

Preparation:

- Disconnect the negative battery terminal. Park the vehicle on level ground and set the emergency brake.
- We recommend reading through the installation instructions in whole before performing the work.
- When button head bolts are being used, install the supplied washer on the nut side. Then, hold the bolt stationary and only turn the nut to tighten. Do not turn the bolt to tighten hardware assembly, unless otherwise noted.
- Estimated Installation Time: **3 Hours for OEM Removal/Bumper Installation**
1 Additional Hour to Wire Lights

****This installation requires 2 people for best results****

****Labor Rates are based on a vehicle with no pre-existing damage. Wiring labor is based on a standard wiring procedure with light switches installed in an easily accessible location. Custom light triggering or switch mounting location will result in a greater labor charge.****

You will need the following tools:

- | | | |
|-----------------------------|----------------------|--------------------------|
| - Ratchet | - 8mm Socket | - Long Ratchet Extension |
| - 7/32" Allen Wrench/Socket | - 10mm Socket | - T40 Torx Socket |
| - 5/16" Allen Wrench/Socket | - 13mm Socket | - Grinder |
| - 9/16" Socket/Wrench | - 15mm Socket/Wrench | - Sharpie |
| - 3/4" Socket/Wrench | - 19mm Socket | - Straight Edge |
| - 1 1/8" Socket/Wrench | - 21mm Socket | - |

Included in Kit:

- | | |
|---|---|
| 6 - Black Button Head Bolts (1/2"-13 x 1 1/2") | 8 - Nylon Lock Nut (1/4"-20) |
| 6 - Black Nylon Lock Nut (1/2"-13) | 8 - Stainless Carriage Bolt (1/4"-20 x 3/4") |
| 12 - Black SAE Flat Washers (1/2") | 8 - SAE Flat Washers (1/4") |
| 2 - SAE Flat Washers (3/8") | 2 - Hex Head Bolts (3/4"-10 x 5 1/2") |
| 2 - Regular Length Extruded U-Nuts (3/8"-16) | 2 - Nylon Lock Nut (3/4"-10) |
| 2 - Hex Head Bolts (3/8"-16 x 1 1/2") | 4 - SAE Flat Washers (3/4") |
| 2 - Outer Sensor Brackets | 2 - Inner Sensor Brackets |
| 2 - Bumper Mounting Plates | 1 - Universal Light Mount Kit |

Removal:

1. Remove the skid plate by using a 13mm Socket to remove the 6 mounting bolts. "Fig A"



2. Remove the metal spacer that the bottom two skid plate bolts go through. "Fig B"



Fig B

3. Use an 8mm Socket to remove the specified bolt. Repeat this step on the other side of the vehicle. "Fig C"

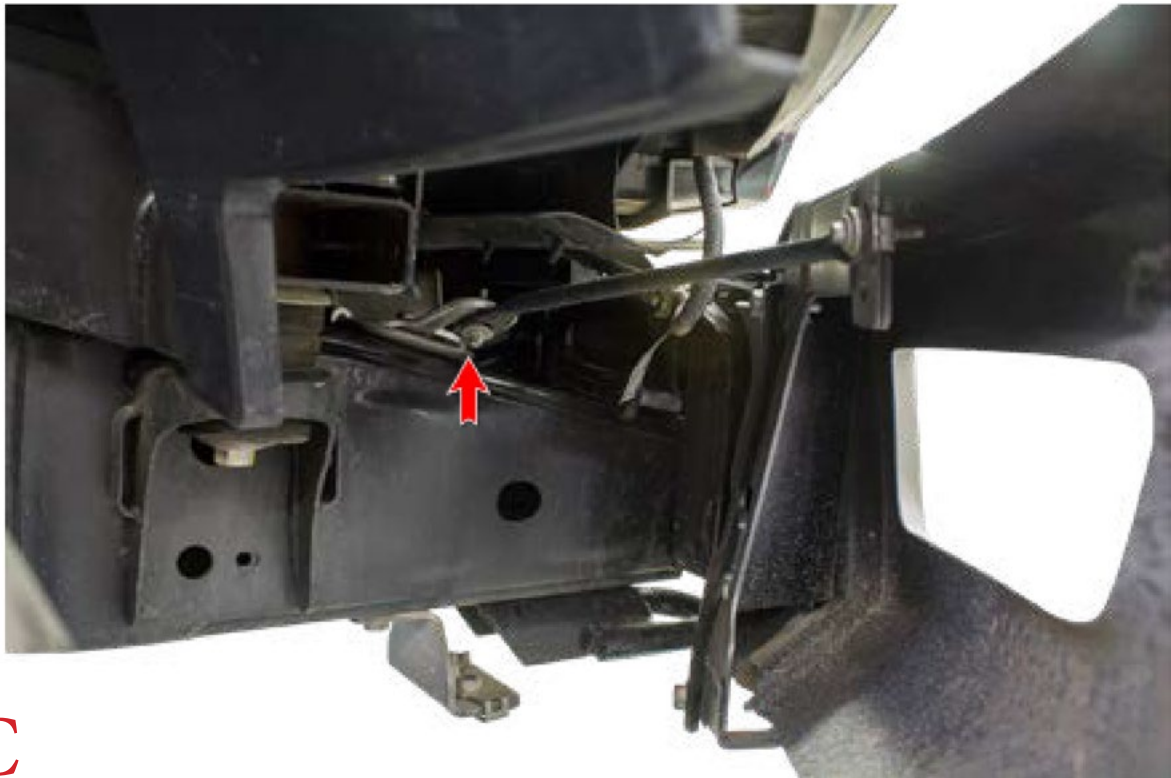


Fig C

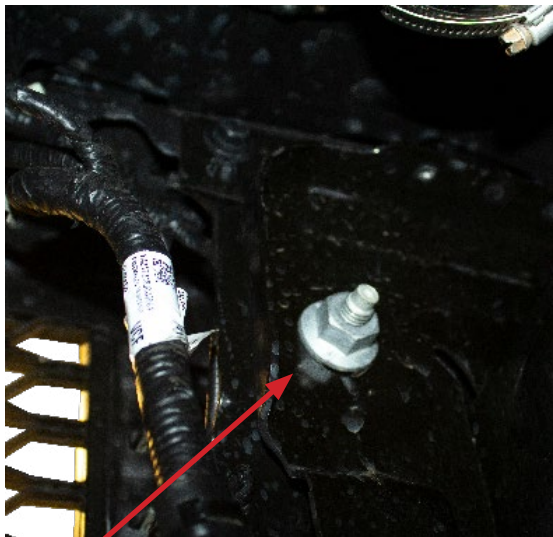
4. Locate the main bumper harness connector by the side support on the passenger side of the vehicle. Disconnect it by pulling the lever back 180 degrees, then pulling it out. "Fig D"



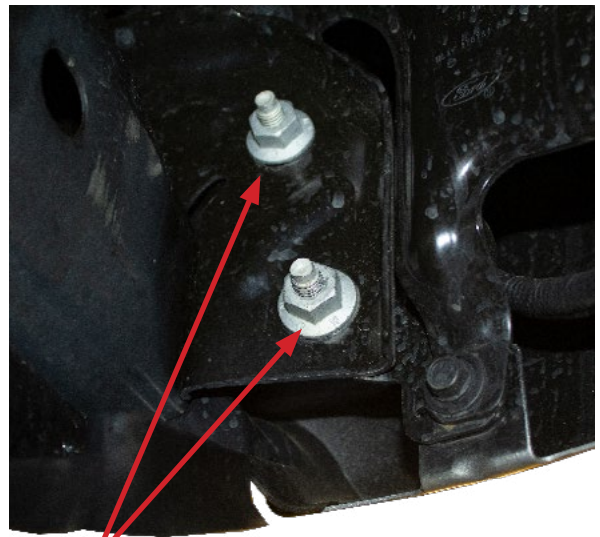
Fig D

5. Use a 21mm Socket to remove the nuts that hold on the front bumper. There are 3 rear facing bolts per side that can be accessed from under the truck. "Fig E"

*****After the bolts are removed the bumper will be loose*****



1 Inner Bolt



2 Outer Bolts

Fig E

- 6. Remove the OEM Bumper from the vehicle.
- 7. Disconnect the plug on the driver side of the intercooler guard. "Fig G"

Disconnect Plug on Top of Intercooler Guard Mount

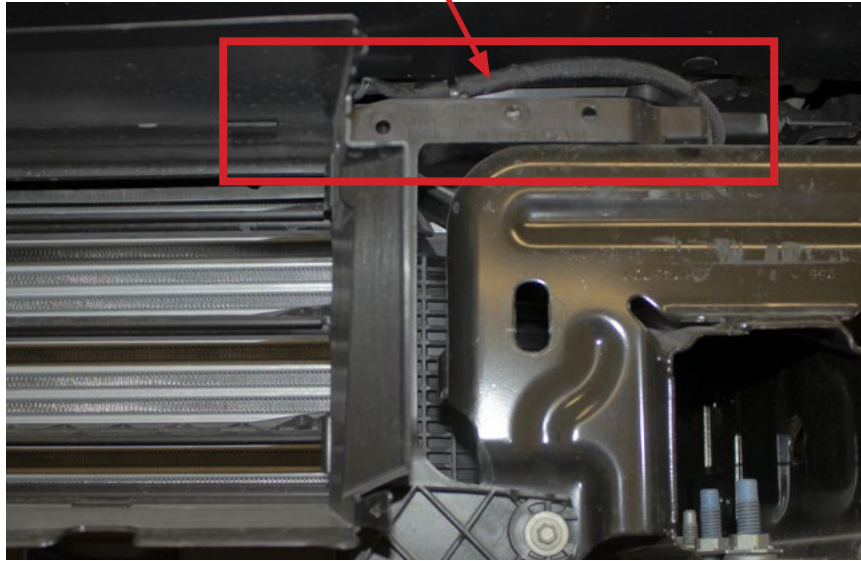
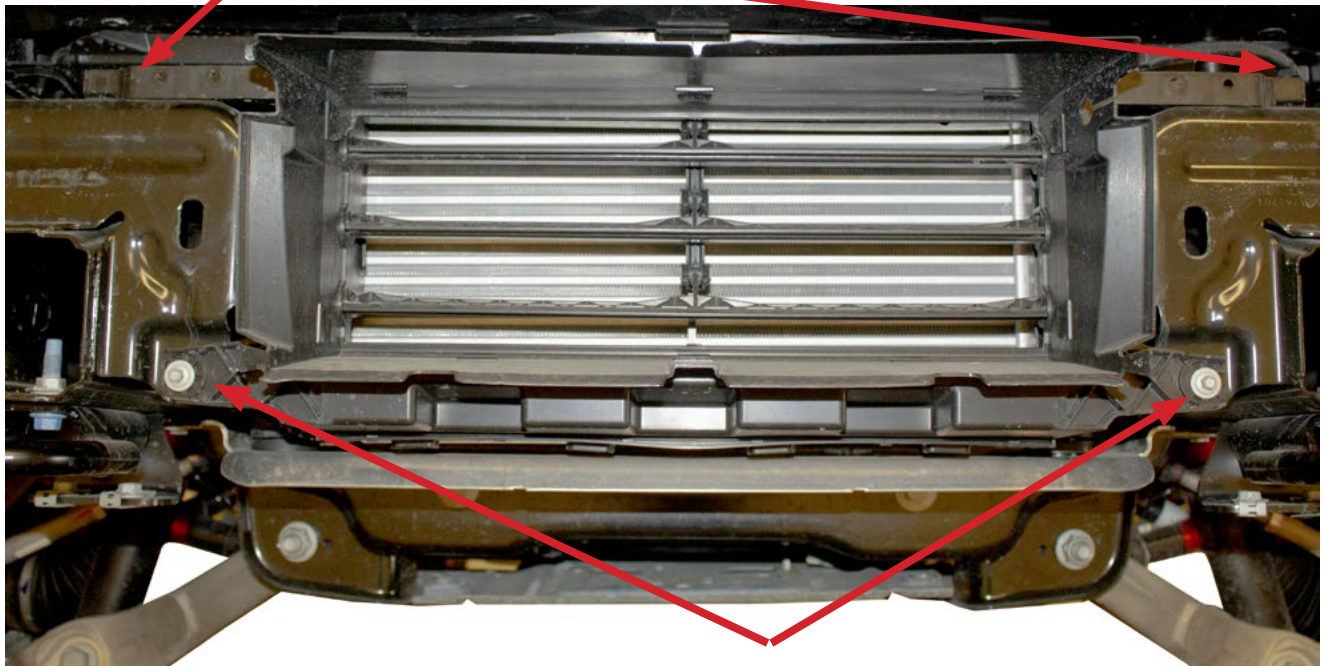


Fig F

- 8. Remove the 4 (8mm) bolts that hold the intercooler guard in place, set aside for reuse as well as the top nut clips "Fig F"

2 Bolts on Top



2 Bolts on Bottom

Fig G

9. Remove the shutter motor from the intercooler guard by removing the two mounting bolts. Set shutter motor aside for reuse."Fig H"

• If you have a **2024 F-150 Raptor**, Follow the install guide for the Shutter Motor Bracket.

https://www.addictivedesertdesigns.com/cdn/shop/files/ADD_InstallGuide_AC1300900NA.pdf?v=4894805209185784070

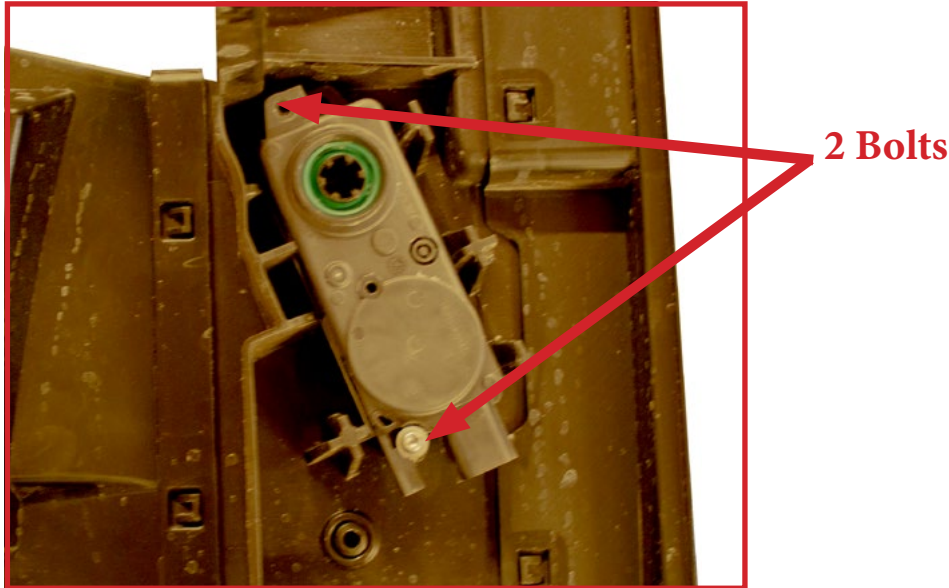


Fig H

10. Remove 15mm bolts that hold the tow hooks in place. Then, remove the hooks from the vehicle. "Fig I"

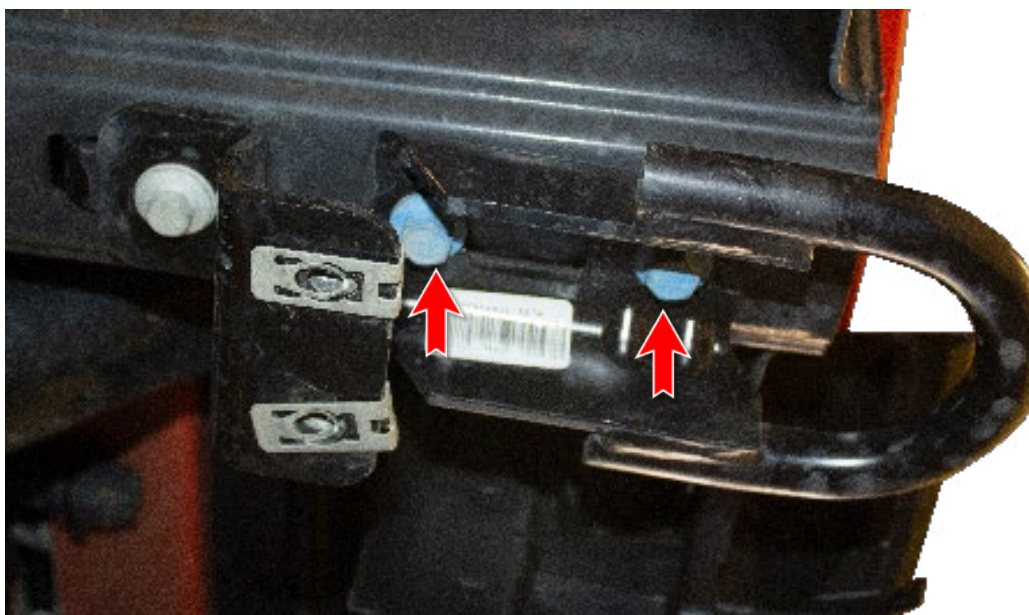


Fig I

11. Remove skid plate mounting brackets by unbolting the (13mm) bolt. Then, remove the brackets from the vehicle (Save bolts for reuse). "Fig J"



13mm Bolt

Fig J

12. Remove the factory nut clips specified in "Fig K"



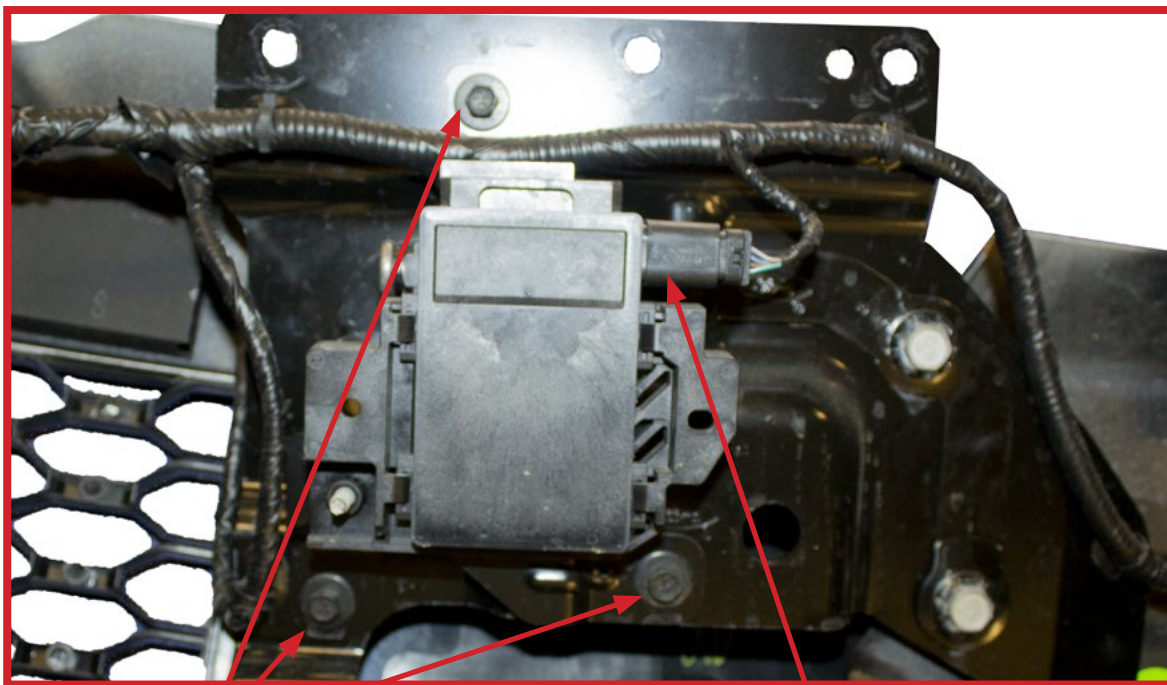
Fig K

13. Using a 10mm socket, remove the 5 mounting bolts shown in Fig L. Then, remove that bracket from the bumper. "Fig L"



Fig L

14. As you are removing the driver side bumper bracket, make sure to unplug the cruise control module. Then unbolt the three (10mm) bolts that hold it to the bracket. Remove the cruise module from the bracket. "Fig M"



Remove (10mm) Bolts

Disconnect Cruise Control

Fig M

15. Remove 4 (10mm) bolts that hold the plastic covers in place. "Fig N"

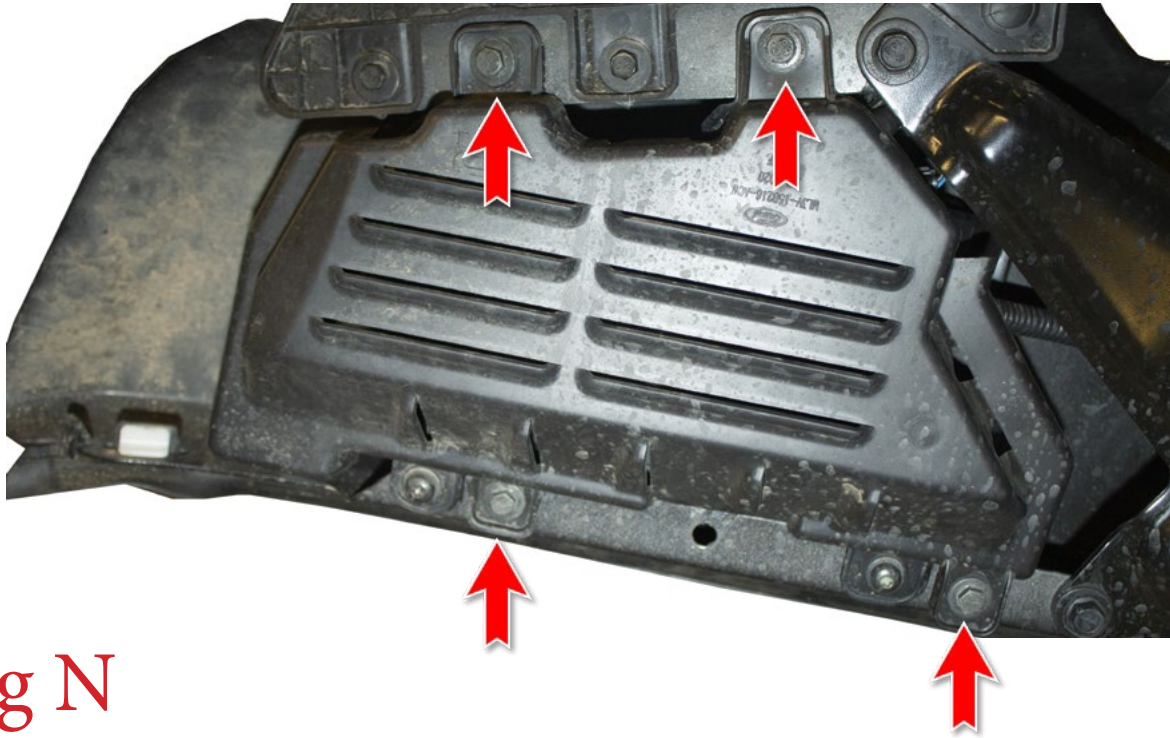


Fig N

16. After the cover has been pulled off, unplug the fog lights. "Fig O"

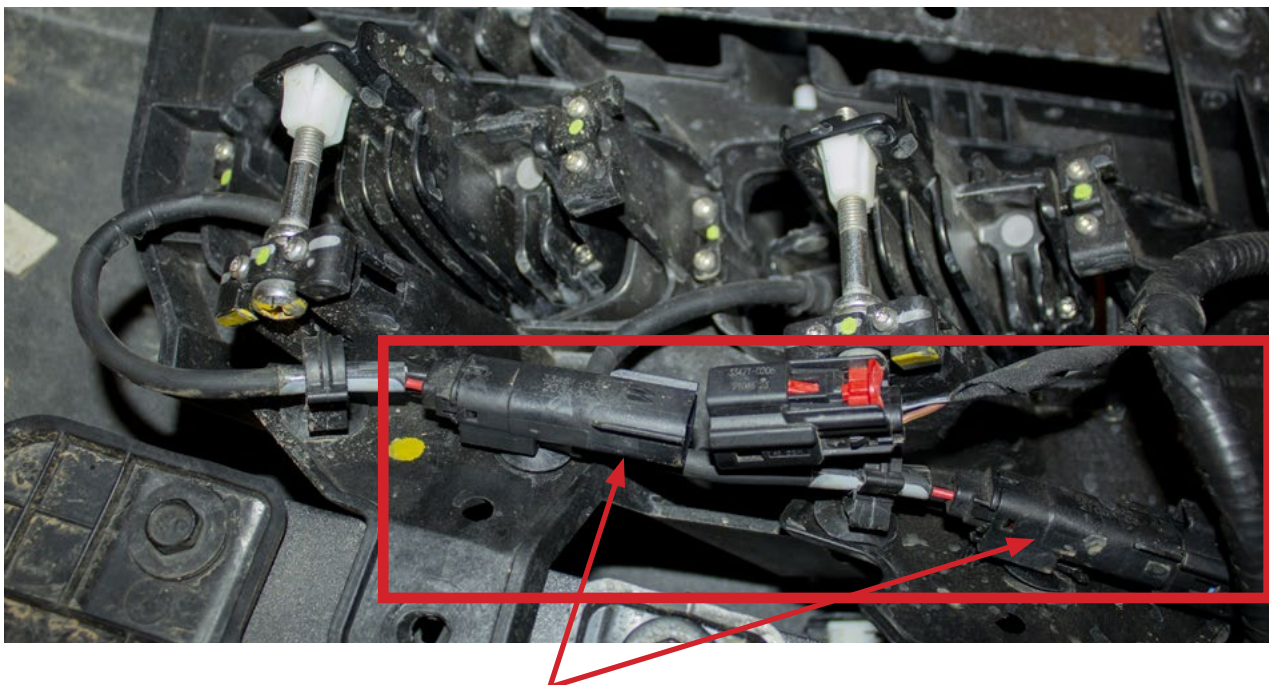
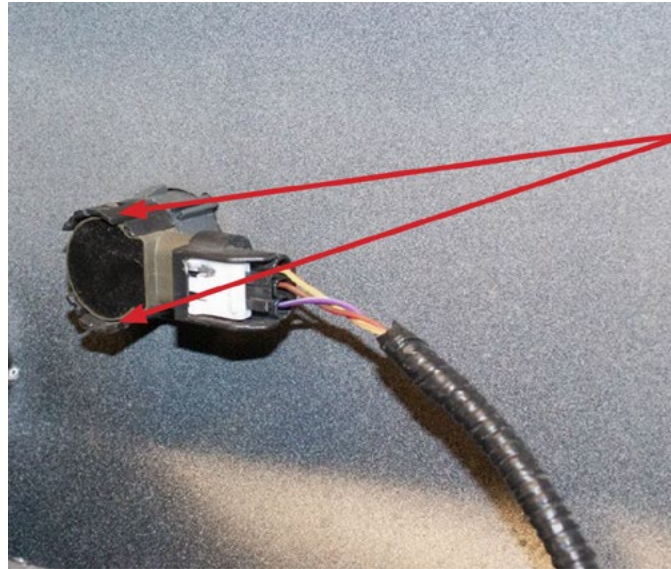


Fig O

Disconnect plugs

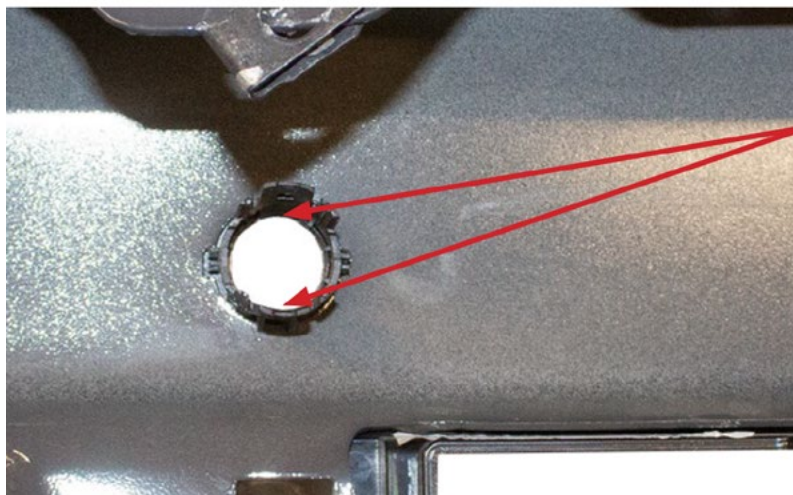
17. Remove the parking sensors from their mounting rings. Do this by spreading the two tabs on the back side of the rings . **(Make sure to keep track of the position/orientation of these rings as you remove them so you can install them on your new bumper in the same position/orientation.)** "Fig P"



Spread these two tabs to release the parking sensors from their mounting rings

Fig P

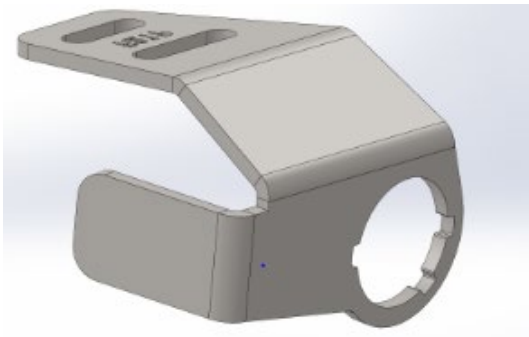
18. Remove the parking sensor mounting rings from the OEM bumper. Do this by pressing in the two tabs along the base on the back side of the mounting rings. **Make sure to keep track of the position/orientation these come off the OEM bumper so you can install them on your new bumper in the same position/orientation.** "Fig Q"



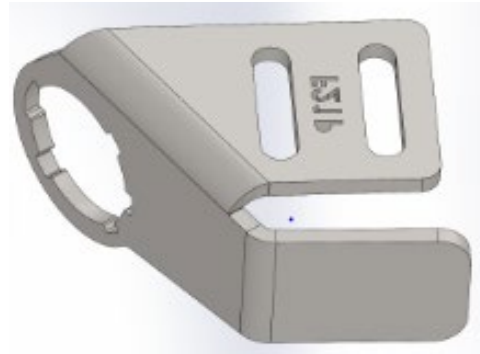
Press these two tabs in to release the mounting rings from the bumper.

Fig Q

19. Bolt-on the sensor brackets on the bumper using the supplied (1/4") carriage bolts, washers and lock nuts. The sensors bracket have adjustment, when bolting them in place make sure they follow in line with the tube of the bumper. "Fig R"



Inner sensor brackets



Outer sensor brackets



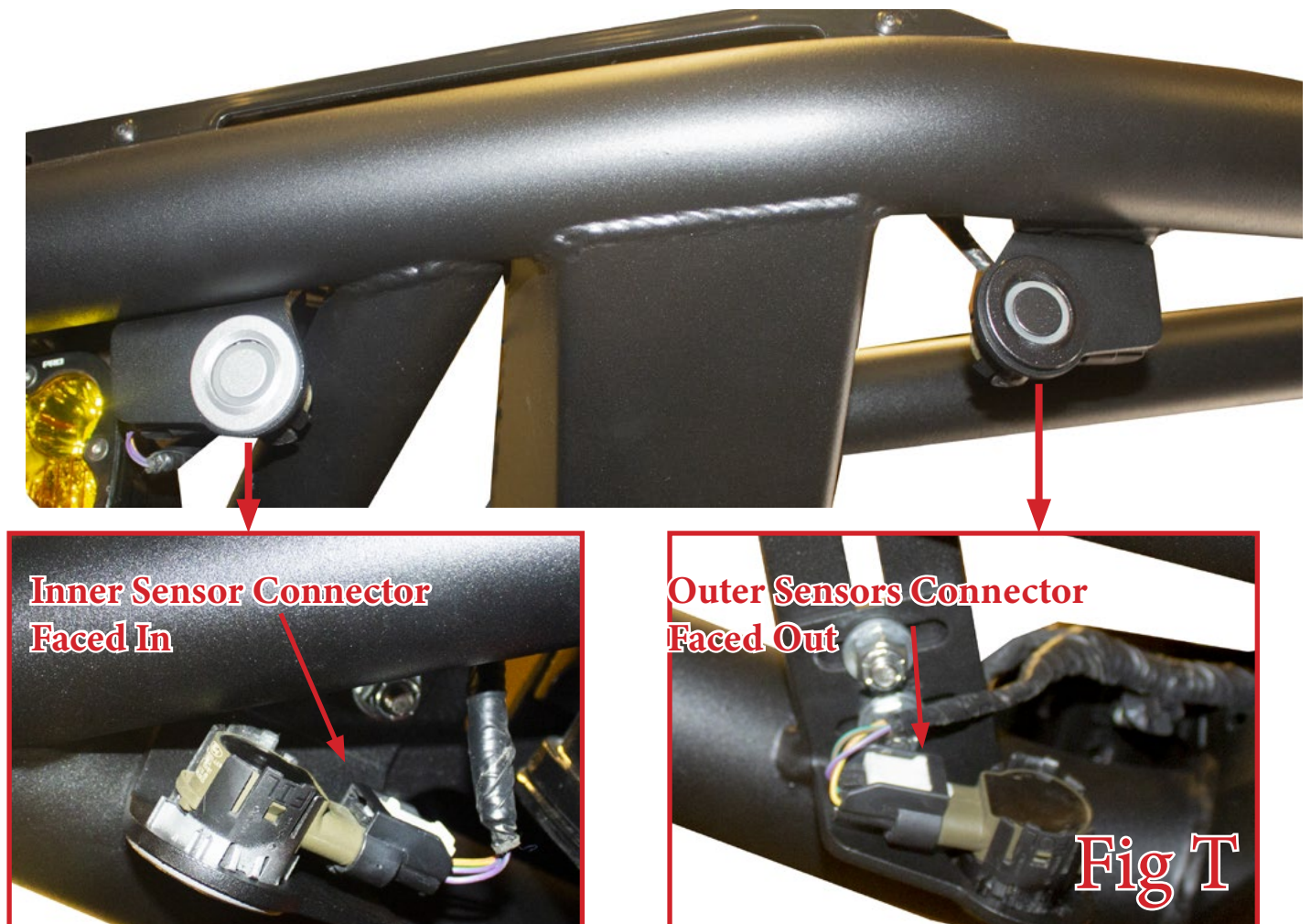
Carriage bolts

Fig R

20. Install the parking sensor mounting rings into their precut holes on your new bumper. Make sure to install them in the same position/orientation as they were on the OEM bumper. If your sensor rings do not click into place, you may have to trim the mounting tabs to accommodate for the thicker material of your new bumper. "Fig S" If your truck does not have parking sensors you can skip this step



21. Install the wiring harness into the bumper and insert the sensors into the sensor brackets on the ADD bumper. (Remember to insert the sensors and bezels in the same position/orientation as they were on the OEM bumper). "Fig T"



22. Connect the shutter motor from step 9 back into the harness. Then, zip tie the shutter motor and harness to the bumper. "Fig U"

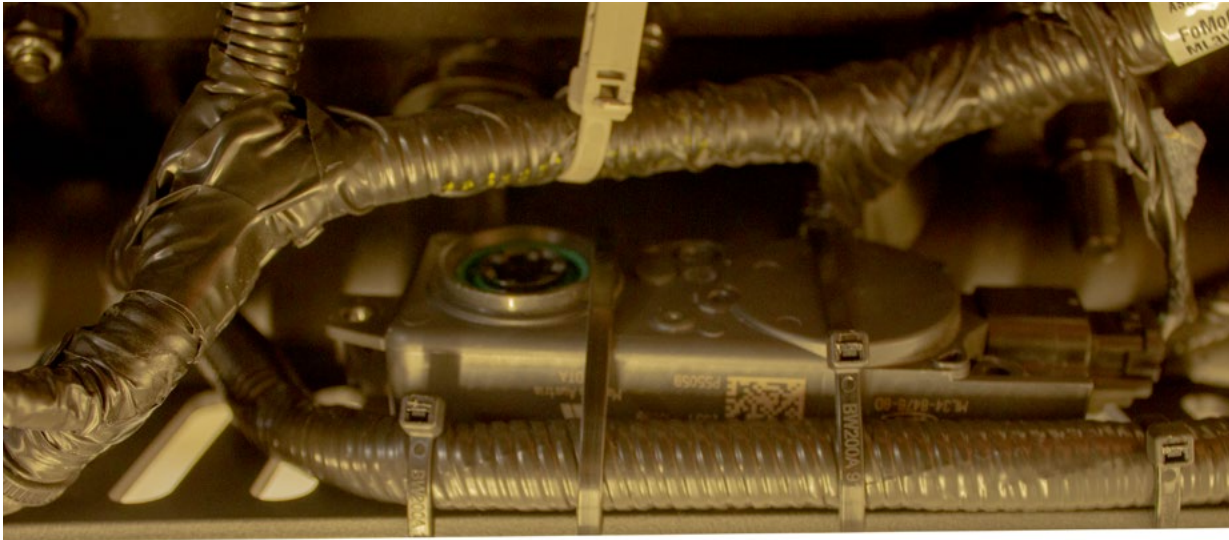


Fig U

23. Mark the top of the U-nut opening on the frame that is referenced in "Fig V".

Top view of frame

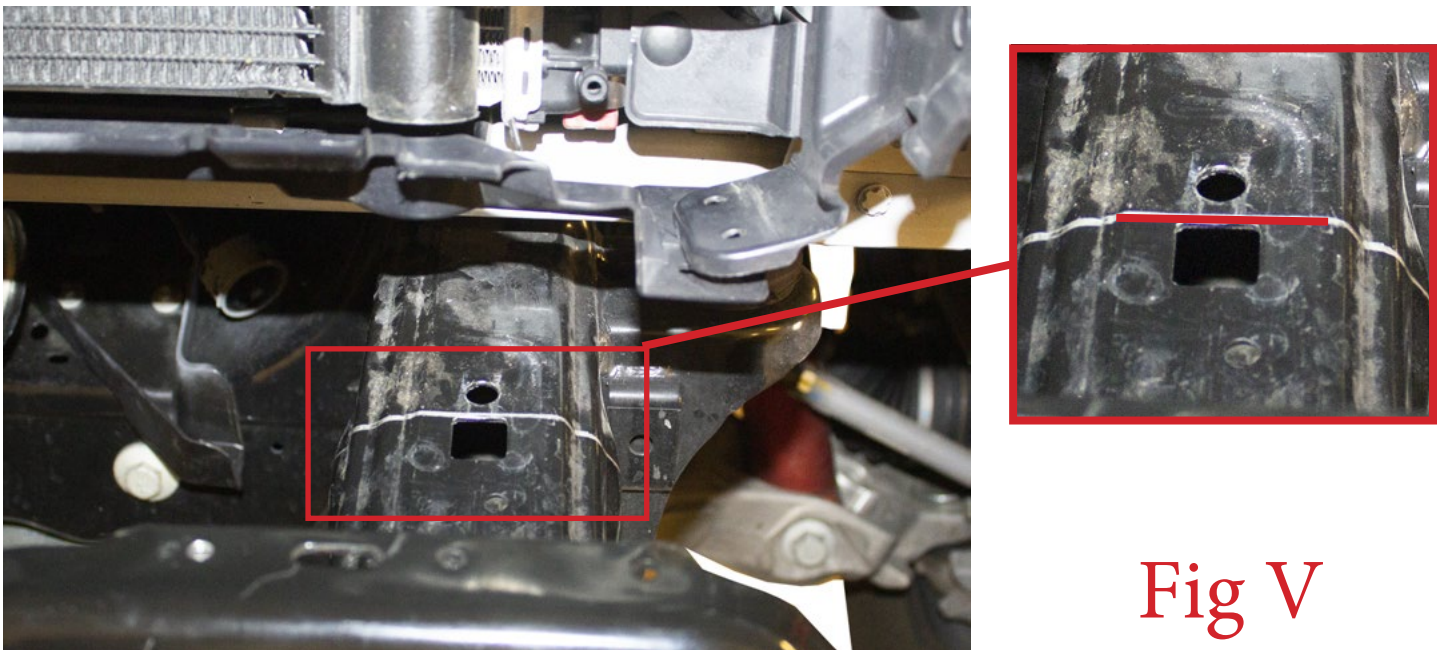


Fig V

24. There is a U-nut opening at the bottom of the frame horn, mark the top of the opening as well. (On the bottom of the frame there is a U-nut clip, leave it in place it will be used for the mounting bracket) "Fig W"

Bottom view of frame

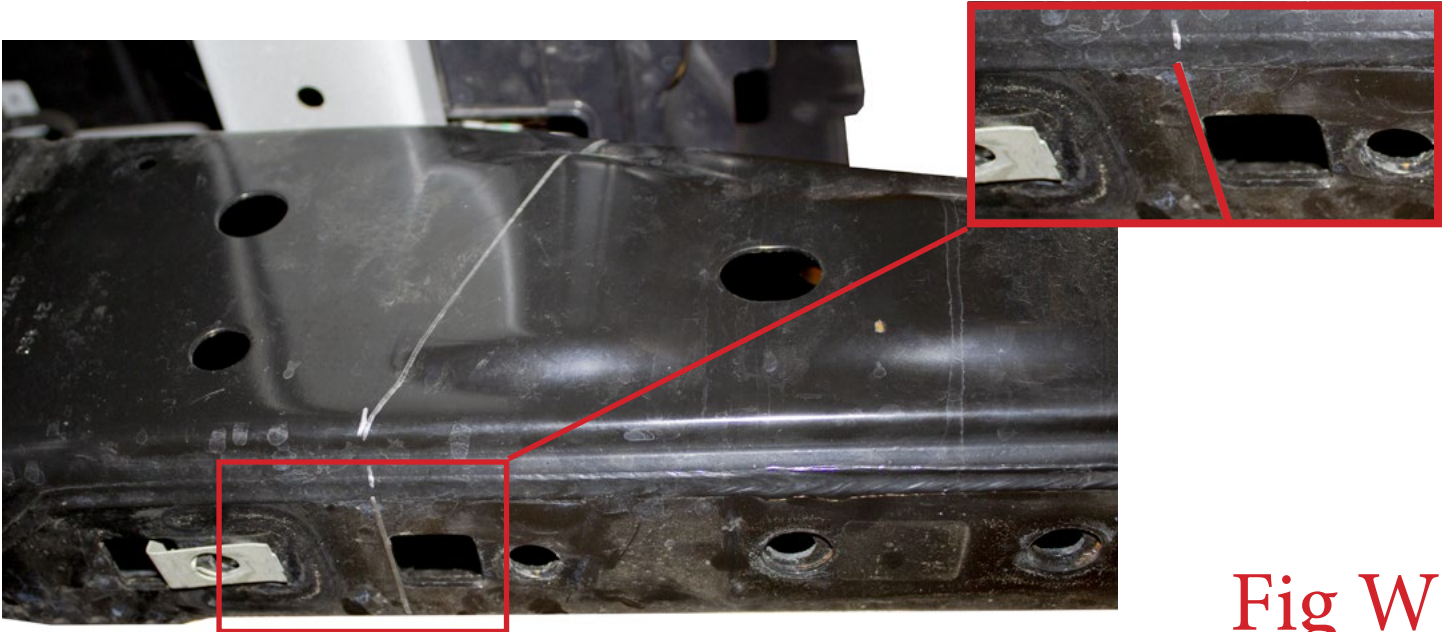


Fig W

25. Along the side of the frame, connect the two lines you made in Steps 23 & 24 using a straight edge. "Fig X"



Fig X

26. Cut along the line you made in Step 25. "Fig Y"



Fig Y

27. Reinstall the factory nut clip back into position from step 8 . "Fig Z"

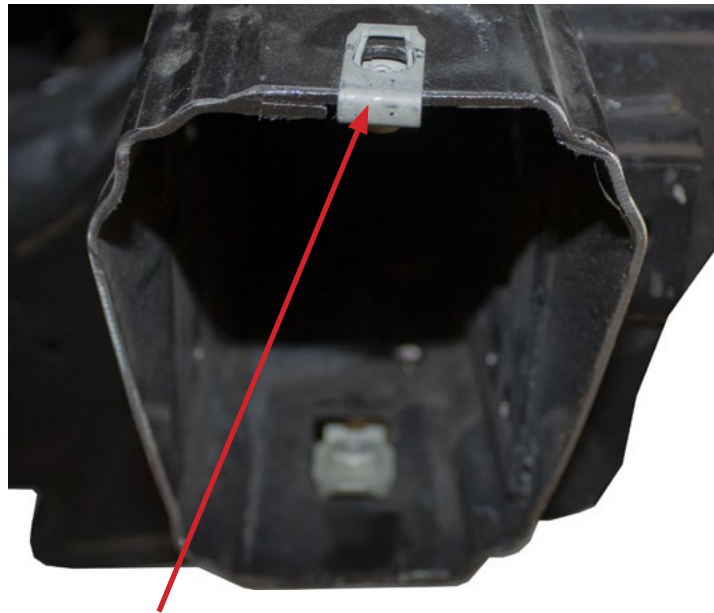
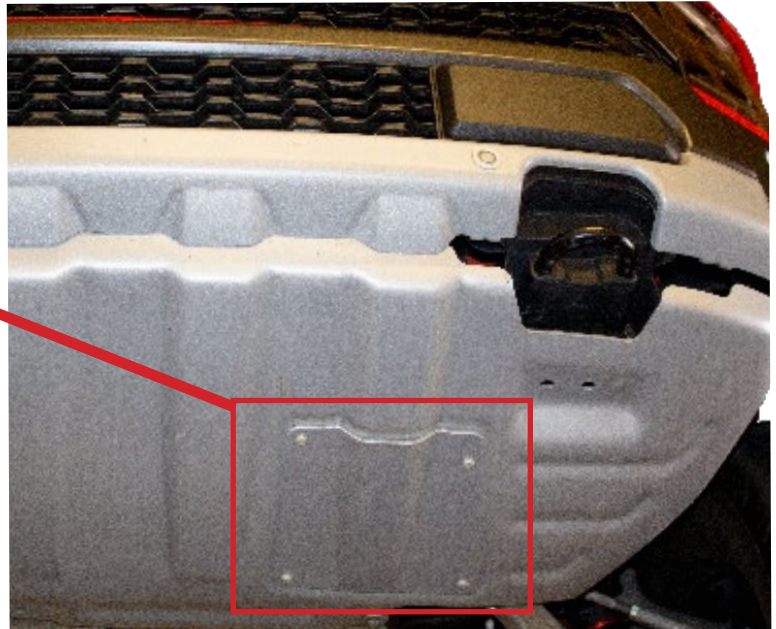
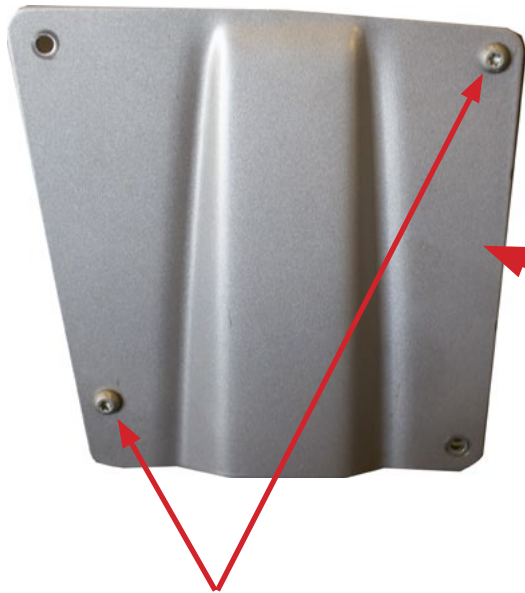


Fig Z

Insert the factory nut clips

28. Take 2 (T40 Bolts) out of the skid plate from step 1. They will be used for the intercooler support in step 30.
"Fig AA"



**Remove and save T40 bolts for
step 23**

Fig AA

29. Slide bumper brackets into frame horns until mounting holes line up. Install the supplied 3/4" Bolt, 3/4" Washers (x2), and 3/4" Nut in the center hole. Leave these bolts loose for now. "Fig AB"

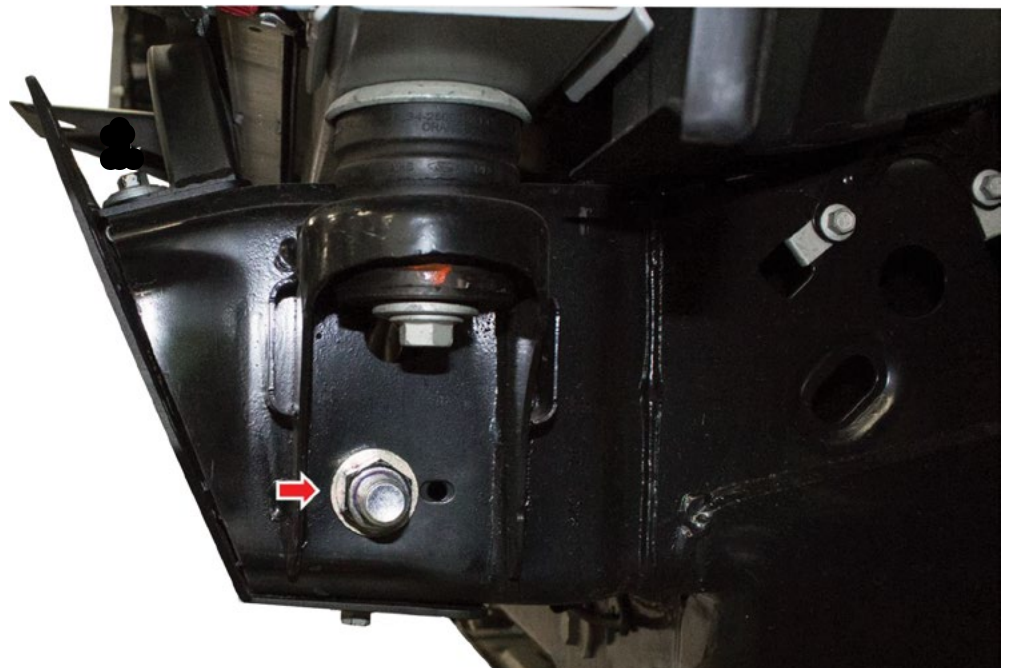


Fig AB

30. Take the intercooler support supplied with your intercooler kit and place on top of the frame rail. Use the skid plate bolts (T40 bolts) to secure it and the new bumper mounting plates in place. Install the OEM bolts in the bottom hole from step 11. **(Leave bolts loose for now)**"Fig AC"

The top and bottom holes are slotted for angle adjustment

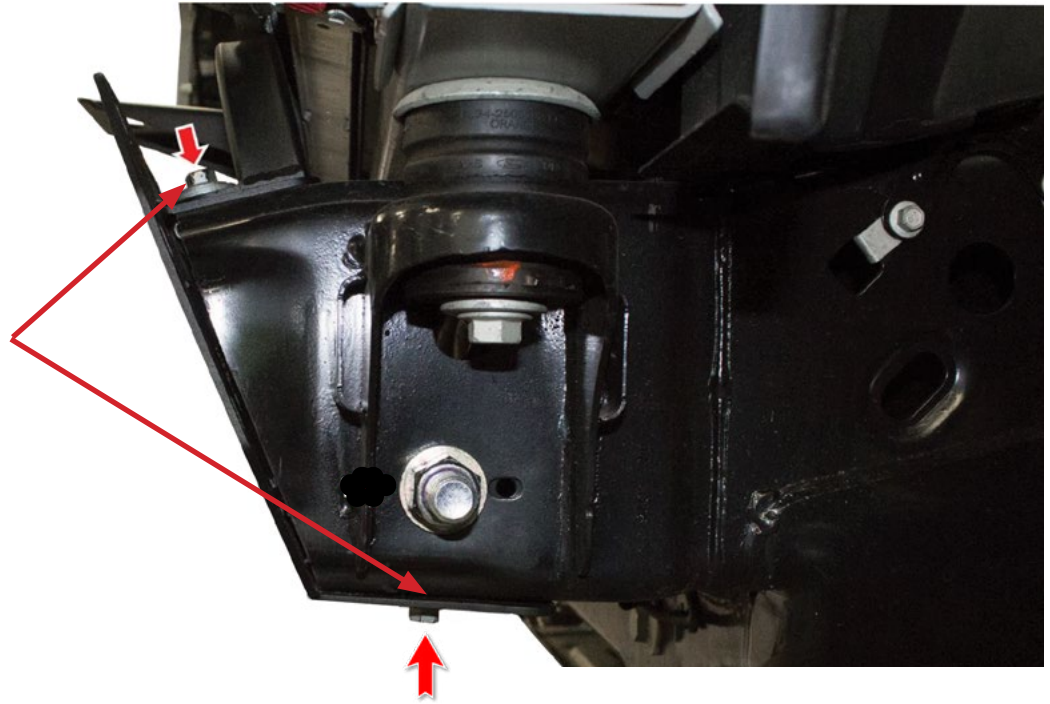


Fig AC

31. Install your intercooler kit now. Follow the manufacturer's install guide for intercooler installation.

32. Install the supplied Regular Length 3/8" U-Nuts (x2) where the factory U-Nuts were."Fig AD"



Fig AD

33. Mount your new Bumper to the Bumper Mounting Plates. Use the supplied Black 1/2" Bolts (x6), 1/2" Washers (x12) and 1/2" Nuts (x6) to hold the bumper loosely in place. "Fig AE"

****Hardware shown in images is not accurate to hardware supplied. Use the black button head bolts for this step****

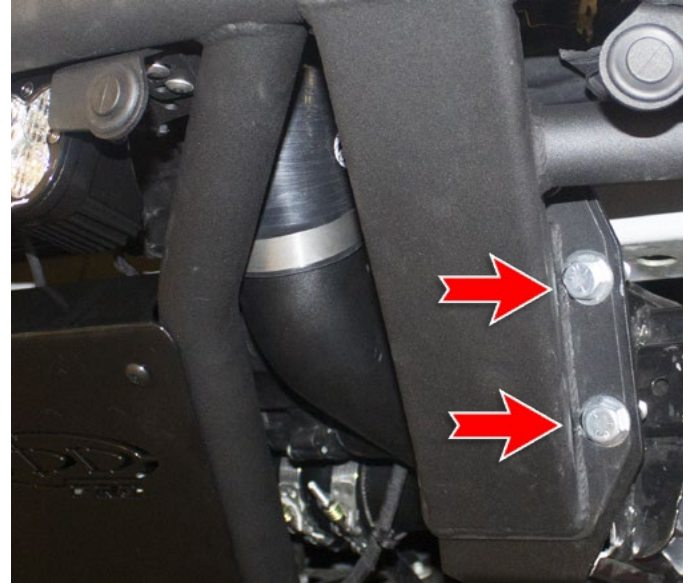
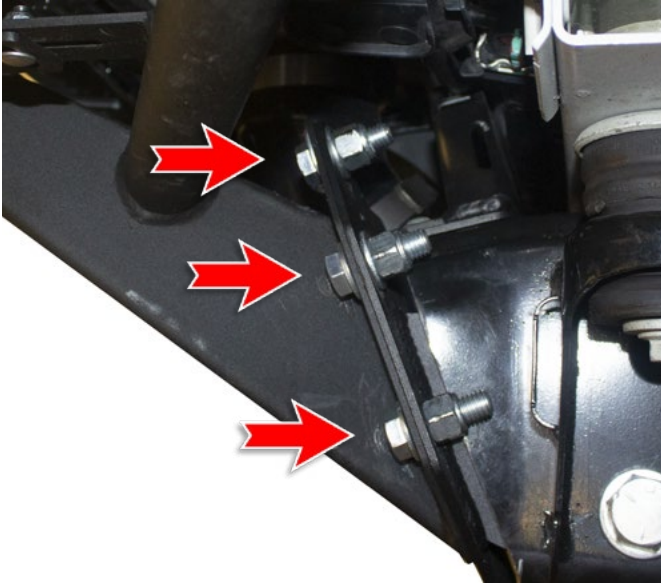


Fig AE

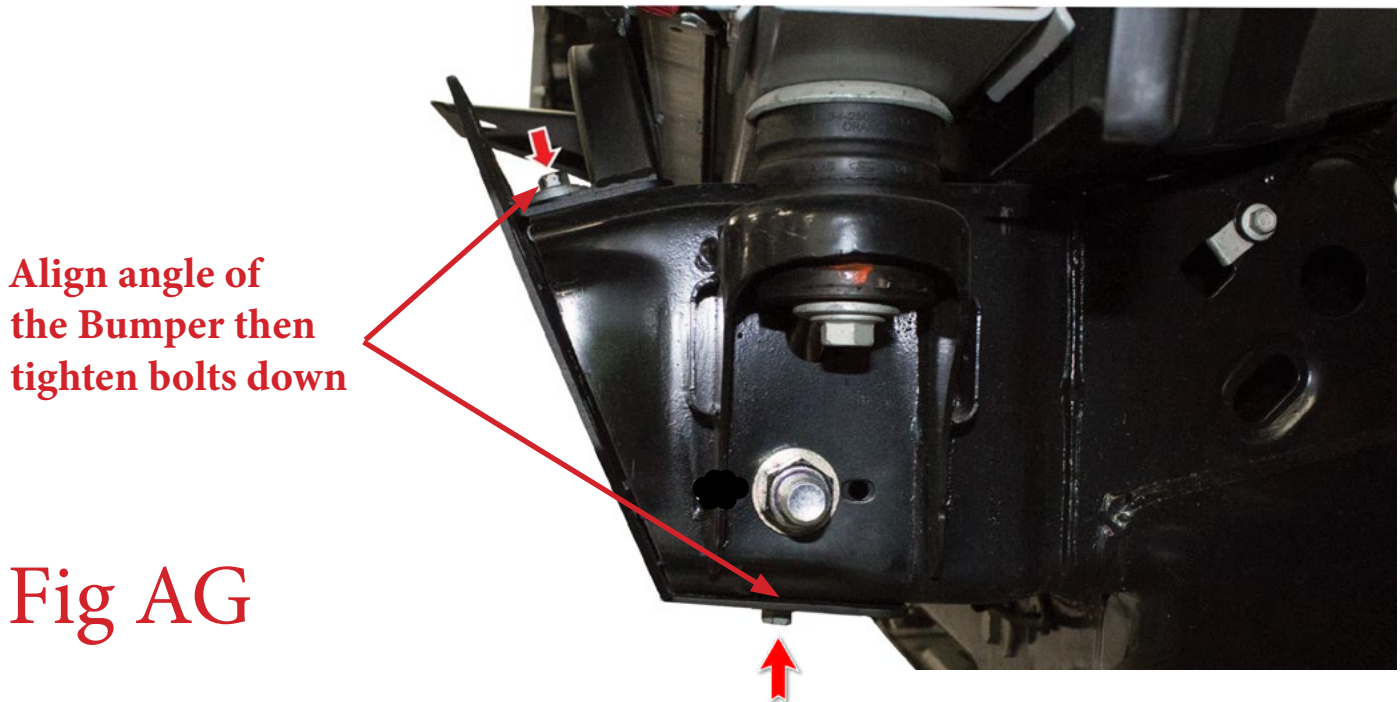
34. Loosely install the supplied 3/8" Hex Head Bolts (x2) and 3/8" Washers into the skid plate mounting holes. "Fig AF"



Fig AF

35. Align the bumper so that it sits straight in relation to the grille/headlight bezels. Then pull the bumper up to the valance as close as possible and torque down the 6 mounting bolts from (step 33) to 70 foot pounds.

36. After the bumper is tight to the mounting plates. Adjust the angle of the bumper to sit flush with the vehicle, then torque the top and bottom mounting bracket bolts to OEM specifications. "Fig AG"



37. Torque the supplied 3/8" Hex Head Bolts to 25 foot pounds. "Fig AH"



Fig AH

38. Torque the 3/4" Bolts to 180 foot pounds from (step 29).
39. Stand back and enjoy your new ADD Pro Cut Frame™ Front Bumper.
40. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

