

# LOD OFFROAD

## FJ Cruiser Rear Bumper with Tire Carrier Installation Instructions



1. Begin with removing factory spare from the rear door.



2. With the rear door open remove pull-style clip from the passenger side just below the door latch.



3. Working your way across the rear, remove the bolts from the plastic bumper. Note: There are also two bolts on the bottom side that will need removed as well. They are located toward the outside edges of the bumper. Unplug the reverse sensor wiring from the vehicle to the bumper to allow removal in next steps.



4. After removing all of the bolts, pop off the plastic bumper. Begin this at the corners as shown in the picture. Pushing up and prying out with moderate force is all that is needed. The plastic bumper is held into place with plastic retainer clips.



5. The plastic bumper is held into place with plastic clips. You will hear a pop when the clips are pulled from their seat.



6. Once the plastic bumper has been removed, remove the styrofoam that sits in place on top the frame rails and across the back.



7. Remove the clips that hold the reverse sensor wiring harness into the factory plastic bumper.



8. Unplug the sensors from the wiring harness.



9. To remove the sensor itself from the bumper, simply slide these clips toward the side. Gently slide the sensor out of the plastic bumper.



10. Measure from the 3-3/4" from the back side of the bumper and mark all the across the top side of the bumper.



Note: For the purpose of marking simply use a chalk line or masking tape to help guide you through the cut.



11. Now that the main center section of the bumper has been marked carefully follow the pictures the mark the sides for cutting.



12. Follow the existing slotted cuts around the corners.



13. When making the cut be sure to leave about  $\frac{1}{2}$ " to  $\frac{3}{4}$ " inside the slotted parts of the factory plastic.

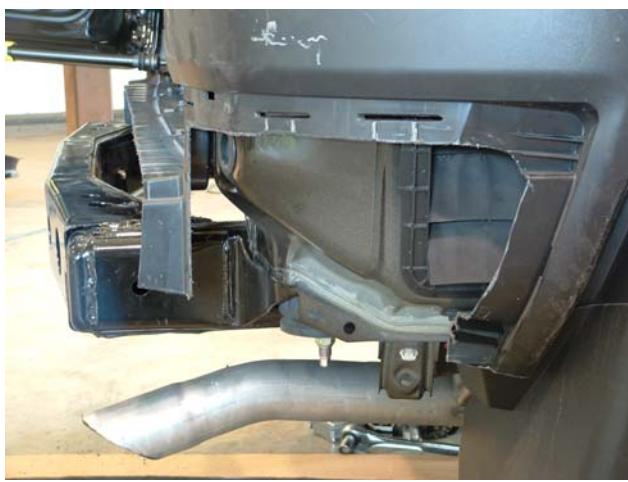
14. This is how the sides should look after the cut has been completed.



15. For cutting purposes we used a sawzall with a fine toothed blade. However, a hacksaw will also work well. The plastic cuts very easily. Note: If you choose to use a sawzall be careful not to let the guard of the sawzall run across the plastic as it the plastic will scuff very easily with the vibration from the sawzall.



16. Using a file simply file the cut edges to cleanup the plastic burr left from the cut.



17. After the cutting and filing is complete reinstall the factory plastic.



18. When reinstalling the plastic align the corners to their proper position and push inward the plastic clips will snap back into place.



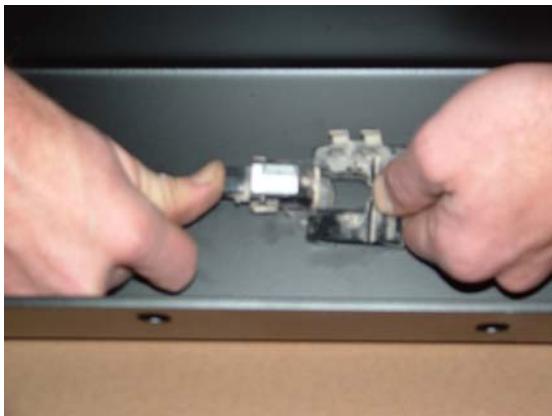
19. Mount the large L-shaped plate to the door where the factory tire carrier was mounted using the bolts from that carrier.



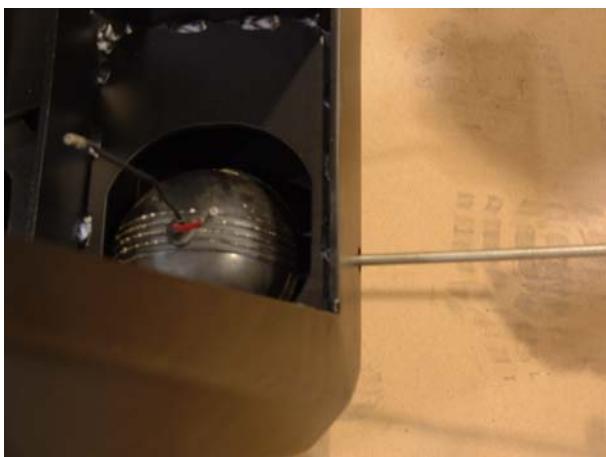
20. Place the factory sensors into the bumper holes. Install the sensors with plug facing toward the outside ends of each side.



21. Push the sensor into the hole. Be very careful with these sensors because they are brittle. To much pressure will break them.



22. With the sensor in the new bumper use the clips that were removed. Some downward force will be required to get these clips to slide into the grooves on the sensors. This is because of the thickness difference between the factory plastic bumper and the new one.



23. Install the lights into the bumper from the lighting kit.



24. Having someone help, place the bumper up into place. Using the bolts from the shorter of the bolts from the installation hardware hold the bumper up as tight as possible and snug the bolts in the center of the face.



25. Slide the spacer plates underneath, between, the bumper mounting brackets and the frame itself.



26. Once the bumper is in the desired position, Mark the holes on the sides. Note: Be sure the bumper is positioned properly before completing this step. Now remove the bumper to drill the (4) four holes that have been marked.



27. To make drilling easier first pilot drill the holes you marked using a small drill bit. (a 3/16" drill bit works well for this step). Now drill the holes to the proper size to allow for a tap to be run into the hole to create the threads required.



28. Tap the hole using a  $\frac{1}{2}$ " Fine Thread Tap.



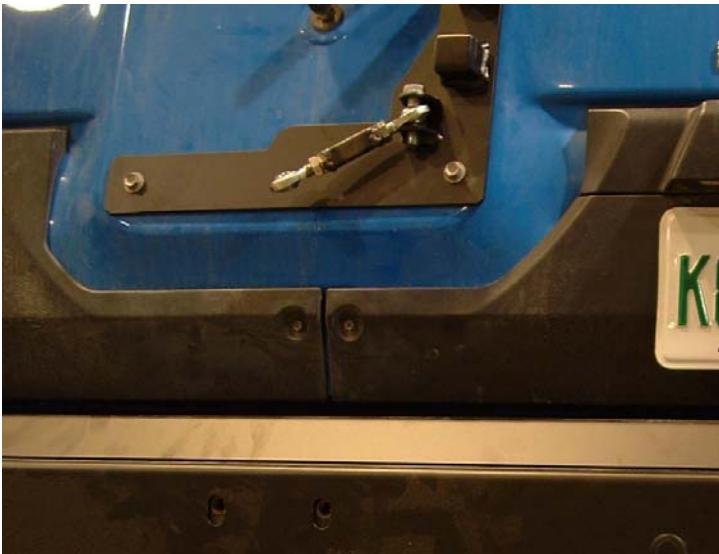
29. Now place the bumper back into place. Using the same technique used to mark the holes.



30. Finish bolting bumper on.



31. Place the adjustable link onto the plate located on the door. There will be (2) two spacers in the hardware kit that need to placed on each side of the rod end. Place the tapered edge of each spacer in toward the rod end and tighten. Note: We recommend using Loctite on all the threads of the bolts and linkage arm to prevent them loosening or movement in the thread.



32. Thread in the adjustable rubber bump-stop in to square block on the door of the vehicle.



32. Apply a lubricant to pin on the bumper and slide the tire carrier into place on the pin.



33. Place the aluminum cap provided in the hardware on top of carrier pin to secure the carrier to the bumper. Use the hex head allen bolt for this cap.



34. With carrier in place swing it toward the closed position. At this point you will want to be sure to adjust the rubber stop on the door out enough to leave gap between the door and the carrier itself. Now, put the adjustable arm through the hole and align with tabs sticking out on the carrier.



35. Place the larger of the spacers on each side of this end of the rod end on the adjustable linkage. Again, as shown in the picture, place the tapered

edges toward the rod end itself. Do not bolt this end tight yet, you will need to adjust the length of the arm for proper fitment.

**\*\*\*IMPORTANT\*\*\***

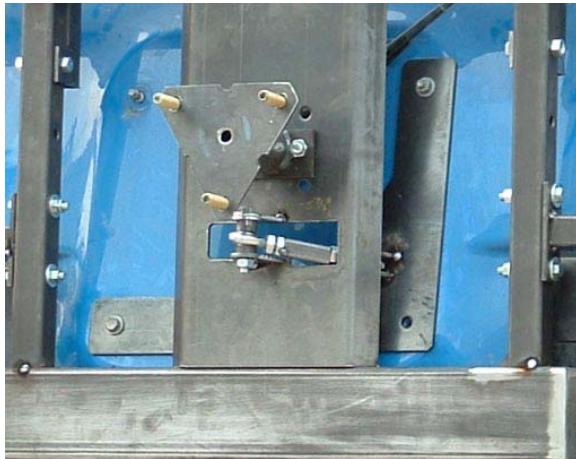
When adjusting the linkage arm, place the door and carrier in the desired closed position with the rubber bump-stop also adjusted to the proper location. Adjust the linkage arm to the length that is required for the carrier to be in the final closed position. With the adjustments made in the closed position, open the door, the carrier will now open with the door. Now gently swing the door toward the closed position. To achieve a rattle-free closed position, simply adjust the rubber isolator so that when the door is closed there is pressure on the isolator. Note: Be careful no to adjust the isolator too far out or too far in, this will cause too much unnecessary force between the door and carrier.



36. Open the door. With the door open there is adequate space to mount the tire mounting hardware. The picture shows the proper location of the hardware. Bolt this part directly to the middle location. The extra holes are there to provide some adjustability.



37. Now is a good time to mount the jack if you desire to carry one on your setup. It will mount horizontally across the top of your carrier.



38. Place the mount for the tire itself onto the part you bolted to the carrier. There are three locations for this part to mount as well. Begin with furthest one in, place the 5/16" bolt through the holes. The idea here is to place the tire onto this mount and use the lug nuts to force the tire up against the frame of the carrier. The tire needs to be tight back against the frame of the carrier. This hardware is not designed to support the weight of the tire, if the tire is hanging out and loose from the frame itself. Sucking the tire back against the carrier is necessary to provide a rattle free system.



When installation is complete your carrier system will look like this.

For questions please contact us at (765)385-0631Or send an email to [sales@lodoffroad.com](mailto:sales@lodoffroad.com)