



LTB01263NAS1

TECHNICAL BULLETIN

26 NOV 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

SECTION:

303-01

SUBJECT/CONCERN:

Whine Noise From Engine Balance Shafts

AFFECTED VEHICLE RANGE:

MODEL:	MODEL YEAR:	VIN:	APPLICABILITY:
Range Rover Velar (LY)	2018 Onwards	700070 Onwards	INGENIUM I4 2.0L Diesel

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:**SITUATION:**

A whine noise from the engine may be evident.

CAUSE:

This may be caused by excessive wear on engine dynamic balance shafts.

ACTION:

Should a customer express this concern, refer to the Diagnostic Procedure, and only if necessary Workshop Procedure, below.

PARTS:

PART NUMBER	DESCRIPTION	QUANTITY
LR054871	O-ring(s) - A/C	2
LR044466	O-ring(s) - A/C	4
LR074075	Balance shafts	2
LR097381	Bolt(s) and washer(s) - Brake caliper	4
LR085468	Bolt(s) - Crankshaft damper	4
LR090641	Bolt(s) - Shock absorber yoke-to-rear lower arm	2
FC110136	Bolt(s) - Shock absorber yoke-to-shock absorber	2
LR093822	Plug(s) - Differential oil drain	1
LR096012	Plug(s) - Differential oil fill	1
LR082314	Gasket(s) - DPF-to-EGR inlet manifold	1
LR085942	Gasket(s) - DPF-to-SCR exhaust pipe	1
FX110046	Nut(s) - DPF-to-SCR exhaust pipe gasket	2

PART NUMBER	DESCRIPTION	QUANTITY
LR074135	Bolt(s) - Drive plate	8
LR101450	Seal(s) - Front Differential Support bracket-to-oil pan	1
LR092703	Bolt(s) - Front halfshaft	4
LR082314	Gasket(s) - High Pressure EGR-to-exhaust manifold	2
LR093715	Circlip(s) - Halfshaft	2
LR073669	Filter - Engine oil	1
LR090520	Bolt(s) - Wheel knuckle upper	2
LR090518	Nut(s) - Lower suspension arm ball joint	2
LR073675	Plug(s) - Oil drain	1
LR093852	Seal(s) - Crankshaft oil - Front	1
LR084639	Seal(s) - Crankshaft oil - Rear	1
STC50550	Sealer - Oil pan/engine	1
FY110056	Nut(s) - Stabilizer link, front arm bush, wheel knuckle	6
LR026275	Nut(s) - Tie rod end	2
LR038661	Bolt(s) - Torque converter-to-drive plate	4
LR072251	Gasket(s) - Turbocharger-to-catalyst	1
LR024151	Nut(s) - Wheel hub	2
ZZZ999	Oil - Engine	6.25
ZZZ999	Oil - Differential	1.0

TOOLS:

Refer to Workshop Manual for any required special tools.

WARRANTY:

NOTES:

- If the vehicle has returned with the same customer complaint, perform the Workshop Procedure using part number LR123806. This part has a restriction applied to it and retailers may be requested to provide evidence of the reported defect before the parts are released to complete a repeat repair.
- An allowance of \$106.94 USD or local equivalent is provided for the locally sourced engine oil (6.25L).
- An allowance \$41.60 USD or local equivalent is provided for the locally sourced differential oil (1.0L).

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
Diagnosis	19.90.89.33	0.3	05	LR074075
Balance shaft assembly - Renew	12.49.16	12.7	05	LR074075

NOTE:

Normal Warranty procedures apply.

DIAGNOSTIC PROCEDURE:

- 1 Remove the accessory drive belt (see TOPIx Workshop Manual section 303-05: Accessory Drive - INGENIUM I4 2.0L Diesel - Removal and Installation - Accessory Drive Belt)
- 2 Verify the whine noise is from the engine dynamic balance shafts:
 - 1 Start the engine.

- If the whine noise is not evident, do not continue with this Technical Bulletin.
 - Switch the engine OFF.
 - Install the accessory drive belt (see TOPIx Workshop Manual section 303-05: Accessory Drive - INGENIUM I4 2.0L Diesel - Removal and Installation - Accessory Drive Belt).
 - Perform normal diagnosis (see TOPIx Workshop Manul section 303-01A: Engine - INGENIUM I4 2.0L Diesel -- Diagnosis and Testing).
- If the whine noise is evident, switch the engine OFF and then go to Step 3.

3 Make sure the whine noise is NOT from the turbocharger.

- If the whine noise is from the turbocharger, do not continue with this Technical Bulletin.
 - Switch the engine OFF.
 - Install the accessory drive belt (see TOPIx Workshop Manual section 303-05: Accessory Drive - INGENIUM I4 2.0L Diesel - Removal and Installation - Accessory Drive Belt).
 - Perform normal diagnosis (see TOPIx Workshop Manul section 303-01A: Engine - INGENIUM I4 2.0L Diesel -- Diagnosis and Testing).
- If the noise is not from the turbocharger, switch the engine OFF and then go to the Workshop Procedure below.

WORKSHOP PROCEDURE:

- 1 Replace the balance shafts (see TOPIx Workshop Manual section: 303-01A: Engine - INGENIUM I4 2.0L Diesel -- Removal and Installation - Balance Shaft Assembly)