



SERVICE ACTION

Global Service Action
Number: N640

Subject: Powertrain Control Module (PCM) Incorrect Calibration	Publication No.: N640
	Model: Discovery (LR)
	Model Year: 2017 - 2020
	Model: Range Rover (LG)
	Model Year: 2016 - 2021
	Model: Range Rover Sport (LW)
	Model Year: 2016 - 2021
	Model: Range Rover Velar (LY)
	Model Year: 2018 - 2019
	Date of Issue: 13 May 2022

To:	Jaguar Land Rover (JLR) North America, LLC - USA and Canada
For the Attention of:	The approved JLR retailer/authorized repairer
Related Information:	<p>NOTE: The information in this campaign 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 JLR retailer/authorized repairer, do not assume that a condition described affects your vehicle. Contact an authorized JLR retailer/authorized repairer to determine if this campaign applies to a specific vehicle</p> <p>This campaign has been issued to provide the relevant repair instructions, parts and warranty information.</p>

DESCRIPTION OF ISSUE

A potential concern has been identified on specific vehicles within the above vehicle range.

A Powertrain Control Module (PCM) update is required on specific diesel vehicles, which will include a revised calibration to rectify a software error that can affect the Exhaust Gas Recirculation (EGR) system.

ACTION TO BE TAKEN

At the next opportunity, you are requested to repair the vehicle.

Visit the British Brands Sales Suite (BBSS) website for a list of affected vehicles at your retailer/authorized repairer. Unsold vehicles must be repaired prior to handover of the vehicle for retail sale.

Check the JLR claims submission system to make sure affected vehicles are correctly identified prior to starting this campaign. The claims submission system will be updated to reflect only those vehicles affected.

At the time of confirming a booking for a vehicle repair, make sure that all outstanding campaigns are identified to make sure the correct parts are available and adequate workshop time is allocated for repairs to be completed at one visit.

Yours faithfully

Simon Barnes

Global Customer Service Quality Director

SERVICE INSTRUCTION - N640



NOTE: The information in this campaign 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 Jaguar Land Rover (JLR) retailer/authorized repairer, do not assume that a condition described affects your vehicle. Contact an authorized [JLR](#) retailer/authorized repairer to determine if this campaign applies to a specific vehicle.

SROs

Description	SRO	Time
Powertrain Control Module (PCM) - Update ECU	85.18.03	0.2
Drive in/drive out	02.02.02	0.2



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.

Warranty Information

Warranty claims should be submitted quoting program code N640 with the relevant option code from the table below. As option codes are used there is no requirement for you to enter SROs or parts, these are included for information only.

Program Code	Option	Description	SRO	Time
N640	A	PCM - Update ECU	85.18.03	0.2
N640	B	PCM - Update ECU Drive in/drive out	85.18.03 02.02.02	0.2 0.2



NOTE: The option that contains the drive in/drive out allowance may only be claimed when the vehicle has been brought back into the workshop for this action alone to be undertaken.

Warranty claims should be submitted in accordance with the current [JLR](#) Global Warranty Manual, and its amendments, unless stated otherwise in this bulletin.

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TRAINING MATERIAL - TOPIX CLOUD DIAGNOSTICS

1. For further assistance using TOPIx Cloud Diagnostics, refer to the below training material, which is located on the Jaguar and Land Rover Excellence websites.
 - **QDMX01932**: Diagnostic Device Agent Installation
 - **QDMX02118**: Diagnostics Tool Capability
 - **QDMX02216**: Running an Application
 - **QDMX02401**: Service and [Pre-Delivery Inspection \(PDI\)](#), Module Programming
 - **QDMX02403**: Fault and Breakdown
 - **QDM102757**: Data logging POC systems and repair
 - **QDM102654**: TOPIx Cloud Enhancements: Service and [PDI](#), Module Programming.

DIAGNOSTIC INSTRUCTION - USING TOPIX CLOUD DIAGNOSTICS

1. Connect the [JLR](#) approved diagnostic equipment and the [JLR](#) approved battery support unit.

2.



NOTE: Only complete this step if the vehicle is in transit mode.

Select the link to disable transit mode.

3.



NOTE: Only complete this step if the vehicle is in transit mode.

Select the link to disable transit mode.

4. Update the [PCM](#) -

5.



NOTE: If required.

Select the link to enable transit mode.

6.



NOTE: If required.

Select the link to enable transit mode.

7. Follow all on-screen instructions to complete the task.
8. Disconnect the [JLR](#) approved diagnostic equipment and the [JLR](#) approved battery support unit.

DIAGNOSTIC INSTRUCTION - USING PATHFINDER

1. CAUTIONS:

This procedure requires a minimum of Pathfinder 374 installed or later.



All ignition ON/OFF instructions must be followed. Failure to complete these instructions may cause damage to the vehicle control modules.



NOTE: The JLR approved diagnostic equipment will read the Vehicle Identification Number (VIN) for the vehicle and automatically take the vehicle out of 'Transportation Mode' if required.

Connect the JLR approved battery support unit.

2. Connect the JLR approved diagnostic equipment to the vehicle and begin a new session.
3. Follow the JLR approved diagnostic equipment prompts.
 - Select 'ECU Diagnostics'.
 - Select Powertrain Control Module PCM.
 - Select 'Update ECU'.
 - Follow all on-screen instructions to complete the task.
4. If required, reset the vehicle to 'Transportation Mode'.
5. When all of the tasks are complete, exit the session.
6. Disconnect the JLR approved diagnostic equipment and the JLR approved battery support unit.

DIAGNOSTIC INSTRUCTION - USING SDD

16 MODEL YEAR RANGE ROVER AND RANGE ROVER SPORT ONLY

1. CAUTIONS:

This procedure requires a minimum of SDD 162 and Software Management Pack 345 installed or later.



All ignition ON/OFF instructions must be followed. Failure to complete these instructions may cause damage to the vehicle control modules.



NOTE: The JLR approved diagnostic equipment will read the Vehicle Identification Number VIN for the vehicle and automatically take the vehicle out of 'Transportation Mode' if required.

Connect the JLR approved battery support unit.

2. Connect the JLR approved diagnostic equipment to the vehicle and begin a new session.

3. Follow the JLR approved diagnostic equipment prompts.
4. If the hyperlink is not available, the application can be found as follows:
 - Select the 'Diagnosis' Session Type
 - Select the following symptom:
 - Electrical - Instruments - Information and message center - Message display area - Powertrain
 - Run and close the 'Datalogger' tool to reveal the 'Extras' tab, select the 'Extras' tab
 - Run 'Configure existing module – Powertrain control module.
5. If required, reset the vehicle to 'Transportation Mode'.
6. When all of the tasks are complete, exit the session.
7. Disconnect the JLR approved diagnostic equipment and the JLR approved battery support unit.