25mm Button Head Bolts
1	Passenger/right Skid Plate Bracket	4	8-1.25mm x 25mm Hex Bolts
1	Skid Plate	2	8-1.25mm x 16mm Hex Bolts
2	LED/Panel "L" Mounting Brackets	12	8mm x 24mm x 2mm Flat Washers
1	License Plate Bracket	6	8mm Lock Washers
2	License Plate Mounting Plugs	6	8mm Hex Nuts
6	Sensor Retaining Caps	3	6mm x 20mm Combo Button Head Bolts
6	Foam Sensor Spacers	2	6-1.0mm x 20mm Button Head Bolts
6	25mm x 15.5mm x 2mm Foam Seals	4	6mm x 18mm x 1.6mm Flat Washers
6	Sensor Plugs	2	6mm Nylon Lock Nuts
2	Wire Harness Extensions	12	4mm Self Tapping Screws
1	Sensor Cover kit	1	5mm Wrench
4	12-1.75mm x 45mm Double Bolt Plate	1	4mm Wrench
8	12mm Plastic Retainers	10	Nylon Wire Ties



PROCEDURE:

REMOVE CONTENTS FROM BOX. VERIFY ALL PARTS ARE PRESENT. READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION. BUMPER IS HEAVY, ASSISTANCE IS HIGHLY RECOMMENDED.

1. Remove the license plate. On models with bumper mounted sensors and/or fog lights, unplug the wiring harness leading to the front bumper. Move the wiring harnesses out of the way.
2. Locate the factory bumper bolts attaching the inner bumper brackets to the end of the frame, (Figure 1). With assistance, remove the (2) long hex bolts per side to remove the bumper assembly, (Figure 2). **WARNING!** Assistance is required to hold the bumper in place during hardware removal to prevent the bumper from falling.

3. Slide the factory bumper off over the tow hooks, (**Figure 2**).
4. Remove the lower frame extensions and tow hooks, if equipped, from the frame, (**Figures 2 & 3**).
5. Select the driver/left Inner and Outer Frame Brackets, (**Figure 4**). Attach the Brackets to the upper bumper mounting hole in the end of the frame with the included (1) 12mm x 110mm Hex Bolt, (2) 12mm x 37mm Large Flat Washers, (1) 12mm Lock Washer and (1) 12mm Hex Nut. Leave hardware loose.
6. Line up the (2) holes in the rear of the Bracket with the lower holes in the frame for the frame extension. Select (2) 12mm x 100mm Hex Bolts and (2) 12mm Thick Spacer Washers. Insert the Hex Bolts with Spacer Washers through the two rear lower mounting holes. Secure the Inner Bracket to the Hex Bolts with the included (2) 12mm x 37mm Flat Washers, (2) 12mm Lock Washers and (2) 12mm Hex Nuts, (**Figures 4 & 5**).
7. Select the driver/left Skid Plate Bracket, (**Figure 6**). Attach the Bracket to the inner facing side of the Mounting Brackets and front lower mounting hole in the frame with (1) 12mm x 110mm Hex Bolt, (2) 12mm x 37mm Large Flat Washers, (1) 12mm Lock Washer and (1) 12mm Hex Nut, (**Figure 7**). Snug but do not fully tighten Bracket hardware.
8. Repeat **Steps 5—7** to attach the passenger/right Inner and Outer Mounting Brackets and Skid Plate Bracket.
9. Carefully remove all sensors and the wiring harness from the back of the OE bumper, (**Figure 8**). Note location of each sensor for correct reinstallation. Carefully unwrap the Ambush Bumper.

Models without bumper sensors:

- a. From the front, push the included Plastic Plugs into the sensor mounting holes, (**Figure 9**).

Models with bumper mounted sensors. NOTE: Sensors, (if equipped), must be installed in Bumper before Bumper is attached to Brackets:

- a. Select the driver/left outer sensor. Remove the seal from the end of the sensor, (**Figure 10**). Replace the seal with the included larger Foam Seal.
 - b. Push the sensor into the mounting socket in the back of the Bumper.
 - c. Apply (1) Foam Spacer to the plug end of the sensor, (**Figure 10**).
 - d. Secure the sensor to the socket with (1) Sensor Retaining Cap, (**Figure 10**).
 - e. Move to the next sensor location. Repeat previous Steps to install the next sensor as you work your way across the Bumper.
 - f. Reinstall the factory wiring harness. **NOTE:** Use the included (2) Harness Extensions to reach sensors as required.
 - g. Secure harness to the Bumper as required with included Wire Ties.
2. Determine if center LED bar style light or the included Fill Panel will be installed.

Mesh Fill Panel installation (do not install Fill Panel with light).

- a. Select (1) "L" Bracket, (**Figure 11**). Attach the Bracket to the driver/left mounting tab on the back of the Bumper with the included (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut. Repeat to install the remaining "L" Bracket on the passenger/right side of the Bumper.
- b. Attach the Center Fill Panel to the "L" Brackets with the included (2) 8mm x 25mm Hex Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, (**Figure 12**). Do not fully tighten hardware at this time. Adjust position and tighten hardware.

Center LED light installation (sold separately). NOTE: It may be easier to attach the light before Bumper Assembly is attached to the Brackets.

- a. Select (1) "L" Bracket, (**Figures 11**). Attach the Bracket to the driver/left mounting tab on the back of the Bumper with the included (1) 8mm x 25mm Hex Bolt, (2) 8mm Flat Washers, (1) 8mm Lock Washer and (1) 8mm Hex Nut. Repeat to install the remaining "L" Bracket on the passenger/right side of the Bumper.



INSTALLATION INSTRUCTIONS

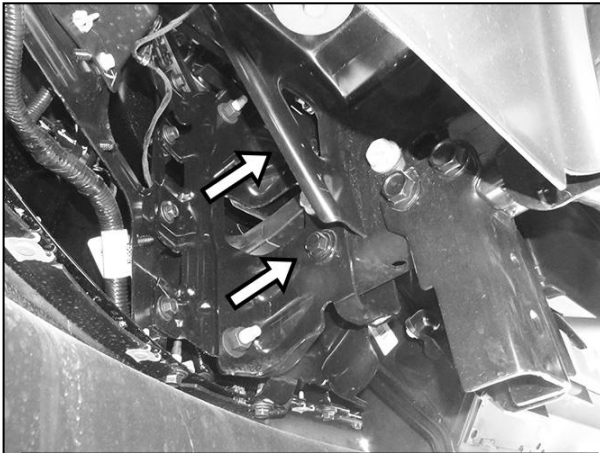
- b. Attach the LED light assembly to the “L” Brackets with the included (2) 8mm x 16mm Hex Bolts, (2) 8mm Lock Washers and (2) 8mm Flat Washers, **(Figure 13)**. Do not fully tighten hardware at this time. Adjust light position and tighten hardware.
- c. Follow light manufacturer’s instructions to wire the light to the vehicle’s electrical system once Bumper has been fully installed.

LED light installation at ends of bumper (sold separately).

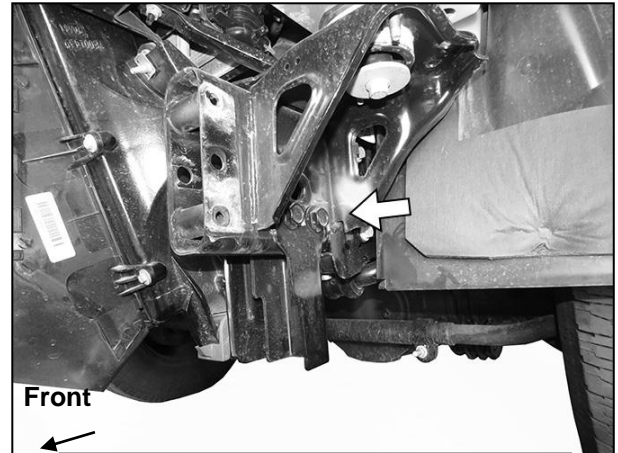
- a. Insert light into opening and up to mounting slots. Check for clearance between front and back of light. If necessary, remove the screens from the back of the openings, **(Figure 14)**.
 - b. Follow the light manufacturer’s instructions to attach lights to slots in the opening, **(Figure 14)**.
 - c. Repeat the above steps for passenger/right side light installation.
 - d. Follow light manufacturer’s instructions to properly wire the light to the vehicle electrical system.
- 10.** Select (1) 12mm Double Bolt Plate and (2) 12mm Plastic Retainers, **(Figure 15)**. Insert the Bolt Plate through the outer mounting holes in the back of the mounting plate on the back of the driver/left side of the Bumper. Thread the (2) Plastic Retainers onto the threaded end of the Bolt Plate, **(Figure 16)**. **NOTE:** The Plastic Retainers are provided to help hold the Bolt Plates in position during Bumper installation. Use is not mandatory for installation. Repeat this **Step** to attach the (3) remaining 12mm Double Bolt Plates to the mounting plates on the driver/left and passenger/right sides of the Bumper.
- 11.** With assistance, position the Bumper assembly up to the Frame Brackets. **WARNING:** To avoid possible injury or damage to the vehicle, do not proceed until the Bumper is fully and safely supported.
- 12.** Guide the threaded end of the Bolt Plates into and through the driver/left side Mounting Brackets. Attach the Bumper to the driver/left Frame Brackets with (4) 12mm x 37mm Flat Washers, (4) 12mm Lock Washers and (4) 12mm Hex Nuts, **(Figures 17—19)**. Snug but do not fully tighten hardware. Repeat this **Step** to attach the passenger/right side of the Bumper.
- 13.** Level and adjust the Bumper to the vehicle and tighten all hardware.
- 14.** 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 Bolts, (4) 6mm Flat Washers and (2) 6mm Nylon Lock Nuts, **(Figure 20)**.
- 15.** Select the Skid Plate. Attach the front of the Skid Plate to the back of the Bumper with the included (3) 6mm Button Head Combo Bolts, **(Figure 20)**. Attach the rear of the Skid Plate to the Skid Plate Brackets with the included (2) 8mm x 25mm Button Head Bolts, (4) 8mm Flat Washers, (2) 8mm Lock Washers and (2) 8mm Hex Nuts, **(Figure 21)**. **NOTE:** Loosen the 12mm Skid Plate Mounting Bracket hardware as necessary to line up the Brackets with the Skid Plate. Once Skid Plate and Brackets are adjusted, fully tighten all hardware.
- 16.** Models with grille mounted camera, remove center screen panel from grill guard.
- 17.** If front license plate is required, insert (2) Plastic Plugs into the square holes in the Bumper, **(Figure 22)**. 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 Bumper Assembly.

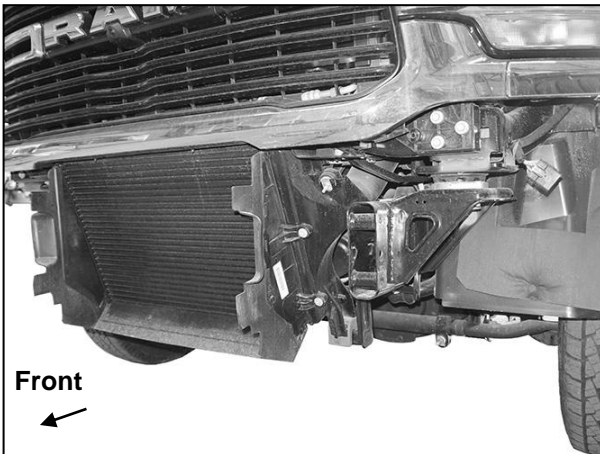
Driver/left Side Installation Pictured



(Fig 1) Locate and remove driver/left side bumper bracket to frame hardware (arrows)

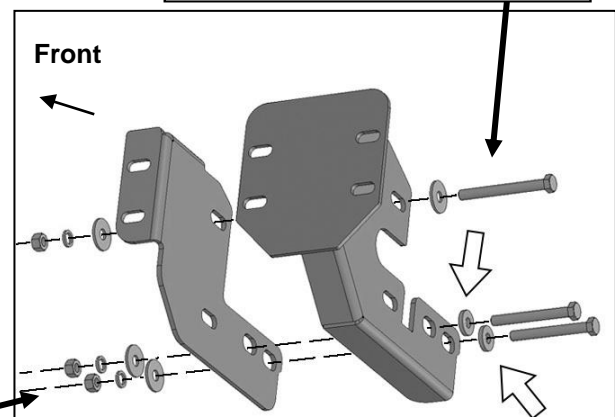


(Fig 2) Bumper removed. Also remove tow hooks and lower frame extensions as equipped (arrow)



(Fig 3) Bumper assembly removed

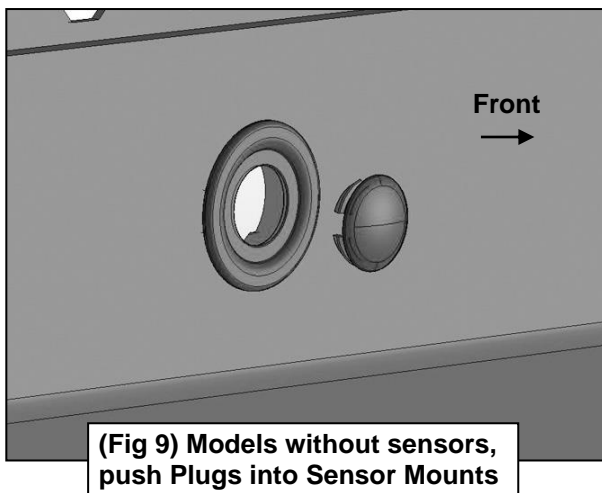
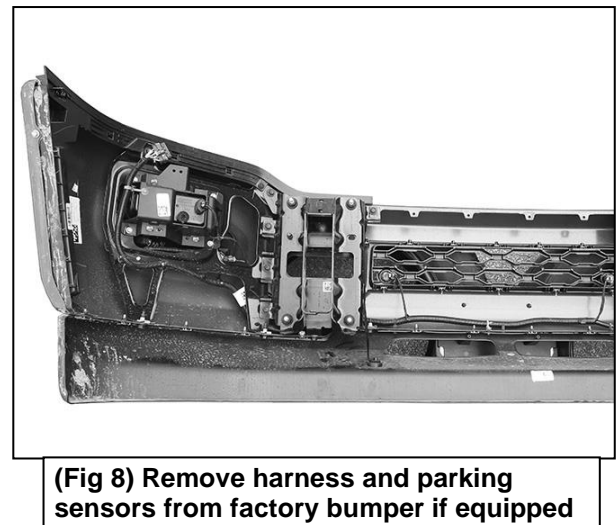
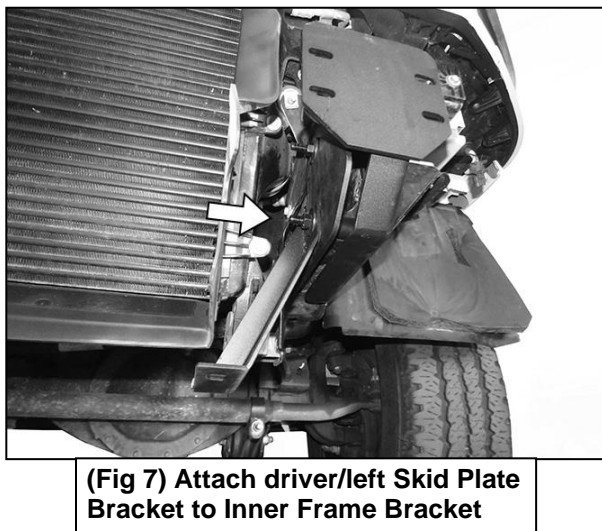
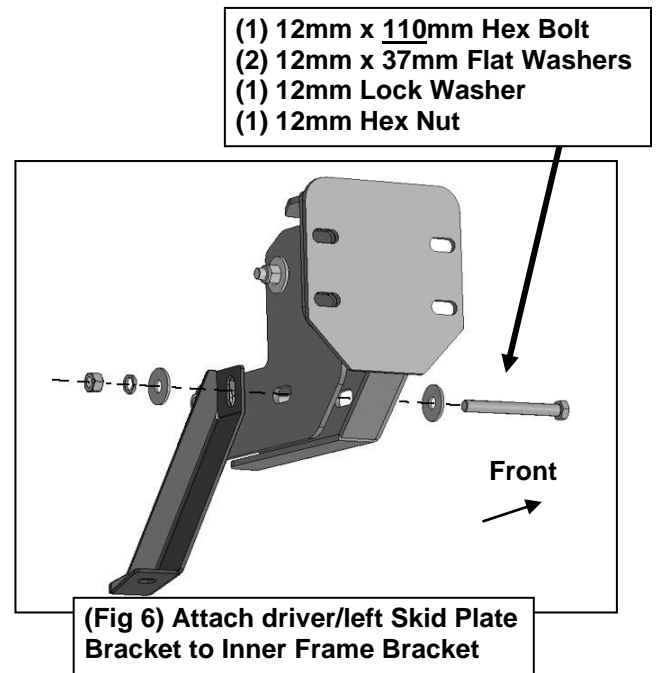
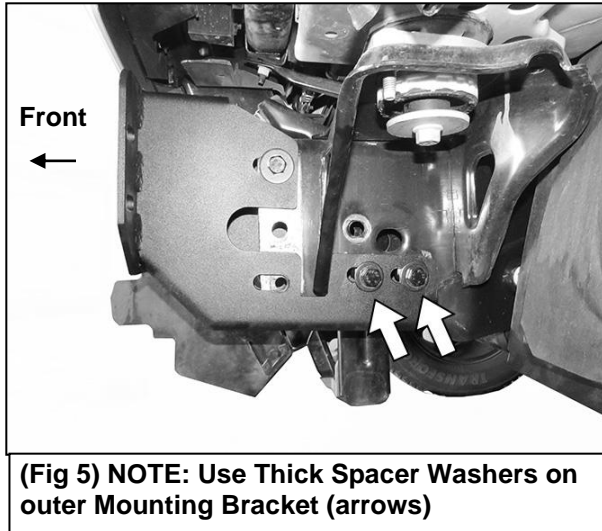
- (1) 12mm x 110mm Hex Bolt
- (2) 12mm x 37mm Flat Washers
- (1) 12mm Lock Washer
- (1) 12mm Hex Nut



(Fig 4) Attach driver/left Outer and Inner Frame Mounting Brackets to sides of frame. NOTE: Use Thick Spacer Washers on outer Mounting Bracket (arrows)

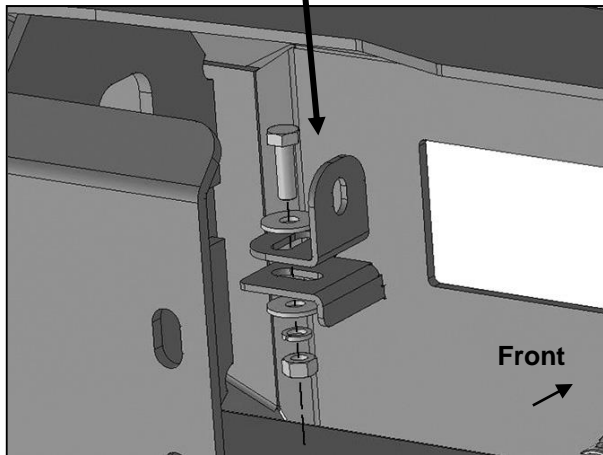
- (2) 12mm x 100mm Hex Bolts
- (2) 12mm Spacer Washers (outer)
- (2) 12mm x 37mm Flat Washers (inner)
- (2) 12mm Lock Washers
- (2) 12mm Hex Nuts

Driver/left Side Installation Pictured



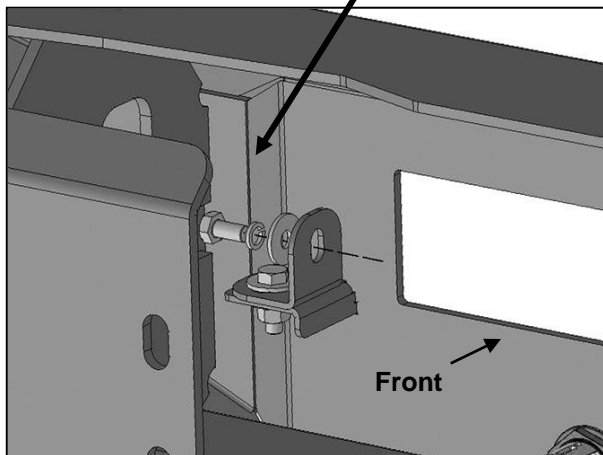
Driver/left Side Installation Pictured

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

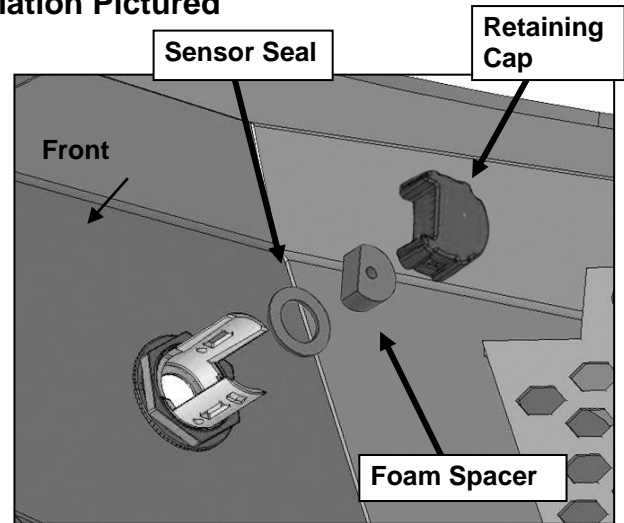


(Fig 11) Attach "L" Bracket to mounting tabs on back of Bumper

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

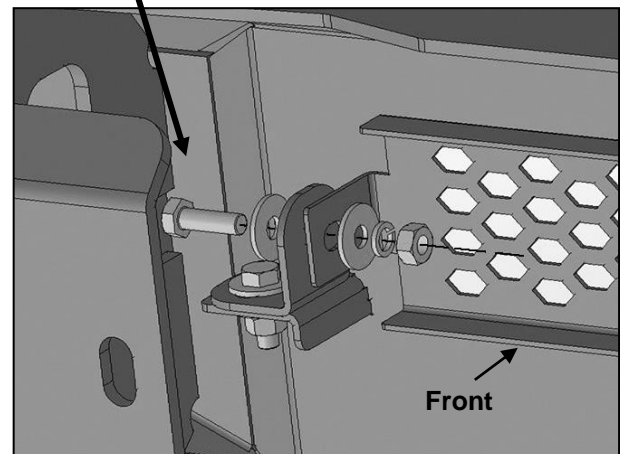


(Fig 13) Attach LED bar style light to "L" Brackets (driver/left side illustrated)



(Fig 10) Remove front seal from Sensor. Apply larger Foam Seal to sensor. Slide sensor into mount, insert Foam Spacer and Retaining Cap to lock sensor in mount

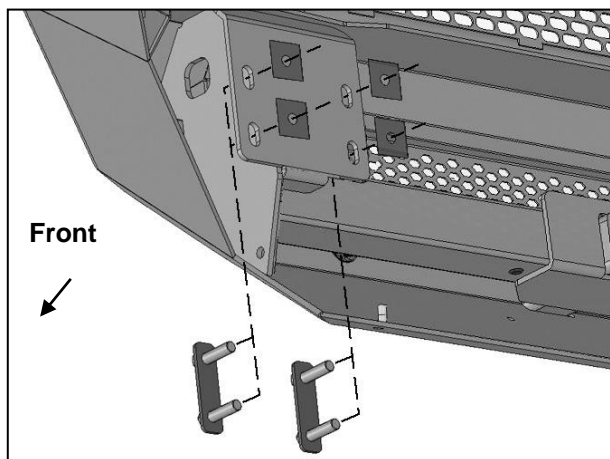
8mm x 25mm Hex Bolt
(2) 8mm Flat Washers
8mm Lock Washer
8mm Hex Nut



(Fig 12) Attach Mesh Fill Panel to "L" Brackets

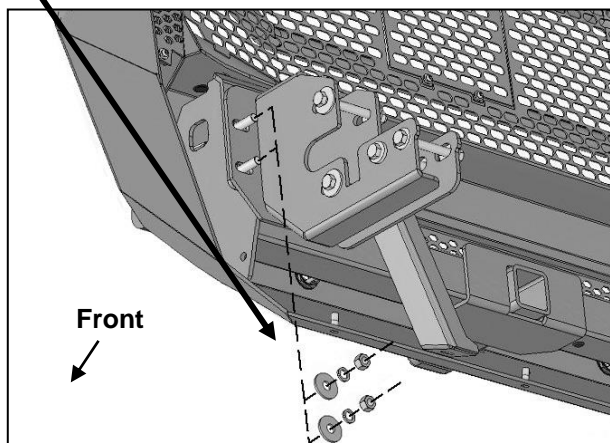
Driver/left Side Installation Pictured

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

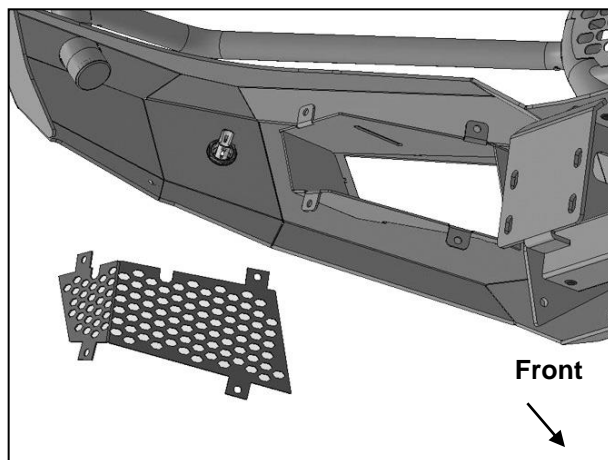


(Fig 15) Insert (2) Double Bolt Plates through back of mounting plate on Bumper

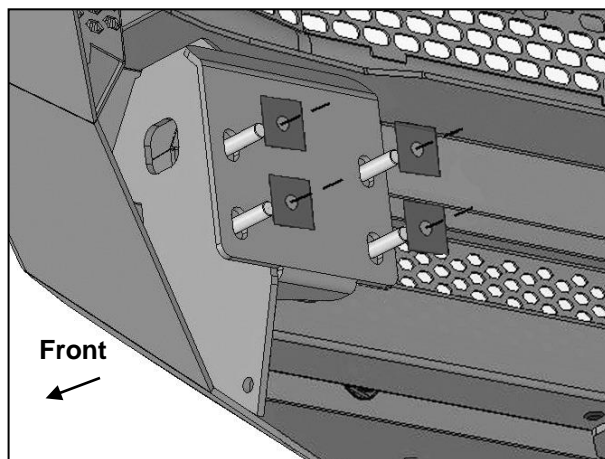
- (2) 12mm Flat Washers
- (2) 12mm Lock Washers
- (2) 12mm Hex Nuts



(Fig 17) Attach driver/left side of Bumper to Frame Brackets. Outer Bracket illustrated



(Fig 14) Remove screens for additional light clearance if needed

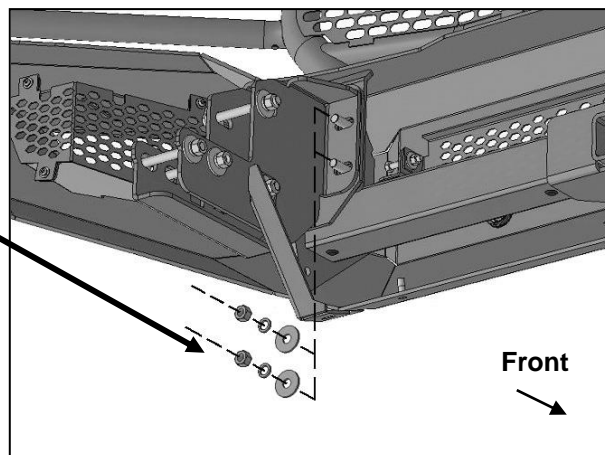


(Fig 16) Thread Plastic Retainers onto Bolt Plates to hold in position

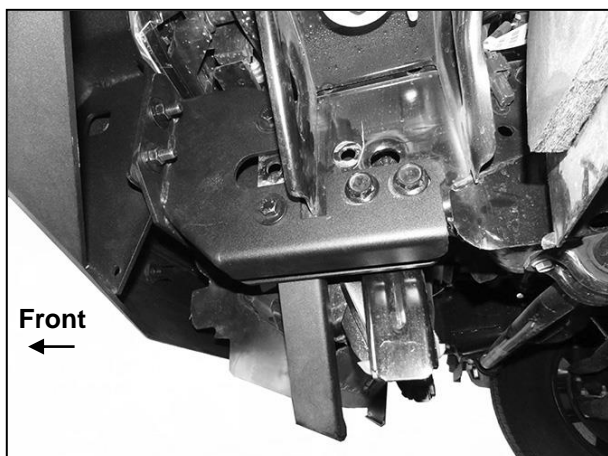
INSTALLATION INSTRUCTIONS

Driver/left Side Installation Pictured

- (2) 12mm Flat Washers
- (2) 12mm Lock Washers
- (2) 12mm Hex Nuts

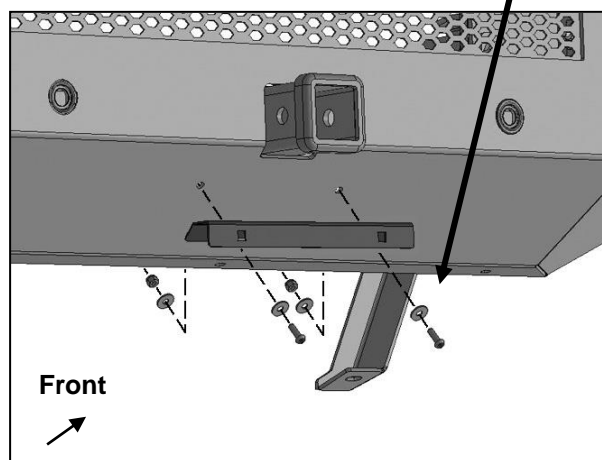


(Fig 18) Attach driver/left side of Bumper to Frame Brackets. Inner Bracket illustrated

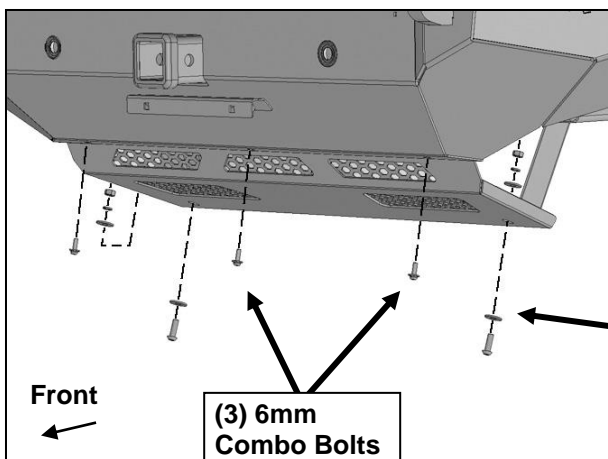


(Fig 19) Driver/left side of Bumper installed

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



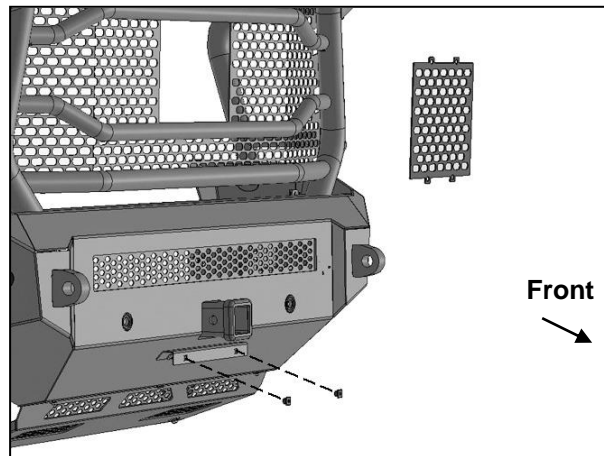
(Fig 20) Attach License Plate Bracket to Bumper before installing Skid Plate



- (3) 6mm Combo Bolts

(Fig 21) Attach Skid Plate to back of Bumper and Skid Plate Brackets

- (2) 8mm x 25mm Button Head Bolts
- (4) 8mm Flat Washers
- (2) 8mm Lock Washers
- (2) 8mm Hex Nuts



(Fig 22) Models with camera, remove panel from grille. Push Plastic Plugs into Bumper for license plate