

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:

- | | |
|--|--|
| 2 - 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) | 2 - Hex Head Bolts (3/8"-16 x 1") |
| 2 - Fender Washers (3/8") | 2 - Stainless Carriage Bolt (3/8"-16 x 1") |
| 4 - SAE Flat Washers (3/8") | 2 - 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") |
| 2 - Black Oxide Nylon Lock Nut (1/2"-13) | |

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"

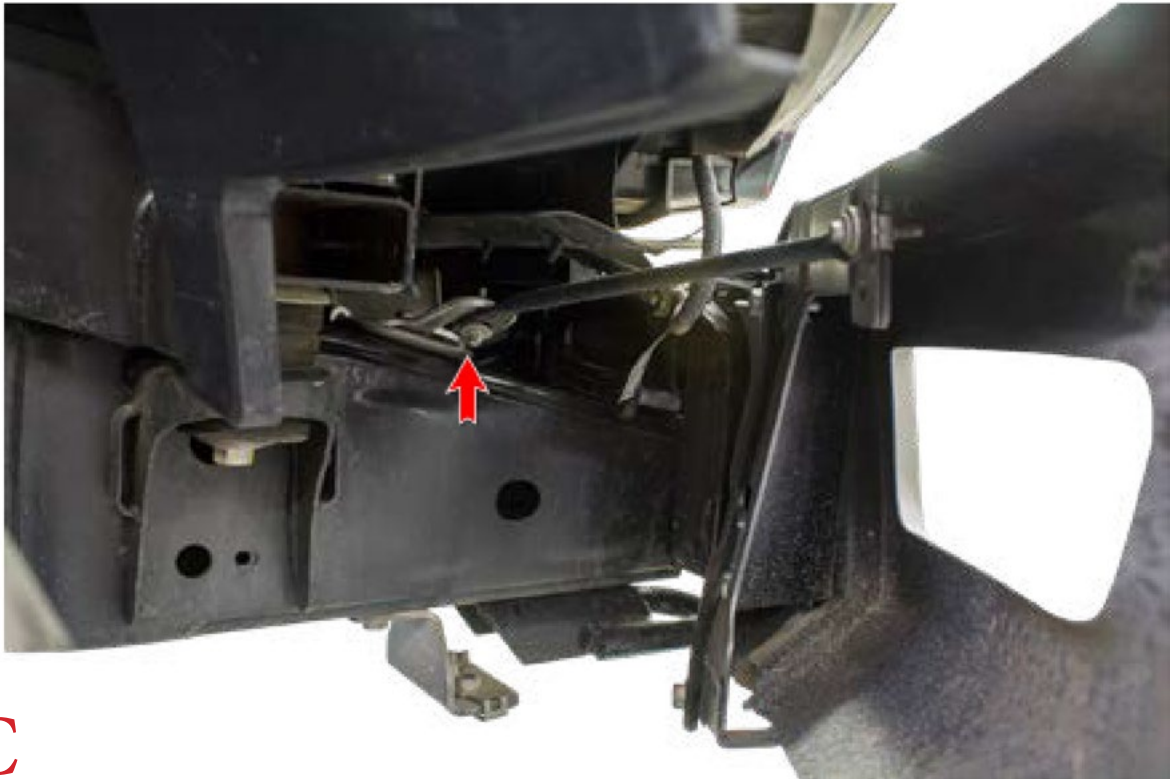


Fig C

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"

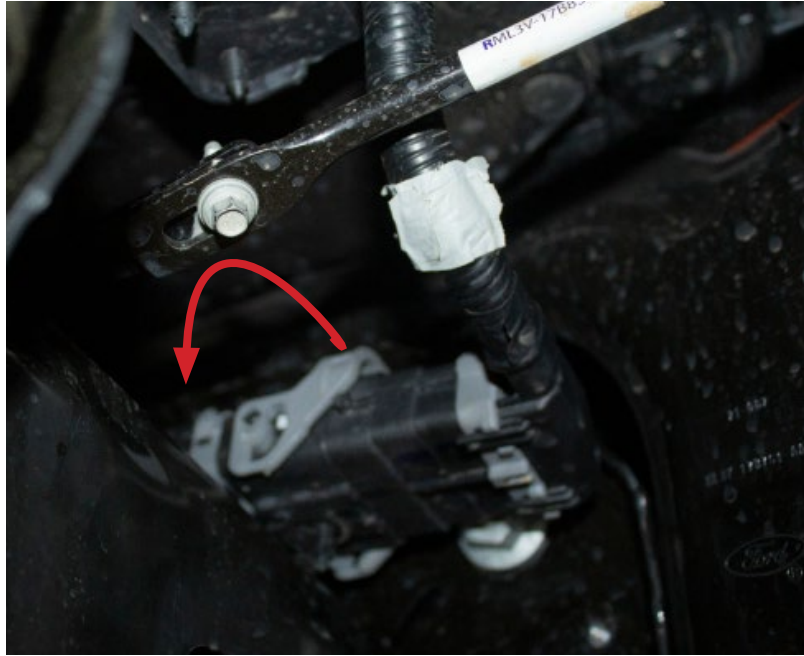
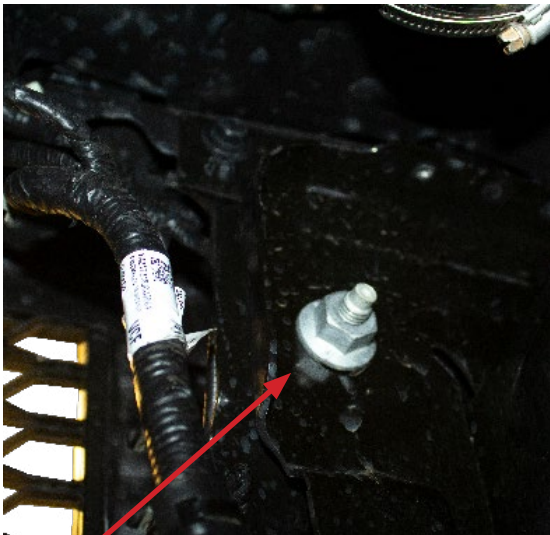
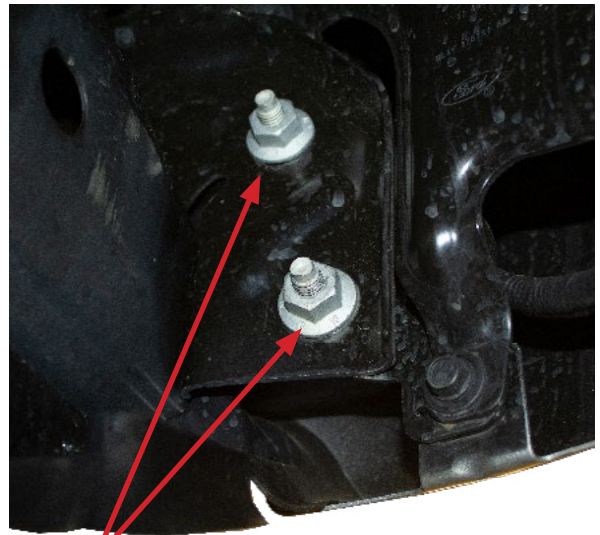


Fig D

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



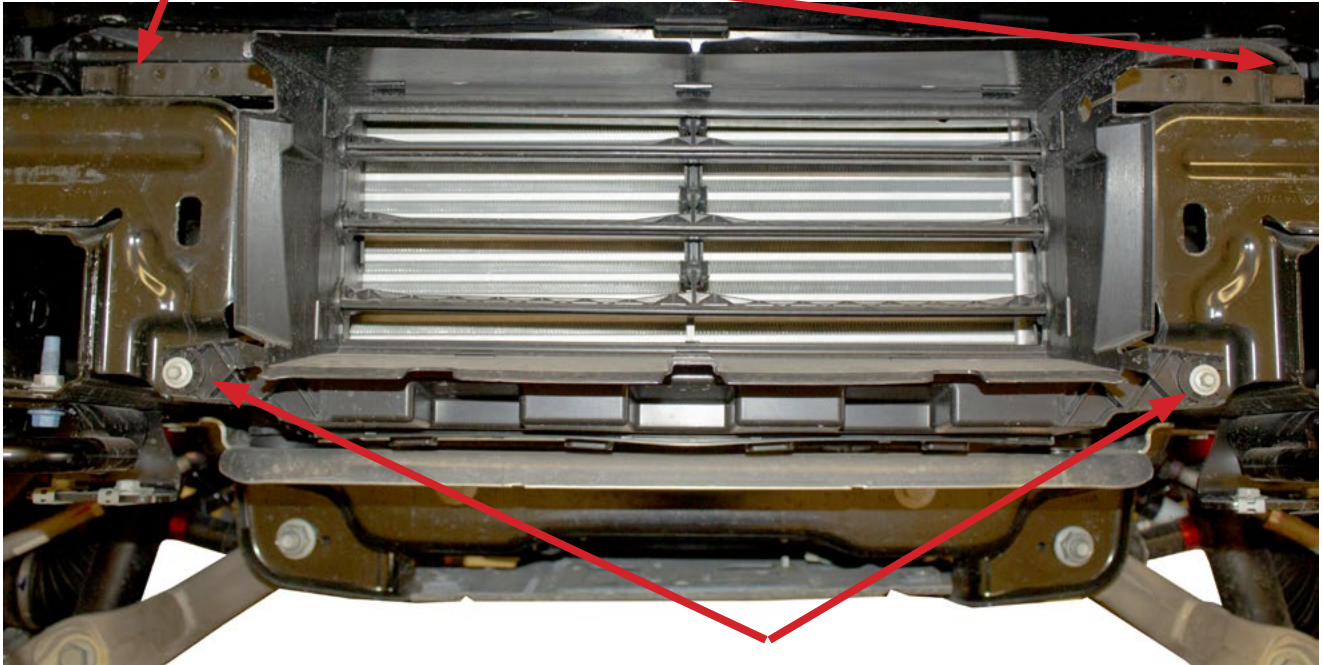
2 outer bolts

Fig E



6. Remove intercooler guard, first disconnect the plug on the driver side on the top of the intercooler guard by the bolt. Then, remove the 2 top bolts then the 2 bottom bolts. "Fig F"

2 Bolts on top



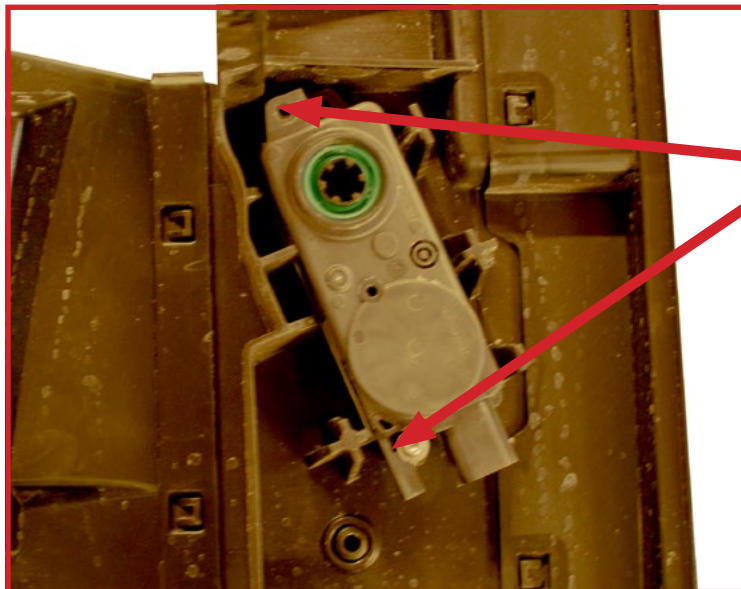
2 Bolts on the bottom

Fig F

7. Remove the shutter motor from the intercooler guard. It is held in place by 2 bolts then can be pulled out then re-connected back into the wiring harness and zip tied on the ADD bumper. "Fig G"

8. 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



2 Bolts

Fig G



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

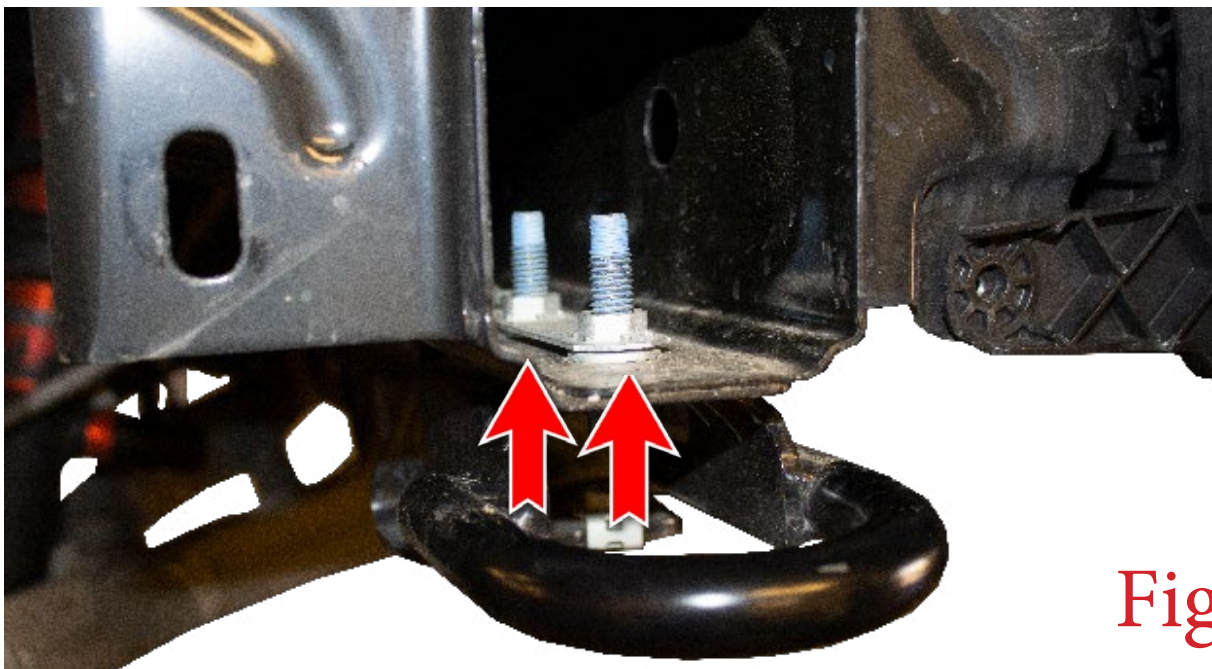


Fig H

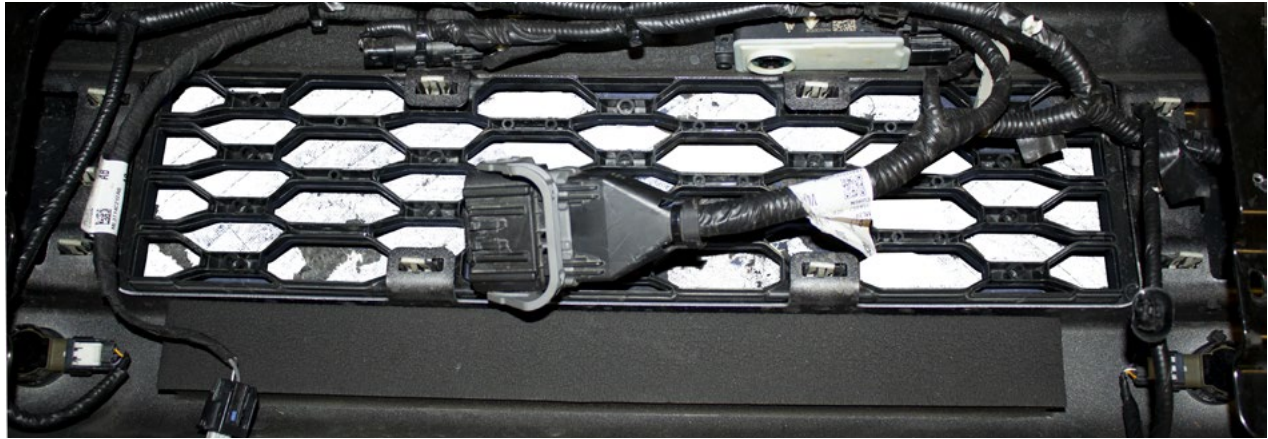
10. Remove the factory nut clips from the bottom two skid plate mounting holes on the vehicle's frame. "Fig H"



11. 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"



12. 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.



13. 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"

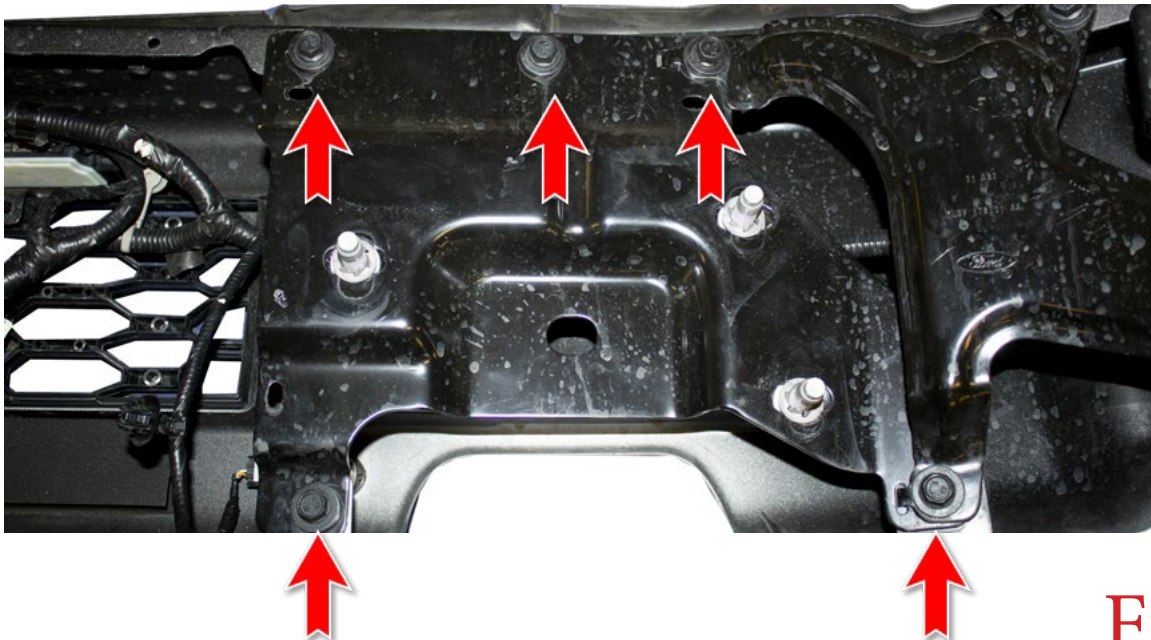


Fig K

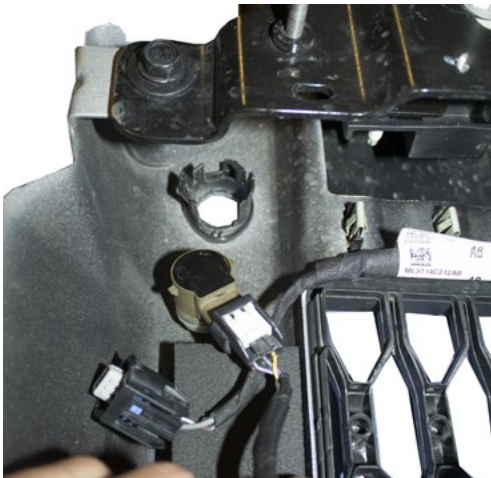


14. There are 4 bolts that hold the plastic covers where the rigid lights are located as well as the outer sensors. After the cover has been pulled off unplug the rigid lights and sensors. "Fig L"



Fig L

15. 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



16. 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"

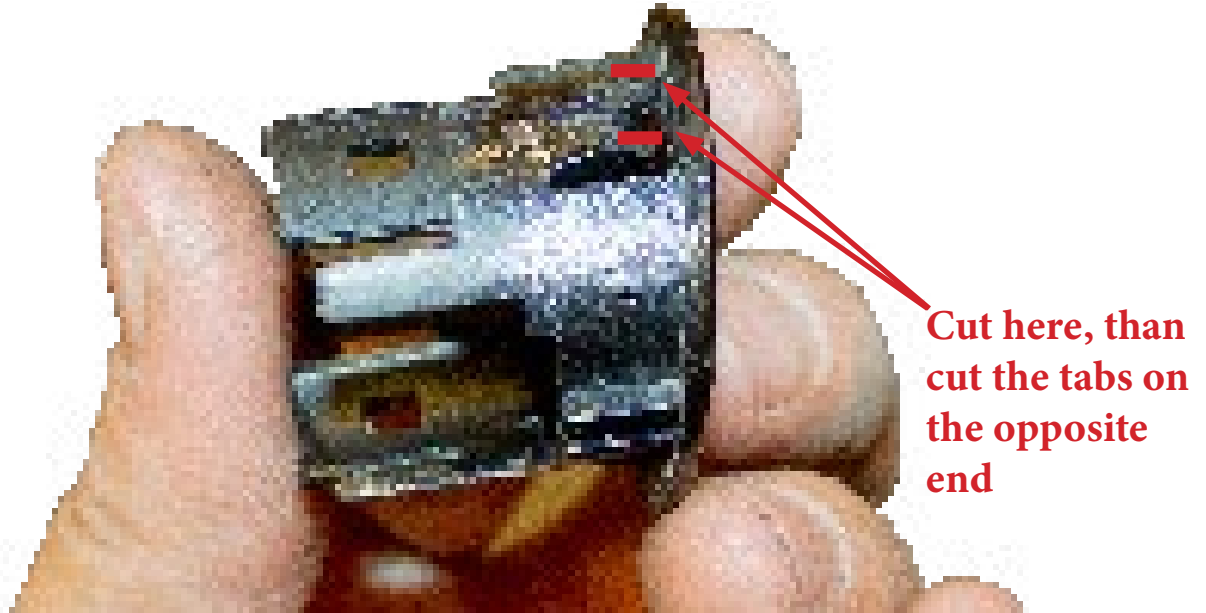


Fig N

17. 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"

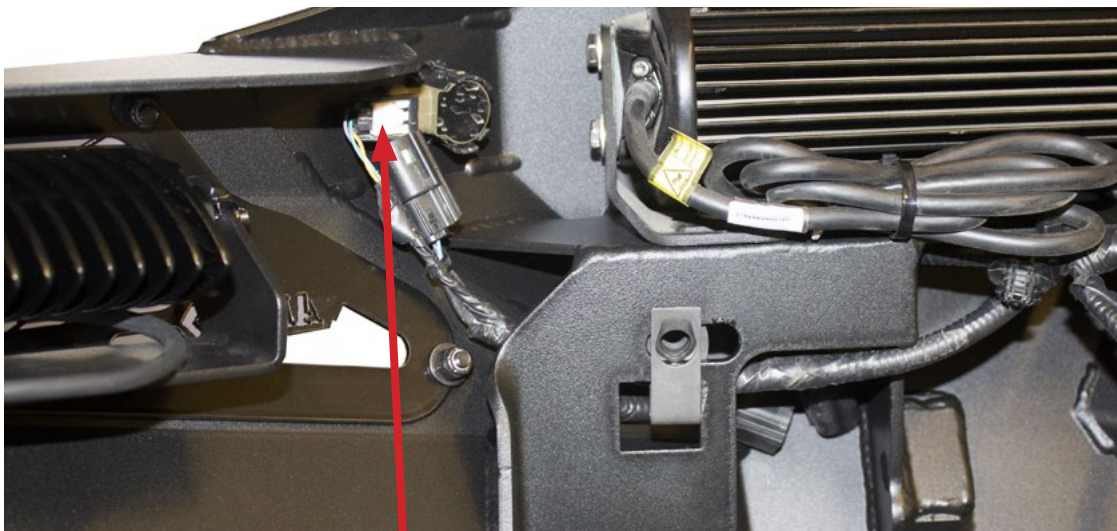


Fig O

Outer sensor
faced outwards

18. After the lights have been installed, take the wiring harness from the OEM bumper and install it on the ADD bumper along with the sensors and sensor bezels (**Note, the 2 outer sensors plugs should be facing out towards to ends of the bumper. Than the 2 inner sensors should face inwards**). Follow the wiring routing shown below which will clear the frame horns. "Fig P"



**Route inside
bumper**

**Outer sensor
faced out**

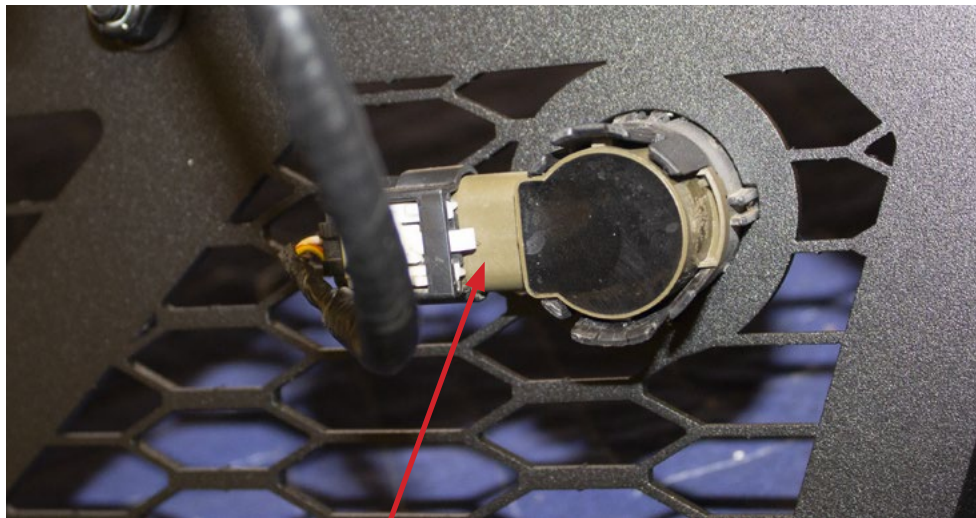
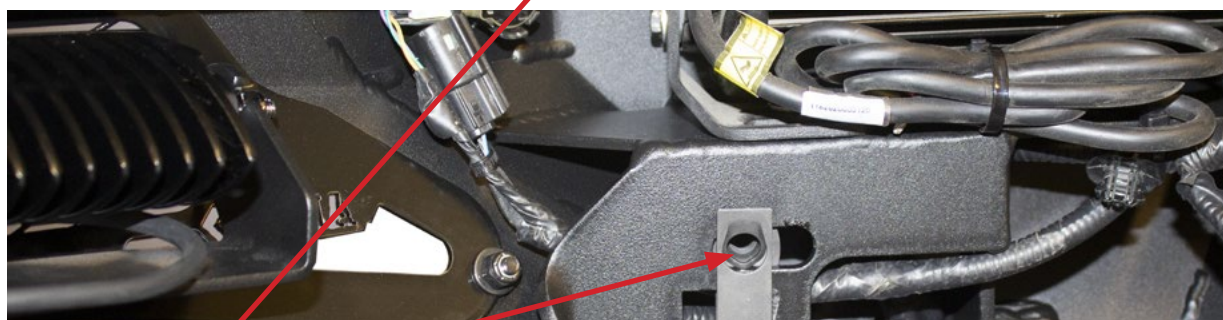


Fig P

**Inner sensors
faced inwards**

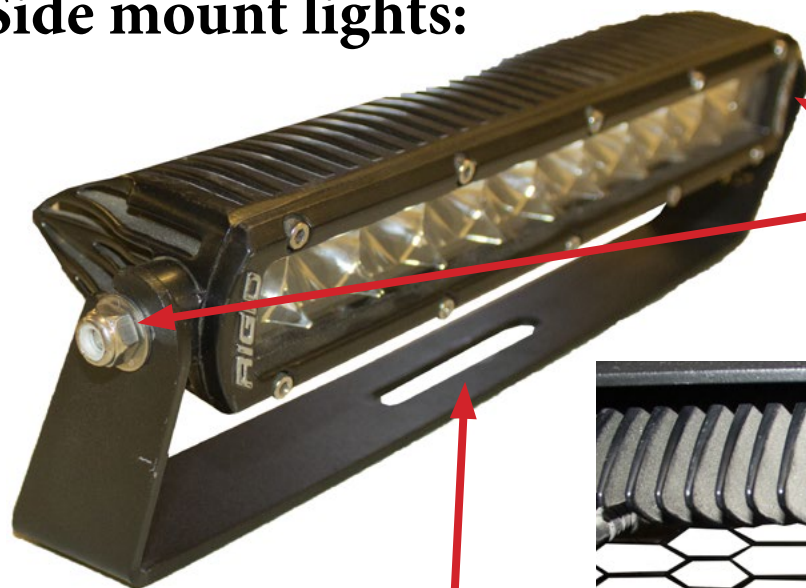
19. After sensors have been installed put the extra long U-Nuts in place there is one on each side. "Fig Q" Also, now is a good time to install any additional lights into the bumper.



2 U-Nuts

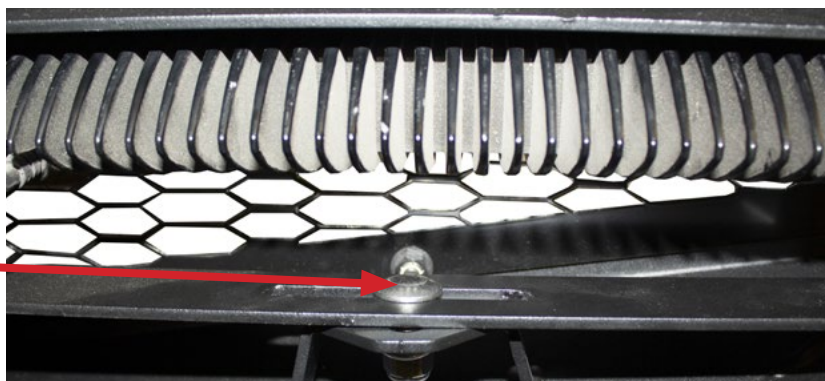
Fig Q

Side mount lights:



Bolt light to bracket

Use the slotted hole to center the light when bolting into place

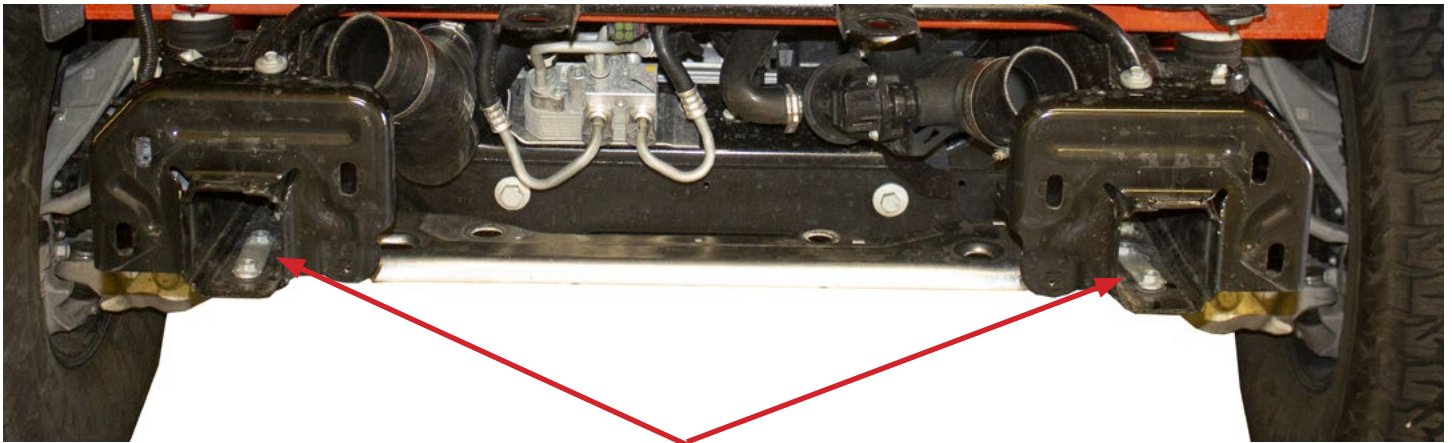


20. Install the supplied Regular Length 3/8" U-Nuts (x2) into the holes you removed the factory U-Nuts.
"Fig R"



Fig R

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



Tow hook nut plates

Fig S

22. 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 T"

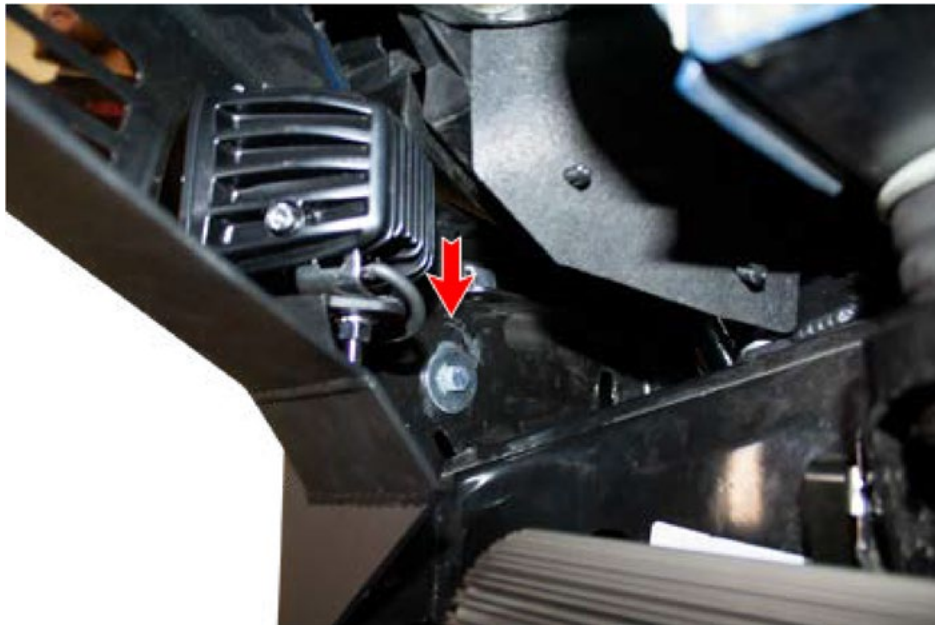


Fig T



23. 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 U"

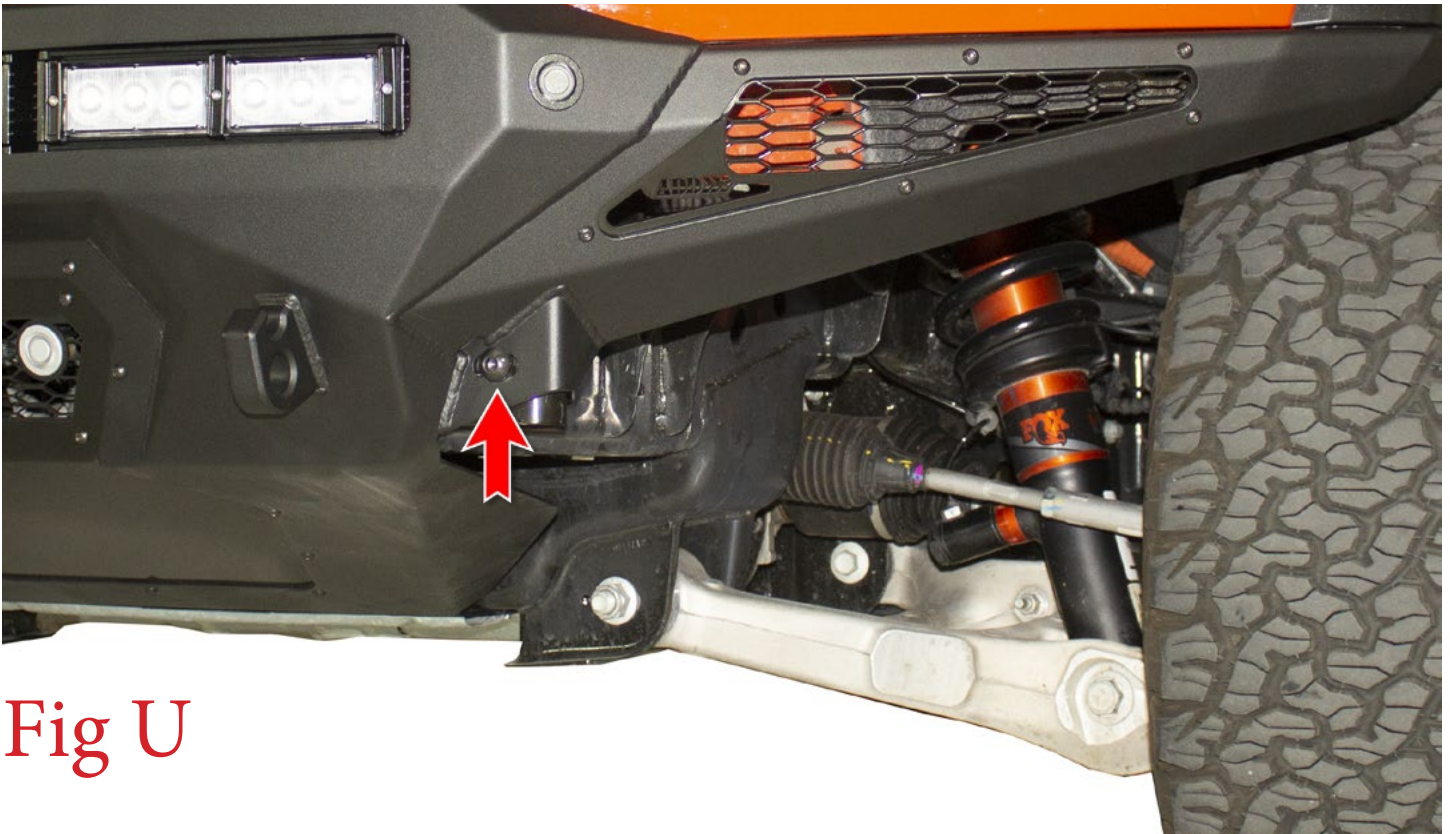


Fig U

24. 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 outside then goes over the ADD Bomber Bumper)** "Fig V"

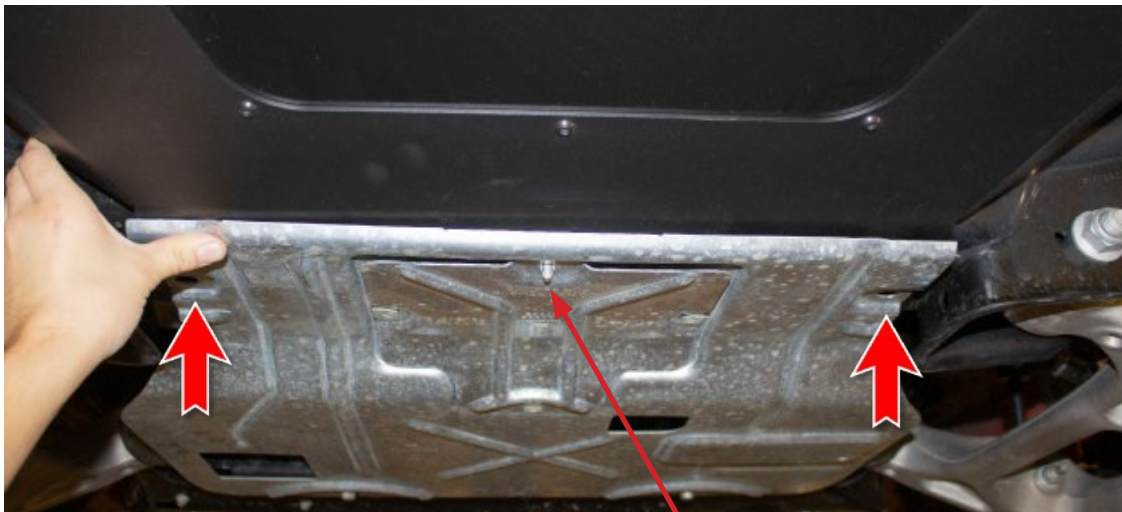


Fig V

Flip clip to the outside

25. Stand back and enjoy your new ADD Stealth Fighter™ Front Bumper.
26. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

