

AC charging does not function. Charging interrupts after 15 minutes of charging

Topic number	LI47.70-P-079963
Version	1
Function group	47.70 - Powertrain energy supply
Date	11/11/25
Validity	Mercedes-AMG GLE 53 Hybrid 4MATIC+ with SA code ME10
Reason for change	

Complaint

AC charging is not possible. Charging is interrupted after 15 minutes.

Following malfunctions on Instrument Cluster (IC) can appear :

- "AC charging inoperative Consult workshop"
- "Performance severely limited "Hybrid drive system"

The following fault codes related to the failure can be found in the below Control units :

PTCU - N127 (Drivetrain control unit)

- P0667FA - On-board charger
- P0F7FFA - On-board charger

OBL223_GEN4 - N83/11 (Alternating current charger for high-voltage battery):

- P0667FA - The internal temperature sensor of the control unit has a malfunction.
- P0F7FFA - The signals of coolant temperature sensors 1 and 2 of the on-board charger are implausible in comparison with each other.
- P0D8F97 - The cooling of the on-board charger is inadequate. The system function is restricted.

INV1G40 - N147 (Power electronics control unit):

- P0A9300 - The cooling system for the low temperature circuit has a malfunction

Instrument cluster warning messages :





Attachments

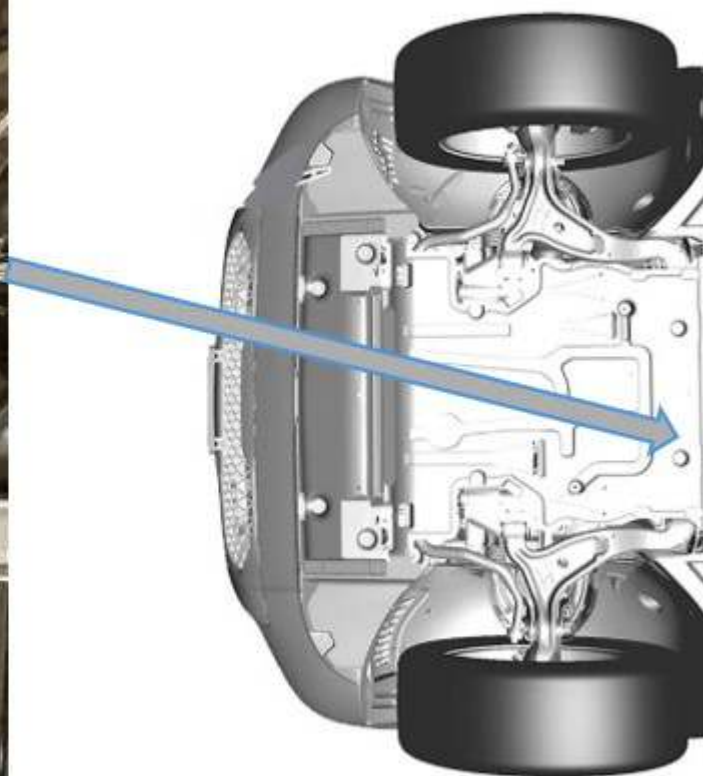
File	Description
IC Malfunction.jpeg	
	
IC Malfunction1.jpg	
	

Cause

- The coolant lines of the LT1 (low temperature) cooling circuit for the power electronics (N147) and the LT2 (low temperature) cooling circuit for the AC charger (OBL), may have been installed in reverse order

Remedy

- It is possible that the coolant hoses highlighted in the pictures are installed in reverse order.
- Interchange these two coolant lines and check if the vehicle is charging without any malfunction.





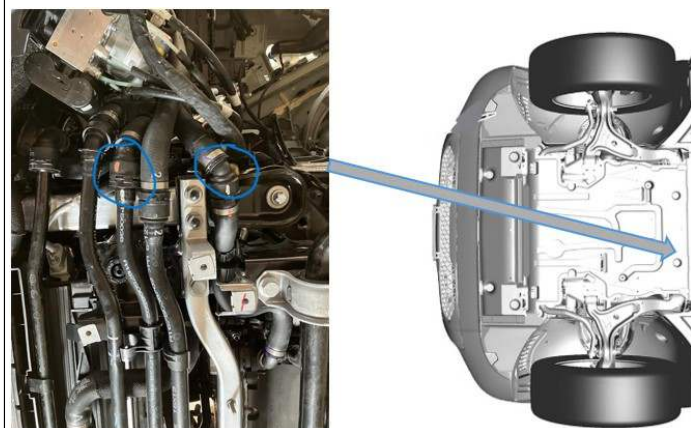
Important Note :

- Do not replace component OBL (N83/11).

Attachments	
File	Description
Coolant hoses.jpg	



Installation Location.jpeg



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 display message > Charging

Power generation > Engine management > Electric drive > Electric machine > Power reduced

Control unit/fault code

Control unit	Fault text
N83 - AC charger for high-voltage battery (SG-LG) (OB-L223_GEN4)	P0D8F97 - The cooling of the on-board charger is inadequate. The system function is restricted. P0F7FFA - The signals of coolant temperature sensors 1 and 2 of the on-board charger are implausible in comparison with each other. _ P0667FA - The internal temperature sensor of the control unit has a malfunction. _
N147 - Power electronics (SG-LE) (INV1G40)	P0A9300 - The cooling system for the low temperature circuit has a malfunction. _
N127 - Control unit "Drivetrain" (PTCU) (CPC3)	P0F7FFA - On-board charger : The signals of coolant temperature sensors 1 and 2 of the on-board charger are implausible in comparison with each other. _ P0667FA - On-board charger : The internal temperature sensor of the control unit has a malfunction. _

Operation numbers/damage codes

Op. no.	Operation text	Time	Damage code	Note
	Cooling system high voltage battery and charger	H	50527	