



SIB 65 01 22

2023-08-16

## KNEE AIR BAG CCM G01 VARIANT WIRE HARNESS REPAIR

This Service Information Bulletin (Revision 5) replaces SI B65 01 22 **dated November 2022**.

**What's New:**

- SIB title changed
- Cause, Correction, and Claim Information sections updated, under-dash panel removal labor ops added, the knee air bags do not need to be removed for this repair.

**MODEL**

E-Series	Model Year	Model Description	Production Dates	Affected Option Code
F97	2020 to 2021	X3 M Sports Activity Vehicle (SAV)	March 11, 2019, to July 28, 2021	All US vehicles are equipped with Knee Air Bags as standard equipment
F98	2020 to 2021	X4 M Sports Activity Coupe (SAC)	March 11, 2018, to July 28, 2021	
G01	2019 to 2021	X3 sDrive30i (SAV)	March 11, 2018, to July 28, 2021	
G01	2018 to 2021	X3 xDrive30i (SAV)	July 14, 2017, to July 28, 2021	
G01	2020 to 2021	X3 xDrive30e (SAV)	December 17, 2019, to July 26, 2021	
G01	2018 to 2021	X3 M40i (SAV)	July 12, 2017, to July 28, 2021	
G02	2019 to 2021	X4 xDrive30i (SAC)	March 13, 2018, to July 28, 2021	
G02	2019 to 2021	X4 M40i (SAC)	March 13, 2018, to July 26, 2021	

**SITUATION**

A check control message (CCM) for the restraint system (Air bag) appears. In the instrument cluster, the red air bag warning light lights up permanently.

One of the following fault codes is stored in the ACSM (air bag control unit):

- 930949** - Knee airbag, driver: short circuit to negative terminal  
**93094F** - Knee airbag, front passenger: short circuit to negative terminal  
**93094C** - Knee airbag driver's side: Resistance too great  
**930952** - Knee airbag, front passenger: Resistance too great

**CAUSE**

Over time, the wiring harness going to the knee air bag(s) can rub against the metal support tubes for the instrument panel, chafing and damaging the wiring.

**CORRECTION**

Remove the center console to access the ACSM control module.

Remove the under-dash trim panels on both the driver's and passenger's sides.

This gives sufficient access to perform this repair.

**The dashboard cover does not need to be removed.**

**The knee air bags do not need to be removed.**

The knee air bag harnesses end connectors are cut off and the wiring taped back to the harness.

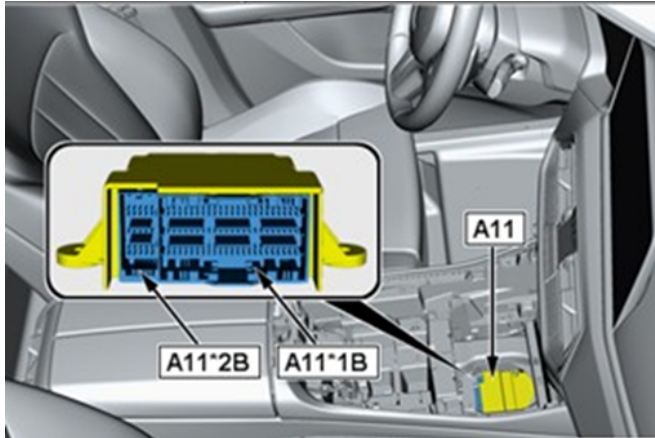
Run the new air bag repair wiring harnesses from the ACSM control module to both knee air bags.

The replacement harnesses do not need to follow the same exact routing path as the original.

***Both replacement harnesses are to be installed, even if there is only a fault showing for one side.***

## **PROCEDURE**

1- Perform a vehicle test with ISTA.



2- Remove the **center console** as per **Repair Instructions 51 16 165** to access the Air Bag Control Module **A11 (ACSM)** wiring connector (**A11\*2B**).

Check the ACSM module for signs of corrosion within the electrical connectors.

3-Follow **Repair Instructions 51 45 184** to remove the under-dash trim panel on the driver's side.

- Unplug the connector (**B8\*1B**) on the knee air bag on the driver's side.
- Cut the knee air bag wiring harness near the connector and tie back the cut wiring with a cable strap

4- Follow **Repair Instructions 51 45 195** to remove the under-dash trim panel on the passenger side.

- Unplug the connector (**B77\*1B**) on the knee air bag on the passenger's side.
- Cut the knee air bag wiring harness near the connector and tie back the cut wiring with a cable strap
- **The repair wiring will be run together with the additional harness protection addressed in the next steps**

5- Apply felt tape to the locations pictured.



6- The knee air bag wiring should be protected from chafing at the dash support bracket.  
Glue the felt generously onto the support tube or to the corresponding edge.  
(Felt tape part number **54 34 7 248 700**).  
Important: The felt must be glued around the edge!



7- The replacement harness does not need to follow the same exact path as the original.

Install felt tape in any other potential chafe location.

8- Unplug the wiring connector from the ACSM (**A11\*2B**).

Reference **Wiring Diagram 'Airbag firing circuits' SP0000061332** and **confirm the wire color and pin number BEFORE cutting these 4 wires at the ACSM connector.**

9- Cut the 4 wires for the knee air bag wiring harnesses near the ACSM connector and tie back the 4 cut wires with a cable strap.

- ACSM Pin 25 (**A11\*2B**) goes to pin 1 of driver knee air bag (**B8\*1B**).
- ACSM Pin 20 (**A11\*2B**) goes to pin 2 of driver knee air bag (**B8\*1B**).
- ACSM Pin 5 (**A11\*2B**) goes to pin 1 of passenger knee air bag (**B77\*1B**).
- ACSM Pin 10 (**A11\*2B**) goes to pin 2 of passenger knee air bag (**B77\*1B**).

Then pin 2 repair cables into the airbag control unit connector (**A11\*2B**).

Wrap the knee wiring harnesses with an abrasion-resistant fabric tape (part number **61 13 6 925 452**).

Route one repair harness to the knee airbag on the driver's side and the other to the knee air bag on the passenger's side. The replacement harness does not need to follow the same exact path as the original.

## **PARTS INFORMATION**

To determine the part number that applies to the specific vehicle being repaired, enter the VIN/chassis number into either ETK or AIR, this will consider the specific equipment and/or options that are fitted to the vehicle.

Part Number	Description	Quantity
61 12 5 A56 386	Repair wiring for airbag system (Knee air bag)	2
54 34 7 248 700	Felt strip, self-adhesive (130 x 40 x 3 mm)	Up to 4/cut to size

### **Bulk Material - Sublet**

Part Number	Description	Quantity
61 13 6 925 452	Fabric adhesive tape abrasion resistant (25 mm x 25 m, DN price = 1 meter)	Up to \$5.00

## CLAIM INFORMATION

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

<b>Defect Code:</b>	<b>6112900300</b>	<b>G0x F9x Check Control message, restraint system (wiring harness, knee airbag)</b>
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Obtain the flat rate unit (FRU) allowances for the following that applies.

Labor Operation	Description	Labor Allowance
00 00 006	Carrying out vehicle test (Main work)	As applicable
Or:		
00 00 556	Carrying out vehicle test (Plus work)	As applicable
And:		
61 21 528	Supporting voltage of the vehicle electrical system / recharging vehicle battery	As applicable

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*	Carrying out vehicle diagnosis, ABL (Work time)	WT
Or		
00 58 500*	Diagnosis Worktime Flat Rate (See below)	2 FRU
And:		
51 16 665	Completely removing and installing center console	As applicable
And:		
51 45 684	Removing and installing trim panel for pedal assembly	As applicable
And:		
51 45 695	Removing and installing instrument trim panel trim at bottom right	As applicable
And:		
00 72 587	Install repair cable of left or right knee airbag <b>for one side</b> (Associated work, after vehicle diagnosis) (center console removed)	4 FRU
And again:		
00 72 587	Install repair cable of left or right knee airbag <b>for the other side</b> (Associated work, after vehicle diagnosis) (center console removed)	4 FRU

Work time labor operation codes 61 00 006 and 00 58 500 are not considered Main labor operations.

### BMW Group's AIR Application Resource for Flat Rate Labor Operation Codes

To obtain the corresponding flat rate unit (FRU) allowance information from the BMW Group' AIR application resource, start by entering the Chassis Number, which consists of the VIN's last seven (7) characters or use the full VIN. Click on the "Search" button, and then enter the applicable flat rate labor operation in the FR code field.

\*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

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And, as needed:

Sublet – Bulk Material (RO and Claim Comments Required)

Sublet Code 4	Up to \$5.00	Reimbursement for the repair-related bulk material (Fabric adhesive tape, do not use the BMW part number for claim submission)
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Sublet reimbursement calculation for claiming the applicable repair-related bulk material (BMW part number for Fabric adhesive tape) is at the dealer net price amount for the quantity 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.

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

Supporting Materials  
[picture\\_as\\_pdf B65 01 22\\_REV03.pdf](#)



# Service Information Bulletin

Audio, Navigation, Information, Safety Systems

June 9, 2022

B65 01 22

## KNEE AIR BAG CHECK CONTROL MESSAGE G01 VARIANTS

This Service Information Bulletin (Revision 3) replaces SI B65 01 22 **dated April 2022**.

**What's New** (Specific text highlighted):

- Correction / Procedure: This repair has been modified to reduce the amount of interior disassembly.

### MODEL

E-Series	Model Description	Production Date	Affected Option Code
G01	X3 Sports Activity Vehicle (SAV)	From Start of Production	All US vehicles are equipped with Knee Air Bags as standard equipment
G02	X4 Sports Activity Coupe (SAC)		
F97	X3 M SAV		
F98	X4 M SAC		

### SITUATION

A check control message for the restraint system appears. In the instrument cluster, the red air bag warning light lights up permanently.

One of the following fault codes is stored in the ACSM (air bag control unit):

**930949** - Knee airbag, driver: short circuit to negative terminal

**93094F** - Knee airbag, front passenger: short circuit to negative terminal

### CAUSE

The wiring harness going to the knee air bag(s) may be rubbing against the support tube of the instrument panel.

### CORRECTION

Remove the center console to access the ACSM control module.

Remove the knee air bags on **both sides** of the vehicle.

This gives sufficient access to perform this repair.

**The dashboard cover does not need to be removed.**

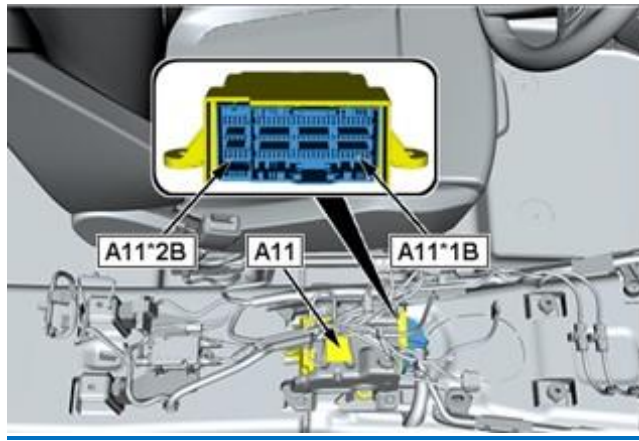
The knee air bag harnesses end connectors are cut off and the wiring taped back to the harness.

Run the new air bag repair wiring harnesses from the ACSM control module to both knee air bags.

The replacement harness does not need to follow the same exact path as the original. **Both harnesses are run regardless of whether there is a fault for one side only.**

### PROCEDURE

1- Perform a vehicle test with ISTA.



2- Remove the **center console** as per **Repair Instructions 51 16 165** to access the Air Bag Control Module **A11 (ACSM)** wiring connector (**A11\*2B**).

Check the ACSM module for signs of corrosion within the electrical connectors.

3- Follow **Repair Instructions 72 12 004** to remove the **driver's knee air bag**.

- Unplug the connector (**B8\*1B**) on the knee air bag on the driver's side
- Cut the knee air bag wiring harness near the connector and tie back the cut wiring with a cable strap

4- Follow **Repair Instructions 72 12 006** to remove the **passenger's knee air bag**.

- Unplug the connector (**B77\*1B**) on the knee air bag on the passenger's side
- Cut the knee air bag wiring harness near the connector and tie back the cut wiring with a cable strap
- **The repair wiring will be run together with the additional harness protection addressed in the next steps**



5- Apply felt tape to the locations pictured.



6- The knee air bag wiring should be protected from chafing at the dash support bracket.

Glue the felt generously onto the support tube or to the corresponding edge.

(Felt tape part number **54 34 7 248 700**).

Important: The felt must be glued around the edge!



7- The replacement harness does not need to follow the same exact path as the original.

Install felt tape in any other potential chafe location.

8- Unplug the wiring connector from the ACSM (**A11\*2B**).

Reference **Wiring Diagram 'Airbag firing circuits' SP0000061332** and **confirm the wire color and pin number BEFORE cutting these 4 wires at the ACSM connector.**

9- Cut the 4 wires for the knee air bag wiring harnesses near the ACSM connector and tie back the 4 cut wires with a cable strap.

- ACSM Pin 25 (**A11\*2B**) goes to pin 1 of driver knee air bag (**B8\*1B**).
- ACSM Pin 20 (**A11\*2B**) goes to pin 2 of driver knee air bag (**B8\*1B**).
- ACSM Pin 5 (**A11\*2B**) goes to pin 1 of passenger knee air bag (**B77\*1B**).
- ACSM Pin 10 (**A11\*2B**) goes to pin 2 of passenger knee air bag (**B77\*1B**).

Then pin 2 repair cables into the airbag control unit connector (**A11\*2B**).

Wrap the knee wiring harnesses with an abrasion-resistant fabric tape (part number **61 13 6 925 452**).

Route one repair harness to the knee airbag on the driver's side and the other to the knee air bag on the passenger's side. The replacement harness does not need to follow the same exact path as the original.

## PARTS INFORMATION

When applicable, 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
54 34 7 248 700	Felt strip, self-adhesive (130x40x3 mm)	Sublet as needed
61 13 6 925 452	Fabric adhesive tape abrasion resistant (25 mm)	As needed
61 12 5 A56 386	Knee air bag repair harness	2

## CLAIM INFORMATION

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

Defect Code:	6111147900	Wiring harness, operating area / instrument panel incorrect connection /contact
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Refer to AIR for the corresponding flat rate unit (FRU) allowance.

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	Work time (WT)
Or		

00 58 500*	Diagnosis Worktime Flat Rate (See below)	2 FRU
And:		
72 12 504	Removing and installing/replacing airbag module for driver's knee protection	Refer to AIR
And/or:		
72 12 506	Removing and installing/replacing airbag module for passenger knee protection	Refer to AIR
And:		
51 16 665	Completely removing and installing center console	Refer to AIR
And, as necessary:		
61 99 000	Work time without specification / vehicle electrical system to perform the associated repair measure	WT

Work time labor operation codes 61 00 006, 00 58 500 and 61 99 000 are not considered a Main labor operations.

### **Additional Work/Repair Procedures (RO and Claim Comments Required)**

When additional work procedures and parts are required to repair the issue described in this Service Information bulletin, claim these items together and the corresponding or substitute labor operations listed in AIR (including any additional diagnosis) under the Defect Code listed above.

\*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.

And, as needed:

### **Sublet – Bulk Materials (RO and Claim Comments Required)**

<b>Sublet Code</b> <b>4</b>	See the sublet reimbursement calculations below	Reimbursement for the repair-related bulk materials (Do not use the BMW part numbers for claim submission)
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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.

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

## **FEEDBACK REGARDING THIS BULLETIN**

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Parts Feedback	To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department