

Display message "Coolant temperature too high" appears in multifunction display

Topic number	LI54.15-P-067157
Version	3
Function group	54.15 Fuse and relay box
Date	01-18-2019
Validity	Model 205, 213 and 253 with engine 274 with electric coolant pump M75/11
Reason for change	PTSS case no longer required
Reason for block	

Complaint:

Display message "Coolant temperature too high" appears in multifunction display.

The workshop diagnosis indicates that the coolant temperature is too high due to a malfunction of the circulation pump.

The following fault codes are stored in the engine control unit:

- P260000: The output for the circulation pump "Coolant" has an electrical fault or an open circuit
- P260200: The output for the circulation pump "Coolant" has a short circuit to ground

Attachments	
File	Description
Display message.jpg	Coolant temperature display message

Cause:

- The fuse (f107) at the engine fuse and relay module (K40/8) is overloaded.
- There could be a contact fault in the current path.

Remedy:

Please examine the entire current path for contact faults:

1. Feed line from K40/8 connector S3 to X244/14.
2. Feed line from X244/16 to M75/11.
 - Check the circuit 30 line at the busbar X244 (see photos "X244_Photo1.jpg" and "X244_Photo2.jpg") for damage after carefully removing the heat-shrinkable tube (for example, the copper strands could be broken). This point must then be closed again with fabric tape.
3. Feed line to ground point W46/1.
4. Check threaded connection of ground point W46/1 (see photo "W46.1.jpg").

XENTRY TIPS

All assembly parts/components can be replaced depending on the scope of the damage, see parts table.

Attachments

File	Description
X244_Photo1.jpg	Busbar, photo 1
X244_Photo2.jpg	Busbar, photo 2
W46.1.jpg	Electric coolant pump ground point

Symptoms

Power generation / Engine cooling system / Function / Has a high coolant temperature
Power generation / Engine cooling system / Function / Coolant level too high
Power generation / Engine cooling system / Display message / Coolant - Serviced Required

Control unit/fault code

Control unit	Fault code	Fault text
N3/10 - Motor electronics 'MED40' for combustion engine 'M274' (ME)	P260200	The output for the circulation pump 'Coolant' has a short circuit to ground. _
N3/10 - Motor electronics 'MED40' for combustion engine 'M274' (ME)	P260000	The output for the circulation pump 'Coolant' has an electrical fault or an open circuit. _

Parts

Part number	ES1	ES2	Designation	Quantity	Note	EPC
			Engine compartment relay unit (K40/8)	1	As required. Determine part number from XPPI: Category 54 / Subcategory 054 / Item 100	
			Water pump electrical wiring harness	1	As required. Includes the affected line from K40/8 plug S3 to busbar X244. For model 205: Refer to XPPI for relevant part number: Category 54 / Subcategory 121 / Item 70. For model 253: Parts are currently being stocked as replacement parts: - LHD vehicles: A 253 540 03 12 If the parts are not available, the body-side engine wiring harness can be ordered for the time being; for this, see XPPI: Category 54 / Subcategory 121 / Item 20.	

XENTRY TIPS

					For model 213: Parts are currently being stocked as replacement parts: - LHD vehicles: A 213 540 15 22 If the parts are not available, the body-side engine wiring harness can be ordered for the time being; for this, see XPPI: Category 54 / Subcategory 121 / Item 20.	
N 000000 007908			Fuse element (f107)	1	E-60A-N; MAXI	X
A 006 545 24 01			Fuse carrier	1	Plug S3	X
			Busbar (X244)	1	As required. XPPI: Category 54 / Subcategory 030 / Item 330.	
			Engine wiring harness	1	As required. Includes the line from busbar X244 to electric coolant pump M75/11. XPPI: Major Assembly M - Engine / Category 54 Engine wiring harnesses / Subcategory Engine wiring harness / Item 10.	
			Coolant pump (M75/11)	1	As required. XPPI: Major Assembly M - Engine / Category 20 Engine cooling system / Subcategory 015 Water pump / Item 30.	
A 007 989 07 85			Fabric tape	1	G12 polyester fabric tape. Width 19 mm. Length 25 m roll.	X

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			54157 74	General electrical fuse - Contact fault/open circuit
			5481Y 74	Engine compartment center partition busbar - Contact fault/open circuit
			540DR 73	Engine compartment fuse and relay module - Electrical fault
			5910R 74	K/Z engine compartment fuse and relay module - Contact fault/open circuit
			590C2 74	K/Z combustion engine electric coolant pump
			2002V 73	Combustion engine electric coolant pump

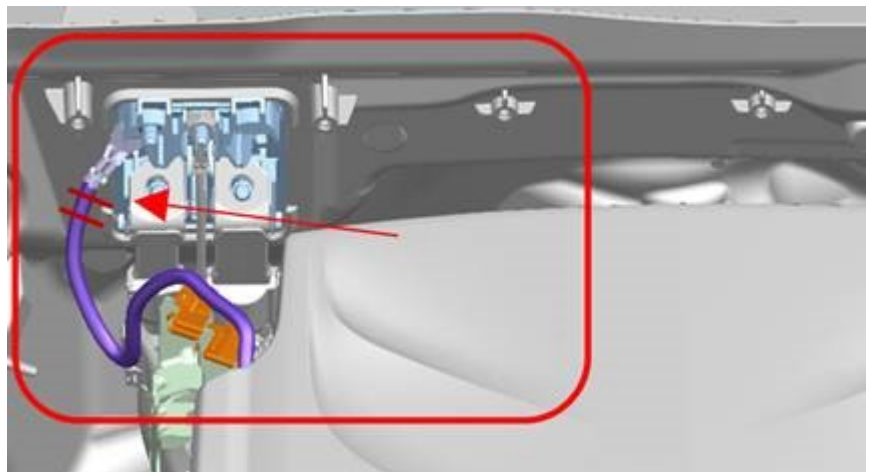
XENTRY TIPS

Attachments

Display message.jpg:



X244_Photo1.jpg:



XENTRY TIPS

X244_Photo2.jpg:



W46.1.jpg:

