# RELENTLESS FAB 2015+ COLORADO Z71/BISON FRONT PLATE 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 (about 120lbs *without* a winch, and around 200lbs with winch installed)! You will need 2-3 able-bodied 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/PARTS REQUIRED:

- ½" Drive Ratchet with Deep/shallow sockets + Extensions. 15mm, 7/16", 9/16", 5/8", etc
- Standard or ratchet wrenches (15mm, 7/16", 9/16", 5/8", etc)
- T15 Torx bit set and driver
- Strong scissors/shears for trimming fender liner
- Rotary cutting tool: small angle grinder, Pneumatic cutoff saw, etc.
- Tape measure, masking tape and marker
- Wiring tools/connectors/etc for any accessories you plan to install.

#### **INCLUDED HARDWARE:**

- 2) 1/4x1" bolts, with 2 nyloc nuts and 4x washers for fog light install
- 2) double slotted L brackets for fog light mounting
- 2) 7/16"x1-1/4" grade 8 bolts, nyloc nuts and 4x washers
- 2) 3/16" steel plate frame reinforcement L brackets

We always recommend working on a clean and dry vehicle. 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, as well as for protection when cutting the bumper cover plastic.

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

#### STEP 1:

Removal and preparation:

Remove the front skid plate/splash guard with a 15mm socket via 2 bolts under motor into frame and 2 bolts into the front cross member under the factory bumper. Set it and the hardware aside for later reinstallation.

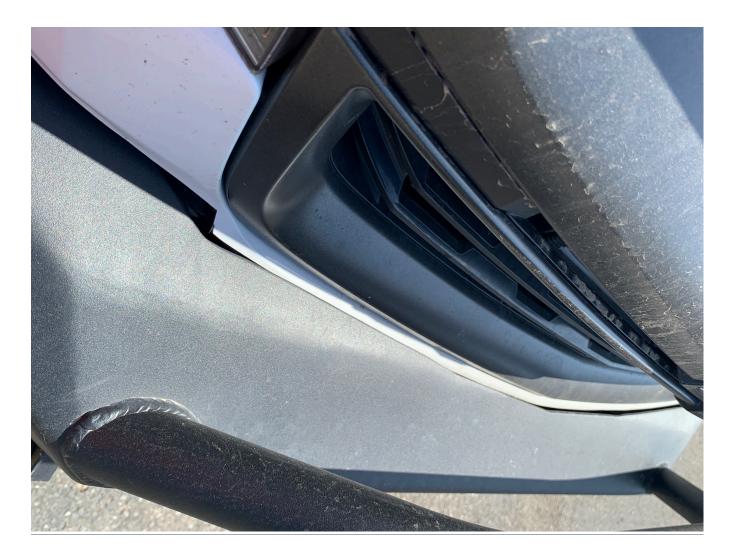
Next remove all of the torx fasteners along the bottom of the bumper cover that are securing it to the supports behind the cover. From here we also need to release the sides of the bumper from the wheel well liners at the front fender wells. Locate the additional torx fasteners and clips at the front of the fender wells and remove any screws not yet removed, up to the screw at the beginning edge of the sheet metal fender. After all of these fasteners have been removed, free the bottom of the inner fender well liner from the bumper cover, and then continue upward separating it slightly from the bumper cover until it is separated to just above the seam at the start of the fender so its out of the way for bumper cover trimming. Unplug fog lights if equipped and ensure wiring is not secured to bumper cover for later bumper removal.

#### STEP 2:

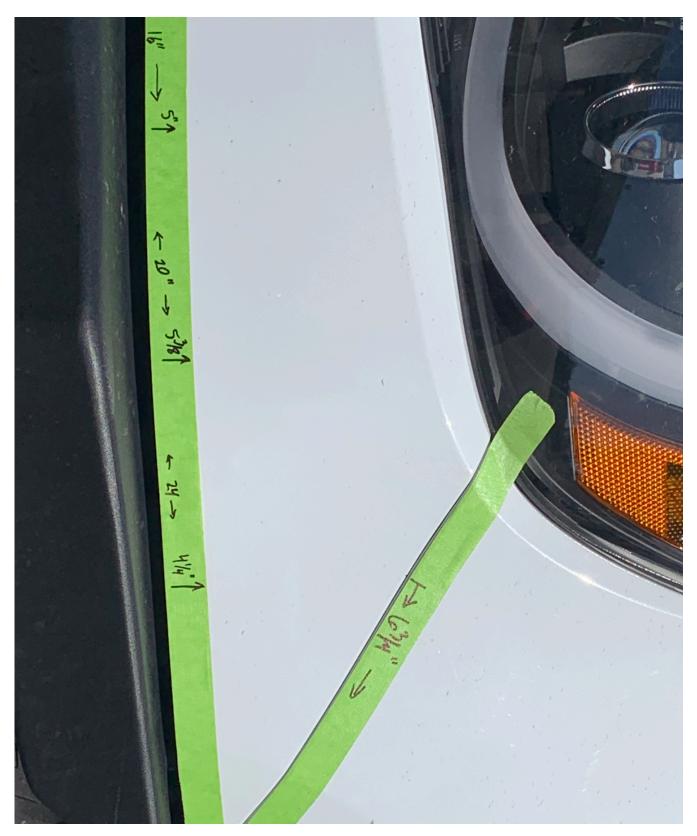
Factory bumper cover trimming:

To begin the preparation for installation of the new Relentless bumper we'll need to trim away the lower portion of the plastic front bumper cover. We will need to measure from reference points and make marks with a sharpie or similar to create a cut contour. See large detailed images below for these measurements. Measurements are done on the horizontal reference from the lower corner of the grille, and vertically off of the headlight and fender/bumper seam. Once we have laid the marks and created a cut line, double check all reference measurements and once confident then begin to trim away the bumper cover. Start the cut parallel to the line drawn but about a ¼" under to allow for later cut-gap adjustment if needed.

When making these cuts the lower portion of the bumper will begin to separate and fall away, try to support it the best you can throughout the process. <u>Be sure not to cut too</u> <u>high, we can always remove more if needed, but we can't put material back if too much</u> is cut!



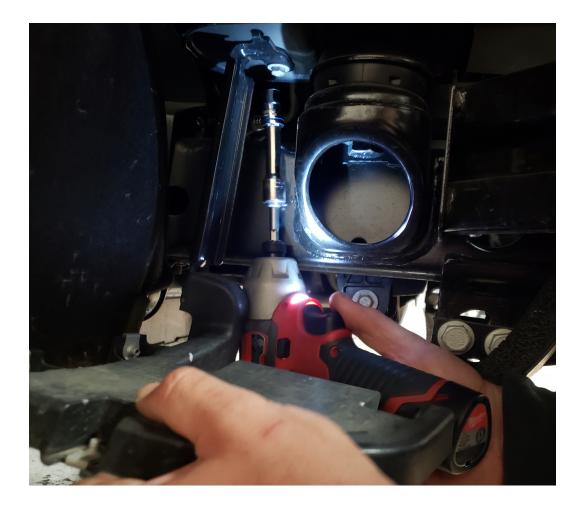




#### STEP 3:

Now that the lower bumper cover is trimmed off we'll remove some parts that were behind it before we can mount the new bumper. Start by removing the long steel crash bar that is bolted to the frame ends via the 2) 15mm head bolts recessed into the holes in the bar. There is an additional plastic radiator scoop piece that needs to unclipped and removed from just above where the crush bar sat on some models. Remove and discard. With all of these parts removed the last parts to be removed are the thin metal support brackets that held the lower edges of the bumper cover at the connection of the wheel well liners. See the following pictures of these components being removed:





At this point we'll need to test fit the new bumper and then touch up, fine tune and sand down our cuts until smooth and consistent gaps are achieved around the new bumper before final install. We recommend taking the outer bolt that secured the crash bar to the frame end and reinstalling from the rear to act as a stud to line up and hold the bumper until other bolts are installed. 2 people should lift the bumper into place as it is heavy and awkward to lift.

Lift the bumper into place and secure with one bolt on each side. Ensure it is snug to the frame ends and sitting level to the lower frame cross member. Measure and trace a new cut line to a consistent 1/2- 5/8" above the bumper along the whole top edge of the bumper under the headlights. Once this line is complete, remove the bumper and cut to this new line. Sand or file the edge smooth.

#### STEP 4:

Relentless Bumper install:

#### We are now ready to prepare your new bumper for installation!

Start by installing your fog/driving lights with the included L tabs and ¼"x3/4" Bolts/nyloc nuts/washers. The narrow slots correspond to the slot on the tab welded to the bumper, the larger slot is where you attach your new LED fog/driving lights for in/out adjustment within our light recesses. Adjust the lights to be centered vertically and horizontally, and aimed as best as you can for now. Snug all bolts to the point that everything is secure but can still be moved with a bit of effort for adjustment once on the truck. You'll want to do final aim adjustments once the lights are wired with the bumper secure on the vehicle and then fully tighten the lights at that point.

If you're installing a light bar in the cutout, secure the light bar into the bumper now as well. If your light bar has the mount studs secure into the bar ends, use a small Allen hex wrench in the end of the stud and remove the stud. The light bar will need to be mounted into the new bumper with screws instead of the studs, the light bar should include replacement screws, if not you'll need 2) ¼-20 screws about 5/8" long and the 2 washers from the light bar hardware pack.

Now, if you also have a winch to be installed it is time to do so. Start by installing the fairlead into the bumper fairlead recess with the hardware included with the winch. Center the fairlead into the mounting location and tighten it down. With that done bolt the winch into the mounting plate within the bumper. Note that large winches such as the Warn Zeon series are not recommended in the bumper, and some winches may need their control packs relocated off of the top winch body to a new location for fit and ease of access to the control plug. We usually find a secure, safe location under the hood near the battery or behind the grille of the truck.



#### STEP 5:

We're now ready to lift the bumper onto the vehicle and secure it. With or without a winch installed the bumper is heavy and we recommend a minimum of 2 strong people for lifting, 3 is even better! Alternately a jack or hydraulic lift table can be helpful in raising and positioning the bumper onto the truck. To aid in lining up and holding the bumper in place while additional hardware is installed we like to take one bolt on each frame plate and screw it in from the back to act as a stud to rest the bumper on until it is partially secured via other bolts.



Now lift and position the bumper over the bolts loosely secure the bumper to the truck with the additional bolt into the frame end plates- these are accessed through the cutouts in the front of the bumper. Install the 2 factory skid bolts Begin to tighten the bolts in order to raise the bumper up. Adjust to about ½-5/8" clearance between top of plate bumper and lower edge of the plastic cut edge under the headlights.

Once desired height is achieved and bumper is level side to side secure the 4) frame end bolts, taking the ones that were installed from the back of the plates to aid in bumper install, and reinstalling them normally from the front to secure the bumper. Lastly, use the included 7/16" bolts, nuts, and washers and the factory tow hook bolts to secure the lower mount braces to the lower cross member of the frame as seen in the image below.



We are now nearly complete with the bumper installation. At this time re-check all fasteners to be sure they're installed tight.

Now we'll take care of the excess fender liner material hanging down. Use your shears or razor to trim away the excess material, but don't get too carried away as the engine air intake draws from inside the fenders and the liners block water from the intake. Make a diagonal cut from the lower corner of the bumper near the fender flare, angled down toward the frame. To secure the liner on the frame side, poke a small hole in the liner about ½ inch from the edge and fold the lower potion up and use a wire tie to attach it to the hole in the body mount on the side of the frame.

Lastly, run your wiring for any accessories safely and securely away from any sharp edges that could rub through the wire casings. We usually route them behind the bumper and into the cutout behind the driver side headlight to the battery. We recommend looming all wires, and securing with wire ties every 6 to 12 inches.

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 250 miles of use, and periodically thereafter as parts can settle or rattle loose from off-road use.

*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*