JTB00480NAS3 TECHNICAL BULLETIN 16 DEC 2020



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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 Jaguar service facility to determine whether this bulletin applies to a specific vehicle.

INFORMATION

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

This bulletin supersedes TSB JTB00480NAS2/2016 dated 01 NOV 2016, which should either be destroyed or clearly marked to show it is no longer valid (e.g. with a line across the page). Only refer to the electronic version of this Technical Bulletin in TOPIx.

Changes are highlighted in blue

SECTION:

303-01

SUBJECT/CONCERN:

Intake Camshaft Variable Cam Timing Actuator - Component Failure

AFFECTED VEHICLE RANGE:

| MODEL: | MODEL YEAR: | VIN: | ASSEMBLY PLANT: | APPLICABILITY: |
|-----------|-------------|---------------|-----------------|------------------|
| XE (X760) | 2017 | 942528-979442 | Solihull | GTDi 2.0L Petrol |

| | | | VIN: | ASSEMBLY PLANT: | APPLICABILITY: |
|---|-----------|-----------|---------------|-----------------|------------------|
| XF (X250) 2013-2015 S50936-U88785 Castle Bromwich GTDi 2.0L Petro | XF (X250) | 2013-2015 | S50936-U88785 | Castle Bromwich | GTDi 2.0L Petrol |

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:

SITUATION:

A rattle noise is coming from the engine compartment, and/or the Malfunction Indicator Lamp (MIL) is illuminated. Diagnostic Trouble Code(s) (DTC) that may be set could include P0016, P0017, P0026 or P0341.

CAUSE:

The 'stopper' in the intake Variable Camshaft Timing (VCT) actuator has become detached leading to the <u>VCT</u> unit not functioning.

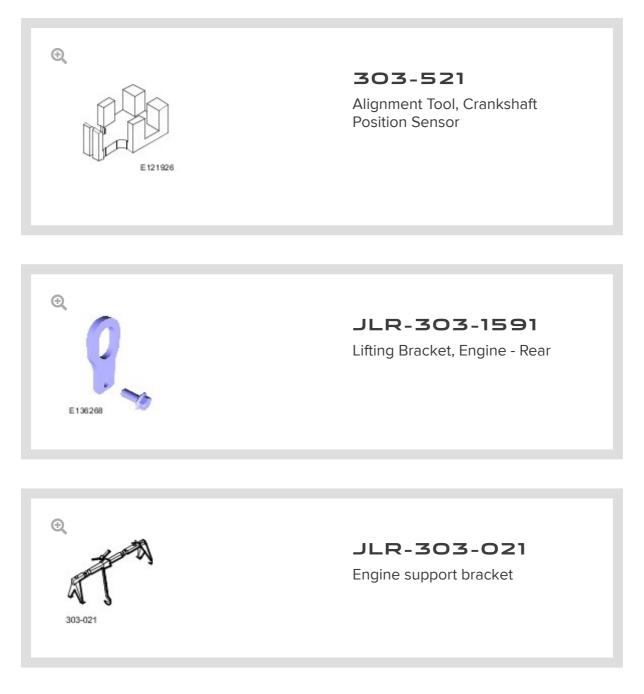
ACTION:

Follow the instructions below.

PARTS:

| PART NUMBER | DESCRIPTION | QUANTITY |
|-------------|-------------|----------|
| C2D 51307 | Intake VCT | 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.

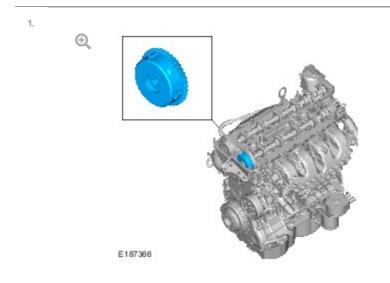
https://www.odyssey.jlrint.com/odyssey/WorkflowHtmlComposition.do?wid=1608124075579

| DESCRIPTION | SRO | TIME (HOURS) | CONDITION CODE | CAUSAL PART |
|---|----------|-----------------|-------------------|----------------|
| VCT actuator - Intake - Check - XE (X760) | 12.13.28 | 0.8 | AR | JDE 34815 |
| VCT actuator - Intake - Renew - XE (X760) | 12.31.21 | 3.8 | AR | JDE 34815 |
| VCT actuator - Intake - Check - XF (X250) | 12.13.28 | 1.0 | AR | JDE 34815 |
| <u>VCT</u> actuator - Intake - Renew - XF (X250) | 12.31.21 | 4.5 | AR | JDE 34815 |

NOTE:

Normal Warranty procedures apply.

COMPONENT LOCATION



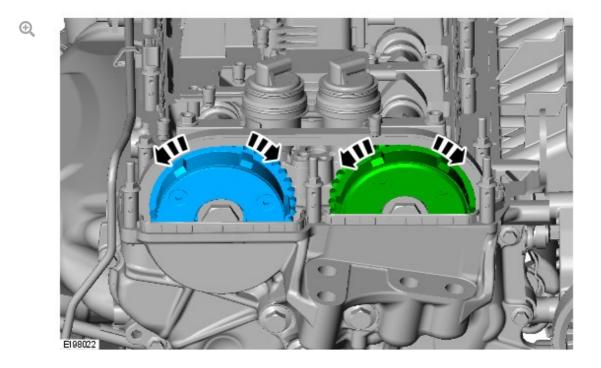
The illustration shows the component location.

SERVICE INFORMATION:

1.

NOTE:

This service information is to prevent misdiagnosis.



Please note the exhaust camshaft <u>VCT</u> actuator unit (shown in blue) has restricted movement when turned. The intake camshaft <u>VCT</u> unit (shown in green) has a less restricted movement when turned.

SERVICE INSTRUCTION:

 Remove the valve cover, (see TOPIx Workshop Manual section 303-01: Engine -GTDi 2.0L Petrol/GTDi 2.0L Petrol - Valve Cover). 2.

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Inspect the <u>VCT</u> actuator and if the 'stopper' has become detached proceed to step 4. If the <u>VCT</u> actuator is found to be noisy but the 'stopper' is in place proceed to step 3. 3.

NOTE:

No clockwise movement should be possible without also rotating the

engine.



0:00

Fully rotate the camshaft counter-clockwise and then attempt to rotate the camshaft clockwise.

- If the camshaft rotates freely in both directions (the <u>VCT</u> actuator is at fault) then proceed to step 4.
- If no clockwise movement was possible without also rotating the engine then (the <u>VCT</u> actuator is functioning correctly) reverse the removal procedure.
- ^{4.} Refer to variable camshaft timing actuator (see Workshop Manual section 303-01: Engine - GTDi 2.0L Petrol - Variable Camshaft Timing Actuator).