

SIB 64 04 20

2020-10-14

BUZZING NOISE IS HEARD WHEN AIR CONDITIONING IS DEACTIVATED

MODEL

| E-Series | Model Description | Production Date | |
|----------|----------------------------|----------------------|--|
| F39 | X2 Sports Activity Coupe | From January 1, 2018 | |
| F48 | X1 Sports Activity Vehicle | production | |

SITUATION

A buzzing noise is heard when the air conditioning (A/C) is deactivated while the vehicle is in park or neutral. Prior to turning off the A/C, the system was functional and cooling properly.

CAUSE

- A/C compressor, or
- The power supply to the A/C compressor is too low

CORRECTION

Replace either the A/C compressor, or the vehicle's main battery.

PROCEDURE

- 1. Start the vehicle. Leave stationary in Park (secure the emergency brake), with the engine idling.
- 2. Turn on the A/C system for 1 minute.

NOTE: If the A/C system is not functional at this moment, then A/C system diagnosis must be performed before this bulletin would apply.

- 3. Turn off A/C system, then increase engine speed to 1000 RPM.
- 4. Is there an abnormal noise heard, vibration felt, when A/C is turned off that increased as engine RPM increased? (NOTE- a vibration may also be felt in the low-pressure A/C pipe that increased with engine RPM)
 - No This bulletin does not apply.
 - Yes Proceed with testing A/C compressor power supply
- 5. With the air conditioning turned off, check the power supply to the A/C compressor using a non-invasive clip-on current measurement probe.
 - If power supply to A/C compressor is **below 260 mA** (milliamps) --> Replace vehicle main battery.
 Run ISTA test plan for battery registration.

Note: If the vehicle arrives with a discharged battery, perform the standard troubleshooting along with the Energy Diagnosis to determine the cause of the discharged battery.

If power supply to A/C compressor is above 260 mA --> Replace A/C compressor.

When compressor is removed check for debris in system. Perform compressor run in test plan

Retest to ensure noise is eliminated.

PARTS INFORMATION

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

| Part Number | Description | Quantity | |
|-----------------|---------------------------------|------------------|--|
| Refer to ETK | Air conditioning compressor | 1 | |
| 83 19 2 446 563 | Refrigerant R1234yf (1 oz unit) | Qty if/as needed | |
| 83 19 2 468 442 | Coolant (1 gallon) | Qty if/as needed | |
| Or: | | | |
| Refer to ETK | Battery | 1 | |

Additionally, other small parts that are not specified above, such as one-time screws, nuts and seals, which must be replaced according to the ISTA repair instructions/ETK, must be selected from the Electronic Parts Catalogue according to the respective vehicle type and invoiced under the corresponding repair defect code that applies.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

| Defect Code: | 6452003900 | Air conditioning compressor (mechan disruptive noises | nical/electrical) |
|--------------------|---|---|-------------------|
| : | | • | |
| Labor Operation | Description | | Labor Allowance |
| 64 50 010 | Extract, evacuate and fill air conditioning system (Automatic climate control) (Main work) | | Refer to AIR |
| Or: | | · · | |
| 64 50 510 | Extract, evacuate and fill air conditioning system (Automatic climate control) (Plus work) | | Refer to AIR |
| Or: | | | |
| 64 50 009 | Extract, evacuate and fill air conditioning system (Basic) (Main work) | | Refer to AIR |
| Or: | | | |
| 64 50 509 | Extract, evacuate and fill air conditioning system (Basic) (Plus work) | | Refer to AIR |
| And: | | | |
| 64 99 000 | Using the non-invasive clip-on current measurement probe to check the power supply to air conditioning compressor | | 2 FRU |
| And: | | | |
| 64 52 523 | Replacing air conditioning compressor for conditioning system (Automatic climate control) | | Refer to AIR |
| Or: | | | |
| 64 52 521 | Replacing air conditioning compressor (Basic) | | Refer to AIR |

If you are using a Main labor code for another repair, use the Plus code labor operation 64 50 510/64 50 509 instead of 64 50 010/64 50 009.

And, as needed:

Sublet – Bulk Materials (RO and Claim Comments Required)

| Sublet Code | See the sublet | Reimbursement for the repair-related bulk materials (Do not |
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| 4 | reimbursement | use the BMW part numbers for claim submission) | |
|---|--------------------|--|--|
| | calculations below | · | |

Sublet reimbursement calculation for claiming the applicable repair-related bulk materials (BMW part numbers) is at the dealer net price amount for the quantities used plus your center's handling.

BMW Antifreeze/Coolant: Claim the corresponding sublet dollar amount for the quantity needed to replace what was drained with a 50/50 coolant/water solution.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

Or:

| Defect Code: | 6121001200 | Vehicle battery (12 V battery) permai | nently failed |
|--------------------|---|---------------------------------------|-----------------|
| : | · | | |
| Labor Operation | Description | | Labor Allowance |
| 61 21 017 | Replacing vehicle electrical system battery - including registering battery replacement (Main work) | | Refer to AIR |
| Or: | | | |
| 61 21 517 | Replacing vehicle electrical system battery - including registering battery replacement (Plus work) | | Refer to AIR |
| And: | | | |
| 64 99 000 | Using the non-invasive clip-on current measurement probe to check the power supply to air conditioning compressor | | 2 FRU |

If you are using a Main labor code for another repair, use the Plus code labor operation 61 21 517 instead of 61 21 017.

Refer to AIR for the corresponding flat rate unit (FRU) allowances.

Work time labor operation code 64 99 000 is not considered a Main labor operation.

As applicable to your center, please refer to <u>SI B01 01 20</u> or <u>B01 07 20</u> for claiming your diagnosis work time, job/repair work time (WT), WT and the repair-related explanation procedures.

QUESTIONS REGARDING THIS BULLETIN

| Technical inquiries | Submit feedback at the top of this bulletin |
|---------------------|--|
| Warranty inquiries | Submit an IDS ticket to the Warranty Department or use the chat available in the Warranty Documentation Portal |
| Parts inquiries | Submit an IDS ticket to the Parts Department |