

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.
- Estimated Installation Time: **3 Hours for OEM Removal/Bumper Installation**

1 Additional Hour to Wire Center Light

****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 | - 9/16" Socket | - 3/4" Socket & Wrench |
| - Reciprocating Saw | - Black Paint | - E6 External Torx Socket |
| - 8mm Socket | - 11mm Socket | - 13mm Socket |
| - 15mm Socket | - 21mm Socket | - 1 1/8" Socket |
| - 1 1/16" Wrench | | |

Included in Kit:

- | | |
|--|--|
| 6 - Hex Head Bolts (1/2"-13 x 1 1/2") | 12 - Flat Washers (1/2") |
| 6 - Nylon Lock Nuts (1/2"-13) | 2 - Hex Head Bolts (3/8"-16 x 1 1/2") |
| 2 - Flat Washers (3/8") | 2 - U-Nuts (3/8"-16) |
| 2 - Hex Head Bolts (3/4"-10 x 5 1/2") | 4 - Flat Washers (3/4") |
| 2 - Nylon Lock Nuts (3/4"-10) | 2 - Bumper Mounting Brackets |
| 1 - Universal Light Mount Kit | |

You will need to install an intercooler relocation kit with a clocked blow-off valve tube with this bumper. For instructions on how to install our intercooler kit, follow this link:

https://www.addictivedesertdesigns.com/files/install/ADD-2017-Current-Ford-Raptor_Intercooler-Clocked-BOV-Installation_Instructions.pdf

- Follow Step 1 through Step 11 of this bumper guide to remove your OEM bumper.
- Then, follow the Intercooler Kit Guide through Step 35.
- After completing the first 34 Steps of the Intercooler Kit Guide, follow Step 12 through Step 18 of this guide to cut your frame and mount the new frame horns.
- Then, finish the intercooler kit install.
- Finally, Finish your bumper install.

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)

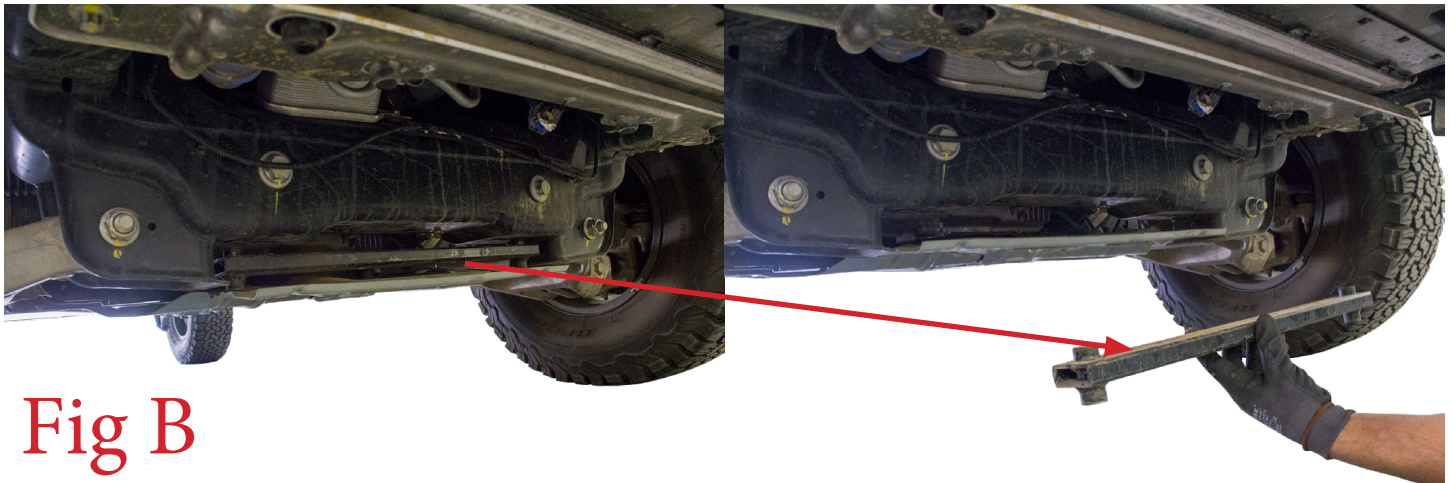


Fig B

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. The intercooler kit installation instructions will cover the relocation of this bracket. (Fig D)

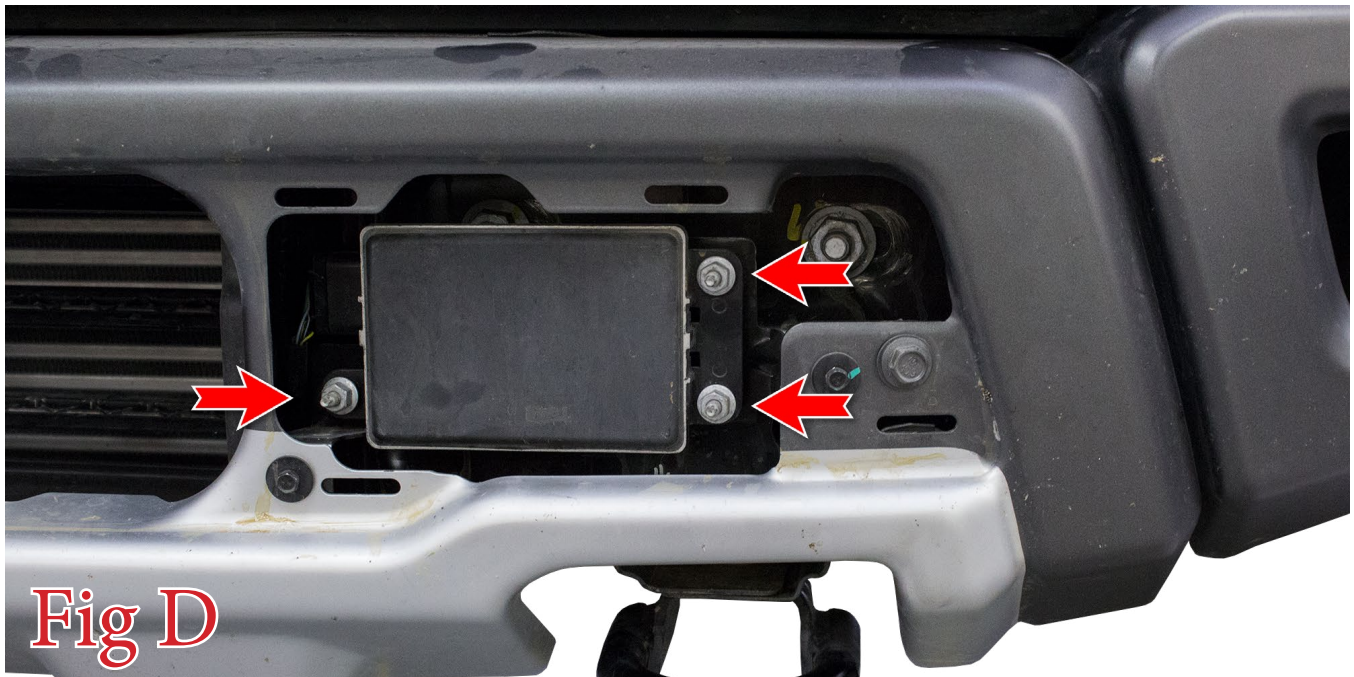


Fig D

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)

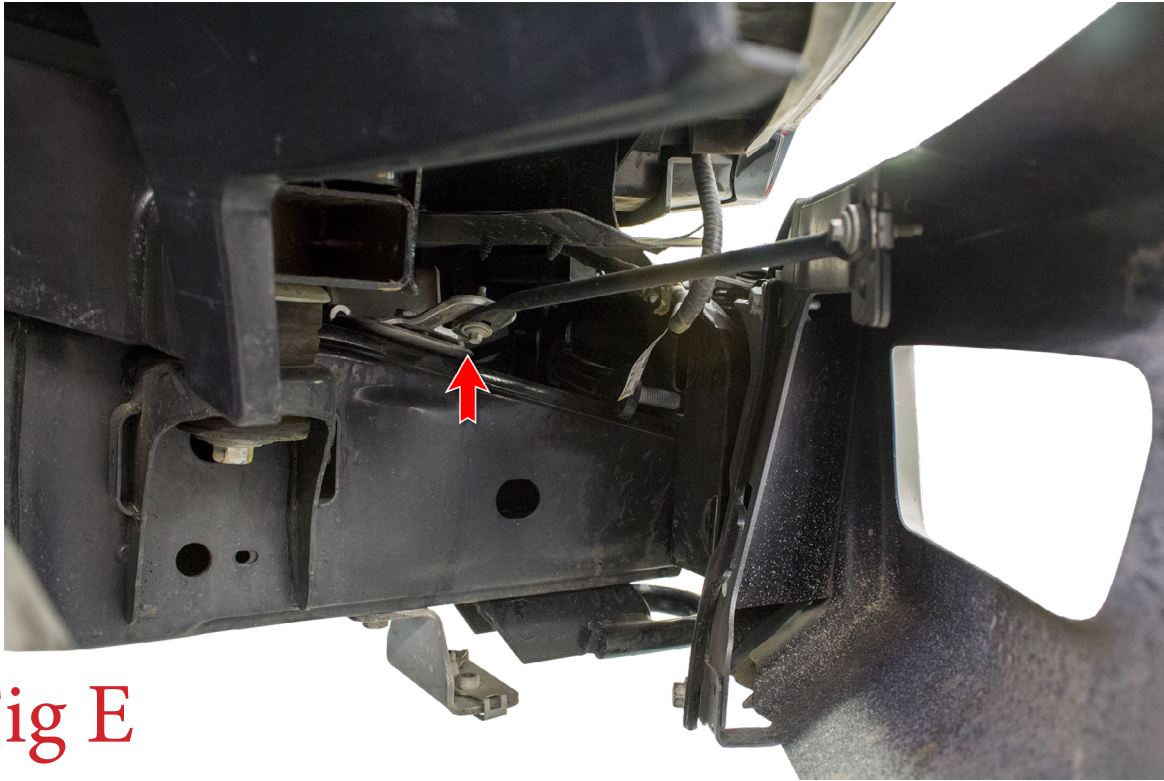


Fig E

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



Fig F

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)

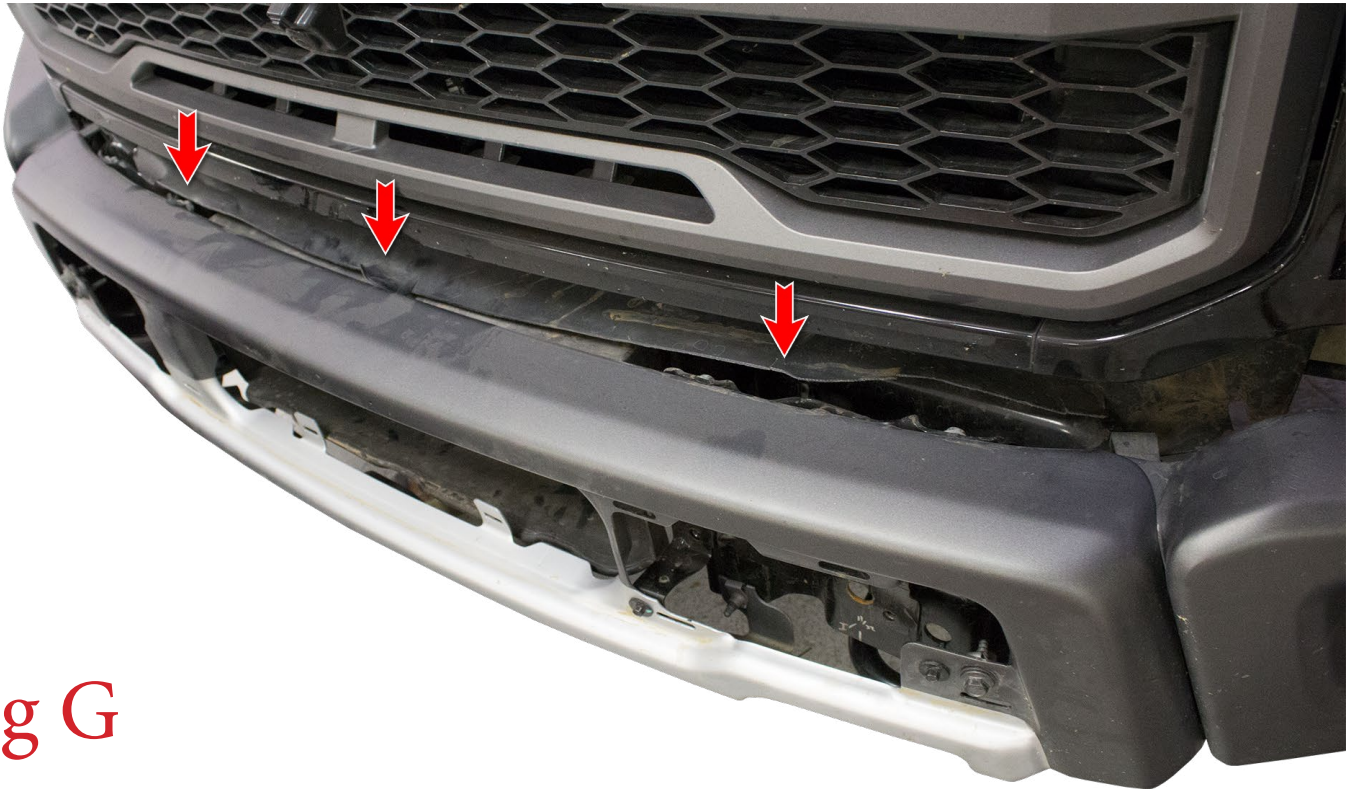


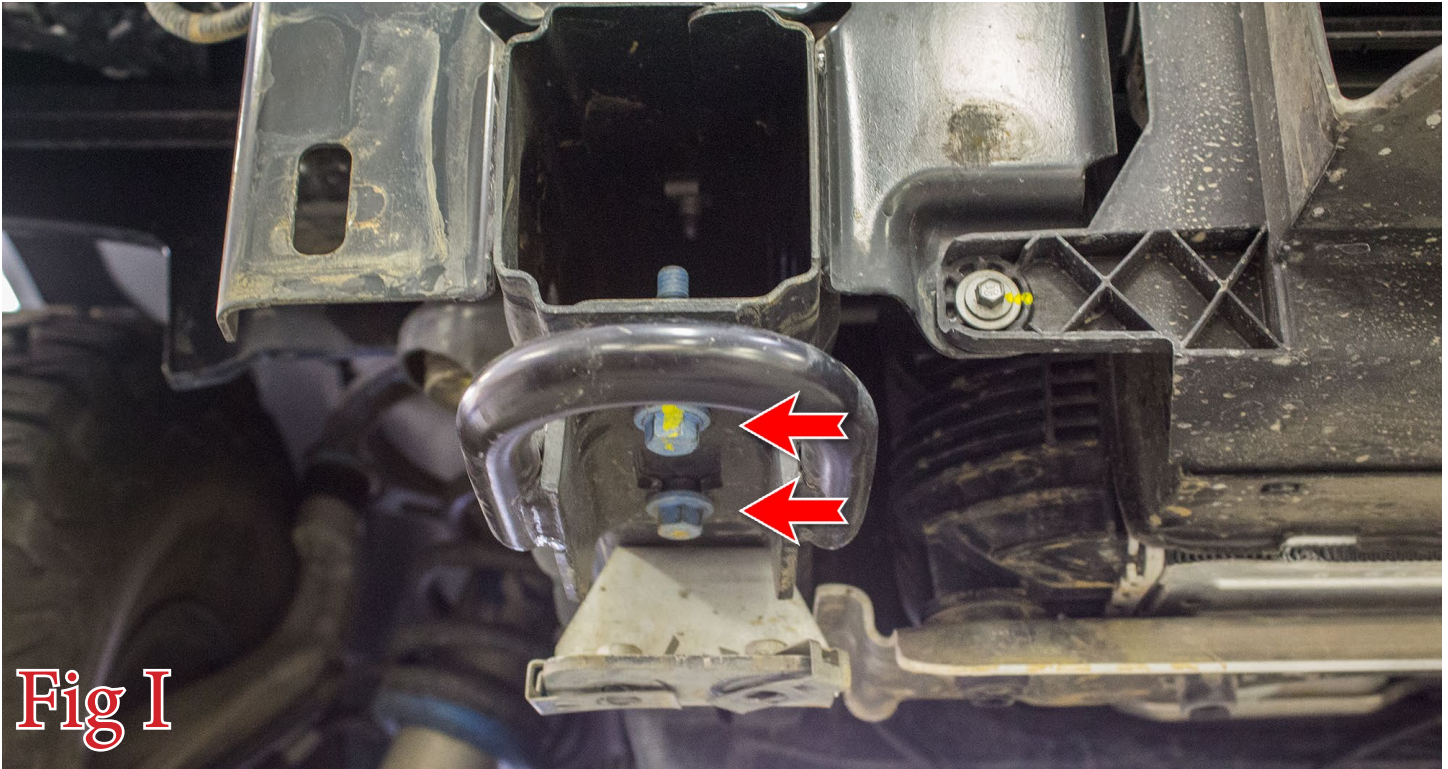
Fig G

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)

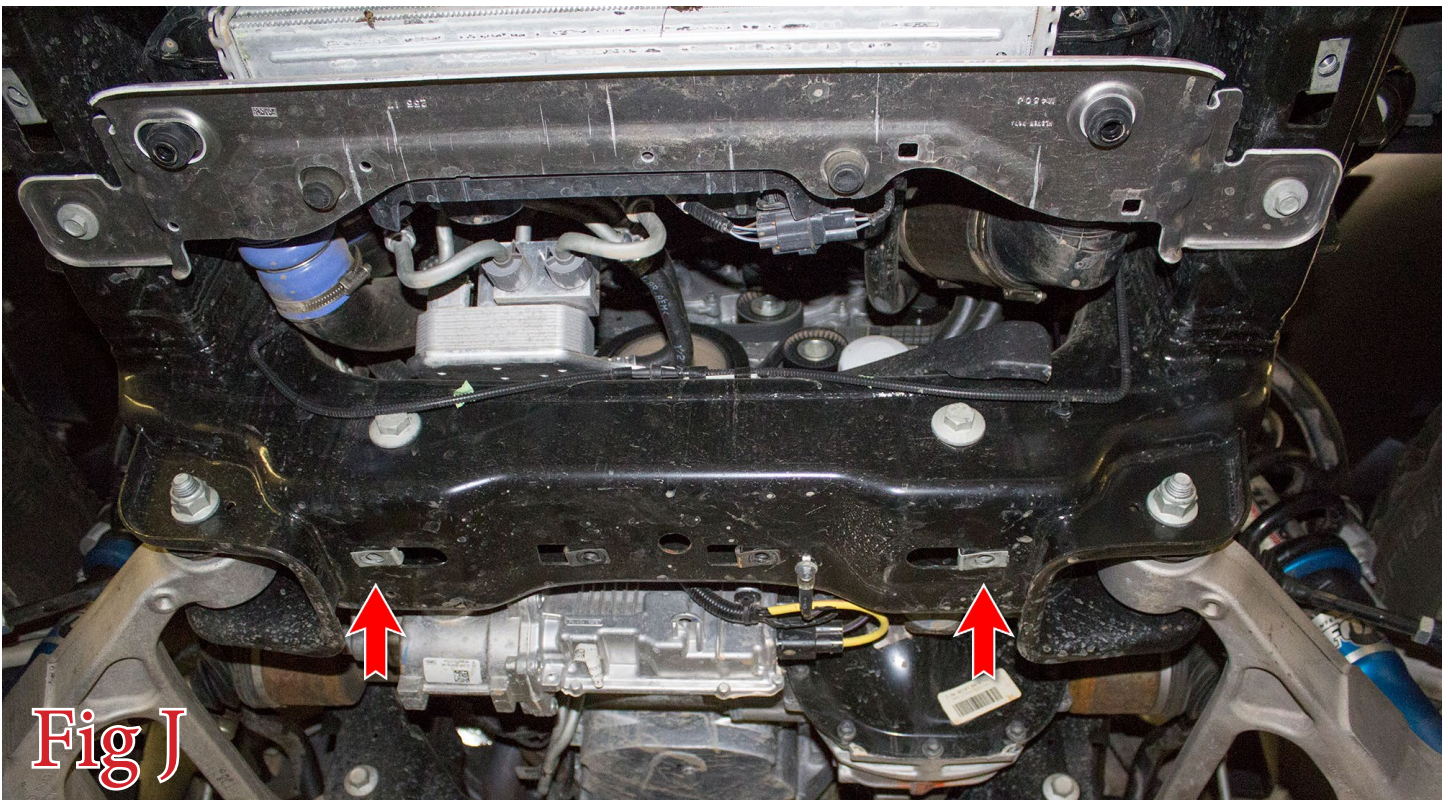


Fig H

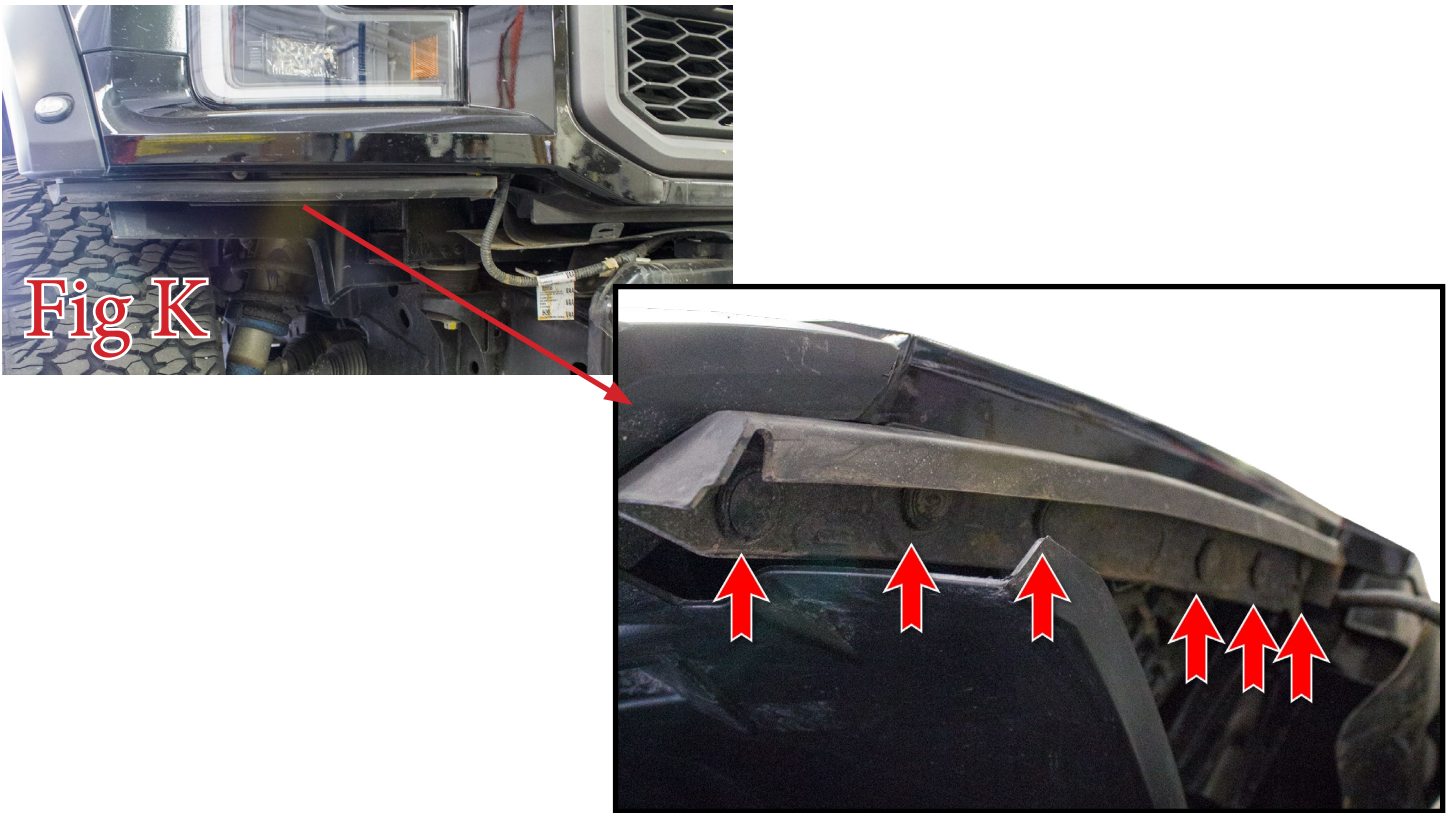
10. Remove the tow hooks by removing the two 15mm bolts that hold each of them on. (Fig I)



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



11. Remove the rubber piece that runs along the bottom/front section of the headlight bezel. There are six plastic clips holding this on. Repeat this step on the other side of the truck. (Fig K)

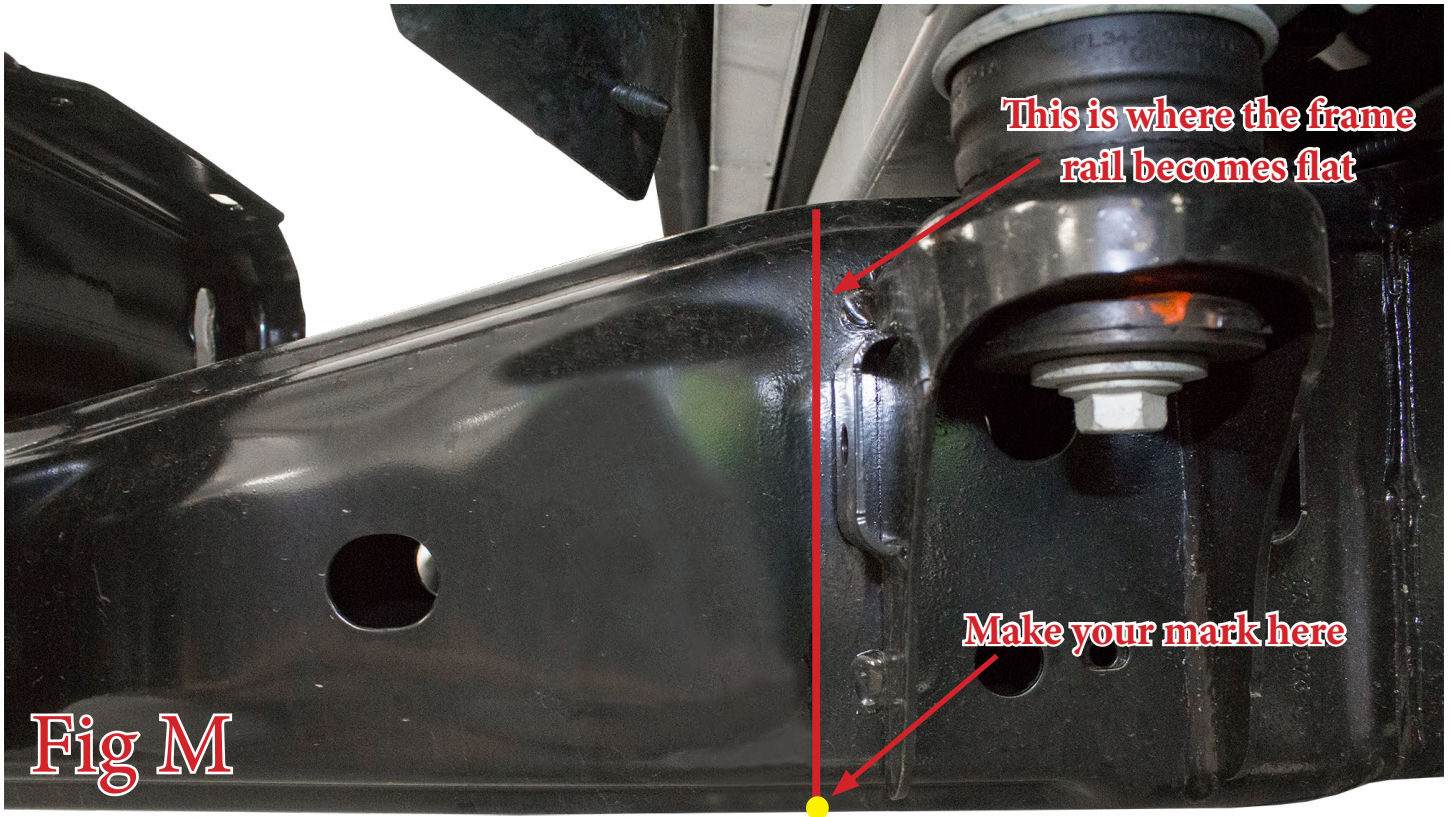


12. Remove your OEM intercooler and surrounding parts. This procedure is outlined in the first 34 Steps of the Intercooler Kit Installation Guide. The link to this guide can be found at the beginning of this guide.

13. Remove the OEM nut clip from the top of the frame rail right behind the frame horn. Then, mark a straight line across the frame rail that lines directly up with the bottom of the square hole that you took the nut clip out of. (Fig L)



14. Look at the side of the frame rail directly behind the frame horn. Before the frame rail hits the first body mount, it becomes flat. Follow the line in which the frame becomes flat down to the bottom of the rail and make a mark. (Fig M)



15. Connect the straight line on top of the frame rail to the mark you made at the very bottom of the side of the frame rail. (Fig N)



16. Cut your frame horn along the line you just made in Step 15. (Fig O)



17. Reinstall the nut clip you removed in Step 13.

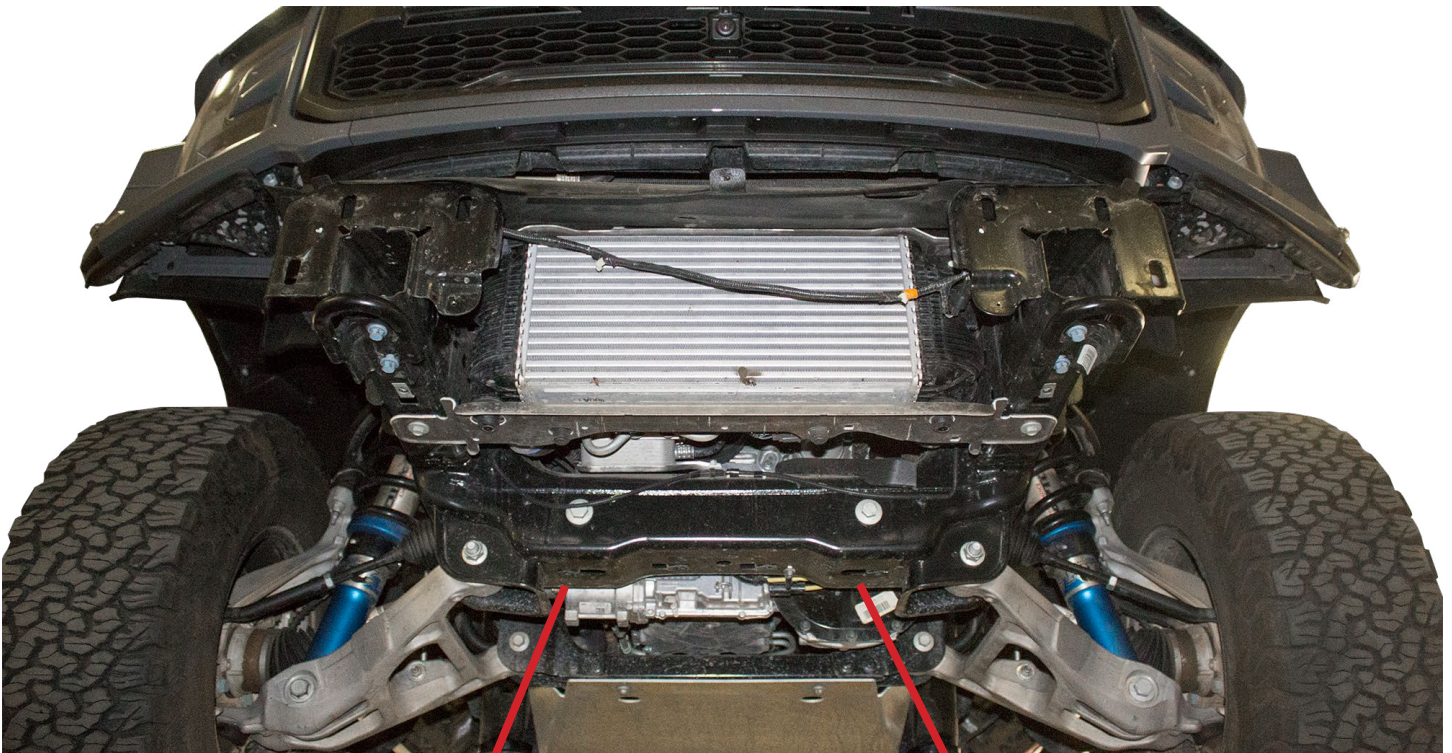
18. Paint any bare metal.

Installation:

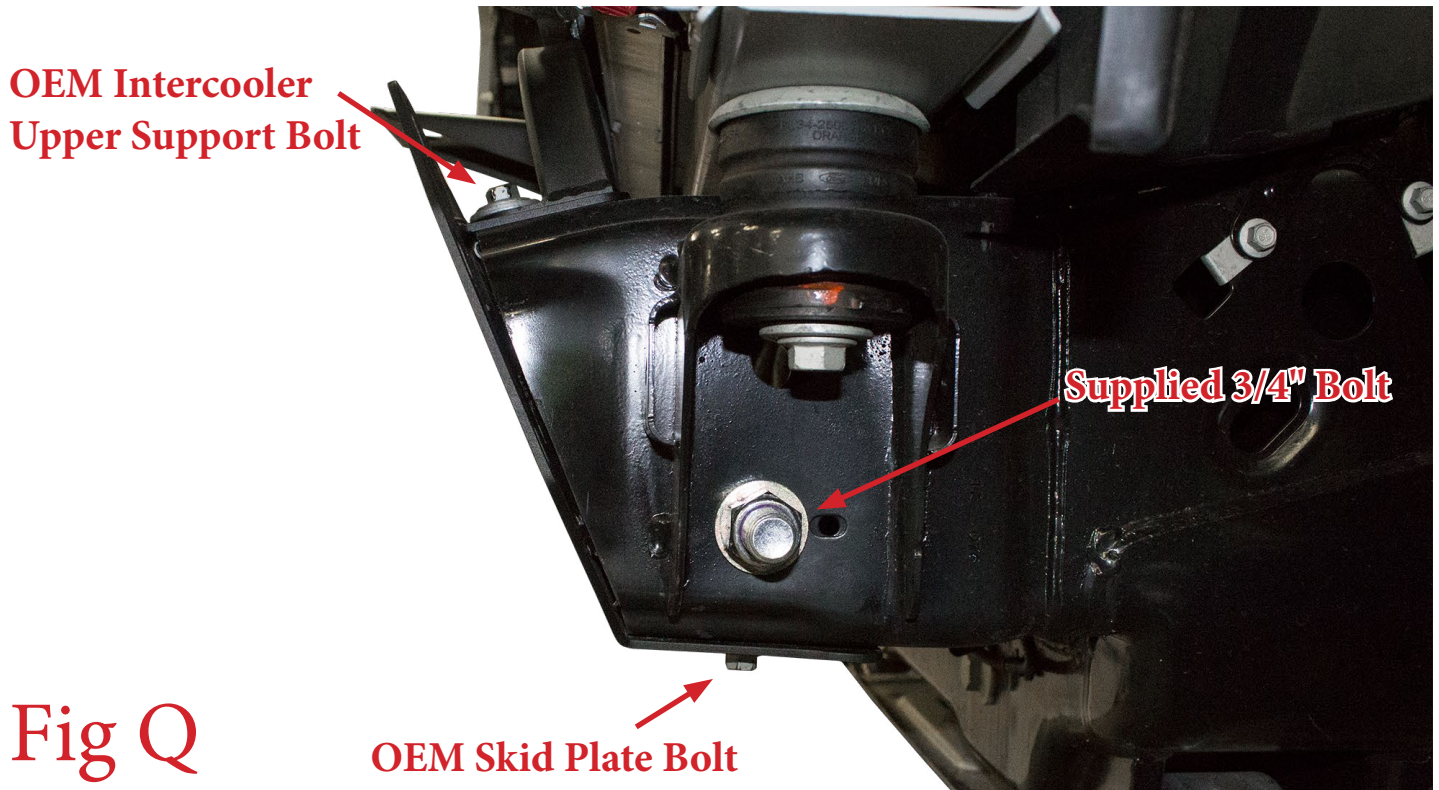
19. If you have any lights to install on your bumper, now is a good time to do so. Please use the brackets in the supplied universal light mount kit to mount your lights (**NOT** the brackets the light manufacturer sends). For installation information on our universal light mount kit, visit: <https://www.addictivedesertdesigns.com/files/install/ADD-Universal-Light-Mount-Kit-Installation-Instructions.pdf>

For wiring information, please follow the light manufacturer's installation instructions.

20. Install the supplied Regular Length 3/8" U-Nuts (x2) into the holes you removed the factory U-Nuts from in Step 9. (Fig P)



21. Set the Bumper Mounting Brackets in place on the vehicle. (Fig Q)
- Install one of the OEM skid plate bolts into the bottom hole.
 - Install the supplied 3/4" Bolt, 3/4" Washers (x2), and 3/4" Lock Nut in the center hole. (1 1/8" Socket & 1 1/16" Wrench)
 - Install the supplied intercooler beam (comes with the intercooler kit) by setting it in place on top of the frame rail and using the OEM bolts to secure it and the new bumper mounting plates in place.
 - Torque the OEM bolts to OEM torque spec. Torque the 3/4" Bolts to 200 foot pounds.



22. Finish your intercooler installation. The link to the intercooler installation guide can be found on the first page of this document.

23. Mount your new bumper to the Bumper Mounting Plates. Line the six mounting holes on the bumper up with the six mounting holes on plates. Use the supplied 1/2" Bolts (x6), 1/2" Washers (x12), and 1/2" Lock Nuts (x6) to hold the bumper loosely in place. (Fig R)

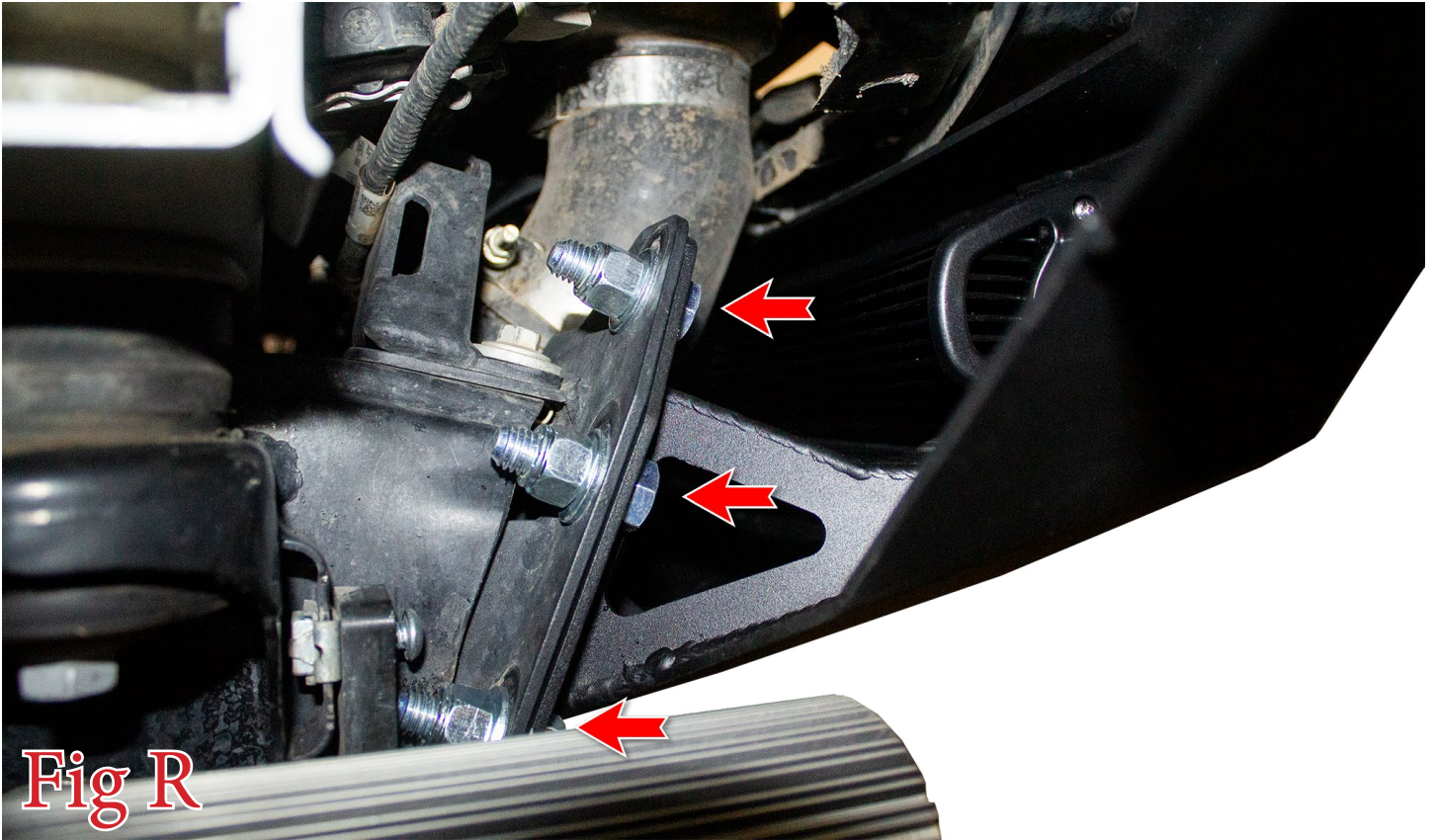


Fig R

24. Install the supplied 3/8" Bolts (x2) and 3/8" Washers (x2) into the skid plate mounting holes. Leave these bolts loose for now. (Fig S)



Fig S

25. Align your bumper so it sits straight in relation to the grille/headlight bezels. Then, torque the 1/2" mounting bolt to 70 foot pounds. Torque the 3/8" mounting bolts to 25 foot pounds.
26. Stand back and enjoy your new ADD Rock Fighter™ Front Bumper.
27. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

