

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

Topic number	LI54.18-P-062956
Version	4
Design group	54.18 Cable harnesses
Date	06-28-2016
Validity	Model 205 - M274 Model 205 - M276 Model 205 - OM626 Model 205 - OM651
Reason for change	Note part numbers of engine control unit connector "F"! Part number adjusted from connector to connector housing for selection of female contacts at connector to engine control unit.
Reason for block	

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 are unavailable. The brake system continues to operate with normal effectiveness. The support functions listed 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 have been logged in the ESP control unit.

Cause:

The fault entry could have been caused by occasional transition 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 Diagnostics have been performed and no component faults were found, the following work must be carried out:

- Replace the female contacts at the connector/ feed line of the accelerator pedal sensor (B37).
- Disconnect engine control unit "plug connector - F and M" once and reconnect.

If the fault occurs again, or if this is a re-occurrence of the same problem, the relevant female contacts on the engine control unit connector "F" must be replaced. The repair may only be performed by specialist personnel.

Notes:

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

XENTRY TIPS

Please do not replace any components/assembly parts (accelerator pedal sensor or engine control unit)!

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 / 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
N3/10 - Motor electronics 'MED40' for combustion engine 'M274' (ME)	P213800	The values from the position sensors of the accelerator pedal are implausible relative to each other. _
N3/9 - Motor electronics 'CR43' for combustion engine 'OM651' (CDI)	P212800	Position sensor 2 for the accelerator pedal has a short circuit to positive _
N3/9 - Motor electronics 'CDI41R' for combustion engine 'OM626' (CDI) (CR41R)	P212700	Position sensor 2 for the accelerator pedal has a short circuit to ground. _
N3/10 - Motor electronics 'MED177' for combustion engine 'M276' (ME)	P212300	Position sensor 1 for the accelerator pedal has a short circuit to positive _
N3/10 - Motor electronics 'MED177' for combustion engine 'M276' (ME)	P212200	Position sensor 1 for the accelerator pedal has a short circuit to ground. _
N3/9 - Motor electronics 'CDI41R' for combustion engine 'OM626' (CDI) (CR41R)	P213800	The values from the position sensors of the accelerator pedal are implausible relative to each other. _
N3/9 - Motor electronics 'CDI41R' for combustion engine 'OM626' (CDI) (CR41R)	P212100	Position sensor 1 for the accelerator pedal has a malfunction. _
N3/9 - Motor electronics 'CDI41R' for combustion engine 'OM626' (CDI) (CR41R)	P212300	Position sensor 1 for the accelerator pedal has a short circuit to positive _
N3/10 - Motor electronics 'MED177' for combustion engine 'M276' (ME)	P212812	Position sensor 2 for the accelerator pedal has a short circuit to positive There is a short circuit to positive.
N3/9 - Motor electronics 'CDI41R' for combustion engine 'OM626' (CDI) (CR41R)	P212200	Position sensor 1 for the accelerator pedal has a short circuit to ground. _

XENTRY TIPS

N3/10 - Motor electronics 'MED177' for combustion engine 'M276' (ME)	P060D64	The signals of accelerator pedal sensors 1 and 2 are implausible in relation to each other. There is an implausible signal.
N3/10 - Motor electronics 'MED177' for combustion engine 'M276' (ME)	P213800	The values from the position sensors of the accelerator pedal are implausible relative to each other. _
N3/9 - Motor electronics 'CR43' for combustion engine 'OM651' (CDI)	P212100	Position sensor 1 for the accelerator pedal has a malfunction. _
N3/9 - Motor electronics 'CR43' for combustion engine 'OM651' (CDI)	P212200	Position sensor 1 for the accelerator pedal has a short circuit to ground. _
N3/9 - Motor electronics 'CR43' for combustion engine 'OM651' (CDI)	P2121FA	Position sensor 1 for the accelerator pedal has a malfunction. _
N3/9 - Motor electronics 'CR43' for combustion engine 'OM651' (CDI)	P212300	Position sensor 1 for the accelerator pedal has a short circuit to positive _
N3/9 - Motor electronics 'CR43' for combustion engine 'OM651' (CDI)	P212700	Position sensor 2 for the accelerator pedal has a short circuit to ground. _
N3/9 - Motor electronics 'CR43' for combustion engine 'OM651' (CDI)	P212164	Position sensor 1 for the accelerator pedal has a malfunction. There is an implausible signal.
N3/10 - Motor electronics 'MED40' for combustion engine 'M274' (ME)	P212711	Position sensor 2 for the accelerator pedal has a short circuit to ground. There is a short circuit to ground.
N3/10 - Motor electronics 'MED40' for combustion engine 'M274' (ME)	P212812	Position sensor 2 for the accelerator pedal has a short circuit to positive There is a short circuit to positive.
N3/10 - Motor electronics 'MED40' for combustion engine 'M274' (ME)	P212200	Position sensor 1 for the accelerator pedal has a short circuit to ground. _
N3/10 - Motor electronics 'MED40' for combustion engine 'M274' (ME)	P212300	Position sensor 1 for the accelerator pedal has a short circuit to positive _
N3/9 - Motor electronics 'CR43' for combustion engine 'OM651' (CDI)	P213800	The values from the position sensors of the accelerator pedal are implausible relative to each other. _
N3/9 - Motor electronics 'CDI41R' for combustion engine 'OM626' (CDI) (CR41R)	P212800	Position sensor 2 for the accelerator pedal has a short circuit to positive _
N3/10 - Motor electronics 'MED177' for combustion engine 'M276' (ME)	P212711	Position sensor 2 for the accelerator pedal has a short circuit to ground. There is a short circuit to ground.

Parts

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 021 545 13 26			Female contact MCP 1.2 LL		"B37 - Accelerator pedal sensor"	X
A 000 545 69 80			Single-wire seal		"B37 - Accelerator pedal sensor"	X

XENTRY TIPS

W22058904991 0		Crimping set MCP 1.2 ELA		Special tool "B37 - Accelerator pedal sensor"	
A 005 982 49 26		Female contact MCP 1.2 CB		Engine control unit connector "F". Engine 274 with connector housing part number A 007 540 90 81 or A 007 540 91 81. Engine 276 with connector housing part number A 007 540 90 81 or A 007 540 91 81. Engine 626 with connector housing part number A 007 540 90 81 or A 007 540 91 81. Engine 651 with connector housing part number A 007 540 90 81 or A 007 540 91 81.	X
A 001 982 41 26		Female contact MLK 1.2 S		Engine control unit connector "F". Engine 276 with connector housing part number A 026 545 87 26 or A 026 545 88 26. Engine 626 with connector housing part number A 026 545 87 26 or A 026 545 88 26. Engine 651 with connector housing part number A 026 545 87 26 or A 026 545 88 26.	X
W22058904991 1		Crimping set MCP 1.2		Special tool	
W22058901993 0		Removal tool MCP 1.2		Special tool	
W22058904993 4		Release tool MCP 1.2 CB		Special tool	
W22058901998 3		Crimping set MLK 1.2 S		Special tool	
W22058901992 5		Removal tool MLK 1.2 S		Special tool	

Operation numbers/damage codes

Op. no.	Operation text	Time	Damage code	Note
			59202 74	Connector/line for accelerator pedal sensor

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

XENTRY TIPS

WS00.19-P-0006B	220 589 04 99 00 Wiring harness repair kit, supplement for passenger cars		Remedy
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