

# **DRIVE▶RITE**

## **AIR SUSPENSION SYSTEMS**

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**DR.02.003449**

*W21-760-3449*

**FORD TRANSIT**

**FRONT WHEEL DRIVE, SQUARE REAR AXLE**

**TYPE 260-300, ABS Vehicles Only**

**SEMI-AIR KIT INSTALLATION INSTRUCTIONS**



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# Introduction

The purpose of this publication is to assist with the installation of the DR.02.003449 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**

## Special Instructions for Air Connections

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



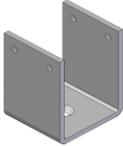
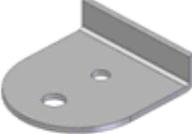
- When inserting the tubing into the connection, it must be pushed in approximately 14mm until a 'click' is heard.
- To remove the tube, you must push the flange in on the connection and at the same time pull the tube. (No tool is necessary.)
- **ATTENTION**, when a tube is removed it is important to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

# Kit Contents

Diagram



## HARDWARE LIST

Name	Quantity	Picture/Description	Part No.
Lower Bracket	2		DRV-7215
Upper Bracket	2		DRV-7218
Anti-Twist Plate	2		DRV-7219
M8 Locknuts	4	for M8 x 100 bolts	0033
M10x1.25-40 Countersunk Bolts	2	Upper Bracket to Chassis (Opt A)	0119
M10x1.5-40 Countersunk Bolts	2	Upper Bracket to Chassis (Opt B)	
M8x1.25-100 Bolts	4	Tighten Lower bracket to axle	3859
Thermal Sleeves	2	for sharp edge near tubing	0899
Air Springs	2	267C1.5 Style	6397
1/4" Tubing	18ft		1141-1M
5/8-18 UNF Half Nut	2	Upper Bracket to Air Spring	3332
5/8 Spring Washer	2	Upper Bracket to Air Spring	3896
3/8 x 3/4 Countersunk Bolt	2	Bottom Bracket to Air Spring	0111
M8 Flat Washers	8	for M8 x 100 bolts	0007
1/8" Elbow	2	Into Air spring	3053
Cable Ties	10		9037
1/4" Inflation valve	2		3032
5/16 Flat Washer	4	For Inflation valves	3638
1/4" Tee piece	1		3025

# Step by Step Installation

## ↘ Step 1: Remove the Bump Stop

Raise the chassis from the axle to create enough room to remove the bump stops.

**NOTE: Do not strain any brake lines or cables.**

Remove the bump stop assembly. These holes will be used to locate the upper brackets.

Take note of the thread on the bump stop as it may be a **standard** or **fine thread**. There are Countersunk Bolts provided in the kit to suit both sizes. The correct sized bolt must be used.



## ↘ Step 2: Upper Bracket to Chassis

Position the upper brackets so that the folded up part of the bracket is facing up and is inside the frame in place of the original bump stops using the correct M10 countersunk bolts, that have been determined in Step one. (Discard the other two M10 countersunk bolts).

*(Torque to approx. 38Nm for Standard Thread, Torque to approx. 43Nm for Fine Thread).*

**Take care not to damage any vehicle OE Electrical harness during assembly.**



## ↘ Step 3: Prepare Air Spring assembly

Fix the Lower Bracket with the 3/8x3/4" countersunk screw. *(Torque to approx. 20-25Nm.)*

Position the anti-twist plate onto the top of the air spring. Check that the threaded hole for the air fitting lines up with the hole in the bracket.



**↘ Step 4: Lower Bracket/Air Spring assembly to axle**

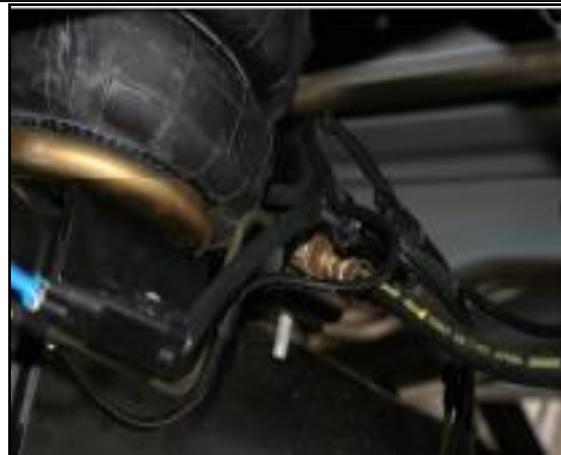
Place the brackets and air springs between the frame and the axle checking that the side of the anti-twist plate is on the outside of the frame.

*Take care not to damage the brake lines or the electrical wire during this stage.*



Attach the Lower Brackets to the axle using the M8x1.25-100 bolts and the M8 nuts, *do not tighten these screws yet.*

Check the alignment of the air spring making sure it is not in contact with any other components of the vehicle. If necessary reposition the small bracket which is used as support for the brake lines, to leave better work space for the air spring. Tighten the bolts on the lower bracket. *(Torque to approx. 22Nm).*



**↘ Step 5: Lower Bracket / Air Spring assembly to upper bracket**

Attach the air springs and anti-twist plates onto the upper bracket using the 5/8" nut and washer.

*(Torque to approx. 55-60Nm.)*

Screw the elbow fittings onto the air spring passing the ABS cable through the upper notch of the air spring bracket.

*It is recommended to use sealant when fixing the air fitting.*



## Step 6: 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.

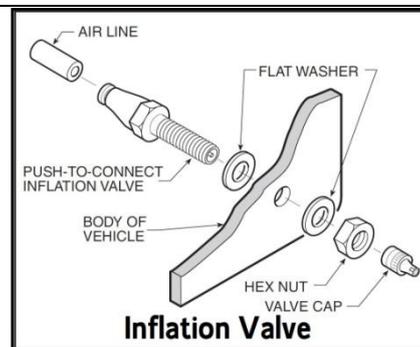


When cutting the air tube, it is vital that the tube is not cut at an angle. This could cause an air leak. It is recommended that a tube cutter or a sharp blade be used.



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 the 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.



TUV SUD AUTOMOTIVE GMBH Westendstrasse 199 D-80686 München		 Automotive
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Hersteller:	Drive-Rite Ltd.	
Typ:	DR.02.0034...	Seite 1 von 9
<b>TEILEGUTACHTEN</b> Nr. 12-00489-CX-GBM-00 TGA-Art: 8.1		
über die Vorschriftsmäßigkeit eines Fahrzeuges bei bestimmungsgemäßem Ein- oder Anbau von Teilen gemäß § 19 Abs. 3 Nr. 4 StVZO		
für das Teil / den Änderungsumfang : Zusatz-Luftfedersystem an der Achse 2		
vom Typ	: DR.02.0034...	
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für das Fahrzeug	: Ford Transit / Tourneo	

**TÜV Certificate Available, contact Drive-Rite for details**

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