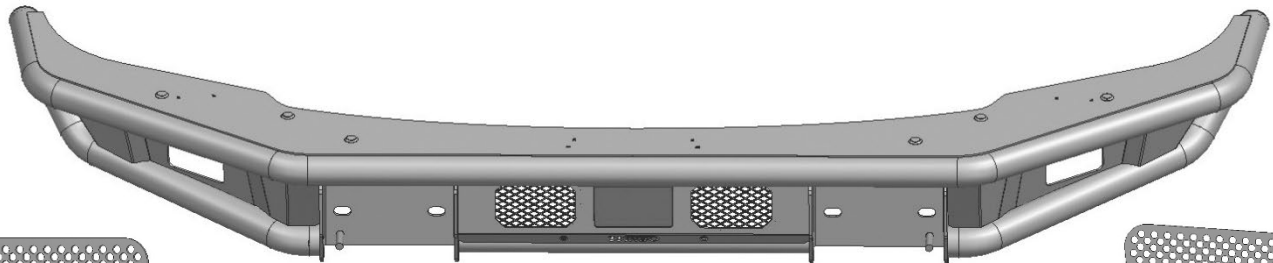


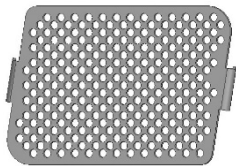
Installation Instructions

PARTS LIST:

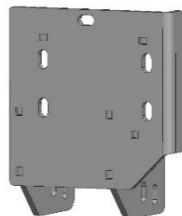
1	LD Bumper Base	8	12 – 1.75mm x 50mm Single Bolt Plate
1	DS/Left Mounting Bracket	2	12 – 1.75mm x 40mm Single Bolt Plate
1	PS/Right Mounting Bracket	8	12 – 1.75mm x 50mm Hex Bolt
1	DS/Left LD Shackle Mount	32	12mm x 32mm x 3mm Flat Washer
1	PS/Right LD Shackle Mount	4	12mm x 24mm x 2.5mm Flat Washer
2	Bumper Cover Plates	18	12mm Lock Washer
1	DS/Left Fill in Mesh Panel	18	12mm Hex Nut
1	PS/Right Fill in Mesh Panel	10	12mm Nylon Lock Nut
1	ACC Relocation Bracket (for 19 – 22 MY)	17	6 – 1.00mm x 20mm Button Head Combo Bolt
1	ACC Mounting Bracket	7	6 – 1.00mm x 25mm Button Head Allen Bolt
1	ACC Protective Cover	10	6mm x 18mm x 1.6mm Flat Washer
1	License Plate Bracket	7	6mm Lock Washer
2	License Plate Plastic Plug	7	6mm Hex Nut
10	12mm Plastic Retainer	7	6mm Serrated Flange Nut
4	12mm Double Bolt Plate	1	Allen Wrench S=4



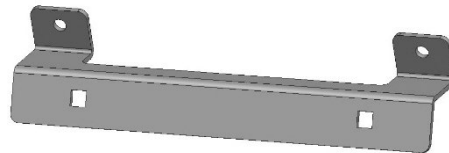
LD Bumper Base



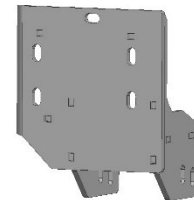
DS/Left Fill in Mesh Panel



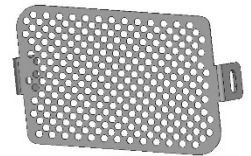
PS Right Mounting Bracket



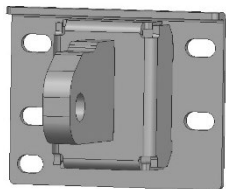
License Plate Bracket



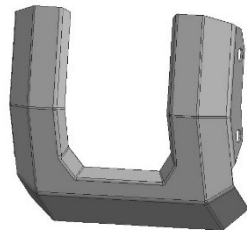
DS Left Mounting Bracket



PS/Right Fill in Mesh Panel



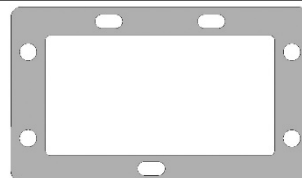
PS/Right LD Shackle Mount



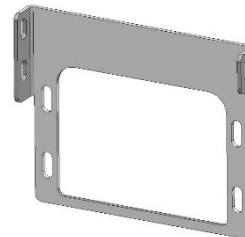
Bumper Cover Plates



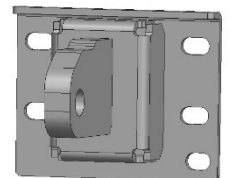
ACC Protective Cover



ACC Relocation Bracket



ACC Mounting Bracket



DS/Left LD Shackle Mount



License Plate Plastic Plug



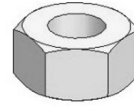
Lock Washer



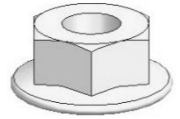
Flat Washer



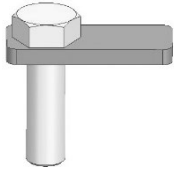
Hex Bolt



Hex Nut



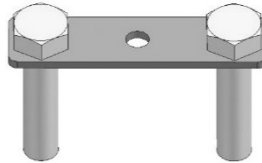
Serrated Flange Nut



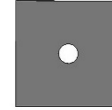
Single Bolt Plate



Button Head Combo Bolt



Double Bolt Plate



Plastic Retainer



Button Head Allen Bolt

TOOLS REQUIRED



Ratchet



13, 18, & 19mm Socket



Extensions



Allen Wrench



Wrench

1

Follow (Fig 1 – 20) to remove factory bumper and wiring harness to prepare vehicle for HD4 Tubular LD Front Bumper installation.



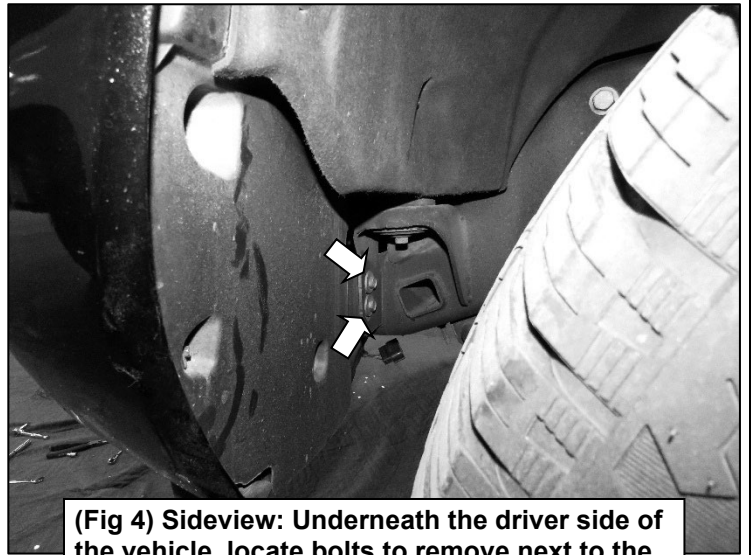
(Fig 1) Begin by going underneath the Driver side of the vehicle.



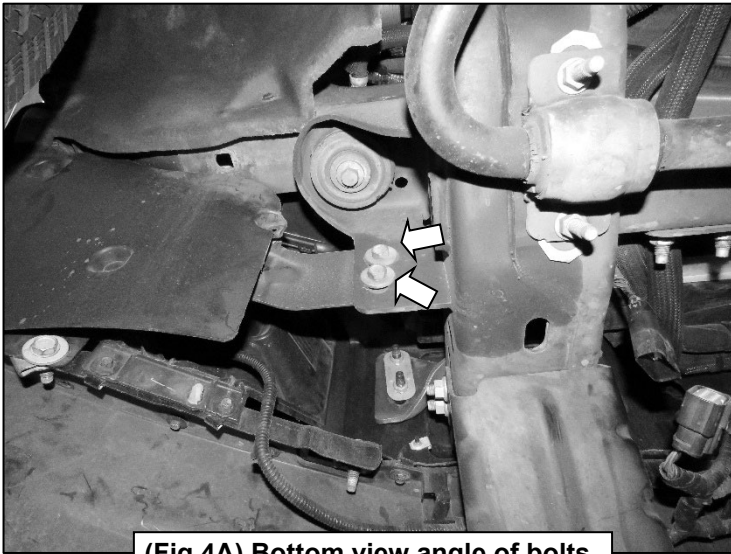
(Fig 2) Underneath the driver side of the vehicle unplug sensor for front bumper removal



(Fig 3) Unplugged sensor



(Fig 4) Sideview: Underneath the driver side of the vehicle, locate bolts to remove next to the wiring harness for front bumper removal.



(Fig 4A) Bottom view angle of bolts



(Fig 5) Removed bolts on driver side next to sensor.



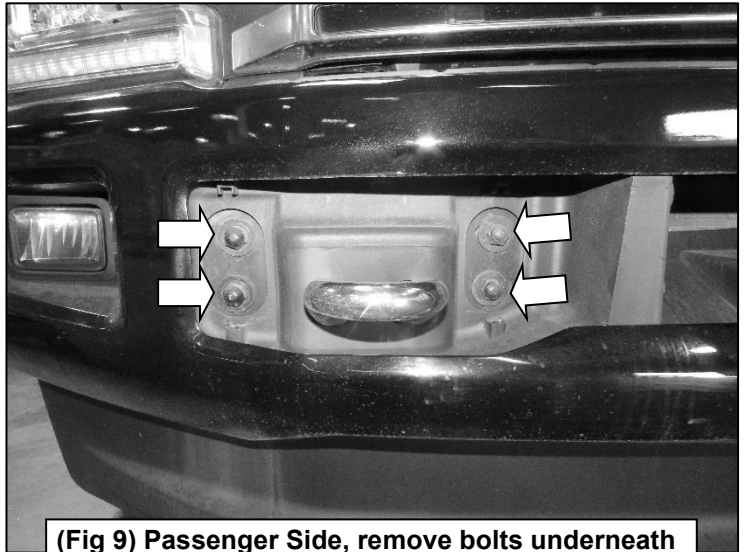
(Fig 6) On passenger side of the vehicle locate the same bolts to remove for front bumper removal.



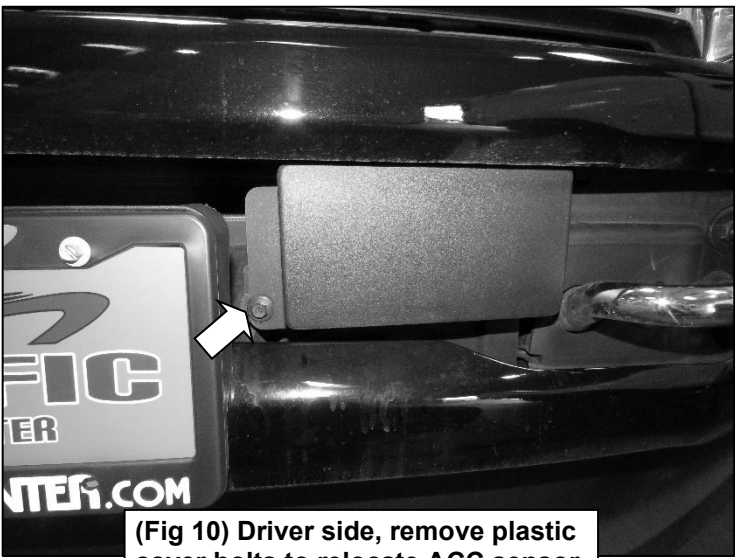
(Fig 7) Back to the front of the vehicle, remove plastic covers to remove bolts.



(Fig 8) Driver Side, remove bolts underneath plastic cover on the plastic bumper pad.



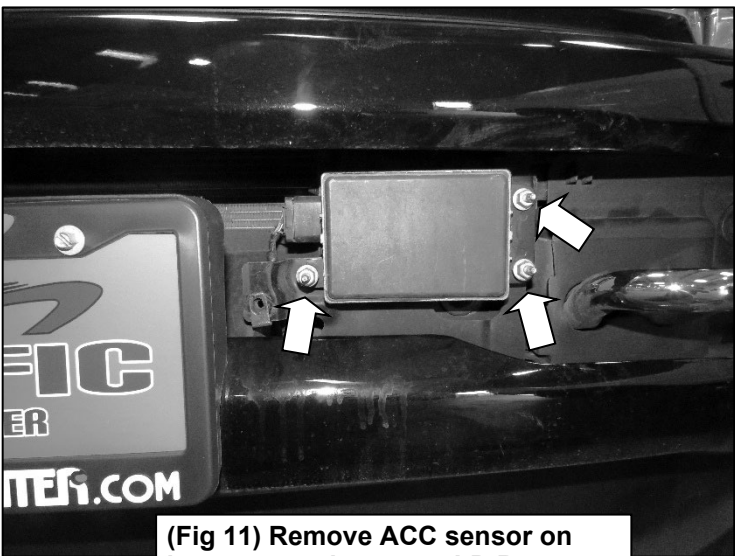
(Fig 9) Passenger Side, remove bolts underneath plastic cover on the plastic bumper pad.



(Fig 10) Driver side, remove plastic cover bolts to relocate ACC sensor.



(Fig 10A) Driver side, remove plastic cover bolts to relocate ACC sensor.



(Fig 11) Remove ACC sensor on bumper to relocate on LD Bumper.



(Fig 12) Remove remaining bolts underneath ACC sensor.



(Fig 13) Slowly pull off factory Front Bumper with help.

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



(Fig 14) Driver side, remove tow hook bolts under frame.



(Fig 15) Removed driver side tow hook and remove double bolt plates on both sides.



(Fig 16) Removed double bolt plates on both sides.



(Fig 17) On passenger side, remove tow hook bolts under frame.



(Fig 18) Removed passenger side tow hook and remove double bolt plates on both sides.



(Fig 19) Removed double bolt plates on both sides.

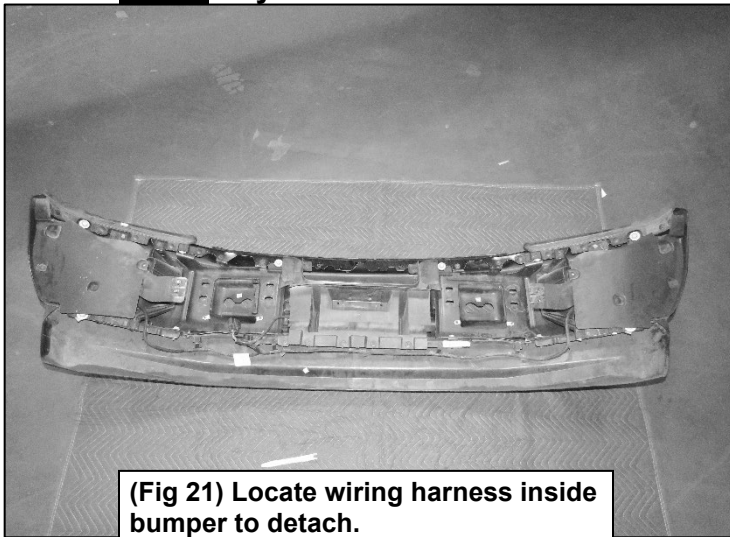


(Fig 20) Mounting points are ready for front bumper bracket installation.

2

Follow (Fig 21 – 47) 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.

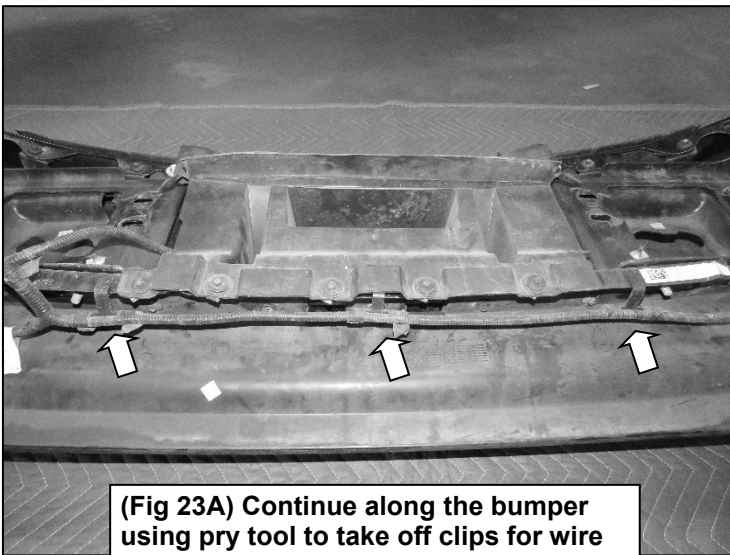
NOTE: If your truck does not have ACC Sensor skip to (Fig 27A) attaching ACC cover.



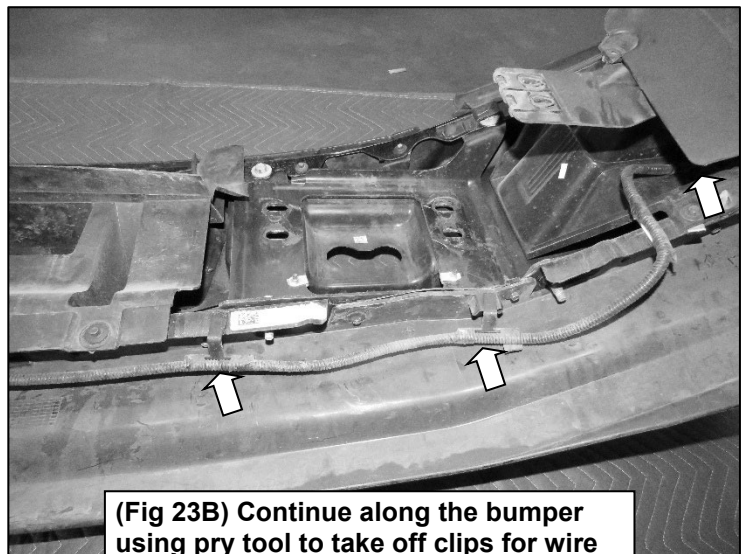
(Fig 21) Locate wiring harness inside bumper to detach.



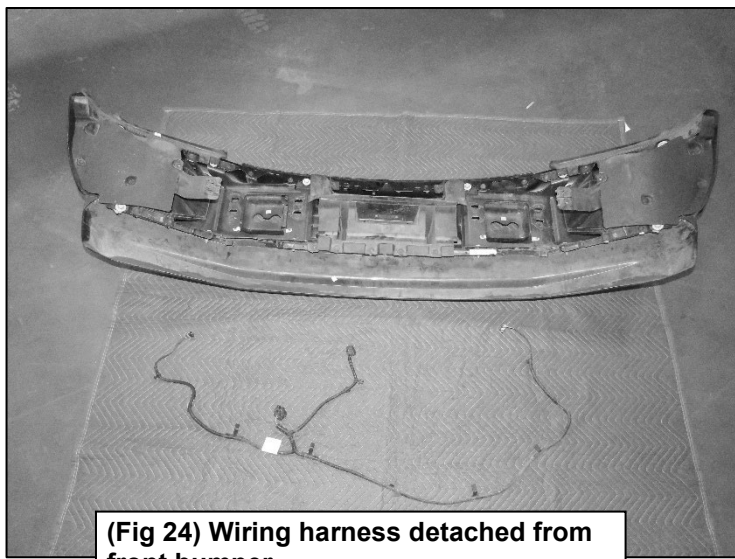
(Fig 22) Use pry tool to take off clips for wire harness relocation.



(Fig 23A) Continue along the bumper using pry tool to take off clips for wire harness relocation.

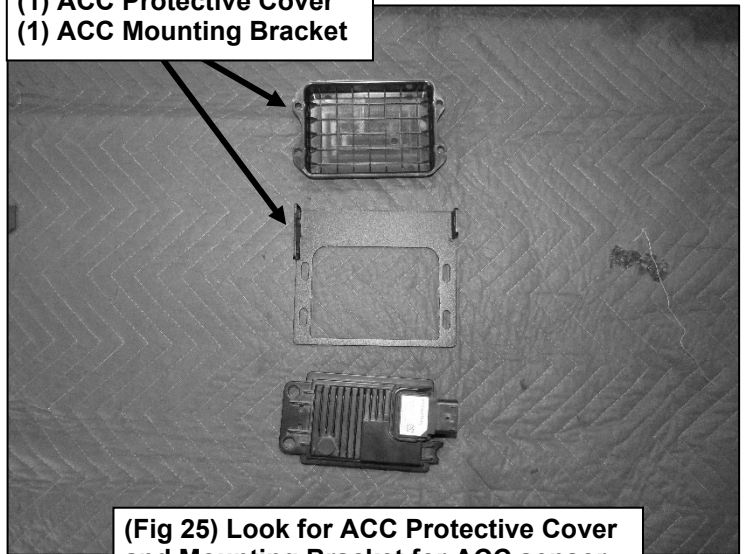


(Fig 23B) Continue along the bumper using pry tool to take off clips for wire harness relocation.

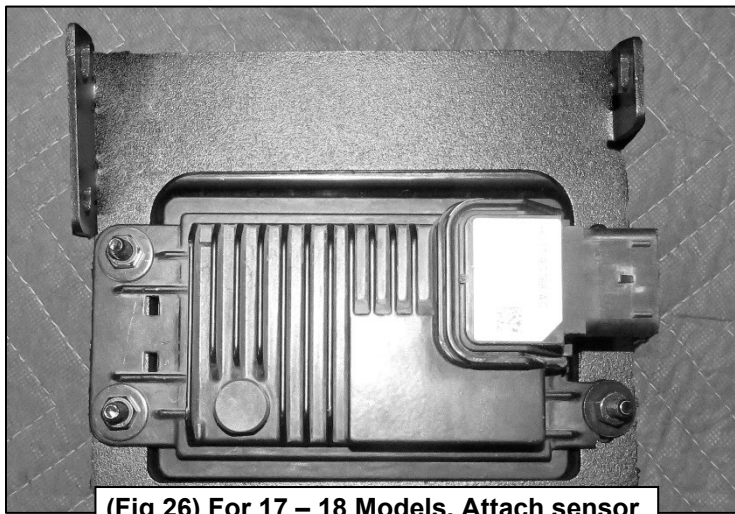


(Fig 24) Wiring harness detached from front bumper.

- (1) ACC Protective Cover
- (1) ACC Mounting Bracket

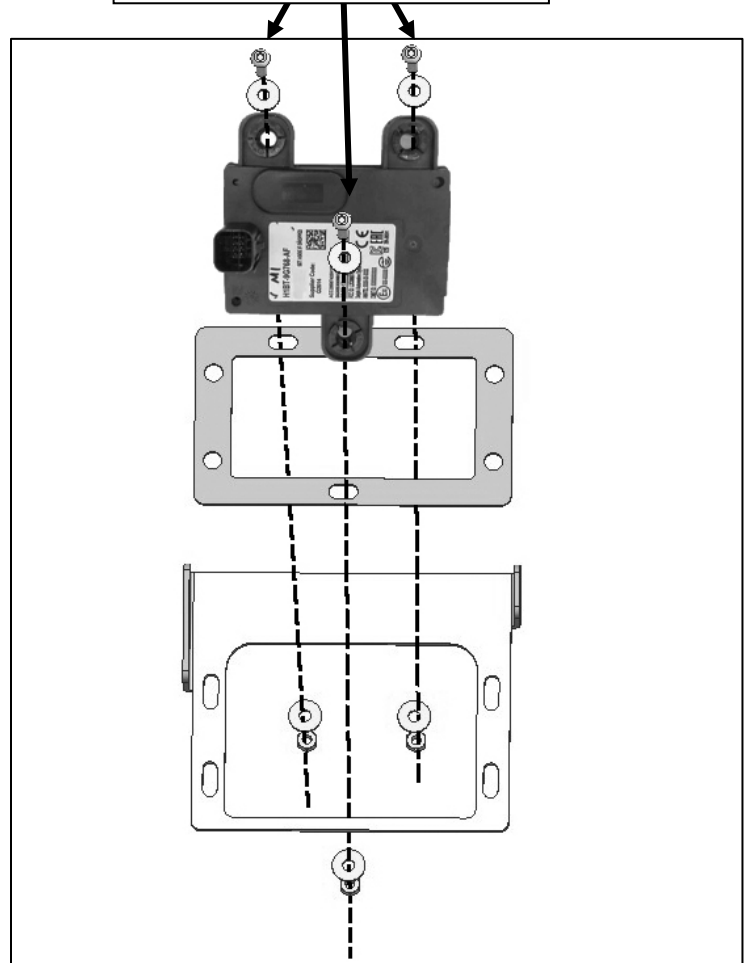


(Fig 25) Look for ACC Protective Cover and Mounting Bracket for ACC sensor.



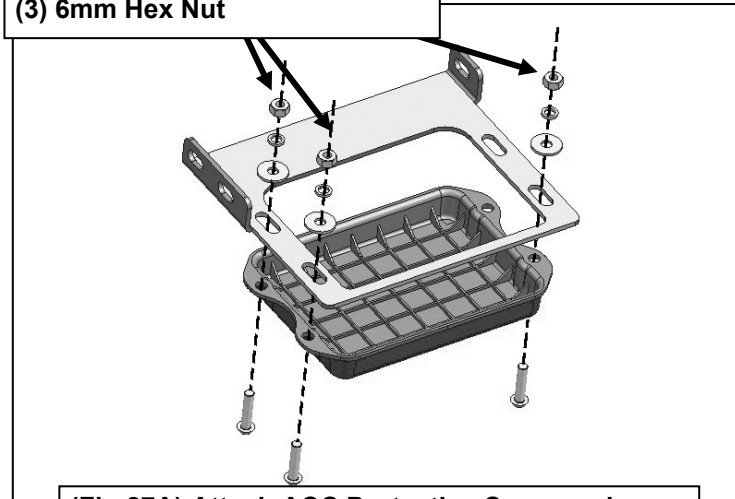
(Fig 26) For 17 – 18 Models, Attach sensor to Protective Cover and Mounting Bracket.

- (3) 6mm Button Head Allen Bolt
- (4) 6mm Flat Washer
- (3) 6mm Hex Nut



(Fig 27) For 19 – 22 Model use ACC Relocation Bracket, attaching to Mounting Bracket with indicated hardware.

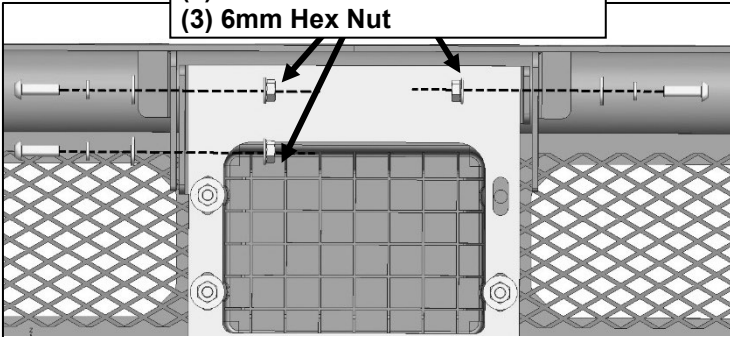
- (3) 6mm Button Head Allen Bolt
- (3) 6mm Flat Washer
- (3) 6mm Lock Washer
- (3) 6mm Hex Nut



(Fig 27A) Attach ACC Protective Cover and Mounting Bracket underneath the sensor with indicated hardware.

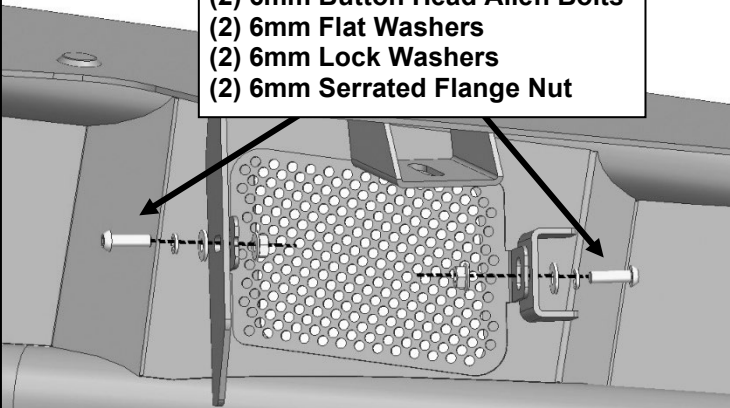
NOTE: Vehicles without ACC, attach protective cover to Mounting Bracket.

- (3) 6mm Button Head Allen Bolt
- (3) 6mm Flat Washer
- (3) 6mm Lock Washer
- (3) 6mm Hex Nut

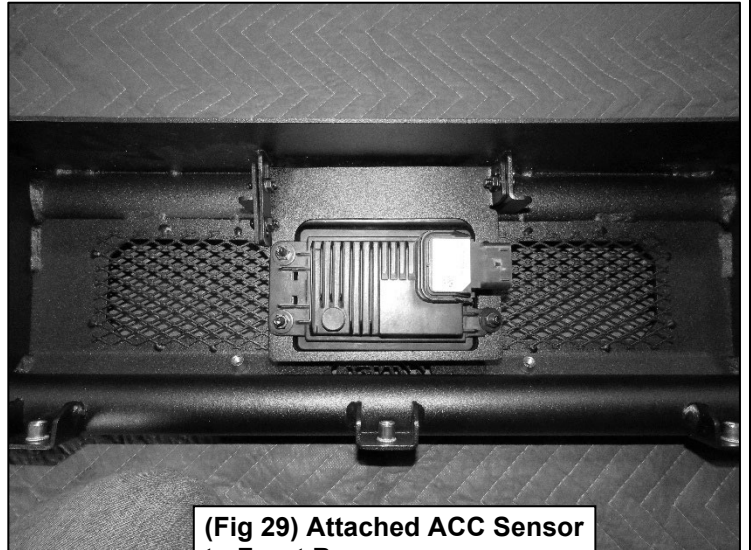


(Fig 28) Attach ACC Sensor to Center mounting point with indicated hardware.

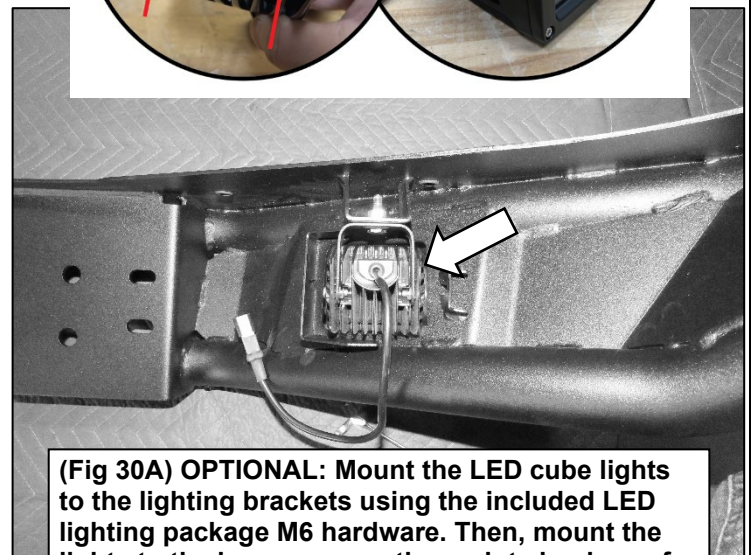
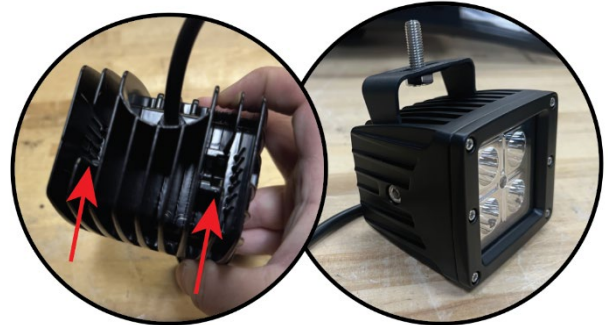
- (2) 6mm Button Head Allen Bolts
- (2) 6mm Flat Washers
- (2) 6mm Lock Washers
- (2) 6mm Serrated Flange Nut



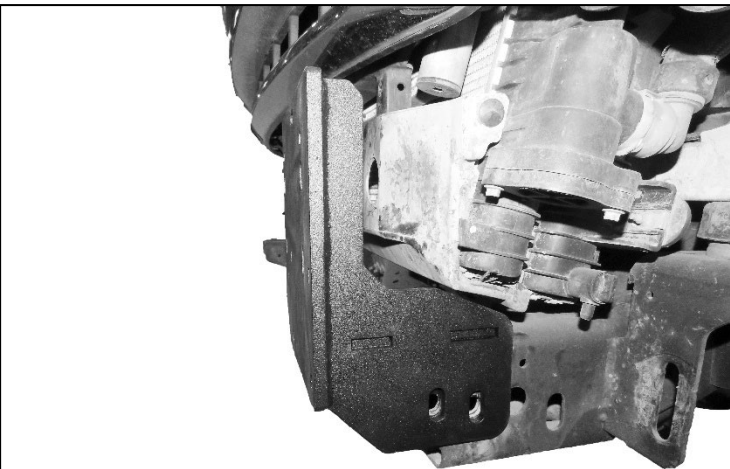
(Fig 30) Attach the Fill in Mesh Panels to both the Passenger/Right and Driver/Left tabs on the back of the bumper with indicated hardware.



(Fig 29) Attached ACC Sensor to Front Bumper.

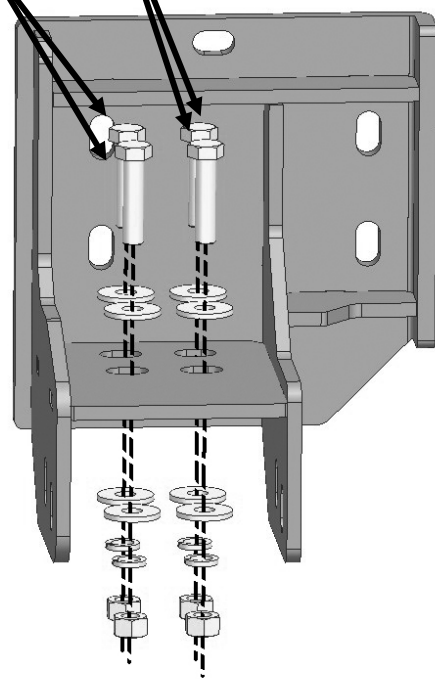


(Fig 30A) OPTIONAL: Mount the LED cube lights to the lighting brackets using the included LED lighting package M6 hardware. Then, mount the lights to the bumper mounting points in place of the mesh panels using the LED lighting package M8 hardware.



(Fig 31) Align the DS/Left Mounting Bracket to the top and side mounting points on the frame.

- (4) 12 – 1.75mm x 50mm Hex Bolt
- (8) 12mm x 32mm x 3mm Flat Washer
- (4) 12mm Lock Washer
- (4) 12mm Hex Nut

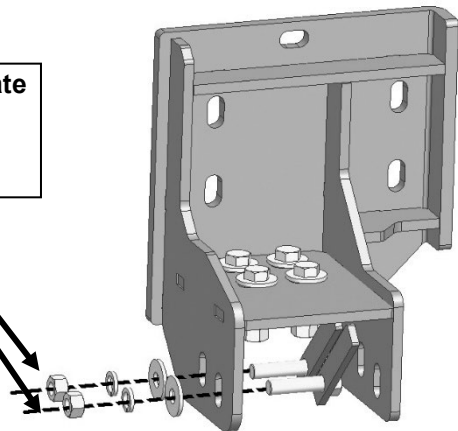


(Fig 32) Attach the DS/Left Mounting Bracket to the top mounting points on the frame with the indicated hardware.

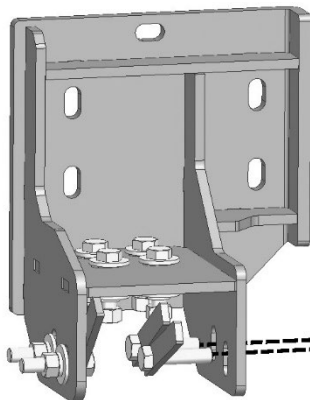


(Fig 33) Attached top mounting points with indicated hardware.

- (2) 12 – 1.75mm x 50mm Single Bolt Plate
- (2) 12mm x 32mm x 3mm Flat Washer
- (2) 12mm Lock Washer
- (2) 12mm Hex Nut



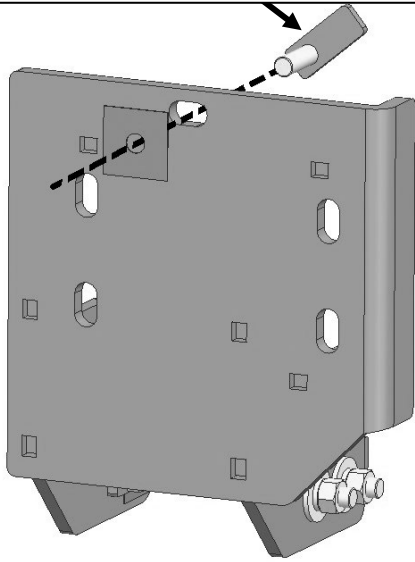
(Fig 34) Attach the DS/Left Mounting Bracket to the side mounting points on the frame with the indicated hardware.



- (2) 12 – 1.75mm x 50mm Single Bolt Plate
- (2) 12mm x 32mm x 3mm Flat Washer
- (2) 12mm Lock Washer
- (2) 12mm Hex Nut

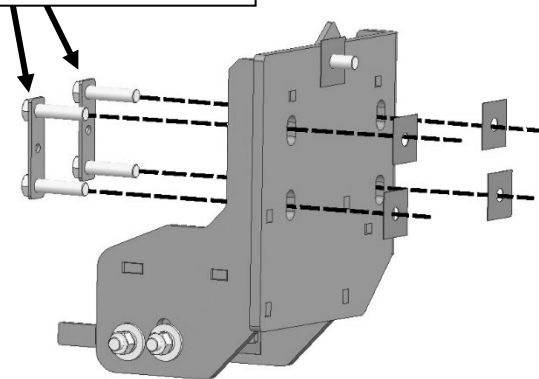
(Fig 35) Again attach side mounting points on the other side with indicated hardware.

- (1) 12 – 1.75mm x 40mm Single Bolt Plate
- (1) Plastic Retainer

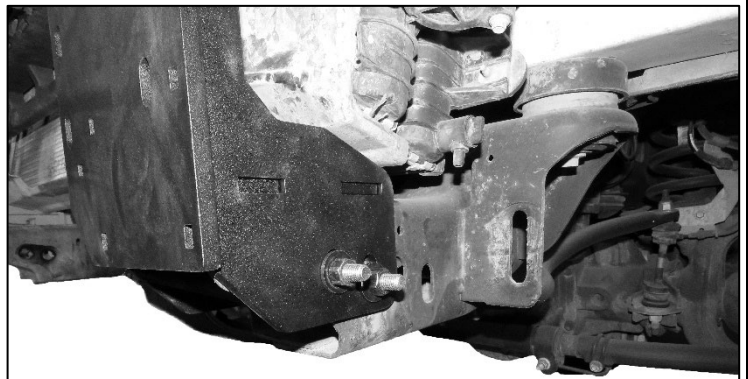


(Fig 37) On PS/Right Mounting Bracket attach indicated hardware on top mounting point.

- (2) 12mm Double Bolt Plate
- (4) Plastic Retainer



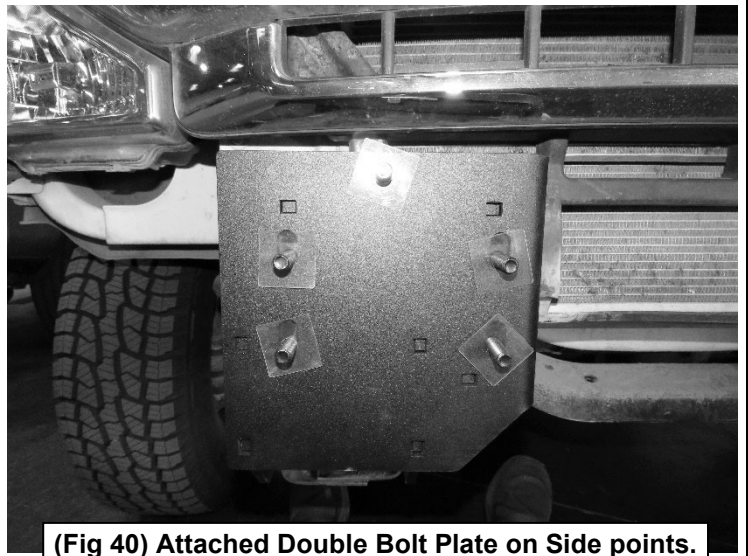
(Fig 39) Attach indicated hardware on side mounting points.



(Fig 36) Attached side mounting points with indicated hardware. (Repeat Fig 29 – 33 for PS/Right Mounting Bracket)



(Fig 38) Attached Single Bolt Plate on Top point.

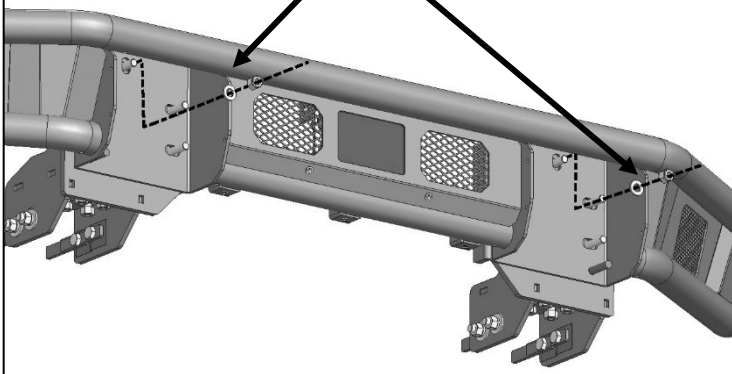


(Fig 40) Attached Double Bolt Plate on Side points.



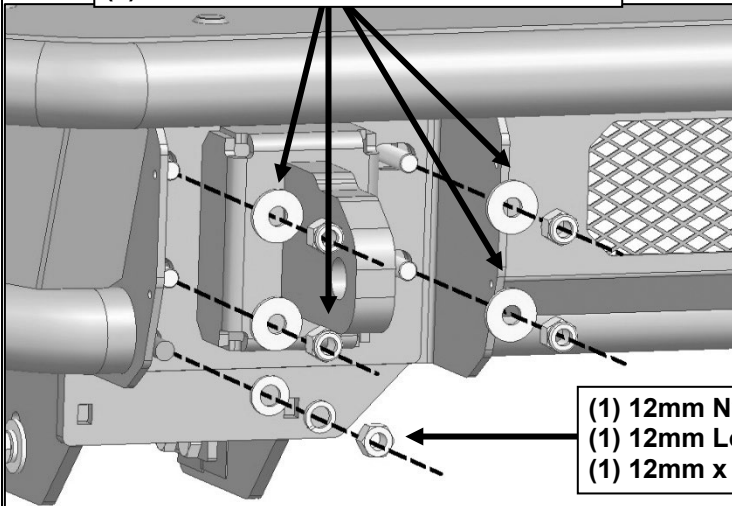
(Fig 41) Attached hardware on DS/Left Mounting. (Refer to Fig 37 – 39 for attachment)

- (2) 12mm Nylon Lock Nut
- (2) 12mm x 24mm x 2.5mm Flat Washer



(Fig 43) Attach hardware to the single bolt plate at the top of the mounting brackets with the indicated hardware.

- (4) 12mm Nylon Lock Nut
- (4) 12mm x 32mm x 3mm Flat Washer

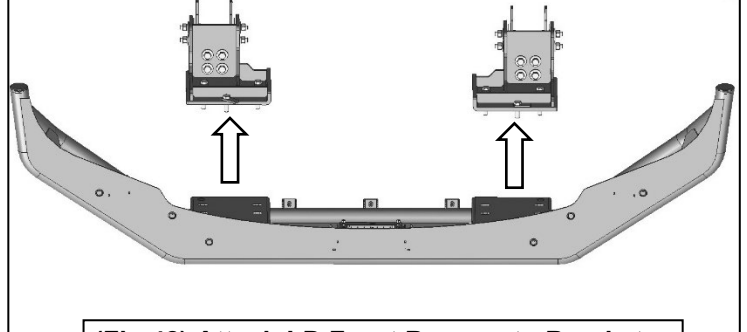


- (1) 12mm Nylon Lock Nut
- (1) 12mm Lock Washer
- (1) 12mm x 24mm x 2.5mm Flat Washer

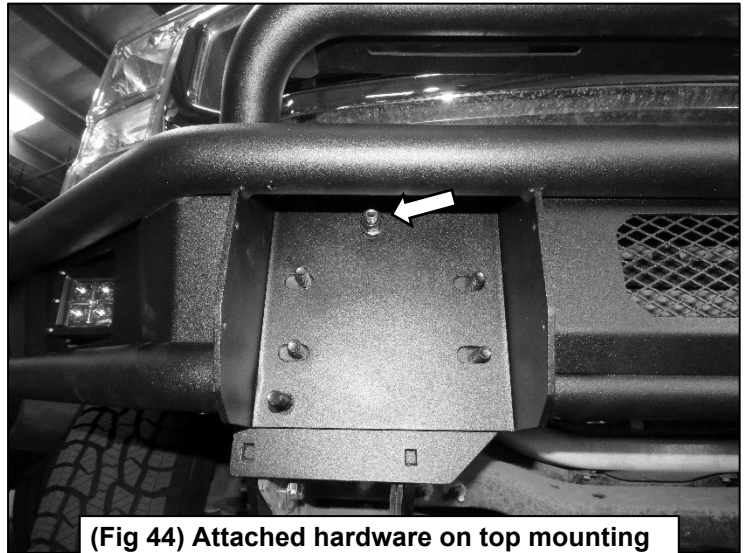
(Fig 45) Attach PS/Right LD Shackle Mount to the double bolt plates and threaded stud on bumper with the indicated hardware.



(Fig 47) Attached DS/Left LD Shackle Mount. (Refer to Fig 45 for attachment)



(Fig 42) Attach LD Front Bumper to Brackets.



(Fig 44) Attached hardware on top mounting point and repeat on Driver Side mounting

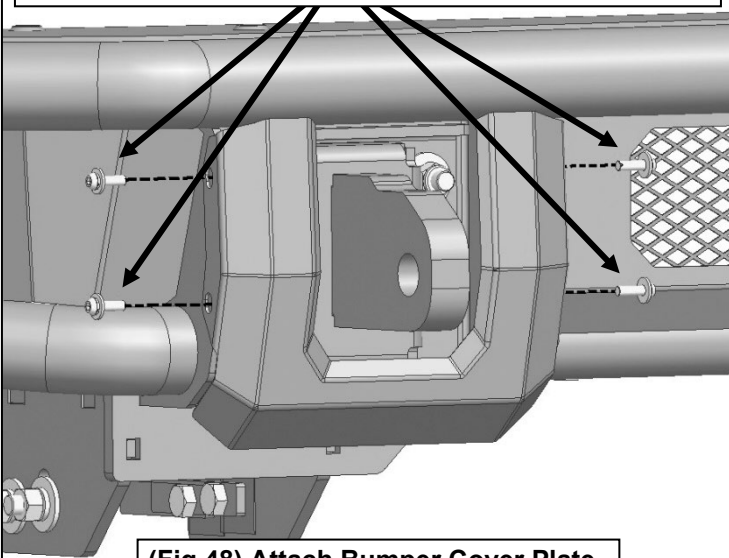


(Fig 46) Attached PS/Right LD Shackle Mount.

3

Follow (Fig 48 – 53) to attach Bumper Cover Plates, License Plate Bracket to Bumper, and Reattach wiring harness. Ensure Bumper is level, then tighten all hardware.

(4) 6mm – 1.00mm x 20mm Button Head Combo Bolt



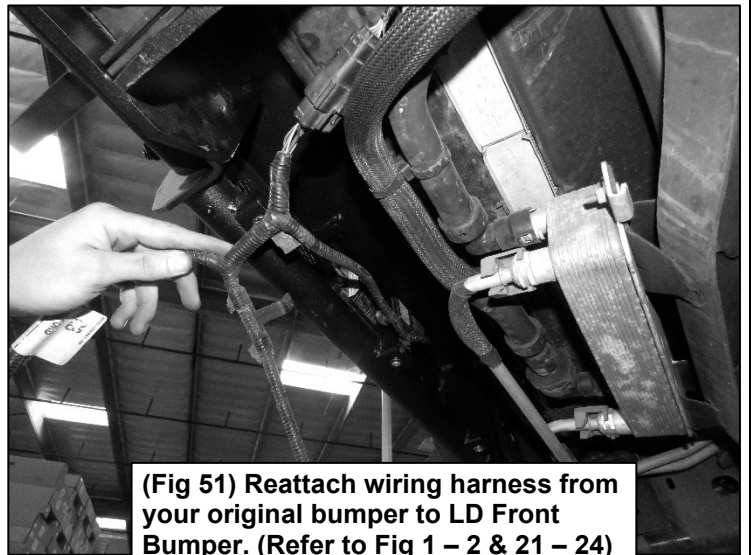
(Fig 48) Attach Bumper Cover Plate with indicated hardware.



(Fig 49) Attached Bumper Cover Plate on Passenger Right side.
NOTE: (LED Cube light not included)

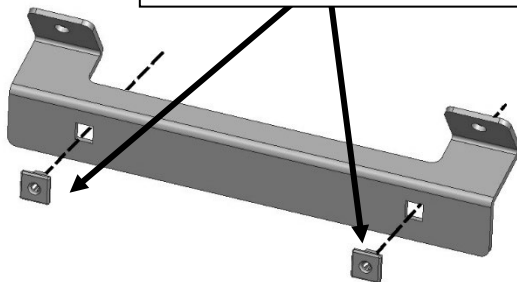


(Fig 50) Attached Bumper Cover Plate on Driver Left side. (Refer to Fig 46 for attachment)
NOTE: (LED Cube light not included)



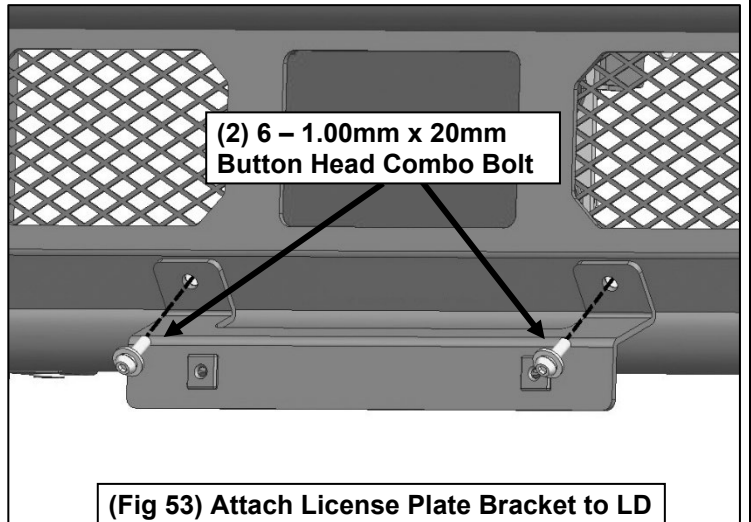
(Fig 51) Reattach wiring harness from your original bumper to LD Front Bumper. (Refer to Fig 1 – 2 & 21 – 24)

(2) License Plate Plastic Plug



(Fig 52) Attach License Plate Plastic Plugs to License Plate Bracket.

(2) 6 – 1.00mm x 20mm Button Head Combo Bolt



(Fig 53) Attach License Plate Bracket to LD Front Bumper with indicated hardware.

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.



Complete Installation (lights, skid plate, and hoop not included)