



## INSTALLATION INSTRUCTIONS

### WARN TIRE CARRIER AND BUMPER

As you read these instructions, you may see **NOTES**, **CAUTIONS** and **WARNINGS**. Each message has a specific purpose. **NOTES** are additional information to help you complete a procedure. **CAUTIONS** are safety messages that indicate a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. A **CAUTION** may also be used to alert against unsafe practice. **WARNINGS** are safety messages that indicate a potentially hazardous situation, which, if not avoided could result in serious injury. **CAUTIONS** and **WARNINGS** identify the hazard, indicate how to avoid the hazard, and advise of the probable consequence of not avoiding the hazard. **PLEASE WORK SAFELY!**

**NOTE:** Additional spacers and bolts are provided in a separate bag for Jeep CJ models. Some applications may require additional spacers to clear hinges and hardtop latches due to variance in frame to body alignment.

**NOTE:** This installation may require some drilling on certain models. Holes may need to be drilled through the side of the frame if they do not currently exist.

**NOTE:** Hartop models may require rotating the rear glass window handle 90° to eliminate interference with the tire carrier.

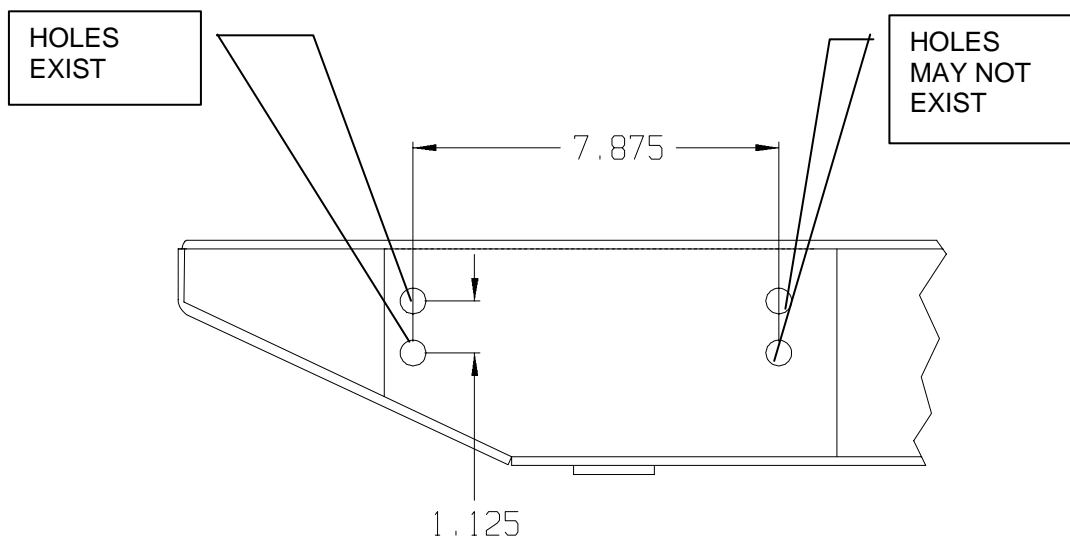
#### General Information:

- Instructions for CJ, YJ, TJ
- Will not accommodate tires larger than 35 x 15.50 or 36 x 12.50 or 150 lbs.
- Factory bumper and tire carrier will need to be removed to install tire carrier.
- The 3<sup>rd</sup> Brake light will need to be relocated when using this tire carrier. Location may vary due to tire size. See instructions.
- 3 lug nuts, ½"-20, will be required to mount spare tire to tire carrier.
- CJ vehicles will **Require** qty 1 of Chrysler P/N 55013350. This is a tailgate bump stop off of a TJ that will be used to eliminate rattling or vibrations.

### Step by Step Instructions:

1. Remove the factory bumper and tire carrier. On TJ models, remove the license plate and license plate mount from body. Save the mounting hardware.
2. Remove the tire carrier, bumper, and hardware from boxes.
3. On 97-01 TJ models, some of the rear 8 frame holes may not be in the frame. These holes are the inner four, two on each side of vehicle. They must be drilled to 7/16". Use figure 2 to locate these holes.

**NOTE:** Some TJ model vehicles may not have all 8 mounting locations on the rear frame area. If not all 8 locations are in the frame, measure the supplied bumper mounting points and match these measurements on the frame. Drill the frame holes to 7/16". **See Figure 1.**



**Figure 1**



**WARNING**



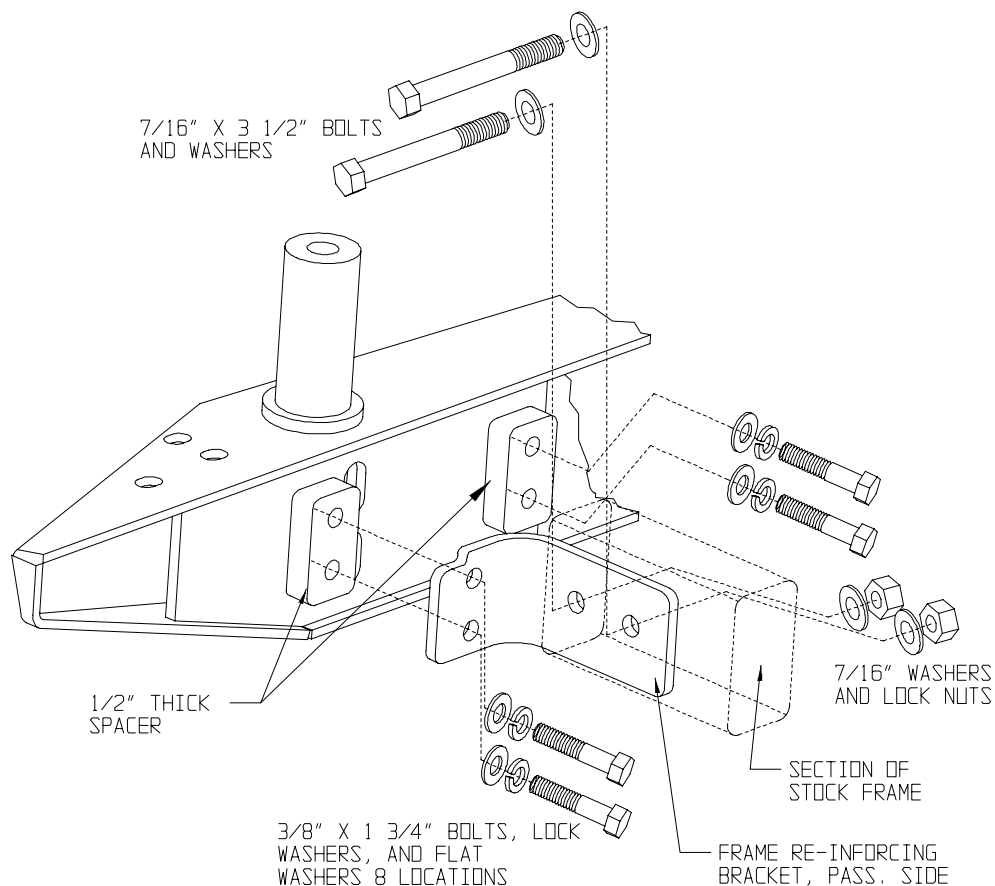
Drilling operations can cause flying metal chips. **WEAR SAFETY GOGGLES.** Flying metal chips can cause eye injury.

- Place the new bumper against the back of the vehicle frame. Using the 3/8" hardware provided, insert a bolt, lock washer, and washer through the appropriate frame stiffener, rear frame section, 1/2" thick spacer (on CJ models) OR 1/4" thick spacer on YJ/TJ models, and start into the bumper. On CJ models, use the 3/8" x 1-3/4" bolts on the all eight rear frame holes. On YJ/TJ models, use 3/8" x 1-3/4" bolts in the four outer hole locations and the 3/8" x 1-1/2" bolts on the four inner hole locations. **See Figure 2 or 3 depending on vehicle. Do not tighten bolts at this time.**

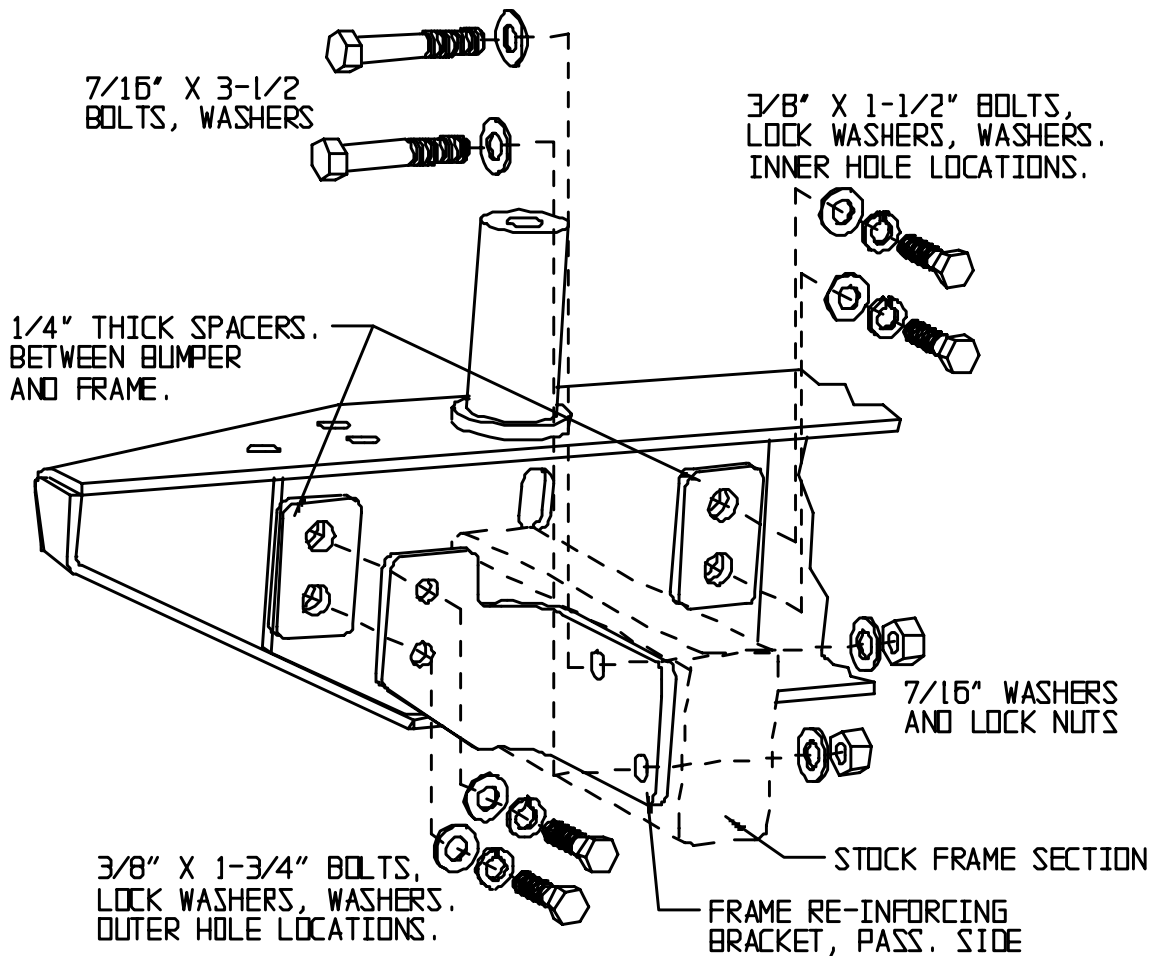
**Note:** It will be easier to get a bolt started on each side and then insert the spacers between the mating surfaces of the bumper and frame. Slide one spacer up in between the bumper and frame and start both top and bottom bolts. Then move to the next locations and repeat the insertion of the spacer. Repeat this for all of the rear frame locations.

On some TJ and YJ models, it may be necessary to loosen the gas tank skid plate to allow for enough hand room to access the inner bolt hole locations.

**Note:** On some CJ models it may be necessary to use additional spacers to prevent interference between the tire carrier and the tailgate hinges.



**Figure 2, CJ VEHICLE, PASSENGER'S SIDE SHOWN,  
DRIVER'S SIDE OPPOSITE**



**PASSENGER'S SIDE ASSEMBLY OF BUMPER  
AND FRAME STIFFENING BRACKET**

**Figure 3, YJ and TJ VEHICLES, PASSENGER'S SIDE SHOWN,  
DRIVER'S SIDE OPPOSITE, TJ FRAME STIFFENING BRACKETS  
SHOWN, YJ HAS SAME SPACERS AND HARDWARE, BUT WITH  
DIFFERENT FRAME STIFFENING BRACKET.**

5. Install the tire carrier to bumper. This must be done before tightening of the eight frame bolts. **If installing on TJ model**, remove the plastic license plate mount from the vehicle, it will be trimmed slightly in the bottom corner later. **If installing on TJ and YJ models**, it is necessary to remove all of the factory rubber tailgate bumpers except the upper one on the driver's side. Place the nylon washer over the post in

the bumper and slide it all the way down. Place the round tube end of the tire carrier on the post sticking up out of the passenger's side of the bumper and slide it all the way down. **See Figure 4.**

6. Once the tire carrier is installed on the post in the bumper, finger tighten all eight bolts that mount the bumper to the frame. Then, insert the single oblong hole spacers between the bottom of the frame and the bottom tabs on the bumper. Insert the 7/16" x 1 1/2" bolts, lock washers and washers through the bottom tabs on the bumper and the spacer and finger tighten.
7. Once all of the fasteners are finger tight, adjust bumper position if necessary. Tighten the 3/8" fasteners to 30-34 ft/lbs and the 7/16" fasteners to 46-50 ft/lbs.
8. Using a drill and 7/16" bit, drill through the inner frame rail using the stiffening bracket and existing outer frame holes on the out side of frame. A good precaution would be to place a piece of metal between the inner frame rail and the gas to prevent from damaging anything on the inside of the frame rails. Checks to see if any wires or lines are attached in the drilling locations. If lines or wires are found, temporarily move them out of the way during the drilling process. Repeat this for the other side of vehicle. **See Figure 2 or 3 depending on vehicle.**

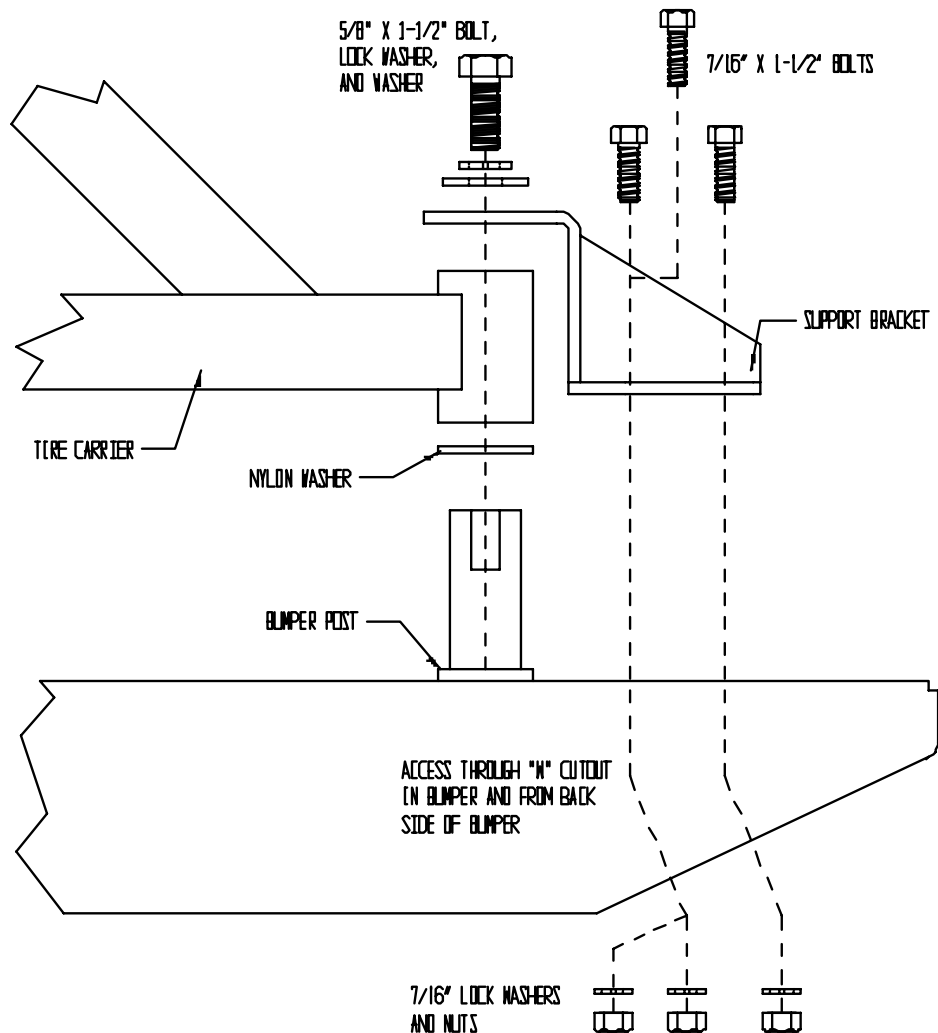


**WARNING**



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9. Insert the 7/16" x 4" bolts and flat washers through the frame stiffener bracket and frame rail and finger tighten using the supplied 7/16" hardware. Torque the 7/16" hardware to 46-50 ft/lbs. **See Figure 2 or 3 depending on vehicle.**
10. Install the post support bracket to the bumper. Using the supplied 5/8 x 1 1/2" bolt, lock washer, and washer, hand tighten the bracket to the post. Then install the 3 supplied 7/16 x 1 1/2" bolts and washers through the support bracket and the bumper. Install a 7/16" washer, lock washer and nut on each bolt inside the bumper. It may be necessary to use a magnet or needle nose pliers to install the nuts and washers onto the bolts. On CJ models it may be necessary to install the two bolts that are furthest forward and match drill the 3<sup>rd</sup> rear hole. This is due to the tight packaging of the bumpers ends. **See Figure 4.**

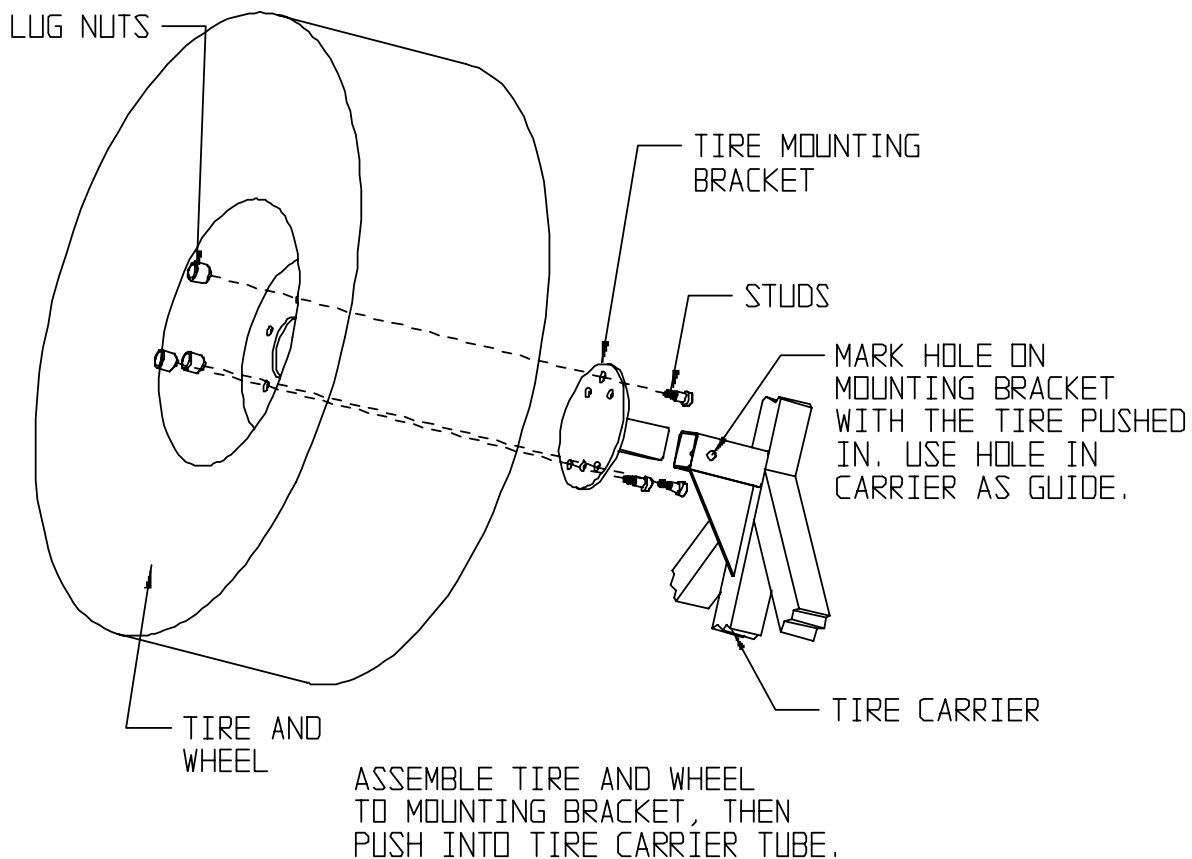


**Figure 4**

11. Once the tire carrier and support bracket are assembled, torque the 7/16" hardware to 46-50 ft/lbs and the 5/8" hardware to 70-90 ft/lbs.
12. Install the supplied zerk fitting into the supplied hole in the tire carrier pivot tube. Once installed, use a grease gun to lubricate the pivot.
13. Close the tire carrier. Install the spare tire to the tire mounting bracket. Use the three wheel studs supplied. The wheel studs can be pressed in or use a vise and

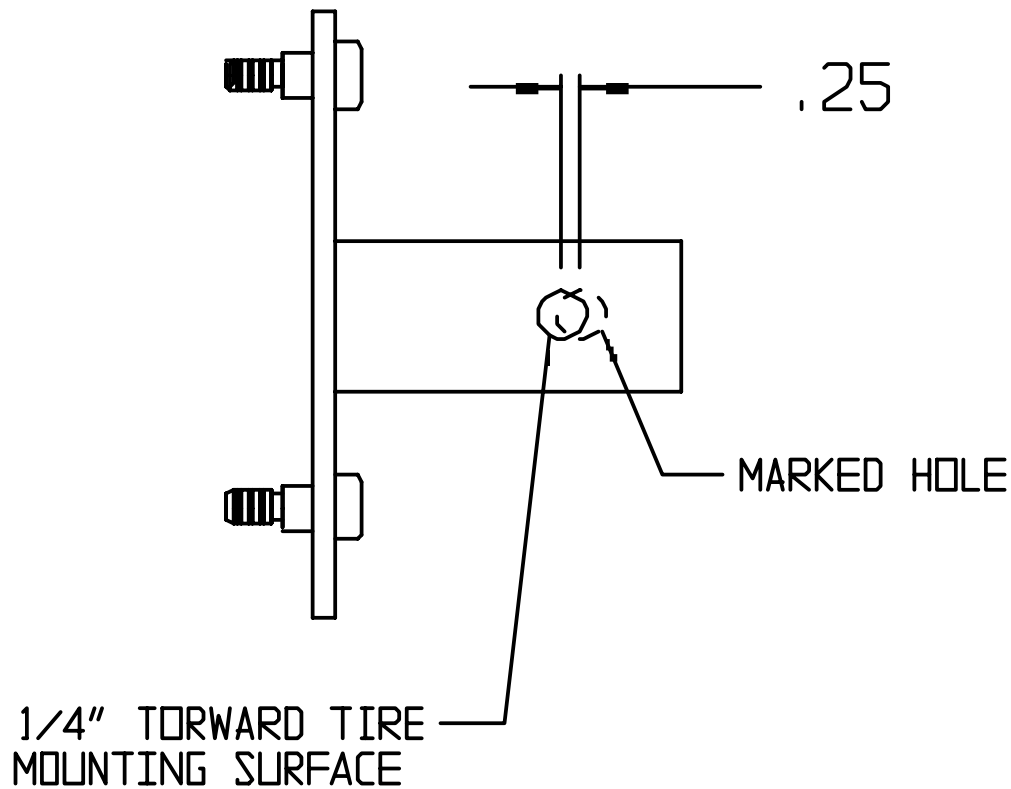
hammer to install them. They can also be installed by installing the tire and use lug nuts to tighten and the studs will pull in when tightening the studs.

14. Once the studs are installed, attach the tire to the mounting bracket. Slide the tire mounting bracket, on the backside of the wheel, into the bracket mounting tube on the tire carrier. With the tire pushed all the way in, mark the tire mounting bracket using the supplied hole in the tire carrier tube. Remove the tire and tire mounting bracket from the carrier. **See Figure 5.**



**Figure 5**

15. Remove the tire and wheel from the mounting bracket. Using the marked location on the tire mounting bracket in the previous step, measure  $\frac{1}{4}$ " back toward the wheel mounting surface. This will give the tire pre-load when mounted. Using a  $\frac{1}{2}$ " drill bit, drill a hole through both sides of the tire mounting bracket at the marked location. Be sure to re-mark the hole  $\frac{1}{4}$ " closer to the tire mounting surface for pre-load. **See Figure 6.**



**Figure 6**



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16. After drilling the hole in step 17, slip the tire mounting bracket into the tube on the tire carrier. Using the supplied  $\frac{1}{2}$ " x 3" bolt, washers, and lock nut, bolt the mounting bracket to the carrier. Torque the  $\frac{1}{2}$ " bolt to 55-60 ft/lbs.
17. Mount the tire and wheel to the tire carrier with lug nuts. Locking lugs can be used to prevent theft.
18. Assemble the latch mechanism. Insert the handle through the hole in the top of the tire carrier tube. Then insert the supplied coil spring through the rectangular hole in the bottom of the tube. Insert the striker latch through the same rectangular hole. The handle will be inserted into the  $\frac{1}{2}$ " diameter hole in the striker. Line up the small cross-holes in the handle and the striker. Insert the roll pin, by tapping it with a hammer, through the hole in the striker and the handle. It should be flush on both sides of the striker when installed fully. See **Figure 7** for exploded view of assembly.



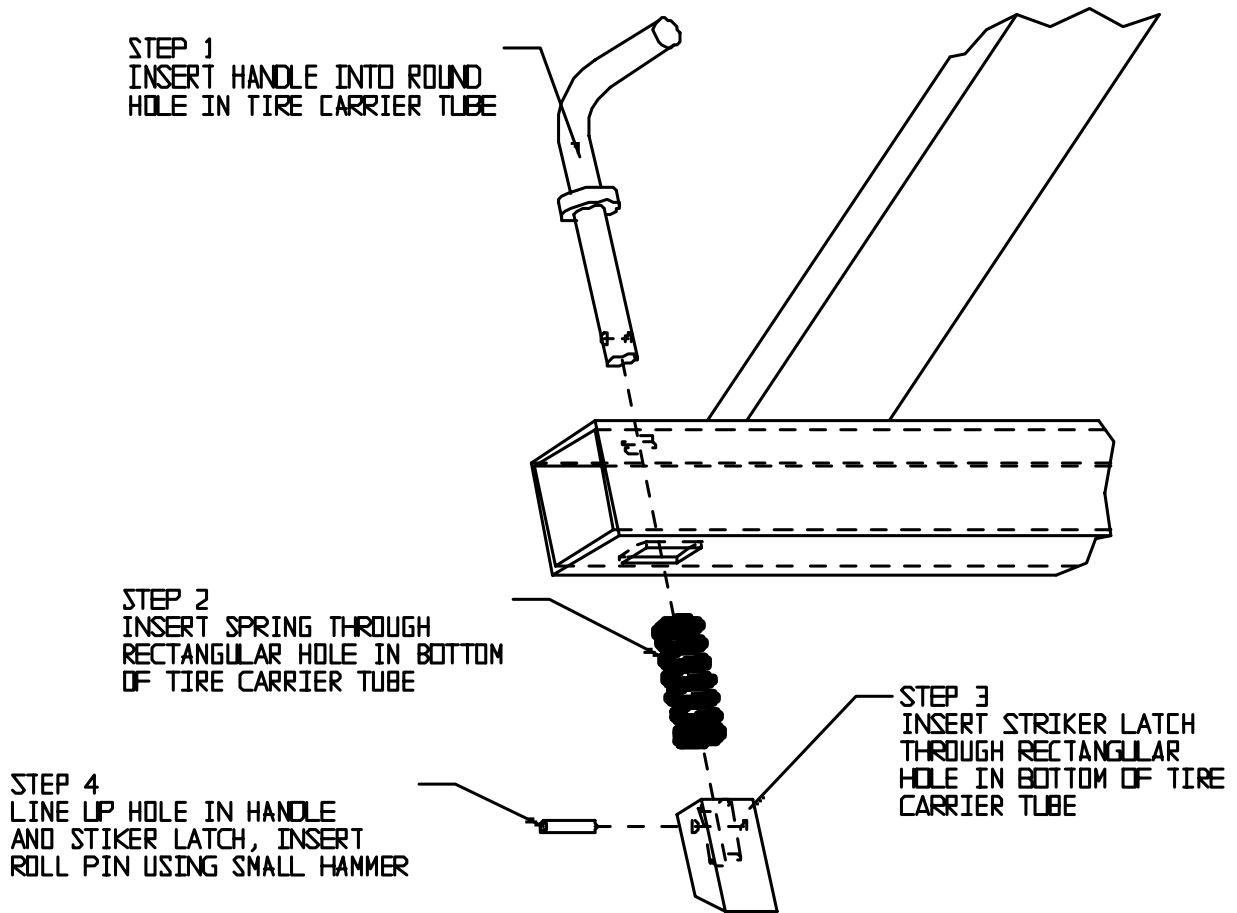
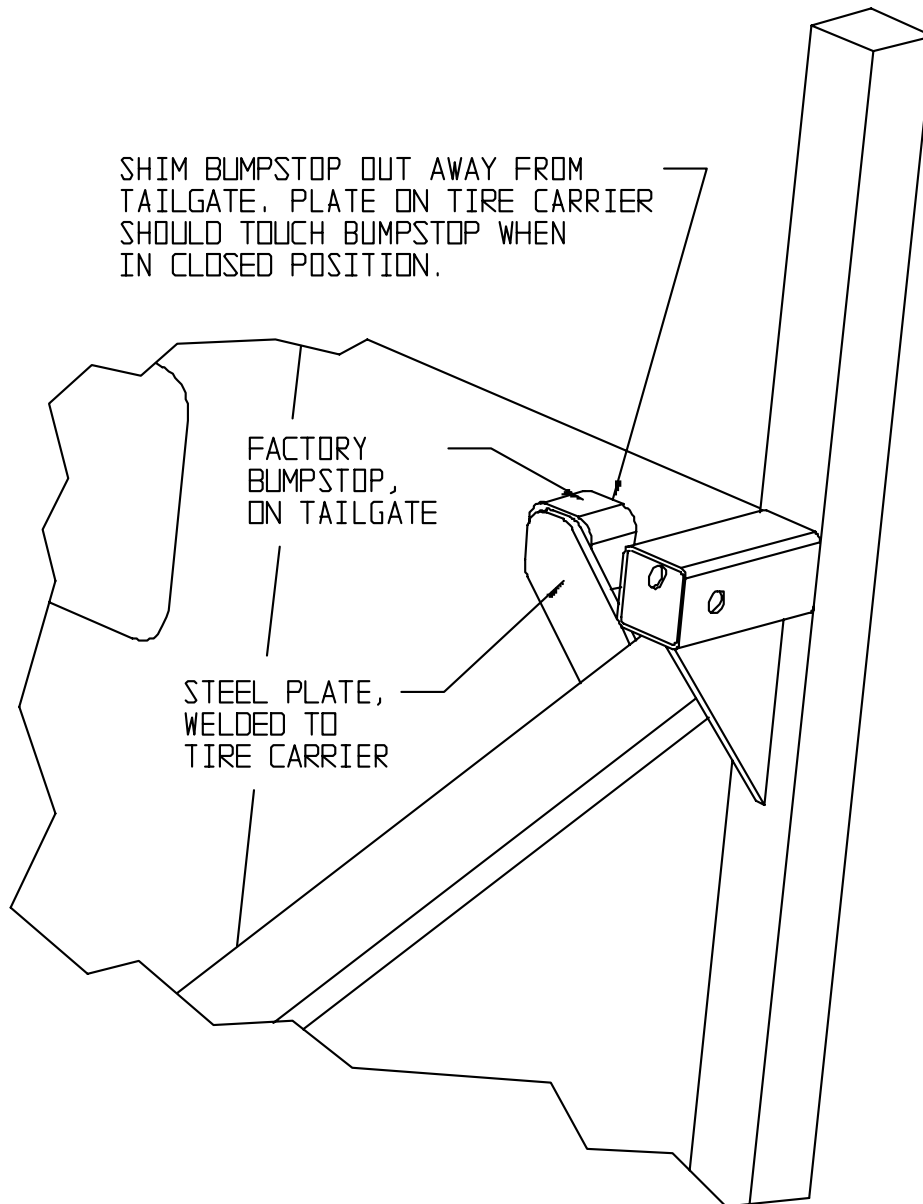


FIGURE 7, EXPLODED VIEW OF LATCH ASSEMBLY.

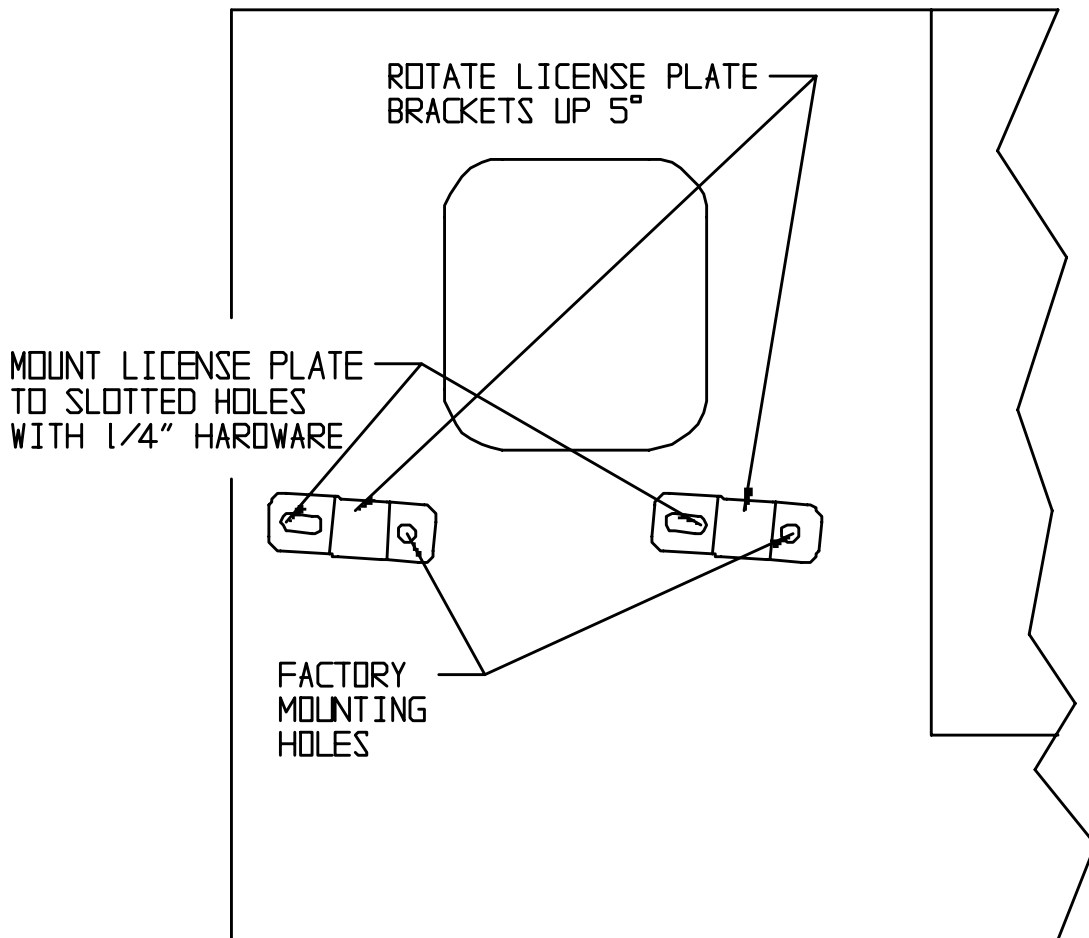
19. There is a flat plate welded to the tire carrier framework. A rubber bumper should be mounted to either the flat plate or the tailgate to prevent the tire carrier from rocking back and forth on rough terrain on CJ models, **see step 24 for CJ installation**. The TJ and YJ have these rubber bumpers mounted on the tailgate already. It may be necessary to shim the driver's side top bumper out away from the tailgate to have slight pressure on the flat plate when the assembly is in the closed position. **See Figure 8.**



**Figure 8, Factory Tailgate Bumpstop, TJ and YJ models.**

20. A CB antenna may be mounted to either the bumper or tire carrier. The reception of the CB should be better if mounted to the bumper. The tire carrier may not give a sufficient ground. Many customers have just drilled a hole on one side of the bumper at the ends.

21. On TJ models, using the two supplied brackets, mount the brackets to the body with the factory screws. The end of the bracket with the standard hole is mounted to the body. The slotted holes are used for mounting the license plate. Align the two brackets so they are rotated up 5 degrees and going away from the tailgate. Tighten the factory screws. Using the 1/4" hardware provided, insert a bolt with flat washer through the license plate and the bracket and finger tighten with a lock washer and nut. Repeat this for both brackets. **See figure 9.**



**FIGURE 9, MOUNTING BRACKETS FOR LICENSE ON TJ MODELS ONLY**

22. On TJ and YJ vehicles with a 3<sup>rd</sup> brake light, it will be necessary to re-install the light. This can be easily done by cutting the Original Bracket and mounting it to the vertical post on the new tire carrier. Two small screws are supplied for mounting it. **See Figure 10.**

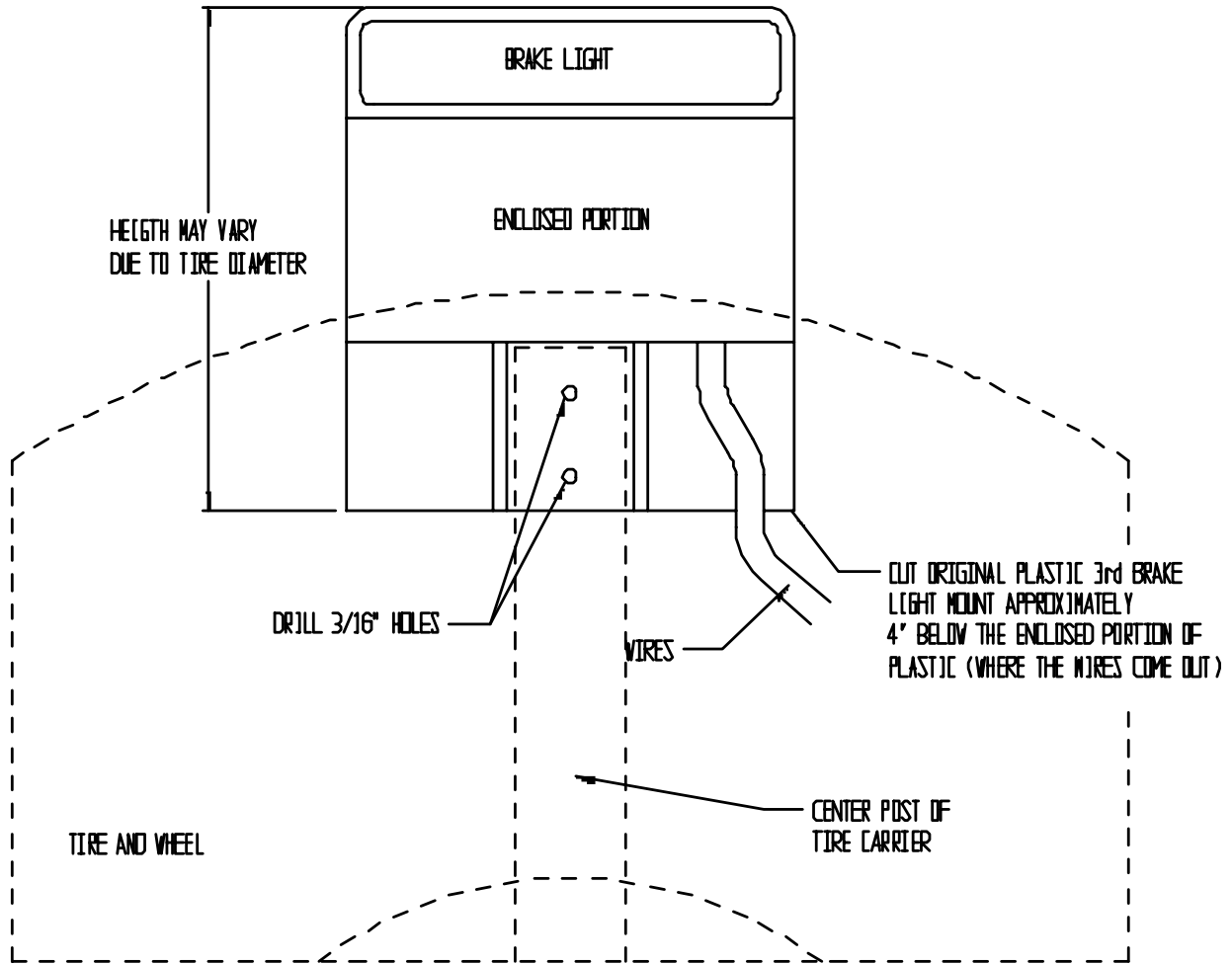


Figure 10, 3<sup>rd</sup> BRAKE LIGHT MOUNTING

23. On CJ vehicles it is required to install a rubber tailgate bumper. The Chrysler/Jeep P/N is **55013350** and is available at Jeep Dealer Parts Departments. A picture is included for reference. Depending on the alignment of the body to frame on your specific vehicle, it may be necessary to shim the rubber bumper out from the tailgate or sand it down, more than likely it will be sanded down.

**NOTE: Very slight pressure should be on the rubber bumper when the tire carrier is in the closed position. Due to vehicles being vastly different and very old, be sure that the tire carrier is vertical when it is in the closed position and there is slight pressure on the tailgate bumper. This may require that more pressure be added to the tailgate bumper to get a vertical reading in the closed position. This will verify that the carrier will not rattle on the tailgate hinges.**

With the tire carrier in the closed position, try to slide the rubber bumper in between the tailgate and welded tab on the tire carrier. In the photo below the bottom edge of the rubber bumper has been sanded off at a 45-degree angle to allow the rubber

bumper to be lower on the tailgate. Once the correct position is found, mark the tailgate. Open the tire carrier and mark the hole in the center of the rubber bumper. The rubber bumper can either be bolted on through the tailgate or sheet metal screwed to the tailgate.



**Photo of Rubber Bumper on CJ tailgate.**



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24. Once all of the above steps are completed, recheck all of the mounting bolts for proper torque.

25. Periodically fill the grease zerk on the tire carrier to prevent corrosion and binding.