

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**
1.5 Additional Hours for Winch Installation
1 Additional Hour to Wire Center
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 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 | - 13mm Socket | - 15mm Socket |
| - 21mm Socket | - T30 Torx Socket | - 9/16" Socket |
| - 3/4" Socket & Wrench | - 1 1/16" Socket | - Cutoff Wheel |
| - Reciprocating Saw | - Black Paint | |

Included in Kit:

- | | |
|---------------------------------------|---------------------------------------|
| 4 - Hex Head Bolts (1/2"-13 x 1 1/2") | 8 - Flat Washers (1/2") |
| 4 - Nylon Lock Nuts (1/2"-13) | 2 - Hex Head Bolts (3/8"-16 x 1 1/2") |
| 2 - Flat Washers (3/8") | 2 - Regular Length U-Nuts (3/8"-16) |
| 4 - Hex Head Bolts (3/8"-16 x 1 1/4") | 4 - Fender Washers (3/8") |
| 4 - Long Reach U-Nuts (3/8"-16) | 6 - Parking Sensor Plug |
| 6 - Grommet for Sensor Plugs | 2 - Skid Plate Adapter Brackets |
| 1 - Universal Light Mount Kit | |

Included Only with Winch Bumpers:

- | | |
|---------------------------------------|--------------------------------------|
| 2 - Hex Head Bolts (1/2"-13 x 1 1/2") | 4 - Flat Washers (1/2") |
| 2 - Nylon Lock Nuts (1/2"-13) | 2 - Grade 8 Bolts (3/8"-16 x 1 1/2") |
| 2 - Grade 8 Washers (3/8") | 2 - Long Reach U-Nuts (3/8"-16) |
| 1 - Winch Mounting Plate | |

Removal:

1. From underneath the vehicle, unplug the main bumper harness connector. This connector can be found along the top side of the passenger side frame rail. (Fig A)

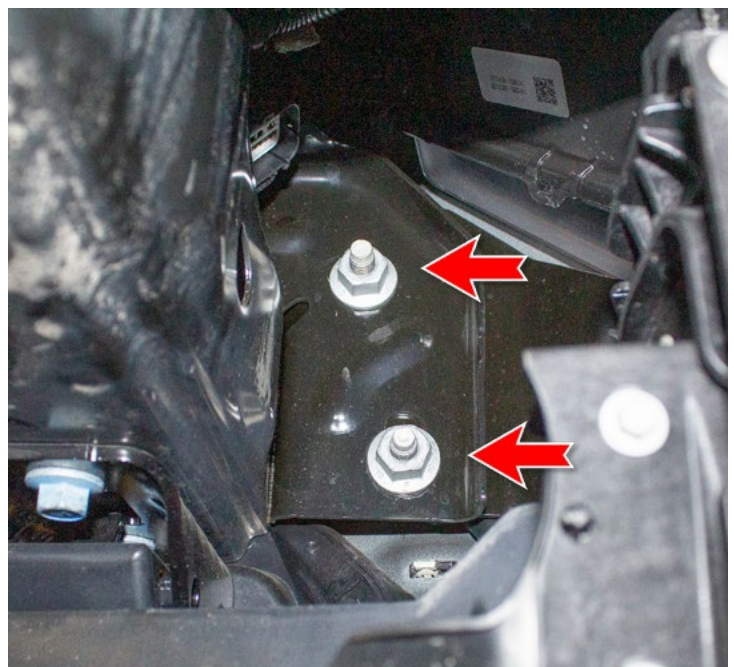


Fig A

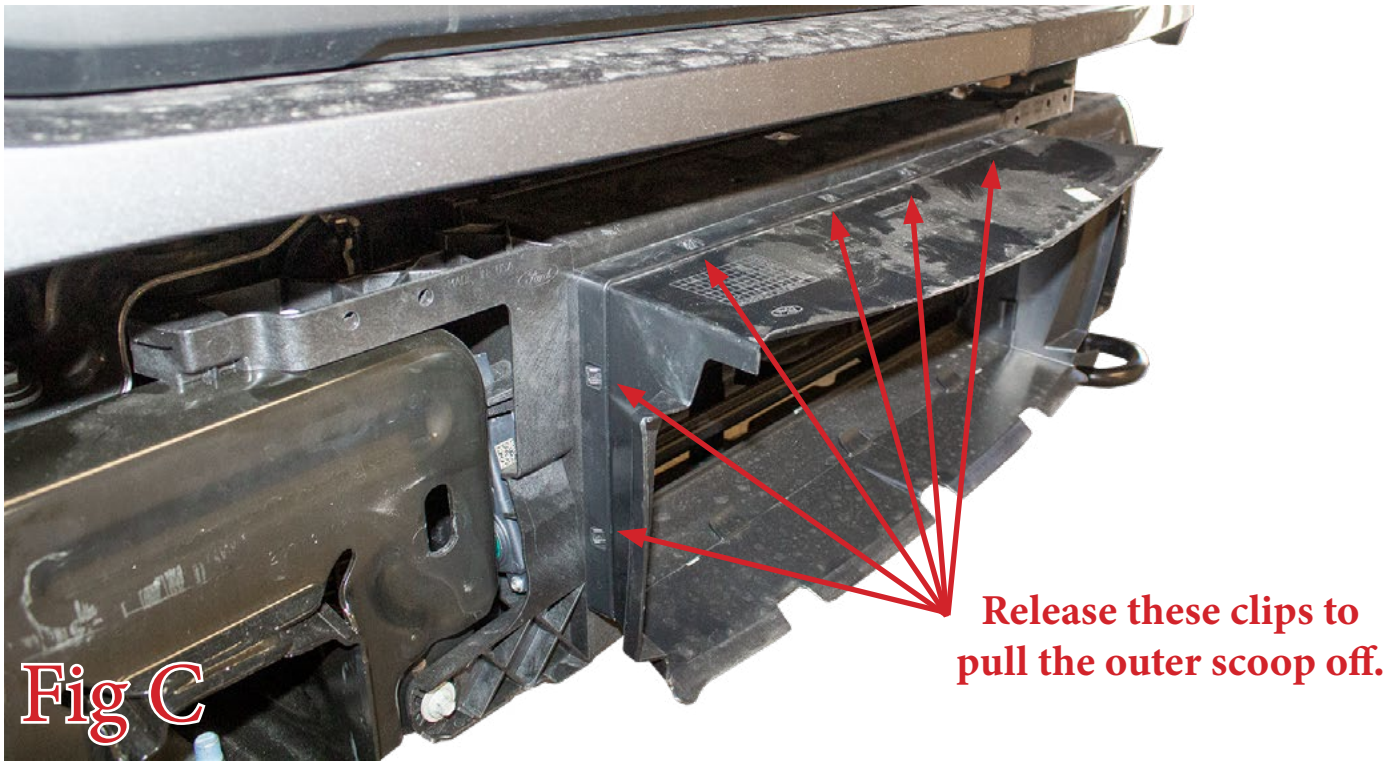
2. From underneath the vehicle, along the back of the frame horns, use a 21mm Socket to remove the 3 mounting bolts (per side) that hold on the OEM front bumper. Then, remove the bumper from the vehicle. As you are removing the bumper, you will have to unplug the lower shutter motor and release the three clips that hold the harness to the lower shutter assembly (for EcoBoost only). (Fig B)



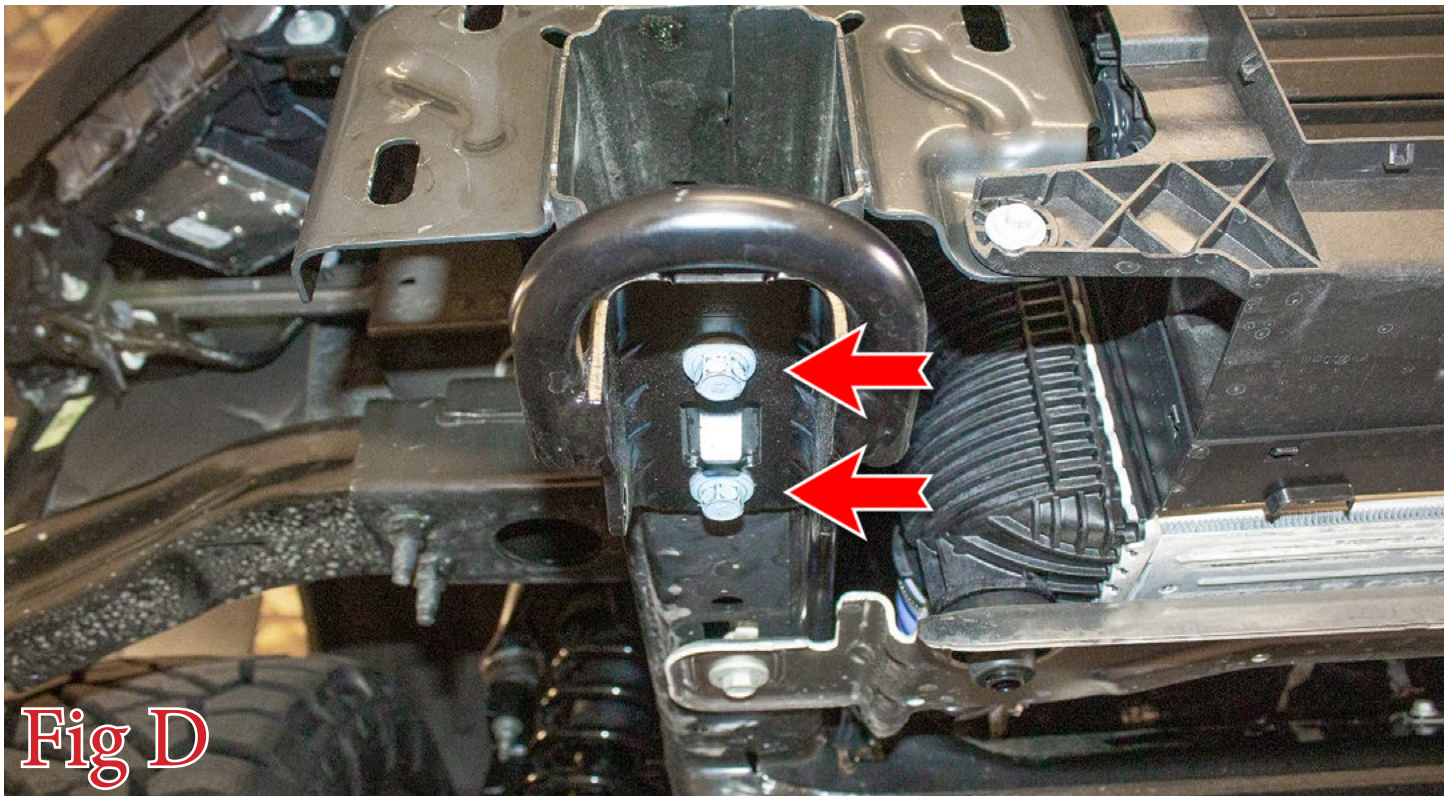
Fig B



3. Remove the outer scoop from the intercooler shutter assembly. They simply pull off by hand. (Fig C)



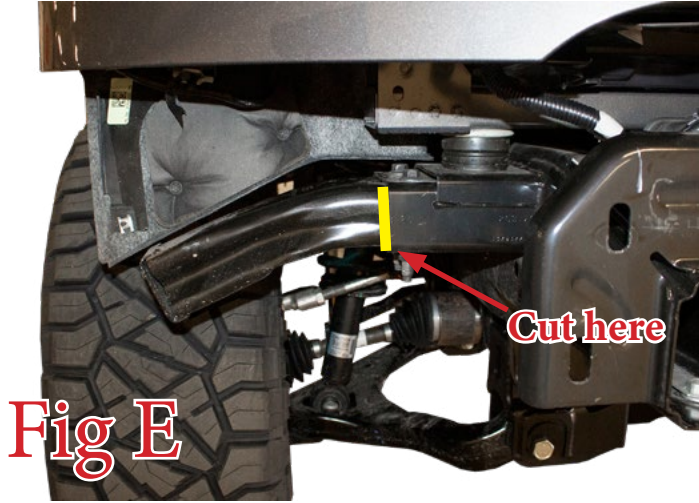
4. Use a 15mm Socket to remove the tow hook mounting bolts (2 per hook). Then, remove the hooks from the vehicle. Save the hooks and hardware for reuse. (Fig D)



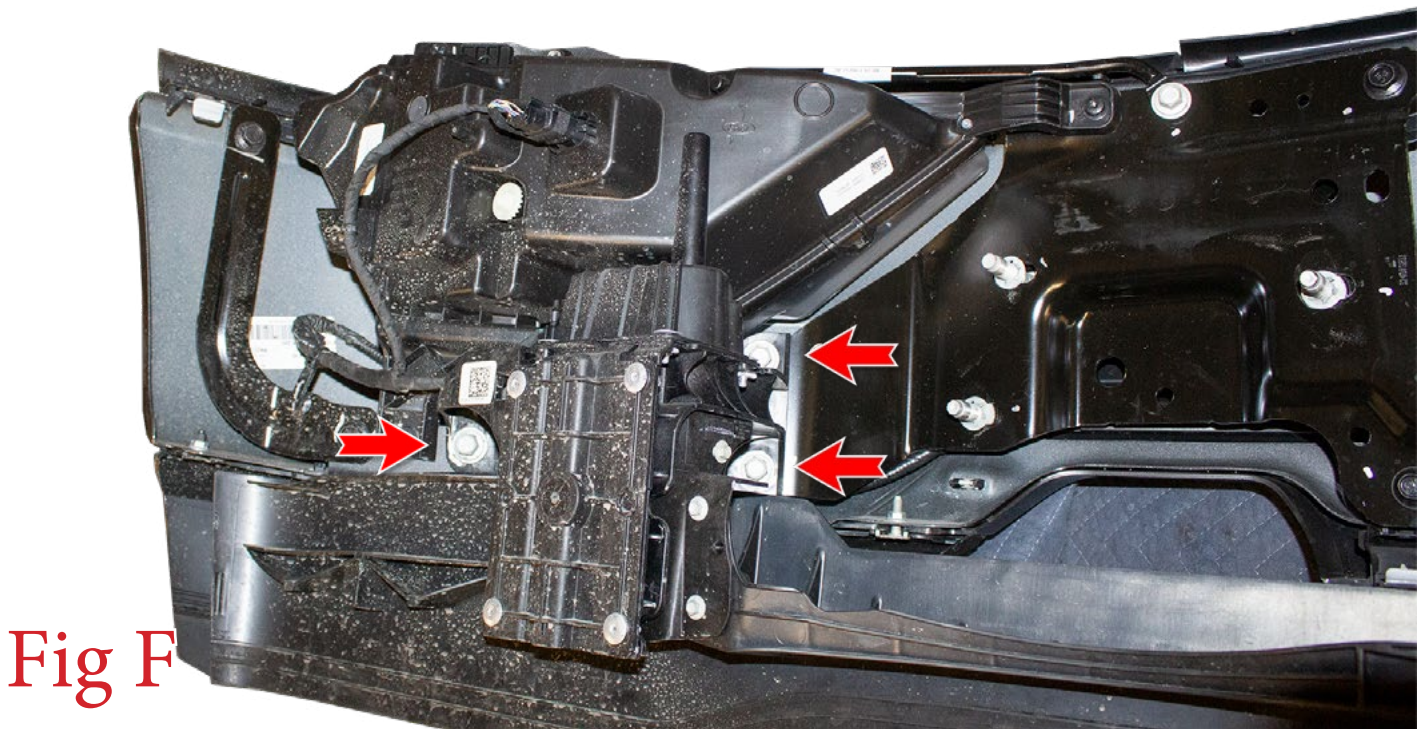
5. Use a sawzall or something similar to cut the crash bars in the front section of each wheel well. Make sure to paint over any bare metal when you are finished. (Fig E)

Before

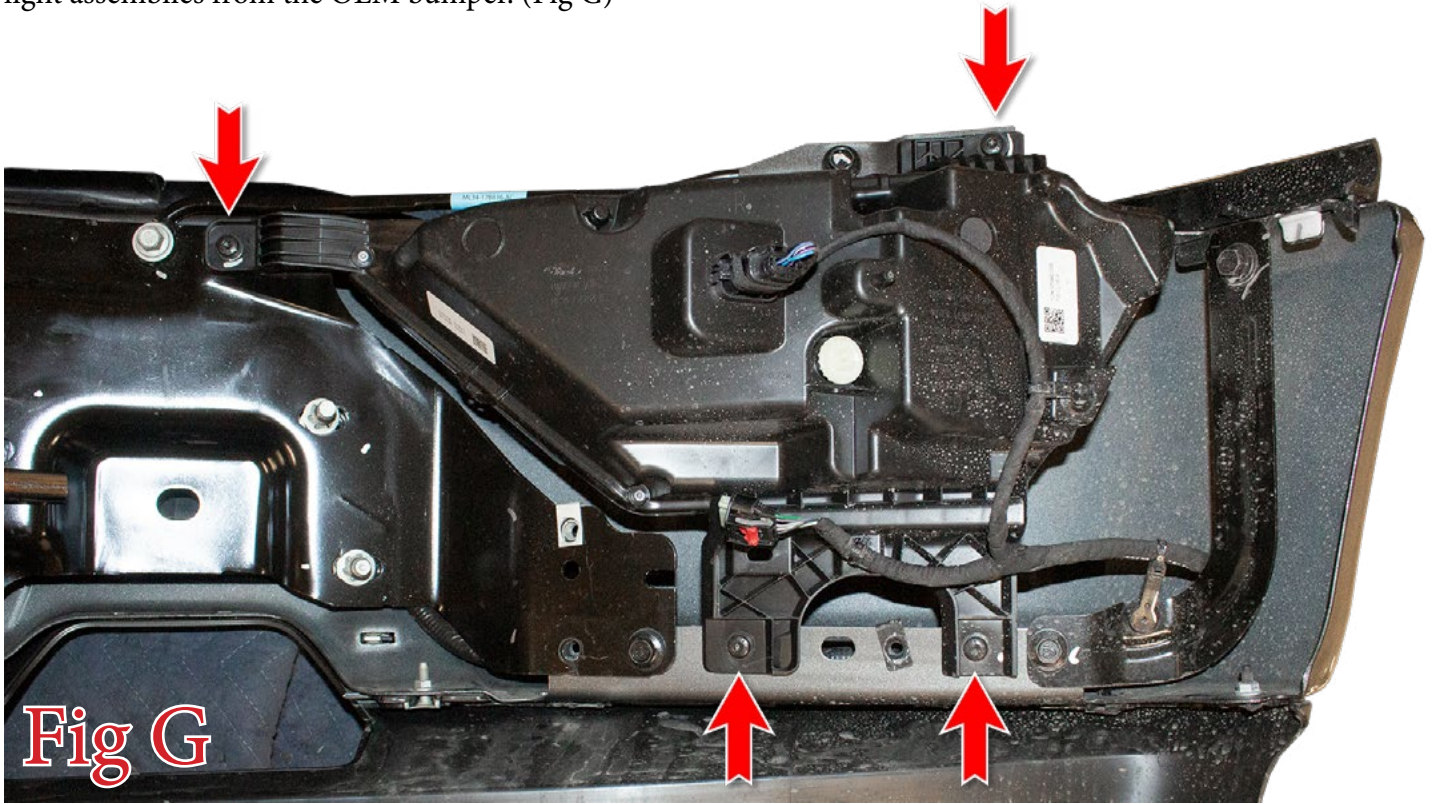
After



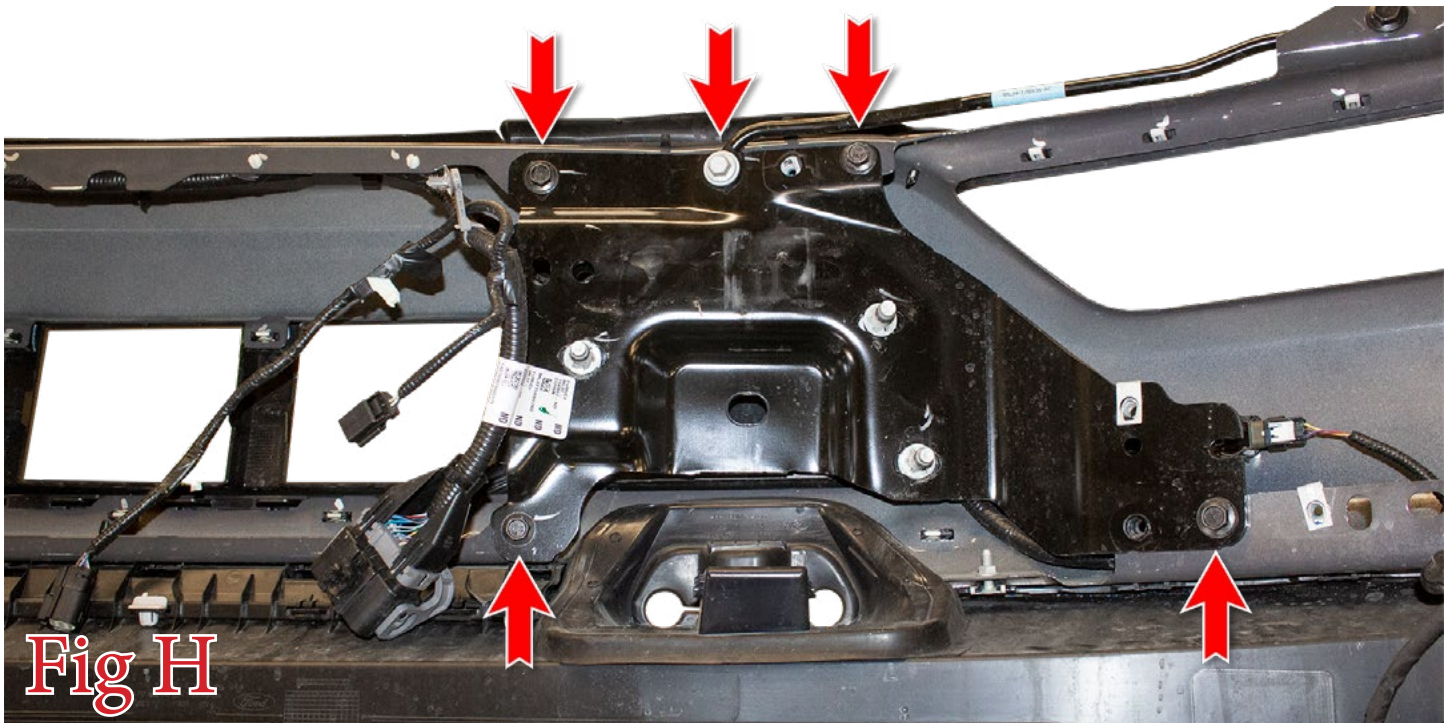
6. Set the OEM bumper on a workbench. Then, use a 13mm Socket to remove the mounting bolts (3 per side) for the lower spoiler system. Once all bolts are removed, remove the lower spoiler. (Fig F)



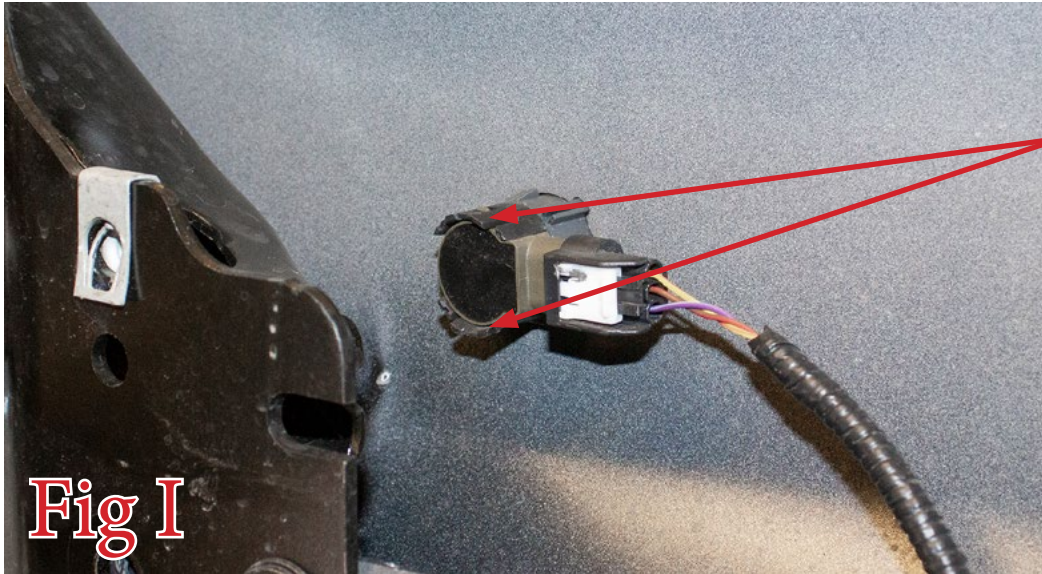
7. Use a T30 Torx Socket to remove the fog light assembly mounting bolts (4 per side). Then, remove the fog light assemblies from the OEM bumper. (Fig G)



8. Using a 13mm Socket, remove the 6 mounting bolts (per side) that hold in the bumper structure. Then, remove those pieces from the bumper. (Fig H)

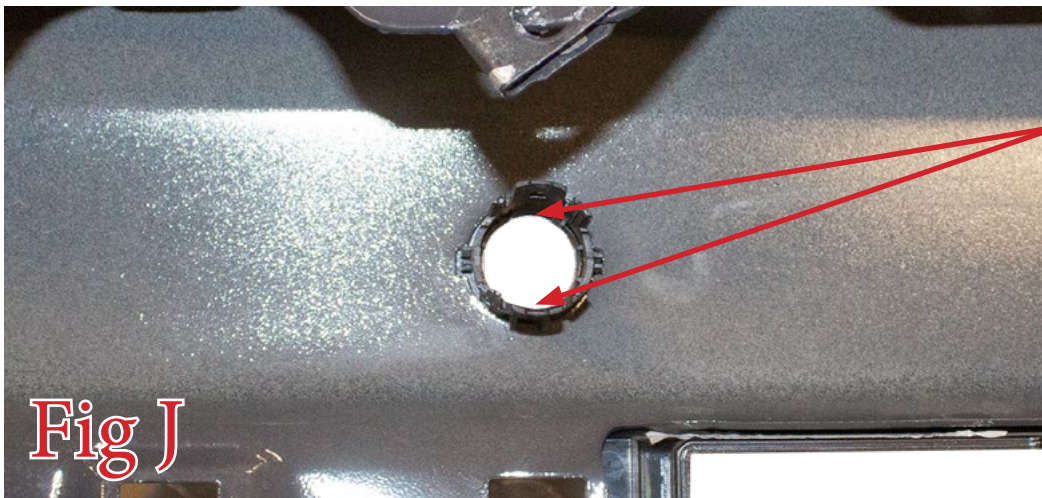


9. Remove the parking sensors from their mounting rings. Do this by spreading the two tabs on the back side of the rings. **Make sure to keep track of what position/orientation they come off the OEM bumper so you can install them on your new bumper in the same position/orientation.** (Fig I)



Spread these two tabs to release the parking sensors from their mounting rings

10. Remove the parking sensor mounting rings from the OEM bumper. Do this by pressing in the two tabs along the base on the back side of the mounting rings. **Make sure to keep track of the position/orientation these come off the OEM bumper so you can install them on your new bumper in the same position/orientation.** (Fig J)



Press these two tabs in to release the mounting rings from the bumper.

11. Remove the series of plastic clips holding the front bumper harness to the OEM bumper. Then, remove the harness from the bumper.

Installation:

12. If you have an adaptive cruise control module to relocate, now is a good time to do so. For more information, follow our adaptive cruise control relocation bracket install guide, which can be found here; <https://www.addictivedesertdesigns.com/files/install/ADD-2021-F150-ACC-Bracket-Installation-Instructions.pdf>

13. Install the parking sensor mounting rings into their precut holes on your new bumper. Make sure to install them in the same position/orientation as they were on the OEM bumper.

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 K)

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

Before

After

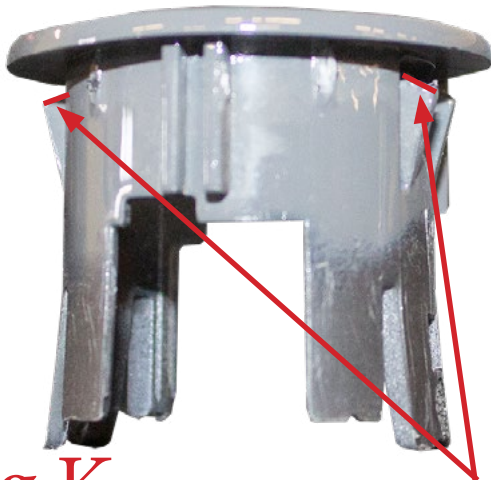


Fig K

Trim Here

14. Install the parking sensors/bumper harness onto your new bumper. Press the parking sensors into their mounting rings until they click into place. Make sure to install them in the same position/orientation as they came off the OEM bumper. (Fig L)

Fig L

15. There are two skid plate mounting brackets sent with each bumper; one for use with a lift kit and one for use with stock suspension. Refer to (Fig M) to see which one fits your application.

LIFT KIT

**STOCK SUSPENSION &
2WD VEHICLES**



Fig M

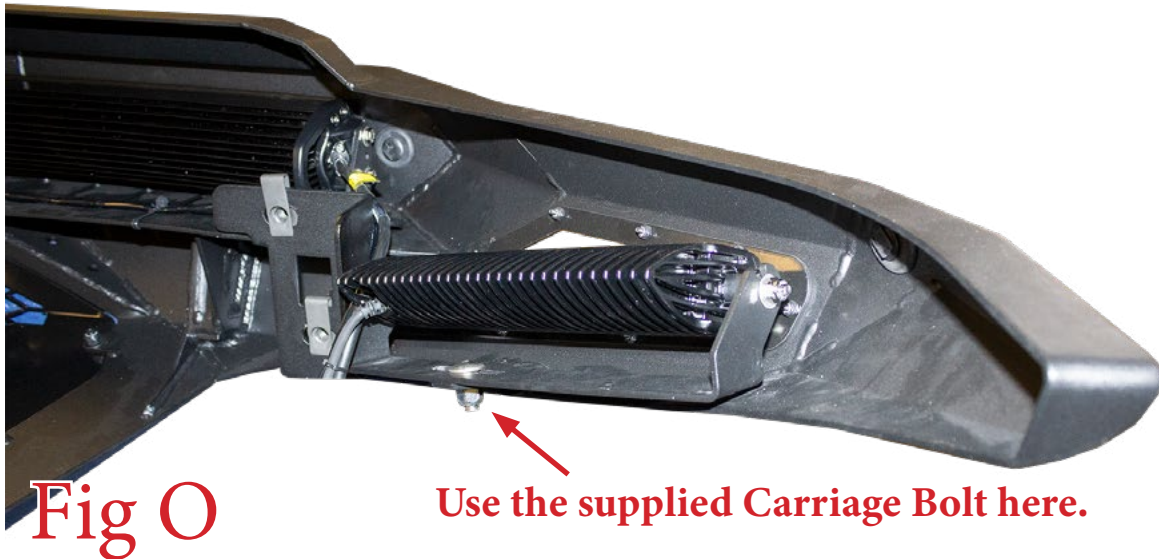
16. Using the supplied 1/2" Bolts (x4), 1/2" Washers (x8), and 1/2" Nuts (x4), secure the correct skid plate bracket to your new bumper. **Leave these bolts loose for now.** (Fig N)



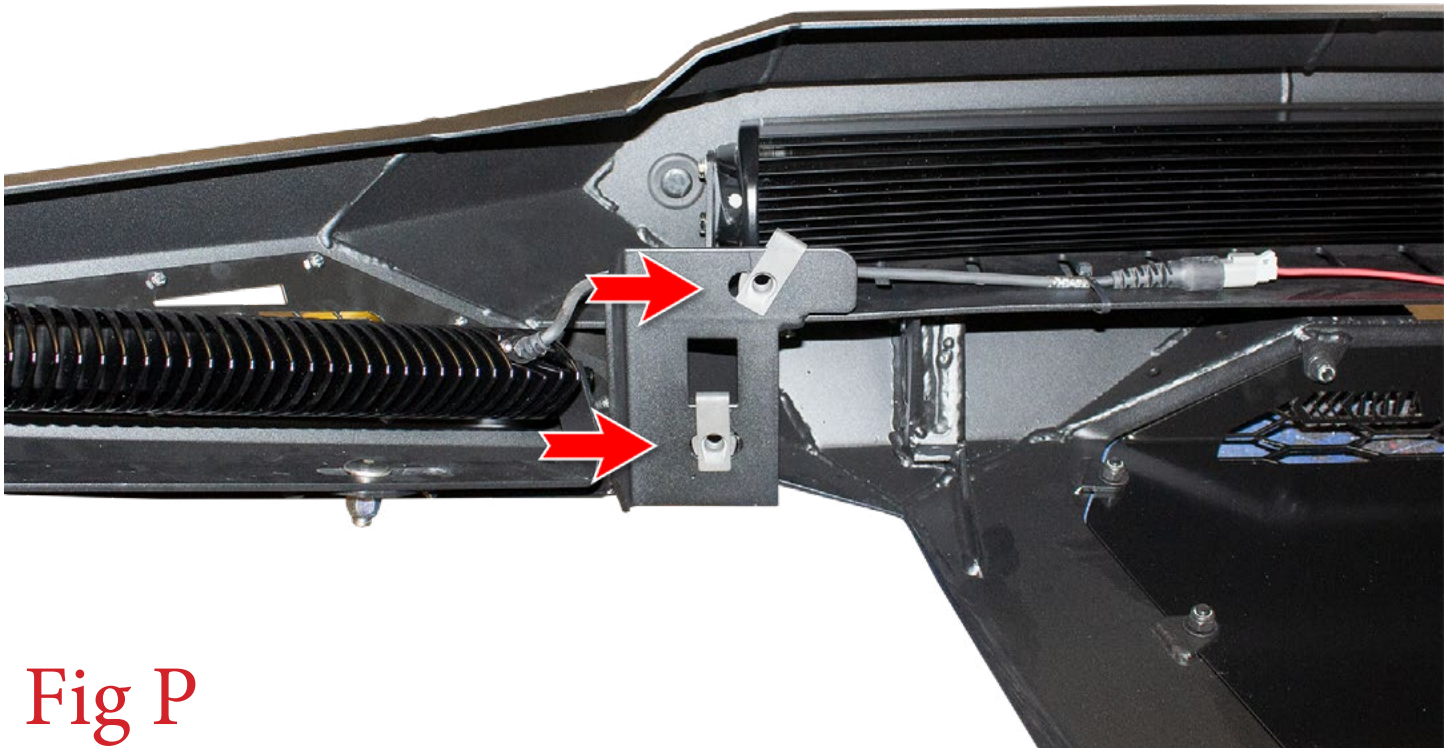
Fig N

17. Install your lights into the center of the bumper. To do this, use the supplied universal light mount kit. Instructions for that kit can be found here:
<https://www.addictivedesertdesigns.com/files/install/ADD-Universal-Light-Mount-Kit-Installation-Instructions.pdf>

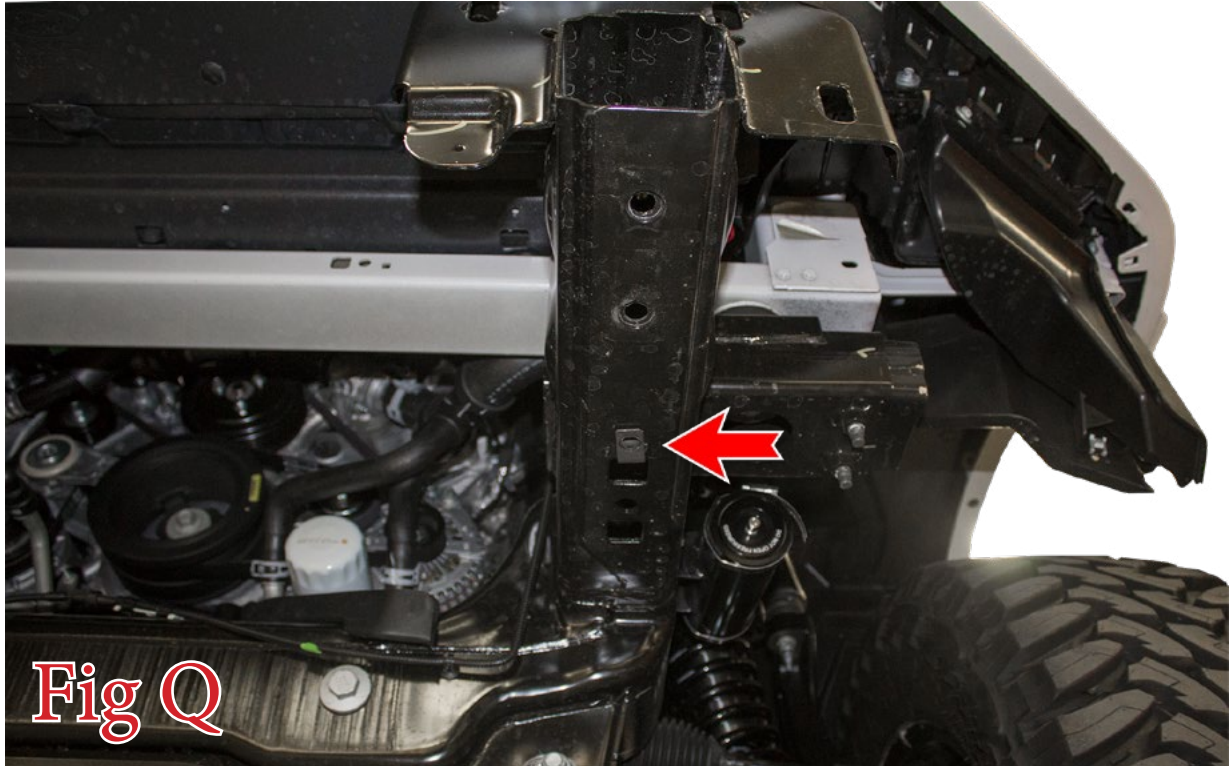
18. Install your side lights now. If you are installing cube lights, you can use the hardware supplied by the light manufacturer and mount them directly to the bumper tabs. If you are using 10" Lights, you will need to mount the supplied 10" Light Brackets to the bumper using the supplied 3/8" Carriage Bolts (1 per side), 3/8" Washers (1 per side) and 3/8" Lock Nuts (1 per side). Then, use the light manufacturer's hardware to mount the 10" light to the bracket. (Fig O)



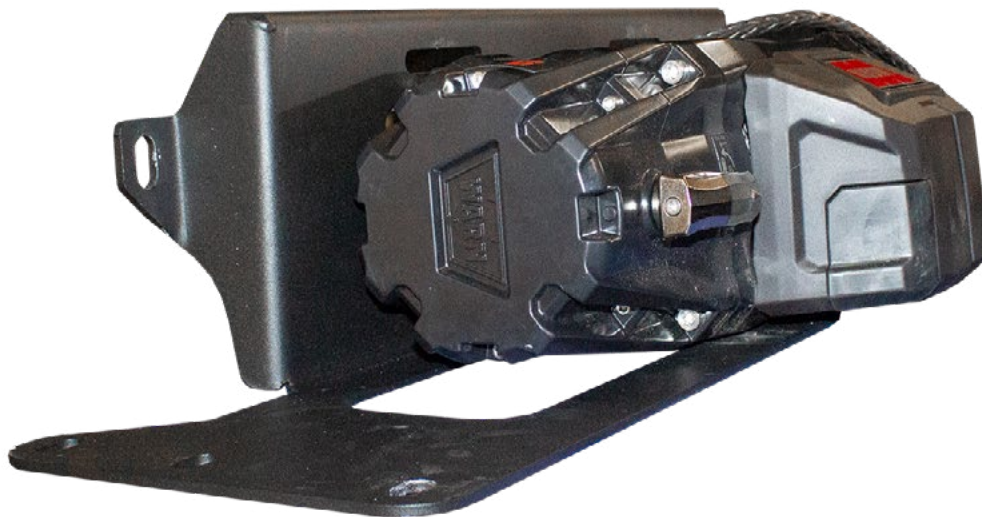
19. Install the supplied U-Nuts (2 per side) onto your new bumper as shown in (Fig P).



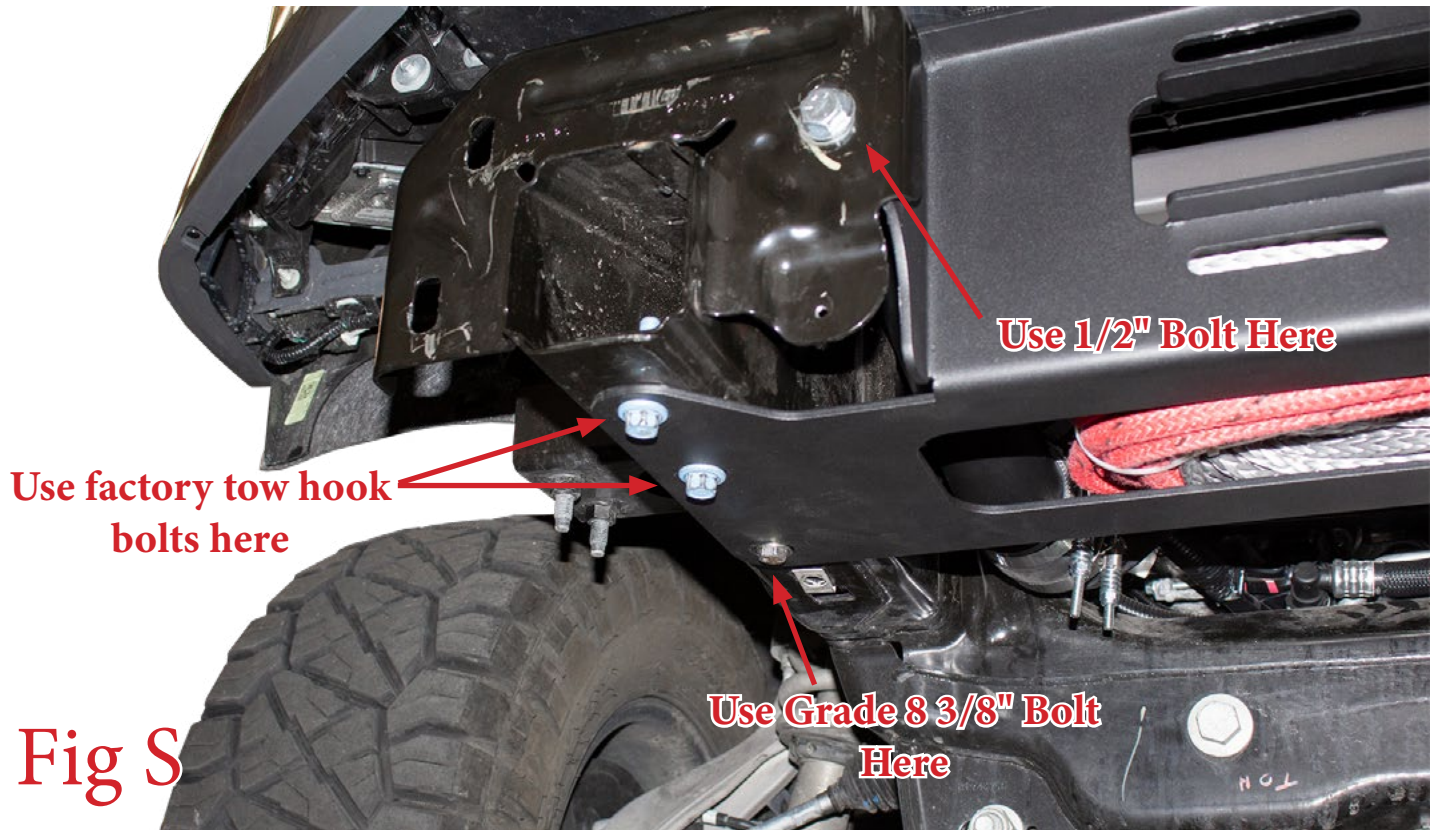
20. If you have a winch bumper, follow this step. If not, move onto the next step. On the bottom side of the frame rail there is a series of holes. Install one of the supplied Long Reach U-Nuts (1 per side) into the third hole back. Then, repeat this step on the other frame rail. (Fig Q)



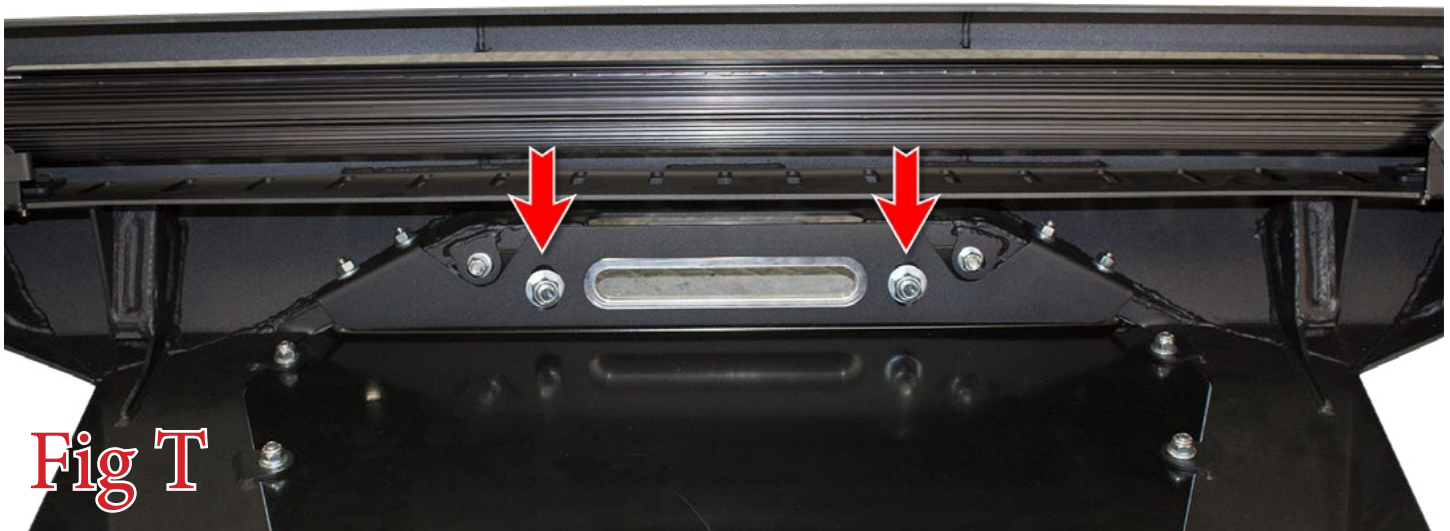
21. If you have a winch bumper, follow this step. If not, move onto the next step. Bolt your winch to the Winch Mounting Plate. Follow the winch manufacturer's guide for mounting information. Try to keep the winch as centered as possible. (Fig R)



22. Bolt your Winch Mounting Plate to your vehicle's frame. Use the tow hook bolts you saved in Step 6 in the first two holes on the bottom side of the frame. Use the supplied 3/8" Grade 8 Bolts (x2) and 3/8" Washers (x2) in the third set of holes on the bottom side of the frame. Use the supplied 1/2" Bolts (x2), 1/2" Washers (x4), and 1/2" Lock Nuts (x2) on the inner most frame horn holes. Once all bolts have been loosely installed, go back and torque the supplied 3/8" bolts to 30 foot pounds, the supplied 1/2" bolts to 70 foot pounds, and the OEM bolts to OEM torque spec. (Fig S)



23. Mount your fairlead to the bumper. Use the winch manufacturer's fairlead and fairlead hardware. (Fig T)



24. If your truck has a bracket lift kit and is 4WD, use a 1 1/16" Socket to remove the lift bracket mounting bolts. (Fig U)



Fig U

25. Use a 13mm Socket to remove the two front skid plate bolts referenced in (Fig V). Then, remove the factory U-nuts and install the supplied Regular Reach (not long) U-Nuts (x2) into each hole.

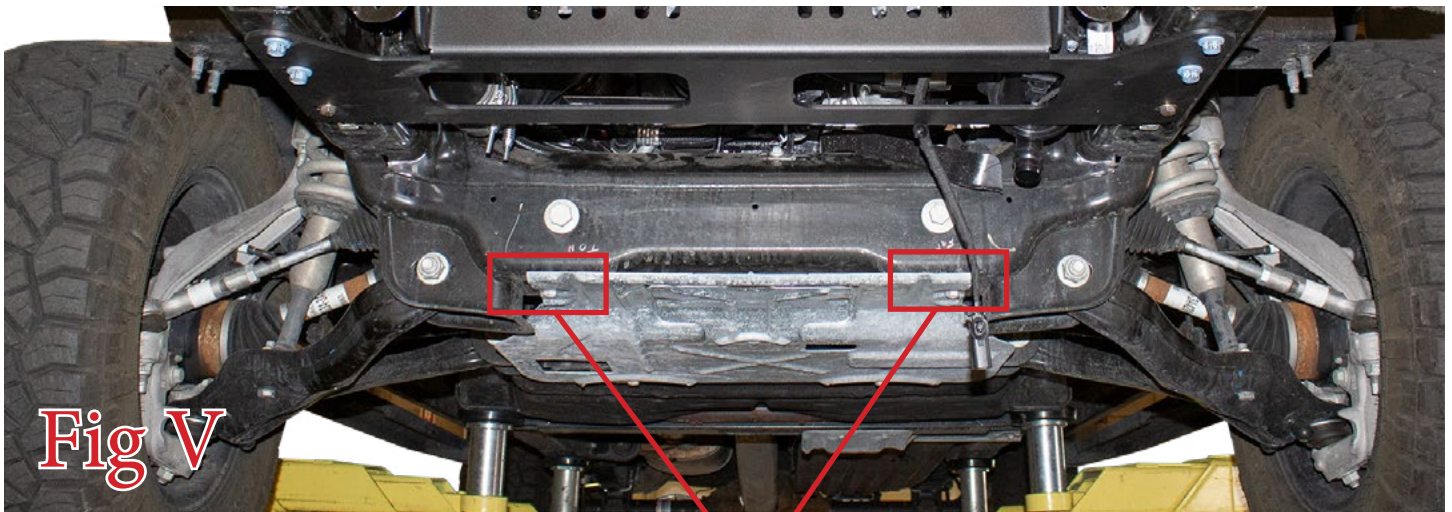


Fig V



26. Set the bumper in place on the vehicle. Then, Set the bumper in place on your vehicle. Install the supplied 3/8" Bolts (x4) and 3/8" Fender Washers (x4) from the back side of the frame horns. Leave these bolts loose for now. (Fig W)

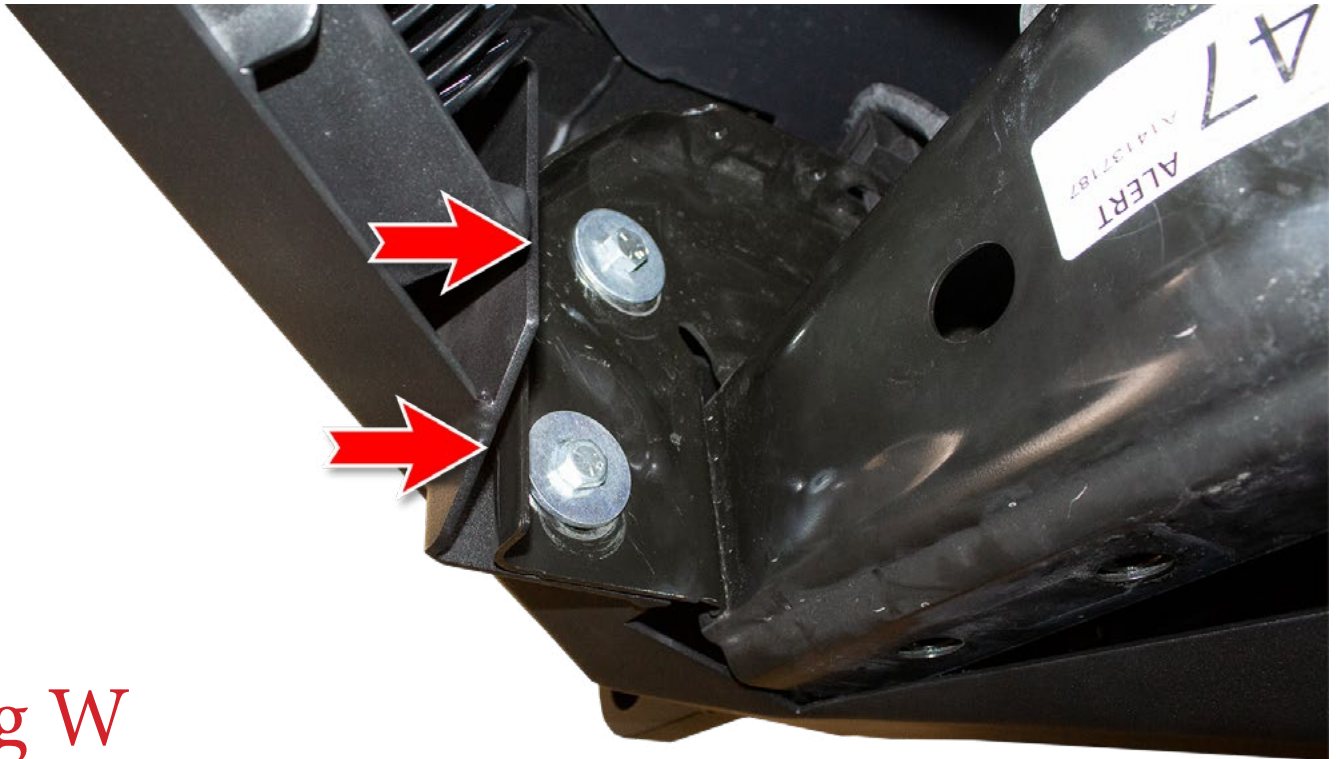


Fig W

27. If you have a 4wd truck with a bracket lift, reinstall the lift kit bolts from Step 24. (Fig X)

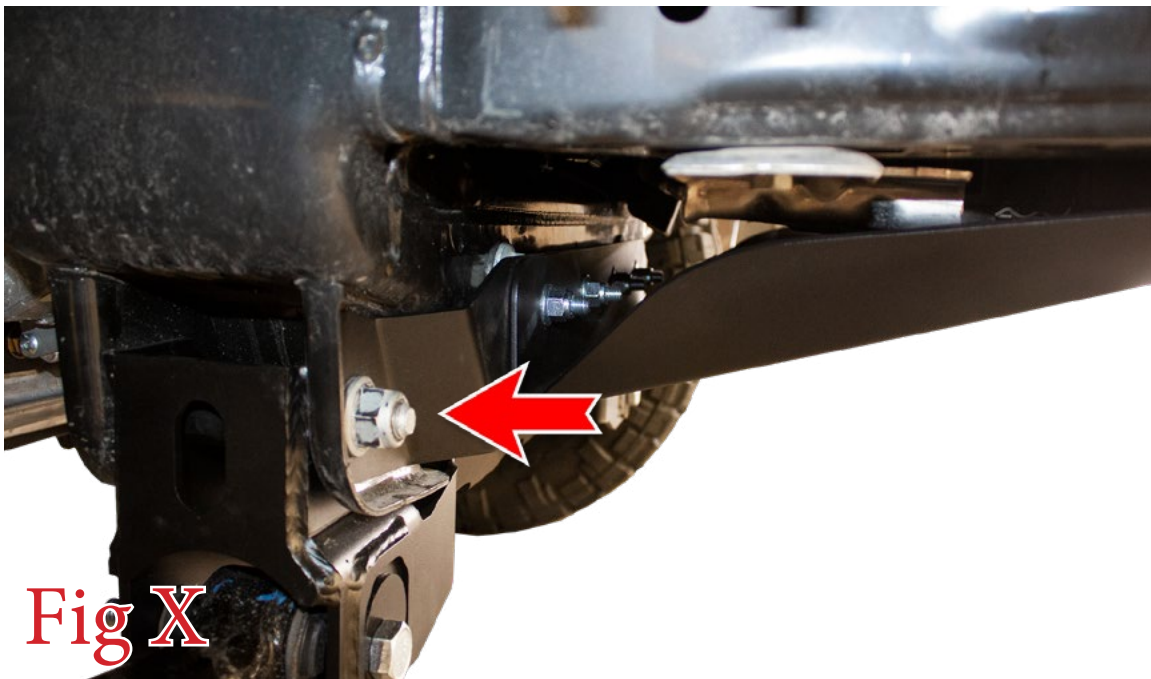
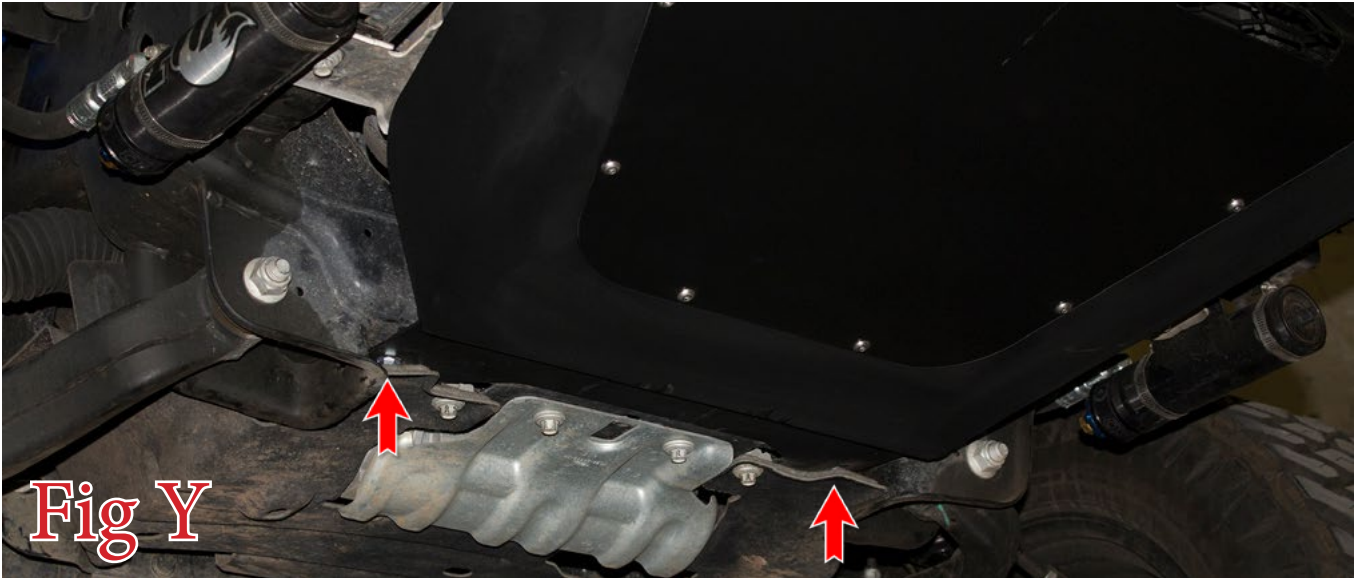


Fig X

28. If you have a truck that is not a bracket lifted 4wd, install the supplied 3/8" Bolts (x2) and 3/8" Washers (x2) into the lower skid plate mounting holes. (Fig Y) Leave these bolts loose for now.



29. Use a cutoff wheel or something similar to trim the inner fender liners to preference. We recommend following a line similar to what's shown in (Fig Z).



30. Align the bumper so it is centered left to right and straight in relation to the vehicle's valance. Then, tighten the bolts from Step 26 to 30 foot pounds. Tighten the bolts from Step 27 to OEM torque specs. Tighten the bolts from Step 28 to 30 foot pounds. Tighten the bolts from Step 16 to 70 foot pounds.
31. Plug in the connector from Step 1.
32. Stand back and enjoy your new ADD Stealth Fighter™ Front Bumper.
33. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

