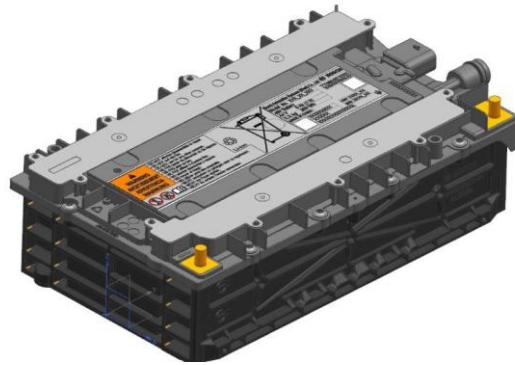




## MAS004109 - 48V battery diagnosis

DATE: April 9th, 2024

The purpose of this document is to provide diagnostic information regarding anomalies of the 48V battery.



**MODELS:** M157, M161, M182. MHEV vehicles only. All MYs.

**SUBJECT:** 48 V battery diagnosis.

### CHECKLIST:

1. Collect the following information about the customer complaint:
  - a. symptom description.
  - b. possible warnings on cluster.
  - c. presence of smoke/bad smell.
  - d. driving conditions.
  - e. frequency of the symptoms.
  - f. general driving profile (urban, extra-urban, possible periods of inactivity, ecc.)
2. Save a complete vehicle scan report (parameters and DTCs).
3. Verify the repeatability of the customer complaint.
4. Carry out the checks reported in section 8.AA.005 of Modis workshop manual: "BATTERY CLASSIFICATION (MOUNTED ON VEHICLE)".
5. Based on the DTCs stored in the 48V battery control unit (BPCM), follow the diagnostic instructions reported in "Diagnosis Help" Modis section.
6. Check the following points. Report the outcome of each check and document with photos:
  - a. connections on the 48V battery poles.
  - b. chassis ground of the 48V battery.
  - c. 48V BDU connections.

- d. 48V APM (DC/DC converter) connections.
  - e. 48V FDU connections.
  - f. 48V BSG connections.
  - g. BPCM connector (both male and female sides).
7. Check that the 48V battery cooling system is functioning properly. To do this, perform the active diagnosis **BPCM → Active Diagnosis → 48V battery blower command** via MD Evo and check the operation of the cooling fan.
  8. Provide a picture of the 48V battery traceability label.
  9. Open a BOL as "Support Request" and report all the information collected during the diagnosis.

TECHNICAL SERVICE OPERATIONS