



Technical Service Bulletin

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

87 24 75 2068460/6 May 10, 2024. Supersedes Technical Service Bulletin Group 87 number 23-55 dated October 2, 2023 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A8 e quattro	2020 - 2021	All	Not Applicable
A6, A6 allroad, S6, A7, S7, A8, S8, e-tron Sportback quattro, Q5, Q5 e quattro, SQ5, Q7, SQ7, Q8, SQ8, and RS Q8	2021 - 2022		
e-tron S, e-tron GT, and RS e-tron GT	2022		

Condition

REVISION HISTORY		
Revision	Date	Purpose
6	-	Revised <i>Service</i> (Add statement regarding sensor interchangeability) Revised <i>Warranty</i> (Corrected SRTs)
5	10/02/2023	Revised <i>Technical Background</i> (Corrected component designation) Revised <i>Service</i> (Corrected component designation) Revised <i>Warranty</i> (Corrected SRTs)
4	08/10/2023	Revised <i>Service</i> (Changed statement concerning sensor marking)

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 / G826).

Production Solution

An improved sensor has been implemented in production.

Service

1. 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 three of this type of sensor installed at various positions in the refrigerant circuit, either on the low- or high-pressure sides of the circuit.
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, there is 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 laser marking on the aluminum housing and may or may not contain a green dot on the connector housing is of the improved type and need not be replaced.



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NOTICE

The presence of the green dot on the sensor is not the sole, conclusive evidence of the sensor being of the improved type. The green dot was applied in production as an immediate identification of an improved sensor, but the green dot was not applied indefinitely. Always check the sensor date as this is the confirmation of the sensor status.

NOTICE

Pressure sensors with different part number indexes are not interchangeable. When replacing the pressure sensors, all of the sensors being replaced must be of the same part number index (e.g., all sensors must be 'E' index, or all sensors must be 'J' index). LIN communication conflict will result if differing part indexes are used.

Warranty

Claim Type:	110 up to 48 Months/50,000 Miles. - G10 for CPO Covered Vehicles – Verify Owner. - If the vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	8757		
Damage Code:	0040		
Labor Operations:	A6 / A7:		
	Check pressure switch	8709 0199	5 TU
	Pressure switches (both) remove and reinstall	8709 2050	See SRT with associated operations
	Q7 / Q8:		
	Check pressure switch	8709 0199	5 TU
	Pressure switches (both) remove and reinstall	8757 2093	See SRT with associated operations
	A8:		
	Check pressure switch	8709 0199	5 TU
	Pressure switch (G395) remove and reinstall	8757 1950	See SRT with associated operations



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	Pressure switch (G826) remove and reinstall	8764 1950	See SRT with associated operations
	e-tron GT:		
	Check pressure switch	8709 0199	5 TU
	Pressure switches (all 3) remove and reinstall	8709 2050	See SRT with associated operations
	Q5:		
	Check pressure switch	8709 0199	5 TU
	Pressure switches (both) remove and reinstall	8709 2050	See SRT with associated operations
	e-tron:		
	Check pressure switch	8709 0199	5 TU
	Pressure switch (G395) remove and reinstall	8757 1950	See SRT with associated operations
	Pressure switch (G826) remove and reinstall	8764 1950	See SRT with associated operations
	-or-		
	Pressure switches (both) remove and reinstall	8709 2051	See SRT with associated operations
Diagnostic Time:	GFF	0150 0060	Time stated on the diagnostic protocol (Max 50 TU)
	Battery charge	2706 8950	See SRT with associated operations
	Road test prior to the service procedure	No allowance	0 TU
	Road test after the service procedure	No allowance	0 TU
Claim Comment:	As per TSB 2068460/6		

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.

Required Parts and Tools



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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

All parts and service references provided in this TSB (**2068460**) are subject to change and/or removal.

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