



## 4010 – 2007-2022, MERCEDES SPRINTER 4X4, ENGINE SKID PLATE

Version 4.2

### General Notes

- For the most up to date and current instructions, please visit our website at [www.vancompass.com](http://www.vancompass.com)
- Please read all instructions thoroughly before starting installing Van Compass products.
- This skid plate can be installed with the vehicle on the ground, sitting under its own weight.
- This is a bolt on skid plate that can be installed with simple hand tools on 2007-2018 NCV3 models. No drilling is required.
- 2 small tabs need to be cut for fitment on 2019-2022 VS30 models. See step 5 for information.
- This skid plate can be completely removed, allowing the vehicle to be returned back to stock configuration if desired.
- The vehicle's engine oil can be changed with the skid plate installed.

### Parts List

#### 4010 – 2007-2022, MERCEDES SPRINTER 4X4, ENGINE SKID PLATE

- |                    |   |
|--------------------|---|
| • (1) 401001-02    | 4X4 ENGINE SKID PLATE, MAIN PLATE, ¼" 6061 AL   |
| • (2) 401001-03    | REAR CROSS MEMBER SPACER WASHER                 |
| • (2) 401001-04    | REAR CROSS MEMBER SPACER, 2.875" TALL           |
| • (2) 401001-05    | FRONT CROSS MEMBER SPACER, 2.165" TALL          |
| • (1) 401001-06    | 4X4 ENGINE SKID PLATE, FRONT PLATE, 3/16" STEEL |
| • (2) CC5-6-42     | 3/8-16 UNC, GR5 CARRIAGE BOLT, 4.50" LONG       |
| • (2) CC5-6-32     | 3/8-16 UNC, GR5 CARRIAGE BOLT, 3.50" LONG       |
| • (4) NNC-7        | 3/8-16 UNC NYLOCK NUT                           |
| • (4) WF8-6        | 3/8" GR8 FLAT WASHER                            |
| • (4) CC5-7-12     | 7/16-14 UNC, GR5 CARRIAGE BOLT, 1.50" LONG      |
| • (4) NNC-7        | 7/16-14 UNC NYLOCK NUT                          |
| • (4) WF8-7        | 7/16" GR8 FLAT WASHER                           |
| • (4) FM08-1.25-25 | M8-1.25 X 25MM LONG, FLAT HEAD SOCKET CAP SCREW |

## Tools Needed

- Quality Jack
  - Optional – Automobile lift and screw jack
- Simple hand tools:
  - Torque Wrench
  - 5mm allen wrench
  - Basic wrench and socket set:
    - Metric sizes: 13mm
    - SAE sizes: 9/16", 5/8"
- 4-1/2" angle grinder with metal cut off wheel (This is needed for 2019+ VS30 models only)

## Approximate Installation Time

- Professional shop with automotive lift: 30 min – 1 hour
- Driveway install with floor jack: 1-2 hours

## Installation

- 1) Note; this skid plate system can be installed with the vehicle on the ground. It does not need to be raised up for installation.
- 2) Begin by removing the 4 bolts securing the front sheet metal guard behind the front bumper valence. Use a 13mm wrench to remove the bolts.

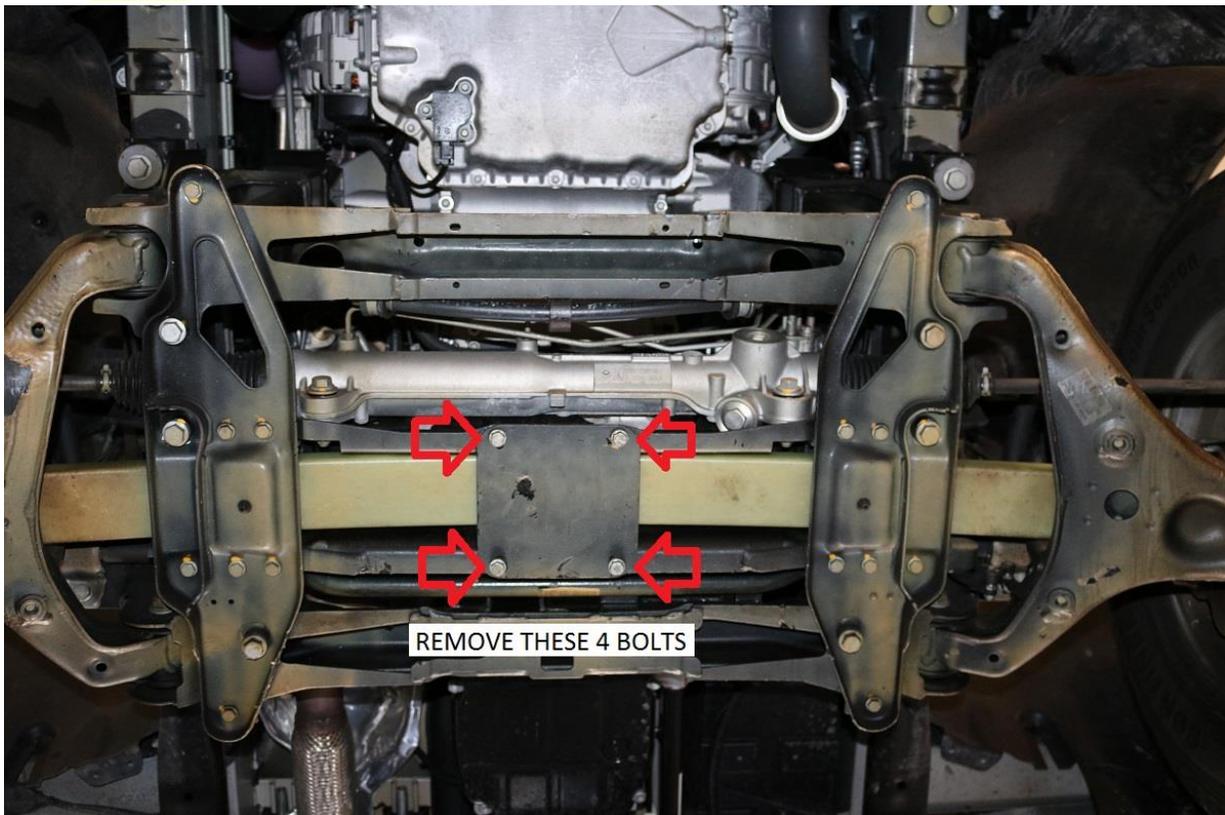


3) Remove the front sheet metal guard from the vehicle.



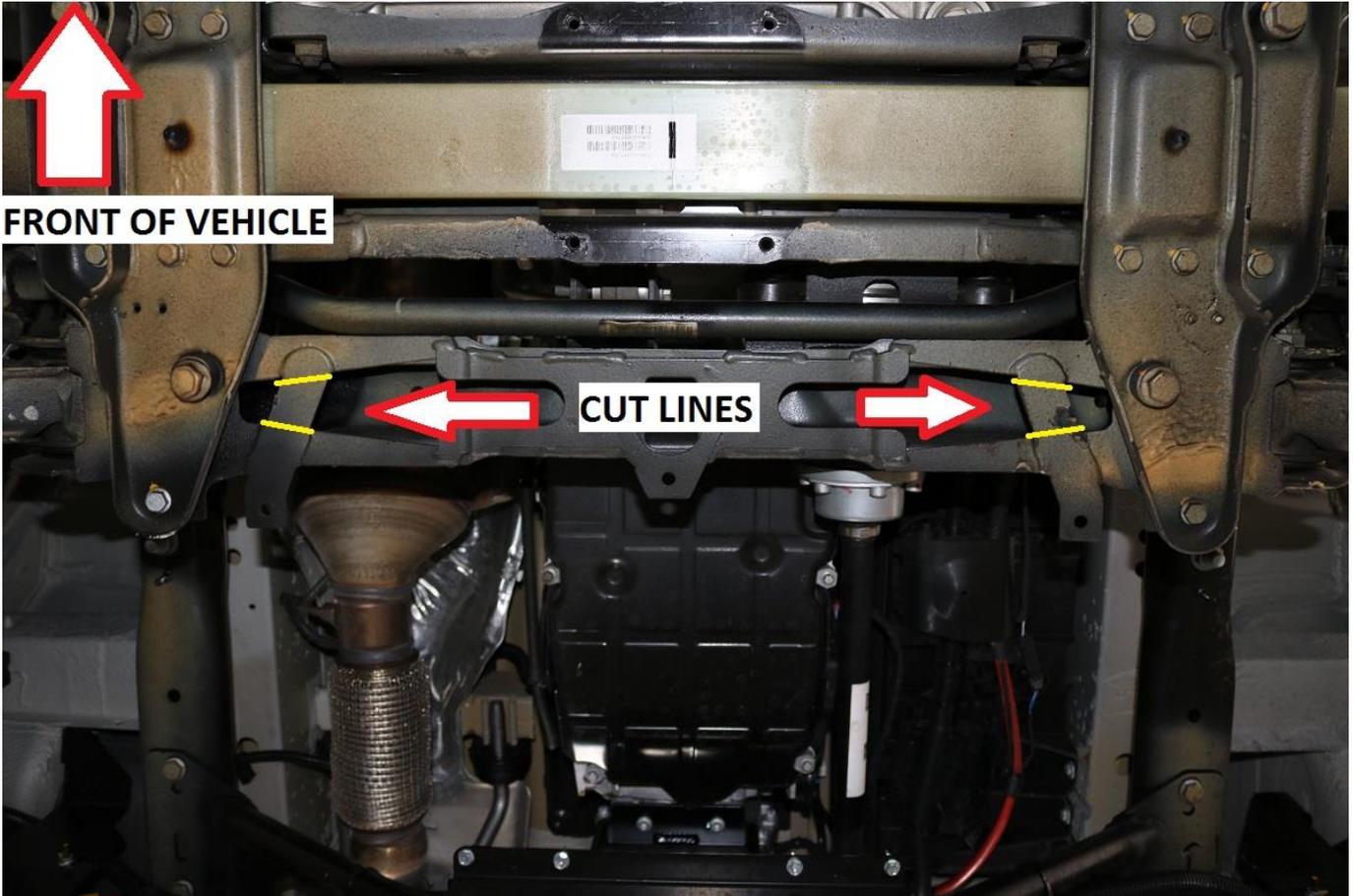
4) Remove the leaf spring skid plate by removing the 4 bolts securing it to the vehicle. Use a 13mm socket or wrench for removal.

a. **\*\*NOTE\*\*** Retain these 4 bolts as they will be re-used to attach the steel front plate to the chassis.

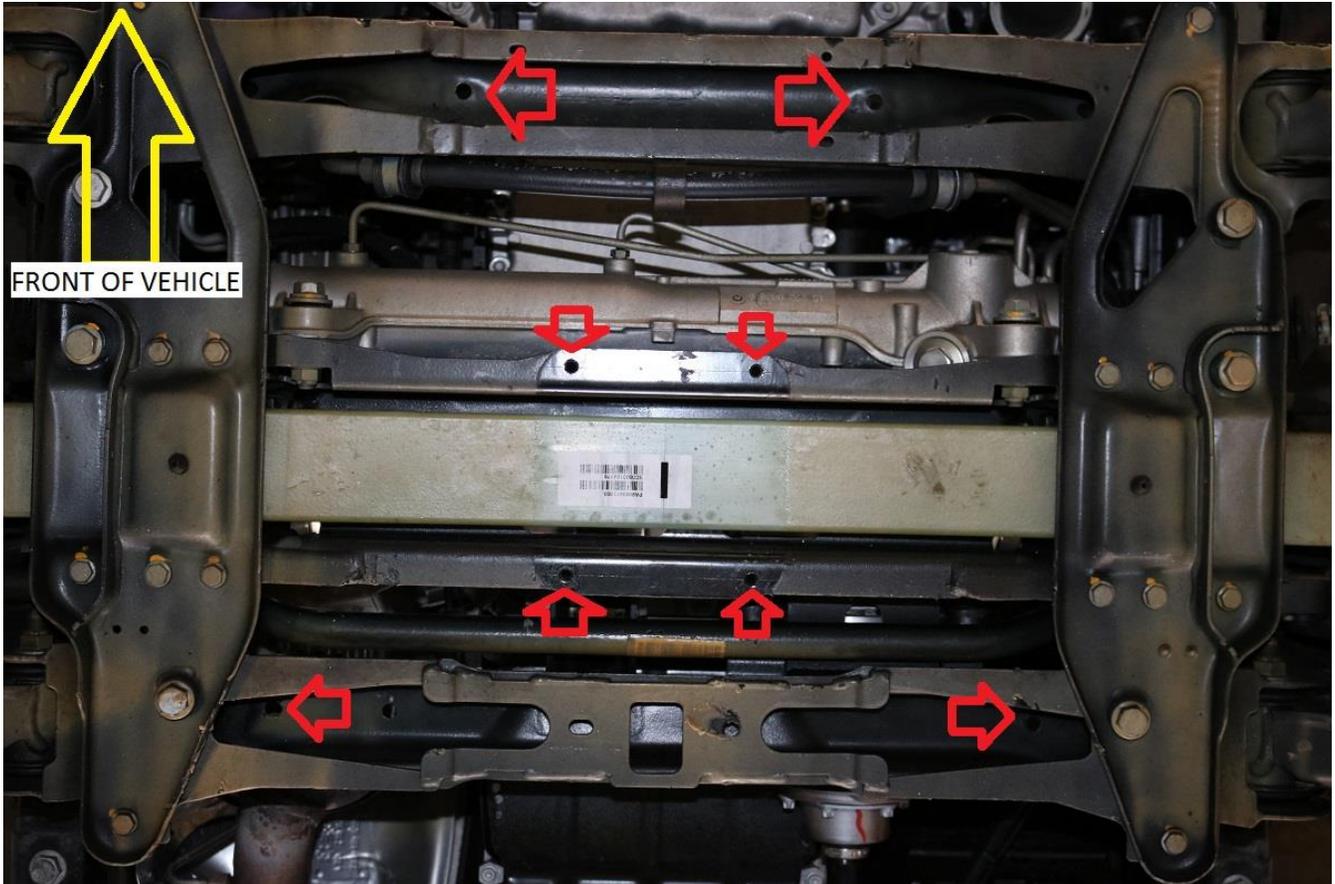


5) If installing skid plate on a 2007-2018 NCV3 model, skip to step 6.

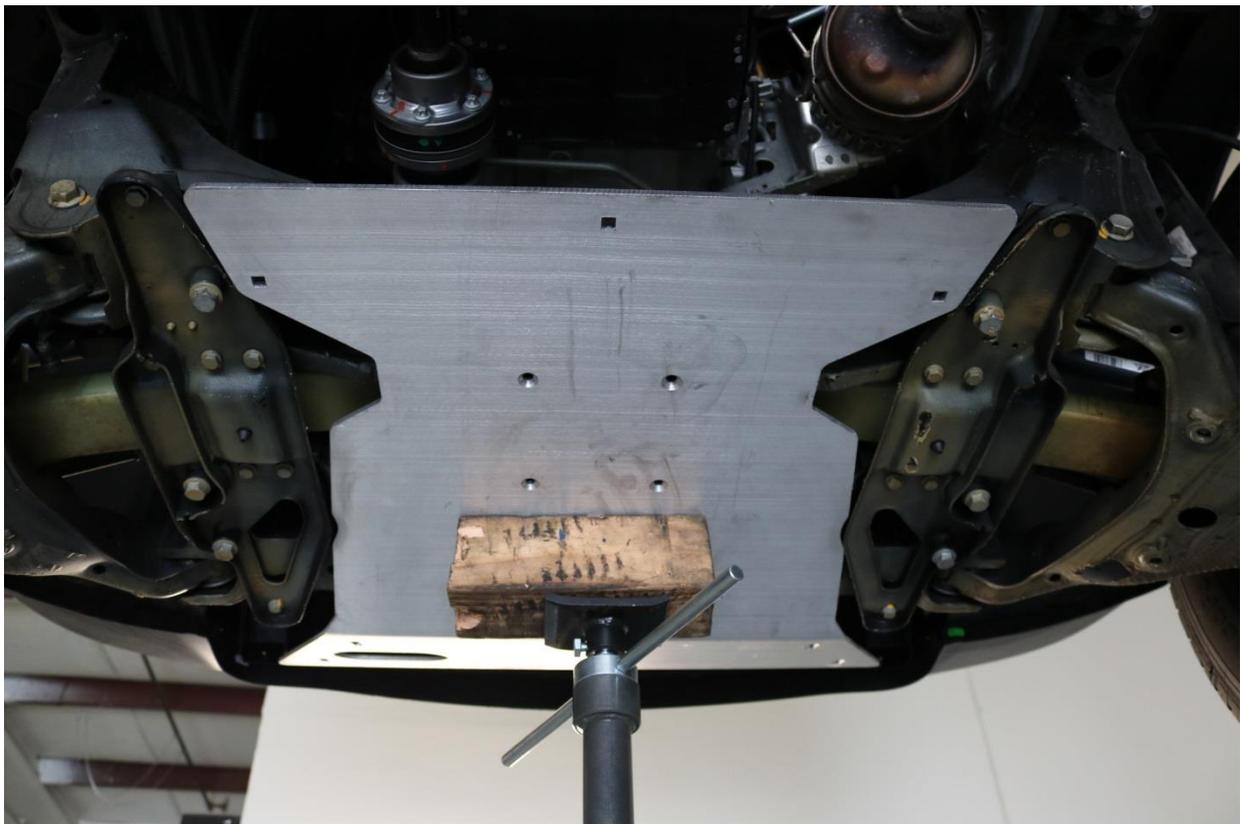
- a. On 2019-2022 VS30 4x4 models, two small tabs need to be cut to access the mounting holes for the skid plate.
- b. Use a 4-1/2" angle grinder with metal cut off wheel or similar tool to cut the tabs in the location denoted in the image below.
- c. Deburr any rough edges with a sander or round file and touch up any exposed areas of metal with paint to prevent chassis corrosion.



6) The main 401001-02 aluminum skid plate attaches to the vehicle via the factory holes noted in the image below. Take note of which holes will be utilized.



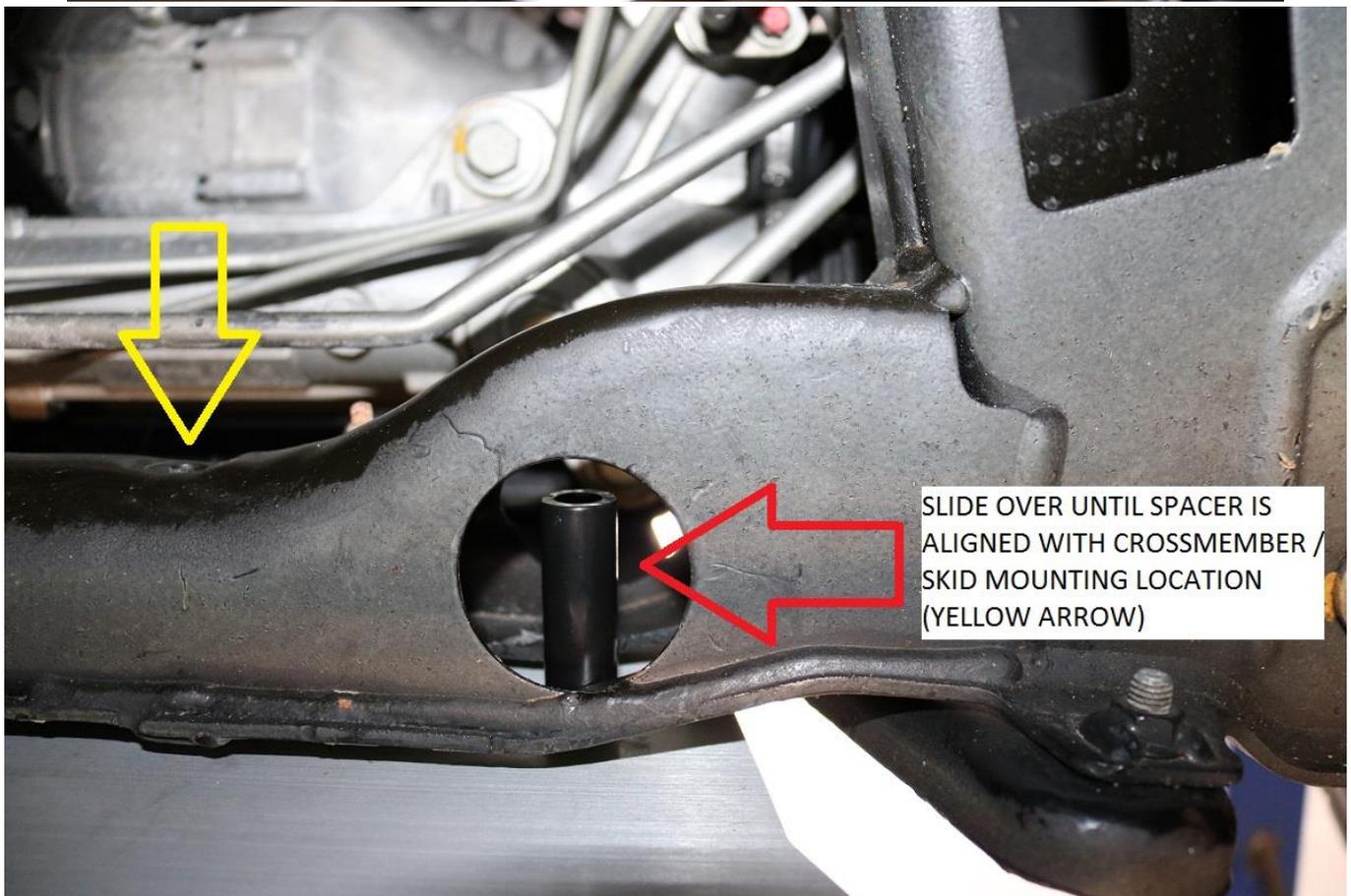
7) Raise the main aluminum skid plate into position. Try not to cover any of the mounting holes when raising it in place. Use a floor jack to lift into position.



- 8) Align the 4 center counter sunk holes with the holes in the chassis which retained the factory leaf spring skid plate removed in step 4.
- Install the M8-1.25 x 25MM long flat head socket cap screws included with the kit to locate the skid plate in place.
  - Use a 5mm allen for installation. Start all 4 flat head socket cap screws about 4 full revolution, allowing the skid plate to still move slightly and hand down from the chassis a bit. This will make it easier to install the remaining hardware and spacers.
  - Remove the floor jack supporting the skid as the center bolts will now hold it in place.



- 9) Install the 401001-05 front spacers. This is the shorter spacer. Install by placing the spacer in the access hole in the front cross member and sliding it over to line up with the mounting hole in the skid plate and cross member.



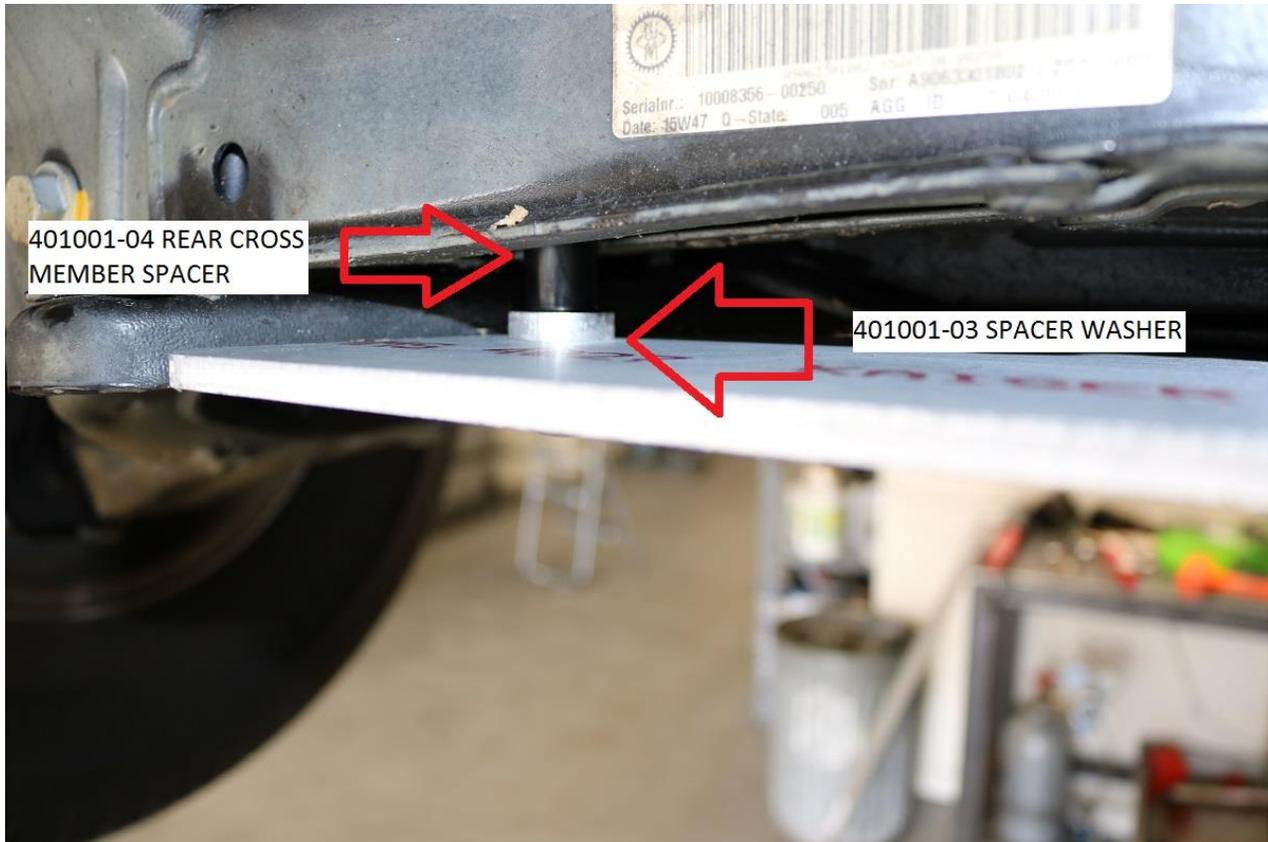
10) Install the 3/8-16 x 3.5" long carriage bolts through the spacer. Use a washer under the nylock nut. Just start the nut. Do not tighten at this time. See image below.



11) **\*\*NOTE\*\*** If installing 4011 Transmission / Transfer case skid plate, refer to those instructions at this time.

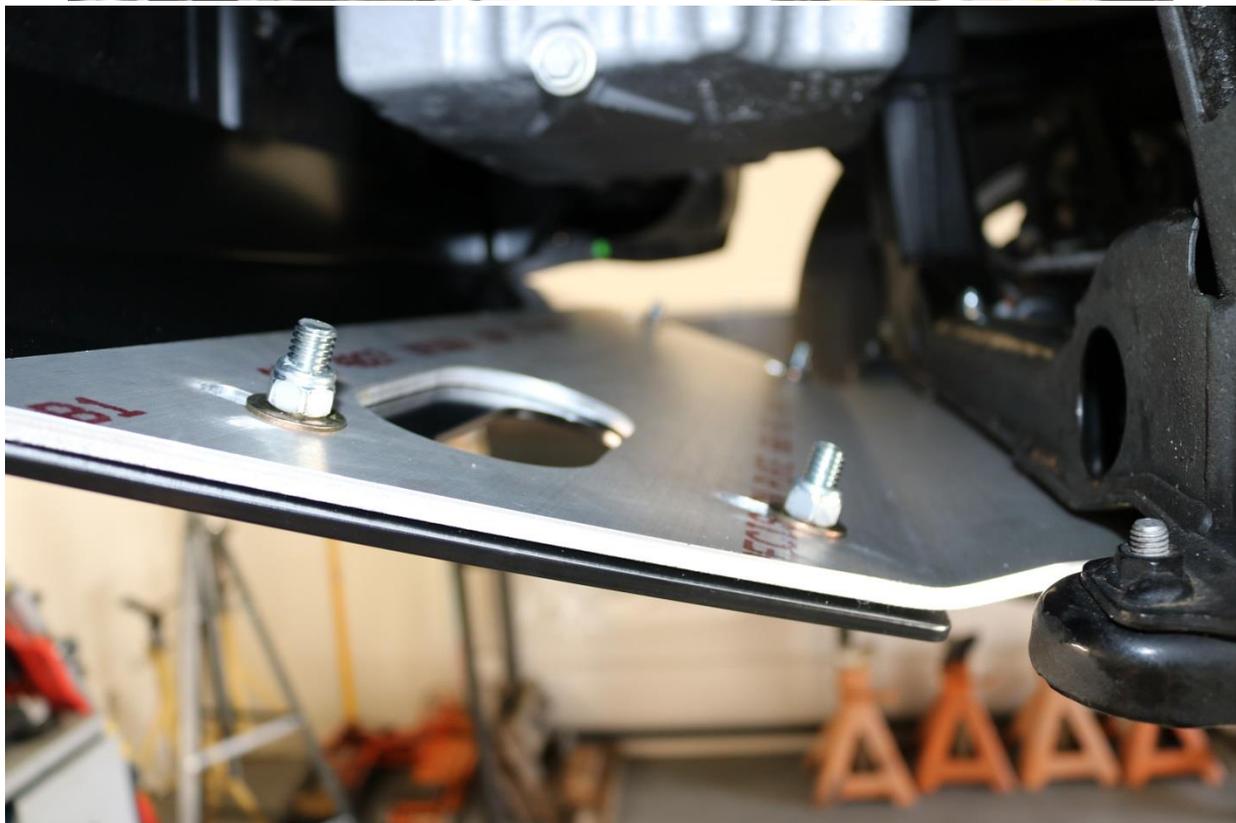
12) Install the 401001-04 rear spacers on top of the 401001-03 aluminum spacer washer. Align the spacers with the mounting hole in the skid plate / factory cross member.

a. Install the 3/8-16 x 4.5" long carriage bolts through the spacer. Use a washer under the nylock nut. Again, just start the nut. Do not tighten at this time. See image below.





- 14) Raise the front steel plate into place and install the 7/16-14 x 1.50" long carriage bolts included in the kit. Use a washer under the nut and start the nut. Install all four bolts.
- Once all four bolts are started, tighten the nylock nuts until there is about 1/8" (3-4mm) between the steel front plate and the aluminum main plate.
  - Note; this front plate can be awkward to install individually. A second person makes installation much easier.



- 15) The steel front plate can now be attached to the front of the vehicle behind the front bumper valence where the metal guard was removed in steps 2 & 3.
- 16) Align the front mounting holes and attach the front plate to the vehicle using the factory leaf spring skid plate bolts removed in step 4.



- 17) Snug the front mounting bolts. Use a 13mm wrench and tighten. It will be difficult to fit a torque wrench in there so we recommend snugging bolts, then giving an additional 1/8 to 1/4 turn for final installation.
  - a. For reference, torque spec for the front mounting bolts is 22 ft-lbs (30 N.m)
- 18) Torque all hardware in the following order:
  - a. M8-1.25 x 25mm flat head socket cap screws – 15 ft-lbs (20 N.m)
  - b. 3/8-16 Carriage bolts – 20 ft-lbs (27 N.m)
  - c. 7/16-14 Carriage bolts – 50 ft-lbs (68 N.m)
- 19) Double check all torque specs after 100 miles of driving.

### Installation is Complete

### RELEASE OF LIABILITY

I, the customer, do hereby release and forever discharge Van Compass LLC, their agents, employees, successors and assigns, and their respective heirs, personal representatives, affiliates, successors and assigns, and any and all persons, firms or corporations liable or who might be claimed to be liable, whether or not herein named, from any and all claims, demands, damages, actions, causes of action or suits of any kind or nature whatsoever, whether known or unknown, fixed or contingent, which I now have or may hereafter have or claim to have, as a result of or in any way relating to the following: Parts sold & installed by Van Compass LLC or parts sold & installed by end-user; any parts sold online, any parts sold online or installed by a re-seller, any parts installed by an installation shop.

It is understood and agreed that this payment is made and received in full and complete settlement and satisfaction of the aforesaid actions, causes of action, claims and demands; that this Release contains the entire agreement between the parties; and that the terms of this Agreement are contractual and not merely a recital. Furthermore, this Release shall be binding upon the undersigned, and his respective heirs, executors, administrators, personal representatives, successors and assigns. This Release shall be subject to and governed by the laws of the State of Idaho.

### **PRODUCT SAFETY WARNING:**

Van Compass LLC strongly recommends the installation of products be done by a certified mechanic. If this does not occur, be certain the person(s) installing the product read, understand and follow all instructions and warnings pertaining to the application before installation. Do not add, alter, or fabricate any factory or aftermarket parts to increase vehicle height over the intended height of the Van Compass LLC product purchased. Mixing component brands is not recommended.

Installation of suspension lift kits or any other lifting kits or devices will raise the center of gravity. For this reason, Van Compass LLC urges that extreme caution be used when encountering driving conditions which may cause vehicle imbalance. Furthermore, the driver's field of vision and judgment will not be as good due to the height of the vehicle. Due to the installation of larger tires, the speedometer will read slower than the actual speed being traveled and more distance will be required to stop the vehicle. It is the owner's responsibility to caution and warn any potential driver of the vehicle about these driving and handling conditions. Van Compass LLC will not be held liable or responsible for damages or personal injuries resulting from the use of lifting

devices and or related products. The tires and rims should be changed to sufficiently increase the vehicle's total overall width and stability to help accommodate lifting devices.

Van Compass LLC aftermarket suspension products and accessories modify a vehicle for uses which exceed conditions anticipated by the vehicle manufacturer. The uses include the high performance demands required during off-road. These conditions vary in the degree of extremity and cannot be controlled by the vehicle or product manufacturer. If the components within the suspension system or accessories become worn due to frequent and/or extreme use, the safety and reliability of the vehicle is at risk. The maintenance of aftermarket equipment to ensure the vehicle occupants safety is entirely your responsibility. Do not purchase Van Compass LLC products unless you are willing to accept this responsibility. Do not install any Van Compass LLC suspension products or accessories unless you feel competent at installing the product without causing present or future injury to yourself or other vehicle occupants; seek an authorized installation center.

Most states have some type of law limiting vehicle height. The amount of lift allowed, and how the lift can be achieved, varies greatly. Several states offer exemptions for farm and commercial registered vehicles. It is the vehicle owner's responsibility to check state and local laws to ensure that their vehicle will be in compliance. Van Compass LLC reserves the right to make changes in design, materials and specifications as deemed necessary without prior notice and without assuming obligation to modify any product previously manufactured. Obligation or liabilities will not be assumed with respect to similar products previously advertised.

This Release of Liability and Product Safety Warning has been read and fully understood by the undersigned and has been explained to me.