

LTB01309NAS1



TECHNICAL BULLETIN

19 AUG 2019

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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

SECTION:

303-01

SUBJECT/CONCERN:

Rattling Noise From Engine And Malfunction Indicator Lamp (MIL) Illuminated

AFFECTED VEHICLE RANGE:

MODEL:	MODEL YEAR:	VIN:	ASSEMBLY PLANT:	APPLICABILITY:
Range Rover Sport (LW)	2019	813622-871409	Solihull	INGENIUM I6 3.0L Petrol

MARKETS:

Canada, United States

CONDITION SUMMARY:

SITUATION:

A rattling noise may be heard coming from the engine as engine speed increases, the noise then fades and disappears as the engine returns to idle speed.

The MIL may be illuminated on the Instrument Cluster (IC) and the following Diagnostic Trouble Codes (DTCs) may be stored in the Powertrain Control Module (PCM):

- P0341-00 - Camshaft Position Sensor A Circuit Range/Performance (Bank 1 or single sensor)
- P0010-00 - Intake "A" Camshaft Position Actuator Circuit Open (Bank 1)
- P0011-71 - "A" Camshaft Position - Timing Over-Advanced or System Performance Bank 1
- P052A-00 - Cold Start "A" Camshaft Position Timing Over-Advanced Bank 1 - No sub type information.

CAUSE:

The retaining bolt(s) for the inlet Variable Camshaft Timing (VCT) actuator have become loose.

ACTION:

Follow the instructions below.

PARTS:


NOTE:

*An allowance of \$2.50 has been allocated to source a cable tie and the relevant sealant.

PART NUMBER	DESCRIPTION	QUANTITY
LR121358	Catalytic converter to Gasoline Particulate Filter (GPF) gasket	1


PART NUMBER	DESCRIPTION	QUANTITY
LR037935	Engine compartment brace bolt(s)	8
WYH500060	Exhaust downpipe nut(s)	3
LR133542	Oil fill pipe O-ring seal	1
LR121801	Upper timing chain guide	1
LR121802	Upper timing chain guide	1
LR121800	Upper timing chain tensioner	1
LR121804	Upper timing chain tensioner guide	1
LR121753	Upper timing cover gasket	1
LR121795	VCT bolt(s)	2
LR121816	VCT actuator - Exhaust	1
LR121815	VCT actuator - Intake	1
LR095784	VCT solenoid O-ring seal(s)	2
Sundry items		
*ZZZ001	Cable tie and sealant	\$2.50

TOOLS:



Jaguar Land Rover (JLR) approved diagnostic equipment

E208514



JLR approved battery support unit

E3 79220

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
VCT actuator - Engine set - Renew	12.65.78	7.2	24	LR121815
Read and clear DTCs	12.90.16	0.2	24	LR121815

NOTE:

Normal Warranty procedures apply.

SERVICE INFORMATION:

1.

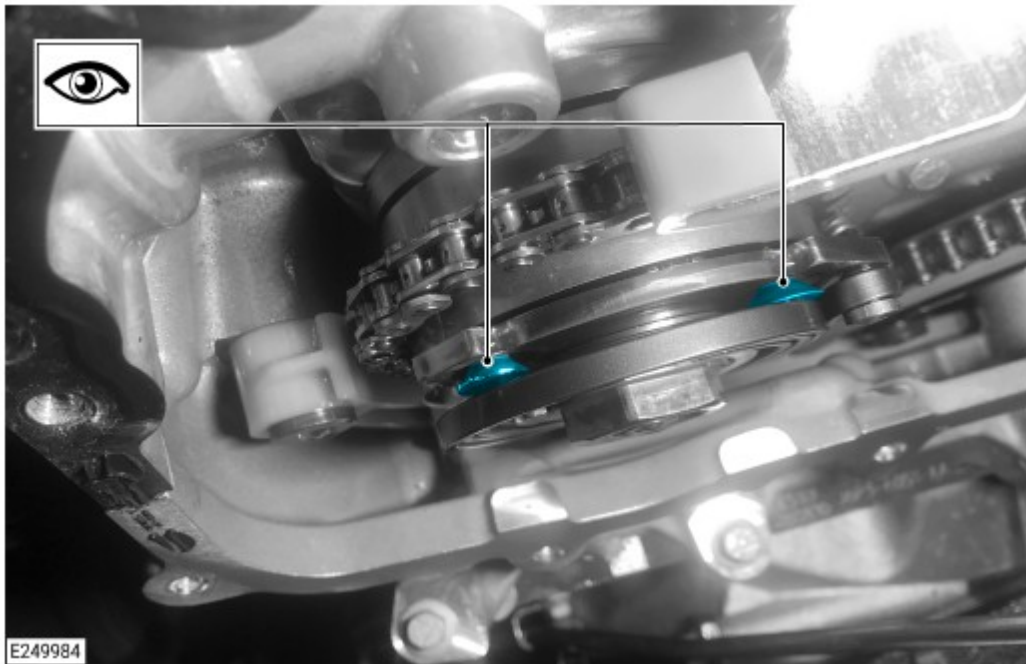
0:00



To assist with diagnosis of the engine rattle, listen/watch the video.

- ■ If the vehicle symptoms match those in the video, **continue to the service instruction.**
 - ■ If the vehicle symptoms **do not** match those in the video, **do not continue with this technical bulletin.** Continue diagnosis using TOPIx Workshop Manual section 303-01F: INGENIUM I6 3.0L Petrol - Diagnosis and Testing.
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2.



To assist with diagnosis, the image shows the loose VCT actuator bolt(s) on the inlet camshaft.

SERVICE INSTRUCTION:

NOTE:

Also renew the exhaust VCT actuator due to potential consequential damage caused by the chain rattling.

1. Renew the inlet and exhaust VCT actuators, (see TOPIx Workshop Manual section 303-01F: Engine - INGENIUM I6 3.0L Petrol - Repairs - Variable Camshaft Timing Actuator - Engine Set).

DIAGNOSTIC INSTRUCTION:

1.

CAUTION:

This procedure requires Pathfinder version 238 loaded or a later version.

NOTES:

- 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.
- 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.

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

 3. Follow the JLR approved diagnostic equipment prompts.

 4. Select 'ECU Diagnostics'.

 5. Select 'All DTCs'.

 6. Select 'Clear all DTCs'.

 7. Follow all on-screen instructions to complete this task.

 8. When all of the tasks are complete, exit the current session.

 9. Disconnect the JLR approved diagnostic equipment and the Jaguar Land Rover approved battery support unit.