

Repair work on the 48 V system following fault message A66 (PP48_214) for the 48 V battery in XENTRY Diagnosis

Topic number	LI54.10-P-080602
Version	1
Function group	54.10 - Battery, power supply, voltage converter
Date	5/20/26
Validity	Models 192, 206, 214, 223, 232, 236, 254 with B01
Reason for change	

Complaint

48V battery (A66) part numbers #A 000 982 78 24, A 000 982 57 30, A 000 982 88 31, A 000 982 50 32, A 000 982 87 32) may trigger a fault message ("48 V Service Required" with fault codes P0ADA91, P0ADE91, P0AA100, P0ADD00 or P0AA000) in the instrument cluster.

This fault message may prevent the 48 V battery contactors from opening automatically if the 12 V power supply is interrupted. In this case, the 48 V on-board electrical system, including connected components, remain energized.

Cause

The contactors of the 48 V battery do not open, resulting in residual voltage (> 3V) even when the 12 V battery is disconnected.

Remedy

When working on the 48 V on-board electrical system or connected components, ensure the component being repaired is de-energized in the 48 V system after disconnecting the 12 V ground line.

Use a DVOM and ensure that there is less than 3V across the 48V terminals.

- If the voltage is less than 3V, the repair can be continued in accordance with the WIS documentation.
- If the voltage is greater than 3V, disconnect the ground line from the 48 V on-board electrical system battery and secure from contacting any ground points of the vehicle before continuing the repair.

Once the work has been completed, follow the procedure for clearing the 48 V battery fault message as specified.

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 > Power supply > Battery/On-board electrical system > Battery/on-board electrical system indicator lamp > Battery charge indicator/consumer shutoff > Illuminates red
Power generation > Engine management > Indicator lamp > Engine diagnosis > lit
Overall vehicle > Power supply > Battery/On-board electrical system > Battery/on-board electrical system display message > Battery/Alternator - Serviced Required
Overall vehicle > Power supply > High-voltage on-board electrical system > High-voltage battery > Malfunction
Overall vehicle > Power supply > High-voltage on-board electrical system > High-voltage battery > Display message

Control unit/fault code	
Control unit	Fault text
A66 - Battery module (48 V battery) (BM48) (PP48_214)	<p>P0AA000 - The contact 'Positive terminal' of the contactor in the hybrid/high-voltage battery has an electrical fault. _</p> <p>P0ADD00 - The actuation of the contact 'Negative terminal' of the contactor in the hybrid/high-voltage battery has an electrical fault or an open circuit. _</p> <p>P0AA100 - The contact 'Positive terminal' of contactor A in the high-voltage battery is jammed closed. _</p> <p>P0ADE91 - The actuation of the contact 'Negative terminal' of the contactor in the hybrid/high-voltage battery has a malfunction. The parameter is outside the permissible range.</p> <p>P0ADA91 - The actuation of the contact 'Positive terminal' of the contactor in the hybrid/high-voltage battery has a malfunction. The parameter is outside the permissible range.</p>

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