



Installation Instructions

HighRock 4x4™

Rear Bumper and Tire Carrier

Vehicle Application: 1986 - 2006 Jeep® Wrangler and Wrangler Unlimited

•HighRock 4x4™ Rear Bumper and Tire Carrier
Part Number: 42931 / 44931

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INSTALLATION TIME	SKILL LEVEL
<p>2-1/2 Hours</p>	<p>4 - Difficult</p>

TOOLS				
<p>Socket</p> <p>13mm, 17mm, 19mm, 22mm, 35mm</p>	<p>Ratchet</p>	<p>Hammer</p>	<p>Wrench</p> <p>5/16", 13mm, 17mm, 18mm, 19mm, 22mm</p>	<p>Torx Wrench</p> <p>T30</p>
<p>Phillips Screwdriver</p>	<p>Flat-Head Screwdriver</p>	<p>Channel Locks</p>	<p>Grease Gun</p>	<p>Crimp Tool</p>
<p>Wire Cutters</p>	<p>Wire Stripper</p>	<p>Safety Glasses</p>		



! WARNING This product is designed primarily to enhance the appearance of the vehicle. Do not rely in any way on the components of this product to protect against injury or death in the event of an accident. Never operate the vehicle in excess of manufacturer's specifications.

WEAR SEAT BELTS AT ALL TIMES

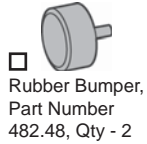
Read and follow, precisely, all installation instructions provided when installing product. Failure to do so may result in a poor fit and could place occupants of the vehicle in a potentially dangerous situation.

HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

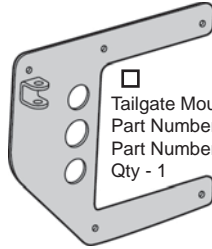
Parts List and Hardware Identification



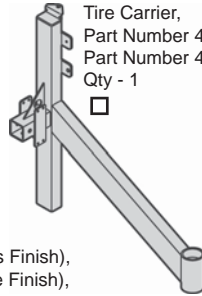
- Rear Bumper with Shaft, Part Number 484.33 (44938) (Gloss Finish), Part Number 498.27 (44938) (Matte Finish), Qty - 1



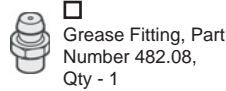
- Rubber Bumper, Part Number 482.48, Qty - 2



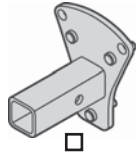
- Tailgate Mount, Part Number 484.36 (Gloss Finish), Part Number 498.06 (Matte Finish), Qty - 1



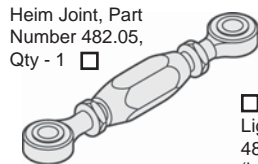
- Tire Carrier, Part Number 484.34 (42937) (Gloss Finish), Part Number 498.28 (44937) (Matte Finish), Qty - 1



- Grease Fitting, Part Number 482.08, Qty - 1



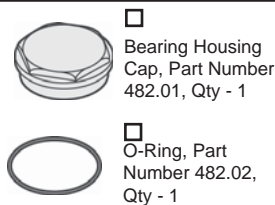
- Tire Mount, Part Number 484.35 (Gloss Finish), Part Number 498.07 (Matte Finish), Qty - 1



- Heim Joint, Part Number 482.05, Qty - 1



- Light Kit, Part Number 482.06, Qty - 1 (Includes 2 Butt Connectors)



- Bearing Housing Cap, Part Number 482.01, Qty - 1
- O-Ring, Part Number 482.02, Qty - 1

Hardware Kit Part # 489.81



- Shaft Seal, Part Number 482.00, Qty - 1
- Shaft Bearing, Part Number 481.99, Qty - 2

Hardware Kit Part # 489.80

Hardware Kit Part # 489.77

- M12 Split Lock Washer, Part Number 414.46, Qty - 4
- M12 Flat Washer, Part Number 414.47, Qty - 10
- M12 x 35mm Hex Bolt, Part Number 414.45, Qty - 4
- M14 x 80mm Hex Bolt, Part Number 482.09, Qty - 1
- M24 Washer, Part Number 482.07, Qty - 1
- M8 Nylock Nut, Part Number 470.06, Qty - 2
- M8 x 20 Hex Bolt, Part Number 486.59, Qty - 2
- M12 x 25mm Hex Bolt, Part Number 482.11, Qty - 1
- M12 Lock Nut, Part Number 482.13, Qty - 2
- M14 Lock Nut, Part Number 482.10, Qty - 1
- M14 Flat Washer, Part Number 489.24, Qty - 2
- M24 Slotted Hex Nut, Part Number 482.03, Qty - 1
- M12 x 50mm Hex Bolt, Part Number 482.12, Qty - 2
- Cotter Pin, Part Number 482.04, Qty - 1



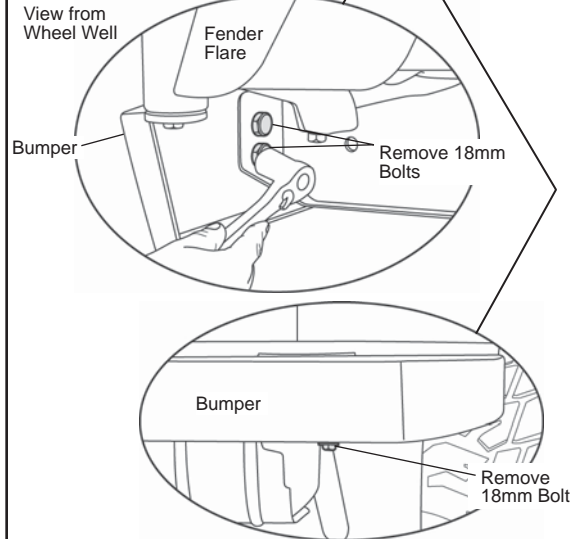
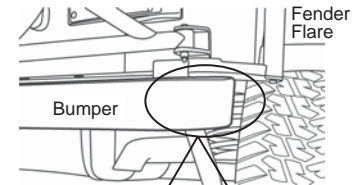
CAUTION

Two or more people may be required to lift the bumper safely.

1 Remove the Original Bumper

Use a socket wrench and an 18mm socket to remove the two (2) bolts on each end of the bumper that attach it to the frame.

Remove the 18mm bolts that attach the bumper to the frame, one under each end of the bumper. Set the bolts aside to be used to install the HighRock 4x4™ Rear Bumper.



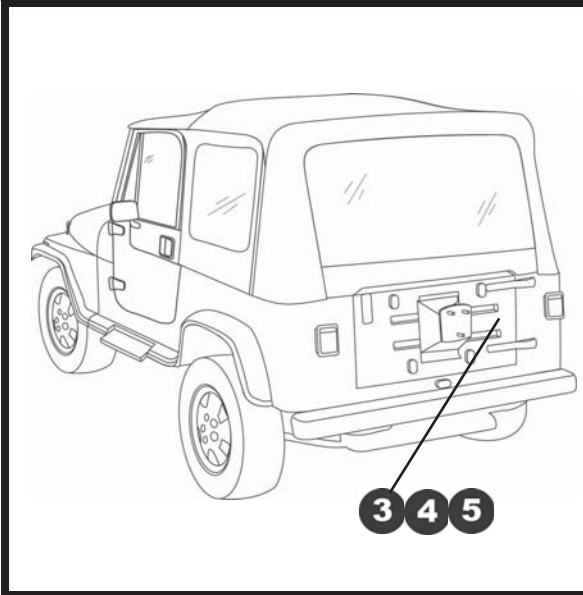
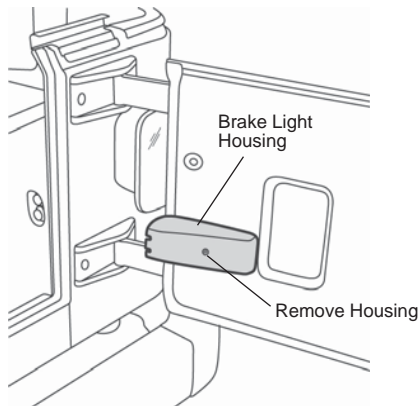
HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

2 Remove Tire

Use a lug wrench to remove the tire from the tire carrier. Set the lug nuts aside to be used later.

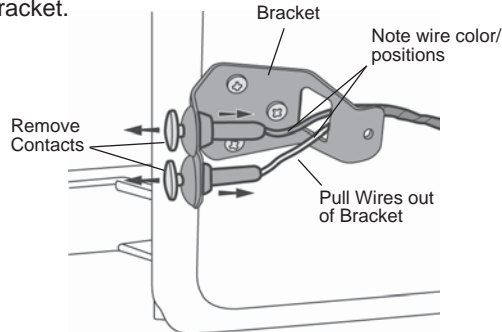
3 Remove Center Brake Light

If your vehicle is equipped with a center brake light, open the tailgate and locate the housing covering the wires for the brake light. Use a phillips screwdriver to remove the housing. Set the screw and housing aside to be reinstalled later.



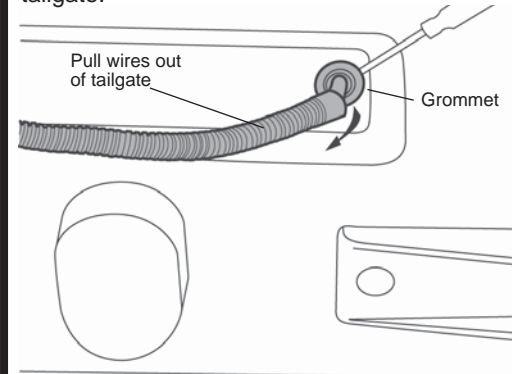
4 Remove Center Brake Light

Make note of the positions of the wires in the bracket so that you can replace the wires in the proper order. Pull the contacts off the ends of the wires and set them aside to be reused later. Pull the wires out of the bracket.



5 Remove Center Brake Light

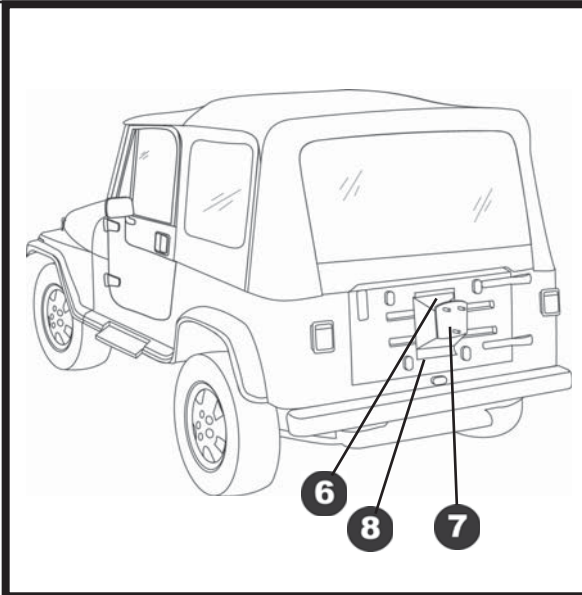
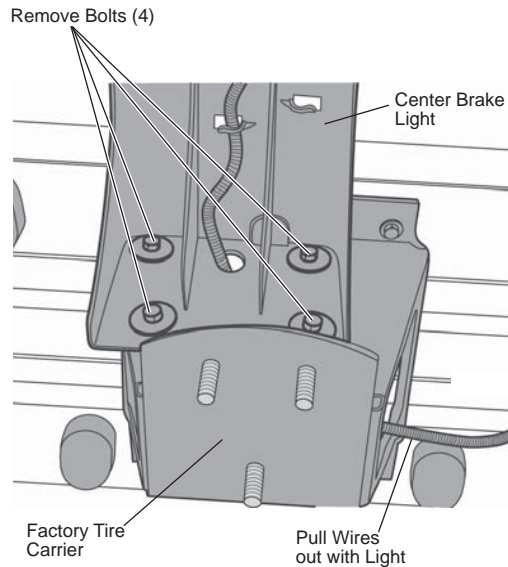
From the outside of the tailgate, use a flat screwdriver to pry out the grommet that guides the wires from the brake light. Pull the wires out of the tailgate.



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6 Remove Center Brake Light

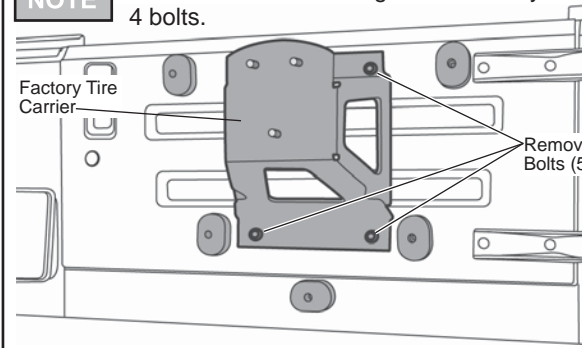
Remove the four bolts that secure the brake light to the tailgate. Lift the light away, pulling the wires through the hole in the factory tire carrier. Set the Center Brake Light aside to be reinstalled later.



7 Remove Factory Tire Carrier

Remove the 5 bolts that secure the factory tire carrier to the tailgate. Set the bolts aside to be reused later. Remove the tire carrier.

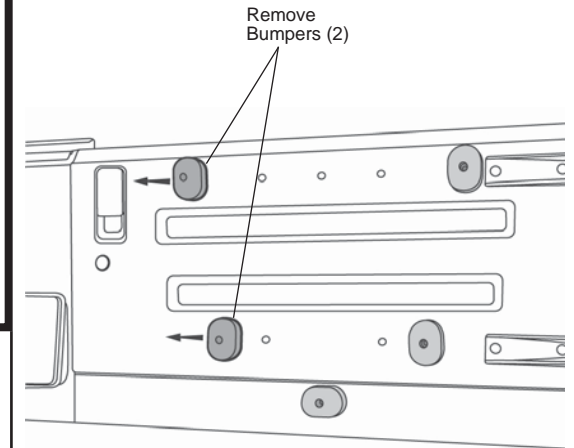
NOTE 2003 and newer Wranglers have only 4 bolts.



8 Remove Bumpers

Use a T30 Torx to remove the two bumpers on the driver's side of the tailgate.

NOTE 2003 and newer Wranglers do not have the lower bumpers.



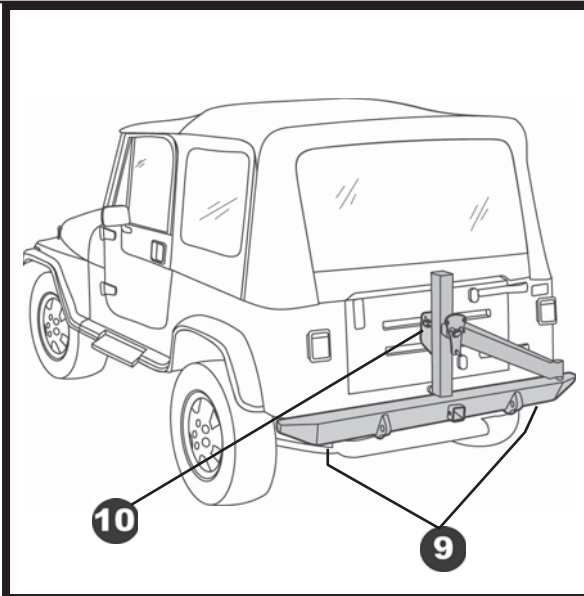
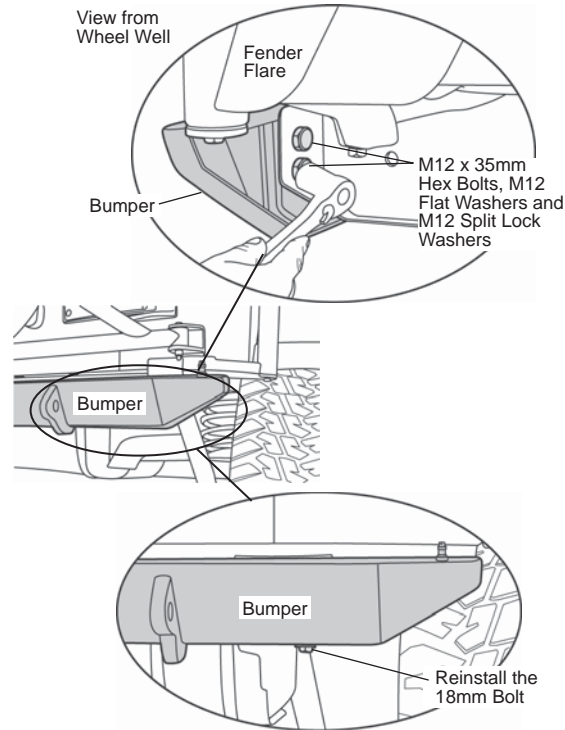
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CAUTION Two or more people may be required to lift the bumper safely.

9 Install Rear Bumper

Place the HighRock 4x4™ Rear Bumper on the vehicle and install two (2) M12 x 35mm Hex Bolts, M12 Flat Washers and M12 Split Lock Washers from the parts kit on each side of the vehicle for '97 - '06 Wranglers. For '86 - '96 Wranglers install four (4) Hex Bolts.

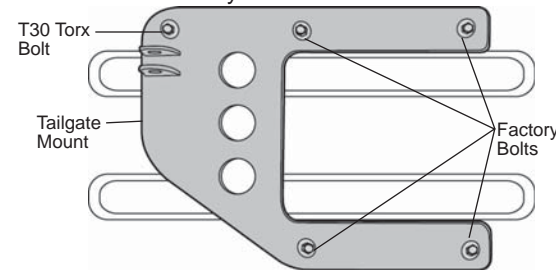
Then reinstall the 18mm Bolt under the bumper on each side of the vehicle.



10 Install Tailgate Mount

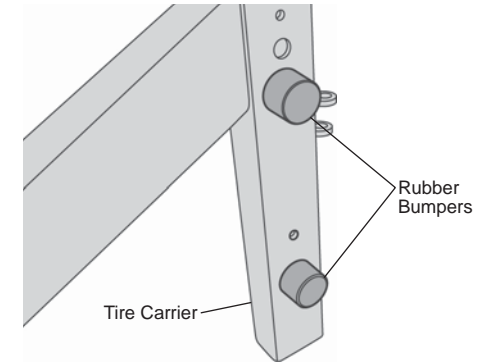
Use two (2) of the bolts that were removed in Step 7 to install the Tailgate Mount in the left side tire carrier holes on the tailgate. Install a torx bolt from one of the bumpers removed in Step 8 in the top left hole.

Replace factory bolts in the remaining right side holes from the factory tire carrier.



11 Install Bumpers

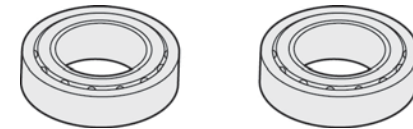
Thread the Rubber Bumpers into the holes on the rear of the Tire Carrier.



12 Pack Shaft Bearings with Grease

Pack both Shaft Bearings with the Grease provided.

Place a large amount of Grease into the palm of your hand. Place the bearing into the grease in your hand and rotate it back and forth to spread the grease into the bearing. Add more grease as needed. Keep packing the grease into the Shaft Bearings until they will not take any more grease. Repeat with both Shaft Bearings.

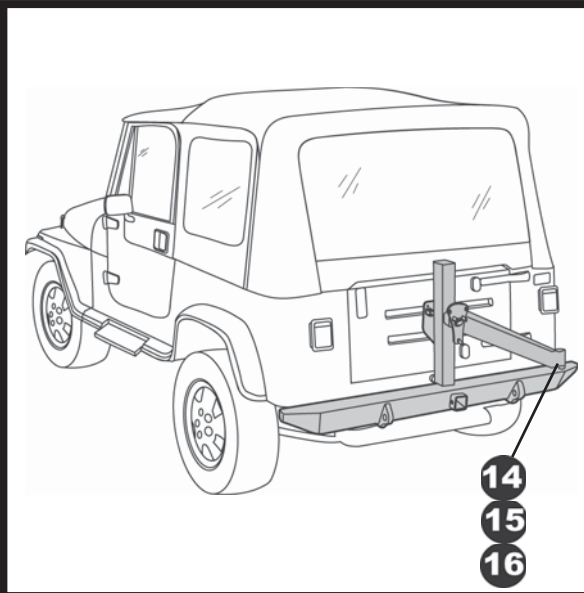
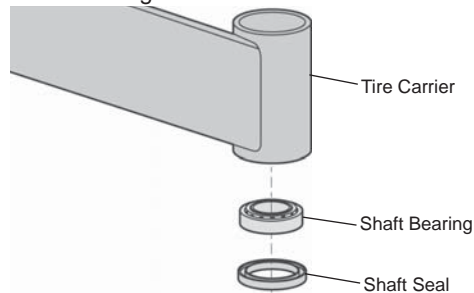


Pack both Shaft Bearings with Grease

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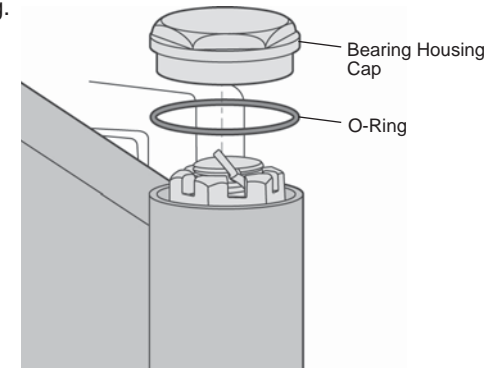
13 Install Shaft Bearing in Tire Carrier Spindle Housing

Orient a Shaft Bearing with the smaller side toward the Tire Carrier spindle housing. Seat the bearing in the housing.
 Orient the Shaft Seal with the open end toward the spindle housing and slide it into the housing. Place a large socket flush with the bottom of the Seal. Tap the socket lightly with a hammer to seat the Seal inside the housing.



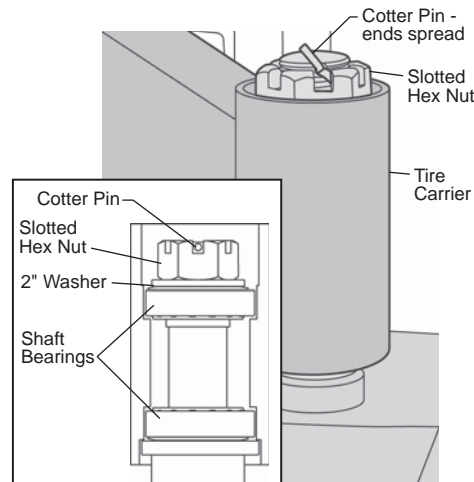
15 Install Bearing Housing Cap

Install the O-Ring on the Bearing Housing Cap. Use channel locks to screw the cap onto the spindle housing.



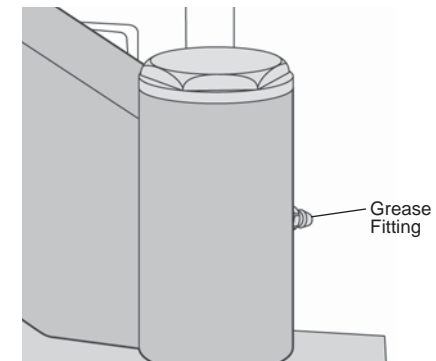
14 Install Tire Carrier on Spindle

Slide the Tire Carrier spindle housing over the shaft on the Bumper.
 Orient the other Shaft Bearing with the smaller side toward the Tire Carrier spindle housing. Seat the bearing in the housing.
 Install the 2" Washer and Slotted Hex Nut over the Shaft Bearing. Tighten the nut to 28 -32 ft. lbs of torque.
 Insert the Cotter Pin through the slots in the Hex Nut and the hole in the shaft. Spread the ends of the Cotter Pin.
 Use straight jaw channel locks to install the Bearing Housing Cap.



16 Install Grease Fitting

Install the Grease Fitting in the hole in the spindle housing and tighten with a 5/16" wrench.
 Once the Grease Fitting is in place, use a grease gun to apply grease to the spindle housing. Use multipurpose lithium grease and pump it until grease begins to emerge back out of the Grease Fitting.



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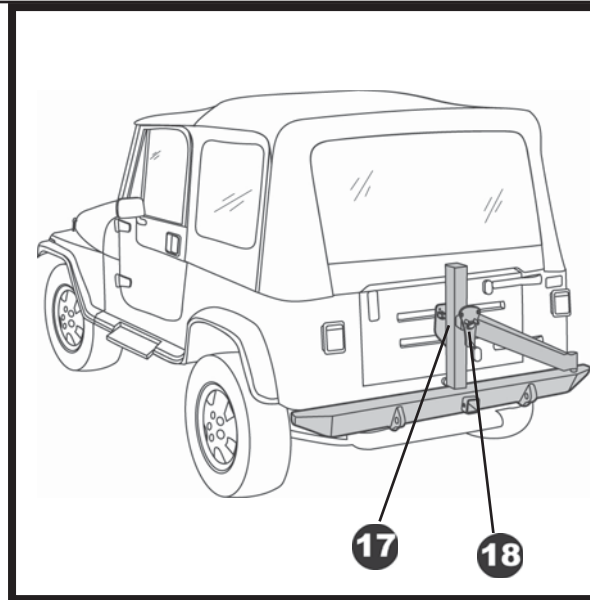
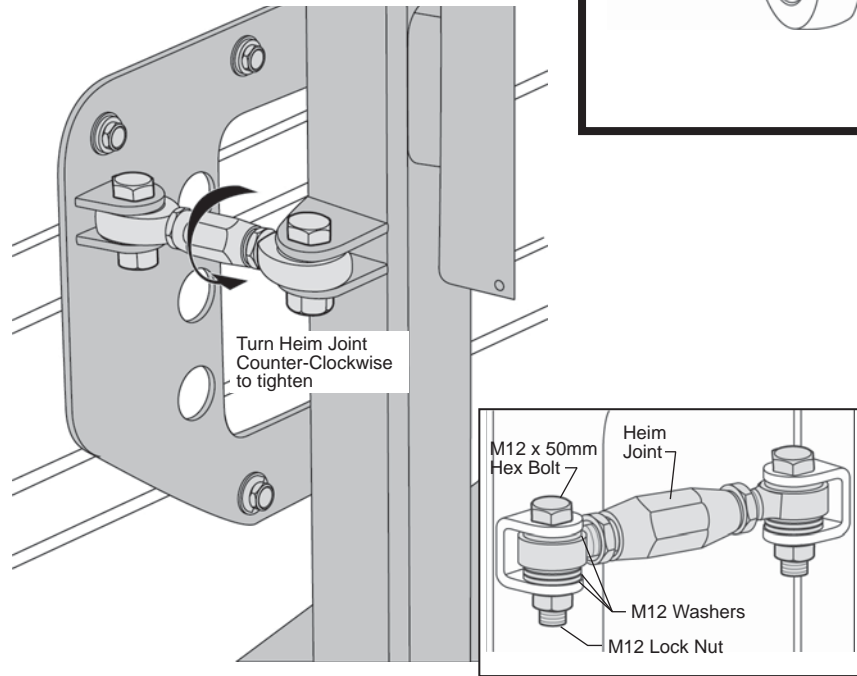
17 Install Heim Joint

Place the Heim Joint on the brackets on the Tire Carrier and Tailgate Mount. Adjust the length of the Heim Joint as needed.

Make sure that the Heim Joint is level. M12 Washers are provided to adjust the height of the Heim Joint to ensure that it is level.

Secure the Heim Joint to each bracket with an M12 x 50mm Hex Bolt and M12 Lock Nut. Tighten securely. Close the tailgate. Turn the Heim Joint counter-clockwise until the Tire Carrier is tight against the tailgate.

Once the Heim Joint is installed, tighten the jam nuts.



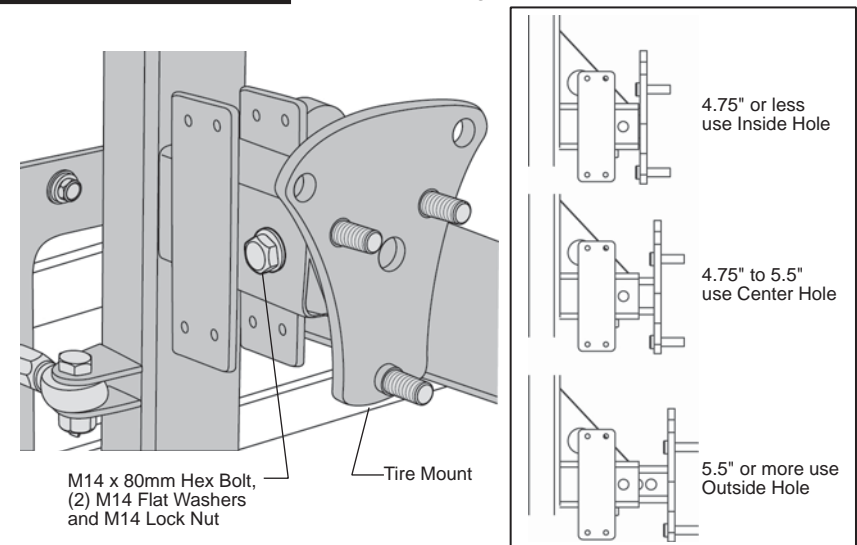
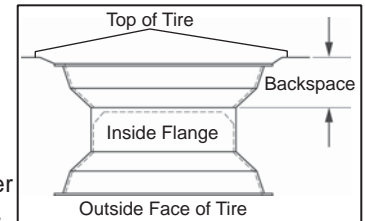
18 Measure Tire Backspace

On the inside of the tire, measure from the top of the tire to the inside flange of the rim. Locate the measurement on the chart to determine which hole to use to install the Tire Mount.

Slide the Tire Mount into the Tire Carrier. Install an M14 x 80mm Hex Bolt, two (2) M14 Flat Washers and M14 Lock Nut to secure the Tire Mount to the Tire Carrier.

NOTE The extra holes in the tire mount are for 8 on 6.5 lug hole patterns.

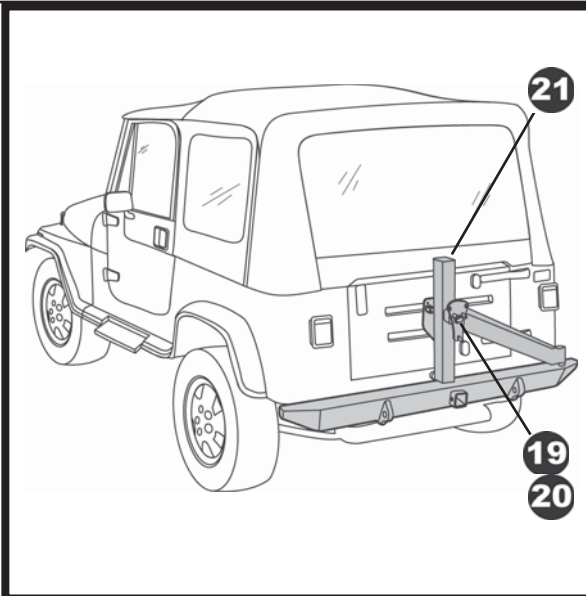
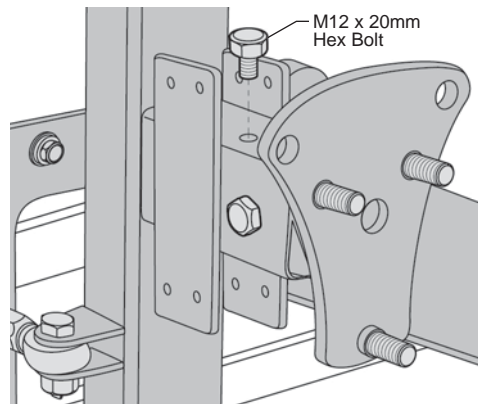
NOTE When tire is mounted and lug nuts are tight, the tire should be pressed against the carrier member to prevent rattling.



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19 Secure Tire Mount

Once the Tire Mount is in position, insert an M12 x 20mm Hex Bolt into the hole in the top of the Tire Mount. Tighten the bolt securely.



21 Install Light Kit

Cut the wires on the factory light about 3" from the connector.

Feed the end of the wire through the Tire Carrier from back to front.

Strip the wires and crimp on the two (2) connectors from the Light Kit.

Connect the Light.

Press the rubber boot on the Light into the hole in the Tire Mount.

Thread the wire through the hole in the tailgate and reinstall the grommet that was removed in Step 12.

Plug in the connector on the inside of the tailgate. Replace the cover.

20 Reinstall Factory Light – Optional

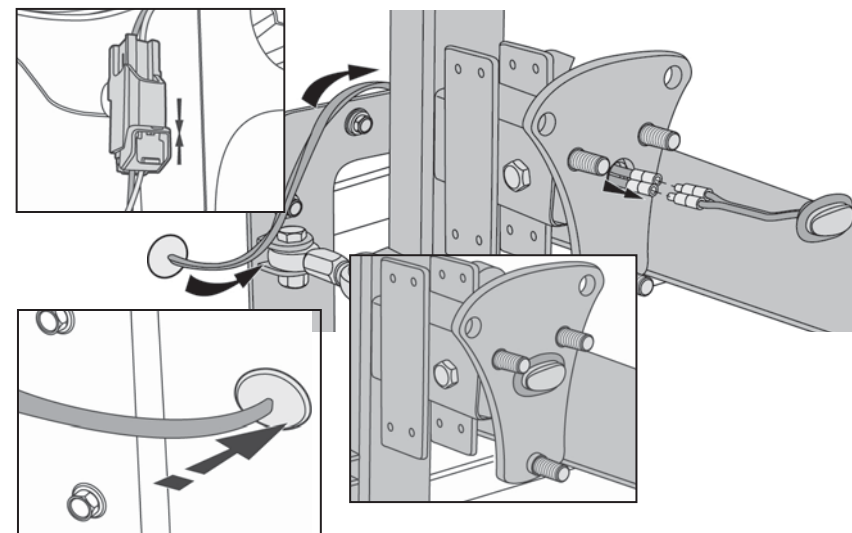
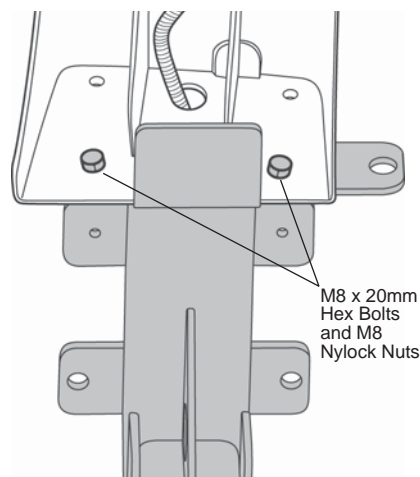
If not reinstalling the factory light, skip to Step 20.

Remove the four (4) bolts that secure the light to the factory tire carrier.

Use an M8 x 20mm Hex Bolt and M8 Nylock Nut to mount the light to the top of the post on the Tire Carrier.

Thread the wire through the hole in the tailgate and reinstall the grommet that was removed in Step 12.

Plug in the connector on the inside of the tailgate. Replace the cover.

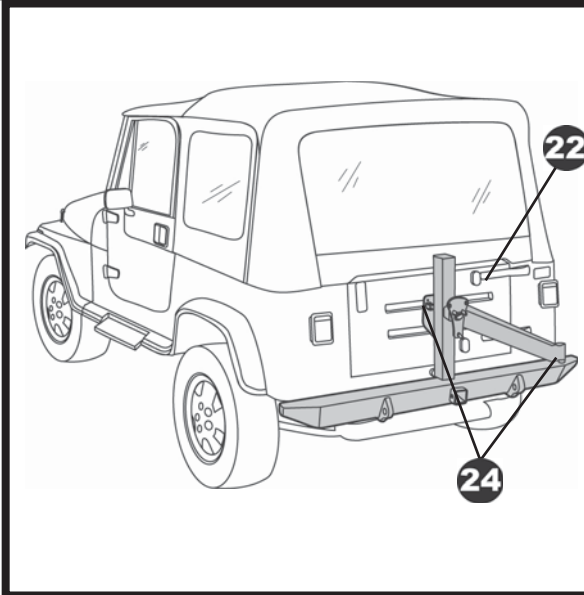
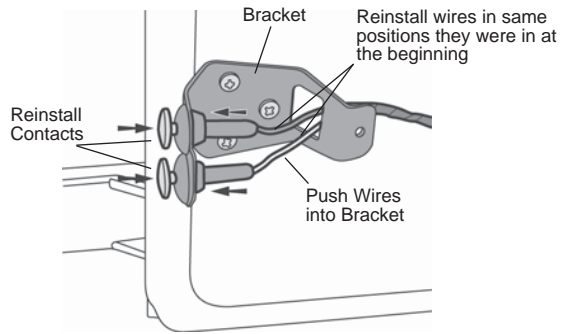


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22 Install Brake Light

Replace the wires through the bracket on the inside of the tailgate. Make sure that they are in the same positions as they were when they were removed in Step 4. Push the wires into the rubber holes and replace the connectors.

Reinstall the cover.



24 Adjustment

Retighten the Heim Joint with the weight of the tire on the Tire Carrier.

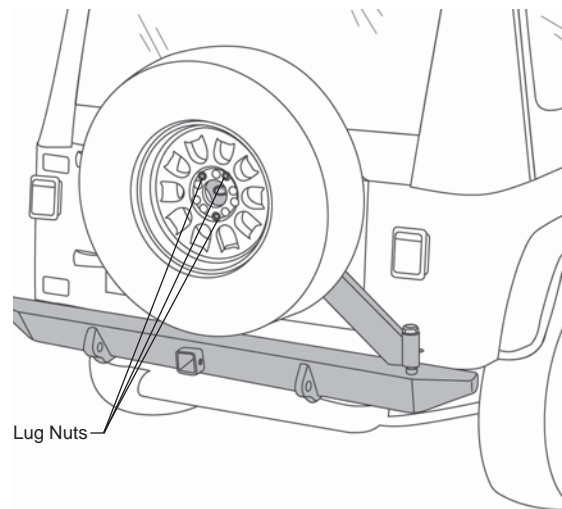
Swing the Tire Carrier back and forth a few times. Remove the Bearing Housing Cap and re-tighten the Slotted Hex Nut.



CAUTION After two (2) weeks, check and re-tighten the Slotted Hex Nut to make sure that it has not become loose.

23 Install Tire

Place the tire on the Tire Mount. Secure with the three (3) Lug Nuts.



WARNING Tow Rating Warning

Do not exceed the vehicle manufacturer's recommended towing capacity.



WARNING DO NOT cut, drill, weld or modify the Bumper.

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LIMITED WARRANTY

We warrant our product to be free from defects in material and workmanship, for the terms specified below, provided there has been normal use and proper maintenance. This warranty applies to the original purchaser only. All remedies under this warranty are limited to the repair or replacement of any item or items found by the factory to be defective within the time period specified. If you have a warranty claim, first you must call our factory at the number below for instructions. You must retain proof of purchase and submit a copy with any items returned for warranty work. Upon completion of warranty work, if any, we will return the repaired or replaced item or items to you freight prepaid. Damage to our products caused by accidents, fire, vandalism, negligence, misinstallation, misuse, Acts of God, or by defective parts not manufactured by us, is not covered under this warranty.

THE WARRANTY TIME PERIOD IS AS FOLLOWS FOR REPLACE-A-TOP™, SAILCLOTH REPLACE-A-TOP™, SUPERTOP®, SUPERTOP® REPLACEMENT SKINS, SUNRIDER®, AND TIGERTOP®: TWO YEARS FROM DATE OF PURCHASE.

THE WARRANTY TIME PERIOD IS AS FOLLOWS FOR ALL OTHER “SOFT GOODS” MANUFACTURED BY OUR COMPANY (USING PRIMARILY VINYL, PLASTICS, AND/OR FOAM): ONE YEAR FROM DATE OF PURCHASE.

THE WARRANTY TIME PERIOD IS AS FOLLOWS FOR ALL OTHER “HARD GOODS” MANUFACTURED BY OUR COMPANY (USING PRIMARILY METALS, PLASTICS, AND/OR FIBERGLASS): ONE YEAR FROM DATE OF PURCHASE.

ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND/OR FITNESS FOR A PARTICULAR PURPOSE CREATED HEREBY ARE LIMITED IN DURATION TO THE SAME DURATION AND SCOPE AS THE EXPRESS WRITTEN WARRANTY. OUR COMPANY SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGE.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



For further information or request for warranty work, please contact:

Bestop Inc. Customer Service

Toll-Free: (800)845-3567

Main: (303)465-1755

E-mail: csbestop@Bestop.com

Website: www.Bestop.com