

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

You will need the following tools:

- | | | |
|-----------------------------|-----------------|-----------------------|
| - Ratchet | - 7mm Socket | - 10mm Socket |
| - 13mm Socket | - 18mm Socket | - 13/16" Socket |
| - 5/32" Allen Wrench/Socket | - 7/16" Wrench | - 3/4 Socket & Wrench |
| - Electrical Tape | - Utility Knife | |

Included in Kit:

- | | |
|---|--|
| 4 - Hex Head Bolts (1/2"-13 x 1 1/2") | 10 - Button Head Bolts (1/4"-20 x 1") |
| 8 - Flat Washers (1/2") | 12 - Flat Washers (1/4") |
| 4 - Nylon Lock Nuts (1/2"-13) | 6 - U-Nuts (1/4"-20) |
| 8 - Button Head Bolts (1/4"-20 x 3/4") | 12 - Nylon Lock Nuts (1/4"-20) |
| 2 - Blind Spot Sensor Mount (Inner) | 2 - Blind Spot Sensor Mount (Outer) |

****This Install Guide covers the installation of a rear bumper with sensors cutouts, blind spot mounts, and exhaust mounts. If your bumper does not have these features, please skip the steps that refer to them.****

Removal:

1. Underneath the vehicle, towards the passenger side, unplug the main bumper harness connector. (Fig A)

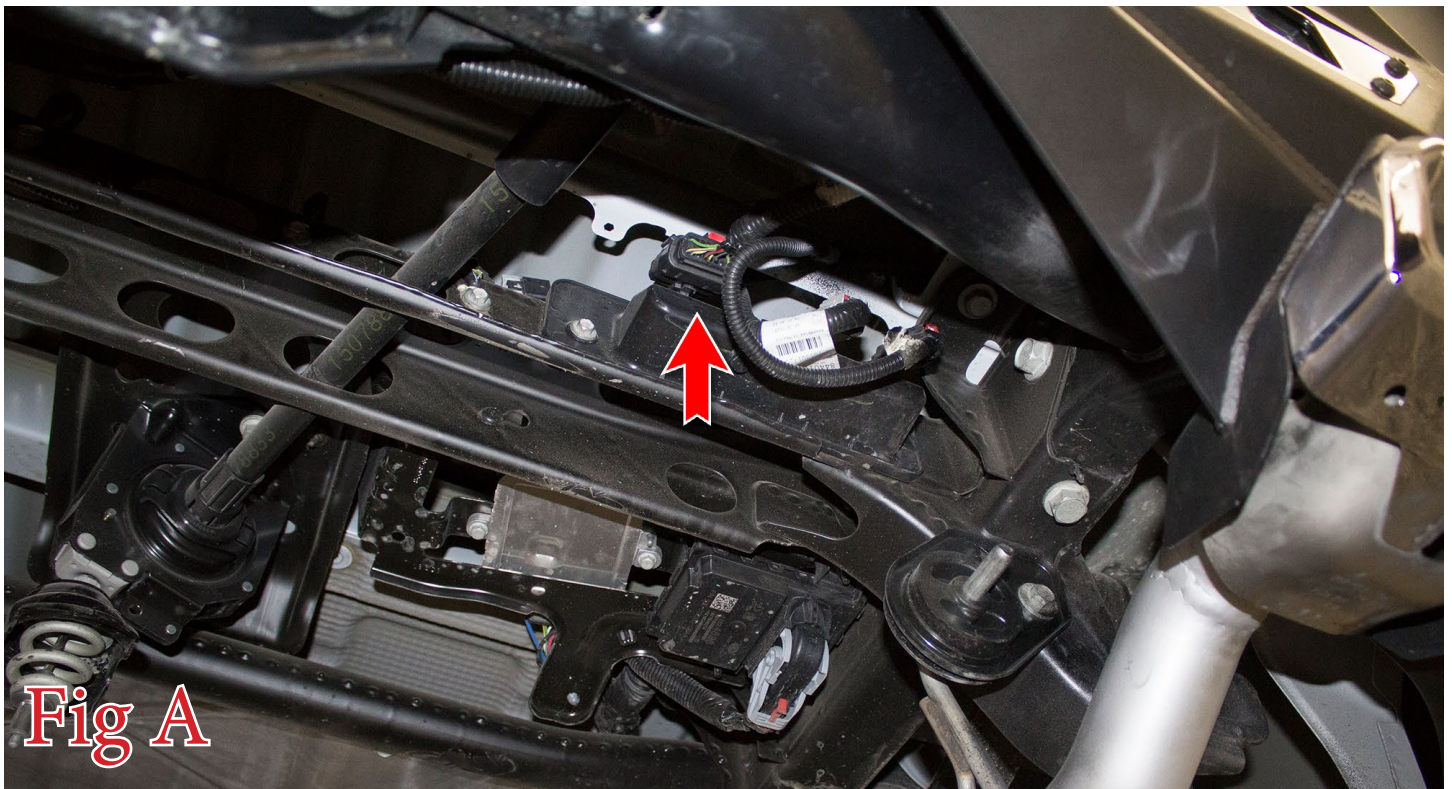


Fig A



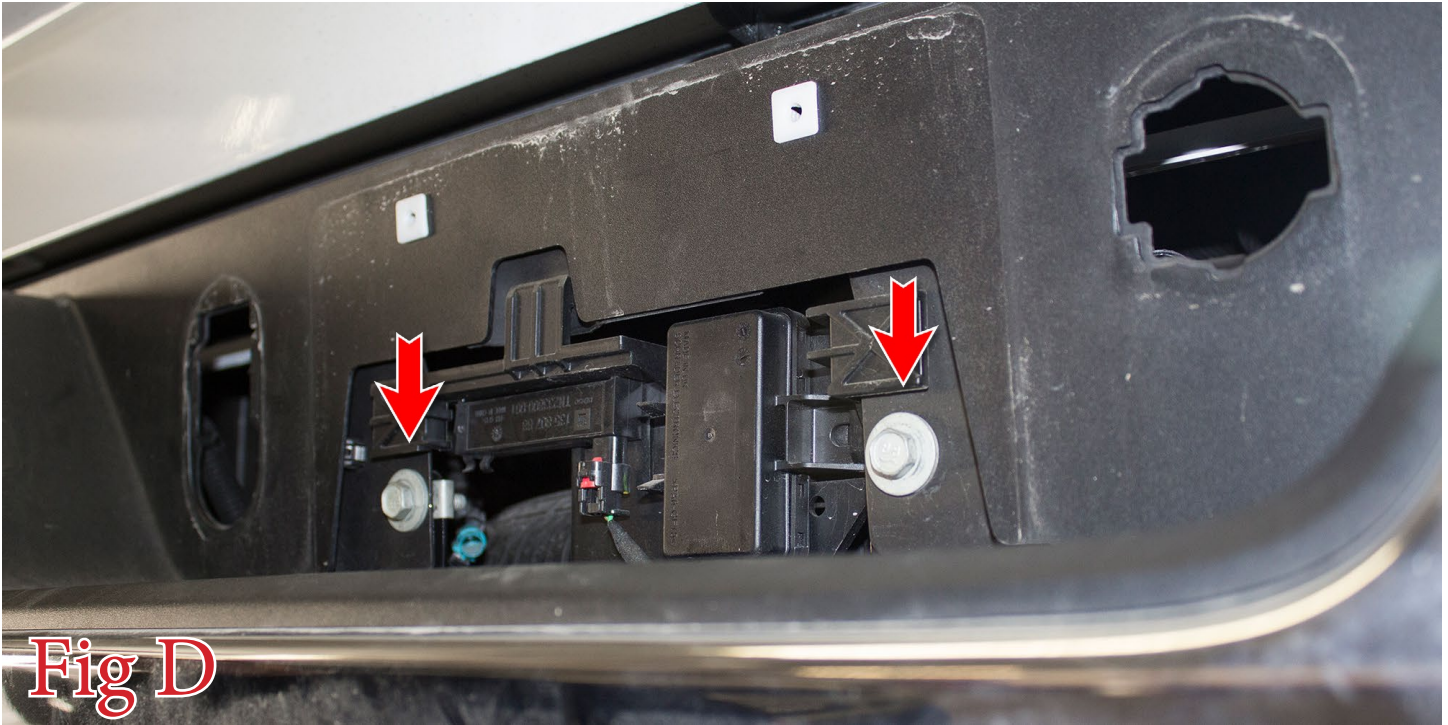
2. Use your key to remove the lock portion of your spare tire lock. Then remove the tube by releasing the tabs on the back side of it. (Fig B)



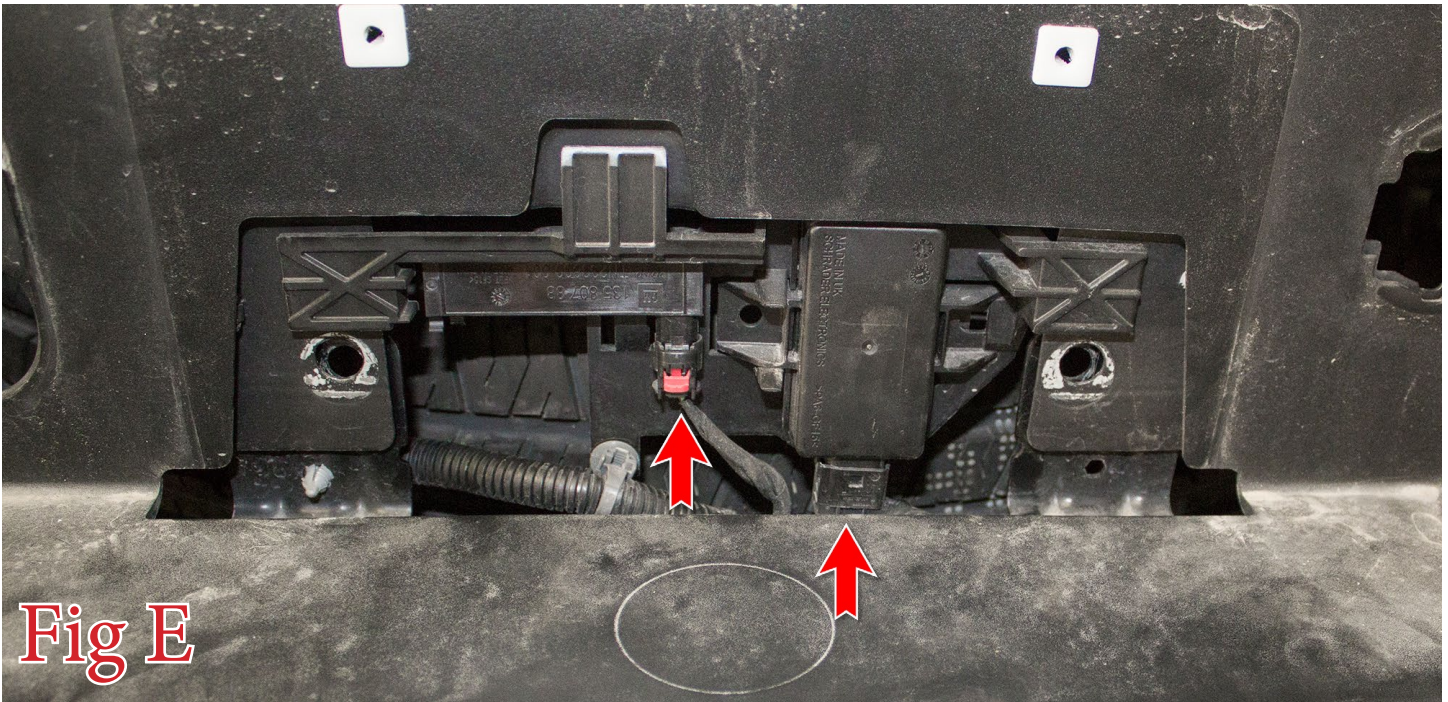
3. Disconnect the plug on the back side of the trailer plug. Then, remove the trailer plug from the bumper by squeezing the tabs together on the back side of the plug. (Fig C)



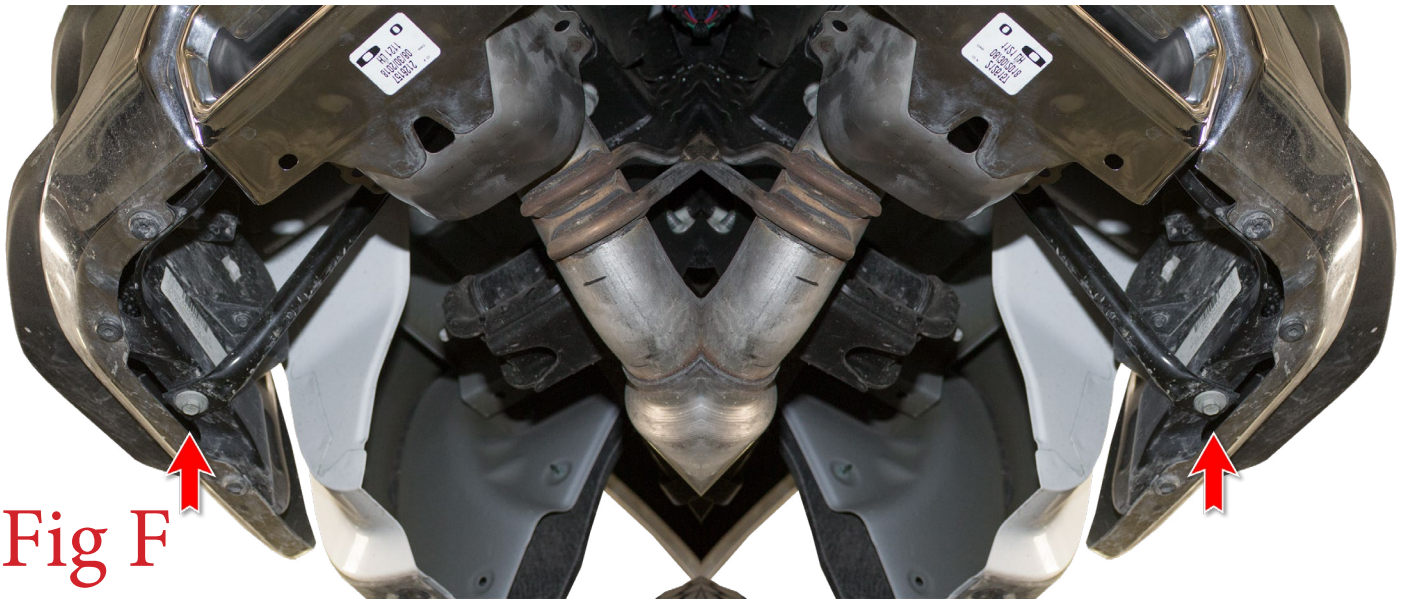
- 4. Remove your license plate.
- 5. Using a 13mm Socket, remove the two bolts that sit behind your license plate. (Fig D)



- 6. Unplug the two modules that sit behind the license plate. (Fig E)



7. Using a 13mm Socket, remove the one bolt (per side) that holds the bumper support bar to the under side of the bumper. (Fig F)



8. Using an 18mm Socket, remove the two mounting nuts (per side) that hold on the OEM bumper. Then, remove the OEM bumper from the vehicle. (Fig G)



9. Using a 13/16" Socket, remove the one bolt (per side) that hold on the bumper support bars. Then, remove these bars from the vehicle. (Fig H)

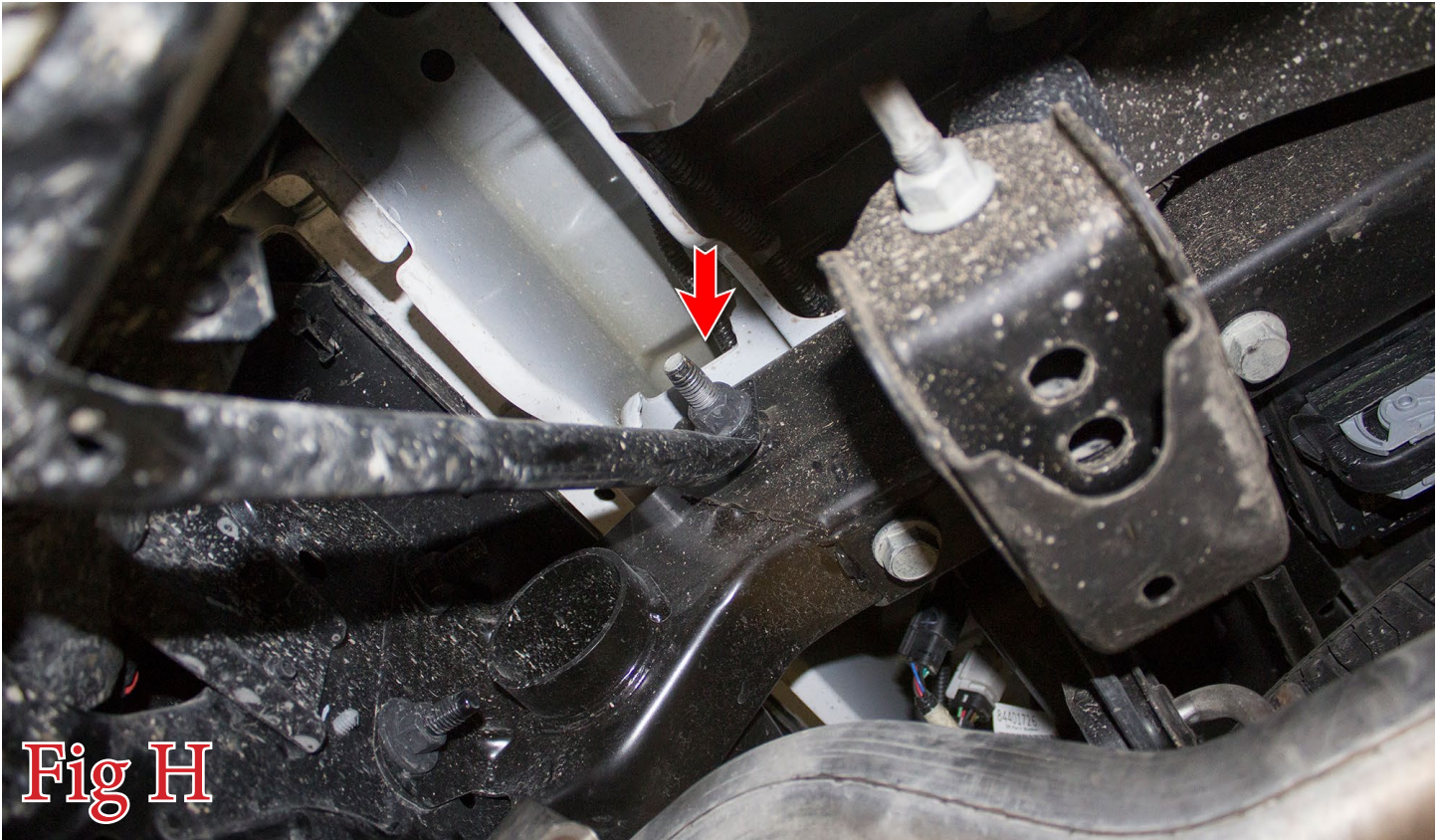


Fig H

10. Using a 10mm Socket or Wrench, remove the two exhaust tips (3 bolts per tip) from the OEM bumper. (Fig I & Fig J)

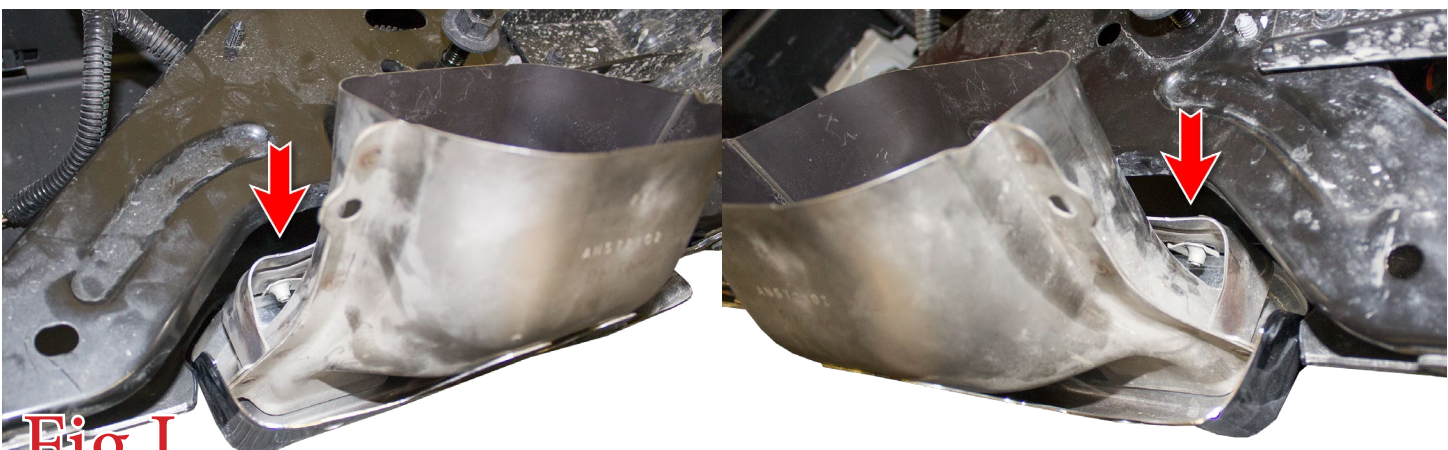


Fig I



Fig J

11. Using a 7mm Socket, remove the two bolts that hold on the blind spot module cover. Repeat this step on the other side of the bumper. (Fig K)

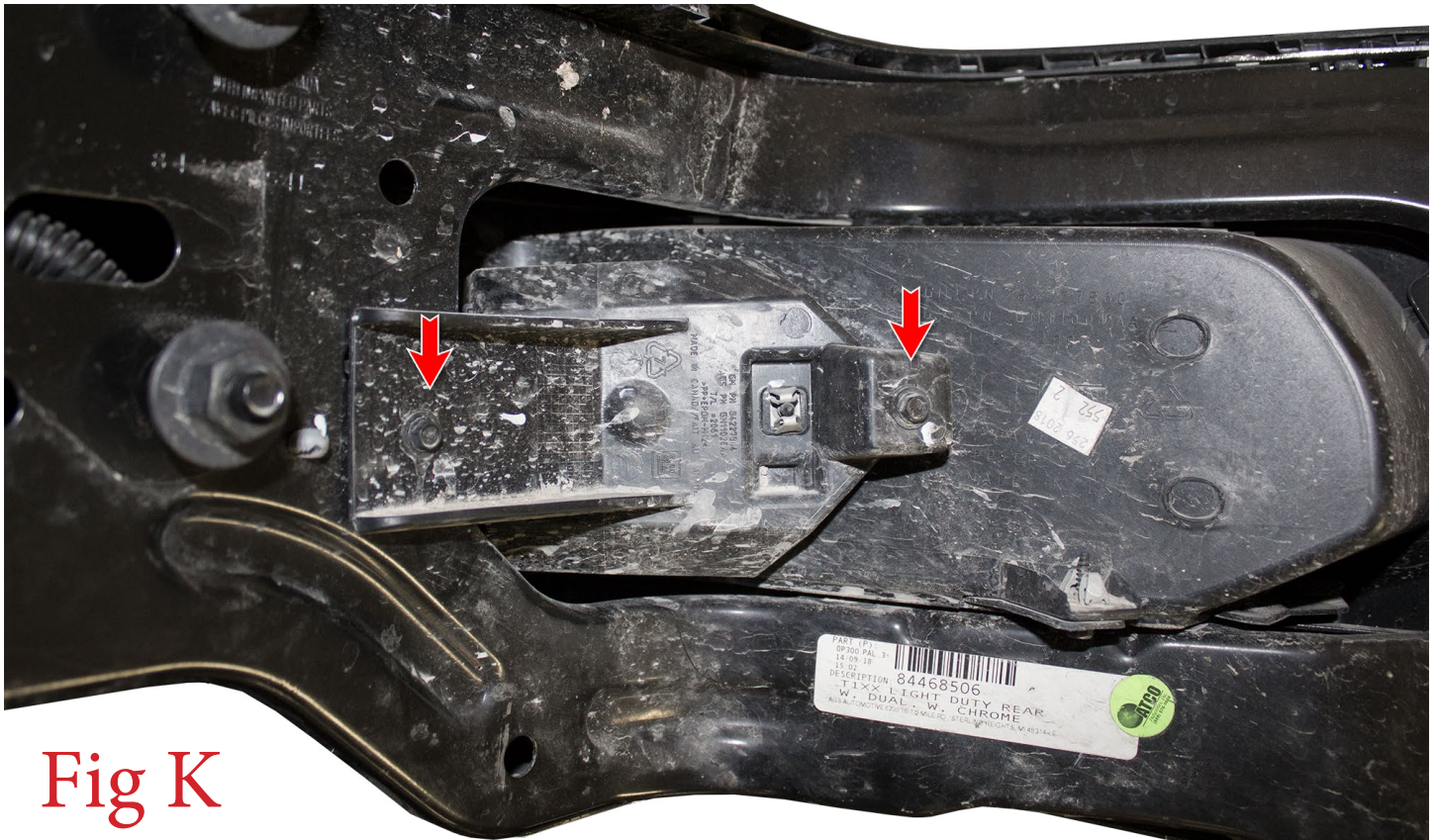


Fig K



12. Using a 7mm Socket, remove the bolt that holds the blind spot module to its bracket. Then, do this to the other blind spot module. With the bolts removed, unplug and remove the modules. (Fig L)



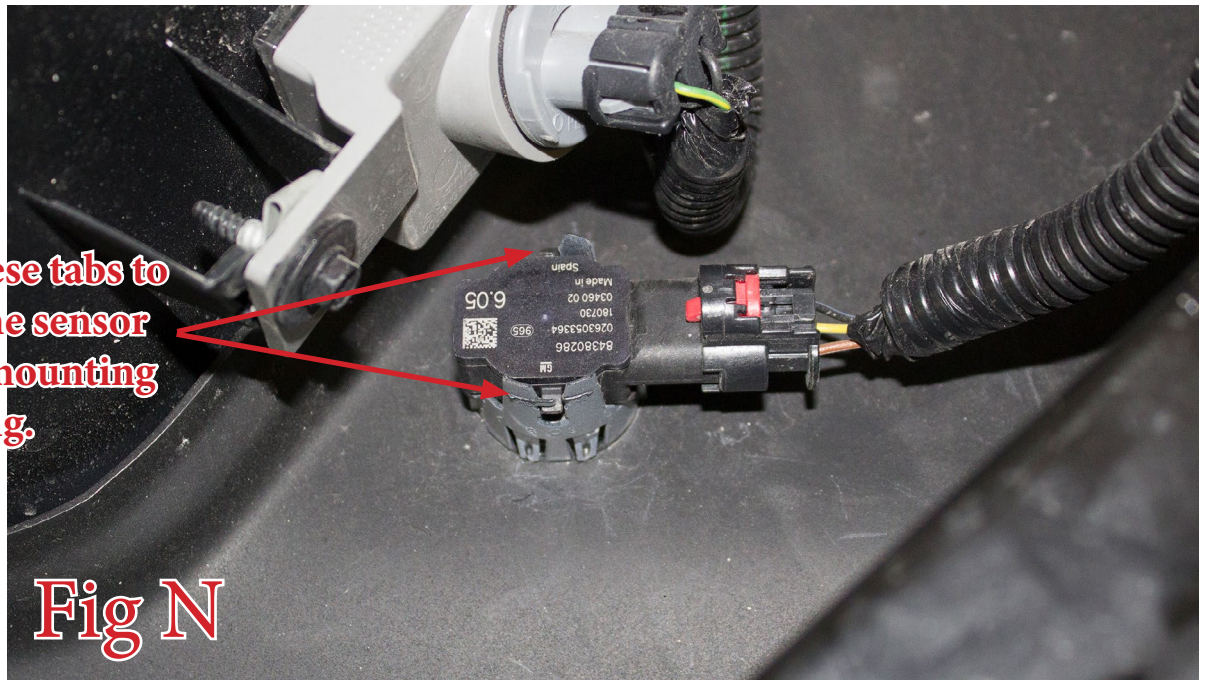
13. Using a 7mm Socket, remove the single bolt (per side) that holds on the license plate light. Then, unplug and remove the license plate light housings from the OEM bumper. (Fig M)





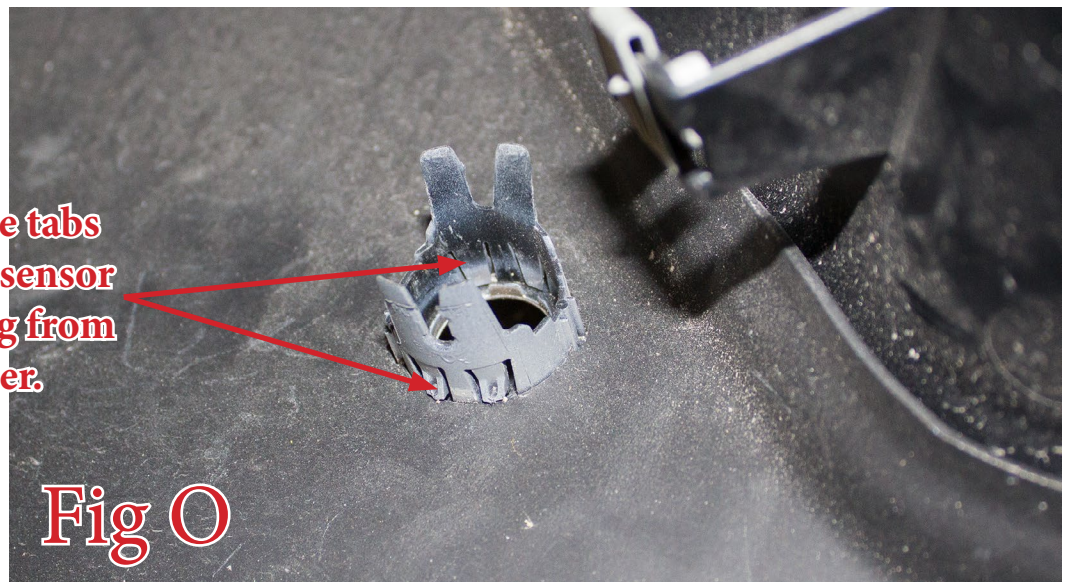
14. Unplug and remove the parking sensors. Do this by spreading the two tabs on the back side of the sensor mounting rings. Be sure to keep track of what position/orientation they are all installed on the OEM bumper so you can install them in the same position/orientation in your new bumper. (Fig N)

Spread these tabs to release the sensor from its mounting ring.



15. Remove the parking sensor mounting rings by squeezing the tabs in that hold them into the OEM bumper. Be sure to keep track of what position/orientation they are all installed on the OEM bumper so you can install them in the same position/orientation in your new bumper. (Fig O)

Squeeze these tabs to release the sensor mounting ring from the bumper.





16. Unclip the two modules (from Step 6) from the plastic piece that they are clipped to. (Fig P)

Release these two
modules from
the plastic piece
they are clipped
to.

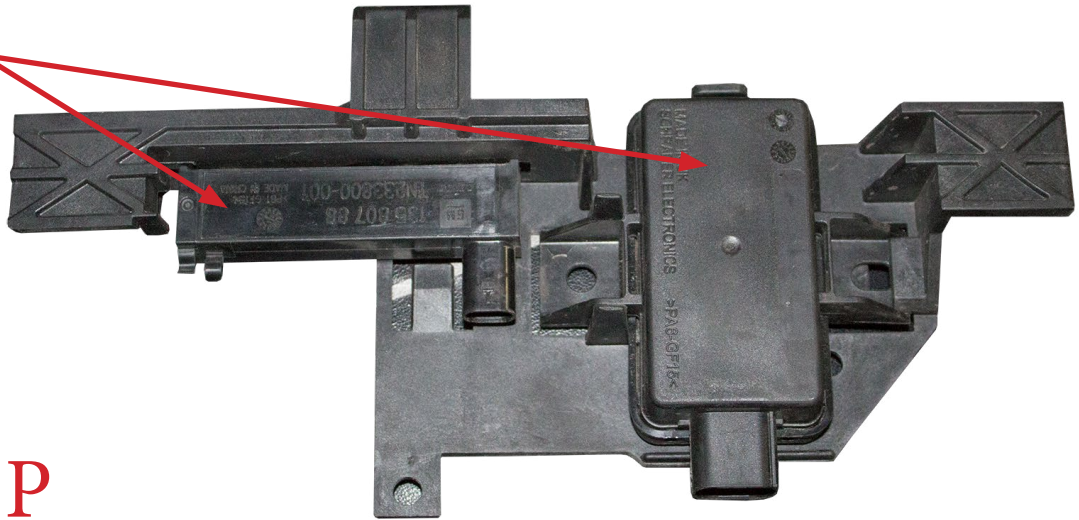


Fig P

Installation:

17. Remove the 4 corner bolts (per side) that hold the plastic piece to the corner of the rear bumper. (Fig Q)

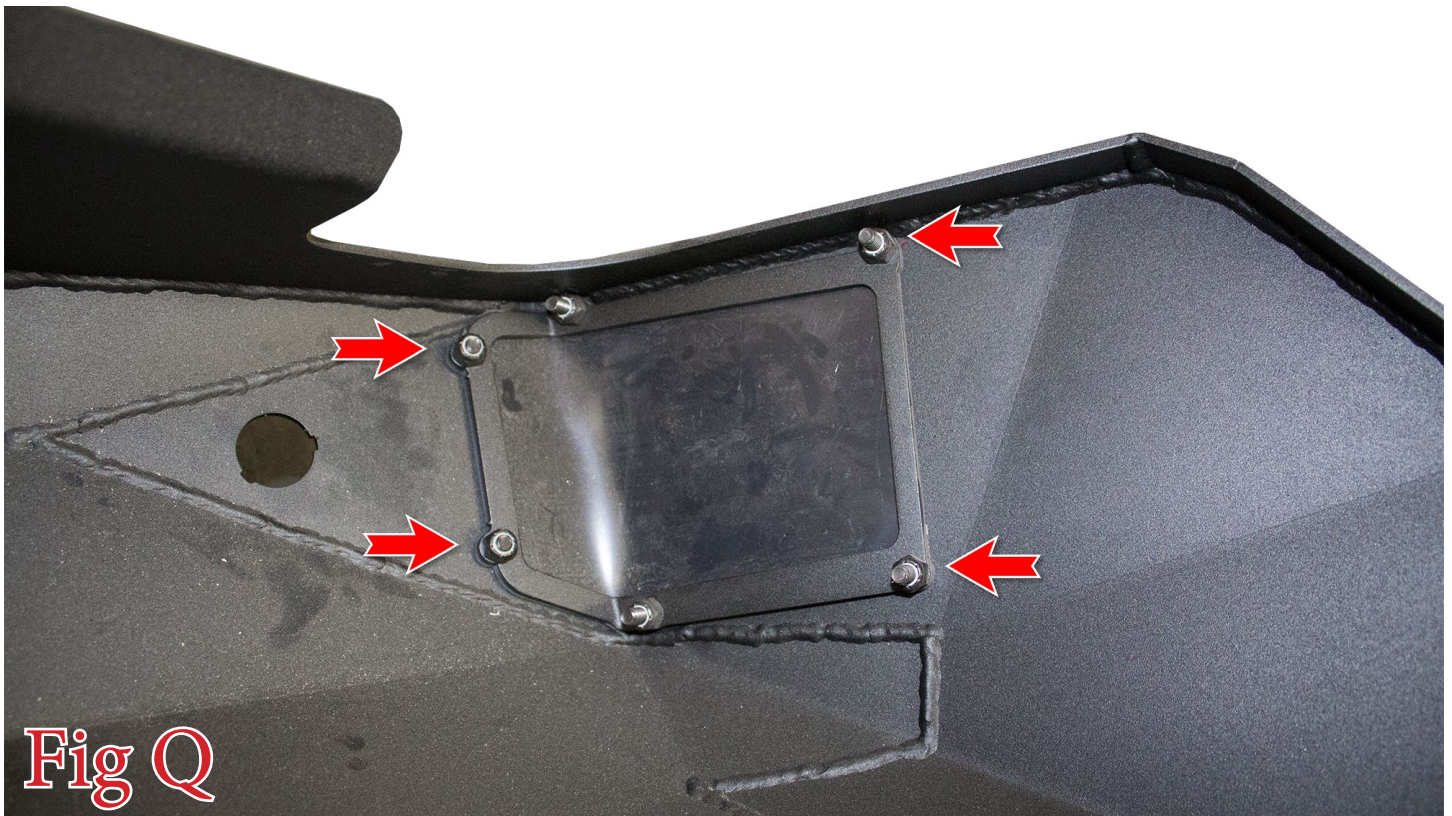
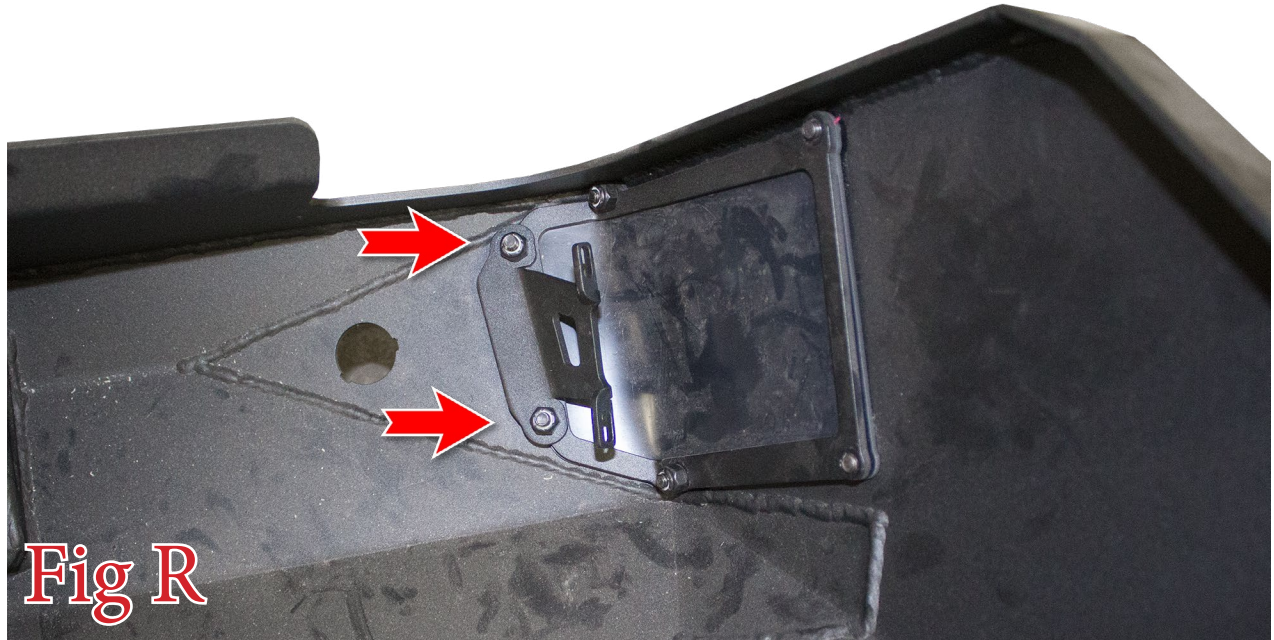


Fig Q



18. Bolt the inner portion of the blind spot module bracket to the bumper as shown in (Fig R). Use the supplied longer 1/4" x 1" Bolts (x2) if the bolts currently in the bumper are not long enough.



19. Bolt the outer portion of the blind spot module bracket to the blind spot module using the supplied 1/4" x 1" Bolt (x1), 1/4" Washer (x1), and 1/4" Lock Nut (x1). Only tighten this bolt until it is snug. Overtightening this bolt may result in damage to the plastic casing of the blind spot module. (Fig S)





20. Slide the tabs on the blind spot module into the slots on the inner portion of the module bracket. Then, use the supplied longer 1/4" x 1" Bolts (x2) to hold the outer portion of the module bracket to the bumper. (Fig T)



Fig T

21. Install the parking sensor mounting rings into your new bumper. Be sure to install them in the same position/orientation as they came off the OEM bumper. If the rings do not click into place, you may have to file the tabs down a little to allow for the thicker material of your new bumper. (Fig U)

You may have to file these surfaces back a little.

Then, push it into its precut hole in the bumper.

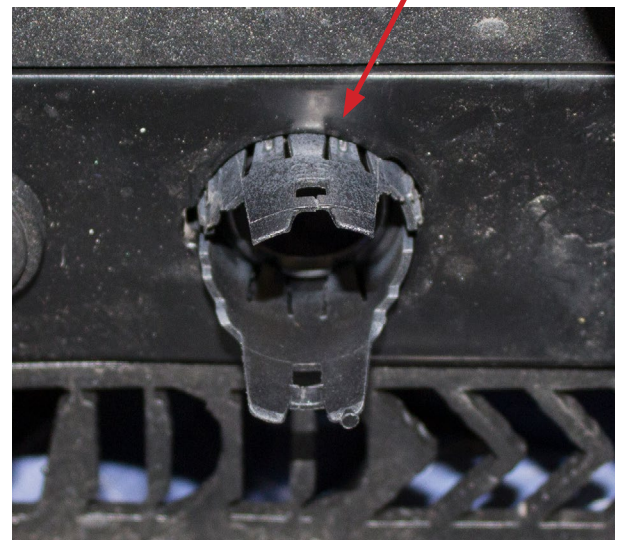
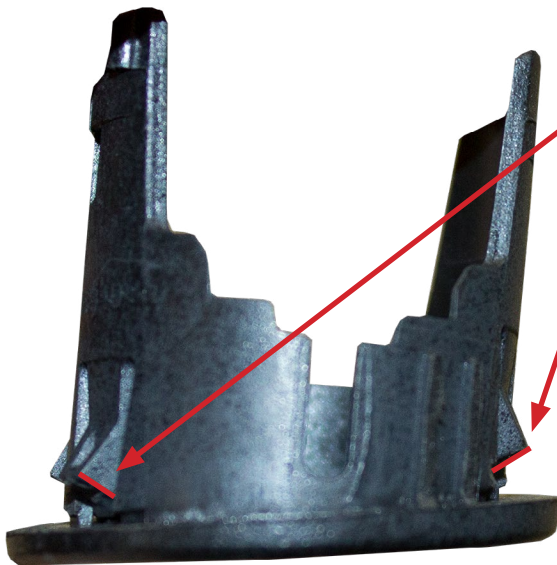


Fig U



22. Install the parking sensors by pressing them into the back side of the mounting rings until they click into place. Be sure to install these in the same position/orientation as they came off the OEM bumper. (Fig V)

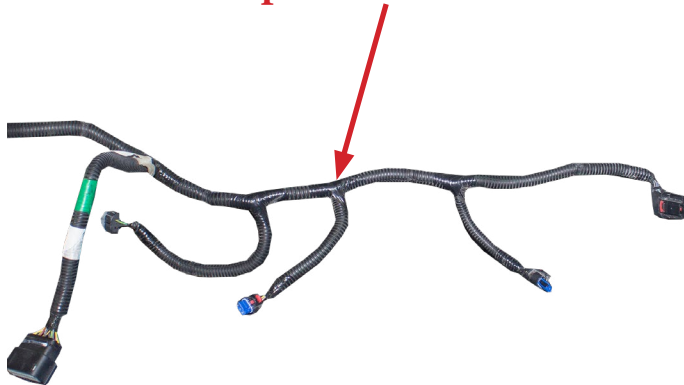


Fig V

23. Install any lights you have for your bumper. Follow the light manufacturer's install guide for mounting/wiring information.

24. Using a Utility Knife or something similar, strip the wiring harness loom on the parking sensor branch closest to the license plate light on each side of the harness. Be careful not to cut or damage any of the wires. (Fig W)

Strip the loom here



It should look like this when you're done

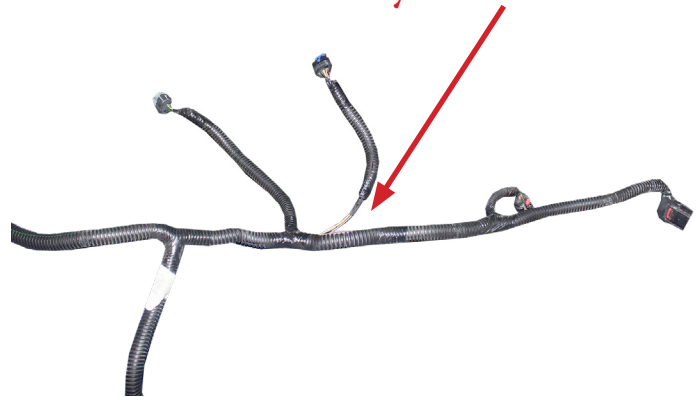
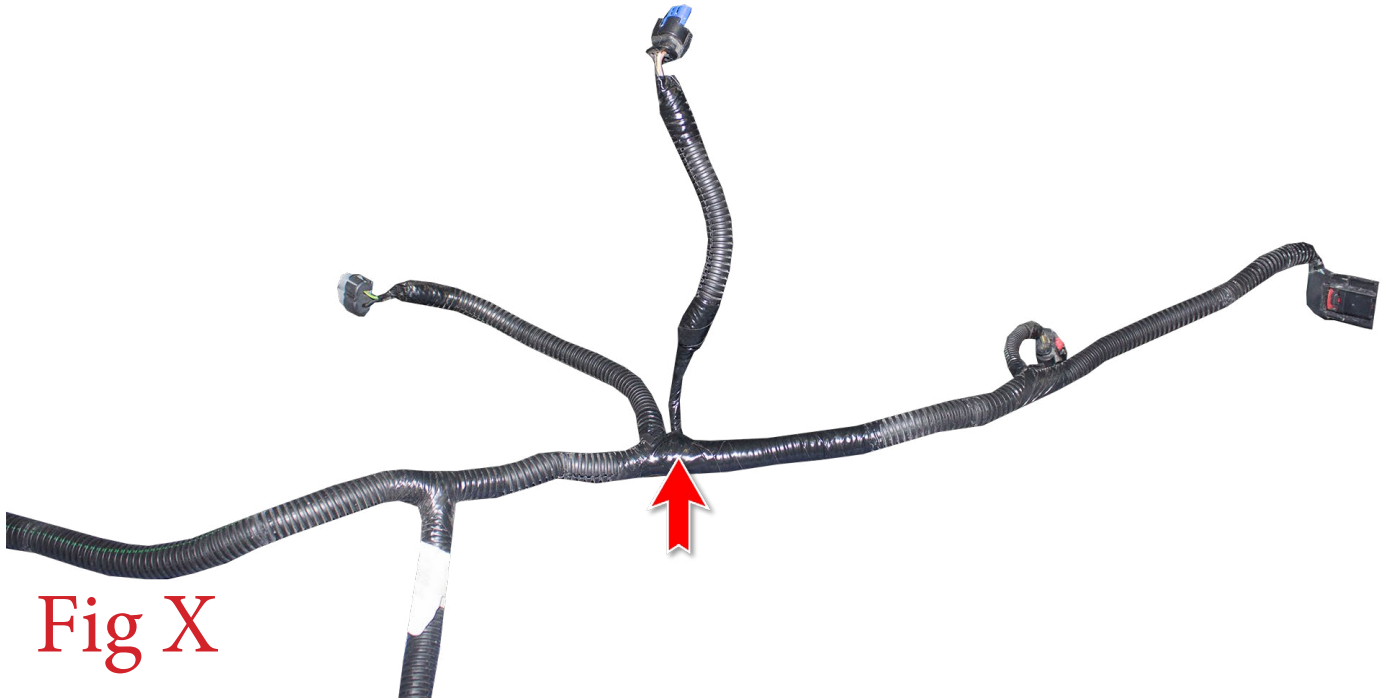


Fig W



25. Use electrical tape to rewrap both sections of loom that you unraveled. The final product should look like (Fig X) and that branch should now be longer and closer to the license plate light branch of the wire harness.



26. Install the wiring harness onto your new bumper. Plug it into each parking sensor and blind spot module. Be sure to keep the main plug on the same side as it came off the OEM bumper. Zip tie the harness up and out of harm's way if necessary.

27. Install the license plate light housings onto your new bumper. Use one of the supplied 1/4" x 3/4" Bolts (x1), 1/4" Washers (x1), and 1/4" Lock Nuts (x1) on each housing. () Once the housings are installed, install the license plate lights and plug them in. (Fig Y)





28. Install two of the supplied 1/4" U-Nuts onto each exhaust tip as shown in (Fig Z).

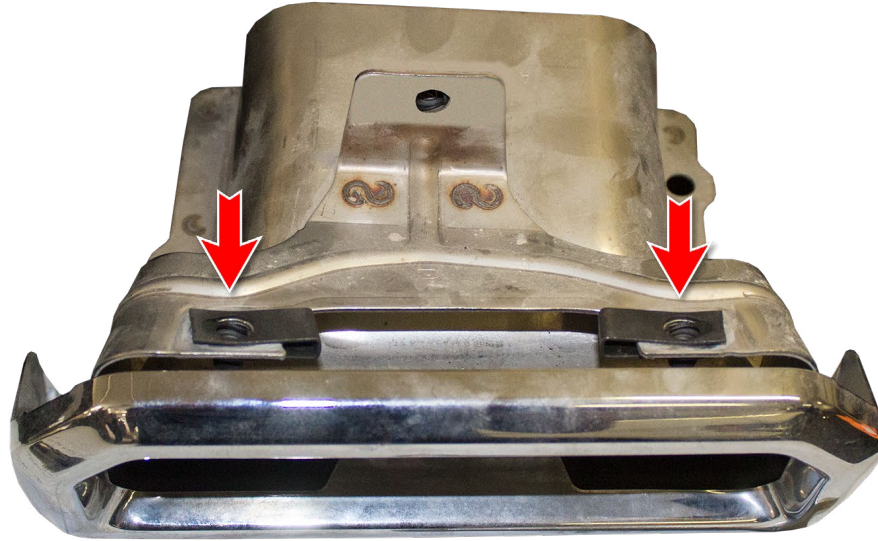


Fig Z

29. Install one of the supplied 1/4" U-Nuts onto each exhaust tip mounting tab on your new bumper. (Fig AA)

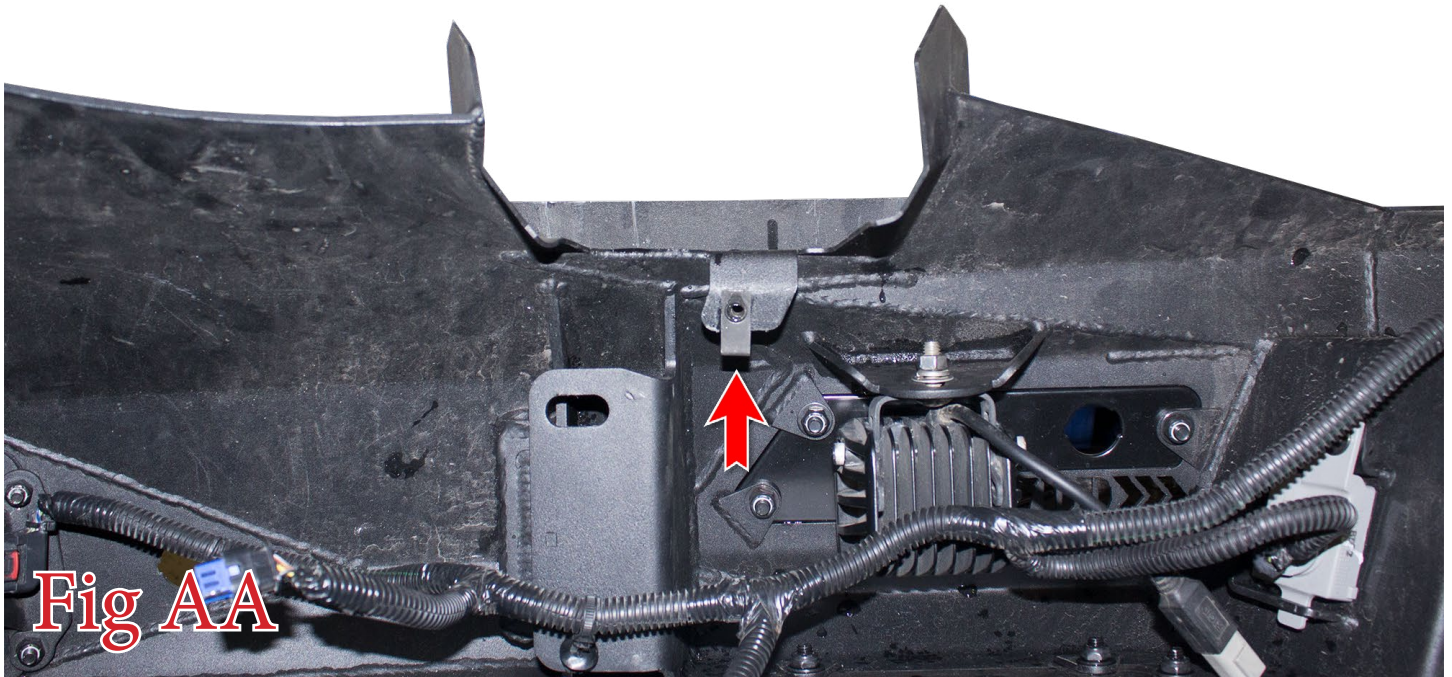
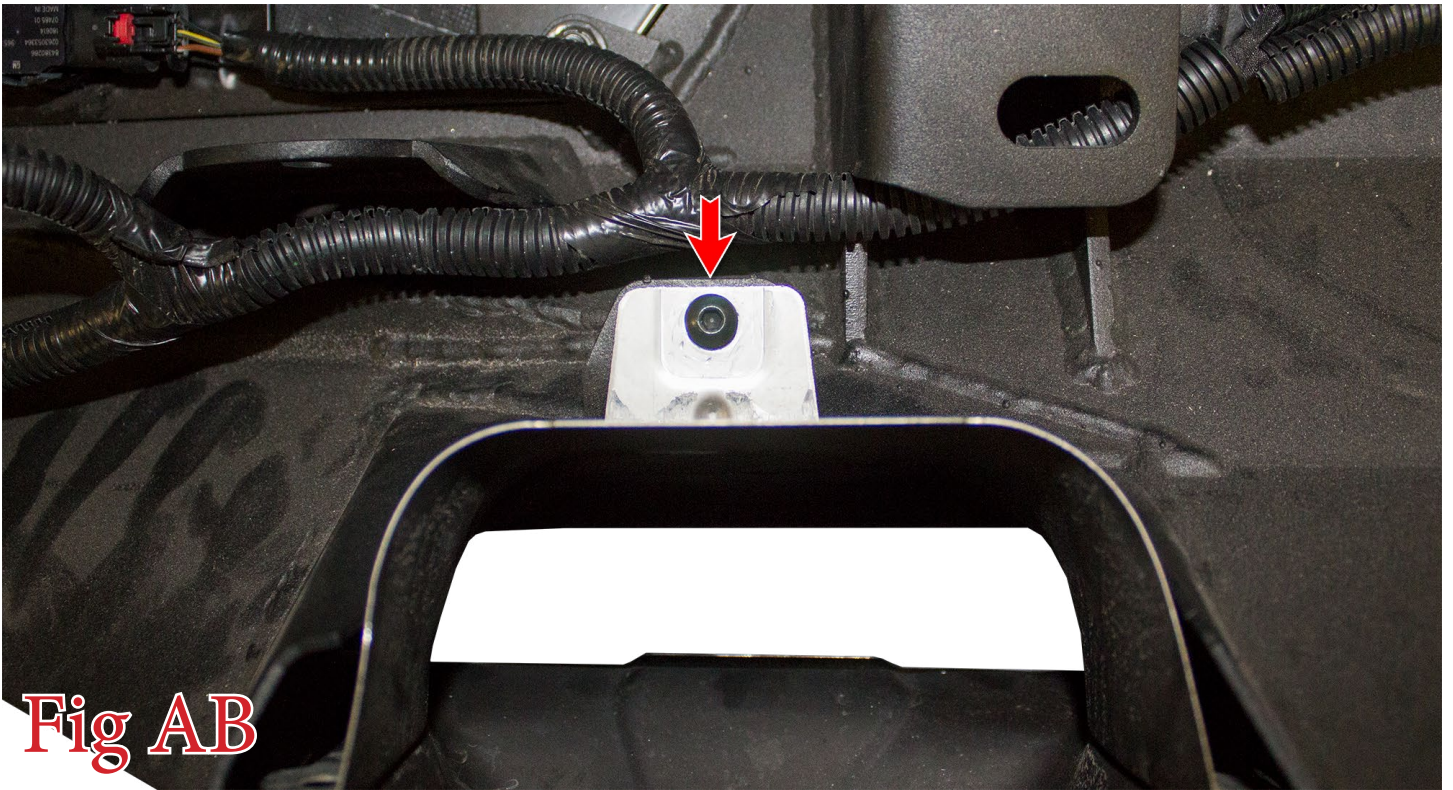


Fig AA

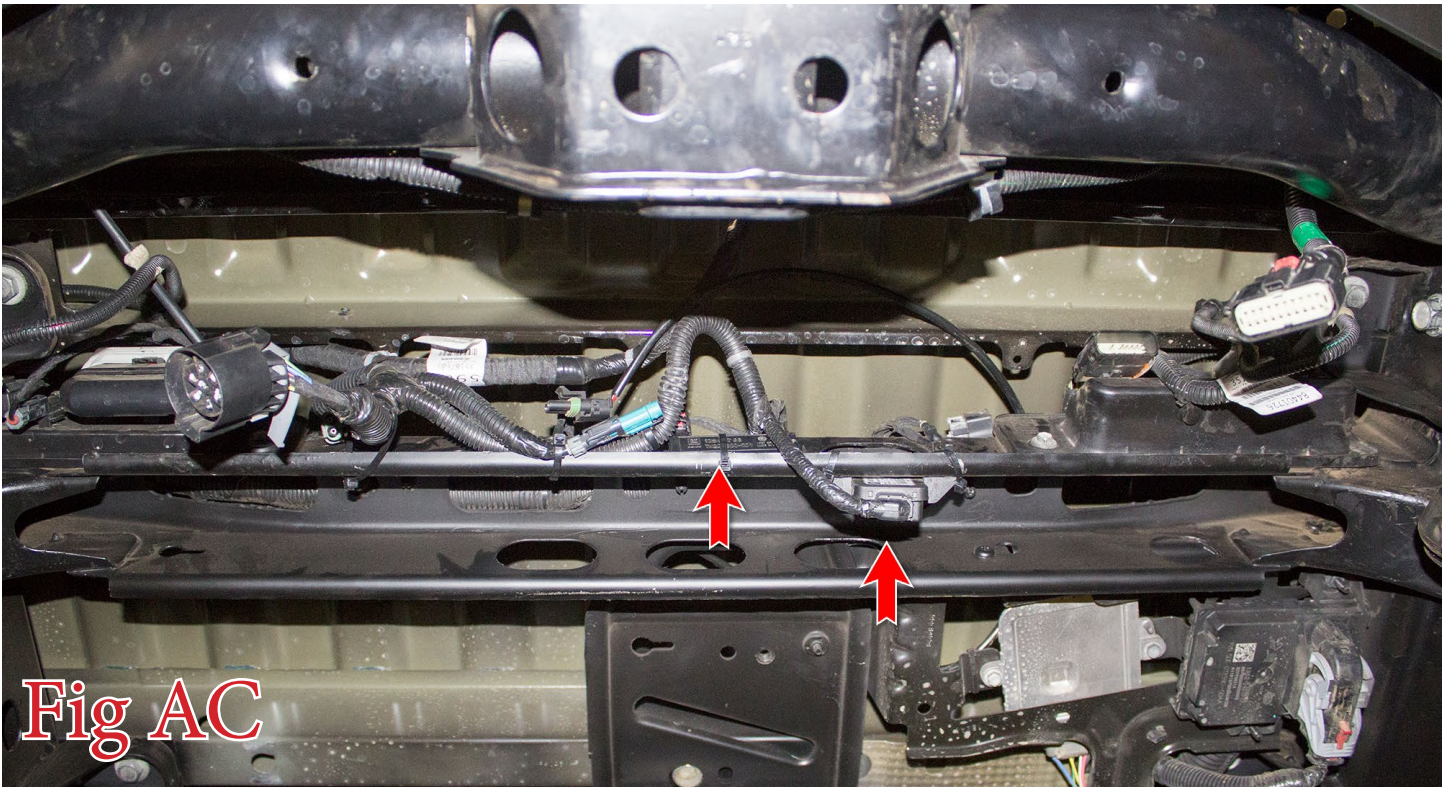


30. Set the exhaust tips in place and secure them to the bumper using the supplied 1/4" x 3/4" Bolts (x6) and 1/4" Washers (x6). (Fig AB)

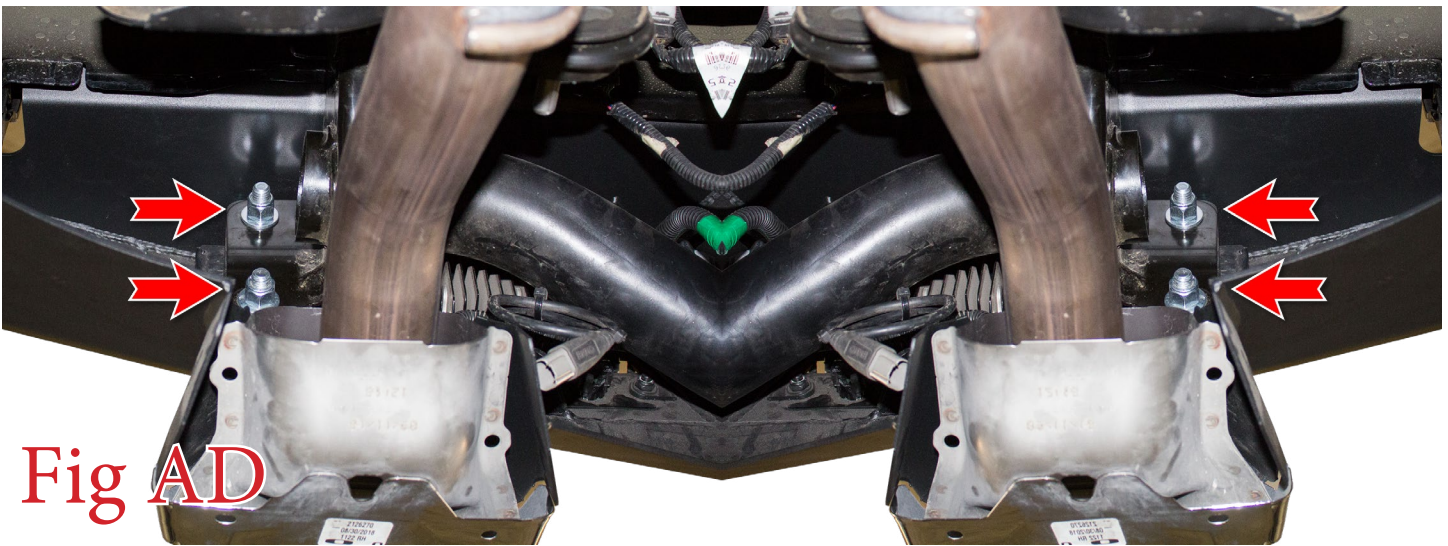




31. Find the two modules from Step 16. Plug them back into the wiring harness on the truck and zip-tie up and out of the way. (Fig AC)



32. Set the bumper in place on the vehicle. Secure it using the supplied 1/2" Bolts (x4), 1/2" Washers (x8), and 1/2" Lock Nuts (x4). Leave these bolts loose for now. (Fig AD)





33. Align your new bumper so it is straight in relation to the tailgate and centered left to right. Then, torque the 1/2" mounting bolts to 70 foot pounds.
34. Plug the bumper harness back into the connector from Step 1.
35. Push the trailer plug into its precut hole in the bumper. Then, plug the connector into the back side of the plug. (Fig AE)



Fig AE

36. Stand back and enjoy your new ADD Stealth Fighter™ Rear Bumper.
37. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

