



## Rear Bumper Installation Instructions

- 1) Remove factory rear bumper, (this includes all tow hitch receivers and recovery hooks)
- 2) Open the tailgate and locate the plastic vent on the inside of the door. Remove the vent by lightly prying on the upper left corner of it until it pulls out,. Be careful not to force the vent out or break it.



- 3) Once the vent is off, locate the small wiring harness just inside the vent and unclip it. This is the wire to the factory third brake light.

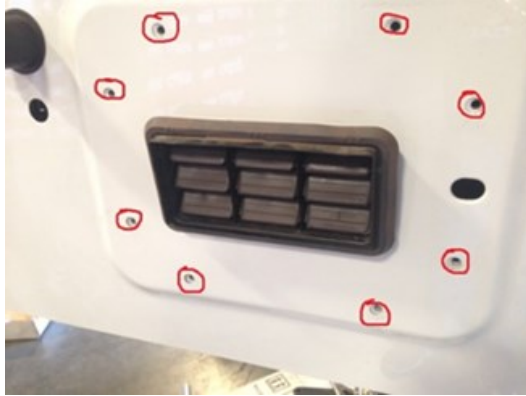


- 4) Next, remove the rubber plug and wire from the tailgate that is connected to your rear brake light. The plug should pull through if you disconnected the wires correctly. If it is not



coming out easily, help the rubber fitting from the inside of the tailgate by pushing from the rear and pulling at an angle downward at the same time.

5) Remove the factory spare tire carrier by removing the 8 bolts (13mm) attached to the tailgate.



6) With the rear door plate mounted, you are now ready to install the bumper. To start insert the nut plates into the frame rails and line up the nuts to the factory holes in the frame.



7) Next insert the 4 large 3"x 12mm through bolts through the frame rail with the threads facing the rear of the Jeep, make sure to put the washers onto the bolts as well. NOTE: You'll have to put the head of the bolt above the exhaust canister to get it into the hole.



8) Next place the spacer plate over the bolts.



9) Have a friend or two lift the bumper with you and place the holes in the middle of the bumper on to the bolts sticking out of the rear of the frame. Install the nylon nuts on the 4 through bolts sticking out of the rear to hold the bumper to the frame. Next, install the shorter bolts through the sides of the bumper and into the nut plates you previously installed into the frame.

frame. Note: Once you have the side bolts in place let the bumper down gently so it doesn't move and damage the body of your Jeep.



10) Next tighten the four center bolts in the rear cross-member first to allow the bumper to properly align itself. Torque to 60 ft/lbs.



11) Tighten the 4 side bolts that are loosely inserted into the nut plates with a ratchet. Torque to 60 ft/lbs



12) Ensure that the bumper is level. If it is not level repeat steps 12-15 making adjustments to level the bumper. NOTE: If the bumper is not level have a friend hold it level and tighten the side bolts first and then tighten the rear cross-member bolts. The bumper should be mounted as level as possible.



13) Take out your new tire carrier and locate the larger bearing that goes with it. Slide the bearing down the axle with the race facing upward. You may need to sand down the shaft, if the coating is too thick, so you can slide bearing all the way to the bottom of the axle.



14) Next, press the bearing races into the carrier. Start with placing the large bearing onto the axle with the race as shown in the picture above. Lower the tire carrier over the threaded post on the bumper. NOTE: Good to have a friend here to hold it level for this process. Now drop in the race from the smaller bearing, fat-side down, followed by the bearing itself just as shown in first picture below. Screw on the castle nut and start tightening. You can use an adjustable wrench or large socket with ratchet. The top race will press-in with little effort. The lower race will be tight. At the beginning, check the lower race to see if going in straight. This process may feel snug at times, but you will know when you are fully seated when it stops abruptly. The top of the castle nut should sit just below the top of the threaded shaft. Now remove castle nut and carrier so you can pack bearings and install the seal on to the bottom of the carrier.



15) Next step is packing the bearings with grease. Once bearing is packed, turn the carrier upside down and place the large bearing in the bottom of the carrier, small side first. Next, install the seal over the bearing by tapping the seal in with piece of wood across it and a rubber mallet. NOTE: It's ok if peels away a little rubber off of the seal when tapping it in.



16) Carefully place the carrier back on the shaft with small bearing on top. Now add the fat washer before the castle nut. Tighten castle nut until it stops abruptly again and back off nut just far enough to get the cotter pin thru the hole in the shaft. NOTE: If you don't have enough room for cotter pin, that is a sign that you need to press the bearing race in a bit more. Simply put a little more torque on the castle nut and you will be able to press it in more.



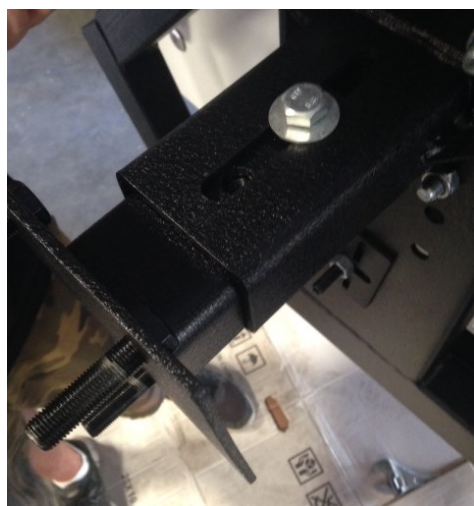
17) Bend the end of cotter pin to secure. Set the cap onto the whole assemble with the holes lined up that are highlighted below and then insert the small tapered head screw and tighten.



18) Next is putting the spare tire adapter arm onto the tire carrier. To do this line up the arm as shown according to your tire size and how high you want the tire mounted. Place the bolts with washers provided through the four holes and tighten with nuts.

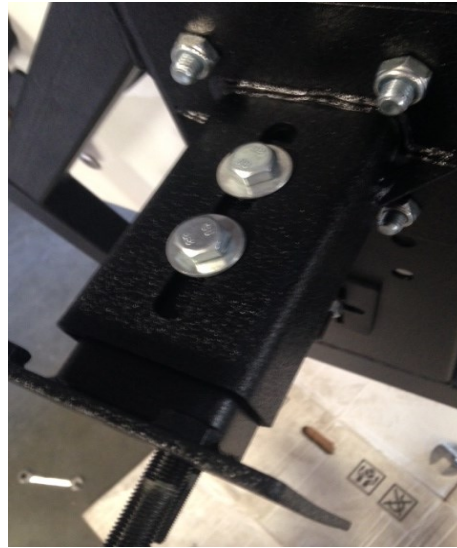


19) Place the final piece of the tire carrier into the slot shown below and use the two bolts provided to loosely attach it.





20) Now take the spare tire you wish to mount and place it onto the 3 studs while the two bolts are still loose and use the tire to press the sliding spare carrier piece back until the tire is snugly against the carrier. Remove the tire without disturbing the sliding piece. Move the sliding portion 1/4" inward and tighten. This is done so it presses the spare firmly against carrier. NOTE: Mounting the tire as low as possible is highly recommended to reduce movement and provide better vision out the back window.



21) Now that everything is tight put your spare tire back onto the studs and secure it using the factory lug nuts. And you're finished!

Enjoy the hassle free use of your Jeep's tailgate again.

