

# 3022 – 2013-PRESENT, FORD TRANSIT, HIGH CLEARANCE REAR LOWER SHOCK BRACKET

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 shock mount which can be installed with simple hand tools.
- Disclaimer: This shock bracket requires cutting part of the lower shock mount off. Once this portion of the bracket is cut off, the rear suspension cannot easily be returned to a stock configuration.
- Shorter shocks are required for non-lifted vans. The factory shocks can bottom out if they are not replaced with a shorter compressed length shock.
- Factory shocks can be used on vans that have a 2" bump stop extension installed. This part is included in the Van Compass Ford Transit Terrain rear lift kit.

## Parts List

## 3022 – 2013-PRESENT, FORD TRANSIT, REAR LOWER SHOCK EXTENSION BRACKET

•	(2) 302201	FORD TRANSIT HIGH CLEARANCE REAR LOWER SHOCK BRACKET
,	(2) 302202	FORD TRANSIT HIGH CLEARANCE REAR LOWER SHOCK BRACKET, SPACER
		BUNG
,	(2) HM14-1.50-80-10.9	M14-1.50 X 80MM LONG GR10.9 HEX HEAD BOLT
•	(2) NSM14-1.50	M14-1.50 STOVER NUT
,	(4) WFM14	M14 FLAT WASHER
,	(2) SM12-1.50-20-12.9-30	M12-1.50 X 30MM LONG GR12.9 SOCKET CAP SCREW
,	(2) NSM12-1.50	M12-1.50 STOVER NUT
,	(4) WFM12	M12 FLAT WASHER

## **Tools Needed**

- Quality Jack & Jack Stands
- 4-1/2" angle grinder with metal cut off wheel and metal sanding disc or similar cutting tool.
- Simple hand tools:
  - Basic wrench and socket set:
    - Metric sizes: 15mm, 18mm, 19mm, 22mm
    - 10mm allen wrench
- Torque wrench

# Approximate Installation Time

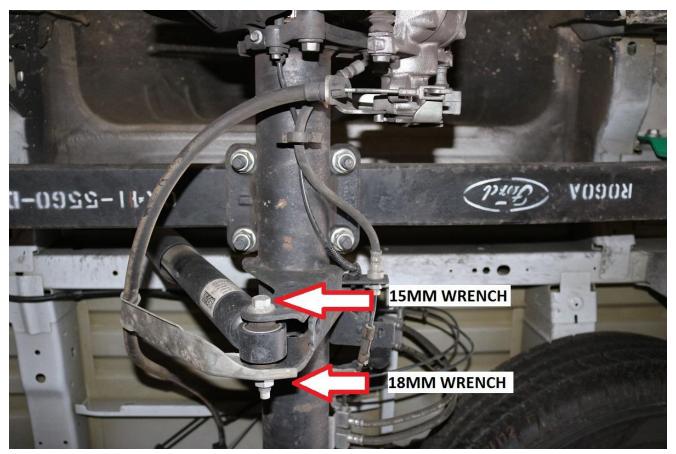
Professional shop: 1-2 hoursDriveway install: 1-2 hours

# **Installation**

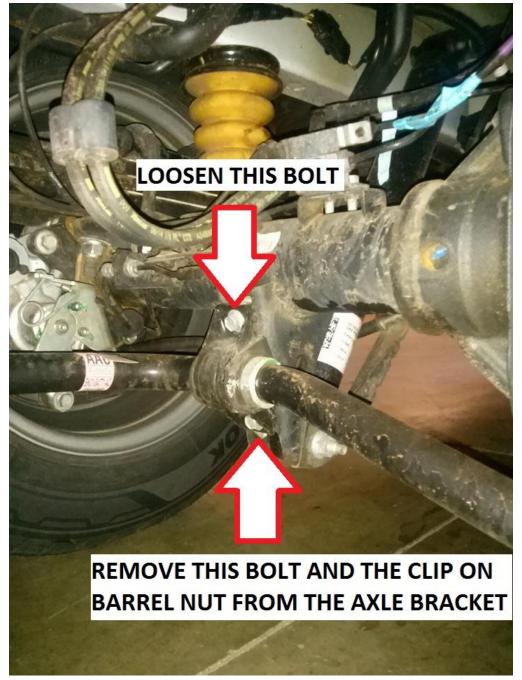
- 1) Begin by safely lifting and supporting the vehicle so that the rear suspension can hang free.
- 2) If the vehicle is equipped with a rear hitch, this is a solid jacking point to raise the vehicle just to the point where the rear tires are about to leave the ground.



- 3) Position some jack stands under the vehicle chassis main sub frame for safety.
- 4) These instructions will document installation on the driver (left hand) side of the vehicle. Installation on the passenger side is identical. Both shock brackets can be installed simultaneously on each side of the vehicle.
- 5) Remove the lower shock bolt.
  - a. Use a 15mm socket / wrench for the head of the bolt.
  - b. Use an 18mm socket / wrench for the nut.
  - c. See image below for reference.



- 6) With the shock bolt removed, pull the shock out from the mount on the axle and position the shock forward so it is out of the way.
- 7) Note; if the vehicle is equipped with a rear sway bar, remove the bottom bolt clamping the sway bar to the rear axle using a 13mm socket / wrench. Loosen the top mounting bolt and remove the clip on barrel nut from the lower mounting hole of the sway bar clamp. See image below for reference.

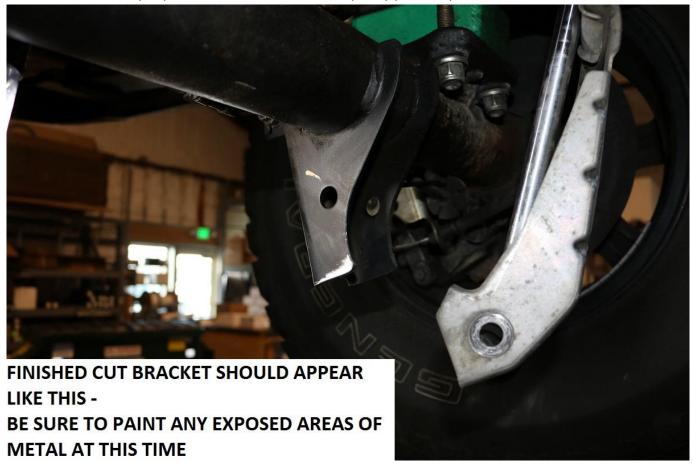


- 8) Fit the shock bracket into the shock mount. The brackets are the same left and right and can only be installed one way.
- 9) Fit the bracket into the factory shock mount on the axle and install the provided M14-1.50 x 80mm long bolt as pictured below to locate the bracket.
  - a. With the bracket in place, mark the bottom of the bracket using a square or straight edge.
  - b. See image below for reference.



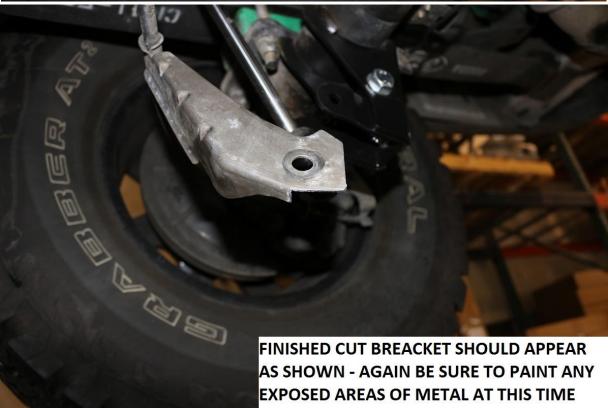
10) Remove the M14 bolt and bracket from the vehicle and cut on the marked line from the previous step. Use a 4-1/2" angle grinder with metal cut off wheel or similar cutting tool. Deburr any sharp or rough edges after cutting with a flap disc or similar metal sanding tool.

a. Paint any exposed areas of metal with a quality paint to prevent corrosion.



- 11) Trim the emergency brake cable bracket as shown in the images below.
  - a. Cut on the bend flange of the bracket up to the first bend of the bracket. Approximately a 1.0" long x .250" wide ( $25mm \times 6mm$ ) piece will be removed.
  - b. Note the red lines in the image below denote the cut lines.
  - c. Again, be sure to paint any exposed areas of metal on the emergency brake cable bracket at this time.

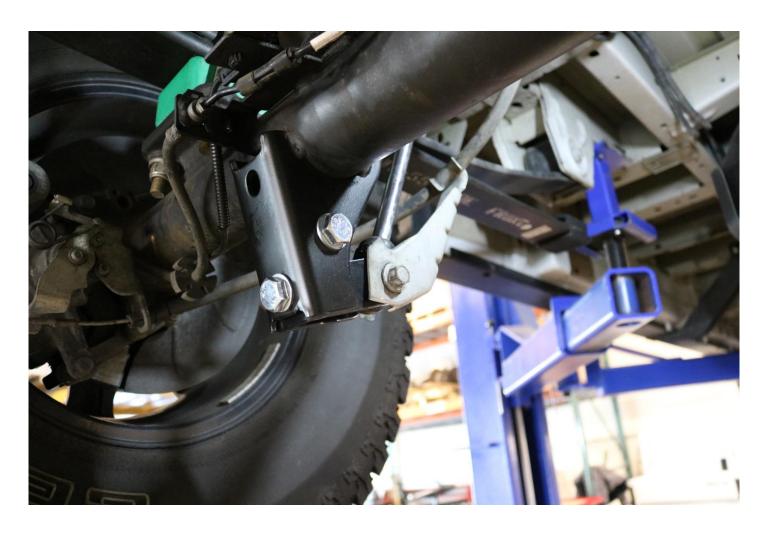




- 12) Install the shock bracket using the M14-1.50 x 80mm long bolt included in the kit. Be sure to install the included spacer between the shock bracket as shown in the image below.
  - a. Use a washer under the bolt head and under the included stover nut. Do not tighten at this time.



- 13) Install the M12-1.50 socket cap screw in the lower sway bar clamp mounting hole replacing the bolt removed in step 7 for vans equipped with a rear sway bar.
  - a. Vehicles that do not use a rear sway bar, be sure to use a washer under the head of the socket cap screw.
  - b. Vehicles that do have a rear sway bar, do not use a washer under the head of the socket cap screw as the washer will not lay flat on the sway bar clamp.
  - c. Install the included M12-1.50 stover nut on the inside of the bracket with a washer under the nut.
- 14) Tighten the socket cap screw first. Use a 10mm allen wrench for the socket bolt and a 19mm socket / wrench for the nut. Torque to 60 ft-lbs (81 N.m)
- 15) Tighten the M14 bolt using a 22mm socket / wrench and torque to 81 ft-lbs. (110 N.m)
- 16) Install the factory lower shock bolt through the emergency brake cable bracket and through the shock / shock bracket. Tighten the factory bolt using a 15mm socket / wrench for the bolt head and an 18mm socket / wrench for the nut. Torque to 81 ft-lbs. (110 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.