

# TJ/LJ SHIELD CARRIER INSTALLATION INSTRUCTIONS

## TOOLS NEEDED

- 3/4" Wrench
- 3/4" Socket
- 1 1/2" Socket
- 1 1/8" Wrench
- 15mm Socket
- Torque Wrench for 1 1/2  
Socket
- T25 Torx
- Hammer
- Punch
- Grease

## 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

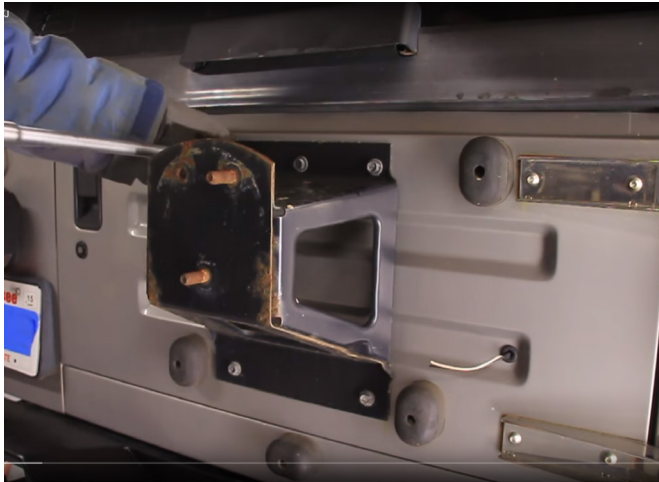
**Please read the mounting instructions below  
carefully before attempting to install.**

Thank you for purchasing your new Tire Carrier from JcR Offroad!  
Checkout our website, [www.jcroffroad.com](http://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.

**1 Remove your spare tire from your current carrier.**

**2 Remove your tire carrier using a 15mm socket.**



**3 Remove the top left rubber stopper from the tailgate with a T-25 torx bit.**



**4** Attach the tailgate plate using the stock hardware you just removed.



**5** Slide the spindle into the bumper and install using the 1 1/8" bolt and washer provided.



- 6** 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.



- 7** 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.



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



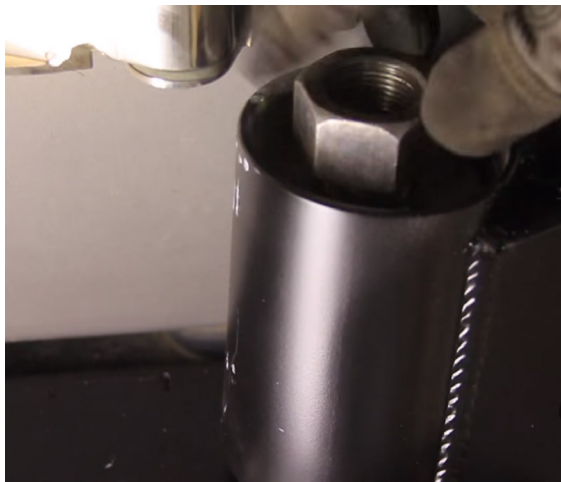
- 9** Turn the carrier right side up, and slide the seal and bearing over the spindle in the bumper. It may take a little moving around to get the bearing to line up with the spindle as the tolerances are very tight. Once it slides on it will slide to the bottom of the spindle.



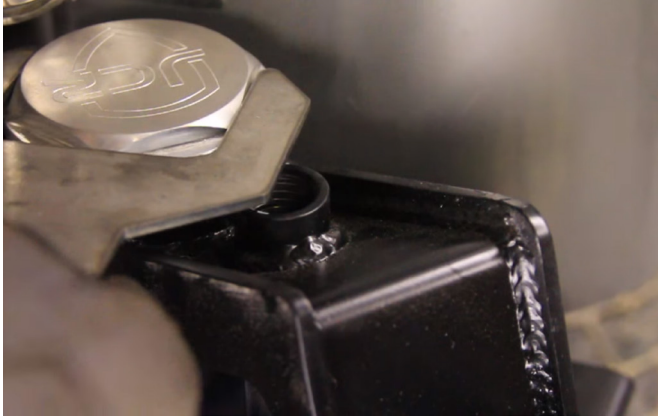
- 10** Hold the carrier up and place the second bearing into its race at the top of the spindle with the small end facing down into the spindle and the large end facing up. You may have to move the bearing around a little to get it to line up with the spindle.



- 11** 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.



- 12** 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.

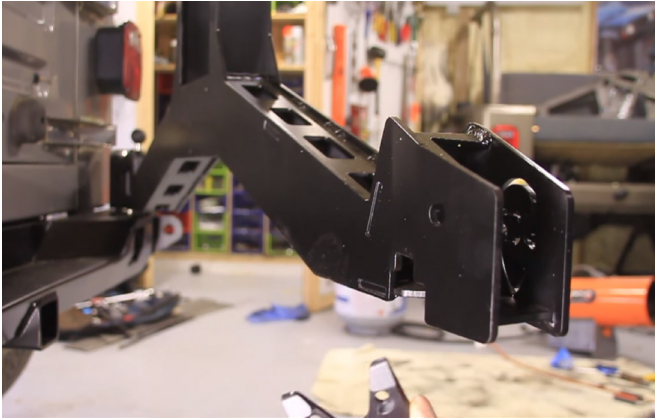


- 13** Install the plunger. Insert it into the hole next to the spindle and tighten it in place. This will lock the carrier in the open position.



## 14 Install the latching mechanism.

- a** Install the plastic faceplate and the latching mechanism using the two bolts provided.



- b** Next, attach the ball to the latch through the hole in the back of the carrier and latch mechanism.



- c** The carrier may rattle back and forth at this stage if it is not closed hard enough. Once the tire is installed it should have enough weight to close correctly without much effort.



## 15 Adjusting the heim.

- a** Put the heim together, making sure that both ends are the same distance from the center. Don't forget to install the jam nuts.
- b** Install one end of the heim into the bracket on the tailgate using the bolt, nut, and two misalignment spacers. Make sure that the flat side of the spacer is against the bracket and the round side is against the heim. Tighten with a 3/4" socket and end wrench.



- c** Repeat this process and attach the heim to the tire carrier.



- d** Now tighten the heim until the tire carrier contacts the rubber bumper on the tailgate.

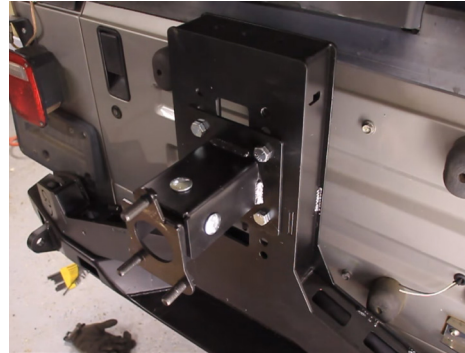


- e** Install the rubber bump stop on the tailgate. Gently open and close the tailgate and adjust the heim until there is some pressure on the bump stop. It should compress slightly.

**f** Once the heim is adjusted correctly, tighten the jam nuts on the heim.

## 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.



**b** 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" from this measurement and set the length of your tire mount and tighten down with the 3/4" wrench and socket.



\* **Wheels with more than 5" 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.**

**18** 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.

**19** 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](mailto:tech@jcroffroad.com).

# SWBSC – SHIELD TIRE CARRIER – TJ/LJ WRANGLER



## Item Code Legend

- EX: SWBSC-PC-TJ  
-PC : Powdercoated  
-BARE : Bare Metal  
-TJ : TJ Wrangler



## Additional Parts



Poly Bumpstop



Heim Joint



Spindle Kit



Tire Mount Part 1 & 2



TJ Shield Tailgate Plate

## Bolt Pack:

### SWB-SC-BP:

- 2 - 5/16 x 1 Button Head
- 2 - 1/2 x 2 Hex Head
- 1 - 6mm - 1.00 Hex Bolt
- 1 - 6mm Flat Washer
- 2 - 1/2 Flange Nut
- 2 - 1/2 Washer

### TC-BP:

- 4 - 1/2 x 1 Hex Head
- 3 - 1/2 x 1 Carrage Bolt
- 7 - 1/2 Flange Nut
- 4 - 1/2 Washer

### Misc Bolts:

- 3 - 5/16 Flat Washer
- 1 - 3/8 Flange Nut
- 3 Lugnuts

## Boxes:

- o 40 x 24 x 6
- o Additional Parts: 9 X 6 X 4
- o Spindle Box: 14 X 6 X 4

**Packed By**

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**Checked By**

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**Revised:** 01/12/16