INTERFERENCE NOISE IN THE HEATING AND AC UNIT

MODEL

F97 (X3 M Sports Activity Vehicle)	F98 (X4 M Sports Activity Coupe)	G01 (X3 Sports Activity Vehicle)	G02 (X4 Sports Activity Coupe)
G20 (3 Series Sedan)	G22 (4 Series Coupe)	G23 (4 Series Convertible)	G26 (4 Series Gran Coupe)
G29 (Z4 Roadster)	G42 (2 Series Coupe)	G80 (M3 Sedan)	G82 (M4 Coupe)

SITUATION

An interference noise (groaning noise) can be heard from within the heating and air-conditioning unit in the center of the instrument panel.

The groaning noise always occurs when either a ventilation flap, air stratification flap or the recirculated air flap moves to a different position.

Due to the complex design of the heating and air-conditioning unit, the kinematics causing it (top or bottom, left or right) may not be able to be precisely located.

Depending on the vehicle model, the number of servomotors (and the associated kinematics unit) varies. Various models use either 2 or 3 servomotors.

CAUSE

- Contamination may cause a decrease in lubrication of the kinematics unit (behind the servomotor) on the ventilation flap, air stratification flap, and the recirculated air flap.
- Incorrect tolerances on the kinematics unit

CORRECTION

If unable to determine which kinematics unit is causing the noise, remove all (2 or 3 depending on model) of the stepper motors to remove and lubricate the kinematics units.

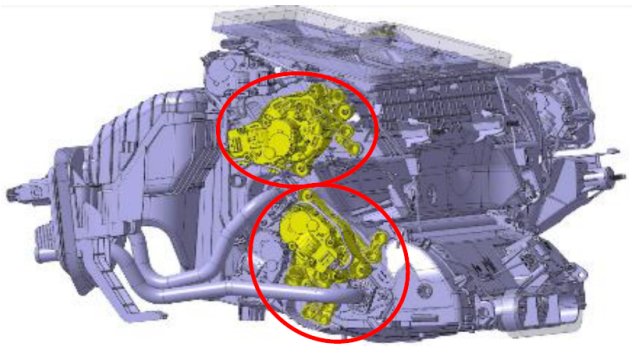
PROCEDURE

Proceed as follows.

1. Remove the instrument panel support.
   Follow repair instructions “**51 45 075** Removing and installing the instrument panel support”.

2. Remove all ventilation flap/stratification flap/recirculated air flap servomotors once the instrument panel support has been removed.

Depending on the vehicle model, the number of servomotors (and the associated kinematics unit) varies. On some variants assembly bolts are covered by the piping for the air conditioning system which requires evacuating the refrigerant from the system prior to removing the servomotor.

	The heating and air-conditioning unit in **F97 / F98 / G01 / G02 / G20 / G22 / G23 / G26 / G42 / G80 / G82** left-hand drive (LHD) vehicles contains 3 servomotors total. **Driver Side** view
	The heating and air-conditioning unit in **F97 / F98 / G01 / G02 / G20 / G22 / G23 / G26 / G42 / G80 / G82** left-hand drive (LHD) vehicles. **Passenger Side** view

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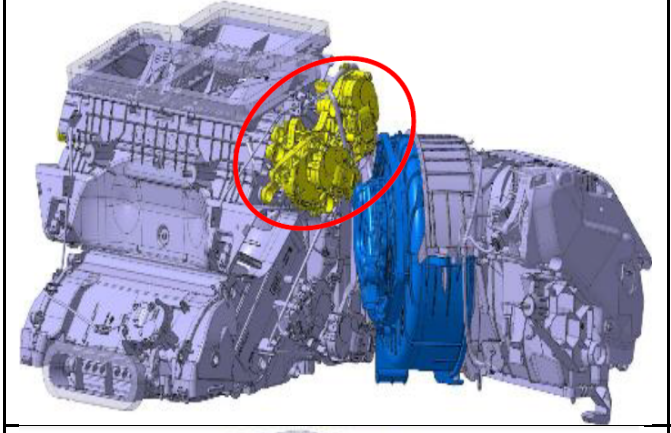
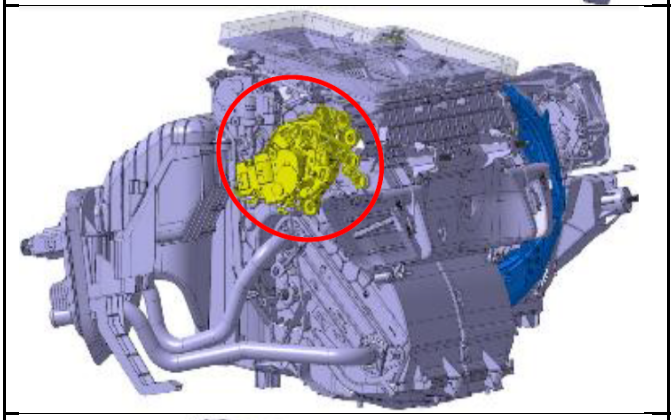
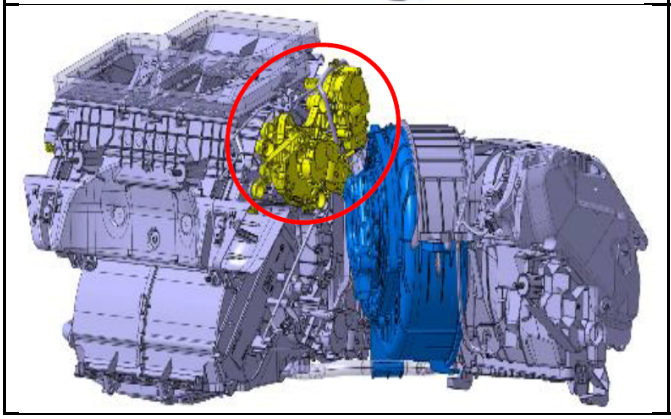
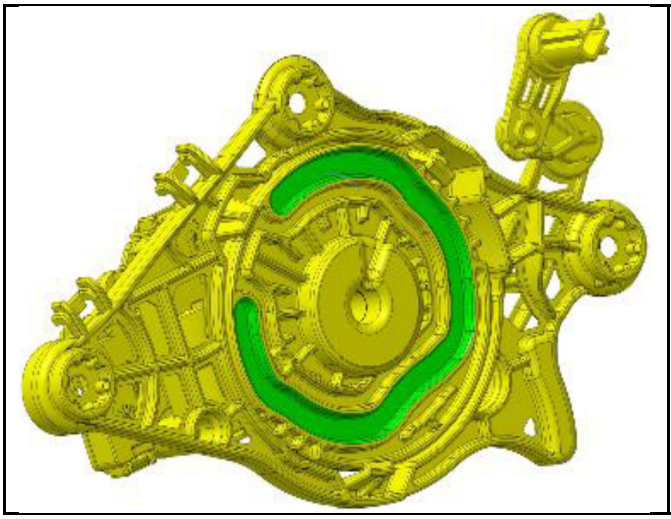
	
	The heating and air-conditioning unit in the **G29**, left-hand drive (LHD) vehicles contain 2 servomotors total. **Driver Side** view
	The heating and air-conditioning unit in the **G29**, left-hand drive (LHD). **Passenger Side** view

3. The relevant kinematics unit, which must also be removed, is located directly behind the removed servomotors.

The kinematics are clipped into the heating and air-conditioning unit.

	4. Remove the old grease on the gate disc of the kinematics (green area) with a clean cloth and use Unisilkon TK M1011 to regrease.

5. Then reassemble the vehicle and test for noises.

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.

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Part Number	Description	Quantity
83 19 2 240 251	Unisilkon TK M1011 (50g/1.76 ounces)	Sublet as needed
83 19 2 446 563	BMW Group R-1234YF - (10lb / 160oz)	Sublet top-up to 7 oz

Additionally, other materials and small parts that are not specified above, such as fluids, lubricants, one-time use screws, nuts, and seals, which must be replaced or installed according to the ISTA repair instructions/ETK, must be selected from the Electronic Parts Catalogue, or other approved BMW resources, according to the respective vehicle type. Invoiced these items separately under the repair Defect Code.

CLAIM INFORMATION

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

Defect Code:	**6411900200**	**F97 F98 G0x G2x G42 G8x Heating and air-conditioning unit interference noises (groaning noises)**

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

Labor Operation	Description	Labor Allowance
51 45 075	Removing and installing support for dashboard (Main work)	Refer to AIR
Or:		
51 45 575	Removing and installing support for dashboard (Plus work)	Refer to AIR
And, as necessary:		
51 00 001*	Localizing body noise	Work time (WT)
Or		
00 58 500*	Diagnosis Worktime Flat Rate (See below)	2 FRU

If you are using a Main labor code for another repair, use the Plus code labor operation 51 45 575 instead of 51 45 075.

Work time labor operation codes 51 00 001 and 00 58 500 are not considered a Main labor operations.

And, for the:

G20, G22, G23, G26, G42, G80 and G82 Only

Labor Operation	Description	Labor Allowance
64 50 510	Extract, evacuate and fill air conditioning system	Refer to AIR

And for the:

G20 Only

Labor Operation	Description	Labor Allowance
51 71 999	Additional work: Strut brace (For adaptive suspension)	Refer to AIR

And, for:

Repairing the First Servomotor

Labor Operation	Description	Labor Allowance
00 72 536	Removing and installing (incl. greasing) kinematics for air flap control (instrument panel trim removed)	3 FRU

And again, for:

Repairing the Second Servomotor

Labor Operation	Description	Labor Allowance
00 72 536	Removing and installing (incl. greasing) kinematics for air flap control (instrument panel trim removed)	3 FRU

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And again, for:

Repairing the Third Servomotor (All applicable Models except the G29)

Labor Operation	Description	Labor Allowance
00 72 536	Removing and installing (incl. greasing) kinematics for air flap control (instrument panel trim removed)	3 FRU

And, as needed:

Sublet – Bulk Materials (RO and Claim Comments Required)

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

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

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

*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.

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries	Submit feedback at the top of this bulletin
Warranty inquiries	Please contact the Warranty department by either using the Live Chat that's available in the Warranty Documentation Portal or through IDS by selecting Coverage, Policy, Coding Questions and Mileage Corrections
Parts inquiries	Submit an IDS ticket to the Parts Department

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