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 Installation

1 Additional Hour to Wire Lights

You will need the following tools:

- Ratchet	- 7/16" Wrench	- 3/4" Wrench
- 5/32" Allen Wrench/Socket	- 5/16" Allen Wrench/Socket	- 7mm Socket
- 13mm Socket	- 18mm Socket	- 21mm Socket
- Cutoff Wheel	- Angle Grinder	- Black Paint

Included in Kit:

4	- Button Head Bolts (1/2"-13 x 1 1/2")	8	- Flat Washers (1/2")
4	- Nylon Lock Nuts (1/2"-13)	2	- Button Head Bolts (1/4"-20 x 1")
2	- Flat Washers (1/4")	2	- U-Nuts (1/4"-20)

Bumpers with Blind Spot Module Option Also Receive the Following:

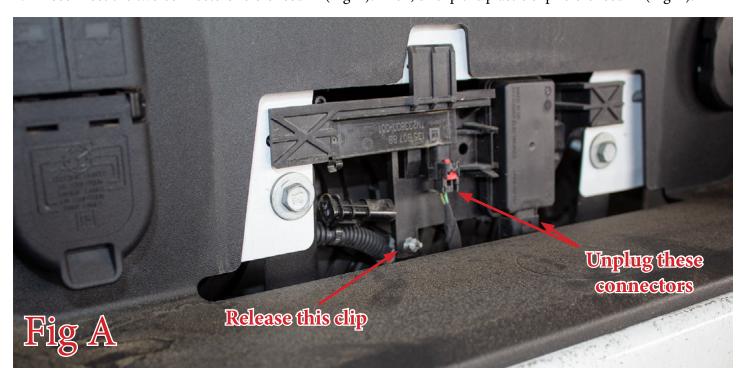
4	- Button Head Bolts (1/4"-20 x 1")	4 - Flat Washers (1/4")
4	- Nylon Lock Nuts (1/4"-20)	2 - Blind Spot Module Mounting Brackets

^{**}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.**

Removal:

- 1. Remove your license plate.
- 2. Disconnect the two connectors referenced in (Fig A). Then, unclip the plastic clip referenced in (Fig A).



3. Use a 13mm Socket to remove the two bolts that sit in the license plate area of the bumper. (Fig B)



4. Disconnect the three connectors on the back side of the trailer plug. Then, remove the plug from the OEM bumper. (Fig C)



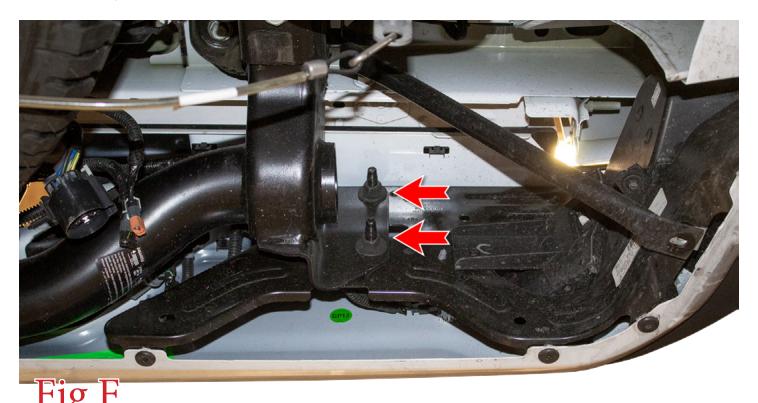
5. Unplug the main bumper connector. This connector is under the truck, on the passenger side (next to the spare tire). (Fig D)



6. Using a 13mm Socket, remove the bolt (1 per side) that holds the support bar to the bumper. (Fig E)



7. Using an 18mm Socket, remove the two bumper mounting nuts (per side). Then, remove the bumper from the vehicle. (Fig F)



8. Use a 21mm Socket to remove the side support bar mounting nut. Then, remove this bar from the vehicle. Repeat this step on the other side of the vehicle. (Fig G)



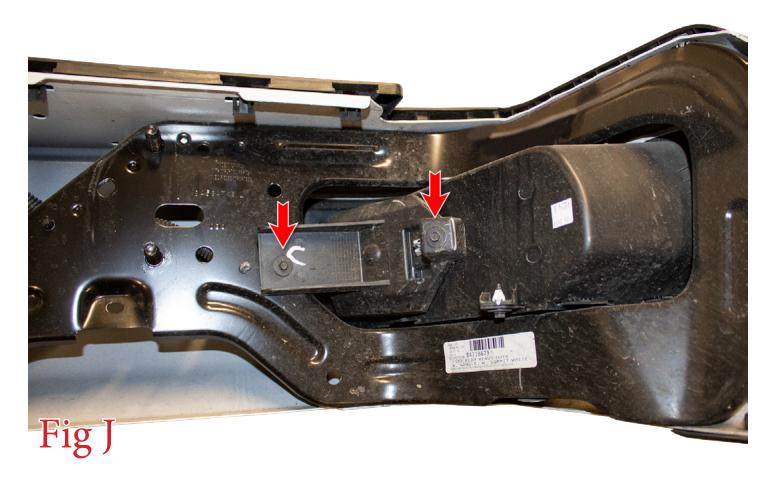
9. Follow the guidelines in (Fig H) and use a cutoff wheel or something similar to remove the license plate mounting bracket from your hitch tube.



10. Grind the hitch tube smooth and paint over any bare metal. Your hitch tube should now look like the one in (Fig I).



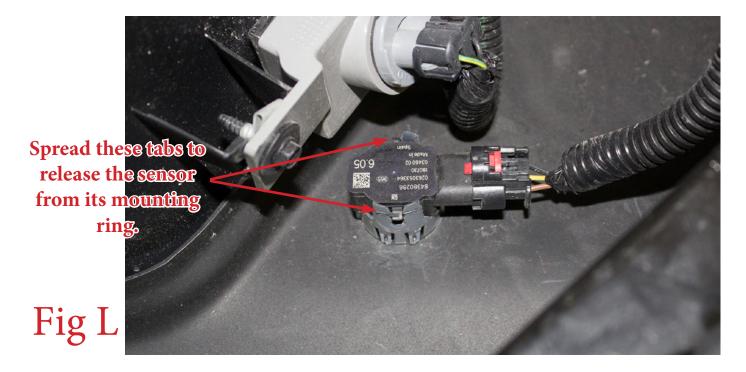
11. With the OEM Bumper on a work bench, use a 7mm Socket to remove the plastic blind spot module cover mounting bolts (x2). (Fig J)



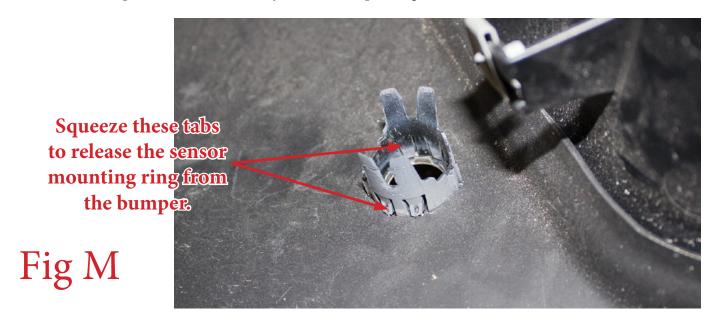
12. Remove the bolt holding the blind spot module to the plastic piece. (Fig K) Then, unplug the blind spot module and remove it from the bumper. **Make sure to keep track of which side (driver/passenger) it came off of.**



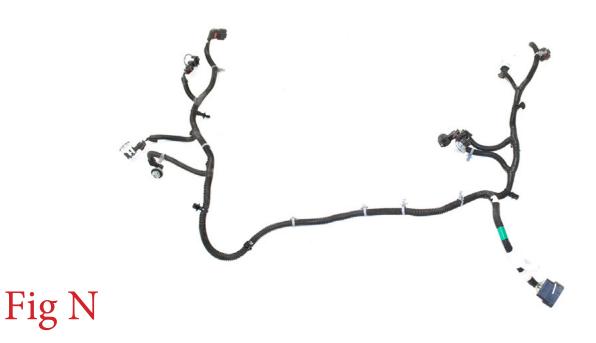
13. Unplug and remove the parking sensors. Do this by spreading the two tabs on the back side of the sensor mounting rings. Be sure to keep track of what position/orientation they are all installed on the OEM bumper so you can install them in the same position/orientation in your new bumper. (Fig L)



14. 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 M)



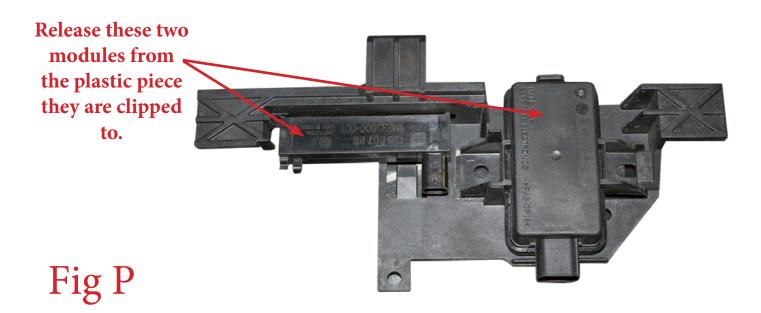
15. Unplug the license plate lights and release the series of clips to remove the entire bumper harness from the OEM bumper. (Fig N)



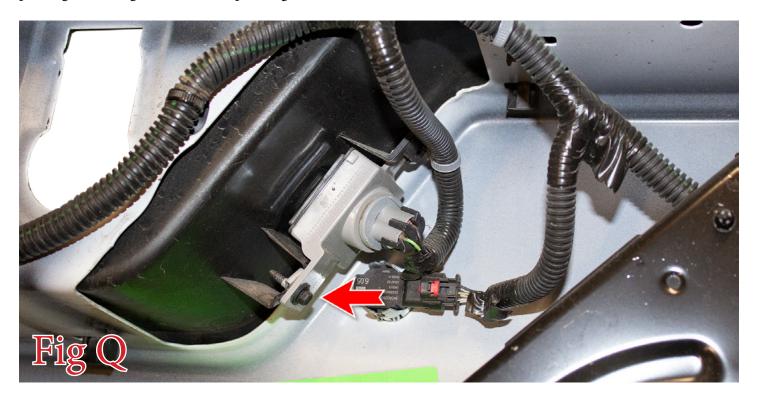
16. Unclip the three clips referenced in (Fig O). Then, remove the plastic bracket from the bumper.



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



18. Use a 7mm Socket to remove the license plate light mounting bolts (1 per side). Then, remove the license plate light housings from the bumper. (Fig Q)



Installation:

19. Take the modules from Step 17 and plug them back into their connectors on the truck. Then, zip tie them up and out of the way. (Fig R)



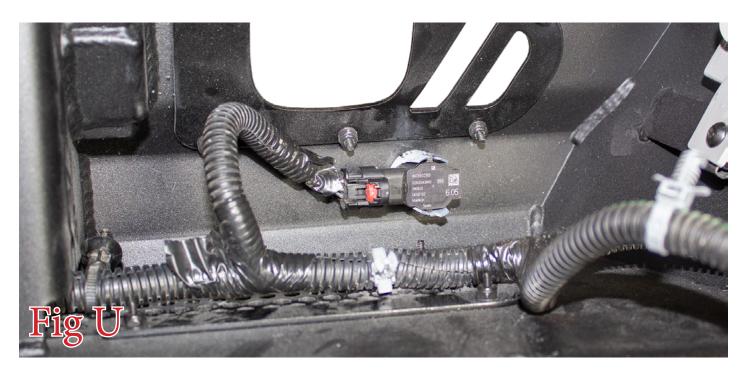
20. Install the supplied 1/4" U-Nuts (1 per side) onto the license plate light mounting holes. Then, set the license plate light housings in place on your new bumper. Use the supplied 1/4" Bolts (1 per side) and 1/4" Washers (1 per side) to secure the housings to the bumper. (Fig S) **Do not overtighten this bolt as it is very easy to crack the license plate light housings.**



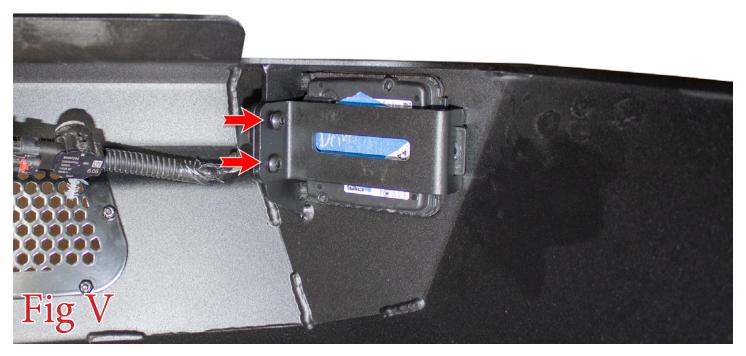
21. Install the parking sensor mounting rings onto the bumper by pressing them into their precut holes. Make sure to install them in the same position/orientation as they came off the OEM bumper. If they do not click into place right away, you may have to file down the mounting tabs on the sensor rings. Refer to (Fig T).



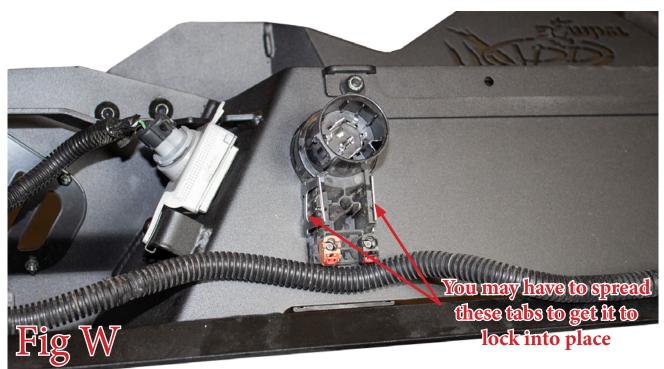
22. Install the license plate lights/parking sensors/bumper harness. Push the parking sensors into their mounting rings from the back side making sure they are installed in the same position/orientation as they came off the OEM bumper. Also make sure the main connector of the bumper harness is in the same place as it was on the OEM bumper. (Fig U)



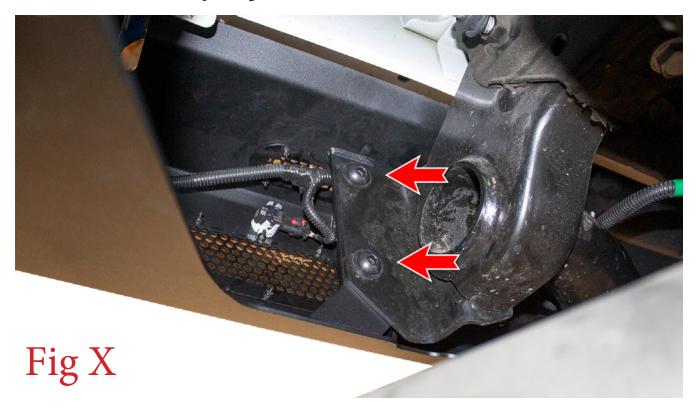
23. Install your Blind Spot Modules onto your new bumper. Do this using the supplied Bracket (1 per side) along with the supplied 1/4" Bolts (2 per side), 1/4" Washers (2 per side), and 1/4" Lock Nuts (2 per side). You will have to plug the module in as you install the bracket. Once the bracket is installed, the plug will no longer be able to be plugged in. (Fig V) Make sure to install the Blind Spot Modules in the same position/orientation as they came off the OEM bumper.



24. Install your Trailer Plug by pressing it into its precut hole until it clicks into place. If it does not click into place, you may have to spread the metal tabs on the back side of the trailer plug until they lock it into place. (Fig W)



- 25. If you have any lights to install on your bumper, now is a good time to do so. Please follow the light manufacturer's installation guide for mounting/wiring information.
- 26. Set the bumper in place on the vehicle. Then, use the supplied 1/2" Bolts (x4), 1/2" Washers (x8), and 1/2" Lock Nuts (x4) to secure the bumper. (Fig X) Leave these bolts loose for now.



- 27. Align the bumper so that it is straight in relation to the tailgate and also centered left to right. Then, tighten the 1/2" mounting bolts to 70 foot pounds.
- 28. Plug in the three connectors on the back side of the trailer plug.
- 29. Plug in the connector from Step 5.
- 30. Stand back and enjoy your new ADD Bomber™ HD Rear Bumper.
- 31. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

