

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

Topic number	LI20.30-P-078333
Version	2
Function group	20.30 - Coolant expansion/overflow tank
Date	3/21/25
Validity	Model 243
Reason for change	New expansion reservoir

Complaint

A "Coolant level too low" warning message is shown in the instrument cluster.
Fault code P25567B ('Coolant level' sensor has detected a fault, 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	Coolant level after a journey and before opening a closing cap (pressure on system, coolant level in chamber of level sensor pushed below the warning threshold))
	

Cause

The vehicle's electric drive motor transports air into the cooling system.
The air transported into the cooling system leads to the formation of an air cushion in the expansion reservoir, which in turn causes the coolant level to drop below the warning threshold of the coolant's fill level sensor when driving.
After opening the closing cap, the coolant level is OK again.

Remedy

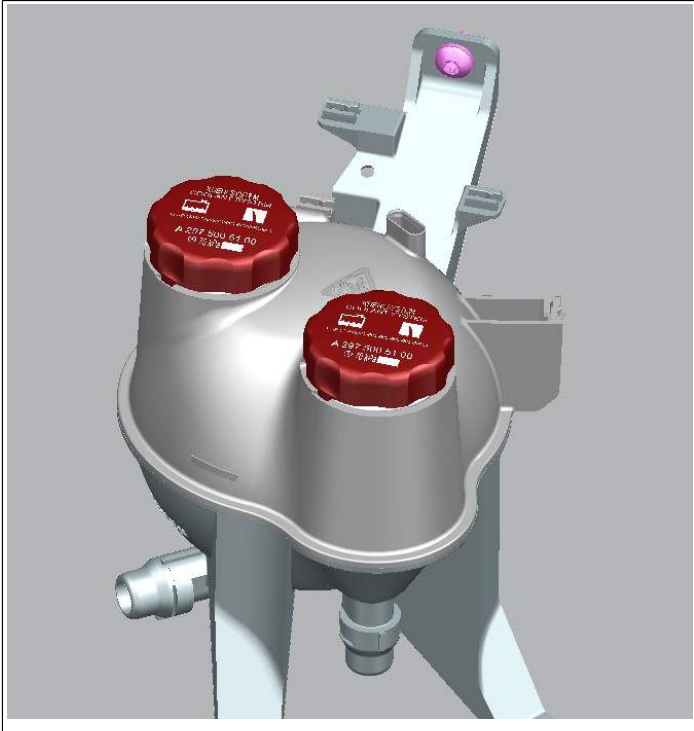
Replace the black cap A210 501 06 15 of the large working chamber of the expansion reservoir with a red cap A297 500 51 00

and the coolant level rises by roughly 20 mm above the MAX. marking.

On vehicles in which the problem cannot be rectified by this procedure, the expansion reservoir A 243 500 41 00 is replaced by the modified container A243 500 60 00.

The new expansion reservoir is to have two red closing caps A 297 500 51 00 fitted to it, and the coolant level is to be set to the MAX. marking.

Attachments	
File	Description
Ausgleichsbehälter BR243 Kühlmittel 20mm über Max.PNG	Original expansion reservoir A243 500 41 00 with red closing cap on large chamber, fluid level raised by roughly 20 mm above MAX.
	
neuer Behälter mit zwei roten Verschlussdeckeln.jpg	Current expansion reservoir A243 500 60 00 with internal connection for both chambers and with two red closing caps A 297 500 51 00



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 and install expansion reservoir	Only in event of problems after installation of red closing cap

Disclaimer

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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

XENTRY Tips

A2435006000			Expansion reservoir	1	Only where the red closing cap does not prevent the problem from occurring	X
A2975005100			Closing cap	1	When replaced, both chambers must be fitted with the red closing cap on the expansion reservoir, if necessary, a second cap should be ordered.	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	