# TECHNICAL BULLETIN
LTB00623NAS1
04 APR 2014


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.

## SECTION: 303-00

Engine MIL Illuminated With DTC P0089-29 Stored

## AFFECTED VEHICLE RANGE:

**LR2 (LF)**
**Model Year:** 2013
**VIN:** DH311358-DH386980

**Range Rover Evoque (LV)**
**Model Year:** 2012-2013
**VIN:** CH000447-DH856579

## MARKETS:

NAS

## CONDITION SUMMARY:

**Situation:** The engine Malfunction Indicator Lamp (MIL) may be illuminated with no noticeable engine-related issue and Diagnostic Trouble Code (DTC) P0089-29 may be stored in the Engine Control Module (ECM).

**Cause:** This may be caused by an over-active relief valve seal within the in-tank fuel pump.

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

## PARTS:

| | | |
|---|---|---|
| LR000966 | Gasket (O-ring) | Quantity: 1 |
| LR036126 | Pump - Fuel - LR2 (L359) | Quantity: 1 |
| LR026192 | Pump - Fuel - Range Rover Evoque (L538) - up to VIN DH728455 | Quantity: 1 |
| LR044427 | Pump - Fuel - Range Rover Evoque (L538) - from VIN DH728456 | Quantity: 1 |
| LR044010 | Sensor - Fuel supply line pressure | Quantity: 1 |

## TOOLS:

**NOTE: This document is an 'Active Bulletin' that will display a functional programming shortcut if accessed within a diagnostic session using SDD.**

SDD with latest DVD and Calibration File; first available on DVD136.02 v.157
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 |
|---|---|---|---|---|
| Update Engine Control Module software | **12.90.13** | 0.2 | 42 | LR028981 |
| Static test cycle | **05.10.20** | 0.2 | 42 | LR028981 |
| Pump - Integral - Fuel tank - Rear - Renew - LR2 (L359) | **19.45.03** | 2.3 | 42 | LR028981 |
| Pump - Integral - Fuel tank - Rear - Renew - Range Rover Evoque (L538) | **19.45.03** | 1.8 | 42 | LR028981 |
| Sensor - Fuel supply line pressure - Renew | **19.22.32** | 0.3 | 42 | LR028981 |

**NOTE: Normal Warranty policies and procedures apply.**

## ***SERVICE INSTRUCTION:***

**NOTE: Check if campaign Q379 has been carried out. If not already carried out, please update the Engine Control Module and claim against campaign Q379. If the campaign has already been carried out, move to step 10.**

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

   **NOTE: SDD must be loaded with DVD136.03 v.158 or later.**

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

**NOTE: The Engine Control Module (ECM) may also be referred to as Powertrain Control Module (PCM).**

2. Turn ignition 'ON' (engine not running).
3. Connect the Symptom Driven Diagnostics (SDD) system to the vehicle and begin a new session.
4. Follow the on-screen prompts, allowing SDD to read the VIN and identify the vehicle and initiating the data collect sequence.
5. Select 'Diagnosis' from the Session Type screen.
6. Select the 'Selected Symptoms' tab, and then select:
   - Electrical - Instruments - Information and message center - Message display area - Powertrain
7. Select 'continue'.
8. Select the 'Recommendations' tab, and then select '**Run**' to perform the 'Configure existing module – Powertrain control module' option.
9. Follow all on-screen instructions to complete this task.
10. Carry out a static test cycle.

    1. From the Recommendations tab, launch 'Datalogger'.

2. Select 'Engine system'.

3. Select 'Fuel rail pressure - Low range sensor'.

4. Start Engine, idle for 60 seconds, and monitor the 'Fuel rail pressure - Low range sensor' signal during the following:

- **Phase 1** – First 30 seconds: expected approximate 'good' value = 3.0v (± 0.15) throughout Phase 1 of test cycle.

- **Phase 2** – Second 30 seconds (engine speed will drop): expected approximate 'good' value = 2.3v (± 0.15) throughout Phase 2 of test cycle.

5. Increase engine speed to 3000 RPM (vehicle stationary) and hold for 10 seconds.

6. Turn ignition OFF.

7. Carry out steps 10.1-10.6 an additional two (2) times (three [3] total) or if engine Malfunction Indicator Lamp (MIL) is illuminated during any of the test cycles.

- Continue to step 10.8.

8. Read all Diagnostic Trouble Codes (DTC).

- If no DTCs are present, continue to step 11 and return vehicle to customer; no further action other than previously performed ECM software update is necessary.

- If related DTCs -- **but NOT P0089-29** -- are present, diagnose and repair as necessary; to be performed as a separate claim.

- If DTC P0089-29 is set (even if pending), continue to step 10.9.

9. DTC P0089-29 set (even if pending)?

- **'YES' and** voltage readings are maintained throughout all three static test cycles **(both Phases 1 and 2)**, replace the Fuel Supply Line Pressure sensor (see TOPIx Workshop Manual, section 310-14B).

- **'YES' and** voltage readings are **not** maintained throughout all three static test cycles **(both Phases 1 and 2)** or begin low (2.6v or lower) after cranking and then slowly builds up to 3.0v during Phase 1, replace the Fuel pump and sender unit (see TOPIx Workshop Manual, section 310-01).

**11.** Exit the current session.

**12.** Disconnect the SDD and the battery power supply from the vehicle.