

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: **2 Hours for OEM Removal/Bumper Installation**

1 Additional Hour to Wire center Lights

1 Additional Hour to Wire side 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**

You will need the following tools:

- | | | |
|-----------------------------|-----------------------------|-------------------------|
| - Ratchet | - 3/4" Socket/Wrench | - 9/16" Socket & Wrench |
| - 5/16" Allen Wrench/Socket | - 7/32" Allen Wrench/Socket | - 8mm Socket |
| - 11mm Socket | - 13mm Socket | - 15mm Socket |
| - 21mm Socket | - 15mm Socket & Wrench | - 18mm Socket |
| - Long Ratchet Extension | | |

Included in Kit:

- | | |
|--|--|
| 4 - Hex Head Bolts (3/8"-16 x 1 1/2") | 2 - Regular Length Extruded U-Nuts (3/8"-16) |
| 2 - Extra Long Extruded U-nut (3/8"-16) | 4 - Stainless Carriage Bolt (3/8"-16 x 1") |
| 2 - Fender Washers (3/8") | 2 - Black Oxide Nylon Lock Nut (1/2"-13) |
| 6 - SAE Flat Washers (3/8") | 4 - Nylon Lock Nut (3/8"-16) |
| 2 - Black Button Head Bolts (1/2"-13 x 1 1/2") | 2 - Black Oxide SAE Flat Washers (1/2") |

Removal:

1. Remove the (x6) skid plate bolts which are 13mm, then remove skid plate from truck. "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 bolt that holds on the bumper side support bar. Repeat this step on the other side of the vehicle. "Fig C"

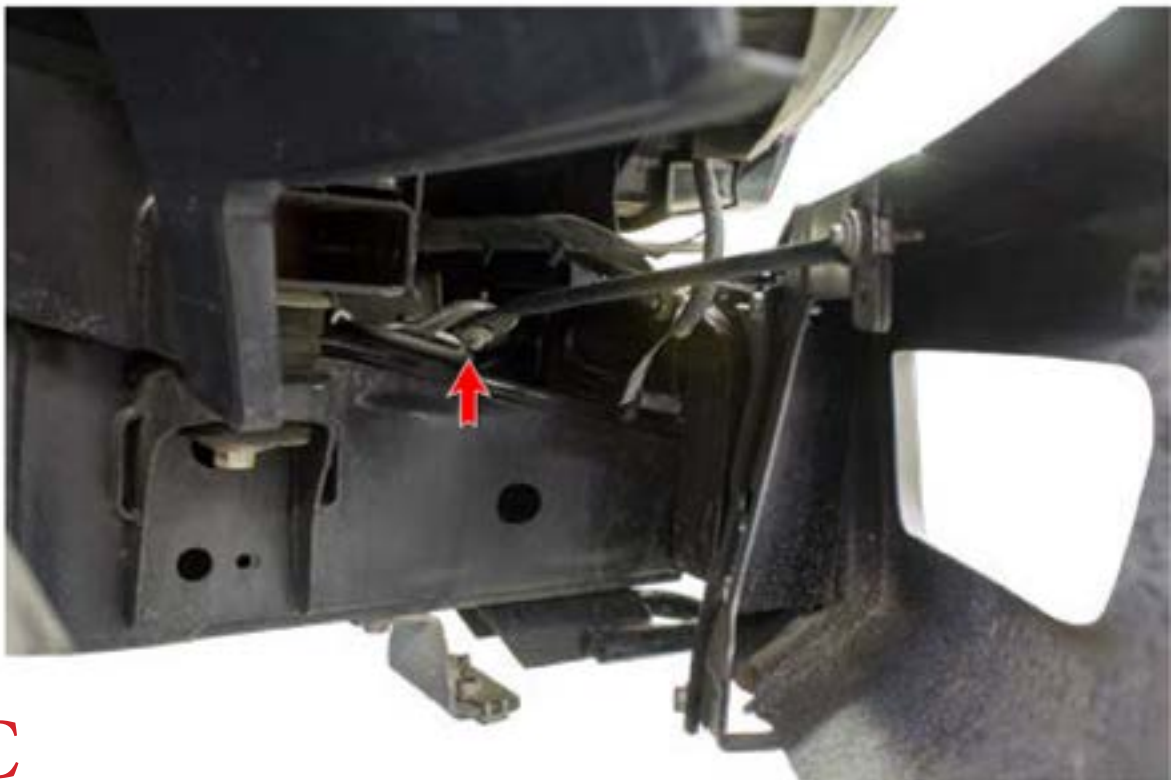


Fig C

4. This is also a good time to disconnect the main wiring harness from the bumper which will be located by the side support that was just removed. To disconnect harness pull lever back 180 degrees then pull out. "Fig D"

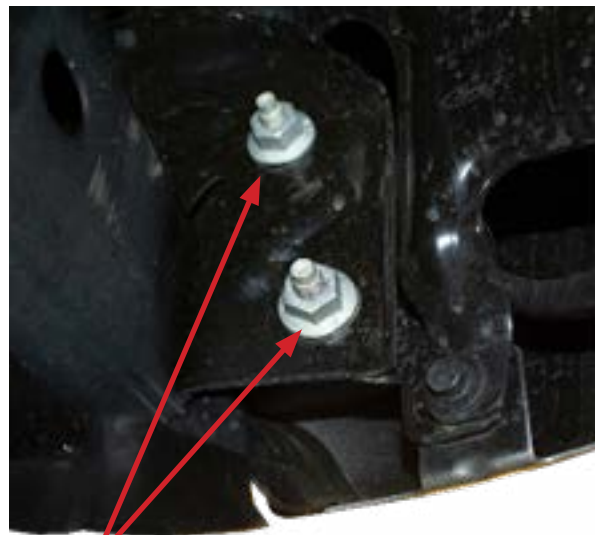


Fig D

5. Use a 21mm Socket to remove the nuts that hold on the front bumper. There are three per side. Two of the nuts (per side) face the front. One of the nuts (per side) faces the rear of the vehicle and is accessible from underneath the truck. After that the bumper can be removed. "Fig E"



1 inner bolt



2 outer bolts

Fig E

6. Remove each of the skid plate mounting brackets by removing the bolt (13mm) that holds them on. There is one bolt per bracket. "Fig F"



Fig F

7. Remove the plastic intercooler scoop, it is held in place by clips which you can easily pull up than your able to take it out. "Fig G"



Fig G

8. Remove the factory nut clips from the bottom two skid plate mounting holes on the vehicle's frame. "Fig H"



Fig H

9. Using a 15mm Socket, remove the two bolts (per hook) that hold the tow hooks in place. Then remove each tow hook. Save these bolts for reuse. "Fig I"

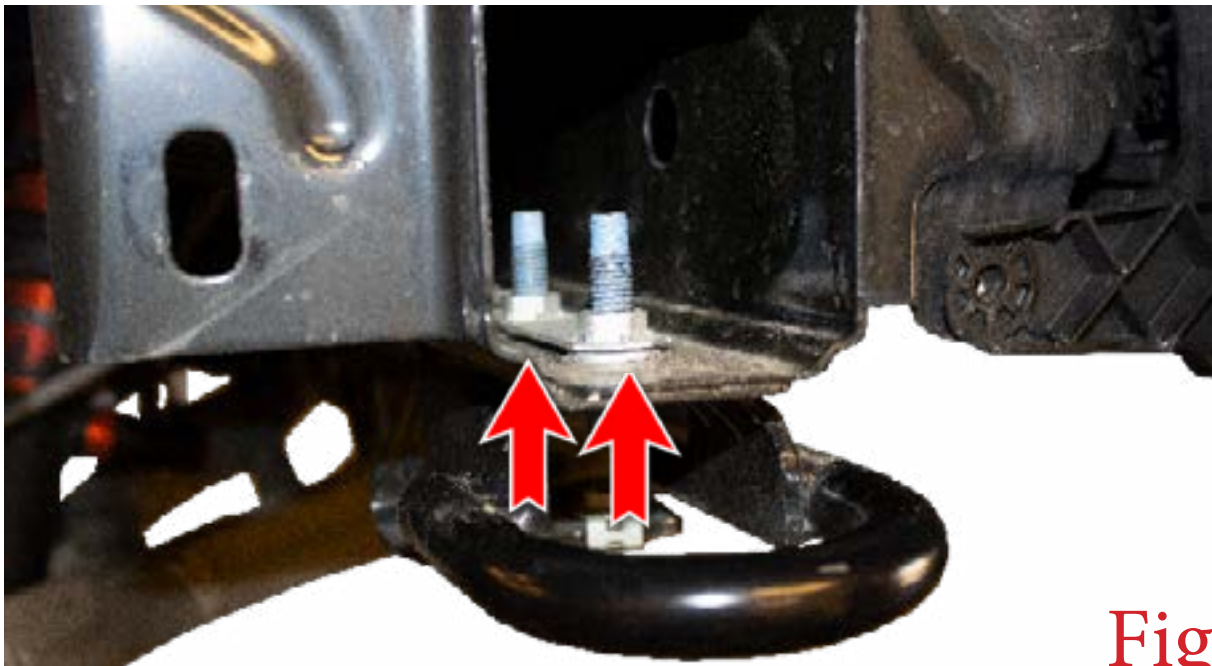


Fig I

10. Remove stock wiring harness from the OEM bumper. There are brackets that will need to be disassembled to get to the harness shown in the next few steps. "Fig J"



Fig J

11. There are 2 brackets on each side of the bumper that need to be disassembled to get to the Adaptive cruise control and harness. There are 5, 10mm bolts to remove the bracket. When unbolting the bracket that contains the Cruise Control Device, make sure to disconnect it. "Fig K"

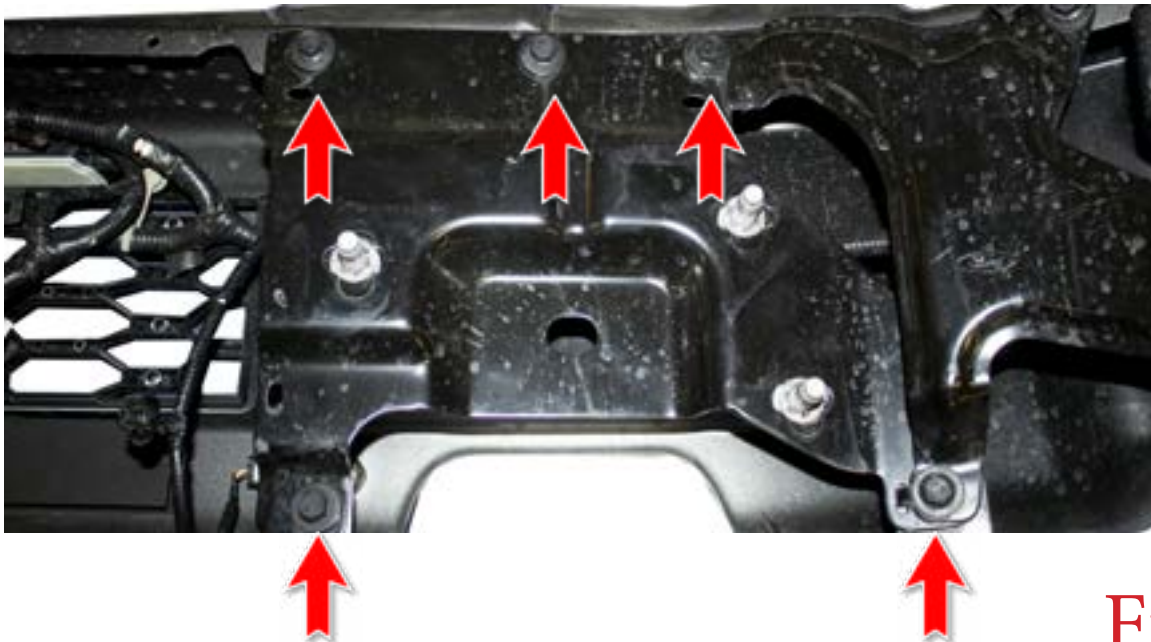


Fig K

12. There are 4 bolts that hold the plastic covers where the rigid lights are located as well as the outer sensors. After the cover has been pulled off unplug the rigid lights and sensors. "Fig L"



Fig L

13. There are 4 sensor locations, the inner ones shown in step 10 are easily accessible for removal. The outer sensors are harder to access as they are tucked into the bump by the rigid lights. After pulling the cover off in step 12 they will be easier to access. "Fig M"



Spread these two tabs to release the sensor from its mounting ring.



Fig M

14. 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 N) If your truck does not have parking sensors, install the supplied rubber grommets/plastic plugs into the sensor holes.

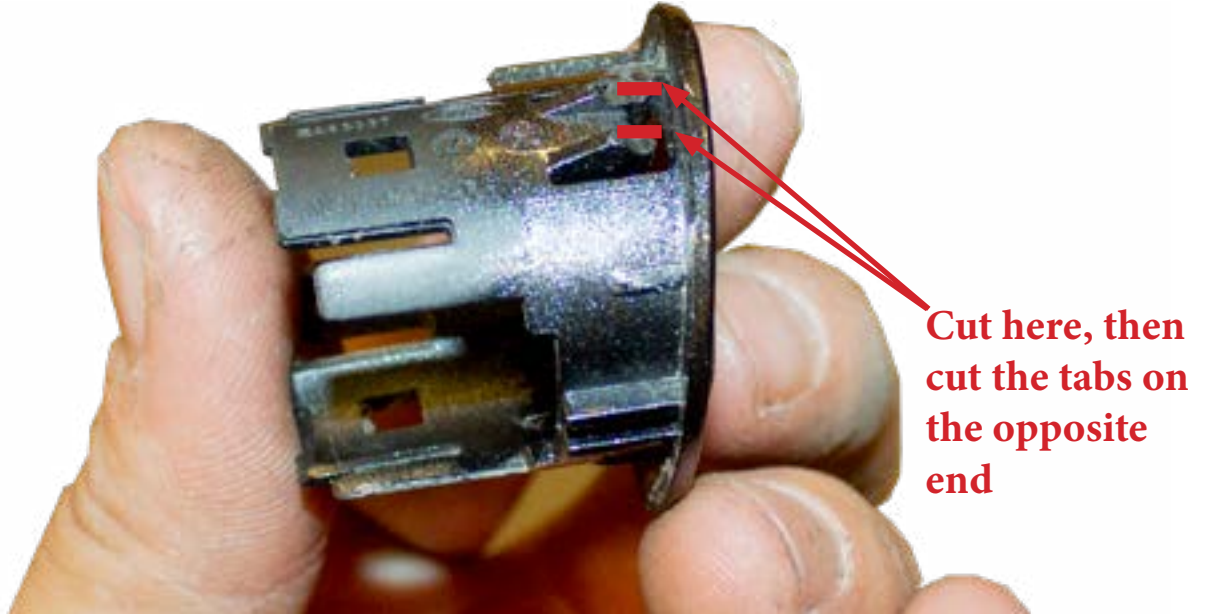


Fig N

15. After the Sensor bezel tab has been modified you can insert them into the ADD bomber bumper. (**Remember to insert the sensors and bezels in the same position/orientation as they were on the OEM bumper.**) "Fig O" Also, now is a good time to install any additional lights into the bumper.



Fig O

Insert Sensor bezels

Installation:

16. If you have Rigid Lights, you can install them according to Rigid's installation instructions. "Fig P"

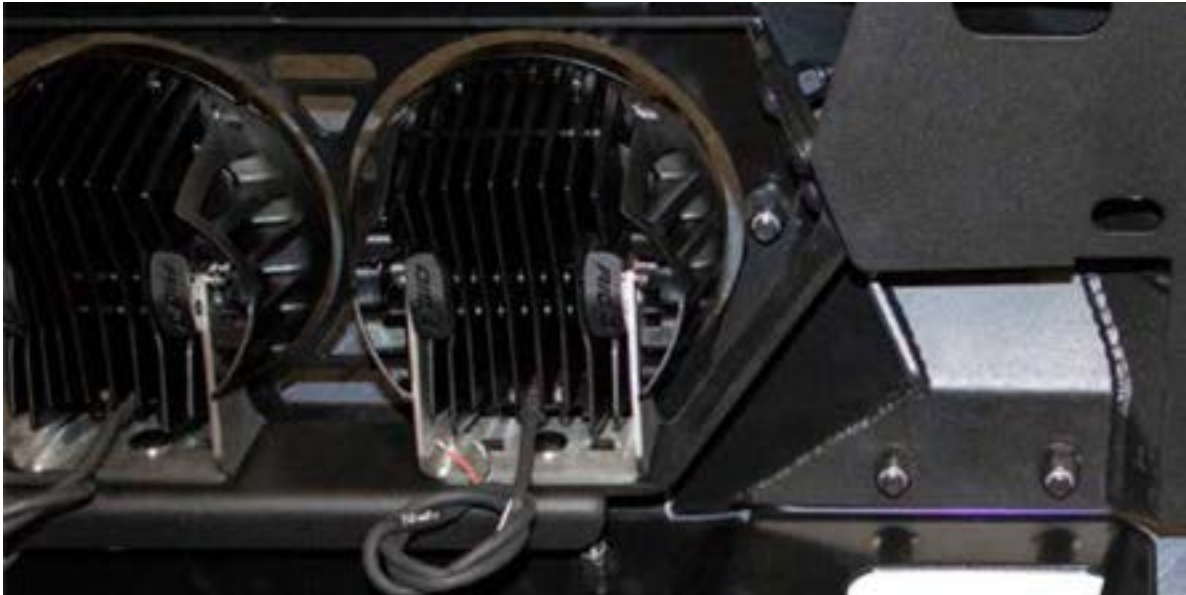


Fig P

17. If you have Baja Designs Lights, follow this step. If not, skip to Step 21. Remove the mounting bolts for The light mounting bracket (3 per side). Then, remove this bar from the bumper. "Fig Q"



Fig Q

18. Use the hardware supplied with your Baja Designs lights to install the lights onto the light mount bracket as shown in. "Fig R"



Fig R

19. Reinstall the light bracket onto your bumper by reinstalling the bolts for the bar. "Fig S"



Fig S



20. If you have dual 20" Light Bars to install, follow this step. If not, skip to step 23. Find the two supplied Light Mount Tabs as well as the supplied 3/8" Carriage Bolts (x4), 3/8" Washers (x4), and 3/8" Lock Nuts (x4). Install the light tabs as shown, but be sure to leave the bolts loose for now. "Fig T"



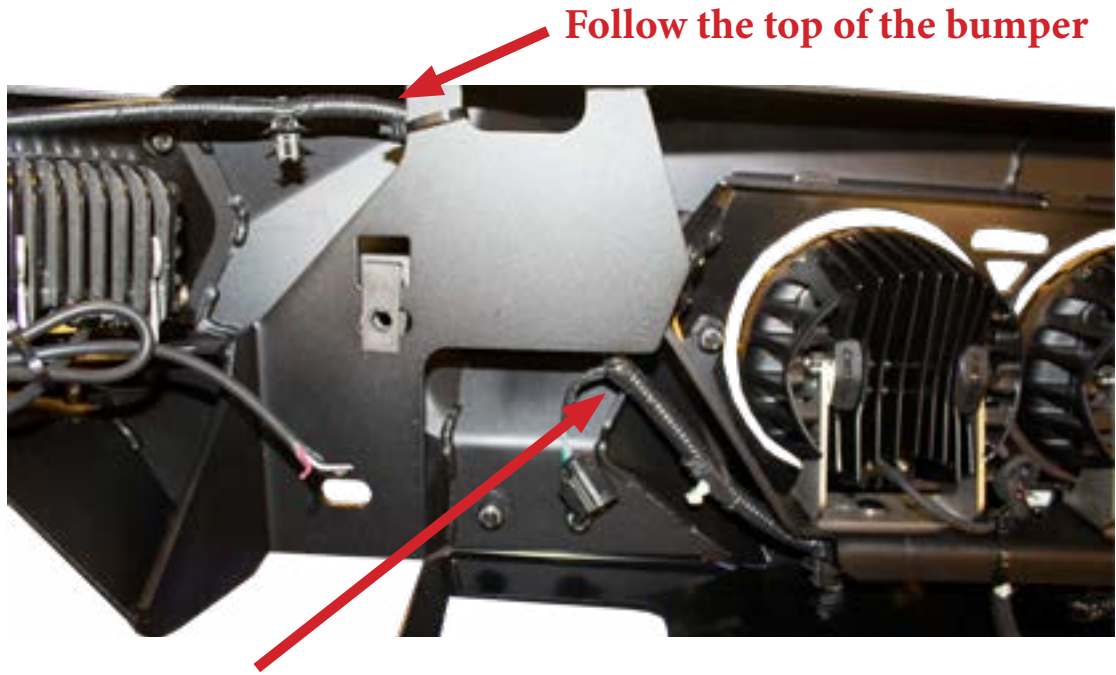
Fig T

21. Use the light manufacturer's hardware to install the light bars onto the light mount tabs. Then, go back and tighten the light tab mounting nuts to 30 foot pounds. "Fig U"

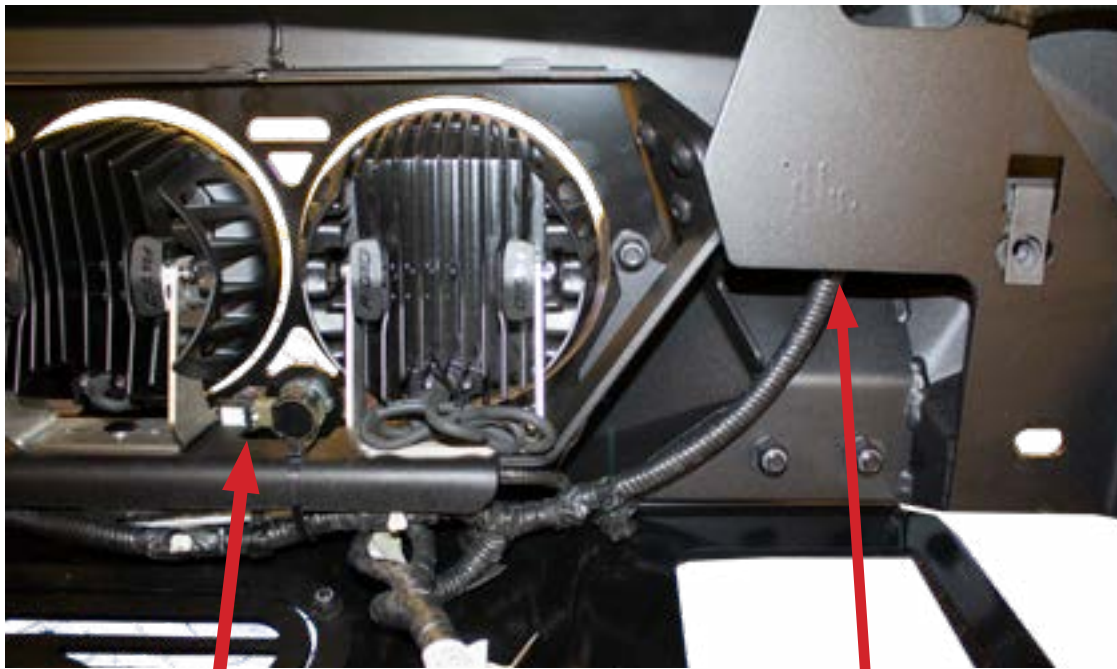


Fig U

22. After the lights have been installed, take the wiring harness from the OEM bumper and install it on the ADD bomber along with the sensors and sensor bezels. Follow the wiring routing shown below which will clear the frame horns. "Fig V"



Route inside bumper

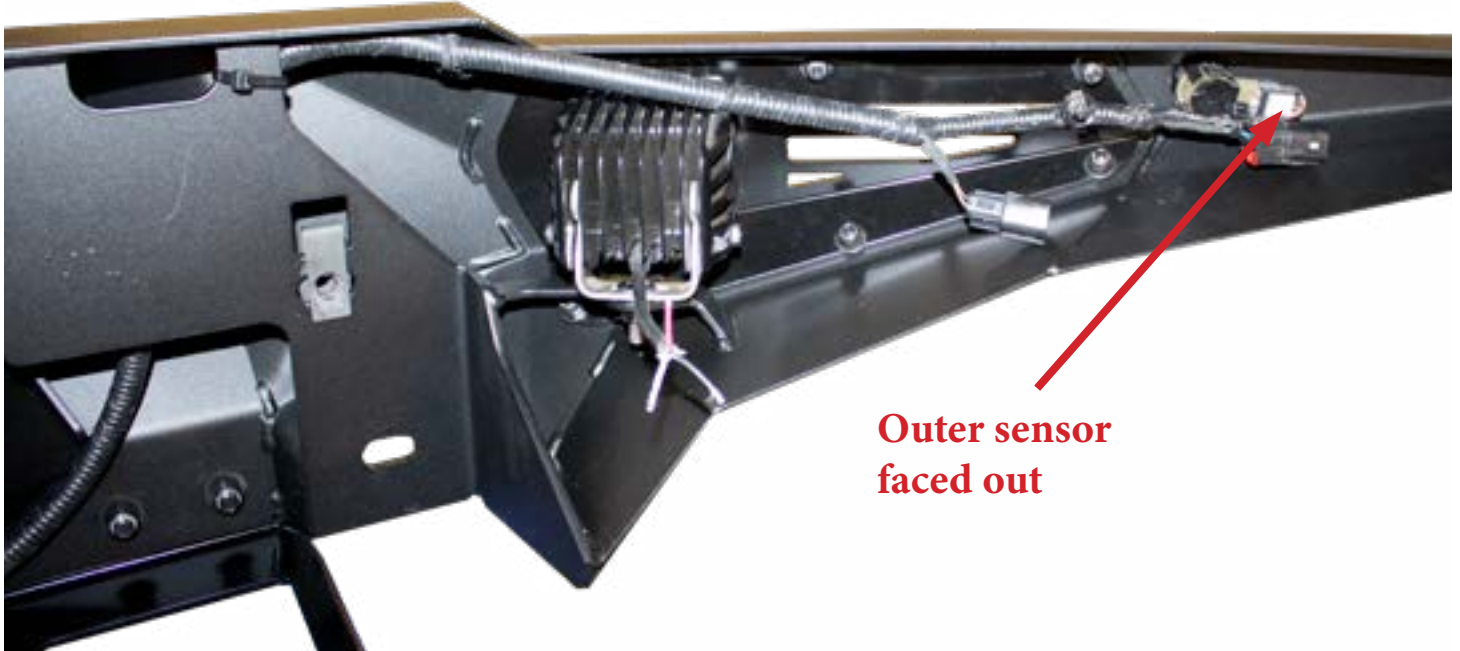


Install inner sensor with plug facing inwards

Route harness inside bumper

Fig V

23. After the wiring harness has been installed on the ADD Bomber install the sensors (**Note, the 2 outer sensors plugs should be facing out towards to ends of the bumper. Than the 2 inner sensors should face inwards**) "Fig W"



**Outer sensor
faced out**

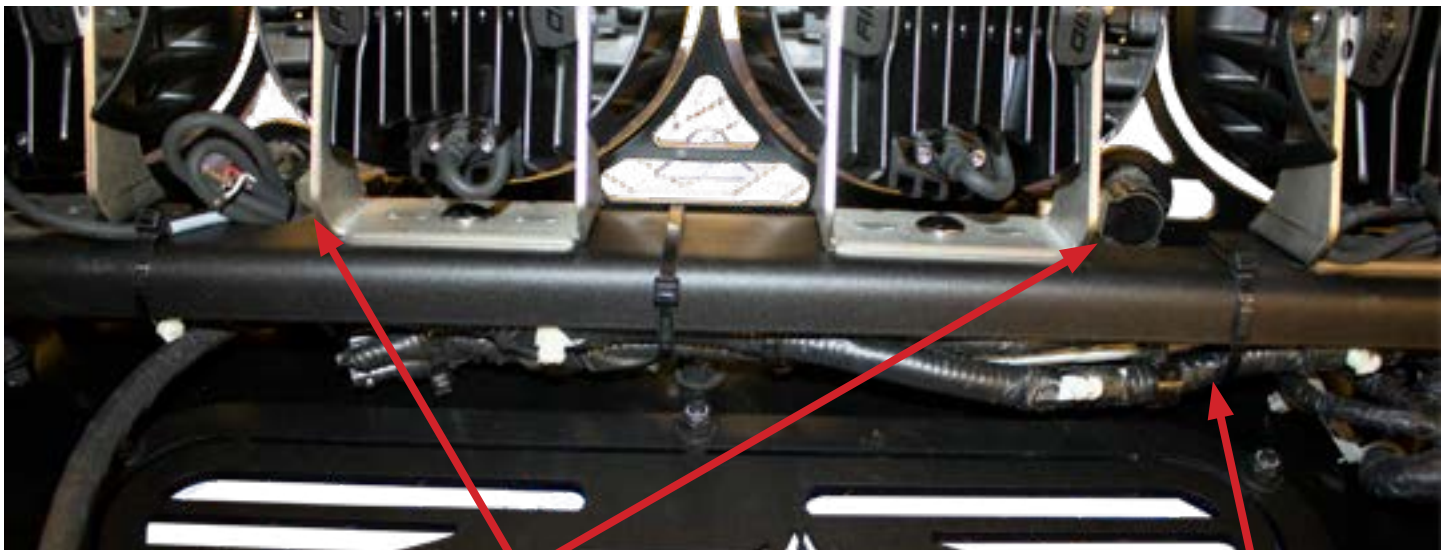
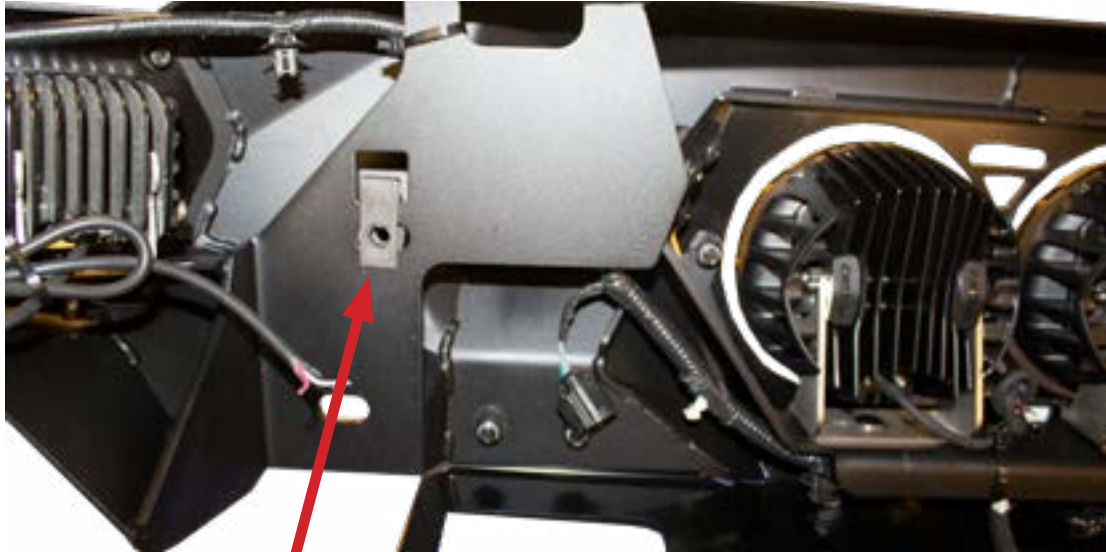


Fig W

**Inner sensor plugs faced
in towards each other**

**Zip tie harness under
bar**

24. After sensors have been installed put the extra long U-Nuts in place there is one on each side. "Fig X"



U-Nut locations

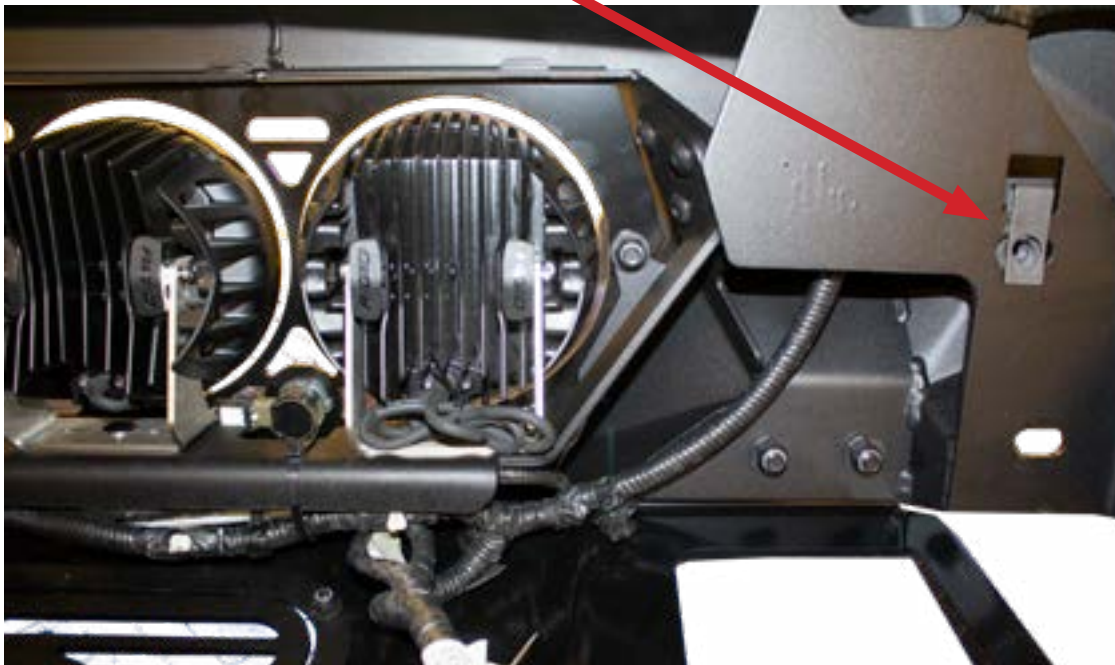


Fig X

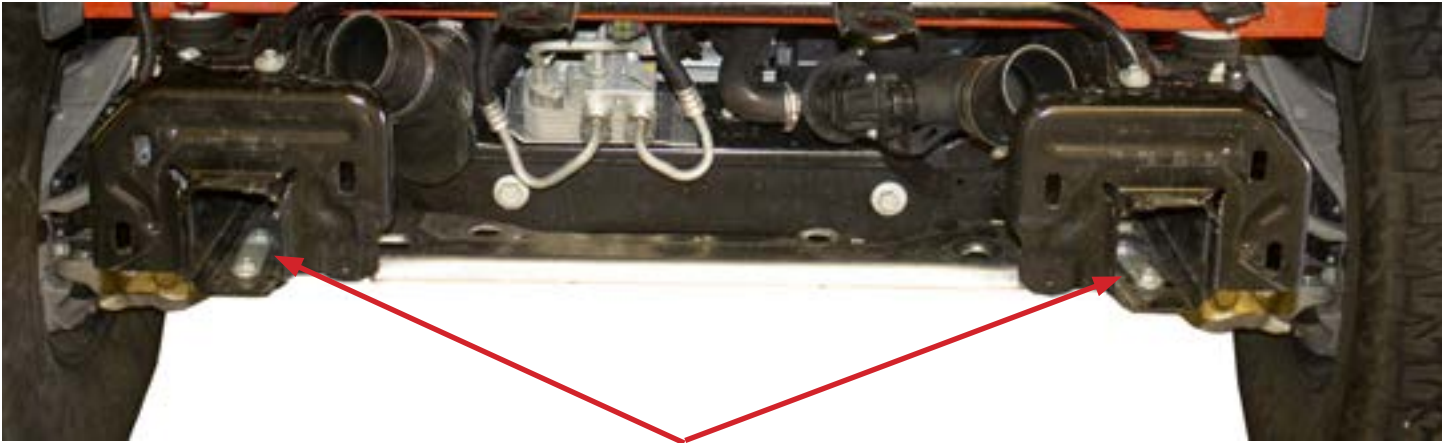


25. Install the supplied Regular Length 3/8" U-Nuts (x2) into the holes you removed the factory U-Nuts.
"Fig Y"



Fig Y

26. Set the tow hook nut plates in place inside the vehicle's frame horns. "Fig Z"



Tow hook nut plates

Fig Z

27. Set the bumper in place on the vehicle. Install the supplied 3/8" Bolts (x2) and 3/8" Fender Washers (x2) from the back side of the vehicle's frame horns "Fig AA"

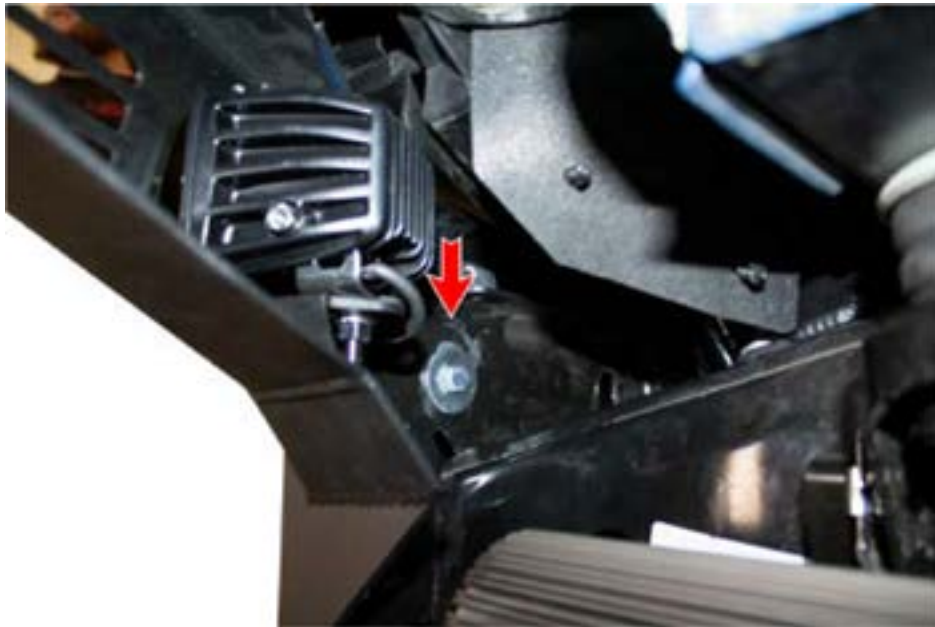


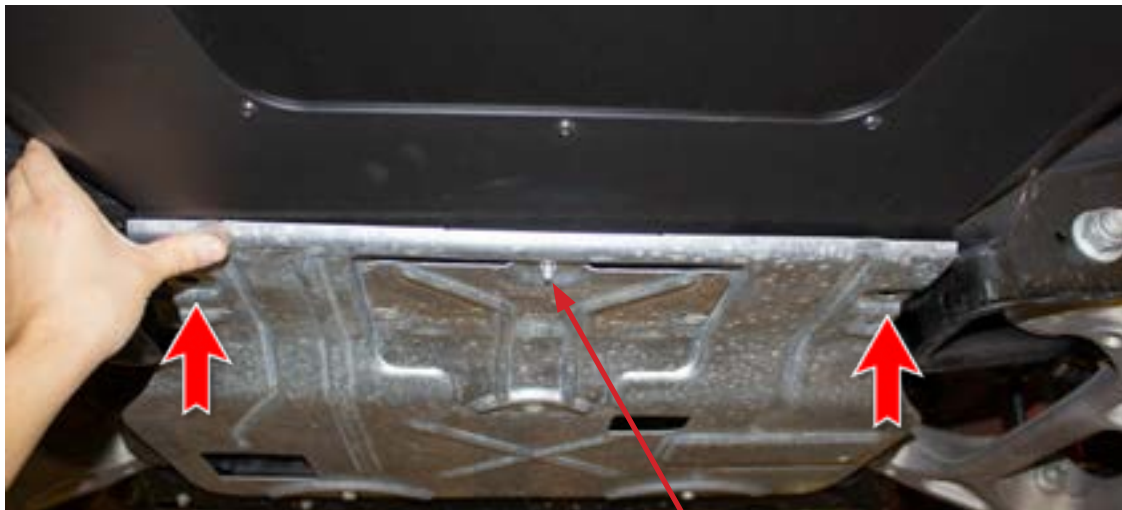
Fig AA

28. Install the supplied 1/2" Bolts (x2), 1/2" Washers (x2), and 1/2" Lock Nuts (x2) into remaining mounting holes on the vehicle's frame horns. (**Leave these bolts loose for now**). "Fig AB"



Fig AB

29. Install the supplied 3/8" Bolts (x2) and 3/8" SAE Washers (x2) into the bumper's skid plate mounting holes as shown in below. (**Make sure the factory skid plate clip is flipped to the outside, then goes over the ADD Bomber Bumper**) "Fig AC"



Flip clip to the outside

Fig AC

31. Align your bumper so it is centered left to right and sits straight in relation to the vehicle's grille/valance. Then, tighten the 1/2" mounting bolts to 70 foot pounds and the 3/8" mounting bolts to 25 foot pounds.

30. Reinstall the tow hooks using the bolts that were set aside. "Fig AD"

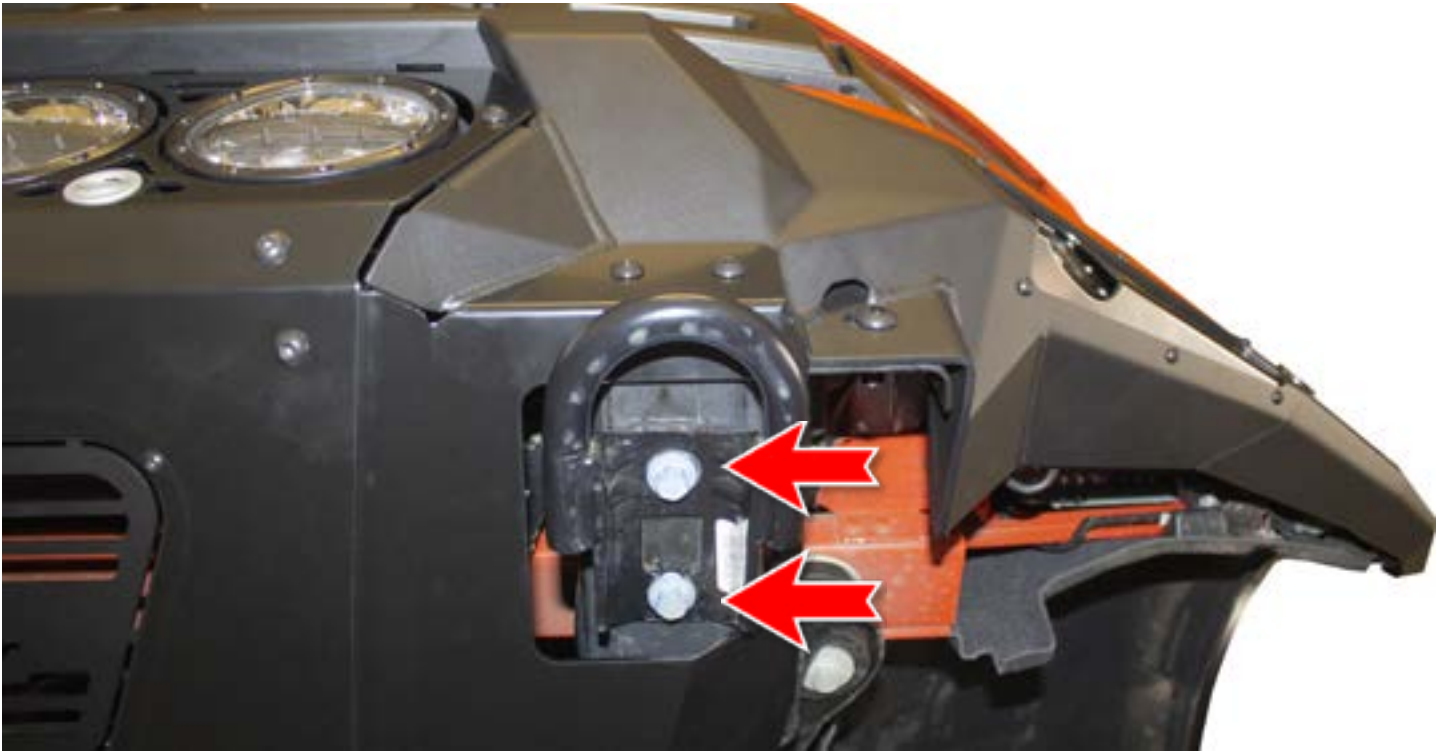


Fig AD

32. Stand back and enjoy your new ADD Bomber™ Front Bumper.
33. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

