



Installation Instructions



HighRock 4x4™

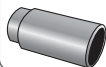











Rear Bumper and Tire Carrier

Vehicle Application: 2007 - Current Jeep® Wrangler and Wrangler Unlimited

•HighRock 4x4™ Rear Bumper and Tire Carrier
Part Number: 42934 / 44934

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

TOOLS			
Socket  13mm, 17mm, 18mm, 19mm, 22mm, 35mm	Ratchet 	Hammer 	Wrench  5/16", 15/16", 13mm, 17mm, 18mm, 19mm, 22mm
Phillips Screwdriver 	Flat-Head Screwdriver 	Channel Locks 	Grease Gun 
Crimp Tool 	Wire Cutters 	Wire Stripper 	Safety Glasses 



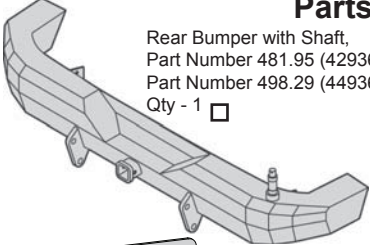
! WARNING This product is designed primarily to enhance the appearance of the vehicle. Do not rely in any way on the components of this product to protect against injury or death in the event of an accident. Never operate the vehicle in excess of manufacturer's specifications.

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

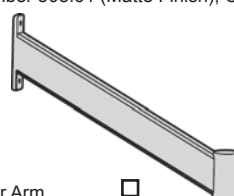


Rear Bumper with Shaft,
Part Number 481.95 (42936) (Gloss Finish),
Part Number 498.29 (44936) (Matte Finish),
Qty - 1

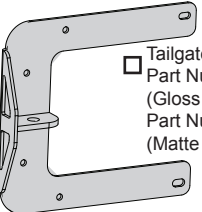
Tire Carrier Assembly
42935 (Gloss Finish), Qty - 1
44935 (Matte Finish), Qty - 1



Tire Carrier Post
Part Number 508.60 (Gloss Finish), Qty - 1
Part Number 508.61 (Matte Finish), Qty - 1




Tire Carrier Arm
Part Number 508.53 (Gloss Finish), Qty - 1
Part Number 508.54 (Matte Finish), Qty - 1




Tailgate Mount,
Part Number 514.17
(Gloss Finish),
Part Number 514.18
(Matte Finish), Qty - 1

Hardware Kit Part # 489.80P




Shaft Bearing, Part
Number 481.99,
Qty - 2




Shaft Seal, Part
Number 482.00,
Qty - 1

Hardware Kit Part # 489.81P




Bearing Housing
Cap, Part Number
609.45, Qty - 1

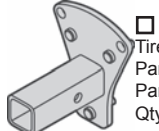


O-Ring, Part
Number 482.02,
Qty - 1

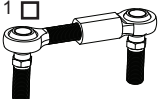
Grease Fitting, Part
Number 482.08,
Qty - 1




Tire Mount,
Part Number 481.97 (Gloss Finish),
Part Number 498.05 (Matte Finish),
Qty - 1




Heim Joint, Part
Number 514.19,
Qty - 1




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




Rubber Bumper,
Part Number
482.48, Qty - 2




Hardware Kit Part # 584.69P




M24 Slotted Hex
Nut, Part Number
482.03, Qty - 1




Cotter Pin, Part Number
482.04, Qty - 1




M12 x 25mm Hex
Bolt, Part Number
482.11, Qty - 1




5/8" Flat Washer
Part Number 522.93
Qty. 4



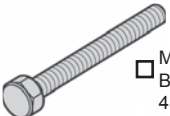
M14 Flat Washer,
Part Number 489.24,
Qty - 4




M24 Washer, Part
Number 482.07,
Qty - 1



M14 Lock Nut,
Part Number 482.10,
Qty - 3



M14 x 80mm Hex
Bolt, Part Number
482.09, Qty - 1



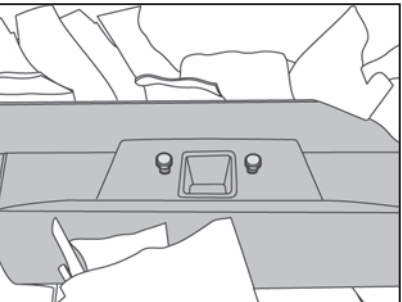
5/8" Lock Nut
Part number, 522.94
Qty. 2

Hardware Kit Part # 485.74P

M12 Hex Bolt Part #
485.43 Qty 2
M12 Lock Washer
Part # 485.45 Qty 2
M12 Flat Washer Part
485.44 Qty 2

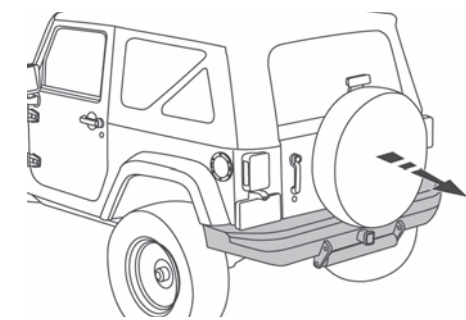
Already installed on
the HighRock 4x4™
Rear Bumper.

Remove the foam
packaging to access
these



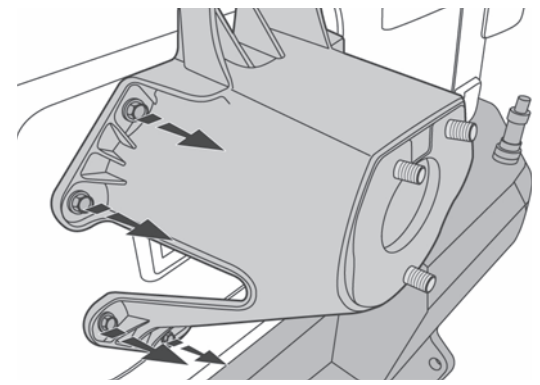
1 Remove Spare Tire

Remove the spare tire from the factory tire carrier.



2 Remove Factory Tire Carrier

Use a 13mm socket wrench to remove the eight (8) bolts that secure the factory tire carrier to the vehicle. Set them aside to be reused.



HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

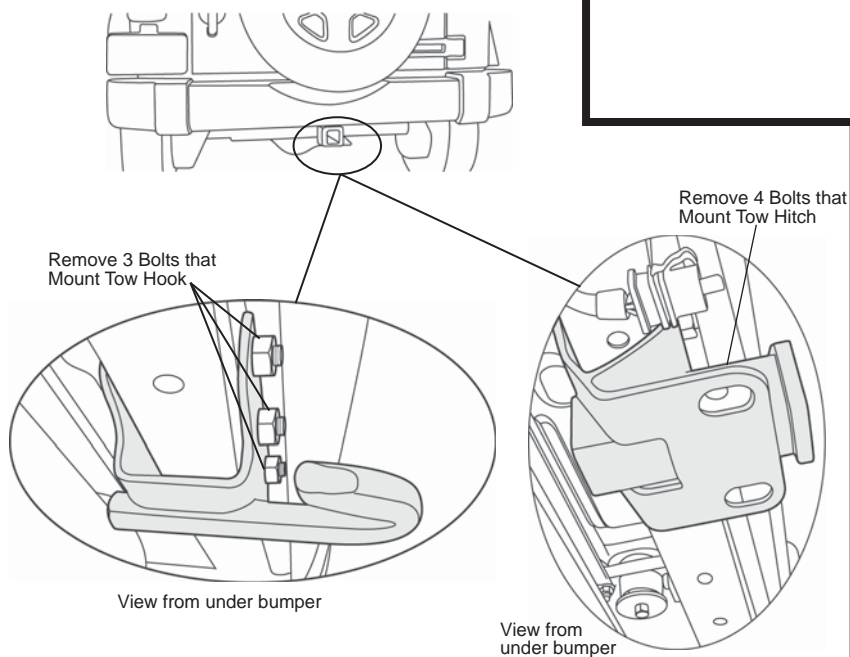
3 Remove Tow Hitch or Tow Hook

If you do not have a tow hitch or tow hook, proceed to Step 2.

If your vehicle is equipped with a tow hitch or tow hook, you will need to remove it before you remove the factory bumper.

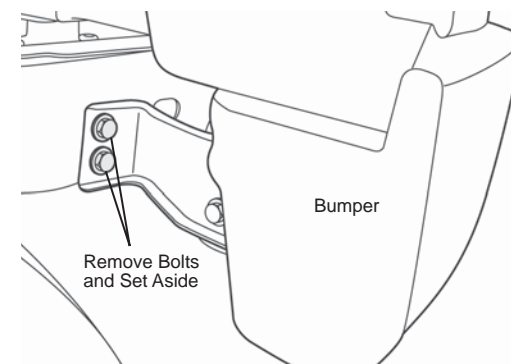
To remove a tow hitch, use a wrench with an 18mm socket to remove the four (4) bolts that secure it to the bumper and discard them.

If you have a tow hook, use a wrench with an 18mm socket to remove the three (3) bolts that mount it to the bumper and discard them.



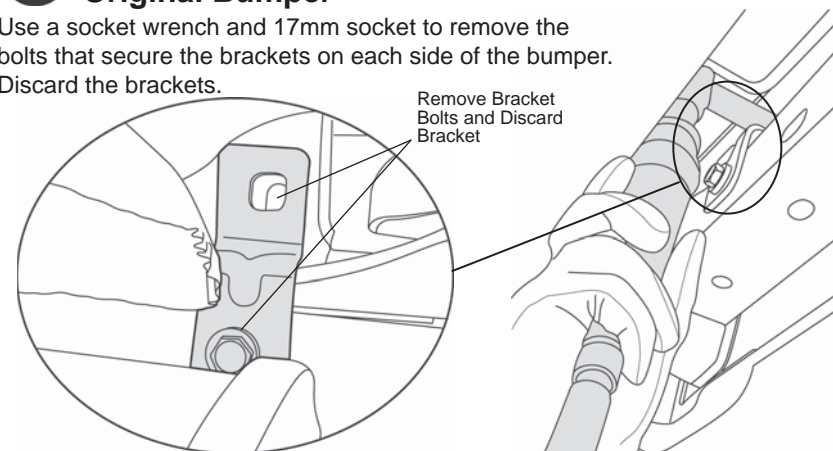
4 Remove Bolts on end of Factory Bumper

Use a socket wrench and 17mm socket to remove the two (2) bolts on each side of the bumper that attach it to the frame. Set the bolts aside to be re-used to install the HighRock 4x4™ Bumper.



5 Remove Bracket Bolts on Original Bumper

Use a socket wrench and 17mm socket to remove the bolts that secure the brackets on each side of the bumper. Discard the brackets.

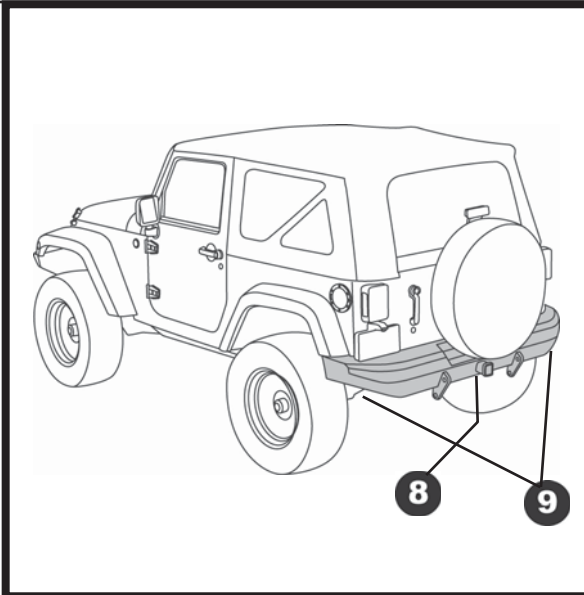
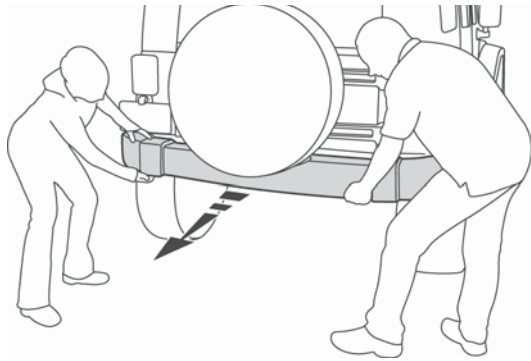


HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

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

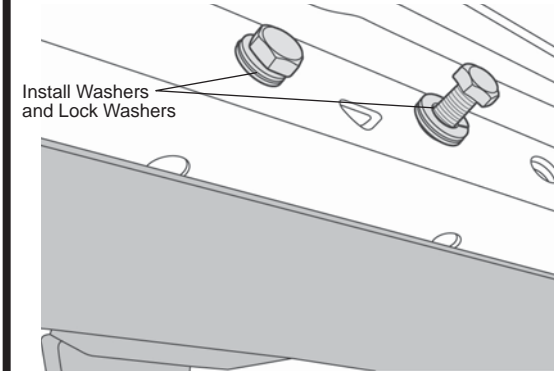
6 Remove Factory Bumper

Position a person on each end of the bumper to lift it away from the vehicle. Set the bumper aside.



8 Install Center Bolts

Locate the two (2) factory installed Hex Bolts on each side of the hitch. Install Washers and Lock Washers on them.



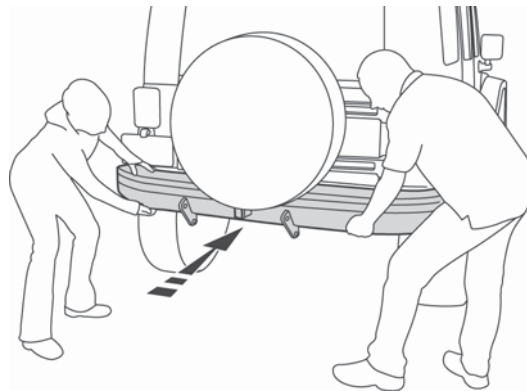
View from under bumper

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

7 Install HighRock 4x4™ Bumper

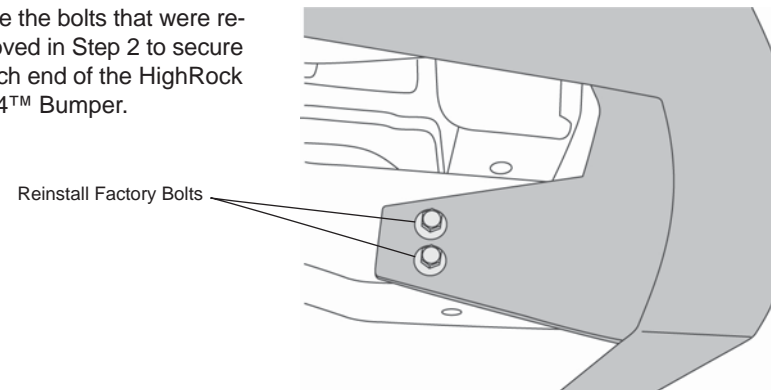
Remove the two (2) Bolts and Washers installed on the Bumper at the factory. Set them aside to be used later.

Position a person on each end of the HighRock 4x4™ Bumper to lift it onto the vehicle.



9 Re-Install Side Frame Bolts

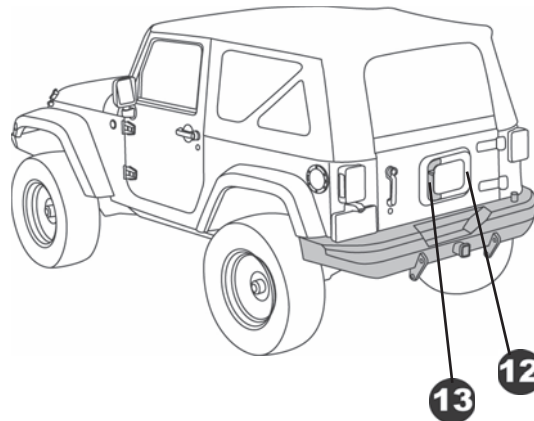
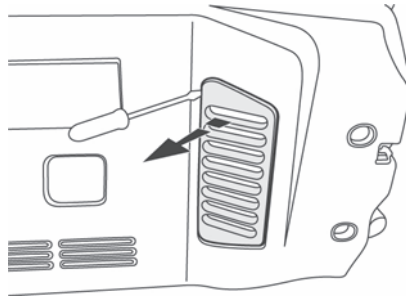
Use the bolts that were removed in Step 2 to secure each end of the HighRock 4x4™ Bumper.



HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

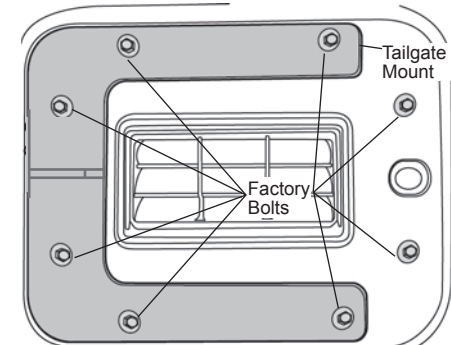
10 Remove Plastic Cover

Open the tailgate.
Slide a flat screwdriver under the left side of the plastic cover on the rear of the tailgate to pry it off.



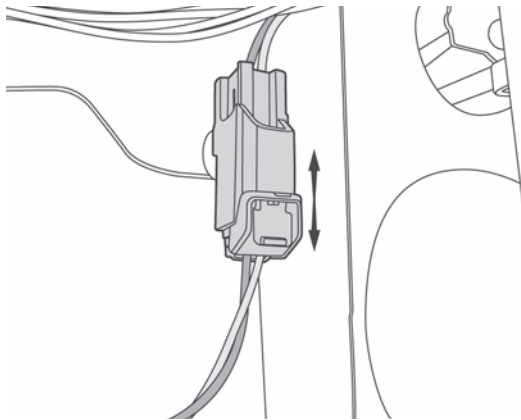
13 Install Tailgate Mount

Use six (6) bolts that were removed in Step 2 to install the Tailgate Mount in the left side tire carrier holes on the tailgate.
Replace the other two (2) remaining factory bolts in the two (2) right side holes from the factory tire carrier.



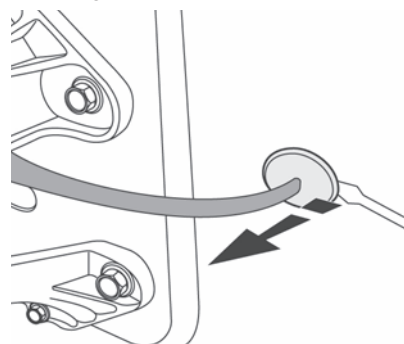
11 Disconnect Light

Disconnect the light connector inside the tailgate.



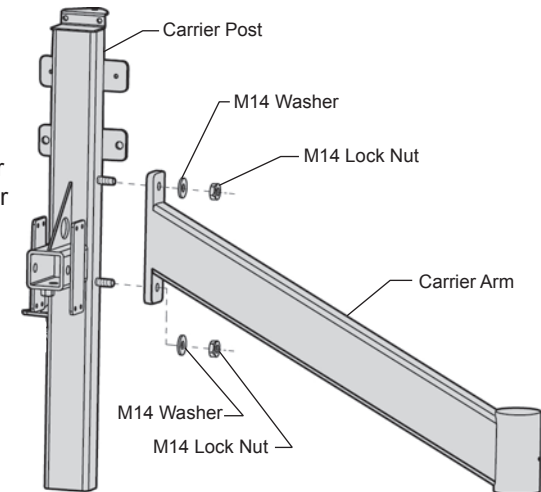
12 Remove Grommet

Use a flat screwdriver to pry out the grommet from the outside of the tailgate. Pull the wire through the hole. Set the grommet aside to be reused.



14 Secure Carrier Arm to Carrier Post

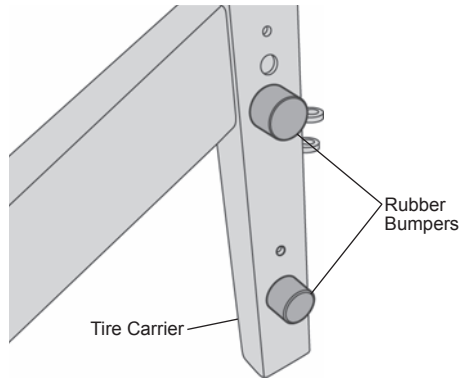
Use two (2) M14 Lock Nuts and two (2) M14 Flat Washers to mount the Carrier Arm to the Carrier Post. Tighten the nuts.



HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

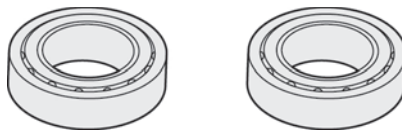
15 Install Bumpers

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

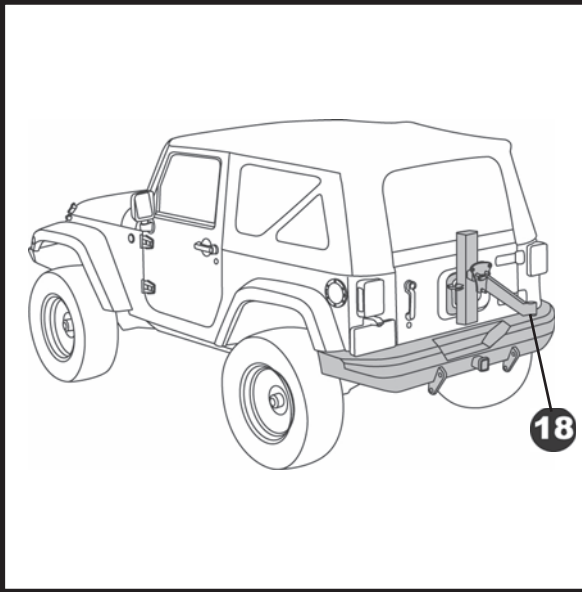


16 Pack Shaft Bearings with Grease

Pack both Shaft Bearings with the Grease. 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



CAUTION

Two people may be required to install the Tire Carrier.

18 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.

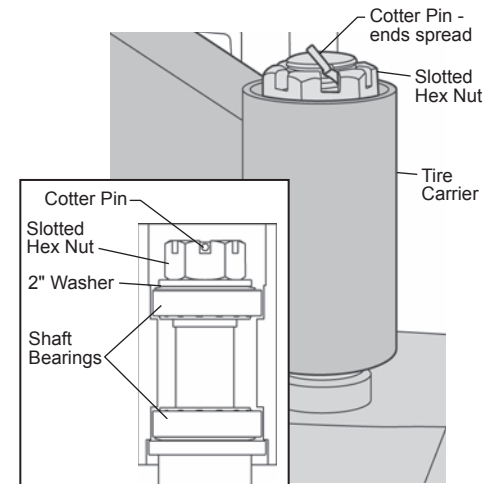
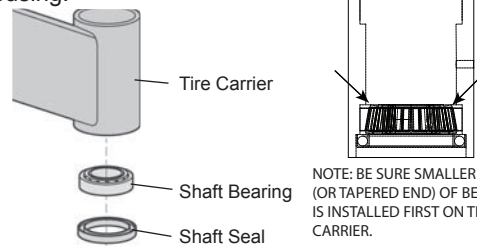
Install the 2" Washer and Slotted Hex Nut over the Shaft Bearing. Tighten the nut to 28 -32 ft. lbs of torque.

Insert the Cotter Pin through the slots in the Hex Nut and the hole in the shaft. Spread the ends of the Cotter Pin.

17 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.

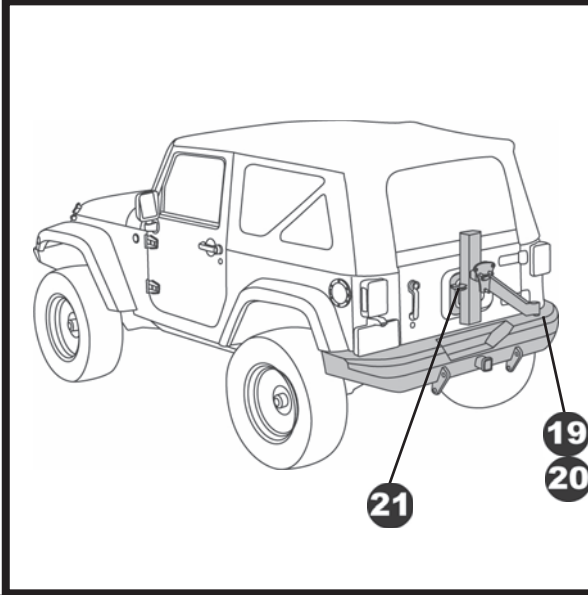
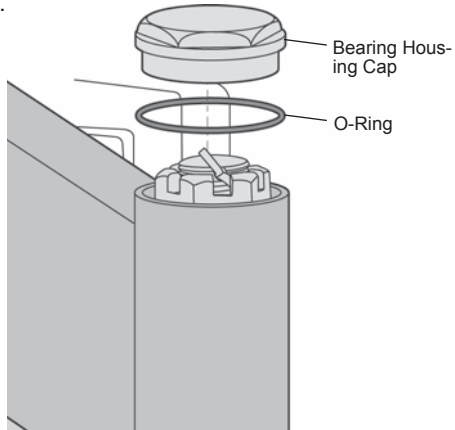
Orient the Shaft Seal with the open end toward the spindle housing and slide it into the housing. Place a large socket flush with the bottom of the Seal. Tap the socket lightly with a hammer to seat the Seal inside the housing.



HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

19 Install Bearing Housing Cap

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



21 Install Heim Joint

Open the tailgate, then place the Heim Joint on to the brackets between the tire carrier and tailgate mount. Close tailgate and check distance between rubber bumpers on tire carrier and tailgate plate, bumpers should be slightly compressed. If not remove heim joint and adjust heim joint as needed. Continue to open and close tailgate until desired compression of rubber bumpers is reached.

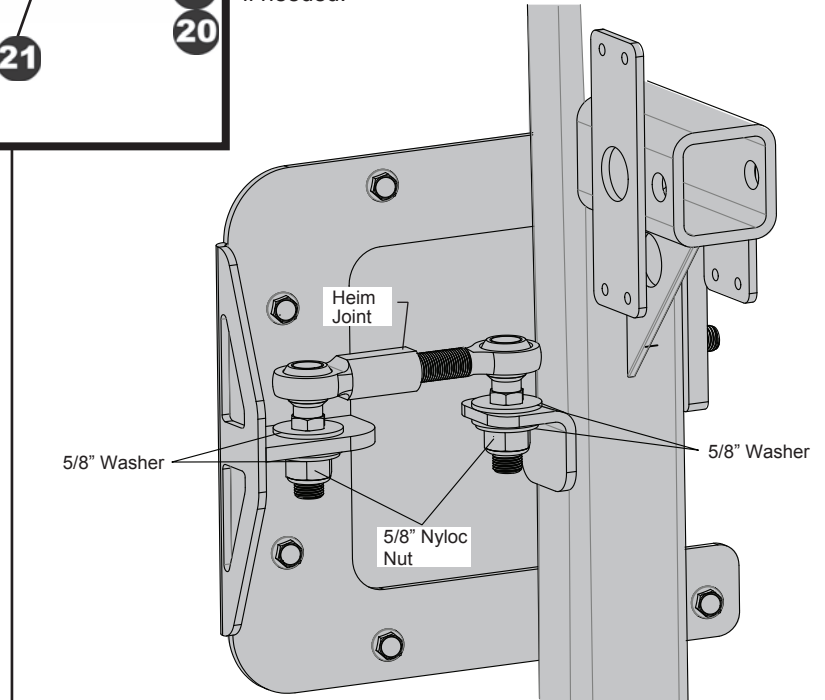
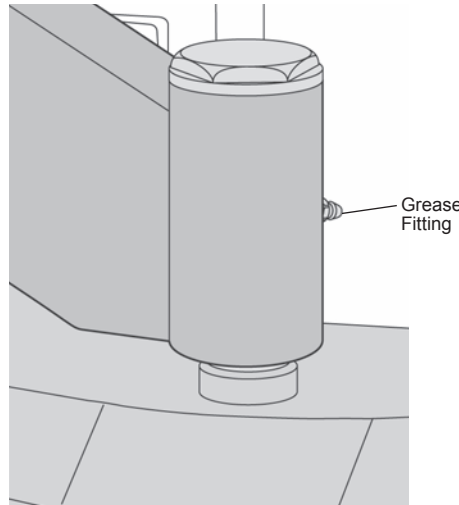
Once desired compression is reached add, 2 - 5/8" washers and 2 - 5/8" lock nuts to heim joint and tighten down.

NOTE: Drive vehicle for 1 week, then re-adjust heim joint if needed.

20 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.



HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

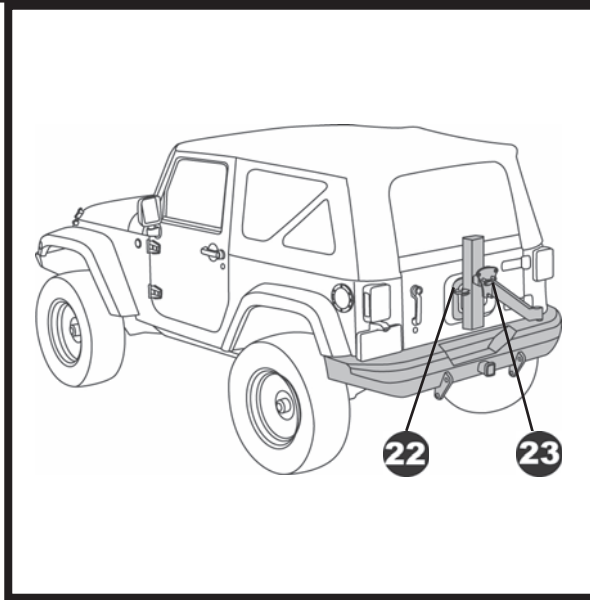
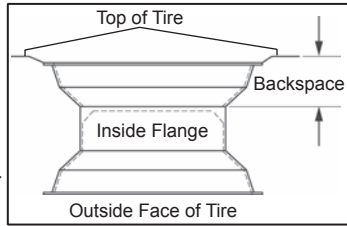
22 Measure Tire Backspace

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

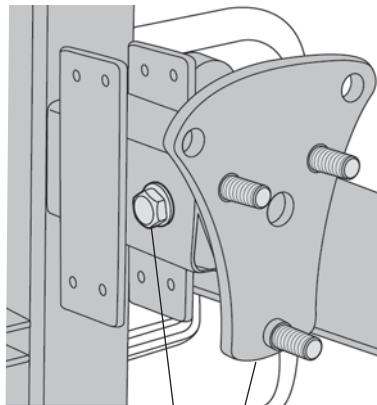
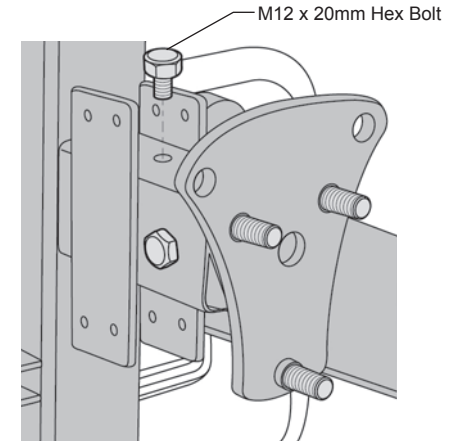
NOTE The extra holes in the tire mount are for 8 on 6.5 lug hole patterns.

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

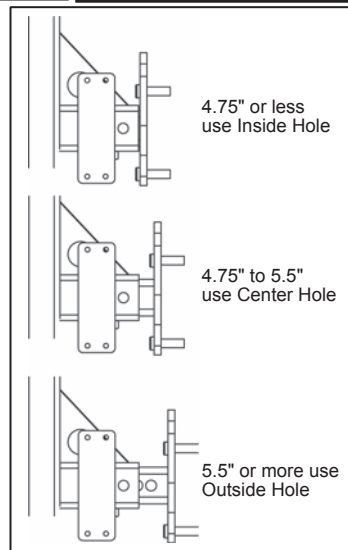


23 Secure Tire Mount

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



M14 x 80mm Hex Bolt,
(2) M14 Flat Washers
and M14 Lock Nut



4.75" or less
use Inside Hole

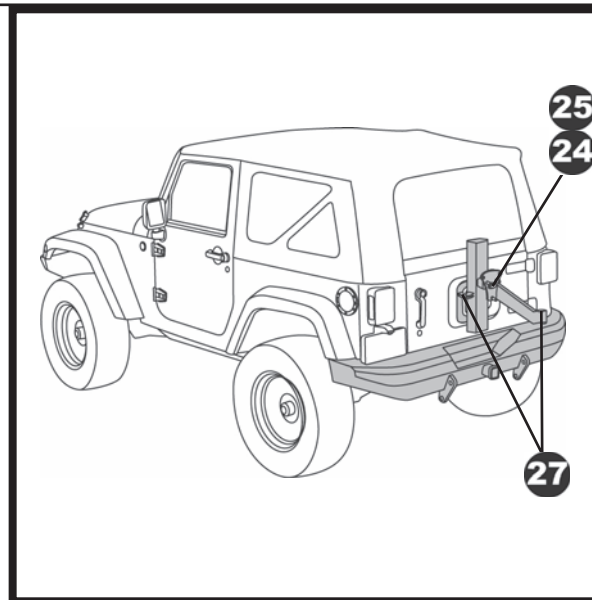
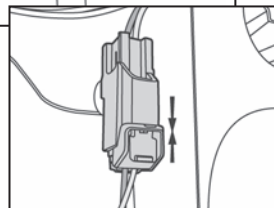
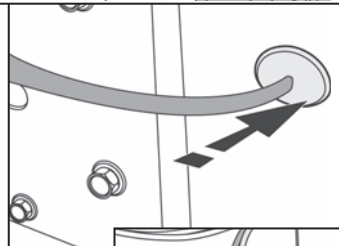
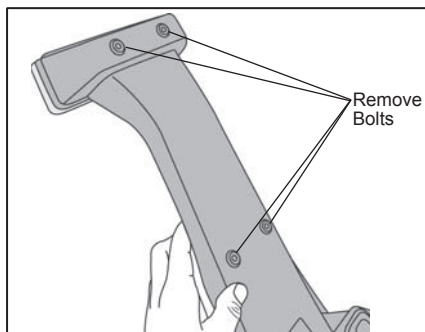
4.75" to 5.5"
use Center Hole

5.5" or more use
Outside Hole

HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

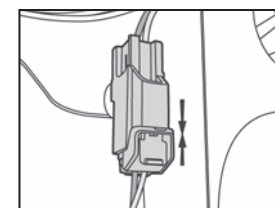
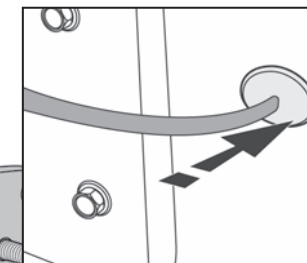
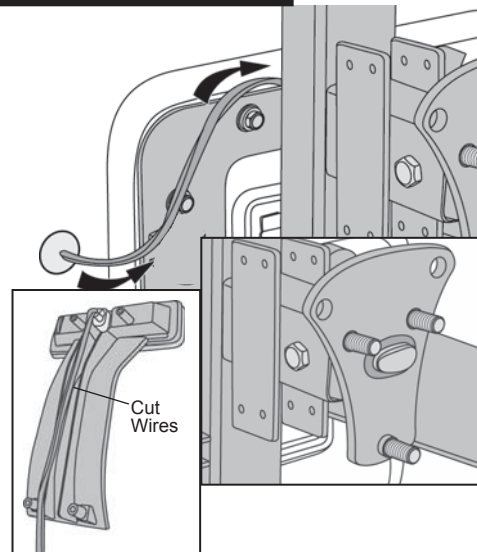
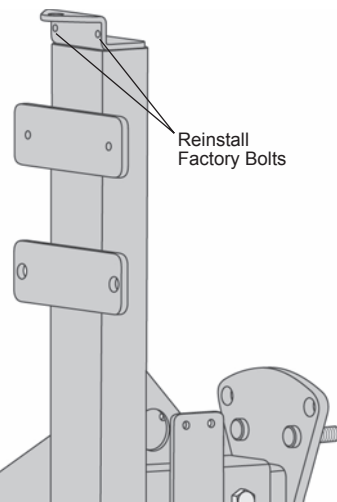
24 Reinstall Factory Light – Optional

If not reinstalling the factory light, skip to Step 25.
Remove the four (4) bolts that secure the light to the factory tire carrier.
Reuse the screws 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.



25 Install Light Kit

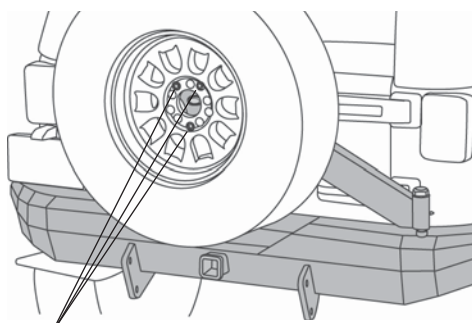
Cut the wires on the factory light about 3" from the connector.
Feed the end of the wire through the Tire Carrier from back to front.
Strip the wires and crimp on the two (2) connectors from the Light Kit.
Connect the Light.
Press the rubber boot on the Light into the hole in the Tire Mount.
Thread the 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.



HighRock 4x4™ Rear Bumper and Tire Carrier Installation Instructions

26 Install Tire

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



Lug Nuts

27 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.



WARNING Tow Rating Warning

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



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

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
E-mail: csbestop@Bestop.com
Website: www.Bestop.com