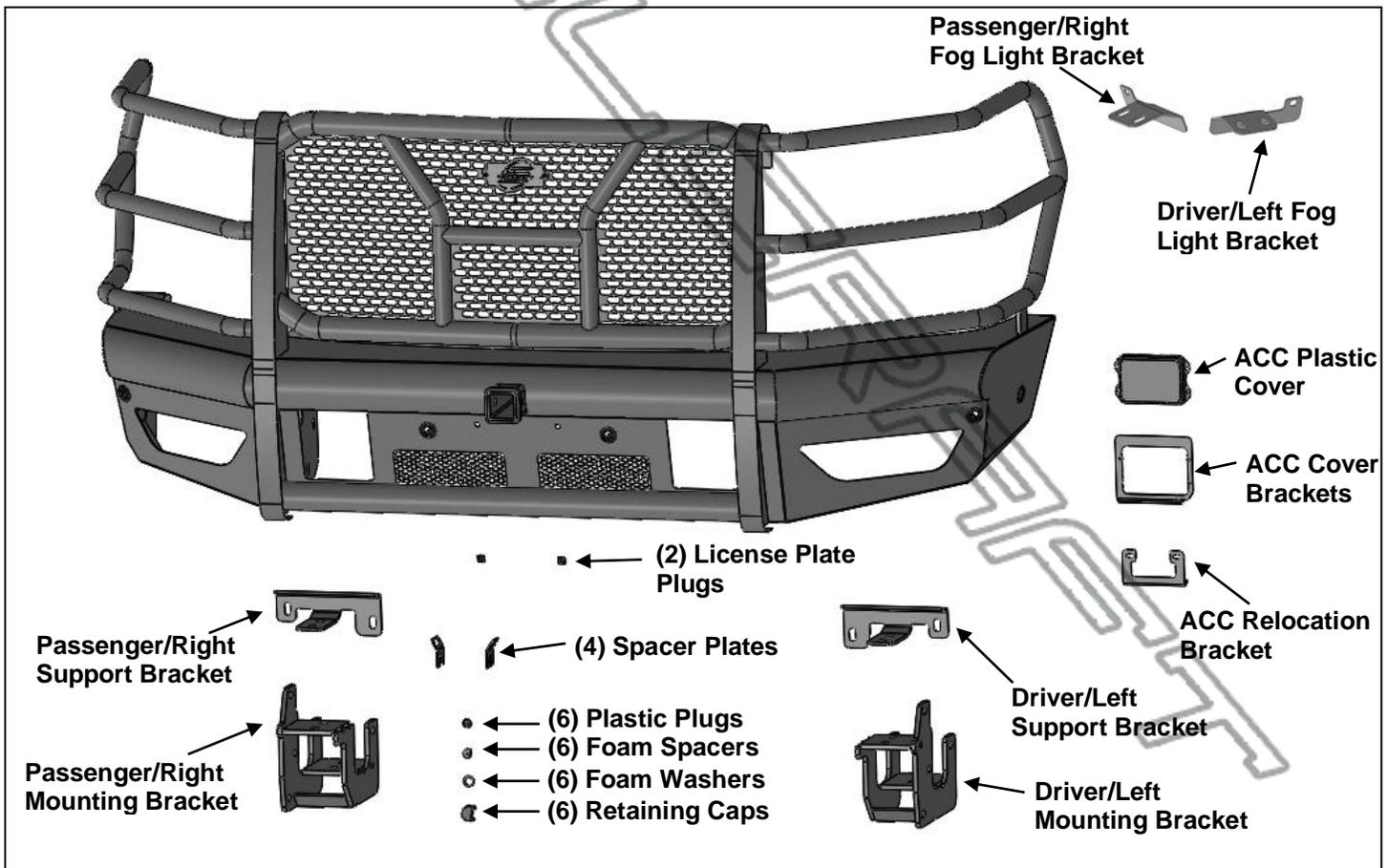


**HD REPLACEMENT FRONT BUMPER  
2021-23 FORD F-150**

**PARTS LIST:**

1	HD Replacement Front Bumper	36	12mm x 37mm OD x 3mm Flat Washers
1	Driver/Left Mounting Bracket	4	12mm Lock Washers
1	Passenger/Right Mounting Bracket	16	12mm Nylon Lock Nuts
1	Driver/Left Support Bracket	2	12mm Double Nut Plates
1	Passenger/Right Support Bracket	4	8mm x 25mm Hex Bolts
1	Driver/Left Fog Light Bracket	8	8mm x 24mm OD x 2mm Flat Washers
1	Passenger/Right Fog Light Bracket	4	8mm Nylon Lock Nuts
1	ACC Plastic Cover	10	6mm x 25mm Hex Bolts
1	ACC Cover Bracket	18	6mm x 18mm OD x 1.6mm Flat Washers
1	ACC Relocation Bracket	10	6mm Lock Washers
4	Spacer Plates	8	6mm Hex Nuts
2	License Plate Plugs	2	6mm Flanged Nuts
6	Plastic Sensor Plugs	4	5mm x 16mm Button Head Bolts
6	Sensor Retaining Caps	4	5mm Flanged Nuts
6	15.5mm x 25mm OD x 2mm Foam Washers	12	4mm Self Tapping Screws
6	20mm x 10mm Foam Spacers	2	Wire Extenders
1	Sensor Cover Kit	1	4mm Hex Wrench
2	12mm x 170mm Hex Bolts	1	3mm Hex Wrench
18	12mm x 45mm Hex Bolts		



**PROCEDURE:**

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

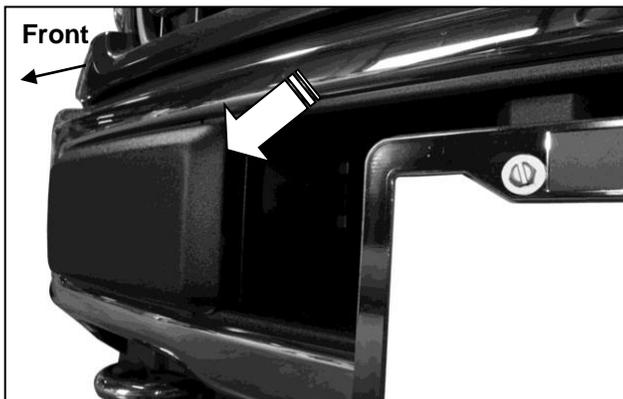
**RECOMMENDED TO AVOID POSSIBLE INJURY OR DAMAGE TO THE VEHICLE. BUMPER  
INSTALLATION WILL INTERFERE WITH GRILLE MOUNTED CAMERA.**

1. Remove the license plate and bracket. Release the wiring harness from the clips attached to the back of the bumper. Move all wiring harnesses away from bumper.
2. Next, remove the plastic bumper pads, **(Figure 1)**. **NOTE:** Release metal clips from back of bumper to remove bumper pad assembly. It may be easier to access bumper hardware with plastic air dam removed from bottom of bumper.
3. 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 large hex nut from the back of each bumper bracket, **(Figure 2)**. Next, from the front of the bumper, remove the (2) factory hex nuts attaching the bumper to each bumper bracket, **(Figure 3)**. **WARNING!** Assistance is required to hold the bumper in place during bolt removal to prevent the bumper from falling. Carefully slide the bumper off over the tow hooks.
4. Remove the tow hooks and plastic covers, (if equipped), from the bottom of the frame, **(Figure 4)**.
5. Next, select the Passenger/Right Mounting Bracket, **(Figure 5)**. Slide the Bracket over the end of the frame. Insert (1) 12mm Double Nut Plate into the open end of the frame. Attach the Mounting Bracket to the bottom of the frame and the Double Nut Plate with (2) 12mm x 45mm Hex Bolts, (2) 12mm Lock Washers and (2) 12mm Flat Washers, **(Figure 5)**. **NOTE:** On models with tow hooks, reuse the factory nut plate and hardware to attach the Mounting Bracket to the bottom of the frame. Do not tighten.
6. Insert (1) 12mm x 170mm Long Hex Bolt with (1) 12mm Flat Washer through the outside of the mounting tab on the Frame Bracket, through the frame and inside tab. Secure with (1) 12mm Flat Washer and (1) 12mm Nylon Lock Nut. Insert (1) Spacer Plate down between each mounting tab and the side of the frame, **(Figure 6)**. Do not tighten.
7. Select the Passenger/Right Support Bracket, **(Figure 7)**.  
**On models without tow hooks,**
  - a. Reuse the factory hex nuts to attach the Support Bracket to the frame, **(Figure 7)**.
  - b. Attach the Support Bracket directly to the top of the Mounting Bracket with (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, **(Figure 8)**. Do not tighten.**On models with tow hooks,**
  - a. Line up the Support Bracket with the top of the Mounting Bracket.
  - b. Reuse the factory hex nuts to attach the Support Bracket to the frame, **(Figure 7)**.
  - c. Slide the tow hook into the Mounting Bracket and up to the top. Attach the tow hook to the Frame Bracket and Support Bracket with (2) 12mm x 45mm Hex Bolts, (4) 12mm Flat Washers and (2) 12mm Nylon Lock Nuts, **(Figure 8)**.
8. Repeat **Steps 5—7** to attach the Driver/Left Mounting Bracket, Support Bracket and tow hook if equipped.
9. If equipped with factory fog lights, unplug both lights and remove the complete light assemblies from back of bumper. Unplug and remove the adaptive cruise control, if equipped.
10. **Models with factory fog lights:**
  - a. Remove the factory fog lights from the back of the OE bumper.
  - b. Select the Driver/Left Fog Light Bracket. Attach the Bracket to the slots in the mounting on the back of the Bumper with (2) 8mm Hex Bolts, (4) 8mm Flat Washers and (2) 8mm Nylon Lock Nuts, **(Figure 9)**.
  - c. Attach the Driver/Left factory fog light to the back of the Bumper and Light Bracket with (3) 6mm Hex Bolts, (6) 6mm Flat Washers, (3) 6mm Lock Washers and (3) 6mm Hex Nuts, **(Figure 10)**.
  - d. Repeat to install the Passenger/Right fog light.
11. **For vehicles equipped with front sensors.**
  - a. Remove the silicone seal from the end of the sensor. Slide the 15.5mm x 25mm x 2mm Foam Washer over front of sensor.
  - b. Insert sensor with Foam Washer into sensor sleeve.
  - c. Place (1) Foam Spacer over end of sensor. Push Sensor Retaining Cap onto sensor mount and lock into mounting holes, **(Figure 11)**.
  - d. Repeat previous Steps to install remaining sensors.**For vehicles not equipped with front sensors.**
  - a. Select the included (4) Plastic Sensor Covers.

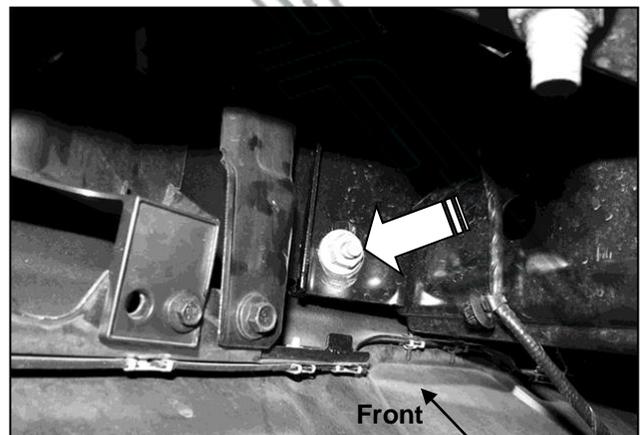
**HD REPLACEMENT FRONT BUMPER  
2021-23 FORD F-150**

- b. From the front of the bumper, push Covers into sensor sleeves, **(Figure 12)**.
12. Determine if vehicle is equipped with an adaptive cruise control, (ACC)  
**NOTE:** Install the ACC assembly before attaching Bumper to vehicle.
- a. Select the ACC Cover Bracket, **(Figure 13)**.
- b. Attach the ACC Plastic Cover to the back of the Bracket with (4) 5mm Button Head Bolts, and (4) 5mm Flanged Nuts, **(Figure 13)**.
- c. Select the ACC and Relocation Bracket. Attach the ACC to the front of the Relocation Bracket with (2) 6mm Hex Bolts, (2) 6mm Lock Washers, (2) 6mm Flat Washers and (4) 6mm Flanged Nuts, **(Figure 14)**.
- a. Attach the ACC assembly and Cover assembly to the mounting plate on the back of the Bumper with (2) 6mm Hex Bolts, (4) 6mm Flat Washers, (2) 6mm Lock Washers and (2) 6mm Hex Nuts, **(Figure 15)**.
13. On models with grille mounted factory camera, remove the center screen.
14. With assistance, position the Bumper Assembly onto the outside of the Mounting Brackets. 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.
15. Attach the Bumper to the Brackets with (6) 12mm Hex Bolts, (12) 12mm Flat Washers and (6) 12mm Nylon Lock Nuts, **(Figure 16)**. Do not tighten.
16. Level and adjust the bumper and fully tighten all 12mm hardware to 65-70ft-lbs. **NOTE:** If additional in-out adjustment is required, loosen Frame Bracket Hardware, slide the Bracket in or out as necessary and fully tighten all hardware.
17. Reattach the wiring harness. Adjust lights as necessary and tighten all fog light bracket hardware.
18. Use the included (2) push-in plastic nuts to attach the front license plate, (if required), to the (2) holes in the front bumper, **(Figure 17)**.
19. 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 Full Replacement Front Bumper assembly.



**(Fig 1) From behind bumper, release metal clips attaching plastic bumper pad to the bumper**



**(Fig 2) Remove factory hex nut (arrow) from back of bumper bracket (Driver side pictured)**

Passenger/right Side Installation Pictured

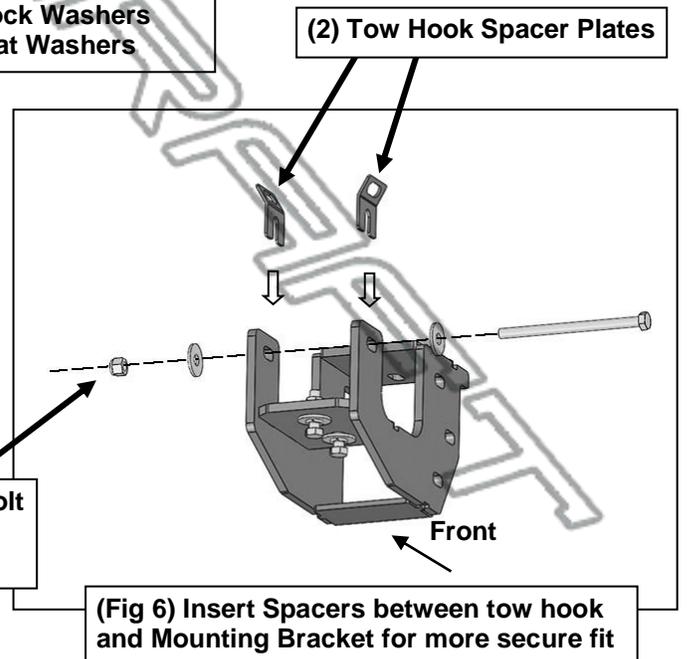
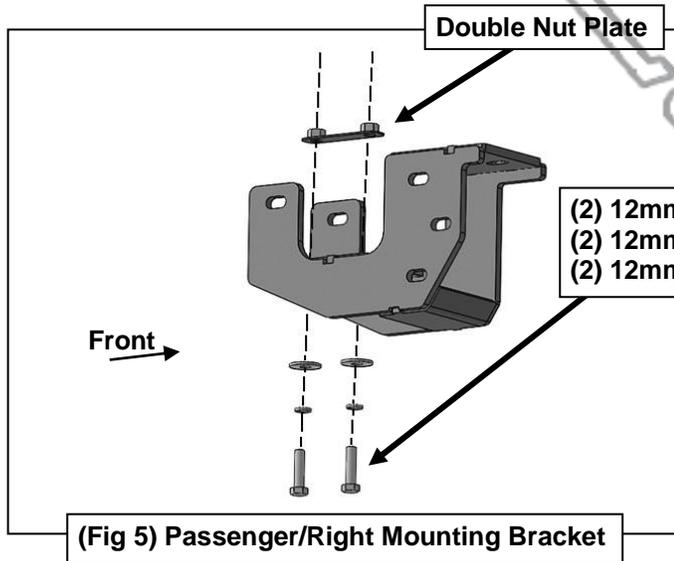


(Fig 3) Remove (2) factory hex nuts from each side

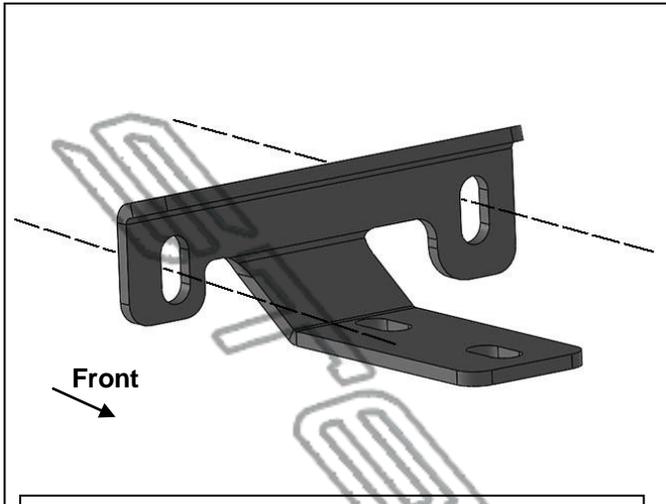
**WARNING!** Do not remove bumper bolts unless the bumper is properly supported on blocks or stands or the bumper may fall.



(Fig 4) Remove the tow hooks and plastic covers, if equipped

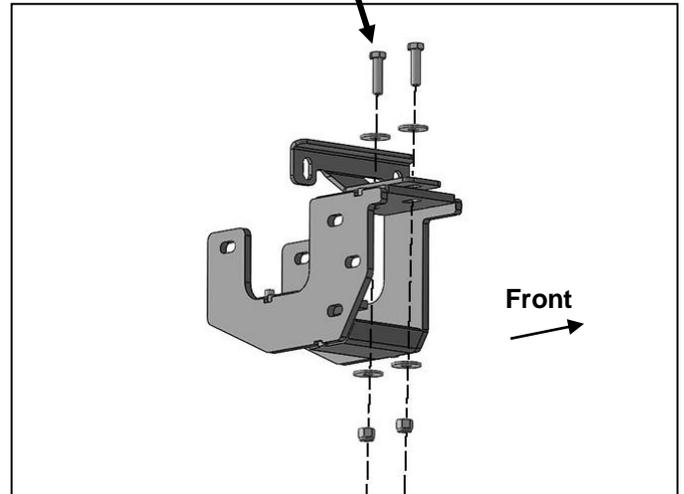


Passenger/right Side Installation Pictured

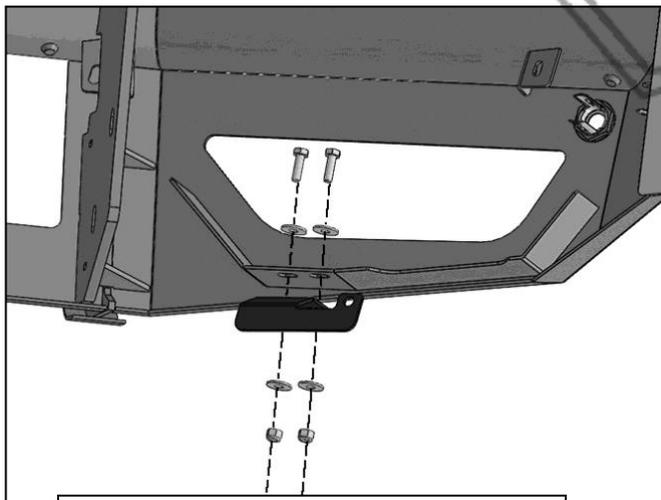


(Fig 7) Reuse the factory hardware to attach the Passenger/Right Support Bracket to the frame

- (2) 12mm x 45mm Hex Bolts
- (4) 12mm Flat Washers
- (2) 12mm Nylon Lock Nuts

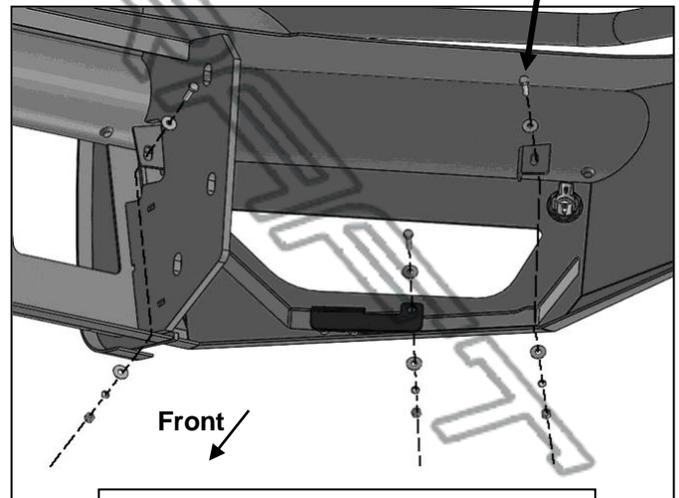


(Fig 8) Models without tow hooks, attach Passenger/Right Support Bracket to the top of the Frame Bracket. Models with tow hooks, attach tow hook to inside top of Mounting Bracket



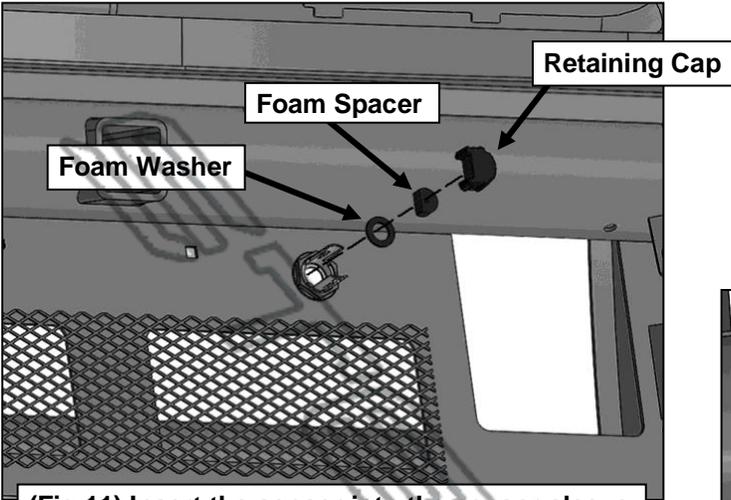
(Fig 9) Attach the Driver/Left Fog Light Bracket to the side of the Bumper

- (3) 6mm Hex Bolts
- (6) 6mm Flat Washers
- (3) 6mm Lock Washers
- (3) 6mm Hex Nuts

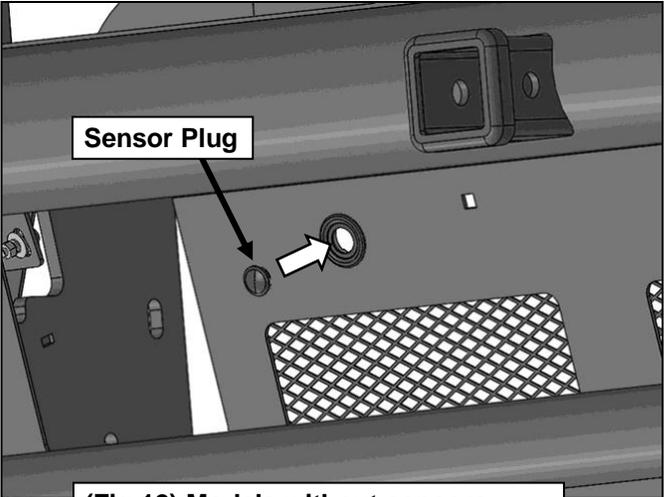


(Fig 10) Attach the factory Driver/Left fog light to the side of the Bumper

Passenger/right Side Installation Pictured



(Fig 11) Insert the sensor into the sensor sleeve

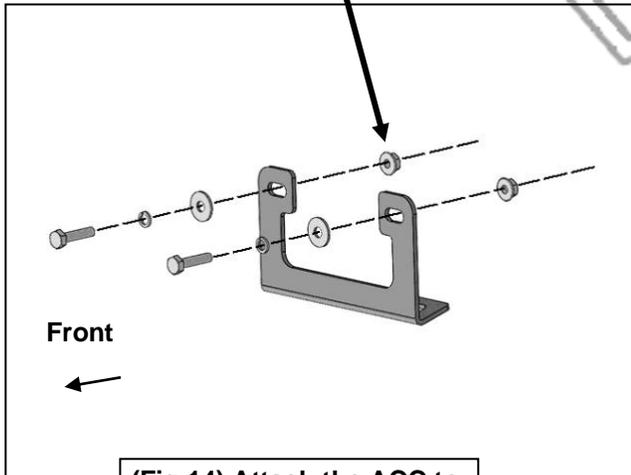


(Fig 12) Models without sensors  
insert sensor covers into the sensor

Passenger/right Side Installation Pictured

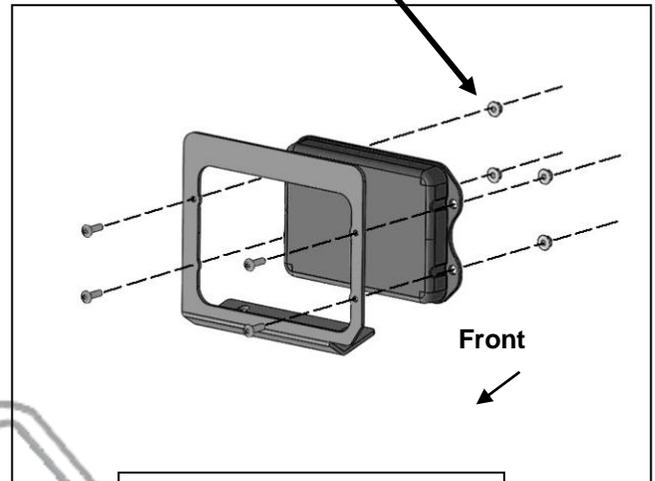
(Fig 11) Attach lower U Bracket to Upper Bracket. Reuse factory adjustment hardware (screw, spring and plastic nut)

- (2) 6mm Hex Bolts
- (2) 6mm Flat Washers
- (2) 6mm Lock Washers
- (2) 6mm Flanged Nuts



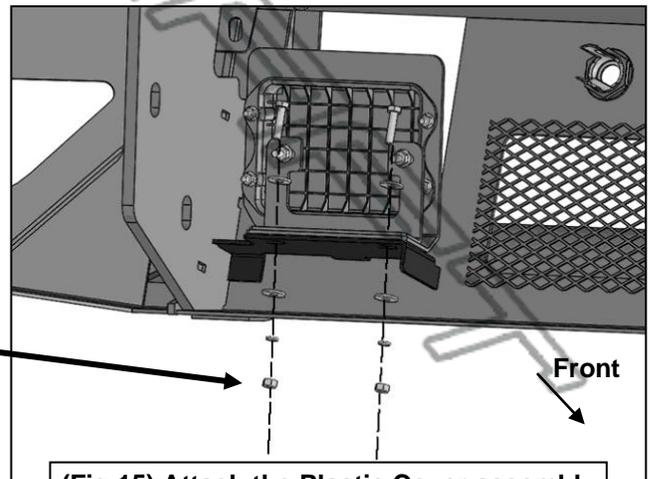
(Fig 14) Attach the ACC to the Relocation Bracket

- (4) 5mm Button Head Bolts
- (4) 6mm Flanged Nuts



(Fig 13) Attach Plastic Cover to the ACC Cover Bracket

- (2) 6mm Hex Bolts
- (4) 6mm Flat Washers
- (2) 6mm Lock Washers
- (2) 6mm Hex Nuts

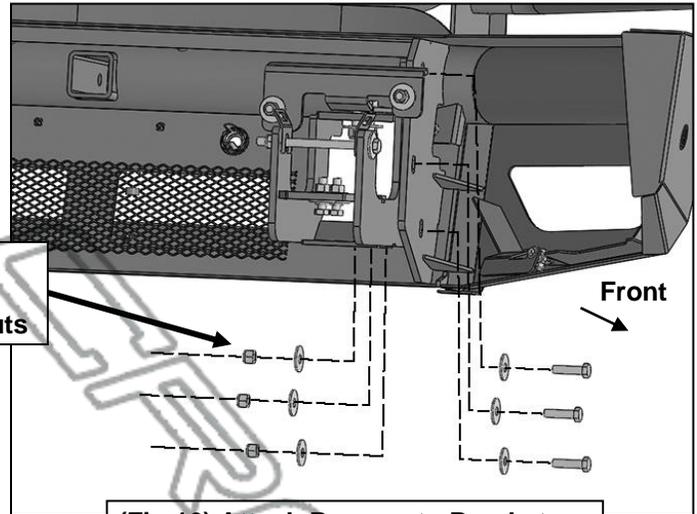


(Fig 15) Attach the Plastic Cover assembly and the ACC assembly to the mounting plate on the back of the Bumper

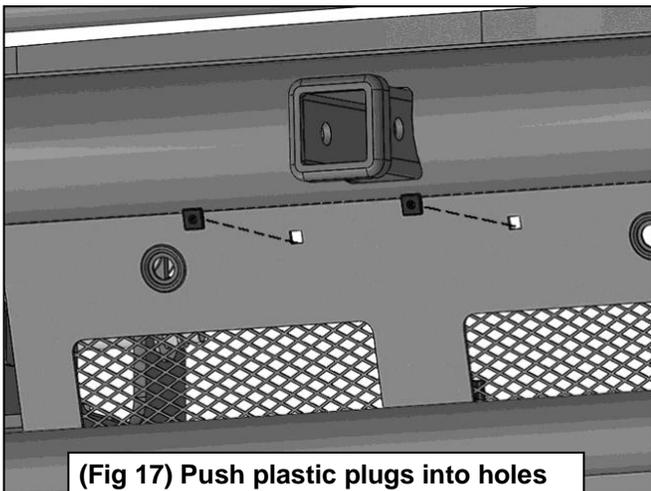
Passenger/right Side Installation Pictured

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

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



(Fig 16) Attach Bumper to Brackets



(Fig 17) Push plastic plugs into holes in Bumper for license plate if required