

Check engine lamp activated, coolant warning message, and engine fan running at full speed

Topic number	LI20.00-P-076708
Version	5
Function group	20.00 - General
Date	1/16/25
Validity	254 GLC-class 167 MY 24 facelift GLE-class With engine M254 and PTCU variant 22A
Reason for change	Remedy adapted

Complaint

Check engine lamp activated, coolant warning message, and engine fan running at full speed.

Below fault codes stored in N127 PTCU related to LIN network components.

U063200, U063287, U02A900, U02A987, U0698E4, U0698E5, U02C800, U02C887, U063B00, U063B87

Cause

Under analysis.

Remedy

Disconnect 12V battery and leave for 20 minutes. Reconnect battery and clear fault codes. Perform 2 test drives, with at least 5 minutes in between with ignition off.

If vehicle operates normally, it can be released to the owner. Software solution is in development for PTCU variant 22A.

N127 - Control unit 'Powertrain' (PTCU)				-f-
Model	Part number	Supplier	Version	
Hardware	000 901 62 22	Continental	21/28 000	
Software	254 902 54 01	Continental	22/33 000	
Boot software	000 904 24 03	Continental	21/31 000	
Diagnosis identifier	004B27	Control unit variant	CPC3_R22A	

If complaint occurs in vehicle with PTCU version later than 22A please check the following:

- Check connections at all LIN bus components connected to N127 PTCU for damage, corrosion, or poor connection
- Check wiring between LIN bus components and N127 for damage or chaffing

-Inspect intermediate connections between LIN bus components and N127 for damage, corrosion, or poor connection

Attachments

File	Description																								
22A location.png																									
N127 - Control unit 'Powertrain' (PTCU) -f- <table><tr><th>Model</th><th>Part number</th><th>Supplier</th><th>Version</th></tr><tr><td>Hardware</td><td>000 901 62 22</td><td>Continental</td><td>21/28 000</td></tr><tr><td>Software</td><td>254 902 54 01</td><td>Continental</td><td>22/33 000</td></tr><tr><td>Boot software</td><td>000 904 24 03</td><td>Continental</td><td>21/31 000</td></tr><tr><td colspan="4"></td></tr><tr><td>Diagnosis identifier</td><td>004B27</td><td>Control unit variant</td><td>CPC3_R22A</td></tr></table>		Model	Part number	Supplier	Version	Hardware	000 901 62 22	Continental	21/28 000	Software	254 902 54 01	Continental	22/33 000	Boot software	000 904 24 03	Continental	21/31 000					Diagnosis identifier	004B27	Control unit variant	CPC3_R22A
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WIS-References		
Document number	Title	Note
AR54.10-P-0051WTC	Disconnect/connect ground line of battery for 12 V on-board electrical system	

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 cooling system > Engine fan > Runs permanently
Power generation > Engine cooling system > Engine fan > Noise
Power generation > Engine cooling system > Indicator lamp > Illuminates yellow
Power generation > Engine management > Indicator lamp > Engine diagnosis > lit
Power generation > Engine cooling system > Display message > Coolant - Serviced Required

Control unit/fault code	
Control unit	Fault text
N127 - Control unit "Drivetrain" (PTCU) (CPC3)	U063B87 - Communication with regulation valve 'High temperature circuit' has a malfunction. The message is missing. U063B00 - Communication with regulation valve 'High temperature circuit' has a malfunction. _ U02C887 - Communication with the component 'Exhaust flap 2' has a malfunction. _ U02C800 - Communication with the component 'Exhaust flap 2' has a malfunction. _

	U0698E5 - Communication with coolant pump 2 of the low-temperature circuit has a malfunction. _ U0698E4 - Communication with coolant pump 2 of the low-temperature circuit has a malfunction. _ U02A987 - Communication with coolant pump 1 of the charge air cooler has a malfunction. The message is missing. U02A900 - Communication with coolant pump 1 of the charge air cooler has a malfunction. _ U063287 - Communication with electric fan 1 has a malfunction. The message is missing. U063200 - Communication with electric fan 1 has a malfunction. _
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Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note