Land Rover Discovery *D2+*

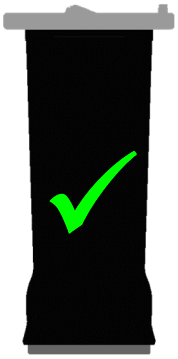
50mm (2 inch) Lift Spring Kit

****** FOR OFF ROAD USE ONLY ******

* WARNING *

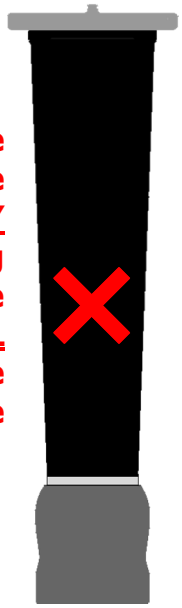
*** EXTREMELY IMPORTANT ***

The air spring is supplied with the diaphragm rolled over the piston, like this...



...during fitting, either lower the vehicle chassis or raise the axle...

...DO NOT roll the diaphragm off the piston AT ANY STAGE during fitting, otherwise the spring WILL NOT inflate correctly once fitted...



Air springs are supplied with the understanding that they are fitted by suitably qualified vehicle technicians, in accordance with the installation instructions as supplied.

Dunlop Systems and Components accepts no responsibility or liability for any failures and costs, expenses, losses or damages arising from incorrect fitting or application of the air spring.

Evidence of incorrect fitting will invalidate your warranty.

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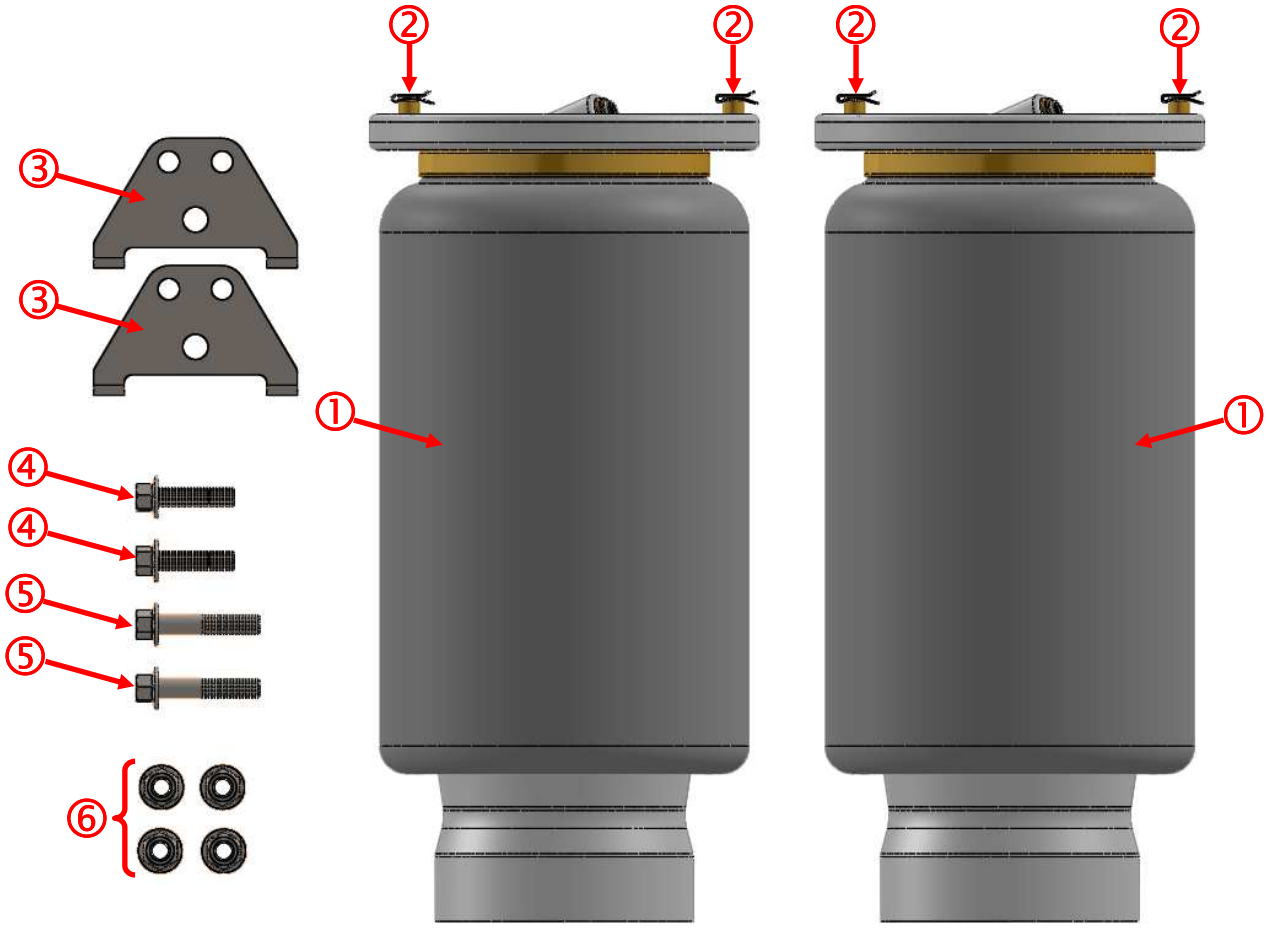
Land Rover Discovery *D2+*
Rear Air Lift Spring Fitting Instructions

Thank you for your purchase of the *D2+* air spring kit from *Dunlop Systems and Components*. Fitting instructions are provided on the following pages.

YOUR KIT

Your kit comprises of the following items...



No.	Item	Quantity
①	Air Spring	2
②	Air Spring Top Plate Clip	4
③	Height Sensor Bracket	2
④	M8 x 30mm Flange Bolt	2
⑤	M8 x 40mm Flange Bolt	2
⑥	M8 Flange *Nyloc* Nut	4

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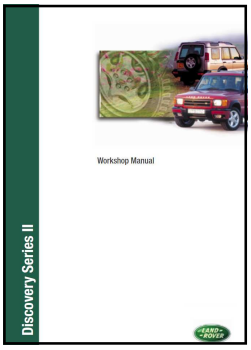
DUNLOP SYSTEMS AND COMPONENTS

STAGE 1: REMOVAL OF ORIGINAL EQUIPMENT AIR SPRINGS

1. **Depressurize the System...**

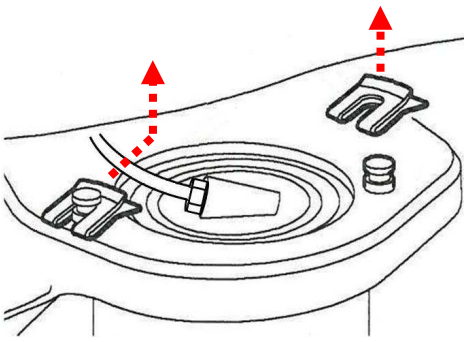


...per Manufacturer's Instructions

2. **Raise the rear of the vehicle, and support BOTH the chassis AND the axle...**

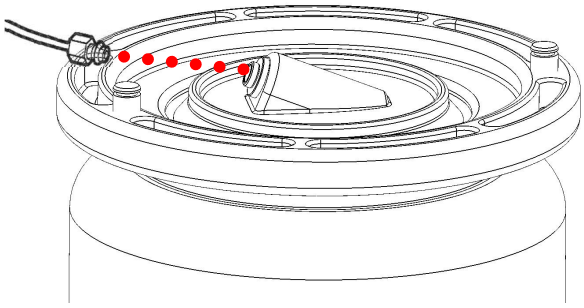
...Remove the Rear Wheel

3. **Remove the Clips from the Spring...**



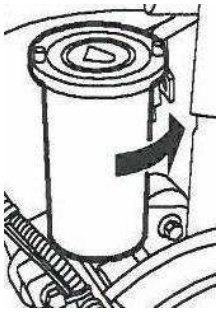
...push downwards to expose Air Fitting

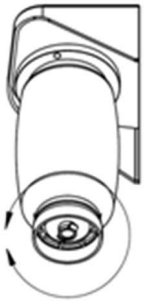
4. **Unscrew the Air Fitting...**



CAUTION! Residual Air may be Released

5. **Rotate the Air Spring through approximately 90° and lift clear of vehicle**





6. **With the vehicle supported at BOTH the chassis AND the axle, proceed to STAGE 2**

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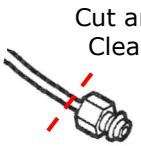
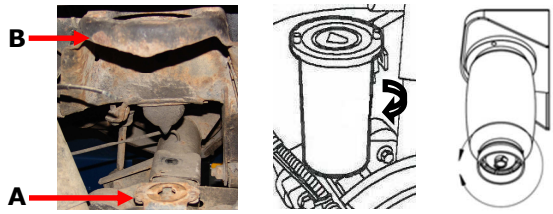
DUNLOP SYSTEMS AND COMPONENTS

STAGE 2: FITTING OF REPLACEMENT AIR SPRINGS

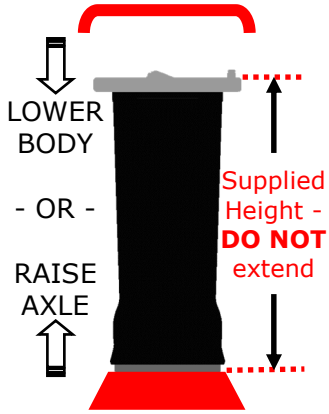
1. **Using an appropriate tool, cut the tube squarely near to the existing fitting and clean the exposed tube end. Discard the existing fitting...**



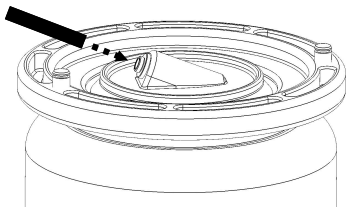
2. **Insert the bayonet fitting at the base of the spring into the socket on the vehicle axle (A) and rotate approximately 90° until the pins in the spring top plate align with the holes in the vehicle chassis bracket (B) (air intake facing tube)...**



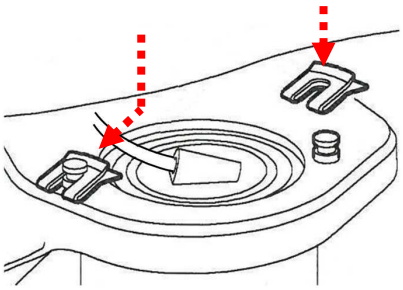
3. **With the spring standing at its supplied length, either lower the vehicle chassis or raise the axle until the spring top plate is very close- to or in contact with the chassis bracket...**



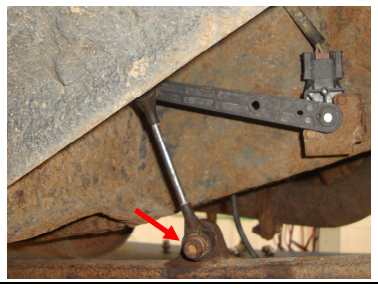
4. **Feed the tube through the chassis bracket from above, push the spring top plate downwards, and push the tube firmly and squarely into the spring air intake...**



5. **Locate the pins in the spring top plate into the holes in the chassis bracket and fit the two new clips from the kit...**

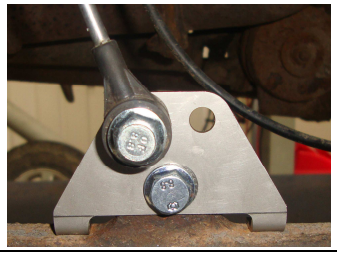


6. **At each side of the vehicle, unscrew and remove the bolt that attaches the height sensor to the flange on the vehicle radius arm...**



7. **At each side of the vehicle, fit a height sensor bracket to the outside of the flange on the vehicle radius arm, using a new M8 x 30 flange bolt and nyloc nut...**

8. **At each side of the vehicle, LOOSELY attach the height sensor connecting rod to the bracket using a M8 x 40 flange bolt and nyloc nut - choose the bracket hole nearest to the front of the vehicle...**



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Rear Air Lift Spring Fitting Instructions

9. **Refit each wheel, tightening nuts to torque 140Nm...**

...lower the vehicle to the ground, removing all supports in the process

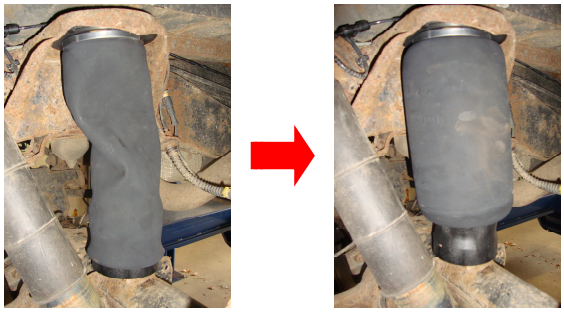
10. **Raise the vehicle <u>chassis</u> at the rear by approximately 75mm ...**

11. **Switch-on the ignition...**

...the air springs will inflate automatically and raise the vehicle to its ride height. Note that this will lift the vehicle off of the jack, which can then be pulled clear.

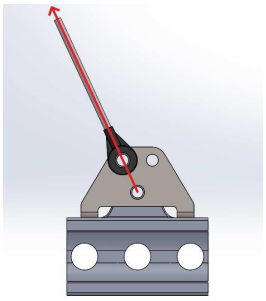
Note: If air spring inflation ceases before ride height is reached, then cycle the ignition and restart the engine.

12. **Once the vehicle has stabilised at its ride height, switch-off the ignition.....**

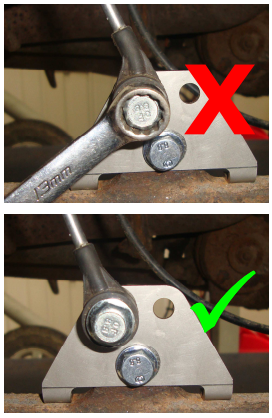


13. **Tighten the bolt connecting the height sensor to the bracket, ensuring that the sensor connecting rod is straight and inline with the bracket holes as indicated on the next panel.....**

Proceed to STAGE 3: INSPECTION



Connecting Rod to be Inline with Bracket Holes



***** IT IS RECOMMENDED THAT LONGER FLEXI BRAKE HOSES ARE FITTED IF SEVERE AXLE ARTICULATION IS ANTICIPATED *****

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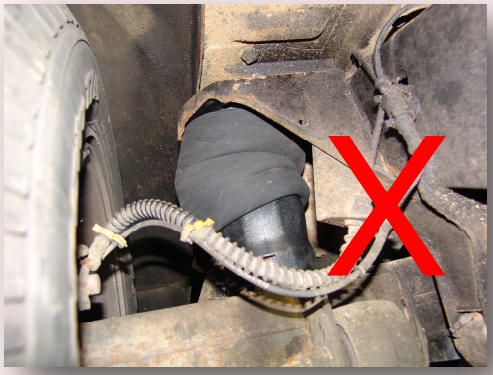
STAGE 3: INSPECTION

Once the air springs have inflated and the vehicle is standing at its ride height (see STAGE 2, Step ⑧), check that the springs have inflated in the correct manner - see the photographs below...

** WARNING - INCORRECTLY INFLATED SPRING! **

This photograph shows an air spring that has inflated INCORRECTLY. This will result from the spring having been fitted with the rubber part either rolled off the piston or in a folded state, and is highly likely to result in damage to the spring wall and/or failure of the crimp...



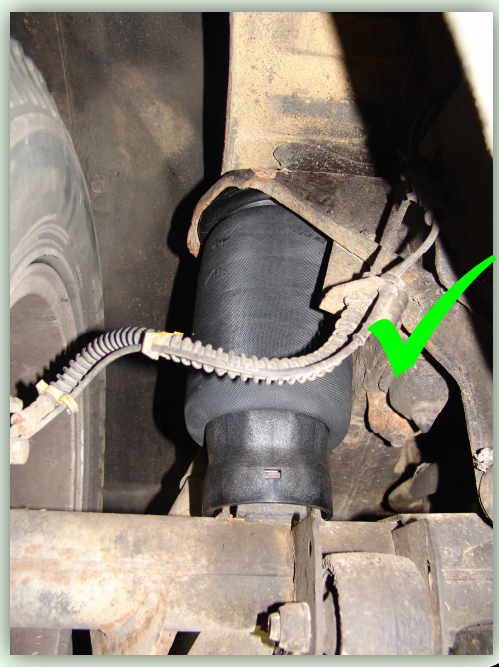
In the event that the springs inflate incorrectly (see right)...

i. **With the ignition switched off, raise the rear of the vehicle by the CHASSIS allowing the axle to hang freely.**

ii. **Once the spring has straightened to the correct shape (see below), slowly lower the chassis and check again. Repeat if necessary.**

** CONGRATULATIONS - CORRECTLY INFLATED SPRING! **

This photograph shows an air spring that has inflated CORRECTLY. Note that the diaphragm wall is straight and true, with no creases or folds...



This completes fitting.

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