

**Message on instrument cluster "ESP Defective Service Required" with vehicle at standstill**

Topic number	G142 47-P-044503
Version	3
Design group	42 47 Adaptive Brake (ABR)
Date	09-28-2009
Validity	Model series 221 Model series 216
Reason for change	Fault code added!

**Complaint:**

Message on instrument cluster "ESP Defective Service Required" and/or "BAS Defective Service Required" with vehicle at standstill.

After ignition OFF/ON, the ESP warning lamp flashes (yellow triangle) and the transmission cannot be shifted out of "P".

The vehicle can lock itself automatically.

With ignition "ON and the vehicle at a standstill, a speed of 260 km/h is displayed on the instrument cluster (IC) after approx. 2 min. The trip odometer and main odometer are incremented.

**Note:**

Either at least three of the following codes

- 5102 and/or
- 5112 and/or
- 5122 and/or
- 5132.

or the fault code combination

- 5995 in the ABR control unit and 722 in the transmission control unit (the code entry was made at an almost identical mileage (+/-16 km) and at the same speed; see fault freeze frame data) must be present in the ESP control unit.

**Cause:**

An implausible rpm sensor signal is detected by the ESP control unit (N47-5).

**Remedy:**

- Flash the ESP control unit
- Replace all 4 rpm sensors

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

# XENTRY

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
ABR-Adaptive Brake (SBC3)	5132	L6/4 (right rear speed sensor):Carry out visual inspection.
ABR-Adaptive Brake (SBC3)	5102	L6/1 (left front speed sensor) Carry out visual inspection.
ABR-Adaptive Brake (SBC3)	5112	L6/2 (right front speed sensor) Carry out visual inspection.
ABR-Adaptive Brake (SBC3)	5122	L6/3 (left rear speed sensor):Carry out visual inspection.
ABR-Adaptive Brake (SBC3)	5995	Event:Hydraulic system of brake was overheated.
ETC-Electronic transmission control (EGS2)	0722	The signal from component Y3/8n3 (Output speed sensor (VGS)) is not available. ([VGS3_*])

Parts							
Part number	xsl-Par-tes1	xsl-Par-tes2	Designation	Quantity	Note	EPC	Non-EPC
A2215400317			Front axle rpm sensor	2	Order with Index 28 NOT 4MATIC	X	
A2215400517			Front axle rpm sensor	2	ONLY 4MATIC	X	
A2215400117			Rear axle rpm sensor	2	Order with Index 28	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	
42-9878	REPLACE RPM SENSORS (BOTH) OF 2ND AXLE FOR ESP (AFTER CHECK)		43A09 73	

WIS-References			
Document number	Title	Note	Allocation
AR42.30-P-0712	Remove/install left front or right rpm sensor		Remedy
AR42.40-P-0820	Remove/install left/right rear axle rpm sensor		Remedy