

Technical Service Bulletin

Topic	87 GFF test plan required for A/C compressor replacements regardless of concern
Market area	United States 444 Volkswagen of America, Inc. (6444)
Brand	Audi
Transaction No.	2041717/13
Level	EH
Status	Released for publishing
Release date	Mar 4, 2025

New customer code

Object of complaint	Complaint type	Position
climate control -> operation, climate control -> A/C system switch	functionality -> too difficult to move	right
climate control -> heating, cooling -> climate control unit cooling output -> A/C compressor activation/deactivation	functionality -> no function	
climate control -> heating, cooling -> climate control unit cooling output -> A/C compressor control	functionality -> no function	

Vehicle data

Audi All Models

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4*	2010	A		*	*	*
4*	2011	A		*	*	*
4*	2012	A		*	*	*
4*	2013	A		*	*	*
4*	2014	A		*	*	*
4*	2015	A		*	*	*
4*	2016	A		*	*	*
4*	2017	A		*	*	*
4*	2018	A		*	*	*
4*	2019	A		*	*	*
4*	2020	A		*	*	*
4*	2021	A		*	*	*
4*	2022	A		*	*	*
4*	2023	A		*	*	*
4*	2024	A		*	*	*
4*	2025	A		*	*	*

Audi All Models

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
8*	2010	A		*	*	*
8*	2011	A		*	*	*
8*	2012	A		*	*	*
8*	2013	A		*	*	*
8*	2014	A		*	*	*
8*	2015	A		*	*	*
8*	2016	A		*	*	*
8*	2017	A		*	*	*
8*	2018	A		*	*	*
8*	2019	A		*	*	*
8*	2020	A		*	*	*
8*	2021	A		*	*	*
8*	2022	A		*	*	*
8*	2023	A		*	*	*
8*	2024	A		*	*	*
8*	2025	A		*	*	*

Audi All Models

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
F*	2016	A		*	*	*
F*	2017	A		*	*	*
F*	2018	A		*	*	*
F*	2019	A		*	*	*
F*	2020	A		*	*	*
F*	2021	A		*	*	*
F*	2022	A		*	*	*
F*	2023	A		*	*	*
F*	2024	A		*	*	*
F*	2025	A		*	*	*

Audi All Models

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
G*	2019	A		*	*	*
G*	2020	A		*	*	*
G*	2021	A		*	*	*
G*	2022	A		*	*	*

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
G*	2023	A		*	*	*
G*	2024	A		*	*	*
G*	2025	A		*	*	*

Documents

Document name
master.xml
vehicle_data_master.doc

Condition

REVISION HISTORY		
Revision	Date	Purpose
13	-	Revised <i>Service</i> (Clarification of the TSB application criteria and requirements)
12	12/17/2024	Revised <i>Service</i> (Add ODIS navigation path, clarified test plan navigation locations)
11	09/20/2024	Revised <i>Service</i> (Add ODIS navigation path, added documentation requirement) Revised <i>Additional Information</i> (Remove reference to TSB 2035582)

This bulletin applies to any repair that requires the replacement of the air conditioning compressor.

Technical Background

Any replacement of A/C compressors—regardless of the reason for failure—must include an ODIS GFF cooling performance test plan (Function Test Log version) of the A/C system with documentation of the recovered refrigerant volume. This GFF test plan requirement is mandatory without exception.

Production Solution

Not applicable.

Service

Before replacing the A/C compressor, run the ODIS GFF test plan. The test plan is in various locations in the navigation depending on the vehicle being serviced. Since the A/C cooling performance test is a 'function test' it is generally found by navigating to the sub-headers such as 'functions', 'other functions', 'general functions tests' or '*basic settings complete*' in either 08 – Heating and Air Conditioning Electronics, in C5 – Thermal Management Control Module in the case of BEV and PHEV vehicles or 09-Vehicle Electrical System Control Module in the case of BCM controlled climate systems. The test plans are generally navigated in the following examples:

Vehicles with 08 – Heating and Air Conditioning Electronics:

Navigate to the Guided Functions tab of the diagnosis program, *Select 08 – Front A/C display control head –E87- >> 08 Heating/Air Conditioning Electronics, functions >> 08-Other Functions.*

Or

Navigate to the Test plan tab of the diagnosis program, *Select Body >> Heating / Air Conditioning >> 01 – On Board Diagnostic (OBD) capable systems >> 08 Climatronic control module, functions J255 >> 08-General function tests.*

BEV Vehicles with C5 – Thermal Management Control Module:

Navigate to *Diagnostic capable system >> 00C5 - Thermal Management Control Module -J1024- >> 00C5 - Thermal management control module, functions >> System function test >> Interior cooling.*

Or

Navigate to *Diagnostic capable system >> 00C5 - Thermal Management Control Module -J1024- >> 00C5 – Basic Settings Complete >> Basic Setting Selection >> System function test >> Interior cooling.*

PHEV Vehicles with C5 - Thermal Management Control Module:

Navigate to *Body >> Heating / Air Conditioning >> 01 - On Board Diagnostic (OBD) capable systems >> 00C5 - Thermal Management Control Module -J1024- >> 00C5 – Thermal management control module, functions >> System function test >> Interior cooling.*

Vehicles with HVAC control in 09-Vehicle Electrical System Control Module:

Body >> Electrical Equipment >> 01-On Board Diagnostic (OBD) capable systems >> 09-Vehicle Electrical System Control Module J519 >> 09-Electric Central Electric, functions >> 09-Other functions, Air Conditioning test plan.

Once the function test has been added to the list of “Tests in current test plan” select “Vehicle is not cooling”.

The air conditioning cooling system performance test plan can then be completed following the prompts.

In cases where the customer’s complaint is a ‘noise’ when the air conditioning system is active, the air conditioning system otherwise operates normally, and the root cause analysis finds that the source of the noise is the air conditioning compressor:

A completed air conditioning cooling system performance test plan must still be performed with the original compressor and a final log uploaded to GFF Paperless.

An audio / video file clearly indicating the compressor as the source of the noise must be uploaded to Doc-IT.

In vehicles equipped with a HV compressor where the customer’s complaint is that the air conditioning system does not cool, a MIL and / or electrical error is displayed in the instrument cluster, the DTC(s) do not provide a cooling system performance test plan to be performed based on the nature of the failure and the root cause analysis is an electrical failure of the air conditioning compressor:

A completed ODIS test plan for the relevant DTCs must be completed and uploaded to GFF Paperless and the result must clearly condemn the HV compressor.

In cases where the customer’s complaint is solely that the air conditioning cooling is insufficient:

If the air conditioning cooling system performance test concludes that the system pressures as well as the evaporator temperature are in specification, then the air conditioning compressor is not to be replaced. The air conditioning compressor is operating properly.

If, after confirming that the system pressures and evaporator temperature are in specification the air conditioning cooling system performance test reveals an imbalance of available cooling inside the cabin to the various zones, the diagnosis into the root cause must be continued (e.g. faulty temperature regulating door or door motor, faulty vent temperature sensor, etc.) and the component at issue repaired as needed.

If the compressor is found to be faulty according to the test plan and is replaced, please:

- Upload a final protocol of the completed test plan that confirms the compressor failure to GFF Paperless.
- Attach a printout of only the “Function Test” section of the diagnostic log to the replaced compressor for return to the WPRC. It is not necessary to print and attach the complete diagnostic log. Only the test plan section that includes the test steps is required.

- Print out the summary report showing the amount of refrigerant and refrigerant oil recovered / discharged from the air conditioning service machine being used. Upload an image of the report to Doc-IT.



NOTICE

As previously mentioned, the cooling performance test plan is in various locations in the navigation depending on the vehicle, equipment level and ODIS version. This variation in test plan location does not in any way waive the requirement for this test plan to be run before an air conditioning compressor is replaced. If the test plan is missing or cannot be found in ODIS, please file an ODIS Feedback.

Warranty

This TSB is informational only and not applicable to any Audi Warranty.

Additional Information

All parts and service references provided in this TSB (**2041717**) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

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