

87 Air conditioning does not cool - P053000, P251500 stored in C5

87 23 38 2068460/2 January 31, 2023. Supersedes Technical Service Bulletin Group 87 number 22-35 dated November 9, 2022, for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6, A6 allroad, S6, A7, S7, A8, S8, e-tron Sportback quattro, Q5, SQ5, SQ7, Q8, SQ8, and RS Q8	2020 – 2022		
A8 e quattro	2020 – 2021		
RS 6 Avant, A7 e quattro, RS 7, e- tron quattro, Q5 e quattro, Q5 Sportback, and SQ5 Sportback	2021 – 2022	All	Not Applicable
e-tron S quattro, e-tron GT, and RS e-tron GT	2022		

Condition

REVISION HISTORY				
Revision	vision Date Purpose			
2	-	Revised Warranty (Change to max time allowed for GFF)		
1	11/09/2022	Initial publication		

Customer states:

The air conditioning system does not cool the cabin. This condition may be intermittent in nature.

Workshop findings:

The symptom is confirmed. One or both of the following DTCs are stored in Thermal management, J1024 (address word 00C5):

- DTC P053000 Air conditioning system pressure sensor electrical fault.
- DTC P251500 Refrigerant pressure sensor 2 electrical fault.

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Technical Background

A failure of the sensor electronics causes a loss of pressure evaluation. The sensor with base part number 4M0959603 and a build date *before* the date Calendar Week 31, 2021 is at issue (G395 / G827).

Production Solution

An improved sensor has been implemented in production.

Service

- Should the vehicle present with the symptom profile described in this TSB inspect and/or replace all of the
 pressure sensors in the refrigerant circuit that are of the base part number 4M0959603 and have a build date
 before Calendar Week 31, 2021. Each model for which this TSB appears will have between 1 and 3 of this
 type of sensor installed at various positions in the refrigerant circuit, either on the low or high pressure sides
 of the circuit (G395 / G827).
- 2. Inspect the markings on the sensor to determine if the sensor has been previously replaced with an improved sensor produced after Calendar Week 31, 2021. Figure 1 shows the locations of the markings and their interpretation. In this example, while the sensor is an 'E' index sensor, contains a green dot on the connector housing and a laser marking on the aluminum housing the build date of the sensor is before Calendar Week 31, 2021, and would require replacement.



Figure 1. Pressure and temperature sensor markings and build date.

3. A sensor with index 'E', produced after Calendar Week 31, 2021, has a green dot on the connector housing, and has a laser marking on the aluminum housing is of the improved type and need not be replaced.



Warranty

Claim Type:	• 110 up to 48 Months/50,000 Miles.				
	G10 for CPO Covered	G10 for CPO Covered Vehicles – Verify Owner.			
	If the vehicle is outside informational only.	in the remove to enterior and removed to the enterior and			
Service Number:	8757				
Damage Code:	0040				
Labor Operations:	A6 / A7:				
	Pressure switches (both) remove and reinstall	8757 1900	See SRT with associated operations		
	Refrigerant drain and fill	8703 1750	See SRT with associated operations		
	Q7 / Q8:				
	Pressure switches (both) remove and reinstall	8757 2093	See SRT with associated operations		
	Refrigerant drain and fill	8703 1750	See SRT with associated operations		
	A8:				
	PHEV: Pressure switch (G395) remove and reinstall	8757 1950	See SRT with associated operations		
	-OR				
	Not PHEV:	8757 1900	See SRT with associated		
	Pressure switches (G395) remove and reinstall		operations		
	Refrigerant drain and fill	8703 1750	See SRT with associated operations		
	e-tron GT:				
	Storage compartment remove and reinstall	7007 1900	See SRT with associated operations		

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Wheel remove and reinstall	4405 1951	See SRT with associated operations	
Cross brace remove and reinstall	5069 1960	See SRT with associated operations	
Disable HV system voltage deactivated and activated	9310 8302	See SRT with associated operations	
Wiper motor remove and reinstall	9215 1950	See SRT with associated operations	
Pressure switches (all 3) remove and reinstall	8709 2099	190 TU	
Refrigerant drain and fill	8703 1750	See SRT with associated operations	
Q5:			
Pressure switches (both) remove and reinstall	8709 1901	See SRT with associated operations	
Refrigerant drain and fill	8703 1750	See SRT with associated operations	
e-tron:			
Pressure switches (all 3) remove and reinstall	8709 2099	190 TU	
Refrigerant drain and fill	8703 1750	See SRT with associated operations	
GFF	0150 0000	Time stated on the diagnostic protocol (Max 50 TU)	
Road test prior to the service procedure	No allowance	0 TU	
Road test after the service procedure	No allowance	0 TU	
As per TSB 2068460/2			
	reinstall Cross brace remove and reinstall Disable HV system voltage deactivated and activated Wiper motor remove and reinstall Pressure switches (all 3) remove and reinstall Refrigerant drain and fill Q5: Pressure switches (both) remove and reinstall Refrigerant drain and fill e-tron: Pressure switches (all 3) remove and reinstall Refrigerant drain and fill GFF Road test prior to the service procedure Road test after the service procedure	reinstall Cross brace remove and reinstall Disable HV system voltage deactivated and activated Wiper motor remove and reinstall Pressure switches (all 3) remove and reinstall Refrigerant drain and fill 8703 1750 Q5: Pressure switches (both) remove and reinstall Refrigerant drain and fill 8703 1750 e-tron: Pressure switches (all 3) 8709 2099 remove and reinstall Refrigerant drain and fill 8703 1750 e-tron: Pressure switches (all 3) 8709 2099 remove and reinstall Refrigerant drain and fill 8703 1750 GFF 0150 0000 Road test prior to the service procedure Road test after the service procedure No allowance	

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.

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Required Parts and Tools

Always check with your Parts Department and/or ETKA for the latest information and parts bulletins.				
Part Number	Part Description	Quantity		
4M0959603E	Pressure and temperature sensor	1 - 3		

Additional Information

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