Engine fan runs continuously or temporarily at the highest level

Topic number	LI20.40-P-066124
Version	2
Function group	20.40 Fan, fan clutch
Date	09-25-2017
Validity	Model 205 and 253
Reason for change	No parts are further required for analysis.
Reason for block	

Complaint:

Engine fan runs continuously or temporarily at the highest level when ignition is off or when driving.

Cause:

The following three topics may be responsible individually or as a combination thereof.

1. Corrosion on Z142z1 - end sleeve LIN for powertrain control unit. (See Attachment "1")

Damage code: 59200 74

2. Line break in LIN bus line (black/yellow) between bulkhead grommet and Z142z1. (See Attachment "2") Damage code: 59200 74

3. Chafe mark between bulkhead grommet to Z142z1, possibly on cable strap. (See Attachment "3") Damage code: 59200 22

Attachments	
File	Description
Z142z1.JPG	Location - left-hand drive vehicles
Z142z1_RHD.jpg	Location - right-hand drive vehicles
1.JPG	Corrosion (photo shows a left-hand drive vehicle)
2.JPG	Line break
3.jpg	Chafe mark

Remedy:

The wiring harness can be repaired using line material sold by the meter and the Z end sleeve using a solder cup, if necessary.

Symptoms

Power generation / Engine cooling system / Engine fan / Runs permanently

Control unit/fault code		
Control unit	Fault code	Fault text
N127 - Control unit 'Powertrain' (PTCU) (CEPC)	P048000	The output of electric fan 1 has an electrical fault or an open circuit. $_$

N127 - Control unit 'Powertrain' (PTCU) (CEPC)	P048013	The output of electric fan 1 has an electrical fault or an open cir- cuit. There is an open circuit.
N127 - Control unit 'Powertrain' (PTCU) (CEPC)	P048300	The electric fan has a malfunction
N127 - Control unit 'Powertrain' (PTCU) (CEPC)	P048392	The electric fan has a malfunction. The function or the instruction is faulty.
N127 - Control unit 'Powertrain' (PTCU) (CEPC)	P0483D5	The electric fan has a malfunction.
N127 - Control unit 'Powertrain' (PTCU) (CEPC)	U121A00	Communication with control unit "Fan" has a malfunction
N127 - Control unit 'Powertrain' (PTCU) (CEPC)	U121A87	Communication with control unit "Fan" has a malfunction. The message is missing.

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 002 546 00 41			Solder cup	1	For repair of the Z end sleeve Z142z1	X
A 001 546 99 41			Solder cup	1	Quantity/number may vary depen- ding on requirement or number of af- fected lines.	X
A 169 543 02 31			Line material sold by the meter	1	Yellow; role with 100 m; 0.50 mm ²	Х

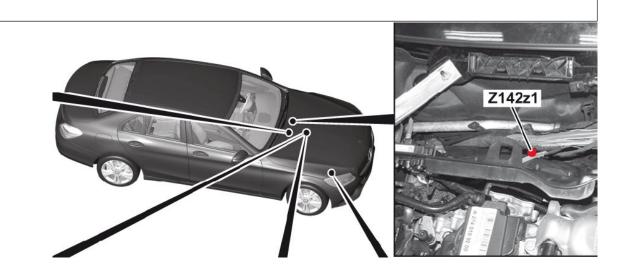
Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			59200 22	Connector/line for fan control unit chafes
			59200 74	Connector/line open circuit in fan control unit

WIS-References			
Document number	Title	Note	Allocation
AR54.18-P-0100-02A	Repair wiring harness using end solder cup		Remedy
AR00.19-P-0100-08A	Protect repair point after line repair		Remedy

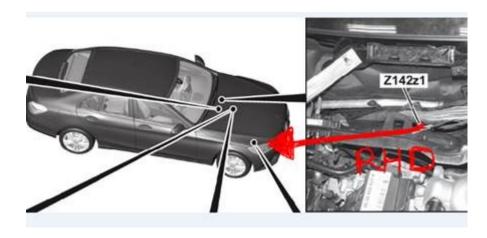
Validity		
Vehicle	Engine	Transmission
C (205)	*	*
GLC (253)	*	*

Attachments

Z142z1.JPG:



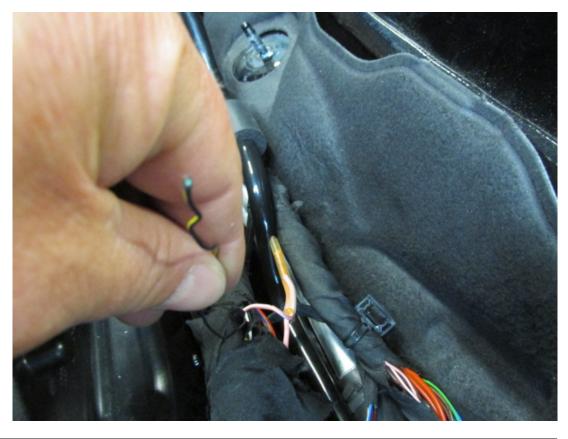
Z142z1_RHD.jpg:



1.JPG:



2.JPG:



3.jpg:

