

254, 214, 223 and MY24 206 - CEL FC P0A7F00 current or stored

Topic number	LI54.10-P-077250
Version	13
Function group	54.10 - Battery, power supply, voltage converter
Date	1/28/25
Validity	All vehicles with B01 and A66 (48 V battery PP48_214)
Reason for change	Validity

Complaint

For the potentially affected vehicles, excessively high aging of the battery was calculated at cold battery temperatures (<50°F) 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

Do not replace any parts!!

Step 1:

Perform the software update of A66 battery module (48 V battery)

After SW has been updated, perform the following reset procedure:

Step 1:

Read the State of Health Resistance - (SOH-R)

Step 2:

If SOH-R ≤125%: Clear fault memory in PTCU(N127) and 48V battery (A66). Procedure finished.

If SOH > 125%: Drive for a duration of 60 minutes to retrain the SOH-R value.

Step 3:

Read the State of Health Resistance - (SOH-R)

If SOH-R <=125%: Clear fault memory in PTCU(N127) and 48V battery (A66). Procedure finished.

If SOH > 125%: Park vehicle in Workshop for >12 hours in warm ambient temperature >60F, afterwards drive for a duration of 60 minutes.

Step 4:

Read the State of Health Resistance - (SOH-R)

If SOH-R <=125%: Clear fault memory in PTCU(N127) and 48V battery (A66). Procedure finished.

If SOH-R is still >125%, open a 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
Power generation > Engine management > Display message > Parameter setting false
Overall vehicle > Power supply > Battery/On-board electrical system > Battery/on-board electrical system indicator lamp > Battery charge indicator/consumer shutoff > Illuminates red

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