INSTALLATION INSTRUCTIONS



JK BODY MOUNTED TIRE CARRIER WITH LICENSE PLATE MOUNT

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Thank you for purchasing this ICON Vehicle Dynamics product. Please read through this entire document before proceeding with installation. If you are not confident in your mechanical skills, please seek the help of a professional to perform the installation. Check your packages immediately upon arrival to ensure that everything listed is included, and to check for damage during shipping. If anything is missing or damaged, or if you need technical assistance with any aspect of this installation, call (951) 689-ICON as soon as possible.



APPLICATION

These installation instructions apply to the following products:

25226 07-18 JK BODY MNT TIRE CARRIER KIT

COMPONENTS INCLUDED

- (1) Tire Carrier Frame
- (1) Tailgate Plate
- (2) Hinge Brackets (Upper & Lower)
- (1) Adjustable Tire Mount Bracket Carrier Side
- (1) Adjustable Tire Mount Bracket Wheel Side
- (1) License Plate Relocation Bracket

TECH NOTES

NOTE: These installation instructions are based on a clean installation on to a stock 2007-2018 Jeep JK Wrangler. Previously modified vehicles may require additional steps.

TOOLS REQUIRED

- 9/16" Socket and Wrench 13MM Socket
- 7/16" Socket and Wrench T50 Torx Bit
- 3/8" Allen Wrench or Hex bit Rubber Hammer or Dead Blow Hammer
- 5/16" Allen Wrench or Hex bit #1Screw Driver/ Flat Head Screw Driver
- 3/4" Open End Wrench
- 17mm Open End Wrench
- Metal Cutting Tool: Dremel or 4-1/2" Angle Grinder with metal cutting wheel
- Medium Grade Loctite

HARDWARE INCLUDED

- (4) **1** Delrin Hat Bushing
- (2) **2** Bushing Sleeve
- (1) **3** Delrin Striker
- (1) Male Rod End CM6
- (1) 5 Female Rod End CF6
- (4) 6 1/4-20 Gr8 Nylon Insert Lock Nut
- (6) 1/4 SAE Flat Washer
- (2) 1/4-20 X 1/2 Gr8 Hex Head Cap Screw
- (2) 9 1/4-20 X 1-3/4 Gr8 Hex Head Cap Screw
- (6) 0 3/8-16 X 1 Gr8 Hex Head Cap Screw
- (6) **1** 3/8-16 Gr8 Nylon Insert Lock Nut
- (8) 2/8 SAE Gr8 Flat Washer
- (1) **1** 3/8-24 Jam Nut RH Thread
- (2) 41/2-13 X 4-1/2 SS Socket Head Cap Screw
- (2) (5) 1/2-13 Gr8 Nylong Insert Lock Nut
- (2) ¹/2 SAE Gr8 Flat Washer
- (4) 10 M10 SS Flat Washer
- (2) ⁽¹⁾ M10-1.50 SS Nylon Insert Lock Nut
- (2) (1) M10-1.50 X 110 SS Socket Head Cap Screw
- (3) 1/2-20 Wheel Lug Stud
- (3) 1/2-20 Wheel Lug Nut
- (2) Tig Welded Cam Adjuster



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IMPORTANT NOTICES - PLEASE READ FIRST

READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!

ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLATION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.

INSTALLATION INSTRUCTIONS

- 1. Ensure the vehicle is placed on a flat, level surface with the transmission in PARK, the tires chocked, and the emergency brake ON. Wear safety glasses from this point forward.
- 2. Use a ratchet with 3/4" deep socket to remove the lug nuts holding the factory spare tire and set them aside.



- FIG.1
- 3. Remove factory tire carrier by removing the 8 bolts with a 13mm Socket *Retain these 8 bolts as they will be re-used.*
- 4. Remove the factory vent insert and plastic hinge covers. These will not be re-used.
- 5. With the tailgate closed and firmly latched, use a 13mm socket and T50 Torx bit to remove the TOP tailgate hinge only. Retain the four 13mm bolts and six T50 bolts they will be reused.

IMPORTANT: DO NOT remove the bottom hinge until after the following modifications have been made to the top hinge and it has been re-installed.

6. Once the hinge has been removed from the jeep, secure it in a vise and cut through the center of

the hinge pin that holds the two parts of the hinge together with a metal cut-off wheel. A Dremel or 4-1/2" angle grinder works well.



- 7. After the pin has been cut, pull the pieces of the pin out and separate the two halves of the hinge. Retain the long half of the hinge that mounts to the tail gate. The half of the hinge that was attached to the Jeep's body tub will not be re-used.
- 8. Install the provided Upper Hinge Bracket on to the jeep using three of the stock T50 hinge bolts. Apply medium grade Loctite to the bolt threads.
- Install the long factory hinge half to the carrier hinge bracket using the provided M10-1.50 X 110 SS Socket Head Cap Screw with M10-1.50 Lock Nut and Flat Washer. Swing the long hinge half to the tailgate and attach it by re-using two of the OE hinge bolts.



FIG.1

10. Repeat the previous steps to remove the lower hinge assembly, cut the hinge pin and separate the two hinge halves, and install the supplied Lower Hinge Bracket. Be careful to keep the tailgate securely latched shut until both the upper and lower hinges with the new Hinge Brackets have been installed and all fasteners tightened.



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- Install the suplied Tailgate Plate on to the tailgate, in place of the OE tire carrier. Re-use the eight OE 13mm tire carrier bolts.
- 12. Install the supplied U-Shaped Delrin Striker bushing into the center tabs of the Tailgate Plate with the supplied 1/4-20 X 1-3/4 Gr8 Hex Head Cap Screws, 1/4 Flat Washers and 1/4-20 Gr8 Nylon Insert Lock Nuts. It is not necessary to fully tighten this hardware yet, as some adjustments will be made later in the process.





- 13. Lightly coat the Delrin Hat Bushings and steel Bushing Sleeves with general purpose grease, and install them into the hinge bushing housings on the Tire Carrier Frame. Light taps with a dead blow hammer in a circular motion will help seat the bushings. Install the delrin bushings halves first, followed by the steel bushing sleeves.
- 14. Mount the Tire Carrier Frame into the Hinge Brackets on the Jeep. At each hinge, use a supplied 1/2-13 X 5 SS Socket Head Cap Screw, Cam Adjuster Washer (placed just under the head of the Cap Screw, 1/2-13 Nylon Insert Lock Nut and 1/2 Flat Washer (placed just above the Lock Nut. Snug the bolts up but leave loose for adjustment after installation is complete.



- 15. Assemble the Male Rod End CM6, Female Rod End CF6, and 3/8-24 Jam Nut - RH Thread into a tierod assembly and connect it to the TailGate Plate using a supplied 3/8-16 X 1-3/4 Gr8 Hex Head Cap Screw, 3/8 Flat Washer and 3/8-16 Gr8 Nylon Insert Lock Nut.
- 16. Attach the opposite end of the tie-rod assembly to the tabs on the back side of the Tire Carrier Frame using the remaining 3/8-16 X 1-3/4 Gr8 Hex Head Cap Screw, 3/8 Flat Washer and 3/8-16 Gr8 Nylon Insert Lock Nut.



- FIG.1
- 17. Adjust the length of the Tie Rod Assembly so that the U-shaped striker on the back of the Tire Carrier Frame seats snugly into the U-Shaped Delrin Striker Bushing when the tailgate is latched shut. If the carrier rattles, the heim joints need to be shortened until the rattle has stopped. Once the length of the Tie Rod has been adjusted correctly, tighten the Jam Nut. Note that the bolts holding the U-shaped Delrin Striker Bushing should still be left un-tightened, as they will be adjusted later.



 Install the Adjustable Tire Mount Bracket - Carrier Side on to the Tire Carrier Frame, with the triangular shape pointing up, using four 3/8-16 X 1 Gr8 Hex Head Cap Screws, 3/8 Flat Washers and 3/8-16 Nylon Insert Lock Nuts. There is some

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adjustment available in the vertical location of the bracket. Select the height that works best with your wheel and tire diameter, taking into account bumper clearance and desired departure angle.



- 19. Place the Adjustable Tire Mount Bracket Wheel Side againse the back of your spare tire wheel and align it to determine the correct three lug stud holes to use for your wheel's bolt patter. Use a hammer to tap the supplied Wheel Lug Stud into the bracket, making sure the knurls of the wheel studs are fully seated into the bracket.
- 20. Set the Wheel Side Bracket on to the Carrier Side Bracket and use two 3/8-16 X 1 Gr8 Hex Head Cap Screws, 3/8 Flat Washers and 3/8-16 Nylon Insert Lock Nuts to bolt them together. Snug these bolts but leave loose enough for wheel backspacing adjustment.
- 21. Mount the spare tire on to the Tire Mount Bracket, install the supplied Wheel Lug Nuts, and tighten. Slide the wheel and wheel bracket forwards towards the front of the Jeep so that the tire is pushing against the carrier on both sides. Make sure the tire is as tight to the carrier as possible, then tighten the two 3/8" bolts in the wheel and carrier bracket.
- 22. Mounting License Plate Relocation Bracket (Optional). Using the supplied 1/4-20 X 1/2 Gr8 Hex Head Cap Screws, Flat Washers and Lock Nuts to mount the license plate bracket to the wheel bracket. The license plate may now be mounted to the License Plate Relocation Bracket. Note that a suitable license plate light (not provided) will need to be installed.
- 23. Perform final adjustments by turning the cam adjusters on the Tire Carrier Hinge, so that the carrier sits level and opens smoothly. Once adjustments have been made, tighten all of the nuts and bolts on the entire carrier, including

the bolts that attach the U-shaped Delrin Striker Bushing to the Tailgate Plate.

24. VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

Congratulations! Your installation is complete.

RE-TORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.



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LIMITED LIFETIME WARRANTY

ICON Vehicle Dynamics warrants to the original retail purchaser who owns the vehicle on which the product was originally installed. ICON Vehicle Dynamics does not warrant the product for finish, alterations, modifications and/or installation contrary to ICON Vehicle Dynamics instructions. ICON Vehicle Dynamics products are not designed, nor are they intended to be installed on vehicles used in race applications, for racing purposes or for similar activities. (A "race" is defined as any contest between two or more vehicles, or a contest of one or more vehicles against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America and Canada.

ICON Vehicle Dynamics' obligation under this warranty is limited to the repair or replacement, at ICON Vehicle Dynamics' discretion, of the defective product. Any and all costs of removal, installation or re-installation, freight charges and incidental or consequential damages are expressly excluded from this warranty. Items that are subject to wear are not considered defective when worn and are not covered.

ICON Vehicle Dynamics components must be installed as a complete kit as shown in our current application guide. Any substitutions or exemptions of required components will immediately void the warranty. Some finish damage may happen to parts during shipping and is not covered under warranty.

This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been improperly installed, modified or customized subject to accident, negligence, abuse or misuse.



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