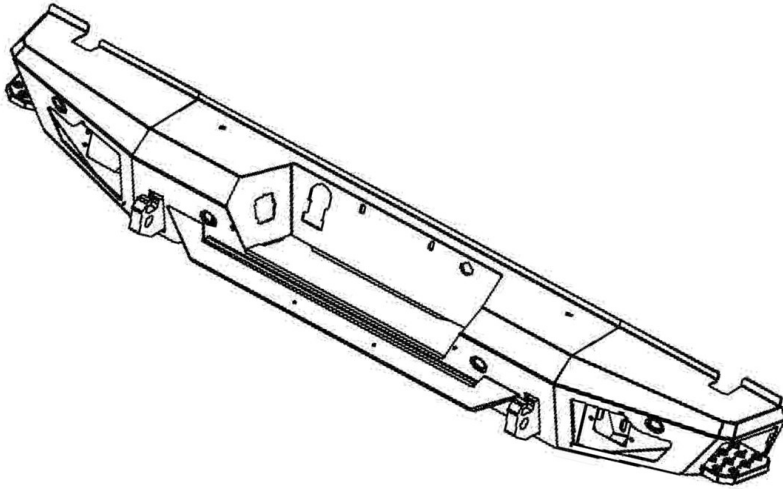


GO RHINO®

INSTALLATION INSTRUCTIONS



PART NO.

- 28296T

PRODUCT DESCRIPTION:

- BR20.5 REAR BUMPER REPLACEMENT

APPLICATION:

- FORD F-150

NOTE: (Excludes King Ranch models with appearance package & Platinum models)

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.



INSTALLATION INSTRUCTIONS

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.

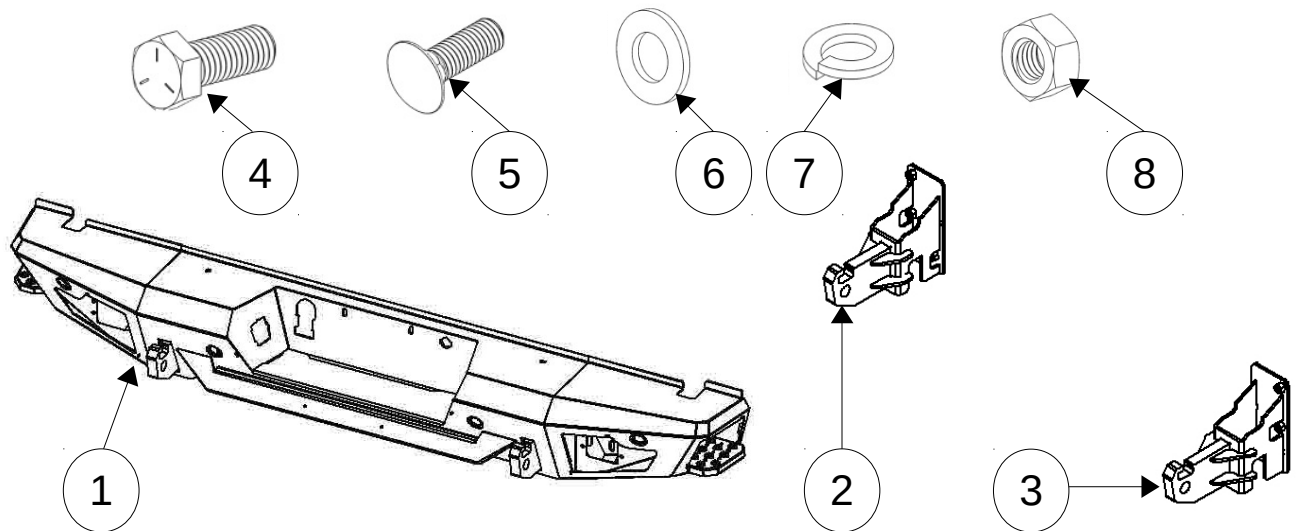
- Installation of some of these products may alter the factory sensor system performance.
- Factory sensors may read shackles or hooks protruding from the fairlead and or tow hooks.
- All sensor testing is completed by Go Rhino Products and or third party testing labs on modified vehicles.
- Sensor sensitivity, 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!



INSTALLATION INSTRUCTIONS

PARTS INCLUDED IN THIS LIST:

ITEM	QTY.	DESCRIPTION	ITEM	QTY.	DESCRIPTION
1	1	BR20.5 Rear Bumper R	5	6	1/2" x 1 1/2" Carriage head bolt
2	1	Driver Side Frame Bracket	6	12	1/2" Flat washer
3	1	Passenger Side Frame Bracket	7	12	1/2" Lock washer
4	6	1/2" x 1 1/2" Hex head bolt	8	6	1/2" 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:

- Standard & Metric Sockets
- Standard & Metric Wrenches
- 5/32" Hex Key
- Ratchet, Ratchet Extensions & Swivel Joint Adapter

ESTIMATED TIME FOR INSTALLATION: 2 Hours

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INSTALLATION INSTRUCTIONS

OEM BUMPER REMOVAL.

STEP #1 Disconnect the factory bumper wiring harnesses from the vehicle wiring harness, (Photo 1).

STEP #2 Remove (2) tree clips and bolt securing the wiring harness ground wire to the frame, (Photo 2).

Photo 1. Driver side.

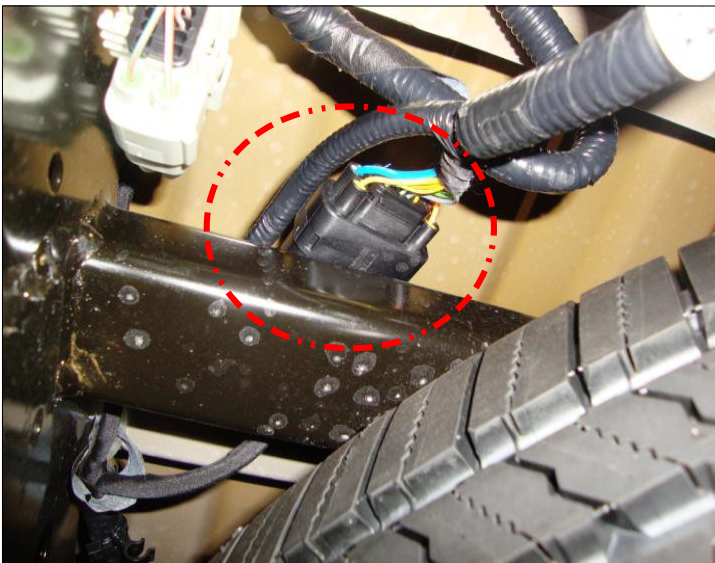
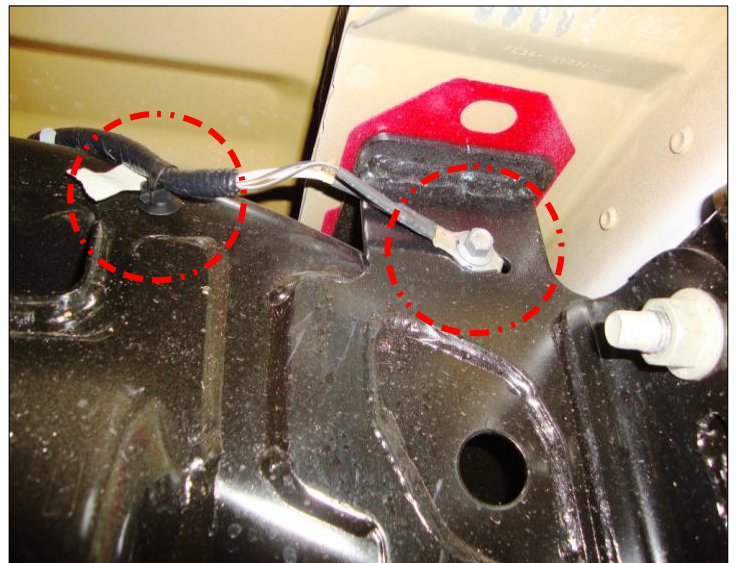


Photo 2. Driver side.



STEP #3 With assistance support the rear bumper and remove the (3) nuts on each side of the vehicle securing the factory bumper and receiver hitch to the frame. Remove the bumper from the vehicle, (Photo 3).

STEP #4 Disconnect the license plate lights, trailer plug (Photo 4) and If equipped disconnect the backup sensors from the factory bumper wiring harness. Remove the wiring harness from the factory bumper.

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INSTALLATION INSTRUCTIONS

Photo 3. Driver side.

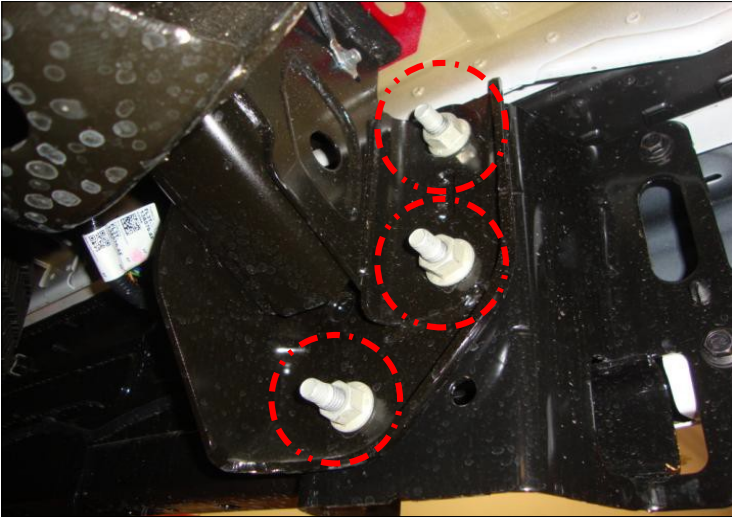


Photo 4.



STEP #5 The factory bumper consists of (3) components. Begin by removing the plastic top pad and center component from the bumper end caps by pulling up from the outside edge. To ease removal, the plastic clips can be popped loose from the underside of the bumper end caps, (Photo 5).

STEP #6 Remove the bumper end caps by removing the (5) bolts securing each end cap to the receiver hitch, (Photo 5).

The factory bumper consists of (3) components. Begin by removing the plastic top pad and center component from the bumper ends by pulling up from the outside edge. To ease removal, the plastic clips can be popped loose from the underside of the bumper ends, (Photo 5).

Photo 5. Driver side.

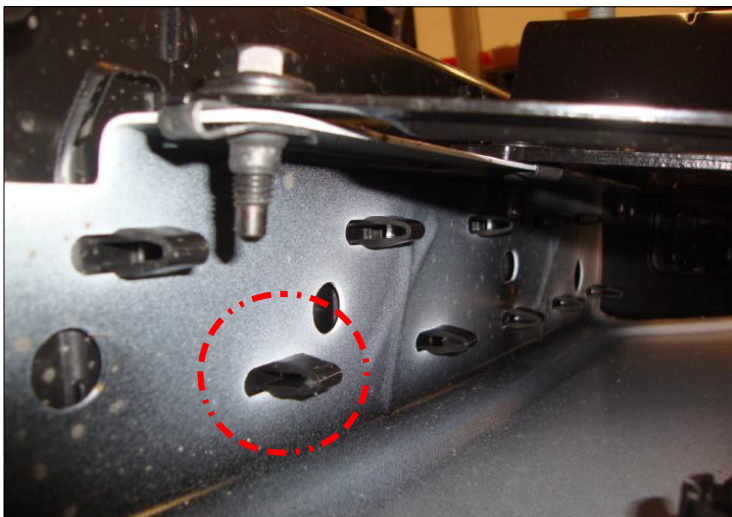
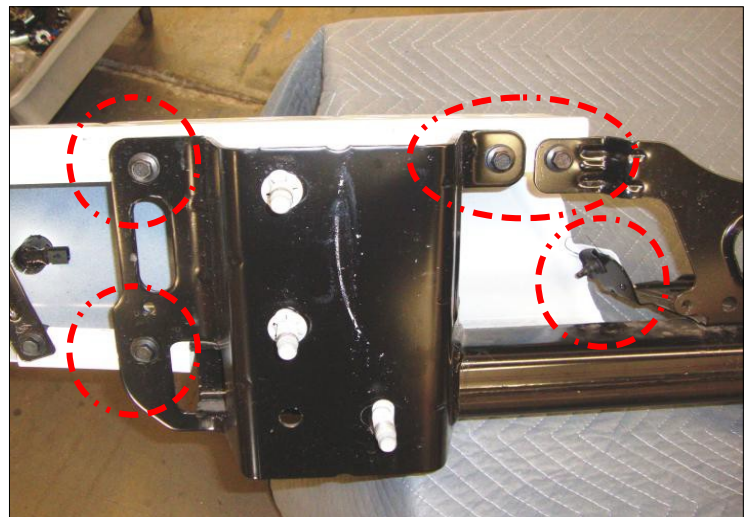


Photo 6. Driver side.



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INSTALLATION INSTRUCTIONS

STEP #7 Remove the retaining clips and stud plates from the factory receiver hitch, (Photo 7).

STEP #8 Cut and remove the bumper attachment flanges for the bumper end caps (driver and passenger side), and the outlined area for the trailer plug mount from the factory receiver hitch, (Photo 8).

Photo 7. Driver side.

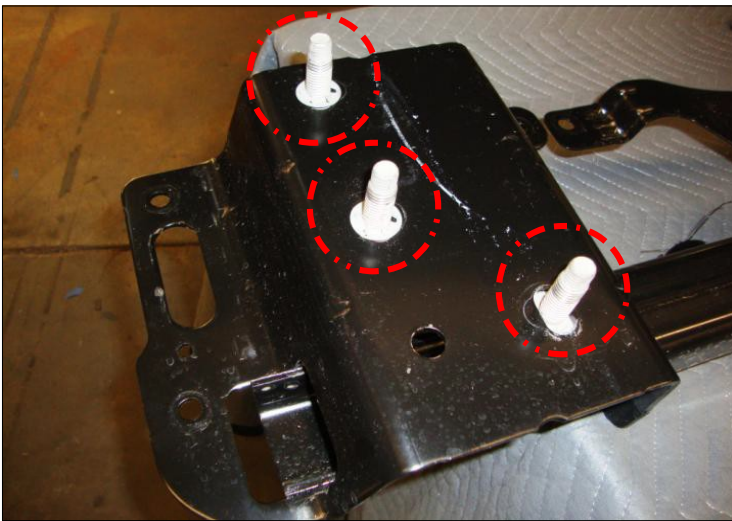
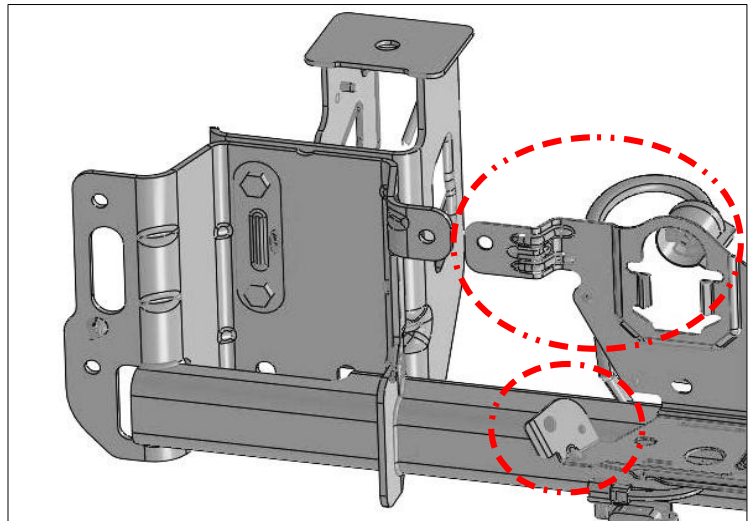


Photo 8. Driver side.



BR20 BUMPER REPLACEMENT INSTALLATION

NOTE: If you are replacing a bumper with rear Park Assist, the sensor detection zone will be altered with use of this bumper replacement.

STEP #1 If the vehicle is equipped with rear Park Assist, remove each sensor from the bezel by gently spreading the bezel tabs and pulling out on the back of the sensors. Note: Do not push on the front of the sensor as this may damage the sensor.

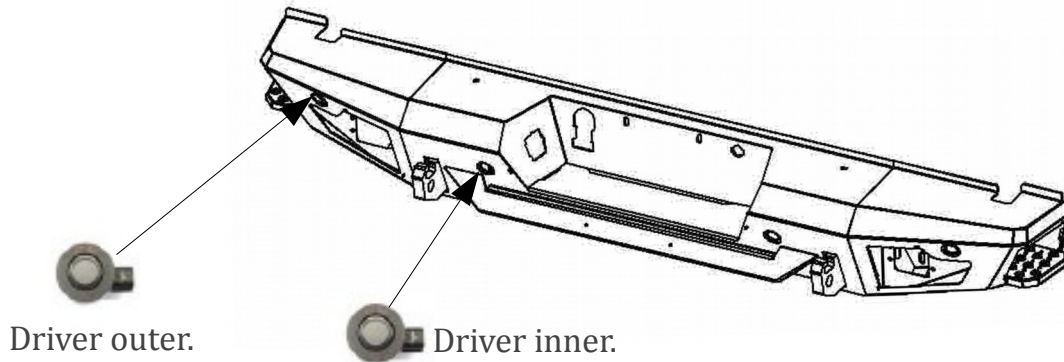
STEP #2 Remove the sensor bezels from the factory bumper by depressing the (4) tabs around the base and pushing the bezel out through the front of the bumper. Note: The sensors and bezels have to be positioned in the replacement bumper in the same location (inner and outer), (driver and passenger) as removed from the factory bumper.

STEP #3 On each side of the BR20.5 bumper, remove the (2) plastic plugs from the sensor bezel brackets that are preinstalled in the bumper.

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INSTALLATION INSTRUCTIONS

Ilustración 1.



STEP #4 From the front of the BR20.5 bumper, push the sensor bezels into their precut holes in the sensor bezel brackets. Make sure to install the bezels in the same position and order as the OEM bumper.

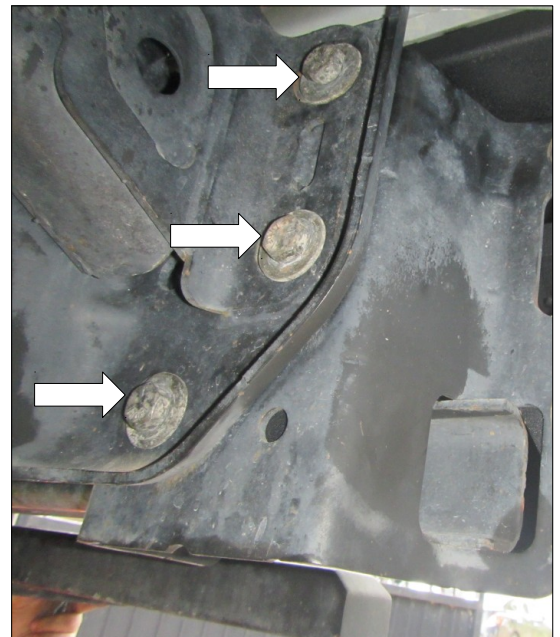
STEP #5 Transfer the OEM bumper wiring harness with the attached sensors to the BR20.5 bumper. Install the parking sensors into each bezel, making sure to install the sensors in the same order as they were removed from the OEM bumper.

STEP #6 With assistance attach the receiver hitch and each frame bracket to the frame using (3) ½" x 1 1/2" hex bolts, (6) ½" flat washers, (6) ½" lock washers, (Photo 1 & 2). Leave the hex bolts loose for final adjustment.

Photo 1. Driver side.



Photo 2. Driver side.



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STEP #7 With assistance attach the bumper bracket to the receiver hitch using (3) ½" x 1 1/2" carriage head bolts, (3) ½" flat washers, (3) ½" lock washers and (3) 1/2" hex nut, (Photo 3 & 4). Leave the hex nut loose for final adjustment.

Photo 3. Driver side.

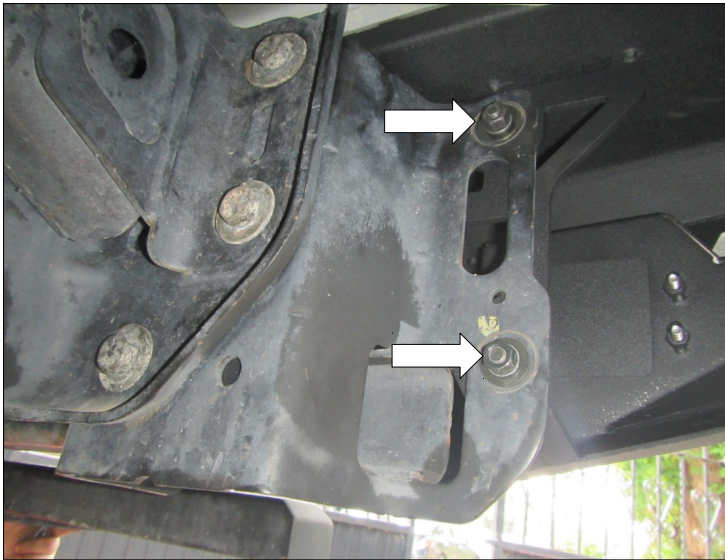
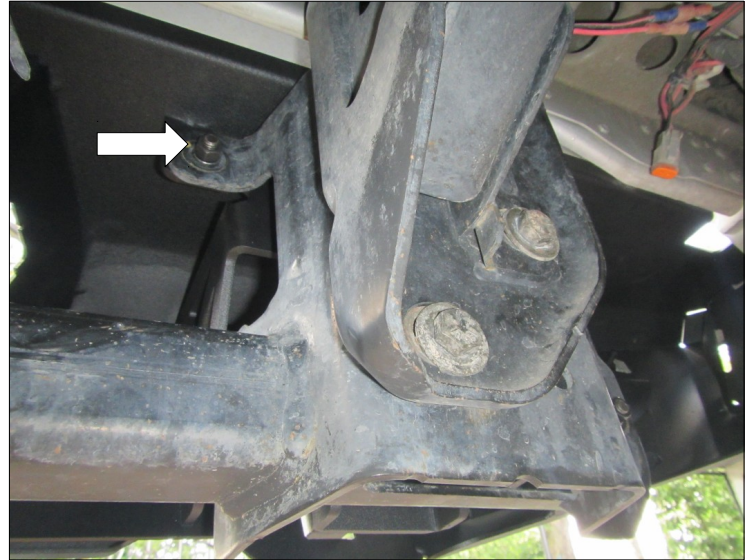


Photo 4. Driver side.



STEP #8 Align the bumper shell with the vehicle, verify that the tailgate clears when lowered, and tighten all nuts and bolts, (Photo 5).

STEP #9 Remove the trailer plug from the factory bumper and install it in the replacement bumper shell, and reconnect the wiring harness, (Photo 6). **NOTE:** Remember to check and retighten all factory and supplied nuts and bolts periodically.

Photo 5.



Photo 6.

