



FS Performance Engineering

Chevy / GMC Express / Savanna Catalytic Converter Installation Instructions (2010-2020)

Professional Installation Recommended as Always - A car LIFT is HIGHLY Recommended

Tools Needed:

- Ratchet Wrench(es)
- ¼" Socket
- ½" Socket & Wrench
- ⅜" Drill Bit
- 17/32" Drill Bit (for the 5/16" Rivnuts) - a step drill works wonders as well
- Drill (wear safety protection when drilling)
- Rivnut (threaded rivet nut) Installation Tool (a heavy duty one is necessary) with a 5/16"-18 mandrel
- Helper
- Marker / Pencil / Pointy Tool / Sharpie
- 2 to 4 C-clamps

What's Supplied:

CARGO VAN:

- (1) Left Cat Guard
- (1) Right Cat Guard
- (4) Interior Bolt-on Shields
- (1) Right Rear L Shield
- (1) Right Rear Shield with Pipe Cut Out

CUTAWAY:

- (1) Left Cat Guard
- (1) Right Cat Guard
- (1) Right Rear L Shield
- (1) Right Rear Shield with Pipe Cut Out
- (1) Right Rear Rectangular Shield
- (2) ½" Thick Spacers
- (4) Interior Bolt-on Shields

Hardware:

BAG 1

- (8) 5/16"-18 x 2" SECURITY Bolts
- (14) 5/16" x 1.25" Washers
- (1) Security Bit (3/16")

BAG 2

- (31 if cutaway, 35 cargo) 5/16"-18 x 1" Hex Head Bolts
- (31 if cutaway, 35 cargo) 5/16"-18 Nyloc Nuts

BAG 3

- (10) 5/16"-18 LONG Rivet Nuts (a few are extra)
- (6) 5mm Spacers
- (6) 5/16"-18 Nyloc Nuts

BAG/ITEM 4

- (1) Threadlocker



← Threaded Rivet Nut (Rivnut) Help

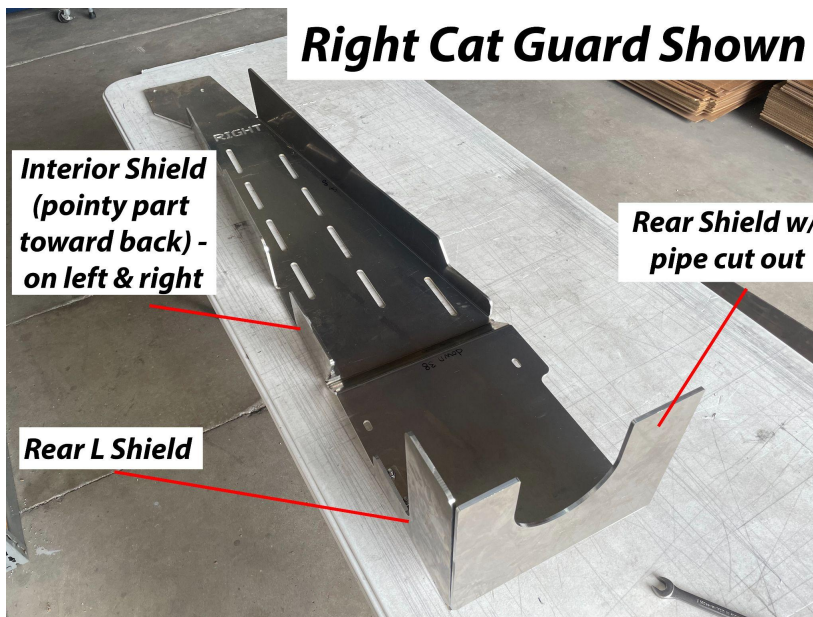
Steps:

1.) Begin by raising your Chevy/GMC. Place it securely on jack stands. Or alternatively use a vehicle lift (highly recommended). The vehicle must be high enough for you to use your rivet nut installation tool (rivnut tool).

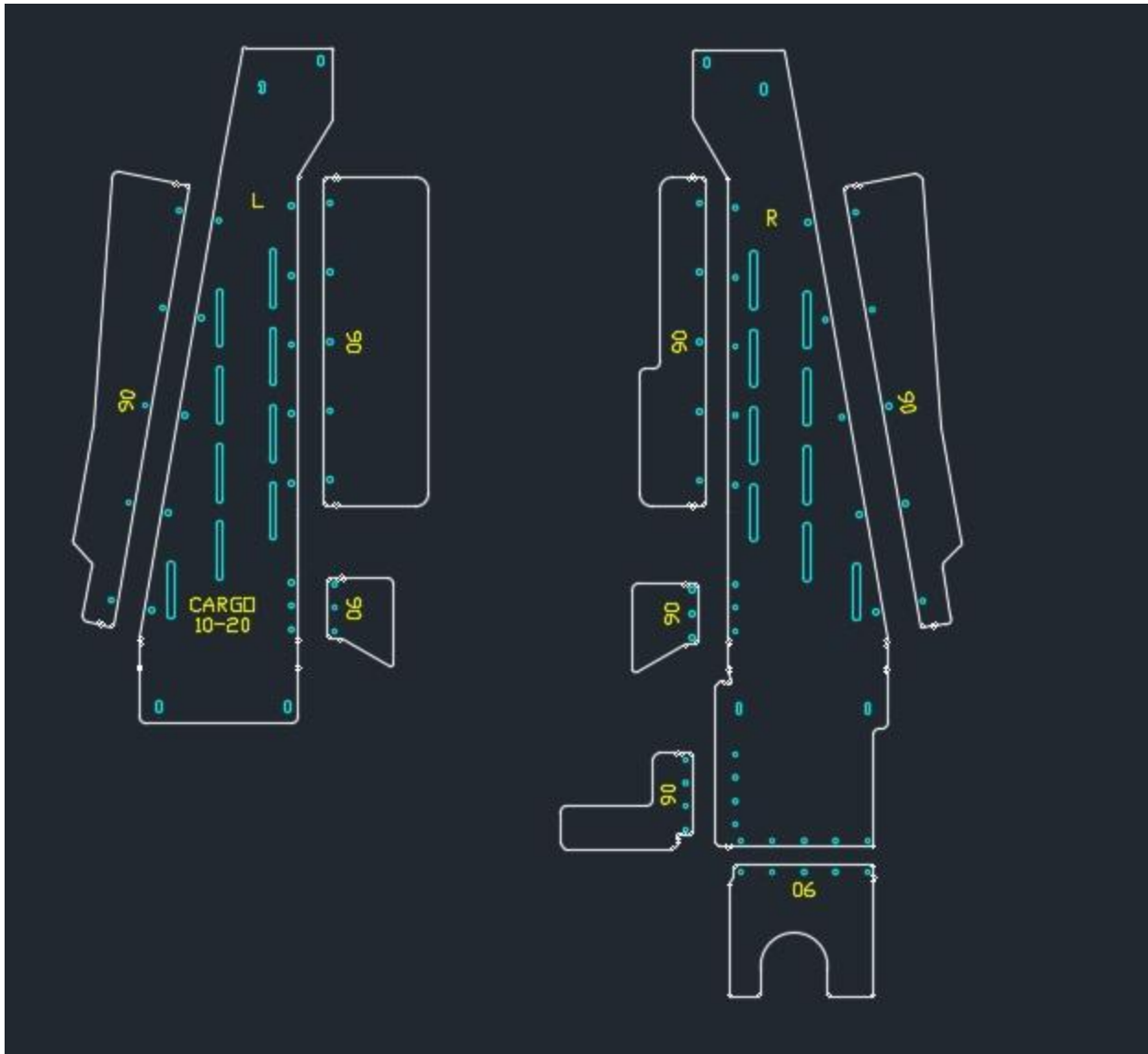
2.) Assemble your catalytic converter guards. Shown is the right side on a cargo van. The next page shows a drawing indicating where the pieces should be bolted.

- All bolt-on pieces sit on top with bolts pointed upward and nuts on top.
- Cargo Van: The left side only has an interior pointy shield.
- Cutaway Van: No interior shield, but there is a right rear rectangular shield.

CARGO VAN SHIELD SHOWN:



EXAMPLE PICTURE OF ASSEMBLY:



3.) Hold your guards up against the frame (left goes on the left, and vice versa).

The guard should sit on the frame at the front and on the crossmember that supports the transmission at the rear.

The outer edges should match with the outer edges of the frame and crossmember. Use C-clamps at the front and rear of each cat guard. Adjust the cat guards forward / backward so the mounting slots align with the frame.

Note: Check that there is no interference with the exhaust system. If the guard is positioned correctly there shouldn't be ->

- CARGO VAN: 4.8L the guard will be close to the exhaust - this is corrected later with 5mm spacers.
- CUTAWAY: The guard will touch the exhaust. This is corrected with 1/2" spacing plates later for the front mounting points.

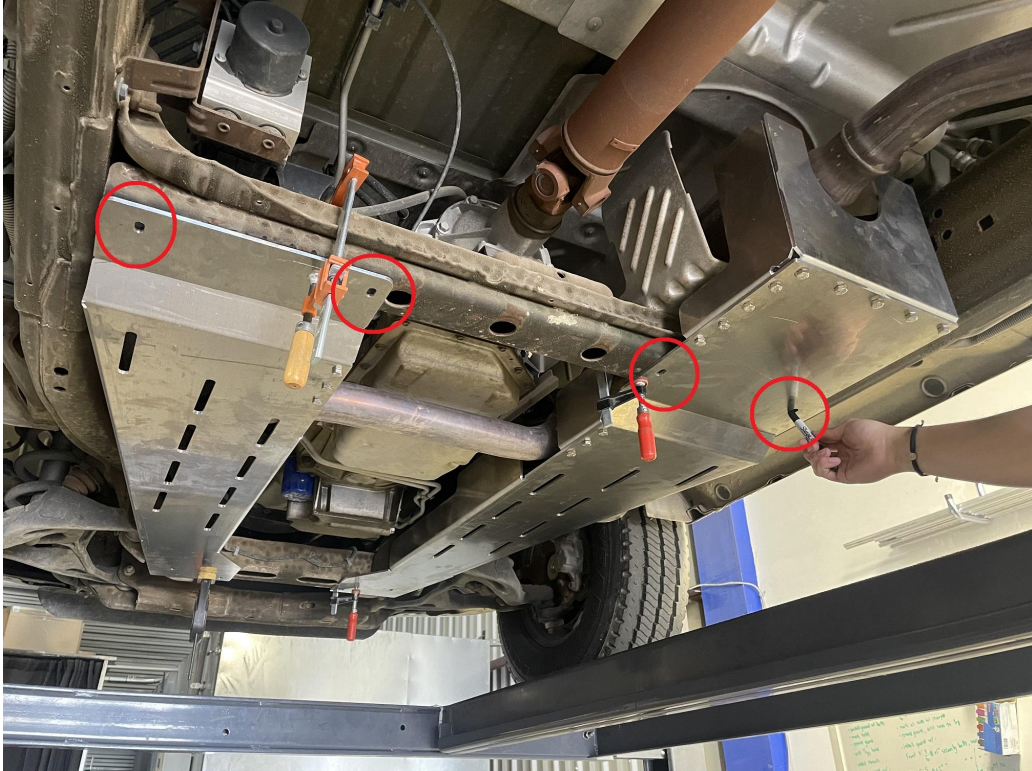
SEE BOTH PICTURES





4.) Mark the 8 slots in the cat guard onto the frame.





5.) The cat guards can be installed in two ways. You can install the 5/16"-18 rivnuts into all of the holes for mounting, OR you can install rivnuts into the CENTER REAR TWO holes and then bolt/nut combination into the remaining six holes.

Remove the cat guards and drill 17/32" holes into the center of the slots.

- If you want to install rivnuts into all of the holes, there will be 8.
- If you want to install rivnuts and nut/bolt combo -> you can drill 17/32" holes at the rear two center holes, then 3/8" holes at the remaining 6.

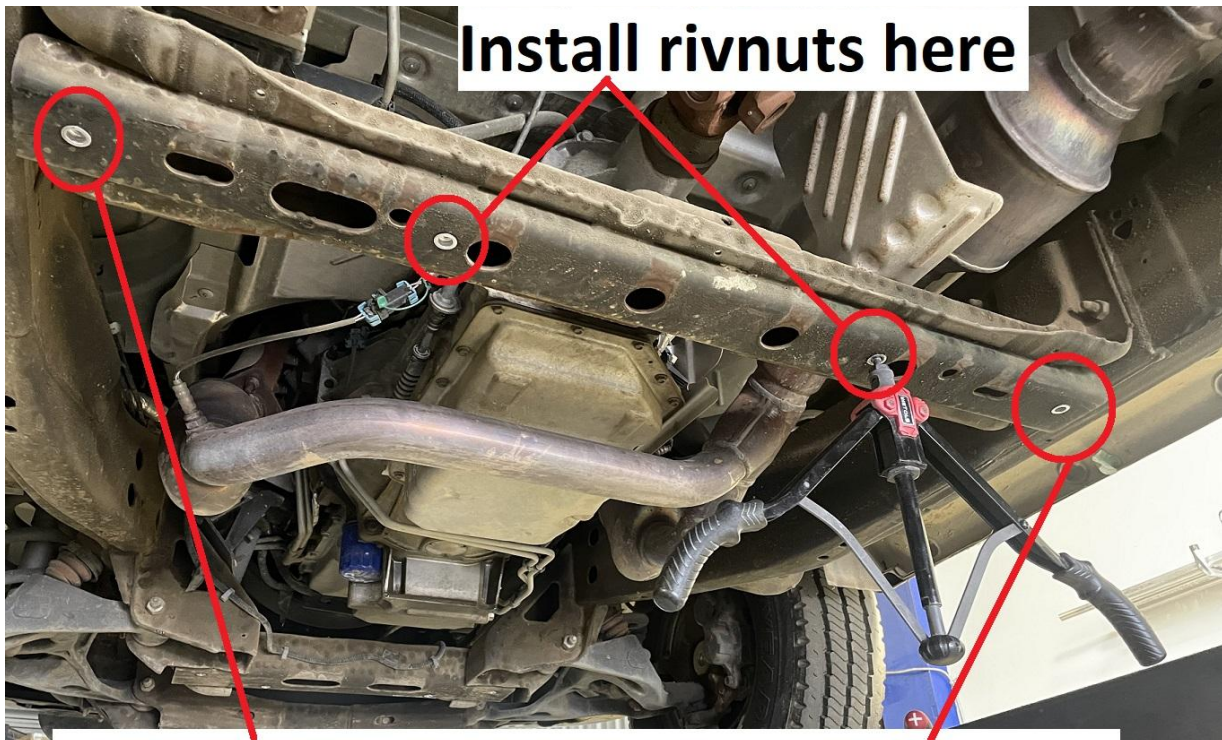
When drilling holes we recommend using a step drill (looks like a Christmas tree) to build up to that size.

If you are unfamiliar with rivnuts please see the QR code on the first page and/or use online resources. A rivnut tool is necessary for installation.





All 4 holes at the front can use rivnuts... OR you can drill 3/8" holes and install a nut/bolt combo.



Install rivnuts here

Install rivnuts OR drill 3/8" holes for nut/bolt combo

6.) Install your cat guards. Use the supplied 5/16"-18 x 2" Security bolts and washers. A security bit was provided that fits into a 1/4" socket.

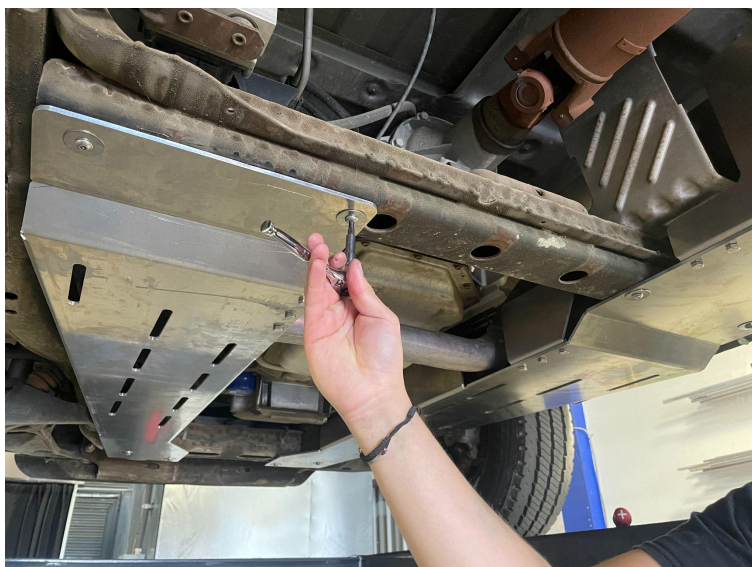
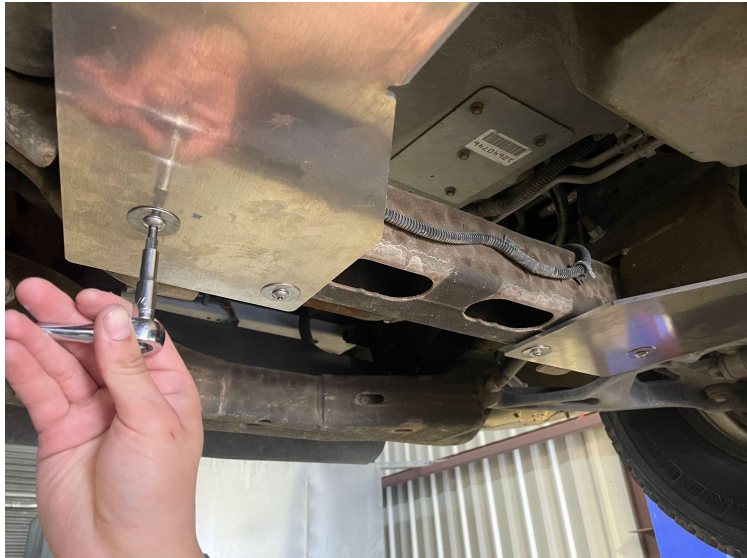
If you're installing into the rivnuts, **use threadlocker on the bolts** - do not tighten so hard that you strip the bolts.

If you're installing bolts/nuts, use washers on top and bottom (above the bolt head, & under the nut). Securely tighten but don't strip the bolts.

NOTE 1 CARGO: The front most 4 holes use 5MM spacers between the cat guard and frame.

NOTE 2 CARGO: On the 4.8L the exhaust hangs lower, the rear left 2 holes use 5MM spacers between the cat guard and frame.

NOTE 3 CUTAWAY: The mounting points at the front need the 1/2" spacers between the cat guard, and frame so there is no exhaust contact.





7.) 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 :)