JLRTB02023NAS1 TECHNICAL BULLETIN



06 MAR 2020

© Jaguar Land Rover North America, LLC

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.

| determine whether this bulletin applies to a specific vehicle. | | | |
|--|--|--|--|
| INFORMATION | | | |
| SECTION: | | | |
| 303-01 | | | |
| SUBJECT/CONCERN: | | | |
| Malfunction Indicator Lamp (MIL) Illuminated on the Instrument Panel Cluster (IPC) | | | |

AFFECTED VEHICLE RANGE:

| MODEL: | MODEL YEAR: | VIN: | ASSEMBLY PLANT: | APPLICABILITY: |
|-----------------------------|----------------|-------------------|------------------|----------------------------|
| Discovery (LR) | 2018-2019 | 014201- 096489 | Solihull | INGENIUM 14 2.0L Petrol |
| Discovery (LR) | 2019-2020 | 400445- 426260 | Nitra (Slovakia) | INGENIUM I4 2.0L Petrol |
| Discovery Sport (LC) | 2018-2019 | 690537- 824661 | Halewood | INGENIUM I4 2.0L Petrol |
| New Range Rover Evoque (LZ) | 2020 | 000011- 022242 | Halewood | INGENIUM 14 2.0L Petrol |

| MODEL: | MODEL YEAR: | VIN: | ASSEMBLY PLANT: | APPLICABILITY: |
|-------------------------|----------------|-------------------|--------------------|----------------------------|
| Range Rover Evoque (LV) | 2018-2019 | 232184- 354437 | Halewood | INGENIUM 14 2.0L Petrol |
| Range Rover Sport (LW) | 2018-2020 | 149358- 872707 | Solihull | INGENIUM 14 2.0L Petrol |
| Range Rover Velar (LY) | 2018-2019 | 700246- 799998 | Solihull | INGENIUM 14 2.0L Petrol |
| Range Rover Velar (LY) | 2019 | 200001- 231027 | Solihull | INGENIUM 14 2.0L Petrol |
| E-PACE (X540) | 2018-2020 | Z00581- Z74881 | Graz (Austria) | INGENIUM 14 2.0L Petrol |
| F-TYPE (X152) | 2018-2020 | K45252- K65706 | Castle Bromwich | INGENIUM 14 2.0L Petrol |
| F-PACE (X761) | 2018-2019 | 488023- 616663 | Solihull | INGENIUM 14 2.0L Petrol |
| XE (X760) | 2018-2020 | P26896- P57662 | Castle Bromwich | INGENIUM 14 2.0L Petrol |
| XF (X260) | 2018-2020 | Y46487- Y85151 | Castle Bromwich | INGENIUM 14 2.0L Petrol |

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:

SITUATION:

The Malfunction Indicator Lamp (MIL) is illuminated on the Instrument Panel Cluster (IPC) with a small loss in performance and reduction in accelerator response.

The following Diagnostic Trouble Code(s) (DTC)s may possibly be stored in the Powertrain Control Module (PCM):

P0011-71 - 'A' Camshaft Position - Timing Over - Advanced or System
 Performance Bank 1 - Actuator stuck

- P000A-00 'A' Camshaft Position Slow Response Bank 1
- P0014-71 'B' Camshaft Position Timing Over Advanced or System
 Performance Bank 1 Actuator stuck
- P000B-00 'B' Camshaft Position Slow Response Bank 1
- P054A-00 Cold Start 'B' Camshaft Position Timing Over Advanced Bank 1
- P013E-00 O2 Sensor Delayed Response Rich to Lean Bank 1 Sensor 2
- P0016-00 Crankshaft Position Camshaft Position Correlation Bank 1 Sensor A

CAUSE:

Insufficient wear resistance of the Variable Camshaft Timing (VCT) solenoid bush.

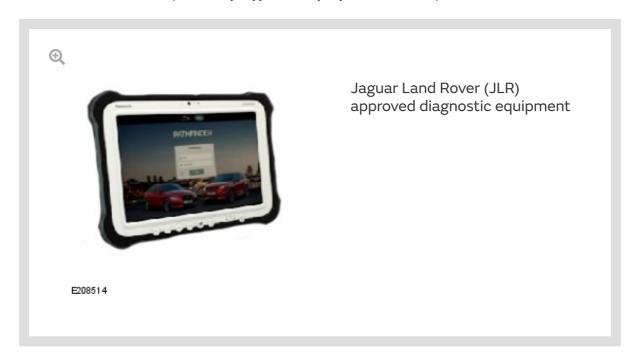
ACTION:

Follow the instructions below.

PARTS:

| PART NUMBER | DESCRIPTION | QUANTITY |
|-------------|---------------------------------|----------|
| T2H48301 | Jaguar - VCT solenoid - Kit | 1 |
| LR140207 | Land Rover - VCT solenoid - Kit | 1 |

TOOLS:





WARRANTY:

NOTES:

- Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Use TOPIx to obtain the latest repair time.
- The JLR claims submission system 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 |
|--|----------|-----------------|-------------------|-------------------|
| JLRTB02023 - Guided Diagnostics - Application | 85.99.18 | 0.2 | 42 | LR126832/T4N32636 |

| DESCRIPTION | SRO | TIME (HOURS) | CONDITION CODE | CAUSAL PART |
|---|----------|-----------------|----------------|-------------------|
| Range Rover Sport, Range Rover Velar, Discovery, F-PACE, XF and XE - <u>VCT</u> solenoid - Engine set - Renew | 18.31.51 | 1 | 42 | LR126832/T4N32636 |
| New Range Rover Evoque, Range Rover Evoque, Discovery Sport and E- PACE - <u>VCT</u> solenoid - Engine set - Renew | 18.31.51 | 0.3 | 42 | LR126832/T4N32636 |
| F-TYPE - <u>VCT</u> solenoid - Engine set - Renew | 18.31.51 | 0.2 | 42 | T4N32636 |

NOTE:

Normal Warranty procedures apply.

SERVICE INSTRUCTION:

NOTE:

Do not clear the <u>PCM DTC</u>s before completing this guided diagnostic routine. The following steps will test the function of the intake and exhaust camshaft <u>VCT</u> solenoids.

1.

CAUTION:

This procedure requires a minimum of Pathfinder 261 installed or later.

NOTES:

- The Jaguar Land Rover (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.
- All ignition ON/OFF instructions must be followed. Failure to complete these instructions may cause damage to the vehicle control modules.

Connect the JLR approved battery support unit.

- Connect the <u>JLR</u> approved diagnostic equipment to the vehicle and begin a new session.
- Follow the <u>JLR</u> approved diagnostic equipment prompts.
 - ■ Select 'Guided Diagnostics'.
 - Select 'Warnings Lamps Engine Malfunction Indicator Lamp (MIL)'.
 - Follow all on-screen instructions to complete the task.
 - If the guided diagnostic routine did not identify a fault with either of the <u>VCT</u> solenoids, complete steps 6 to 8 and continue to diagnose the customer concern using the applicable diagnosis and testing section within the TOPIx Workshop Manual.
 - If the guided diagnostic routine did identify a fault with either of the <u>VCT</u> solenoids, continue to step 4.

NOTE:

4

In this instance, the <u>VCT</u> solenoids must be renewed as a pair. If a single <u>VCT</u> solenoid is diagnosed as failed in the future, only renew the failed component.

Renew both <u>VCT</u> solenoids (see TOPIx Workshop Manual section 303-14: Electronic Engine Controls - INGENIUM I4 2.0L Petrol - Remove and Installation - Variable Camshaft Timing Solenoid).

- 5. Select 'ECU Diagnostics'.
 - ∘ Select 'All DTCs'.
 - ∘ Select 'Clear all DTCs'.
 - Follow all on-screen instructions to complete this task.
- 6. If required, reset the vehicle to 'Transportation Mode'.
- When all of the tasks are complete, exit the session.

8. Disconnect the <u>JLR</u> approved diagnostic equipment and the <u>JLR</u> approved battery support unit.