ESP, BAS, PRE-SAFE - Fault message in instrument cluster

Topic number LI54.18-P-067550

Version 7

Function group 54.18 - Cable harnesses

Date 5/27/22

Validity Model 213 and 238

Reason for change Model series 257 removed (not affected)

Complaint

ESP®, BAS, PRE-SAFE®, HOLD function, Hill-Start Assist and ESP® trailer stabilization are unavailable. Also the adaptive brake lights, Adaptive Brake Assist and/or ATTENTION ASSIST may be unavailable. The brake system continues to operate with normal effectiveness. The support functions listed may be unavailable, but are available again after an ignition off/on cycle.

One or more of the faults listed under 'Control unit/fault code' for the accelerator pedal (B37) is logged in the PTCU control unit (N127). Consequential faults may have been logged in the ESP control unit.

Cause

The fault entry may have been caused by resistance at contacts.

Remedy

The remedy refers only to the model series listed and is not compatible with other published TIPS documents for other model series.

If all the test steps stored in XENTRY Diagnosis have been performed and no component faults were found, the following work must be carried out:

- Replace the connector/ feed line to the accelerator pedal sensor (B37) using the wiring harness repair kit (see parts table).

Please ensure that the twisted lines are untwisted as little as possible.

Please do not replace any other components (e.g. accelerator pedal sensor).

Reoccurrence of the problem:

If the fault occurs again, or if this is a reoccurrence of the same problem, please make sure that the line connectors between the repair wiring harness and the interior wiring harness are fitted correctly and that the solder has dispersed evenly. In case of doubt, please repeat the repair. If the problem reoccurs after the second repair attempt, please create a TIPS case with informative photos of all line connectors.

Information on alternative to repair wiring harness:

If there should be any supply bottlenecks with regard to the repair wiring harness, then the contact sockets on the accelerator pedal sensor can be replaced as an alternative.

WIS-References				
Document number	Title	Note		

XENTRY TIPS

AR00.19-P-0100A	Wiring harness general repair methods	
AR00.19-P-0120A	Remove contacts from connectors, couplings	
WS00.19-P-0002B	220 589 02 99 00 Wiring harness repair kit	
WS00.19-P-0006B	220 589 04 99 00 Wiring harness repair kit, supplement for passenger cars	

Symptoms

Power generation > Engine management > Indicator lamp > Engine diagnosis > lit

Chassis/suspension > Brake system > Brakes/traction regulation system > Brake assist system BAS > Display message > Brake assist - not available

Chassis/suspension > Brake system > Brakes/traction regulation system > Brake assist system BAS > Indicator lamp > Goes on

Chassis/suspension > Brake system > Brakes/traction regulation system > Starting-off aid > Malfunction

Chassis/suspension > Brake system > Brakes/traction regulation system > Electronic Stability Program (ESP) > Display message

Communication/information > Assistance and warning systems > Brake Assist > Malfunction

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A2135401091			Accelerator pedal sensor wiring harness repair	1		Х
A0009829510			Cable connector	6		Х
W220589019925			Release tool MLK 1.2	1	Alternative: Release tool MLK 1.2 for removing the old contact sockets from the plug to the accelerator pedal sensor B37.	Х
A0215451726			Contact socket MCP 1.2	6	Alternative: New contact socket on plug for accelerator pedal sensor B37.	Х
A0005456880			Single-wire seal	6	Alternative	Х
W220589049910			Crimping set MCP 1.2 ELA	1	Alternative	Х

Control unit/fault code				
Control unit	Fault text			
N30/4 - Electronic stability program (ESP®)	U040181 - Implausible data were received from control unit 'combustion engine'. Incorrect data were received.			
	U0416FA - Implausible data were received from control unit 'Traction system'			
	U0401EC - Implausible data were received from control unit 'combustion engine'			
	U0401FA - Implausible data were received from control unit 'combustion engine'			

	U0401FC - Implausible data were received from control unit 'combustion engine'
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	U0401FC - Implausible data were received from control unit 'combustion engine'.
N3/10 - Motor electronics 'MED40' for combustion engine 'M274' (ME)	P2138F1 - The values from the position sensors of the accelerator pedal are implausible relative to each other
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N127 - Control unit 'Powertrain' (PTCU)	P213800 - The values from the position sensors of the accelerator pedal are implausible relative to each other
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B37n1 - Haptic accelerator pedal module (HFPM)	U044229 - Implausible data were received from control unit 'Drivetrain'. There is an invalid signal.
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Operation numbers/damage codes					
Op. no.	Operation text	Time	Damage code	Note	
			5920274	Connector/line for accelerator pedal sensor	