



4123 – 2007-PRESENT, MERCEDES SPRINTER HD DIFFERENTIAL COVER

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 diff cover can be installed with the vehicle sitting on the ground under its own weight.
- Note; this diff cover features a ¼" NPT upper port that can be utilized for a rear differential temperature sensor or to route an air line for a locking rear differential through.
- This diff cover features NPT ports, while not required, Teflon tape or thread sealant can be used on the NPT plugs for additional insurance to prevent leaks.
- Draining and refilling of the rear differential is required for reinstallation. Reference your owner's manual for specific recommendations. 2-3 quarts will be required for refill.

Parts List

4123 – 2007-PRESENT, MERCEDES SPRINTER, HD DIFFERENTIAL COVER

- (1) 412301 MERCEDES SPRINTER, HD DIFFERENTIAL COVER
- (1) 412302 DIFFERENTIAL COVER GASKET
- (1) 412303 FILL PLUG WITH O-RING
- (10) SM08-1.25-30-12.9 M8-1.25 X 30MM LONG SOCKET CAP SCREWS
- (10) WL-M8 M8 LOCK WASHER
- (1) 250-NPT ¼" NPT PLUG
- (1) MAG-PLUG MAGNETIC LEVEL PLUG

Tools Needed

- Simple hand tools:
 - Torque Wrench
 - Basic wrench and socket set:
 - Metric sizes: 14mm allen, 17mm allen (Some 3500 vans) , E12 inverted torx (or 10mm 12pt socket)
 - SAE sizes: ¼" allen, 3/8" allen, 9/16" allen
- Paint scraper or razor blade (To remove OEM gasket material)
- Scotchbrite or similar to prep sealing surface of differential
- Brake Clean or Acetone.
- RTV (optional)

- Thread sealant / Teflon tape (optional)

Approximate Installation Time

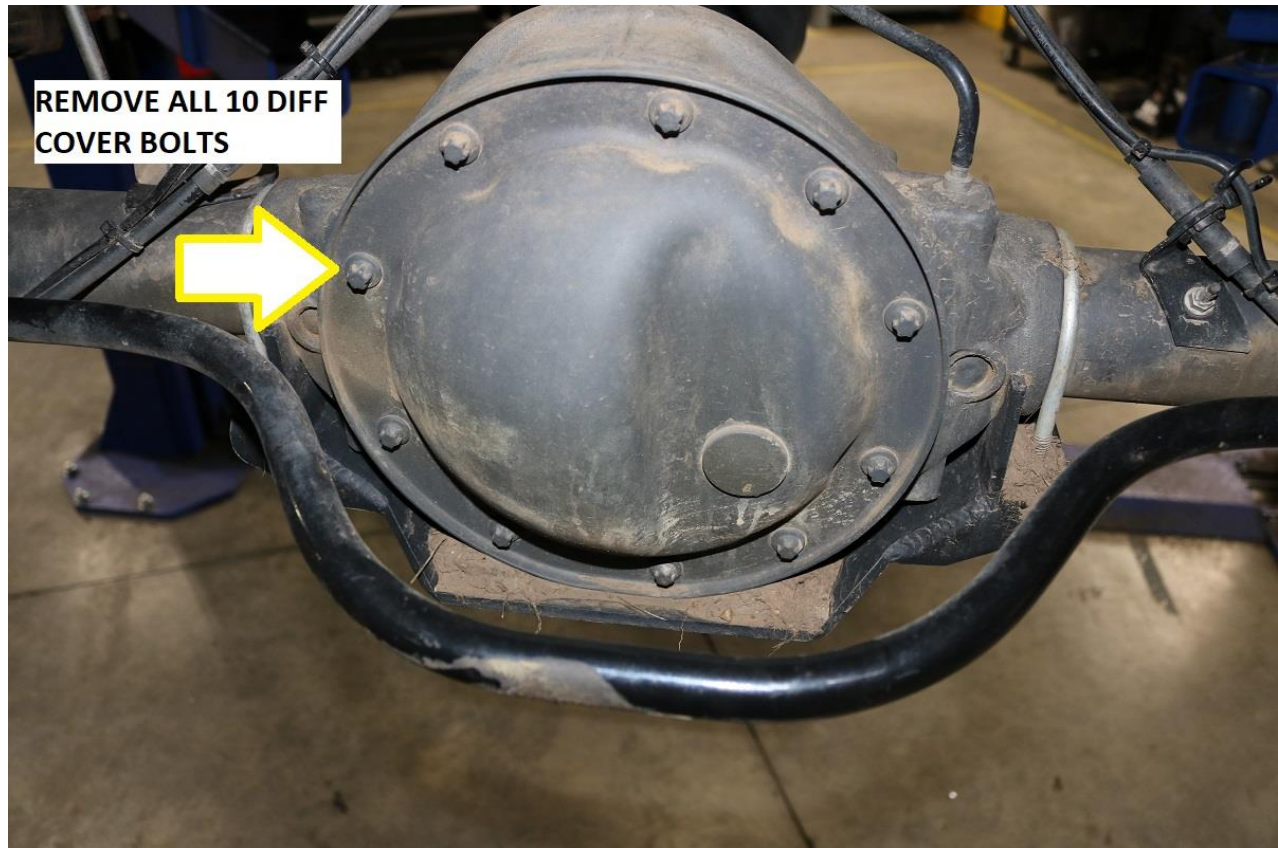
- 30 min – 1 hr

Installation

- 1) Note; this differential cover can be installed with the vehicle on the ground. It does not need to be raised up for installation.
 - a. Additionally, if the vehicle is equipped with a Van Compass differential skidplate, it is recommended to remove it prior to installation. It can be re-installed once the diff cover is fitted to the vehicle.
- 2) Locate the OEM differential drain plug. Remove the drain plug with a 14mm allen and drain the oil.
 - a. Note, some 3500 vans will require a 17mm allen for drain plug removal.



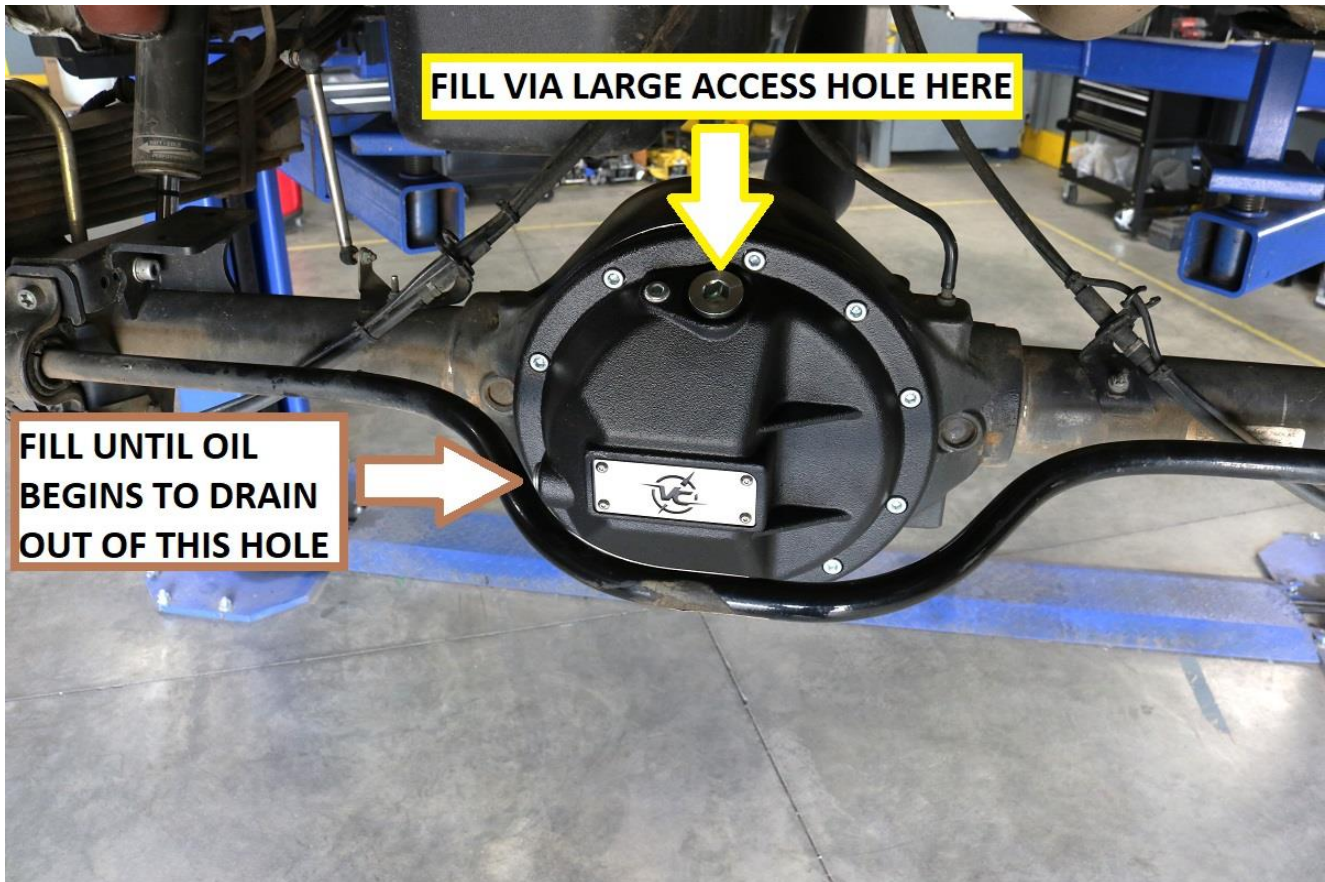
- 3) Remove the 10 inverted torx bolts securing the OEM diff cover to the axle. Use an E12 inverted torx socket if available. Note, a 12 point 10mm socket also works for this hardware.



- 4) With the OEM diff cover removed, use a paint scraper or razor blade to remove any of the OEM gasket that may have stuck to the differential housing.
- Once all gasket material has been removed, use a piece of scotchbrite or similar material to prep and clean the mating surface of the differential.
 - Once prepped, clean the mating surface using acetone or brake clean.



- 5) At this point wipe the mating surface of the new 4123 differential cover with acetone or brake clean to make sure the mating surface is clean.
- 6) Utilize the included paper gasket between the diff cover and differential. Alternatively, RTV can be used as a stand alone or in conjunction with the paper gasket.
- 7) Fit the differential cover to the vehicle and install the M8-1.25 x 30mm long socket cap screws. Install using a 6mm allen wrench.
 - a. Start all hardware before fully tightening.
 - b. Once all hardware is tight, torque to 16 ft-lbs (22 N.m) in a criss-cross pattern.
- 8) Re-install the OEM drain plug previously removed in step 2. OEM torque spec is 75 ft-lbs (101 N.m)
- 9) Fill the differential with fresh fluid, utilize the large upper fill plug to fill the rear end. Fill until oil comes out the side port near the logo plate. See image below for reference.



- 10) Install the large fill plug with O-ring using a 9/16" allen. Torque to 60 ft-lbs (81 N.m)
- 11) Use a 1/4" allen wrench to install the small 1/4" NPT sender plug if a temp sensor or airline routing is not required. Snug NPT fitting, but do not overtighten. Approximate torque range is around 15 ft-lbs (20 N.m)
- 12) Lastly, install the 1/2-14 NPT side plug with a 3/8" allen. Torque to 60 ft-lbs (81 N.m)
- 13) 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.