

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

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 | - 8mm Socket | - 10mm Socket |
| - 13mm Socket | - 16mm Socket | - 17mm Socket |
| - 18mm Socket | - 21mm Socket | - T40 Torx Socket |
| - 3/32" Allen Wrench/Socket | - 5/16" Allen Wrench/Socket | - 7/32" Allen Wrench/Socket |
| - 11/32" Socket or Wrench | - 9/16" Socket & Wrench | - 3/4" Socket or Wrench |
| - Drill | - 1/2" Drill Bit | - Cutoff Wheel |
| - Black Paint | | |

Included in Kit:

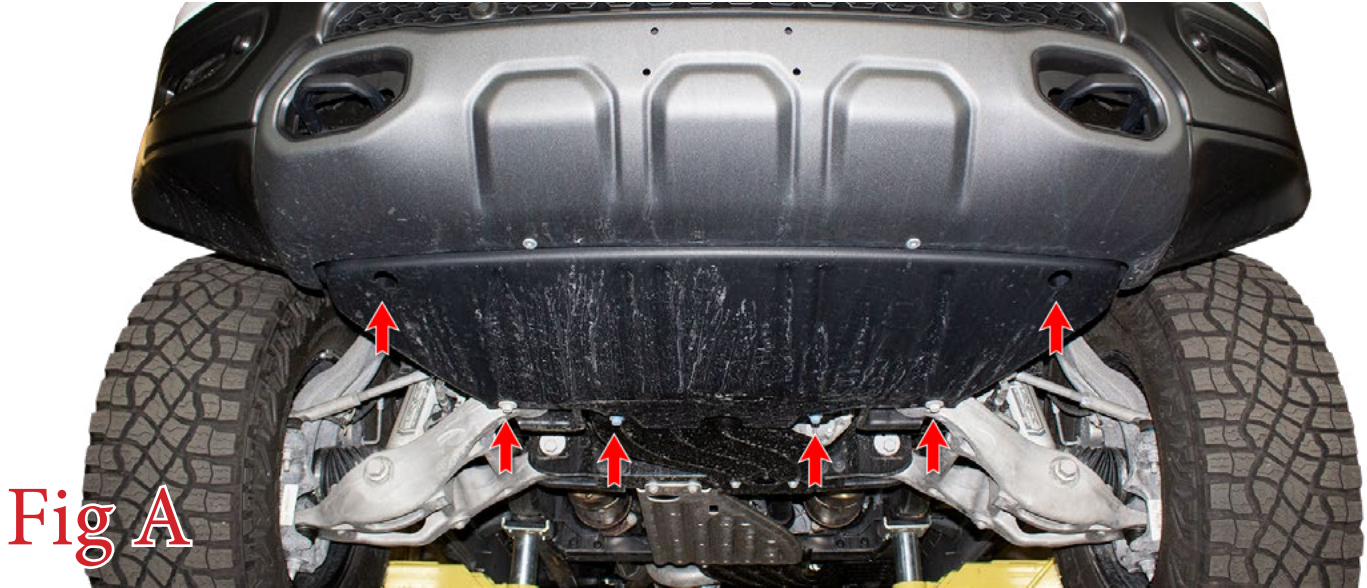
- | | |
|--|--|
| 4 - Hex Head Bolts (3/8"-16 x 1 1/4") | 4 - Wide Washers (3/8") |
| 4 - U-Nuts (3/8"-16) | 2 - Black Button Head Bolts (1/2"-13) |
| 2 - Black Washers (1/2") | 2 - Black Lock Nuts (1/2"-13) |
| 3 - Hex Head Bolts (M10-1.5 x 30mm) | 3 - Flat Washers (M10) |
| 4 - Black Button Head Bolts (#8-32 x 3/4") | 4 - Flat Washers (#8) |
| 4 - Black Lock Nuts (#8-32) | 1 - Parking Sensor Bezels (Set of 4) |
| 6 - Parking Sensor Cutout Plug | 6 - Parking Sensor Cutout Plug Grommet |

Also Included in Kit for Dual 20" Bumpers Only:

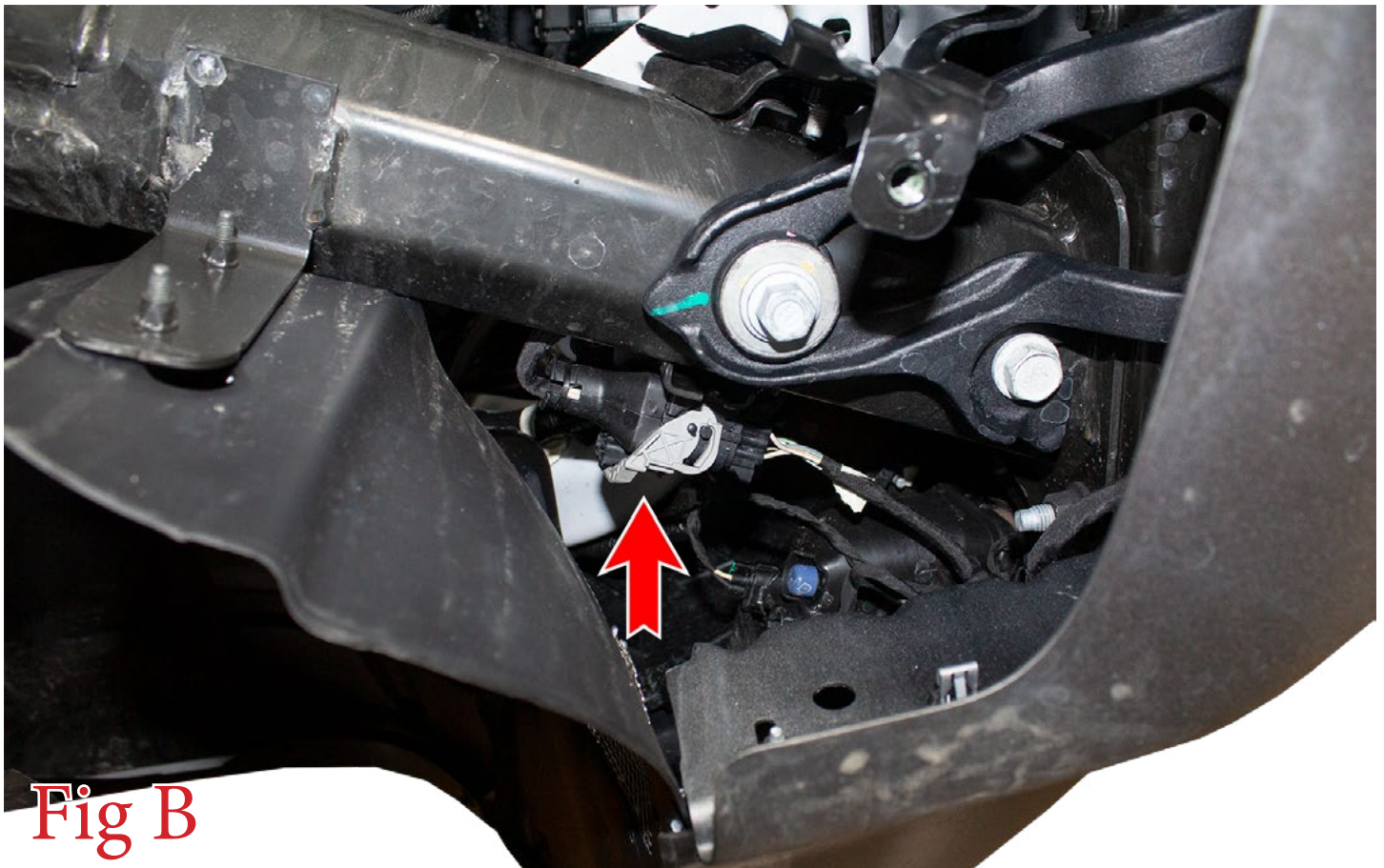
- | | |
|-------------------------|--------------------------------------|
| 2 - Light Mounting Tabs | 4 - Button Head Bolts (3/8"-16 x 1") |
| 4 - Flat Washers (3/8") | 4 - Nylon Lock Nuts (3/8"-16) |

Removal:

1. Using a 16mm Socket, remove the skid plate mounting bolts (x6). Then, remove the skid plate from the vehicle. (Fig A)



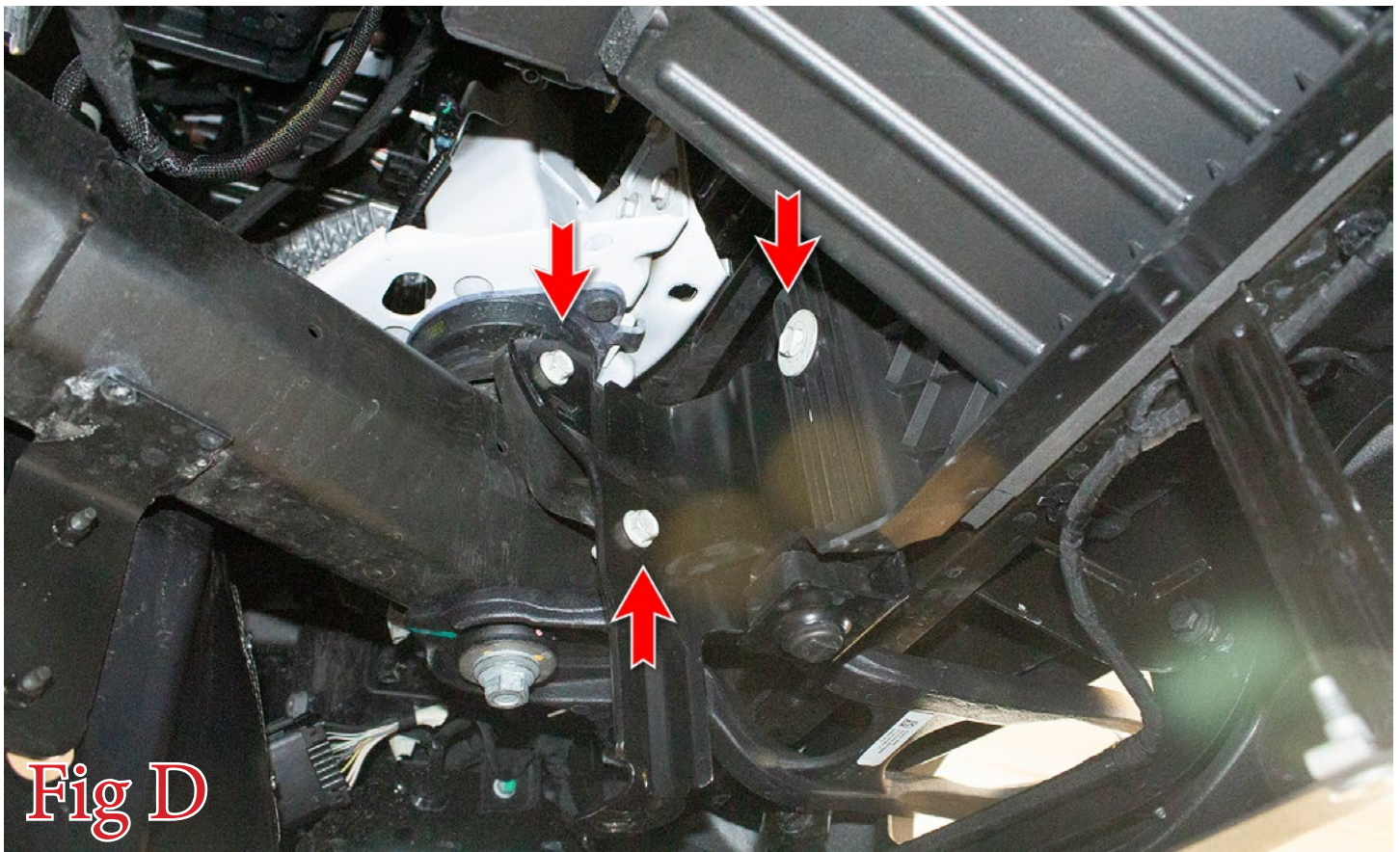
2. From underneath the vehicle, unplug the main bumper harness connector located on the driver side of the vehicle along the frame rail. (Fig B)



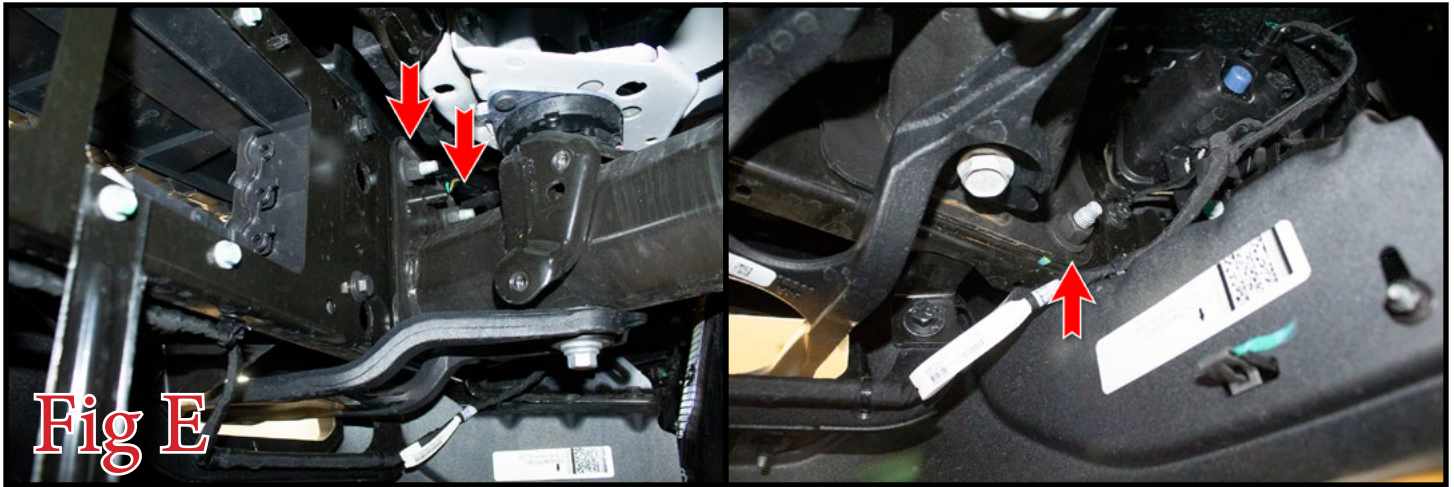
3. Using an 8mm Socket, remove the two bolts (per side) along the front portion of each front wheel well. (Fig C)



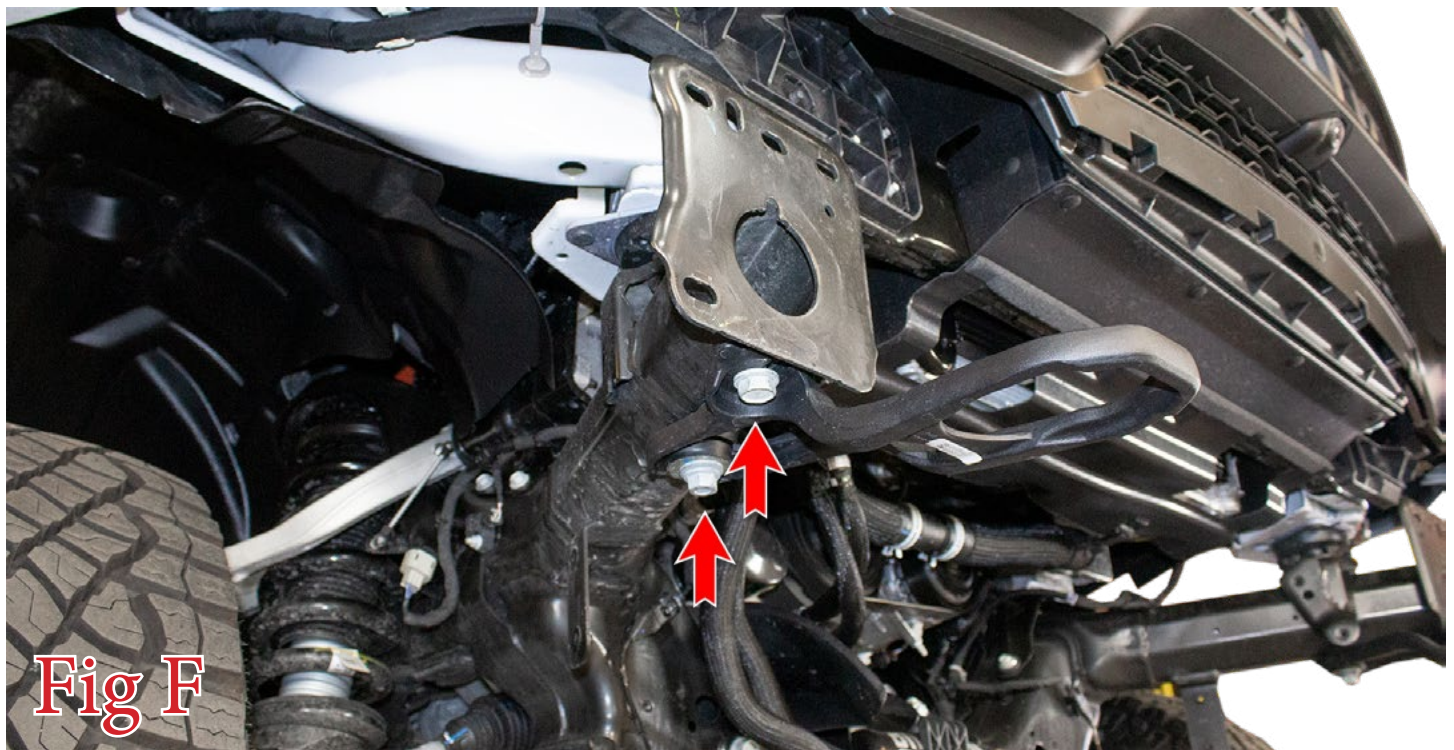
4. Using a 13mm Socket, remove the three bolts (per side) that hold the oil cooler to the vehicle. Then, zip tie the cooler out of the way for the time being. (Fig D)



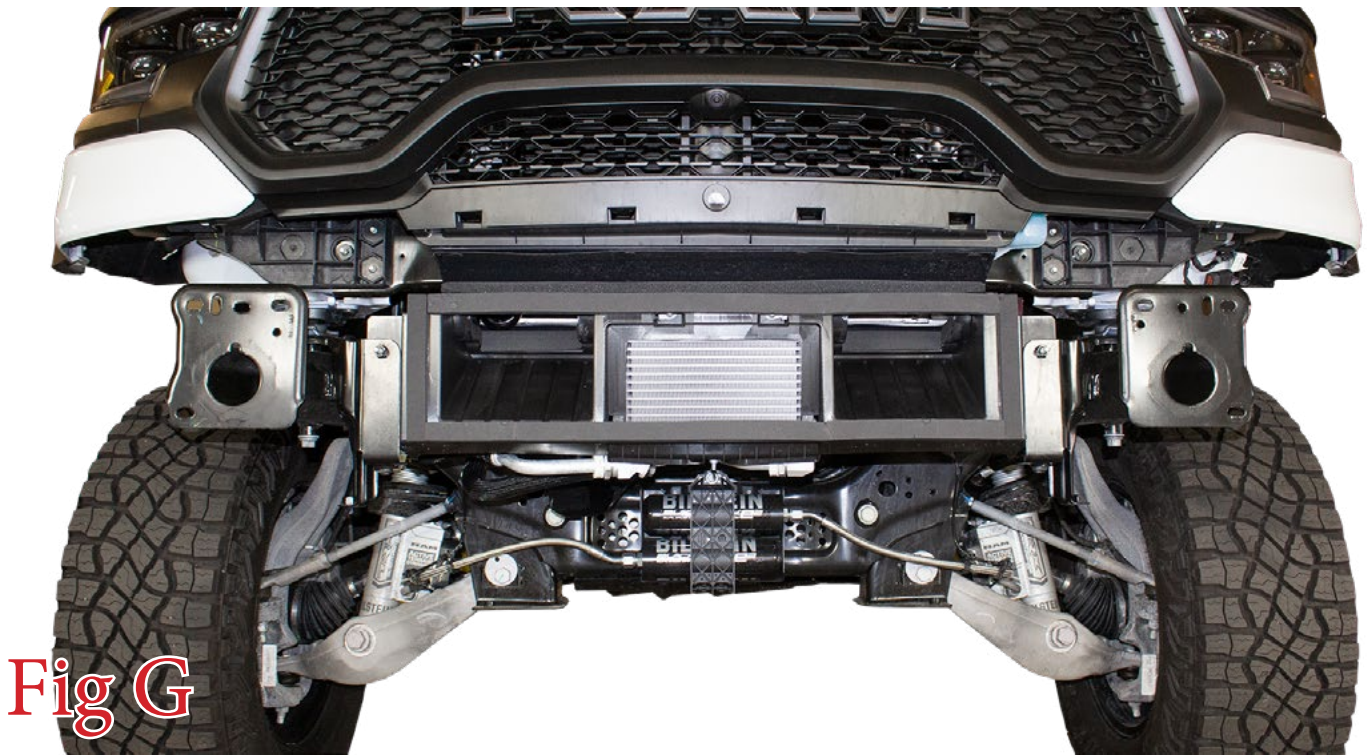
5. Using an 18mm Socket, remove the three mounting nuts (per side) that hold the bumper to the vehicle. Then, remove the bumper from the vehicle. (Fig E)



6. Use an 18mm and 21mm Socket to remove the two tow hook mounting bolts (per hook). Then remove the tow hooks from the vehicle. (Fig F)



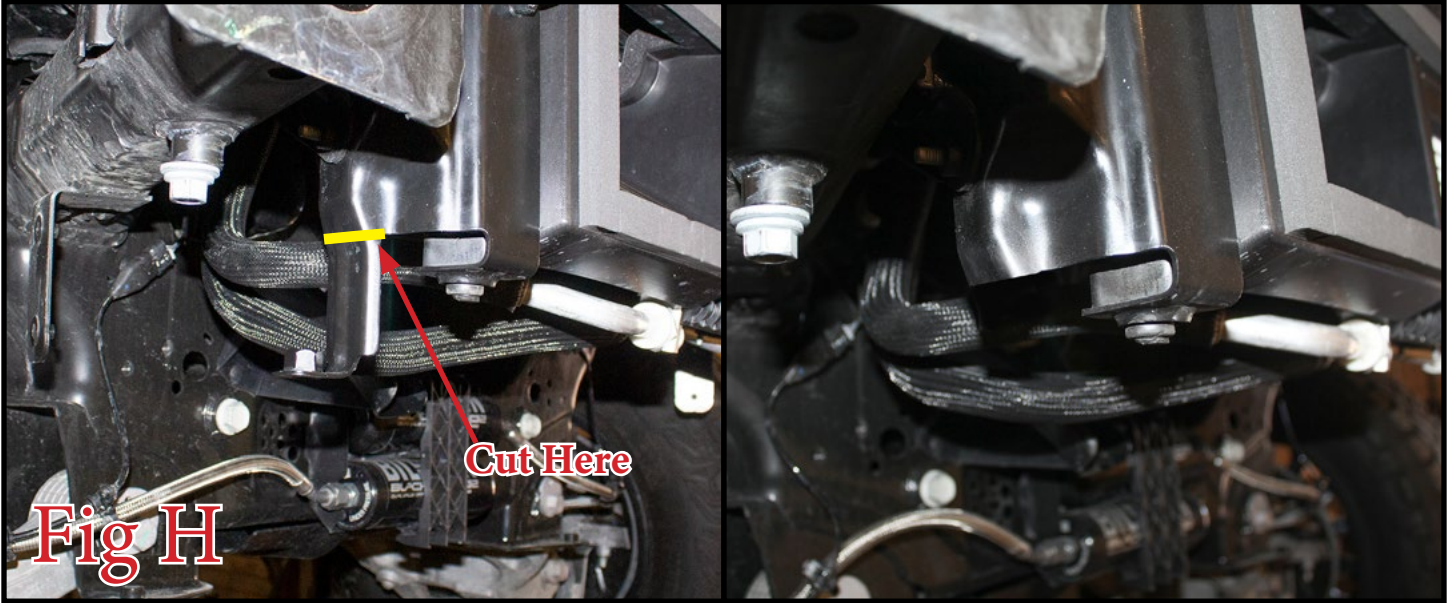
7. Reinstall the oil cooler by reinstalling the bolts that were removed in Step 4. (Fig G)



8. Use a cutoff wheel or something similar to trim the skid plate mounting bracket as shown in (Fig H). **Make sure to paint over any bare metal.**

Before

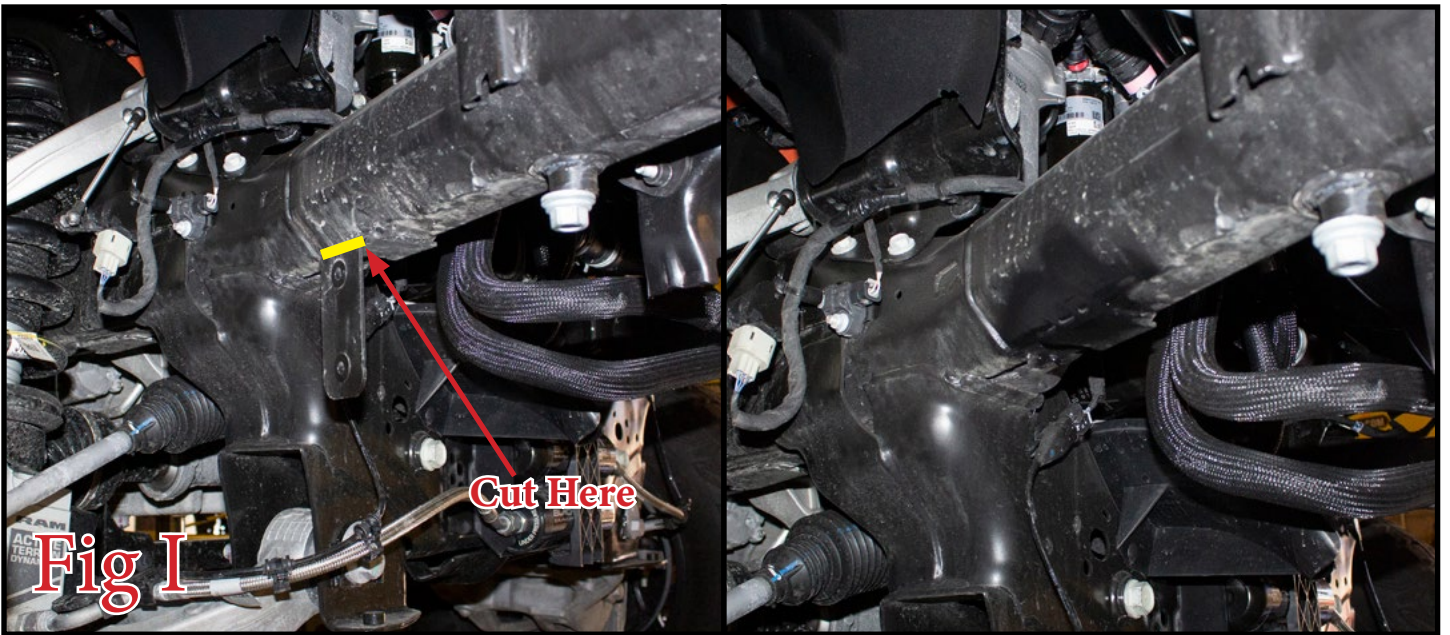
After



9. **This step is optional and is done for aesthetics.** Use a cutoff wheel or something similar to trim the inner fender mounting bracket as shown in (Fig I). **Make sure to paint over any bare metal.**

Before

After



10. Set the OEM bumper on work bench. Use an 8mm Socket to remove the three mounting bolts (per side) that hold the inner liner to the bumper. Remove the inner liners from the bumper. (Fig J)

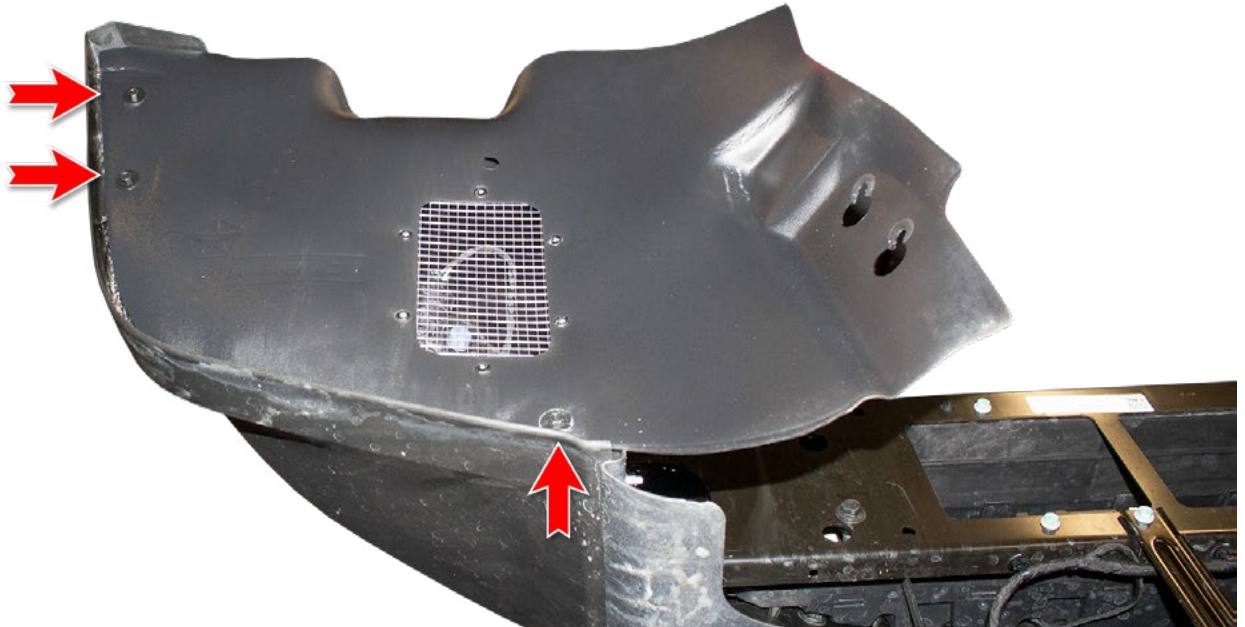


Fig J

11. Remove the fog lights from the OEM bumper. To do this, remove the two vertical facing bolts (T40 Torx Socket) along the top side of the fog light. Then, remove the 10mm bolt and nut along the bottom side of the fog light piece. Unplug the fog light and remove any plastic harness clips that need to be removed to get this piece off the bumper. (Fig K)

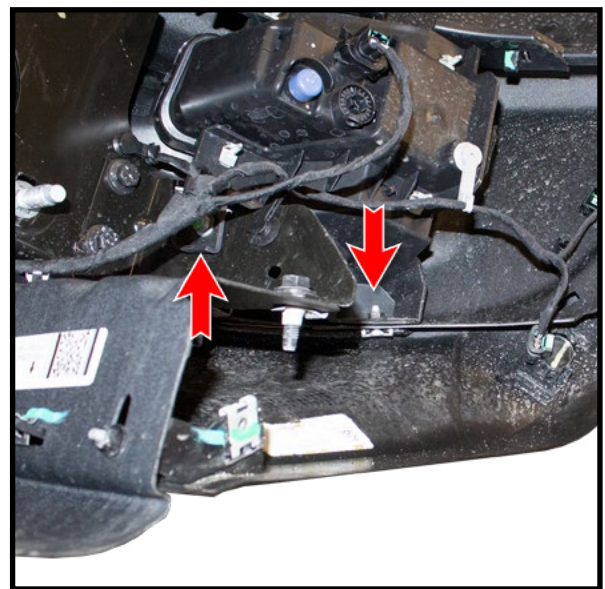
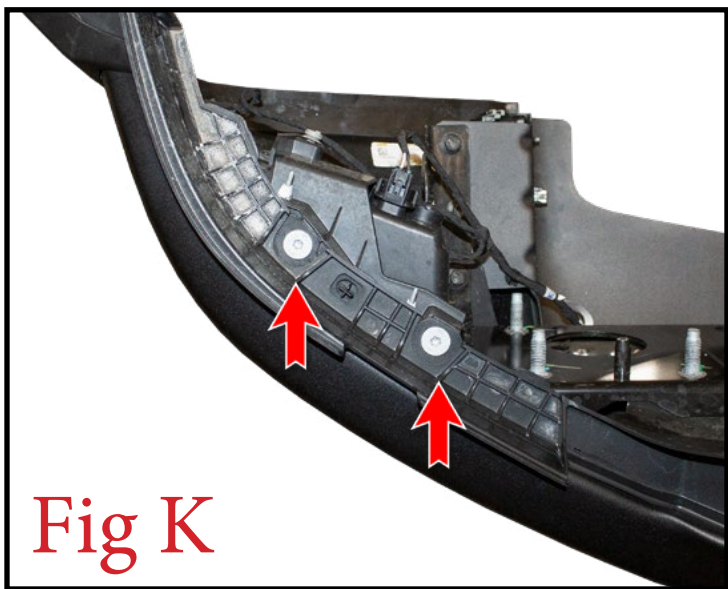
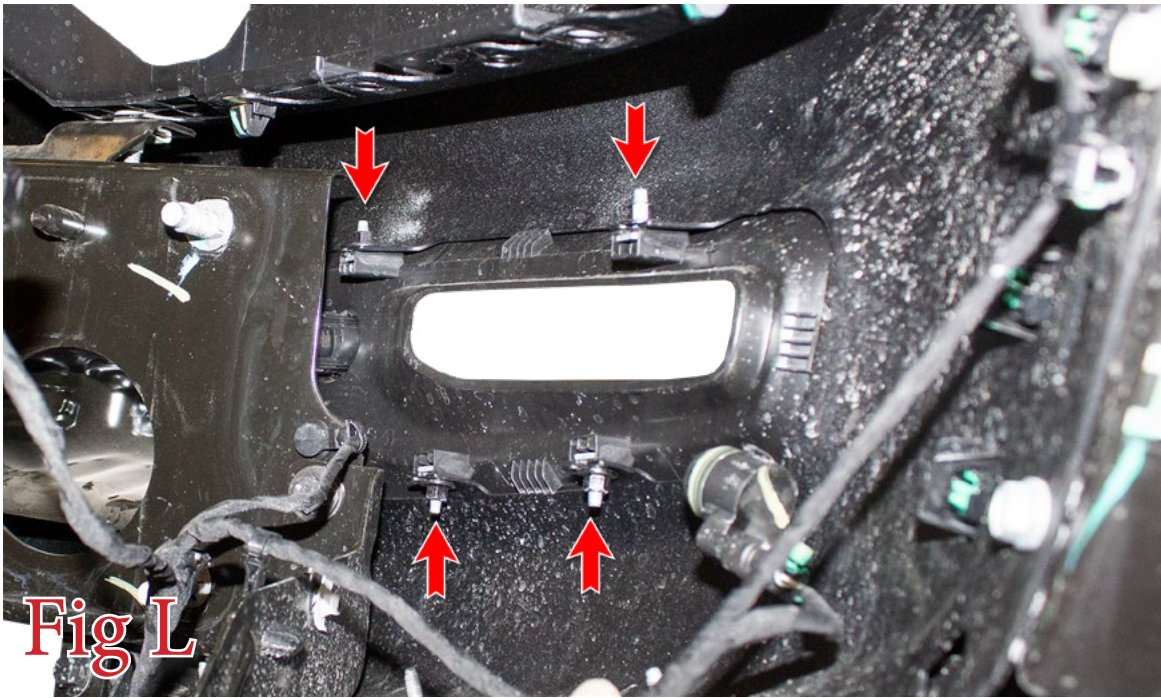
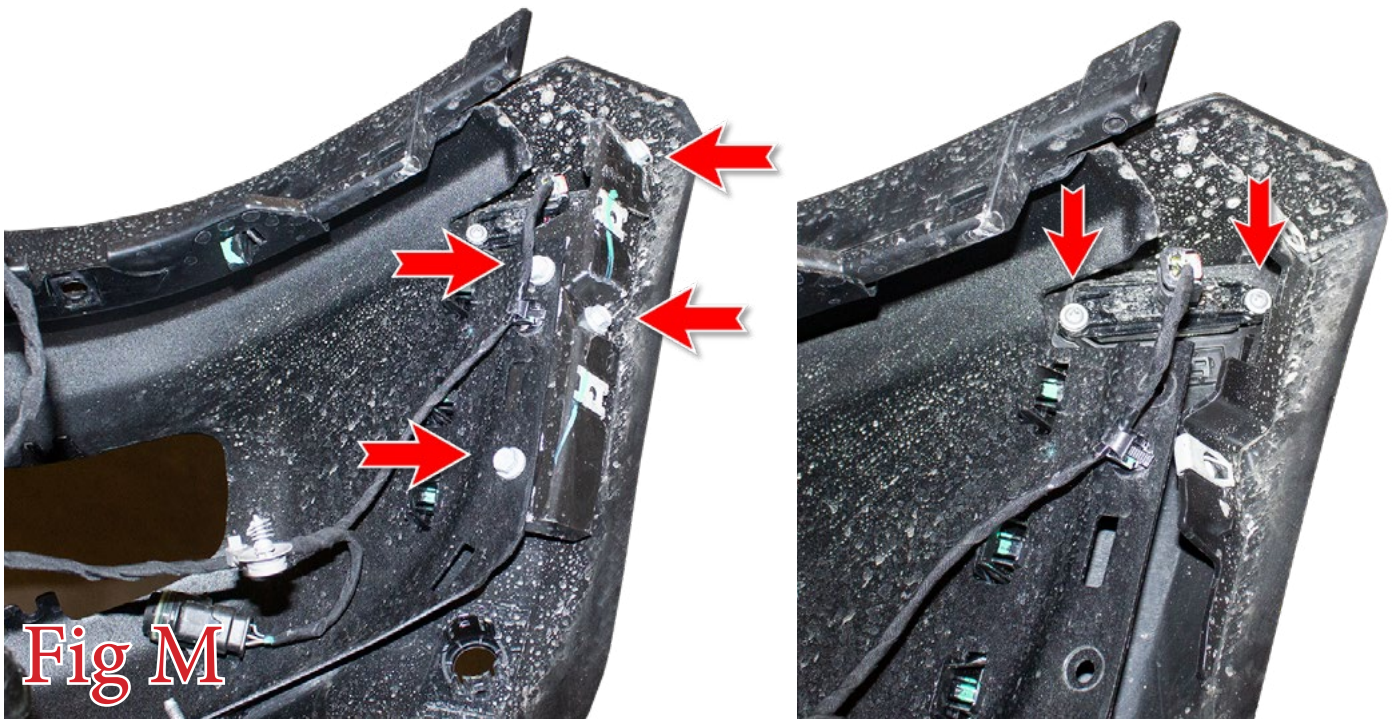


Fig K

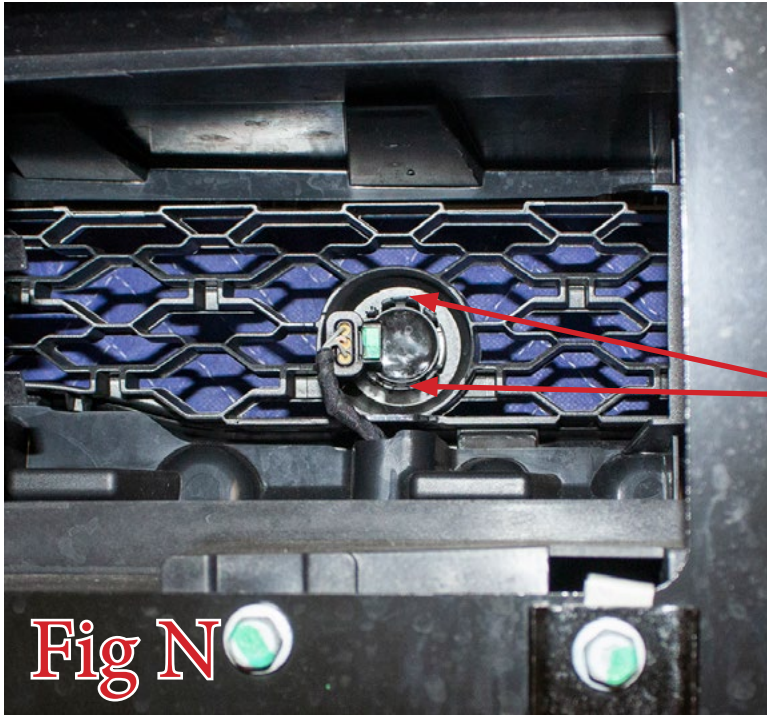
12. Use an 8mm Socket to remove the mounting nuts that hold the fog light trim piece onto the bumper. Then, remove that piece from the bumper. (Fig L)



13. Use a 10mm Socket to remove the four bolts that hold the plastic trim piece to the edge of the OEM bumper. Then, remove that piece and use a Phillip's Head Screwdriver to remove the two marker light mounting screws. Remove the marker lights from the bumper. (Fig M)

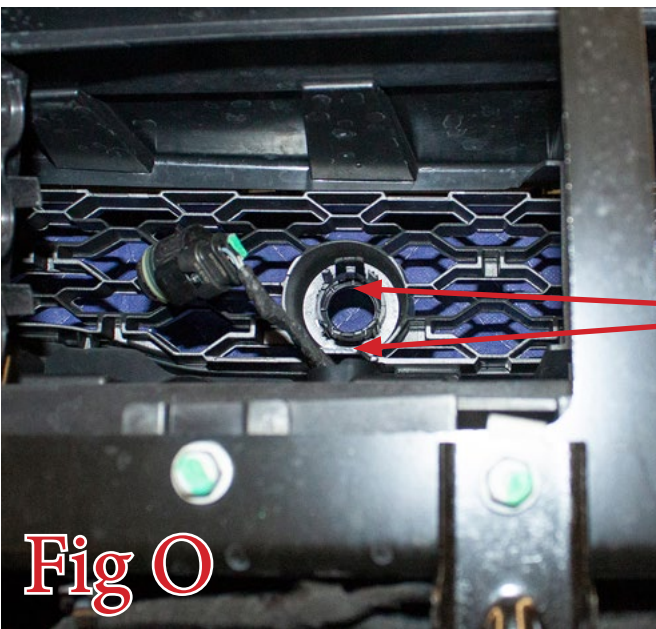


14. Remove the parking sensors from their mounting rings. To do this, spread the tabs on the back side of the rings and push the sensors out the back side. **Make sure to keep track of the position/orientation they come off your OEM bumper so you can reinstall them in the same position/orientation on your new bumper.** (Fig N)



Spread these two tabs to release the parking sensor from its mounting ring

15. Remove the inner four sensor rings. Do this by pressing in the tabs along the base of the sensor rings and pushing the rings out the front side of the bumper. **Make sure to keep track of the position/orientation they come off your OEM bumper so you can reinstall them in the same position/orientation on your new bumper.** (Fig O) You do not need to remove the outer two sensor bezels.



Squeeze these two tabs to release the mounting rings from the bumper

Fig O

16. Release the series of plastic clips holding the OEM bumper harness to the OEM bumper. Then, remove the harness from the OEM bumper. (Fig P)



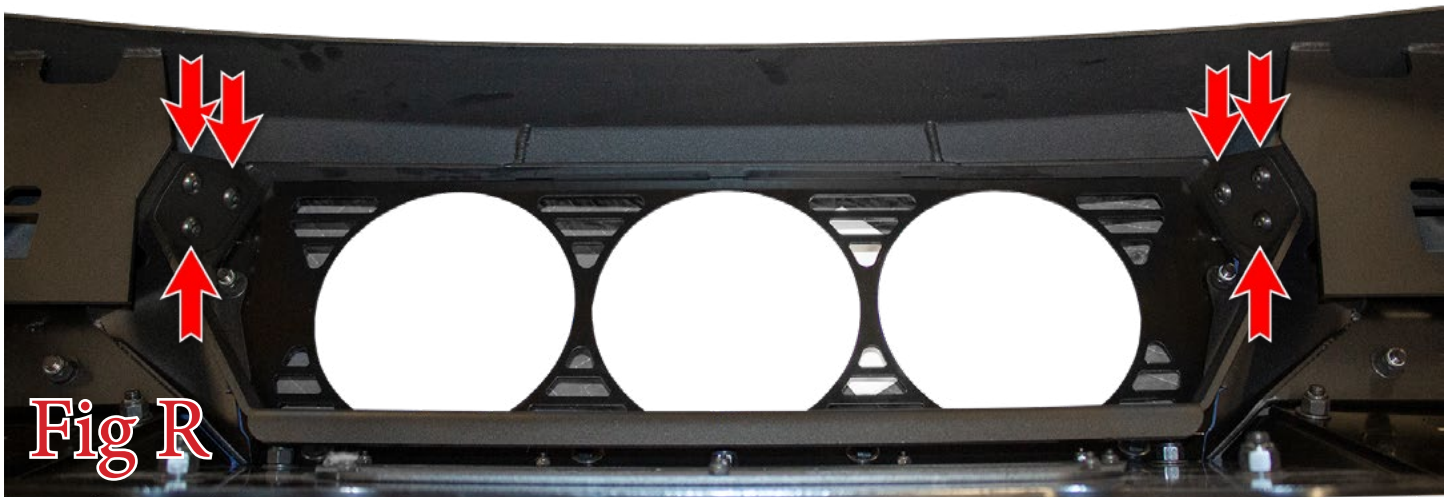
Fig P

Installation:

17. If you have the dual 20" light bar version of this bumper, follow this step. If not, skip this step. Use the supplied 3/8" Button Bolts (x4), 3/8" Washers (x4), and 3/8" Lock Nuts (x4) to loosely install the onto the bumper. Then, install the light bars using the hardware supplied by the light manufacturer. Once all bolts are loosely installed, tighten the light manufacturer's hardware to their torque spec. Tighten the 3/8" Button Head Bolts to 30 foot pounds. The final product will look like (Fig Q).



18. If you have the Baja LP6 version of this bumper, follow the next 3 steps. If not, skip to Step 21. Remove the 6 bolts that hold the light bracket to the bumper. Then, remove this bracket from the bumper. (Fig R)



19. Install your Baja LP6 lights using the light manufacturer's mounting hardware. (Fig S)



Fig S

20. Reinstall your light bracket onto the bumper by reversing Step 18.

21. If you have the Rigid 360 Series version of this bumper, you can install your lights onto the bumper without removing the light bracket. You may also install your cube lights onto the side pods of your bumper at this time.

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

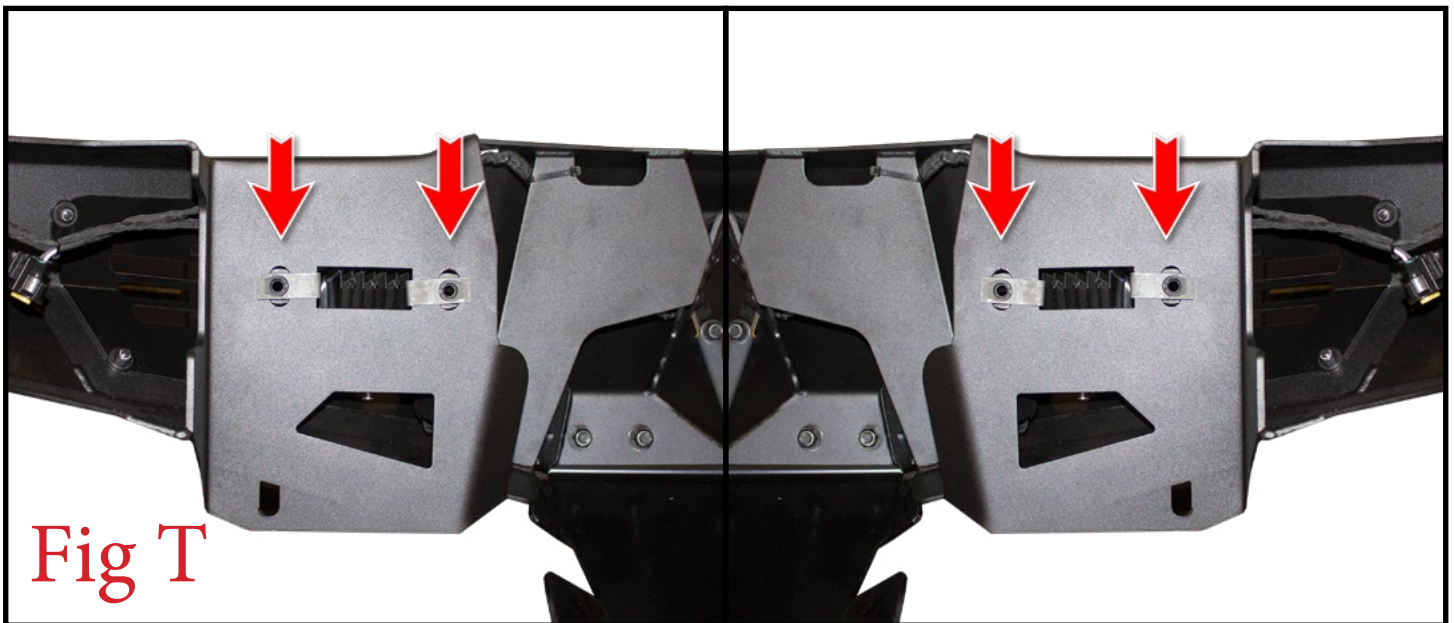


Fig T

23. Install the inner four parking sensor mounting rings and parking sensors onto your new bumper. Carry over the wiring harness from OEM bumper at the same time. Install the sensors/rings by pressing the rings into their precut holes until they click into place. Then, press the sensors into the rings from the back side. **Make sure to install them in the same position/orientation as they came off your OEM bumper.** (Fig U)

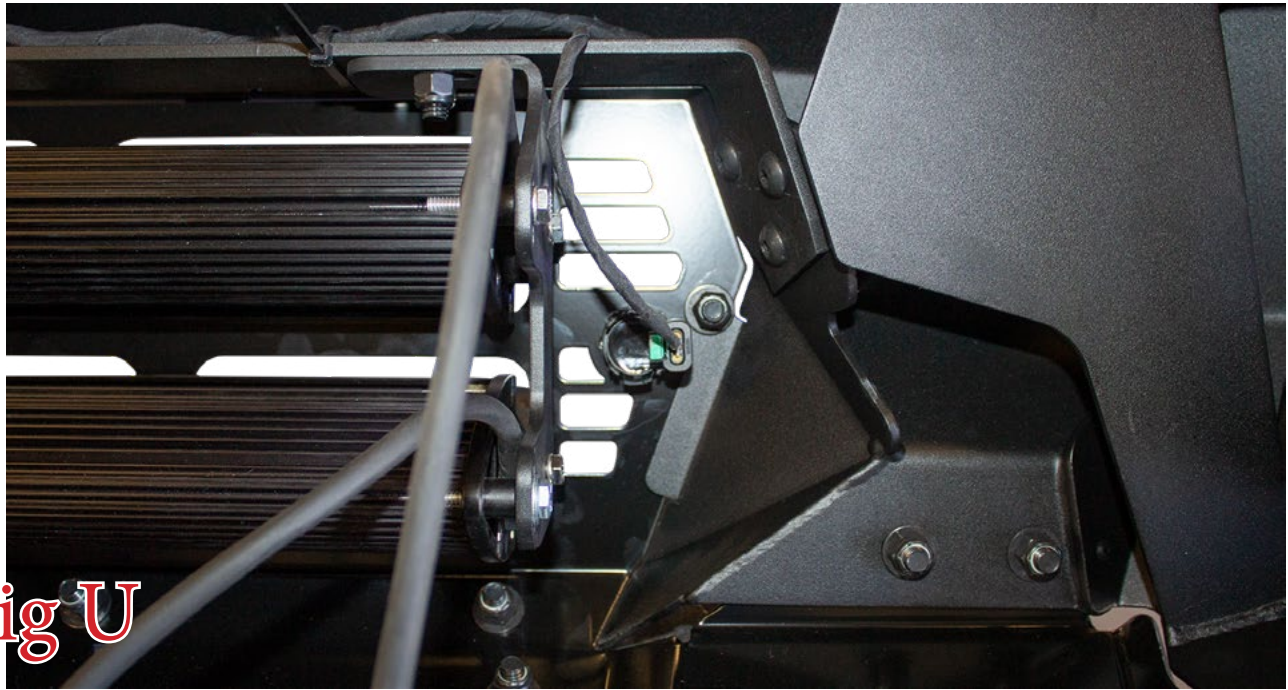


Fig U

24. On the two outer sensor locations install the sensors in the provided bezels with the skinny side facing up. You will notice that one side will be oriented the same as factory and the driver side will be 180 degrees opposite. ****Also note that the sensor plug needs to be 90 degrees to the ground**** If your sensor bezel is loose in the bumper and can easily be rotated we recommend applying a small dab of silicone or epoxy to the back side to prevent them from rotating.

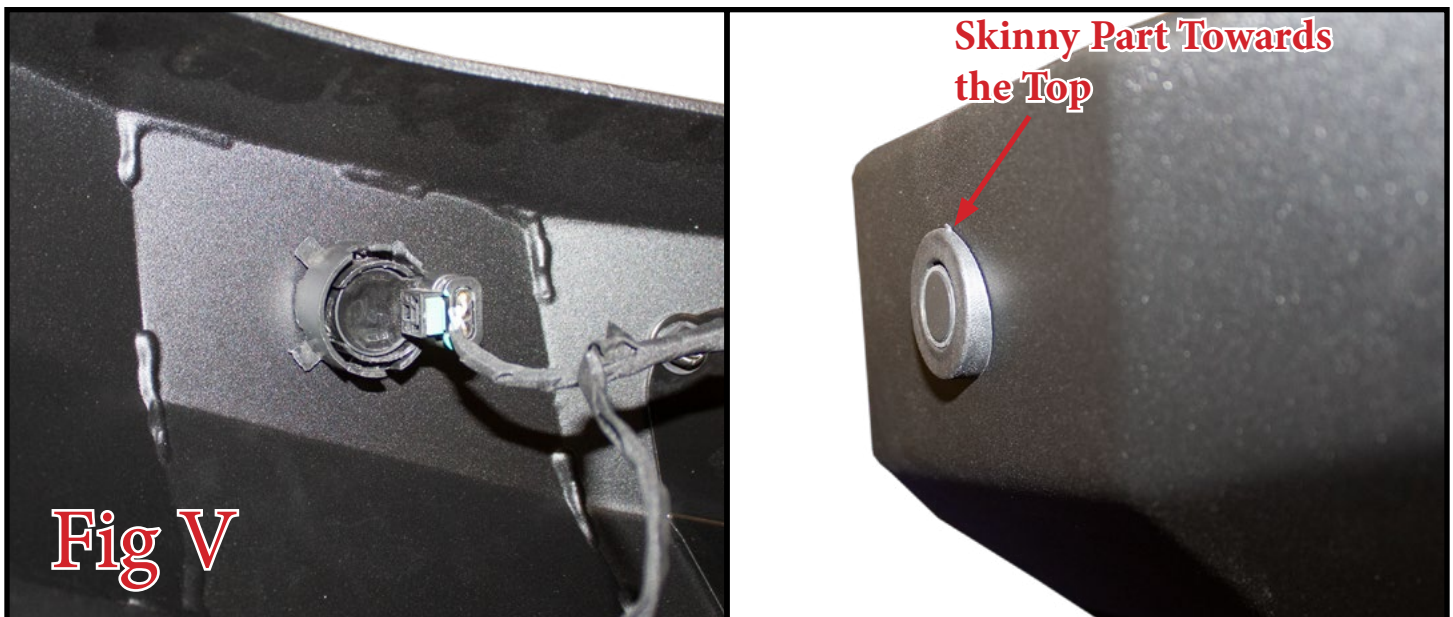


Fig V

25. Install the OEM marker lights onto your new bumper. To do this, use the supplied #8 Bolts (2 per side), #8 Washers (2 per side) and #8 Lock Nuts (2 per side). **Do not overtighten these bolts or the plastic on the light will break.** (Fig W)

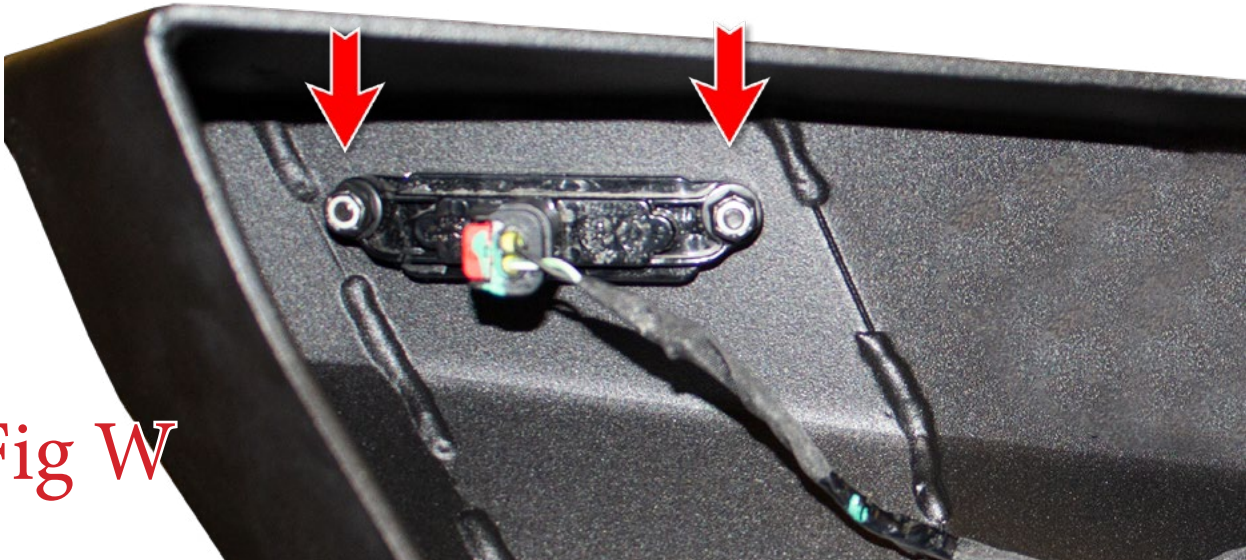


Fig W

26. Use a Drill and a 1/2" Drill Bit to drill out the lower/outer mounting holes on each side of the frame horns. (Fig X)

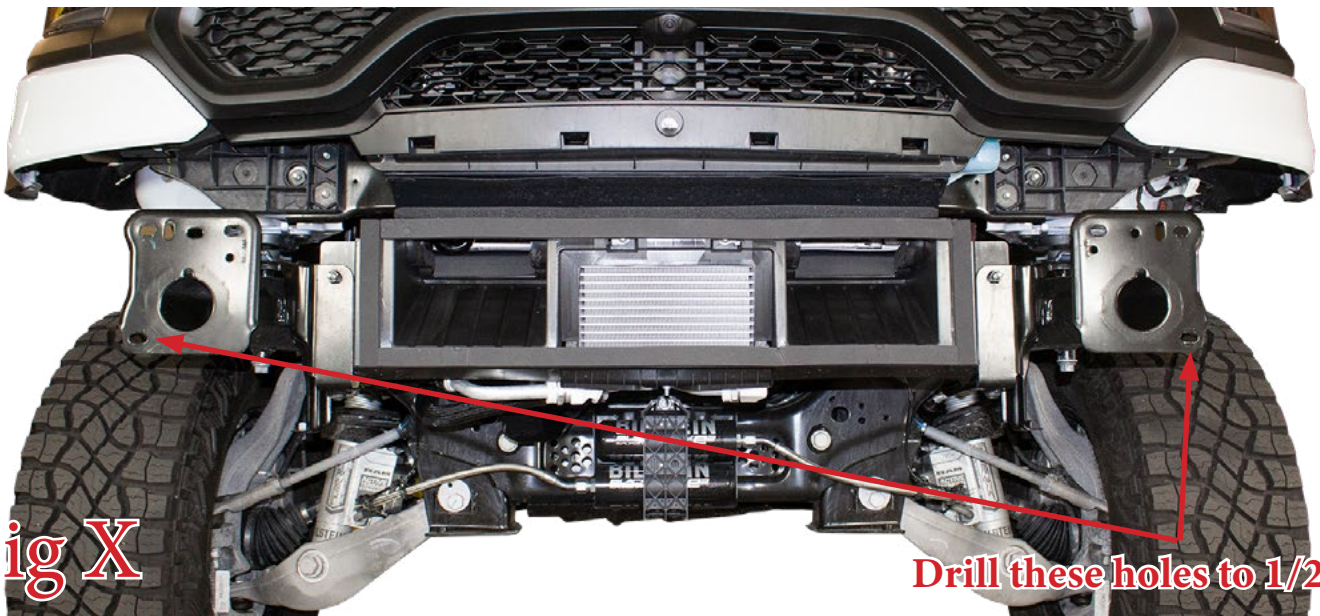


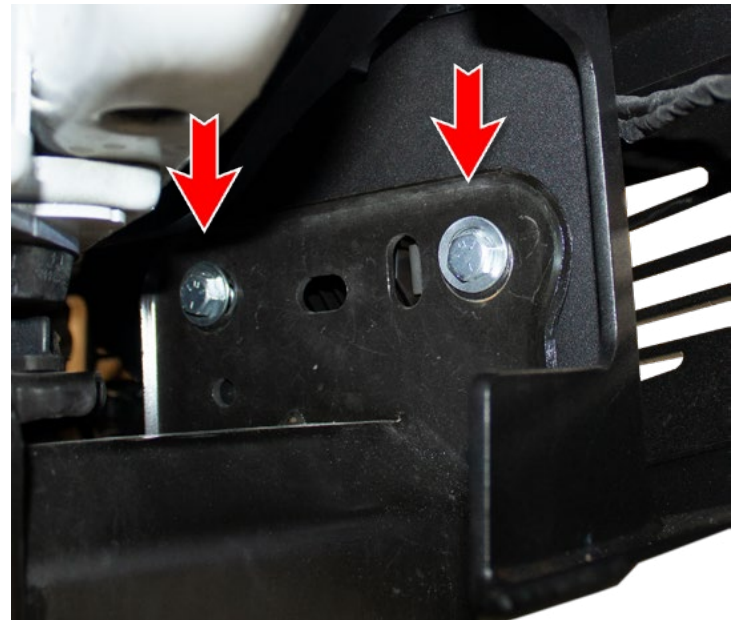
Fig X

Drill these holes to 1/2"

27. Set the bumper in place on the vehicle. Use the supplied 3/8" Hex Head Bolts (2 per side) and 3/8" Washers (2 per side) in the upper mounting holes. In the holes that were drilled out in Step 26, use the supplied Black 1/2" Bolts (1 per side), Black 1/2" Washers (1 per side), and Black 1/2" Lock Nuts (1 per side). Leave these bolts loose for now. (Fig Y)

View From Front

View From Rear



28. Install the lower skid plate mounting bolts. Use the supplied M10 Bolts (x2) and M10 Washers (x2). Leave these bolts loose for now. (Fig Z)



29. Install the remaining M10 Bolt/Washer into the hole referenced in (Fig AA).



Fig AA

30. Align your bumper so it is centered left to right and straight in relation to the grille/valance. Then, tighten the 1/2" mounting bolts to 70 foot pounds, the 3/8" mounting bolts to 30 foot pounds and the M10 mounting bolts to 40 foot pounds.

31. Reinstall the tow hooks by reversing Step 6. (Fig AB)

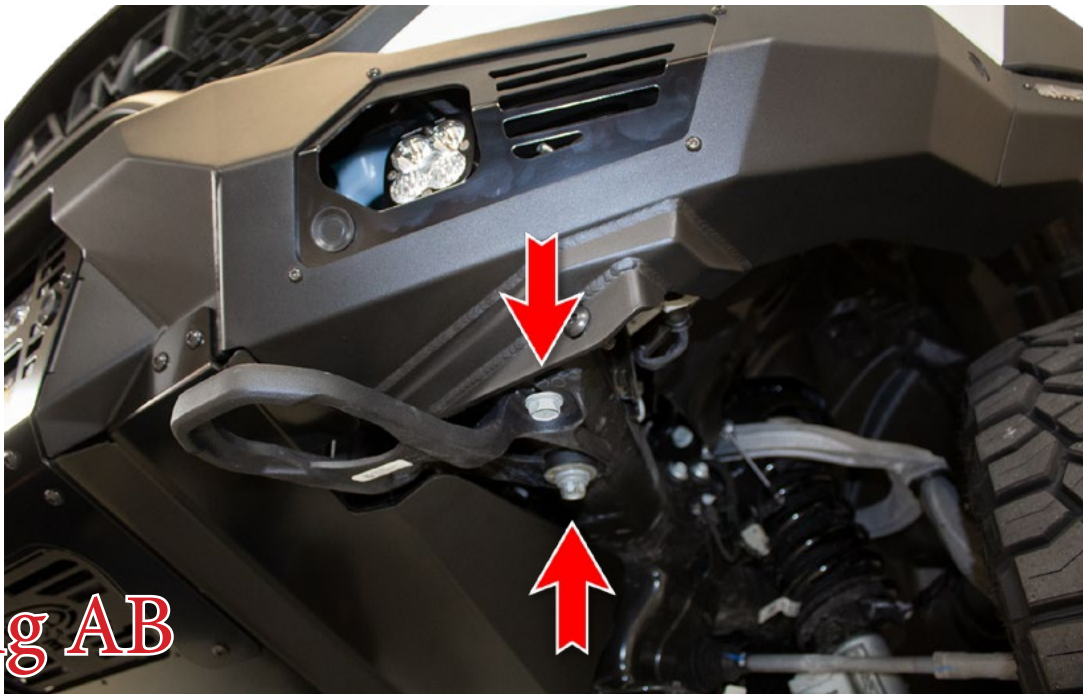


Fig AB

32. Stand back and enjoy your new ADD Bomber™ Front Bumper.
33. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

