

H293NAS1

TECHNICAL BULLETIN

18 FEB 2021



© Jaguar Land Rover North America, LLC

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.

SECTION:

414-00

SUBJECT/CONCERN:

Service Action: High Voltage (HV) Battery Degradation

AFFECTED VEHICLE RANGE:

MODEL:	MODEL YEAR:	VIN:
I-PACE (X590)	2019	F61981
I-PACE (X590)	2019	F62467
I-PACE (X590)	2019	F62651
I-PACE (X590)	2019	F66003

MARKETS:

CANADA; USA

CONDITION SUMMARY:**SITUATION:**

A potential issue has been identified on certain Jaguar vehicles within the listed Affected Vehicle Range where one or more of the following may occur:

- Loss of range when fully charged;
- Range 'drops' quicker than expected while driving; and/or
- Unable to obtain 100% State Of Charge (SOC).

ACTION:

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 procedure(s) 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.

Affected vehicles already in the hands of customers should be updated at the next available opportunity.

PARTS INFORMATION:**NOTES:**

- Additional parts may be required for this repair after submitting the Technical Assistance (TA) request; these part numbers are provided as a guide only.
- Use the Vehicle Identification Number (VIN) and the Electronic Parts Catalogue (EPC) to confirm part number(s) necessary to perform repairs.

DESCRIPTION	PART NUMBER/SUNDRY CODE	QUANTITY/VALUE
Module - Electric Vehicle (EV) battery	T4K13636	2
Kit - Thermal paste	T4K8813	3
Battery Electrical Module (BEM) kit	T4K9727	1
Battery lid kit	T4K13637	1
Safe voltage reduction kit	T4K9624	1
Module bolt - M6 x 90	T4K8735	8
Module support bracket bolt - M6 x 70	T4K8737	4

WARRANTY INFORMATION:**NOTE:**

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

At the time of confirming a booking for vehicle repair, make sure that all open Recall and Service Actions are identified to make sure 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, Option Code 'X', and the relevant SROs and parts which are required for this repair. The SROs) 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 TOPIx to obtain the latest repair time.

This program is valid for a limited time only. Warranty claims with a repair date prior to the October 31, 2022 closure date must be submitted or payment within 30 calendar days of completion of the repair.

PROGRAM CODE	OPTION CODE	DESCRIPTION	SRO	TIME (HOURS)	PART NUMBER / SUNDRY CODE	QUANTITY / VALUE
H293	X	H293 - High Voltage battery (HV Battery) pack cell state of health	99.02.40	0.4	-	-
H293	X	EV battery module - Renew (1-36)	16.11.01-16.11.36	13.6-15.4	See Parts table	See Parts table
H293	X	Additional EV battery module - Renew	16.11.41	3.0	See Parts table	See Parts table
H293	X	Drive in/drive out	10.10.10	0.2	-	-
H293	X	Car hire	-	-	ZZZ999	*\$104.90 per day (maximum 5 days)

* An allowance of \$104.90 USD (per day; 5 days maximum) or local equivalent has been provided to cover the cost of a rental vehicle.

Normal Warranty policies and procedures apply.

SERVICE INFORMATION:

-
1. ■ The SOC of the HV Battery must be lower than 50% before continuing to step 2.
 - If the HV Battery has a SOC higher than 50%, the vehicle must be driven until the SOC is lower than 50%.

-
2. ■ The vehicle must complete a sleep cycle before continuing to the 'Diagnostic Instruction' section.
 - Lock the vehicle.
 - Allow the vehicle to stand without charging or discharging until the illuminated hazard warning lamp switch has extinguished.
 - When the illuminated hazard warning switch has turned OFF, allow the vehicle to stand without charging or discharging for additional 1 hour.

DIAGNOSTIC INSTRUCTION:**CAUTION:**

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

1.

CAUTION:

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

Connect the Jaguar Land Rover-approved battery support unit to the vehicle startup battery.

2.

NOTE:

The Jaguar Land Rover-approved diagnostic equipment must be loaded with PATHFINDER version 314 (or later).

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

3. ■ Follow all on-screen instructions.

- 1. Select 'ECU Diagnostics'.
 - Select 'Battery Energy Control Module [BECM]'.
 - Select 'ECU Functions'.
 - Select 'Read High Voltage (HV) Battery Pack Cell State of Health'.
- 2. Follow the on-screen instructions until the application finishes successfully.

4. **Only if required:** set the vehicle to Transit mode.

- 1. Follow the on-screen instructions until the application finishes successfully.

5. Exit the current session.

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

7. Use the 'PATHFINDER Sessions Extractor' tool to download the PATHFINDER session file.

8. Connect the charging cable and allow the vehicle to fully charge before continuing to the next step.

-
9. The vehicle must complete a sleep cycle before continuing to the 'Diagnostic Instruction' section.
 - 1. Lock the vehicle.
 - 2. Allow the vehicle to stand without charging or discharging until the illuminated hazard warning lamp switch has extinguished.
 - 3. When the hazard warning switch illumination has turned OFF, allow the vehicle to stand without charging or discharging for 1 additional hour.

-
10. Connect the Jaguar Land Rover-approved battery support unit to the vehicle startup battery.

11.

NOTE:

The Jaguar Land Rover-approved diagnostic equipment must be loaded with PATHFINDER version 290 (or later).

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

-
12. ■ Follow all on-screen instructions.
 - 1. Select 'ECU Diagnostics'.
 - Select 'Battery Energy Control Module [BECM]'.
 - Select 'ECU Functions'.
 - Select 'Read HV Battery Pack Cell State of Health'.
 - 2. Follow the on-screen instructions until the application finishes successfully.

-
13. **Only if required:** set the vehicle to Transit mode.
 - 1. Follow the on-screen instructions until the application finishes successfully.

-
14. Exit the current session.

-
15. Disconnect the diagnostic equipment and battery support unit from the vehicle.
-
16. Use the 'PATHFINDER Sessions Extractor' tool to download the PATHFINDER session file.
-

17.

NOTE:

The TA engineers will use the results of the HV Battery Battery Pack Cell State of Health readings to determine the required level of repair.

Submit a TA request:

- 1. State 'H293' in the Customer Comments field.
- 2. Select 'EV - Warning message displayed' from the symptom list.
- 3. Attach both saved session ZIP files.
- 4. Await further instructions based on the TA submission.
- 5. Follow the applicable SERVICE INSTRUCTION ('A' or 'B') section below based on the instructions received from TA.

SERVICE INSTRUCTION 'A': EV BATTERY MODULE/ADDITIONAL EV BATTERY MODULE RENEW

1.

NOTE:

Do not discard any parts removed from the vehicle as part of this repair. The parts must be stored safely and a parts return request raised.

Renew the EV battery module(s) identified by TA (see TOPIx Workshop Manual section 414-01: Battery, Mounting and Cables - High Voltage System - Removal and Installation - Module 1 to Module 36).

SERVICE INSTRUCTION 'B': EV BATTERY RENEW

1.

NOTE:

Do not discard any parts removed from the vehicle as part of this repair.
The parts must be stored safely and a parts return request raised.

Renew the EV battery (see TOPIx Workshop Manual section 414-01: Battery, Mounting and Cables - High Voltage System - Removal and Installation - Electric Vehicle Battery).