BR231 and BR172 - Vehicle does not start, battery discharged.

Topic number	LI54.10-P-066341
Version	2
Design group	54.10 Battery, power supply, voltage converter
Date	07-19-2017
Validity	BR231 and BR172
Reason for change	Revised analysis
Reason for block	

Complaint:

Vehicle does not start, battery discharged.

The on-board electrical system data indicates a high discharge in the engine-off cycle; "CAN bus awake unusually long", "Charge balance UNUSUAL".

Cause:

To be able to assess whether a bus keepawake event caused the battery discharge, it is necessary to examine the stationary cycles. A constantly active CAN is identified by the text "Interior CAN awake unusually long" (see attachment). If this text is not displayed, the battery discharge has a different cause.

Cause 1:

IC (instrument cluster) is keeping the CAN bus awake. Vehicle battery is being discharged.

Affects vehicles with code 807.

Fault Code Identification:

1. Affects vehicles with code 807.

2. The on-board electrical system data indicates a high discharge in the engine-off cycle; "CAN bus awake unusually long", "Charge balance UNUSUAL".

3. The bus keepawake entry names the IC.

Cause 2:

HERMES is keeping the CAN bus awake, for (code 494). Refer to LI82.85-P-066086.

With code 362 (HERMES LTE communication module), code 522 (Audio 20) and code 807.

NOT Cause 1 or Cause 2:

Reference Remedy 3 below for more information.

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Remedy:

Remedy 1:

DO NOT REPLACE ANY PARTS

Remedy with clean point will be published.

Report all cases

Damage code: 54201-54

Remedy 2:

Refer to LI82.85-P-066086

Damage code: 8209Z-90

Remedy 3:

If not resolved by Remedy 1 or Remedy 2, please create a PTSS case with all the documents listed below and include in the case attachments.

Engineering may provide further instruction upon reviewing each case.

Documents needed in case attachments:

1. Quick test

2. Control units event log for rear signal acquisition and actuation module (SAM-H)

3. Bus keepawake event detection (from EIS --> Actual values)

3.1. Last bus keepawake entry

3.2. Last-but-one bus keepawake entry

4. Up-to-date quiescent current measurement

Symptoms
Overall vehicle / Power supply / Battery/On-board electrical system / Battery function / Battery discharges
Overall vehicle / Power supply / Battery/On-board electrical system / Battery/on-board electrical system display message / Low voltage Charge battery

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			54201 54	Instrument cluster - no-load current too high
			8209Z 90	Communication module for telematics service - software release

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