FITTING GUIDE

BRITPART

The quality parts for Land Rovers

DA3517

STANDARD HEIGHT AIR TO COIL CONVERSION

Vehicle Compatibility

- Discovery 3
- Discovery 4

DISCLAIMER

This product should be fitted by a competent mechanic with appropriate tools and safety equipment. Britpart accepts no liability for damage or injury resulting from improper installation or misuse of this product. Always follow vehicle manufacturer guidelines when carrying out modifications or repairs.

SAFETY PRECAUTIONS

During the fitting of new suspension components safety is paramount. When working on a vehicle of any type, all precautions must be taken to ensure the vehicle is correctly immobilized and properly lifted and supported during any work.

The air suspension system on your vehicle is pressurized. Air suspension components may retain some residual air pressure. To relieve pressure slowly remove the air valve / fittings, only fully remove fitting once pressure is released.

WEAR HAND, EAR & EYE PROTECTION AT ALL TIMES

WARNING: DO NOT REMOVE ANY FITTINGS WHILST AIR SUSPENSION SYSTEM IS ACTIVE OR IGNITION IS SWITCHED ON.

Whilst working on any vehicle electrical system, precautions need to be taken to isolate batteries and any component capable of generating or discharging an electrical charge as to prevent personal injury or damage to property.

BEFORE PROCEEDING WITH THE INSTALLATION, IT IS RECOMMEND THAT A QUALITY DIAGNOSTIC TOOL IS PLUGGED IN TO THE VEHICLE TO CHECK FOR UNDERLYING FAULT CODES, ESPECIALLY ON OLDER VEHICLES OR THOSE WITH A HISTORY OF ELECTRICAL ISSUES.

KIT CONTENTS

Front coil strut, assembled x 2
Rear coil strut, assembled x 2
EAS bypass module
Wiring harness x 2 (See instructions for specifics)
Heat shrink
Cables ties x 2

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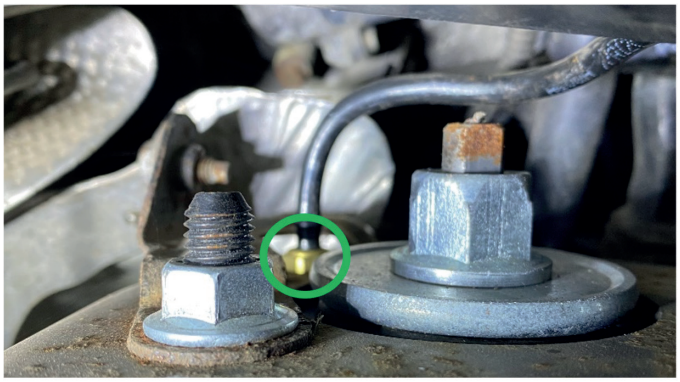
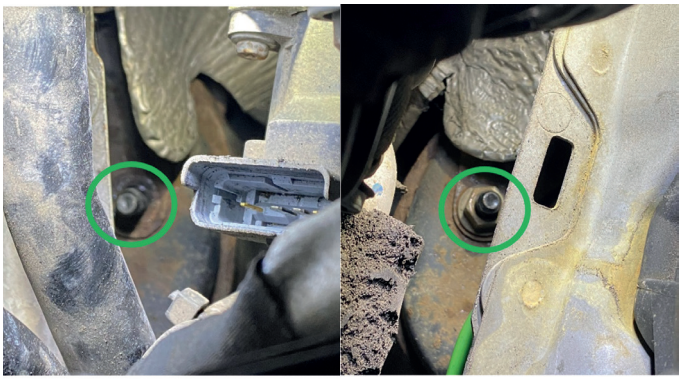
REMOVAL PROCESS - FRONT AIR STRUTS
WITH THE FRONT OF THE VEHICLE LIFTED AND SUPPORTED CORRECTLY, REMOVE THE FRONT WHEELS.

1. Begin by depressurizing the front struts by slowly turning the air fitting using a 12mm spanner until the sound of air being released can be heard. Once the air pressure has been fully vented, remove the air fitting from the strut.



2. With the air strut depressurized, remove the three upper mounting bolts (15mm nut size).
   The outer two mounting nuts can be removed using a ratchet or regular spanner.
   The inner mounting nut can also be done this way but access is limited. It is possible to remove the inner nut via the engine bay using a socket, universal joint adaptor, and a suitable extension.



Right Side of Engine Bay

Left Side of Engine Bay

3. Remove the lower strut bolt using a 21mm socket on the bolt head and a 24mm spanner on the nut.
   Support the shock as you remove the bolt.
   Use caution when removing the bolt as this will cause the strut assembly to be free and could cause damage or injury if not supported during removal.

The images show the right side being removed. The process and steps are the same for the left side.

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REMOVAL PROCESS - REAR AIR STRUTS
WITH THE REAR OF THE VEHICLE LIFTED AND SUPPORTED CORRECTLY, REMOVE THE REAR WHEELS.

1. Begin by depressurizing the rear struts by slowly turning the air fitting using a 12mm spanner until the sound of air being released can be heard. Once the air pressure has been fully vented, remove the air fitting from the strut.

2. To aid the removal of the air strut and installation of the new coil strut it is advised to remove the rear toe link arm bolt (18mm).
   This will allow unrestricted access to remove the air strut and to refit the new coil strut.

3. With the air strut depressurized, remove the three upper mounting bolts (15mm nut size) The three mounting nuts can be removed using a ratchet or regular spanner.

4. The lower strut bolt can now be removed. For this you will need a 21mm socket for the bolt head and a 24mm spanner for the nut.

   Use caution when removing the bolt as this will cause the strut assembly to be free and could cause damage or injury if not supported during removal.

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The fitting of the coil strut assemblies is the reverse of the removal of the air strut versions.
The coil struts will use the same mounting points and fittings.
They will come with new top fitting lock nuts and the lower strut bolt can be reused if in good condition or replaced separately.

The tightening torques for each fitting can be found below.

Fitting Type	Tightening Torque (lbs/ft – NM)
Top mounting nuts (15mm) front/rear	48lbs.ft - 63nm
Lower strut bolt front/rear	221lbs.ft - 300nm
Rear toe link bolt	129lbs.ft - 175nm
Road wheel nuts	103lbs.ft - 140nm

When torquing the lower shock and suspension bolts (both front and rear) it is important to do this when the vehicle is fully lowered and, on the ground, (or ramp if using a 4-poster style ramp).

If the bolt is tightened with the wheels off the ground then it could cause the bush in the shock to tear and cause a knocking sound.

CONTROL MODULE FITTING PROCEDURE

1. Before commencing any of the below fitting instructions, the vehicle battery must be fully disconnected.
   This includes any auxiliary batteries that may be connected.
   Failure to do this will result in the malfunction lamp being on after fitting.

2. Remove the 3 interior panels on the driver's side to allow access to the ride control module.

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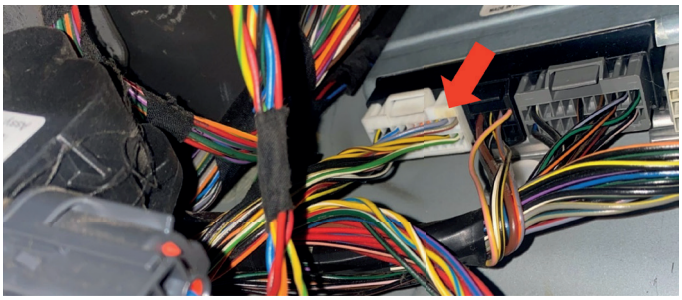
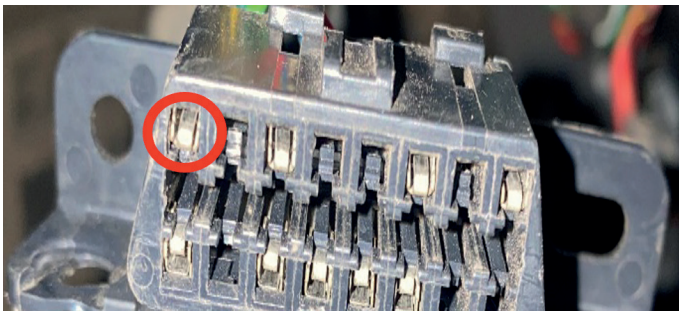
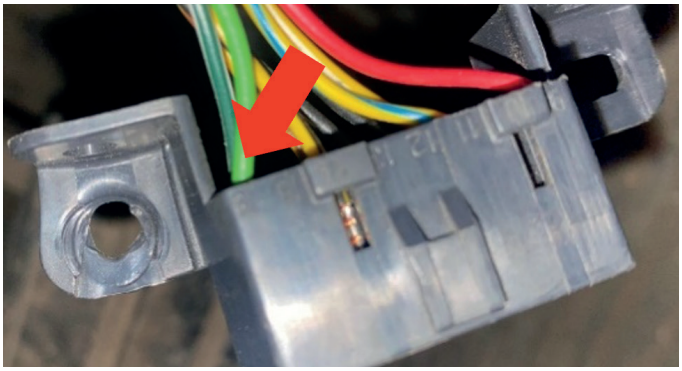
3. The ride control module is located on the underside of the dashboard. Remove the white multipin connector by depressing the tab and pulling the connector from the module.



4. Remove The OBD port from the mounting point by removing the 2x T25 torx screws.

5. Remove pin 16 from the connector. This normally a green wire or green with black tracer on later models.





6. Once pin 16 of the OBD port has been removed, you can then identify the correct harness by comparing the shape of the terminal on the wire removed from pin 16 with the images below:

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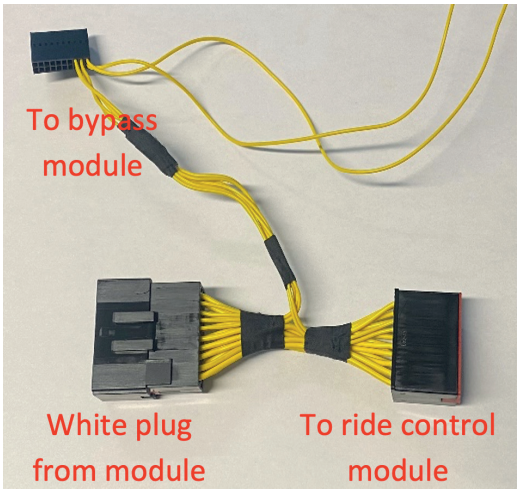
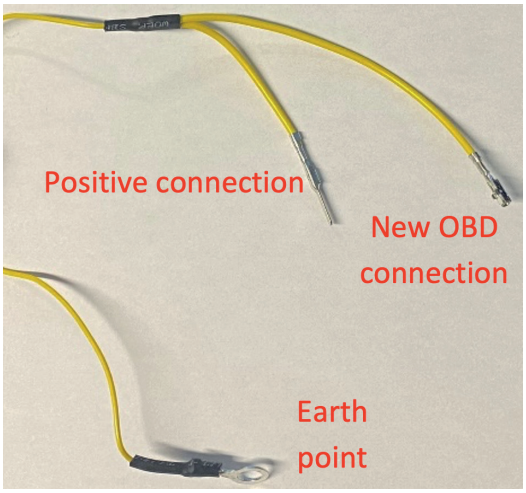
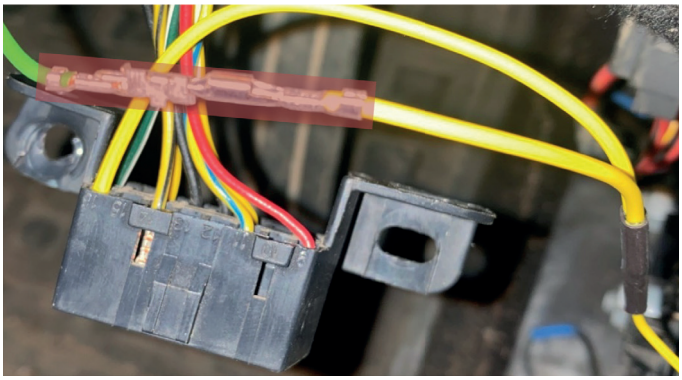
7. Remove the applicable wiring harness from the bag. The harness is made up of 3 connectors and 3 separate wires. See below for harness labelling and where to connect to.





8. With pin 16 removed, replace with the square female pin and make sure it is connected and locked in place on the OBD port.
Connect the OEM pin 16 to the male positive connector pin and heat shrink to secure the connection.



9. With the wiring connected, close the heat shrink to secure the connection to prevent it from disconnecting. Remove the 10mm nut from the earthing point located on the body of the vehicle. Place the eyelet from the module loom and refit the earth nut.

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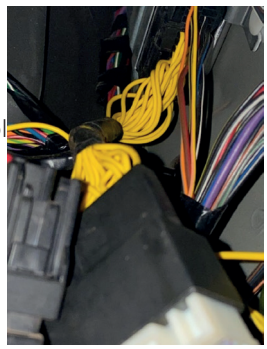
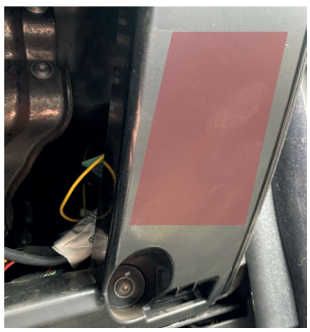
10. Connect the male end of the wiring loom to the ride control module. Plug the white plug removed earlier from the control module into the female end of the wiring loom.



11. Connect the module to the wiring loom and attach the module box to the back of the dashboard using double sided tape.



12. Making sure all the module wiring loom is concealed out the way and cannot be snagged or damaged while driving, refit all the removed panels to the interior and reconnect the battery.

13. With all components reconnected and the battery connected, turn the ignition to the accessories position.

14. **DO NOT START** the engine.
Allow the system 10-15 seconds to complete its self-scan and for the module to send the signal to deactivate the air suspension.

15. The engine can now be started to check the air suspension light is off with the engine running.

16. Clear all codes from the module and the vehicle is ready to drive.

17. The following code will be stored in the ride control module – Air suspension control module (RLM) – U3000-52 This code does not indicate a fault in the system. This code is set to let the vehicle know the air suspension module has been deactivated.