

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

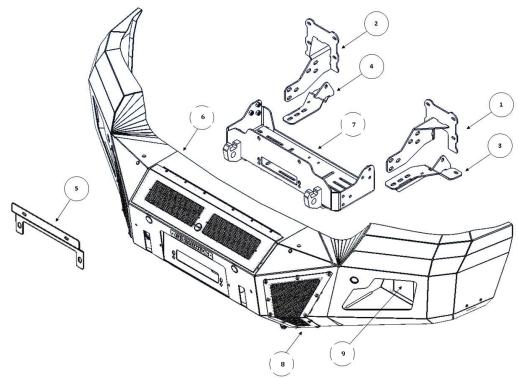
Some products have been designed to work together with factory rear sensor systems, factory forward facing sensor systems and factory air bags.

- 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
1	1	Frame Bracket (driver)	9	2	Light Pod Plates (Pre installed)	17	4	½" Bolt plate
2	1	Frame Bracket (passenger)	10	4	Sensor Bezel Plates (pre installed)	18	22	½" Flat washer
3	1	Auxiliary Bracket (driver)	11	4	3/8 x 1 1/4" Hex bolt	19	22	½" Lock washer
4	1	Auxiliary Bracket (passenger)	12	8	3/8" Flat washer	20	10	½" Hex nut
5	1	License Plate Bracket	13	4	3/8" Lock washer	21	2	1⁄4" Flat washer
6	1	Bumper Shell	14	4	3/8" Hex nut	22	2	1/4" Hex lock nut
7	1	Winch Tray	15	12	½ x 1 ½" Hex bolt			
8	2	Vent Covers (Pre installed)	16	6	½ x 1 ½" Carriage bolt			



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

TOOLS NEEDED FOR INSTALLATION:

- 10mm, 15mm, 18mm, 9/16" & 3/4" Sockets
- 10mm, 15mm, 18mm, 9/16" & 3/4" Wrenches
- · Slotted Screw Driver or Panel clip removal tool,
- 5/32" Hex Key
- · Ratchet, Ratchet Extensions & Swivel Joint Adapter

ESTIMATED TIME FOR INSTALLATION:

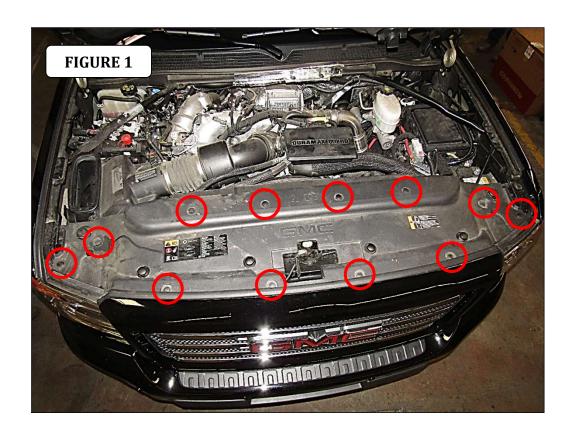
2 Hour



OEM Bumper Removal

Step-1 Open the hood and disconnect the vehicle battery or batteries.

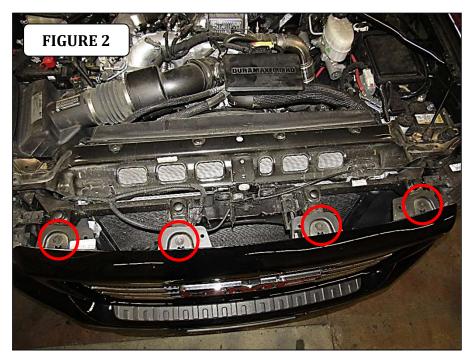
Step-2 Locate the (12) plastic push pins (6) per side securing the radiator cover, (FIGURE 1). Using a slot screw driver or panel removal tool, pull the head of the push pins up, remove push pins and lift radiator cover off and remove from the vehicle.





 $\textbf{Step-3} \ \text{Using a 10mm socket} \ , \ \text{remove the (4) screws (2) per side securing the top of the grille,} \\$

(FIGURE 2).



Step-4 Step-3 Working from side to side gently pull outward to unsnap the (8) clips, and remove the grille, (FIGURE 3).

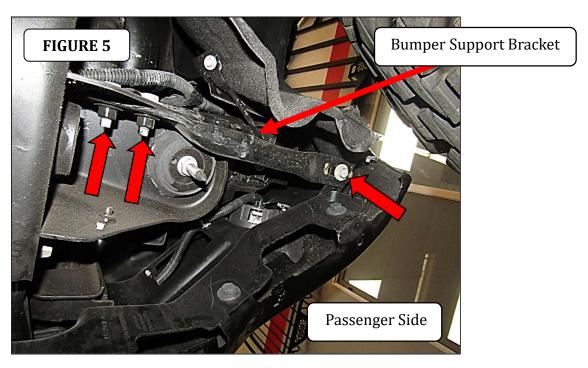




Step-5 Disconnect the bumper wiring harness from the vehicle harness, (FIGURE 4).

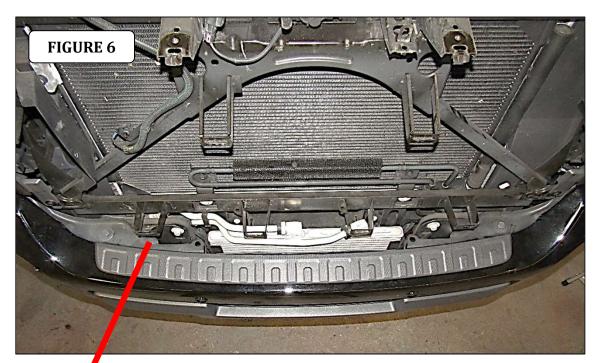


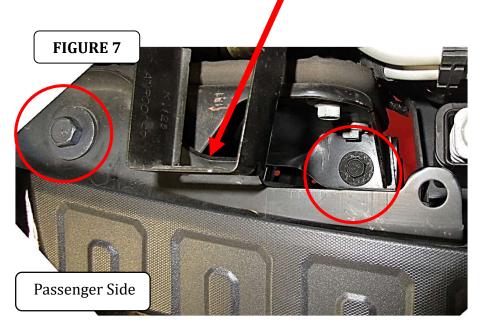
Step-6 On each side of the vehicle, use a 15mm socket to remove the bolt securing the outer bumper support bar to the bumper and the (2) bolts securing the opposite end of the support bar to the frame body mount bracket, (FIGURE 5). Remove the support bar from the vehicle.





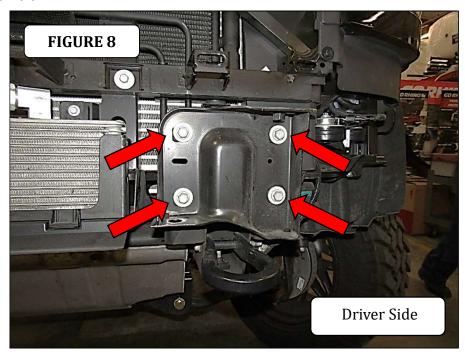
Step-7 With assistance support the bumper, use an 18mm socket and ratchet, and remove the (2) bolts on each side of the vehicle securing the bumper and bracket assembly to the frame, (FIGURE 6 & 7). Remove the bumper from the vehicle.



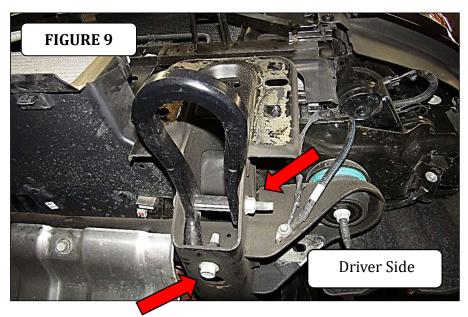




Step-8 On each side of the vehicle, using a 15mm socket remove (4) bolts securing the bumper bracket to the frame, (FIGURE 8). Retain the bolts as they will be used to secure the bumper replacement frame brackets to the vehicle.



Step-9 If equipped, using a 18mm socket, and wrench remove the nut and (2) bolts' securing the tow hooks to the frame, (FIGURE 9). Note: The tow hooks will not be reinstalled.

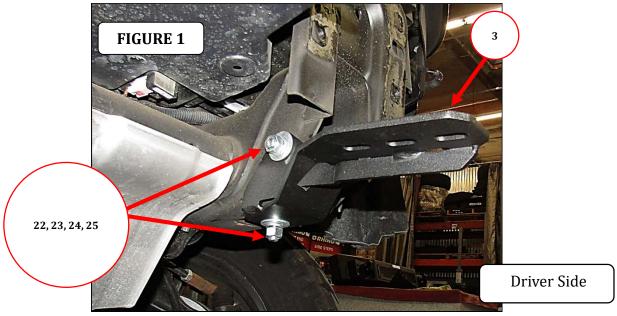


Step-10 Reinstall the grille, radiator cover, bumper cover upper cap, fender liners and front fender moldings.

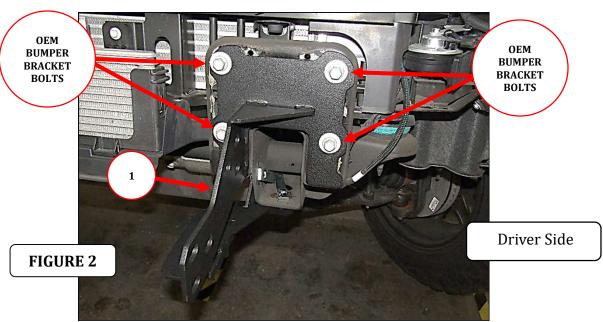


BR10.5 Bumper Installation

Step-1 Install the driver side auxiliary bracket by positioning the bracket on the side of the frame, align the holes in the auxiliary bracket with the tow hook bolt holes and secure the auxiliary bracket to the frame using (2) ½" bolt plates, (2) ½" flat washers, (2) ½" lock washers and (2) ½" hex nuts, (FIGURE 1). Leave the nuts and bolt plates loose for final adjustment. Repeat to install the passenger side auxiliary bracket.

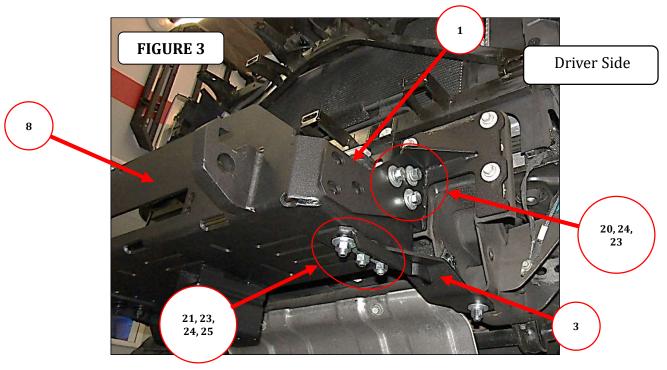


Step-2 Position the driver side frame bracket up to the end of the frame, align the holes in the frame bracket with the OEM bumper bracket attachment holes in the frame and secure the frame bracket to the frame using the (4) OEM bumper bracket bolts, (FIGURE 2). Leave the bolts loose for final adjustment. Repeat to install the passenger side frame bracket.

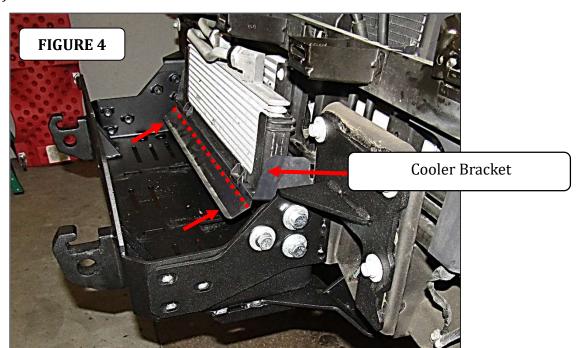




Step-3 Position the winch tray on top of the auxiliary brackets. Align the holes and secure the winch tray to each frame bracket using (3) $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " hex bolts, (2) $\frac{1}{2}$ " flat washers, (2) $\frac{1}{2}$ " lock washers, and to each auxiliary bracket using (3) $\frac{1}{2}$ " x 1 $\frac{1}{2}$ " carriage bolts, (3) $\frac{1}{2}$ " flat washers, (3) $\frac{1}{2}$ " lock washers and (3) $\frac{1}{2}$ " hex nut, (FIGURE 3 & 4). Leave the nuts and bolts loose for final adjustment.

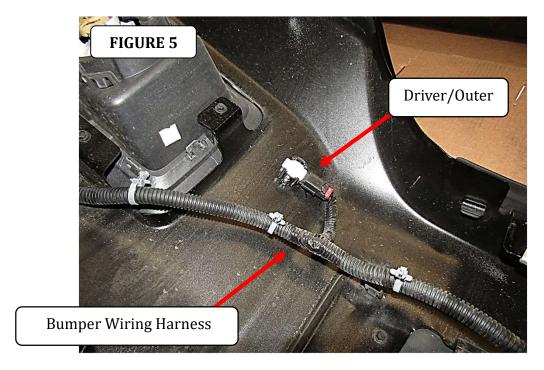


Step-4 If you are installing a winch, place the winch in the winch tray and refer to the winch manufacturer's instructions for installation. **Note:** It may be necessary to cut and remove the bottom lip from the plastic bracket that supports the cooler to allow additional clearance for the winch, (FIGURE 4). Do not install the fairlead at this time.





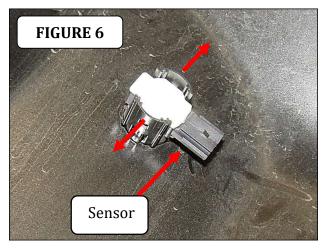
Step-5 If equipped with park sensors remove the wiring harness, sensors and bezels from the OEM bumper. **Note:** The sensors and bezels have to be positioned in the BR front bumper in the same location (inner and outer), (driver and passenger) as removed from the OEM bumper.

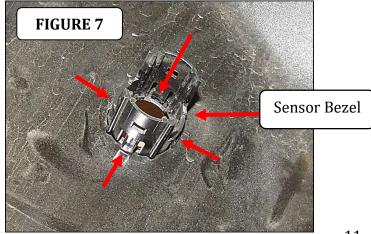


5a Remove each sensor from the bezel by gently spreading the bezel tabs and pulling out on the back of the sensor.

Note: Do not push on the front of the sensor as this may damage the sensor. The sensors and bezels have to be positioned in the replacement bumper in the same location (inner, middle and outer), (driver and passenger) as removed from the OEM bumper.

5b Remove the sensor bezels from the OEM bumper by depressing the tabs around the base and pushing the bezel out through the front of the bumper.





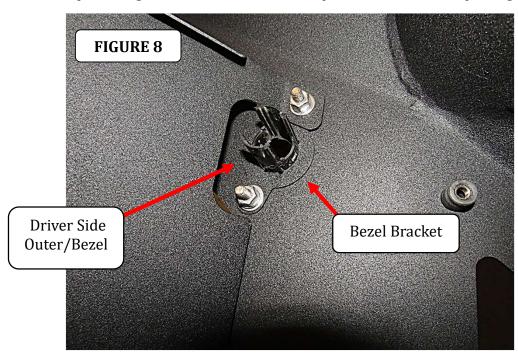


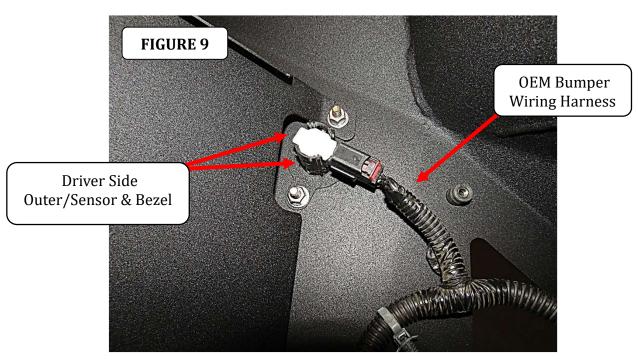
5c Remove the (4) plastic plugs from the bezel brackets that are preinstalled in the BR front bumper,

5d Install the OEM parking sensors in the BR front bumper by pressing each bezel in from the front of the bumper into place in the bezel bracket, then press the sensor into the bezel from the back side, (FIGURE 8 & 9).

5e Transfer the OEM bumper wiring harness to the BR front bumper and connect to the parking sensors,

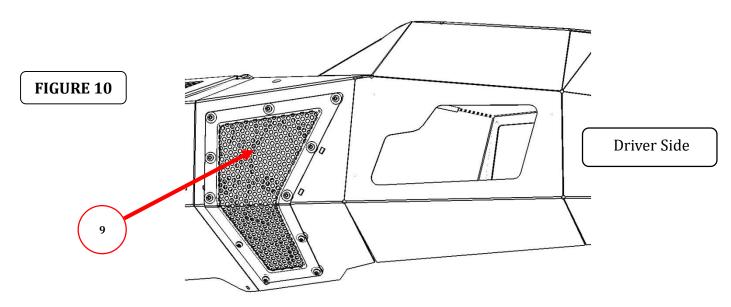
(FIGURE 9).



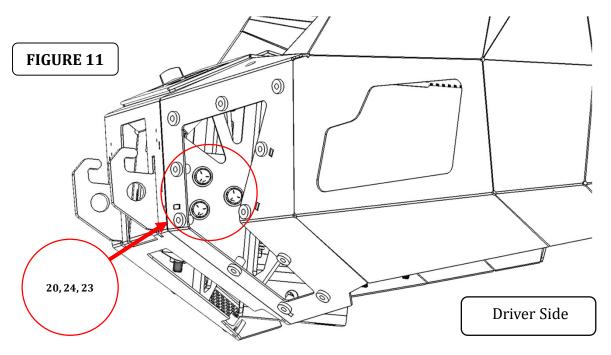




Step-6 The pre-installed Mesh Vent Covers need to be removed using hand tools to slowly remove the bolts, (FIGURE 10). Using an air assisted impact or ratchet will damage the bolt threads and Rubber Rivet-Nut assembly in the bumper shell.

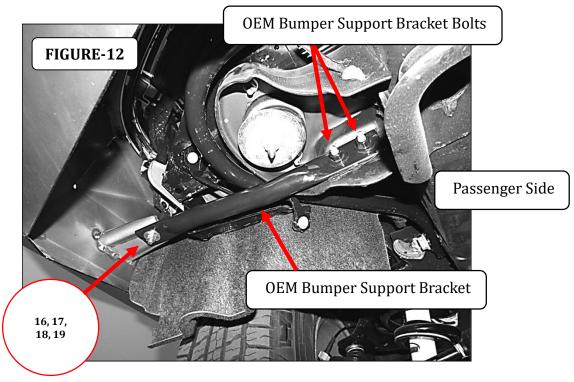


Step-7 With assistance lift the bumper shell up to the vehicle, align the holes in the bumper shell brackets with the holes in the frame brackets, and weld nuts on the winch tray. Secure the bumper shell bracket to each side of the winch tray using (3) $\frac{1}{2}$ " x 1 1/2" hex bolts, (3) $\frac{1}{2}$ " lock washers and (3) $\frac{1}{2}$ " flat washers, (FIGURE 11). Leave the bolts loose for final adjustment.





Step-8 Align the holes and attach each OEM bumper support bracket to the bumper shell bracket using (1) 3/8" x 1" hex bolt, (1) 3/8" flat washer, (1) 3/8" lock washer and (1) 3/8" hex nut, and to the vehicle using (2) of the OEM bolts, (FIGURE 12).



Step-9 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.

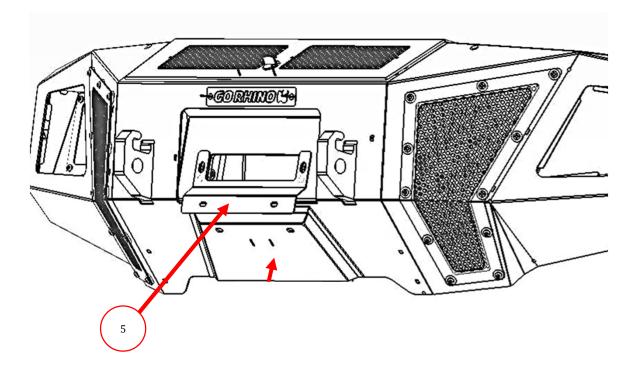
Step-10 If installing a winch, install the roller fairlead to the bumper shell at this time. Refer to the winch manufacturer's instructions for installation. If installing an BR bumper replacement optional light bar, install the light bar to the bumper replacement at this time. Refer to the light bar instructions for installation.

Step-11 Re-install 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.



Step-15 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. (FIGURE 13).

FIGURE 13



Remember to check and retighten all factory and supplied nuts and bolts periodically.