

High-voltage battery warning message in instrument cluster

Topic number	LI83.70-P-064480
Version	3
Design group	83.70 Stationary heater, auxiliary heater
Date	08-11-2016
Validity	Clean point: Model 205: 55S2050471U157143, WDD2050472F377705, WDD2052471F377680. Model 253: WDC2539541F095830. Model 222: WDD2221631A272601. Model 242: WDD2428901J011012.
Reason for change	Process for requesting damaged part through TIPS case module
Reason for block	

Complaint:

Moisture ingress and/or corrosion (occasionally also foreign objects / dirt) in 12 volt female connector from high-voltage PTC heater booster (component designation: N33/5 - female connector 1).

Attachments	
File	Description
1.pdf	Moisture and/or corrosion in high-voltage PTC heater booster female connector

Cause:

- Possible leak in silicone seal (main seal)
- Missing blind plugs
- Damaged individual conductor seals
- Foreign objects (dirt)

at female connector.

Remedy:

Clean point of production year 2016, week 15:

The connectors are all (100%) subjected to a pressure test at the supplier's.

A PTSS case should be opened if further complaints occur after the clean point.

All problem components (damaged parts) can be requested through a TIPS case module once received, please do not dispose of them:

XENTRY TIPS

- High-voltage PTC heater booster
- 12 Volt connector from high voltage PTC heater booster
- 30 cm away from wiring harness downstream of female connector

Repair:

All parts can be found in the parts table.

The wiring harness can be repaired using meter goods and cable connectors.

Attachments	
File	Description
3.pdf	After repair

Symptoms
Body / Air conditioning / Stationary heater/auxiliary heater / Goes off without obvious cause
Overall vehicle / Power supply / High-voltage on-board electrical system / High-voltage battery / Display message

Control unit/fault code		
Control unit	Fault code	Fault text
N82/2 - Battery management system (BMS) (BMS222MH) (S (222),C (205),GLC (253))	P0A0B00	The interlock circuit of the high-voltage on-board electrical system has a malfunction. _
N22/1 - Air conditioning (AAC) (HVAC222) (S (222),C (205))	B10BE00	The switchover valve on PTC heater booster "High-voltage" has a malfunction. _
N82/2 - Battery management system (BMS) (BMS222MH) (S (222),C (205),GLC (253))	P0A0A00	The interlock circuit of the high-voltage on-board electrical system has an electrical fault. _
N82/2 - Battery management system (BMS) (BMS222MH) (S (222),C (205),GLC (253))	P0A0D00	The interlock circuit of the high-voltage on-board electrical system has a short circuit to positive. _
N22/1 - Air conditioning (AAC) (HVAC222) (S (222),C (205))	B19A400	LIN bus 2 of the air conditioning system has a malfunction. _
N82/2 - Battery management system (BMS), Battery management system (BMS222PI) (S (222),C (205),GLC (253))	P142600	There is a vehicle-side isolation fault in the high-voltage on-board electrical system. _

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
			Heater unit	1	The relevant part number must be obtained from the EPC: Category 50, Subcategory 330, Item 10.	
A 031 545 02 26			Clutch	1	12-pin	X
A 021 545 13 26			Female contact	8	MCP 1.2 LL (with catch spring).	X

XENTRY TIPS

					[Also suitable for 0.35 mm ² female contacts.] Not for model 242.	
A 000 545 69 80			Single-wire seal	8	Not for model 242.	X
A 169 543 02 31			0.5 mm ² line (sold by the meter)		Sold by the meter (yellow): 100 m roll	X
A 001 545 59 80			Blind plug	4	Not for model 242.	X
W22058904991 0			Crimping set MCP1.2 ELA	1	In combination with hand crimper W220589019910.	
A 001 546 99 41			Cable connector	8	Raychem cable connector with Hot-melt adhesive, immersion-proof.	X
A 002 982 58 26			Female contact	2	For model 242. MLK 1.2 S. 0.35 mm ² and 0.5 mm ² Pin 1, 2, 5, 6.	X
A 000 982 30 26			Female contact	2	For model 242. MLK 1.2 S. 0.75 mm ² Pin 3 + 4.	X
A 001 545 50 80			Single-wire seal	6	For model 242	X
A 001 545 59 80			Blind plug	6	For model 242	X
W22058901998 4			Crimping set MLK 1.2 ELA	1	In combination with hand crimper W220589019910.	

Attachments	
File	Description
2.pdf	As-delivered state after TIPS case module

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			5112G 74	Connector/line, high-voltage PTC heater booster

WIS-References			
Document number	Title	Note	Allocation
AR00.19-P-0100-08A	Protect repair point after line repair	Protection of repair point by means of heat-shrinkable tubing	Remedy