

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 Cube Lights

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

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 | - E6 External Torx Socket | |

Included in Kit:

- | | |
|---|---|
| 2 - Button Head Bolts (1/2"-13 x 1 1/2") | 4 - Hex Head Bolts (3/8"-16 x 1 1/2") |
| 2 - Flat Washers (1/2") | 2 - Fender Washers (3/8") |
| 2 - Nylon Lock Nuts (1/2"-13) | 2 - Flat Washers (3/8") |
| 2 - Extra Long U-Nuts (3/8"-16) | 2 - Regular Length U-Nuts (3/8"-16) |
| 4 - Carriage Bolts (3/8"-16 x 1") (Dual 20" Only) | 4 - Flat Washers (3/8") (Dual 20" Only) |
| 4 - Nylon Lock Nuts (3/8"-16) (Dual 20" Only) | 2 - Light Mount Tabs (Dual 20" Only) |

****If you plan to keep your adaptive cruise control function, you must install our ACC relocation bracket. Instructions can be found here****

<https://www.addictivedesertdesigns.com/files/install/ADD-2015-2017-F150-2017-Current-Raptor-ACC-Bracket-Installation-Instructions.pdf>

Removal:

1. Using 13mm and 15mm Sockets, remove the skid plate bolts (x6). Then, remove the skid plate from the truck. (Fig A)



Fig A



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



Fig B

3. Carefully pull the front plastic piece off of the bumper. There are no tools required for this step, it simply pulls off by hand. (Fig C)

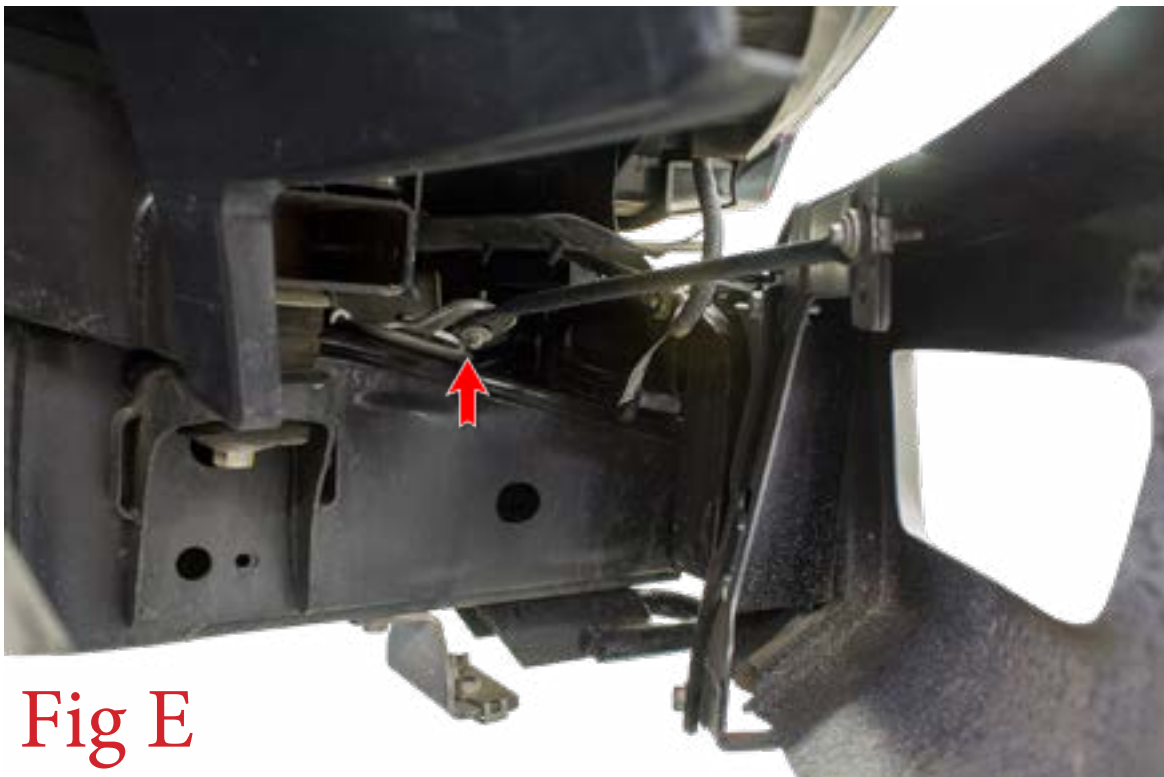


Fig C

4. Remove your Adaptive Cruise Control Module. Using an 11mm Socket, remove the three nuts holding the Module on. Then, use an E6 External Torx Socket to remove the three studs holding the module on. Then, unplug and remove the module from the truck. Follow our ACC Bracket instructions (link at the beginning of this document) if you are relocation your adaptive cruise control module. (Fig D)



5. 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 E)





6. 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 (they were hidden behind the plastic piece you removed in Step 3). One of the nuts (per side) faces the rear of the vehicle and is accessible from underneath the truck. (Fig F)

View From the Front

View From the Rear



7. Remove the bumper from the truck. As you are removing the bumper, release the plastic clips that hold the rubber shroud to the top side of the 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. Using an 8mm Socket, remove the four mounting bolts for the intercooler scoop. Then, remove that scoop from the vehicle. As you remove the scoop, unplug the intercooler shutter motor. (Fig I)

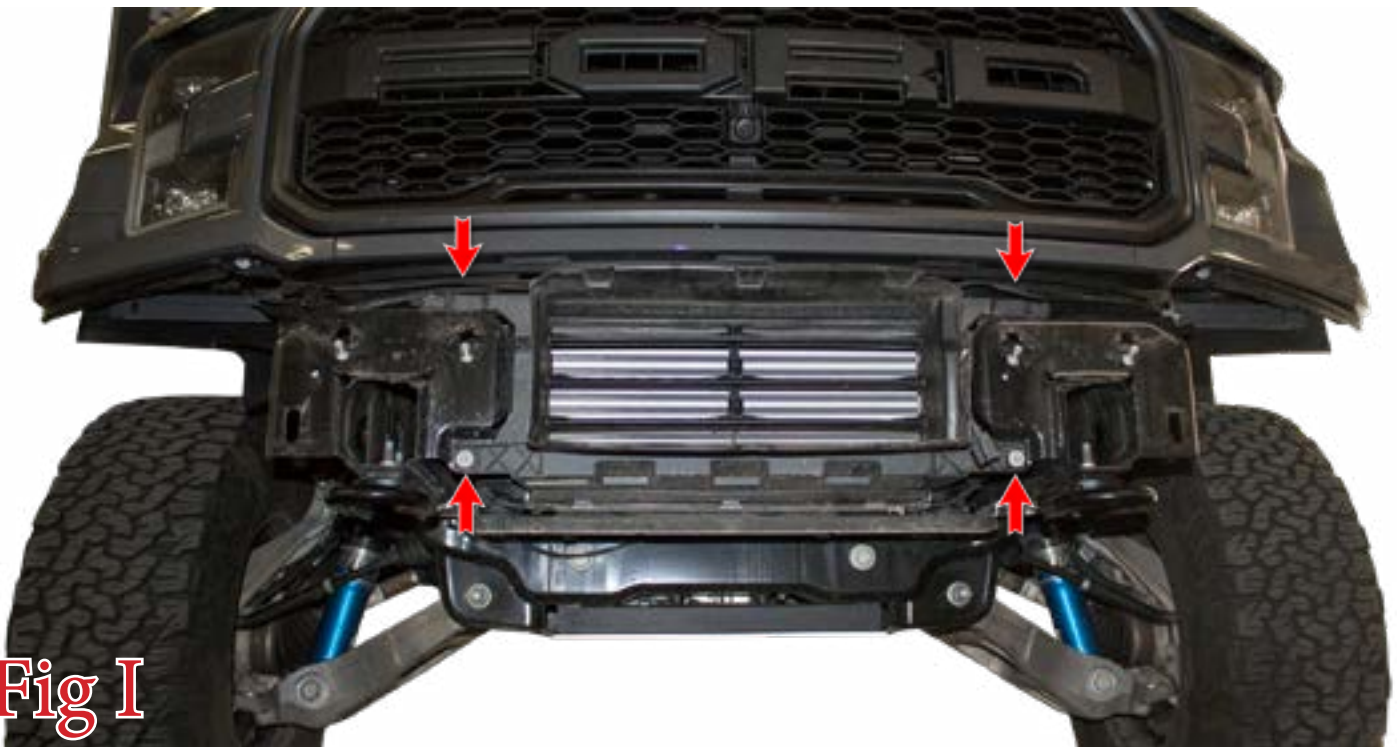


Fig I

10. Release the clip holding the intercooler shutter motor to the scoop assembly. Then, remove that motor from the assembly. (Fig J)

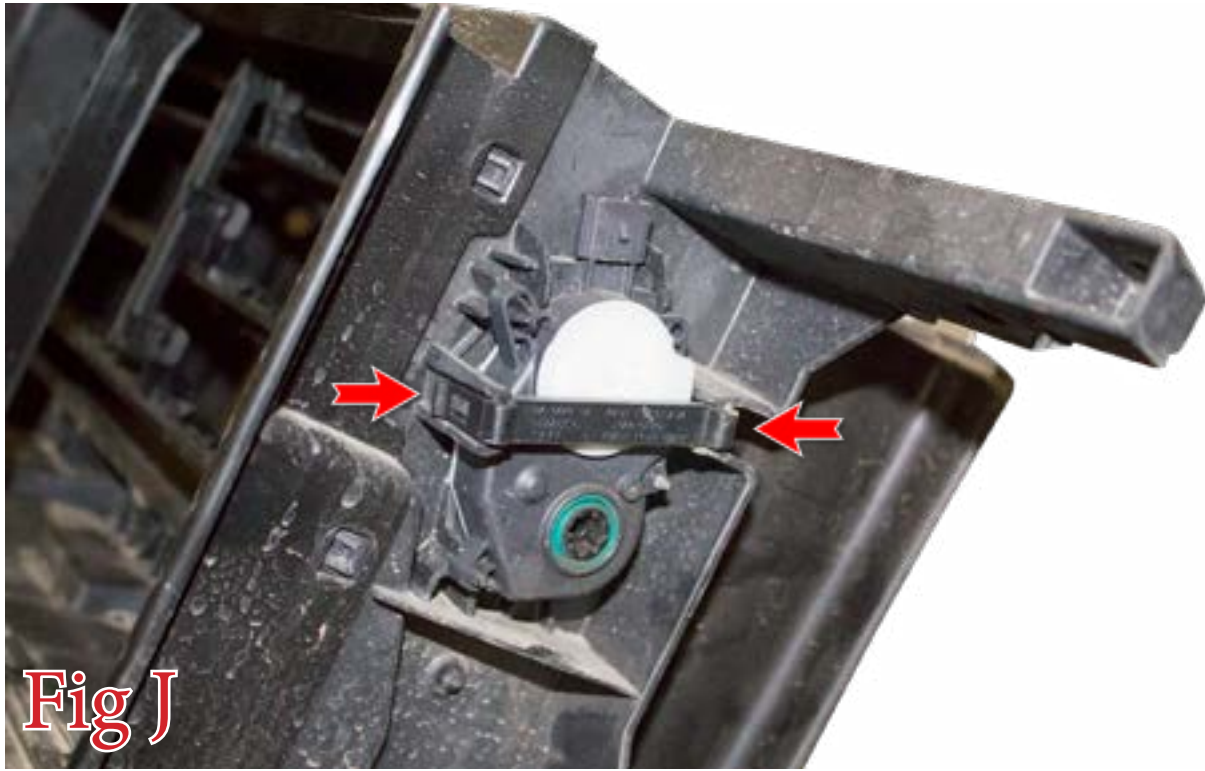


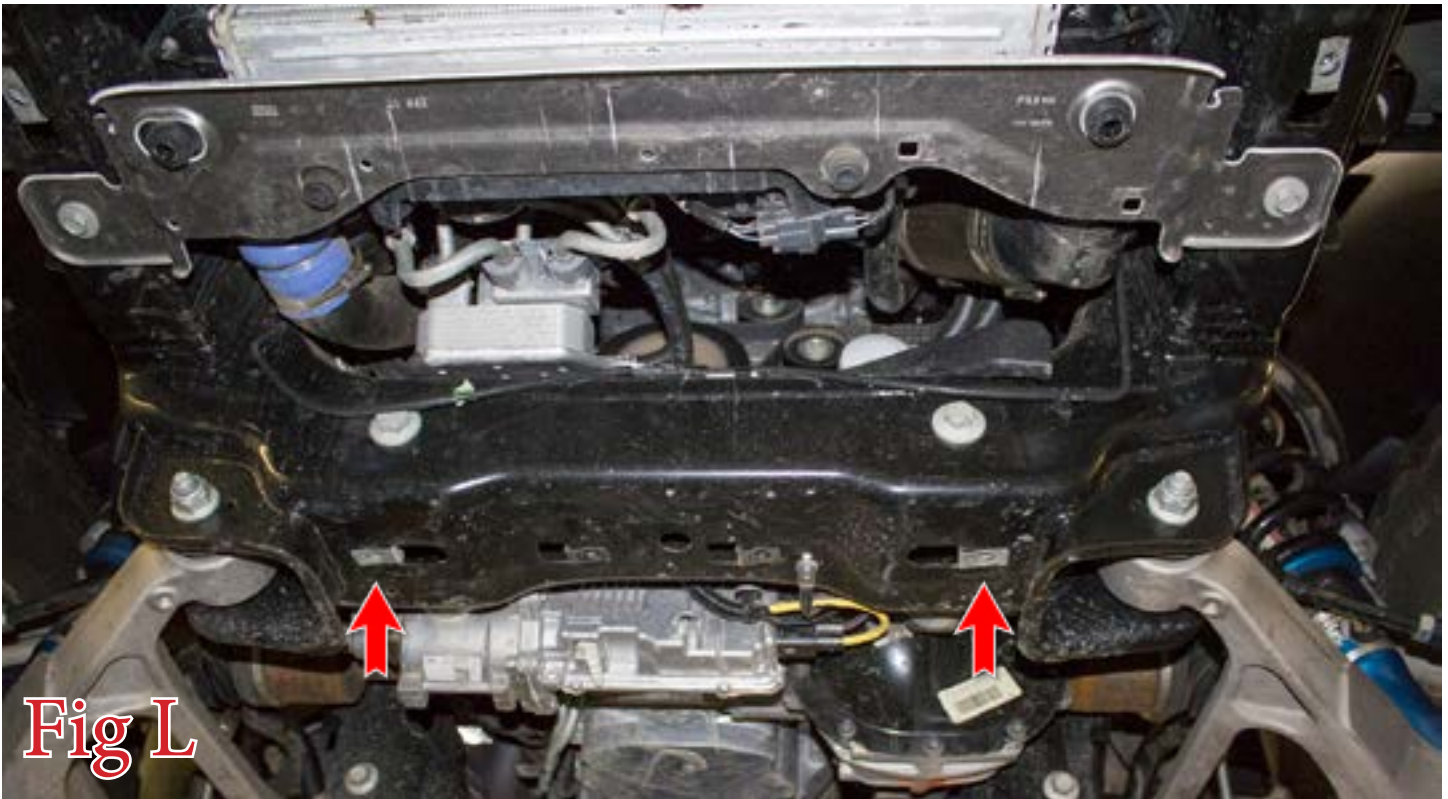
Fig J

11. Plug the intercooler shutter motor back into the harness on the vehicle and zip tie it up and out of the way. (Fig K)



Fig K

12. Remove the factory nut clips from the bottom two skid plate mounting holes on the vehicle's frame. (Fig L)



13. Remove the series of clips holding on the rubber trim pieces below each headlight bezel. Then, remove these trim pieces. (Fig M)





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

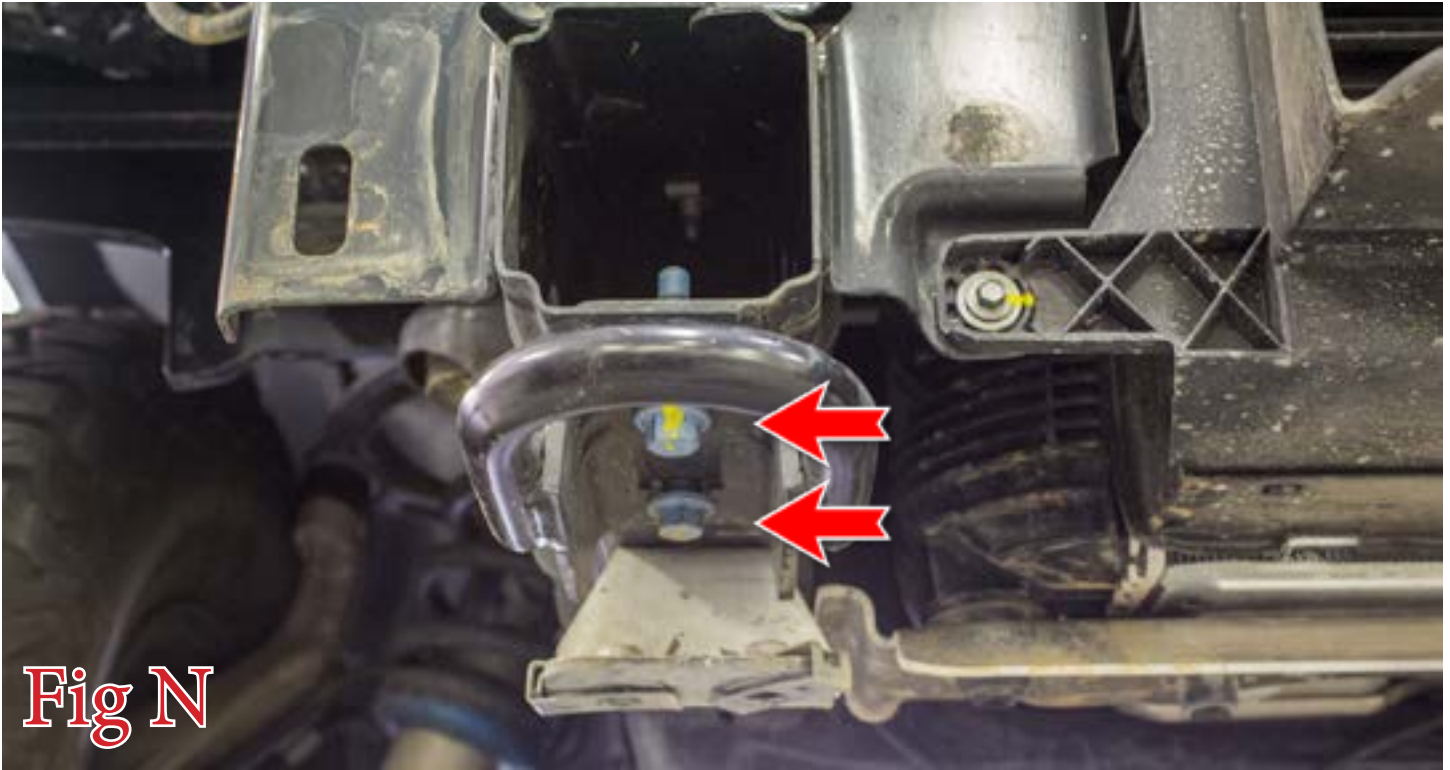


Fig N

Installation:

15. If you have Rigid Lights, you can install them according to Rigid's installation instructions, then skip to Step 21. If you have Baja Designs lights, please follow Steps 16-18.



Fig O

16. If you have Baja Designs Lights, follow this step. If not, skip to Step 19. Remove the mounting bolts for the light mounting bracket (3 per side). Then, remove this bar from the bumper. (Fig P)



Fig P



17. Use the hardware supplied with your Baja Designs lights to install the lights onto the light mount bracket as shown in (Fig Q).



Fig Q

18. Reinstall the light bracket onto your bumper by reinstalling the bolts from Step 16. (Fig R)



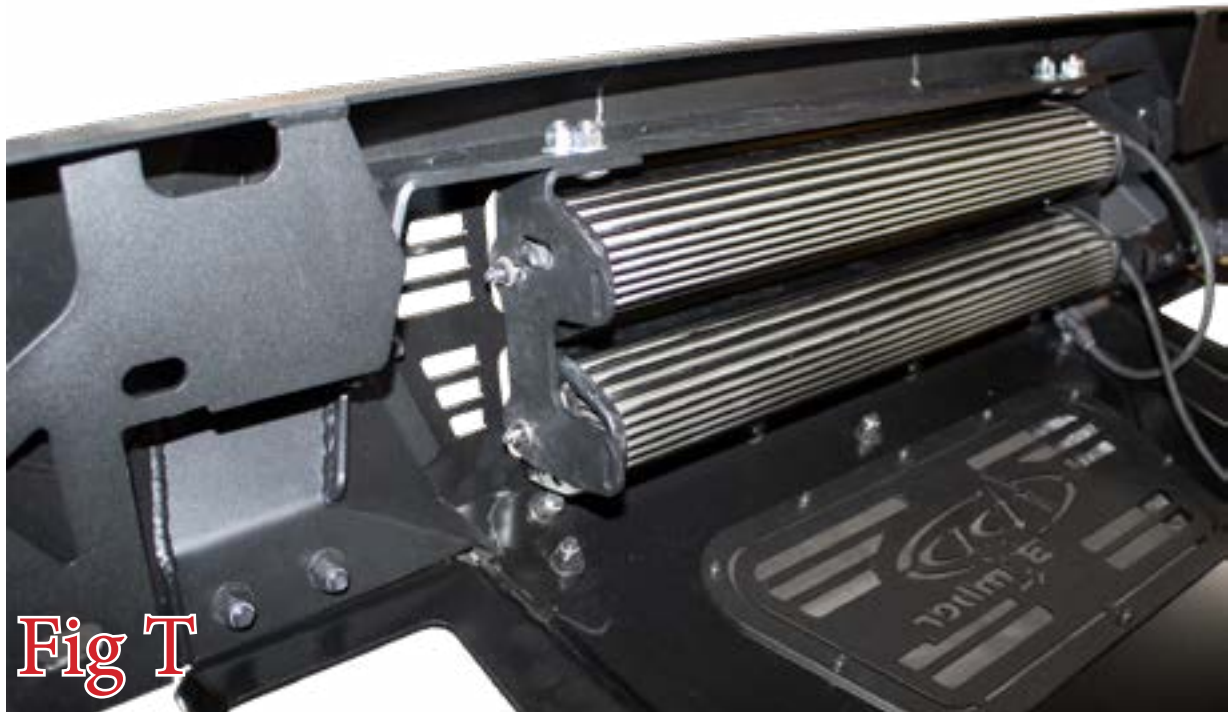
Fig R



19. If you have dual 20" Light Bars to install, follow this step. If not, skip to Step 21. 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 the leave the bolts loose for now. (Fig S)



20. 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 T)





21. Install the supplied Regular Length 3/8" U-Nuts (x2) into the holes you removed the factory U-Nuts from in Step 12. (Fig U)



Fig U





22. Install the supplied Long U-Nuts (x2) onto your bumper as shown in (Fig V).



23. Set the tow hook nut plates in place inside the vehicle's frame horns. (Fig W)



Fig W

24. 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 X) **Leave these bolts loose for now.**

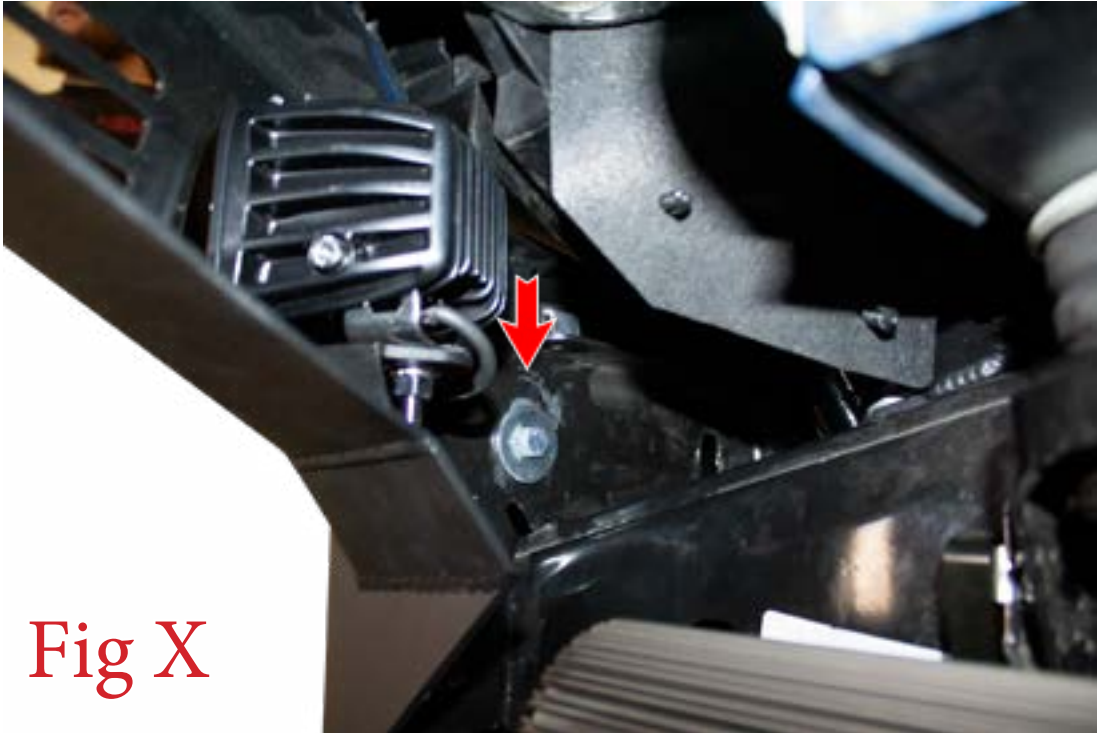


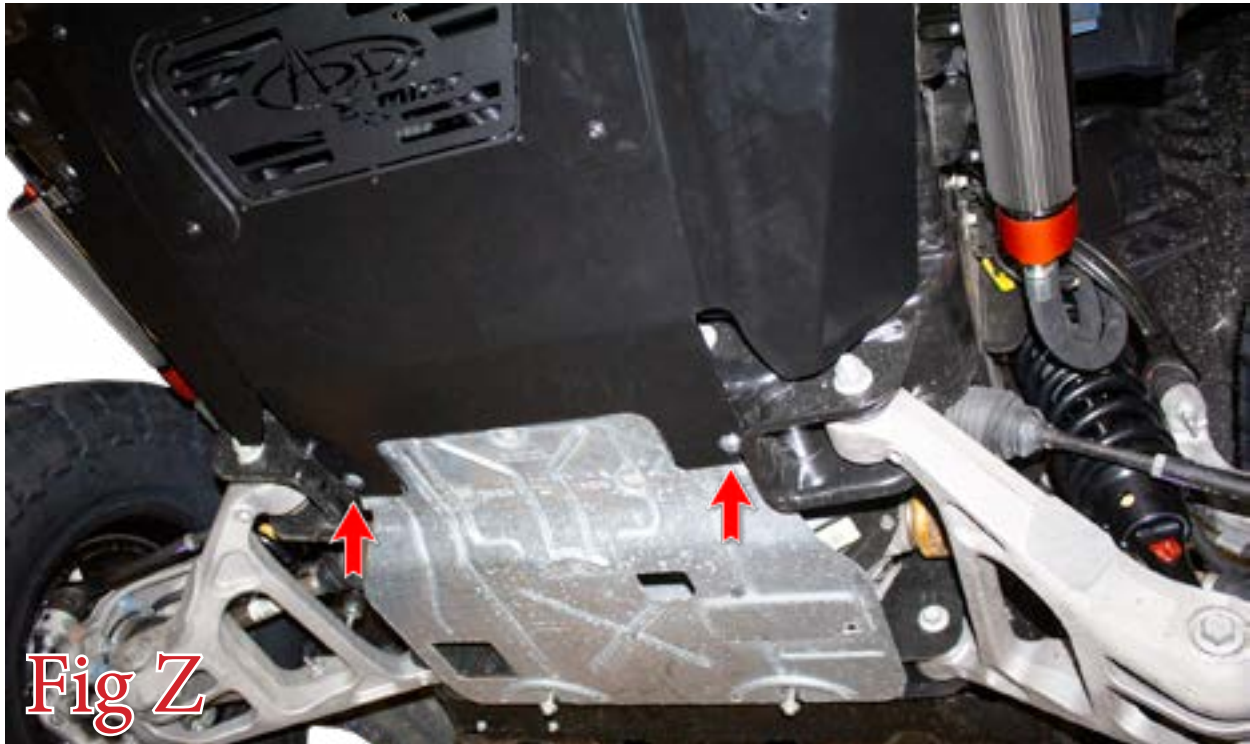
Fig X

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. (Fig Y) **Leave these bolts loose for now.**



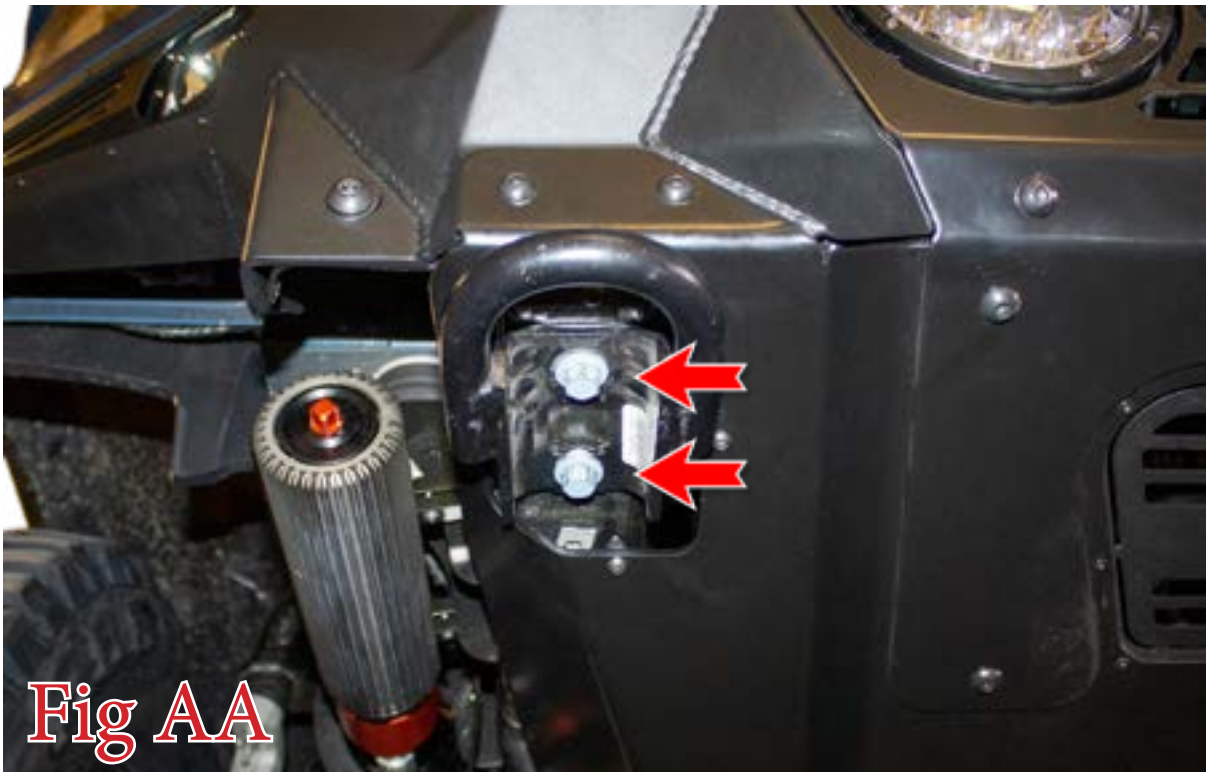
Fig Y

26. Install the supplied 3/8" Bolts (x2) and 3/8" Washers (x2) into the bumper's skid plate mounting holes as shown in (Fig Z). Leave these bolts loose for now.



27. 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.

28. Reinstall the tow hooks using the bolts that were set aside in Step 14. (Fig AA)



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

