

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: **4 Hours for OEM Removal/Bumper/Tire Gate 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 | - 3/4" Socket & Wrench | - 13mm Socket |
| - 16mm Socket | - 17mm Socket | - 18mm Socket |
| - 7/32" Allen Wrench/Socket | - 9/16" Wrench & Socket | - 13/16" Socket & Wrench |
| - Razor Blade | - 1 1/4" Wrench | |

Included in Kit:

- | | |
|--|---|
| 4 - Hex Head Bolts (M10-1.5 x 30mm) | 4 - Flat Washers (M10) |
| 2 - Hex Head Bolts (1/2"-20 x 4 1/2") | 4 - Flat Yellow Washers (1/2") |
| 2 - Metal Lock Nuts (1/2"-20) | 2 - Hex Head Bolt (9/16"-18 x 4") |
| 4 - Flat Washers (9/16") | 2 - Nylon Locking Nut (9/16"-18) |
| 2 - Hex Head Bolts (1/2"-13 x 1 1/2") | 16 - Flat Washers (1/2") |
| 6 - Hex Head Bolts (1/2"-13 x 1") | 8 - Nylon Locking Jam Nut (1/2"-13) |
| 2 - Hex Nuts (1/2"-20) | 2 - Extruded U-Nuts (5/16"-18) |
| 1 - Aluminum Threaded Tube (1/2"-20) | 2 - Threaded Rubber Bumpers (2" Long) |
| 2 - Male Heim Joints (1/2") | 5 - Button Head Bolts (3/8"-16 x 1 1/4") |
| 5 - Nylon Locking Nut (3/8"-16) | 10 - Matching OD Washers (3/8") |
| 2 - Hex Nuts (7/8") | 2 - Johnny Joints (7/8" Thread) |
| 4 - Johnny Joint Spacers | 1 - Spare Tire Mounting Bracket |
| 1 - Tire Gate | 1 - Tire Gate Mounting Bracket |
| 1 - Tail Gate Plate | 1 - Tire Gate Gusset Plate 1 |
| 1 - Tire Gate Gusset Plate 2 | |

Installation:

1. Use a 16mm Socket to remove the two bolts per side that hold the bumper to the side of the Jeep's frame. (Fig A) was taken looking towards the rear of the vehicle into the wheel well.



Fig A

2. Use a 16mm Socket to remove the two bolts on the back side of the rear bumper. These bolts are above the rear frame rail. There are not visible in the following picture, but are just above the bolts that are visible in the picture. (Fig B)

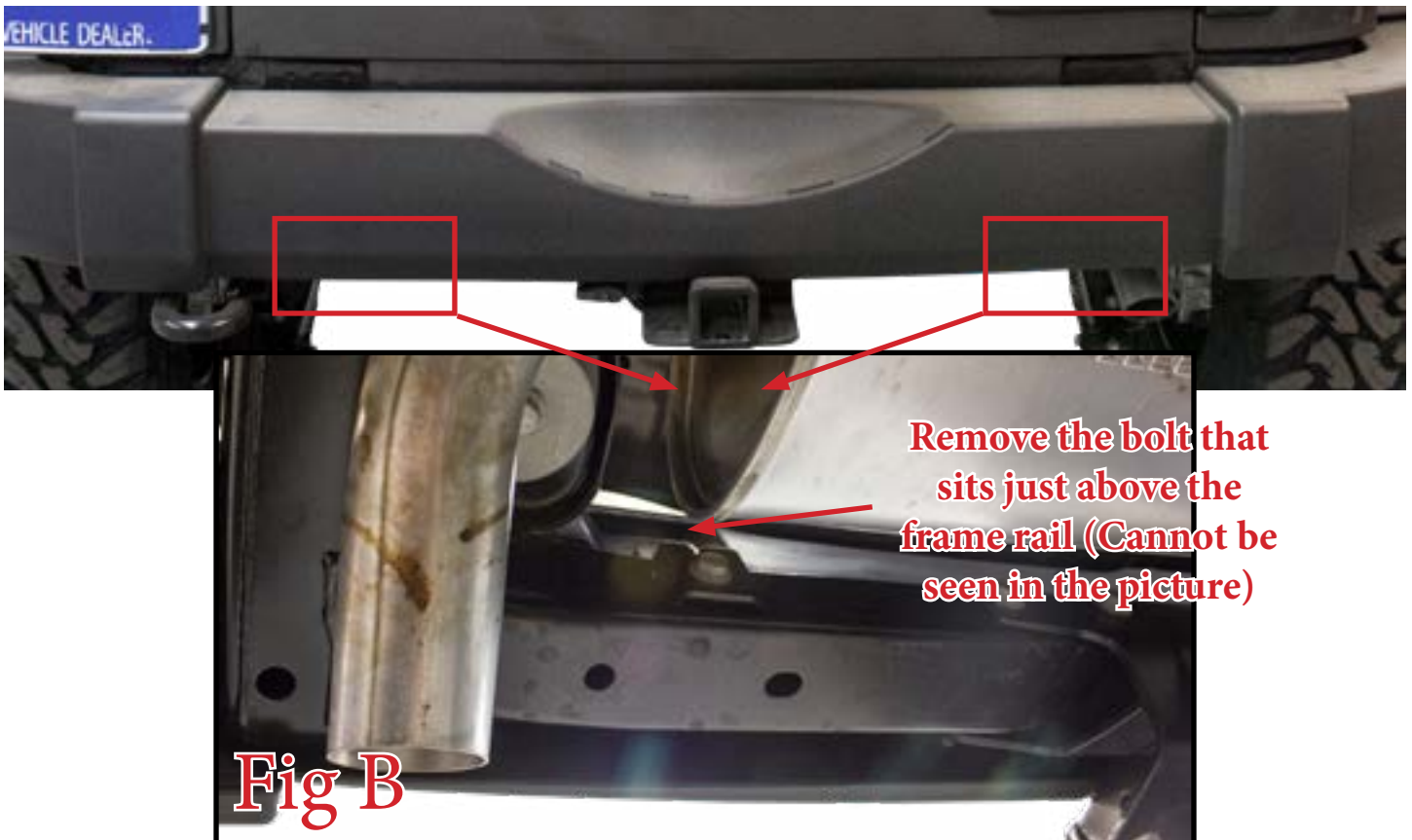
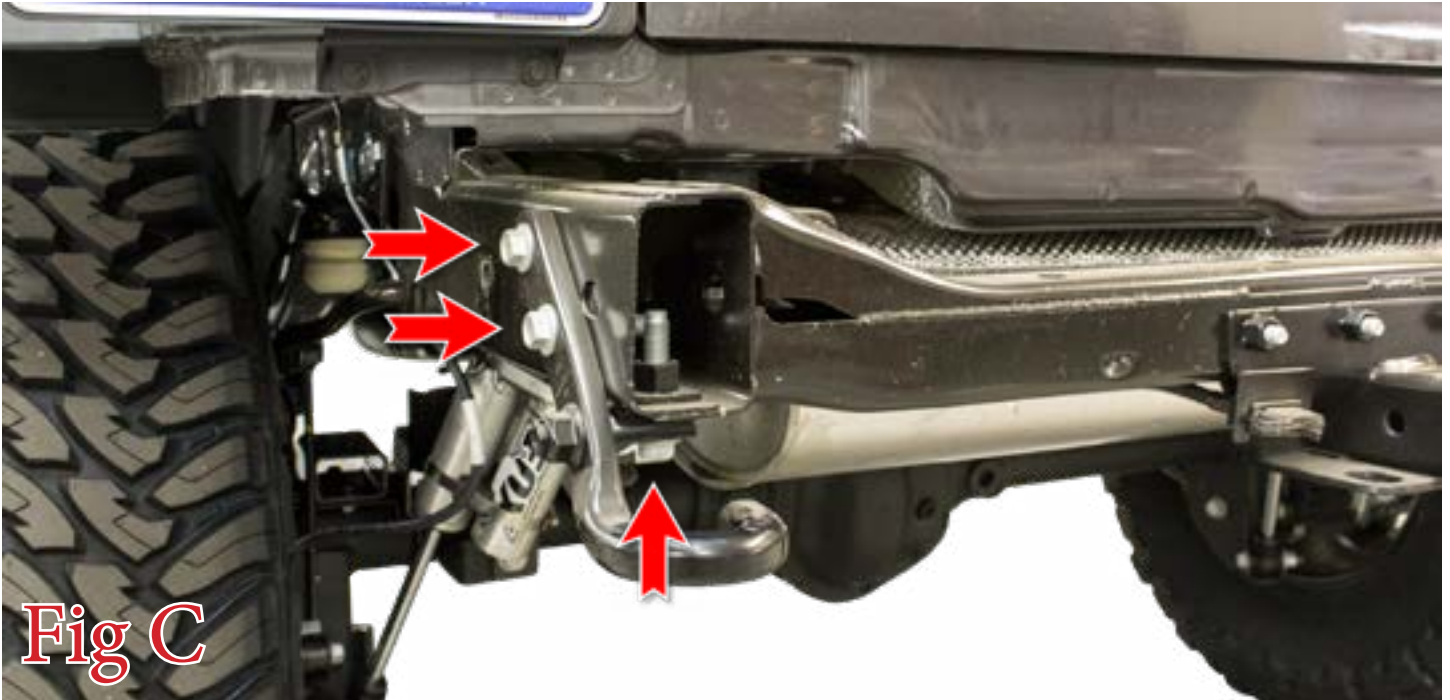


Fig B

3. Lift the OEM bumper off the vehicle.
4. Using an 18mm Socket, remove the three bolts that hold on the rear tow hook. Then, remove the tow hook. (Fig C)



5. Remove your spare wheel/tire. (Fig D)





6. Open your rear hatch, then find the small plastic cover that sits on the inside portion of your hatch. Remove this panel by pulling the left side of the panel outwards. (Fig E)



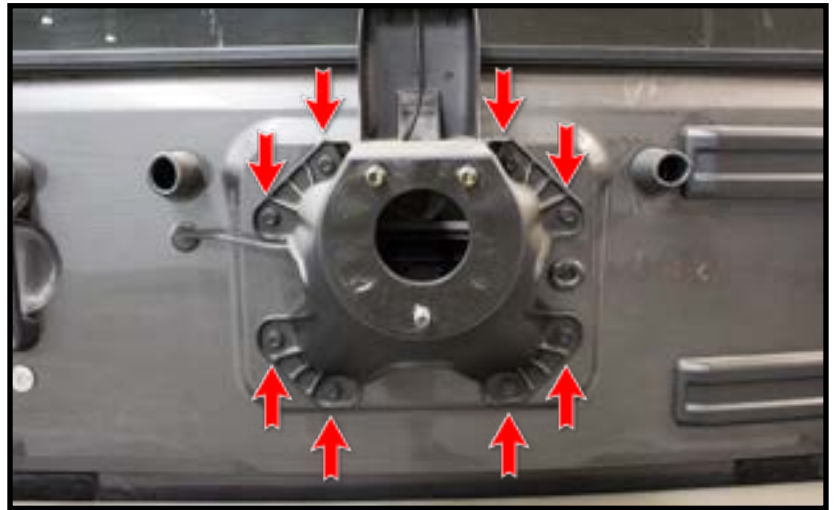
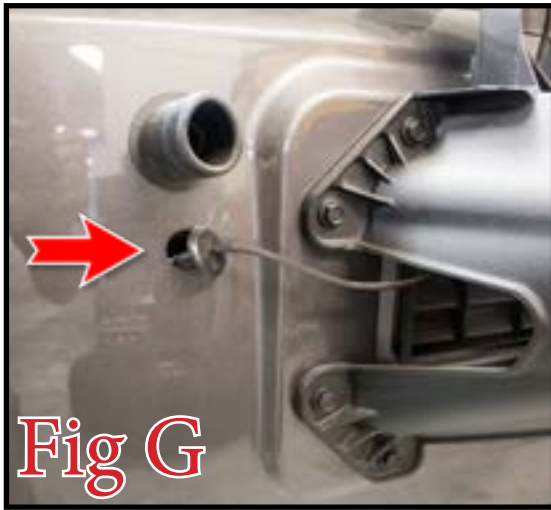
Fig E

7. Unplug the connector just inside of that panel. Then, reinstall the panel. (Fig F)



Fig F

8. Using a 13mm Socket, remove the bolts that hold on the OEM spare tire carrier. **Save these bolts for reuse.** Then, remove the carrier from the vehicle. Make sure to pull the rubber grommet /harness out of the tailgate as you pull the carrier off. (Fig G)



9. Pull the vent out of the rear hatch. (Fig H)





10. Using a razor blade or something similar, cut the rubber grommet that is on the OEM 3rd brake light harness down one side. Then, remove it from the OEM harness and reinstall it in the hole it originally came from. (Fig I)



11. Install the supplied Tail Gate Plate onto your Jeep's tailgate. Use the OEM bolts saved in Step 8 to mount the plate. Torque these bolts to OEM torque spec. (Fig J)

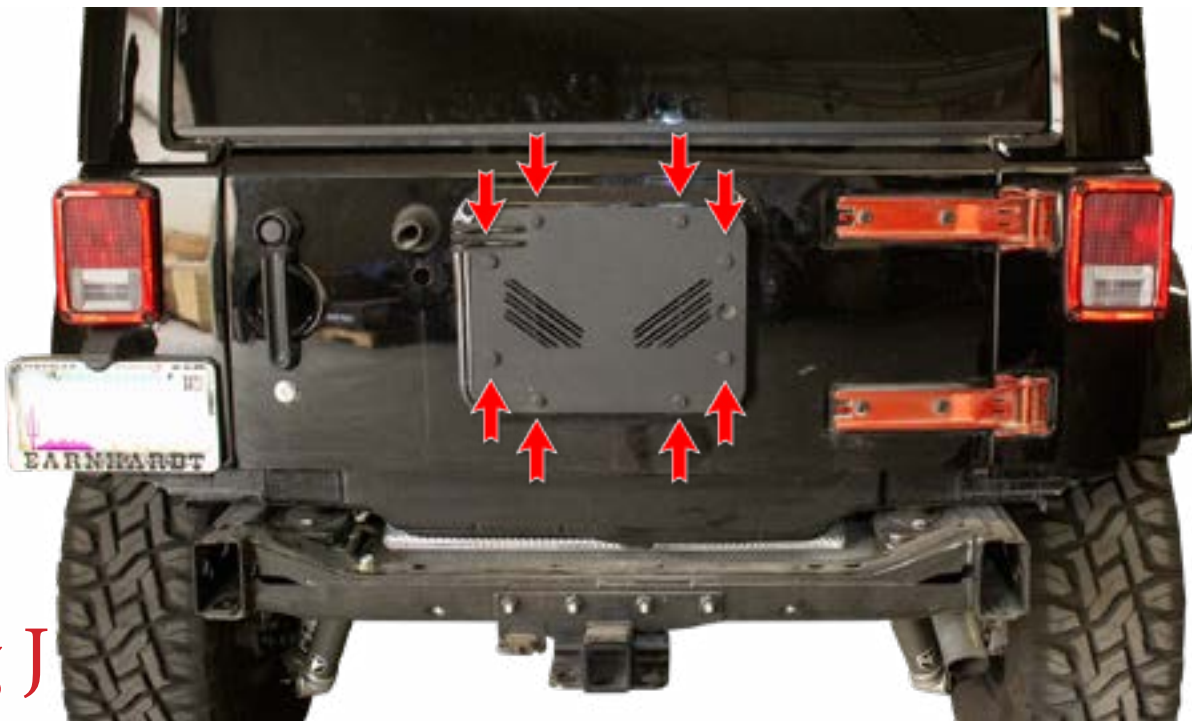


Fig J



12. Remove the three mounting bolts for the ADD Plate on the top your new rear bumper. Then, remove this plate from your bumper. (Fig K)



Fig K

13. Set the Tire Gate Mounting Bracket in place on your new bumper. Make sure to mount the supplied Gusset Plates on the bottom side of where the bracket mounts to the bumper. (Fig L) Use the supplied 3/8" Button Head Bolts (x5), 3/8" Washers (x10), and 3/8" Lock Nuts (x5). Once all bolts are loosely installed, go back and torque them to 30 foot pounds. (Fig M)

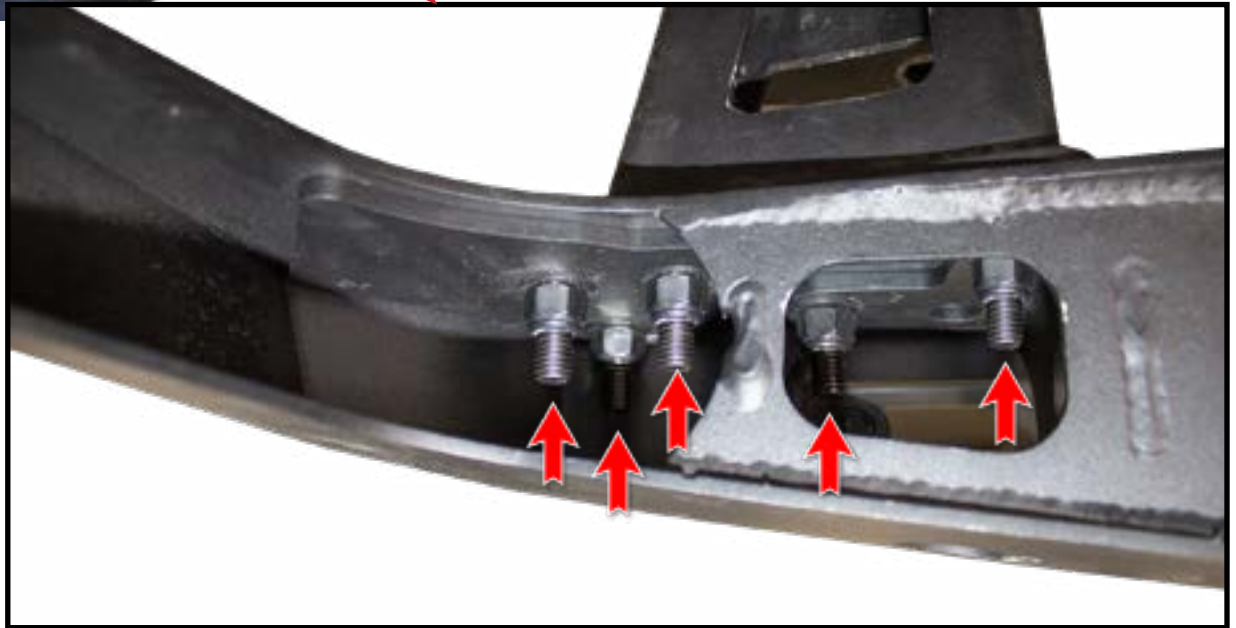
In order to get the bolts in, you will have to put all the bolts through the mounting holes of the Tire Gate Bracket BEFORE putting the Tire Gate Bracket onto the bumper.



Fig L



Fig M





14. If you have lights to install in your bumper, now is a good time to do so. Please follow the light manufacturer's install guide for mounting/wiring information.
15. Set the bumper in place on the vehicle. Then, use the supplied M10 Bolts (x4) and M10 Washers (x4) into the side mounting holes on the bumper. Leave these bolts loose for now. (Fig N)



Fig N

16. Install the supplied 1/2" x 4 1/2" Bolts (x2), 1/2" Washers (x4), and 1/2" Lock Nuts (x2) into the lower bumper mounting holes. (Fig O)



Fig O



17. Align the bumper so it is straight in relation to the tailgate. **Also, make sure the bumper is not tipped up or down. The side wings of the bumper should be square to the body of the Jeep.** Then, torque the M10 mounting bolts to 40 foot pounds. Torque the 1/2" mounting bolts to 80 foot pounds.

18. Find the Tire Gate, measure the upper and lower joints. Make sure the measurements match what is shown in (Fig P). If the measurements do not match, adjust the joint length and tighten the joint jam nuts. **Always make sure the grease fittings face outwards (NOT towards the Jeep).**

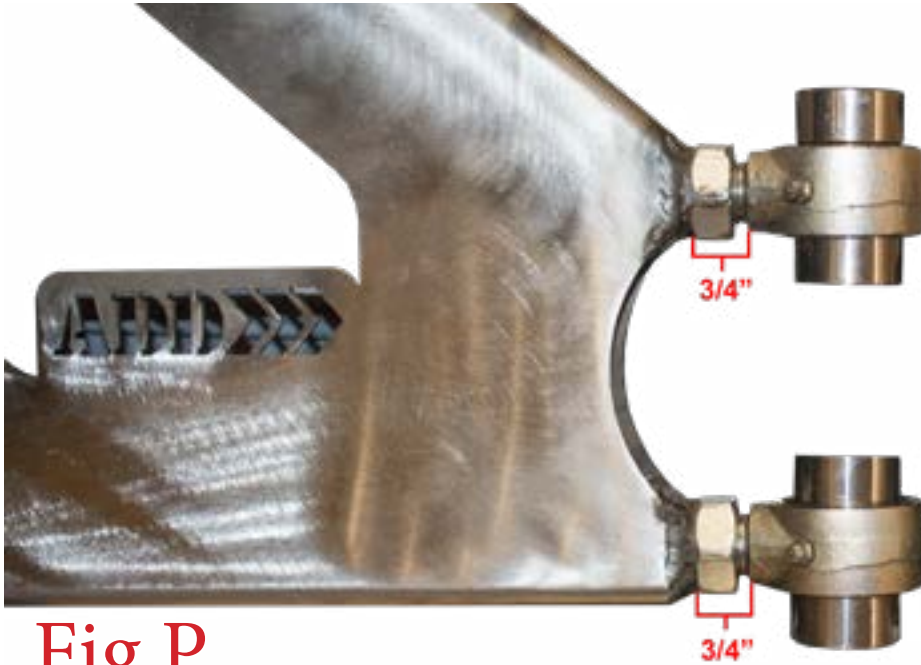


Fig P

19. Install the supplied Spare Tire Mounting Bracket onto the Tire Gate as shown in (Fig Q). Use the supplied 1/2" x 1" Bolts (x6), 1/2" Washers (x12), and 1/2" Lock Nuts (x6). Once all bolts are loosely installed, torque them to 57 foot pounds. You can mount this bracket in two positions. Most off-road tires will use the higher position. If you put everything together and your tire looks too high, move the bracket down one set of holes.

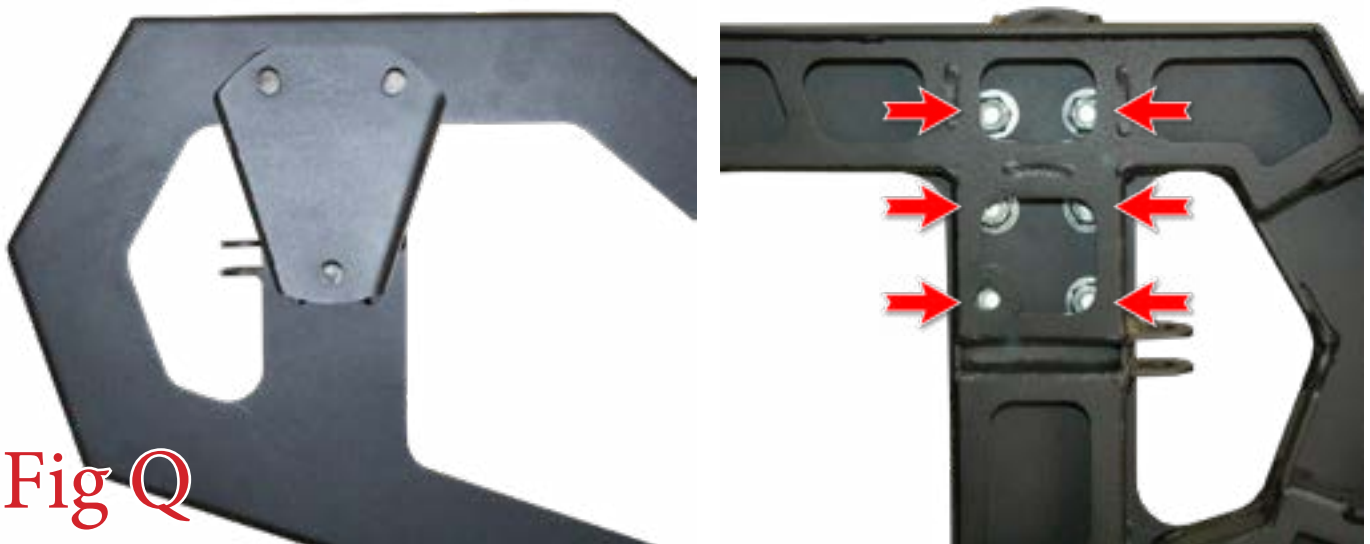


Fig Q



20. Set the Tire Gate in place on the bumper. Put a set of Johnny Joint Spacers on each joint. Use the supplied 9/16" x 4" Bolts (x2), 9/16" Washers (x4), 9/16" Lock Nuts (x2). Once both bolts are in place, torque them to 82 foot pounds. (Fig R)

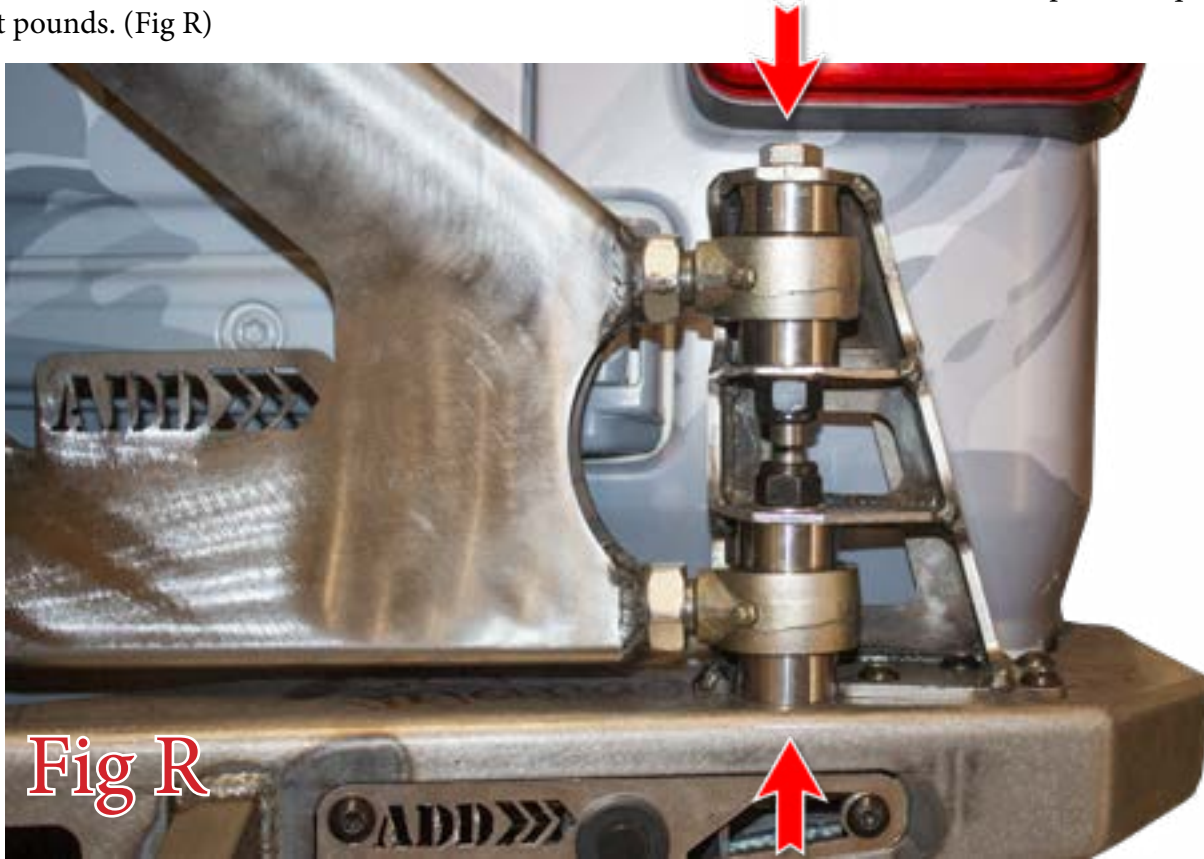


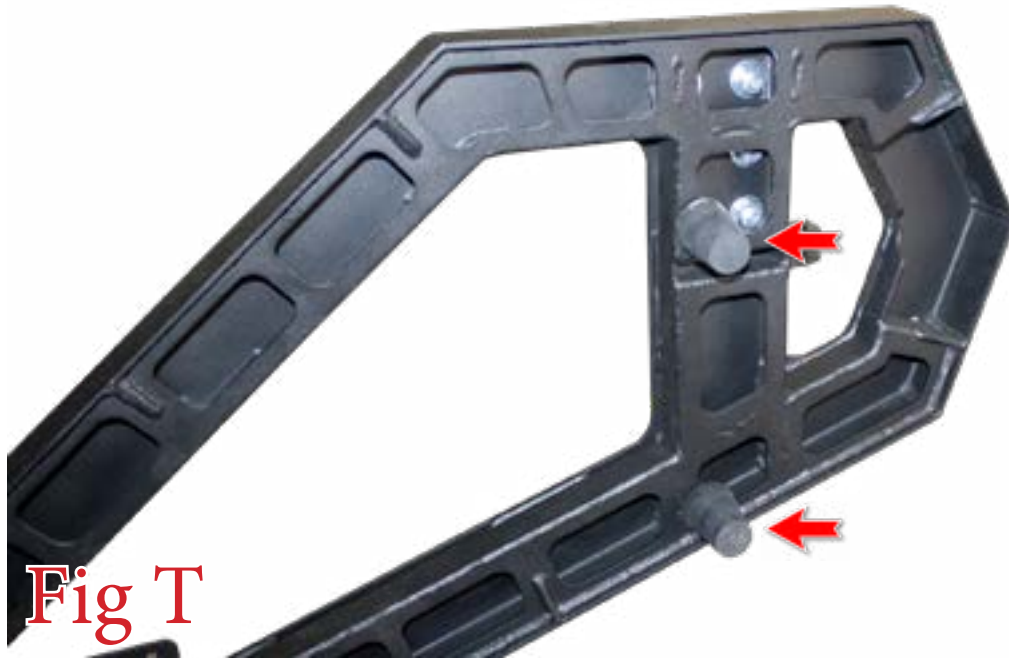
Fig R

21. Install the supplied 5/16" U-Nuts (x2) onto the back side of the Tire Gate as shown in (Fig S).



Fig S

22. Find the supplied Threaded Rubber Bumpers (x2) and screw them into the newly installed U-Nuts. (Fig T)



23. Assemble the supplied Threaded Aluminum Tube (x1) with the supplied 1/2" Heims (x2) and 1/2" Nuts (x2). **Adjust the heims so that the total length of the assembly is 6 3/4".** (Fig U)



Fig U

24. Install the assembly from Step 23 onto the tailgate plate and the tire gate as shown in (Fig V). Use the supplied 1/2" x 1 1/2" Bolts (x2), 1/2" Washers (x4), and 1/2" Lock Nuts (x2). Torque these bolts to 57 foot pounds.



25. Install your spare tire.
26. If the Tire Gate does not sit straight in relation to the top of the bumper, you will have to adjust the mounting Joints. To do this, you will have to remove the bolts from Steps 20 & 24 and remove the entire Tire Gate assembly from the bumper. If the tire gate is leaning down on the passenger side, screw the bottom joint in. If the tire gate is leaning down on the driver side, unscrew the bottom joint. Then, reinstall all bolts.
27. If the Tire Gate is loose with the tailgate closed, you may have to make the 1/2" heim assembly shorter. Do this by removing the bolts from Step 24. Then, screw the heims in and reinstall all bolts.
28. If your Tire Gate is not parallel to the back of the Jeep (when looking from the side), then you may have to readjust your bumper. Make sure the bumper is mounted properly so the side wings of the bumper are square to the Jeep body. To readjust your bumper, loosen all bumper mounting bolts, position it properly, then re-tighten all bumper mounting bolts.
29. Stand back and enjoy your new ADD Stealth Fighter™ Tire Carrier.
30. Check and re-tighten, if needed, all mounting bolts after 100 miles and periodically thereafter.

