

Combustion engine does not start, auxiliary consumer fuse in the HV battery defective

Topic number	LI54.21-P-079255
Version	1
Function group	54.21 - Control units / basic modules
Date	1/30/26
Validity	Model 223.182
Reason for change	

Complaint

Combustion engine does not start, MIL (Malfunction Indication Light) may light up in instrument cluster, only electric driving possible.

Fault code P0E2F00 logged in control unit BMS N82/10.

Cause

Auxiliary consumer fuse in the HV battery has an open circuit, caused by a short circuit in the auxiliary consumer line.

Remedy

Requirement:

Before carrying out test work, it must be ensured that the person performing the work has successfully completed the required qualification for work on the high-voltage system. Qualification according to WIS is required to replace the auxiliary consumer fuse including eLearning T3057D-US.TTB.

Note:

If the fault "P0E2F00 The electrical fuse B for the high voltage has a malfunction" is stored in the N82/10 BMS control unit, the HV protocol must also be checked to see whether the fuse for the auxiliary consumers is ok.

Check:

To determine the causing HV component in the auxiliary consumer line, please follow and process the guided troubleshooting of the fault "P0E2F00 The electrical fuse B for the high voltage has a malfunction" saved in the N82/10 BMS control unit.

WIS-References		
Document number	Title	Note
AR47.70-P-0022AMS	Remove/install electrical fuse for high-voltage on-board electrical system	Fuse is in the control unit box

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 > Starter motor > Function > Defective

Power generation > Engine management > Indicator lamp > Engine diagnosis > lit

Power generation > Engine management > Engine start/stop > Does not start

Overall vehicle > Power supply > High-voltage on-board electrical system > High-voltage battery > Malfunction

Overall vehicle > Power supply > Fuel cell > Display message

Parts

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A7899800200			Auxiliary consumer fuse parts kit	1		X

Control unit/fault code

Control unit	Fault text
N82/10 - Battery management system (BMS) (BMS10P-B01_AMG)	P0E2F00 - Electrical fuse B for the high voltage has a malfunction. _

Operation numbers/damage codes

Op. no.	Operation text	Time	Damage code	Note
			540K074	