

LTB00916NAS5

TECHNICAL BULLETIN

18 MAY 2018



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

INFORMATION

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

Changes are highlighted in blue

SECTION:

303-01: Engine

SUBJECT/CONCERN:

Intake Camshaft Variable Cam Timing Actuator - Component Failure

AFFECTED VEHICLE RANGE:

MODEL:

MODEL YEAR:

VIN:

ASSEMBLY PLANT:

MODEL:	MODEL YEAR:	VIN:	ASSEMBLY PLANT:
LR2 (LF)	2013-2015	311358-439912	Halewood
Discovery Sport (LC)	2015-2017	503863-721493	Halewood
Range Rover Evoque (LV)	2012	000447-000695	Halewood
Range Rover Evoque (LV)	2012-2015	600018-999999	Halewood
Range Rover Evoque (LV)	2015-2017	000051-266123	Halewood

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:

SITUATION:

A rattle noise may be evident from the engine compartment and/or the Malfunction Indicator Lamp (MIL) is illuminated and Diagnostic Trouble Code (DTC) P0016, P0017, P0026, or P0341 may be stored in the Powertrain Control Module (PCM).

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, refer to Component Location and Service Information and then follow the Workshop Procedure below.

PARTS:

PART NUMBER	DESCRIPTION	QUANTITY
LR085467	Intake camshaft Variable Camshaft Timing (VCT) unit	1
LR083920	Variable Camshaft Timing (VCT) actuator	1

PART NUMBER	DESCRIPTION	QUANTITY
LR025016	Variable Camshaft Timing (VCT) actuator bolt	1
LR025305	Variable Camshaft Timing (VCT) actuator friction washer	1
LR025011	Crankshaft sprocket friction washer	1
LR025009	Crankshaft sprocket bolt	1
LR034323	High Pressure (HP) fuel pump housing to cylinder head gasket	1
LR039593	Vacuum Pump Seal	1
LR101733	Fuel rail supply pipe	1
STC50550	Sealant	1

TOOLS:

Refer to Workshop Manual for any required special 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. Always refer to JLR claims submission system 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
Variable Camshaft Timing actuator - Intake - Check - LR2 (L359)	12.13.46	1.1	01	LR050849
Variable Valve Timing actuator - Intake - Renew - LR2 (L359)	12.65.79	3.9	01	LR050849
Variable Camshaft Timing actuator - Intake - Check - Discovery Sport (L550)	12.13.46	1.0	01	LR050849

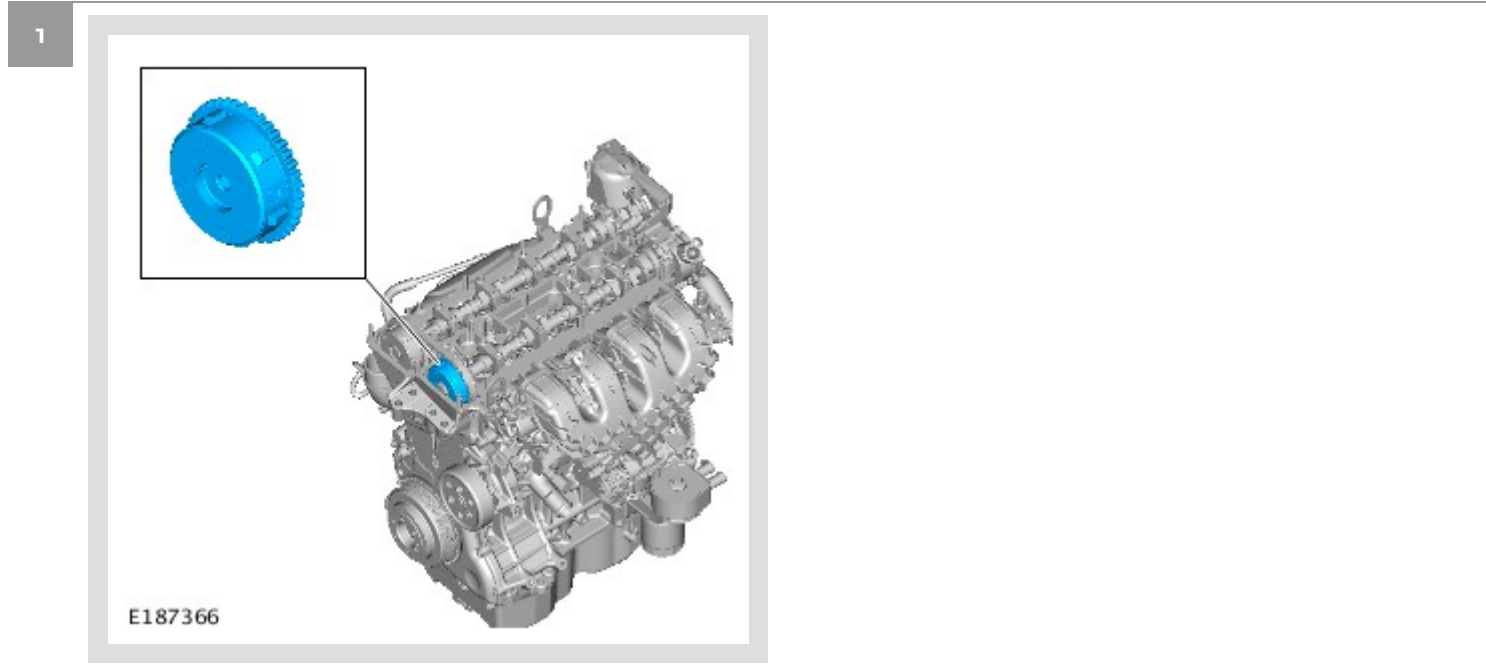
DESCRIPTION	SRO	TIME (HOURS)	CONDITION CODE	CAUSAL PART
Variable Valve Timing actuator - Intake - Renew - Discovery Sport (L550)	12.65.79	3.6	01	LR050849
Variable Camshaft Timing actuator - Intake - Check - Range Rover Evoque (L538)	12.13.46	1.0	01	LR050849
Variable Valve Timing actuator - Intake - Renew - Range Rover Evoque (L538)	12.65.79	3.6	01	LR050849

△

NOTE:

Normal Warranty procedures apply.

COMPONENT LOCATION



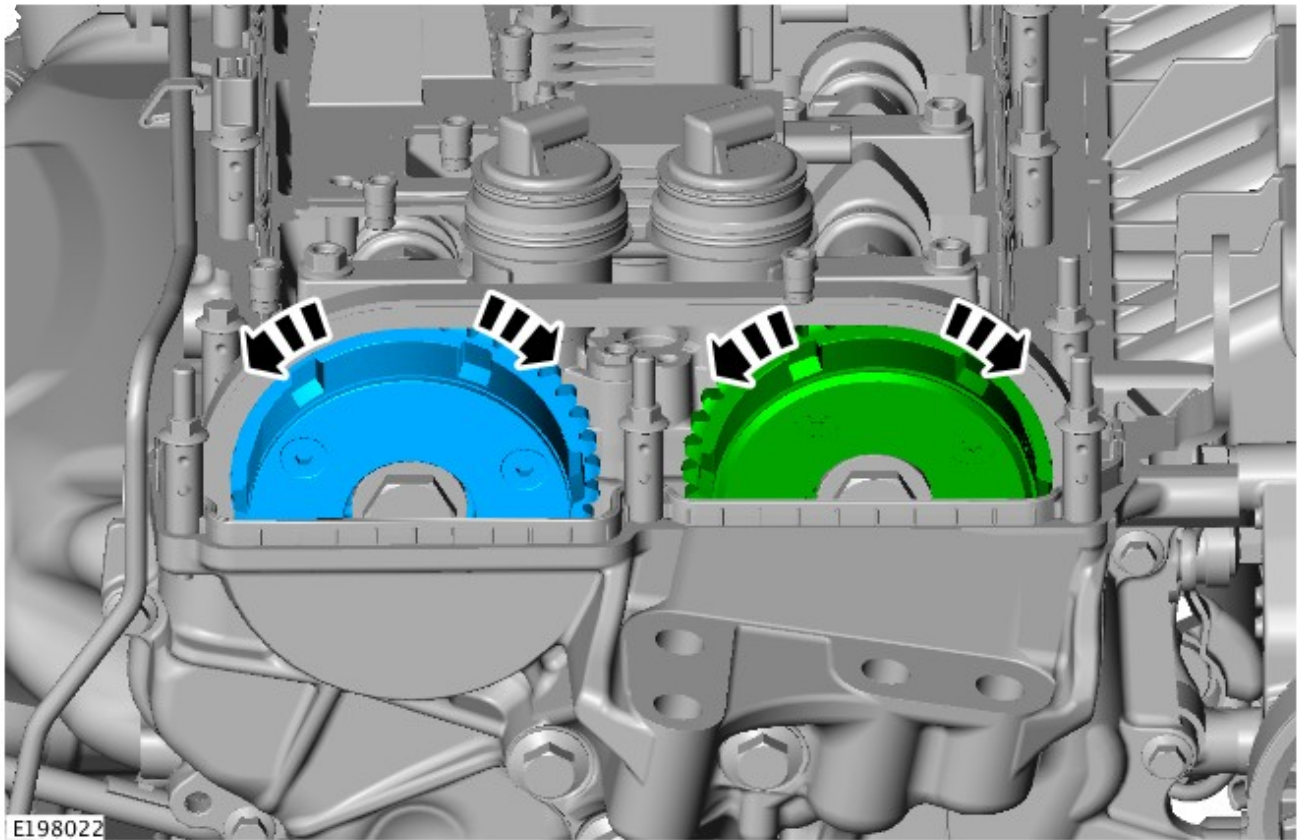
Intake camshaft Variable Camshaft Timing (VCT) actuator location.

SERVICE INFORMATION:

1

 NOTE:

This Service Information is to prevent misdiagnosis.

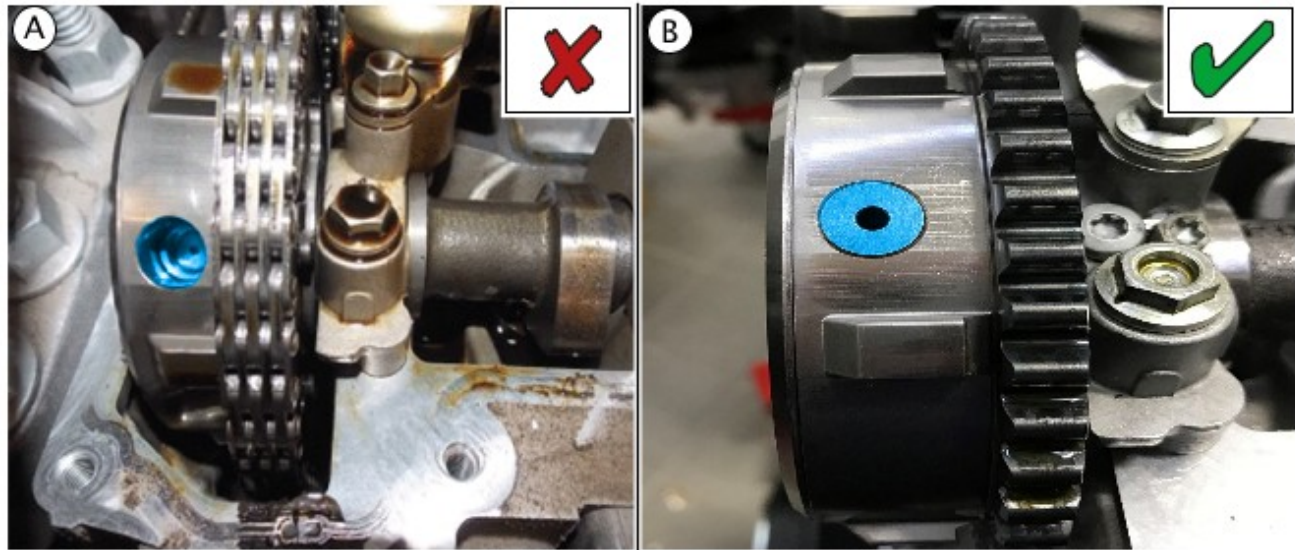


The exhaust camshaft Variable Camshaft Timing (VCT) actuator unit (shown in blue) has restricted movement when turned. The intake camshaft VCT unit (shown in green) has a less restricted movement when turned.

WORKSHOP PROCEDURE:

- 1 Remove the camshaft cover (see TOPlx Workshop Manual section 303-01: Engine - GTDi 2.0L Petrol - Removal and Installation - Valve Cover).

2



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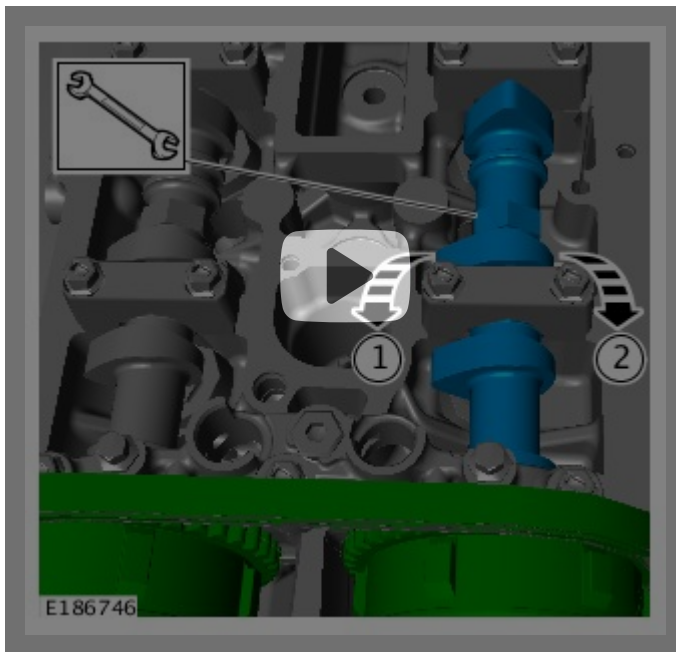
Inspect the Variable Camshaft Timing (VCT) actuator 'stopper' as shown.

- 1 If the 'stopper' is detached **(A)**, go to Step 4.
- 2 If the VCT actuator is found to be noisy but the 'stopper' is in place **(B)**, go to Step 3.

3

△ NOTE:

No clockwise movement should be possible without also rotating the engine.



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

- If no clockwise movement is possible without also rotating the engine, do not continue with this Technical Bulletin.
 - Continue to diagnose the customer concern (see TOPIx Workshop Manual section: 303-1 - Engine - GTDi 2.0L Petrol - Diagnosis and Testing).
- If the camshaft rotates freely in both directions, go to Step 4.

- 4 Replace the VCT actuator (see Workshop Manual section 303-01: Engine - GTDi 2.0L Petrol - Removal and Installation - Variable Camshaft Timing Actuator).