

### **FS Performance Engineering**

Transit 150 (2014-2019) Catalytic Converter Guard Installation Instructions Professional Installation Recommended as Always - A car LIFT is HIGHLY Recommended

#### **Tools Needed:**

• Ratchet Wrench(es) - ½" Wrench • ½" Socket - 3/8" Wrench • ½" Socket - 3/8" Drill Bit

- Drill • 5/16" Socket

• 12mm Socket - Pen/Sharpie/Marker, a long pencil or something similar

• 13mm Socket

#### What's Supplied:

#### Parts:

- (1) Forward Guard
- (1) Rear Guard
- (2) Bolt-on Shields for rear guard
- (1) Fender Guard

#### **Hardware:**

#### FORWARD GUARD

### <u>BAG 1</u> Staple to this bag—----> <u>BAG 2</u>

(2) 5/16"-18 x 1.5" SECURITY Bolts (2) M8-1.25 x 40mm HEX Bolts

(4) 5/16" x 1.25" Washers (2) 5/16" x 1.25" Washers

(1) Blue Threadlocker (2) 5/16"-18 Nyloc Nuts

#### **REAR GUARD**

#### <u>BAG 1</u> Staple to this bag—----- <u>BAG 2(to fasten bolt-on shields)</u>

(4) 5/16-18 x 1" SECURITY Bolts

(3) 5/16-18 x 2" SECURITY Bolts

(12) 5/16" x 1.25" Washers

(7) 5/16"-18 Nyloc Nuts

(2) 5/16"-18 Nuts (to help with installation)

(3) 25mm Spacers

#### FENDER GUARD

#### BAG 1

- (1) (10-24) x 1" Bolt
- (1) 10-24 Nyloc Nut
- (1) 5/16"-18 x 1" Bolt
- (2) 5/16"x1.25" Washers
- (1) 5/16"-18 Nyloc Nut

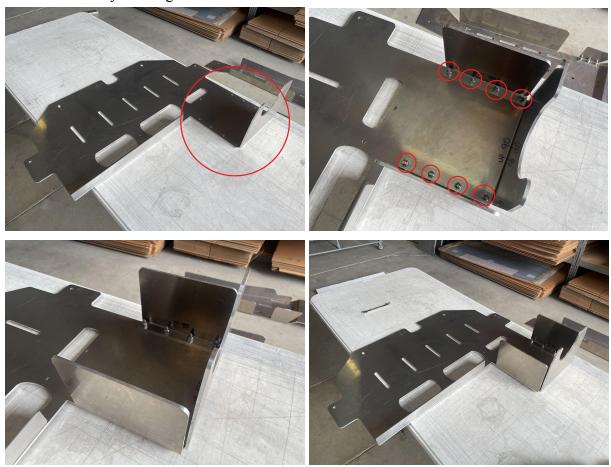
(8) 5/16"-18 x 1" HEX Bolts

(8) 5/16"-18 Nyloc Nuts



### **Steps:**

- 1.) Begin by raising your T-150. Place it securely on jack stands. Or alternatively use a vehicle lift (highly recommended).
- 2.) Assemble your rear catalytic converter guard. The two bolt-on pieces sit on top with bolts pointed upward and nuts on top these pieces are symmetrical so they can go on either side. You're essentially creating a box.

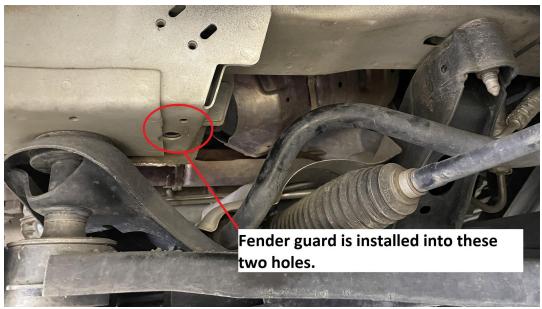




3.) You are now ready to install your cat guard 1 piece at a time. Let's start with the fender guard; a small box-like piece.

The fender guard utilizes a 5/16" bolt and 10-24 bolt. It is meant to discourage intruders from entering from the fender. The fender guard will be installed onto the passenger side (right side) of the van. Turn the wheel all the way to the left to gain access.

Here is the area we are trying to block, we've circled where this piece gets installed:



To gain access to the inside of these holes, the vehicle must be lifted. Access is through a large slot in the frame on the other side of the frame rail. See below.





Install your fender guard as shown. Use a 5/16" bolt in the big hole pointed upward. Use the larger washers on top and bottom, and a 5/16" nyloc nut on top. A  $\frac{1}{2}$ " socket and wrench will be needed.

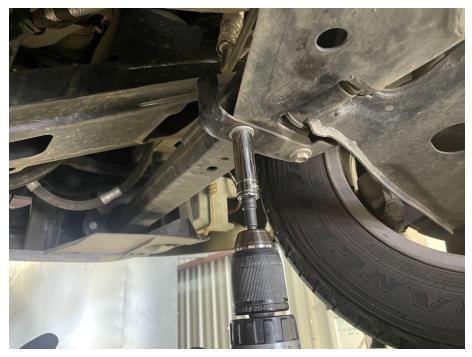
In the small hole use the 10-24 bolt and nyloc nut. A 5/16" socket and  $\frac{3}{8}$ " wrench will be needed. Tighten securely.



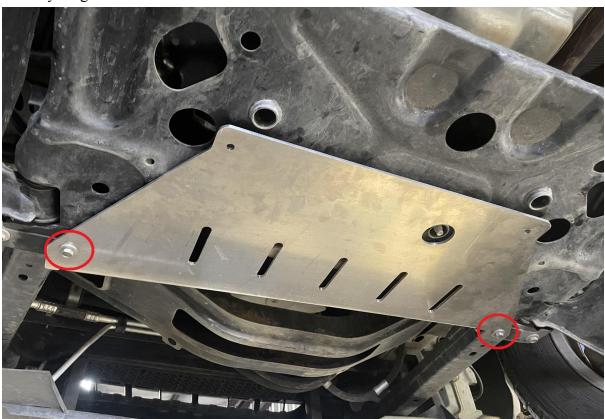
4.) Let's install the front guard. Remove the two bolts shown in the frame using a 13mm wrench. These are found under the engine. Don't remove the outer bolts.







5.) Install your front guard into these two holes with the bolts just removed. The top side of the front guard will need to be slipped past the upper part of the frame. Make sure it is not interfering with anything.



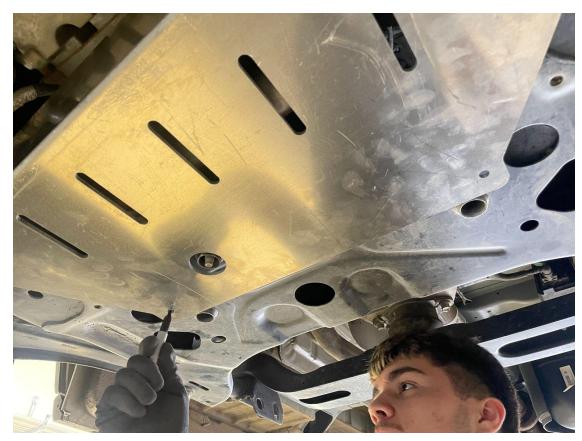




6.) Mark the two holes in the front guard onto the frame, then remove the guard and drill 3/8" holes where you marked.









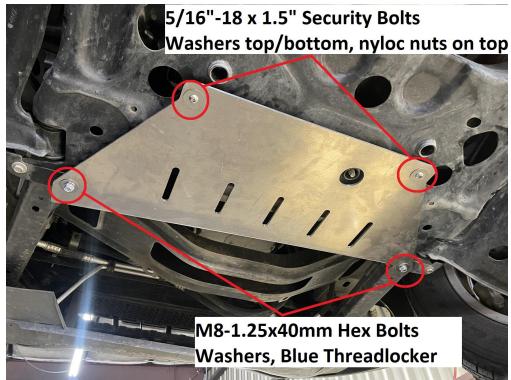




7.) The front cat guard can now be installed. The forward two OEM threaded holes use the M8-1.25 x 40mm hex bolts + washers. Use blue threadlocker on the threads.

The rear two holes use 5/16"- $18 \times 1.5$ " security bolts with washers on top and bottom, and nyloc nuts on top. The security bolts use the supplied bit that fits into a  $\frac{1}{4}$ " socket. Holding a wrench on top will be tricky, but that's what we want! Tighten securely.

NOTE:Do not overtighten security bolts as they can be stripped.





8.) The last piece to the cat guard is the rear guard. It can be installed in 4 OEM holes but 3 more must be drilled.

Install the guard in the two holes shown using 5/16"- $18 \times 1$ " security bolts and 5/16"- $18 \times 1$ 0 nuts (no need for nyloc nuts yet). Point bolts upward and hand tighten. Feel free to use washers on top and bottom.





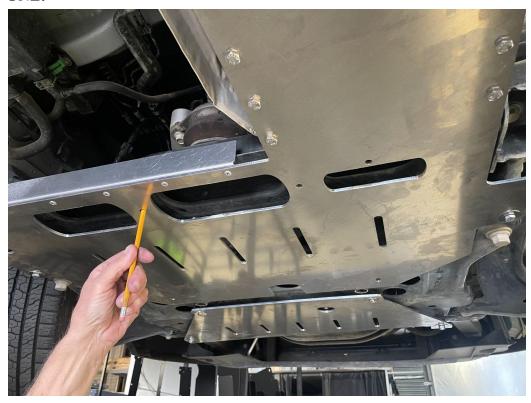








9.) Use a long, pointy marker or pencil to mark these three holes onto the frame: **ONE:** 



## TWO:





# THREE:

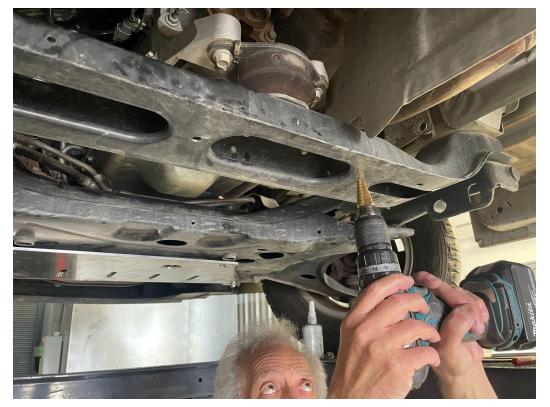


10.) Remove the guard and drill  $\frac{3}{8}$ " holes through the frame where the three holes were marked. **ONE:** 





# TWO:



## THREE:



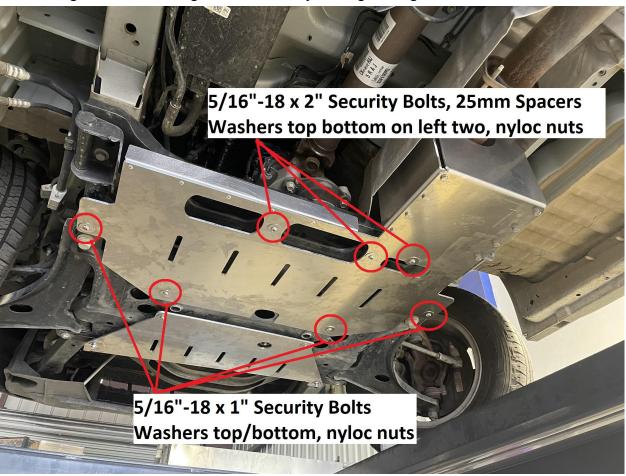


11.) Your rear guard can now be installed. The holes from the previous step use 5/16"- $18 \times 2$ " long security bolts. All three use 25mm spacers between the frame and guard. The right-most hole uses no washers, while the two left-most holes use 5/16"x1.25" washers on bottom & in the frame, and all three use nyloc nuts on top.

The four most-forward holes in the guard use 5/16"-18 x 1" long security bolts, washers on bottom and in the frame, and nyloc nuts.

Use the supplied security bit with a 1/4" socket. Tighten securely, but not so much to strip the bolts.

Assure the guard isn't touching the exhaust and you are good to go!





12.) 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.



PHONE: 661-809-0954 EMAIL: costas@fspeinc.com

THANK YOU:)