

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 for OEM Removal/Bumper Installation**

1 Additional Hour to Wire Cube 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 | - 7mm Socket | - 13mm Socket |
| - 9/16" Wrench | - T-40 Torx Socket | - 3/16" Allen Wrench/Socket |
| - 7/32" Allen Wrench/Socket | - Grinder | - Black Paint |

Included in Kit:

- | | |
|-------------------------------------|--------------------------------------|
| 2 - Button Head Bolts (3/8-16 x 1") | 4 - Flat Washers (3/8") |
| 2 - Nylon Lock Nuts (3/8"-16) | 8 - Button Head Bolts (5/16-18 x 1") |
| 8 - Flat Washers (5/16") | 8 - U-Nuts (5/16"-18) |
| 8 - Plastic Snap-in Plugs | |

Removal:

1. From underneath the truck, unplug the main rear bumper harness connector along the driver side frame rail. (Fig A)

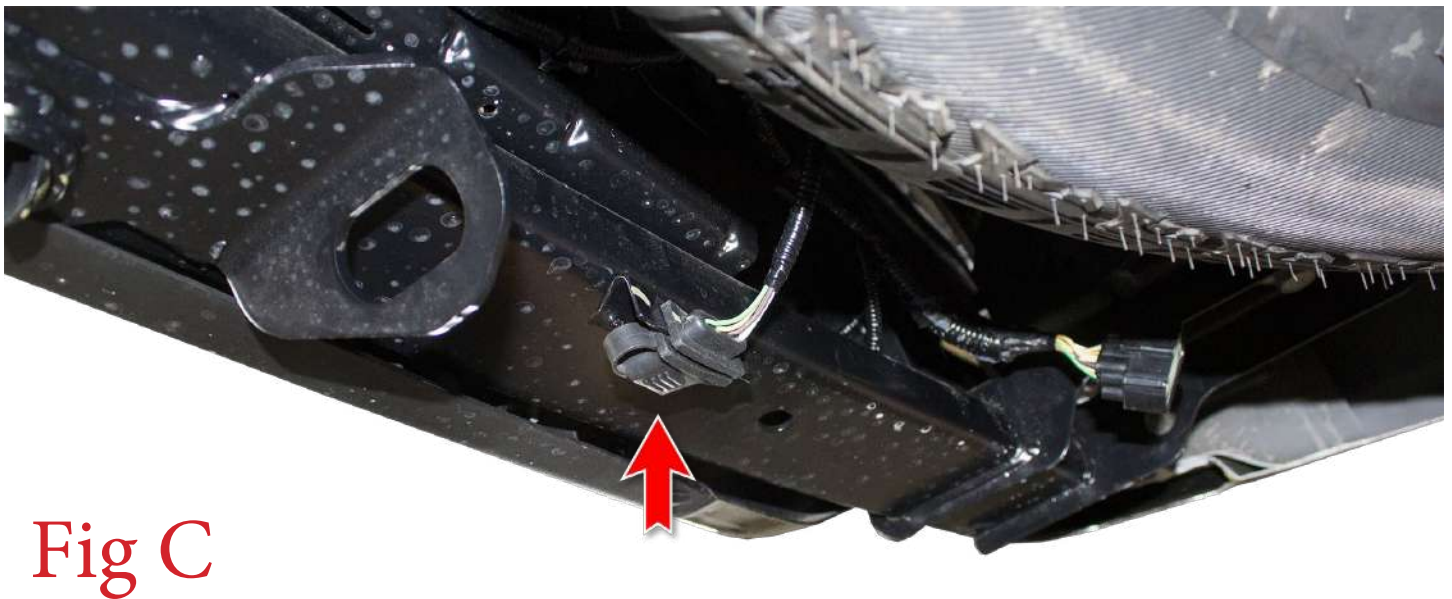


Fig A

2. Unplug your license plate lights and remove the inner part of the housing (Fig B)



3. Pull the trailer plug wiring free from its clip. (Fig C)



4. Release the plastic clips that hold the bumper harness to the back side of the plastic bumper piece. (Fig D)



Fig D

5. Remove the two plastic clips along the bottom of the plastic bumper piece. (Fig E)



Fig E

6. Remove the two plastic clips that sit in the license plate area. (Fig F)



Fig F

7. Remove the parking sensors from their mounting rings. Do this by spreading the two tabs on the back side of the rings and pushing the sensors out the back. **Make sure to keep track of the position/orientation these sensors are in so you can reinstall them in the same order/orientation on your new bumper.** (Fig G)



Spread these two tabs and push the sensor out the back side of the mounting ring

Fig G

8. Pull the plastic bumper piece off the vehicle. There are no tools required for this step, it simply pulls off by hand. (Fig H)



Fig H

9. Using a 13mm Socket, remove the bumper side pod mounting bolts (3 per side) referenced in (Fig I).

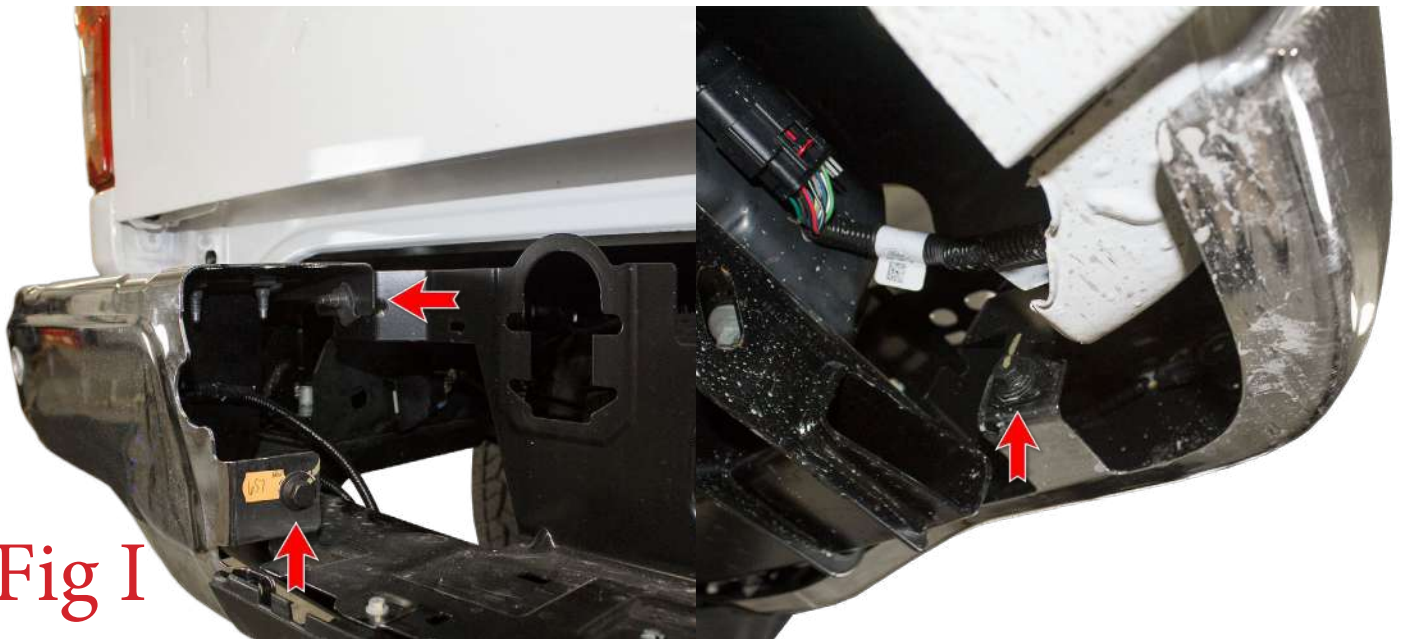


Fig I

10. Using a T-40 Torx Socket, remove the four (per side) upper mounting bolts for the bumper side pods. (Fig J)



Fig J

11. Release the last couple of plastic clips holding the harness to the rear frame. Then, remove the bumper harness from the vehicle. (Fig K)



Fig K

12. Using a 7mm Socket, remove the bolts referenced in (Fig L). Then, remove that plastic piece.



Fig L

13. Use a grinder to grind through the four welds on the license plate bracket. Once the welds have been ground through, the bracket will come off. Smooth out the frame and paint over any bare metal with black paint. (Fig M)



Fig M

14. Pull off the four (per side) OEM nut clips on the bumper mounting brackets. (Fig N)

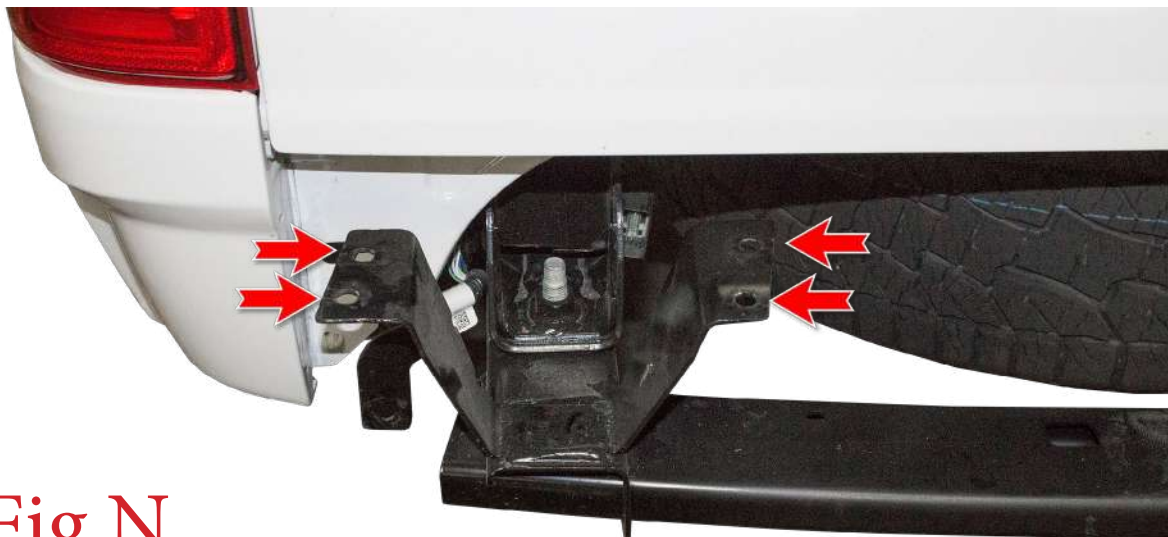


Fig N

15. Press in the two tabs on the back side of the parking sensor mounting ring to release both pieces from the bumper. Make sure to keep track of the position/orientation these sensors are in so you can reinstall them in the same order/orientation on your new bumper. (Fig O)



Installation:

16. Install the supplied U-Nuts (x8) onto the outer holes of each bumper mounting bracket. (Fig P)



17. Install the sensor mounting rings into your new bumper. Do this by pressing them into place from the front side of the bumper. **Make sure to install these in the same position/orientation as they came off the OEM bumper.** (Fig Q)



Fig Q

18. If you have any lights to install on your bumper, now is a good time to do so. Please follow the light manufacturer's guide for mounting/wiring information.

19. Install the license plate light housings by pressing them into their precut holes until they click into place. (Fig R)



Fig R

20. Install the parking sensors/wiring harness on your new bumper. Plug in the license plate lights and press the parking sensors into their mounting rings from the back side. **Make sure to install these in the same position/orientation as they came off the OEM bumper.** (Fig S)



Fig S

21. Set the bumper in place on the vehicle. Then, secure it using the supplied 5/16" Bolts (x8) and 5/16" Washers (x8). Leave these bolts loose for now. (Fig T)



Fig T

22. Install the supplied 3/8" Bolts (x2), 3/8" Washers (x4), and 3/8" Lock Nuts (x2) into the lower mounting holes on the bumper. Leave these bolts loose for now. (Fig U)



Fig U

23. Once all the mounting bolts are loosely installed, go back and torque the 3/8" mounting bolts to 30 foot pounds and the 5/16" mounting bolts to 15 foot pounds.

24. Push the supplied Snap-in Plugs (x8) into the holes for the upper bumper mounting bolts until they click into place. (Fig V)



Fig V

25. Plug the bumper harness back into the connector from Step 1.
26. Stand back and enjoy your new ADD Venom™ Rear Bumper.
27. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

