



H059NAS2

TECHNICAL BULLETIN

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

INFORMATION

Changes are highlighted in blue

SECTION:

303-01A: Engine - INGENIUM I4 2.0L Diesel

SUBJECT/CONCERN:

Service Action: Balancer Shaft Whine

AFFECTED VEHICLE RANGE:

MODEL:	MODEL YEAR:	VIN:	ASSEMBLY PLANT:	APPLICABILITY:
F-PACE (X761)	2017-2018	045080-099999	Solihull	INGENIUM I4 2.0L Diesel
F-PACE (X761)	2017	494996-499964	Solihull	INGENIUM I4 2.0L Diesel

MODEL:	MODEL YEAR:	VIN:	ASSEMBLY PLANT:	APPLICABILITY:
F-PACE (X761)	2017-2018	880002-899997	Solihull	INGENIUM I4 2.0L Diesel
F-PACE (X761)	2018	240049-273746	Solihull	INGENIUM I4 2.0L Diesel
XE (X760)	2017	923882-978627	Solihull	INGENIUM I4 2.0L Diesel
XE (X760)	2017-2018	P10168-P30540	Castle Bromwich	INGENIUM I4 2.0L Diesel
XF (X260)	2017-2018	Y11889-Y61825	Castle Bromwich	INGENIUM I4 2.0L Diesel

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:

SITUATION:

An issue has been identified on certain vehicles within the listed Affected Vehicle Range which may exhibit an audible engine whine noise within the cabin. Investigations have highlighted that the noise is related to the engine balance shaft which requires remedial action with the least amount of delay.

ACTION:

Affected VINs will not be flagged in the Jaguar Land Rover claims submission system or TOPIx until the following steps are complete:

- a. Completion of accurate diagnosis in accordance with instructions in the Workshop Procedure.
- b. Submission of information detailed in the Workshop Procedure to jlrcamp@jaguarlandrover.com.
- c. Receipt of confirmation vehicle has been added to this program and that repairs may commence.

Retailers are required to **HOLD** affected new vehicles that are within your control and refrain from releasing the vehicles for **new vehicle sale** pending completion of the Workshop Procedure detailed in this Technical Bulletin. Unsold vehicles should have this performed as part of the Pre-Delivery Inspection (PDI) process but **must** have it completed prior to vehicle handover to the customer.

PARTS:**NOTE:**

Order only the expected percentage demand of parts identified.

F-PACE (X761) VEHICLES

DESCRIPTION	PART NO./SUNDRY CODE	QTY./VALUE	EXPECTED PERCENTAGE DEMAND
Balancer Shaft	JDE36994	2	100
Seal - Crankshaft Oil - Rear	JDE39481	1	100
Seal - Crankshaft Oil - Front	JDE38485	1	100
Sealer - Adhesive-Oil Pan/Engine	STC50550	1	100
Crankshaft damper bolt	JDE39146	4	100
Drive plate bolt	T2R15200	8	100
Plug - Oil Drain	AJ813202	1	100
Kit - Element & Gasket - Oil Filter	JDE37128	1	100
Gasket - High Pressure EGR to exhaust manifold	AJ813342	2	100
DPF to EGR inlet gasket	AJ813345	1	100
DPF to intermediate exhaust gasket	T2H14088	1	100
DPF to intermediate exhaust nut	T2H2804	2	100
Torque converter to drive plate	C2D25075	4	100
Turbocharger to Catalyst Gasket	T2H11760	1	100
AC o-ring	T2R4991	2	100
AC o-ring	C2P24809	4	100
Halfshaft circlip	T4A12521	2	100
Halfshaft bolt	T2H9243	4	100
Differential Support bracket to sump seal	T4A18130	1	100

DESCRIPTION	PART NO./SUNDRY CODE	QTY./VALUE	EXPECTED PERCENTAGE DEMAND
Brake Caliper bolt and Washers	T4A16359	4	100
Wheel hub nut	C2P12731	2	100
Track rod end to vertical link Nut	T4N8037	2	100
Stabilizer link nut, Front arm bush nut, wheel knuckle nut	XR848057	6	100
Diff oil fill plug	T2H13852	1	100
Diff oil drain plug	T2H13851	1	100
Lower suspension arm Ball joint nut	T2H3159	2	100
Wheel knuckle bolt	T2H6322	2	100
Damper bracket bolt	T2H17786	2	100
Damper bracket bolt	C2P11385	2	100
Engine Oil	ZZZ999	6.25	\$102.83
Differential Oil	ZZZ999	1	\$40.00

An allowance (\$102.83 USD or local equivalent) has been provided to cover the cost of the engine oil (6.25L). Claim using Sundry Code 'ZZZ999'.

An allowance (\$40.00 USD or local equivalent) has been provided to cover the cost of the differential oil (1L). Claim using Sundry Code 'ZZZ999'.

XE (X760), XF (X260) VEHICLES

DESCRIPTION	PART NO./SUNDRY CODE	QTY./VALUE	EXPECTED PERCENTAGE DEMAND
Balancer Shaft	JDE36994	2	100
Seal - Crankshaft Oil - Rear	JDE39481	1	100
Seal - Crankshaft Oil - Front	JDE38485	1	100
Sealer - Oil Pan/Engine	STC50550	1	100
Crankshaft damper bolt	JDE39146	4	100
Drive plate bolt	T2R15200	8	100

DESCRIPTION	PART NO./SUNDRY CODE	QTY./VALUE	EXPECTED PERCENTAGE DEMAND
Plug - Oil drain	AJ813202	1	100
Kit - Element & Gasket - Oil Filter	JDE37128	1	100
Gasket - HP EGR exhaust manifold	AJ813342	2	100
DPF to EGR inlet gasket	AJ813345	1	100
DPF to intermediate exhaust gasket	T2H14088	1	100
DPF to intermediate exhaust nut	T2H2804	2	100
Torque converter to drive plate	C2D25075	4	100
Turbocharger to Catalyst Gasket	T2H11760	1	100
AC o-ring	T2R4991	2	100
AC o-ring	C2P24809	4	100
Brake Caliper bolt and Washers (17" wheels)	T2H18669	4	100
Wheel hub nut	C2P12731	2	100
Track rod end to vertical link nut	T4N8037	2	100
Stabilizer link nut, Front arm bush nut, wheel knuckle nut	XR848057	6	100
Lower suspension arm ball joint nut	T2H3159	2	100
Wheel knuckle bolt	T2H6322	2	100
Bolt shock absorber yoke	T2H17786	2	100
Bolt shock absorber yoke	C2P11385	2	100
Halfshaft circlip	C2D23748	2	100
Halfshaft bolt	T2H9243	4	100
Differential Support bracket to oil pan seal	C2D27326	1	100
Engine Oil	ZZZ999	6.25	\$102.83

An allowance (\$102.83 USD or local equivalent) has been provided to cover the cost of the engine oil (6.25L). Claim using Sundry Code 'ZZZ999'.

SPECIAL TOOLS:**2017MY vehicles only**

Jaguar Land Rover-approved Midtronics Battery Power Supply

Jaguar Land Rover-approved diagnostic tool with latest SDD Software Management Pack

WARRANTY:**NOTE:**

Use the Jaguar Land Rover claims submission system to make sure that a vehicle is affected by this program prior to undertaking any rework action.

At the time of confirming a booking for vehicle repair, make sure that **all** outstanding Recall and Service Actions are identified to ensure the correct parts are available and adequate workshop time is allocated for repairs to be completed at one visit.

Warranty claims must be submitted quoting the Program Code '**H059**', Option Code '**X**', and all the relevant SRO and parts information. The Option Code(s) that allows for the drive in/drive out allowance may only be claimed if the vehicle is brought back into the workshop for this action alone to be undertaken.

Repair procedures are under constant review and therefore times / prices are subject to change; those quoted here must be taken as guidance only. Use the Jaguar Land Rover claims submission system to obtain the latest repair time.

This program is valid for a limited time only. Warranty claims with a repair date prior to the **31 January 2020** closure date must be submitted or payment within 30 calendar days of completion of the repair.

PROGRAM CODE	OPTION CODE	DESCRIPTION	SRO	TIME (HOURS)
H059	X	Balance shaft assembly - Renew - F-PACE (X761)	12.49.16	9.1
H059	X	Balance shaft assembly - Renew - XE (X760; AWD)	12.49.16	9.2
H059	X	Balance shaft assembly - Renew - XE (X760; RWD)	12.49.16	7.9

PROGRAM CODE	OPTION CODE	DESCRIPTION	SRO	TIME (HOURS)
H059	X	Balance shaft assembly - Renew - XF (X260; AWD)	12.49.16	9.3
H059	X	Balance shaft assembly - Renew - XF (X260; RWD)	12.49.16	7.9
H059	X	Drive in/drive out	10.10.10	0.2

An allowance (\$102.83 USD or local equivalent) has been provided to cover the cost of the engine oil (6.25L). Claim using Sundry Code 'ZZZ999'.

An allowance (\$40.00 USD or local equivalent) has been provided to cover the cost of the differential oil (1.0L). Claim using Sundry Code 'ZZZ999'.

Normal Warranty policies and procedures apply.

SERVICE INFORMATION:

NOTES:

Diagnosis time must be performed under a separate claim, per the warranty terms and conditions, and not as part of this Program.

- The vehicle must be diagnosed correctly prior to performing this Program to avoid an incorrect repair.

1

NOTE:

The engine build date is the first 6 characters (YY/MM/DD) of the engine serial number.



Locate and record the engine serial number.

- **2017MY vehicles only:** if the engine build date (first 6 characters of the engine serial number) is before **170817W0976204DTD** (2017 August 17), go to Workshop Procedure 'A'.
- **2018MY vehicles OR** if the engine build date (first 6 characters of the engine serial number) is or after **170817W0976204DTD** (2017 August 17), go to Workshop Procedure 'B'.

WORKSHOP PROCEDURE 'A':

ⓘ CAUTION:

The Jaguar Land Rover-approved diagnostic tool (with the latest SDD Software Management Pack) IDU2 application **MUST** be used to confirm the diagnosis to make sure a Turbocharger whine is not evident.

This Procedure is only for vehicles requiring the Jaguar Land Rover-approved diagnostic equipment with Symptom Driven Diagnostics (SDD).

ⓘ CAUTIONS:

A Jaguar Land Rover-approved Midtronics battery power supply must be connected to the vehicle startup battery during diagnosis / module programming.

All ignition ON/OFF requests **MUST** be performed; failure to do these steps may cause damage to vehicle control modules.

⚠ NOTES:

Diagnosis time must be performed under a separate claim, per the warranty terms and conditions, and not as part of this Program.

The vehicle must be diagnosed correctly prior to performing this Program to avoid an incorrect repair.

1 Connect the Jaguar Land Rover-approved Midtronics battery power supply to the vehicle startup battery.

2 **⚠ NOTE:**

The Jaguar Land Rover-approved diagnostic equipment must be loaded with SDD153.06 Software Management Pack v298 (or later).

Connect the Jaguar Land Rover-approved diagnostic equipment to the vehicle and begin a new session.

3 **⚠ NOTE:**

The Jaguar Land Rover-approved diagnostic equipment will read the correct Vehicle Identification Number (VIN) for the current vehicle and automatically take the vehicle out of Transit mode if required.

Follow the on-screen prompts, allowing the diagnostic equipment to read the VIN and identify the vehicle and initiating the data collect sequence.

 **NOTE:**

Perform the recommendations of the In-Line Diagnostic Unit 2 (IDU2) application (if required); do not continue with this bulletin.

4

 **NOTE:**

Perform the recommendations of the In-Line Diagnostic Unit 2 (IDU2) application (if required); do not continue with this bulletin.

If the hyperlink is not available:

- 1 Select **Diagnosis** from the Session Type screen.
- 2 Select the **Selected Symptoms** tab.
- 3 Select the following:
 - **Powertrain - Engine system - Engine performance - Poor acceleration and lack of power**
- 4 Run and close the **Datalogger** tool to reveal the **Extras** tab.
- 5 Select the **Extras** tab.
- 6 From 'Recommendations' select **Run** to perform the '**Powertrain - In-line Diagnostic Unit 2 (IDU2) diagnostic test - Turbocharger**' option.
- 7 Follow the on-screen instructions until the application finishes successfully.
- 8 Switch the engine 'OFF'.
- 9 Go to the next Step.

5

Exit the current session.

- 1 If necessary, set the vehicle to '**Transit mode**'.
- 2 Select the **Session** tab.
- 3 Select the **Close session** option.

6

Disconnect the diagnostic equipment and battery support unit from the vehicle.

- 1 If required, install the transit relay.

- 7 Remove the alternator belt (see TOPlx Workshop Manual section 303-05: Accessory Drive - Removal and Installation - Accessory Drive Belt).

- 8 Start the engine.

- 1 If the noise is evident, go to Workshop Procedure 'C'.
- 2 If the noise is not evident, perform secondary diagnosis.
- 3 Switch the engine 'OFF'.
- 4 Do not continue with this bulletin.

- 9 Install the alternator belt (see TOPlx Workshop Manual section 303-05: Accessory Drive - Removal and Installation - Accessory Drive Belt).

WORKSHOP PROCEDURE 'B':

NOTES:

Diagnosis time must be performed under a separate claim, per the warranty terms and conditions, and not as part of this Program.

- The vehicle must be diagnosed correctly prior to performing this Program to avoid an incorrect repair.

1 NOTE:

If a suitable recording device is not available, email jlrcamp@jaguarlandrover.com with the vehicle: engine serial number, complete VIN, mileage, and repair history relating to balance shaft.

Use a suitable device to record a sound file of the noise.

- 1 Start engine and run to optimum operating temperature.
- 2 With the recording device 3 feet from the left-side of the engine, raise and hold the engine at 1,800 rpm for 30 seconds and then allow the engine to return to idle speed.

- Repeat this sub-step 2 additional times.

3 Email jlrcamp@jaguarlandrover.com with the following vehicle information:

- Sound file;
- Engine serial number;
- Complete VIN;
- Mileage; and
- Repair history relating to balance shaft.

4 Wait for further instructions before continuing.

WORKSHOP PROCEDURE 'C':

NOTE:

This Workshop Procedure shall only be performed after receiving approval.

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