

TECHNICAL BULLETIN

LTB00710NAS3
22 DEC 2015



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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: 303-04C

Metallic 'Clicking' / 'Rasping' Noise From The Engine

AFFECTED VEHICLE RANGE:

LR4 (LA) Model Year: 2014-2016 VIN: 679426-804855 Assembly Plant: Solihull	Engine: V6 S/C 3.0L Petrol
Range Rover Sport (LW) Model Year: 2014-2016 VIN: 001154-568760 Assembly Plant: Solihull	Engine: V6 S/C 3.0L Petrol
Range Rover Sport (LW) Model Year: 2014-2016 VIN: 600009-642986 Assembly Plant: Solihull	Engine: V6 S/C 3.0L Petrol
Range Rover (LG) Model Year: 2014-2016 VIN: 110440-270747 Assembly Plant: Solihull	Engine: V6 S/C 3.0L Petrol

MARKETS:

NAS

CONDITION SUMMARY:

Situation: A metallic 'clicking' / 'rasping' noise may be evident from the engine. The noise may be more noticeable when the engine is at idle speed and when the engine is cold.

Cause: This may be caused by a noisy high pressure fuel pump outlet valve.

Action: Should a customer express this concern, follow the Service Instruction outlined below to determine if the noise is emitted from one of the high pressure fuel pumps located in the engine bay.

PARTS:

LR066512 High pressure fuel pump Quantity: as required

TOOLS:



NOTE: this Active Bulletin will display a functional programming shortcut if accessed within a diagnostic session using the Jaguar Land Rover-approved diagnostic tool with latest DVD and Calibration File.

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

Jaguar Land Rover-approved Midtronics battery power supply

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 (HOURS)	CONDITION CODE	CAUSAL PART
Fuel pump test - SDD	19.90.18	0.3	42	LR035527
High pressure fuel pump - Rear - Renew - LR4 (L319)	19.45.31	2.0	42	LR035527
High pressure fuel pump - Front - Renew - LR4 (L319)	19.45.30	1.9	42	LR035527
High pressure fuel pump - Rear - Renew - Range Rover Sport (L494); Range Rover (L405)	19.45.31	2.2	42	LR035527
High pressure fuel pump - Front - Renew - Range Rover Sport (L494); Range Rover (L405)	19.45.30	2.5	42	LR035527
Fuel pump test - SDD	19.90.18	0.3	42	LR035527



NOTE: Normal Warranty procedures apply.

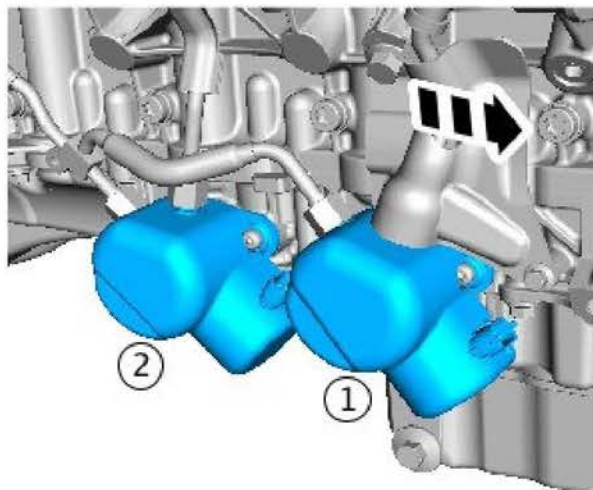
COMPONENT LOCATION:



NOTE: arrow indicates front of engine.

The illustration shows the high pressure fuel pumps and their possible alternate designation.

- Pump 1: front
- Pump 2: rear



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DIAGNOSTIC PROCEDURE:

The following will aid in the diagnosis of which of the high pressure fuel pumps is noisy.


- 1  **NOTE: carry out the diagnostic routine on a cold engine (less than 95°F / 35°C) at idle speed with the hood open.**

Carry out the following routine while listening for the suspected fuel pump noise. As the fuel pumps are deactivated in turn, it should be possible to determine which pump is noisy as the metallic 'clicking' / 'rasping' noise will stop when that fuel pump is no longer running. Replace only a noisy pump; if no difference can be determined from either pump during the routine, further diagnostics will be required into the source of the noise. In the unlikely event that both pumps are suspected to be noisy, contact the Technical HelpLine for further advice.

 **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/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 DVD144.01 v.225 or later.**

 **NOTE: the primary function of the following routine is to assist in determining pump performance. In this bulletin the test is being utilized for an audible fault. The test will conclude with a pass or fail. If the test concludes with a pass, this does not indicate the pump is not causing an audible fault.**

2 Connect the Jaguar Land Rover-approved Midtronics battery power supply to the vehicle battery.

3 Turn ignition 'ON' (engine not running).

4 Connect the Jaguar Land Rover-approved diagnostic tool to the vehicle and begin a new session.

5 Follow the on-screen prompts, allowing SDD to read the VIN and identify the vehicle and initiating the data collect sequence.

6 Select **Diagnosis** from the Session Type screen.

7 Select the **Selected Symptoms** tab and then select:

- **Powertrain > Engine system > Engine performance**

8 Select **continue**.

9 Select the **Recommendations** tab and then select **Run** to perform the **Powertrain - High pressure fuel pump test** option.

- When the SDD application is running the high pressure fuel pumps will be sequenced as follows.
 1. High pressure fuel pump 2 - disabled (the tool will display the following: High pressure fuel pump 1 - PCM - Switch off).
 2. Both high pressure fuel pumps - enabled.

3. High pressure fuel pump 1 - disabled (the tool will display the following: High pressure fuel pump 2 - PCM - Switch off).
4. Both high pressure fuel pumps - enabled.
 - If no error message is displayed, continue to step 12.
 - If error message '36' or '37' appears, run the following procedure and repeat the high pressure fuel pump test.

10Select the **Recommendations** tab and then select **Run** to perform the **Powertrain - High pressure fuel pump test** option.

11Select the **Service Functions** Session Type screen and then select **Run** to perform the **Powertrain - Powertrain control module unlock application**.

12Follow all on-screen instructions to complete this task, ensuring all DTCs are cleared.

13Exit the current session.

14Disconnect the diagnostic tool and the battery power supply from the vehicle.

15Install new high pressure fuel pump(s) as per diagnostics results (see TOPIx workshop Manual, section 303-04C: Fuel Charging and Controls - V6 S/C 3.0L Petrol).

16Retest vehicle to confirm the noise has been rectified.