

7017 – 1994-2006, MERCEDES SPRINTER T1N 3500, REAR 2.0" LIFT KIT

Version 1.0

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.
- This is a bolt on lift kit that can be installed with basic hand tools. Eight, ¼" diameter holes need to be drilled for attaching brackets to the vehicle.
- This suspension kit can be completely removed, allowing the vehicle to be returned back to stock configuration if desired.

Parts List

3001 – 1994-2006, MERCEDES SPRINTER T1N, REAR LIFT BLOCK, 2.0" LIFT KIT

• (2) 300101 REAR LIFT BLOCK, 2.0" LIFT

• (4) UB-750-1800 75MM DIAMETER X 180MM LONG, M14X1.50" THD, U-BOLT

• (8) NLM14-1.50 M14-1.50 LUG NUT

3002 – 1994-2006, MERCEDES SPRINTER T1N, REAR SWAY BAR DROP BRACKET, 2.0" LIFT KIT

(2) 300201 REAR SWAY BAR DROP BRACKET, 2.0" LIFT

• (2) 300201-03 REAR SWAY BAR DROP BRACKET, 2.0" LIFT, SPACER BUNG

(4) HM12-1.50-55-10.9
 M12-1.5 X 55MM LONG, GR10.9, YELLOW ZINC HEX HEAD BOLT

(4) NSM12-1.50
 M12-1.5 STOVER NUT

• (8) WFM12 M12 YELLOW ZINC FLAT WASHER

• (2) HT5-5-10 5/16-18 X 1" LONG, HEX HEAD THREAD CUTTING SCREW

3004 – 1994-2006, MERCEDES SPRINTER T1N 3500, REAR UPPER SHOCK MOUNT, 2.0" LIFT KIT

(2) 300401 REAR LOWER SHOCK MOUNT, 2.0" LIFT

(4) HM14-1.50-90-10.9
 M14-1.5 X 90MM LONG, GR10.9, YELLOW ZINC HEX HEAD BOLT

• (4) NSM14-1.50 M14-1.5 STOVER NUT

• (8) WFM14 M14 YELLOW ZINC FLAT WASHER

• (2) HT5-5-10 5/16-18 X 1" LONG, HEX HEAD THREAD CUTTING SCREW

3005 – 1994-2006, MERCEDES SPRINTER T1N, REAR BUMP STOP DROP BRACKET, 2.0" LIFT KIT

• (2) 300501 REAR BUMP STOP DROP BRACKET, 2.0" LIFT

• (4) HT5-5-10 5/16-18 X 1" LONG, HEX HEAD THREAD CUTTING SCREW

3014 – 1994-PRESENT, MERCEDES SPRINTER, REAR BRAKE PROPORTIONING BRACKET, 2.0" LIFT KIT

(1) 301401 REAR BRAKE PROPORTIONING BRACKET
 (1) HM08-1.25-30-10.9 M8-1.25 X 30MM LONG HEX HEAD BOLT

(1) NSM08-1.25
 (2) WFM08
 M8-1.25 STOVER NUT
 M8 FLAT WASHER

Tools Needed

Quality Jack and 2 jack stands.

Optional – Automobile lift and two screw jacks

• Simple hand tools:

o Torque Wrench

Dykes or similar tool for cutting zip ties.

Basic wrench and socket set:

Metric sizes: 10mm, 13mm, 17-19mm, 22mm

■ SAE sizes: ½"

• Drill with quality metal cutting ¼" diameter drill bit.

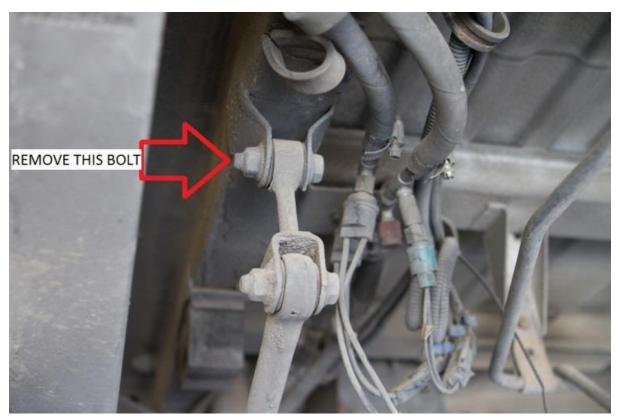
• Nut driver or drill with ¼" socket bit attachment for installation of thread cutting hardware.

Approximate Installation Time

Professional shop with automotive lift: 2-3 hours
Driveway install with jack and jack stands: 3-4 hours

Installation

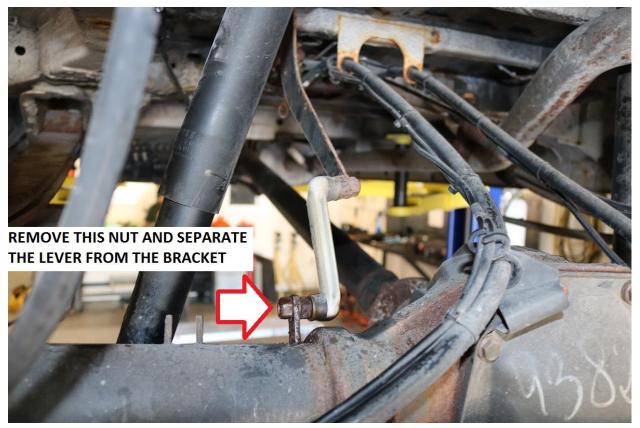
- 1) Begin by safely supporting the vehicle so that the rear suspension can hang free. This can be done with an automobile lift or a quality jack and a pair of jack stands.
- 2) With the rear suspension hanging free, remove the rear wheels / tires.
- 3) Remove the rear sway bar.
 - a. Begin by using an 18mm socket and wrench to remove the sway bar link bolts at the chassis.



b. With the sway bar links disconnected from the chassis, allow the sway bar to rotate down as shown in the image below.



4) On most 3500s, there will be an additional lever connected to the rear axle. Disconnect this lever from the bracket at the axle. Use a 13mm socket / wrench for removal. See image below for reference.



5) Support the axle and disconnect the lower shock bolt. Use a 19mm socket or wrench for the head of the bolt and a 21mm socket / wrench for the nut. Once the shock is removed, allow the axle to hang freely again. Note that the springs will limit the downward travel with the shocks removed.



- 6) Remove the bump stops. Use some Windex or similar glass cleaner to lubricate the rubber bump stops for easier removal.
 - a. Note Bump stop designs vary by year and wheelbase options. However, they all attach to the chassis in the same manner. A pry bar can be useful in bump stop removal. See images below.



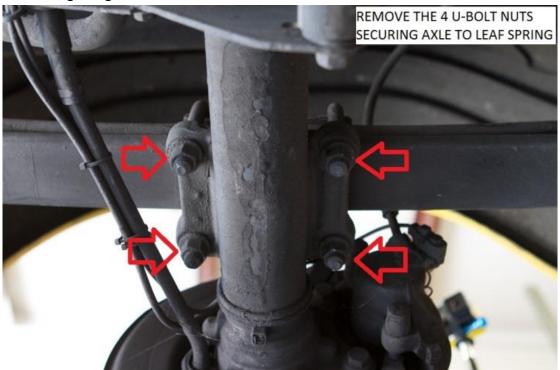


3001 Rear Lift Block Installation

7) Begin by cutting the zip tie closest to the axle which retains the breather tube to the ABS / E-brake cables.



8) Install the rear lift blocks one side at a time. Starting on the driver side, support the rear axle with a floor jack towards the driver's side of the axle. Remove the 4 U-bolt nuts securing the leaf spring to the axle housing using a 19mm socket.



9) Lower the rear axle on the driver's side until there is approximately 2-1/2" (65mm) between the axle spring perch and the bottom of the leaf spring. Install the lift block so the pin on the lift block drops into place on the axle spring perch as shown below.



- 10) Align the pin on the bottom of the leaf spring with the hole in the top of the lift block and raise the axle until the pin falls into place.
- 11) Jack up the axle to the point where the leaf spring takes on some load.
- 12) At this point, install the new U-bolts and nuts included with the kit. Snug up all the nuts but do not fully tighten at this time.



- 13) Repeat this procedure for the passenger side.
- 14) Torque U-bolt nuts to 125 ft-lbs (169 N.m).

3005 Rear Bump Stop Drop Bracket Installation

- 15) Installation of the bump stop drop brackets can be done on both sides of the vehicle simultaneously.
- 16) Position the rear bump stop drop bracket in place as shown and mark the two mounting holes with a sharpie or transfer punch.



17) Center punch the hole locations and drill with a ¼" (7mm) diameter drill bit.



18) With both holes drilled, positions the bump stop drop bracket in place and secure it to the chassis using the $5/16-18 \times 1''$ long thread cutting screws included with the kit. Use a nut driver or drill with a 1/4'' bit adapter and a 1/4'' socket to install the screw. Try to keep the drill / driver as straight as possible when cutting the threads.



- 19) Use drill / driver to snug bolts into place. Do not fully tighten using drill / driver. Torque bolts to 13 ft-lbs (17 N.m).
- 20) With drop brackets installed and hardware torqued to spec, thoroughly coat the rubber bump stops with Windex or a similar glass cleaner.



21) Install bump stop into the drop bracket. Install one edge at a time. Bend the bump stop in the middle to get the second side started. Installation can be tricky as the bump stops fit very tightly both in the factory location and in the drop brackets.





22) Once the second side is started, a screw driver, some wiggling and some additional lubricant will be needed to get the bump stop fully seated in the bracket.



3002 Rear Sway Bar Drop Bracket Installation

- 23) Installation of the rear sway bar drop brackets can be done on both sides of the vehicle simultaneously.
- 24) Begin by test fitting the drop bracket into the sway bar attachment point on the chassis as shown below.
 - a. Note, some vehicles have an excessive buildup of undercoating spray and will need to be removed with a small chisel or scraper in order for the bracket's hole to line up.





25) Install M12-1.5 x 55mm long bolt provided as shown above to locate bracket in place. Mark the two additional mounting hole locations which either a sharpie or transfer punch.

26) Remove bracket and center punch the hole locations. Drill holes using a ¼" (7mm) diameter drill bit.



27) Reinstall drop bracket. Again, align with the 12mm bolt provided. Use the $5/16-18 \times 1''$ long thread cutting screws included with the kit. Use a nut driver or drill with a $\frac{1}{4}$ " bit adapter and a $\frac{1}{4}$ " socket to install the screw. Try to keep the drill / driver as straight as possible when cutting the threads.



28) Use drill / driver to snug bolts into place. Do not fully tighten using drill / driver. Torque bolts to 13 ft-lbs (17 N.m).

29) Remove the 12mm bolt aligning the bracket and re-install it with a washer under the bolt head and the included 300201-03 spacer bung as shown. Use a washer under the stover nut and start the nut on the other end.

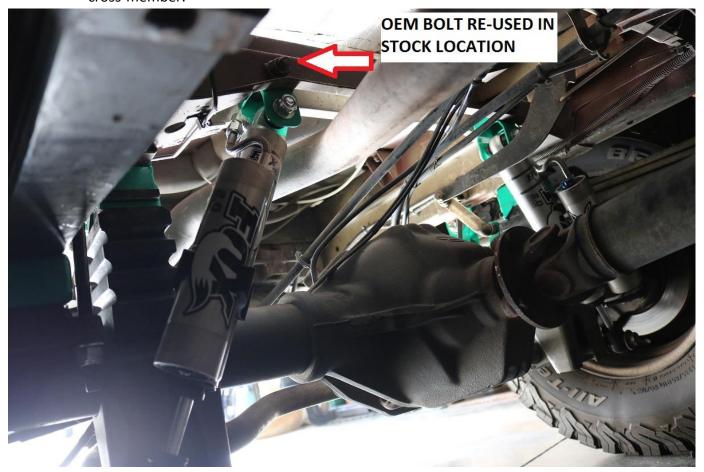


30) Complete rear sway bar installation by securing the sway bar end links to the drop brackets. Use the remaining M12-1.5 x 55mm long bolts provided in the kit with a washer under both the bolt head and stover nut. With a 19mm socket and wrench, torque both upper and lower M12 hardware on the drop bracket to 60 ft-lbs (95 N.m).

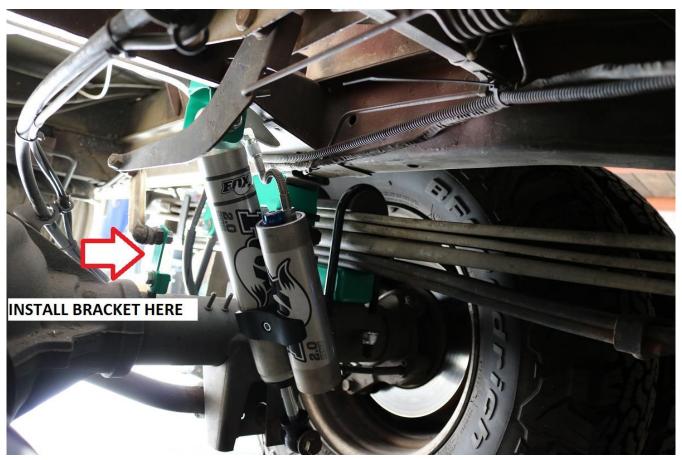


3004 Rear Upper Shock Mount Installation

- 31) Installation of the rear lower shock mounts can be done on both sides of the vehicle simultaneously.
- 32) Install the brackets as shown below. Use the OEM upper shock bolt to secure it to the chassis.
 - a. OPTIONAL if desired, drill a $\frac{1}{2}$ " hole through the upper hole in the shock bracket and secure to the chassis with the included $\frac{5}{16-18} \times 1$ " long self-tapping bolt. This will secure through the floor of the van so be sure it is not going to damager anything in the cabin.
 - b. NOTE On Cab & Chassis versions, this bolt can be thru bolted through the upper shock mount cross-member.



- 33) Install the M14-1.5 x 90MM long bolt included to attach the shock to the drop bracket. Be sure to use a washer under both the bolt head and nut.
- 34) Install shock into relocation bracket as shown above. Install the included M14-1.50 x 90mm long bolt to secure the shock to the bracket. Be sure to use a washer under both the bolt head and nut.
- 35) If the vertical self-tapping bolt was used, torque with a ½" socket to 13 ft-lbs (17 N.m).
 - a. Use a 19mm and 21mm socket / wrench to torque the upper OEM bolt to 80 ft-lbs (108 N.m)
 - b. Use a 22mm socket / wrench to torque the included bolt to 100 ft-lbs (135 N.m)
- 36) Re-install wheels / tires and lower van to ground. OEM torque spec for wheel studs are as follows:
 - a. 3500 DRW: 140-150 ft-lbs (190-200 N.m)
- 37) With the van sitting at ride height. Install the brake proportioning lever extension bracket onto the axle so it is vertical. Use the included M8-1.25 X 30mm long bolt. Use a washer under both the bolt head and nut. Torque to 20 ft-lbs (27 N.m). See image below for reference.



38) 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 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.