

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

Topic number	LI54.18-P-057974
Version	2
Design group	54.18 Cable harnesses
Date	03-13-2014
Validity	Model 117, 176, 246 with engine 270, 607, 651
Reason for change	Remedy adapted
Reason for block	

Complaint:

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

One or more of the faults relating to the accelerator pedal (B37) listed under 'Control unit / Fault code' are stored in the engine control unit. Consequential faults may be stored in the ESP; see also under 'Control unit / Fault code'.

Cause:

The fault entry could have been caused by occasional transition resistance at contacts.

Remedy:

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

- Check contacts of accelerator pedal plug connector (B37) for widening/damage! Make sure that testing is performed using the correct contact spring (here MLK1.2) from the electrics case, otherwise the contact could be damaged! If damage/widening is found, the female contacts must be replaced.
- Disconnect engine control unit "plug connector - F and M" once and then reconnect.

Engines 651 and 270 only:

If the fault reoccurs, or if this is a reoccurrence of the same fault, the relevant female contacts of the engine control unit connector "M" or "F" must be replaced. A PTSS case should be opened and MBUSA will dispatch a person to perform the repair in the attached instructions!

Notes:

Contact spray must never be used on contacts on the engine wiring harness. The use of contact cleaners can cause consequential damage!

Please do not replace any components!

Attachments	
File	Designation
651,270_117,176,246_Tausch Kontaktbuchse_german.pdf	Instructions: Replace female contact - German
651,270_117,176,246_Change female contact_english.pdf	Instructions: Replace female contact - English

Symptoms
Power generation / Engine management / 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 / Starting-off aid / Nonfunctional
Chassis/suspension / Brake system / Brakes/traction regulation system / Brake assist system BAS / Indicator lamp / Goes on
Chassis/suspension / Brake system / Brakes/traction regulation system / Electronic Stability Program ESP / Indicator lamp / Goes on
Chassis/suspension / Brake system / Brakes/traction regulation system / Electronic Stability Program ESP / Display message / Display text, yellow/white / Unavailable - ESP - See Operator's Man.
Communication/information / Warning and control system / COLLISION PREVENTION ASSIST / Warning system nonfunctional

Control unit/fault code		
Control unit	Fault code	Fault text
CDI - Motor electronics 'CRR1' for combustion engine 'OM607' (N3/9)	P022664	Fault of function monitoring of electronic accelerator There is an implausible signal.
CDI - Motor electronics 'CDID3' for combustion engine 'OM651' (N3/9) (CRD3)	P213862	The values from the position sensors of the accelerator pedal are implausible relative to each other. The signal comparison is faulty.
ESP® - Electronic stability program (N30/4) (ESP9MFA)	C03A400	The CAN message from control unit 'Engine' is faulty.
EFB - Electric parking brake (N128) (EPKB166)	U010000	Communication with the control unit 'combustion engine' has a malfunction.
CDI - Motor electronics 'CDID3' for combustion engine 'OM651' (N3/9) (CRD3)	P212714	Position sensor 2 for the accelerator pedal has a short circuit to ground. There is a short circuit to ground or an open circuit.
ME - Motor electronics 'MED40' for combustion engine 'M274' (N3/10)	P213800	The values from the position sensors of the accelerator pedal are implausible relative to each other. _

Parts							
Part number	ES1	ES2	Designation	Quantity	Note	EPC	Other make part
A 002 982 58 26			Female contact MLK1.2S ----- 0.5mm ²		"B37 - Accelerator pedal"	X	
A 000 982 30 26			Female contact MLK1.2S ----- 0.75mm ²		"B37 - Accelerator pedal"	X	
A 001 545 50 80			Single-wire seal		"B37 - Accelerator pedal"	X	
W00058913990 0			Wiring harness repair kit, basic		To be ordered as special tool!		X
W22058904990 0			Wiring harness repair kit, supplement for passenger cars		To be ordered as special tool!		X

W22058901994 0		Wire stripper		To be ordered as special tool!		X
A 021 545 01 26		Female contact MCP1.2 ----- 0.5-0.75mm ²		For engine control unit connector M/F - See attachment	X	
A 021 545 05 26		Female contact MCP1.2 ----- 0.25-0.35 mm ²		For engine control unit connector M/F - See attachment	X	
A 007 989 07 85		Fabric tape		See attachment	X	
A 004 997 98 90		Cable tie		For engine control unit connector M/F - See attachment	X	

Work units				
Op. no.	Operation text	Time	Damage code	Note
			54581 73	Diesel engine control unit
			598BF 74	Connector/line F for gasoline engine control unit
			59202 74	Connector/line for accelerator pedal sensor
			598DF 74	Connector/line F for diesel engine control unit

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

Validity		
Vehicle	Engine	Transmission
117.342	270	*
117.343	270	*
117.344	270	*
117.346	270	*
246.200	651	*
246.201	651	*
246.203	651	*

246.207	651	*
246.211	607	*
246.212	607	*
246.242	270	*
246.243	270	*
246.244	270	*
246.247	270	*
A (176)	270	*
A (176)	607	*
A (176)	651	*
CLA (117)	607	*
CLA (117)	651	*

Full model designation breakdown		
Vehicle	Engine	Transmission
117.301	651.901	711.642
117.301	651.901	724.003
117.303	651.930	724.003
117.312	607.951	711.632
117.312	607.951	724.020
117.342	270.910	711.632
117.342	270.910	711.643
117.342	270.910	724.002
117.343	270.910	711.643
117.343	270.910	724.002
117.344	270.920	724.003
117.346	270.920	724.011
176.000	651.901	711.642
176.000	651.901	724.003
176.001	651.901	711.642
176.001	651.901	724.003
176.002	651.930	724.011
176.003	651.930	724.003
176.005	651.930	724.011
176.007	651.930	711.645
176.007	651.930	724.003
176.008	651.930	711.645
176.008	651.930	724.003
176.011	607.951	711.632
176.011	607.951	711.645
176.011	607.951	724.020
176.012	607.951	711.632

176.012	607.951	711.645
176.012	607.951	724.020
176.042	270.910	711.632
176.042	270.910	711.643
176.042	270.910	724.002
176.043	270.910	711.643
176.043	270.910	724.002
176.044	270.920	724.003
176.046	270.920	724.011
246.200	651.901	711.642
246.200	651.901	724.003
246.201	651.901	711.642
246.201	651.901	724.003
246.203	651.930	724.003
246.207	651.930	711.645
246.207	651.930	724.003
246.211	607.951	711.632
246.211	607.951	724.020
246.212	607.951	711.632
246.212	607.951	711.645
246.212	607.951	724.020
246.242	270.910	711.632
246.242	270.910	711.643
246.242	270.910	724.002
246.243	270.910	711.643
246.243	270.910	724.002
246.243	270.910	724.003
246.244	270.920	724.003
246.247	270.920	724.011