

# **DRIVE▶RITE**

## **AIR SUSPENSION SYSTEMS**

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### **DR.02.013410**

*W21-760-3410*

**IVECO DAILY**

**35C-50C**

**Twin Rear Wheel with ABS &**

**IVECO DAILY**

**35S**

**Single Rear Wheel with ABS**

## **INSTALLATION INSTRUCTIONS**

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# Introduction

The purpose of this publication is to assist with the installation of the DR.02.013410 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.

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## 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 tyre, 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.**

## **NEVER DRIVE WITH DEFLATED AIR SPRINGS**

### Special Instructions for Air Connections

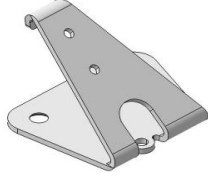
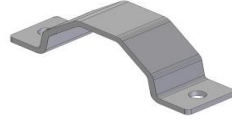
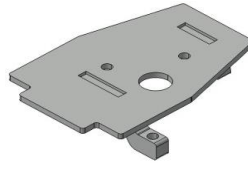
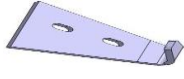
- To cut the tubing correctly an appropriate cutter must be used (not scissors)



- 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

| Part Name                      | Quantity | Picture/Description  | Part #   |
|--------------------------------|----------|--|----------|
| Left Upper Air Spring Bracket  | 1        |    | DRV-7562 |
| Right Upper Air Spring Bracket | 1        |    | DRV-7574 |
| Axle Strap                     | 2        |   | DRV-7226 |
| Left Lower Bracket             | 1        |  | DRV-7223 |
| Right Lower Bracket            | 1        |  | DRV-7575 |
| Chassis Extension Left         | 1        |  | DRV-7592 |
| Chassis Extension Right        | 1        |  | DRV-7593 |
| M10 Nyloc Nuts                 | 8        | For M10 Bolts  | 0034     |
| M10 x 40 Counter Sunk Screw    | 4        | Upper Bracket to Chassis   | 3844     |
| M10 x 50 Hex Bolts             | 4        | Axle Strap to Lower Bracket  | 0164     |
| M10 Washers                    | 12       | For M10 Bolts  | 0079     |
| M8 x 20 Hex Head Bolt          | 4        | Chassis extension to upper brackets  | 0004     |
| M8 Nyloc                       | 4        |  | 0033     |
| M8 Washer                      | 8        |  | 0007     |

|                               |          |                             |             |
|-------------------------------|----------|-----------------------------|-------------|
| Air Springs                   | 2        | Style 224C                  | 0335        |
| 3/8" UNC x 3/4" Flange Bolt   | 2        | Air Spring to Upper Bracket | 3069        |
| 3/8" UNF Flange Lock Nut      | 4        | Air Spring to Lower Bracket | 3023        |
| <b>6MM TO 1/4 METAL ELBOW</b> | <b>2</b> |                             | <b>3614</b> |
| <b>6MM TEE PIECE</b>          | <b>1</b> |                             | <b>3666</b> |
| <b>6mm Inflation Valve</b>    | <b>2</b> |                             | <b>3660</b> |
| <b>6mm Compression Joiner</b> | <b>2</b> |                             | <b>190</b>  |
| Cable Ties                    | 12       |                             | 9037        |
| Thermal Sleeves               | 2        |                             | 0899        |
| 6mm Tubing                    | 5m       |                             | 1364-1MR    |
| De-Breathing Elbow Fitting    | 1        | Added to Axle               | 3020        |

## Step by Step Installation

### Step 1: Prepare the Air Spring Assembly

Assemble the Lower Bracket to the air spring as shown, using 3/8" UNF Flange lock nuts (it is recommended to use Loctite on these)

*(Torque to approx. 30-35Nm).*

Screw the elbow connection in into the top of the air spring so that sealant ring fully engages.

*Note: Picture shows left hand side lower bracket, DRV-7223*

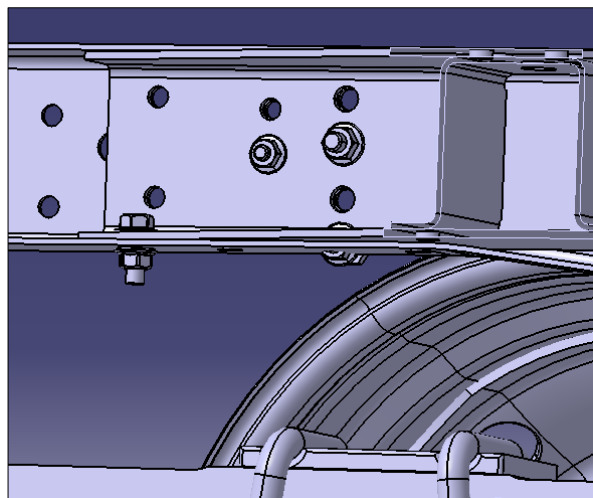
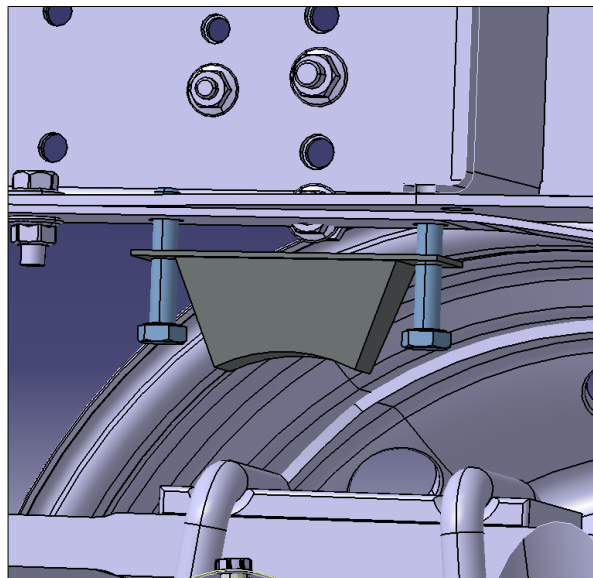
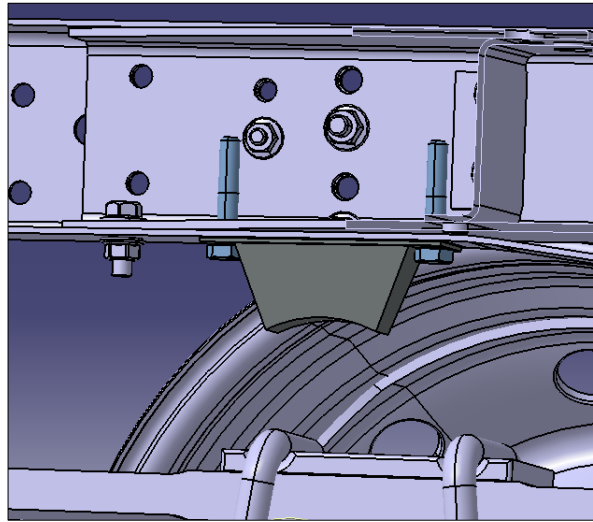


## ↘ Step 2: Remove the Bump Stop

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

Remove the bump stops from the rear axle. The holes used to mount the bump stops will now be used to mount the Upper Bracket.

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



**↘ Step 3: Prepare the vehicle – De-Breather Tube**

Before mounting the air spring, the bracket welded to the axle must be bent downwards.



Unscrew the “**De-Breather Tube**” on the left hand side of the axle.

This is an 8mm tube that is threaded into the top of the axle.



Replace with the new replacement “**De-Breather Tube**” that is supplied with the kit.

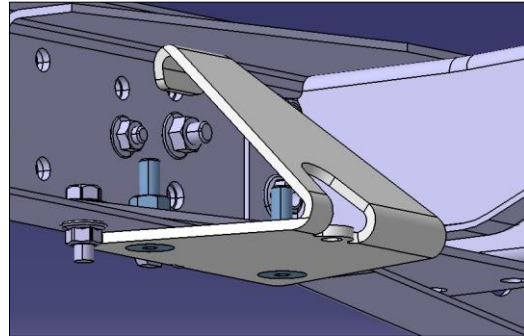
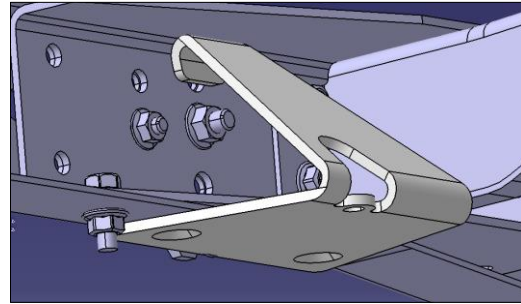




**Step 4: Upper Bracket to Chassis**

Install the Upper Bracket in place of the bump stop as in the photo. Fix in place using the M10x40 Countersunk bolts with the M10 washers and the M10 Locknuts.  
(Torque to approx. 38Nm).

*Note: Picture shows left hand side of vehicle using DRV-7562*

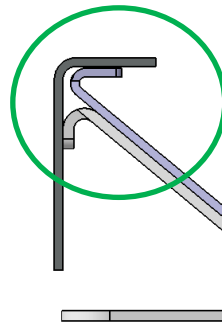
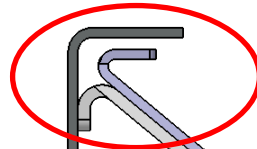
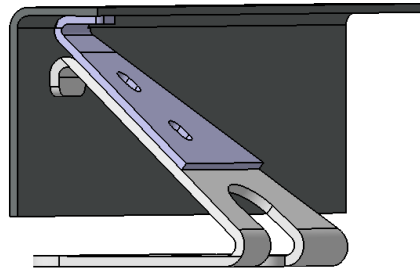


For vehicles with taller frame, fit chassis extension piece using M8 x 20 Hex Head Bolt.  
(Left hand side Shown)

Ensure extension is pushed into corner as much as possible.

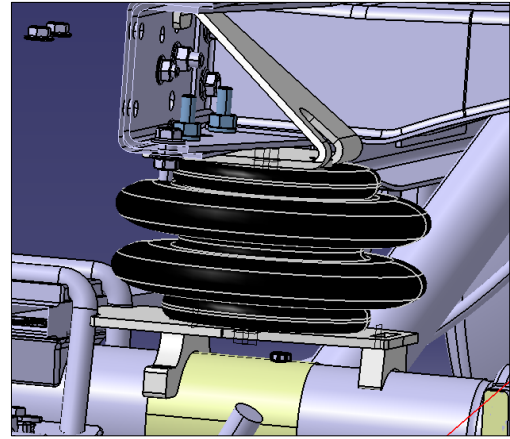
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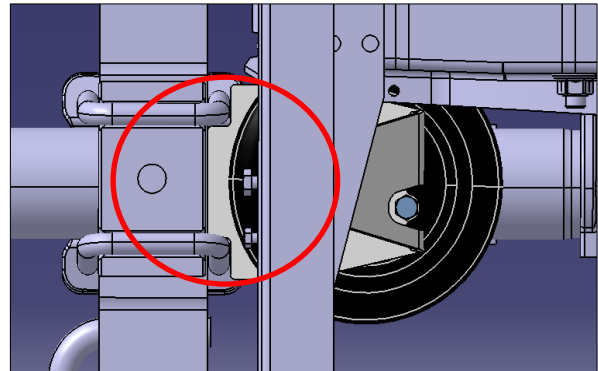


## ↘ Step 5: Air Spring Assembly to Vehicle

Now mount the Air Spring and Lower Bracket between the Upper Bracket and the Axle as in photo.

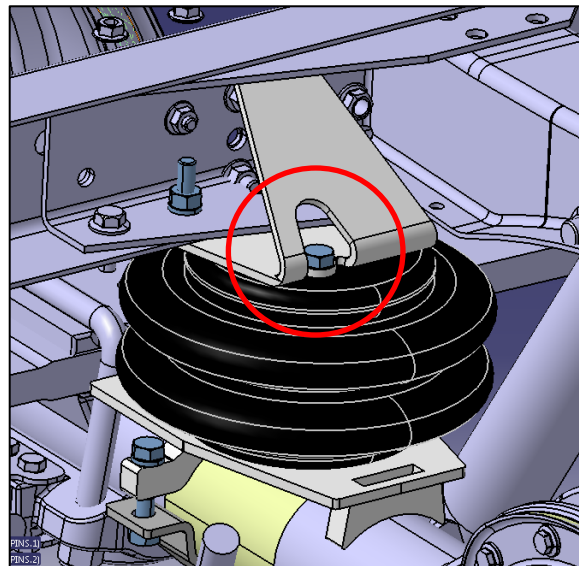


Make sure that the end of the Lower Bracket fits between the U-bolts on the leaf springs **making it impossible to rotate the bracket.**



Fasten the air spring to the Upper Bracket using the 3/8" hex head bolt.  
(Torque to approx. 20-25Nm).

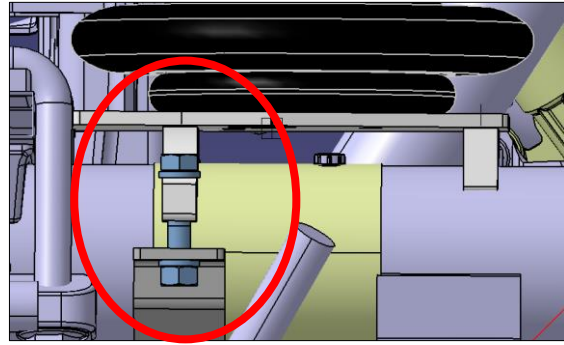
**Finally examine the air spring and make sure that no parts of the vehicle will interfere with it during operating conditions.**



### Step 6: Axle Strap to Lower Bracket

Attach the Lower Bracket to the axle using the Axle Straps with the M10x50 bolts, M10 locknuts and M10 washers.

(Torque to approx. 38Nm).



### 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.

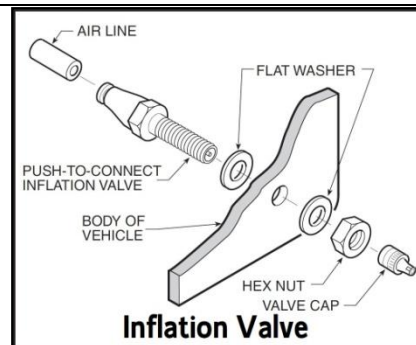


When cutting the air tube, it is vital that the tube is not cut at an angle. This could cause an air leak. It is recommended that a tube cutter or a sharp blade be used.



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.

#### 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 Load Sensing Valve (LSV), then adjust the LSV to give maximum

braking (1:1).

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

**For vehicles without ABS, please contact us on +353 1 4507833.**

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