

48 V battery A66 with P0A7F00 - The age limit of the hybrid/high-voltage battery module has been reached

Topic number	LI54.10-P-080199
Version	1
Function group	54.10 - Battery, power supply, voltage converter
Date	1/14/26
Validity	All vehicles with B01 and A66 (48 V battery PP48_214)
Reason for change	Distribution adjusted

Complaint

For the potentially affected vehicles, excessively high aging of the battery was calculated at cold battery temperatures (<10°C) and the MIL activated accordingly, even though there is no corresponding high level of aging physically.

In this regard, the fault code P0A7F00 "The age limit of the hybrid/high-voltage battery module has been reached" is displayed in the N127 PTCU control unit and/or A66 battery module control unit (48 V battery).

Cause

Faulty computation of the age limit of the 48 V battery.

Remedy

Step 1: Software update of A66 battery module (48 V battery)

Step 2: Perform reset routine:

2.1 Read out actual value 056 in A66 control unit (age limit SOH-R)

a. If SOH-R ≤ 125%: Delete fault memory in PTCU control unit (N127) and 48 V battery (A66). Process ended.

b. If SOH-R > 125%: Drive for 60 min to add SOH-R value.

2.2 Read out actual value 056 in A66 control unit (age limit SOH-R)

a. If SOH-R ≤ 125%: Delete fault memory in PTCU control unit (N127) and 48 V battery (A66). Process ended.

b. If SOH-R > 125%: Park vehicle > 12 hours in the workshop at a warm ambient temperature > 15°C, then drive for 60 min.

2.3 Read out actual value 056 in A66 control unit (age limit SOH-R)

a. If SOH-R ≤ 125%: Delete fault memory in PTCU control unit (N127) and 48 V battery (A66). Process ended.

b. If SOH-R > 125%: Create TIPS case

Disclaimer

NOTE: The information contained in this document is intended for use by trained, professional technicians with the knowledge to properly and safely perform diagnosis and repairs on Mercedes-Benz vehicles, using Mercedes-Benz approved tools and equipment. It informs service technicians about conditions that could occur in certain vehicles and provides information that could assist in proper vehicle diagnosis, service, or repair. It does not indicate that a defect is present in any vehicle referenced in this document nor does it imply warranty coverage. DO NOT assume that a symptom or condition, or a described cause of a symptom or condition, affects any particular vehicle or groups of vehicles, or that a described repair applies to any particular vehicle or groups of vehicles. There can be multiple causes resulting in the same or similar symptoms or conditions described in this document, and trained professional service technicians must use their diagnostic skills to make evaluations on a case-by-case basis. The information contained in this document does not guarantee warranty coverage nor does it extend the vehicle's warranty in any way.

Symptoms
Overall vehicle > Cleaning system > Cleaning system indicator lamp > Washer fluid level > lit

Control unit/fault code	
Control unit	Fault text
N127 - Control unit "Drivetrain" (PTCU) (CPC3AMG)	P0A7F00 - The state of health limit of the hybrid/high-voltage battery module has been reached. _
N127 - Control unit "Drivetrain" (PTCU) (CPC3)	P0A7F00 - The state of health limit of the hybrid/high-voltage battery module has been reached. _
N125 - Charging and driving central controller (CDCC) (CDCC07)	P0A7F00 - The state of health limit of the hybrid/high-voltage battery module has been reached. _
A66 - Battery module (48 V battery) (BM48) (PP48_214)	P0A7F00 - The state of health limit of the hybrid/high-voltage battery module has been reached. _

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			541PM	