



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 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 | - 9/16" Socket & Wrench | - 7/32" Allen Wrench/Socket |
| - 10mm Socket | - 12mm Socket | - 14mm Socket |
| - 17mm Socket | - Drill | - 3/8" Drill Bit |
| - Black Paint | | |

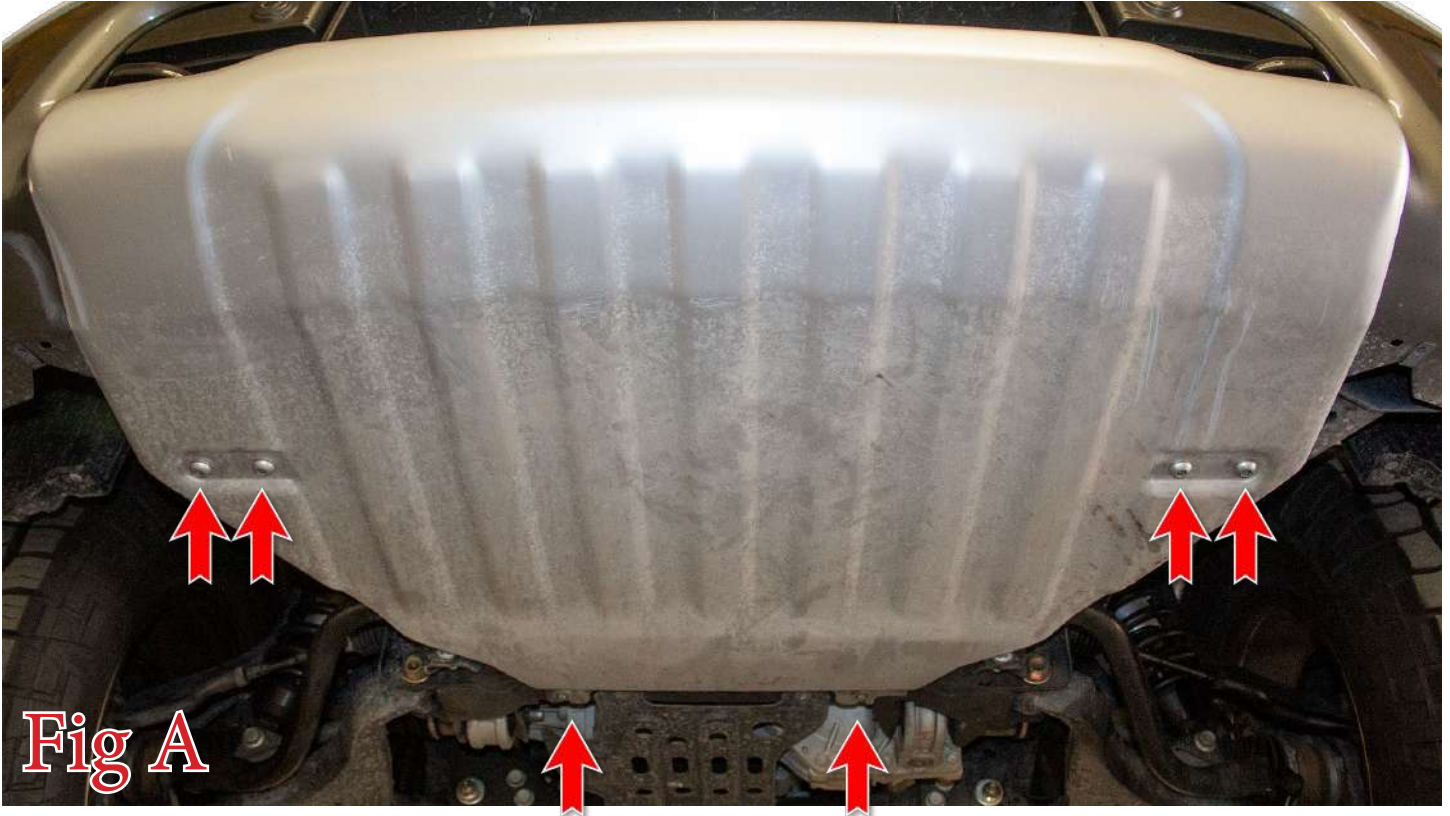
Included in Kit:

- | | |
|---|-------------------------------------|
| 12 - Hex Head Bolts (3/8"-16 x 1") | 12 - Flat Washers (3/8") |
| 8 - Long U-Nuts (3/8"-16) | 4 - Short U-Nuts (3/8"-16) |
| 2 - Hex Head Bolts (M12-1.25 x 30mm) | 2 - Flat Washers (M12) |
| 4 - Black Button Head Bolts (3/8"-16 x 1") | 4 - Black Flat Washer (3/8") |
| 4 - Black Nylon Lock Nuts (3/8"-16) | 2 - Bumper Mounting Brackets |

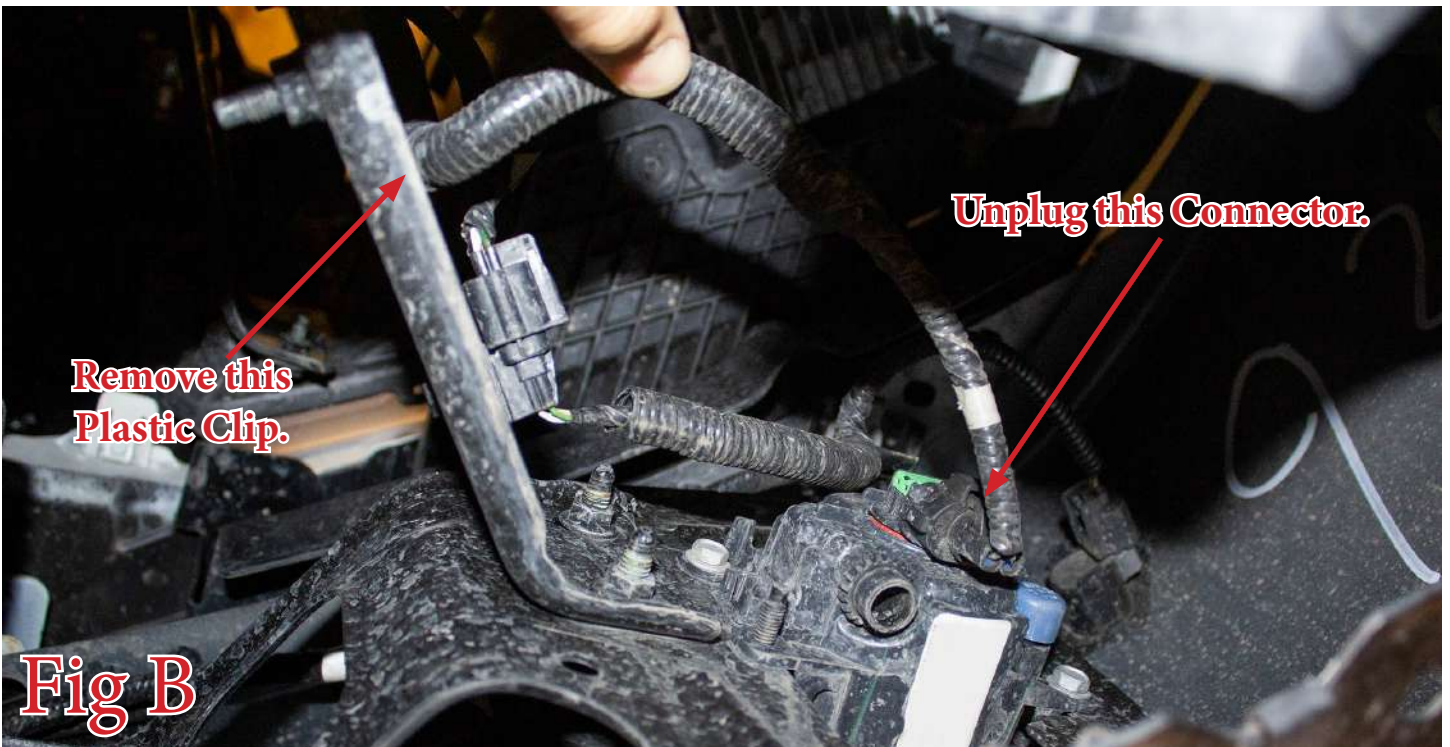


Removal:

1. Use a T50 Torx and a 10mm Socket to remove the OEM skid plate mounting bolts. Once all bolts are out, remove the skid plate from the vehicle. (Fig A)



2. Unplug each fog light and remove the first plastic clip that holds the fog light wiring to the bumper. (Fig B)





3. Unplug the main bumper harness connector that sits next to the passenger side fog light. (Fig C)



4. Pull off the plastic covers that sit over the tow hooks. There are no tools required for this step, they simply pull off by hand. Make sure to unplug the parking sensors as you do this. (Fig D)

Before

After

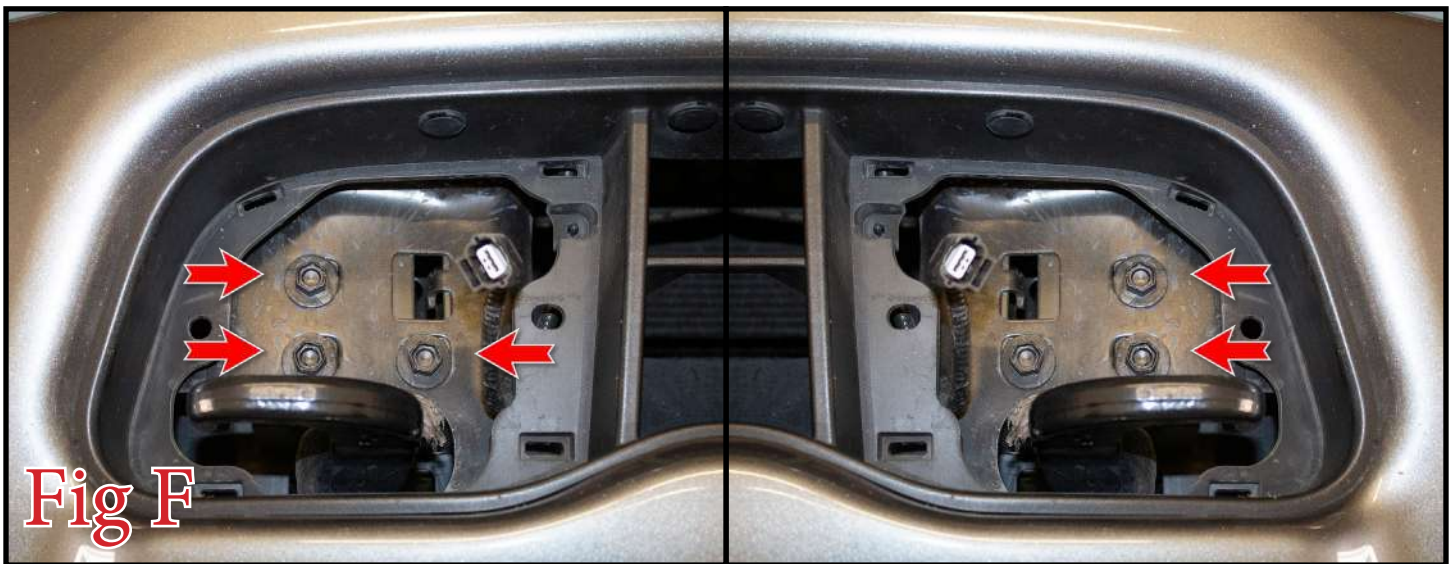




5. Using a 12mm Socket, remove the two bolts (per side) that hold the bumper side support bars to the frame of the vehicle. These bolts can be found in the front portion of each wheel well. (Fig E)



6. Using a 14mm Socket, remove the 3 bolts (per side) that were behind the plastic panels that got removed in Step 4. Once these bolts have been removed, take off the OEM bumper. You will have to be careful of the side support bar as you remove the bumper. (Fig F) **Save these bolts for reuse.**





7. Using a 17mm Socket, remove the two tow hook bolts (per side). Then, remove the tow hooks and the skid plate mounting brackets. Slide the tow hooks forward to remove them, and slide the skid plate brackets backwards to remove them. (Fig G)

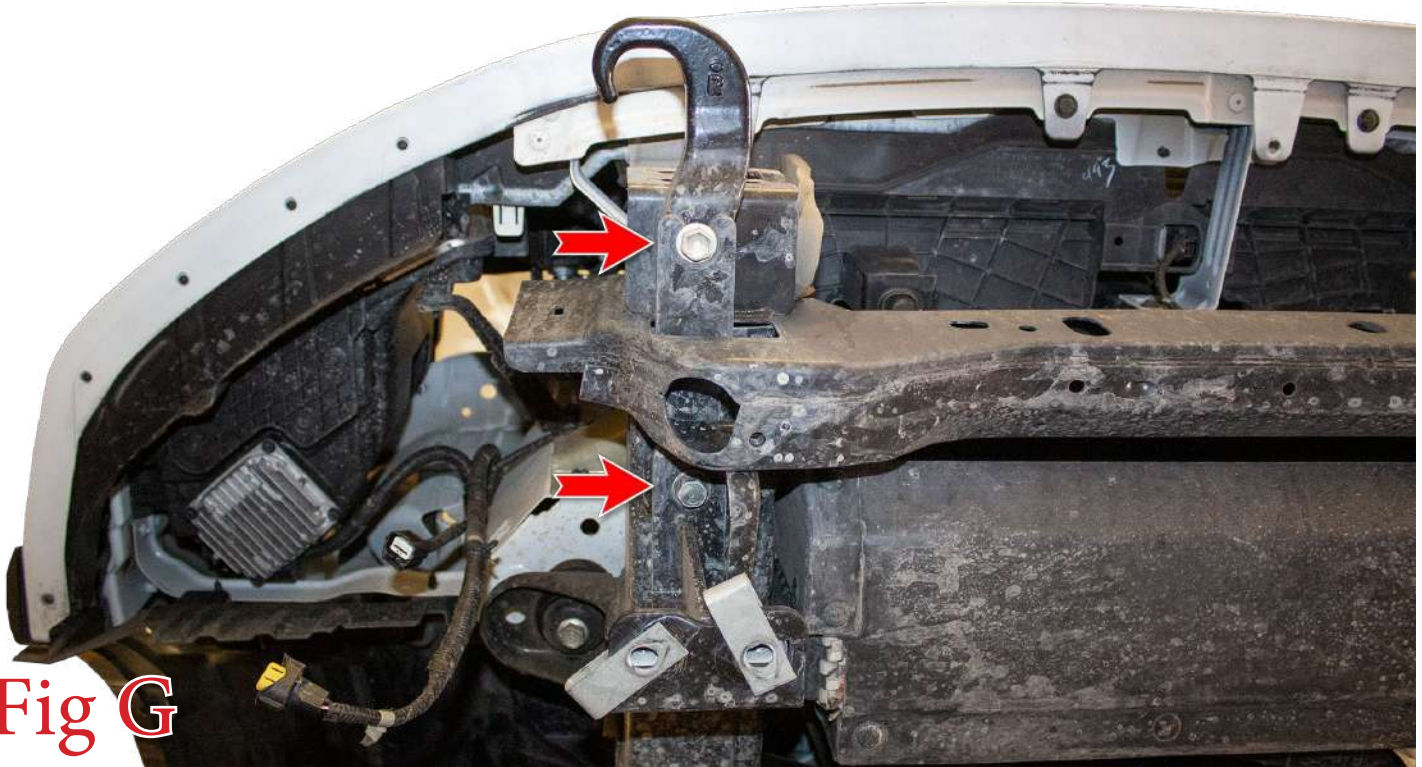


Fig G

8. Unplug the parking sensors. Then, remove them from the OEM bumper. Do this by spreading the two tabs on the back side of the sensor mounting rings. **Make sure to keep track of the position/orientation of parking sensors so they can be reinstalled on your new bumper in the same position/orientation.** (Fig H)

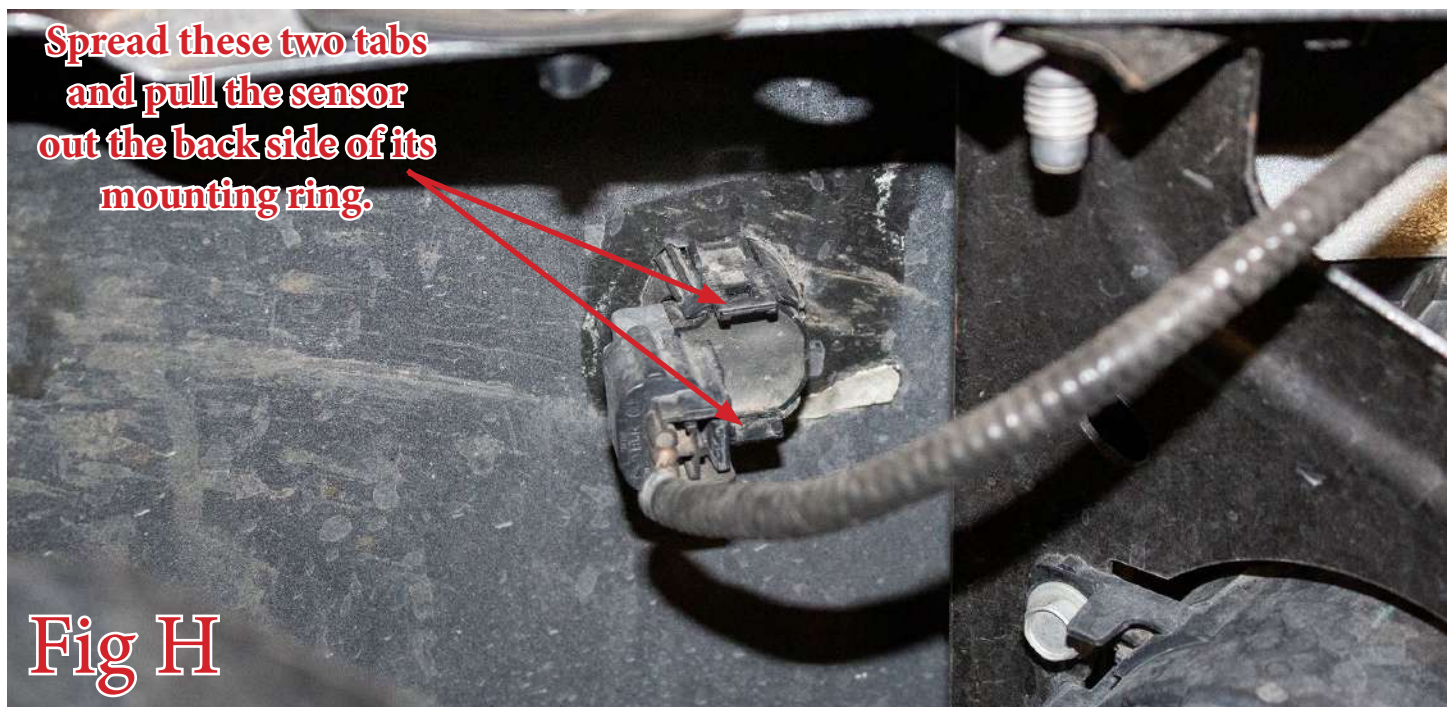
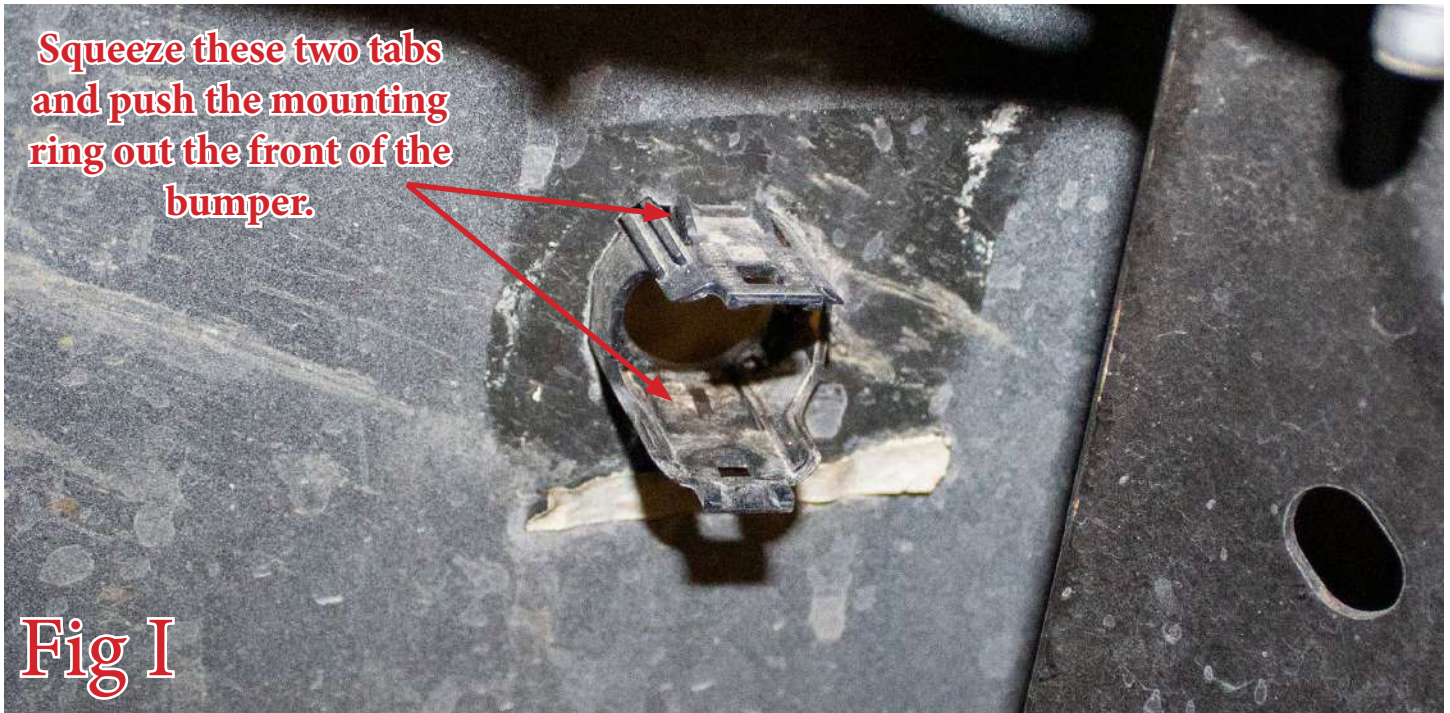


Fig H



9. Remove the parking sensor mounting rings from the bumper by pressing in the two tabs on the back side of the mounting rings. **Make sure to keep track of the position/orientation of the mounting rings so they can be reinstalled on your new bumper in the same position/orientation.** (Fig I)



10. Remove the series of plastic clips holding the bumper harness to the OEM bumper. Then, remove the harness from the bumper. (Fig J)

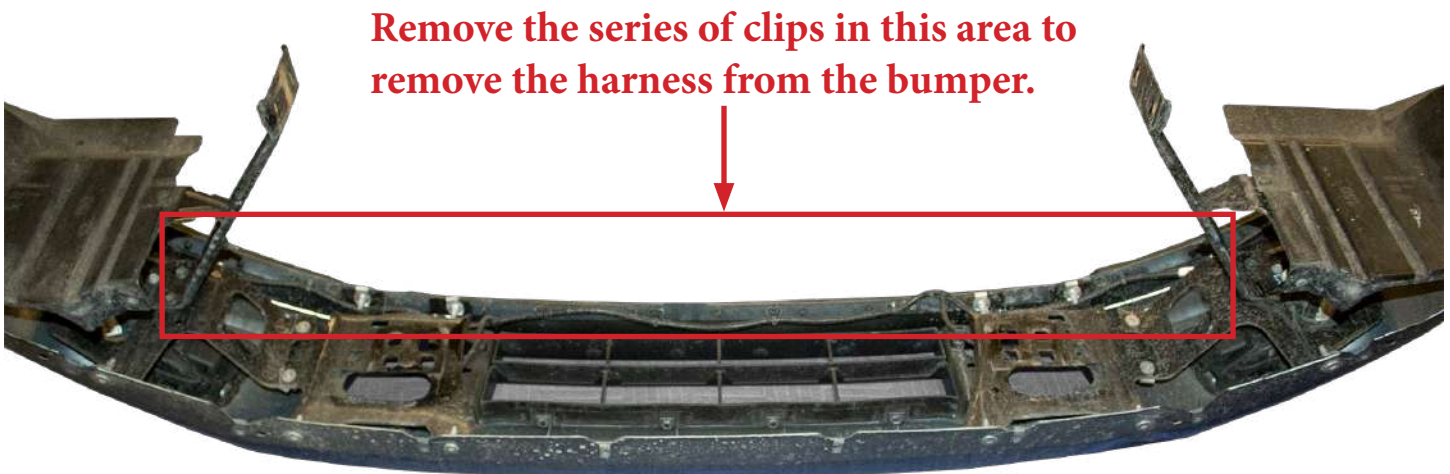


Fig J



11. Using a 12mm Socket, remove the two bolts referenced in (Fig K), which are in the front portion of the driver side wheel well. Then, remove that bracket from the vehicle. If you have a bracket like this on the passenger side of the truck, remove that one as well.

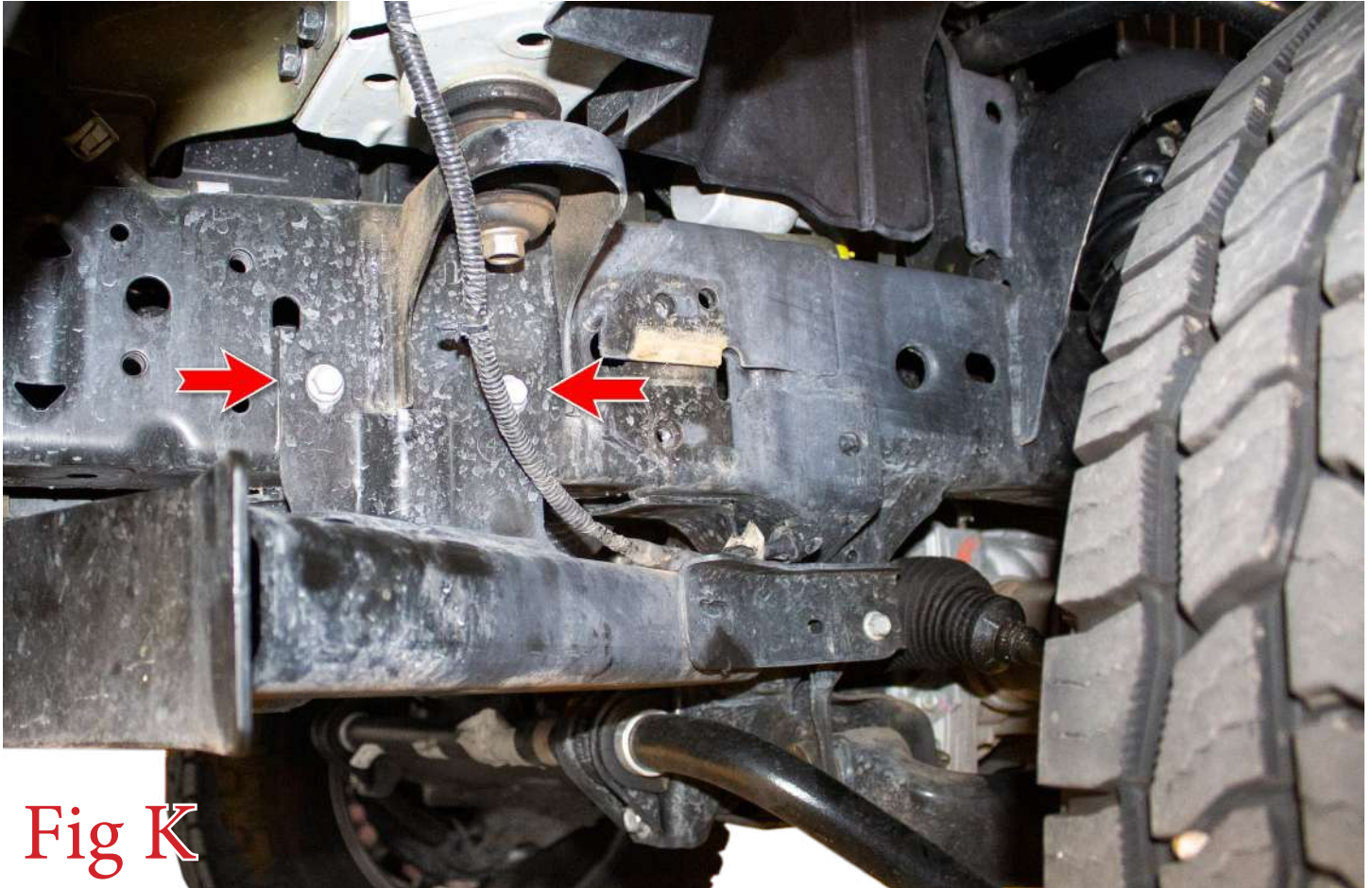
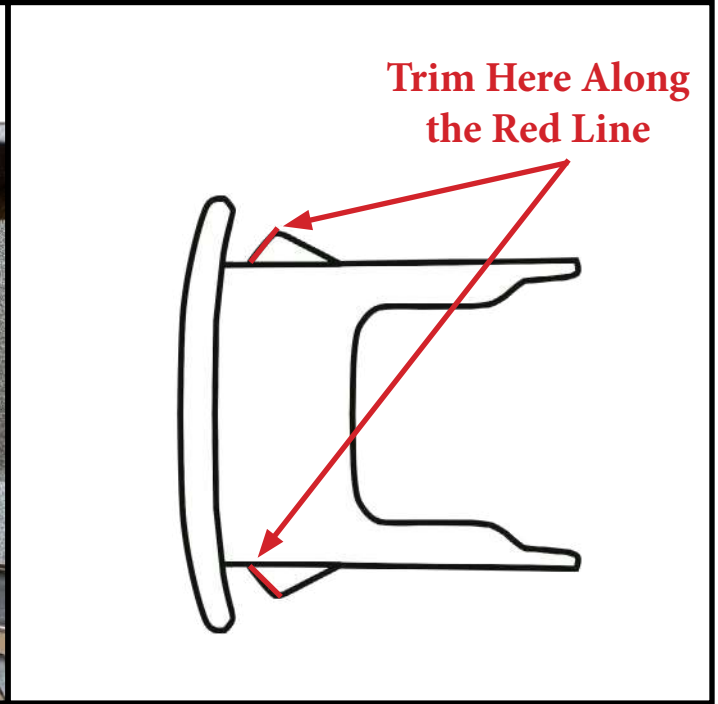


Fig K



Installation:

12. Install the parking sensor mounting rings into your new bumper in the same position/orientation as they came off the OEM bumper. In order for them to fit the thicker material of the new bumper, you may have to file back the tabs that hold the mounting ring in place. Once the mounting rings are installed, push the sensor into the mounting ring from the back side until it clicks into place. (Fig L)



13. If you have any lights to install on your bumper, please do so now. For mounting/wiring information, please follow the light manufacturer's installation guide.

For the center light, use the universal light mount kit that is shipped with this bumper.



14. Install the OEM bumper harness onto your new bumper. Plug it into each parking sensor. Zip-tie it up and out of the way if necessary. (Fig M)



Fig M

15. Install the supplied U-Nuts (4 long & 2 short per side) onto the bumper. Use the shorter length U-Nuts where specified. (Fig N)

Use Long U-Nuts Here

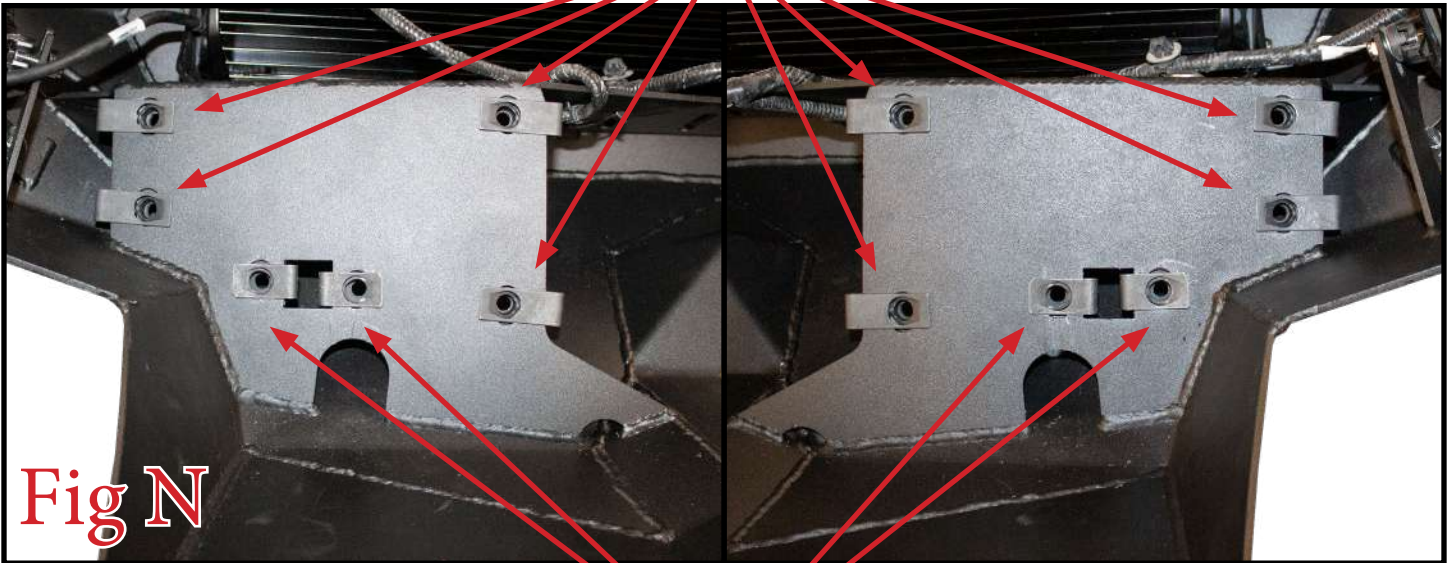


Fig N

Use Short U-Nuts Here



16. Install the supplied Mounting Brackets to the vehicle using the bolts that were saved in Step 6. (Fig O)
Tighten these bolts to OEM torque spec.

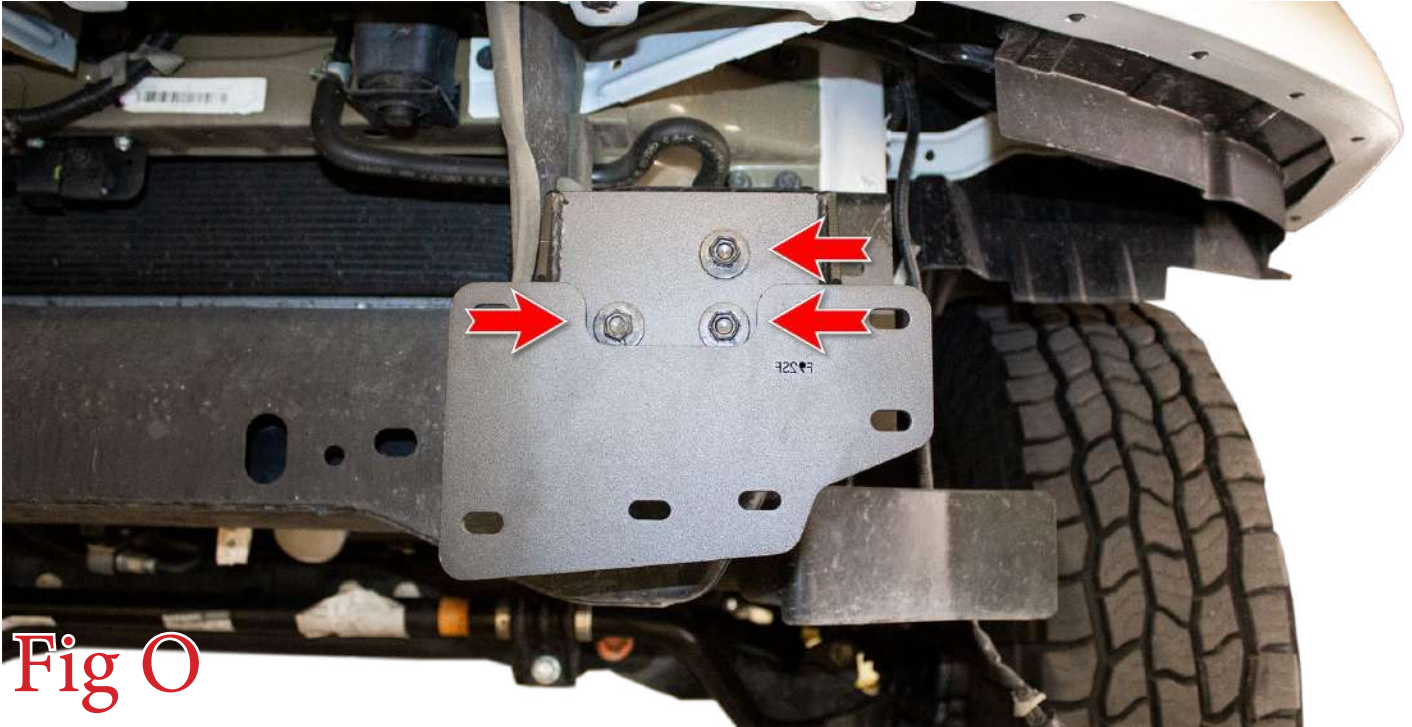


Fig O

17. If you have OEM bolts in this location, please install those now and skip to Step 20. If not, follow this step. Make a mark where these two holes line up with the frame horn. Then, remove the Mounting Bracket from the vehicle. (Fig P)

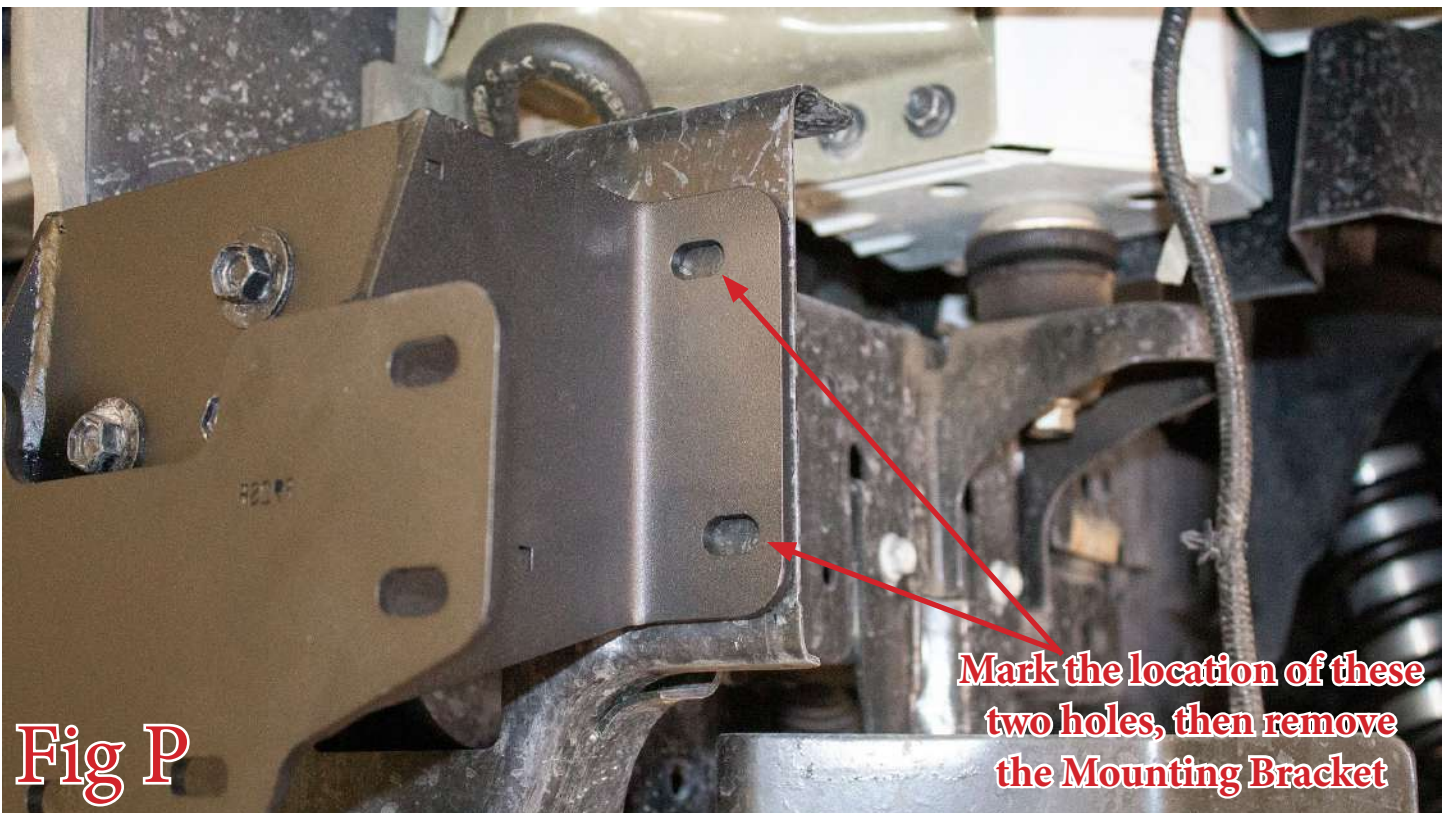


Fig P

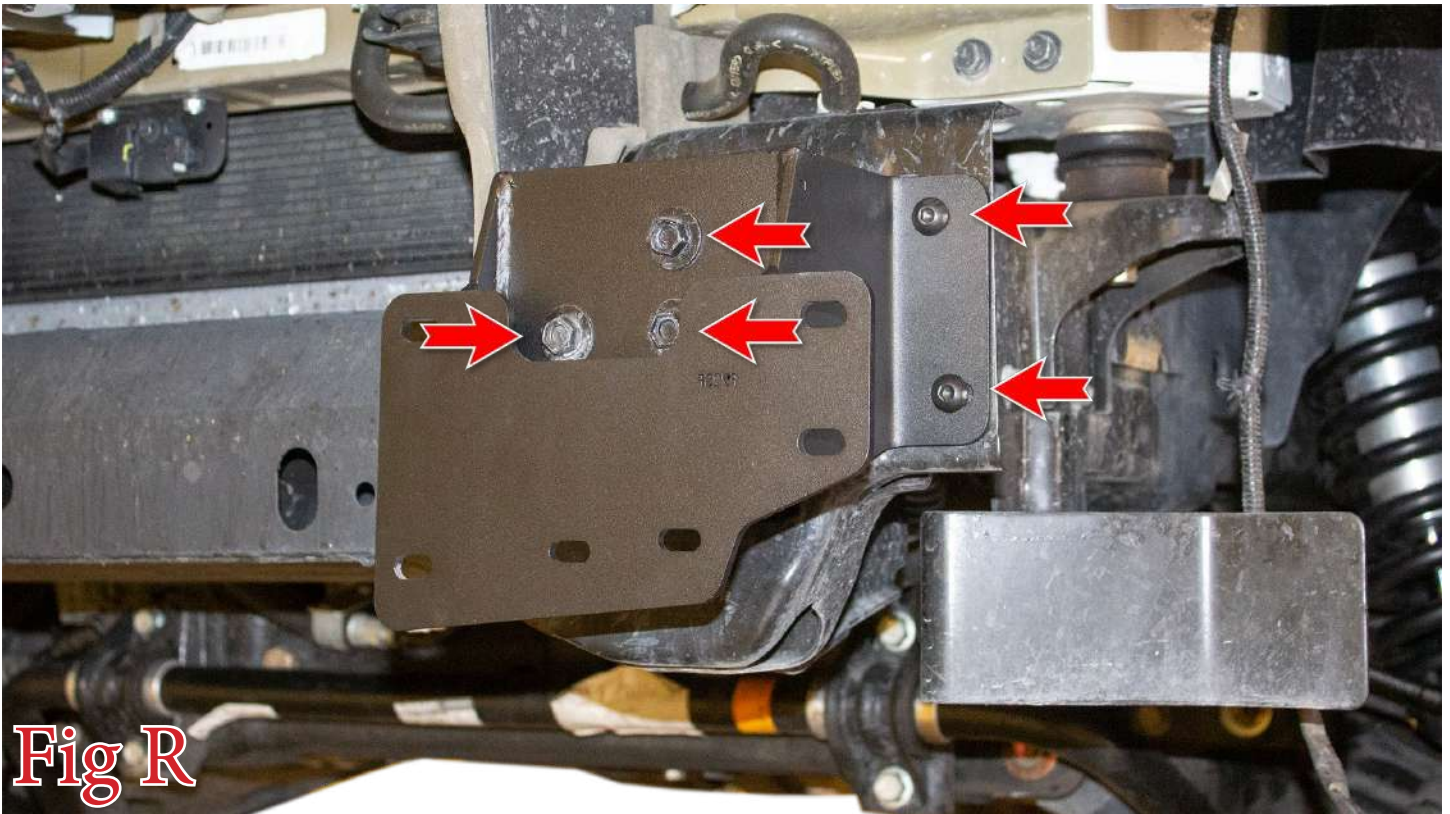
Mark the location of these two holes, then remove the Mounting Bracket



18. Using a 3/8" Drill Bit, drill a hole at each location you marked in Step 17. Paint over any bare metal. (Fig Q)



19. Reinstall the Mounting Brackets by repeating Step 16 and also installing the supplied 3/8" Black Bolts (2 per side), 3/8" Black Washers (2 per side), and 3/8" Black Lock Nuts (2 per side). (Fig R)

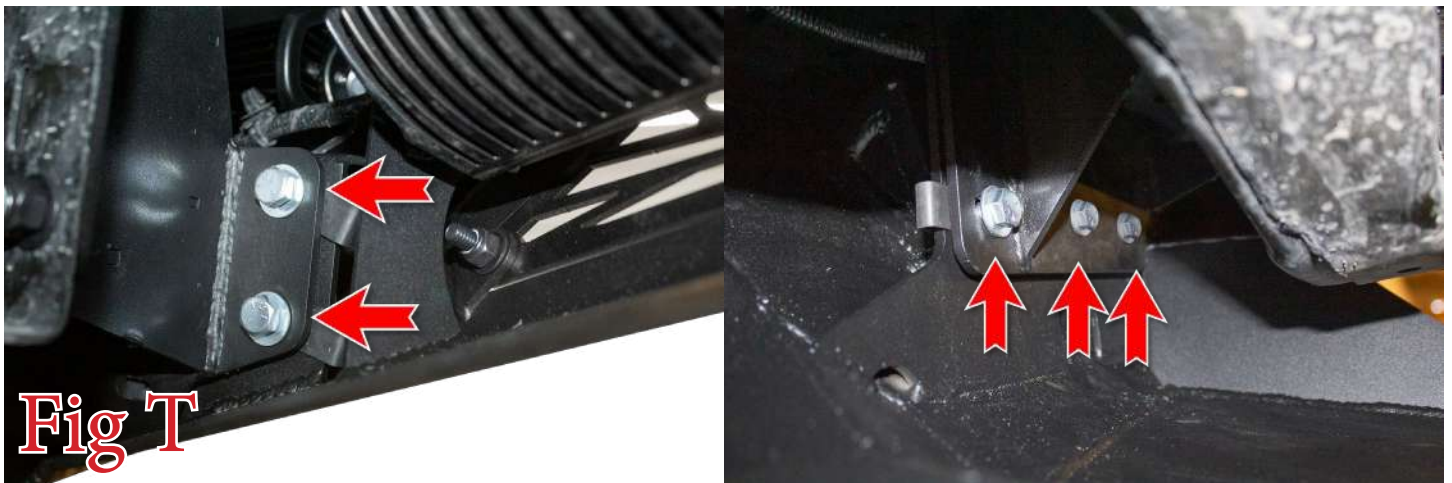




20. Find the supplied M12 Bolts (x2) & M12 Washers (x2) and install them in the bottom hole on each Bumper Mounting Bracket. (Fig S)



21. Set the bumper in place on the vehicle. Then, install the supplied 3/8" Bolts (x12) & 3/8" Washers (x12) from the back side of the Bumper Mounting Brackets. Leave these bolts loose for now. (Fig T)



****There is one additional bolt not shown in this picture****



22. Adjust your bumper so it is centered left to right and straight in relation to the vehicle's valance. Then, tighten the 3/8" mounting bolts to 25 foot pounds. Tighten the M12 Bolts to 99 foot pounds.
23. Stand back and enjoy your new ADD Stealth Fighter™ Front Bumper.
24. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

