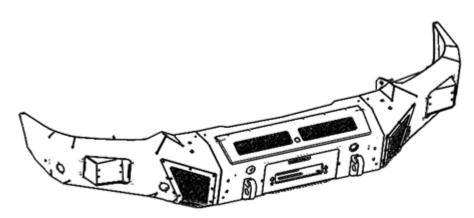


PART NO.

24132T



PRODUCT DESCRIPTION:

BR6 BUMPER REPLACEMENT

APPLICATION:

• RAM 1500

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.



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

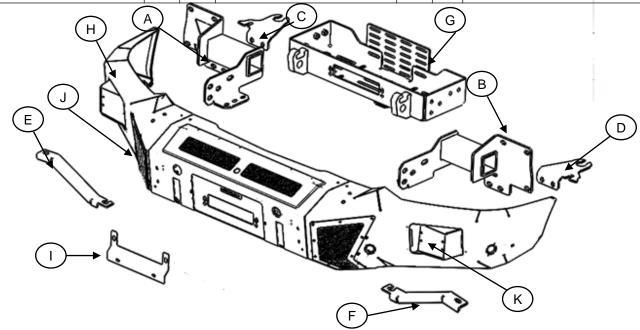
Some products have been designed to work together with factory rear sensor systems, factory forward facing sensor systems and factory air bags.

- 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 | ITEM | QTY. | DESCRIPTION |
|------|------|-------------------------------|------|------|-----------------------------------|------|------|------------------------|
| Α | 1 | Frame Bracket (driver) | ı | 1 | License Plate Bracket | Q | 18 | ½ x 1 ½" Carriage Bolt |
| В | 1 | Frame Bracket (passenger) | J | 2 | Vent Covers (pre-installed) | R | 8 | ½ x 1 ½" Hex Bolt |
| С | 1 | Auxiliary Bracket (driver) | К | 2 | Light Pods Plates (pre-installed) | S | 26 | ½" Flat Washer |
| D | 1 | Auxiliary Bracket (passenger) | | | | Т | 26 | 1/2" Lock Washer |
| Е | 1 | Lateral Bracket (driver) | | | | U | 18 | ½" Hex Nut |
| F | 1 | Lateral Bracket (passenger) | | | | V | 2 | 3/8 x 1 1/4" Hex Bolt |
| G | 1 | Winch Tray | | | | W | 4 | 3/8" Flat Washer |
| Н | 1 | Bumper Shell | | | | Х | 2 | 3/8" Lock Washer |
| | | | | | | Y | 2 | 3/8" Hex Nut |



Go Rhino recommends you, the installer, read this installation instruction manual from front to back before installing the product.

TOOLS NEEDED FOR INSTALLATION:

- 3/4" Socket & Wrench
- 9/16" Socket & Wrench
- 8, 10, 12 & 18mm Socket
- Ratchet & Extension

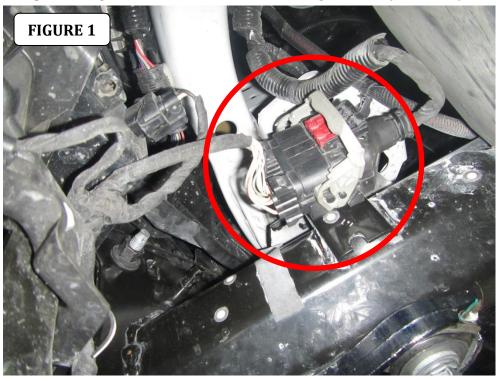
ESTIMATED TIME FOR INSTALLATION:

1.5 Hour



OEM Bumper Removal

Step-1 Open the hoof and disconnect the vehicle battery. From under the vehicle, on the driver side, disconnect the bumper wiring harness from the vehicle wiring harness (FIGURE 1).



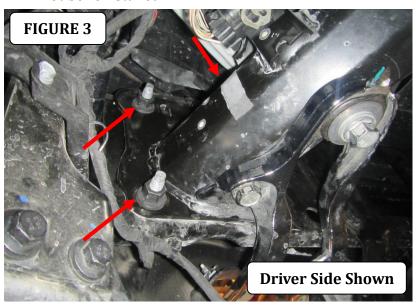
Step-2 Locate on each side of the vehicle, using a 8mm socket, remove the (5) screws securing the fender liner, (FIGURE 2).

FIGURE 2

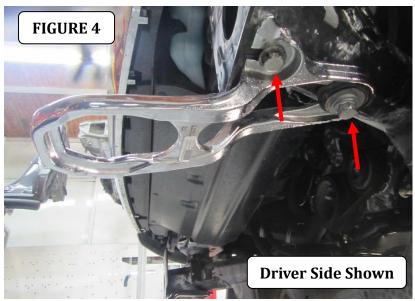




Step-3 From underneath on each side of the vehicle, using a 18mm socket remove (3) nuts securing the OEM bumper, (FIGURE 3). Remove the OEM bumper from vehicle. Note: If equipped, unplug the connector on the back side of the air dam motor and remove (4) nuts attaching the air dam from the vehicle. The air dam will not be reinstalled.



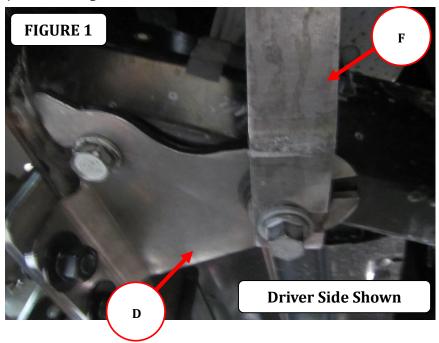
Step-4 If equipped, on each side of the vehicle using a 18mm socket remove the (2) bolts securing the tow hook, then remove the hook pushing out the rubber ring from the rear part of the hook (FIGURE 4). Note: The tow hooks will not be reinstalled.



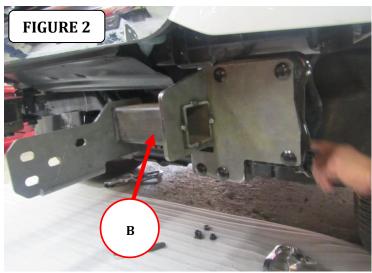


BR5.5 Bumper Installation

Step-1 Install the driver side auxiliary bracket by positioning the bracket underneath the frame member, secure using the bolts previously removed. Leave the rear bolt loose to install the lateral bracket sliding on the bolt. NOTE: Leave the bolt's rubber spacer between the brackets. Leave the bolts loose for final adjustment. Figure 1.



Step-2 Install the driver side frame bracket by positioning the bracket up to the end of the frame member plate and the auxiliary bracket, align the holes and secure using (5) $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " Carriage bolts, (5) $\frac{1}{2}$ " Flat washers, (5) $\frac{1}{2}$ " Lock washers and (5) $\frac{1}{2}$ " Hex nuts. Leave the nuts loose for final adjustment. Figure 2.





Step-3 Position the winch tray on top of the frame brackets. Align the holes and secure the winch tray to the side of each bracket using (1) $\frac{1}{2}$ x 1 $\frac{1}{2}$ " hex bolt, (1) $\frac{1}{2}$ " flat washers, (1) $\frac{1}{2}$ " lock washers and to the bottom of each bracket using (3) $\frac{1}{2}$ x 1 $\frac{1}{2}$ " carriage bolt, (3) $\frac{1}{2}$ " flat washers, (3) $\frac{1}{2}$ " lock washers and (3) $\frac{1}{2}$ " hex nuts. Figure 3. Leave the bolts and nuts loose for final adjustment.



Note: If you are installing a winch, place the winch in the winch tray and refer to the winch manufacturer's instructions for installation. Do not install the fairlead at this time.

If your vehicle is not equipped with front Park Assist, move ahead to page 9 of the BR6 Bumper Installation instructions. If your vehicle is equipped with front Park Assist, continue with the following steps. **Note:** The Park Assist sensors and sensor bezels have to be installed in the BR6 bumper replacement in the same position as removed from the OEM bumper.

Step-4 Disconnect the parking sensors from the OEM bumper wiring harness and remove the wiring harness from the OEM bumper.

Step-5 Remove each parking sensor from the plastic bezel by gently spreading the bezel tabs and pulling out on the back of the sensor. Note: Do not push on the front of the sensor as this may damage it.

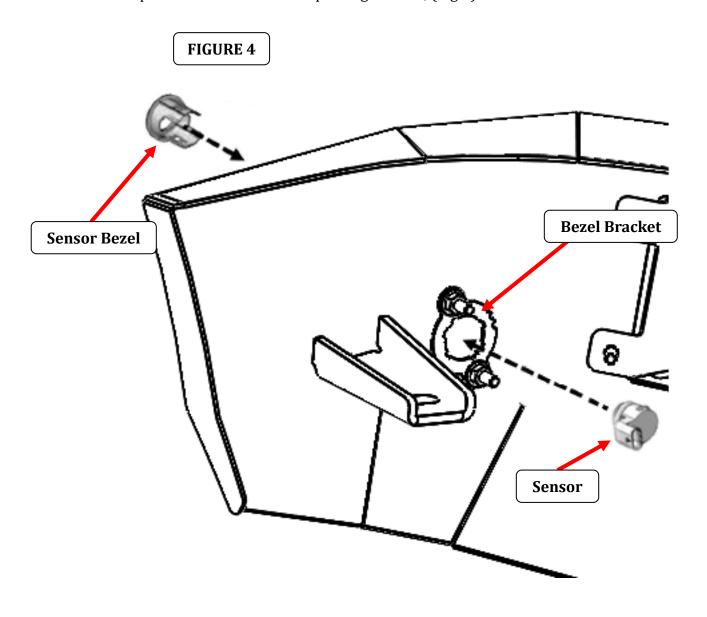
Step-6 Remove the parking sensor bezels from the OEM bumper by depressing the tabs around the base and pushing the bezel out through the front of the bumper.



Step-7 Remove the (4) plastic plugs from the sensor bezel plates that are preinstalled in the BR6bumper.

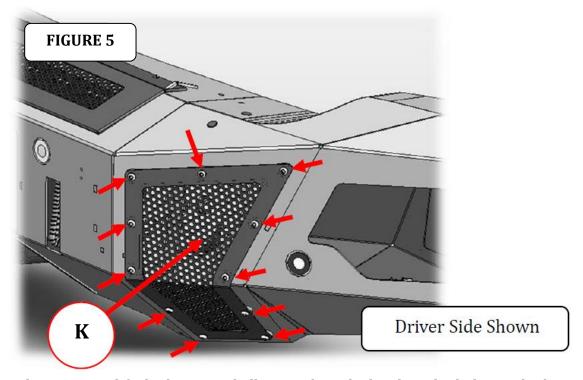
Step-8 Aline the protrusions on each sensor bezel with the profile in the matching bezel plate, then from the front of the BR6 bumper push the bezel through the profile in the plate until the tabs around the base lock in position. **Note:** The Park Assist sensors and bezels have to be installed in the BR6 bumper replacement in the same position as removed from the OEM bumper.

Step-9 Install the parking sensors in the sensor bezels and transfer the OEM bumper wiring harness to the BR6 bumper and re-connect to the parking sensors, (Fig 4).

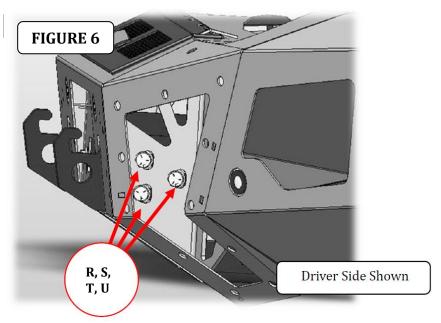




Step-10 The pre-installed Mesh Vent Covers need to be removed from each side of the bumper using hand tools to slowly remove the bolts, (Fig 5). Note: Using an air assisted impact or ratchet will damage the bolt threads and rubber rivet-nut assembly.

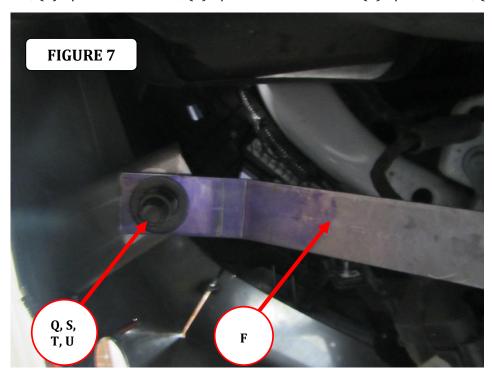


Step-11 With assistance lift the bumper shell up to the vehicle, align the holes in the bumper shell brackets with the holes in the frame brackets, and weld nuts on the winch tray. Secure the bumper shell bracket to each side of the winch tray using (3) $\frac{1}{2}$ " x 1 1/2" hex bolts, (3) $\frac{1}{2}$ " lock washers and (3) $\frac{1}{2}$ " flat washers, (Fig 6). Leave the bolts loose for final adjustment.





Step-12 Attach the opposite end of each support bracket to the bumper shell bracket using (1) 1/2" x 1 1/2" hex bolt, (2) 1/2" flat washers, (1) 1/2" lock washer and (1) 1/2" hex nut, (Fig 7).



Step-13 With assistance, adjust and hold the bumper shell visual alignment position, then tighten all factory and supplied nuts and bolts securing the brackets, winch tray and bumper shell.

Step-14 If installing a winch, install the roller fairlead to the bumper shell at this time. Refer to the winch manufacturer's instructions for installation. If installing an BR6 bumper replacement optional light bar, install the light bar to the bumper replacement at this time. Refer to the light bar instructions for installation.

Step-15 Reinstall the passenger and driver side front vent covers to the bumper shell using the $\frac{1}{4}$ " x 1" button head bolts, $\frac{1}{4}$ " plastic flat washers and $\frac{1}{4}$ " rubber rivet-nuts removed in step 10.



Step-19 If your state law requires a front license plate, attach the license plate bracket to the holes in the face of the bumper shell, using the supplied 3/8" bolts, washers and nuts. Attach the license plate to the holes in the license plate bracket. If installing a winch, attach the license plate directly to the holes in the hitch cover, (Fig 9).

FIGURE 9

