

# **DRIVE▶RITE**

## **AIR SUSPENSION SYSTEMS**

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**DR.02.014009**

**VW Crafter NF FWD Panel Van/ MAN TGE Panel Van up to  
1.2m overhang**

**Up to 3.665m wheelbase  
INSTALLATION INSTRUCTIONS**



# Table of Contents

<b>Table of Contents .....</b>	<b>2</b>
<b>Introduction .....</b>	<b>3</b>
IMPORTANT SAFETY NOTICE .....	3
Special Instructions for Air Connections .....	3
<b>Kit Contents .....</b>	<b>4</b>
HARDWARE LIST .....	4
<b>Step by Step Installation .....</b>	<b>5</b>
Step 1: Remove the Bump Stop .....	5
Step 2: Upper Plate 1 to Chassis .....	5
Step 3: Upper Plate 2 to Air Spring .....	6
Step 4: Lower Bracket to Axle .....	7
Step 5: Upper Plate 2 to Upper Plate 1 .....	8
Step 6: Air spring to Lower Bracket .....	9
Step 7: Routing the Air Tubing .....	10

# Introduction

The purpose of this publication is to assist with the installation of the Drive-Rite Semi-Air air suspension kit.

It is important to read and understand the entire installation guide before beginning installation or performing any maintenance, service or repair. The information here includes a hardware list and step-by-step installation information.

Drive-Rite reserves the right to make changes and improvements to its products and publications at any time. Contact Drive-Rite at +353 1 8612 632 or visit us online at [www.driveriteair.com](http://www.driveriteair.com) for the latest version of this manual.

## IMPORTANT SAFETY NOTICE

The installation of this kit does not alter the Gross Vehicle Weight Rating (GVWR) or payload of the vehicle. Check your vehicle's owner's manual and do not exceed the maximum load listed for your vehicle.

**Gross Vehicle Weight Rating** = the maximum allowable weight of the fully loaded vehicle (including passengers and cargo). This number — along with other weight limits, as well as tire, rim size and inflation pressure data — is shown on the vehicle's Safety Compliance Certification Label.

**Payload:** The combined, maximum allowable weight of cargo and passengers that the truck is designed to carry. Payload is GVWR minus the Base Curb Weight.

### Precautions

Never exceed the maximum and minimum recommended pressure limits:

- Minimum Pressure 1 Bar (14.5 p.s.i.)
- Maximum Pressure 7 Bar (100 p.s.i.)

*While it is possible to inflate the system in static mode to 7 Bar (100 p.s.i.), it should not be necessary to exceed operating pressure in the region of 3.5 Bar (50 p.s.i.) at vehicle full GVW. This kit should not be used to carry any greater load than manufacturers stated GVW.*

*To avoid damage to airsprings – When the kit has been installed, please ensure there is adequate clearance (25mm) around the airspring so the airspring does not come in contact with any other parts.*

## **NEVER DRIVE WITH DEFLATED AIRSPRINGS**

## Special Instructions for Air Connections

- To cut the tubing correctly an appropriate cutter must be used (not scissors)



- When inserting the tubing into the connection, it must be pushed in approximately 14mm until a 'click' is heard.
- To remove the tube, you must push the flange in on the connection and at the same time pull the tube. (No tool is necessary.)
- **ATTENTION**, when a tube is removed it is important to trim 14mm from the end before reconnection.
- It is advisable that LOCTITE or similar sealant be used on the threaded fittings.

# Kit Contents

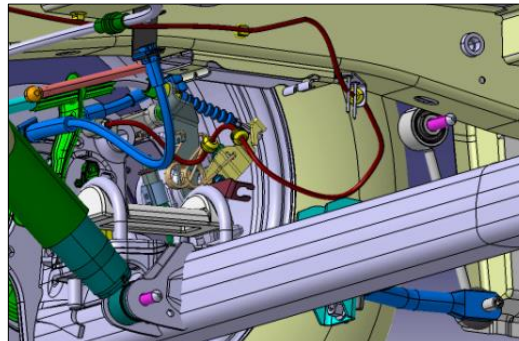
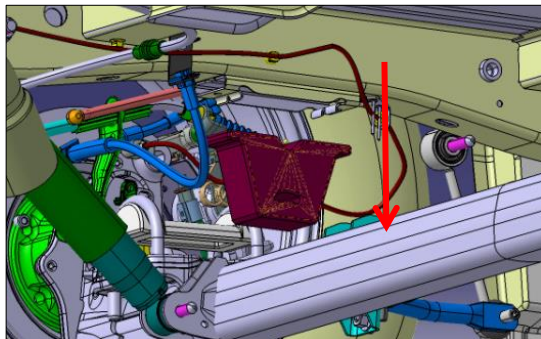
## ▼ HARDWARE LIST

Name	Quantity	Picture/Description	Part #
Upper Plate 1	2		DRV-7638
Upper Plate 2	2		DRV-7639
Locking Plate	4		DRV-7640
Lower Left Bracket	1		DRV-7641
Lower Right Bracket	1		DRV-7642
M8 X 12 Cap Head	4		0116
M8 Spring Washer	4		0011
M6 X 20 Button Head Bolt	4		0117
M12 X 1.5 X 30 Cap Head Bolt	4		3915
M6 Flange Nut	4		3995
Air Spring	2		017339
3/8 x 3/4 UNC Countersunk Bolt	4	Air Spring to Upper Plate 2	6034
1/2" X 1" Hex Head Bolt	2	Air Spring to Lower Bracket	
M12 Washer	6	Air Spring to Lower Bracket	0128
Cable Tie	12		9037
Thermal Sleeve	2		0899
1/4" to 6mm elbow	2		3614
6mm tee piece	1		3666
6mm inflation valve	2		3660
6mm tubing	5m		1364-1MR

# Step by Step Installation

## Step 1: Remove the Bump Stop

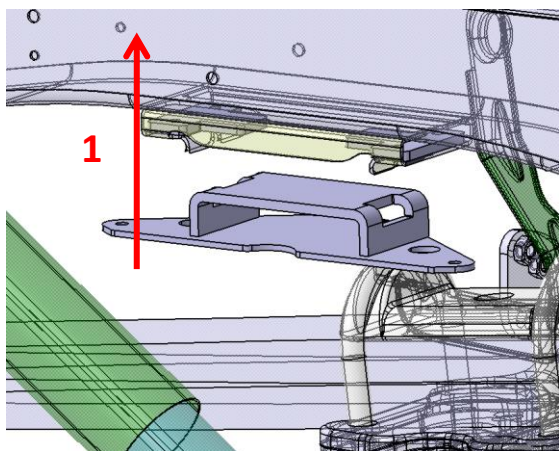
Remove bump stop from vehicle



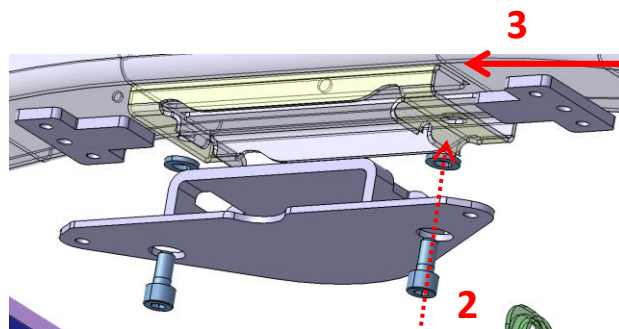
## Step 2: Upper Plate 1 to Chassis

Locate Upper Plate 1 into original bump stop position.

Secure to vehicle using M8 cap screws, spring washer and Locking Plate.

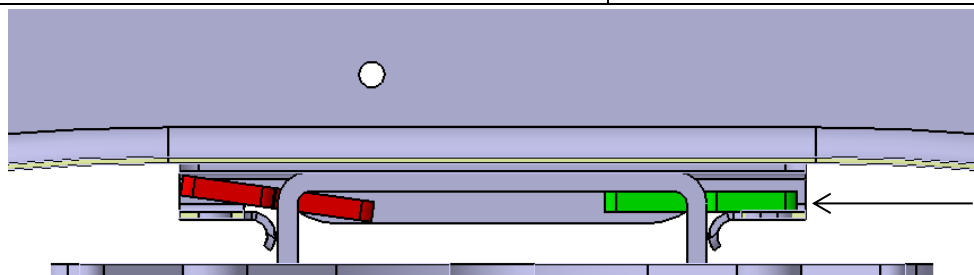


*RHS Shown*



*Torque to 20 Nm.*

*Use Loctite on this bolt.*



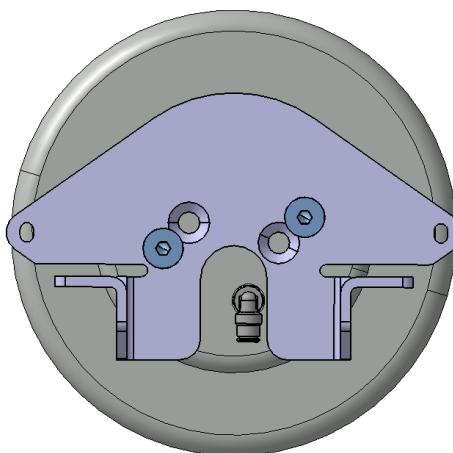
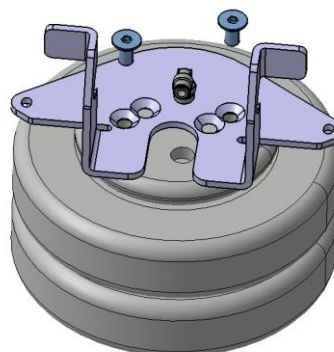
Ensure locking plates are sitting flush with upper bracket

### Step 3: Upper Plate 2 to Air Spring

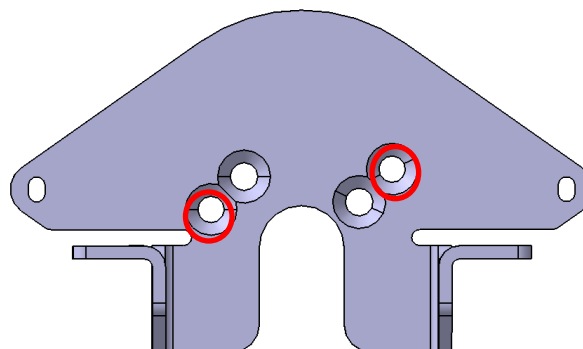
Secure to airspring using 3/8 Countersunk Bolts.

**Torque to 12 Nm.**

Fit elbow to airspring until sealant ring fully engages.



○ = 4009 kit





### Step 4: Lower Bracket to Axle

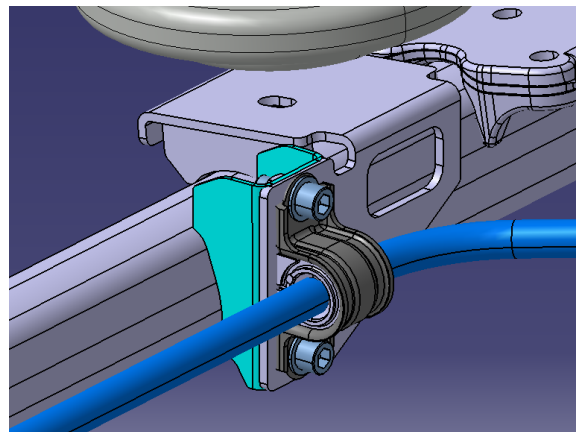
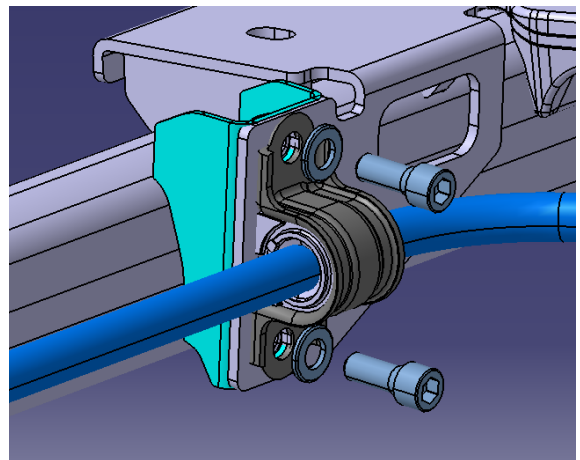
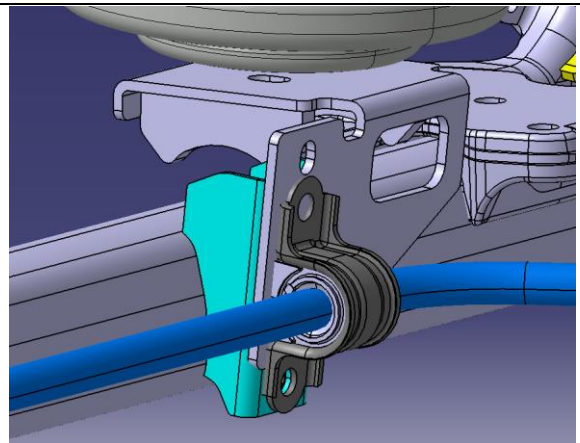
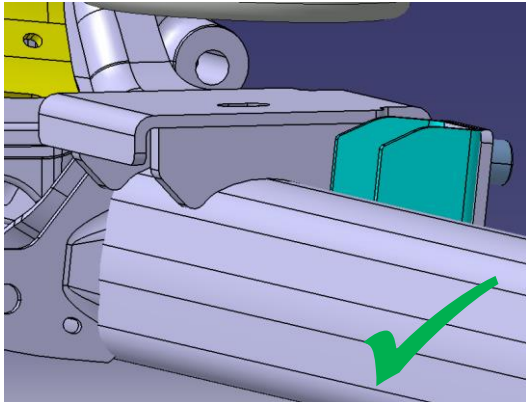
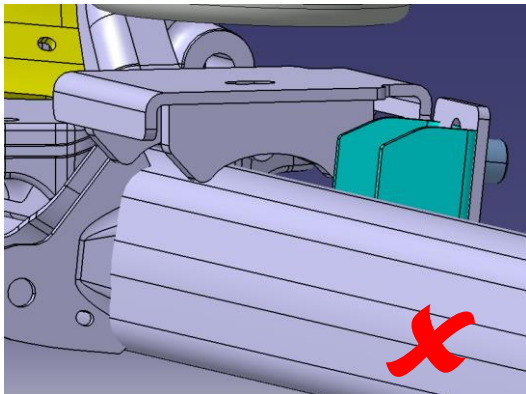
Remove anti-roll bar bolts and discard.

Place lower bracket between anti-roll bar bush and axle.

Push bracket down so it is flush with the axle.

Secure using M12 bolt & washer provided.

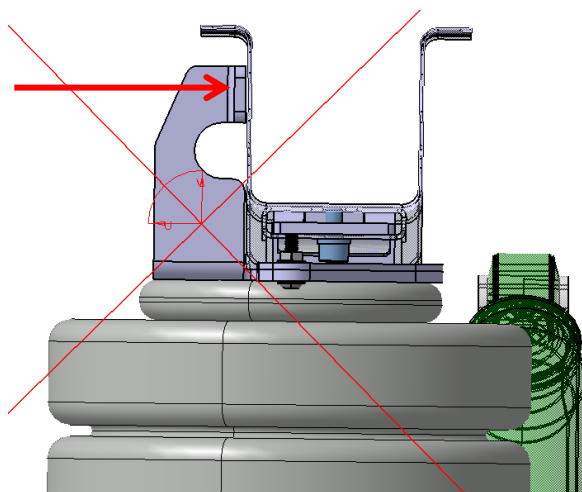
**Torque to 160 Nm.**



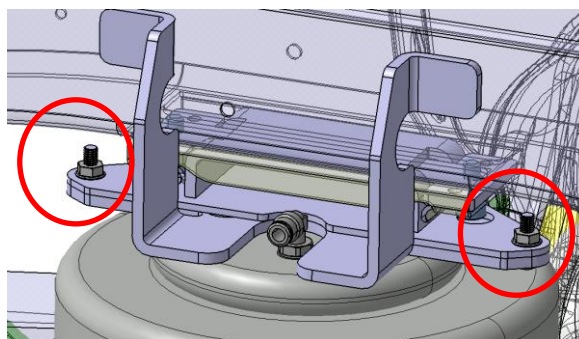
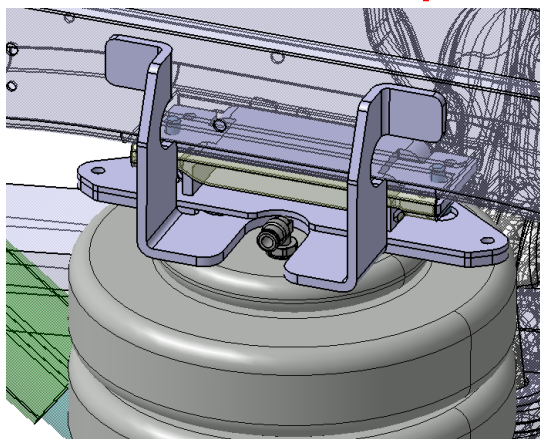
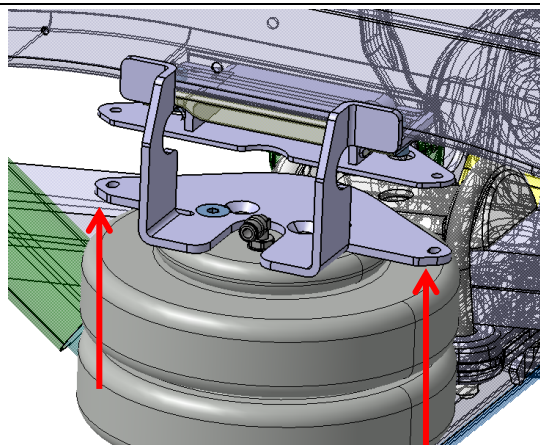
## Step 5: Upper Plate 2 to Upper Plate 1

Using M6 button head bolt and flange nut provided secure Upper Plate 1 to Upper Plate 2.

Ensure Upper Plate 2 is in contact with the inside face of the chassis.



**Torque M6 to 12Nm.**

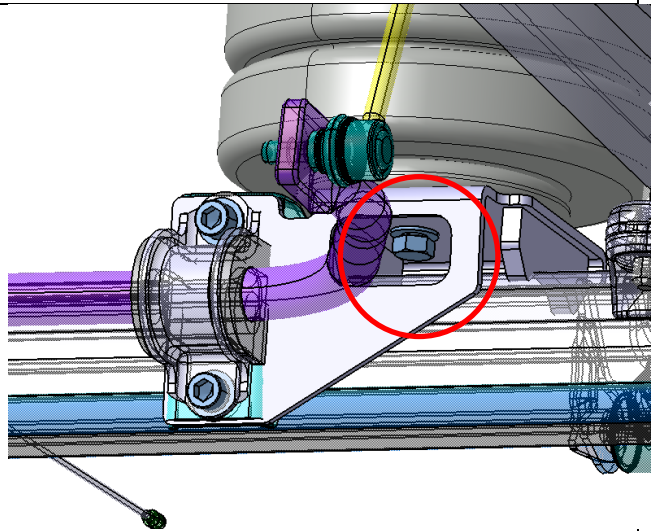




**Step 6: Air spring to Lower Bracket**

Secure air spring to Lower Bracket using bolt supplied.

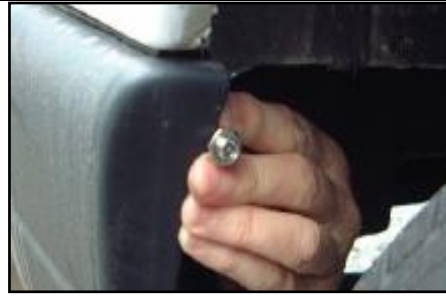
**Torque to 20 Nm.**



**LHS Shown**

## **Step 7: Routing the Air Tubing**

Cut a long length of tubing in order to connect the valve to the nearest air spring. Do the same for the opposite side. Choose whether you want separate inflation valves for each side or one valve common to both sides using the T shaped connector. Use the nylon ties provided to tie the tubing up into a safe position.

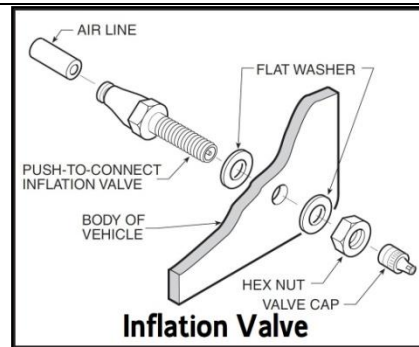


When cutting the air tube, it is vital that the tube is not cut at an angle. This could cause an air leak. It is recommended that a tube cutter or a sharp blade be used.



Drill an 8mm (5/16") hole and mount the inflation valve as shown in the diagram, pushing the valve through the hole from behind and attaching with 2 washers and a nut.

Cut the air tube to length, making sure the end is cut squarely, and push the end as far as possible into the back of the inflation valve.



### **IMPORTANT:**

- Attach all tubing securely to the underneath of the vehicle using nylon ties.
- Do not attach to brake lines.
- Protect the tube with the sleeves provided where there are any sharp edges or sources of heat.
- Ensure all fittings are fastened to recommended torque.

### **Examination:**

After assembly, inflate air springs and check all mounting bolts are tight. Screw all connections tight again. It must be ensured that the mounting brackets cannot move. If the plates touch the brake hose at the air springs, then these must be moved by suitable means.