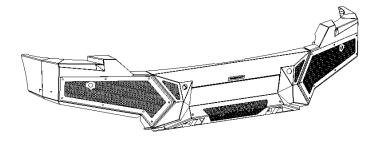
# GO RHINO &

### INSTALLATION INSTRUCTIONS

PART NO.

- 34183T
- 341831T



#### PRODUCT DESCRIPTION:

ELEMENT FRONT BUMPER REPLACEMENT

#### APPLICATION:

• TUNDRA (New Body Style)

#### 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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#### 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

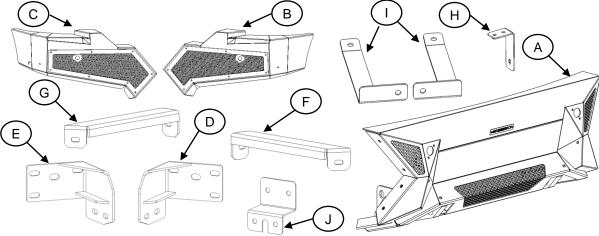
Some products have been designed to work together with factory rear sensor systems, factory forward facing sensor systems and factory air bags.

- 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	1	Center Bumper Section	Q	6	7/16" Lock washer
В	1	Outer Wing (driver)	R	6	7/16" Hex nut
С	1	Outer Wing (passenger)	S	4	1/2 x 1 1/4" Carriage bolt
D	1	Frame Bracket (driver)	Т	4	1/2" Flat Washer
Е	1	Frame Bracket (passenger)	U	4	1/2" Lock Washer
F	1	Auxiliary Bracket (driver)	V	4	1/2" Hex nut
Ð	1	Auxiliary Bracket (passnger)	W	10	3/8 x 1 1/4" Hex Bolt
H	2	Power Bar Bracket (only w/actuator bumper)	Χ	12	3/8" Flat Washer
_	1 set	Brace brackets	Υ	10	3/8" Lock Washer
J	1	Jog bracket	Z	2	3/8" Hex Nut
K	2	5/16" Bolt plate	α	6	1/4 x 1" Hex Bolt
L	2	5/16" Flat washer	β	2	1/4 x 3/4" Button Bolt
М	2	5/16" Lock washer	γ	16	1/4" Flat Washer
N	2	5/16" Hex nut	δ	8	1/4" Lock Washer
0	6	7/16 x 1 1/4" Hex bolt	3	8	1/4" Hex Nut
Р	12	7/16" Flat washer	ζ	2	Vinyl gasket



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:

Masking tape, rotary cutter

- 8, 10, 14, 17 & 18mm Socket
- 7/16, 1/2", 9/16", 11/16, 3/4" Socket & Wrench
- Ratchet & Extension

#### ESTIMATED TIME FOR INSTALLATION:

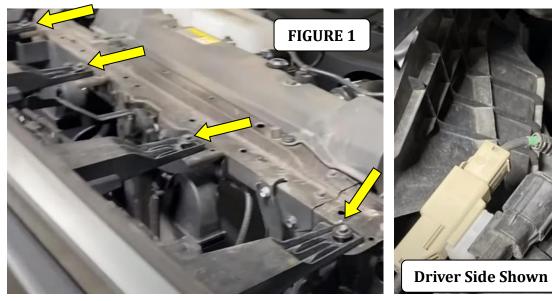
2.5 Hours

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



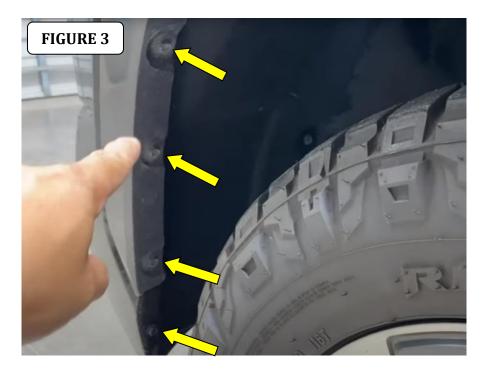
#### **OEM Bumper Removal**

**Step-1** Remove the (4) screws securing the top of the grille, using a 10mm socket (FIGURE 1). Unclip the push pin on each side of the grille, (FIGURE 2).



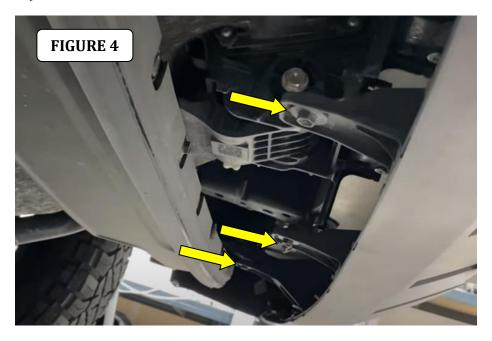


**Step-2** Locate on each side of the vehicle, using a 10mm socket, remove the (4) screws securing the fender liner, (FIGURE 3).



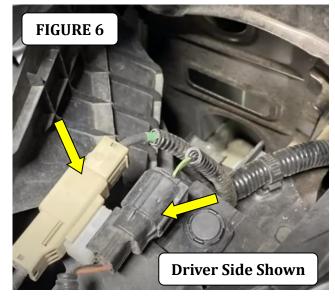


**Step-3** From underneath of the vehicle, using a 10mm socket remove (4) bolts securing the 0EM bumper, (FIGURE 4).



**Step-4** Disconnect the bumper wiring harnesses on each side of vehicle, (FIGURE 5 & 6). Pop the fenders and the panel around the light heads out before to proceed to remove the bumper. With assistance, remove the OEM bumper and grille from the vehicle.



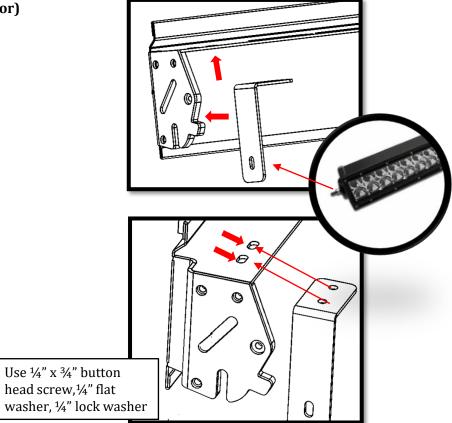




**Light Bar Installation (Only bumper w/actuator)** 

**Step-5** Install the LED bar onto the power bar bracket and have the light bar threads show as an exposed stud (both sides). You'll need to use the supplied hardware that came with your light bar. Secure each side and fasten it down. Be sure that the top side of the light bar is touching the top of the power bar or it will point downwards when in use. Repeat process for both sides.

**Step-6** Install reinforcement brace on the inner part of the power bar mount. Use  $\frac{1}{4}$ " x  $\frac{3}{4}$ " button head screw,  $\frac{1}{4}$ " flat washer and  $\frac{1}{4}$ " lock washer (two per side) to secure the reinforcement from the topside of the power bar mount. Repeat process for both sides.

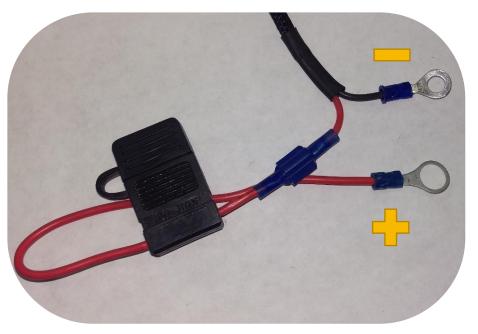




#### Step-7



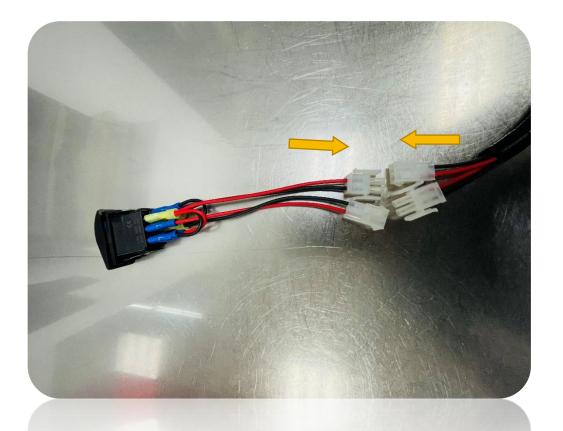
• Attach female plug to actuator



- Attach red terminal eyelet to battery positive. Secure black terminal eyelet to a suitable ground or battery negative.
- Beware of sharp edges, abrasive surfaces and heat sources when routing wires.



Step-8



 Route harness to desired switch location.

• 3 position switch

0-Neutral

I-Bar up

II-Bar down

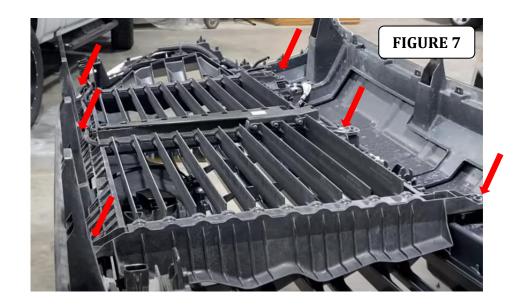
- Switch may be left in position I or II, which will keep indicator LED on.
- In order to turn off indicator LED, move switch to neutral position.





#### **Element Bumper Installation**

Step-9 Remove the radiator shutter assembly by removing the 6 bolts holding it, (FIGURE 7).



**Step-10** If the vehicle is equipped with front parking assist sonar, remove the parking sensors wiring harness from the OEM bumper.

**Step-11** Remove each parking sensor from the plastic bezel by gently spreading the bezel tabs and pulling out on the back of the sensor. Figure 8. Note: Do not push on the front of the sensor as this may damage it.



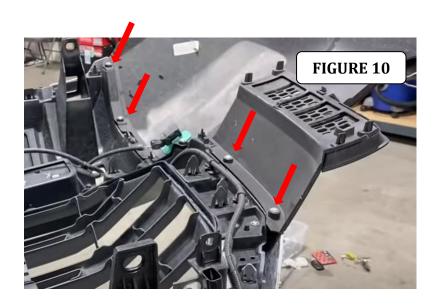


**Step-12** Using a masking tape we are going to get a layout to cut the bumper end cap as shown, (Figure 9). Use the shown line of the bumper as a reference.



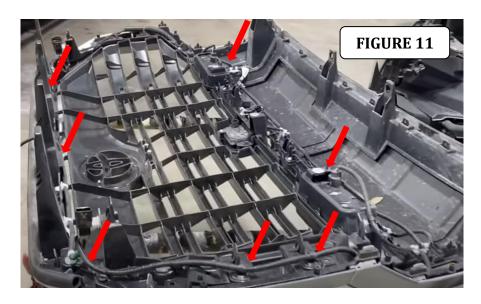
Step-13 Remove the Phillips screws that holding the end cap on both sides, (Figure 10).

**Step-14** Remove the Phillips screws holding the plastic frame to the grille





**Step-15** Unclip the upper grille cover from the grille the plastic frame. Then remove the screws and unclip the lower grille cover from the plastic frame. Remove the lights and the harness.



**Step-16** Using a opaque paint marker we are going to get a layout to cut the plastic frame as shown, only the top part of the frame will be useful.



**Step-17** Proceed to cut out the plastic frame and the end caps previously removed.

**Step-18** Re-assembly the grille back.



**Step-19** Remove the parking sensor bezels from the OEM bumper by detaching using a blade to remove carefully the tape sticking it, (FIGURE 13).

**Step-20** Remove the covers from the sensor cut outs that are preinstalled in the Element bumper.

**Step-21** Remove any tape residue from the sensor bezel, re-install the sensors in their bezels and apply a new pieces of tape. Figure 14. Note: The Park Assist sensors and bezels have to be installed in the Element bumper replacement in the same position as removed from the OEM bumper.

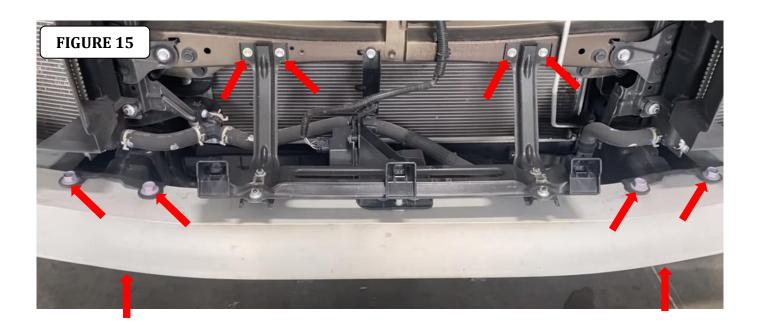
**Step-22** Tape the sensor bezels on the Element bumper and transfer the OEM bumper wiring harness and re connect to the parking sensors.







**Step-23** Remove the lower grille support by removing the (4) bolts securing the brackets and the front beam bumper from the vehicle, by removing the 10 bolts attaching it, (FIGURE 15).



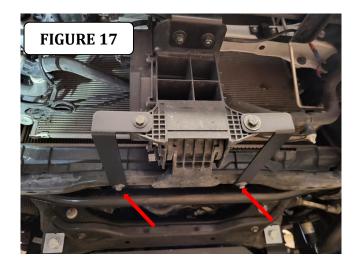
**Step-24** Reinstall the grille on the vehicle.

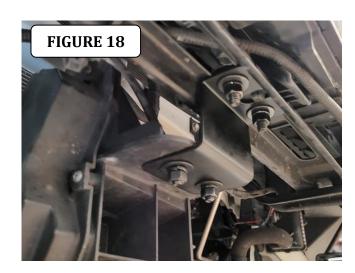


**Step-25** Place the mounting brackets on the frame ends secure it using (3)  $7/16 \times 11/4$ " hex bolt, (6) 7/16" flat washers, (3) 7/16" lock washers and (3) 7/16" hex nuts per bracket. Leave the brackets loose, (FIGURE 16).



**Step-26** Secure the radiator shutter motor using the brackets provided. Attach the brace brackets to the frame using the factory bolts, secure the other end to the motor using (1)  $\frac{1}{4}$  x 1" hex bolt, (2)  $\frac{1}{4}$ " flat washers, (1)  $\frac{1}{4}$ " lock washer and (1)  $\frac{1}{4}$ " hex nut, per bracket, (FIGURE 17). Secure the jog bracket to the motor and the radiator support with (2)  $\frac{1}{4}$  x 1" hex bolts, (4)  $\frac{1}{4}$ " flat washers, (2)  $\frac{1}{4}$ " lock washer and (2)  $\frac{1}{4}$ " hex nut, on each side, (FIGURE 18).







**Step-27** With both brackets installed, leave a center distance of 28 1/16" in between. Brackets should be finger tight to allow for adjustment when installing the center bumper section.

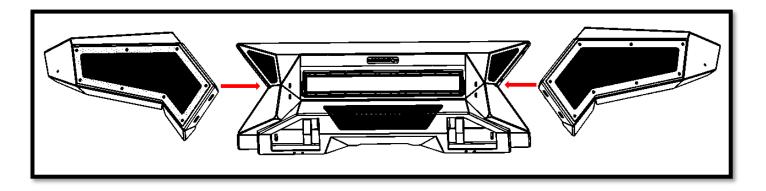


**Step-28** With assistance, position the center section of the Element bumper onto the frame brackets. Note that the frame horn brackets install on the inside area of the Element center section. You will need to use two (per side)  $\frac{1}{2} \times 1 \frac{1}{2}$  carriage bolts to secure it. Introduce the carriage bolt from the inside of the Element bumper so that it protrudes as a stud. Fasten one 1/2" flat washer, one 1/2" lock washer, one 1/2" hex nut per carriage bolt, (FIGURE 13). Leave finger tight for final adjustment. Repeat process for both sides.

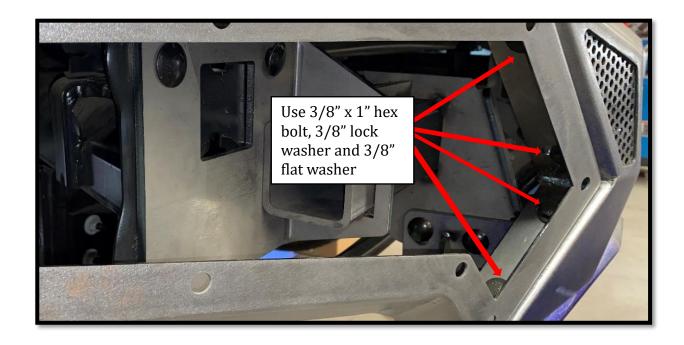


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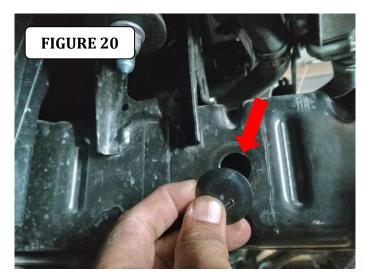


**Step-29** Install outer wings (without the mesh covers) onto the center section of the bumper. Exercise caution when installing each side to that you don't damage your paint. Each side with use four 3/8" hex bolts, four 3/8" lock washers, four 3/8" flat washers. This can be done with the mesh covers off as it will allow for greater access to the welded nuts on the center section. Repeat process for both sides.





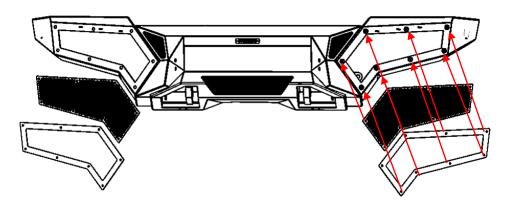
**Step-30** Locate and remove the cap on the inner side wall of the frame to exposure a hole where (1) 5/16" bolt plate will be placed, put a vinyl gasket to the bolt thread to prevent the bolt plate from falling into the frame rail. Install the auxiliary bracket and secure it to the bolt plate using (1) 5/16" flat washer, (1) 5/16" lock washer and (1) 5/16" hex nut. Use (1) 3/8" x 1" hex bolt, (2) 3/8" flat washer, (1) 3/8" lock washer and (1) 3/8 hex nut, to secure to the wing bracket, (FIGURE 20 & 21). Leave finger tight and repeat process for the other side.



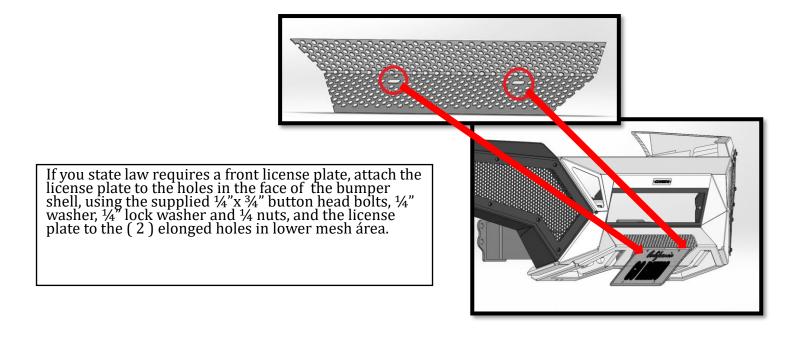


**Step-31** Adjust your bumper to square up with the front end and fasten any loose hardware accordingly. The wings of the bumper should line up where the fender and OEM bumper meet.





**Step-32** Once you are satisfied, Reinstall the outer mesh covers and mesh plate on the bumper using the hardware removed.



REV.01



**Step-33** Reconnect the wire harnesses. Check every 6 months that the hardware is fasted.



REV.01



#### 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 weather 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 <a href="mailto:warranty@gorhino.com">warranty@gorhino.com</a>. 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, 1002 Carriers Drive, Laredo, Texas 78045.

#### PRODUCT REGISTRATION

Please remember to register your new purchase. You may register your product at <a href="www.gorhino.com">www.gorhino.com</a>. 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.

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www.bigcountryauto.com

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