# **GTIVE DESERT DESIGNS®**

### **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 station-
- ary 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 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
- 3/4" Socket/Wrench
- 5/16" Allen Wrench/Socket 7/32" Allen Wrench/Socket
- 11mm Socket - 13mm Socket
- 21mm Socket - 15mm Socket & Wrench
- Long Ratchet Extension

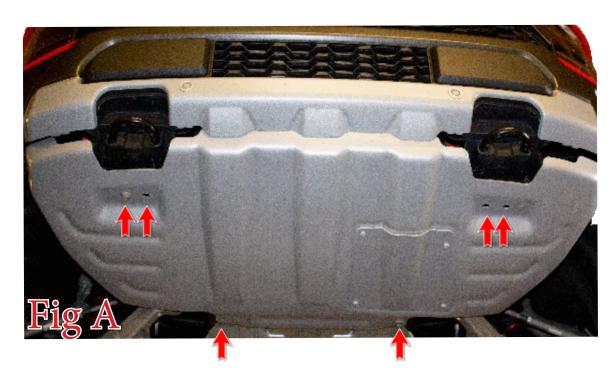
#### Included in Kit:

- Hex Head Bolts (3/8"-16 x 1 1/2") 2
- 2 - Extra Long Extruded U-nut (3/8"-16)
- Fender Washers (3/8") 2
- SAE Flat Washers (3/8") 6
- Black Button Head Bolts (1/2"-13 x 1 1/2") 2
- 2 - Black Oxide Nylon Lock Nut (1/2"-13)

- 15mm Socket
- Regular Length Extruded U-Nuts (3/8"-16) 2
- 2 - Hex Head Bolts (3/8"-16 x 1 1/2")
- 4 - Stainless Carriage Bolt (3/8"-16 x 1")
- Nylon Lock Nut (3/8"-16) 4
- Black Oxide SAE Flat Washers (1/2") 2

#### **Removal:**

Remove the (x6) skid plate bolts which are 13mm, then remove skid plate from truck. "Fig A" 1.



- 9/16" Socket & Wrench - 8mm Socket
- 18mm Socket

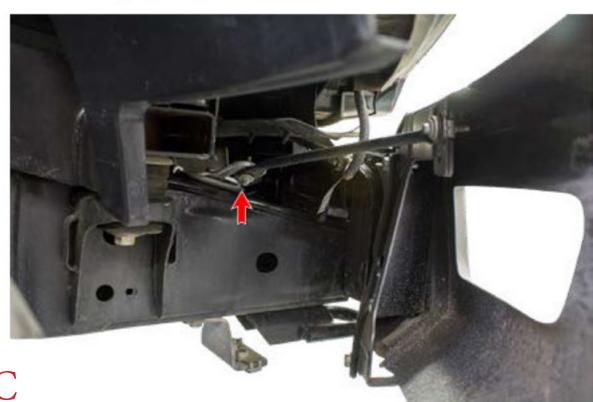


2. Remove the metal spacer that the bottom two skid plate bolts go through. "Fig B"



# 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

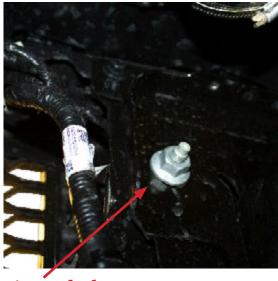


4. This is also a good time to disconnect the main wiring harness from the bumper which will be located by the side support that was just removed. To disconnect harness pull leaver back 180 degrees then pull out. "Fig D"

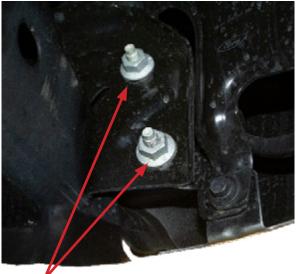


### Fig D

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



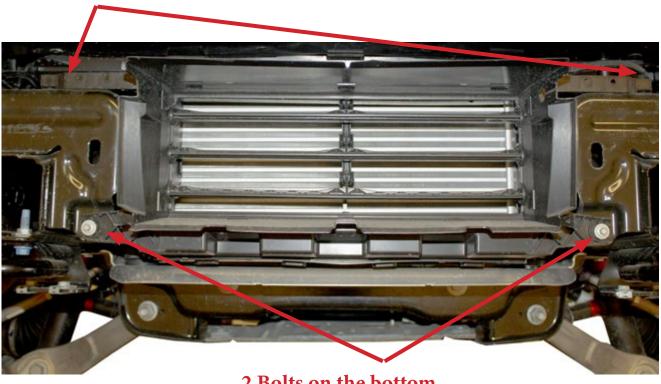
2 outer bolts

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

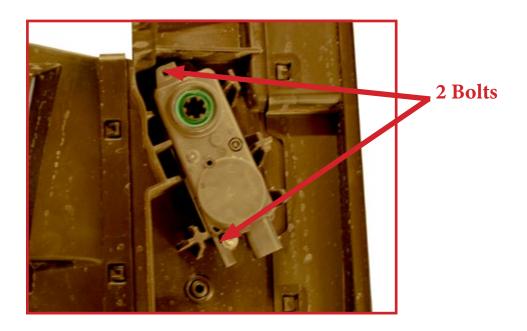


2 Bolts on the bottom

Fig F

Fig G

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"



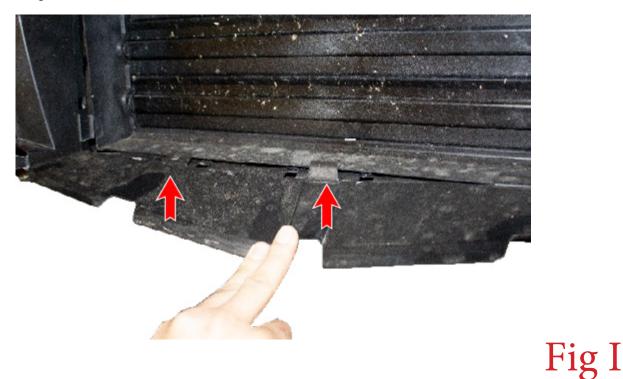


8. Remove each of the skid plate mounting brackets by removing the bolt (13mm) that holds them on. There is one bolt per bracket. "Fig H"



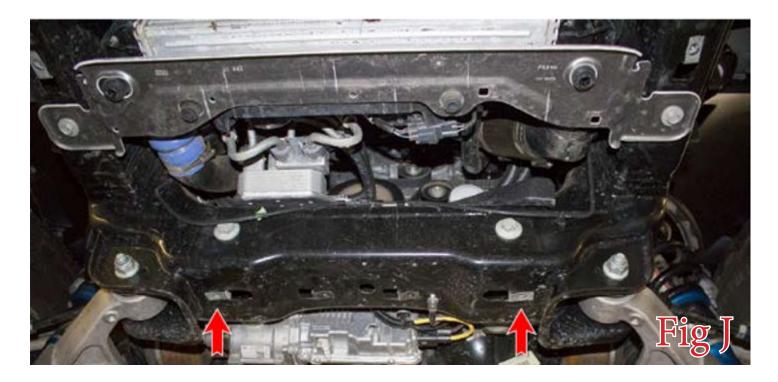
### Fig H

9. 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 I"

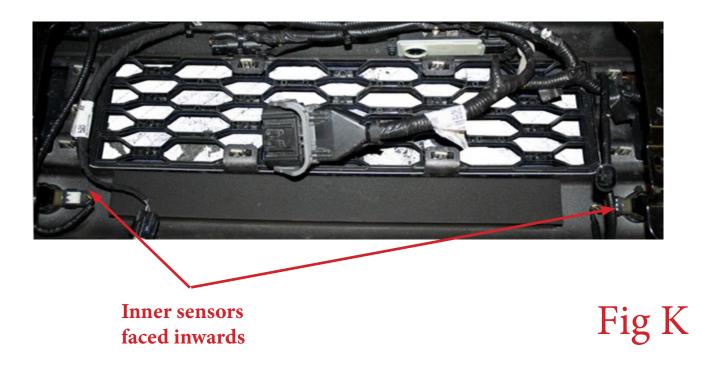




10. Remove the factory nut clips from the bottom two skid plate mounting holes on the vehicle's frame. "Fig J"

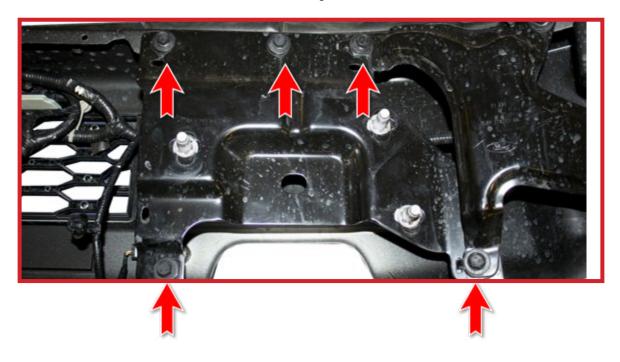


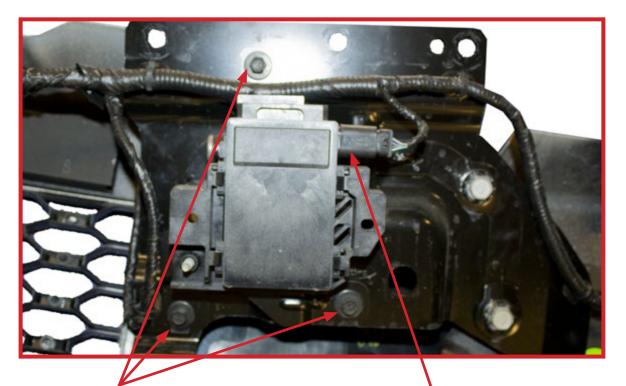
11. Remove stock wiring harness from the OEM bumper. There are brackets that will need to be disassembled to get to the harness shown in the next few steps. *"Fig K"* 





12. 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 L"





Remove 3 bolts holding cruise control

Disconnect Cruise control

Fig L



13. 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 M"



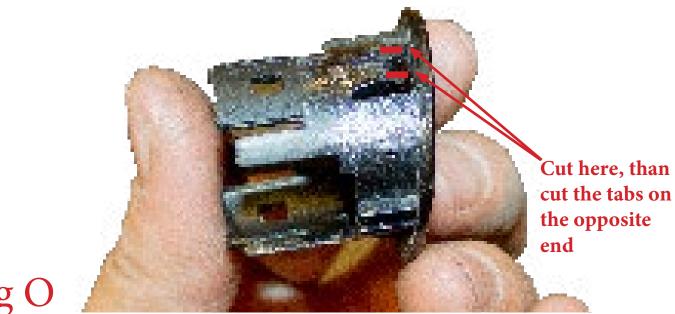
14. There are 4 sensor locations, the inner ones shown step 11 are easily accessible for removal. The outer sensors are harder to access as they are tucked into the bump by the rigid lights. After pulling the cover off in step 12 they will be easier to access. "Fig N"







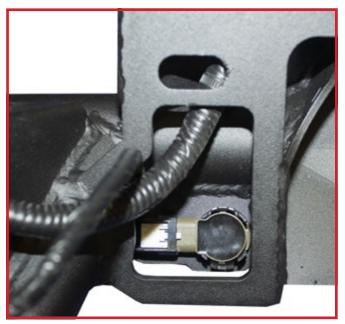
15. After sensors bezels have been removed you will need to modify them for better fitment. There are 2 tabs on each side of the bezel that will need to be slightly trimmed down. The tabs look like a triangle and the part facing the ring of the bezel needs to be trimmed. "Fig O"



# Fig O

16. After the Sensor bezel tab has been modified you can insert them into the ADD bumper. (*Remember to insert the sensors and bezels in the same position/orientation as they were on the OEM bumper*). "Fig P"



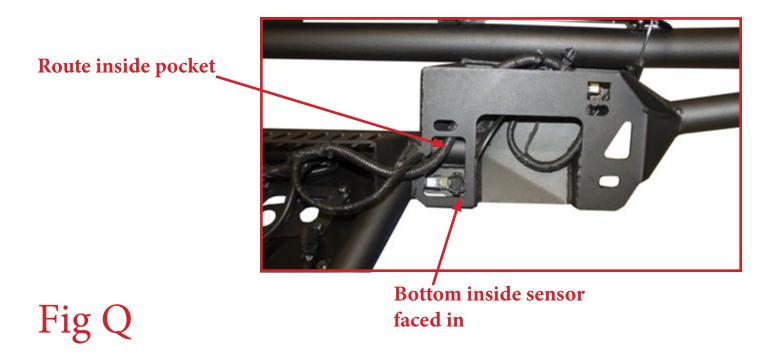


# Fig P



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





18. After the wiring harness has been installed on the bumper install the U-nut's, there is a total of 4 (2 per side).



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

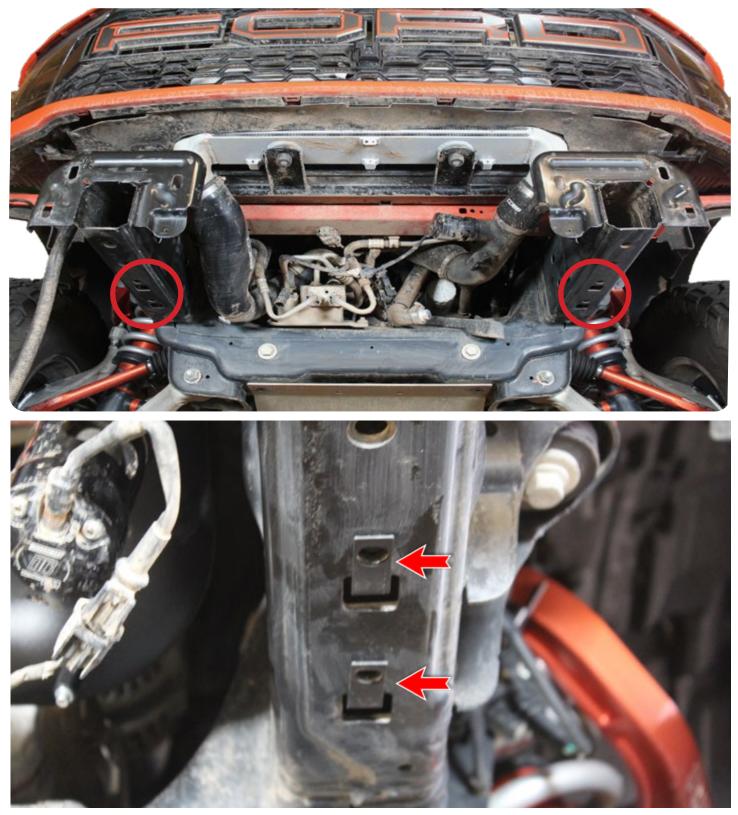






### WINCH INSTALLATION

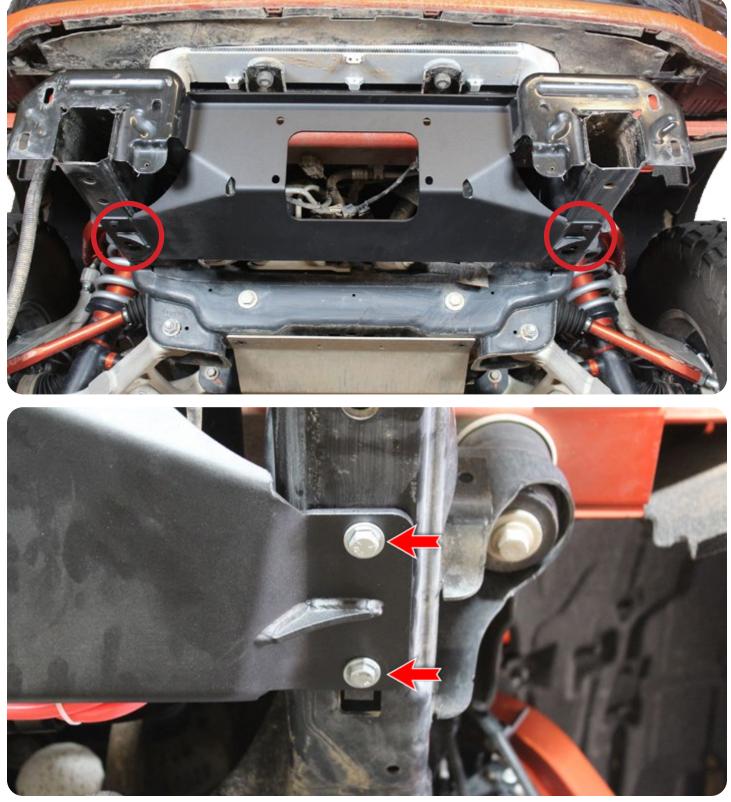
20. Install the supplied Regular Length 3/8" U-Nuts (x2) in the slots shown below.





### WINCH INSTALLATION

21. Install your winch to the mount and bolt the mount to bottom of the frame horns as shown using a 7/16 socket to install the (4x) 3/8 bolts and washers.

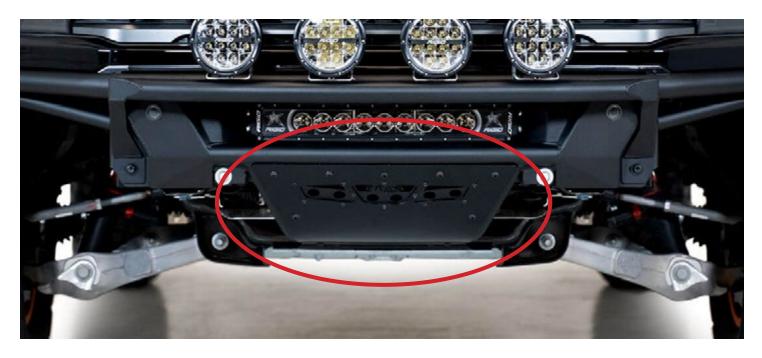


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### WINCH INSTALLATION

22. Remove the existing skid plate by using a 7/32 allen wrench and a 9/16 box end wrench. Reuse hardware and install your new winch skid plate.







### WINCH INSTALLATION

23. install the support bracket behind the skidplate when installing the fairlead. Follow steps 24-27 for final install.







24. Set the bumper in place on the vehicle. Install the supplied 3/8" Bolts (x4) and 3/8" Fender Washers (x4) from the back side of the vehicle's frame horns (**They are located on each side of the frame**) "Fig S"

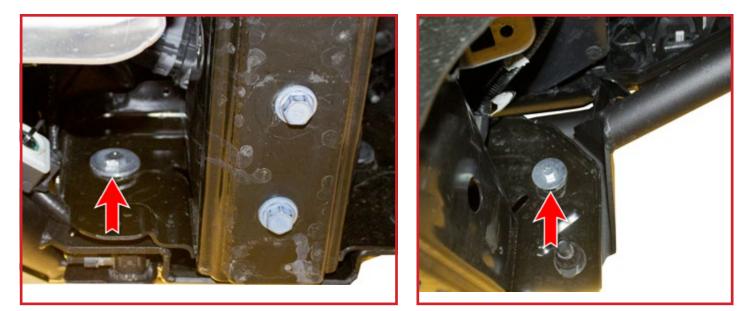
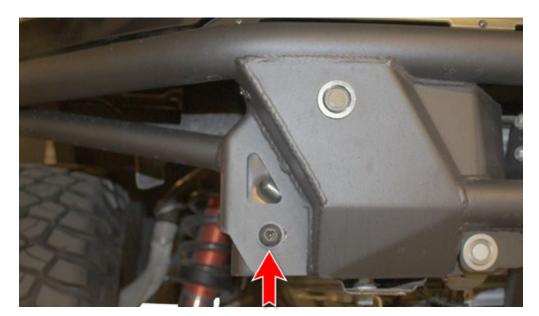


Fig S

#### For Light Hoop install skip step 21:

25. 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, Then fully tighten when the truck is off the jack stands sitting on it's own weight for a more accurate fit). "Fig T"



# Fig T



#### Light Hoop install:

26. First install the Lights on the Light Hoop. Then place the light hoop on the bumper and bolt in place using the supplied 1/2" Bolts (x2), 1/2" Washers (x2), and 1/2" Lock Nuts (x2) (Fig U). (Make sure the rubber gasket is on the ends of the light hoop where it will hook onto the pro bolt on bumper)



# Fig U



27. Install the supplied 3/8" Bolts (x2) and 3/8" 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 V"

#### Before



### Fig V



28. 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.

29. Stand back and enjoy your new ADD Bomber<sup>™</sup> Front Bumper.

30. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.



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