

#### PART NO.

• 28176T

#### PRODUCT DESCRIPTION:

BR20.5 BUMPER REPLACEMENT

#### **APPLICATION:**

CHEVROLET SILVERADO 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

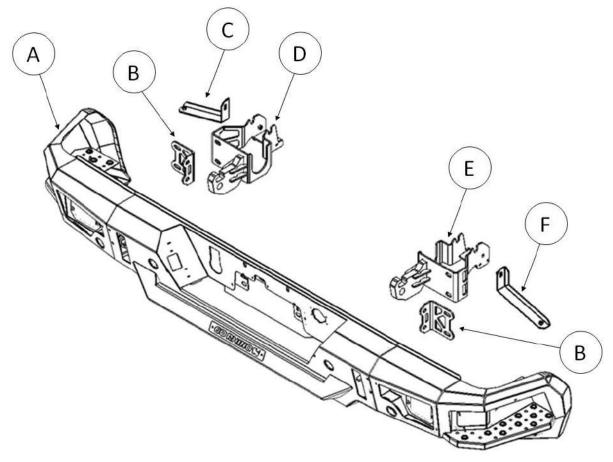
Some products have been designed to work together with factory rear sensor systems, factory forward facing sensor systems and factory air bags.

- 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
Α	1	BR20.5 Bumper	D	1	Frame Bracket (driver)
В	2	Auxiliary Bracket	Е	1	Frame Bracket (passenger)
С	1	Support Bracket	F	1	Support Bracket



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

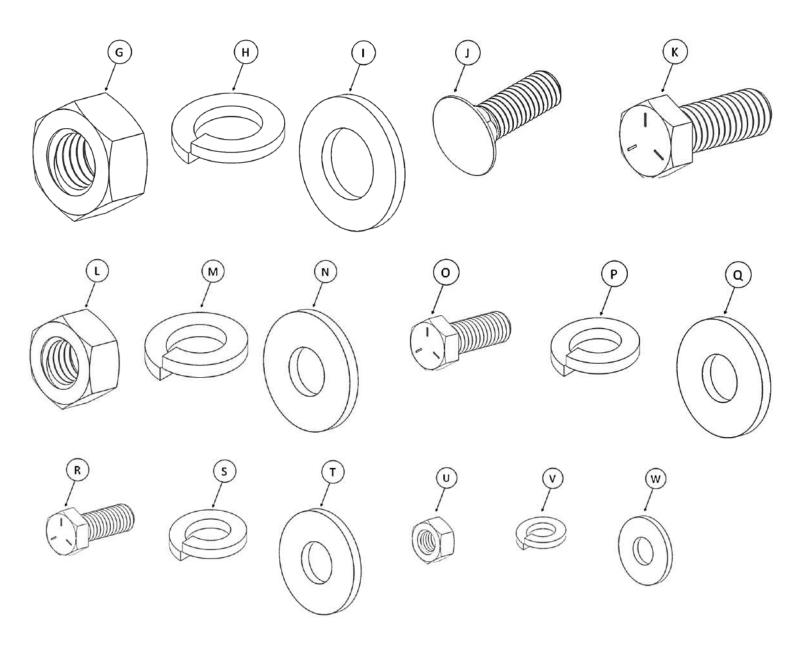
ESTIMATED TIME FOR INSTALLATION:

2 Hour



### PARTS INCLUDED IN THIS LIST:

ITEM	QTY.	PART NUMBER	DESCRIPTION	TORQUE	ITE	A QTY	. PART NUMBER	DESCRIPTION	TORQUE
G	2		M14 Hex Nut		P	4		3/8" Lock Washer	
Н	2		M14 Lock Washer		Q	4		3/8" Flat Washer	
I	2		M14 Flat Washer		R	2		1/4" x 3/4" Hex Bolt	6 ftlbs.
J	4		1/2" x 1-1/2" Carriage Bolt	57 ftlbs.	S	2		1/4" Lock Washer	
K	4		1/2" x 1-1/4" Hex Bolt	57 ftlbs.	Т	2		1/4" Flat Washer	
L	4		1/2" Hex Nut		U	2		3/16" : Hex Nut	
M	8		1/2" Lock Washer		V	2		3/16" Lock Washer	
N	8		1/2" Flat Washer		W	2		3/16". Flat Washer	
0	4		3/8" x 1" Hex Bolt	23 ftlbs.					



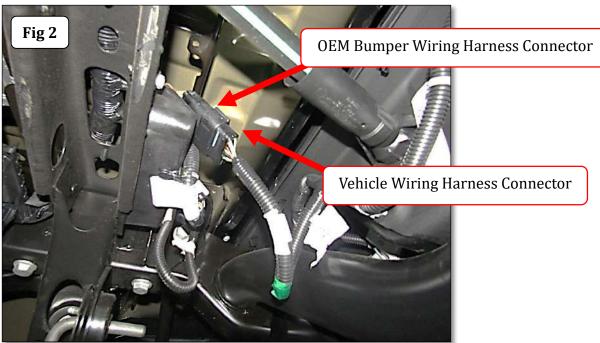


### **OEM Bumper Removal**

**Step-1** Remove the spare tire winch access lock. Using the tools included with the vehicle Lower the spare tire and remove the spare tire to access the factory bumper attachment bolts and vehicle wiring.

**Step-2** Unplug the wiring connector on the back side of the OEM bumper for the trailer plug, (Fig 1) and unplug the OEM bumper wiring harness from the vehicle wiring harness, (Fig 2).



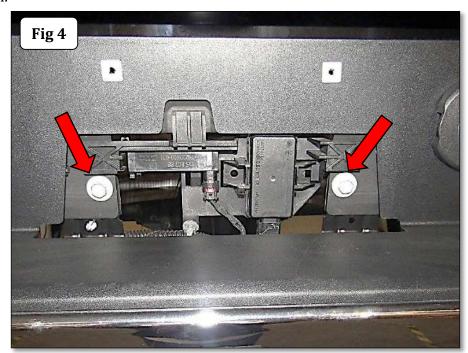




Step-3 Remove the fasteners and License plate from the OEM bumper. If equipped, unplug the two wiring connectors for the Rear Cross Traffic Alert sensors, (Fig 3).



**Step-4** Using a 13mm socket remove the (2) bolts securing the center of the OEM bumper to the receiver hitch, (Fig 4). Retain the (2) bolts as they will be used for attachment of the BR20.5 bumper to the receiver hitch.





**Step-5** On each side of the vehicle use a 18 mm socket and remove (2) nuts securing the OEM bumper bracket the receiver hitch, (Fig 5).

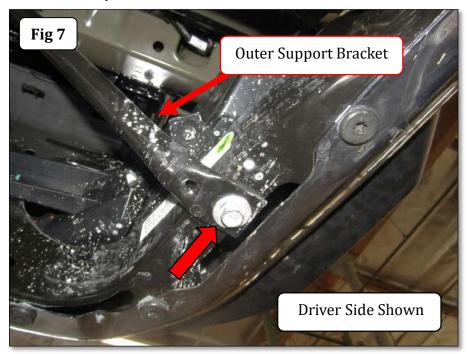


**Step-6** On each side of the vehicle use a 21 mm socket and remove (1) nut securing the outer support bracket to the stud on the side of the frame, (Fig 6).



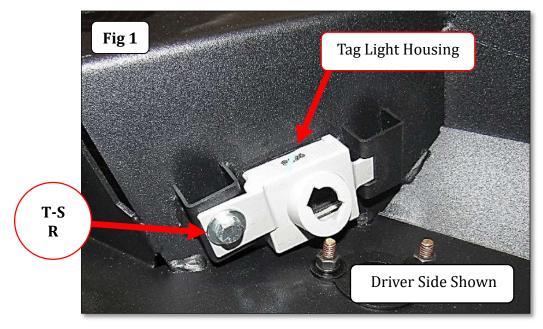


**Step-7** On each side of the vehicle use a 13mm socket and remove (1) bolt securing the outer support bracket to the OEM bumper, (Fig 7). With assistance, remove the OEM bumper by slightly lifting and pulling the bumper rearward away from the vehicle.



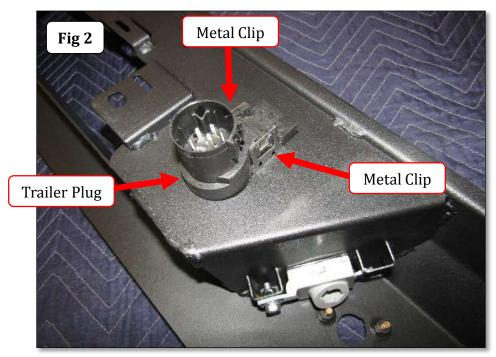
#### **BR20.5 Bumper Installation**

**Step-1** Remove the tag lights from their housing, then remove the tag light housings from the OEM bumper. Install in the driver side tag light housing by positioning the housing upper tab through the slot in the BR20.5 bumper upper bracket and secure the hole in the opposite end of the housing to the weld nut in the BR20.5 bumper lower bracket using (1)  $\frac{1}{4}$ " x  $\frac{3}{4}$ " hex bolt, (1)  $\frac{1}{4}$ " lock washer and (1)  $\frac{1}{4}$ " flat washer, (Fig 1). Tighten the bolt. Repeat for the passenger side tag light housing.

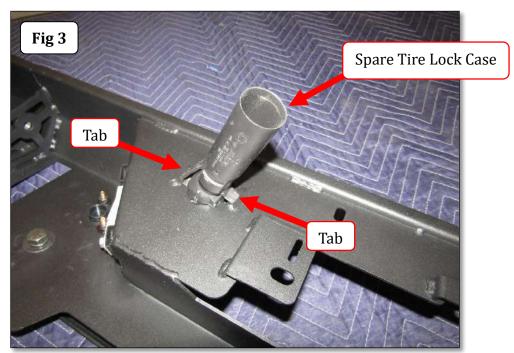




**Step-2** Remove the trailer plug from the OEM bumper by pressing in the (2) metal clips on the sides and pushing the trailer plug out the front of the bumper. From the front of the BR20.5 bumper, install the plug by pressing it into its precut hole in the bumper until the metal clips move into place, (Fig 2).

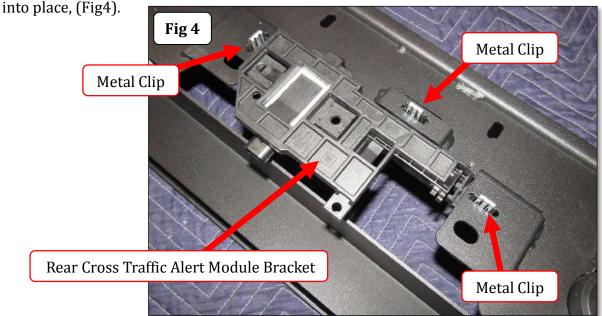


**Step-3** Remove the spare tire lock case from the OEM bumper by pressing in the (2) plastic tabs on the sides and pushing the spare tire lock case out the front of the bumper. From the front of the BR20.5 bumper, install the spare tire lock case by pressing it into its precut hole in the bumper until the plastic tabs move into place, (Fig 3).

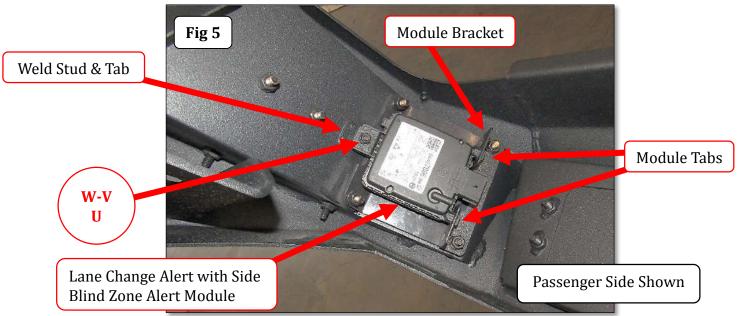




**Step-4** If equipped Rear Cross Traffic Alert, remove the bracket with the attached modules from the OEM bumper by pressing in the (3) metal clips and pushing the bracket out the front of the bumper. From the front of the BR20.5 bumper, install the bracket with the attached modules by pressing the metal clips on the bracket into the precut slot holes in the bumper brackets until the metal clips move into place. (Fig.4)



**Step-5** If equipped with Lane Change Alert with Side Blind Zone Alert, on each side of the vehicle use a 7 mm socket and remove the bracket with the attached module from the OEM bumper, then remove the module from the bracket. Install each Lane Change Alert with Side Blind Zone Alert module to the BR20.5 bumper by positioning the (2) tabs on the module through the slots in the module bracket and secure the hole in the opposite end of the module to the 3/16" screw and tab using (1) 3/16" flat washer, (1) 3/16" lock washer and (1) 3/16" hex nut, (Fig 5). Note: The modules have to be positioned in the BR20.5 bumper in the same location (driver and passenger) as removed from the OEM bumper.



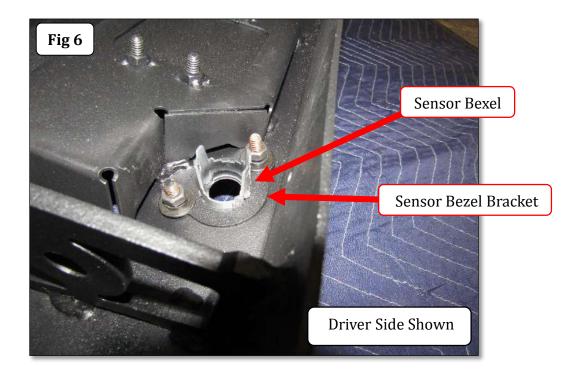


**Step-6** If equipped with Rear Park Assist, remove the sensors from each bezel in the OEM bumper. Remove the sensor by gently spreading the two tabs at the top on the back side of the bezel, then pushing the sensor out the back of the bezel. Leave the sensors plugged into the OEM bumper wiring harness and remove the wiring harness with the attached sensors from the OEM bumper. Note: The sensors have to be positioned in the bumper replacement in the same location (inner and outer), (driver and passenger) as removed from the OEM bumper.

**Step-7** Remove the sensor bezels from the OEM bumper by depressing the (2) tabs around the base and pushing the bezel out through the front of the bumper. Note: The bezels have to be positioned in the BR20.5 bumper in the same location (inner and outer), (driver and passenger) as removed from the OEM bumper.

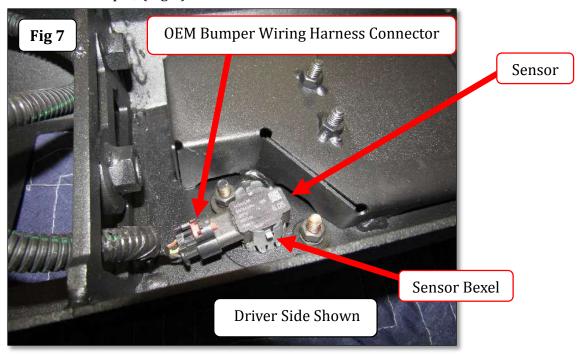
**Step-8** On each side of the BR20.5 bumper, remove the (2) plastic plugs from the sensor bezel brackets that are preinstalled in the bumper.

**Step-9** From the front of the BR20.5 bumper, push the sensor bezels into their precut holes in the sensor bezel brackets, (Fig 6). Make sure to install the bezels in the same position and order as the OEM bumper.



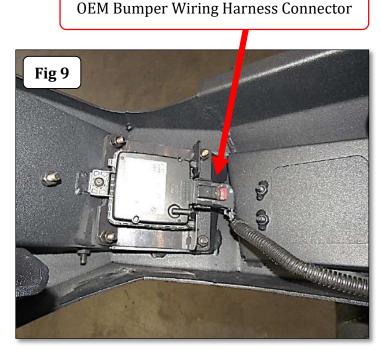


**Step-10** Transfer the OEM bumper wiring harness with the attached sensors to the BR20.5 bumper. Install the parking sensors into each bezel, making sure to install the sensors in the same order as they were removed from the OEM bumper, (Fig 7).



**Step-11** Reconnect the tag lights to their housing (Fig 7) and the OEM bumper wiring harness connector to each Lane Change Alert with Side Blind Zone Alert module, (Fig 9).



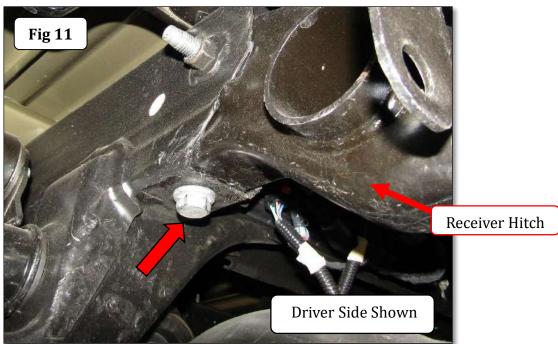




**Step-12** Align the holes and secure one of the auxiliary brackets to the weld nuts on the BR20.5 bumper driver side main bracket using (2) 1/2" x 1-1/4" hex bolts, (2) 1/2" lock washers and (2) 1/2" flat washers, (Fig 10). Tighten the bolts. Repeat to install the remaining auxiliary bracket on the passenger side of the BR20.5 bumper.

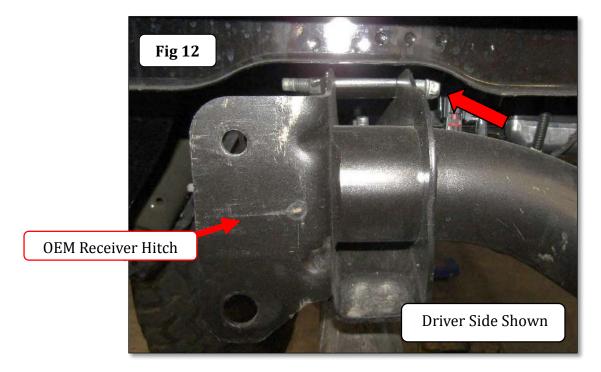


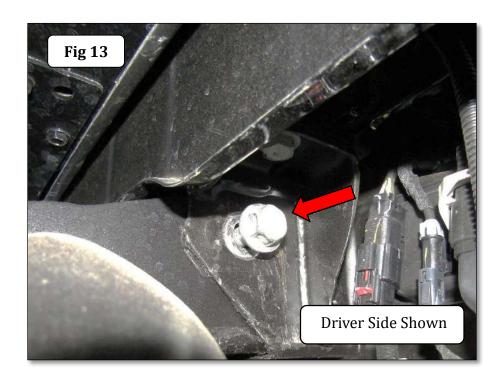
**Step-13** On each side of the vehicle use a 21 mm socket and remove (1) bolt securing the receiver hitch to the bottom of the frame, (Fig 11). Retain the bolts as they will be used for attachment of the BR20.5 frame brackets.





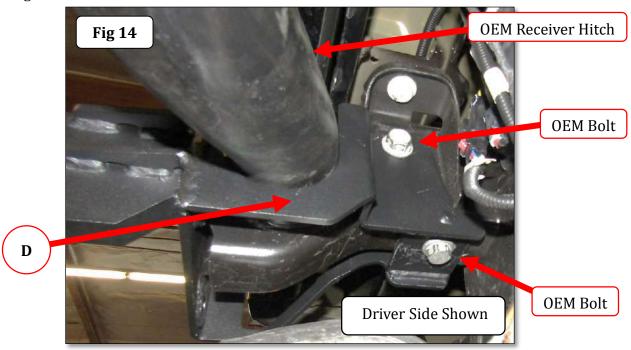
**Step-14** On each side of the vehicle use a 21 mm socket and loosen (1) bolt securing the OEM receiver hitch to the sides of the frame, (Fig 12). **Note:** Loosen the bolt so there is about a  $\frac{1}{2}$ " gap between the underside of the bolt head and the side of the frame, (Fig 13).



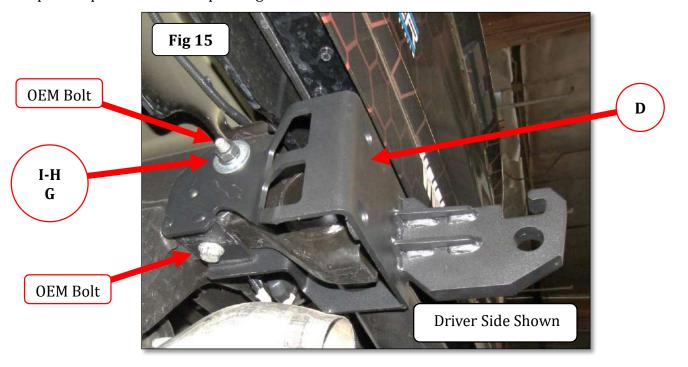




**Step-15** Position the driver side frame bracket on the frame so the notch on the inboard flange of the bracket is between the head of the bolt and side of the frame, and the bolt protruding out through the notch on the outboard flange of the bracket. With the bracket in position, align the hole in the bottom of the bracket with the weld nut in the bottom of the frame and reinstall the OEM bolt, (Fig 14). Snug but do not tighten the bolt.

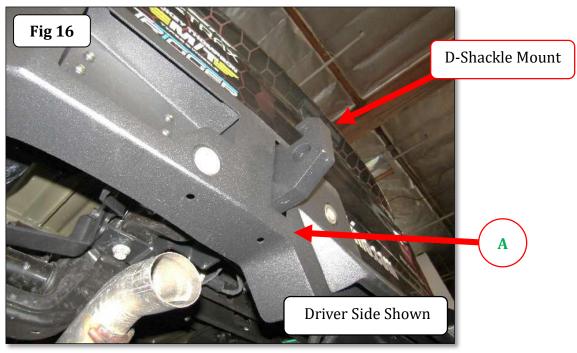


**Step-16** Install (1) 14mm flat washer, (1) 14mm lock washer and (1) 14mm hex nut on the threads of the bolt protruding through the outboard flange, (Fig 15). Snug but do not tighten the nut and bolt. Repeat step 15 & 16 for the passenger side frame bracket.

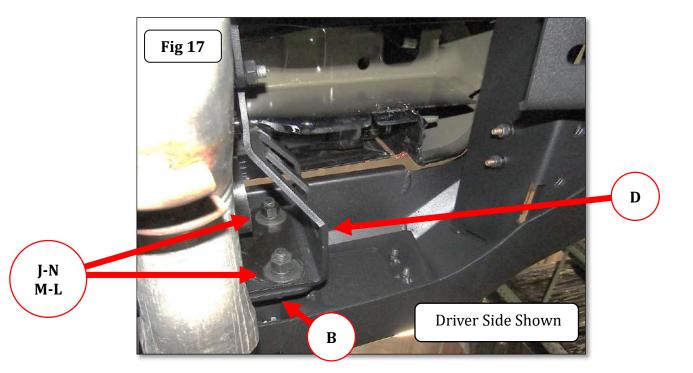




**Step-17** With assistance lift the BR20.5 bumper up to the vehicle, and position the bumper so the driver and passenger side frame bracket D-Shackle mounts protrude out through the rectangular openings in the bumper, (Fig 16).



**Step-18** Align the holes and attach the auxiliary brackets to each frame bracket using (2)  $\frac{1}{2}$ " x 1- $\frac{1}{2}$ " carriage bolts, (2)  $\frac{1}{2}$ " flat washers, (2)  $\frac{1}{2}$ " lock washers and (2)  $\frac{1}{2}$ " Hex nuts, (Fig 17). Leave the nuts and bolts loose for final adjustment.





**Step-19** Attach the center of the BR20.5 bumper to the receiver hitch using the (2) OEM bolts removed in step 4 of the OEM bumper removal (Fig 18).



**Step-20** Position the driver side outer support bracket on the side of the driver side frame bracket and on top of the bumper shell bracket. Align the hole in the outer support bracket with the hole and the weld nut on the frame bracket and secure the outer support bracket to the frame bracket using (1) 3/8" x 1" hex bolt, (1) 3/8" lock washer and (1) 3/8" flat washer. Attach the opposite end of the outer support bracket to the bumper shell bracket using (1) 3/8" x 1" hex bolt, (1) 3/8" lock washer and (1) 3/8" flat washer, (Fig 19). Repeat for the passenger side.



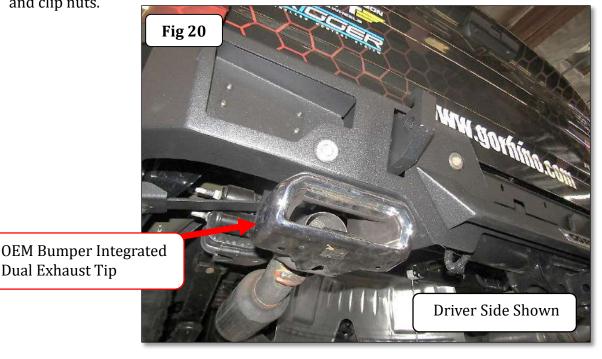


Step- 21 Reconnect the wiring connecter to the trailer plug, Rear Cross Traffic Alert modules and the bumper wiring harness connector to the vehicle wiring harness connector.

**Step-22** If equipped, remove the screws and integrated dual-exhaust tips from the OEM bumper. Attach each exhaust tip to the (2) holes provided in the BR20.5 bumper using (2) of the OEM screws

and clip nuts.

**Dual Exhaust Tip** 



**Step-23** Align the BR20.5 bumper with the vehicle, verify that the tailgate clears the top of the bumper replacement when lowered, then tighten all nuts and bolts.



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