

<b>Reference</b>	SSM74445
<b>Models</b>	I-PACE / X590
<b>Title</b>	Range less than expected at PDI
<b>Category</b>	Diagnostic Software Hardware
<b>Last modified</b>	06-Jun-2019 00:00:00
<b>Symptom</b>	000101 Diagnostic Concerns

**Content****Issue:**

During PDI the retailer may experience range less than expected at 100% charge, specifically this has been reported as 325km or 201 miles which does not meet customers' expectations.

**Affected Vehicle VIN Range**

SADHA2B10L1F79241 – onwards

**Cause:**

An erroneous significant negative temperature value (-40deg) is reported by the PCM during the vehicle manufacturing process (due to ambient temperature sensor not being fitted when PCM is first powered). This causes the climate system to send a very high predicted electrical load to the PCM (~5kW vs a more typical 0.5kW).

The PCM uses this load prediction to calculate a negative offset to the predicted range which is then stored in memory to avoid range changes between drive cycles. Any changes to this offset are heavily filtered and, as such, the range will be incorrectly reduced below the expected figure for approximately the first 11 hours of driving.

A range reset will not cure this as the climatic load offset is not cleared during this procedure (only the historic energy consumption is reset).

**Action/Diagnostic Procedure:****CAUTION:**

This procedure requires a minimum of **Pathfinder version 235** loaded or a later.

**NOTE:**

The Jaguar Land Rover (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.

1. Connect the JLR approved battery support unit.

**Notes:**

This workaround will load a software file to Jaguar Land Rover (JLR) Approved Diagnostic Equipment using the Manual Patch Update process.

This Manual Patch will not stay on the JLR Approved Diagnostic Equipment and will need to be re-applied

every time.

2. Restart the JLR Approved Diagnostic Equipment.
3. Select 'Manual Patch' Icon on the Application Launcher screen. Make sure that both Symptom Driven Diagnostics (SDD) and PATHFINDER are closed before opening the Manual Patch downloader.
4. A pop-up will be displayed for Manual Patch downloader
5. Enter '**MP\_PF\_ER\_L0058**' in the Patch Name field.
6. Select 'Start'.
7. The Manual Patch downloader will then download the manual patch.
8. When the patch download has completed, a message will be displayed, asking the user to confirm that the application can run the manual patch. Select 'Yes'.
9. When complete, the following message will be displayed: 'Successfully downloaded and started manual patch. Please make sure that the patch has been installed successfully.' NOTE: This message will end after 10 seconds.
10. Connect the JLR approved diagnostic equipment to the vehicle and begin a new session (do NOT restart the JLR Approved Diagnostic Equipment at this point.)
11. Follow the JLR approved diagnostic equipment prompts.
12. Select 'ECU Diagnostics'
13. Select 'Powertrain Control Module [PCM]'.
14. Select 'Update ECU'. (Note: This will load an *earlier* level of PCM software to the module.)
15. Follow all on-screen instructions to complete this task.
16. When all of the tasks are complete, exit the session.
  
17. Restart the JLR Approved Diagnostic Equipment (this step will automatically remove the manual patch).
18. Start a new diagnostic session.
19. Follow the JLR approved diagnostic equipment prompts.
20. Select 'ECU Diagnostics'
21. Select 'Powertrain Control Module [PCM]'.
22. Select 'Update ECU'. (Note: This will load the *latest* level of PCM software to the module.)
23. Follow all on-screen instructions to complete this task.
24. When all of the tasks are complete, exit the session.
25. Disconnect the JLR approved diagnostic equipment and the JLR approved battery support unit.
26. Perform a Battery Range Reset: Turn Ignition on, press and hold Brake pedal and Accelerator Pedal simultaneously, look at Instrument Panel Cluster (IPC) and monitor range value. The range value will change within 10 second.
27. Confirm that original concern has been rectified.

Your support in this investigation is greatly appreciated, JLR will update this communication as a solution is developed.