

## 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**

**1.5 Additional Hours to Install & Wire Winch**

*\*\*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:

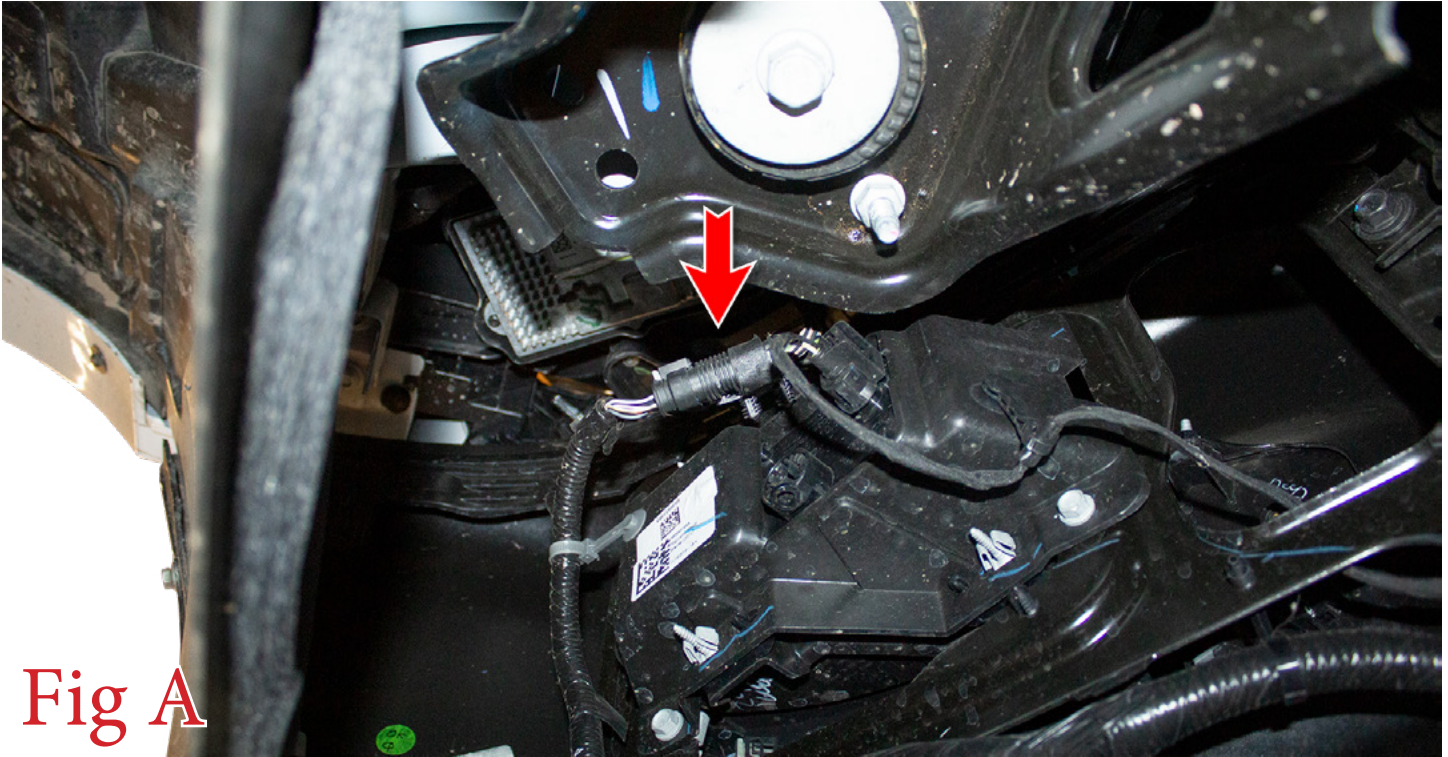
- |                 |                        |                        |
|-----------------|------------------------|------------------------|
| - Ratchet       | - 10mm Socket          | - 18mm Socket & Wrench |
| - 15/16" Socket | - 3/4" Socket & Wrench | - 9/16" Wrench         |

## Included in Kit:

- |  |   |
|--|---|
| <b>4</b> - Grade 8 Hex Head Bolts (1/2"-20 x 3 1/2") | <b>8</b> - Grade 8 Washers (1/2")             |
| <b>4</b> - Metal Lock Nuts (1/2"-20)                 | <b>12</b> - Hex Head Bolts (1/2"-13 x 1 1/2") |
| <b>24</b> - Flat Washers (1/2")                      | <b>12</b> - Nylon Lock Nuts (1/2"-13)         |
| <b>1</b> - Winch Mounting Plate                      | <b>2</b> - Bumper Mounting Brackets           |
| <b>1</b> - Universal Light Mount Kit                 |   |

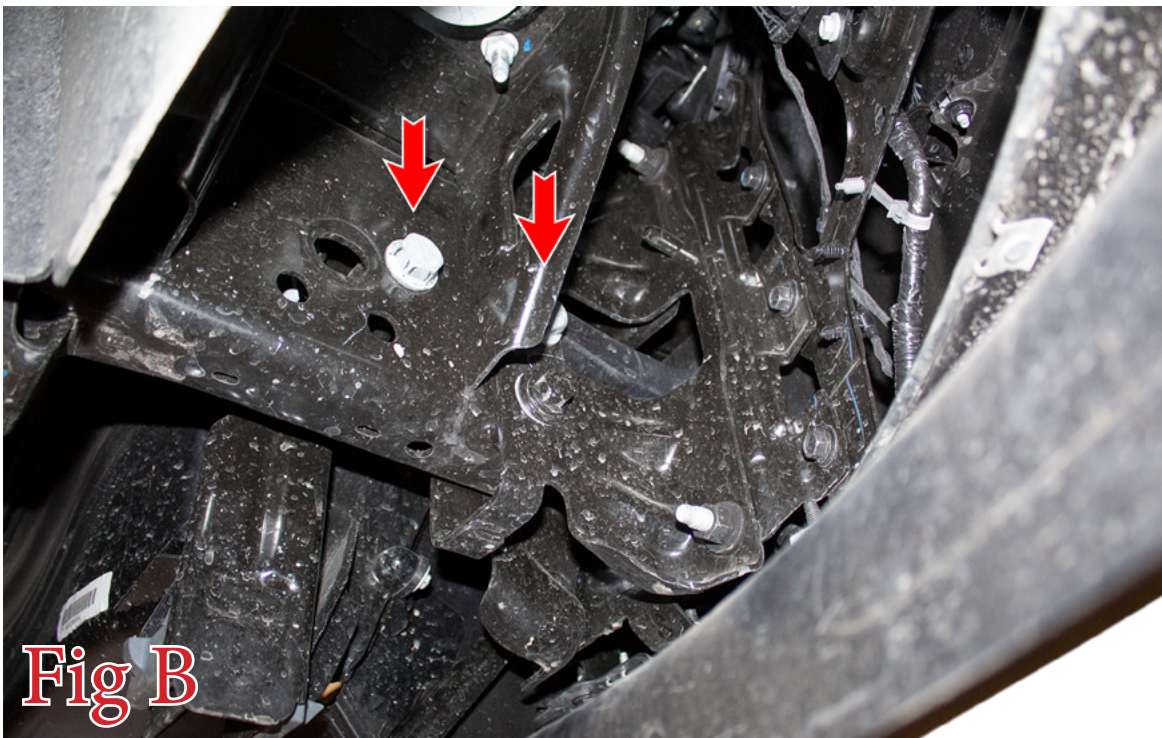
**Removal:**

1. Underneath the truck on the driver side, unplug the main bumper harness connector. (Fig A)



**Fig A**

2. Remove the tow hooks from the vehicle. There are 2 mounting bolts (per side) along the vehicle's frame horn. These can be accessed from underneath the vehicle. Use a 15/16" Socket to remove both of these bolts. Then, pull the tow hooks out the front of the bumper. (Fig B)

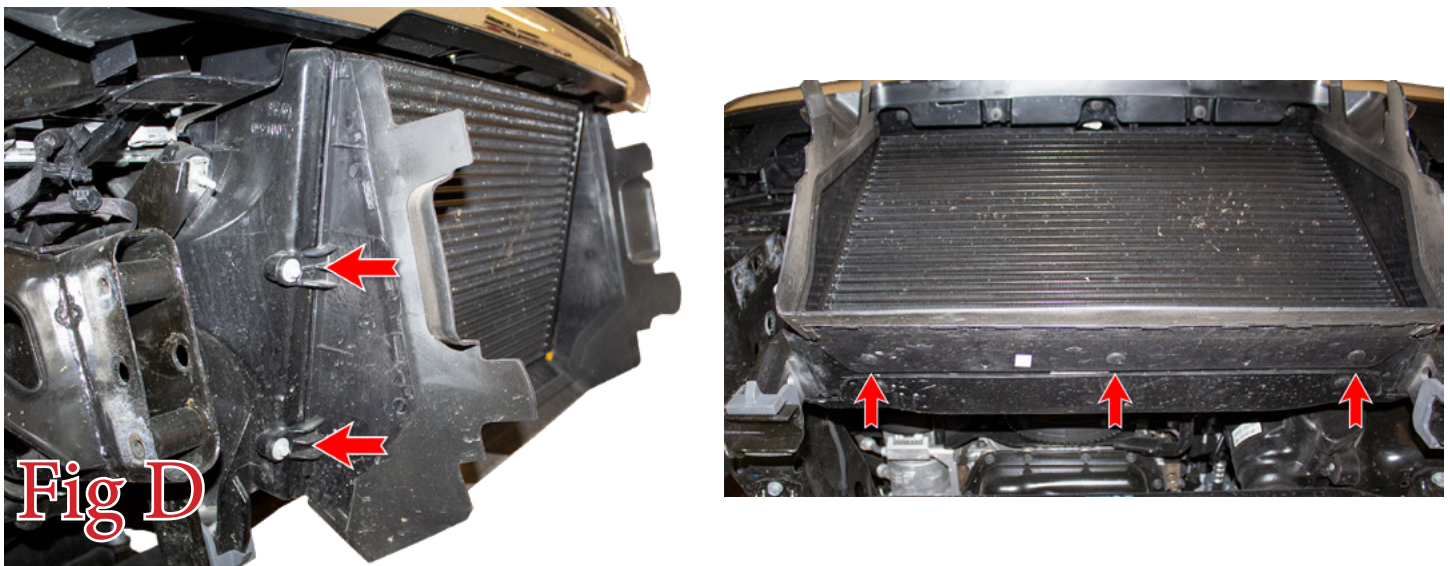


**Fig B**

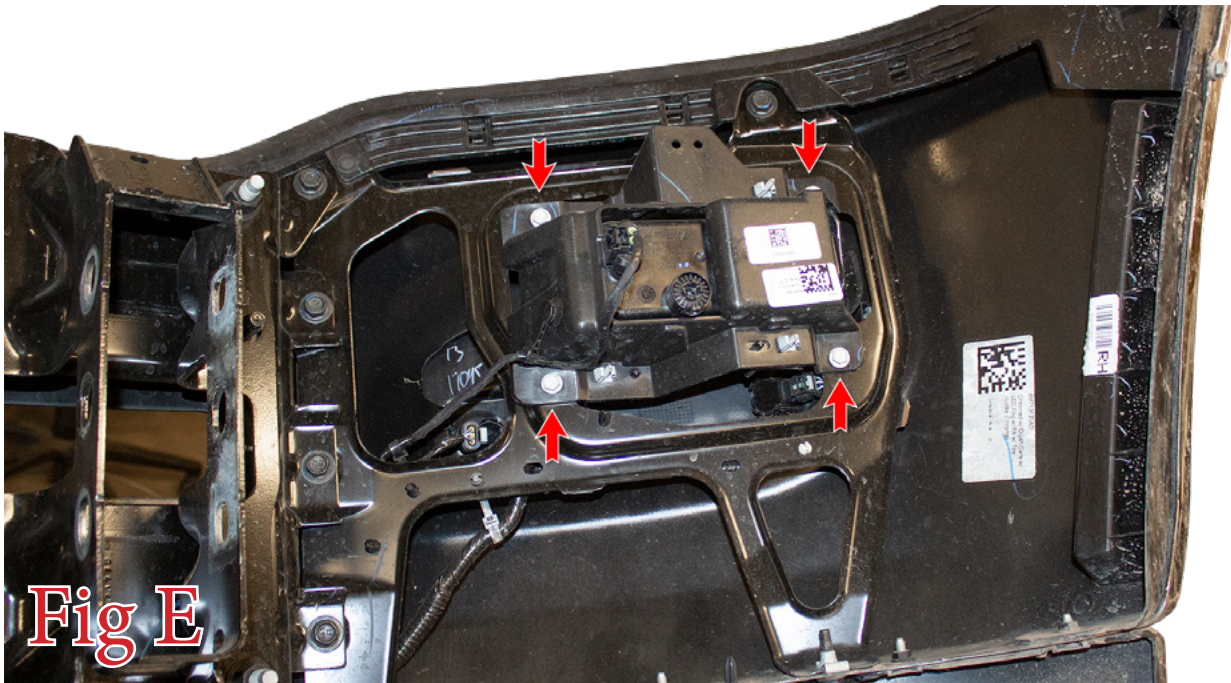
3. Use an 18mm Socket & Wrench to remove the two bumper mounting bolts (per side). Then, remove the OEM bumper from the vehicle. (Fig C) **Save these bolts for reuse.**



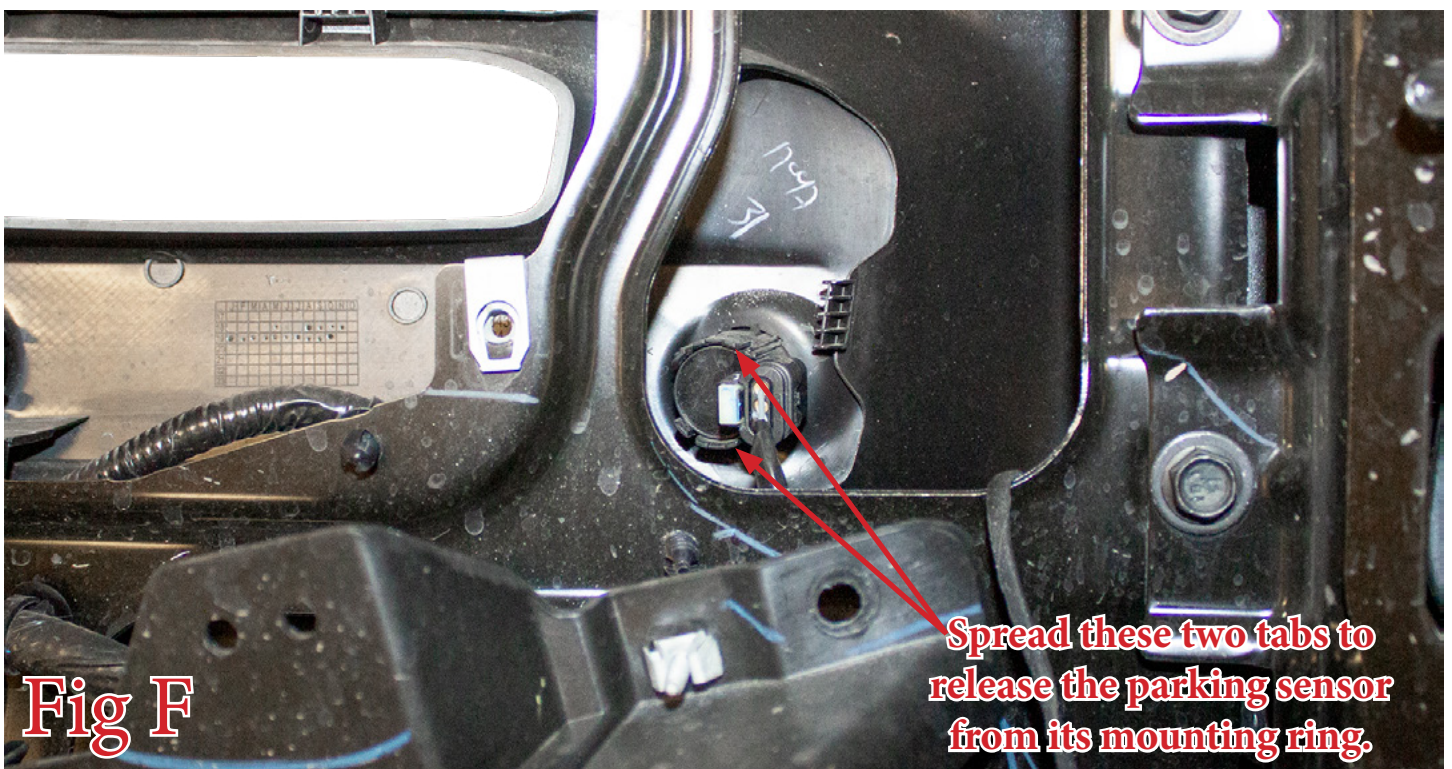
4. Use a 10mm Socket to remove the intercooler scoop mounting bolts (x4). Then, remove the three plastic clips along the bottom of the intercooler scoop and remove the scoop from the vehicle. (Fig D)



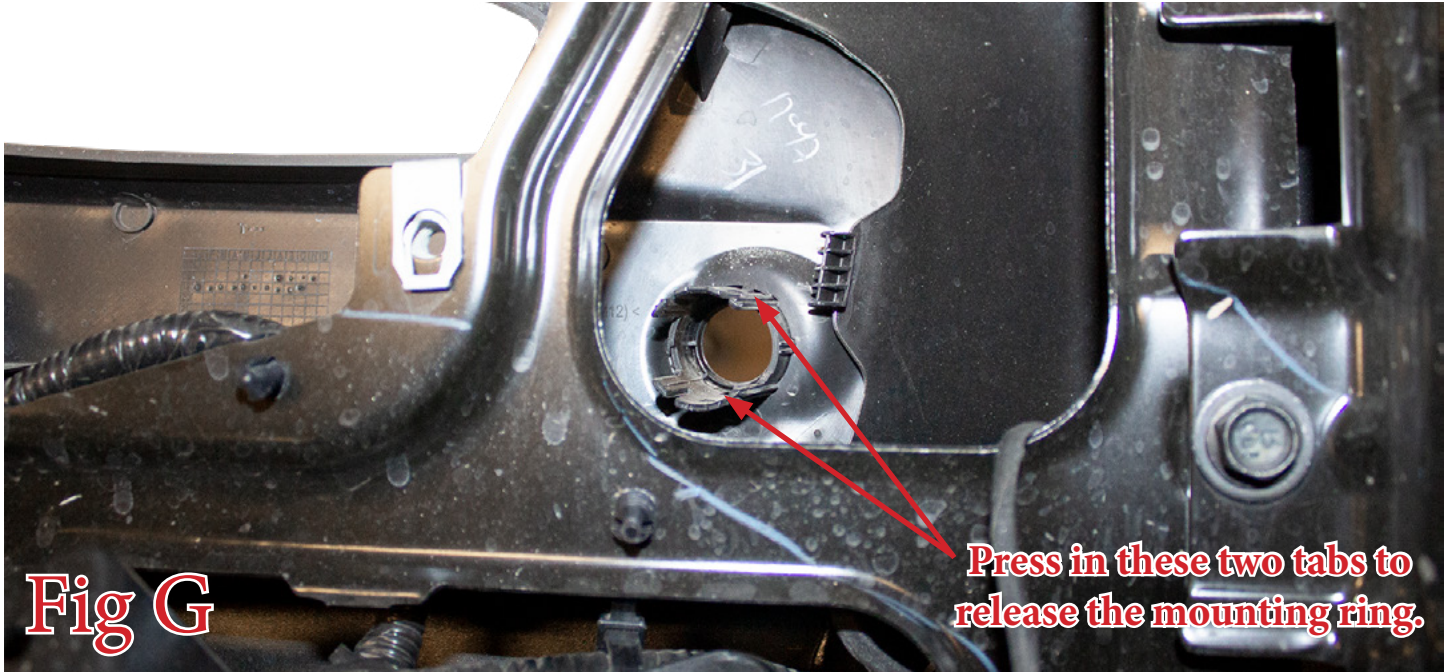
5. Set the OEM bumper on a workbench or something similar. Use a 10mm Socket to remove the four bolts holding on each fog light. (Fig E)



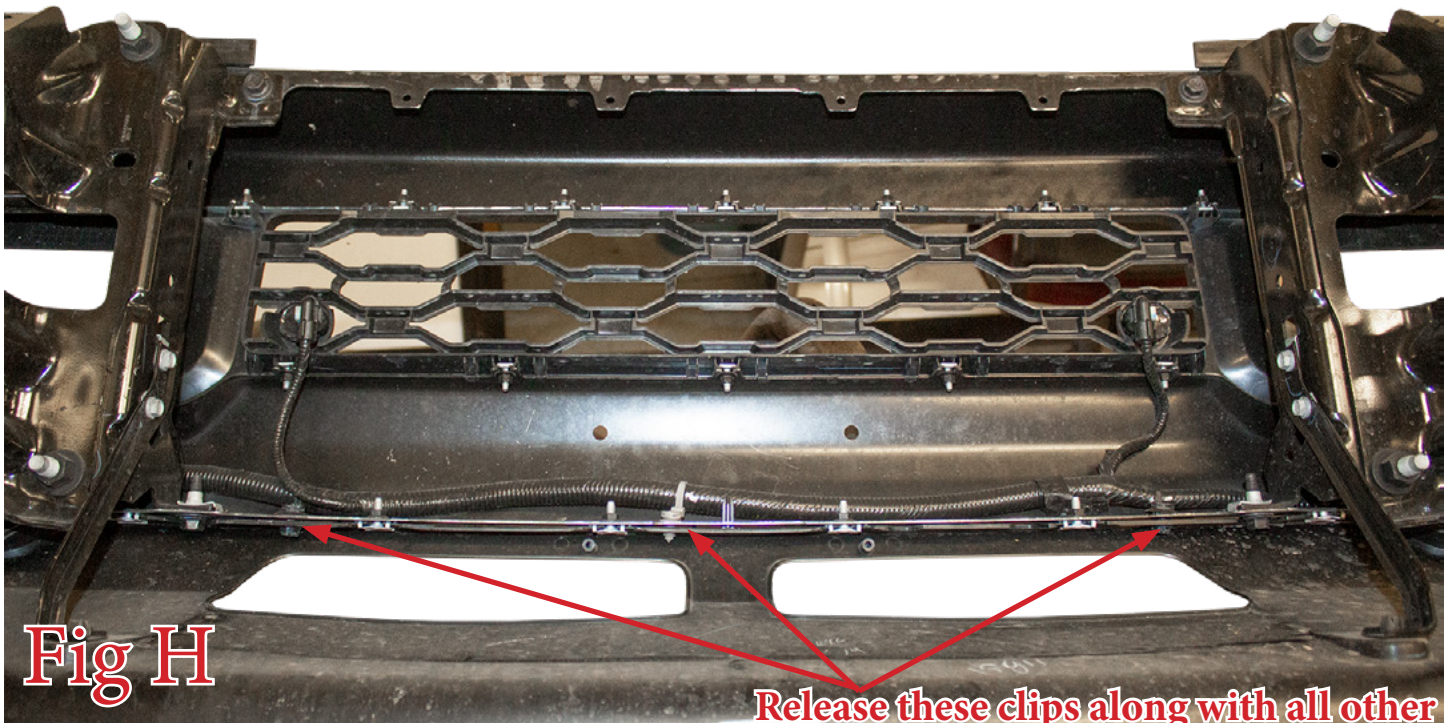
6. Remove the OEM parking sensors from their mounting rings. Do this by spreading the two tabs on the back side of the mounting rings. Then, push the sensors out the back side of the rings. (Fig F) **Make sure to keep track of the position/orientation that the parking sensors come off the OEM bumper so that they can be installed on your new bumper in the same position/orientation.**



7. Remove parking sensor mounting rings from the OEM bumper. Do this by pressing in the two tabs along the bottom of the back side of the mounting rings. (Fig G) **Make sure to keep track of the position/orientation that the mounting rings come off the OEM bumper so that they can be installed on your new bumper in the same position/orientation.**



8. Release the series of plastic clips holding on the OEM bumper harness. Then, remove this wiring harness from the OEM bumper. (Fig H)

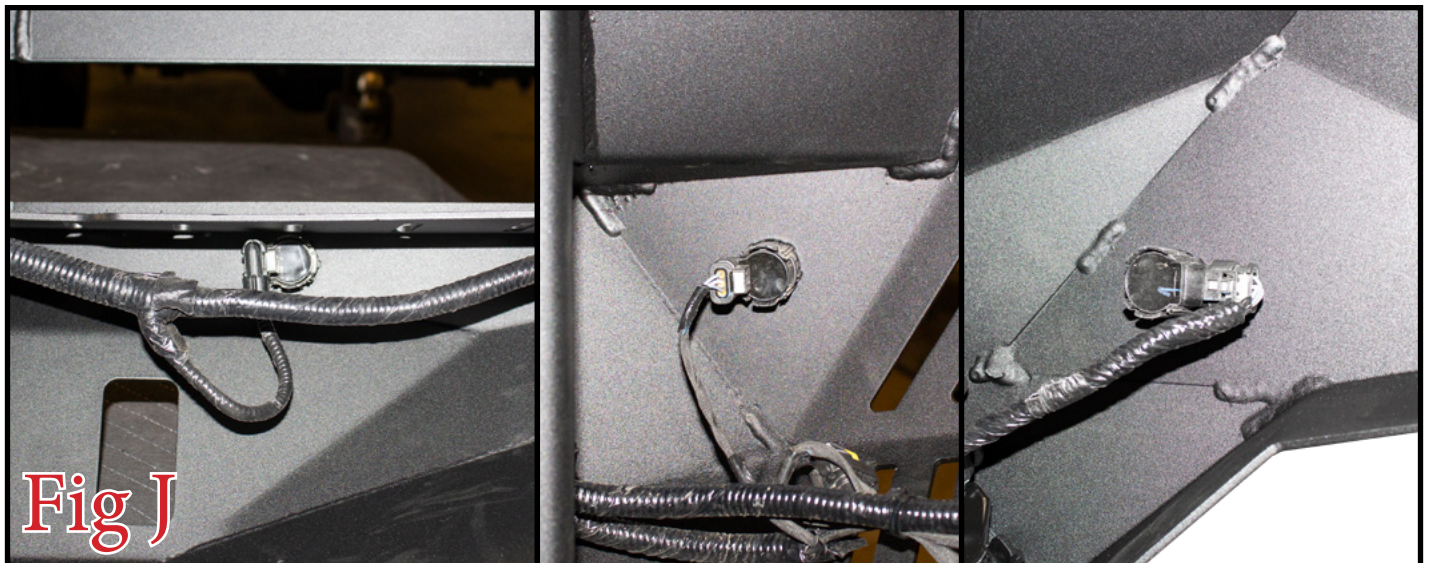


## Installation:

9. Install the parking sensor mounting rings onto your new bumper. Install them by pressing them into their precut holes on the new bumper. **Install them in the same position/orientation as they came off the OEM bumper.** (Fig I)

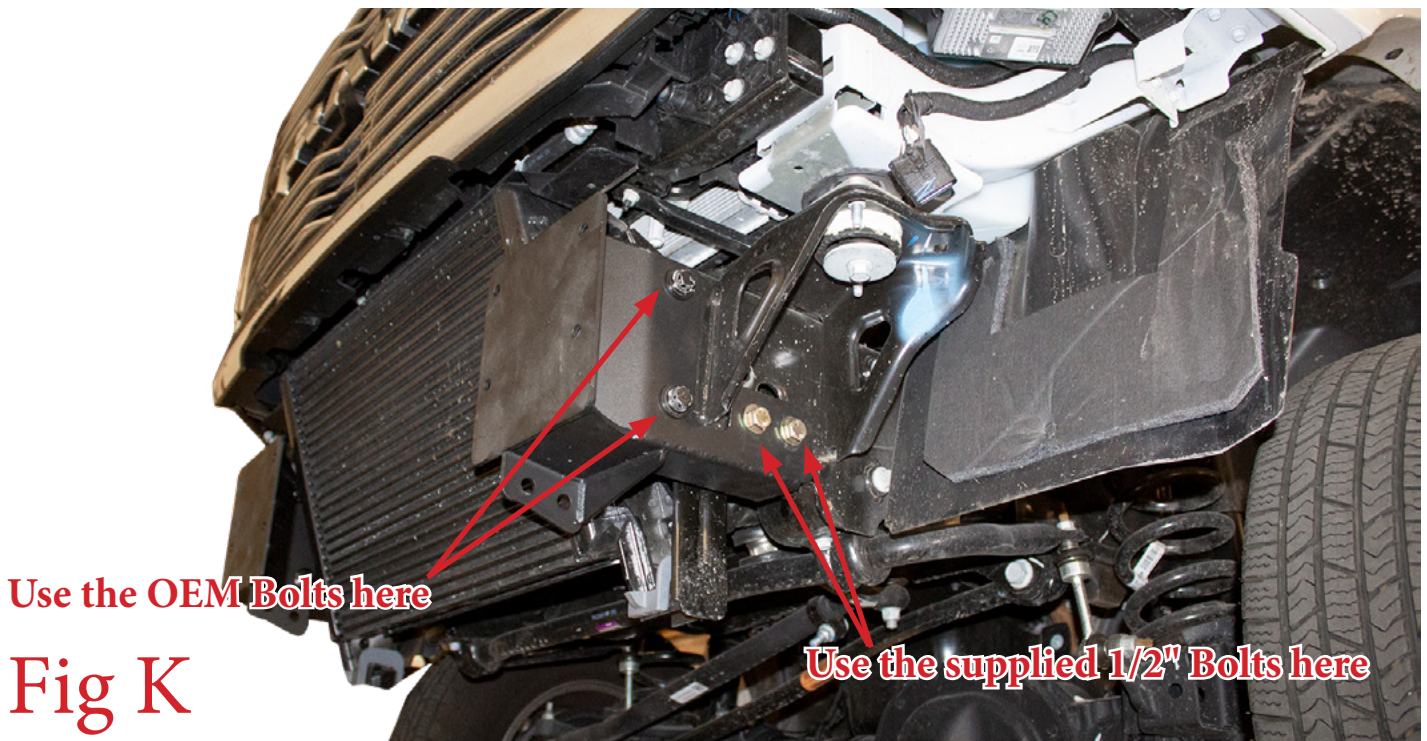


10. Move the bumper harness/parking sensors over to your new bumper. Press the parking sensors into their mounting rings from the back side. As you are installing the parking sensors, make sure to run the harness so that it will be out of harm's way when the bumper is installed. Also make sure the main harness connector is on the proper side. Lastly, install the parking sensors in the exact orientation as they came off the OEM bumper. (Fig J)



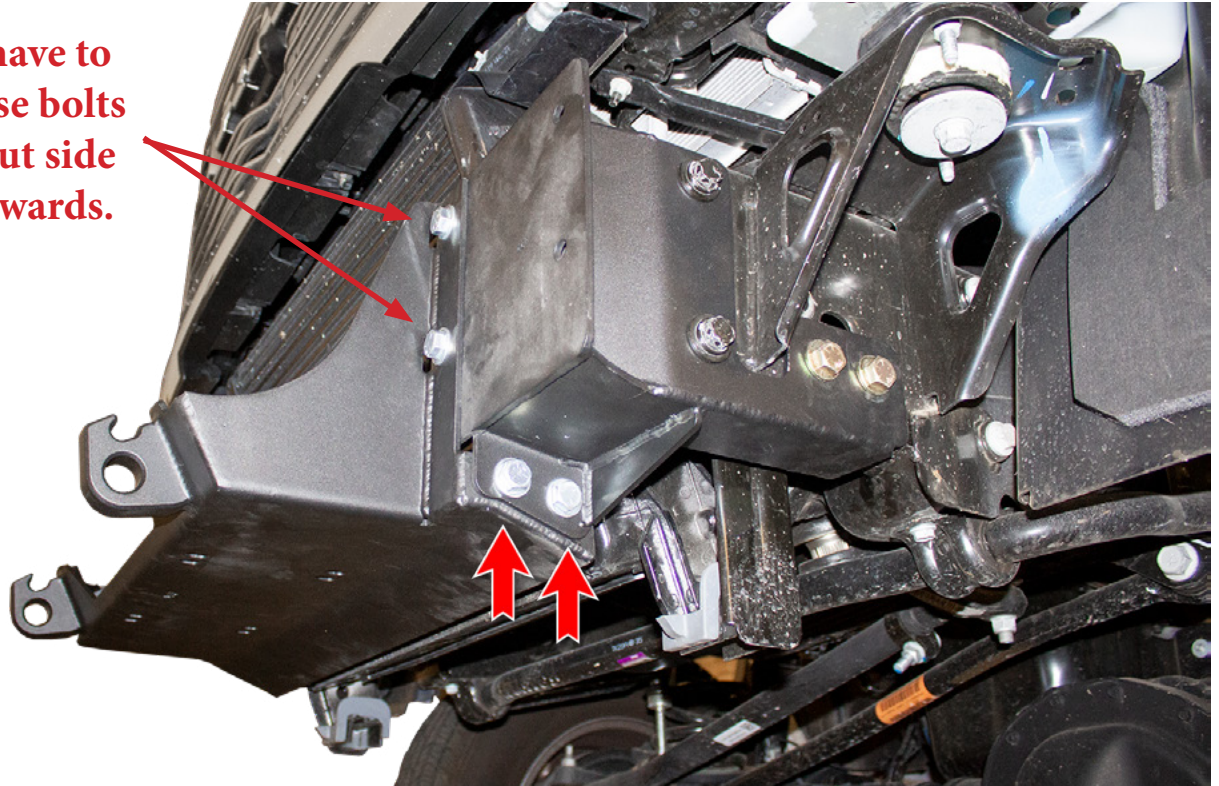
11. If you have lights to install on your bumper, do so now. To mount any light bars in the center of your bumper, use the supplied universal light mount kit. For instructions on how to use this kit, please follow this URL:  
<https://www.addictivedesertdesigns.com/files/install/ADD-Universal-Light-Mount-Kit-Installation-Instructions.pdf>  
For wiring information, follow the light manufacturer's installation guide.

12. Find the supplied Bumper Mounting Brackets. Set them in place on the vehicle. Use the OEM bumper mounting bolts from Step 3 as well as the supplied 1/2" x 3" (2 per side), 1/2" Grade 8 Washers (4 per side), and 1/2" Metal Lock Nuts (2 per side) to secure the brackets to the vehicle. (Fig K) Torque the supplied 1/2" Bolts to 80 foot pounds. Torque the OEM Bolts to OEM torque spec.



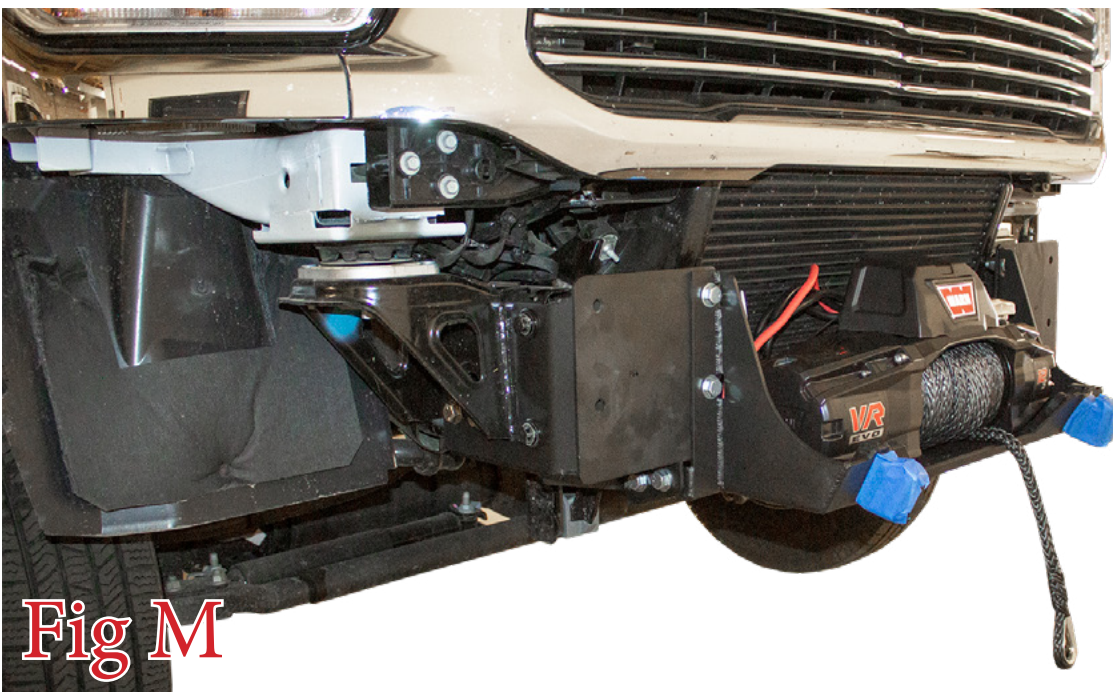
13. Find the supplied Winch Mounting Plate. Set the plate in place on the vehicle and use the supplied 1/2" Bolts (x8), 1/2" Washers (x16), and 1/2" Lock Nuts (x8) to secure the plate to the vehicle. Once all bolts are loosely installed, go back and torque them to 70 foot pounds. **If the studs on the upper mounting bolts touch your intercooler you will have to turn the bolts around so the nut side faces outwards.** (Fig L)

**You may have to mount these bolts with the nut side facing outwards.**



**Fig L**

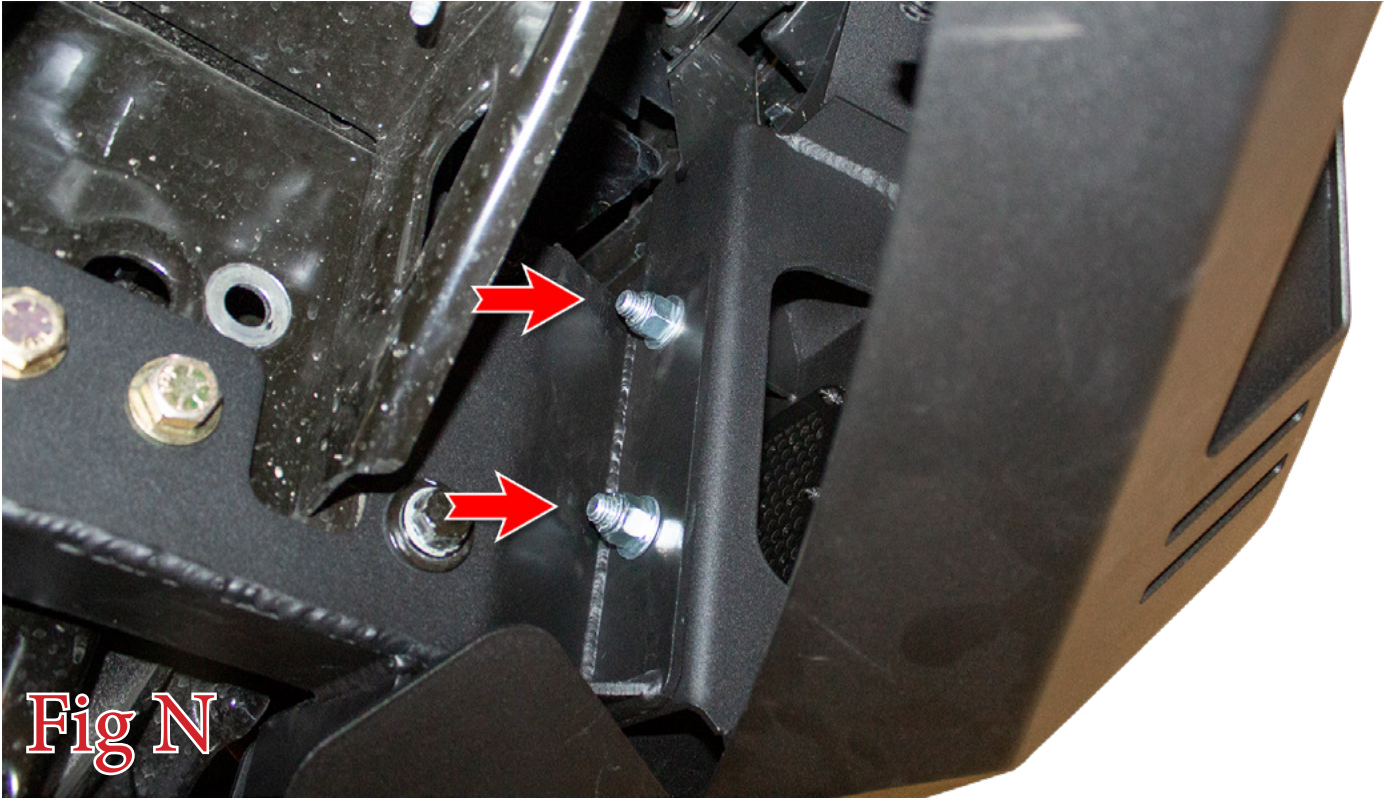
14. Mount your winch to the winch plate now. Use the winch manufacturer's mounting hardware. Follow the winch manufacturer's guide for mounting/wiring information. Install your fairlead to your bumper now. (Fig M)



**Fig M**



15. Set the bumper in place on the vehicle. We recommend wrapping the tow hooks with painter's tape to help prevent damage as you install the bumper. Use the supplied 1/2" Bolts (x4), 1/2" Washers (x8), and 1/2" Lock Nuts (x4) to secure the bumper. Leave these bolts loose for now. (Fig N)



16. Center the bumper left to right. Then, tighten the mounting bolts from the previous step to 70 foot pounds.
17. If you have lights to install in your side panels do so now. Follow the light manufacturer's guide for mounting/wiring information.
18. Stand back and enjoy your new Stealth Fighter™ Front Bumper.
19. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

