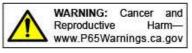


PART NO.

272120T PRODUCT DESCRIPTION: TRAILLINE FULL REAR BUMPER Application: JEEP WRANGLER JL

PRODUCT SAFETY & LEGAL DISCLAIMER

- IMPORTANT READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLING, FAILURE TO DO SO MAY CAUSE PERSONAL INJURY OR DAMAGE TO PRODUCT AND/OR PROPERTY.
- **Review the product package and contents prior to beginning the installation.** Take care when opening the packaging and removing items. If a return is needed you will want to return the product in its original packaging if possible.
- This instruction guide is provided as a GENERAL installation guide, some vehicles vary dimensionally and may require additional steps.
- Test fit the product on the vehicle prior to any third party modifications and or finishing. The manufacturer and/or distributors do not accept responsibility for third party charges, labor and or third part replacement modifications. Some modifications may void the factory warranty.
- Exercise due-diligence when installing this product. The manufacturer and distributors of this product do not accept any responsibility for vehicle damage or personal injury resulting from the installation of this product. Careless installation and operation can result in serious injury or equipment damage.
- This product is for general off-road use. All liability for installation and use rests with the owner/operator.
- INSTALLER: Once installation is complete, please return this guide along with other documentation included in this product back to the consumer for future reference. The manufacturer/distributors of this product do not guarantee this particular version will be available at a later date.



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<u>www.gorhino.com</u> 589 W. Apollo St., Brea, CA 92821 P: 888 427 4466



INJURY HAZARD

Please complete a shop and tool inspection prior to beginning the installation.

- Always make sure you have a clean, dry and well lit work area.
- Always remove jewelry, loose fitting clothing and wear protective gloves and eye protection.
- Always use extreme caution when jacking or raising a vehicle for work. Set the emergency brake and use tire/wheel blocks and jack stands. Refer to the vehicle manufacturer hand book. Utilize the vehicle manufacturers designated lifting points.
- Always use appropriate and adequate care in lifting parts during disassembly and installation. Seek help in lifting heavy or large items into place. Utilize jacks and or lifting devices when available.
- Always insure products are secure during disassembly and installation.
- Always wear eye protection and take steps to protect any exposed skin during the installations. Drilling, cutting and grinding plastic and metal may create flying particles that can cause injury.
- Always use extreme caution when drilling, cutting and or grinding on a vehicle. Thoroughly inspect the area to be drilled, on both sides of material, prior to modification and relocate any objects that may become damaged.
- Always assemble and tighten all fasteners per the installation instructions.
- Always route electrical cables carefully. Avoid moving parts, parts that may become hot and rough or sharp edges.
- Always insulate and protect all exposed wiring and electrical connections.

MAINTENANCE AND CARE

- Always perform regular inspections and maintenance on mounts and related fasteners.
- Periodically check and tighten all fasteners.
- Stripped, fractured, or bent fasteners must be replaced.
- After washing the vehicle make sure to fully dry all surfaces.
- In areas with cold temperatures make sure to wash the product often to remove harmful materials used on road ways.
- Never use abrasive cleaners or polish compounds. Clean with a gentle soap and water. If you use wax use a non-abrasive automotive wax such as pure carnauba wax.

WARNING

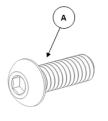
Some products have been designed to work together with factory rear sensor systems, factory forward facing sensor systems and factory air bags.

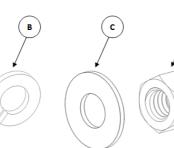
- Installation of some of these products may alter the factory sensor system performance.
- Factory sensors may read shackles or hooks protruding from the fairlead and or tow hooks.
- All sensor testing is completed by Go Rhino Products and or third party testing labs on modified vehicles.
- Sensor sensitivity, factory sensor housing, orientation, and operating conditions are all variables that will influence functionality of the sensors.
- Installation of some product may effect the factory air bag systems.
- Some products allow the use of third party products such as winches, shackles, hooks, etc. Follow the respective manufacturers operating instructions for use with our products.
- Make sure to fully understand the product, it's intended use and operation prior to use.
- Above all... be safe!

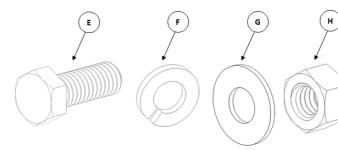


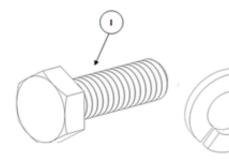
PARTS INCLUDED IN THIS LIST:

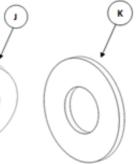
ITEM	QTY.	DESCRIPTION	ITEM	QTY.	DESCRIPTION
Α	4	1/4" x 3/4" Button Head Hex Drive Bolt	Ι	4	3/8" x 1 1/4" Hex Bolt
В	4	1/4" Lock Washer	J	4	3/8" Lock Washer
С	8	1/4" Flat Washer	К	4	3/8" Flat Washer
D	4	1/4" Hex Nut	L	4	1/2" X 1 1/2" Hex Bolt
Е	4	5/16" x 1" Hex Bolt	М	8	1/2" Lock Washer
F	4	5/16" Lock Washer	Ν	8	1/2" Flat Washer
G	8	5/16" Flat Washer	0	4	1/2" Hex Nut
Н	4	5/16" Hex Nut			

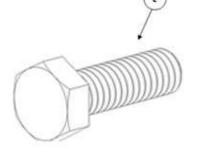


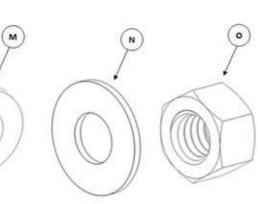












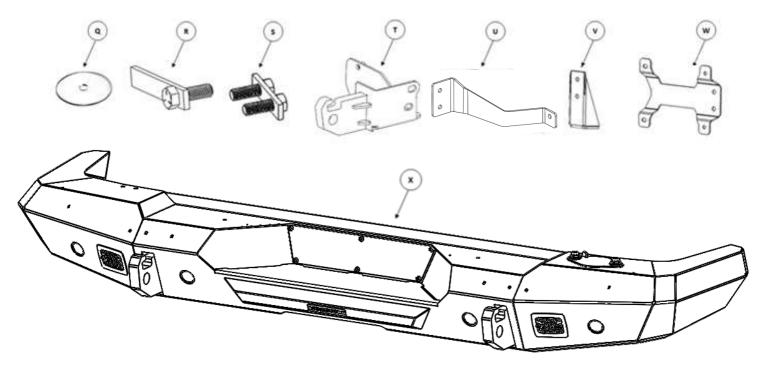
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GORHINO[®]**K**

INSTALLATION INSTRUCTIONS

PARTS INCLUDED IN THIS LIST:

ITEM	QTY.	DESCRIPTION	ITEM	QTY.	DESCRIPTION
Q	2	Vinyl Washer	V	1	License Plate Base Bracket
R	2	1/2" Bolt Plate	W	1	License Plate Bracket
S	1	1/2" Double Bolt Plate	Х	1	Trailline Full Rear Bumper
Т	1Pr.	Frame Bracket (Passenger Side Shown)			
U	1Pr.	Corner bracket (Passenger Side Shown)			



Go Rhino recommends you, the installer, read this installation instruction manual from front to back before installing the product. You may also <u>click here</u> to view an installation video or visit http://www.gorhino.com/Installation-Videos.

TOOLS NEEDED FOR INSTALLATION:

- 8mm, 16mm, 18mm, 21mm, 7/16", ¹/₂" & 3/4" Sockets
- 8mm, 16mm, 18mm, 21mm, 7/16", ¹/₂" & 3/4" Wrenches
- 5/32" Hex Key
- Ratchet, Ratchet Extensions & Swivel Joint Adapter

ESTIMATED TIME FOR INSTALLATION:

: 2 Hour

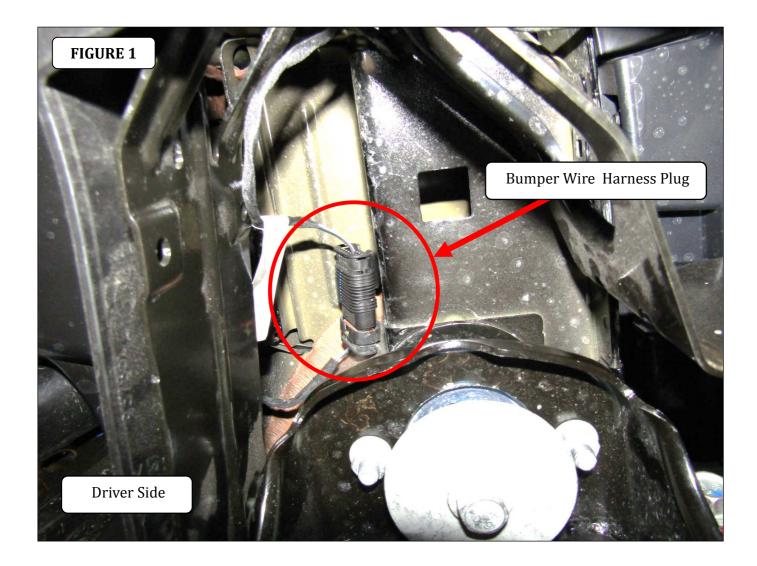
If you need installation service for your new product, call the authorized distributor from whom you purchased the product or an authorized installation service company which can be found by calling toll free 1-888-427-4466



OEM Bumper Removal

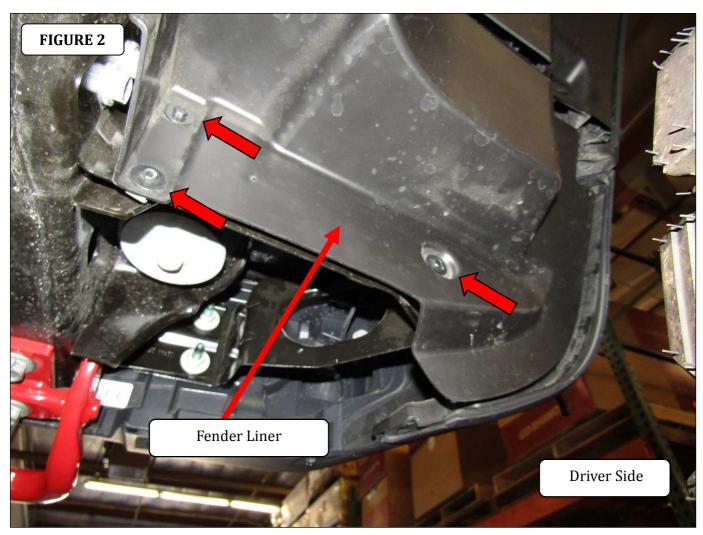
- Step-1 Open the hood and disconnect the vehicle battery or batteries.
- **Step-2** Remove the OEM spare tire.

Step-3 On the driver side, disconnect the bumper wire harness from the vehicle harness, (FIGURE 1).



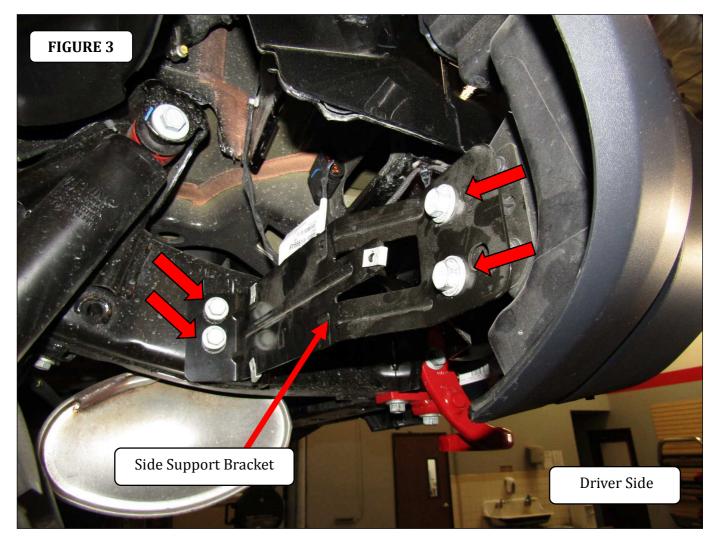


Step-4 On each side of the vehicle, use a M8 socket and remove the (3) screws securing the lower section of the fender liner to the bumper side support bracket, (FIGURE 2). Note: The fender liners will not be re-installed.



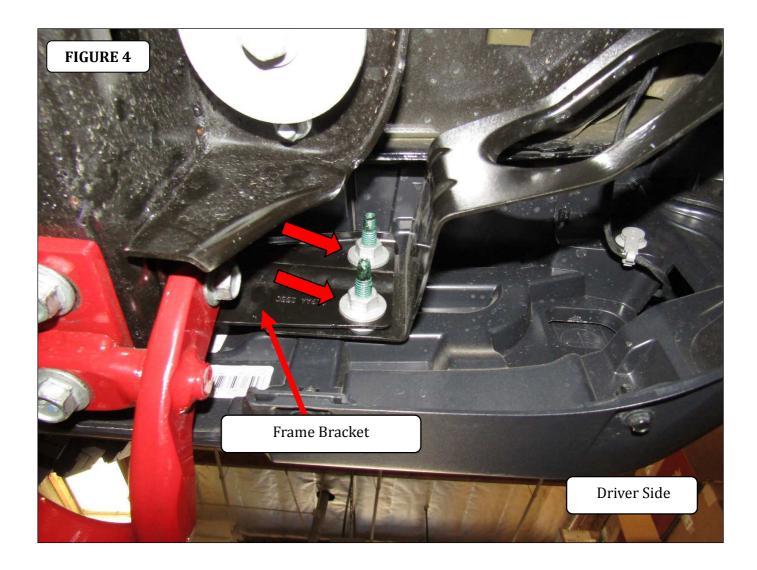
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Step-5 On each side of the vehicle, use a M16 socket and remove the (2) bolts securing the bumper side support bracket to the frame and the (2) bolts securing the side support bracket to the bumper, (FIGURE 3).



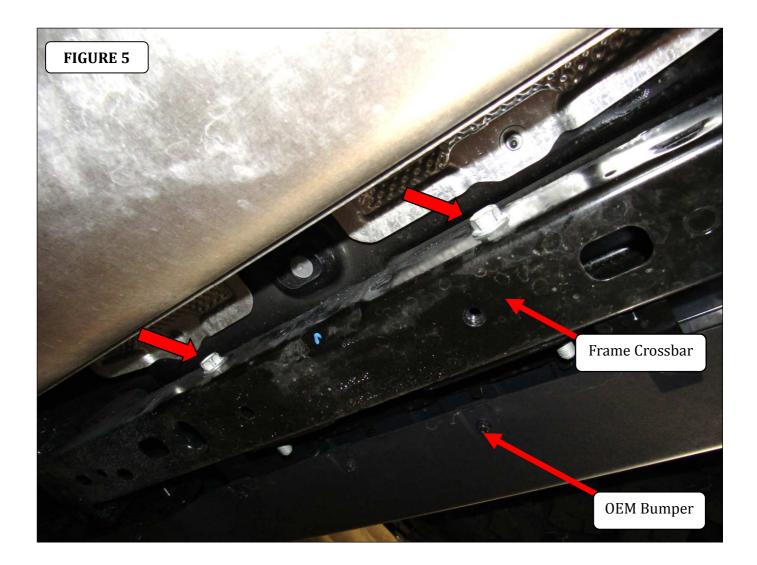
GORHINO[®]

Step-6 On each side of the vehicle use a M16 socket and remove the (2) nuts from the studs securing the bumper to the frame bracket, (FIGURE 4).



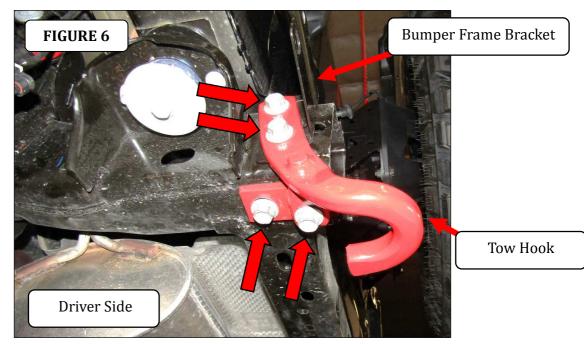


Step-7 Using a M18 socket remove the (2) bolts securing the OEM bumper to the frame crossbar, (FIGURE 5). With assistance remove the OEM bumper from the vehicle.

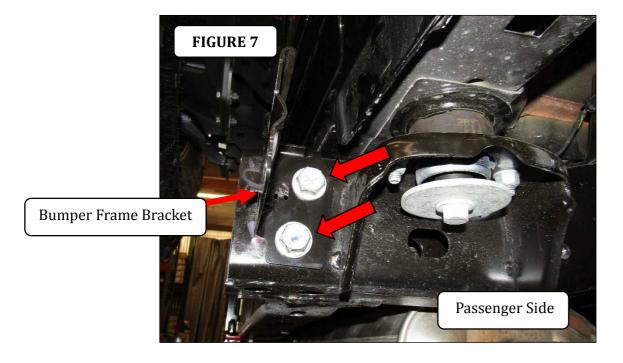




Step-8 On the driver side of the vehicle use a M18 socket and remove the (4) bolts securing the tow hook and bumper frame bracket to the frame, (FIGURE 6). Retain the 4 bolts, the tow hook will not be re-installed.



Step-9 On the passenger side of the vehicle use a M21 socket and remove the (2) bolts securing the bumper bracket to the frame, (FIGURE 7). Retain the 2 bolts.





Trailline Bumper Installation

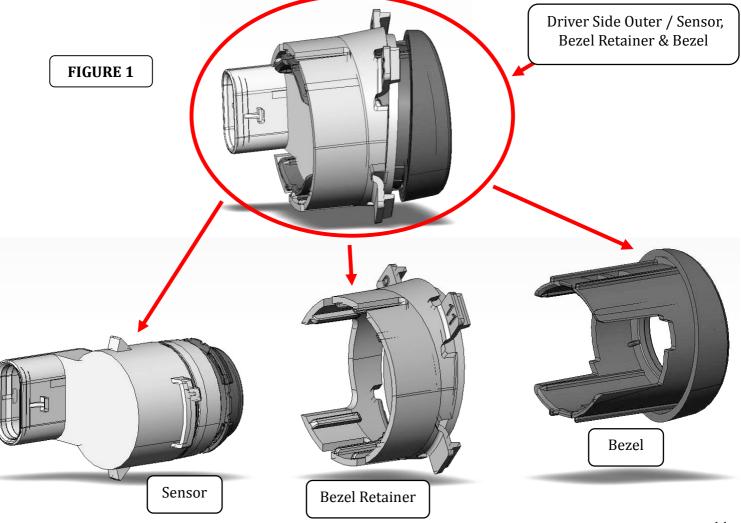
Step-1 If equipped with park sensors remove the wiring harness, sensors, mounting rings and bezels from the OEM bumper. **Note:** The sensors, mounting rings and bezels have to be positioned in the Rockline rear bumper in the same location (inner and outer), (driver and passenger) as removed from the OEM bumper.

1a Unplug the sensors from the wiring harness and remove the wiring harness from the OEM bumper.

1b Remove the sensor by spreading the tabs on the bezel and releasing the sensor out the back side of the bumper.

1c Spread the tabs on the bezel retainer to release it from the bezel.

1d Press the tabs in on the bezel to push it out the front side of the bumper.



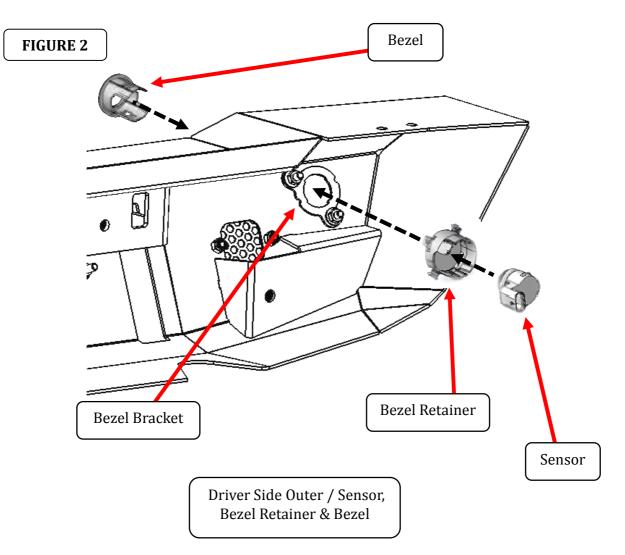
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1e Remove the (4) plastic plugs from the bezel brackets that are preinstalled in the Trailline rear bumper,

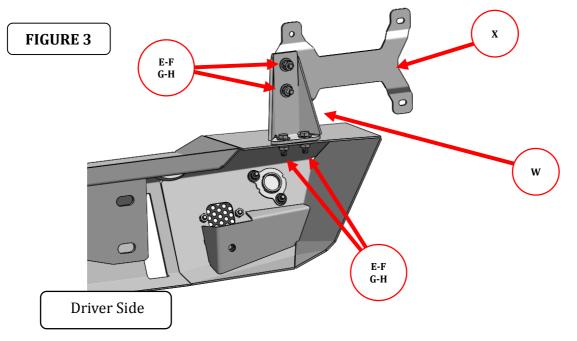
1f Install the OEM parking sensors in the Trailline rear bumper by pressing each bezel in from the front of the bumper into place in the bezel bracket, then press the bezel retainer onto the bezel from the backside. Next press the sensor into the bezel from the back side.

1g Transfer the OEM bumper wiring harness to the Trailline rear bumper and connect to the parking sensors.



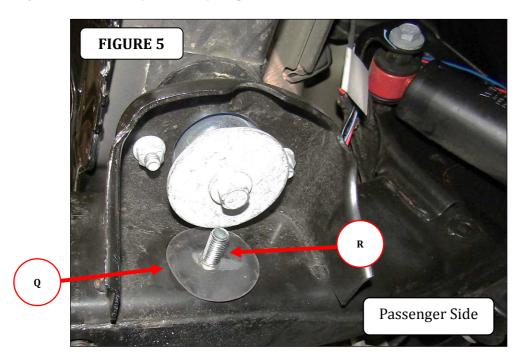


Step-2 Attach the license plate base bracket to the holes in the top, on the driver side of the Trailline bumper using (2) $5/16" \times 1"$ hex bolts, (4) 5/16" flat washers, (2) 5/16" lock washers and (2) 5/16" hex nuts, then attach the license plate bracket to the base bracket using (2) $5/16" \times 1"$ hex bolts, (4) 5/16" flat washers, (2) $5/16" \times 1"$ hex bolts, (4) 5/16" flat washers, (2) $5/16" \times 1"$ hex nuts, (4) 5/16" flat washers, (2) $5/16" \times 1"$ hex bolts, (4) 5/16" flat washers, (2) $5/16" \times 1"$ hex bolts, (4) 5/16" flat washers, (2) $5/16" \times 1"$ hex bolts, (4) 5/16" flat washers, (2) $5/16" \times 1"$ hex bolts, (4) 5/16" flat washers, (2) $5/16" \times 1"$ hex bolts, (4) 5/16" flat washers, (2) $5/16" \times 1"$ hex bolts, (4) $5/16" \times 1"$ hex bolts, (5) $5/16" \times 1"$ hex bolts, (4) $5/16" \times 1"$ hex bolts, (4) $5/16" \times 1"$ hex bolts, (5) $5/16" \times 1"$ hex bolts, (5) $5/16" \times 1"$ hex bolts, (7) $5/16" \times 1"$

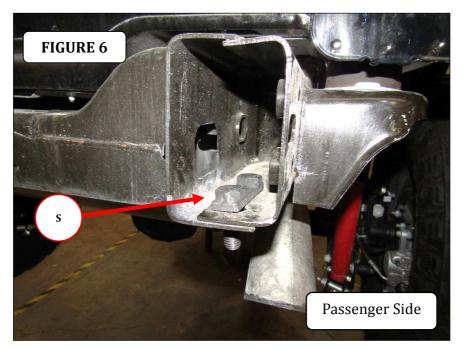




Step-3 Locate the large obround hole in the passenger side of the frame next to the body mount, and install (1) 1/2" T-Bolt in the frame and install (1) vinyl gasket over the threads to prevent the T-Bolt from falling into the frame, (FIGURE 5). Repeat for the driver side.

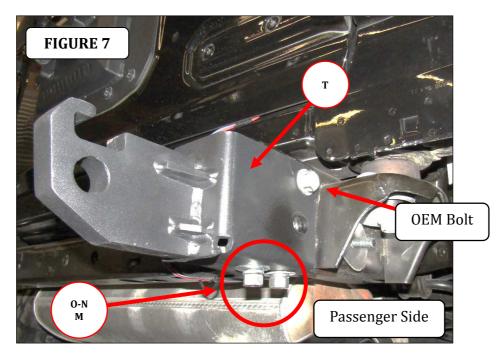


Step-4 Position the ½" double bolt plate inside the passenger side frame rail, so the (2) bolts extend down through the (2) holes in the bottom of the frame rail, (FIGURE 6).

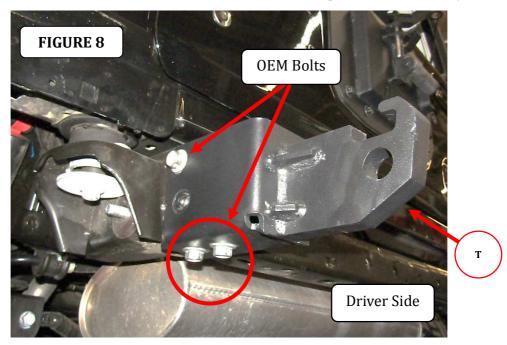




Step-5 Attach the passenger side frame bracket to the side of the frame using (1) OEM bolt used for attachment of the OEM bumper frame bracket, and to the bottom of the frame using the $\frac{1}{2}$ " double bolt plate, (2) $\frac{1}{2}$ " flat washers, (2) $\frac{1}{2}$ " lock washers and (2) $\frac{1}{2}$ " hex nuts, (FIGURE 7).



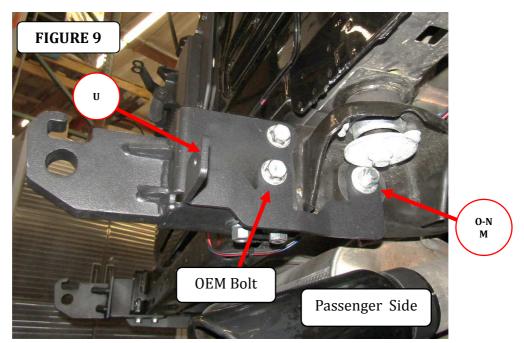
Step-6 Position the driver side frame bracket on the bottom and outside of the vehicle frame, and attach the bracket to the side of the frame using (1) OEM bolt, and to the bottom of the frame using the (2) OEM bolts used for attachment of the OEM tow hook and bumper frame bracket, (FIGURE 8).

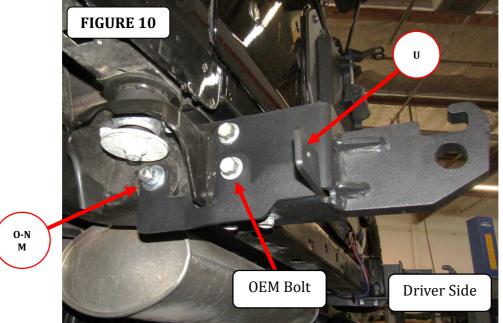


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Step-7 Position the hole in the end of the passenger side corner bracket over the ½" T-Bolt. Align the hole in the center of the corner bracket with the hole in the frame bracket and the weld nut inside the frame. Secure the corner bracket and frame bracket to the frame using (1) OEM bolt and to the side of the frame using the $\frac{1}{2}$ " T-Bolt, (1) $\frac{1}{2}$ " flat washer (1) $\frac{1}{2}$ " lock washer and (1) $\frac{1}{2}$ " hex nut, (FIGURE 9). Leave the bolt and nut loose for final adjustment. Repeat for the driver side, (FIGURE 10).



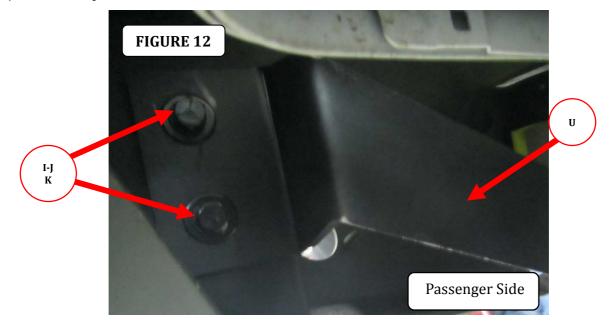




Step-8 With assistance lift the Trailline bumper up to the vehicle, and position the bumper so the driver and passenger side frame bracket D-Shackle mounts protrude out through the rectangular openings in the Trailline bumper, (FIGURE 11).

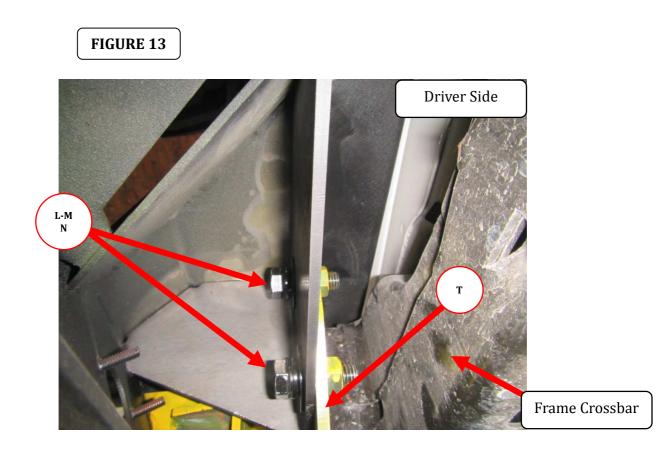


Step-9 Secure the corner bracket to the weld nuts in the Trailline bumper using (2) 3/8" x 1 1/4" hex bolt, (2) 3/8" lock washer and (2) 3/8" flat washer, (FIGURE 12). Leave the bolt loose for final adjustment. Repeat for the driver side.





Step-10 Align the holes in each bumper center bracket with the holes in the frame bracket, and attach the Trailline rear bumper to the frame bracket using (2) 1/2" x 1 1/2" hex bolt, (2) 1/2" lock washer, (2) 1/2" flat washers, (FIGURE 13). Leave the bolt loose for final adjustment.





Step-11 Align the Trailline rear bumper with the vehicle, then tighten all nuts and bolts.



Step-12 Attach the license plate to the license plate bracket using the supplied ¹/₄" x ³/₄" button head hex drive bolts, ¹/₄" flat washers, ¹/₄" lock washers and ¹/₄" hex nuts.

Remember to check and retighten all nuts and bolts periodically.



LIMITED WARRANTY

Go Rhino warrants to Buyer that for a period of five (5) years from the date of shipment of the product(s) ("Warranty Period") for black finishes and chrome finishes, that such products will materially conform to the specifications set forth in Go Rhino's specifications in effect as of the date of shipment(s) and will be free from material defects in material workmanship.

Go Rhino warrants to Buyer that for the life of the product(s) from the date of shipment of the product(s) ("Warranty Period") for polished stainless steel finished products purchased after April 2004, that such products will materially conform to the specifications set forth in Go Rhino's specifications in effect as of the date of shipments and will be free from material defects in material workmanship.

Warranty claims must be accompanied with the original invoice and photos of the product. It is the customer's responsibility to clean regularly and protect finish with regular applications of a nonabrasive polish that is compatible with the product's finish.

This warranty covers the cost of the product only and does not include the cost of removal, installation, third party modifications or shipping of the product. In no event shall Go Rhino be liable to buyer or any third party for any damage or harm caused by the product or use thereof, regardless of whether such damages were foreseeable and whether or not Go Rhino has been advised of the possibility of such damages, not withstanding the failure of any agreed or other remedy of its essential purpose. This warranty is void if the product shows signs of alteration, misuse, mishandling, improper care, neglect, improper application and/or damage due to improper installation.

With respect to any such product(s) during the limited warranty period, Go Rhino shall, in its sole discretion, either: (i) provide a one-time repair or replacement of such products (or the defective part) or (ii) credit or refund the price of such products at the pro rata contract rate provided that, if Go Rhino so requests, Buyer shall, at Go Rhino's expense, return such product(s) to Go Rhino. The remedies shall be the Buyer's sole and exclusive remedy and Go Rhino's entire liability for any breach of the limited warrant(ies).

Go Rhino disclaims all other warranties except to the extent that any such warranty cannot be validly disclaimed under applicable law.

Finish Limited Warranty:

Limited lifetime on stainless steel products (after April 2004) 5 year warranty on black powder coat products 5 year warranty on chrome products This warranty does not cover exposed welds

Finish warranty covers peeling, flaking, or cracking. Washing all finishes regularly with car wash soap and rinsing well with water is the best method for maintaining the finish on your products. You must also protect the finish with nonabrasive automotive wax on a regular basis. The use of any compound which contains abrasives becomes a self-defeating exercise as the compound scratches the finish and opens it to corrosion. The use of harsh chemicals used to remove bugs and tar may also cause the finish to fail and should be avoided.

If you are unsatisfied with your purchase please contact the establishment you purchased the product from.

If you need to place a warranty claim or need assistance, the Go Rhino customer service team will answer any questions you may have. Please contact the Go Rhino customer service team at 1-888-427-4466 during normal business hours Monday thru Friday 7 am to 5 pm PST. You may also email <u>warranty@gorhino.com</u>. In order to better serve you please provide a copy of the original invoice / receipt, a photo of the issue you are experiencing and a photo of the vehicle the product is installed on.

All warranty returns must have an approved RGA number. The RGA number must be clearly marked on the exterior of the return package. All approved warranty returns must be shipped to Go Rhino Products, 810 Nafta Blvd Laredo, TX 78045

PRODUCT REGISTRATION

Please remember to register your new purchase. You may register your product at <u>www.gorhino.com</u>. Registering your product may help speed any future warranty or customer service inquiries.

Thank you again for purchasing from Go Rhino Products

Please take a few minutes to view additional products for your vehicle and more at GORHINO.com These installation instructions are available on the Go Rhino web site along with installation videos for

many of our products.

www.gorhino.com www.bigcountryauto.com www.gorhinopd.com