4090 – 2015-2022, MERCEDES SPRINTER 4X4, ROCKER GUARDS, 170” WB

Version 1.3

General Notes

- For the most up to date and current instructions, please visit our website at www.vancompass.com
- Please read all instructions thoroughly before starting installing Van Compass products.
- These are bolt on rocker guards which can be installed with basic hand tools
- Drilling into the pinch seam of the van is required for installation.

Parts List

4090 – 2015-2022, MERCEDES SPRINTER 4X4, ROCKER GUARDS 170” WB

- (2) 409001-01 MERCEDES SPRINTER ROCKER GUARD 170” WB, TOP PLATE
- (2) 409001-02 MERCEDES SPRINTER ROCKER GUARD 170” WB, BOTTOM PLATE
- (2) 4022-03 MERCEDES SPRINTER 4X4, FRONT CHASSIS TIE IN, NON-LIFTED
- (2) 4022-09 MERCEDES SPRINTER 4X4, FRONT CHASSIS TIE IN, 2.0” LIFTED VAN
- (2) 4022-08 MERCEDES SPRINTER, MID CHASSIS TIE IN
- (2) 4023-03 MERCEDES SPRINTER, MID-REAR CHASSIS TIE IN, 170” WB
- (2) 402303-03 MERCEDES SPRINTER, MID-REAR CHASSIS TIE IN, NUT TAB
- (2) 4023-04 MERCEDES SPRINTER, REAR CHASSIS TIE IN, 170” WB
- (2) 402304-04 MERCEDES SPRINTER, REAR CHASSIS TIE IN, NUT TAB
- (1) 402206-01 MERCEDES SPRINTER, ROCKER GUARD INSTALL TOOL
- (80) BHCS02-10-20-SS BUTTON HEAD CAP SCREW, 1/4-20 X 1.0" LONG, STAINLESS STEEL
- (86) FNS-02-20 FLANGE NUT, SERRATED, 1/4-20, CLEAR ZINC
- (86) WFS-02 FLAT WASHER, 1/4" STAINLESS
- (6) HC5-03-10 HEX HEAD BOLT, 3/8-16 X 1.0" LONG, GRADE 5, CLEAR ZINC
- (6) NNC-03 NYLOCK NUT, 3/8-16, CLEAR ZINC PLATE
- (12) WF8-03 FLAT WASHER, SAE, THRU-HARDNED, YELLOW ZINC, 3/8"
- (4) HC5-08-10 HEX HEAD BOLT, ½-13 X 1.0” LONG, GRADE 5, CLEAR ZINC
- (4) WF8-08 FLAT WASHER, SAE, THRU HARDENED, YELLOW ZINC, 1/2"
- (6) HT5-5-10 HEX HEAD THREAD CUTTING BOLT, 5/16-18 X 1.0” LONG, CLEAR ZINC
- (6) HC8-02-10 HEX HEAD BOLT, ¼-20 X 1.0” LONG, GR8, YELLOW ZINC

Tools Needed

- Quality Jack and 2 jack stands.

- Level - Digital level recommended for precise fitment.
- Simple hand tools:
    - Basic wrench and socket set:
        - Metric sizes: 16mm
        - SAE sizes: 7/16”, ½”, 9/16”, ¾”
        - 5/32” Allen wrench / socket bit
        - One pair of “Quick clamps” or C-clamps or vise grips
- Drill with quality metal cutting drill bits. Sizes needed:
    - ¼” (7mm)
    - 7/16” (11mm)
    - ½” (13mm)
    - Recommended: Step Drill bit (Uni-bit) with 1/4“ – ½” size range.

Approximate Installation Time

- 6-8 hours

Installation

1) Installation of the rocker guards is the same for both the left and right side of the vehicle. We recommend fully installing one side before moving onto the opposing side of the vehicle.
2) If possible, park the van on a level surface for the duration of the installation.
3) Begin on the driver (left hand) side of the vehicle first. Begin by fitting the 402301-01 Top Plate onto the vehicle as shown below.
    a. Note that the top plates are left and right specific. Make sure the taper or angled portion of the top plate is at the front of the vehicle where the mud flap is.
    b. For 2007-2018 NCV3 Models: Position the rocker guard behind the front mud flap so there is about 1/16” – 1/8” (1.5-3mm) of spacing between the front of the rocker plate and the rear of the mud flap.


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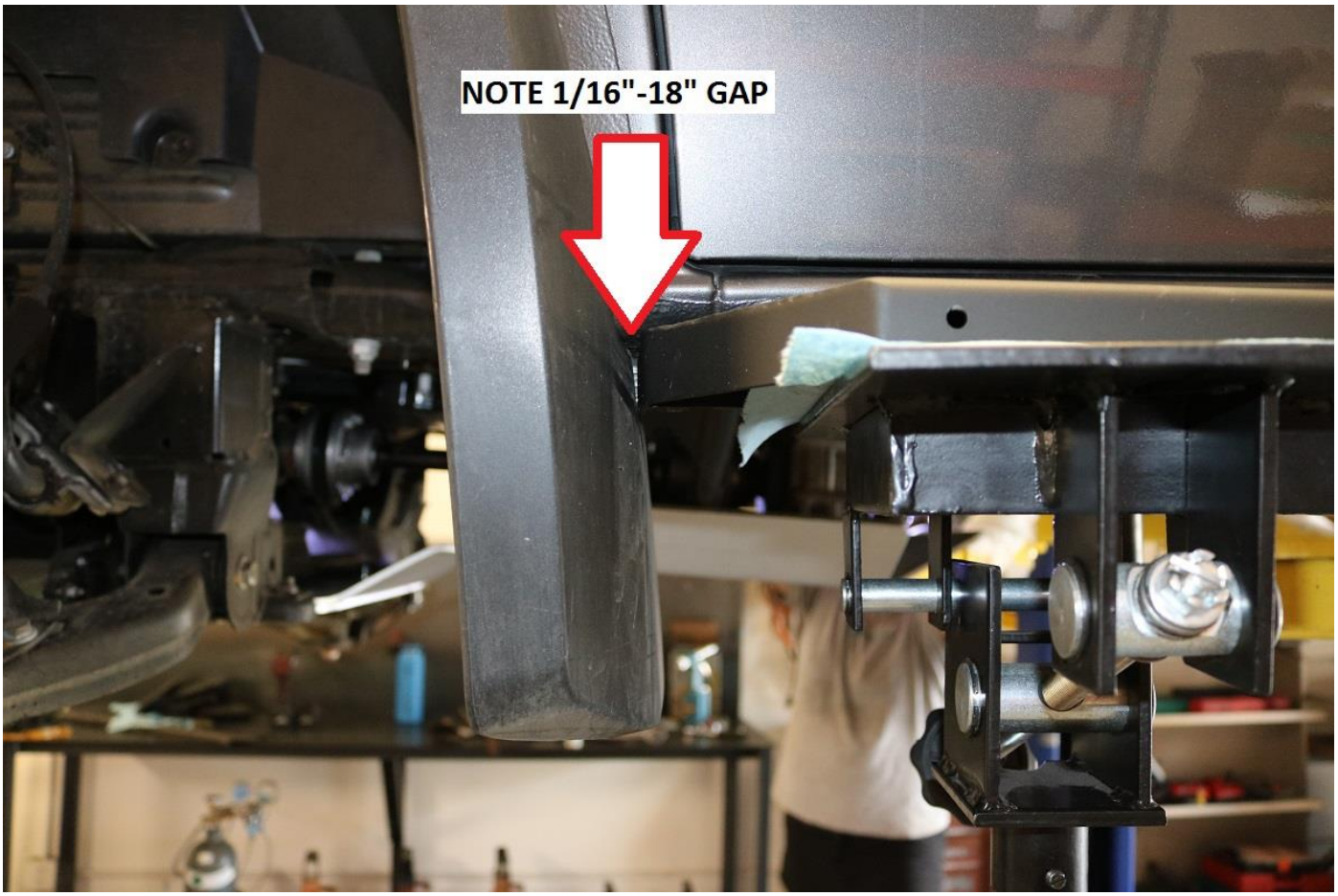
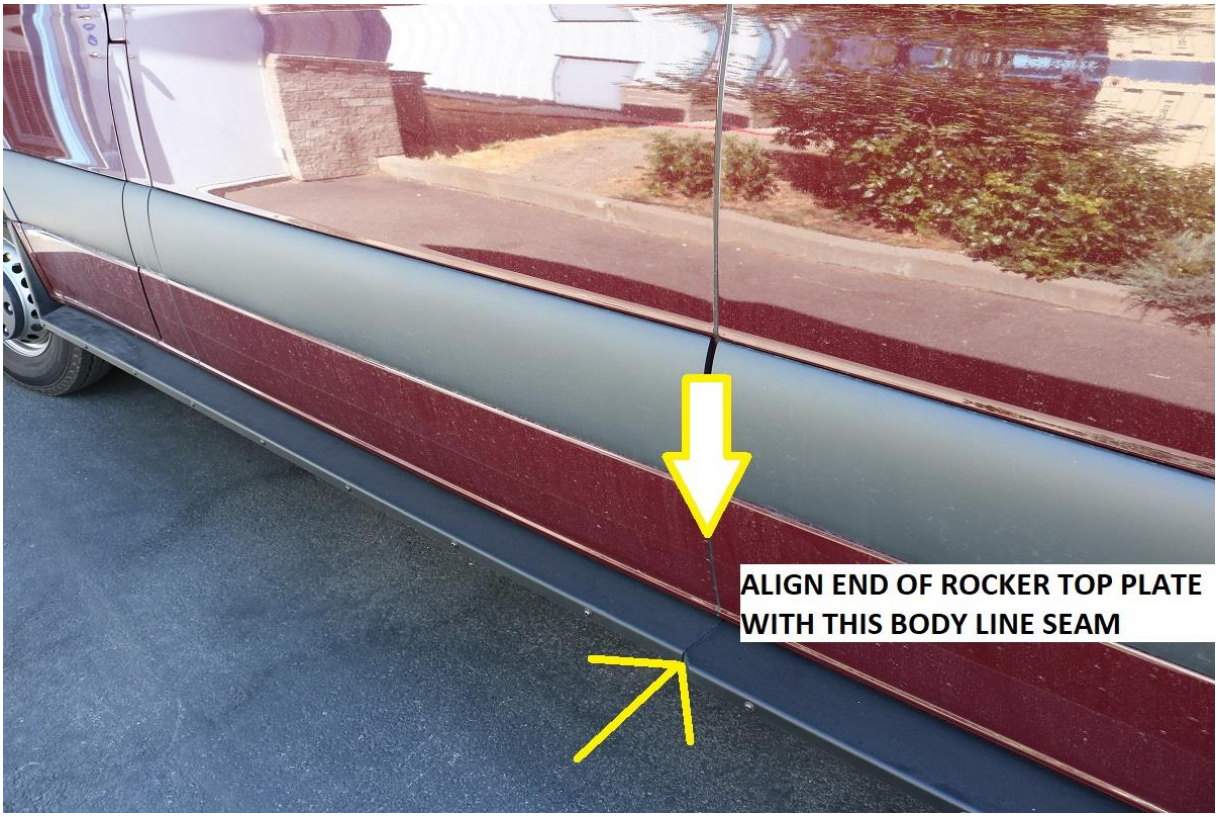
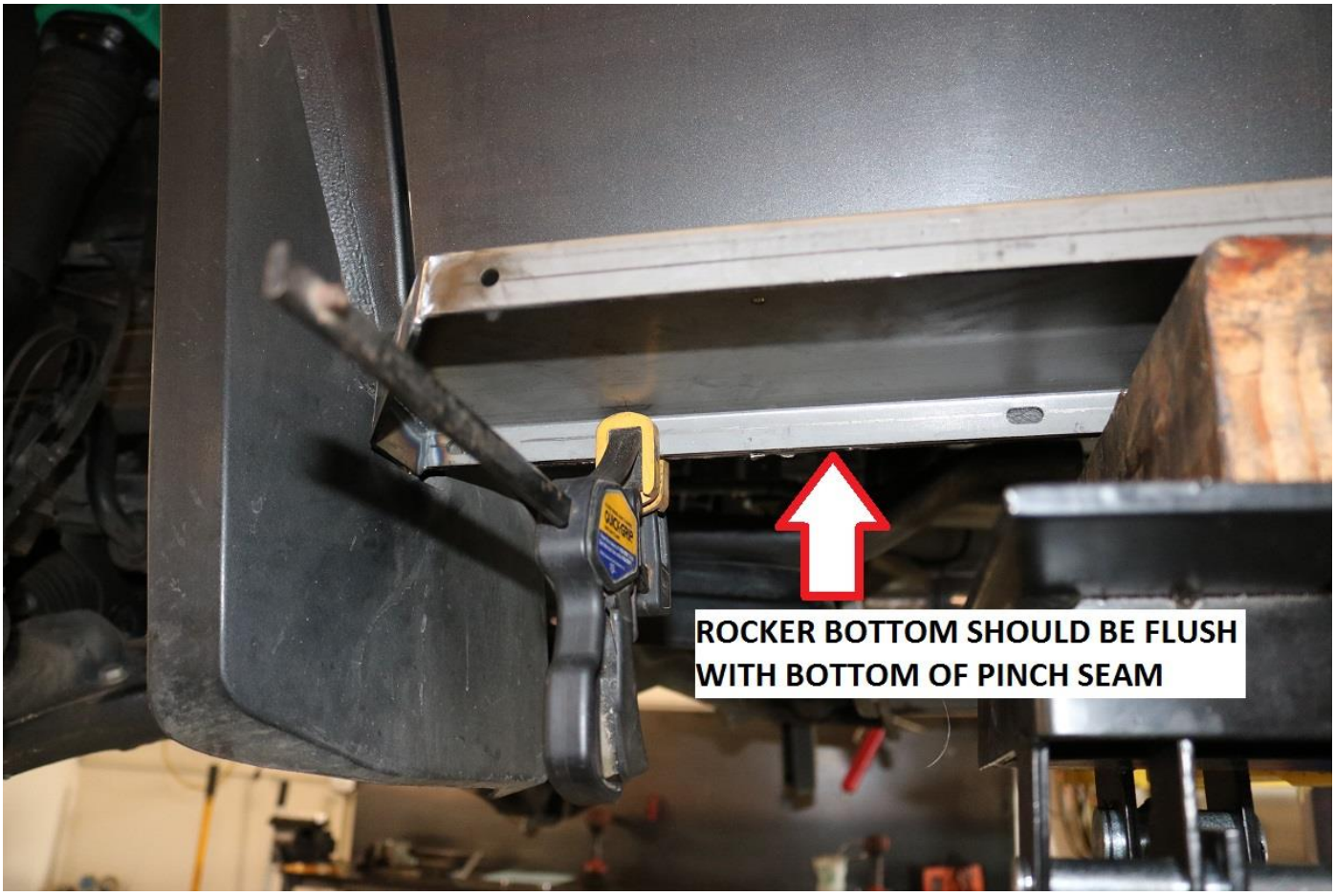

NOTE 1/16"-18" GAP

c. For 2019-2022 VS30 models: Align the rear of the 402301-01 top plate with the body seam at the rear of the mid section of the van (end of slider door). See images below for reference.
    i. Note, you should end up with approximately a 2” gap to the rear of the front mudflap on an unmodified van.



d. Use a floor jack and some jack stands to support the top plate up against the bottom of the body.
e. A pair of clamps as shown in the images below if helpful in locating the top plate against the pinch seam.
f. Make sure rocker is pushed up against the bottom of the van and flush with the bottom edge of pinch seam. The rocker top plate should be level with the van.

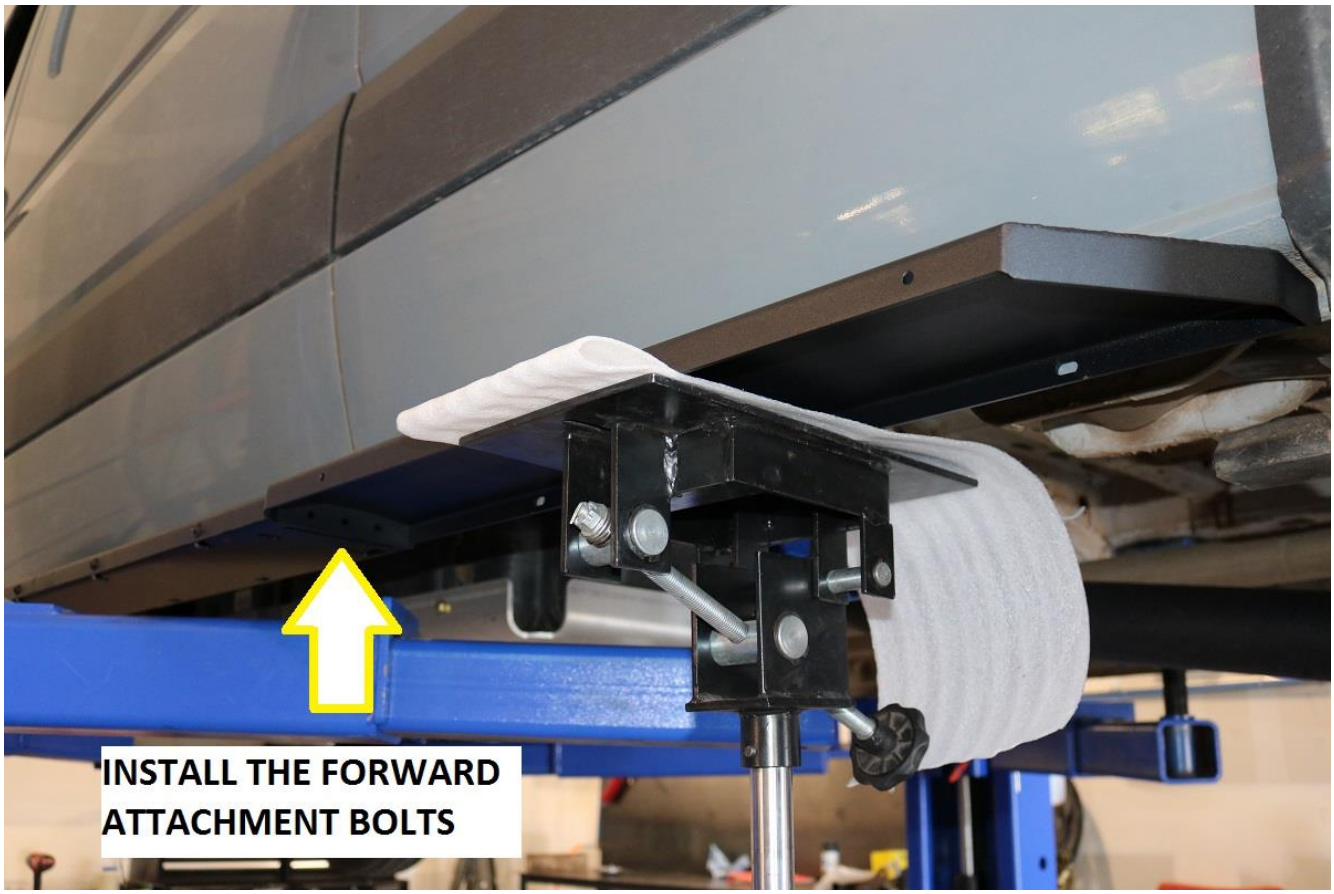


4) Once satisfied with the position of the top plate, mark all the slotted mounting holes. Mark holes in the center of the slot.
5) Remove the top plate from the van, center punch and drill all the mounting holes with a ¼" drill bit.
6) We recommend touching up any exposed areas of metal with a quality paint to prevent corrosion.

7) Assemble the top and bottom plates off the vehicle by installing all of the outer bolts only. Just install the outer bolts and start the nuts. Do not tighten them at this time. Use a washer under the bolt head. Use a 5/32” allen tool and the included 402206-01 install tool / wrench to aide in nut installation.
8) Note, the rocker guard bottom plates are left and right specific but can only install one way. Reference photo below for clarification on an assembled driver side front rocker assembly.

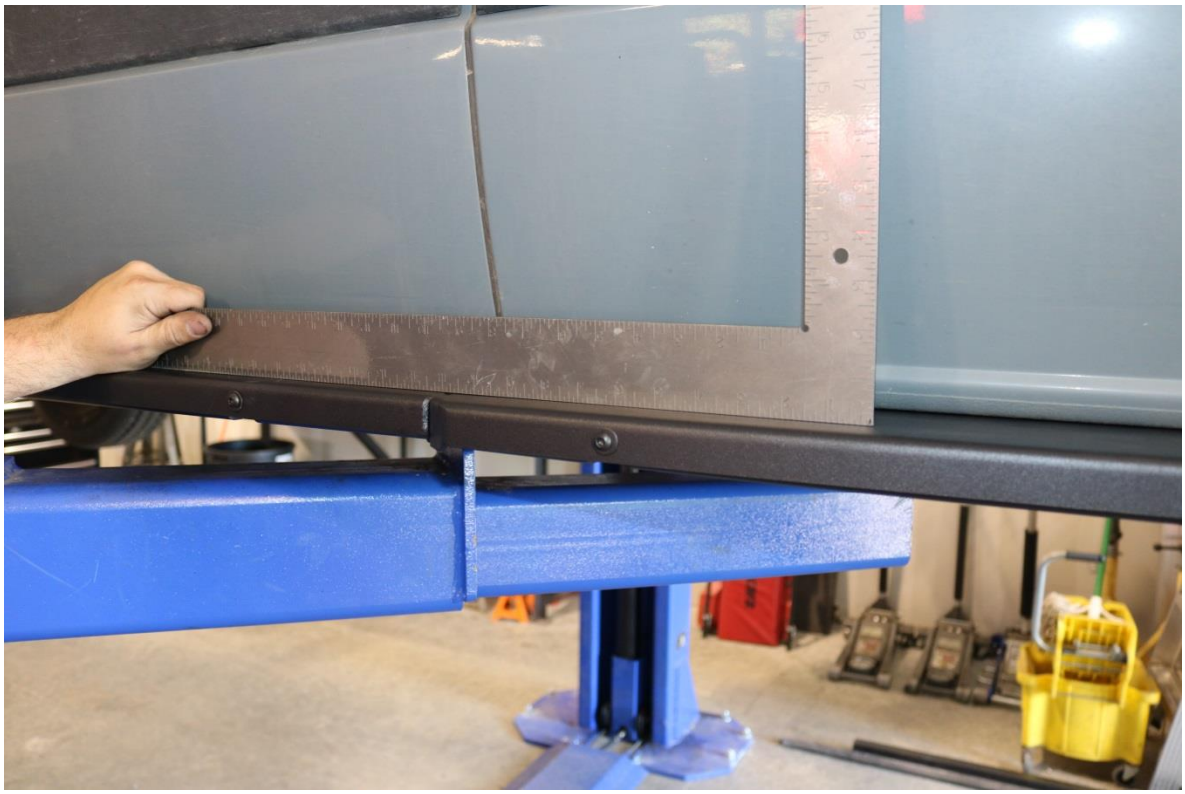
9) At this time an extra set of hands is very helpful in installing the rocker guards to the vehicle. Fit the bolted together rocker guard to the van in the same manner as before. Use some floor jacks and jack stands to fit them in place on the vehicle.
10) The bolted together rocker plates are designed to sandwich the pinch seam and bolt through it.
11) Support the rocker so it is close to level and install all the bolts. Use a washer under the bolt head. Install all inner mounting bolts and nuts. Do not tighten until all hardware has been installed.

12) Once all inner and outer bolts have been installed with their respective flange nuts on the inside. Tighten the hardware. Torque all bolts to 80 in-lbs (9 N.m).
13) Repeat the top step fitment process with the rear portion of the rocker guards. Fit the top plate to the chassis and align the front 3 mounting holes to the rear of the front rocker guard assembly.
    a. Once aligned, bolt the top step of the rear plate to the front assembly using 3 of the ¼-20 x 1.0" long bolts included with the kit.
    b. Snug these three bolts and make sure the rear portion of the rocker lines up well with the forward portion. Adjust as necessary and level with the chassis.



14) Once satisfied with fitment, mark the three pinch seam mounting holes in the center of their respective slots.
15) Remove the top plate from the van, center punch and drill all the mounting holes with a ¼" drill bit.
16) Assemble the top and bottom plates off the vehicle by installing all of the outer bolts only. Just install the outer bolts and start the nuts. Do not tighten them at this time. Use a washer under the bolt head. Use a 5/32" allen tool and the included 402206-01 install tool / wrench to aide in nut installation.

17) Install the rear half assembly onto the vehicle, again so it sandwiches the pinch seam.
18) Support the rocker so it is close to level and install all the bolts. Use a washer under the bolt head. Install all inner mounting bolts and nuts. Do not tighten until all hardware has been installed.
19) Install the three ¼-20 x 1.0" long hex head bolts which connect the front and rear portions together. Use a washer under the bolt head. Use a straight edge across the top of the rocker plates to ensure they are flat and even. Once satisfied with fitment, begin tightening all hardware.

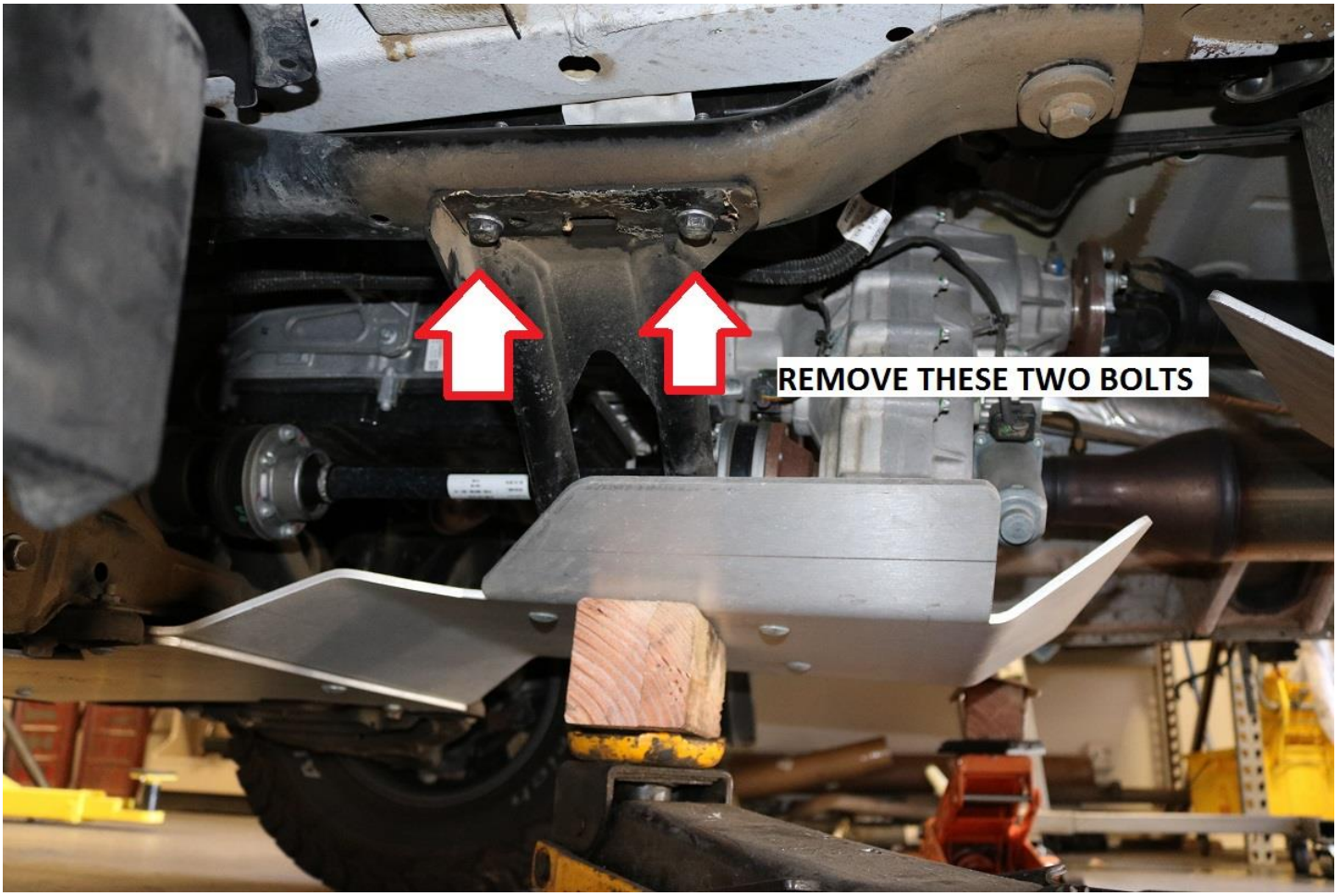


20) Once all inner and outer bolts have been installed with their respective flange nuts on the inside, tighten the hardware. Torque all bolts to 80 in-lbs (9 N.m).

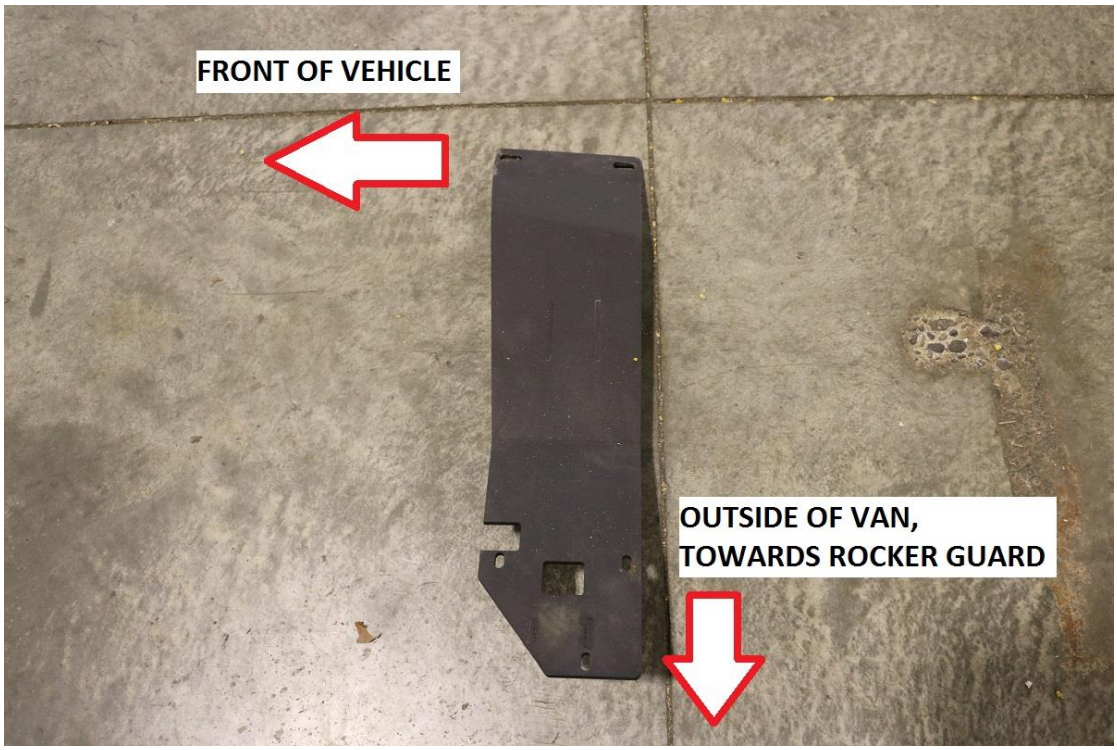
4022-03 / 4022-09 Front Chassis Tie-in

21) Determine which front chassis tie-ins will be used on the van. See image below for reference.
    a. If the van is stock height and does not have a Van Compass 2” Striker lift kit installed, utilize 4022-03 front chassis tie-ins.
    b. If the van is lifted 2” using a Van Compass Striker lift, utilize the 4022-09 front chassis tie-ins.
    c. See image below for reference.

22) Support the transmission cross member with a floor jack as shown below.
23) Remove the two bolts / nuts securing the transmission cross member to the suspension sub frame. Use a 16mm socket / wrench for removal.



24) Install the 4022-03 Front Chassis Tie-in on the vehicle. These tie-in brackets are left and right specific and will only go on one way. Note image below for reference, showing the orientation of the bracket for the left side (driver side) of the vehicle.

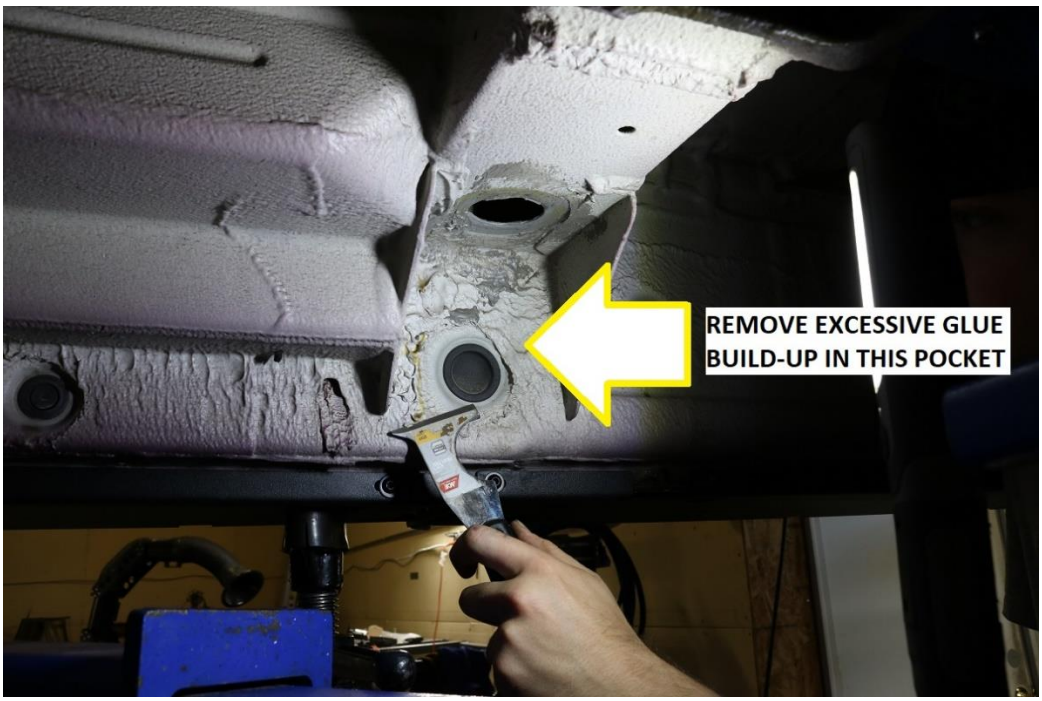


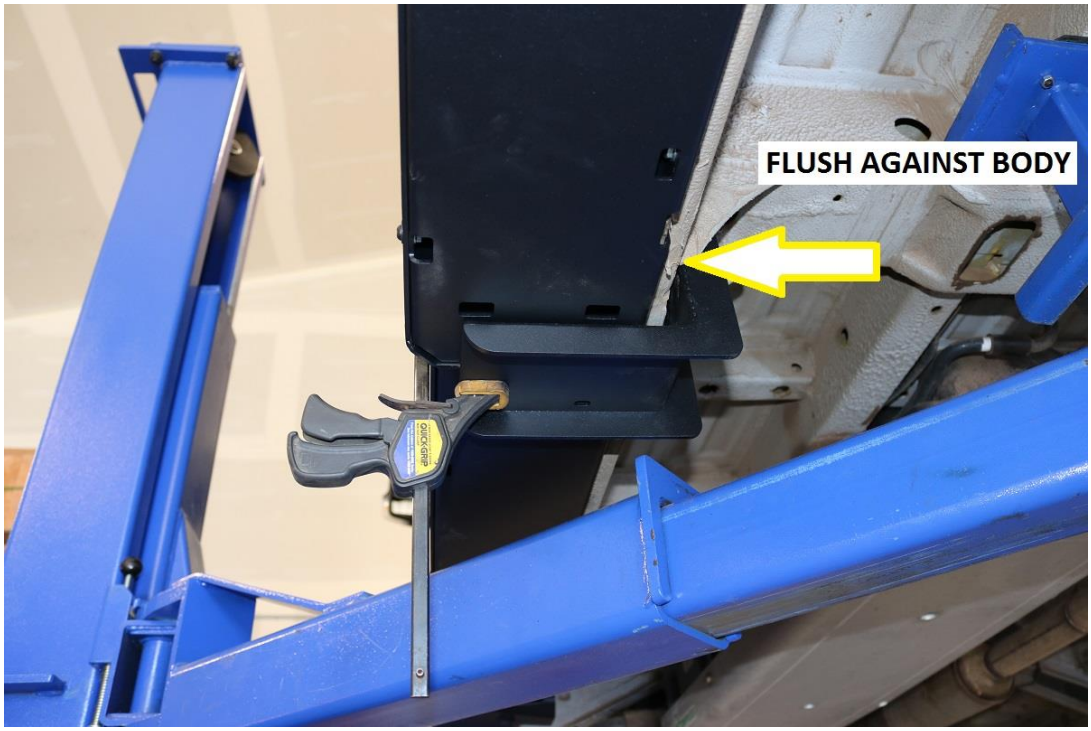
25) Re-install the factory transmission cross-member bolts as shown below. Snug the bolts but do not fully tighten at this time.
26) At this time, with the rocker guard close to level with the van, take note of whether the ¼" spacer plate will be needed for proper fitment. If the chassis tie in has more than a 1/8" gap between the rocker and top of the tie in plate, install the spacer plate.

27) Align the holes securing the chassis tie in to the rocker guard and start the 1.0" long button head stainless bolts. Again, use a washer under the bolt head. Once all hardware has been started, torque the button head bolts to 80 in-lbs. (9 N.m).
28) Torque the transmission cross member attachment bolts to 52 ft-lbs (70 N.m).

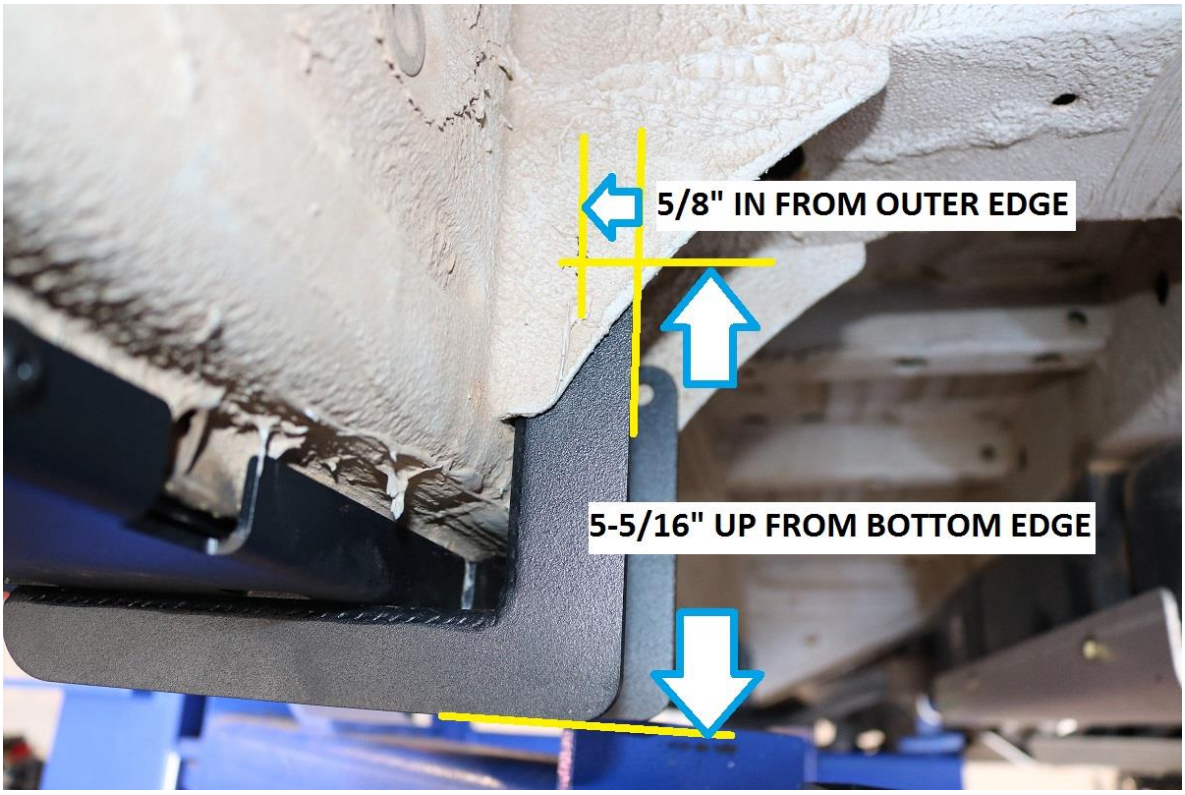
4023-03 Mid-Rear Chassis Tie-in

29) Again, have the rockers positioned level or close to level before installing the mid-rear chassis tie in.
30) The mid-rear chassis tie-ins are the same left to right.
31) Fit the tie-in bracket to the chassis as shown below. It is designed to fit in the cross member gussets where the front and rear portions of the rocker step meet.
    d. Note, there is often an excessive amount of glue / undercoating built up in this area. It is recommended to remove any heavy build up with a scraper / chisel to improve fitment of the chassis tie-in.





32) Install the 1.0” long button head bolts to attach it to the rocker guard step. Make sure the face of the chassis tie-in is flush against the body as shown in the image above. Snug these bolts but don’t fully tighten at this time.
33) Mark and drill the two outer mounting holes. We recommend marking the holes and drilling them from the outside.
    e. At this time, mark the upper ½” mounting hole as well.
34) Use a square or straight edge to mark up 5-5/16” up from the bottom of the bracket gusset.
    f. Mark inwards 5/8” from the outer edge of the bracket gusset.
    g. Drill through with a 3/8” drill bit for the side mounting holes.
    h. Drill through with a ½” drill bit for the upper mounting hole.



35) Once drilled, install the 3/8-16 x 1.0” long bolts with a washer under both the bolt head and stover nut.
36) Install the upper mounting bolt utilizing the 402303-03 nut tab through the large hole in the crossmember.
37) Tighten and torque the mid-rear chassis tie-in hardware.
    i. Torque button head bolts to 80 in-lbs. (9 N.m).
    j. Torque the 3/8-16 x 1.0” long bolts using a 9/16” socket / wrench. Torque to 20 ft-lbs. (27 N.m)
    k. Torque the ½-13 upper bolt using a ¾” socket / wrench. Torque to 50 ft-lbs. (68 N.m)

4023-04 Rear Chassis Tie-in

38) Again, have the rockers positioned level or close to level before installing the rear chassis tie-in.
39) The rear chassis tie-ins are left and right specific. The side gusset mounting hole should be orientated towards the front of the van.
40) Begin by locating the rubber body plug near the rear wheel well of the van. See image below for reference.

41) Use a flat nose screw driver to pry the larger plastic body plug out of the body which is just forward of the rear leaf spring's forward attachment point.

42) Loosely install the three button head cap screws securing the rear chassis tie in to the rocker guard. It helps to use a quick clamp or similar device to hold the tie-in to the rocker for installing these bolts.

43) Once the three bolts have been installed with the nuts loosely securing it to the rocker, install the 402304-04 nut tab into the large forward hole and align it with the lower hole in the body. Once aligned, start the ½-13 UNC x 1.0" long bolt included. Use an included washer under the bolt head.

44) Snug all the attachment bolts and mark the front gusset hole on the body as referenced above.
45) Remove the rear chassis tie in from the vehicle and drill this hole with a 7/16” (11mm) drill bit.
    l. We have found a step drill bit works well in this position.

46) Once the hole is drilled touch up any exposed areas of metal with a quality paint to prevent corrosion and re-install the bracket. Start all hardware before tightening.
47) Install the 3/8-16 UNC x 1.0” long hex head bolt and nylock nut in the newly drilled mounting hole. Use a washer under both the bolt head and nut.
48) With all hardware installed, snug and then torque the bolts in the following order;
    m. ½-13” nut tab bolt – 40 ft-lbs (54 N.m)
    n. ¼-20 button head bolts – 80 in-lbs (9 N.m)
    o. 3/8-16 front bolt – 20 ft-lbs (27 N.m)

49) Re-install the large plastic body plug.

4022-08 Mid Chassis Tie-in

50) Again, have the rockers positioned level or close to level before installing the mid chassis tie in.
51) Begin by checking to make sure there are no components that will interfere with mounting the mid chassis tie in. On many Sportsmobiles, we have found batteries located in this general area on the driver side which can easily be moved out of the way during installation.
52) Clamp the mid chassis mount to the rocker guard and start all three button head bolts / nuts. Use a washer under the bolt heads and snug all ¼" button head bolts using a 5/32" allen tool.

53) Tighten the ¼” button head bolts to the point where the bracket is just barely movable on the van.
54) Make sure the inner face of the mid chassis tie in is resting against the inside wall of the van. See image below.

55) Go ahead and snug the three button head bolts securing the mid chassis tie in to the bottom of the rocker.
56) Next, mark and drill the three inside mounting holes using a 15/64” drill bit (6mm).
57) Once all three holes are drilled, use a ½” socket or nut driver bit to install the 5/16-18 x 1.0” long thread cutting bolts.
58) Torque the bolts to 10 ft-lbs (14 N.m)

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 incompliance. 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.