



3038 – 2007-PRESENT, MERCEDES SPRINTER 2WD, REAR REPLACEMENT LEAF SPRINGS

Version 1.2

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 leaf springs can be installed with basic hand tools. Two, ¼" diameter holes need to be drilled for attaching brackets to the vehicle.
- The installation of these leaf springs will require removal of brake hoses to install brake line drop brackets. Bleeding the brake system will be required.
- These springs can be completely removed, allowing the vehicle to be returned back to the stock spring configuration if desired.
- These springs are designed to lift the rear of the vehicle 2"-2.5" depending on weight variances.

Parts List

4008 – 2007-PRESENT, MERCEDES SPRINTER, REAR BRAKE LINE DROP BRACKET, 2.0" LIFT KIT

- (2) 400801 REAR BRAKE LINE DROP BRACKET, 2.0" LIFT
- (2) HM06-1.00-25-10.9 M6-1.00 X 25MM LONG, GR10.9, YELLOW ZINC HEX HEAD BOLT
- (2) NNM06-1.00 M6-1.00 NYLOCK NUT, CLEAR ZINC
- (4) WFM06 M6 YELLOW ZINC FLAT WASHER
- (2) HM12-1.50-25-10.9 M12-1.50 X 25MM LONG, GR10.9, YELLOW ZINC HEX HEAD BOLT
- (2) NNM12-1.50 M12-1.50 NYLOCK NUT, CLEAR ZINC
- (2)WFM12 M12 YELLOW ZINC FLAT WASHER
- (1) HOSE-VAC-06-12 1 FOOT, 3/8" VACUUM HOSE

3038 – 2007-PRESENT, MERCEDES SPRINTER 2WD, REAR LEAF SPRINGS

- (2) 3038-XXXX 2WD 2500 REAR REPLACEMENT LEAF SPRINGS
- (4) UB-750-1800 75MM DIAMETER X 180MM LONG, M14X1.50" THD, U-BOLT
- (8) NLM14-1.50 M14-1.50 LUG NUT

Tools Needed

- Quality jacks and 2 jack stands.
 - Optional – Automobile lift and screw jack
- Simple hand tools:
 - Torque Wrench

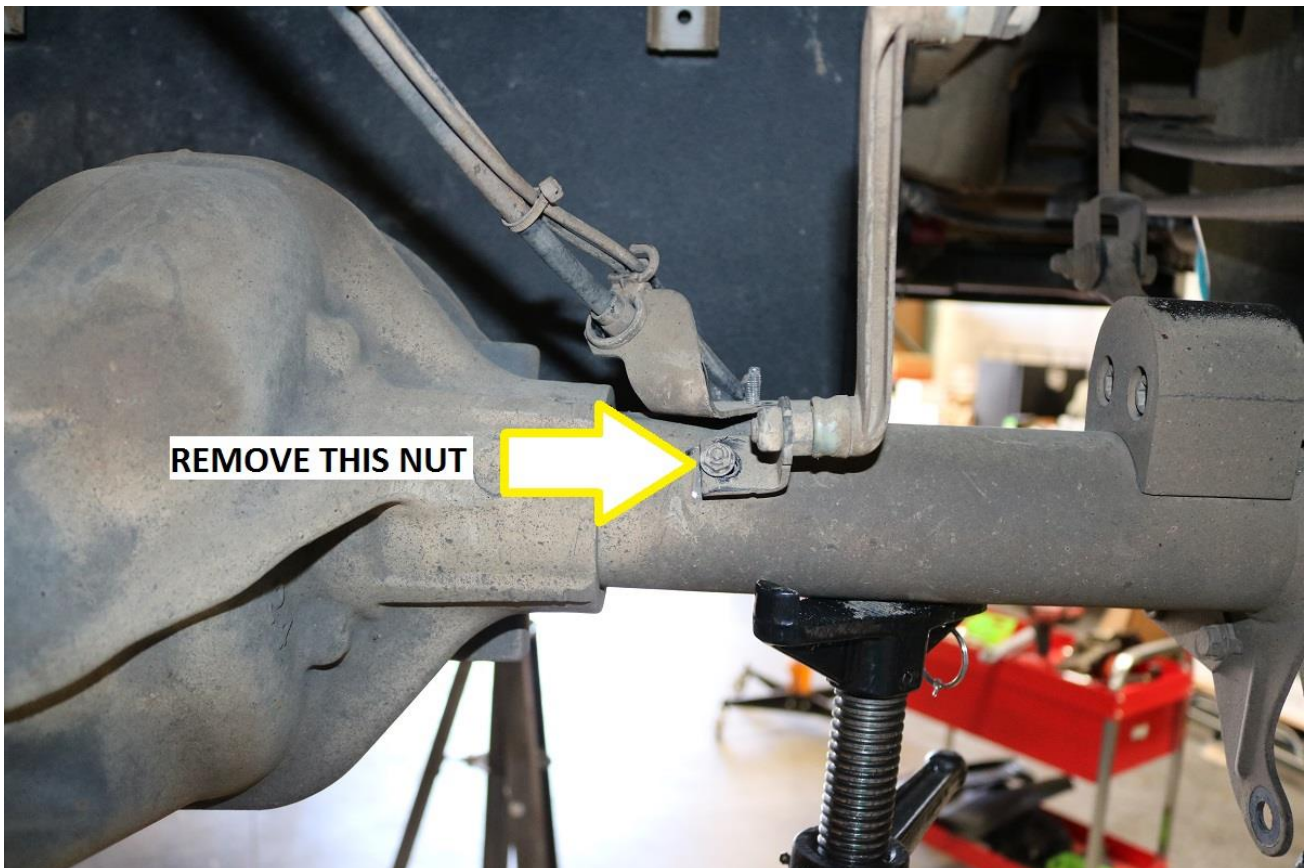
- Dykes or similar tool for cutting zip ties.
- Basic wrench and socket set:
 - Metric sizes: 10mm, 11mm, 18-19mm, (21mm for 3500)
- Drill with quality metal cutting step drill or unibit will be needed.
- Brake bleeding tool.
- DOT 4 Synthetic Brake Fluid

Approximate Installation Time

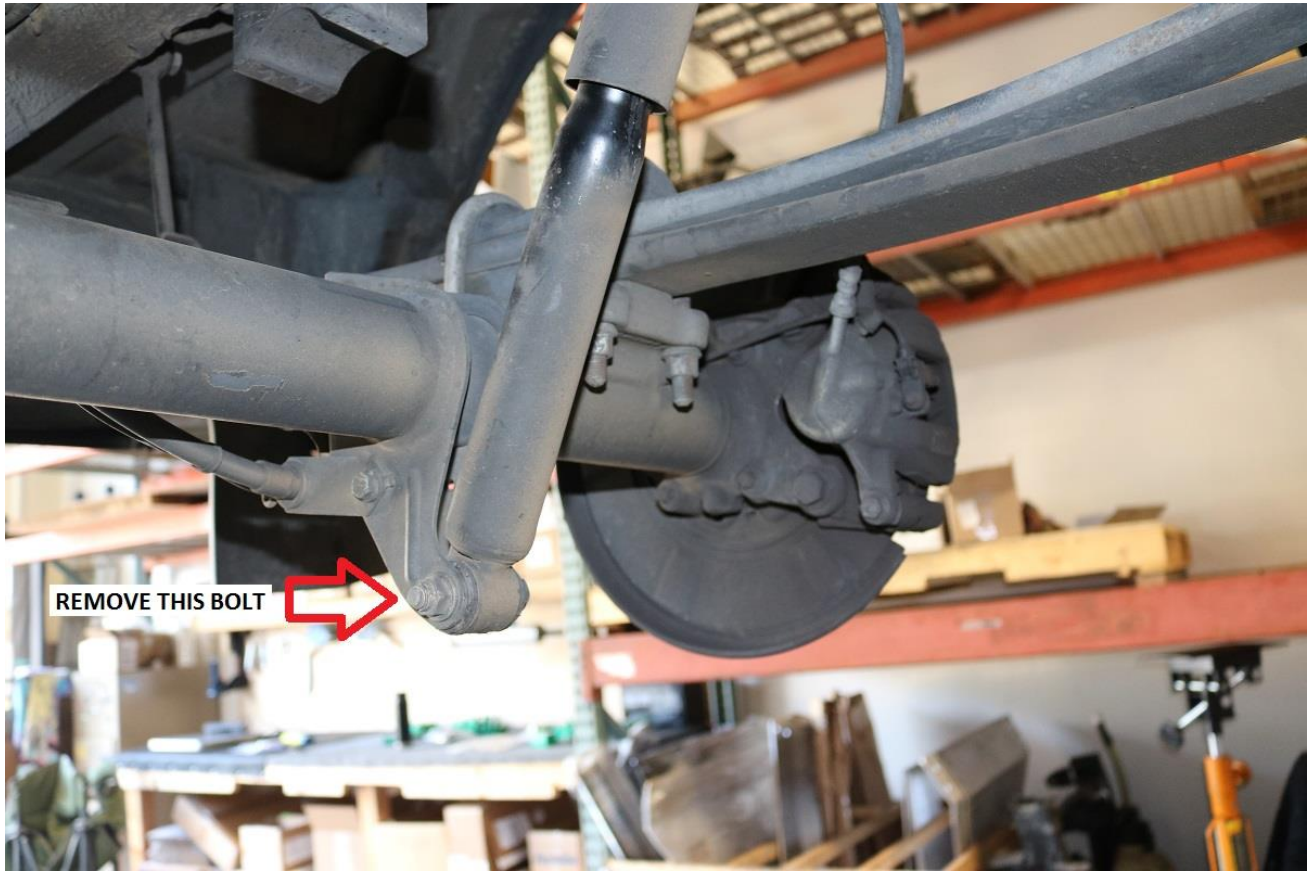
- Professional shop with automotive lift: 1-2 hours
- Driveway install with jack and jack stands: 2-4 hours

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) Disconnect the headlight adjuster bracket at the axle by removing the 10mm nut securing the L-bracket to the axle. Retain the nut for future use. .



- 4) Support the axle and disconnect the lower shock bolt. Use an 18mm (21mm for 3500) socket and wrench for removal. 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.
 - a. Retain the lower shock bolt / nut as it will be re-used.



REMOVE THIS BOLT

4008 Rear Brake Line Drop Bracket Installation

- 1) Installation of the rear brake line drop brackets can be done on both sides of the vehicle simultaneously.
- 2) Use an 11mm brake line wrench and disconnect the brake hose from the brake line at the chassis. See image below.



LOOSEN THIS FITTING AND SEPARATE THE BRAKE HOSE FROM BRAKE LINE

- 3) Fit the 400801 brake line drop bracket as shown below. Use the M12-1.50 x 25mm long bolt provided with the kit to align the bracket as shown. Mark the top hole and drill using a ¼" (6mm) drill bit.



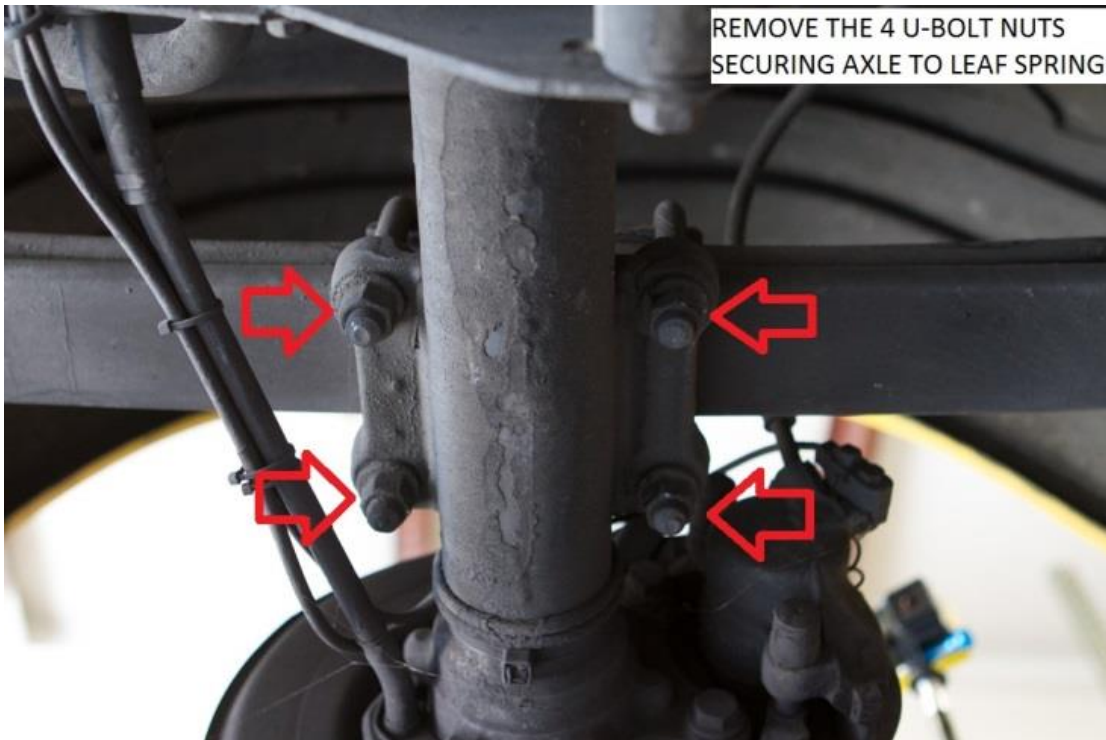
- 4) Once the upper hole is drilled, install the brake line drop bracket.
- a. Use a washer under both the bolt head and nylock nut of the 6mm bolt.
 - b. Use a washer under just the bolt head of the 12mm bolt.
- 5) Separate the brake hard line from the chassis retaining clip nearest the end of the brake line. Use a flat nose screw driver or similar tool to depress the clip and allow the brake line to come free.





3038 Rear Leaf Spring Installation

- 6) Install the rear leaf springs 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.



- 7) 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.



- 8) Remove the forward leaf spring bolt using an 18mm socket / wrench (21mm if the vehicle is a 3500)
- 9) Remove the lower shackle bolt so the entire leaf spring / shackle assembly can be removed from the vehicle. Again, use an 18mm socket / wrench for removal. (21mm for 3500 vehicles)
- 10) Remove the leaf spring from the vehicle and set it next to the new spring.
- Take note of the double military wrap on one side of the leaf spring, this is the front of the spring and is to be installed towards the front of the vehicle.
 - Remove the bolt securing the shackle to the rear of the leaf spring.

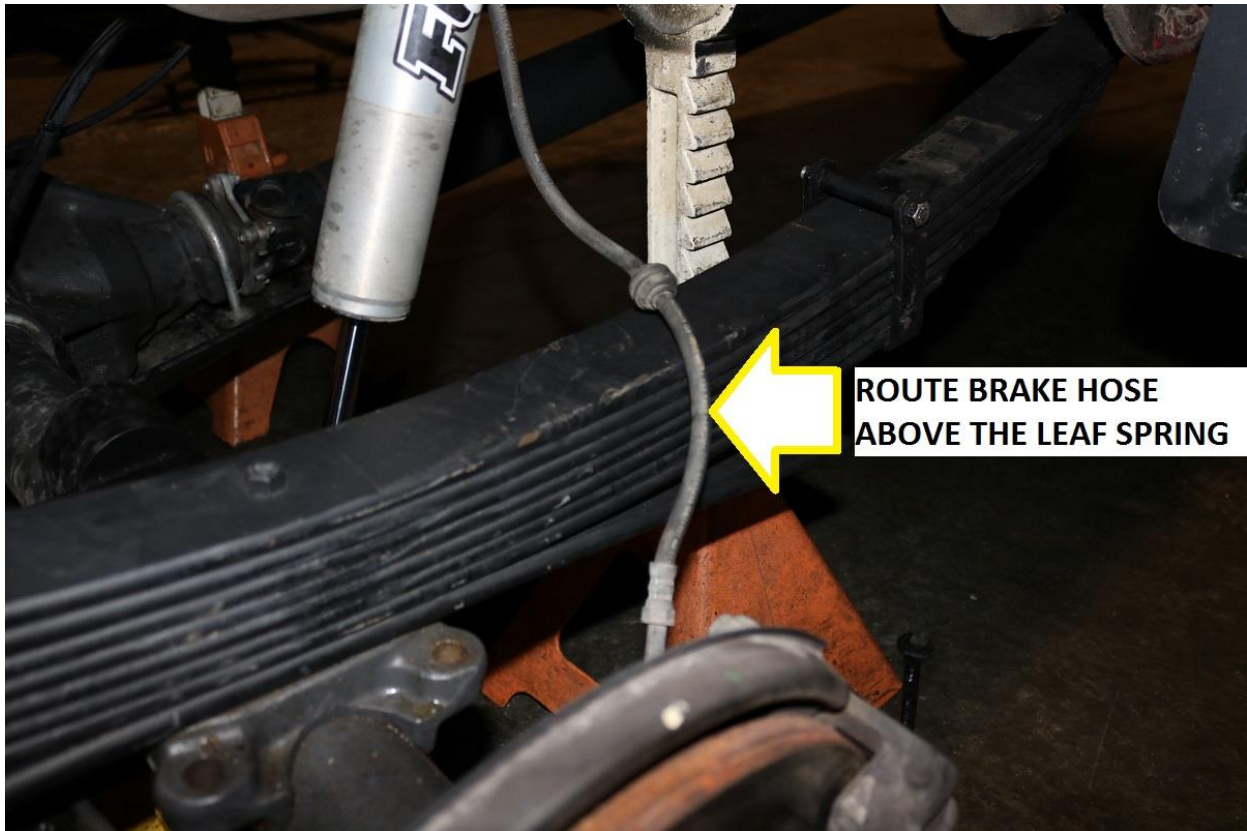




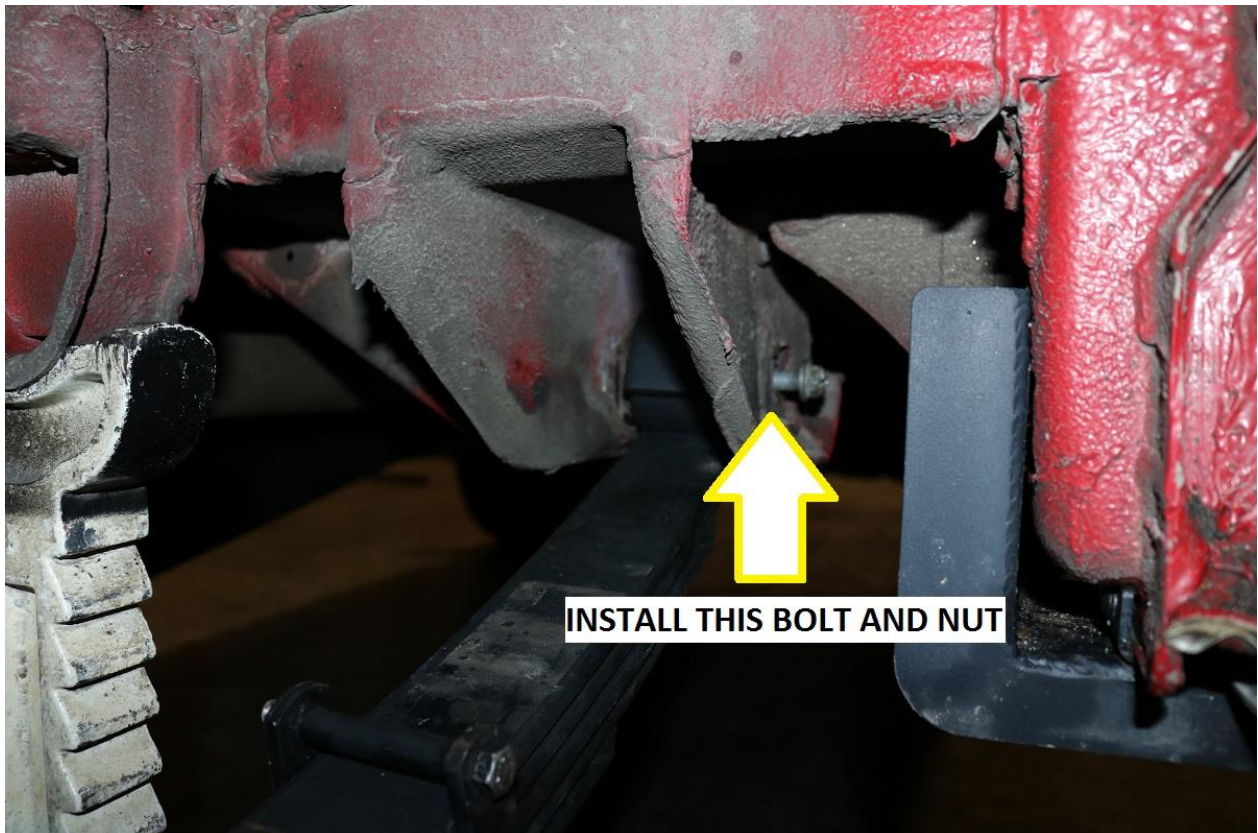
- 11) Bolt the shackle onto the rear of the new leaf spring. Bolt the shackle on so it is perpendicular to the arch of the main spring.
 - a. Torque the shackle bolt to 100 ft-lbs.



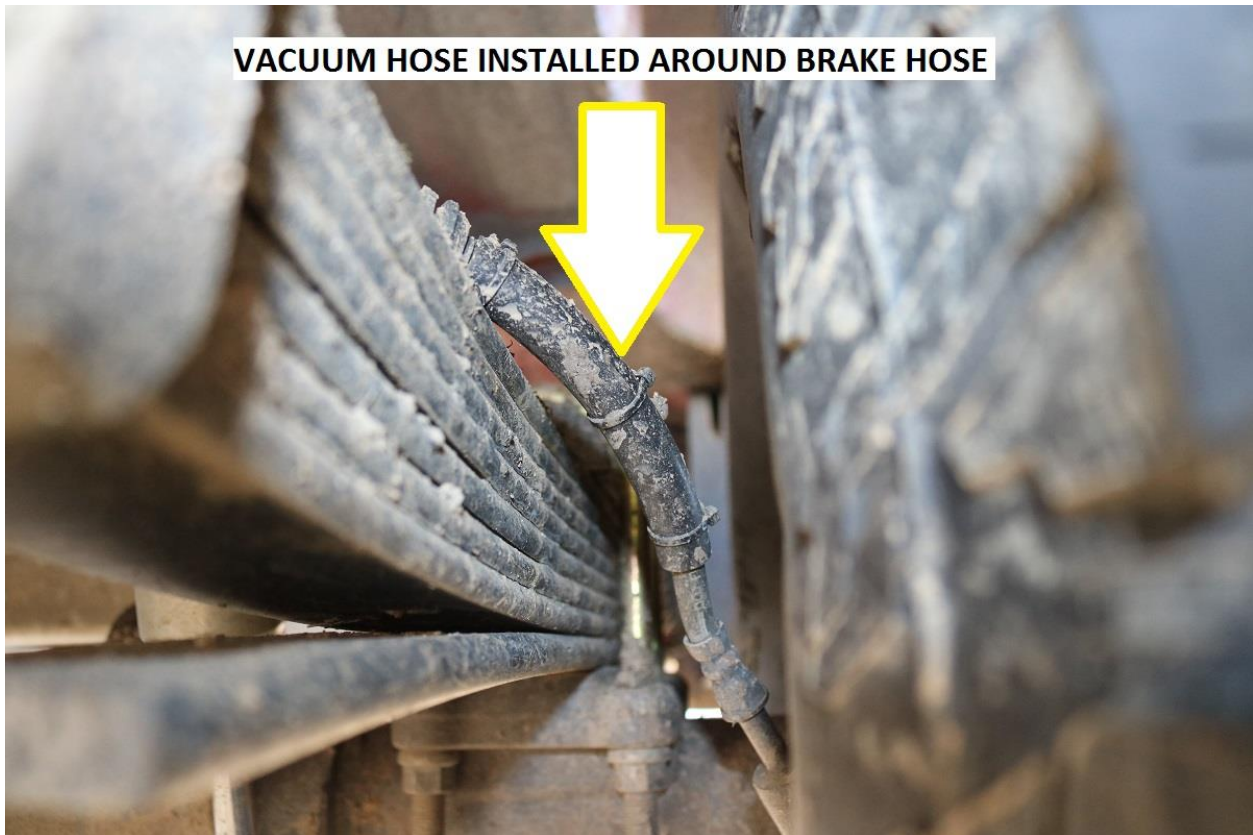
- 12) Install the leaf springs into the vehicle. We have found it easiest to install the springs upside down and then rotating them up into position once under the vehicle.
- a. Be sure to locate the brake hose above the leaf spring.



- 13) Once the springs are rotated into position. Install the forward spring bolt in the spring hanger. Install the nut but do not tighten at this time.



- 14) Jack the axle up or down accordingly to be able to install the lower shackle bolt. Once aligned, install the bolt and nut but do not tighten at this time.
- 15) Make sure the leaf spring center pin falls into the spring perch pocket on the axle and jack up the axle to the point where the leaf spring takes on some load.
- 16) 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. Use a 19mm socket / wrench to tighten.
- 17) Repeat this procedure for the passenger side.
- 18) Cut the 3/8" ID rubber vacuum hose included with the 4008 Rear Brake Line Drop Bracket kit into two equal length pieces. Position a piece over each brake hose where it touches the leaf spring. Split the hose length wise and secure it to the brake hose with multiple zip ties as shown. This is to protect the brake hose against any potential chaffing that might occur over time.



- 19) Re-install the lower shock bolt.
 - a. For 2500 SRW vans: torque to 60 ft-lbs. (81 N.m)
 - b. For 3500 DRW vans: torque to 125 ft-lbs. (169 N.m)
- 20) Refill the master cylinder with DOT 4+ Synthetic Brake Fluid. Refer to owner's manual for certainty.
- 21) Bleed the rear brakes using the factory recommended sequence. Ensure there is good pedal feel and all air is eliminated from the system. Failure to eliminate all air from the braking system is not only dangerous, but will also trigger an ABS warning light on the instrument cluster.
- 22) Re-install wheels / tires and lower van to ground. OEM torque spec for wheel studs on factory steel wheels are as follows:
 - a. 2500 SRW: 177-187 ft-lbs (240-250 N.m)
 - b. 3500 DRW: 140-150 ft-lbs (190-200 N.m)
- 23) Torque the lower shackle bolt and front leaf spring bolt as follows:

- a. For 2500 SRW vans: torque to 100 ft-lbs. (135 N.m)
- b. For 3500 DRW vans: torque to 125 ft-lbs. (169 N.m)

24) Torque the U-bolt nuts to 125 ft-lbs (169 N.m).

25) 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.