1062 – 2013-PRESENT, FORD TRANSIT, MONOTUBE INVERTED RALLY STRUT INSTALLATION

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.
- **A proper alignment must be done immediately after installation of this lift kit.**
- This is a bolt on suspension package that can be installed with simple hand tools and removed at a later time to return the vehicle to stock configuration if desired.
- This suspension package provides anywhere from -0.5” to +0.5” of lift with an OEM coil depending on snap ring placement on the strut.
- When paired with the Van Compass 1030 1” lift coil and our Topo kit camber correction spacer, this strut can net 1.50” to 2.50” of lift depending on weight configuration of the chassis and snap ring placement on the strut.
- The following instructions document the installation on a 2020 AWD Transit. Installation on older models and RWD models will be very similar.
- We recommend a maximum tire size of 265/75/16 tires with this lift kit. Any larger tire will contact the top of the inner fender when the suspension fully bottoms out. There are details regarding pinch seam trimming for tire clearance at the end of these instructions.
- NOTE: These instructions do not cover removal and replacement of the strut from the vehicle. For that information, please reference Van Compass Topo Kit instructions. Part Number: 7089

Parts List

1062 – 2013-PRESENT, FORD TRANSIT, MONOTUBE INVERTED RALLY STRUT

- (2) 106201 TRANSIT INVERTED MONOTUBE RALLY STRUT
- (2) 106202 TRANSIT LOWER COIL SPRING PERCH
- (2) 106203 TRANSIT LOWER COIL ISOLATOR
- (2) 106204 TRANSIT UPPER COIL SPRING PERCH
- (2) 106205 TRANSIT UPPER COIL ISOLATOR
- (2) 106206 TRANSIT SWAY BAR LINK (ASSEMBLED WITH NUTS)
- (2) NSFM12-1.25 M12-1.25 FLANGED STOVER NUT
- (4) NSFM12-1.50 M12-1.50 FLANGED STOVER NUT (ASSEMBLED ON SB LINK)
- (2) RP-02-590 ROLL PIN, .125” DIAMETER, .590” LENGTH
- (1) 106210-01 TRANSIT RALLY STRUT, INSTALL INDEX TOOL

Tools Needed (along with those listed in 7089 instructions

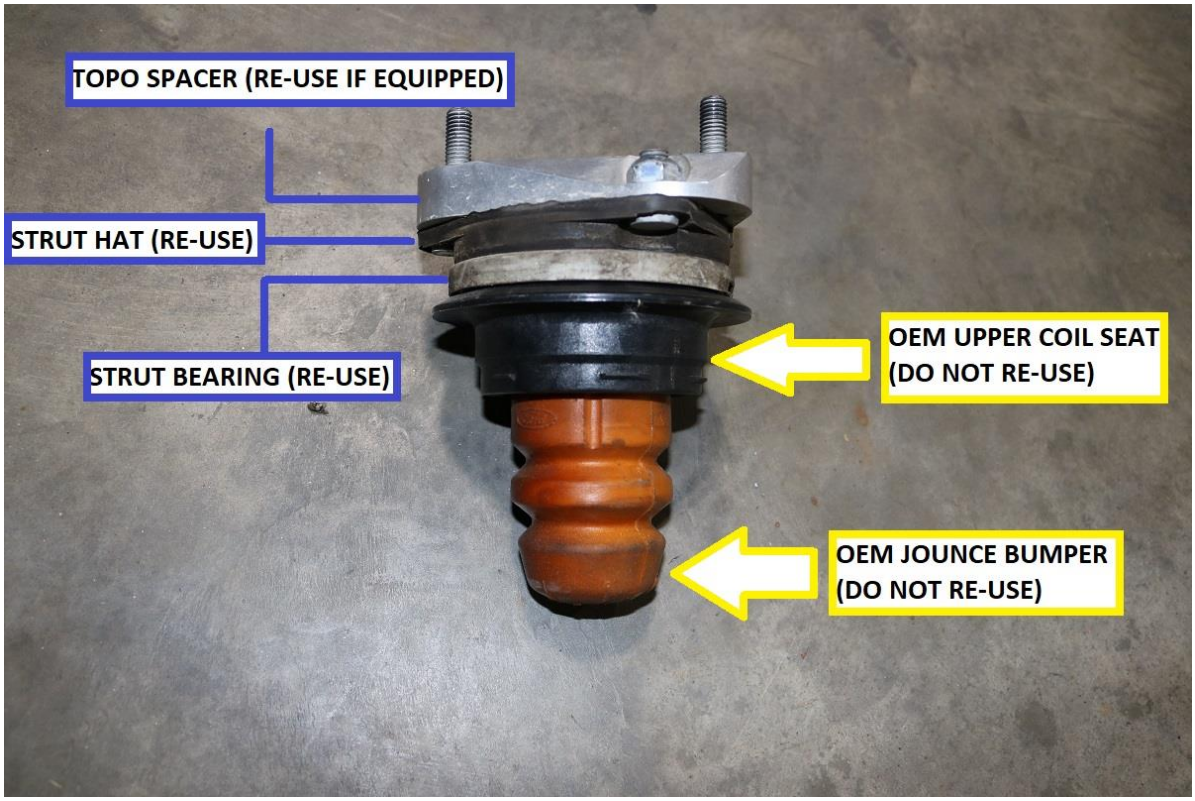
- Coil Spring Compressor
- Flat faced snap ring pliers.
    - (Optional, 2 small flat blade screw drivers for adjustment of snap ring on strut)
- 18mm wrench (SB Link nuts and upper strut nut)
- 6mm allen (SB link studs)
- T-40 Torx bit (Upper Strut stud)

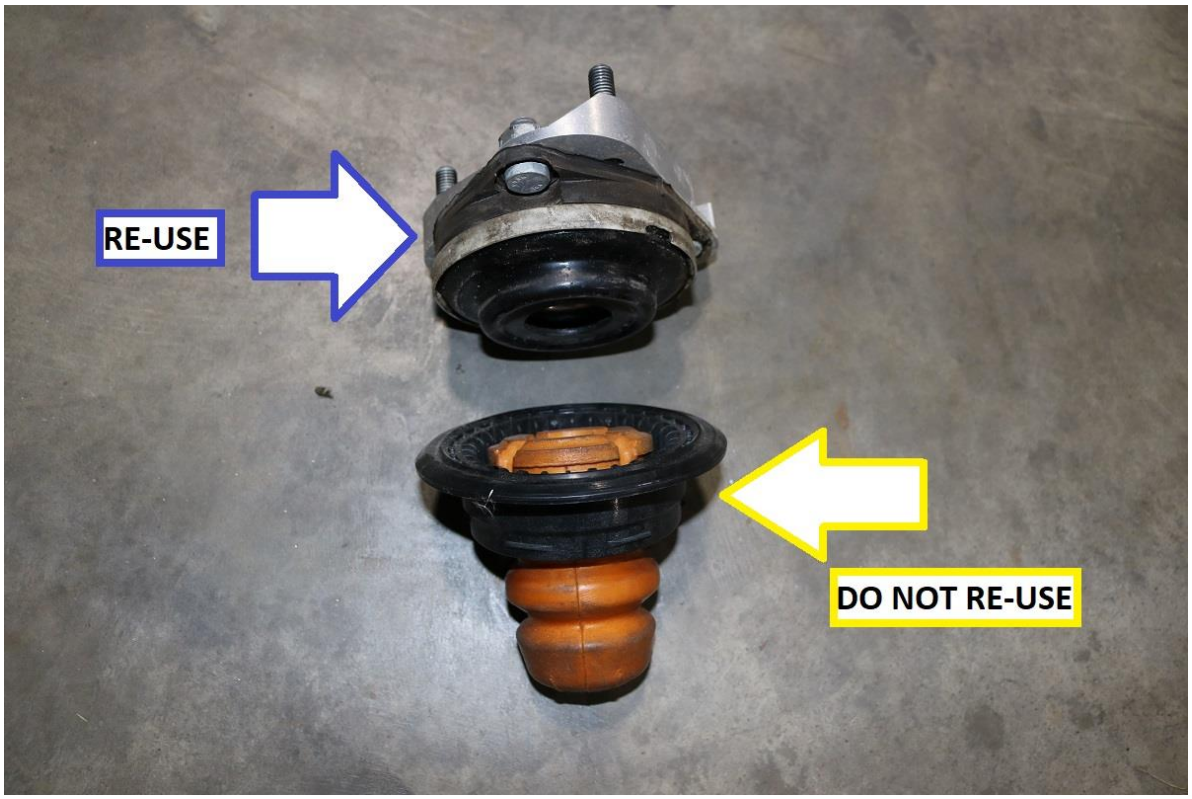
Approximate Installation Time

- Professional shop with automotive lift: 4-5 hours
- Driveway install with jack and jack stands: 6-7 hours

Installation

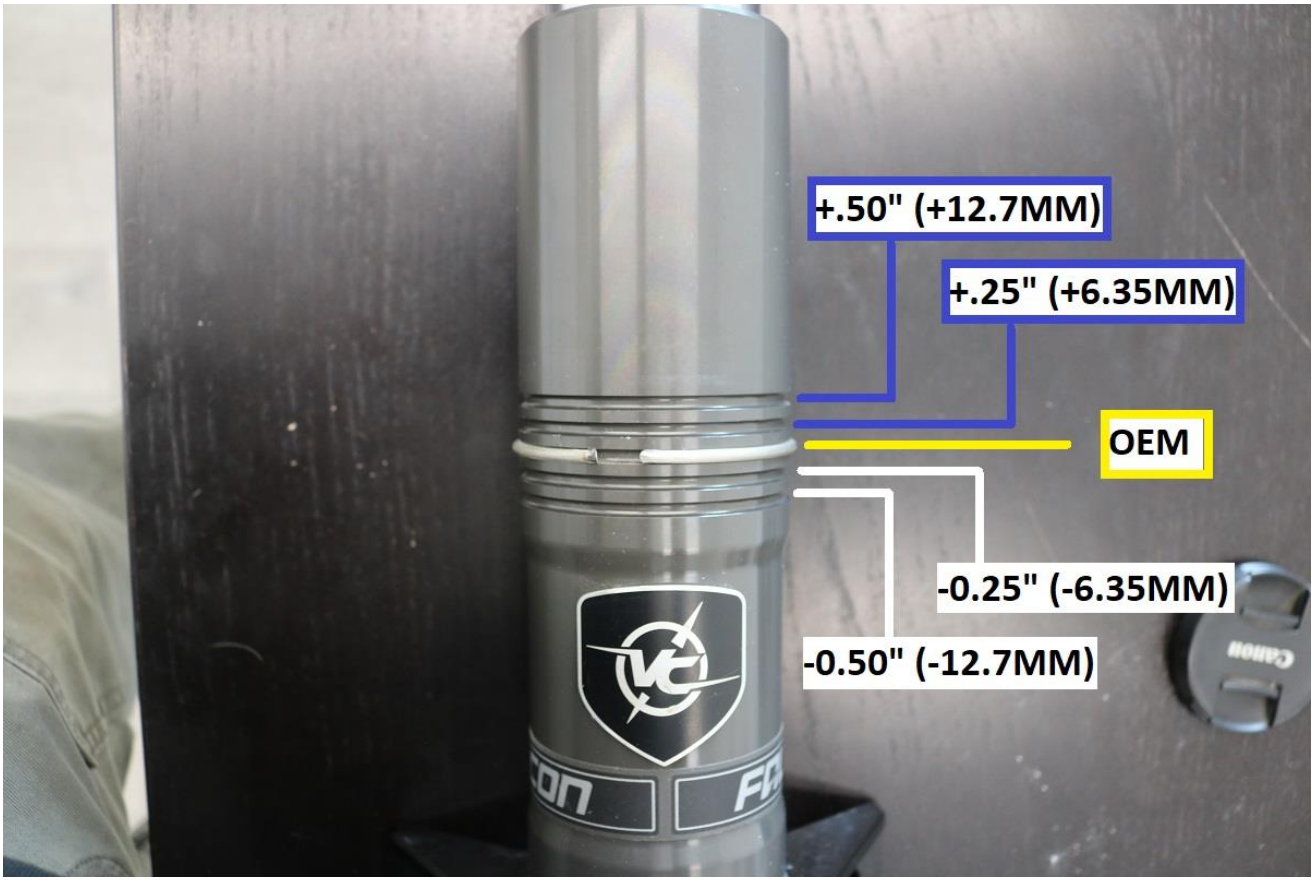
1) Reference Topo Kit (VC part number 7089) Instructions through Step 19 for removal process of the strut.
2) With the strut removed from the vehicle, use a spring compressor to safely remove the OEM strut hat and strut bearing as those items will be re-used.
    a. Take note of top & bottom coil orientation.
    b. Note, if the vehicle has more than 60k miles on the original strut bearing, it's a good idea to replace it at this time with a replacement Motorcraft strut bearing. Motorcraft part number: AD1110
    c. Note the upper strut nut is removed with an 18mm wrench.
3) Below is an image of the upper strut hat assembly that will be removed from the strut.
    a. The OEM Jounce bumper and upper coil seat will not be re-used.



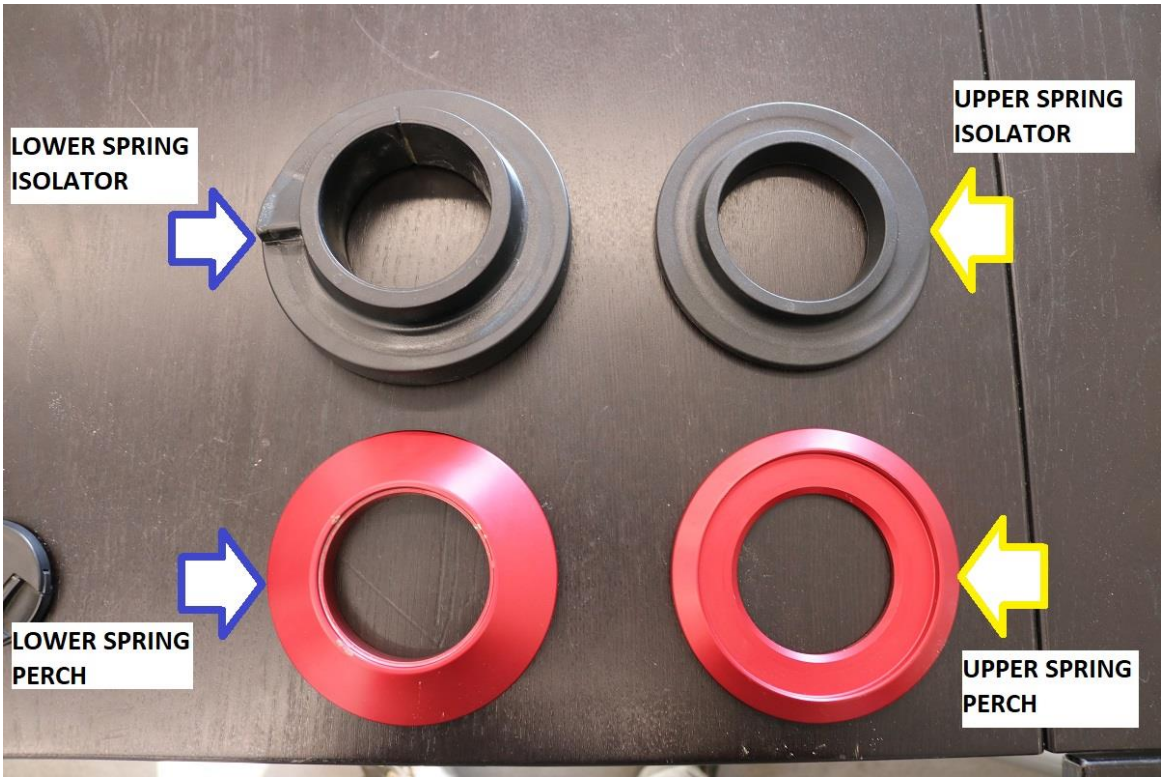


STRUT PRE-ASSEMBLY

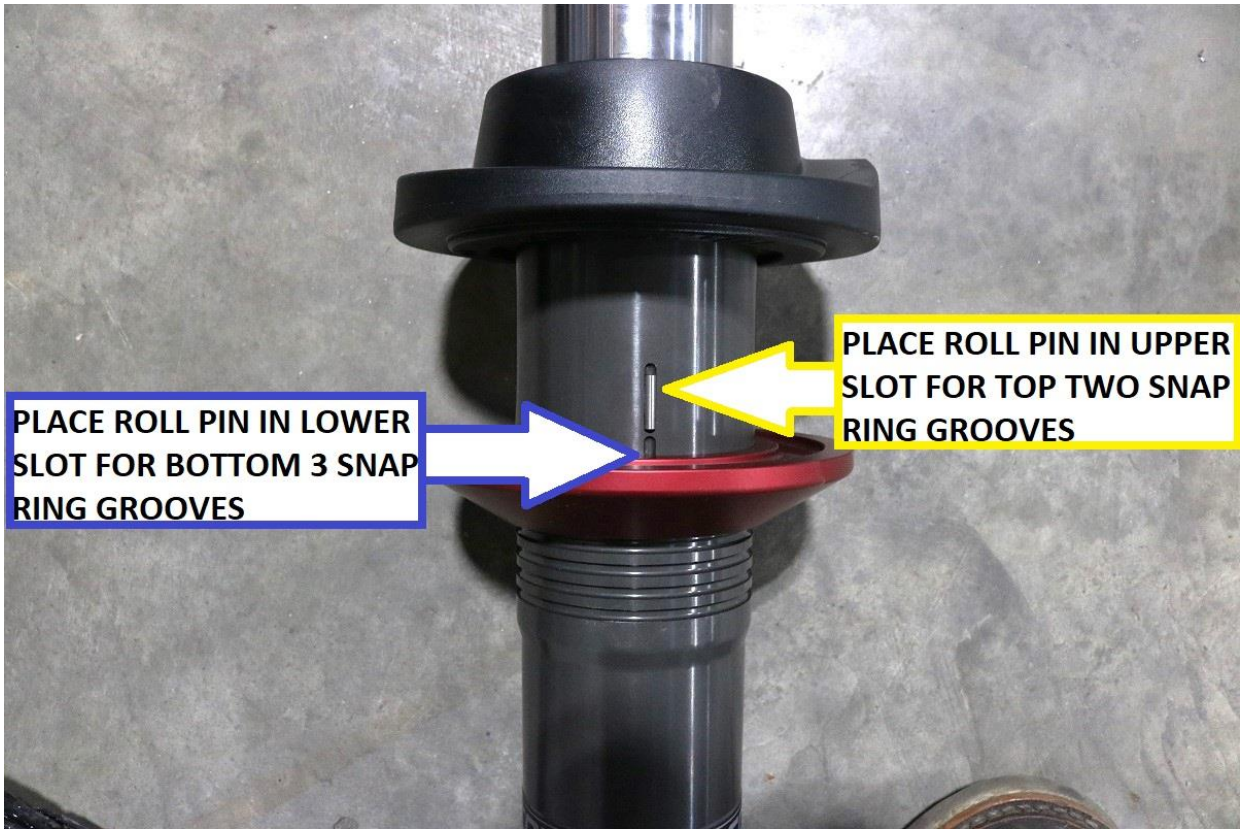
4) The strut will come disassembled but the snap ring will be installed on the strut body. The image below shows how the groove locations translate to ride height changes.
    a. Note, if the goal is to match the current ride height of the vehicle, install the snap ring in the middle groove (OEM location)



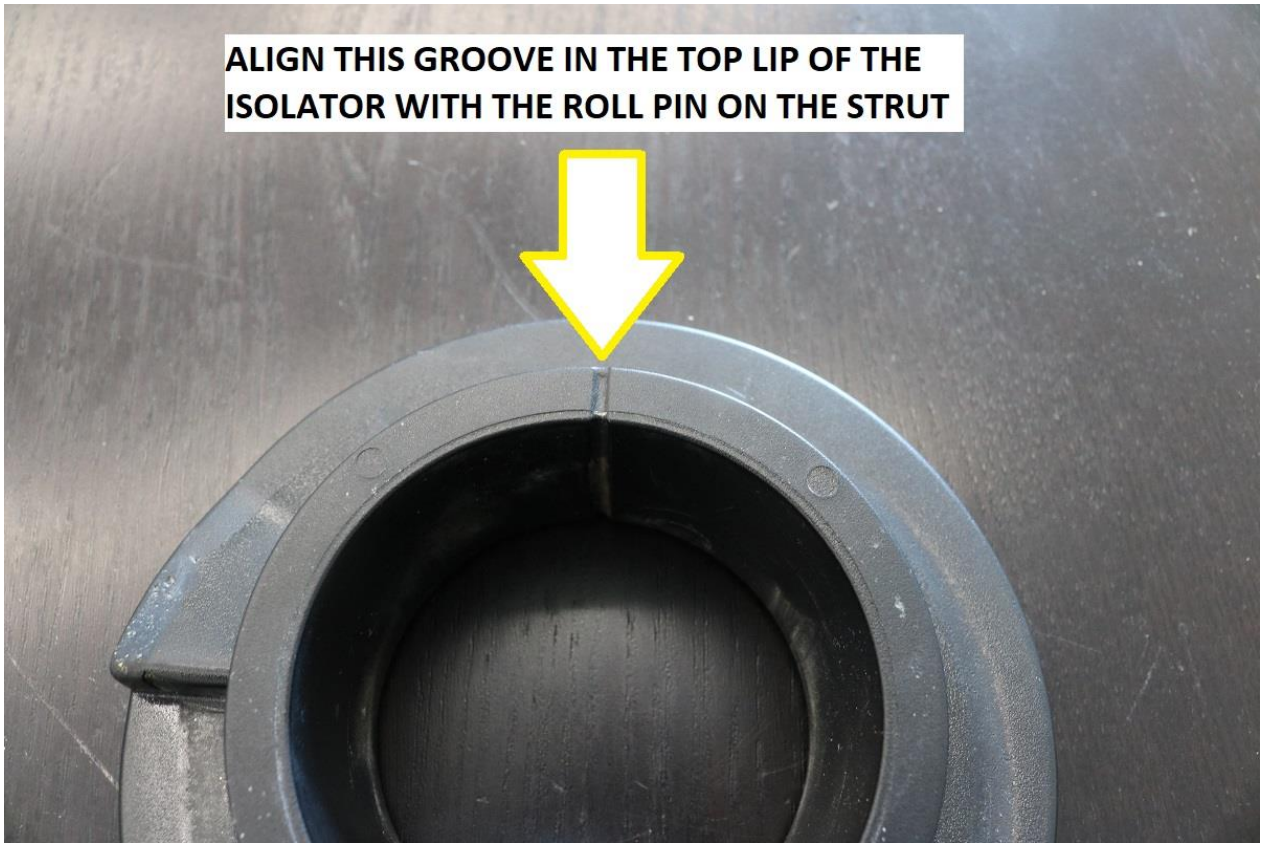
5) Once the snap ring position has been determined, fit the lower coil spring perch to the strut, position it all the way down to the point where it rests on the snap ring.
    a. Note, the lower spring perch has a more conical shape than the upper. See image below for reference.



6) With the lower spring perch fitted, lay the strut on a work surface and orient it so the machined roll pin grooves are oriented up towards you. Place the roll pin into the slot as shown in the image below.



7) With the roll pin in place, install the lower coil spring isolator. Be sure to align the internal groove in the coil spring isolator with the roll pin location. Slide the isolator all the way down till it rests on the coil perch. Make sure the isolator cannot rotate freely on the strut body.



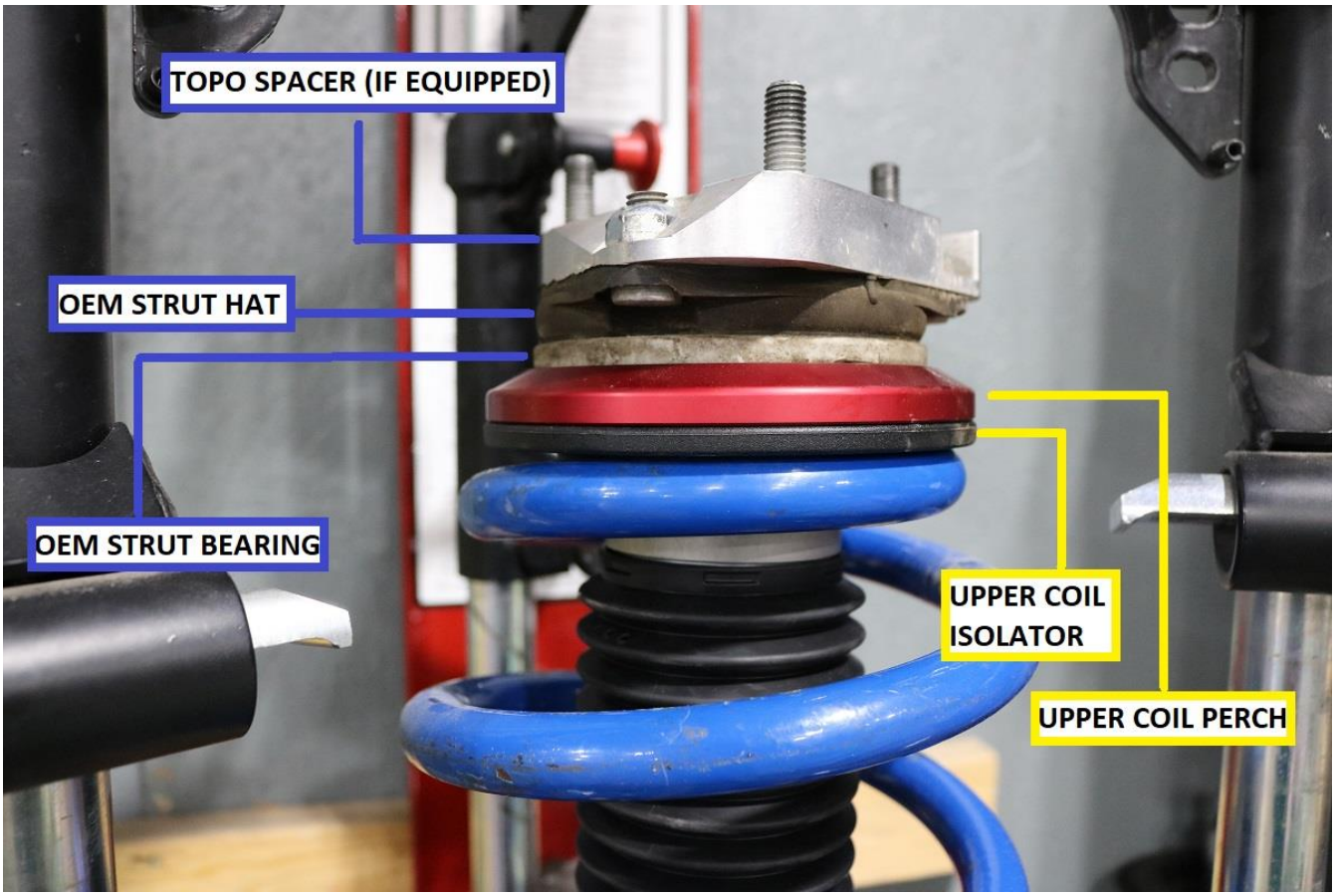
8) Fit the dust boot over the top cap of the strut and snap it into the machined retention groove in the top cap. See image below for reference.
    a. Once the boot is installed, the strut is now ready to have the coil spring installed.

COIL AND UPPER STRUT ASSEMBLY

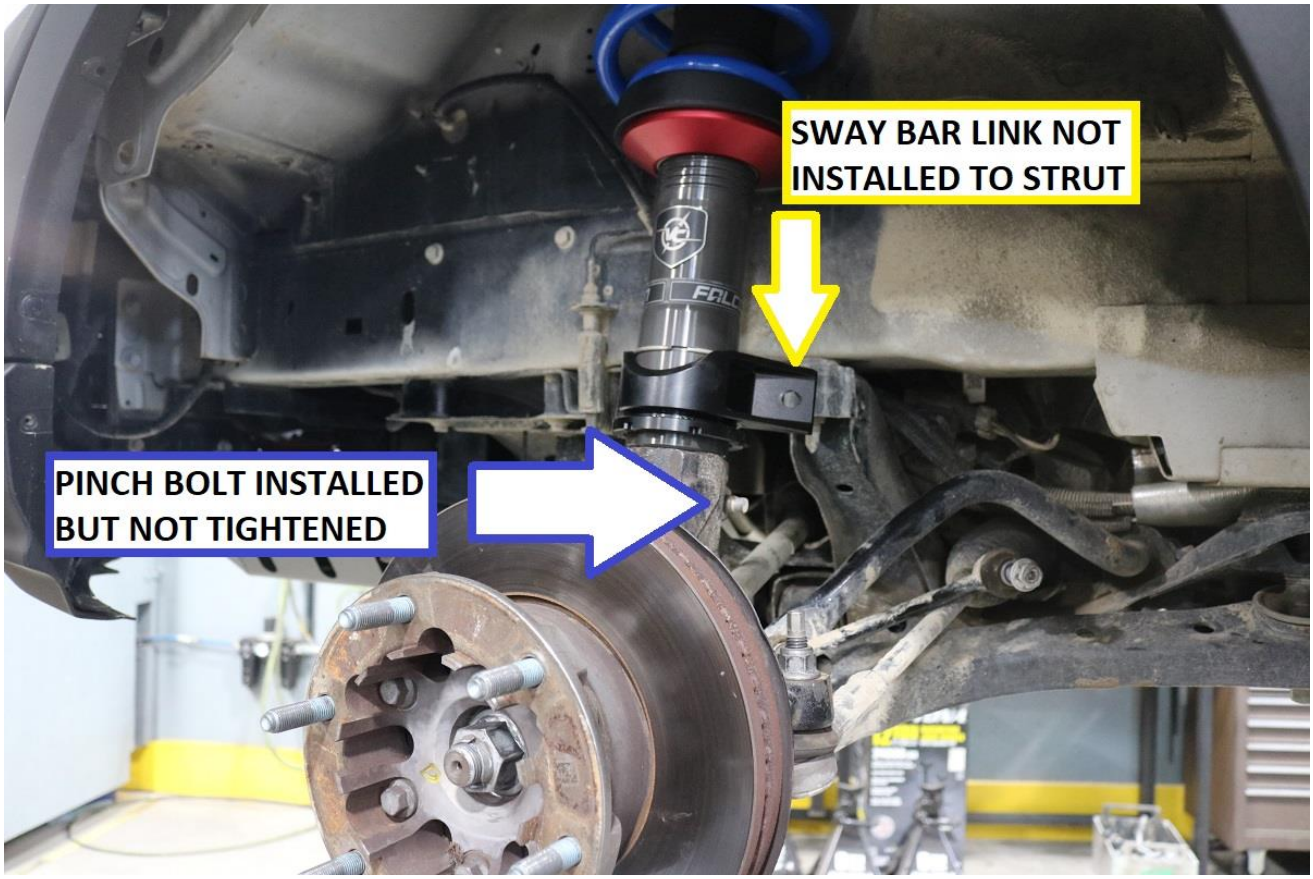
9) From here on forward, be careful not to let the lower spring isolator move to the point where the roll pin can fall out.
10) Fit the coil to the strut. Note the coils are different top and bottom but are the same left to right.
    a. The bottom wind of the coil spring is “offset” to one side. The top wind of the coil spring is centered.
    b. If using a Van Compass 1030 Coil, the Logo and part number should be oriented the right way up.
    c. Rotate the coil so the end of the lower pigtail indexes into the coil stop of the lower isolator. See image below for reference.

11) Fit the upper coil isolator, upper spring perch and OEM strut bearing / top hat assembly to the strut.

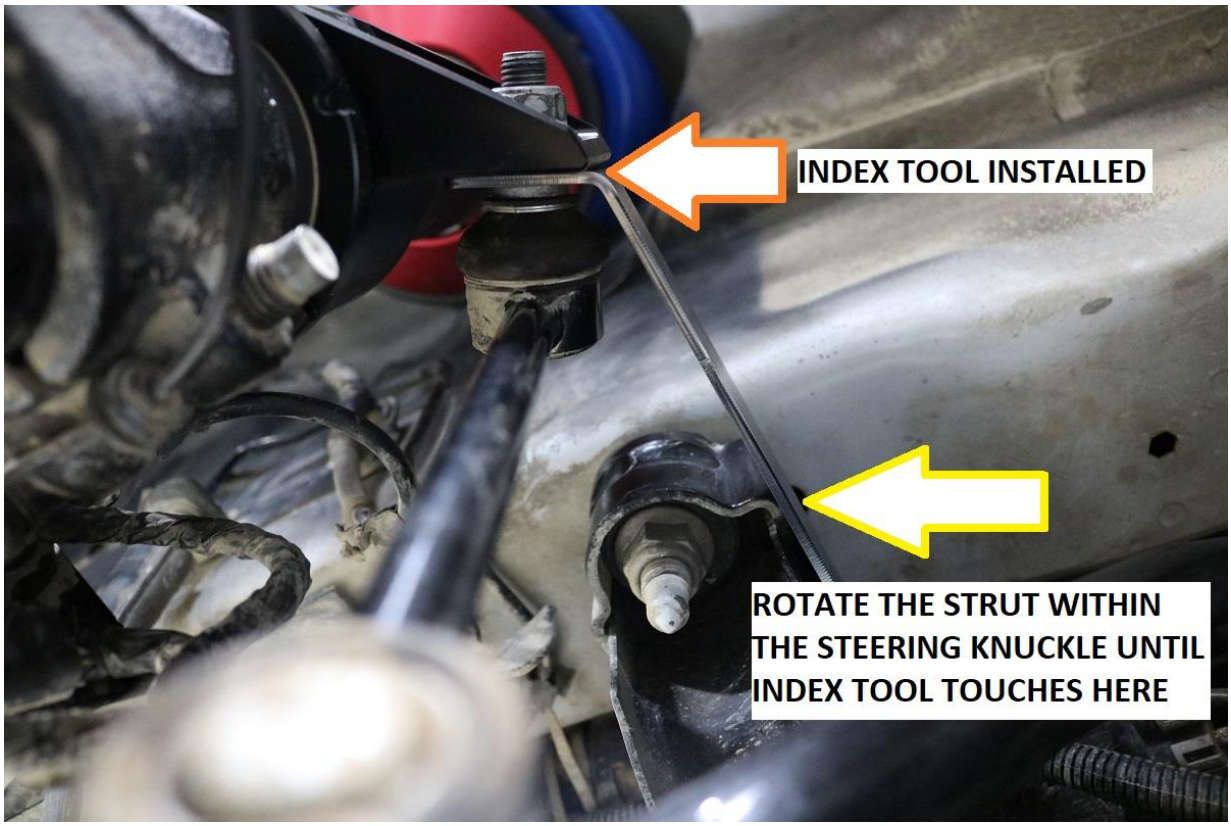
a. Torque the new included upper strut nut to 41 ft-lbs. (55Nm) using an 18 mm socket / wrench.



12) With the strut fully assembled, it can now be refitted to the vehicle. Reference 7089 instructions for step by step re-installation. Installation is the same process as an OEM strut with a few differences explained here.
13) Re-assemble the front suspension fully with the exception of the rear sway bar link and the strut pinch bolt at the steering knuckle.
    a. The kit comes with new sway bar links and hardware, the OEM sway bar links are not used, nor are they sway bar extension brackets from a Topo kit.
    b. You can install the sway bar link to the sway bar, but do not attach it to the strut yet. See image below for reference.
    c. At this point, double check that the steering wheel is still straight.



14) Fit the included index tool to the strut using the sway bar link & nut. Fit the tool as shown on the back side of the sway bar tab between the sway bar link and strut.
15) With the index tool fitted, rotate the strut within the steering knuckle so the tool contacts the rear of the suspension subframe as shown. Tighten the pinch bolt on the steering knuckle to 76 ft-lbs. (103 Nm). Rotate an additional 90 degrees after torque is achieved.



16) Remove the strut index tool and repeat the procedure on the passenger side.
17) Torque sway bar end links to 76 ft-lbs (103 N.m) with an 18mm wrench and 6mm allen.
18) At this point finish any remaining re-assembly using the Topo kit instructions as a guideline. Be sure to secure ABS sensor wiring to prevent damage.
19) Take vehicle to alignment shop for a proper alignment to be done.

20) Re-check all bolt torques 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.