



SIB 64 08 22

2022-11-14

INOPERATIVE OR IRREGULAR A/C COOLING POWER

## MODEL

E-Series	Model Description	Production Date
I20	iX Sports Activity Vehicle	From start of production to December 6, 2022
G26	4 Series Gran Coupe BEV	

## SITUATION

The climate control system may be inoperative or perform irregularly. There may be:

- Lack of or irregular cooling power or air conditioning
- No or poor heater output
- Difference between left and right vent temperatures in the passenger area
- Interference noises (clattering noise) coming from the electric A/C compressor (EKK)

## CAUSE

This may be caused by the air conditioning system not being sufficiently filled, or leaking, or impurities in the refrigerant circuit.

## CORRECTION

Find and repair the leak.

If there is system contamination, flush the system and replace components as listed.

## PROCEDURE

A. In the event of a customer complaint, proceed as follows.

1. Heat up the vehicle (temperature in the passenger area at approx. 88° F (~30°C)). Then press Max AC button and take the following steps.

Read out the temperature value of the evaporator using ISTA.

The path in ISTA is as follows:

Service functions -> Heating and air conditioning functions -> Temperature sensors -> Heating and air conditioning functions test module: Monitor temperature sensors.

The **desired temperature** is **46° F** (8 °C) or less.

2. Check temperature differential at the ventilation vents.

The **difference between left and right should not be greater than 9° F** (5° C).

3. Check the suction pressure and high pressure using ISTA

"Temperature Sensor Test Module -> Menu Item -> Show Values"

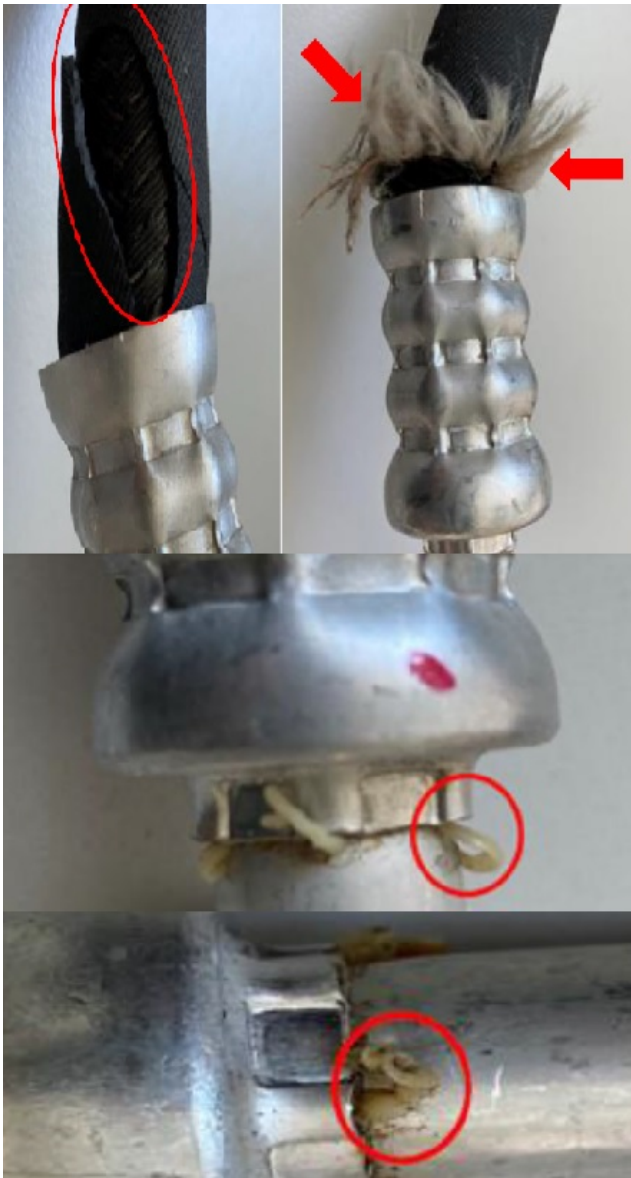
A **suction pressure of 2.5 - 4 bar** and a **high pressure of 8-18 bar** is OK.

4. If one of the above checks deviates from the desired state, proceed as follows.

- Check the amount of refrigerant in the refrigerant circuit.
- If the system is not sufficiently filled, then check the system for leaks. A detailed pressure test (recommendation: nitrogen test) must be carried out.

B. If the tests under Section A are not passed and **there is a leak**, only the leaking components are to be exchanged.

Check the compressor-capacitor pressure line for damage.



**Important:** If the leaking components include the electric A/C compressor (EKK) and/or the compressor-capacitor pressure line, the following components must be replaced in combination:

- Compressor-condenser pressure line
- Electric A/C compressor EKK
- Air conditioning condenser
- Non-return valve (in intake pipe)
- Electrical expansion valve (at the evaporator)
- Cooling unit (referred to as a chiller in the EPC)

Then refill the system and check again for leaks.

C. If the tests under Section A are not passed and **there is no leakage**, the refrigerant circuit must be checked for dirt.

If the refrigerant oil is black or chips are visible, flush the system and then replace the following components:

- Compressor-condenser pressure line
- Electric A/C compressor EKK
- Air conditioning condenser
- Non-return valve (in intake pipe)

- Electrical expansion valve (at the evaporator)
- Cooling unit (referred to as a chiller in the EPC)

D. To avoid repeat repairs due to deposits from components that have not been exchanged, flushing the refrigerant circuit is strongly recommended.

If an A/C service station with the "Flush refrigerant circuit" function is available, the refrigerant circuit must be flushed.

Follow the repair instructions "Flush the refrigerant circuit (A/C compressor, air conditioning condenser and heat pump exchanger removed) **64 50 770** "REP-REP-P-6450770-I20 - V.3".

**Important:** If flushing is to be carried out, the components are replaced only after flushing.

Then reassess the vehicle.

## **PARTS INFORMATION**

Obtain and confirm the part numbers for your specific vehicle by entering the chassis number in either ETK or AIR which considers specific equipment and/or options.

## **CLAIM INFORMATION**

This Service Information bulletin provides technical and repair-related information.

Damage and/or issues caused by outside influences are not covered under the BMW limited warranties.

### **Eligible and Covered Work/Repairs**

When used to repair a verified defect in materials or workmanship, the information provided in this bulletin is covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

To submit a claim, please follow the established and applicable warranty policy and procedures (Labor/Part/Sublet) that apply to the repair being performed.

Refer to AIR for the corresponding Defect Code, flat rate labor operations (including the diagnosis that applies\*) and the flat rate unit (FRU) allowances.

Only one Main labor operation code can be claimed per repair visit.

\*Based on which one applies to your center, please refer to **SI B01 01 20** or **B01 07 20** for the applicable procedure for documenting, claiming, and explaining, on the RO and in the claim comments, your diagnosis work time (WT), job/repair work time (WT), and the vehicle repairs your center performed, unless otherwise required by State law.

## **FEEDBACK REGARDING THIS BULLETIN**

Technical Feedback	To submit feedback for the technical topics of this bulletin: Submit your feedback in the rating box at the top of this bulletin
Warranty Feedback	To submit feedback for the CLAIMS section of this bulletin: Submit an IDS ticket to the Warranty Department, or use the chat available in the Warranty Documentation Portal
Parts Feedback	To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department