# **FS Performance Engineering**

Chevy Colorado / GMC Canyon GEN 2 Cat Guard Installation Instructions
Professional Installation Recommended as Always - A car LIFT is HIGHLY Recommended

### **Tools Needed:**

- Ratchet Wrench(es)
- 1/4" Socket (to hold Security Bit)
- 7/16" Socket & Wrench
- 17/32" Drill Bit (for the 5/16" Rivnuts)
- 15mm socket (if you have a transfer case shield)
- Drill an electric one makes life easier
- Rivet Nut (rivnut) installation tool (a heavy duty one is necessary) w/ a 5/16"-18 mandrel
- Helper
- Marker / Pencil
- Blue Threadlocker

# **What's Supplied:**

#### Parts:

- (1) Colorado / Canyon Cat Guard
- (1) Rear Shield

### **Stock Body Hardware:**

- (6) 5/16"-18 Rivnuts (extra(s) are supplied)
- (5) 5/16"-18 x 2" Security Bolts
- (5) 5/16" ID, 1.25" OD Washers
- (1) Security Bit (3/16")
- (2) 20MM Spacers
- (3) 25MM Spacers
- $(5) \frac{1}{4}$ "-20 x 1" hex bolts
- $(5) \frac{1}{4}$ "-20 nyloc nuts
- (10) 1/4" ID small washers

# 4" Rough Country Lift

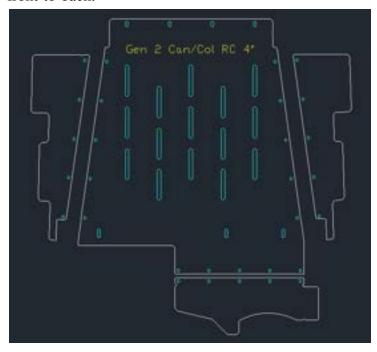
- (4) 5/16"-18 Rivnuts (1 extra is supplied)
- (3) 5/16"-18 x 2" Security Bolts
- (3) 5/16" ID, 1.25" OD Washers
- (1) Security Bit (3/16")
- (3) 25MM Spacers
- (15) 5/16"-18 x 1" hex bolts
- (15) 5/16"-18 nyloc nuts



### **4" ROUGH COUNTRY LIFTS:**

If you have a 4" Rough Country lift, your installation will be easier.

You will want to first assemble your cat guard. The left and right side panels, and rear panel, all bolt on with 5/16"-18 x 1" bolts & nyloc nuts. Be sure to point all bolts upward. We've provided a diagram below of our 2D drawing. Keep in mind that the cat guard angles upward from front-to-back.



There are 4 bolts on the crossmember between the front control arms. You will want to mount the cat guard to those bolts, then mark your rear holes on the transmission crossmember.

Then remove the guard, drill the marked holes, install rivet nuts, then reinstall your cat guard using blue thread locker on all bolt threads.

Please follow the instructions below keeping in mind that you already have the mounting holes on the front crossmember.



### **Steps:**

- 1.) Begin by raising your Chevy/GMC. Place it securely on jack stands. Or alternatively use a vehicle lift. The vehicle must be high enough for you to use your rivnut installation tool.
- 2.) This cat guard needs support at one end to get the holes correctly aligned. We recommend help from another person.

It also requires a rivet nut installation tool (rivnut tool for short) with a 5/16"-18 mandrel. We recommend a heavy duty one with handles squeezed with both hands.

3.) Begin by removing the transfer case shield (if you have one). It is located on the rear crossmember that supports the transmission. If you don't have one, move to the next step. It is held on by three bolts with 15mm heads.





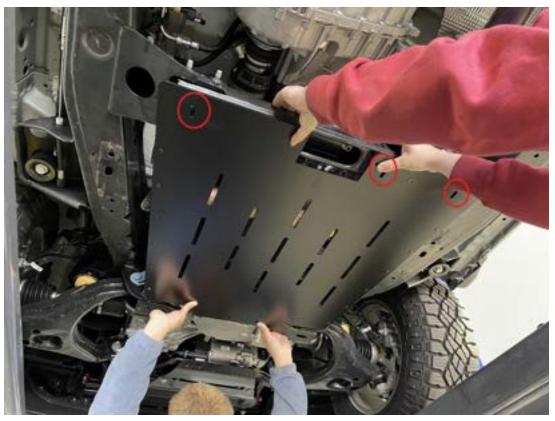




4.) With help from another person, hold the catalytic converter guard up against the vehicle. It will mount to the front cross member just behind/under the engine, and to the rear crossmember supporting the transmission.

You will want to align it so the front edge of the guard sits flush with the front edge of the front cross member. Use the 20mm spacers between the guard and frame while holding it up to provide spacing.

Align the back edge of the guard with the rear crossmember. It needs to be positioned in the middle (left to right) of the crossmember. Use a marker to mark the slots onto the crossmember. NOTE: The mid-slot will not be used on older vehicles as the crossmember is different.









5.) At the center of the slots just marked onto the crossmember, drill 17/32" holes (there are only two holes for older models). Then install the 5/16" rivnuts into those holes. If you need to learn how to use a rivnut tool, use online resources.













6.) If you have a transfer case shield, reinstall it.



- 7.) Loosely install your catalytic converter guard onto the rear crossmember using the supplied 5/16" x 2" long security bolts. A security bit was supplied that fits into a  $\frac{1}{4}$ " socket. Use 25mm spacers between the guard, and frame.
  - Then mark the front two slots onto the front crossmember.
  - Then remove the guard and drill 17/32" holes in the center of the slots, and then install 5/16" rivnuts.











8.) While the cat guard is off of the vehicle, securely install your rear shield onto the top of the cat guard. It uses FIVE  $\frac{1}{4}$ "-20 bolts and nyloc nuts. The  $\frac{1}{4}$ " small washers go under the heads of the bolts and nuts. The bolts are inserted from the bottom.







- 9.) You can now install your cat guard. Leave all bolts only hand tight. All 5 (or 4 on older models) slots use 5/16" x 2" security bolts with 5/16" washers under the heads.
  - The front crossmember uses 20mm spacers between the frame and cat guard.
  - The rear crossmember uses 25mm spacers between the frame and cat guard.

Once it is installed, remove one bolt and apply blue threadlocker onto the threads, then reinstall it securely. Do this to all of the security bolts one at a time. Let the threadlocker sit for at least 30-60 minutes before driving the vehicle.

# FRONT:

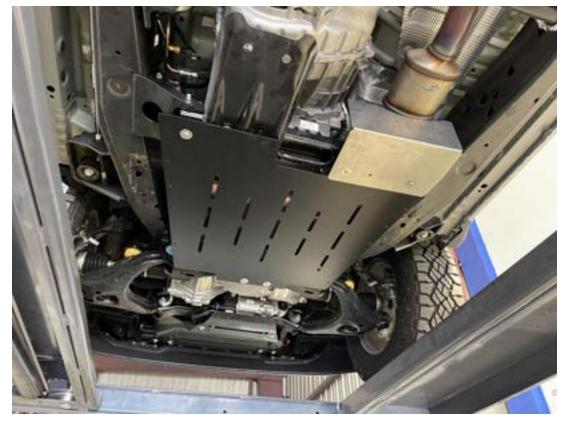






REAR: Note that ours may look a little bit different as we are always improving products.







10.) Double check all bolts are secure and you are done! Feel free to tag us online using #FSPerformanceEngineering or #FSPEinc. If you have any questions don't hesitate to contact us.

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THANK YOU:)