
**Automatic transmission in limp-home mode,
fault codes 0717, 0718, 0722, 0723, 2767, 2768**

Topic number	LI27.50-P-049710
Version	5
Design group	27.50 Gear assembly
Date	02-22-2011
Validity	Transmission 722.9 not for controller unit A220 270 12 06 and A220 270 14 06
Reason for change	Extension/restriction of validity.
Reason for block	

Complaint:

Automatic transmission 722.9 switches to limp-home while driving (gearshifts no longer possible) and/or one or more of the following fault codes are stored or current: 0717, 0718, 0722, 0723, 2767, 2768

Cause:

Rpm sensor fault

Remedy:

Process the rpm sensor fault code completely using the DAS/Xentry guided test (possible as of DVD 01/2011 and add-on 1707 or 11/2010 and add-on 1706). This may entail a repair of the EHS. In this case the adaptation data of the old transmission control unit are read out in the DAS/Xentry guided test and transferred to the new control unit after the repair. Subsequently, the transmission control unit, which is bolted onto the electrohydraulic controller unit (EHS), may only be replaced using the EHS repair kit (A000 270 17 00).

See also the Akubis direct film:

"Replacement of "fully integrated transmission control" (VGS) controller unit at electrohydraulic controller unit (EHS) on automatic transmission 722.9" The VGS Control Unit (Control Module) only is to be replaced for VGS2 and VGS3 Control Unit versions with these fault codes. VGS Control Unit is available as EHS Repair Kit (A000 270 17 00)

Complete valve body "Electrohydraulic Controller Unit (EHS)" replacement is necessary for VGS1 Control Unit versions with these fault codes.

Control Unit Version is identified from the Transmission Control Unit Log.

Note:

This procedure differs from a complete valve body replacement as the adaptation data, coding and valve body calibration data are transferred from the old VGS Control Unit to the new VGS control unit. This data from the old VGS Control Unit is stored in the Star Diagnosis unit by processing one of the above codes. The same Star Diagnosis System unit MUST be used to process the fault code and perform initial startup of the new VGS Control Unit. Failure to do so will result in the necessary data not being transferred and improper transmission functionality after VGS Control Unit replacement.

1. Process the speed sensor fault code completely by following the instructions in DAS/Xentry related to the fault code.

Note:

During the replacement of the VGS Control Unit, it is imperative that the position of the solenoid valves are noted and re-installed in their original positions. Failure to do so will cause a mismatch in the calibration data to respective solenoid valve(s) and subsequent shifting complaints.

2. Replace the VGS Control Unit per WIS instructions For the initial road test following VGS Control Unit replacement the vehicle must be driven gently for the first several shifts in each gear since it will be necessary to bleed the air from the valve body. Until the air is bleed out, irregular shifting will be noticed momentarily and will clear up with subsequent shift processes. Because the adaptation data is transferred from the original VGS Control Unit, performing subsequent shift adaptations is not necessary.

Use damage code 53376 73 Sensor fault, internal transmission rpm, or 53377 73 Sensor fault, output rpm.

Symptoms
Power transmission / Automatic transmission / Automatic transmission - function / Limp-home mode
Power transmission / Automatic transmission / Automatic transmission - function / Electrical fault/Fault code

Control unit/fault code		
Control unit	Fault code	Fault text
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215) ,G (463),CL (216),SLK (171))	2768	Component Y3/8n2 (Internal speed sensor (VGS)) is defective. ([VGS2_*])
ETC-Electronic transmission control (EGS3) (G (463))	0722	The internal electrical check of component B49 (Transmission output speed sensor) has failed. ((BAUREIHE@461) or(BAUREIHE@463))
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215) ,G (463),CL (216),SLK (171))	0722	The signal from component Y3/8n3 (Output speed sensor (VGS)) is not available. ([VGS2_*])
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215) ,G (463),CL (216),SLK (171))	0722	The signal from component Y3/8n3 (Output speed sensor (VGS)) is not available. ([VGS3_*])
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215) ,G (463),CL (216),SLK (171))	0718	Component Y3/8n1 (Turbine speed sensor (VGS)) is defective. ([VGS2_*])
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215) ,G (463),CL (216),SLK (171))	0718	Component Y3/8n1 (Turbine speed sensor (VGS)) is defective. ([VGS3_*])
ETC-Electronic transmission control (EGS3) (S (221), CLK (209),CL (215),G (463), SL (230),CL (216),S (220),SLK (171),C (203),E (211))	0717	Component Y3/6n2 (speed sensor 2) is faulty or the sensor supply has Open circuit.

ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215),G (463),CL (216),SLK (171))	0717	The signal from component Y3/8n1 (Turbine speed sensor (VGS)) is not available. ([VGS2_*])
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215),G (463),CL (216),SLK (171))	0717	The signal from component Y3/8n1 (Turbine speed sensor (VGS)) is not available. ([VGS3_*])
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215),G (463),CL (216),SLK (171))	2768	Component Y3/8n2 (Internal speed sensor (VGS)) is defective. ([VGS3_*])
EGS53 - Electronic transmission control (N15/3) (C (204), GLK (204),E (207),E (212))	2767	No signal from component 'Y3/6n3 (Rpm sensor 3)'
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215),G (463),CL (216),SLK (171))	2767	The signal from component Y3/8n2 (Internal speed sensor (VGS)) is not available. ([VGS3_*])
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215),G (463),CL (216),SLK (171))	2767	The signal from component Y3/8n2 (Internal speed sensor (VGS)) is not available. ([VGS2_*])
ETC-Electronic transmission control (EGS3) (S (221), CLK (209),CL (215),G (463), SL (230),CL (216),S (220),SLK (171),C (203),E (211))	2767	Component Y3/6n3 (speed sensor 3) is faulty.
ETC-Electronic transmission control (EGS3) (G (463))	0723	The signal from component B49 (Transmission output speed sensor) is implausible. ((BAUREIHE@461)or(BAUREIHE@463))
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215),G (463),CL (216),SLK (171))	0723	Component Y3/8n3 (Output speed sensor (VGS)) is defective. ([VGS2_*])
ETC-Electronic transmission control (EGS2) (R (251), M (164),CLK (209),GL (164), SL (230),S (220),CLS (219),C (203),E (211),S (221),CL (215),G (463),CL (216),SLK (171))	0723	Component Y3/8n3 (Output speed sensor (VGS)) is defective. ([VGS3_*])

XENTRY

Parts							
Part number	xsl-Par-tEs1	xsl-Par-tEs2	Designation	Quantity	Note	EPC	Non-EPC
A 000 270 17 00	80		Controller unit repair kit	1		X	

Work units				
Op. no.	Operation text	Time	Damage code	Note
			53376 73	
			53377 73	

WIS-References			
Document number	Title	Note	Allocation
AR27.19-P-0220B	Disassemble/assemble electrohydraulic controller unit	Repair kit	Remedy
AR27.19-P-0200W	Remove/install electrohydraulic controller unit (transmission installed)	Replacement of complete electrohydraulic controller unit	Remedy

Validity		
Vehicle	Engine	Transmission
*	*	722.901
*	*	722.902
*	*	722.903
*	*	722.904
*	*	722.906
*	*	722.907
*	*	722.930
*	*	722.950
*	*	722.960
*	*	722.961
*	*	722.962
*	*	722.964
*	*	722.965
*	*	722.998
*	*	722.999
*	*	722.963
*	*	722.996
*	*	722.997

XENTRY

*	*	722.908
---	---	---------