

# **DRIVE▶RITE**

## **AIR SUSPENSION SYSTEMS**

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**DR.04.013489**

*W21-760-3489R*

**MERCEDES VITO**

**REAR AXLE KIT**

### **INSTALLATION INSTRUCTIONS**



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# Introduction

The purpose of this publication is to assist with the installation of the DR.02.013489 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)

### **NEVER DRIVE WITH DEFLATED AIRSPRINGS**

**Note:** Any torque values given are for general information, not for specific installation. Always use the torque values of the factory service manual if they differ from the torque values recommended here.

## Special Instructions for Air Connections

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

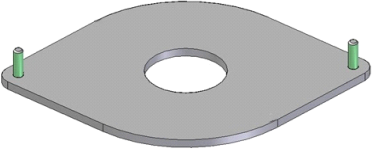
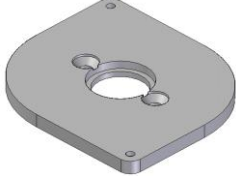
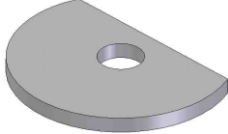


- When inserting the tubing into the connection, it must be pushed in approximately 14mm until a 'click' is heard.
- To remove the tube, you must push the flange in on the connection and at the same time pull the tube. (No tool is necessary.)
- **ATTENTION**, when a tube is removed it is important to 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

Description	Quantity	Picture/Description	Part #
Upper Bracket	1 Set (Handed)		DRV-7287
Air Spring Plate	1 Set (Handed)		DRV-7288
Lower Airspring Washers	2		DRV-7289
M6 Nyloc Nuts	4	Air Spring plate to upper bracket	0014
M6 Flat Washers	4	for M6 Nyloc Nut	0008
3/8 x 3/4 Countersunk Bolts	2	Upper Bracket To Air Spring	6034
Tapered Sleeves	2	140/90 Sleeve Comfort Spring	9041
Shock Absorbers	2		WS1822545
M10x1.5-20mm Hexhead Bolt	2	Bottom of Air Spring Vehicle	3813
M10 Spring Washers	2	For M10 Bolt	0069
Cable Ties	12		9037
1/8" to 6mm Swivel Elbow	2		3056
6mm T-Piece	1		3703
6mm Inflation Valve	2		0155
6mm Tubing	5m		1321-1M
Adhesive Glue	1	Upper Bracket to Chassis	
Thermal Sleeves	2		0899

# Step by Step Installation

## ↘ Step 1: Prepare the Vehicle

Raise the vehicle and support by axle stands under the chassis.

Remove the bottom shock absorber bolts and allow the suspension arms to lower. Retain the bolts.

A 21mm Spanner is used.



## ↘ Step 2: Remove the Coil Spring

With the Shocks released, you can now lower the axle to give access to the suspension.

Remove the Coil Springs.



## ↘ Step 3: Remove the Bump Stops

Remove the bump stops by pulling them down to unclip from the top spigots.



## ↘ Step 4: Install Upper Bracket to Chassis

Using the Adhesive Glue supplied, attach the Upper Bracket to the upper coil spring mounting plate.

***Leave the glue to dry before attempting to use the vehicle.***

Repeat on the other side of the vehicle.



### ↘ Step 5: Secure the Air Spring assembly to Upper Bracket

Offer up the Air Spring assembly to the plates, and secure using the M6 nyloc nuts provided.

A 10mm Spanner can be used.



### ↘ Step 6: Fix Bottom of Air Spring into Position

Using the M10 bolts, bolt the bottom of each Air Spring through the Lower Air Spring Washer and through the hole in the bottom coil spring holder.



### ↘ Step 7: Secure new Shock Absorbers

Remove the top bolts from the shock absorbers.

Replace the shock absorbers with the new shocks provided, using the original bolts.

Raise the suspension arms and secure the bottom shock absorber bolts.





## Step 8: 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.

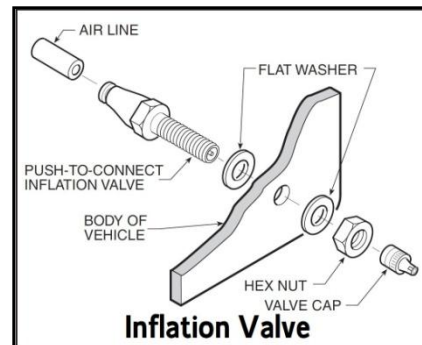


When cutting the air tube, it is vital that the tube is not cut at an angle. This could cause an air leak. It is recommended that a tube cutter or a sharp blade.



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.

### 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.

If the vehicle is fitted with ABS and no LSV, then no brake adjustment is required.

For vehicles without ABS and have a LSV fitted you will need to fit the brake modulation kit. The part number is W21-760-3452.

**For vehicles without ABS, please contact us on +353 1 8612632.**



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