

XENTRY

Message in instrument cluster "ESP Malfunction - Service Required" after engine start

Topic number	LI42.45-P-051202
Version	5
Design group	42.45 Electronic Stability Program (ESP), Stability Control (SR)
Date	09-24-2014
Validity	Model series 164 Model series 251
Reason for change	Part number changed
Reason for block	

Complaint:

After engine start the ESP warning lamp (yellow triangle) flashes and the message "ESP Malfunction - Service Required" and/or "BAS Malfunction - Service Required" appears in the instrument cluster after a few seconds.

Note:

At least two of the following codes

- 5101 and/or
- 5102 and/or
- 5105 and/or
- 5106 and/or
- 5111 and/or
- 5115 and/or
- 5116 and/or
- 5112 and/or
- 5115 and/or
- 5116 and/or
- 5121 and/or
- 5122 and/or
- 5125 and/or
- 5126 and/or
- 5131 and/or
- 5132 and/or
- 5135 and/or
- 5136

must be present in the ESP control unit (ESP CU) (N47-5).

Cause:

An implausible wheel speed sensor (DZS) signal is detected by the ESP CU.

Remedy:

Check the part number of the DZS already installed:

a.) If part number A164 905 82 00 or A164 905 83 00 or A251 905 57 00 is installed, follow the test available in Xentry and replace the DZS if necessary.

b.) If part number A164 905 82 00 or A164 905 83 00 or A251 905 57 00 is not installed, replace all four DZS.

Symptoms
Chassis/suspension / Brake system / Service brake / Brakes, Display / Goes on
Chassis/suspension / Brake system / Brakes/traction regulation system / Antilock Brake System ABS / Display message / Antilock braking system - visit workshop
Chassis/suspension / Brake system / Brakes/traction regulation system / Electronic Stability Program ESP / Display message / Display text, yellow/white / Electronic stability program - visit workshop
Chassis/suspension / Brake system / Brakes/traction regulation system / Electronic Stability Program ESP / Display message / Display text, yellow/white / Electronic stability program not available
Chassis/suspension / Brake system / Brakes/traction regulation system / Brake assist system BAS / Display message / Brake assist - visit workshop
Chassis/suspension / Brake system / Brakes/traction regulation system / Brake assist system BAS / Display message / Brake assist - not available

Control unit/fault code		
Control unit	Fault code	Fault text
ESP-Electronic stability program (ESP3)	5132	L6/4 (right rear speed sensor):Check wheel bearing(s).
ESP-Electronic stability program (ESP3)	5125	L6/3 (left rear speed sensor):Implausible wheelspeed
ESP-Electronic stability program (ESP3)	5136	This fault can be ignored and erased.
ESP-Electronic stability program (ESP3)	5126	This fault can be ignored and erased.
ESP-Electronic stability program (ESP3)	5131	L6/4 (right rear speed sensor):Carry out visual inspection.
ESP-Electronic stability program (ESP3)	5135	L6/4 (right rear speed sensor):Implausible wheelspeed
ESP-Electronic stability program (ESP3)	5105	L6/1 (left front speed sensor):Implausible wheelspeed
ESP-Electronic stability program (ESP3)	5116	This fault can be ignored and erased.
ESP-Electronic stability program (ESP3)	5112	L6/2 (right front speed sensor):Check wheel bearing(s).
ESP-Electronic stability program (ESP3)	5122	L6/3 (left rear speed sensor):Check wheel bearing(s).
ESP-Electronic stability program (ESP3)	5102	L6/1 (left front speed sensor):Check wheel bearing(s).
ESP-Electronic stability program (ESP3)	5106	This fault can be ignored and erased.
ESP-Electronic stability program (ESP3)	5101	L6/1 (left front speed sensor):Carry out visual inspection.
ESP-Electronic stability program (ESP3)	5121	L6/3 (left rear speed sensor):Carry out visual inspection.

XENTRY

ESP-Electronic stability program (ESP3)	5111	L6/2 (right front speed sensor):Carry out visual inspection.
ESP-Electronic stability program (ESP3)	5115	L6/2 (right front speed sensor):Implausible wheelspeed

Parts							
Part number	ES1	ES2	Designation	Quantity	Note	EPC	Other make part
A 164 905 82 00			Front axle rpm sensor	2	Model series 164 ONLY	X	
A 251 905 57 00			Front axle rpm sensor	2	Model series 251 ONLY	X	
A 164 905 83 00			Rear axle rpm sensor	2	Model series 164 and model series 251	X	

Work units				
Op. no.	Operation text	Time	Damage code	Note
42-9873	REPLACE RPM SENSORS (BOTH) OF 1ST AXLE FOR ESP (AFTER CHECK)		43A08 73	Use the respective damage code for each DZS
42-9878	REPLACE RPM SENSORS (BOTH) OF 2ND AXLE FOR ESP (AFTER CHECK)		43A09 73	Use the respective damage code for each DZS

WIS-References			
Document number	Title	Note	Allocation
AR42.30-P-0712	Remove/install left or right front rpm sensor		Remedy

Validity		
Vehicle	Engine	Transmission
251.020	*	*
251.021	*	*
251.022	*	*
251.023	*	*
251.026	*	*
251.054	*	*
251.056	*	*
251.065	*	*
251.072	*	*
251.075	*	*
251.077	*	*
251.122	*	*

XENTRY

251.123	*	*
251.124	*	*
251.125	*	*
251.126	*	*
251.154	*	*
251.156	*	*
251.165	*	*
251.172	*	*
251.175	*	*
251.177	*	*
GL (164)	*	*
M (164)	*	*

Full model designation breakdown

Vehicle	Engine	Transmission
164.120	642.940	722.902
164.121	642.820	722.902
164.122	642.940	722.902
164.124	642.820	722.902
164.125	642.820	722.902
164.128	629.912	722.903
164.156	272.967	722.906
164.172	273.963	722.904
164.175	113.964	722.901
164.177	156.980	722.907
164.182	272.945	722.999
164.186	272.967	722.906
164.195	272.973	722.550
164.822	642.940	722.902
164.823	642.822	722.903
164.824	642.820	722.902
164.825	642.820	722.902
164.828	629.912	722.903
164.871	273.923	722.904
164.886	273.963	722.904
251.020	642.950	722.902
251.021	642.872	722.903
251.022	642.950	722.902
251.023	642.872	722.903
251.026	642.950	722.902
251.054	272.945	722.999
251.056	272.967	722.906

XENTRY

251.065	272.967	722.906
251.072	273.963	722.904
251.075	113.971	722.901
251.077	156.980	722.907
251.122	642.950	722.902
251.123	642.872	722.903
251.124	642.870	722.902
251.125	642.870	722.902
251.126	642.950	722.902
251.154	272.945	722.999
251.156	272.967	722.906
251.165	272.967	722.906
251.172	273.963	722.904
251.175	113.971	722.901
251.177	156.980	722.907