


"Coolant level too low" warning message is shown in the instrument cluster

Topic number	LI20.30-P-078333
Version	1
Function group	20.30 - Coolant expansion/overflow tank
Date	8/29/24
Validity	MODEL 243
Reason for change	

Complaint

"Coolant level too low" warning message is shown in the instrument cluster.

Fault code P25567B (The 'Coolant level' sensor has a malfunction. The fluid level is too low) is stored in the signal acquisition and actuation module (SAM) control unit N10.

Attachments	
File	Description
Beanstandung Kühlmittelstand zu gering.jpg	Problem after driving and before opening the cap
	

Cause

The electric drive motor of the vehicle conveys air into the cooling system.

The air conveyed into the cooling system leads to an air cushion forming in the expansion reservoir, which in turn causes the coolant level to fall below the warning threshold of the coolant level sensor during travel.

XENTRY Tips

After the cap is opened, the coolant level is once again OK.


Remedy

Replace the black cap A210 501 06 15 of the large working chamber of the expansion reservoir with a red cap A297 500 51 00

and increase the coolant level by 20 mm over the max. marking.

On vehicles where this process does not remedy the issue, the expansion reservoir A 243 500 41 00 is replaced by the modified container A243 500 41 00 28.

If the problem is still present, please create a TIPS case.

Attachments	
File	Description
Ausgleichsbehälter BR243 Kühlmittel 20mm über Max.PNG	Expansion reservoir with red cap on large chamber, fill level 20 mm over max.
	

WIS-References		
Document number	Title	Note
AP08.50-P-2053G	Check the coolant level in the coolant expansion reservoir cooling circuit of the high-voltage battery	-
AR20.30-P-4950EQA	Remove/install expansion reservoir	Only in the event of complaints following installation of the red cap

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

XENTRY Tips

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 > Indicator lamp > Illuminates yellow
Power generation > Engine cooling system > Function > Coolant level too low
Power generation > Engine cooling system > Display message > Coolant - Serviced Required

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A2435004100	28		Expansion reservoir	1	Only in the event that the red cap does not prevent the problem	X
A2975005100			Cap	1	Apply exclusively to the large chamber of the expansion reservoir	X

Control unit/fault code	
Control unit	Fault text
N10 - Signal acquisition and actuation module (SAM) (BCMFA2)	P25567B - Sensor 'Coolant level' has a malfunction. The fluid level is too low.

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			50101S9	