# TECHNICAL BULLETIN LTB00793NAS3 23 AUG 2016



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NOTE: The information in Technical Bulletins is intended for use by trained, professional Technicians with the knowledge, tools, and equipment required to do the job properly and safely. It informs these Technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by 'do-it-yourselfers'. If you are not a Retailer, do not assume that a condition described affects your vehicle. Contact an authorized Land Rover service facility to determine whether this bulletin applies to a specific vehicle.

This reissue replaces all previous versions. Please destroy all previous versions.

Changes are highlighted in gray

### **SECTION: 204-05**

Suspension Air Supply Unit Exhaust Valve Fails To Vent

## <u> AFFECTED VEHICLE RANGE:</u>

LR4 (LA)

Model Year: 2015-2016

VIN: 745077 Onwards Vehicles With: Dynamic Suspension

Assembly

Solihull Plant:

Range Rover Sport (LW)

Model Year: 2015-2016

VIN: 505041-587719 Vehicles With: Dynamic Suspension

Assembly

Solihull Plant:

Range Rover Sport (LW)

Model Year: 2014-2016

VIN: 601162-652754 Vehicles With: Dynamic Suspension

Assembly Solihull

Plant:

Solihull

Range Rover (LG)

Model Year: 2015-2016

VIN: 197621-287438 Vehicles With: Dynamic Suspension

Assembly

Plant:

### MARKETS:

NAS

#### CONDITION SUMMARY:

Situation: The air suspension system may not raise/lower with a warning displayed on the Instrument Cluster and Diagnostic Trouble Code (DTC) C1A13-64 may be stored.

Cause: This may be caused by the suspension air supply unit failing to vent in the allotted time due to either a blocked silencer or faulty exhaust valve.

Action: Should a customer express this concern, follow the Service Instruction below.

#### PARTS:

| LR075760 | Suspension air supply unit exhaust valve - LR4 (L319)                                      | 1 |
|----------|--|---|
| LR078650 | Suspension air supply unit - LR4 (L319)  | 1 |
| LR075759 | Suspension air supply unit exhaust valve - Range<br>Rover Sport (L494), Range Rover (L405) | 1 |
| LR069693 | Suspension air supply unit - Range Rover Sport (L494;                                      | 1 |

vehicles with 7 seats)

Suspension air supply unit - Range Rover Sport (L494; vehicles without 7 seats), Range Rover (L405) LR069691

LR088858 Silencer with vent hole 1

## TOOLS:



Jaguar Land Rover-approved diagnostic tool with latest SDD software and Calibration File

E179225



Jaguar Land Rover-approved Midtronics battery power supply

Refer to the Service Instruction/Workshop Manual for any required special tools.

# **WARRANTY:**

NOTE: Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Always refer to TOPIx to obtain the latest repair time.

NOTE: DDW requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.

| DESCRIPTION  | SRO      | TIME<br>(HOURS) | CONDITION<br>CODE | CAUSAL<br>PART |
|--|----------|-----------------|-------------------|----------------|
| Suspension air supply unit exhaust valve and silencer - Renew - LR4 (L319) | 64.50.05 | 0.6             | 41                | LR078650       |
| Suspension air supply unit - Renew - LR4 (L319)                            | 60.50.10 | 0.5             | 41                | LR078650       |
| Read and clear DTCs - LR4 (L319)   | 12.90.16 | 0.2             | 42                | LR078650       |
|  |          |                 |                   |                |

| Suspension air supply unit exhaust valve and silencer -<br>Renew - Range Rover Sport (L494; vehicles with 7<br>seats)    | 64.50.05.50 | 0.5 | 41 | LR069693 |
|--|-------------|-----|----|----------|
| Suspension air supply unit exhaust valve and silencer -<br>Renew - Range Rover Sport (L494; vehicles without 7<br>seats) | 64.50.05    | 0.7 | 41 | LR069693 |
| Suspension air supply unit - Renew - Range Rover<br>Sport (L494; vehicles with 7 seats)                                  | 60.50.10.50 | 0.4 | 41 | LR069693 |
| Suspension air supply unit - Renew - Range Rover<br>Sport (L494; vehicles without 7 seats)                               | 60.50.10    | 0.5 | 41 | LR069693 |
| Read and clear DTCs - With diagnostic equipment already connected - Range Rover Sport (L494)                             | 12.90.16.01 | 0.1 | 42 | LR069693 |
| Tune - Download - Chassis Control Module (CHCM) -<br>Range Rover Sport (L494)  | 64.90.05    | 0.1 | 41 | LR069693 |
| Suspension air supply unit exhaust valve and silencer -<br>Renew - Range Rover (L405)                                    | 64.50.05    | 0.7 | 41 | LR069691 |
| Suspension air supply unit - Renew - Range Rover<br>(L405)   | 60.50.10    | 0.5 | 41 | LR069691 |
| Tune - Download - Chassis Control Module (CHCM) -<br>Range Rover (L405)  | 64.90.05    | 0.1 | 41 | LR069691 |
| Read and clear DTCs - With diagnostic equipment already connected - Range Rover (L405)                                   | 12.90.16.01 | 0.1 | 42 | LR069691 |

NOTE: Normal Warranty procedures apply.

# **SERVICE INSTRUCTION:**

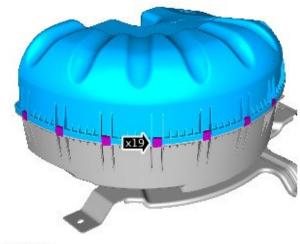
CAUTION: Before disconnecting or removing components, make sure the area around the joint faces and connections are clean. Plug open connections to prevent contamination.



1. Remove the suspension air supply unit (see TOPIx Workshop Manual section 204-05: Vehicle Dynamic Suspension).



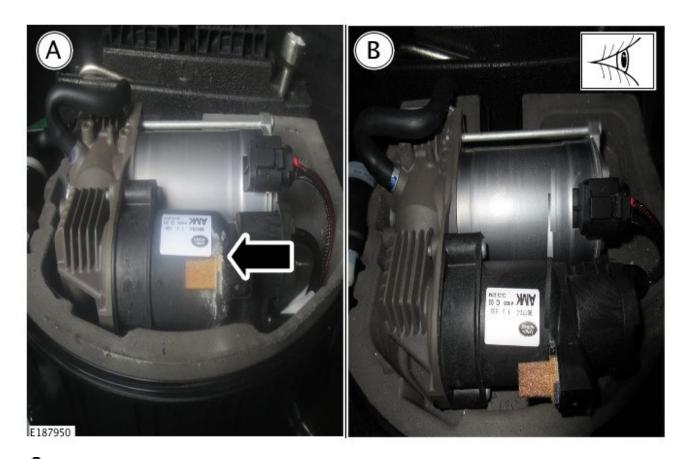
Remove the suspension air supply unit cover.



E161582

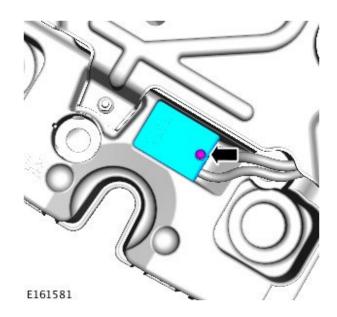
- **3.** Check for white powder at the suspension air supply unit silencer.
  - If white powder is present at the silencer (A), replace the suspension air supply unit (see TOPIx Workshop Manual section 204-05: Vehicle Dynamic Suspension).

- Once the new suspension air supply unit installation is complete:
  - LR4 vehicles: continue to Step 13.
  - Range Rover Sport (L494), Range Rover (L405) vehicles: continue to CHASSIS CONTROL MODULE SOFTWARE UPDATE.
- If no white powder is present at the silencer (B), continue to:
  - LR4 (L319) vehicles up to and including VIN 757869: continue to Step 7.
  - LR4 (L319) vehicles from VIN 757870: install the suspension air supply unit.
    - Continue to Step 13.
  - Range Rover Sport (L494) vehicles up to and including VIN 517889 or between VINs 601162-613694: continue to Step 4.
  - Range Rover Sport (L494) vehicles from VINs 517890 and 613695: continue to Step 10.
  - Range Rover (L405) vehicles up to and including VIN 214541: continue to Step 4.
  - Range Rover (L405) vehicles from VIN 214542: continue to Step 10.

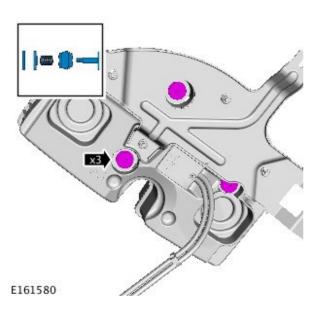




- 4. Remove the retaining screw.
  - · Remove the electrical wiring cover.
  - Torque: 1 Nm

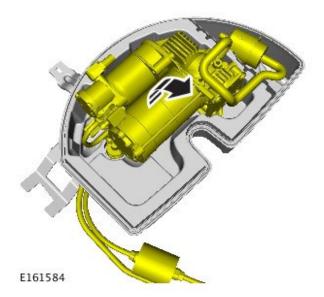


- **5.** Remove the suspension air supply unit retaining bolts.
  - Torque: 10 Nm



6. CAUTION: Before replacing the upper cover, make sure that the intake hose and filter are fitted in their correct positions. Failure to follow this instruction may cause damage to the component.

Reposition the suspension air supply unit to access the exhaust valve.

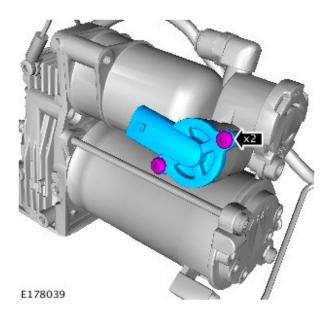


7. CAUTION: When removing the suspension air supply unit exhaust valve, all three O rings must be removed from the suspension air supply unit.

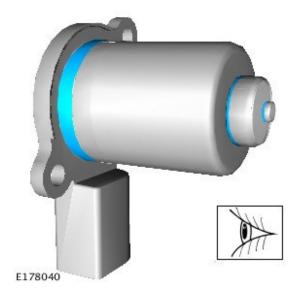
NOTE: Note the installed position before removal.

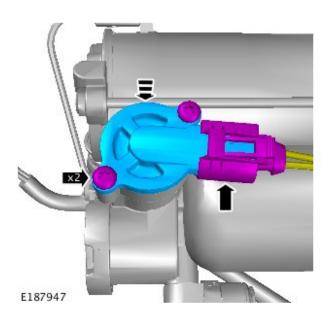
Remove the retaining screws from the exhaust valve of the suspension air supply unit.

• Remove the exhaust valve (including all three O rings) from the suspension air supply unit.



**8.** Make sure all three O rings on the exhaust valve have been removed from the suspension air supply unit.



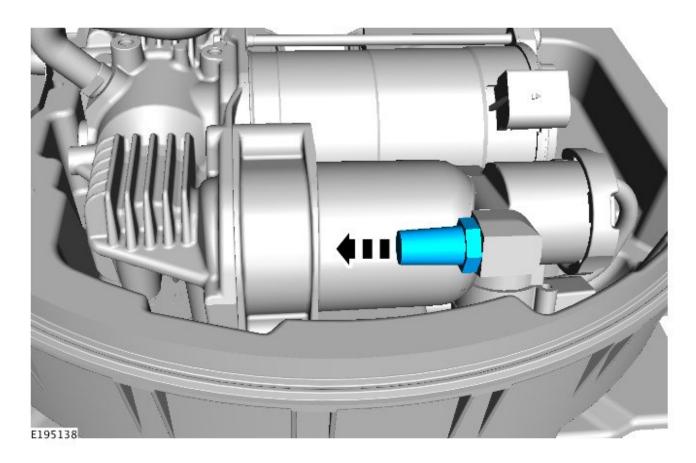


- **9.** Install the new suspension air supply unit exhaust valve.
  - Torque: **3Nm**

NOTE: Steps 10-11: Range Rover Sport (L494) and Range Rover (L405) vehicles only.

10. NOTE: Support the silencer mounting point by hand when removing.

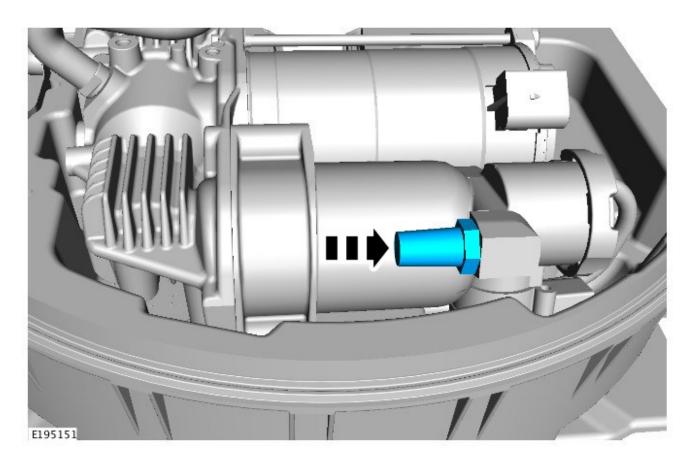
Remove and discard the suspension air supply unit silencer.



11. NOTE: Support the silencer mounting point by hand when installing.

Install the suspension air supply unit silencer.

• Torque: **2.5Nm** 



- 12. Install the suspension air supply unit (see TOPIx Workshop Manual section 204-05: Vehicle Dynamic Suspension).
  - Once the suspension air supply unit is installed:
    - LR4 vehicles: continue to Step 13.
    - Range Rover Sport (L494), Range Rover (L405) vehicles: continue to CHASSIS CONTROL MODULE SOFTWARE UPDATE.

CAUTION: A Jaguar Land Rover-approved Midtronics battery power supply must be connected to the vehicle battery during SDD diagnosis / module programming.

CAUTION: Ensure all ignition 'ON' / ignition 'OFF' requests are carried out; failure to perform these Steps may cause damage to control modules in the vehicle.



- 13. Connect the Jaguar Land Rover-approved Midtronics battery power supply to the vehicle battery.
- 14. Turn ignition ON (engine not running).
- 15. Connect the Jaguar Land Rover-approved diagnostic tool to the vehicle and begin a new session.
- **16.** Follow the on-screen prompts, allowing the diagnostic tool to read the VIN and identify the vehicle and initiating the data collect sequence.
- 17. Read and clear all diagnostic trouble codes (DTC).
- 18. Follow all on-screen instructions to complete this task.
- 19. Exit the current session.
- **20.** Disconnect the diagnostic tool and battery power supply from the vehicle.

### CHASSIS CONTROL MODULE SOFTWARE UPDATE

CAUTION: A Jaguar Land Rover-approved Midtronics battery power supply must be connected to the vehicle battery during SDD diagnosis / module programming.

CAUTION: Ensure all ignition 'ON' / ignition 'OFF' requests are carried out; failure to perform these Steps may cause damage to control modules in the vehicle.



NOTE: The Jaguar Land Rover-approved diagnostic tool must be loaded with SDD146.04 v.245 or later.

- 1. Connect the Jaguar Land Rover-approved Midtronics battery power supply to the vehicle battery.
- 2. Turn ignition ON (engine not running).
- 3. Connect the Jaguar Land Rover-approved diagnostic tool to the vehicle and begin a new session.
- **4.** Follow the on-screen prompts, allowing the diagnostic tool to read the VIN and identify the vehicle and initiating the data collect sequence.
- 5. Read and clear all diagnostic trouble codes (DTC).
- **6.** Follow all on-screen instructions to complete this task.
- 7. Select **Diagnosis** from the Session Type screen.
- 8. Select the **Selected Symptoms** tab and then select one of the following:
  - Chassis Suspension system Vehicle dynamic suspension Height Will not lower
  - . Chassis Suspension system Vehicle dynamic suspension Height Will not raise
  - Electrical Instruments Warning lamps Suspension warning lamp
  - Electrical Instruments Warning lamps Ride level warning lamp
  - Electrical Instruments Information and message center Message display area Chassis
- 9. Select continue.
- 10. Select the Recommendations tab.
- 11. Select Run to perform the 'Configure existing module Chassis control module' option.
- 12. Follow all on-screen instructions to complete this task.
- 13. Exit the current session.
- 14. Disconnect the diagnostic tool and battery power supply from the vehicle.