

JK SHIELD TIRE CARRIER INSTALLATION INSTRUCTIONS

TOOLS NEEDED

- 3/4 Wrench
- 3/4 Socket
- 9/16 Wrench or Socket
- 1 1/2 Socket
- 1 1/8 Wrench
- 13mm Socket
- Torque Wrench for 1 1/2

Socket

- 5mm Allen
- T20 Torx
- Hammer
- Punch
- Grease

OPTIONAL TOOLS

HARDWARE

- 2 1/2 X 2 Hex Bolt
- 4 1/2 x 1 Hex Bolt
- 6 1/2 Flat Washer
- 3 1/2 x 1 Carriage Bolt
- 9 1/2 Flange Nut
- 8 8MM x 1.25 Button Head
- 8 5/16 Flat Washer
- 3 3/8 Flange Nut
- 2-3/8 x 2.25 Hex
- 3 Lug Nut

Please read the mounting instructions below carefully before attempting to install.

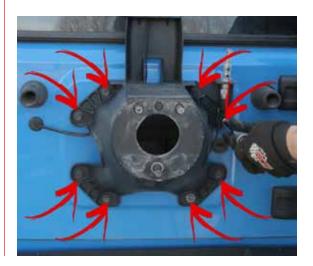
Thank you for purchasing your new Body mount Tire Carrier from JcrOffroad! Checkout our website, www.jcroffroad.com for other great off-road products. Be sure to rate and review our product online. If you have any questions or are missing parts, please don't hesitate to call us at 269-353-1184 x20!

It is always best to trial install before painting/finishing to ensure proper fit. You should first install your JcrOffroad rear bumper before installing this product. When installing this tire carrier, take special care in keeping paint away from bearing surfaces and bearing cap threads. If using a bed liner type product, you may need to use a drill or file to open holes or openings to the proper size.

Remove your spare tire from your current carrier.



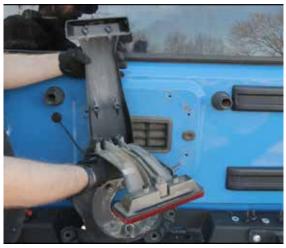
2 If you have another after market carrier, uninstall that carrier. If you still have the stock carrier, use the 13mm socket to remove the eight bolts holding the stock carrier to the tailgate.



3 Using the T20 torx, remove the four screws that hold the third break light bracket together.

Unplug the third break light and pull the wire out of the bracket.





4 Remove the plastic vent. It is held in with plastic clips that can be pushed down with a flat head screwdriver. Once removed it should look like this.



Attach the carrier tailgate plate to the center of the tailgate using the provided 8mm bolts using the 5mm allen head wrench.



Install the isolator using the 3/8 x 2.25 bolts, washers, and flange nuts. Then attach the female end of the heim joint to the top tabs using the 1/2 x 1.75 bolts, washers, and flange nuts. Make sure to place the miss alignment washers on either side of the joint with the small side towards the joint. Both the isolator and the joint should be finger tight.





Its time to pack your bearings! This is messy and disposable gloves are suggested. Place some bearing grease in the palm of your hand. Press the side of the bearing into the grease, forcing the grease into the rollers of the bearings. Do this until the grease starts to come out the top and bottom of the bearing. Rotate the bearing and repeat. Do this for both bearings and set them aside.



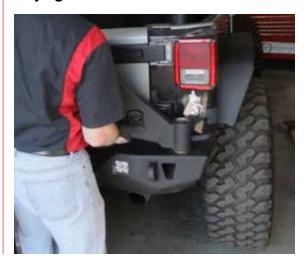
8 Turn the tire carrier so that the bottom of the carrier is facing up. Place the greased bearing into the race in the bottom of the carrier, with the small end facing in and the large end facing you.



9 Place the spindle seal with the metal side towards the bearing, and the rubber facing out. Tap into place with the small punch.



10 Turn the carrier right side up, and slide the seal and bearing over the spindle in the bumper. It may take a little moving around to get the bearing to line up with the spindle as the tolerances are very tight. Once it slides on it will slide to the bottom of the spindle.



Hold the carrier up and place the second bearing into its race at the top of the spindle with the small end facing down into the spindle and the large end facing up. You may have to move the bearing around a little to get it to line up with the spindle.



12 Place the large silver washer on top of the bearing and thread the large spindle nut onto the spindle. Using the 1 1/2 socket on the top nut, 1 1/8 wrench on the bottom bolt and a torque wrench, tighten the spindle down to 65 foot pounds.



Using your finger, smear a little of the grease around the rubber O ring that is on the JCR spindle cap. Thread the cap on to the top of the spindle and tighten with the supplied spindle wrench.



14 Adjusting the heim.

- **a** With both the carrier and the tailgate open, line up the male end of the heim between the tabs on the carrier with the misalignment spacers on both side of the joint and the small end facing the joint. Place the $1/2 \times 1.75$ both through the heim to keep in place.
- **b** Close the carrier, you will see a wedge shaped piece on the carrier slide into the isolator on the tailgate plate. That wedge should be making firm contact with the isolator, but not so much that its hard to close the gate.
- C If the carrier can not close or is hard to close, open the tailgate and carrier, pull the 1/2 bolt out of the male end of the heim and turn the heim to extend it. Then place back between the tabs and replace the 1/2 bolt and try closing it again.
- If the wedge is not making firm contact with the isolator, open the tailgate and carrier, pull the 1/2 bolt out the male end of the heim and turn the heim to shorten it. Then place back between the tabs and replace the 1/2 bolt and try closing again.
- **e** Once the heim is adjusted correctly, tighten the jam nut on the heim.



- When you closed the carrier, the isolator should have adjusted into position and stayed there.

 Tighten the isolator mounting bolts now.
- **16** Assemble and install the tire mount.
 - **a** Place tire mount part 1 inside of part 2.

 Place the carriage bolts through the outside with the nuts on the inside and finger tighten.
 - D Use a tape measure and find half the height of your tire. Use this measurement to set the vertical mounting position (When in doubt, always round up). Use the four 1/2 x 1.75 Hex head bolts are to mount the tire mount to the carrier.
 - C Place the tire face down and lay something straight, like a broom handle, across the tire. Measure from the inside mounting surface of the wheel to the bottom of the straight edge. Subtract 1/4 inch from this measurement and set the length of your tire mount and tighten down with the 3/4 wrench and socket.







* Wheels with more then 5 inches of back spacing may need a spacer to sit properly.

The tire should compress slightly against the carrier.

If installing optional 3rd brake light, do that now.

- Install the poly bumpstop in the hole near the tabs for the heim joint with the 3/8 flange nut.

 Tighten with the 9/16 wrench.
- Place your tire on the tire mount and use the 1/2 lug nuts provided to hold in place. Use a 3/4 deep well socket to tighten the lugs down.



- Now that the tire mounted, grab the top of the tire and give it a good shake to see if rattles or squeaks. If it does, start with the isolator and see if the heim needs to be readjusted now that the tire is on. Next common place is the 1/2 carriage bolts holding the tire mount together might need to be tighter. If noise still persists, double check all bolts for tightness.
- **20** If you have the Shield Hi-Lift Mount, install it now.
 - Enjoy that new Shield Tire Carrier!

 Any questions about this install, give us a call at 269-353-1184 or email at tech@jcroffroad.com.

JKSC2 - SHIELD TIRE CARRIER - JK WRANGLER

Item Code Legend EX: JKSC2-PC -PC: Powdercoated -BARE: Bare Metal



Additional Parts



Poly Bumpstop



Heim Joint



Spindle Kit









Carrier Tailgate Plate



Isolator

Bolt Pack:

- JKSC2-BP:

 2 1/2 X 2 Hex Bolt

 4 1/2 x 1 Hex Bolt

 6 1/2 Flat Washer

 - 3 1/2 x 1 Carriage Bolt 9 1/2 Flange Nut 8 8MM x 1.25 Button Head 8 5/16 Flat Washer

 - 3 3/8 Flange Nut
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