TECHNICAL BULLETIN JTB00480NAS2 01 NOV 2016



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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.

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

Changes are highlighted in gray

SECTION: 303-01

Intake Camshaft Variable Cam Timing Actuator - Component Failure

<u> AFFECTED VEHICLE RANGE:</u>

XE (X760)

Model Year: 2017 Onwards VTN:

942528 Onwards GTDi 2.0L Petrol

Assembly

Solihull Plant:

XF (X250)

Model Year: 2013-2015

VIN: S50936-U88785 GTDi 2.0L Petrol

Assembly Castle Bromwich Plant:

<u> MARKETS:</u>

NAS

<u>CONDITION SUMMARY:</u>

Situation: A rattle noise may be evident from the engine compartment and/or the Malfunction Indicator Lamp (MIL) is illuminated. The Diagnostic Trouble Code (DTC) that may be logged include P0016, P0017, P0026, or P0341.

Cause: This may be caused by the 'stopper' in the intake camshaft Variable Cam Timing (VCT) actuator becoming detached, leading to the VCT actuator not functioning.

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

<u>PARTS:</u>

C2D 51307 Intake Variable Camshaft timing Actuator (VCT) 1

TOOLS:

Alignment Tool, Crankshaft Position Sensor 303-521



Lifting Bracket, Engine - Rear JLR-303-1591



Engine support bracket JLR-303-021

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.

igspaceNOTE: DDW requires the use of causal part numbers. Labor only claims must show the causal part

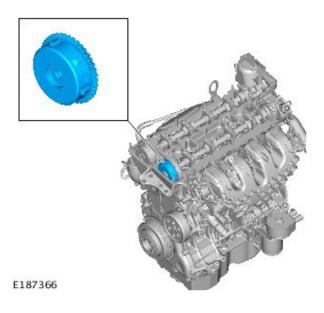
number with a quantity of zero.

DESCRIPTION	SRO	TIME (HOURS)	CONDITION CODE	CAUSAL PART
Variable Camshaft Timing actuator - Intake - Check - XE (X760)	12.13.28	0.8	01	JDE 34815
Variable Camshaft Timing actuator - Intake - Renew - XE (X760)	12.31.21	3.8	01	JDE 34815
Variable Camshaft Timing actuator - Intake - Check - XF (X250)	12.13.28	1.0	01	JDE 34815
Variable Camshaft Timing actuator - Intake - Renew - XF (X250)	12.31.21	4.5	01	JDE 34815

ightharpoonupNOTE: Normal Warranty procedures apply.

COMPONENT LOCATION

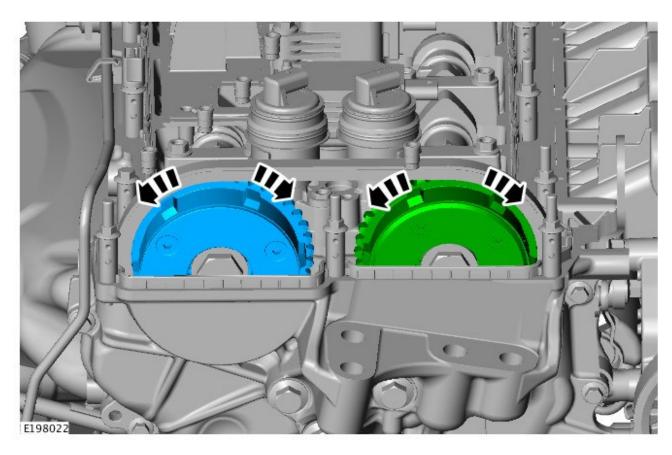
1. Intake camshaft Variable Camshaft Timing (VCT) actuator location



SERVICE INFORMATION:

NOTE: This Service Information is to prevent misdiagnosis.

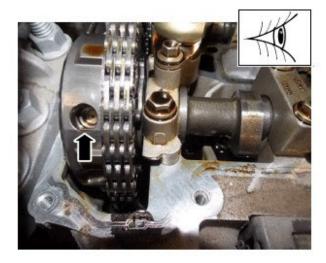
The exhaust camshaft Variable Camshaft Timing (VCT) actuator unit (shown in blue) has restricted movement when turned. The intake camshaft VCT unit (shown in green) has a less restricted movement when turned.



SERVICE INSTRUCTION:

- 1. Remove the camshaft cover (see TOPIx Workshop Manual section 303-01A / 303-01B / 303-01F: GTDi 2.0L Petrol/GTDi 2.0L Petrol - Valve Cover).
- 2. Inspect the Variable Camshaft Timing (VCT) actuator.
 - If the VCT actuator is noisy but the 'stopper' is in
 - place, go to Step 3.

 if the 'stopper' has become detached from the VCT actuator, go to Step 4.

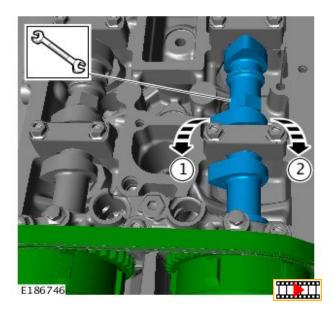


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3. NOTE: Clockwise movement should NOT be possible without also rotating the engine.

Fully rotate the camshaft anti-clockwise (1) and then attempt to rotate the camshaft clockwise (2).

- If the camshaft rotates freely in both directions, the VCT actuator is NOT functioning correctly; go to Step
- If no clockwise movement was possible without also rotating the engine, the VCT actuator is functioning correctly.
 - Reverse the removal procedure.



4. Renew the intake camshaft VCT actuator (see TOPIx Workshop Manual section 303-01A / 303-01B / 303-01F: Engine - GTDi 2.0L Petrol - Variable Camshaft Timing Actuator).