

No cooling output, fault code 9006 in air conditioning control unit

Topic number	LI83.30-P-049644
Version	7
Design group	83.30 Air conditioning
Date	11-15-2016
Validity	All veh. of model series 164/251
Reason for change	Damage code adjusted
Reason for block	

Complaint:

No cooling output, fault code (FC) 9006 stored in air conditioning (AAC) control unit.

Cause:

- Poor system ground at ground point W29/2
- Software in AAC control unit
- Poor ground at refrigerant compressor

Remedy:

1. Check ground point W29/2 (A-pillar, see WIS documents in attachment for details) and repair if necessary.
-> Optimize contact, tightening torque: 9 Nm
2. Check crimping of ground line of AAC control unit at ground point W29/2 and repair if necessary.

In vehicles produced prior to 04/2010:

3. Flash AAC control unit with flashware (FW) 2519021300 using Star Diagnosis.

Then perform the following test on the vehicle:

4. Perform the Star Diagnosis tests stored after fault code 9006, including the test of the refrigerant compressor.
5. Check ground line between AAC control unit and ground point W29/2 for open circuit and repair if necessary.
6. Check positive line between AAC control unit and refrigerant compressor for open circuit and repair if necessary.

In vehicles up to code 808 (YoM 07/1) :

7. From the connection of the regulation valve on the refrigerant compressor one cable with a cable lug is bolted onto the housing of the refrigerant compressor as a ground line; the other cable goes via the connector to the engine wiring harness. An additional ground line with a cross section of 0.75 mm² must be properly routed from the bolt-on point of the ground cable on the housing of the refrigerant compressor to ground point W16/4 in the front right of the engine compartment below the engine hood hinge (see photos in attachment).

XENTRY TIPS

In vehicles as of code 808 (YoM 07/1) :

8. Convert electrical line on refrigerant compressor from 1-pin to 2-pin. (Part number of 2-pin wiring harness A1644406641) When connecting the 2-pin wiring harness, ensure correct polarity otherwise the regulation valve will be irreparably damaged. The regulation valve is thus grounded via the operating unit.

Replacing the refrigerant compressor and the A/C operating unit does not remedy the problem in this case.

Attachments	
File	Description
Massepunkt W16-4.jpg	Ground point W16/4

Symptoms
Body / Air conditioning / Air conditioning / Insufficient cooling output
Body / Air conditioning / Air conditioning / Temperature differences
Body / Air conditioning / Air conditioning / Windows fogged
Body / Air conditioning / Air conditioning / Temperature control not sensitive enough

Control unit/fault code		
Control unit	Fault code	Fault text
AAC-Automatic air conditioning (KLA8)	9006	Component A9 (AC compressor) has Short circuit.

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 164 440 66 41			Electrical wiring harness	1	In vehicles as of code 808 (YoM 07/1)	X

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			6304B 38	Interior compartment ground point, loose
			83405 90	Automatic air conditioning operating unit, software release
			83421 74	A/C compressor ground

WIS-References			
Document number	Title	Note	Allocation
GF00.19-P-2000MAA	Location and assignment of ground points	Model series 164	Remedy

XENTRY TIPS

GF00.19-P-2000RAA	Location and assignment of ground points	Model series 251	Remedy
-------------------	--	------------------	--------

Attachments

Massepunkt W16-4.jpg:

