JLRTB02012NAS3 TECHNICAL BULLETIN 14 AUG 2020



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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.

This bulletin supersedes TSB JLRTB02012NAS2/2020 dated 04 MAR 2020, which should either be destroyed or clearly marked to show it is no longer valid (e.g. with a line across the page). Only refer to the electronic version of this Technical Bulletin in TOPIx.

Changes are highlighted in blue

SECTION:

418-02

SUBJECT/CONCERN:

'Gearbox Fault Detected' Displayed On The Instrument Panel Cluster (IPC)

AFFECTED VEHICLE RANGE:						
MODEL:	MODEL YEAR:	VIN:	ASSEMBLY PLANT:			
I-PACE (X590)	2019-2020	F60094-F80069	Graz (Austria)			

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:

SITUATION:

A 'Gearbox Fault Detected' warning message may be displayed on the Instrument Panel Cluster (IPC). If the vehicle is in PARK, the customer may not be able to select DRIVE or, if already in DRIVE, the customer may experience a ratcheting type noise followed by an abrupt stop when the vehicle speed has reduced to 5 km/h (3 mph).

The following Diagnostic Trouble Code(s) (DTC)s may also be stored in the Powertrain Control Module (PCM):

- P07E4-00
- P272C-13
- P303F-15
- P303F-29
- P07E6-00
- P272C-11

CAUSE:

No retention to the front Electric Drive Unit (EDU) causing strain on the wiring going to the <u>EDU</u> parking lock actuator connector (C1YE113A).

ACTION:

Follow the instructions below.

PARTS:

PART NUMBER

DESCRIPTION

QUANTITY

PART NUMBER	DESCRIPTION	QUANTITY
J9D1171	Air Conditioning (A/C) pipe to condenser O-ring seal	2
C2P24810	A/C pipe O-ring seal	2
C2P24811	A/C pipe O-ring seal	2
T4A16359	Brake caliper bolts	4
T4K9603	EDU parking lock actuator (if required)	1
T4K12931	Engine compartment wiring harness	1
J9D1114	Front EDU to subframe bolts	2
C2Z2224	Front EDU upper mounting nut/stabilizer bar link lower nuts	3
T4K2896	Front EDU upper mounting vibration damper nut	1
C2P12731	Front halfshaft nuts	2
T2H3774	Front subframe to body bolts M12/rear lower control arm bolts	6
T2H3162	Front subframe to body bolts M14	2
T4K5106	Front lower control arm bolts	2
T4K12935	Ground cable	1
T2H5007	Lower control arm nuts	4
XR857426	Steering column lower shaft lower bolts	1
T2H5057	Steering gear boot inner clips	2
T4N8037	Tie-rod end nuts	2
T2H6322	Upper control arm to knuckle bolts	2
XR848057	Upper control arm to knuckle nuts	2
T2H17786	Yoke retaining bolts	2

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
JLRTB02012 - Front compartment wiring harness - Renew	99.01.12	11.8	В4	T4K7182/T4K7184/T4K6641
JLRTB02012 - Front compartment wiring harness and EDU parking lock actuator - Renew	99.01.13	11.9	Β4	T4K7182/T4K7184/T4K6641/T4K9603

NOTE:

Normal Warranty procedures apply.

SERVICE INSTRUCTION:

CAUTION:

DO NOT attempt to repair any damaged wiring found on the front compartment wiring harness. If the customer concern is still present after completing step 1 of the service instruction, a new updated front compartment wiring harness **MUST** be installed to repair the customer concern. Failure to follow this instruction may result in rejection of the warranty claim and subsequent repeat repairs due to the customer concern not being rectified in the first instance or the symptoms returning in the future.

NOTES:

- Some variation in the illustrations may occur, but the essential information is always correct.
- Some components are shown removed for clarity.

NOTE:

Make sure any other related repairs are completed before continuing with this technical bulletin.







Refer to the TOPIx Workshop Manual section 100-00: General Information – Description and Operation – Diagnostic Trouble Code Index DTC: Powertrain Control Module (PCM) for diagnosis and testing information relating to <u>DTC</u>s P07E4-00, P272C-13, P303F-15, P303F-29, P07E6-00 and P272C-11.

- If the <u>EDU</u> parking lock actuator connector (C1YE113A) wiring is found to be damaged as per the illustration, **continue to step 2**.
- If no related repairs were identified and the customer concern is still present, continue to step 2.
- If any related repairs were identified and have been rectified and the customer concern is still present, continue to step 2.
- If any related repairs were identified and have been rectified but the customer concern is not present, do not continue with this technical bulletin.

^{2.} Remove the front compartment wiring harness (see TOPIx Workshop Manual section 418-02: Wiring Harnesses - Removal and Installation - Front Compartment Wiring Harness).

3.



Inspect the electrical connector pins of the <u>EDU</u> parking lock actuator for signs of water ingress or corrosion.

- If signs of water ingress or corrosion are not present on the electrical connector pins of the <u>EDU</u> parking lock actuator, as shown in the image with a GREEN '\/', continue to step 5.
- If signs of water ingress or corrosion are present on the electrical connector pins of the <u>EDU</u> parking lock actuator, as shown in the images with a RED 'X', continue to step 4.
- ^{4.} Renew the <u>EDU</u> parking lock actuator (see TOPIx Workshop Manual section 601-01: Electrical Drive Unit - Removal and Installation - Electric Drive Unit Parking Lock Actuator).



Using a suitable tool, create a hole in the <u>EDU</u> upper Noise, Vibration and Harshness (NVH) cover, as shown in the illustration.



Remove and discard the front <u>EDU</u> ground cable.

- Release the retaining clip.
- Remove the bolt.

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Install the new front <u>EDU</u> ground cable.

- Secure the ground cable with the retaining clip.
- **Tighten the bolt**.
 - Torque: 12 Nm

NOTE:

When installing the new front compartment wiring harness make sure the new front <u>EDU</u> ground cable is routed through the loop formed by the <u>EDU</u> parking lock actuator break out harness, as shown in the illustration.





Install the new updated front compartment wiring harness (see TOPIx Workshop Manual section 418-02: Wiring Harnesses - Removal and Installation - Front Compartment Wiring Harness).



During the installation of the front <u>EDU</u>, make sure the new wiring harness clip is installed in the <u>NVH</u> cover, as shown in the illustration.

^{10.} An Electronic Product Quality Report (EPQR) must be submitted to provide a clear photograph of any damage found on the original front compartment wiring harness. A clear photograph of the electrical connector pins of the EDU parking lock actuator, showing the signs of water ingress or corrosion, should also be provided.