



Technical Service Bulletin

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

87 23 50 2068460/4 August 10, 2023. Supersedes Technical Service Bulletin Group 87 number 23-40 dated April 10, 2023, 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, Q5 e quattro, SQ5, Q7, SQ7, Q8, SQ8, and RS Q8	2020 – 2022	All	Not Applicable
A8 e quattro	2020 – 2021		
RS 6 Avant, RS 7, e-tron quattro, Q5 Sportback, and SQ5 Sportback	2021 – 2022		
e-tron GT, RS e-tron GT, and e-tron S quattro	2022		

Condition

REVISION HISTORY		
Revision	Date	Purpose
4	-	Revised <i>Service</i> (Changed statement concerning sensor marking)
3	04/11/2023	Revised <i>Warranty</i> (Correction to e-tron SRT)
2	01/31/2023	Revised <i>Warranty</i> (Change to max time allowed for GFF)

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

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 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.



Note:

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.



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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.

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:		
	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: Pressure switches (G395) remove and reinstall	8757 1900	See SRT with associated operations
	Refrigerant drain and fill	8703 1750	See SRT with associated operations



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	e-tron GT:		
	Storage compartment remove and reinstall	7007 1900	See SRT with associated operations
	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 (both) remove and reinstall	8709 2051	See SRT with associated operations
	Refrigerant drain and fill	8703 1750	See SRT with associated operations
Diagnostic Time:	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



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Claim Comment:	As per TSB 2068460/4
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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

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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