



SIB 65 26 24

2024-10-16

KNEE AIR BAG CCM G01 VARIANT WIRE HARNESS REPAIR

MODEL

E-Series	Model Description	Production Dates	Affected Option Code
F97	X3 M Sports Activity Vehicle (SAV)	From July 29, 2021	All US vehicles are equipped with Knee Air Bags as standard equipment
F98	X4 M Sports Activity Coupe (SAC)	From July 29, 2021	
G01	X3 sDrive30i, xDrive30i, M40i (SAV)	From July 29, 2021	
G01	X3 xDrive30e (SAV)	From July 27, 2021	
G02	X4 xDrive30i (SAC)	From July 29, 2021	
G02	X4 M40i (SAC)	From July 27, 2021	

The knee air bag wire harness repair for models produced prior to the production dates above are covered in SI [B65 01 22](#).

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

Create sufficient access at the work area to perform this repair:

- 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

Neither the dashboard cover nor the knee air bags 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.

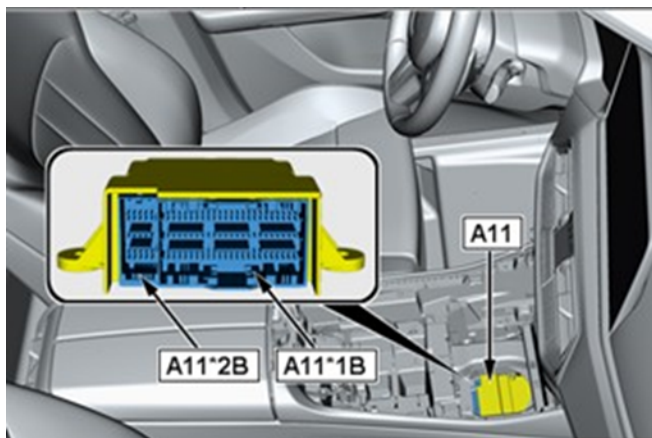
The replacement harnesses do not need to follow the same exact routing path as the original.

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** (Plus code 51 45 684 included in 51 16 665) 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** (Plus code 51 45 695 included in 51 16 665) 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**

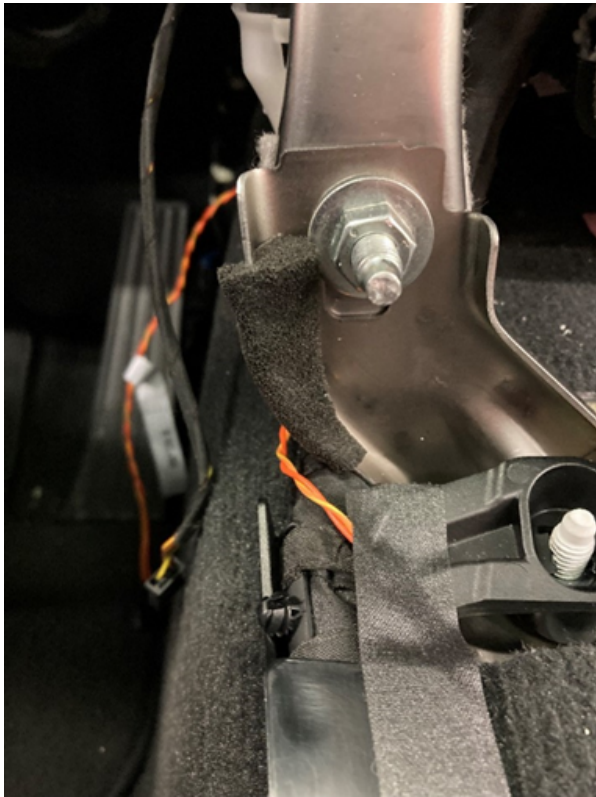
5- Apply felt tape to the locations circled.



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.

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Important: The felt must be glued around the edge of the bracket!



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

Install felt tape at 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**).

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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(s) 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 Supply 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.

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

Diagnosis

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 them (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 FRU
Or		
00 58 500*	Diagnosis Worktime Flat Rate (See below)	2 FRU

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And with the above that applies:

Repair

Labor Operation	Description	Labor Allowance
51 16 665	Completely removing and installing center console (includes Plusposition labor operation codes 51 45 684 and 51 45 695)	As applicable
And:		
00 72 587	Install repair cable of left or right knee airbag for one side (Associated work, after vehicle diagnosis) (center console removed)	4 FRU
And again:		
00 72 587	Install repair cable of left or right knee airbag for the other side (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 (last seven (7) characters of the VIN), and click on the "Search" icon. If the "Vehicle Selection" window displays two or more model possible vehicle choices, select the applicable Model, or enter the full VIN (17 characters) instead to proceed. Click on the "Flat Rate Units" button and enter a flat rate labor operation code number "without spaces" in the field to the right, click on the "Search" icon to display the corresponding listing of "Flat rate unit group details" that are available and their corresponding FRU allowances.

(*) 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 Supply Materials (RO and Claim Comments Required)

Sublet Code 4	Reimbursement for the repair-related bulk material (Fabric adhesive tape, do not use the BMW part number for claim submission)	Up to \$5.00
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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 proportional 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

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