

**SIB 72 04 17**

2022-12-28

**FALSE WARNING OF OCCUPIED FRONT PASSENGER SEAT
WITHOUT BUCKLED SAFETY BELT**

This Service Information Bulletin (Revision 14) replaces SI B72 04 17 dated **December 2021**.

What's New (Specific text highlighted):

- Models removed and put into new SI B72 01 22 (**This bulletin will be released in the near future**)
- Correction, Procedure, Parts, Claim sections have changed

MODEL

F90 (M5 Sedan) produced to July 31, 2018
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SITUATION

Acoustic and visual warnings indicate that the front passenger seat is occupied, and the safety belt is not fastened when the seat is actually unoccupied.

If the situation is currently present, sit in the seat and move the seat to a slightly different position. The POL (Passenger Occupancy Light) light should now function correctly.

In some cases, the air bag Warning Light was illuminated. Advanced Crash Safety Module (ACSM) fault "930A1C - Front passenger seat occupancy detection transmitting fault (moisture)" is stored.

CAUSE

Any or all of the following can contribute to this situation:

1. Electronics (e.g., smart phones or laptops) are connected to the USB charging port or cigarette lighter and placed on the seat.
2. The seat was wet (e.g. very high humidity, wet clothing, spilled liquids, rain).
3. Insufficient shielding of the seat heater wiring.
4. Ground for the CIS seat mat is not secure.

CORRECTION

Consultation with the customer whether objects were possibly laid on the front passenger seat or the seat was subjected to moisture (for example: from rain through an open window, wet clothes or towel or the spilling of fluids on the seat cushion surface).

Perform a non-invasive check for moisture / stains on the seat and at the CIS evaluation electronics module electrical connector.

Check the CIS seat mat ground.

If there are no obvious moisture/stains, check the part number and revision index of the currently installed seat heater (seat occupancy) combined mat assembly versus the chart in the Procedure Step 3.

- If the index is **lower** than specified below or is one of the part numbers listed below, then the CIS seat mat must be replaced.
- If the index already **greater** or **equal** than specified below, continue diagnosis with ISTA.

Note: Do not replace the CIS electronics or the ACSM module for this situation.

PROCEDURE

For conditions that are like the situation described above:

1. Verify with the customer that no objects were lying on the seat that could have caused the warnings.

Note: Electronic devices that are placed on the front passenger seat, e.g., laptop computers, mobile phones, etc., could cause the front passenger airbag warning lamp to activate.

This behavior occurs primarily with devices that are connected to the vehicle electrical system via a USB cable or other charger adapter.

In vehicles with an acoustic safety belt warning, this could cause the warning signal to sound.

2. Moisture on the seat surface can also cause a faulty seat occupancy detection. In this case ACSM fault 930A1C will be stored.

- Perform a **non-invasive** check for signs of moisture.
 - a. If moisture is found, dry the mat and clear the fault. Moisture caused by outside influence is a non-warranty issue.
 - b. If no moisture is found, proceed to the next step

3. The passenger restraint warning message can be triggered due to partial or no contact between the CIS ground wire and the seat structure/frame.

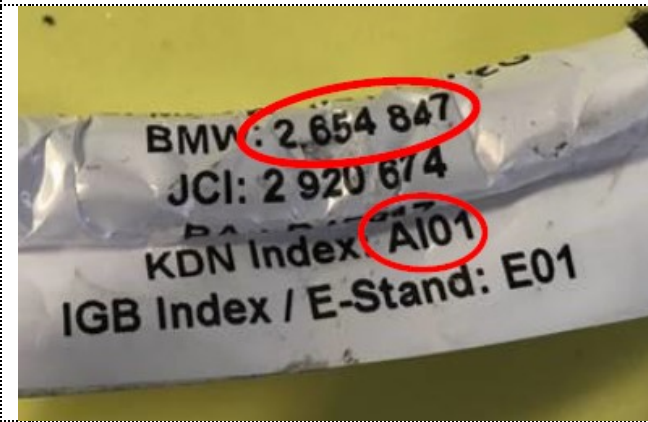
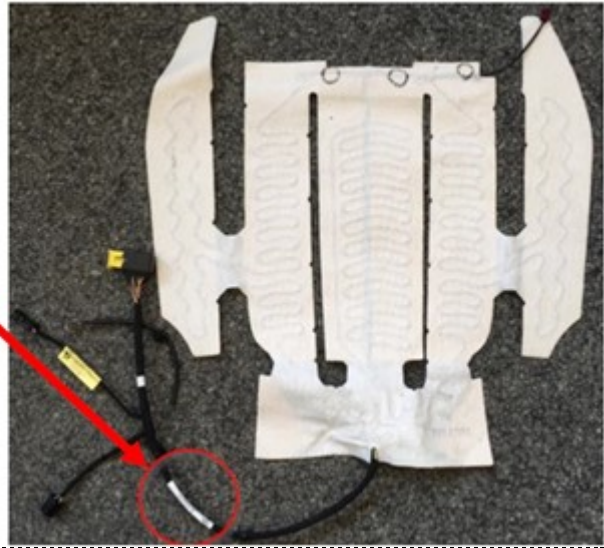


Prior to replacing components, inspect the connection of the CIS ground wire to the structure at the lower right side of the backrest (circled). The eyelet on the ground wire should make solid connection to the structure with no free play. If free play is identified, repair as needed.



Secure ground screw to eliminate free play to the structure.
Torque specification: **4.5 Nm (+/-0.5)**

4. If steps 1 - 3 do not identify the cause of the warnings, access the label on the seat mat harness. Access the bottom seat cushion as per Repair Instructions to check the front and rear seat heating part number including Change Index (loosen seat mounting, open central connector, and fold seat to the back completely).



BMW Part Number 2654847 is shown (circled).

AI Change Index of 01 is shown (circled).

5. Check the seat heating part number and the corresponding Change Index (AI) refer to the table below:

Model	Optional Equipment	Optional Equipment Code	Part Number	Change Index
F90	Sport Seat	No Code	7450449	05
F90	Multifunction Seat	SA 4MA	8068251	05

6. Check the part number and revision index of the currently installed seat heater (seat occupancy) combined mat assembly.

- If the Change Index is already **greater** or **equal** than specified above, then continue diagnosis with ISTA. The seat mat does not need to be replaced.
- If the Change Index is **lower** than specified above, then the CIS seat mat must be replaced and coded/enabled with ISTA
- If the part number is one of the following, then the CIS seat mat must be replaced and coded/enabled with ISTA:
 - 52 10 2 654 846
 - 52 10 2 654 847

- o 52 10 2 654 848
- o 52 10 4 810 481

NOTE: The new CIS mat has improved shielding and does not require the cable straps mentioned in prior versions of this bulletin.

7. Check the validity of the repair by:

- Ensuring no faults or check control messages are displayed
- Confirming operation of the seat occupancy function with an adult in the seat

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 or AIR	Heater element, Comfort seat perforated (CIS)	1 if needed

PARTS OVERVIEW.

Note: Replacing the CIS electronics or the ACSM module will not correct this issue.

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CLAIM INFORMATION

Covered, for defects in materials or workmanship (non-moisture related issues), under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

Defect Code:	5210900100	F90 Seat occupancy mat, front seat (fault message)
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Refer to AIR for the corresponding flat rate unit (FRU) allowances.

Labor Operation	Description	Labor Allowance
00 00 006	Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work)	Refer to AIR
Or:		
00 00 556	Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work)	Refer to AIR
And:		
61 21 528	Support voltage of the vehicle electrical system / recharge vehicle electrical system battery	Refer to AIR

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006, or exclude (including 61 21 528) when the Vehicle Test is included in another repair.

And, as necessary:

Labor Operation	Description	Labor Allowance
61 00 006*	Performing vehicle diagnosis – test module (Including inspecting the CIS ground wire connection and tightening if necessary)	Work time (WT)
Or		
00 58 500*	Diagnosis Worktime Flat Rate (See below) (Including inspecting the CIS ground wire connection and tightening if necessary)	2 FRU

And, when applicable:

Labor Operation	Description	Labor Allowance
52 17 904	Replacing seat cover for front passenger seat (To access the seat heater element/CIS mat)	Refer to AIR
Or:		
52 17 935	Replacing seat cover for front passenger seat (front passenger seat removed) (To access the seat heater element/CIS mat)	Refer to AIR
And, as necessary:		
52 14 982	Additional work, heating element, seat	Refer to AIR
52 14 980	Additional work heating element thigh support	Refer to AIR

And, with replacing the seat heater element/CIS mat

Labor Operation	Description	Labor Allowance
61 00 730	Programming/encoding control unit(s) (See below)	Refer to AIR

During the workshop visit for this repair procedure, the vehicle may also show one or more programming and encoding Technical Campaign repairs open, the programming and encoding procedure may only be invoiced one time.

If you have this situation, program, and encode the vehicle by performing and submitting for one of these open Technical Campaigns instead (which includes labor operations 00 00 006/556, 61 21 528, and 61 00 730).

Please be sure to perform any additional before and/or after work (including attaching labels) that is required by the open campaigns on the vehicle. Close any remaining open programming and encoding Campaign repairs as outlined in the corresponding Service Information Bulletin.

Programming and Encoding the Vehicle Control Units (RO and Claim Comments Required)

This procedure automatically reprograms and encodes any vehicle control modules that do not have the latest software I-level.

If one or more control modules fail during the reprogramming procedure, claim the required consequential repair work procedures to address this issue (including performing the IRAP Control Unit Recovery first as

required, refer to the SIB in AIR) under the Defect Code in this bulletin with the labor operations in AIR that apply.

Please explain the additional work procedures that were performed (The why and the what) on the repair order and in the claim comments.

For covered repairs that address control module failures that occurred prior to performing this reprogramming procedure, claim this work with the Defect Code and labor operations (including the diagnosis that applies) in AIR that apply.

Other Repairs (Including CIS ground wire tightening as a Stand-alone Repair)

If other eligible and covered work is performed because of performing the ISTA diagnostics, the related test plans and/or diagnosis, claim this work with the applicable defect code and the labor operations that are listed in AIR (including diagnosis).

*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

