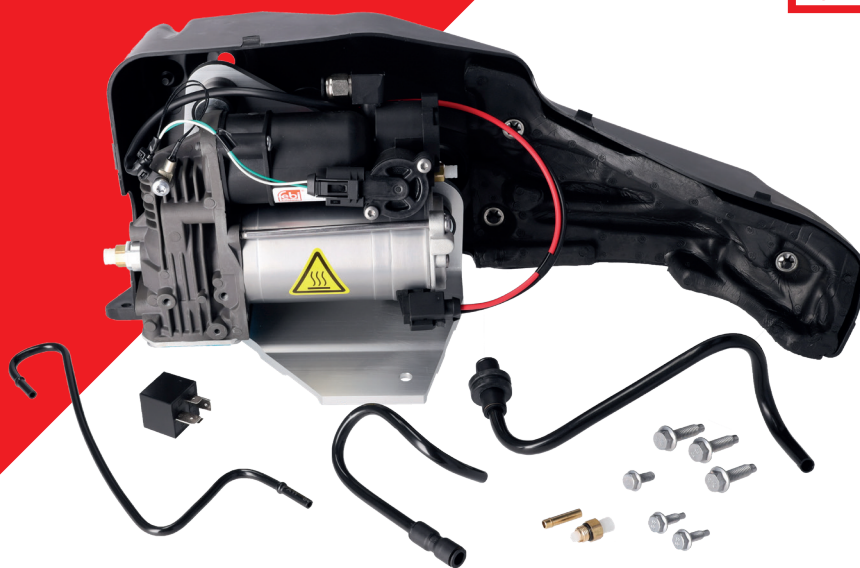


**To fit:**

Land Rover Discovery III, IV (L319)  
and Range Rover Sport (L320)



## Compressor for Air Suspension

EN

**Problem**

Vehicle suspension system deflated and will not rise. Air suspension warning lamp illuminated. Possible fault codes logged in the control unit:

- C1830 Air suspension compressor relay circuit fault
- C1A13 Pressure does not drop
- C1A20 Pressure rise too slow
- C1A27 Compressor circuit
- C1131 Air compressor air supply cannot fill pressure chamber
- B143D Air suspension compressor power supply

**Cause**

Air compressor is overworked and failing due to air leaks in the system, the compressor motor seals have deteriorated and are not sealing.



Figure 1

**Solution**

During the production period of the models listed above the vehicle manufacturer changed the design of the air suspension compressor to improve reliability. Therefore, febi have created a kit which follows O.E. that can be installed on all the models listed above, with parts included to adapt the earlier models. (Fig.1)

Discovery III, early Discovery IV and Range Rover Sport models were fitted with an earlier design of compressor manufactured by Hitachi and AMK. The febi compressor included in this kit matches the current design from the vehicle manufacturer.

The affected vehicles which were fitted with the earlier design of compressor are as follows:

- Discovery III 2005-2009 VIN: 5A000360-9A513325 (Hitachi compressor)
- Discovery IV 2010-2012 VIN: AA510742-CA638965 (AMK Compressor old design)
- Range Rover Sport 2006-2013 VIN: 6A900129-DA768550 (Hitachi or AMK old design)

All later vehicles are fitted with the newer compressor. However, some of the vehicles in the listed chassis ranges may have had their original compressor replaced in service and updated.



Figure 2

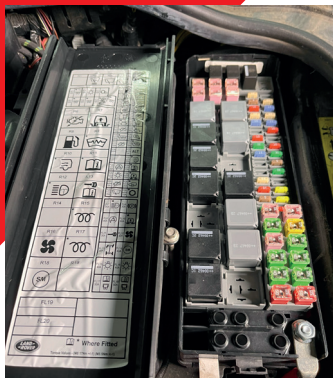


Figure 3



Figure 4

### Replacement of the compressor

To begin the process of replacing the air compressor, set the air suspension into 'Jacking Mode' before raising the vehicle.

- Ensure all doors are closed
- Start engine and allow to idle with the transmission in the park (P) position
- Press and release suspension control button (Fig.2)
- A warning symbol illuminates to indicate suspension is being raised
- A warning symbol illuminates to indicate suspension system is in maximum ride height mode
- Parking brake should be applied and switch the ignition off

Open the bonnet, lift the fuse box cover, remove relay R7 and raise the vehicle. (Fig.3)

For ease of access, remove the left rear wheel.

To replace the compressor, first remove the lower cover and identify which compressor the vehicle is fitted with. If it is of the current design identical to the compressor in the febi kit, no modifications are required to the pneumatic air lines and no software update is required.

If the vehicle has a Hitachi or early AMK compressor, (Fig.4) the pneumatic air lines need adapting and a software update which reduces the run time of the compressor must be carried out, as well as a firmware update on the control unit. Failure to do these will void the warranty and may also severely damage the compressor.

Disconnect the three pneumatic air lines and the two electrical connectors, undo the three chassis fixing bolts for the compressor bracket and remove the compressor and upper insulation cover. Remove the air line to the solenoid valve and install the quick connector supplied with the kit. (Fig.5) Tighten to 2 Nm. Remove blanking plug and insert the new pipe.

The two air lines at the rear of the compressor must be adapted. After removing the quick air fittings, the length of the air line pipe must be reduced by 40 mm if a Hitachi compressor is fitted or by 60 mm for an earlier AMK compressor.



Figure 5



Figure 6



Figure 7

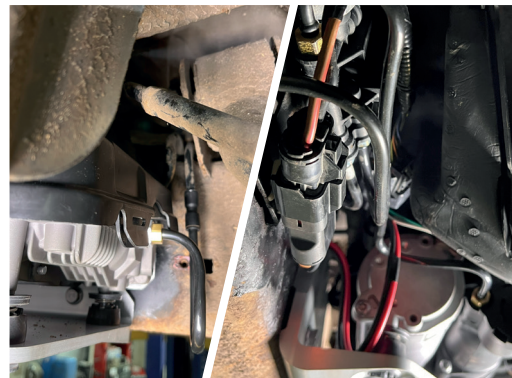


Figure 8

Alternatively, test fit the new compressor assembly to the chassis and align the new pipe with the pipe to be cut (Fig.6) and cut to length using a suitable pipe cutting tool. With the pipe cut to length, insert the brass ferrule into the pipe. (Fig.7)

With all pneumatic air lines adapted, fit the new insulation upper cover ensuring it is located behind the solenoid bracket. Remove the new compressor from the bracket and install to the chassis using the new fixings supplied. This makes it easier to install the compressor.

Install the new compressor with the new air lines then remove the blanking plugs from the quick connectors at the front and rear of the compressor and insert all three new pneumatic air lines, ensuring they are correctly routed.

Refit the compressor to the bracket ensuring all three mounting plates and springs are assembled in the correct order.

Connect the two electrical plugs securing in place.

Before installing the new lower cover, check all pipes and cables are routed correctly and will not chafe or cause vibration. (Fig.8)

Install new lower cover, refit the wheel and and lower the vehicle. (Fig.9)

Install new updated relay into position R7 and refit fuse box covers. (Fig.10)

### Attention!

**With all new parts installed carry out a software update using a suitable diagnostic tool which reduces the run time of the compressor as well as a firmware update on the control unit. Failure to do these will void the warranty and may severely damage the compressor.**

Once complete, test operation of the compressor monitoring the function of the air suspension and ride height setting. If the compressor has failed due to being overworked as a result of other air suspension components leaking, repair and replace as necessary.

For more technical information please visit: [partsfinder.bilsteingroup.com](http://partsfinder.bilsteingroup.com)



Figure 9



Figure 10