# RELENTLESS FAB 2021+ COLORADO ZR2

# EVOLUTION FRONT LO-PRO 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 of and confidence in competing all procedures and have the necessary tools. If you are not confident in your ability to complete the procedure please seek professional installation. Be aware that the bumper is fairly heavy (about 80lbs *without* a winch)! We recommend 2 people to lift the bumper into position to secure it to the vehicle. We assume no liability or responsibility for any injury or property damages from installation or use of our off-road bumper.

#### TOOLS/PARTS REQUIRED:

- ½" and/or a 3/8" drive ratchet, plus deep/shallow sockets and drive Extensions
- Open end wrenches and/or ratchet wrenches (11mm, 13mm, 15mm, 18mm, 5/8", etc.)
- Torx bit set and driver
- Strong scissors/shears, or Razor for trimming felt fender liners
- Rotary cutting tool or body saw: small angle grinder, dremel, Pneumatic cutoff saw, fine tooth hack saw, etc. for trimming plastic and a file for de-burring.
- Screw driver or body clip pry tool
- Masking tape
- Wiring and wiring tools/connectors/etc for any accessories you plan to install.

#### **INCLUDED HARDWARE AND BRACKETS:**

- 2) 7/16"x1.25" grade 8 bolts, nyloc nuts and washers for the
- 2) lower mounting 'L' frame brace plates
- 10) 3/8"x 1" grade 8 bolts and SAE washers for side flange installation
- 2) M10-1.5x40mm bolts with 3/8" spacers for skid re-installation

Install notes: Not all winches will fit in this bumper; we recommend the Warn VR Evo series, specifically the 10-S winch although the 8's and 12's will also fit. If not using the recommended winch, confirm your winch is compact enough to fit inside the bumper prior to beginning install.

We've designed this bumper around Baja Designs LED lights, the Squadron series as fog/driving lights and the Squadron, XL's, and S8 20" as aux lights mounted to the top. There are specific mounting locations cut into the top of the bumper for these lights. If mounting an S8 20" light bar please contact us for some specific light mounting brackets that space it forward slightly for grille clearance. Fit is not guaranteed If using other lights than those from Baja Designs.

We always recommend working on a clean and dry vehicle on a flat and level surface. We STRONGLY recommend wearing safety glasses throughout the install process to keep debris from within the bumper/fenders from falling into your eyes while working under the truck, as well as for protection when cutting the bumper cover plastic.

Read the instructions fully before starting, and each step of the install procedure fully before beginning that step. With the vehicle parked on level ground, transmission in park, and parking brake set begin the install process:

#### STEP 1:

Removal and preparation:

While lying on the ground (use a creeper if you have one) or with truck on a 2-post lift, remove the front aluminum skid plate via 4 bolts and set it and the hardware aside for later reinstallation.

Next remove all of the small torx fasteners along the bottom of the bumper cover that are securing it to the supports behind the cover and lower portion of the felt fender liners.

#### STEP 2:

### Factory bumper cover trimming:

To begin preparing for the installation of the new Relentless Evolution bumper we'll need to trim away the lower portion of the plastic front bumper cover and connection to grille. We'll first cut the lower part of the grille as shown in the image below. With your cutting tool, trim across the lower tabs of the grille just below the lower horizontal member as detailed below.



Now we'll do our initial cut along the down-angled body lines of the bumper as highlighted in the image above in order to open up the center area where the bumper will mount and expose additional components. Cut and free this portion from the rest of the bumper, then we'll unbolt the steel crash bar from the frame ends, this is accomplished with a 15mm socket in the recessed holes. Remove the factory tow hooks with an 18mm, retain the bolts and nuts for later use in securing the lower bumper brace plates. Remove the plastic bumper support brackets from the cross member. Unclip the ambient temperature sensor and free the wiring loom from the plastic supports, let it hang out of the way for the next step.

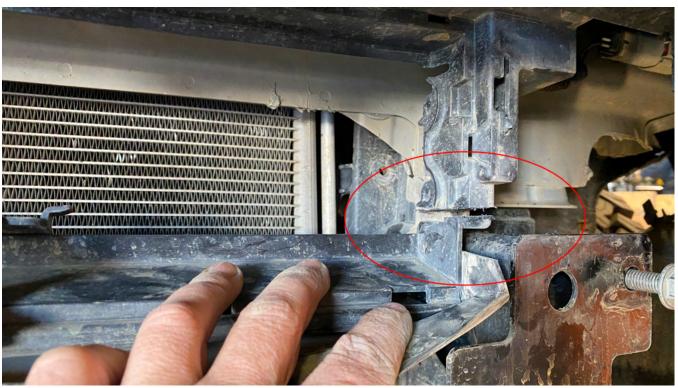


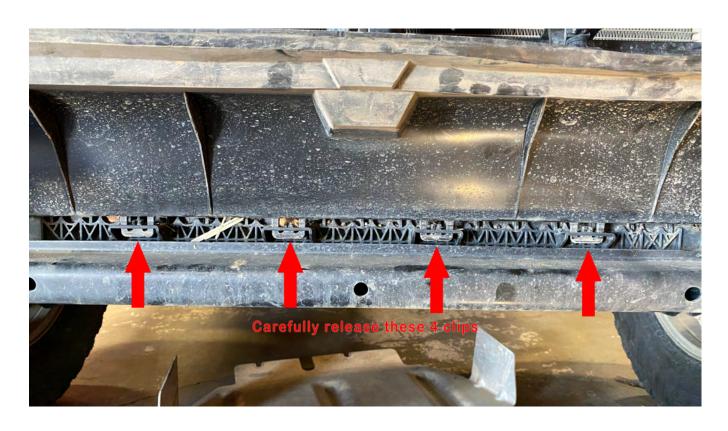
#### STEP 3:

WARNING: In this step we will be trimming near the radiator. Extreme care should be taken to not damage your radiator or other critical components while completing this step!

Now that the main portion of the lower bumper cover is trimmed off and a few bolt on components are out of the way we'll need to trim the lower radiator air shrouds for clearance of the new bumpers recessed winch plate. Trim away the plastic shrouds even to the tops of the frame rails, and trim the center support flush to the horizontal member as shown in images below. Unclip the lower edge of the shroud from the bottom of the radiator and discard shroud. Clean up any cuts/burrs as necessary with a file or similar.









#### STEP 4:

## Final prep and test fitting:

We are now ready to prepare your new Evolution lo-pro bumper for installation! We recommend test fitting the bumper onto the frame at this point before installing the winch and other accessories to keep it as light as possible. To aid in installation of the main center of the bumper we like to take the outer frame-end bolt and install it from the back side of the frame plate as shown below. This acts as a stud to hold the weight of the bumper until the inner 2 frame-end bolts can be secured, at which point we remove the outer bolts and install it from the front to secure the bumper to the frame.



With the main section of the Evolution bumper secured to the frame ends and raised up tight to the lower cross member, install each of the side flanges with 2-3 of the included 3/8"bolts and washers from the interior of the bumper. With the sides secured into position lay a tape line on the plastic along the edges as a reference to trace and adjust your cuts on the plastic bumper for an even gap all the way around. We recommend a \%" to 3/8" gap. NOTE: If the gap is too tight some rubbing may occur which will result in the paint on the bumper being rubbed off and rust forming.



After tape lines have been laid along the sides place a tape line from the lower corner of the side flange parallel to the ground rearward toward the wheel as shown in the image. Our tape line and measurement for approximate cut location is shown in the image. Complete this process on both sides maintaining as much symmetry as possible. Now remove the bumper side flanges and then the main section to give room to complete the additional clean up and lower bumper plastic trimming.



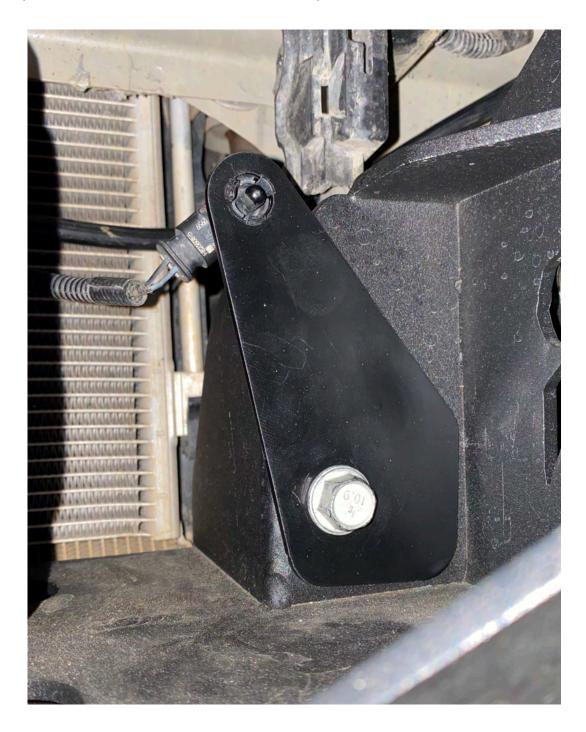
#### STEP 5:

Once the bumper has been test fitted and final cutting has been completed, start the final bumper install by installing your winch fairlead into the recess on the Evolution bumper and then bolting the winch down to secure it to the winch plate. Feed the winch rope through the fairlead and secure your hook to the end.



On most winches the control pack will need to be relocated off the top/side of the winch to a new location under the hood of the truck due to space constraints inside the bumper and for easier access to the remote plug. In order to relocate the control pack some longer leads between the control and the winch motor will be necessary so you'll need to determine placement and routing of the cables, we usually mount our control pack behind the passenger headlight and in front of the air intake box, routing the wiring up under the headlight via a hole cut in the plastic trim panel under the headlight and the winch ground toward the driver side/battery. With all of this planned and routed, connect the cables to the winch motor and then mount the bumper onto the frame ends and lift it tight to the lower cross member before tightening the frame end bolts. On the driver side frame rail remove the inner frame end bolt and install the

included ambient temperature sensor relocation bracket by securing it inside the bumper with this bolt, the sensor should clip into the bracket from the back side.



Next install the lower mounting brace plates with the included 7/16" hardware to the bumper, and the 2 factory tow hook bolts to the frame.



At this time the side flanges are the last bumper component so install your fog lights onto them if you haven't done so and route the wiring harness for the lights into position near their mounting locations at the frame ends. Adjust the lights to be centered vertically and horizontally in the cutouts, and aimed as best as you can for now. (note: Lights will likely need to be positioned as far forward/outward as possible on the mounting tab to prevent contact with bumper frame mounting) Snug all bolts on the lights to the point that everything is secure but can still be moved with a bit of effort for final adjustment once the flanges are later secured to the bumper center. You'll want to do final aiming adjustments once the lights are wired and can be illuminated.

Connect the fog lights to the harness and then secure the bumper side flanges to the main center portion with all 5 of the included 3/8" bolts and washers. Repeat on other side then finalize wiring connections for all accessories.

At this time the final step is to reinstall the aluminum skid plate. The 2 rear/lower factory bolts are reused and the included longer M10x40mm bolts will be used to secure the plate to the frame crossmember and through the lower bumper tabs. The aluminum spacers go between the skid and the bumper to keep the skid from contacting the bumper. Note our optional ¼" Aluminum skid plate is available as a nice compliment to the bumper and will sit tight to the cross member and match the width of the bumper compared to the thinner bulkier factory skid.



Congratulations on completing the installation of your new Relentless Off-Road Fabrication Evolution Lo-Pro bumper!

We hope you enjoy your new bumper for years to come!

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

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