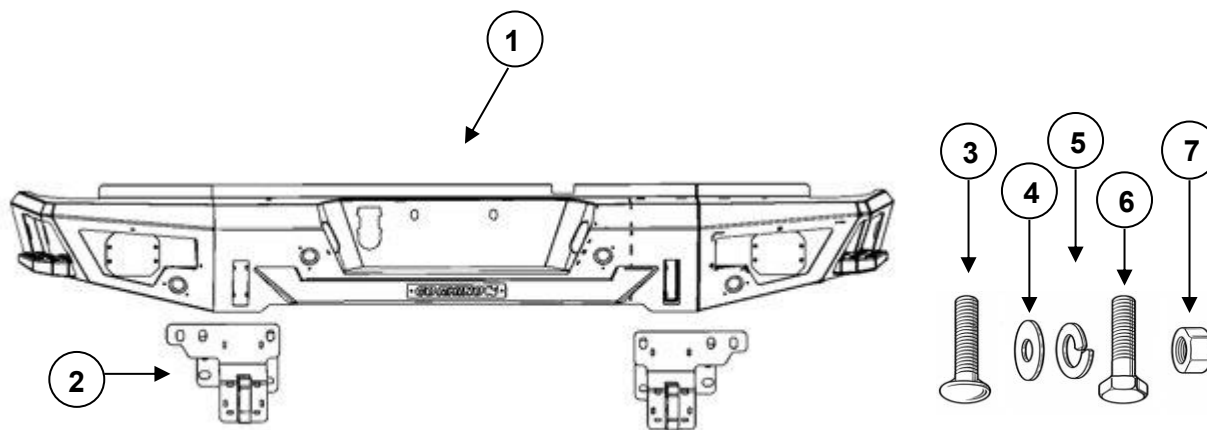


Component List:



Item	Quantity	Description
1	1	BR20.5 Bumper Cover
2	1	BR20.5 Bumper Brackets (Pair)
3	6	1/2" Carriage Bolt
4	12	1/2" Flat Washer
5	10	1/2" Lock Washer
6	4	1/2" Hex Bolt
7	10	1/2" Hex Nut

TOOLS NEEDED FOR INSTALLATION:

- 15mm, 3/8" & 3/4" Sockets & Wrenches
- Ratchet, Ratchet Extensions & Swivel Joint Adapter

Hardware Torque Specifications & Installer Responsibility

The following chart provides general torque specifications and wrench sizes for commonly used SAE and Metric fasteners found in automotive accessory installations. These values serve as guidelines based on standard Grade 5 / Grade 8 (SAE) and Class 8.8 / 10.9 (Metric) hardware.

IMPORTANT:

It is the **installer's responsibility** to ensure all fasteners are tightened to the appropriate torque. **Failure to torque hardware correctly can lead to part failure, vehicle damage, or personal injury.** Always verify torque requirements in the vehicle's factory service manual when available.

Bolt Size	Torque Grade 8 / 10.9	Wrench/Socket Size (in/mm)
1/4"-20	8 ft-lbs (11 Nm)	7/16"
5/16"-18	17 ft-lbs (23 Nm)	1/2"
3/8"-16	30 ft-lbs (40 Nm)	9/16"
7/16"-14	45 ft-lbs (61 Nm)	5/8"
1/2"-13	80 ft-lbs (108 Nm)	3/4"
M6 x 1.0	7 ft-lbs (10 Nm)	10 mm
M8 x 1.25	16 ft-lbs (22 Nm)	13 mm
M10 x 1.5	35 ft-lbs (48 Nm)	17 mm
M12 x 1.75	60 ft-lbs (81 Nm)	19 mm

Inspection & Maintenance Recommendations

- After installation, **inspect all hardware after the first 100 miles** of driving.
- Thereafter, **reinspect every 3 months** or 3,000 miles, whichever comes first.
- Ensure all fasteners remain tight and free of corrosion or damage.
- Re-torque as needed using the specifications in the chart above or per OEM requirements.

Installer assumes all liability for proper installation and continued inspection of hardware. If torque values are not properly applied and maintained, failure of the part and safety risks may result.

Installation Instructions:

Verify that the tailgate does not contact the bumper replacement when opening or in the fully lowered position before final tightening of all nuts and bolts. If necessary, loosen the hardware and adjust the bumper to obtain proper clearance.

If replacing a bumper on a vehicle equipped with rear Park Assist, be aware that the sensor detection zone may be altered when using this bumper replacement. For 2010–2013 Ram HD pickups, the factory trailer hitch may include a trailer ball standoff welded to the center of the hitch. The standoff and weld must be ground flush to allow proper installation of the bumper replacement.

Care and Maintenance:

Keep the product clean and avoid abrasive cleaners or polishing waxes.

Textured Painted Finish: Clean with a mild liquid detergent.

Polished Stainless and Semi-Gloss Painted Finishes: Use only a non-abrasive automotive wax, such as pure carnauba, to help prevent scratches and corrosion.

Factory Bumper Removal

Step-1 Disconnect the vehicle battery or batteries.

Step-2 Disconnect the wiring harness for the trailer plug, (Photo 1).

Step-3 Disconnect the license plate lights from the factory bumper and disconnect the factory bumper wiring harness from the vehicle wiring harness, (Photo 2).

Step-4 Remove the license plate from the factory bumper and the (2) bolts or nuts exposed by the license plate, using a 15mm socket and ratchet, (Photo 3).





Step-5 Remove the bolts (2) per side securing the factory bumper brackets to the frame/receiver hitch using a 15mm socket and ratchet, (Photo 4).

Step-6 With Assistance, remove the factory bumper from the vehicle by rotating backwards to clear the boss located on the receiver hitch under the plastic center cover

BR20 Bumper Replacement Installation

Note: If your vehicle is not equipped with rear Park Assist install the supplied round plugs in the holes in the replacement bumper and proceed to Step 8.

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-8 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-9 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.

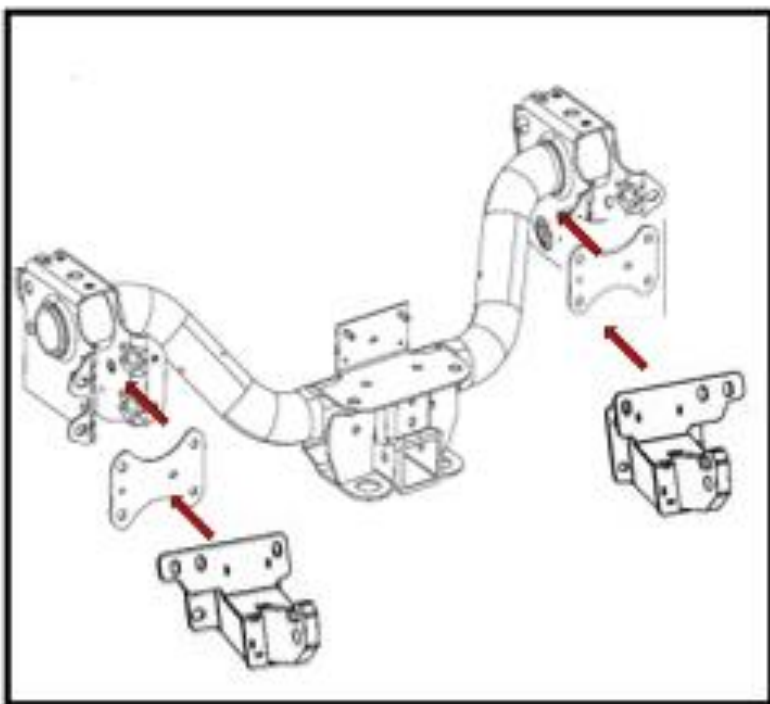
Step-10 On each side of the BR20.5 bumper, remove the (2) plastic plugs from the sensor bezel brackets that are preinstalled in the bumper.

Step-11 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-12 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).

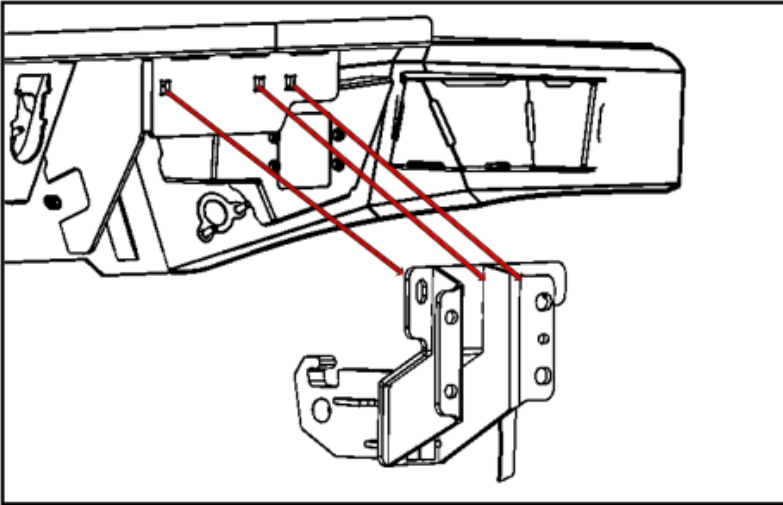
Step-13 Reconnect the tag lights to their housing



Step-14 Remove the (2) bolts and frame plates from the driver and passenger side of the frame/receiver hitch, (Photo 5).

Step-15 Install the passenger side frame bracket by positioning the bracket on the frame/receiver hitch, align the holes and secure the bracket to the frame/receiver hitch using (2) 1/2" x 1 1/2" hex bolts, (2) 1/2" flat washers, (2) 1/2" lock washers and (2) 1/2" hex nuts, and the (2) factory bolts removed in step 3 and (2) 3/8" flat washers. Leave the nuts and bolts loose for final adjustment. Repeat this step to install the driver side frame bracket,

Note: If your vehicle only has the (2) larger bolts per side securing the factory bumper brackets to the frame/receiver hitch, disregard using the smaller factory bolts as referenced in step 9, and secure the bracket to the frame/receiver hitch using (2) 1/2" x 1 1/2" hex bolts, (2) 1/2" flat washers, (2) 1/2" lock washers and (2) 1/2" hex nuts.



Step-16 With assistance attach the bumper shell brackets to each frame bracket using (1) $\frac{1}{2}$ " x $1\frac{1}{2}$ " carriage bolts, (3) $\frac{1}{2}$ " flat washers, (3) $\frac{1}{2}$ " lock washers and (2) $\frac{1}{2}$ " Hex nuts, Align the bumper shell with the vehicle, verify that the tailgate clears when lowered, and tighten all nuts and bolts, (Photo 7). If necessary, loosen the frame / receiver hitch bolts to adjust the bumper shell