

Rusty's 2007-2017 JK Tire Carrier JBJK800 INSTALLATION INSTRUCTIONS

Last Revised: 10/16/2019

Introduction:

Rusty's recommends that this installation be performed by a certified automotive technician or a person with professional mechanical knowledge. Installing this kit without this expertise may jeopardize the handling and safety of the vehicle.

Read instructions several times before starting. Be sure you have all the needed parts and know where they install. Read each step completely as you go. Exhaust modifications may be necessary. Prior to drilling or cutting, check behind the surface being worked on for any wires, lines, or hoses that could be damaged. After any drilling or cutting, remove burrs and grind smooth any surfaces. An inclinometer or similar tool may be needed to measure driveshaft angles before and after the installation.

Warning:

- It is the owners' responsibility to inspect all Rusty's products for proper torque specs to prevent loosening of components.
- Seat belts and shoulder harnesses should be worn at all times.
- Re-check all bolts and nuts after the first 100 miles and after any off-road usage during the first 300 miles.
- Although all of our products are made from the highest quality materials possible, they are not a substitute for Safe and Careful driving. In other words, have good safe on-road / off-road sense. Know the terrain, the speed limitations, and any obstacles that may lie ahead. Please remember to preserve our right to enjoy public land through the proper use of off-road vehicles.

Before Starting Installation:

1. Carefully Read all warnings and instructions completely before beginning.
2. Verify all parts have been received in this kit by checking the parts list on page#2 of this document.
3. Only install this kit on the vehicle for which it is specified.
4. Park the vehicle on a clean, dry, flat, level surface and block the tires so the vehicle cannot roll in either direction.
5. Be certain the vehicle is safely secured on jack stands or a vehicle lift prior to working around or under a vehicle. Never rely on a jack alone to support a vehicle's weight; use appropriately rated stands to support the vehicle's frame and any other heavy components.

Parts List:

Note: Please be sure that you have all the provided parts listed below before continuing with the installation.

<u>Part #</u>	<u>DESCRIPTION:</u>	<u>Quantity</u>
RA-TC1-JK	Rusty's JK HD Adjustable Tire Mounting Bracket #1	1
RA-TC2-JK	Rusty's JK HD Adjustable Tire Mounting Bracket #2	1
RA-TC3-JK	Rusty's JK HD Hinge Mounts	2
RA-TC4567-JK	Rusty's JK HD Tire Carrier Assembly	1
68017920	M8 x 1.25mm x 25mm Length Button Head Cap Screw (Stainless Steel)	18
68025162	M8 Flat Washer (Stainless Steel)	18
MC-FF621-01B	Oilite Bearings (1/2" I.D. x 3/4"O.D.) Flange (1" O.D. x 1/8" Thickness)	4
88628169	1/2" x 3" Shoulder Bolt (Stainless Steel)	2
F-1137264	3/8"-16 Zinc Finish Steel Top Lock Nut	2
74454919	1/2"-13 x 1-1/2" Length Grade 8 Hex Head Cap Screw	8
67488965	1/2"-13 Grade 8 Hex Lock Nut	8
05724646	1/2" SAE Flat Washer	16
MC-9750K22	7/8" Head Diameter Plastic Round Plug (Fits 1/2" I.D.)	2
83503066	1/2" Zinc Coated Wheel Stud	3

Installation Instructions

Note: Save all factory components and hardware for reuse, unless noted.

1. Remove the spare tire from the factory tire carrier mount. (**Note:** Have an assistant help you lift the tire off of the carrier.)
2. Remove the spare tire mounting bracket by unbolting the (Qty:8) hex head bolts with a 13mm socket.
3. Remove the factory 3rd brake light bracket from the factory tire carrier by removing the (Qty:4) Torx screws with a T20 Torx driver. Save all hardware for re-use.
4. Remove the 3rd brake light wiring from bracket and disconnect from the light by unclipping the electrical connector from the brake light assembly.

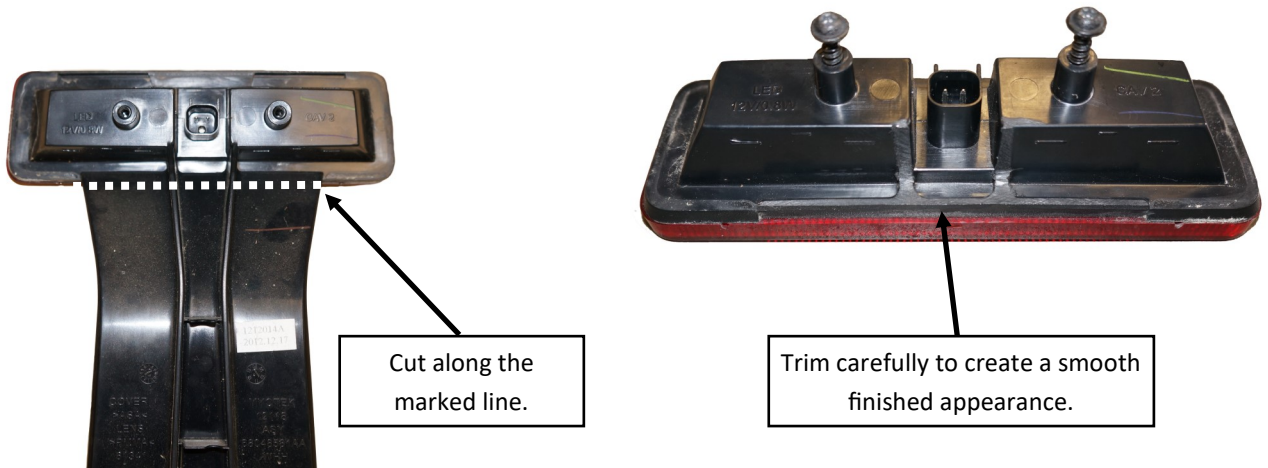


For Questions or Suggestions, contact our Tech Department (256-442-0607)

Installation Instructions (Continued)

Note: Save all factory components and hardware for reuse, unless noted.

5. Cut the lower portion of the 3rd brake light from the assembly as pictured below. Cut close to the marked line then trim up to the body of the light housing in order to create a finished appearance.



6. Remove and discard the plastic covers from both upper and lower hinges.
7. Remove the two factory spare tire bump stop pads from the tailgate by pulling them outward from the tailgate.
8. Install the (Qty:2) 7/8" Head Diameter Plastic Round Plug (Fits 1/2" I.D.) to the two hole locations exposed from the removal of the factory spare tire bump stop pads where removed.
9. Apply masking tape horizontally across the opening of the rear tail gate door in 3 locations. (**Note:** This step is needed in order to ensure that the door is located properly back into the original location.)



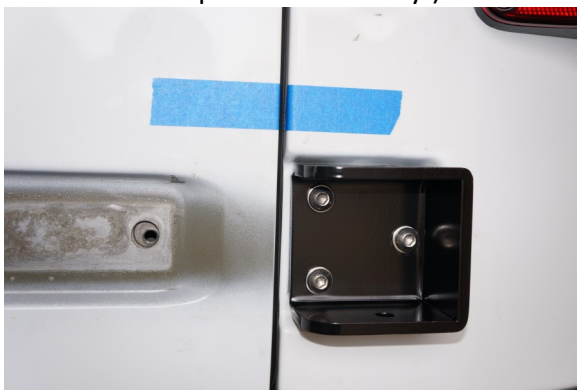
Installation Instructions (Continued)

10. (**Note:** It is a good idea to use a spacer or small block of wood to support the tailgate during the following steps to prevent movement.) Remove the (Qty:4) hex headed bolts with a 13mm socket that fasten the upper and lower hinges on to the door.
11. Have an assistant hold the door in place to ensure that it does not fall. Remove the (Qty:6) T50 Torx bolts that fasten the upper and lower hinges on to the body. (**Note:** Take any necessary precautions to prevent the tailgate from falling.)



IMPORTANT NOTE: Do not attempt to open the tailgate until instructed to do so, doing so will cause the tailgate to fall.

12. Clean all of the exposed surfaces that that will be covered by the new hinge mounts and the tire mount assembly.
13. Install the new hinge mounting brackets on the body where the factory hinges were located as shown below using the (Qty:6) supplied 8mm Allen head bolts and washers. (**Note:** Apply a small amount of anti-seize to each bolt prior to assembly.)



IMPORTANT NOTE: Do not completely tighten the hardware in step 13 at this time. The brackets should remain loose enough to allow movement up and down, and side to side.

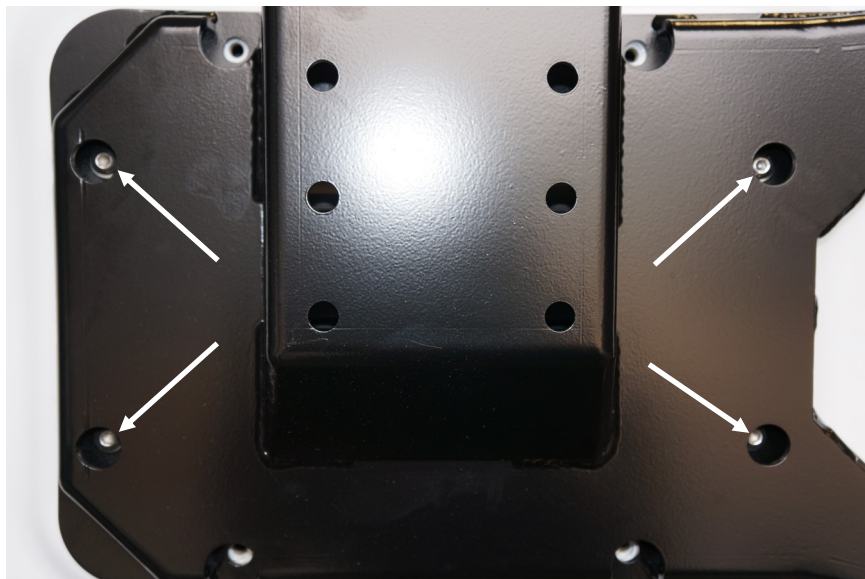


Installation Instructions (Continued)

14. Install the supplied metal bushings in the tire carrier mount. (**Note:** Apply a small amount of anti-seize to each bushing on the inside and outside prior to installation.)
15. Insert the tire carrier into the hinge brackets on the body. Line up the bushings in the carrier with the mounting holes in the hinge brackets and insert the two supplied 1/2" stainless steel shoulder bolts to secure the tire carrier.



16. Start the two supplied 3/8" top lock nuts on the tire carrier shoulder bolts. Snug, but do not tighten at this time.
17. Install the four supplied 8mm allen head bolts in the hole locations shown in the center of the tailgate. (**Note:** Apply a small amount of anti-seize to each bolt prior to assembly.) Do not tighten at this time.



Installation Instructions (Continued)

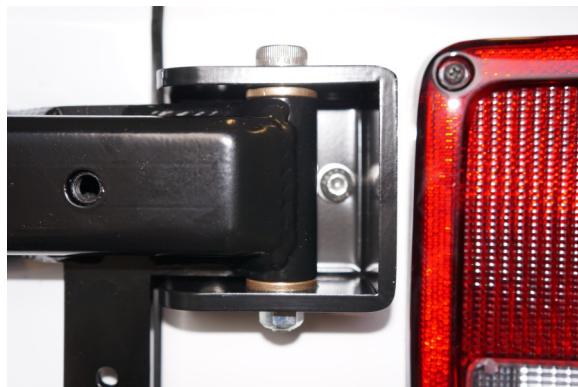
18. Install the supplied 8mm allen head bolts in the top two hole locations shown below, between the center of the carrier and the hinges. (**Note:** Apply a small amount of anti-seize to each bolt prior to assembly.)

IMPORTANT NOTE: Do not completely tighten the hardware in steps 17 & 18. All hardware should be snug but still allow for adjustments to be made.



19. The following steps are to help ensure the tire carrier hinge brackets are positioned level with the tire carrier.

- A. Use a digital or bubble level to verify that the vehicle is level.
- B. Place the level on the tire carrier bracket and adjust until the tire carrier is level.
- C. Once adjusted, tighten the six 8mm allen head bolts to secure the tire carrier to the tailgate.
- D. Check the tailgate alignment by looking at the tape lines made during disassembly to see if they are all aligned. Make adjustments as needed to get proper alignment.
- E. Tighten the two accessible outer hinge bolts to prevent the hinges from potentially moving as shown.



Installation Instructions (Continued)

20. Remove the six 8mm allen head bolts that attach the tire carrier mount to the tailgate.
21. Carefully swing the tire carrier away from the tailgate to access the remaining four 8mm allen head bolts securing the hinges to the body.



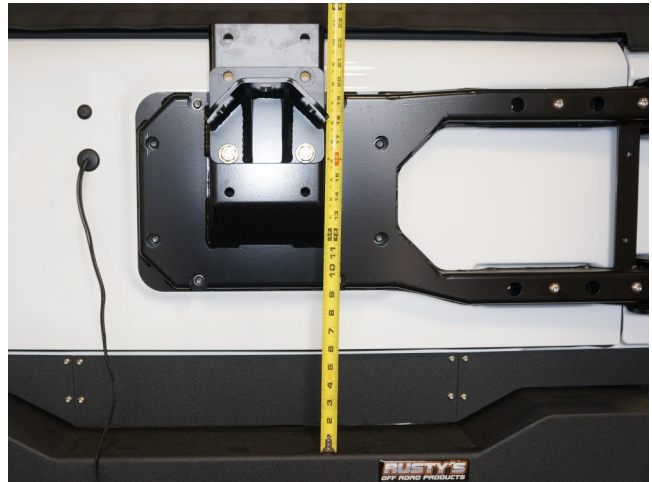
22. Tighten the four 8mm allen head bolts.
23. Carefully swing the tire carrier back to the tailgate.
24. Apply a small amount of anti-seize to all of the remaining twelve 8mm allen head bolts and start the bolts into each of the hole locations before tightening. Work in a star pattern when tightening the hardware.



25. Torque the two hinge shoulder bolts installed during step 16.
26. At this point everything should be tightened and adjusted properly. Open the tailgate to ensure that the tailgate opens and closes smoothly. Double check your tape lines to make sure that everything is still aligned, then remove the tape from the vehicle.

Installation Instructions (Continued)

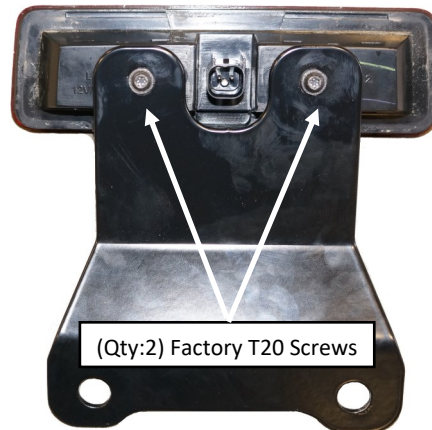
27. The tire carrier is designed to work with several wheel bolt patterns. Refer to the diagram on page 11 to match the bolt pattern for your vehicle's wheel bolt pattern. Press the three supplied wheel studs into the correct locations in the Rusty's JK HD Adjustable Tire Mounting Bracket #1 using a large socket and bench vice.
28. Locate the Rusty's JK HD Adjustable Tire Mounting Bracket #2. Note there are several possible mounting holes to attach this bracket to the tailgate assembly. The size of the spare tire and the bumper design will determine the which hole locations on the tailgate bracket will be the best for your application. There are several ways to determine the best location; we recommend placing the spare tire face down and mocking up the tire mounting bracket Part A into the wheel. Measure from the flat surface of the bracket to the bottom edge of the tire. Use this distance to determine which tailgate bracket mounting holes are best for bracket #2. Secure the bracket to the tailgate using the supplied hardware: in the bottom two holes ONLY :(Qty:2) 1/2"-13 x 1-1/2" Length Grade 8 Hex Head Cap Screw, (Qty:4) 1/2" SAE Flat Washer, & (Qty:2) 1/2"-13 Grade 8 Hex Lock Nut. Do not tighten at this time.



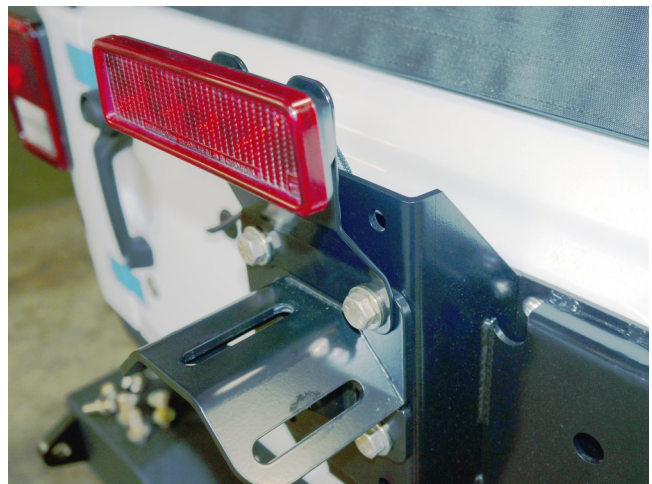
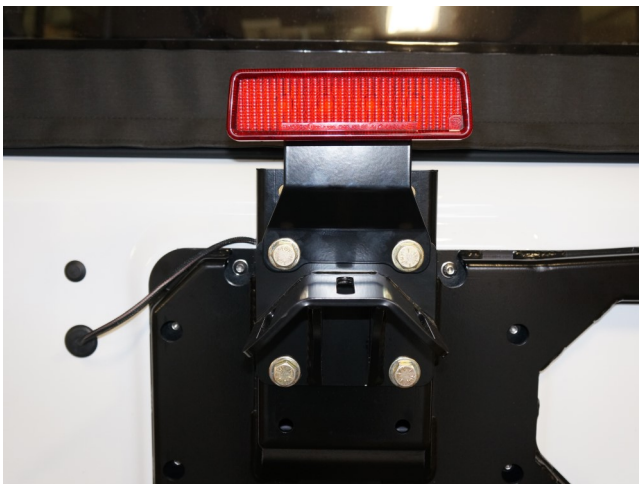
For Questions or Suggestions, contact our Tech Department (256-442-0607)

Installation Instructions (Continued)

29. Attach the 3rd brake light to the supplied 3rd brake light mounting bracket with two of the four factory Torx screws from step 3 as shown below.

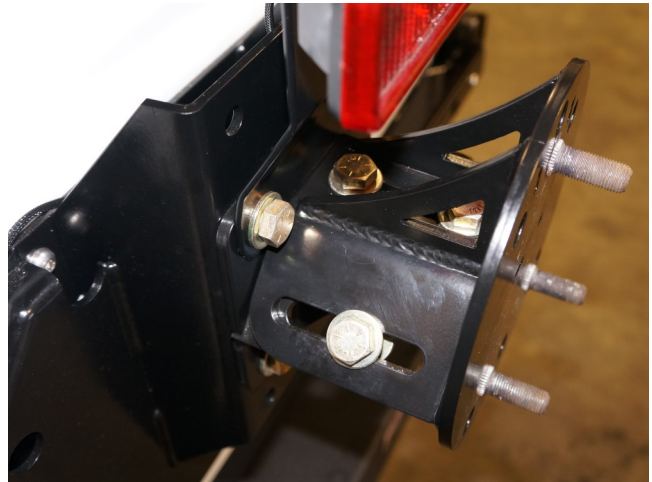
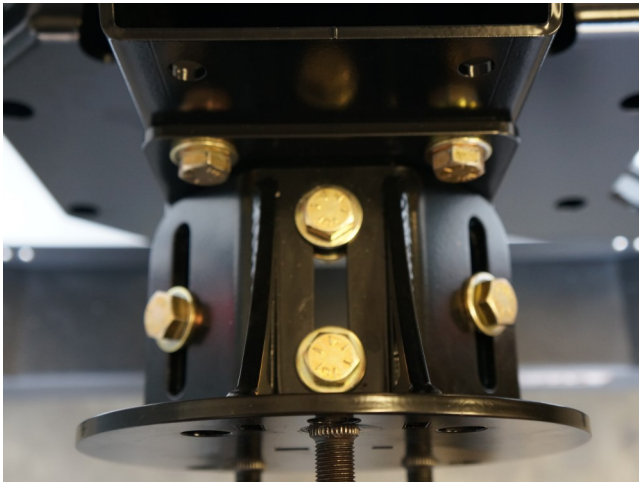


30. Attach the completed 3rd brake light assembly to the two upper mounting holes that help to secure the Tire Mounting Bracket #2 to the tire carrier assembly. Tighten the 1/2" hardware to 80 ft.-lbs.



Installation Instructions (Continued)

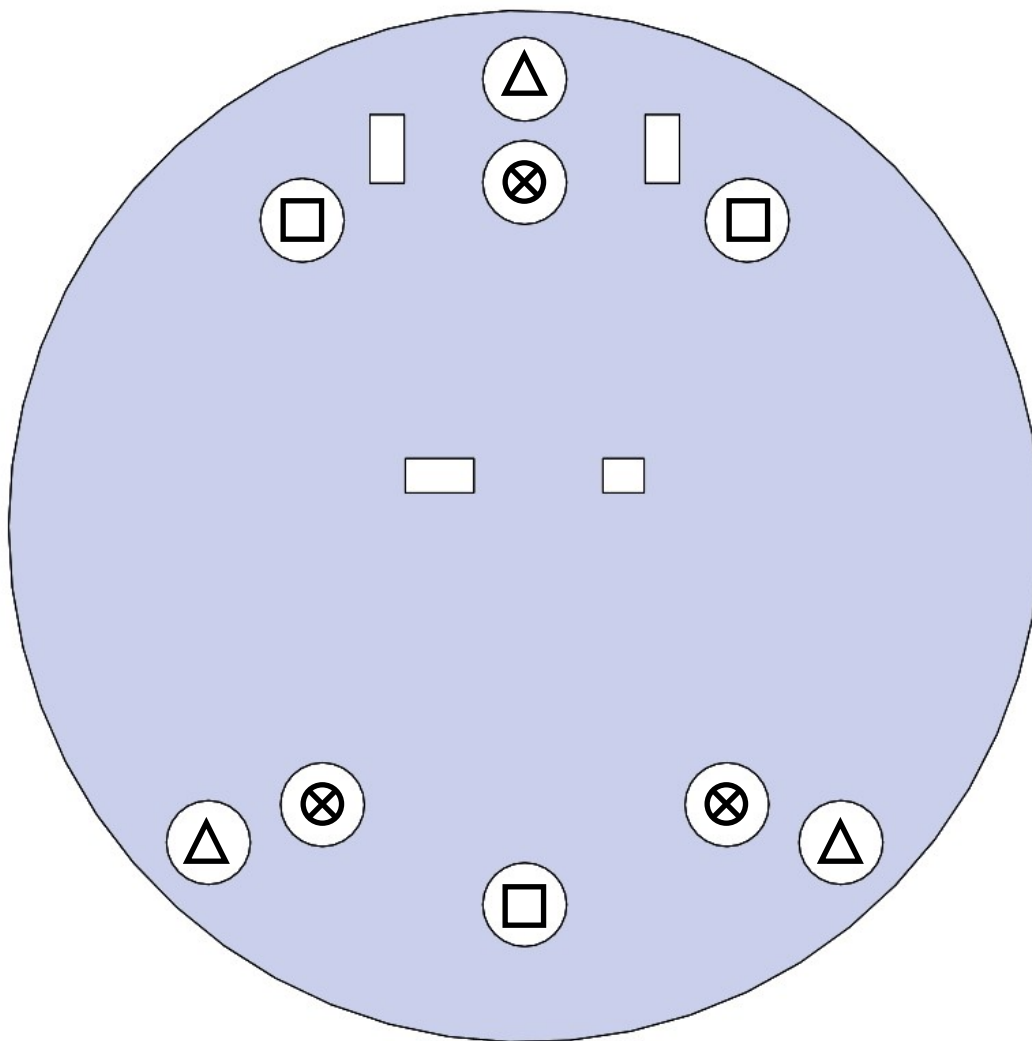
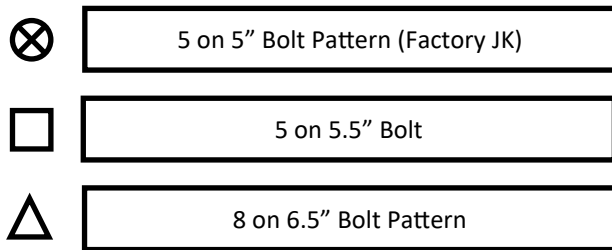
31. Align the slots on the Rusty's JK HD Adjustable Tire Mounting Bracket #1 & #2 .Secure the two mounting brackets to one another with the supplied hardware: (Qty:4) 1/2"-13 x 1-1/2" Long Grade 8 Hex Head Cap Screw, (Qty:8) 1/2" SAE Flat Washer, & (Qty:4) 1/2"-13 Grade 8 Hex Lock Nut. Snug the hardware so that the bracket is still able to be adjusted but does not move loosely to allow for depth adjustment (**Note:** Install two of the 1/2" bolts, washer, and locknuts into the top center slotted mounting point of the mounting brackets as pictured below.)



32. With the help of an assistant, temporarily mount the spare tire to the tire carrier assembly and install a lug nut to hold the tire in place.
33. Adjust the tire mounting bracket to get the tire as close to the tire carrier as possible. Once you have determined the best location for your spare tire, tighten the hardware. If necessary, tighten one or two bolts and then remove the spare tire to provide easier access to the remaining hardware. Important Note: It is strongly recommended that the tire is mounted as close to the tailgate as possible.
34. Tighten all of the hardware to secure the mounting brackets. Torque the 1/2" hardware to 80 ft.-lbs.
35. Double-check all fasteners for proper torque. Re-install the spare tire and secure with three lug nuts.
36. At this time install the supplied Rear Tailgate Tether by referring to the Rear Tailgate Tether Installation Instructions on page 12.
37. Open and close the tailgate to verify proper alignment and operation of the tailgate hinges. If opening or closing the tailgate requires excessive force, something is misaligned and must be addressed before the vehicle can be driven. Make adjustments as necessary until the tailgate operates smoothly. Note that the tire carrier can accommodate up to a 40" diameter tire with most common wheel offsets.

Spare Tire Bolt Pattern Diagram

Refer to the diagram below to make sure that you install the supplied wheel studs to match the correct bolt pattern on your vehicle. The 5 on 5" bolt pattern is what comes standard on all of the Jeep JK Wrangler models.



For Questions or Suggestions, contact our Tech Department (256-442-0607)

Rusty's JK Wrangler Tailgate Tether JBJK800-TT INSTALLATION INSTRUCTIONS

Last Revised: 07/22/2019

Parts List:

Note: Please be sure that you have all the provided parts listed below before continuing with the installation.

<u>Part #</u>	<u>DESCRIPTION:</u>	<u>Quantity</u>
MC-30645T861	JK Wrangler Tailgate Tether	1
67563080	1/4"-20 x 3/4" Length Button Head Cap Screw	2
08411266	1/4"-20 Knurled Threaded Nut Insert	2
09331745	1/4"-20 UNC Manual Threaded Insert Installation Tool	1

Installation Instructions

Note: Save all factory components and hardware for reuse, unless noted.

1. Open rear tailgate door to 90 degrees from the closed position to access the work area. Position a small piece of cardboard or towel between the hinge and tire carrier bracket to prevent damaging the powder coating. (**Note:** If equipped with the factory subwoofer on the passenger side this will need to be unbolted from the vehicle in order to gain access to the work area as shown below.)



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Installation Instructions (Continued)

2. Pull the carpet back from the passenger side corner to expose the sheet metal of the wheel well behind the rear roll bar as shown.



3. Locate the spot weld shown below on the rear tub approximately 7" behind the roll bar. Mark and center punch your hole location then drill hole with a 3/8" drill to install the supplied 1/4"-20 Knurled Threaded Nut Insert with the supplied 1/4"-20 UNC Manual Threaded Insert Installation Tool. (**Note:** Refer to the instructions supplied with the 1/4"-20 UNC Manual Threaded Insert Installation Tool when installing the threaded insert.)



Installation Instructions (Continued)

4. Install one end of the supplied (Qty:1) JK Wrangler Tailgate Tether to the 1/4"-20 Knurled Threaded Nut Insert using the supplied (Qty:1) 1/4"-20 x 3/4" Length Button Head Cap Screw. Do not tighten at this time.

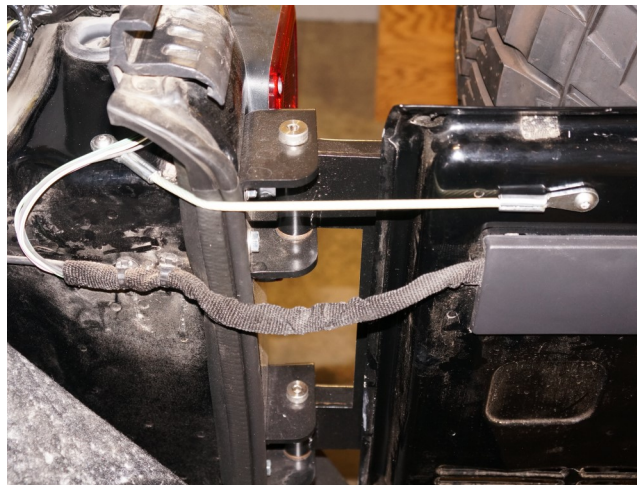


5. Make sure that the tailgate door is held square to the rear of the jeep in the open position approximately 90 degrees. Pull the tether tightly to the tailgate so that it is aligned with the spot welds on the door. Mark and center punch your hole location then drill hole with a 3/8" drill to install the supplied 1/4"-20 Knurled Threaded Nut Insert with the supplied 1/4"-20 UNC Manual Threaded Insert Installation Tool. (**Note:** Refer to the instructions supplied with the 1/4"-20 UNC Manual Threaded Insert Installation Tool when installing the threaded insert.)



Installation Instructions (Continued)

6. Install the loose end of the supplied (Qty:1) JK Wrangler Tailgate Tether 1/8" Diameter x 12" Length to the 1/4"-20 Knurled Threaded Nut Insert using the supplied (Qty:1) 1/4"-20 x 3/4" Length Button Head Cap Screw.



7. With both ends of the tether connected and the hardware left loose, apply a small amount of pressure to the tailgate door to apply tension to the tether. With tension held on the tether, tighten both 1/4"-20 x 3/4" Length Button Head Cap Screws to secure tether in place.
8. Reinstall the carpet and factory subwoofer (if equipped) using factory hardware.
9. Installation is now complete.

WARNING

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