

Air Conditioning System Occasionally Does Not Cool Correctly At Outside Temperatures Above 40°C

Topic number	LI83.30-P-070309
Version	6
Function group	83.30 Air conditioning
Date	10-30-2020
Validity	Model series 118, 177 and 247 from SOP to clean point of the manufacturing plant; see list
Reason for change	Adaptation to country distribution. MBD removed at own request. Breakpoint updated for Aguascalientes. Brief description of cause.
Reason for block	

Complaint:

Air conditioning system occasionally does not cool at outside temperatures >40°C

To check whether the vehicle could be affected, check the letter in 11th place in the FIN and then the associated clean point; there are 5 production plants each with their own clean point.

The letter (11th place) in the FIN indicates the plant, the letters being assigned as follows.

Aguascalientes (W) 02.10.2020

Kecskemét (N) 22.02.2020

Rastatt (J) 02.03.2020

Valmet (V) 28.02.2020

Cause:

Due to the quantity of refrigerant contained in the system (690 g), pressures > 28 bar may occur on the high-pressure side of the refrigerant circuit at outside temperatures above 40°C.

At these pressure levels, there is a brief high-pressure shutdown of the refrigerant circuit for safety reasons. As a result, the system no longer achieves its full cooling output.

Attachments	
File	Description
pic.1.jpg	OCP picture

Remedy:

1. Please carry out a quick test and process the fault code.
2. On vehicles with CODE 2U1, check fan and radiator shutters for correct mechanical installation.
3. Check whether connector coupling to radiator shutters is correctly plugged in.
4. If radiator shutters are installed in vehicles without code 2U1, these must be removed.
5. Remove overhead control panel (OCP) and check that manufacturing date is later than 06.04.2019 (Pic.1)
6. Connect A/C charging station and compare pressure values on the manometer with the value of pressure sensor B12/2 in Xentry.

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7. If the values differ, replace pressure sensor B12/2.
8. With Xentry Diagnostics, select "A/C control unit", then "Actual values" and "Display measurement values" and click on all options.

Then carry out a measuring drive for approx. 30 min. with the diagnostic device and record the values as you do so.

9. Extract the refrigerant, note down the amount of refrigerant extracted and re-charge with 590 g of R134a.
10. When changing the fill quantity to 590 g for R134a, select the appropriate information label from the XENTRY Portal parts procedure and attach it to the radiator crossmember/hood.

Note: If vehicle returns after reducing refrigerant charge quantity, please open a PTSS case stating the original refrigerant quantity, the manufacturing date of the OCP, the customer's AAC settings (when the problem occurs) and the measurement values recorded.

Symptoms
Body / Air conditioning / Air conditioning / Insufficient cooling output

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			83431 F7	

Validity		
Vehicle	Engine	Transmission
A (177)	*	*
CLA (118)	*	*

Attachments

pic.1.jpg:



XENTRY TIPS
