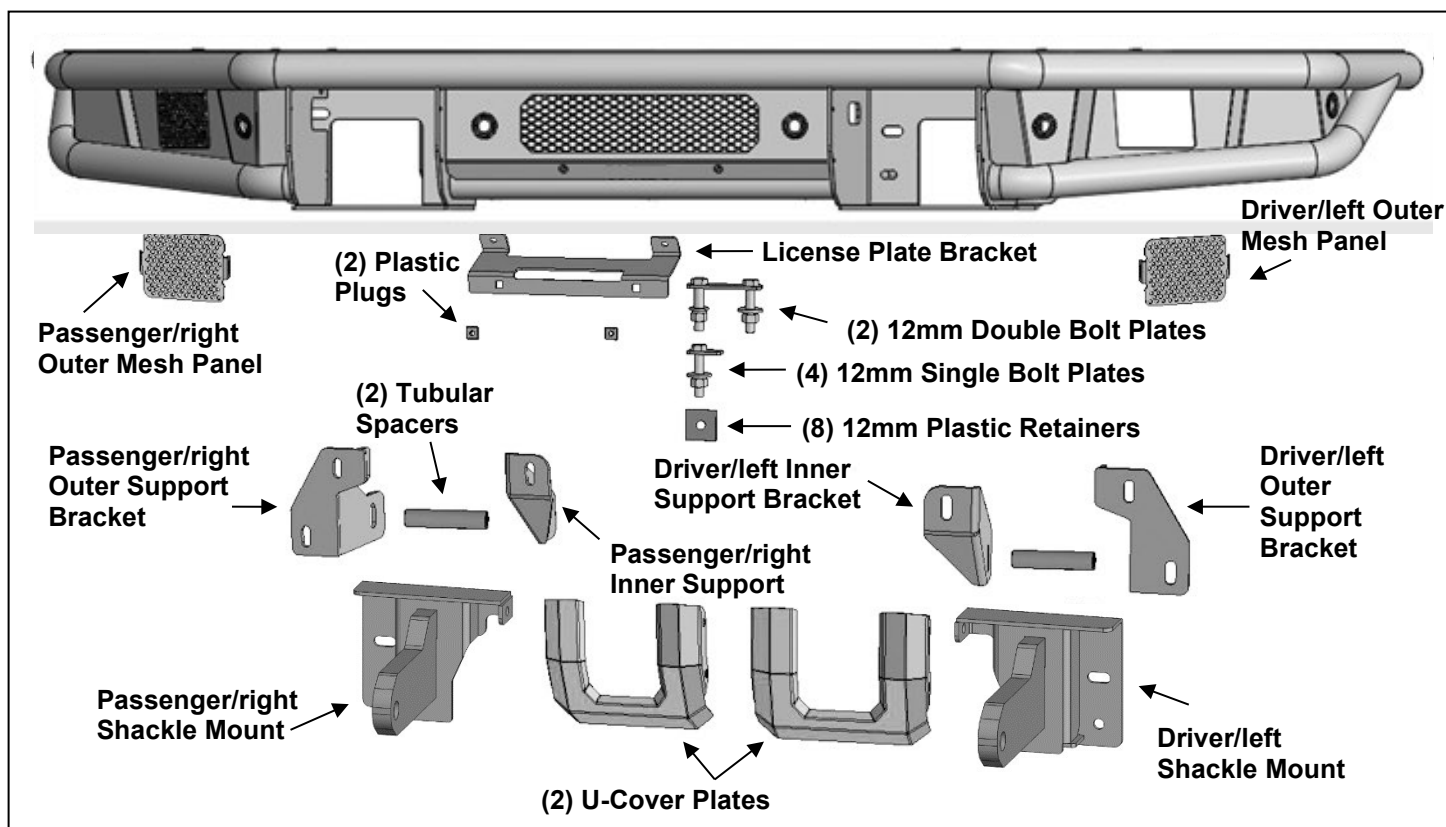


Installation Instructions

PARTS LIST:

1	Bumper Base	6	Foam Washer 15.5mm x 25mm x 2mm
1	DS/left Shackle Mount	6	Plastic Plug (Without sensors) (PP)
1	PS/right Shackle Mount	6	20mm x 10mm Foam Washer
1	DS/left Bracket Inner Support Bracket	12	Flat Head Self Tapping Screw
1	PS/right Bracket Inner Support Bracket	2	Sensor harness extension
1	DS/left Bracket Outer Support Bracket	1	Allen Wrench S=4
1	PS/right Bracket Outer Support Bracket	1	Allen Wrench S=5
1	PS/Right Mesh Panel	6	12mm Plastic Retainers
1	DS/Left Mesh Panel	14	6-1.00mm x 20mm Combo Bolts
2	12mm Tubular spacers	4	6mm Hex Flange Nuts
2	U-Shaped Cover plates	2	12-1.75mm x 35mm Hex Bolt
1	PS/right 12-1.75mm x 50mm Double-Bolt Plate	2	12-1.75mm x 150mm Hex Bolt
1	DS/left 12-1.75mm x 50mm Double-Bolt Plate	12	12mm x 32mm x 3mm Flat Washers
1	License Plate Bracket	2	12mm Hex Nut
2	License Plate Plastic Inserts	4	12mm Lock Washers
2	12-1.75mm x 50mm Single-Bolt Plate	2	12mm x 24mm x 2.5mm Flat Washers
6	Retaining Cap (PP)	8	12mm Nylon Lock Nut



TOOLS REQUIRED



Ratchet



13 & 19mm Socket



Extensions

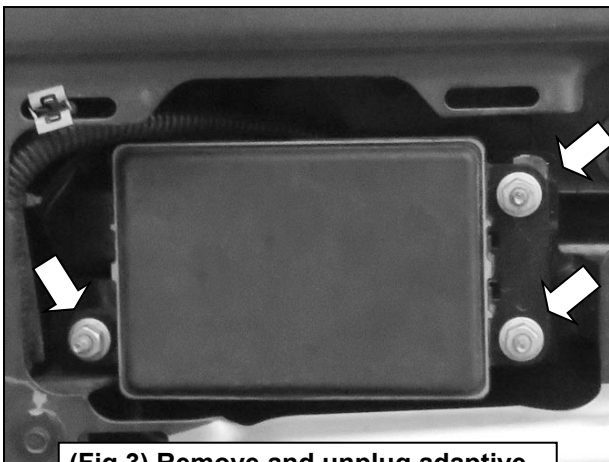


Wrench

- 1** Follow (Fig 1 – 9) to remove factory bumper and wiring harness to prepare vehicle for LD Bumper installation.



(Fig 1) Remove license plate from Bumper



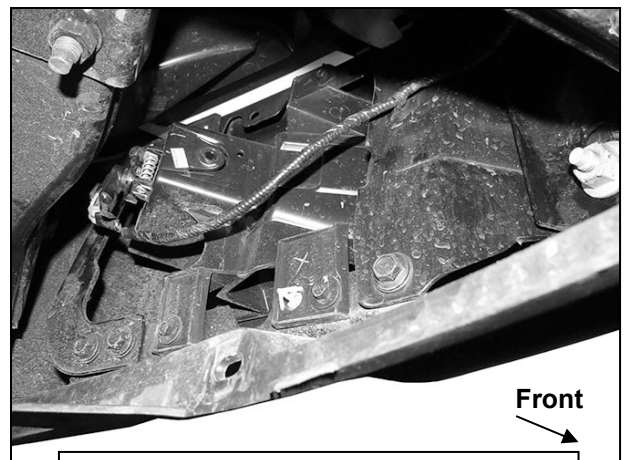
(Fig 3) Remove and unplug adaptive cruise control from driver/left side of frame, if equipped



Front

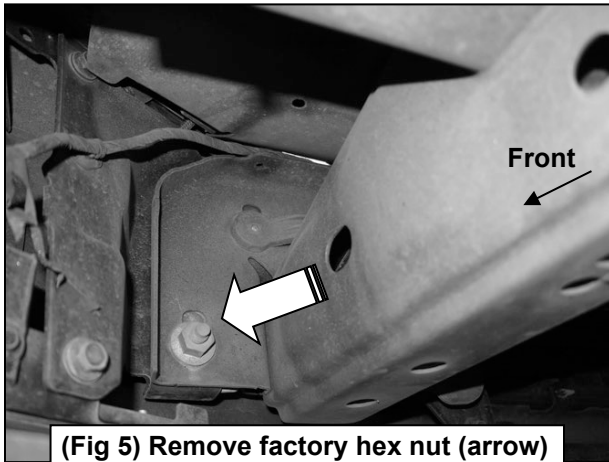


(Fig 2) Remove the plastic bumper pad from the front of the Bumper



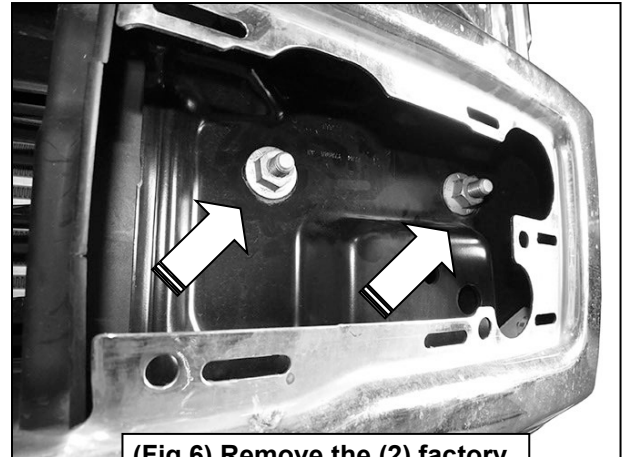
Front

(Fig 4) Unplug and move factory wiring harness for fog lights (if equipped)

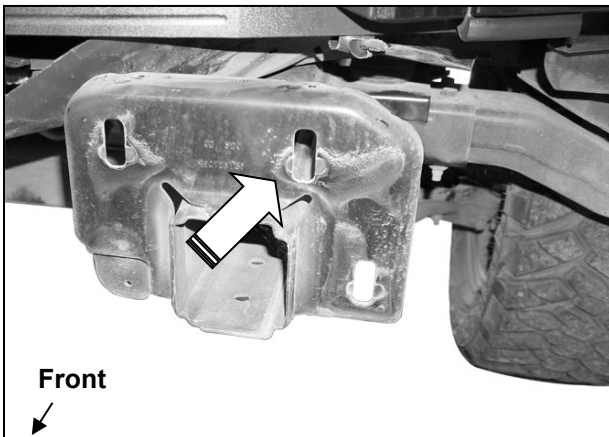


(Fig 5) Remove factory hex nut (arrow) from back of bumper bracket

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



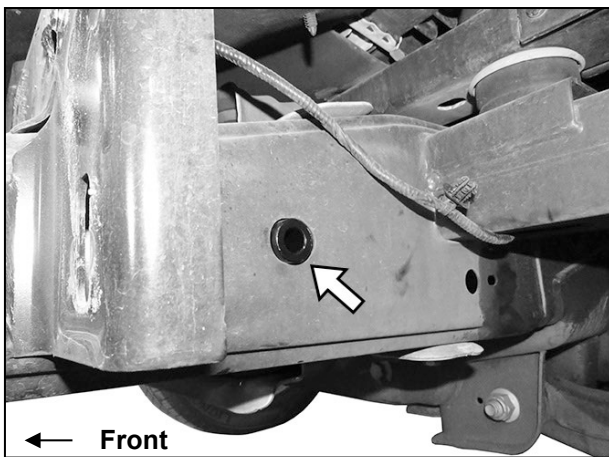
(Fig 6) Remove the (2) factory hex nuts from each side



(Fig 7) Remove double bolt plates from end of frame (driver/left side end of frame pictured)

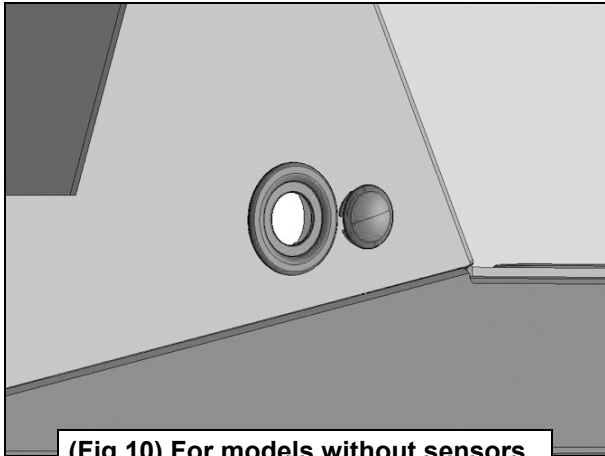


(Fig 8) Optional, remove the factory frame extensions, if equipped

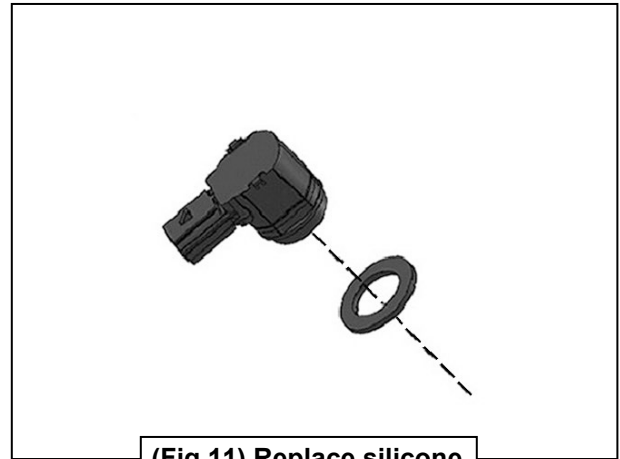


(Fig 9) Insert the Frame Tube Spacers into the holes in the frame. Driver/left side pictured

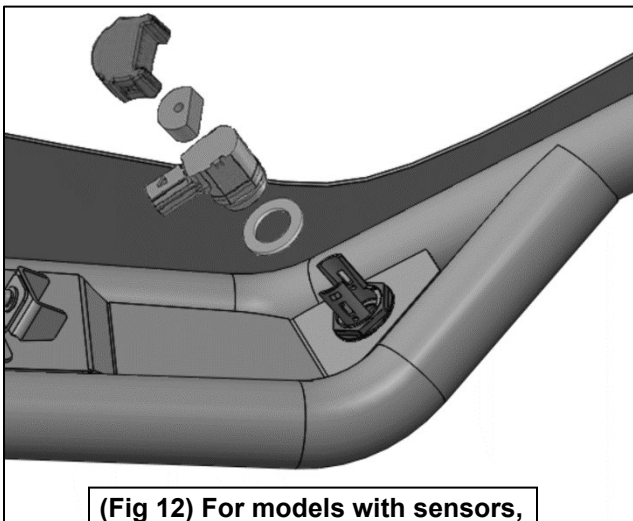
Follow (Fig 10 – 24) to attach Brackets and Sensors or Plastic Plugs, prepare Bumper for installation, then attach Bumper to Brackets. Ensure Bolts are hand tightened at this point.



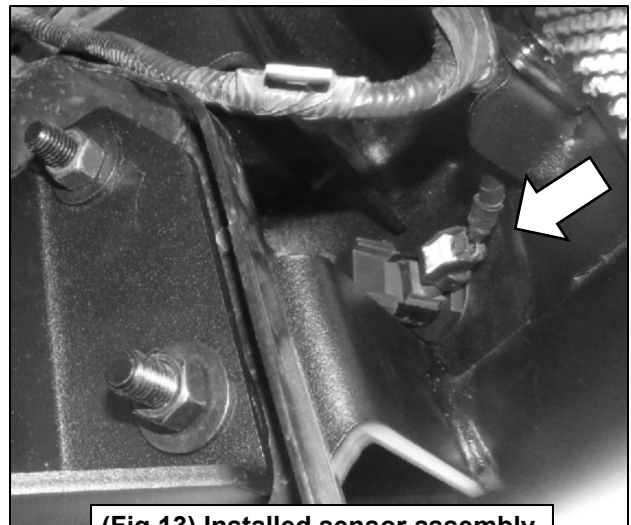
(Fig 10) For models without sensors, push Plastic Plug into sensor mount



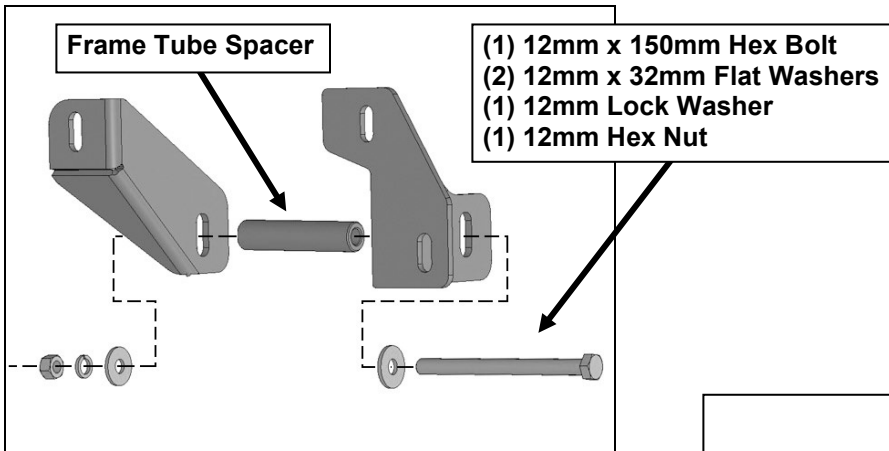
(Fig 11) Replace silicone seal with large Seal



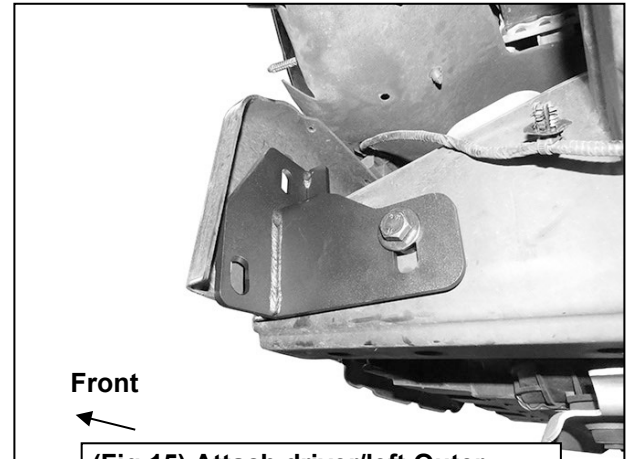
(Fig 12) For models with sensors, insert sensor assembly into sensor mount on back of Bumper



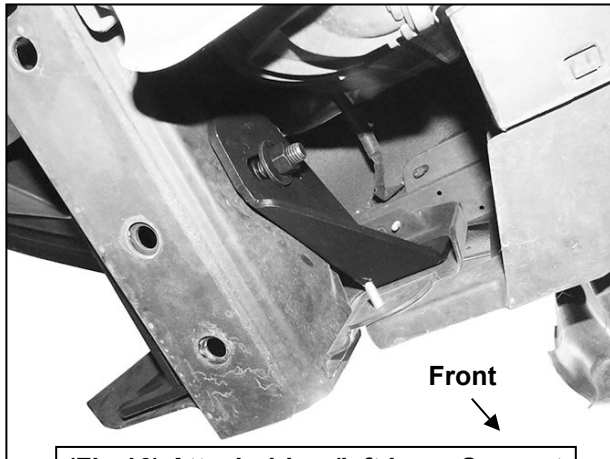
(Fig 13) Installed sensor assembly



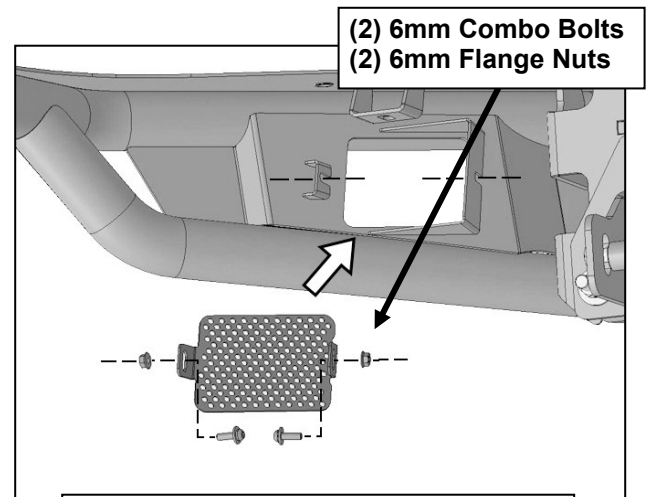
(Fig 14) Attach the driver/left Inner and Outer Support Brackets to the sides of the frame



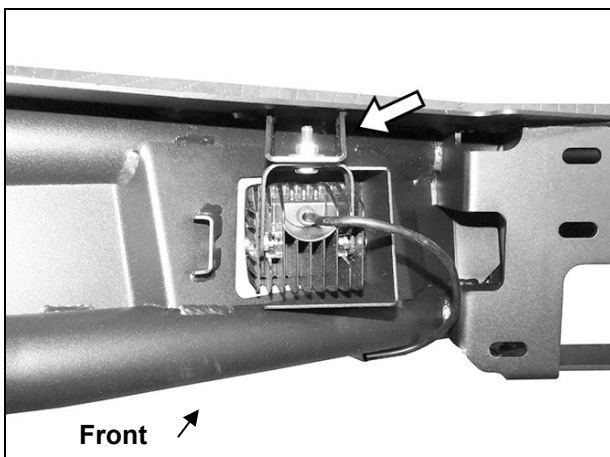
(Fig 15) Attach driver/left Outer Support Bracket to outside of frame



(Fig 16) Attach driver/left Inner Support Bracket to inner side of frame



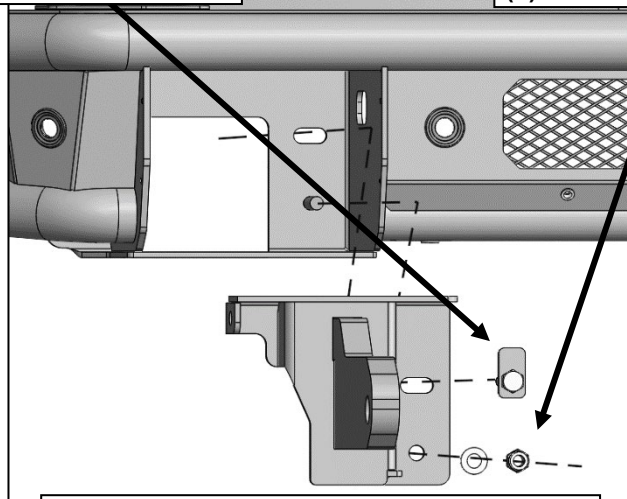
(Fig 17) Attach the Outer Mesh Panels to the tabs on the back of the Bumper



(Fig 18) Attach the cube light (not included) to the tab on the back of the Bumper

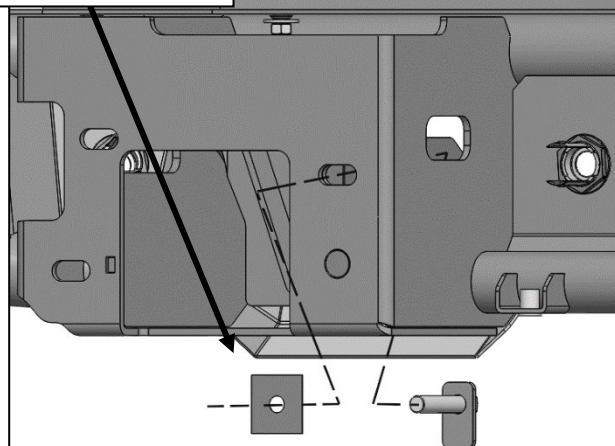
(1) Single Bolt Plate

(1) Single Bolt Plate
(1) Plastic Retainer



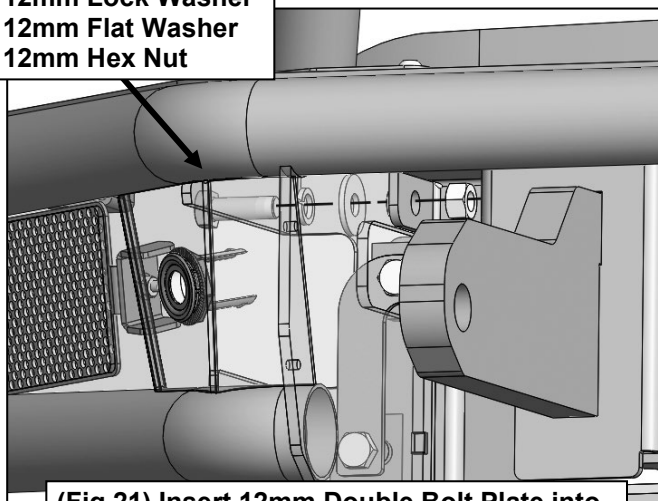
(Fig 19) Attach Shackle Mount to threaded stud on Bumper. Insert Single Bolt Plate through top inner mounting slot

(1) Single Bolt Plate
(1) Plastic Retainer



(Fig 20) Thread Plastic Retainers onto Bolt Plate to hold them in place for Bumper installation

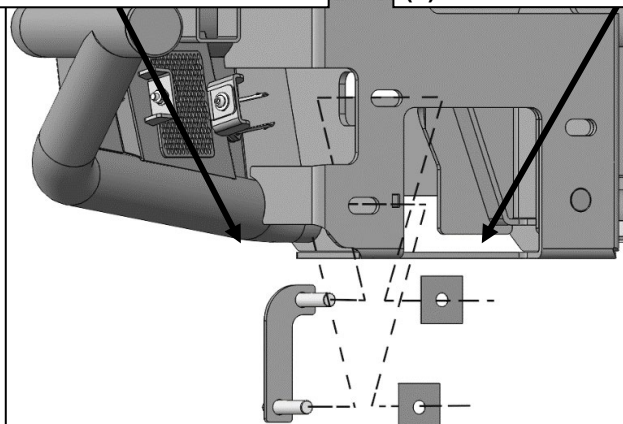
(1) 12mm Hex Bolt
(1) 12mm Lock Washer
(1) 12mm Flat Washer
(1) 12mm Hex Nut



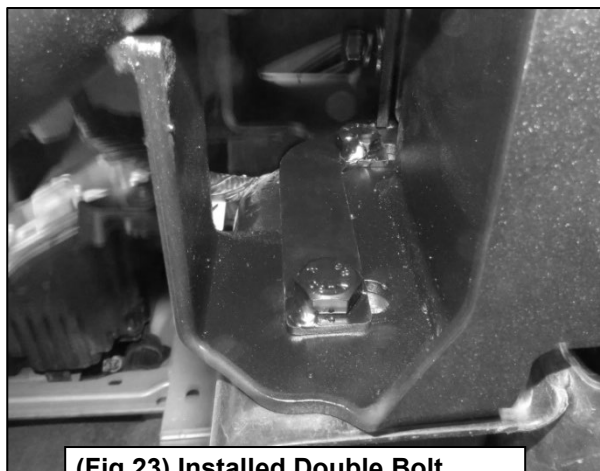
(Fig 21) Insert 12mm Double Bolt Plate into outer slots in Shackle Mount and Bumper

(1) 12mm Double Bolt Plate

(2) Plastic Retainers



(Fig 22) Use Double Bolt Plate to attach Shackle Mount to Bumper. Thread Plastic Retainers onto Bolt Plate to hold them in place for Bumper installation

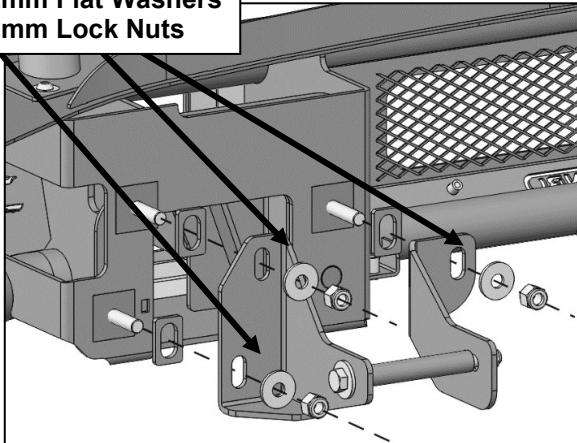


(Fig 23) Installed Double Bolt Plate. Picture from behind Bumper

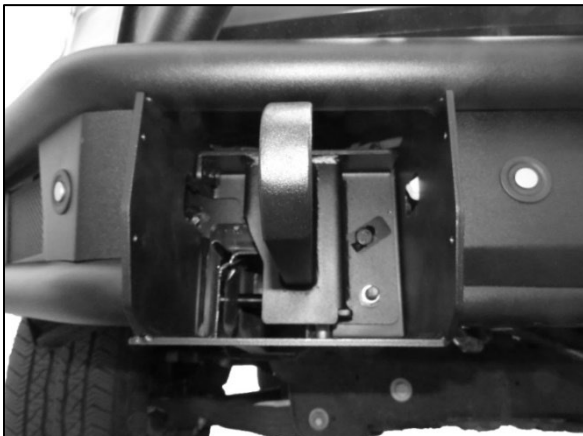
3

Follow (Fig 24 – 30) to attach U-Covers and License Plate Bracket to Bumper. Ensure Bumper is level, then tighten all hardware.

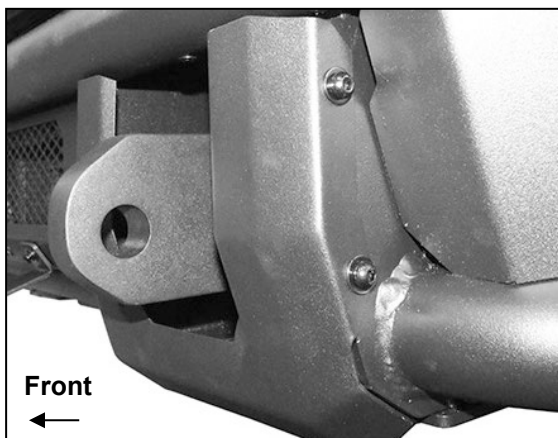
(3) 12mm Flat Washers
(3) 12mm Lock Nuts



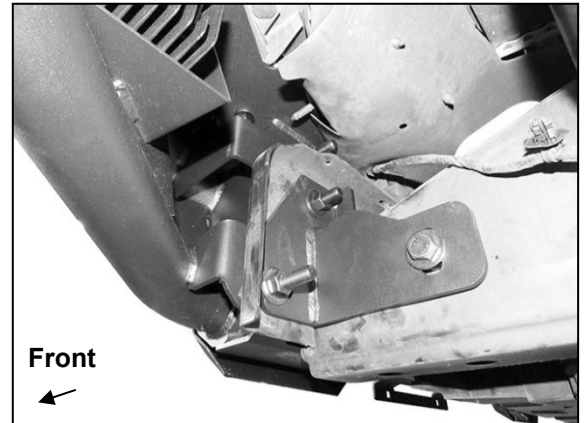
(Fig 24) Hold Bumper up to end of frame. Guide Bolt Plates in Bumper through bumper bracket on frame and Support Brackets



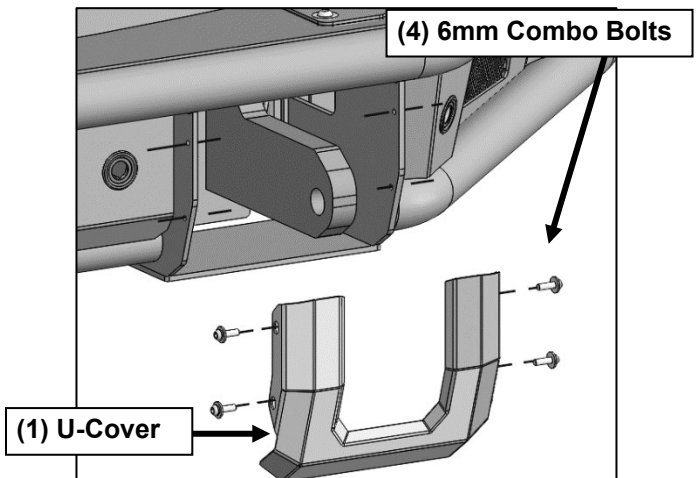
(Fig 26) Driver/left side of Bumper installed (cube light pictured not included)



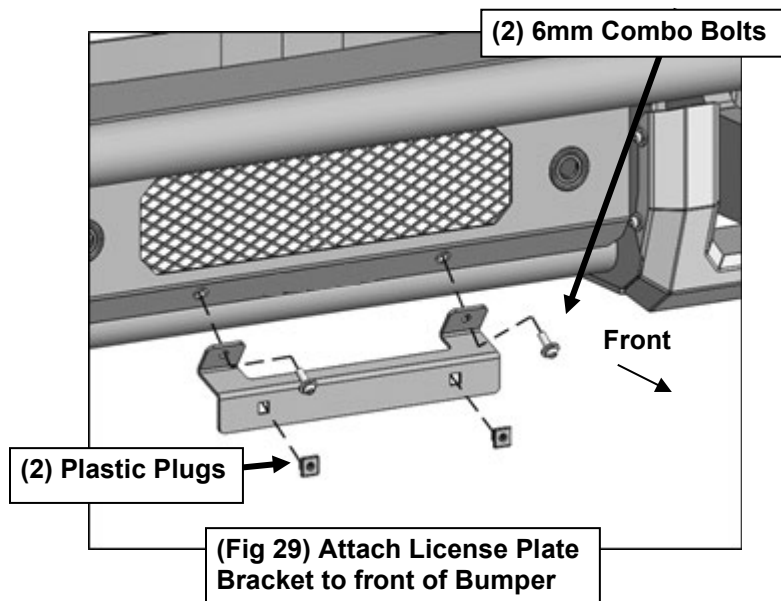
(Fig 28) Driver/left U-Cover installed (light not included)



(Fig 25) Driver/left side of Bumper installed. Pictured from behind Bumper



(Fig 27) Once Bumper is fully installed and hardware fully tightened, install U-Covers



4

Ensure Bumper is level and all fasteners are tightened at this point, then ensure all connections are secure. Installation is complete. Do periodic inspections to the installation to make sure that all hardware is secure and tight.

