



FS Performance Engineering

Chevy Silverado / GMC Sierra 1500 (Gen 4) + Yukon/XL/Tahoe/Suburban (Gen 4)

Catalytic Converter Guard V8 Gasoline Installation Instructions

Professional Installation Is Recommended

Tools Needed:

- ½” Wrench
- ¼” Socket for Security Bit
- ½” Socket
- 17mm Socket
- Ratchet Wrench
- Drill
- 25/64” Drill Bit (for the Rivnuts)
- Rivnut Insert Tool (a heavy duty one is necessary)
- Helper
- White Marker (we used the tip of a ¼” drill bit)

What’s Supplied:

Parts:

(1) Silverado/GMC 1500 Cat Guard

Hardware:

(8) ¼”-20 Rivnuts (some are extra)

(2) ¼”-20 x 1” Security Bolts

(4) ¼”-20 x 2” Security Bolts

(6) ¼”x1” Washers

(1) Security Bit (5/32”)

(4) 25mm Metal Spacers

(2) 5/16”-18 x 1” Hex Head Bolts

(4) 5/16” ID, 1.25” OD Washers

(2) 5/16”-18 Nuts

(2) 5/16”-18 Nyloc Nuts

(1) Blue Threadlocker



← Threaded Rivet Nut (Rivnut) Help

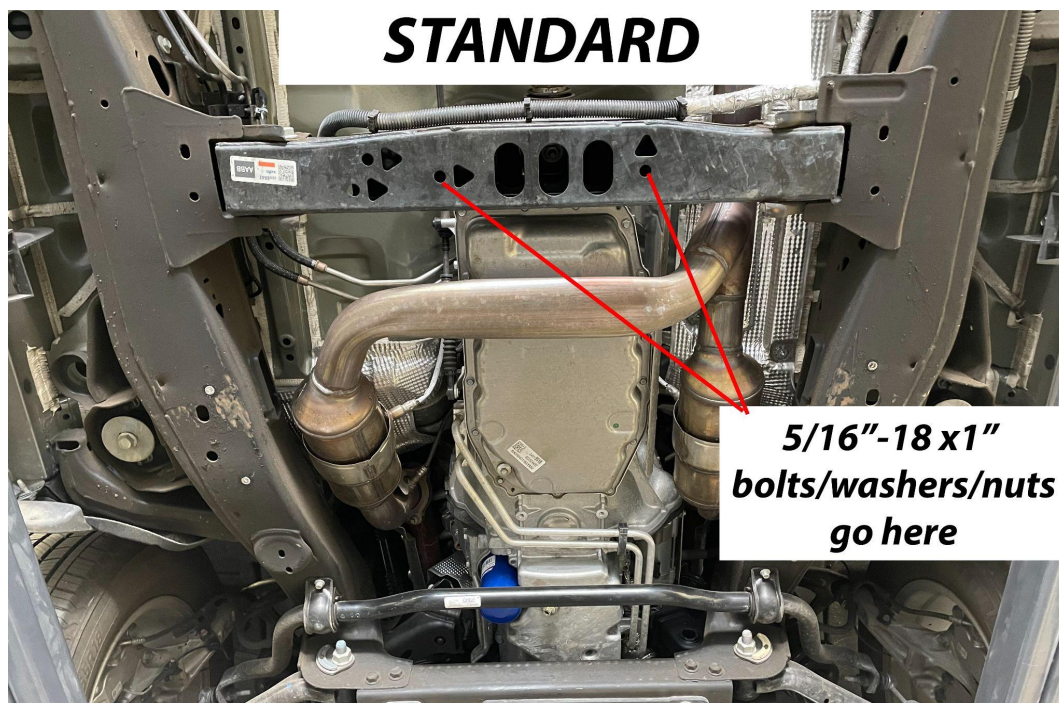
Steps:

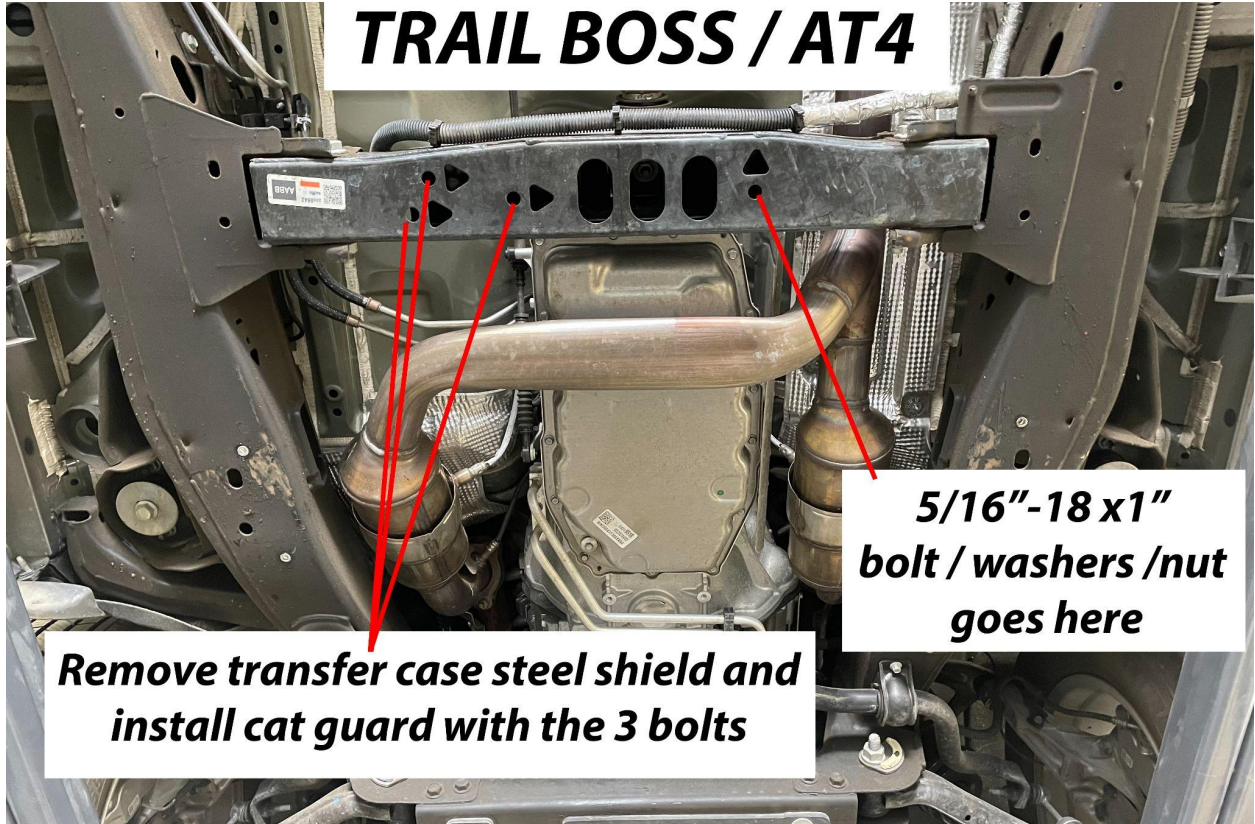
- 1.) Begin by raising your truck. We used a 4 post drive-on lift. A lift is recommended to gain full access to the underside of your truck.
- 2.) In this installation there will be 2 different applications described:
 - Trucks with no transfer case (we'll call these trucks **STANDARD**)
 - Trucks WITH a transfer case steel shield (we'll call these trucks **TRAIL BOSS / AT4**) - even if yours isn't a Trailboss/AT4 that's OK, all that matters here is the transfer case steel shield presence (we made these instructions awhile ago!)

The difference between the two is that some applications come from the factory with a steel shield for the transfer case. If you have a steel transfer case shield you will be installing the cat guard above the steel shield.

Identify the subframe bar located just behind the catalytic converters. Install your cat guard here. **STANDARD:** Use 5/16"-18 x 1" bolts with washers (place washers under the head and nut) and NON-nyloc nuts to install the cat guard. To make things easier feel free to point them downward. Hand tighten with the bolts in the middle of the slots.

TRAIL BOSS / AT4: Use a 17mm socket to remove the 3 bolts holding the steel shield that protects the transfer case. Install your cat guard hand tight into these three holes in the middle of the slots. Use a 5/16"-18 x 1" bolt with washers (place washers under the head and nut) and NON-nyloc nuts on the right side slot. To make things easier feel free to point the bolt downward. Keep the transfer case steel shield off for now.





The **STANDARD** is shown here in the next pictures. **TRAIL BOSS / AT4** is the same process but the most rearward left hole will be omitted because it will be covered by the transfer case steel shield.





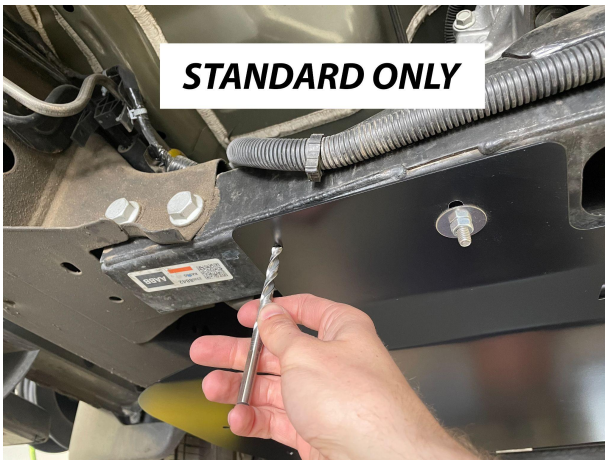


3.) Have your helper hold up the front of the cat guard. Assure the cat guard is installed upright with the upward folds tucked just behind the oil filter & above the sway bar. Position the cat guard squarely with the frame. Use your white marker (we used the tip of a ¼” drill bit) to mark through the cat guard holes onto the frame.

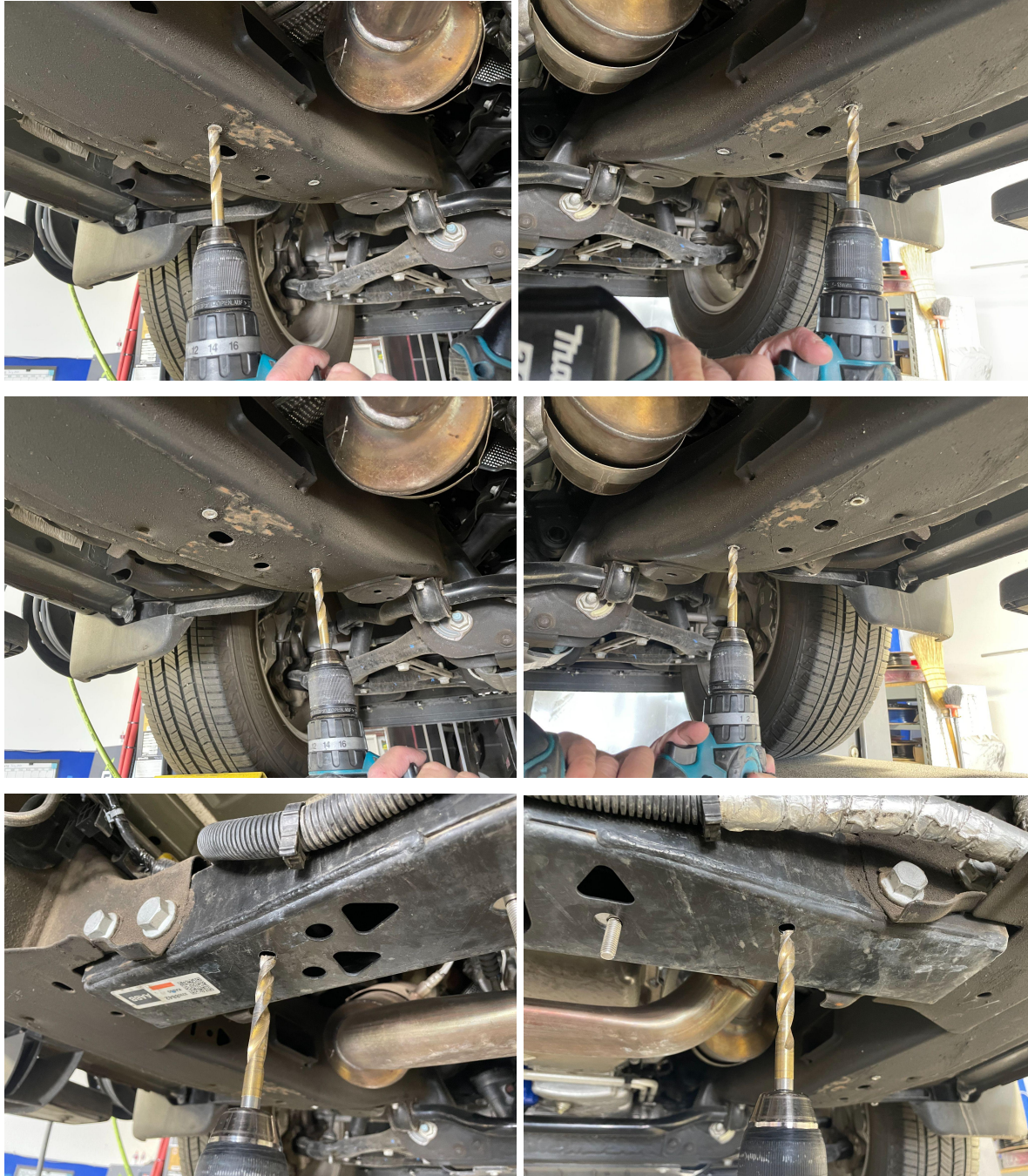
STANDARD: You will be marking 6 holes.

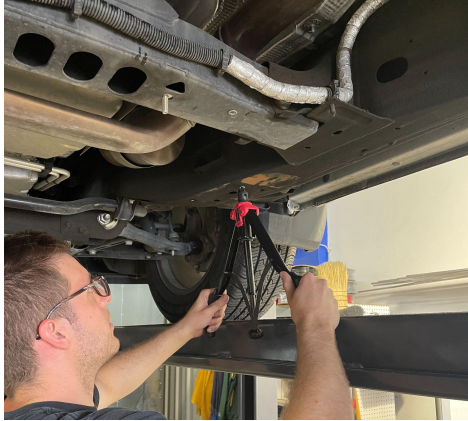
TRAIL BOSS / AT4: You will be marking 5 holes. The 6th hole located at the most rearward left will be omitted because the transfer case steel shield covers it once installed.



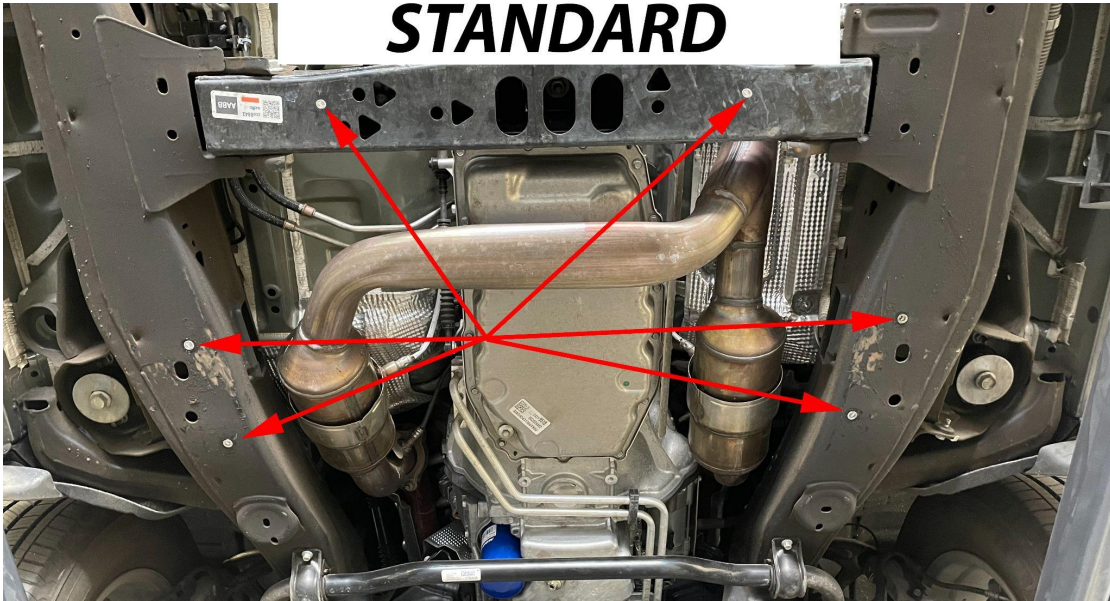


4.) Remove the cat guard. At the locations just marked drill holes using a 25/64" drill. Then install the supplied 1/4"-20 rivnuts (**6 ON STANDARD, 5 ON TRAIL BOSS / AT4**). We recommend a heavy duty rivnut installation tool. Mounting rivnuts to steel requires a lot of torque so a small installation tool may not be sufficient

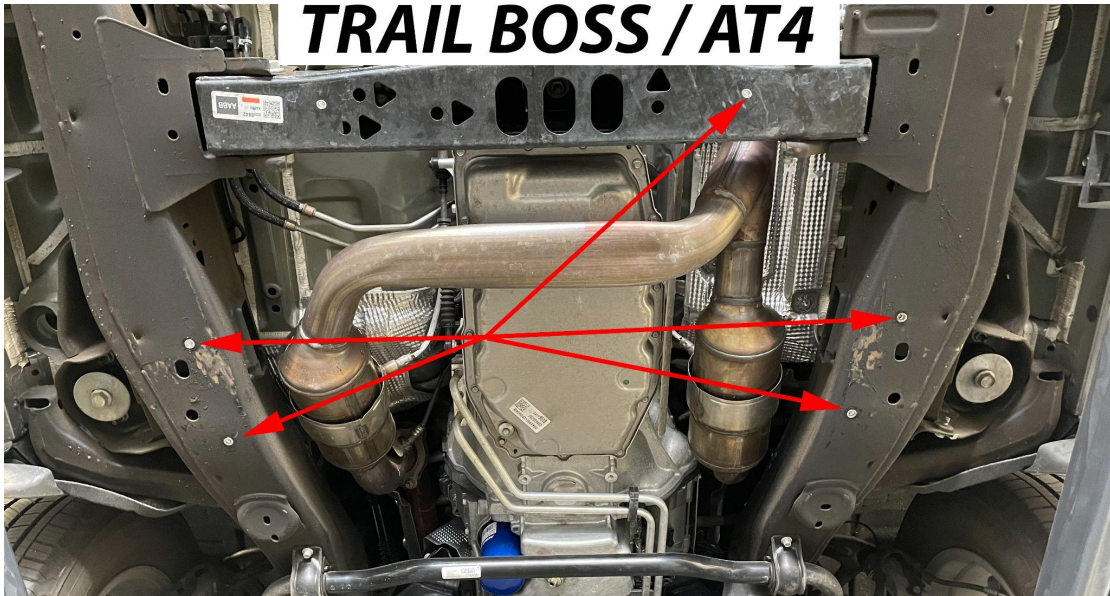




STANDARD



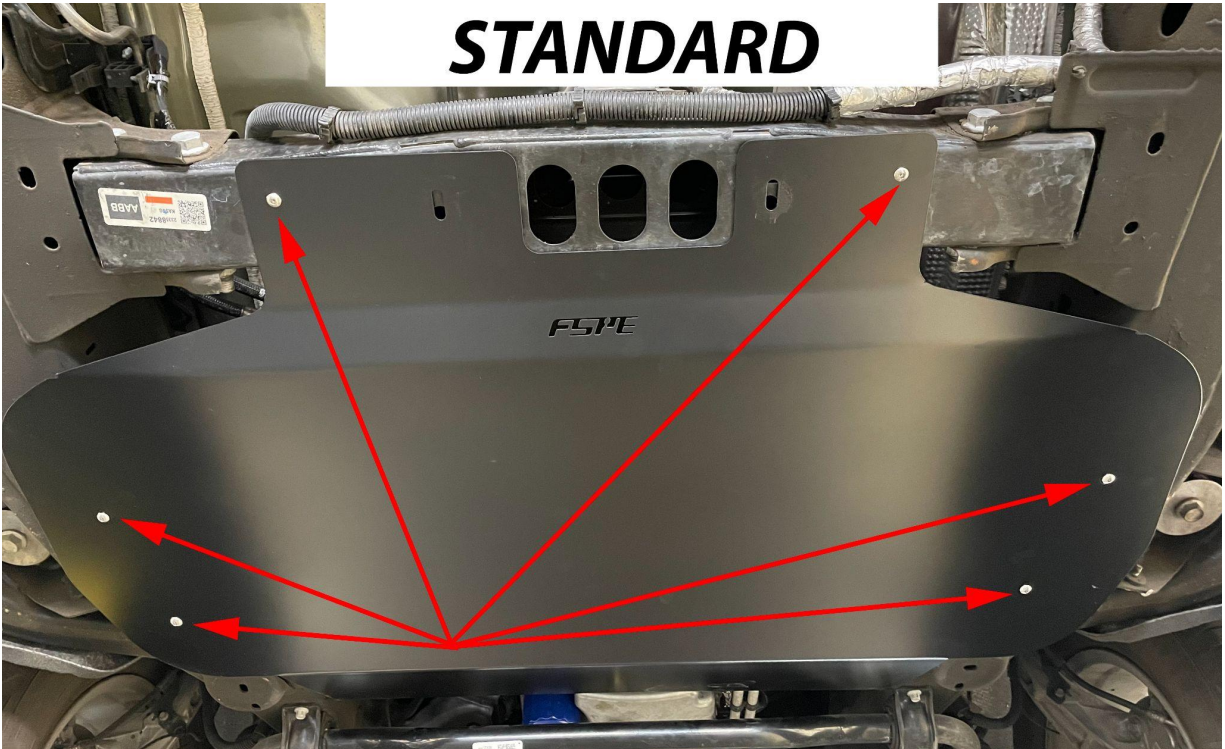
TRAIL BOSS / AT4

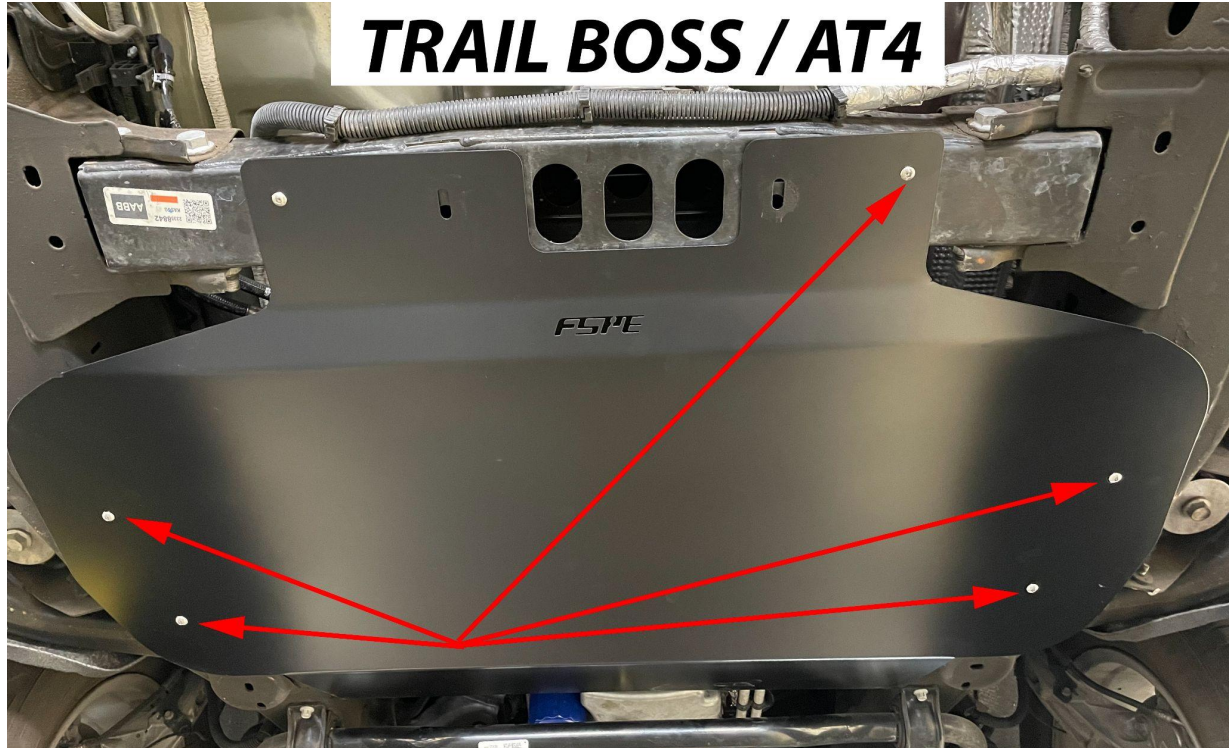




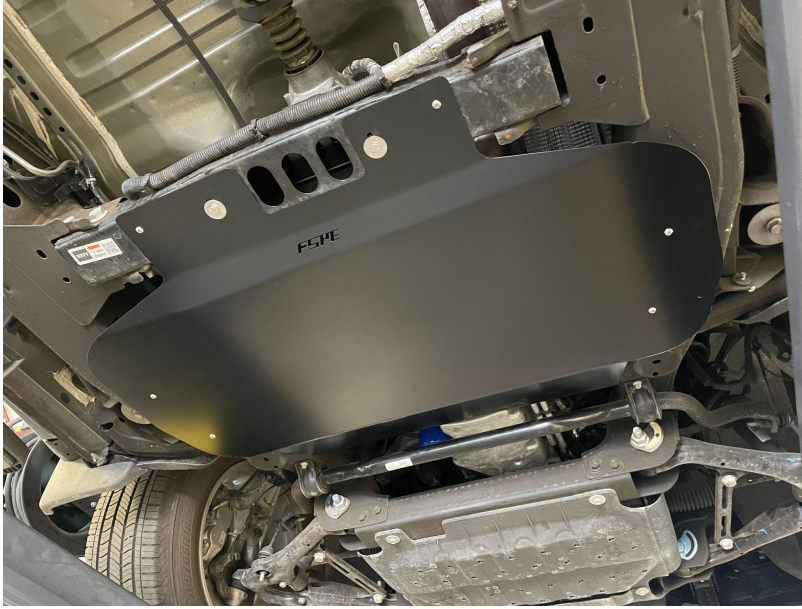
5.) Install your cat guard using the 1/4"-20 x 1" security bolts (2 bolts for STANDARD, 1 for TRAIL BOSS / AT4) at the subframe (toward back), and the 1/4"-20 x 2" long security bolts at the 4 locations on the actual frame - these 4 longer bolts use 25mm spacers between the cat guard and frame!!! Hand tighten.

NOTE: We now supply 1/4"x1" washers, and blue thread locker for these bolts. Please use under the heads of the bolts.





- 6.) Install your 5-16"-18 x 1" bolts/washers/NYLOC nuts through the slot(s) at the rear in the subframe (**2 bolts for STANDARD, 1 bolt for TRAIL BOSS / AT4**). Point bolt(s) upward.
STANDARD: Securely tighten all security bolts and 5/16" bolts/nuts.
TRAIL BOSS / AT4: Install your transfer case steel shield underneath the cat guard. Securely tighten these bolts, as well as the 5/16" bolt/nut and security bolts.
ONLY STANDARD IS SHOWN IN THE FOLLOWING PICTURE:



7.) Enjoy your new catalytic converter guard/shield! Feel free to tag us online using #FSPEinc or #FSPerformanceEngineering. If you have any questions feel free to contact us.

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THANK YOU :)