

RELENTLESS FAB 2020+ JEEP GLADIATOR REAR BUMPER

INSTALLATION GUIDE

THANK YOU FOR YOUR PURCHASE!

Note: we recommend professional installation on all of our products. Please fully read install guide prior to attempting installation to ensure you have a complete understanding and all required tools and procedures. If you are not confident in your ability to complete the procedure please seek professional installation. Be aware that the bumper is heavy! You will need 2-3 people to lift the bumper into position to secure it to the vehicle. **We assume no responsibility for any injury or property damages from installation or use of our bumper.**

TOOLS REQUIRED:

- ½" and 3/8" Drive Ratchet set with Deep/shallow sockets and Extensions, metric and SAE.
- Standard and/or ratchet wrench sets, metric and SAE
- Flat screw driver or trim clip tool
- pliers, diagonal cutters
- Wiring tools/connectors/loom/etc for any lights or other accessories you plan to install.
- Hex key/Allen bit set

INCLUDED HARDWARE:

- 8) #8 screws/nylocs for mounting fog lights
- 4) 3/8"x1.25" bolts with nyloc nuts and washers

- 4) M10 bolts and flat washers
- 4) rubber grommets for models equipped with parking sensors

We always recommend working on a clean and dry vehicle that is securely parked on a hard flat surface and parking brake applied. We STRONGLY recommend wearing safety glasses throughout the install process to keep debris from within the bumper/fenders from falling into your eyes while under the truck.

Read each step of the install procedure fully before beginning that step.

STEP 1:

Preparation and original bumper removal:

Double check all listed hardware is present and you have all necessary tools before starting.

Begin by lowering and removing the spare tire from under the truck using the crank assembly in the roadside kit included with the vehicle under the back seat. Next, disconnect the wiring harnesses clips and connector(s) at the driver frame rail between the bumper and main harnesses for the trailer wiring and license plate light and/or parking sensor harnesses. Ensure these are separated between the bumper and main harnesses before loosening any bumper mounting bolts as to not damage any wiring.



With the wiring separated the bumper assembly can now be removed. The receiver hitch and bumper are bolted into one assembly so only the frame bolt locations need to be loosened. If your truck is a Rubicon, the bed side rub rails and their frame support brackets will need to be removed prior to the other bumper mounting bolts. Fully separate and remove the Rubicon rub rails and brackets from the truck and detach from the main bumper corners.



Unbolt and remove the original bumper from the truck via the 2 bolts under each frame rail and the 2 through. Leaving one through the frame on each side will support the bumper for final removal, we recommend 2 people to support and remove the bumper assembly.

If your truck is equipped with parking sensors, remove them by spreading the 2 tabs on the external ring and pushing them out the back of the bezels. Unclip the harness from the bumper and transfer them into the new bumper at this time routing the harness through the pass-through holes in the mounting plates of the new bumper. The sensors



will push snugly into the rubber grommets in the new bumper and the harness can be secured with some zip ties to the small cutout slots provided in the bumper.

All JT rear bumpers come with an integrated hidden receiver hitch, if you intend on using the hitch we recommend using the flip up light bracket sold by Rugged Ridge part number RGG-1123301, which can be purchased directly on our website, and other online retailers. Other hinged license brackets may work but will likely need mounting holes drilled for a different pattern.

STEP 2:

Relentless Bumper install: We are now ready to prep your new bumper!

Transfer over your license plate and trailer wiring plug from the old bumper and mount them into the new bumper.

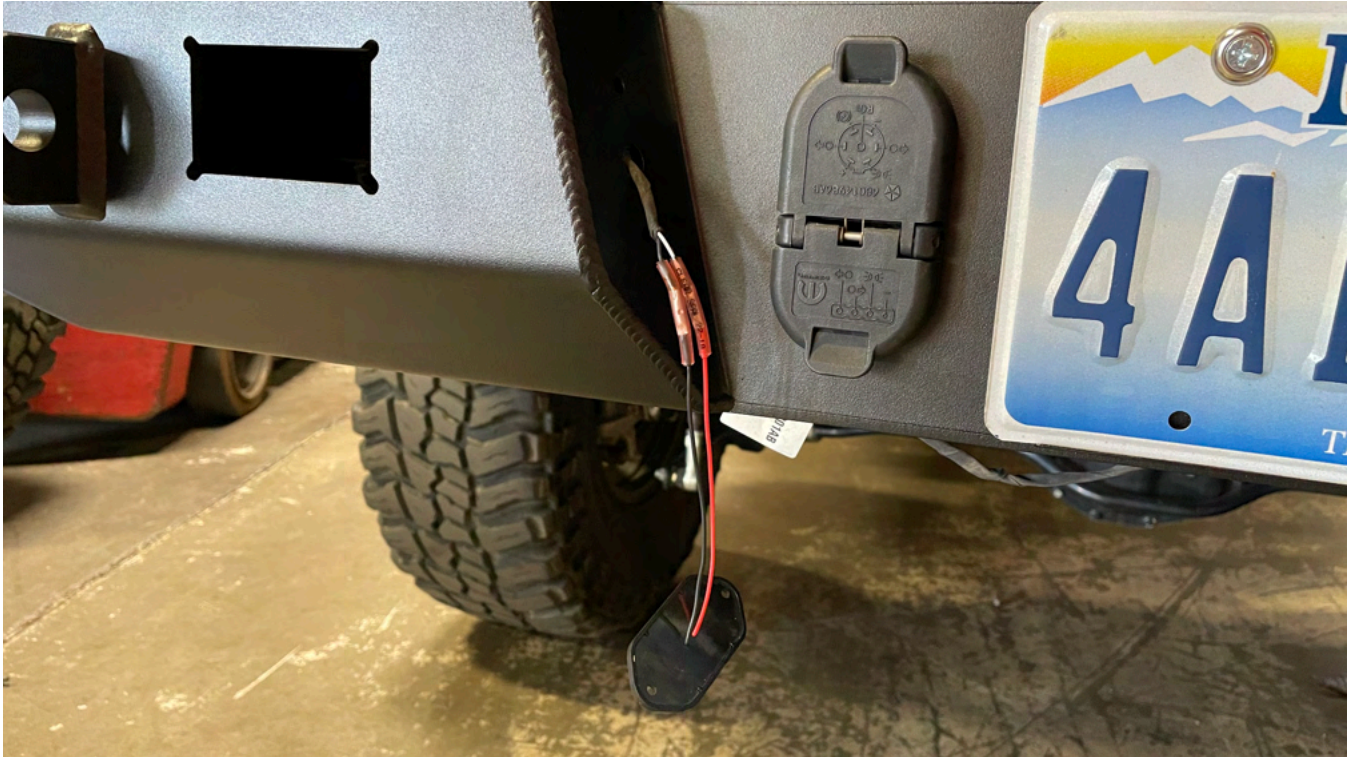
Install the(optional) Baja Designs S2 reverse lights into the provisions in the bumper.

Ensure your parking sensors are transferred and secured into the new bumper before mounting to the truck if your truck is equipped with sensors.

The bumper can now be lifted onto the vehicle for installation. Placing some rags or towels draped over the sides of the bumper while lifting into place will help prevent possible scratches to the body since the bumper wraps around it. We recommend you lift and secure the bumper with 2 to 3 people or a hydraulic lift. The side support tubes in the bumper will likely contact the OEM exhaust resonator on your truck, check clearance by lifting the bumper up and testing to see if there are any conflicts. If there is, we recommend cutting the exhaust pipe where it points down just behind the rear of the fender flare and deleting the resonator. Some aftermarket high clearance/offroad exhausts may not require this mod as they usually delete this resonator altogether and/or stop short.

To mount the bumper, secure the bumper first with the 2 original hitch/bumper through-bolts slid into each frame rail to support the majority of the weight while other bolts are installed. Install the remaining 2 side bolts and 2 bottom bolts on each side of the truck frame. Use the included washers, lock washers and nuts on the inside of the OEM long through bolts to secure them. Run these bolts in until just slightly snug, NOT yet tight. Before tightening them completely snug up the 2 bottom bolts to raise the bumper fully into place against the frame, then tighten the side bolts and finally fully tightening the bottom bolts to OEM specs. Take care to ensure there is adequate clearance between the bumper and truck bed sides throughout tightening all hardware as to not possibly pinch, scratch or damage anything. If the bumper is not level then you may need to use the included pair of washers to shim between the lower bumper mount and frame rail for fine tuning as necessary.

With the bumper secured to the truck, installation can be completed by connecting the OE wiring harnesses connectors back under the frame rails and wiring in the new LED license lights with butt connectors to the OE wiring.



STEP 3 OPTIONAL STEP:

Tire carrier installation:

If you ordered the bumper with the tire carrier swing out, the carrier swing out assembly can be installed onto the bumper at this time. For powder coated bumpers we do most of the carrier pre-assembly to make the job simpler for you by mounting the latch and placing components loosely into their intended locations. We recommend test fitting the 1" pivot bolt through the upper and lower mounting brackets on the bumper and filing any paint/powder coat as needed for it to fit in place, they're snug by design and the coating can sometimes prevent the bolt from simply dropping in but this is nothing to worry about.

First, start by packing the bearings with grease (waterproof grease recommended) and installing a bearings into the carriers spindle from each top and bottom, followed by the

tapered aluminum bearing preload spacers to cap off each end. The taper should sit inside the spindle sleeve up against the bearing with the larger flat surface at the outside. The carrier can now be lifted and slid in place between the brackets on the bumper. This is a 2 person job in most cases as it is a snug/tight fit and both ends need to be supported throughout the process. A dead blow hammer may be necessary to hit the carrier spindle/bearing assembly in between the brackets- protect the powder coating during this time by placing a rag over the carrier spindle sleeve where the dead blow hammer will contact. Tap/push the bearing assembly of the arm in position between the brackets until the pivot bracket holes line up, then install the 1" bolt from the top and nyloc nut to secure the arm. After this is snugged down with 2 wrenches, thread in the T-knob lock-open pin into the threaded barrel on the pivot side of the arm and adjust the tensioning bolt/jam nut for the latch for proper closing. The latch has a positive detent action and should take a little force to overcome the over center detent and hold tension to secure the carrier from bouncing/rattling. If it is left too loose or allowed to come out of adjustment it will cause wear to the brackets and lead to noise and rattling. Adjust periodically and lube latch pivots with PTFE or Graphite dry lube occasionally. The carrier pivot bearings should be greased periodically, we usually recommend greasing them in the fall and in the spring, depending on use and your environment more periodic greasing may be needed. Once the carrier arm is properly installed you can choose the desired placement of the tire mount and secure it to the arm with the 6) included bolts/nuts/washers and mount your spare tire. Lug nuts are not included as the intention is for you to match the rest of the lug nuts on your vehicle, our studs are the same thread/size as existing on your vehicle.

The tire carrier ships with a relocation mount for the original reverse camera. The camera is removed from the tailgate by opening the access panel on the inside of the tailgate, disconnecting and routing the cable from the camera out the bottom of the tailgate to under the truck bed, then unclipping the camera from the plastic bracket inside the tailgate. The camera assembly with the cover bezel and interior clip will mount the camera into the new relocation bracket just as it was in the tailgate. Mount the bracket and camera in the desired location on the carrier with the included hardware. The backing strip can be used to secure the camera bracket through the molle cutouts, or you can drill holes and mount it where desired. Route the cable extension from under the truck bed to the corner of the truck near the tailgate and then along the back side of the carrier to your camera location, connect it and secure the wiring with zip ties while ensuring there is a bit of slack near the pivot to allow for the opening and closing of the carrier arm. Secure excess cable under the truck bed. *Note that the camera view area and perspective will be somewhat skewed depending on how far you*

move the camera from its original location in the tailgate which can alter its effectiveness and the accuracy of the parking grid guidelines.

Lastly, run your accessory reverse light wiring harness safely and securely along the frame rail away from any sharp edges, moving or hot parts that could rub through the wire casings. Connect the light wiring per the light manufacturer or accessory switch controller directions.

Congratulations on completing the installation of your new Relentless Off-Road Fabrication bumper! We hope you enjoy your new bumper for years to come!

Be sure to re-check torque on all bolts after the first week or 250 miles of use, and periodically thereafter as parts can settle or rattle loose from continued off-road use.

If you have any questions, comments, or concerns please feel free to contact us Mon-Fri 9am-5PM PST at 775-200-0544 or any time via email: sales@relentlessfabrication.com

We love when customers tag us in their social media posts!

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