

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 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
- T-40 Torx Bit
- 9/16" Socket & Wrench
- Black paint
- Grinder
- Long Ratchet Extension

Included in Kit:

- 4 - Grade 8 Hex Head Bolts (3/8"-16 x 1 1/2")
- 4 - Grade 8 Washers (3/8")
- 4 - Metal Lock Nuts (3/8"-16)

Removal:

1. Unplug the connector on the back side of the trailer plug. Then, remove the plug by pushing in the two tabs and pulling it out the front of the bumper. "Fig A"



Fig A

2. Take off your license plate.
3. Remove your license plate lights from their housings. Then, remove the license plate light housings by pressing in the tabs on the back side of the housings.
4. Remove the parking sensors (x4) from their outer mounting rings. Simply spread the two tabs on the back of the mounting ring to allow the sensors to push out the back of the rings. Make sure to keep track of what order these sensors were installed in your OEM bumper as they will need to be installed in the same order on your new bumper. "Fig B"

Fig B

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



5. Carefully pull the plastic center piece of the bumper off. There are no tools required for this step, it pulls off by hand. "Fig C"



Fig C

6. Using a T-40 Torx Bit, remove the bolts (x5) holding on each metal side piece. Save two of these bolts for reuse. "Fig D"

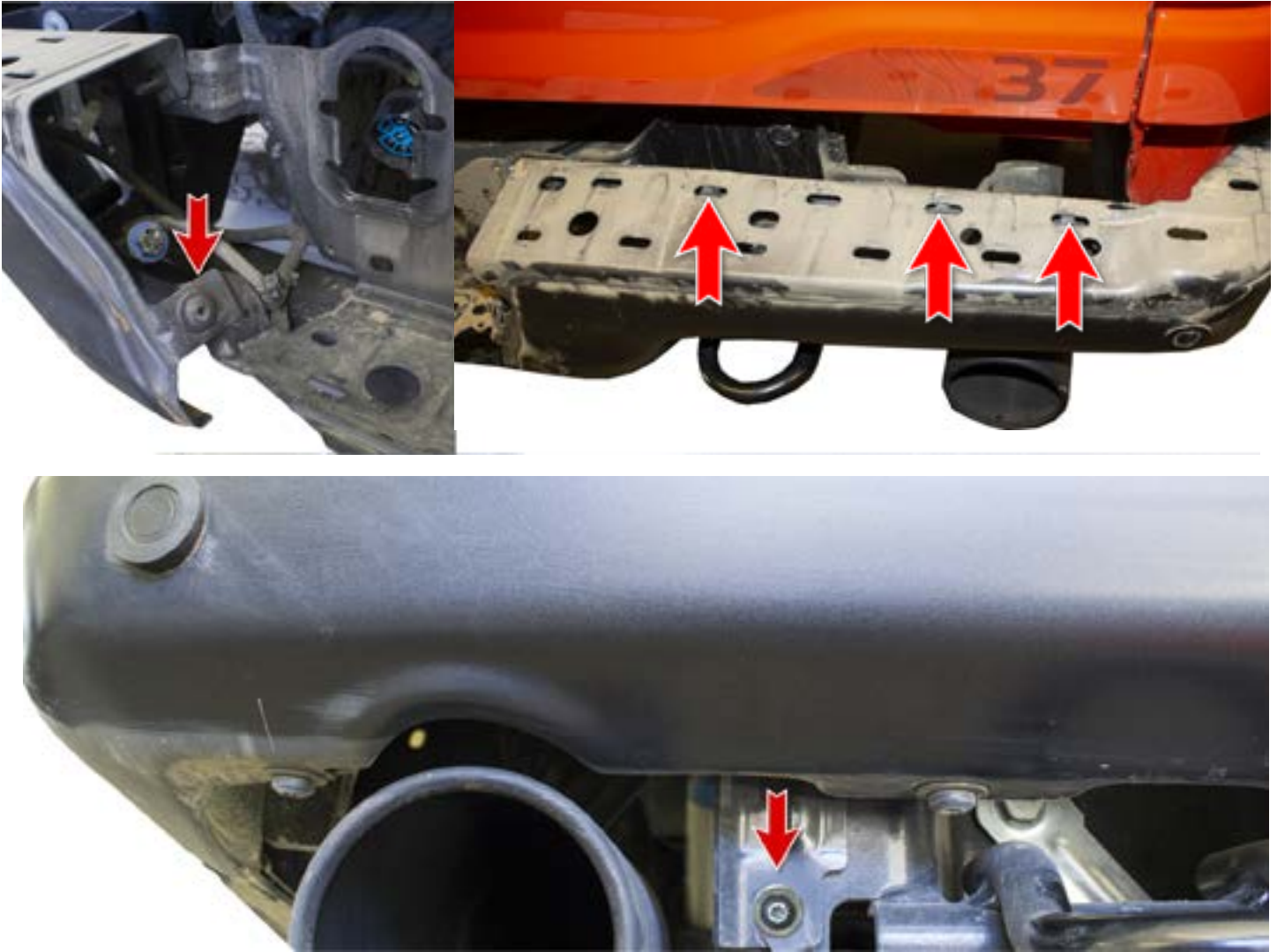


Fig D

7. Disconnect the rear bumper wiring harness located by the spare tire, if there is not enough room we recommend lowering the spare tire.



Fig E

**Disconnect by pulling handle
back 180 degrees than pull apart**

9. Remove the plastic clips (that hold the parking sensor harness in place) from the metal bumper ends, then remove the metal bumper ends from the truck."Fig F"



Fig F

8. Grind the welds to remove the license plate structure from the rear frame. Make sure to paint over any bare metal when you're done grinding."Fig G"



Fig G

10. Remove the parking sensor mounting rings from the OEM bumper. Do this by pressing in the two tabs on the back of the ring and pushing the rings out the front of the bumper. Make sure to keep track of what position/orientation these were installed on your OEM bumper as they will need to be installed in the same position/orientation on your new bumper. "Fig H"

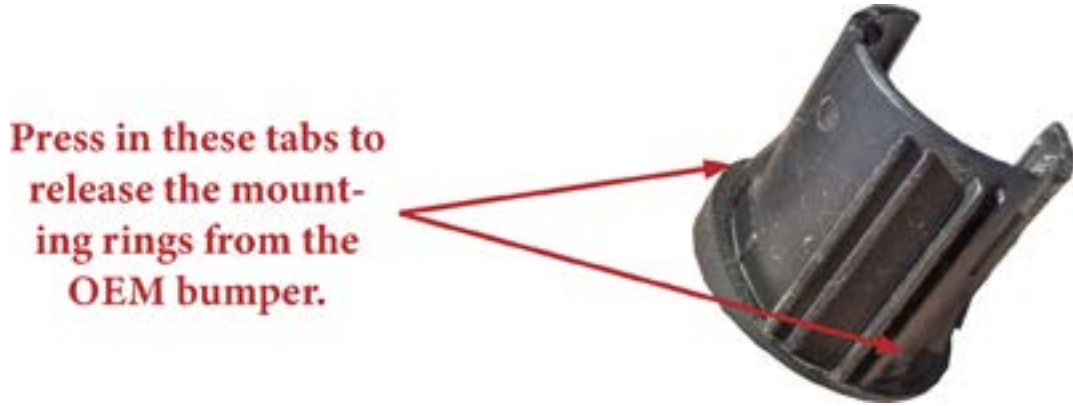


Fig H

11. Install the license plate light housings on your new bumper by pressing them into their precut holes until they click into place. Make sure to install them in the same position as they were installed on the OEM bumper. Then press in the trailer plug and use the key to install the spare tire lock. "Fig I"

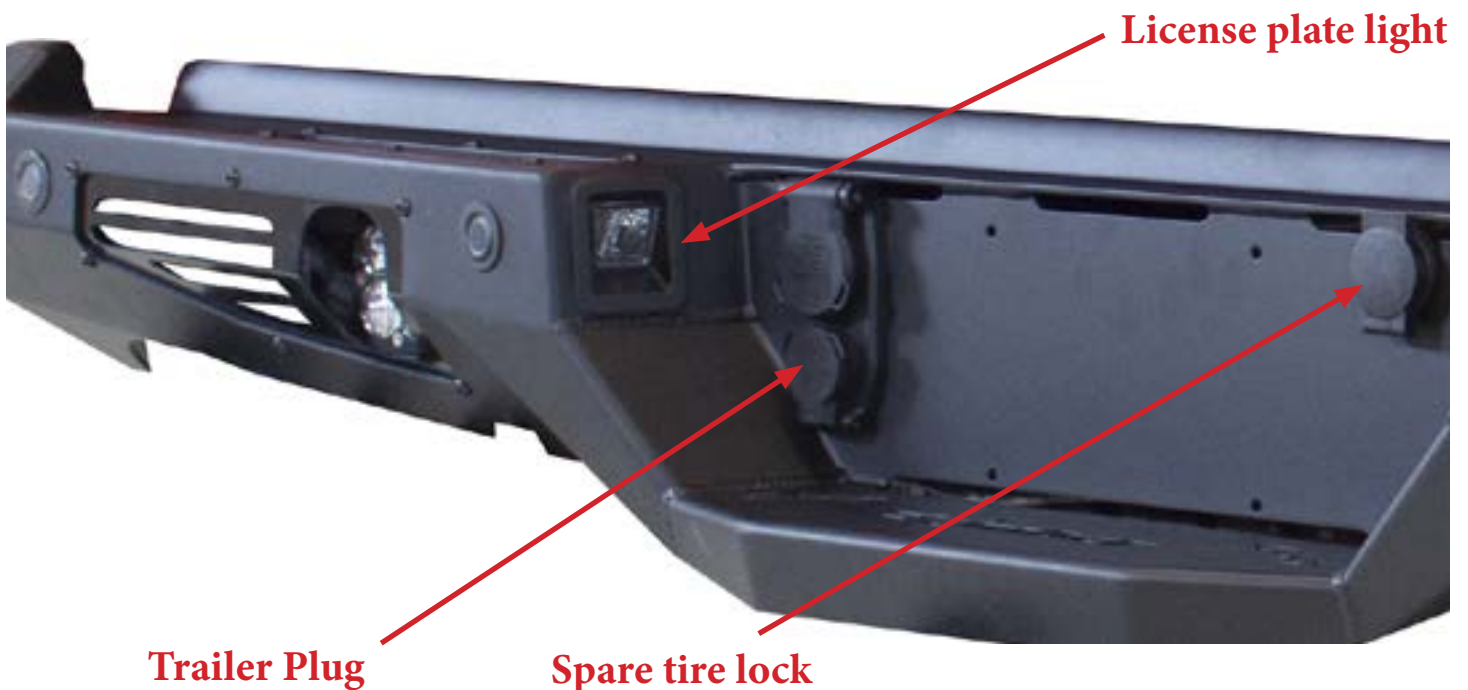


Fig I

12. Install the parking sensor mounting rings onto your bumper by pressing them into their precut holes until they click into place. Make sure to install them in the same position/orientation as they came off your OEM bumper. If the rings do not click into place, you may have to trim the tabs on the sides of the mounting rings.
"Fig J"



Fig J

13. Install your parking sensors onto your bumper by pressing them into the front side of their mounting rings. Make sure to install these in the same position/orientation as they came off your OEM bumper."Fig K"



Inner sensor faced outwards

License plate light

Outer sensor faced inwards



Fig K

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

- 15. Get the bumper close enough to the vehicle for the harness to be able to be installed while its still connected to the truck. Route the harness through the bumper so that it sits out of harm's way. Plug in the license plate lights, parking sensors, and trailer plug. ****The area around the inner parking sensors and license plate lights is tight, but there is enough room for both to be connected**"Fig L"**

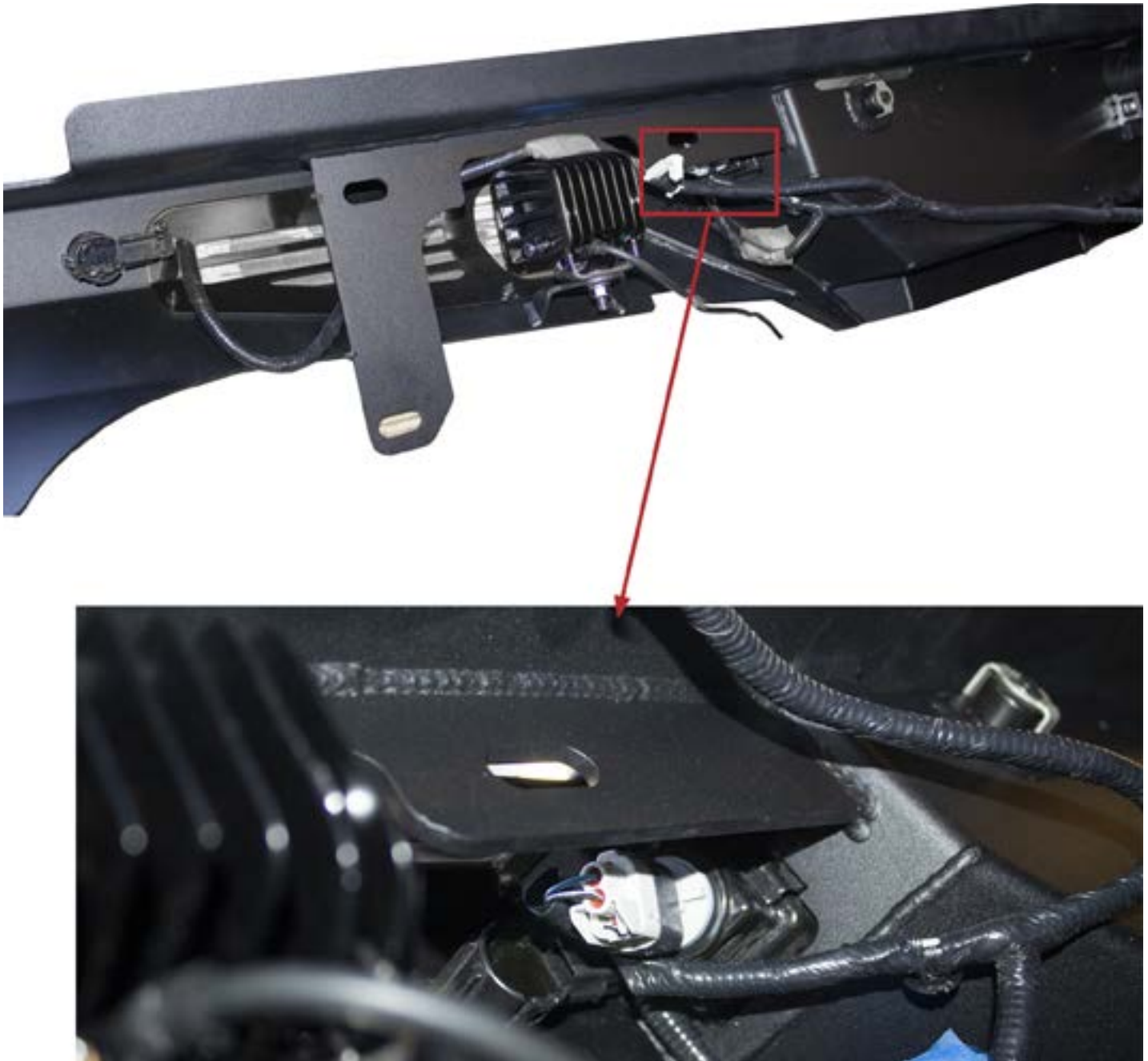


Fig L

16. Set the bumper in place on the vehicle. Use the supplied 3/8" Bolts (x4), 3/8" Washers (x8), and 3/8" Lock Nuts (x4) to secure it. Leave these bolts loose for now. **(Do not tighten, leave loose for adjustments when truck is sitting on the ground off the jack stands/lift)**. When the bumper is aligned/centered ready to be tightened torque these bolts to 45 foot pounds. "Fig M"

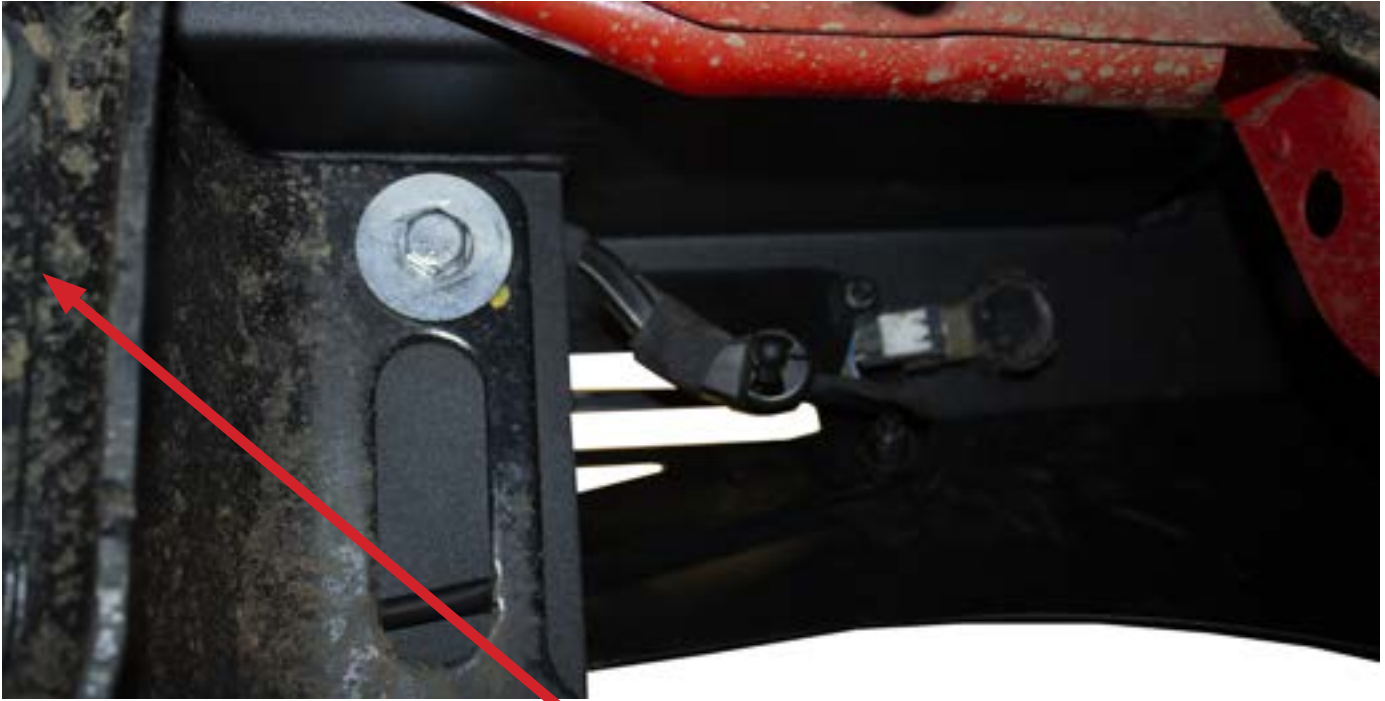


Fig M

There is another bolt on the other side of the hitch, not visible in this picture

17. Install the two bolts you saved in Step 6 in the lower bumper mounting holes. (Do not tighten, leave loose for adjustments when truck is sitting on the ground off the jack stands/lift)."Fig N"

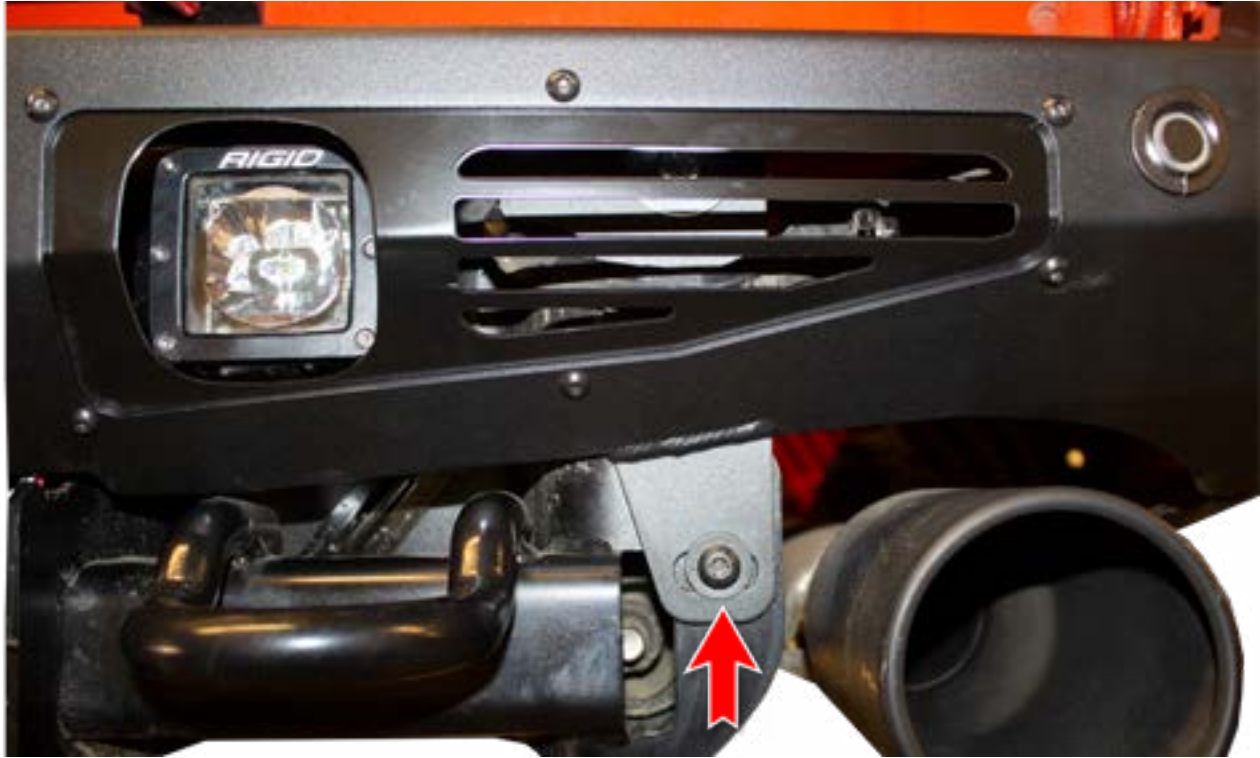


Fig N

18. Align the bumper so that it sits straight in relation to the tailgate and is centered left to right. Then, tighten the 3/8" mounting bolts to 30 foot pounds. Tighten the OEM mounting bolts to OEM torque spec.
19. Transfer the spare tire lock from your OEM bumper to your new bumper
20. Stand back and enjoy your new ADD Bomber™ Rear Bumper.
21. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

