

DRIVE▶RITE

AIR SUSPENSION SYSTEMS

Unit 626 Kilshane Avenue, North West Business Park, Ballycoolin, Dublin 15, Ireland

Telephone: +353 1 8612 632 Fax: +353 1 8612 647 email: info@driveriteair.com

Web: www.driveriteair.com

DR.02.013120

W21-760-3120

RENAULT MASTER / NISSAN INTERSTAR

OPEL & VAUXHALL MOVANO

FRONT WHEEL DRIVE

Single Rear Wheel

INSTALLATION INSTRUCTIONS



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Introduction

The purpose of this publication is to assist with the installation of the DR.02.013120 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 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 AIR SPRINGS

Special Instructions for Air Connections

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




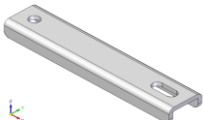
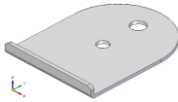
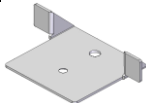
- When inserting the tubing into the connection, it must be pushed in approximately 14mm until a 'click' is heard.
- To remove the tube, you must push the flange in on the connection and at the same time pull the tube. (No tool is necessary.)
- **ATTENTION**, when a tube is removed it is important to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

Kit Contents

DIAGRAM



HARDWARE LIST

Part Name	Quantity	Picture/Description	Part #
Bottom Bracket	2		DRV-7327
Axle Strap	2		DRV-7328
Anti Twist Plate	2		DRV-7329
Upper Bracket	2		DRV-7330
M10 Locknuts	4	For Carraige Bolts	
M10 x 35 Countersunk Bolts	2	Upper Bracket to Vehicle	
M10 x 110 Carriage Bolts	4	Axle Strap to Bottom Bracket	
M10 Flat Washer	4	For Carraige Bolts	
3/8 x 3/4 Countersunk Bolt	2	Bottom Bracket to Airbag	
Thermal Sleeves	2		0899
Airbags	2		6397
18 ft. 1/4" Tubing	1		1141-1M
5/8-18 UNF Half Nut	2	Anti Twist plate to Airbag	3332
5/8 Flat Washer	2	Anti Twist plate to Airbag	
1/8" Swivel Elbow	2		3053
Cable Ties	10		
1/4" Inflation valve	2		3032
5/16 Flat Washer	4	For Inflation Valves	
1/4" Tee piece	1		3025

Step by Step Installation

↘ Step 1: Remove the Bump Stop

Remove the rubber bump stop by pulling the rubber bumper away from the metal plate.

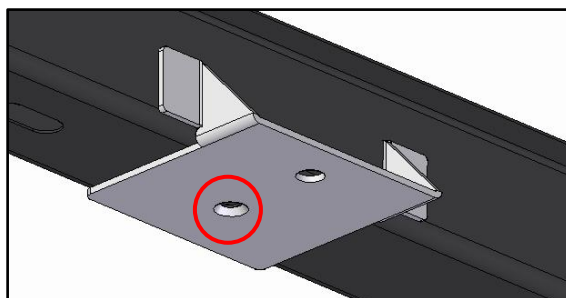
This will reveal an M10 bolt. Remove this bolt and the bump stop bracket. This hole will be used to fix the upper bracket to the chassis.



↘ Step 2: Upper Bracket to Chassis

Using the M10 countersunk bolt fix the upper bracket to the threaded hole that was originally used to hold the bump stop receiver in place. **The bracket is fastened with two flanges facing outboard.** Torque to approx. 40Nm.

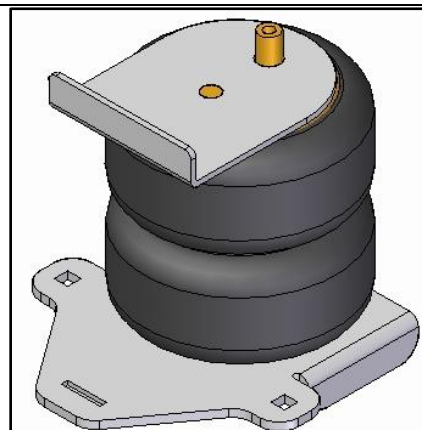
Note that this particular style bag acts as a bump stop when deflated. So in the unlikely event that there is a leak in the air spring the top and bottom bracket cannot touch as the air spring rubber folds in on itself.



↘ Step 3: Prepare the Air Spring Assembly

Assemble the air spring to the Lower Bracket using the 3/8" UNC x 3/4" bolt. Note that the pointed end of the lower bracket must be facing forwards the centre of the vehicle.

Place the anti twist plate on the top of the air spring by locating the larger hole over the threaded stud on the air spring and the smaller hole over the locating stud on the air spring.

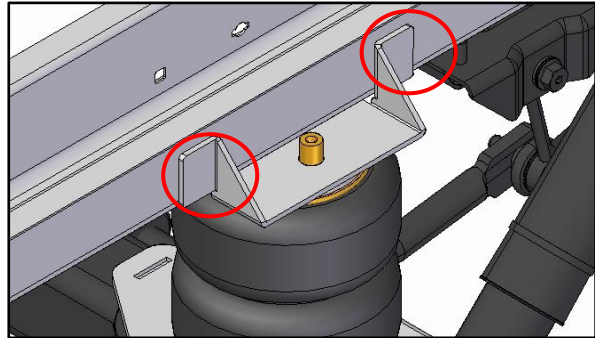


Step 4: Air Spring Assembly to Upper Bracket

Compress the assembly and place the Lower Bracket on the bump stop receiver plate.

The Upper Bracket flanges (Circled in red) must be resting against the outboard face of the chassis.

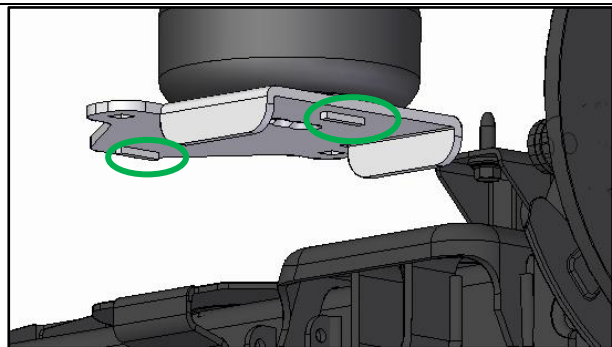
The threaded stud on the air spring will sit in the remaining hole on the upper bracket. Bolt the air spring to the upper bracket using the 5/8" UNF Nyloc half nut and the M16 flat washer. Torque to approx. 27Nm.



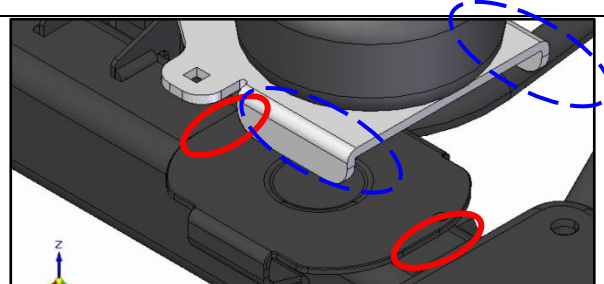
Step 5: Air Spring Assembly to Axle

There are 2 locators on the base of the lower bracket (Circled in Green, in the image to the right). These will sit inboard and outboard on the bump stop receiver plate (Circled in Red below).

The purpose of the locators is to prevent lateral movement.



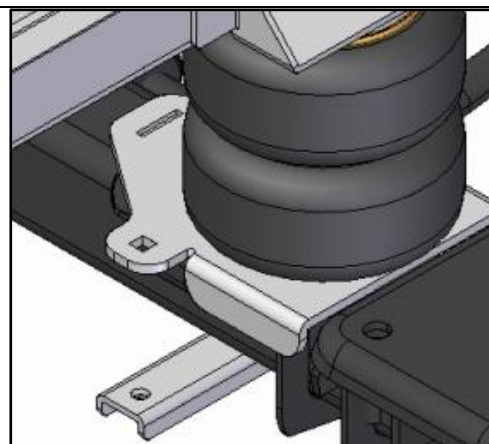
Longitudinal movement is prevented by the 2 flanges (Circled in dashed Blue line) which keep the lower bracket seated on the bump stop receiver plate.



Step 6: Securing the Lower Bracket

Place an axle strap under the axle in line with the square cutouts on the lower bracket and fix the lower bracket to the axle strap using the M10 carriage bolts, flat washers and nyloc nuts.

Torque to approx. 38Nm.



Step 7: Install the Air Fittings

Insert the swivel elbow into the air spring.

It is recommended that sealant is used when installing the Air Fittings.



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.

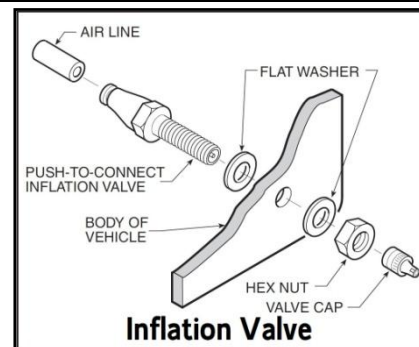


When cutting the air tube, it is vital that the tube is not cut at an angle. This could cause an air leak. It is recommended that a tube cutter or a sharp blade.



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.



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