

# **DRIVE▶RITE**

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**DR.02.014013/DR.02.024013**

**Maxus Deliver 9**

**FRONT WHEEL DRIVE, SQUARE REAR AXLE**

**ABS Vehicles Only**

**INSTALLATION INSTRUCTIONS**



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# 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			
DR.02.014013			
Name	Quantity	Picture/Description	Part #
Lower Bracket	2		DRV-7917
Anti Twist Plate Maxus	2		DRV-7895
Upper Bracket	2		DRV-7894
Axle Strap	2		DRV-7908
M10 NYLOC NUT	4		DR.43.010034
M10 x 1.5 x 30 COUNTERSUNK BOLT	2		DR.42.013914
M10 FLAT WASHER	4		DR.44.010079
M10X1.5X20 COUNTERSUNK	2		DR.42.013845
DR.07.016397	2		DR.07.016397

3/8 X 3/4 CSK SOCKET UNC	2		DR.41.016034
58 -18 UNF HALF NYLOC NUT	2		DR.43.013332
M16 FLAT WASHER	2		DR.44.010125
1-8 6mm ELBOW	2		DR.41.013618
M10X130-46603-ZP	4		DR.42.010031
6mm T-PIECE - METAL - PTC	1		DR.41.013666
6mm INFLATION VALVE-PTC	2		DR.41.013660
6mm DRIVE-RITE TUBING (RED)	5		DR.46.1364-1MR
CABLE TIES	10		DR.45.019037
SEMI-AIR USER MANUAL	1		DR.51.016000
DRIVE-RITE DOCUMENT POUCH	1		DR.50.019347
DRIVE-RITE SEMI-AIR BOX	1		DR.50.010488

**DR.02.024013**

Name	QTY	Picture/Description	Part #
Lower Bracket	2		DRV-7917
Anti Twist Plate Maxus	2		DRV-7895
Upper Bracket	2		DRV-7894
Axle Strap	2		DRV-7908
M10 NYLOC NUT	4		DR.43.010034
M10 x 1.5 x 30 COUNTERSUNK BOLT	2		DR.42.013914
M10 FLAT WASHER	4		DR.44.010079
M10X1.5X20 COUNTERSUNK	2		DR.42.013845
DR.07.017936	2		DR.07.017936
M16 FLAT WASHER	2		DR.44.010125

M16_X_2_Half_Nut	2		DR.43.014002
M10X130-46603-ZP	4		DR.42.010031
CABLE TIES	10		DR.45.019037
6mm T-PIECE - METAL - PTC	1		DR.41.013666
6mm DRIVE-RITE TUBING (RED)	5		DR.46.1364-1MR
1-8 6mm ELBOW	2		DR.41.013618
6mm INFLATION VALVE-PTC	1		DR.41.013660
DRIVE-RITE SEMI-AIR BOX	1		DR.50.010488
DRIVE-RITE DOCUMENT POUCH	1		DR.50.019347
SEMI-AIR USER MANUAL	1		DR.51.016000

# Step by Step Installation

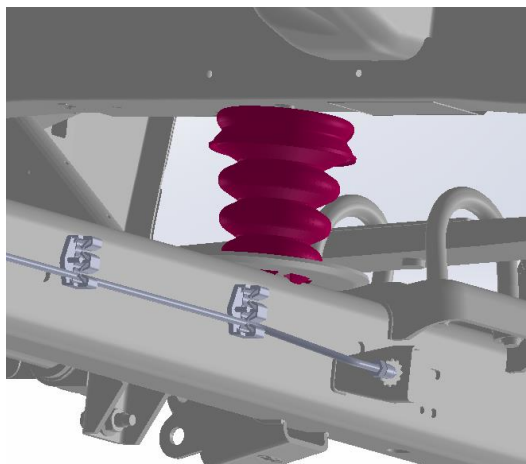
## ✂ Step 1: Remove the Bump Stop

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.

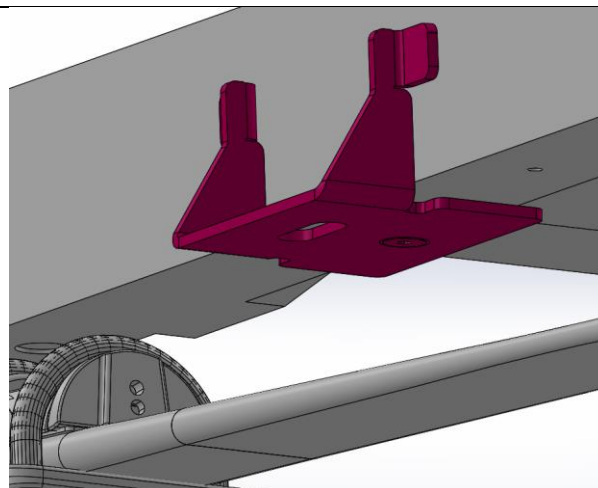
Detach the ABS cables from their holder on the left hand side of the vehicle.



## ✂ Step 2: Upper Bracket to Chassis

Position the upper brackets so that the folded up part of the bracket is facing up and is OUTSIDE the frame in place of the original bump stops. To fit this bracket use the M10 x 30 countersunk bolts that have been supplied with the bracket kit.

(Torque to approx. 38Nm)





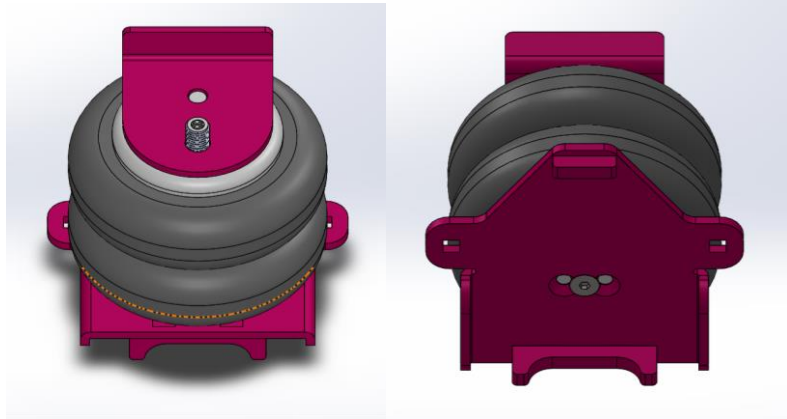
### Step 3: Lower Bracket to Air Spring

Fix the Lower Brackets on the air springs using the remaining COUNTERSUNK Bolts.

*(Do not fully torque)*

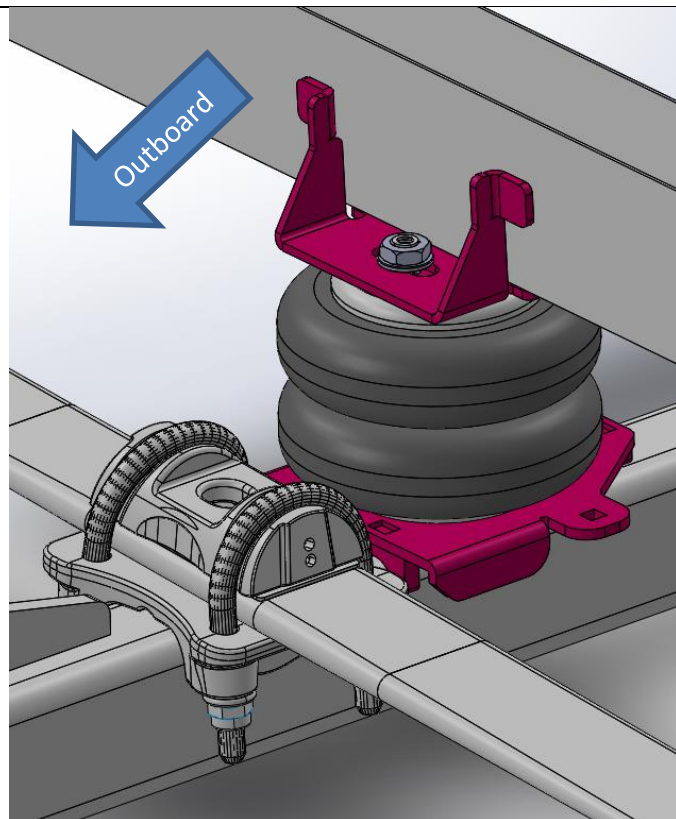
There are optional lower mount holes to choose from. Choose the hole that gives the best air spring alignment once the bracket has been fit to the vehicle.

Position the anti-twist plate onto the air spring ensuring that the stud fits into the correct hole.



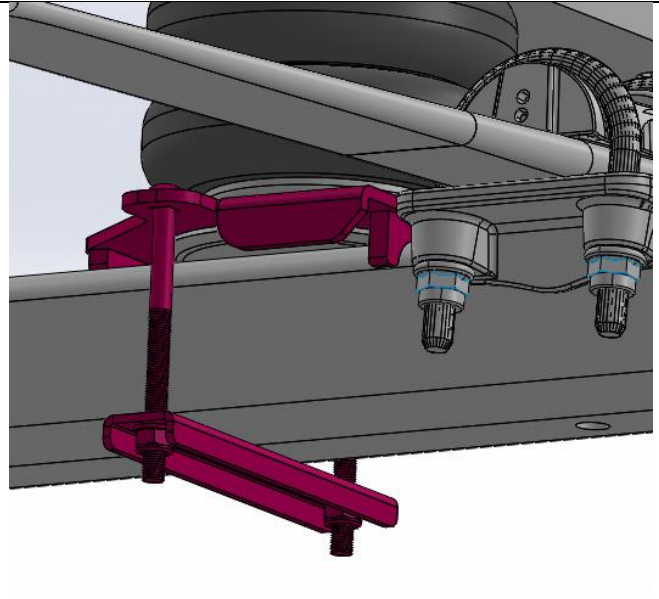
### Step 4: Upper Bracket/Air Spring Assembly to Chassis

Fit air spring assembly to vehicle with anti-twist plate facing inside chassis face.



### ➤ Step 5: Lower Bracket/ Air Spring Assembly to axle

Use the supplied axle clamps and bolts to fix the lower bracket to the axle.



Fix the air spring assembly onto the axle using the Axle Strap, M10 Bolts, Washers and Nyloc Nuts provided.

There are M10 x 130mm coach bolts provided with this kit.

Before tightening coach bolts – **torque bottom CSK bolt to 22Nm**

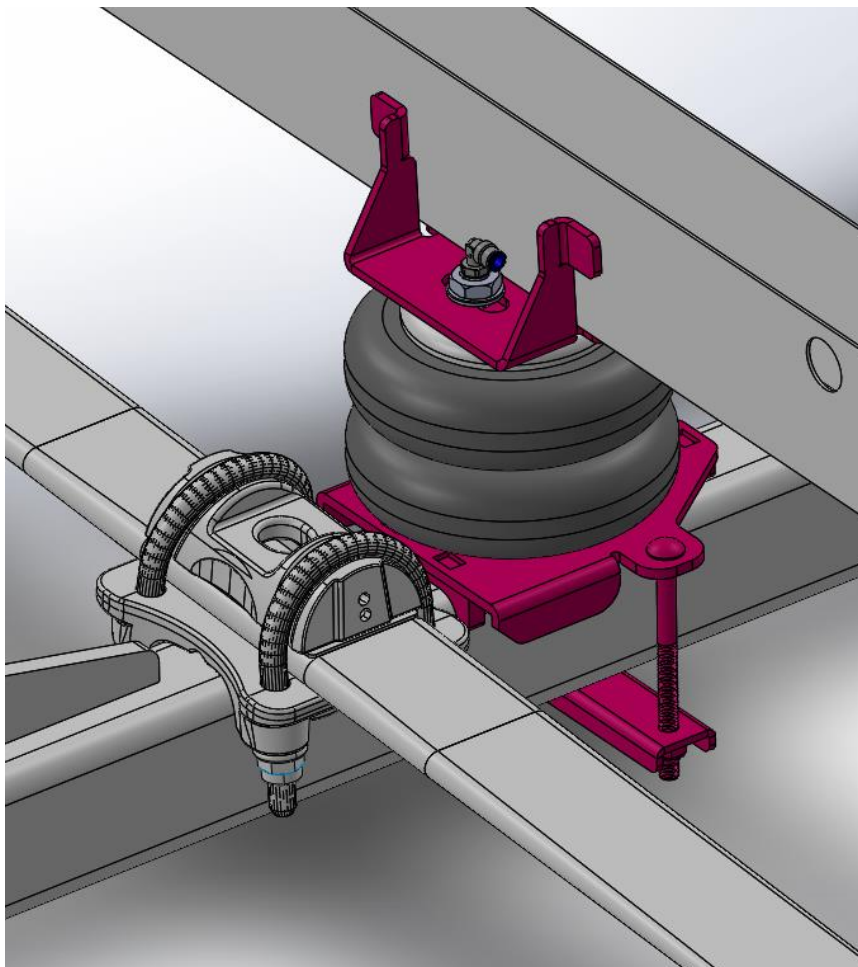
**(Torque to approx.. 55-60 N.m)**



**Step 6: Connect the Elbows**

Screw the elbow connections onto the air bags.

It is advised to use sealant on the elbow fittings.



**RHS 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.

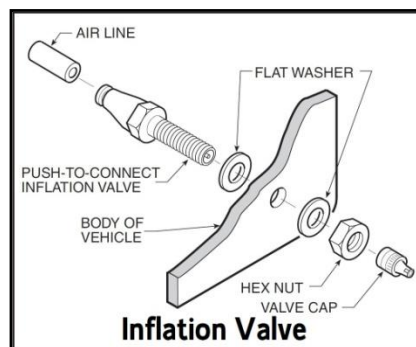


When cutting the air tube, it is vital that the tube is not cut at an angle. This could cause an air leak. It is recommended that a tube cutter or a sharp blade be used.



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.

### 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.