

Engine fan runs continuously, A/C operation nonfunctional or engine indicator lamp lights up sporadically

Topic number	LI83.30-P-064672
Version	1
Design group	83.30 Air conditioning
Date	08-11-2016
Validity	Model 166 and 292 with engine 276 and code 806. Clean points (fault rectified since): - New clip + rotated through 180° -> Optimization of line routing, implementation of VIN: 4JGDA5GB5GA717187, production: 20.01.2016. - Use of protective hose X6, discontinuation of binding under protective hose, implementation of VIN: WDC1660631A775262, production: 04.05.2016. - Splice shifted out of critical area, implementation of VIN: WDC1660561A81588, production: 25.07.2016. - Bracket edge is rounded off/deburred to avoid any sharp edges, scheduled implementation: 16.09.2016.
Reason for change	
Reason for block	

Complaint:

- On the fuse box, circuit 30g cockpit (F3/3) the electrical fuse f19 (AAC control and operating unit (N22/7)) is overloaded -> A/C operation nonfunctional.
- Engine fan runs continuously.
- Engine indicator lamp lights up sporadically.
- Pre-Safe warning message in the instrument cluster.
- Blind Spot Assist warning message in instrument cluster.

Attachments	
File	Description
1.pdf	Chafe mark

Cause:

Possible chaffing between bracket A2761500817 (between engine and major assembly partition wall) and engine compartment wiring harness M276.

This affects the subharness for the electrical connection X22/2 to X30/21.

Remedy:

The clip on the engine control unit F-connector (see attachment "2") has to be replaced by clip A0059976290, and the new clip has to be rotated through 180° and mounted.

The photo in attachment "2" shows the clip in the 9-o'clock position, the new clip has to be in a 3-o'clock position.

XENTRY TIPS

Please round off/deburr the edge of the bracket using a file.

Repair wiring harness using generally repair methods (AR00.19-P-0100A).

Attachments	
File	Description
2.pdf	Clip for problem

Symptoms
Power generation / Engine cooling system / Engine fan / Runs permanently
Power generation / Engine management / Indicator lamp / Engine diagnosis / lit
Communication/information / Information display / Indicator lamp / lit
Overall vehicle / Wiring / Cable damaged/faulty
Overall vehicle / Networking / CAN/FlexRay communication / Malfunction
Body / Air conditioning / Air conditioning / Air conditioning display error
Communication/information / Warning and control system / COLLISION PREVENTION ASSIST / Warning message in instrument cluster
Communication/information / Warning and control system / Blind spot assist / Warning message in instrument cluster

Control unit/fault code		
Control unit	Fault code	Fault text
N3/10 - Motor electronics 'MED177V6LA' for combustion engine 'M276 Turbocharger' (ME)	B221402	Control unit "Air conditioning" has a malfunction. There is a general signal fault.
N51/3 - AIRMATIC (SPC292)	U015500	Communication with the instrument cluster has a malfunction. _
N51/3 - AIRMATIC (SPC292)	U012200	Communication with control unit 'Traction system' has a malfunction. _
Y3/8n4 - Transmission control for 7-speed transmission (VGS) (VGSNAG2)	C164	CAN communication with control unit 'Air conditioning' has a malfunction.
N51/3 - AIRMATIC (SPC292)	U010100	Communication with control unit "Transmission" has a malfunction. _
Y3/8n4 - Transmission control for 9-speed transmission (VGS) (VGSNAG3)	U002800	Communication with the drivetrain CAN bus has a malfunction. _
Y3/8n4 - Fully integrated transmission control (VGS) (VGS4NAG2)	U000288	Drive train CAN bus OFF fault Bus OFF
Y3/8n4 - Fully integrated transmission control (VGS) (VGS4NAG2)	U001988	Interior CAN bus OFF fault
Y3/8n4 - Transmission control for 9-speed transmission (VGS) (VGSNAG3)	U010000	Communication with the control unit 'combustion engine' has a malfunction. _
N3/10 - Motor electronics 'MED177V6LA' for	B221412	Control unit "Air conditioning" has a malfunction. There is a short circuit to positive.

XENTRY TIPS

combustion engine 'M276 Turbocharger' (ME)		
N3/10 - Motor electronics 'MED177V6LA' for combustion engine 'M276 Turbocharger' (ME)	B221411	Control unit "Air conditioning" has a malfunction. There is a short circuit to ground.
Y3/8n4 - Transmission control for 7-speed transmission (VGS) (VGSNAG2)	C002	CAN bus OFF fault
Y3/8n4 - Transmission control for 9-speed transmission (VGS) (VGSNAG3)	U016400	Communication with the air conditioning has a malfunction. _
N3/10 - Motor electronics 'MED177V6LA' for combustion engine 'M276 Turbocharger' (ME)	B221414	Control unit "Air conditioning" has a malfunction. There is a short circuit to ground or an open circuit.
Y3/8n4 - Fully integrated transmission control (VGS) (VGS4NAG2)	U150700	Communication with control unit 'Combustion engine' has a malfunction.
Y3/8n4 - Fully integrated transmission control (VGS) (VGS4NAG2)	U000200	Drive train CAN bus OFF fault _
N51/3 - AIRMATIC (SPC166) (M/GLE (166))	U010000	Communication with the control unit 'combustion engine' has a malfunction. _
N51/3 - AIRMATIC (SPC166) (M/GLE (166))	U015500	Communication with the instrument cluster has a malfunction. _
N3/10 - Motor electronics 'MED177V6LA' for combustion engine 'M276 Turbocharger' (ME)	B221400	Control unit "Air conditioning" has a malfunction. _
N3/10 - Motor electronics 'MED177V6LA' for combustion engine 'M276 Turbocharger' (ME)	B221401	Control unit "Air conditioning" has a malfunction. There is a general electrical fault.
Y3/8n4 - Transmission control for 7-speed transmission (VGS) (VGSNAG2)	C001	CAN bus OFF fault
Y3/8n4 - Fully integrated transmission control (VGS) (VGS4NAG2)	U016400	Communication with the air conditioning has a malfunction. _
Y3/8n4 - Transmission control for 9-speed transmission (VGS) (VGSNAG3)	U000100	Drive train CAN communication has a malfunction. _
N51/3 - AIRMATIC (SPC292)	U010000	Communication with the control unit 'combustion engine' has a malfunction. _
N51/3 - AIRMATIC (SPC292)	U003788	Communication with the chassis CAN bus has a malfunction. Bus OFF

Parts

XENTRY TIPS

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 005 997 62 90			Cable strap	1		X

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			59200 22	K/Z*, fan control unit
54-0650	12V			
54-1011	QUICK TEST			
54-7943	HARNESS REPAIR			

WIS-References			
Document number	Title	Note	Allocation
AR00.19-P-0100A	Wiring harness general repair methods		Remedy