

Vehicle does not start, battery discharged.

Topic number	LI54.10-P-066342
Version	3
Function group	54.10 Battery, power supply, voltage converter
Date	08-08-2017
Validity	MFA (model series 117/156/176/242/246)
Reason for change	Examples added
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"

Attachments	
File	Description
Beispiel_Buswachhalter.pdf	Example_bus keepawake control unit
example_BUS_keep_awake.pdf	Example_BUS_keep_awake

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 (Model Year 2017).

Fault 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

NOTE: See examples in attachments below

Cause 2:

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

XENTRY TIPS

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

If the vehicle does not match Cause 1 or Cause 2 please open a PTSS Case, see Remedy 3 below.

Remedy:

Remedy 1:

DO NOT REPLACE ANY PARTS and open a PTSS case.

Remedy with clean point will be published.

Damage code: 54201-54

Remedy 2:

Refer to LI82.85-P-066086.

Damage code: 8209Z-90

"Remedy" 3:

If not identified in Cause 1 or 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 signal acquisition and actuation module (SAM)
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

