

# 3023 – 2007-PRESENT, MERCEDES SPRINTER NCV3, REAR DIFFERENTIAL GUARD

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 differential guard which can be installed with simple hand tools.
- This differential guard requires no modification to the rear differential housing and can easily be removed for service or to return the vehicle back to stock configuration.
- The differential drain plug can be accessed with this guard still in place for easy serviceability.

# **Parts List**

# 3023 – 2007-PRESENT, MERCEDES SPRINTER NCV3, REAR DIFFERENTIAL GUARD

(1) 302301 MERCEDES SPRINTER NCV3 REAR DIFFERENTIAL GUARD
(1) UB-8C-4000-0500 U-BOLT, 4.00" DIAMETER X 5.00" LONG, ½-13 UNC
(2) UB-6C-3000-0475 U-BOLT, 3.00" DIAMETER X 4.75" LONG, 3/8-16 UNC

(2) NNC-8
(2) WF8-8
(4) NNC-6
(4) WF8-6
(5) MF8-13 UNC NYLOCK NUT
(6) WF8-6
(7) MF8-13 UNC NYLOCK NUT
(8) MF8-16 UNC NYLOCK NUT
(9) WF8-16 UNC NYLOCK NUT

## **Tools Needed**

- Floor Jack
- Simple hand tools:
  - Basic wrench and socket set:

Metric sizes: 10mmSAE sizes: 9/16", ¾"

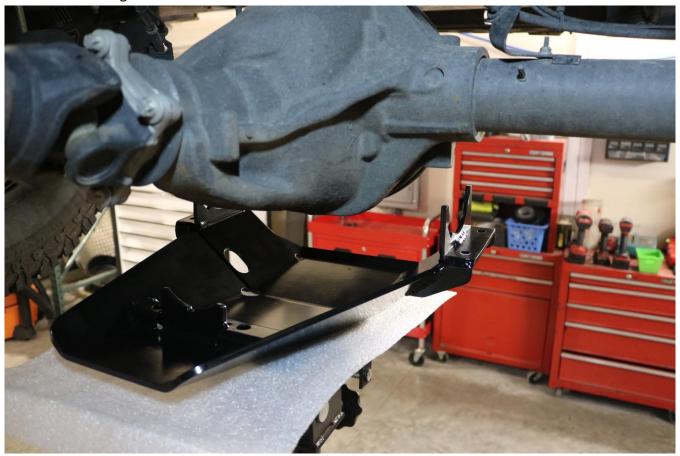
Torque wrench

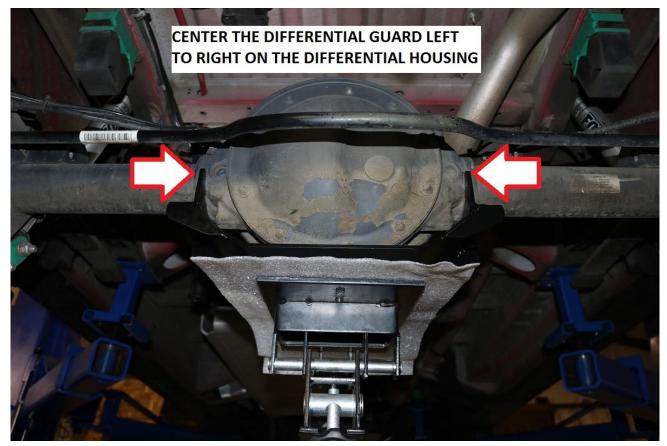
# <u>Approximate Installation Time</u>

Professional shop: 30min - 1 hour
Driveway install: 30min - 1 hour

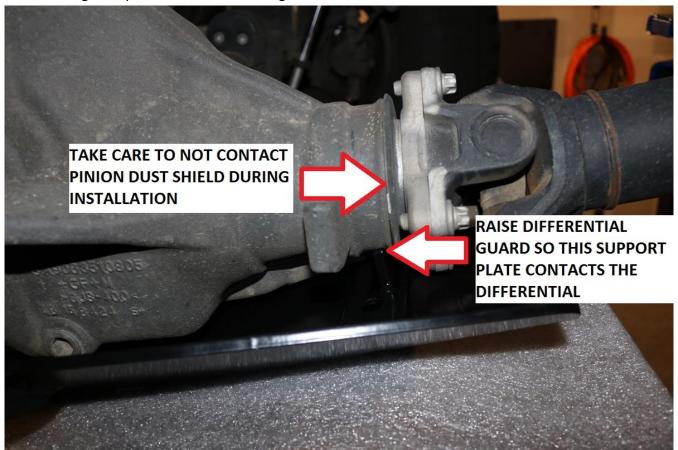
# **Installation**

- 1) Installation of the rear differential guard can be done on the ground with the vehicle sitting under its own weight.
- 2) Use a floor jack to raise the differential guard into position as shown in the images below.
  - a. Note use a towel or some cardboard on the floor jack saddle to not mar the powder coat finish of the differential guard.
  - b. The differential guard should sit evenly left to right on the cast center section of the differential housing.

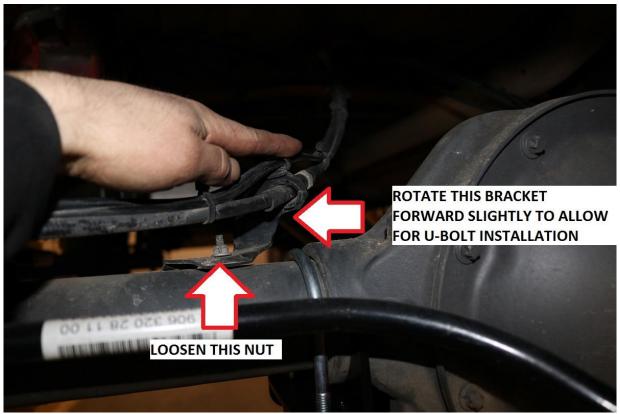




3) Take care when raising the differential guard into position that the front contact point does not contact or damage the pinion dust shield during installation.



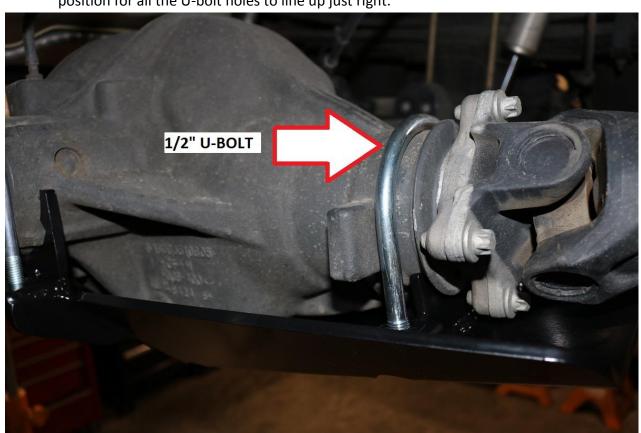
- 4) Adjust the differential guard placement as needed until satisfied with fitment. Use the floor jack to apply decent upward pressure to the differential guard so it sits in place and is contacting the differential.
- 5) Install the included 3/8" (3.0" inside diameter) U-bolts as pictured below. Note, on the driver (left hand) side of the axle housing, the emergency brake cable mounting bracket may need to be loosened to fit the U-bolt.
  - a. Use a 10mm socket / wrench to loosen the brake cable mounting bracket and rotate it forward to allow the U-bolt to slip past.
  - b. Re-secure the brake cable mounting bracket once the U-bolt is in position.



6) Once the 3/8" U-bolts are in place, install a washer and 3/8" nylock nut as pictured below. The nuts may be snugged down but do not fully tighten at this time. Use a 9/16" socket for installation.



- 7) Fit the  $\frac{1}{2}$ " (4.0" inside diameter) U-bolt over the front portion of the differential and through the differential guard.
  - a. Note; a deadblow or rubber mallet may be needed to slightly shift the differential guard into position for all the U-bolt holes to line up just right.



8) Install the included washers and nylock nuts on the front U-bolt. Snug the nuts on this U-bolt but again, do not fully tighten at this time. Use a ¾" socket for installation.



- 9) Torque the 3/8" axle tube U-bolts to 15 ft-lbs. (20 N.m)
- 10) Torque the  $\frac{1}{2}$ " front U-bolt to 30 ft-lbs (40 N.m)
- 11) Remove the floor jack.
- 12) Re-check 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.