

# Original BMW Accessory. Installation Instructions.



## Advanced DVD system with multimedia changer retrofit BMW 7 Series Saloon (E65 / E66)

<b>Retrofit kit No.</b>	65 12 0 406 359	DVD advanced monitors installation kit
	65 12 0 406 362	DVD advanced MMC installation kit

### Installation time

The installation time for the full system (multimedia changer and two rear monitors) is approx. 5.0 hours. If you only install one rear monitor and the multimedia changer, the installation time will be approx. 4.0 hours. The installation time may vary depending on condition of the car and the equipment in it.

### Important information

These installation instructions are primarily designed for use within the BMW dealership organisation and by authorised BMW service companies.

In any event the target group for these installation instructions is specialist personnel trained on BMW cars with the appropriate specialist knowledge.

All work must be completed using the latest BMW repair manuals, circuit diagrams, servicing manuals and work instructions in a rational order using the prescribed tools (special tools) and observing current health and safety regulations.

**To avoid unnecessary extra work and/or costs, if any installation or function problems occur, after a brief troubleshooting session (approx. 0.5 hours), contact the following:**

- 1. Either your national sales company or your regional office or**
- 2. The Support team via the Aftersales Assistance Portal (ASAP) using the optional technical parts support application.**

**Quote the VIN and the part number of the retrofit kit and provide a detailed description of the problem.**

Do not archive the hard copy of these installation instructions since daily updates are made by ASAP.

See ASAP for details of the pictograms.

All the figures show LHD cars, proceed in exactly the same way on RHD cars.

Pictograms



Denotes instructions that draw your attention to special features.

◀ Denotes the end of the instruction or other text.

Subject to technical modifications.

### **Installation information**

The Auxiliary jack **G1** must always be installed on the left-hand side of the monitor trim **AT**.

Ensure that the cables/lines are not kinked or damaged as you install them in the car. The costs incurred as a result of this will not be reimbursed by BMW AG.

Additional cables/lines that you install must be secured with cable ties.

If the specified PIN chambers are already used, bridges, double crimps or twin-lead terminals must be used.

Deburr holes and treat them with anti-corrosive coatings as set out in BMW directives to protect them from corrosion.

### **Ordering instructions**

The monitor trims **AC/AT** are not supplied in the retrofit kit and must be ordered separated in the interior trim colours of the car or in a primed finish (see EPC for part numbers and further details).

The multimedia changer **L** is not included in the retrofit kit and must be ordered separately for the appropriate region code (see EPC for part number and further details).

The monitor **AA** is not included in the retrofit kit and must be ordered separately (see EPC for part number and further details).

### **List of special equipment**

**SA 456** Comfort seat, front

**SA 601** TV function

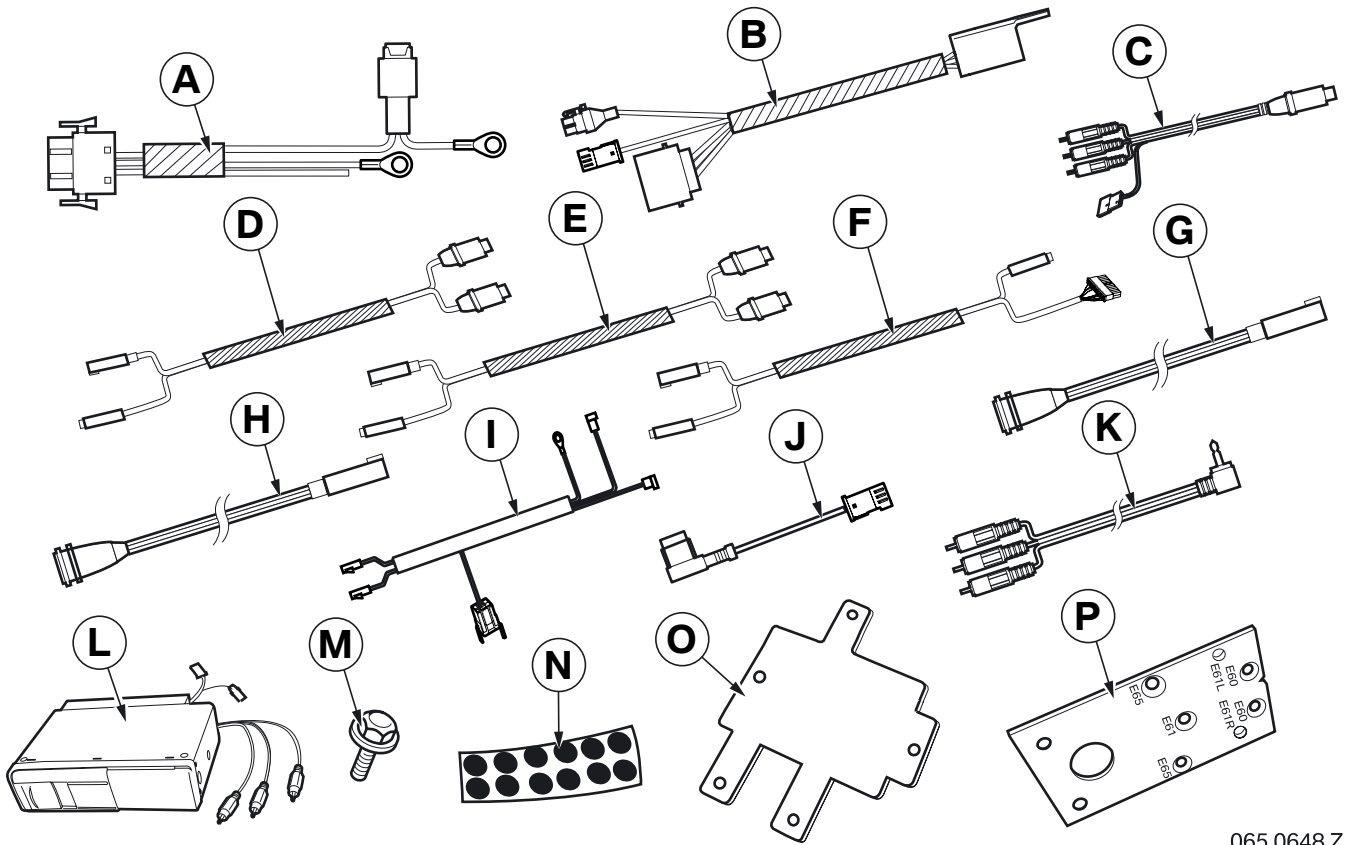
### **Special tools required**

00 9 317, Installation wedge

## Contents

Section	Page
1. Parts list .....	4
2. Preparations.....	7
3. Connection diagram.....	8
4. Installation and cabling diagram .....	12
5. To install the fan and module holder .....	13
6. To install the connection cable and multimedia changer .....	15
7. To install the fan cable (cars without an additional fan in the boot only) .....	20
8. To install the monitor .....	21
9. To connect the seat .....	27
10. Concluding work and coding .....	28
11. Fan wiring harness circuit diagram .....	30

## 1. Parts list

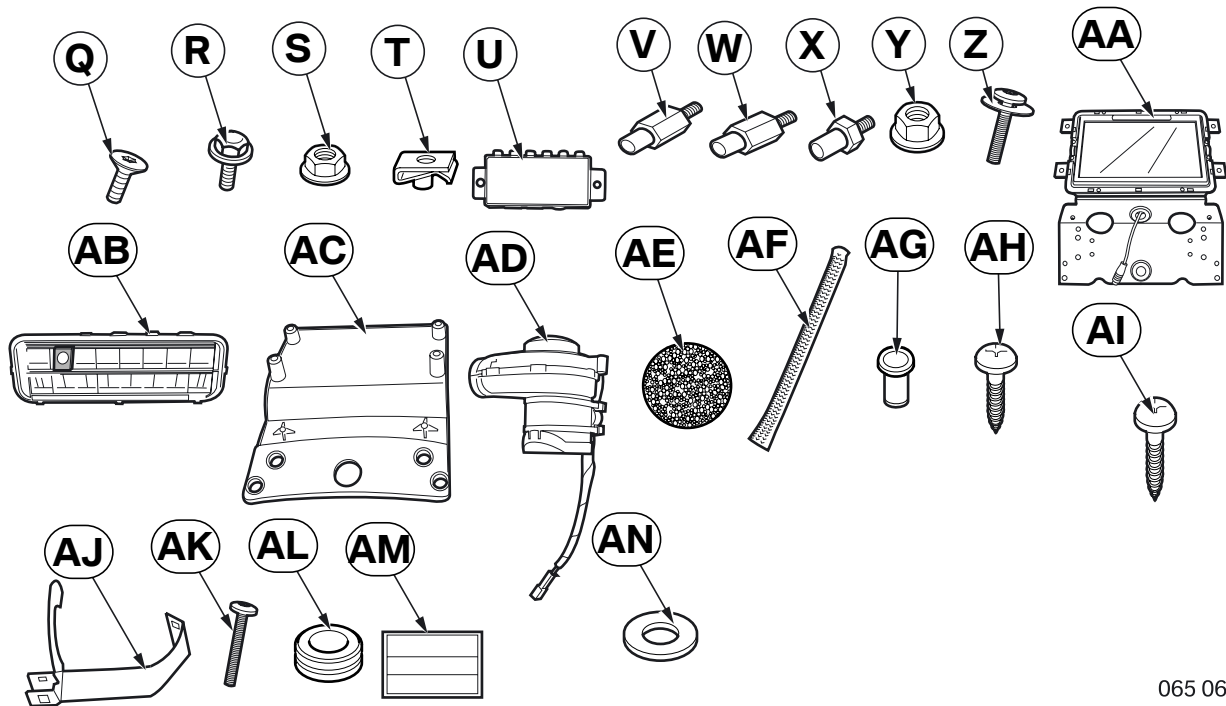


065 0648 Z

### Legend

- A Connection cable
- B Voltage supply
- C Multimedia changer AV adapter
- D Connection wiring harness (left seat, length 5200 mm)
- E Connection wiring harness (right seat, length 6700 mm)
- F Seat wiring harness (2x)
- G Auxiliary cable (jack diameter 2.5 mm, 2x)
- H Headphone cable (jack diameter 3.5 mm, 2x)
- I Fan wiring harness
- J Multimedia changer power supply cable
- K Auxiliary adapter (2x)
- L Multimedia changer (not supplied with the retrofit kit)
- M Hexagonal screw M5 x 14 mm (not required)
- N Adhesive patches (supplied with the multimedia changer kit)
- O Mounting plate
- P Spacer plate (2x)

## 1. Parts list

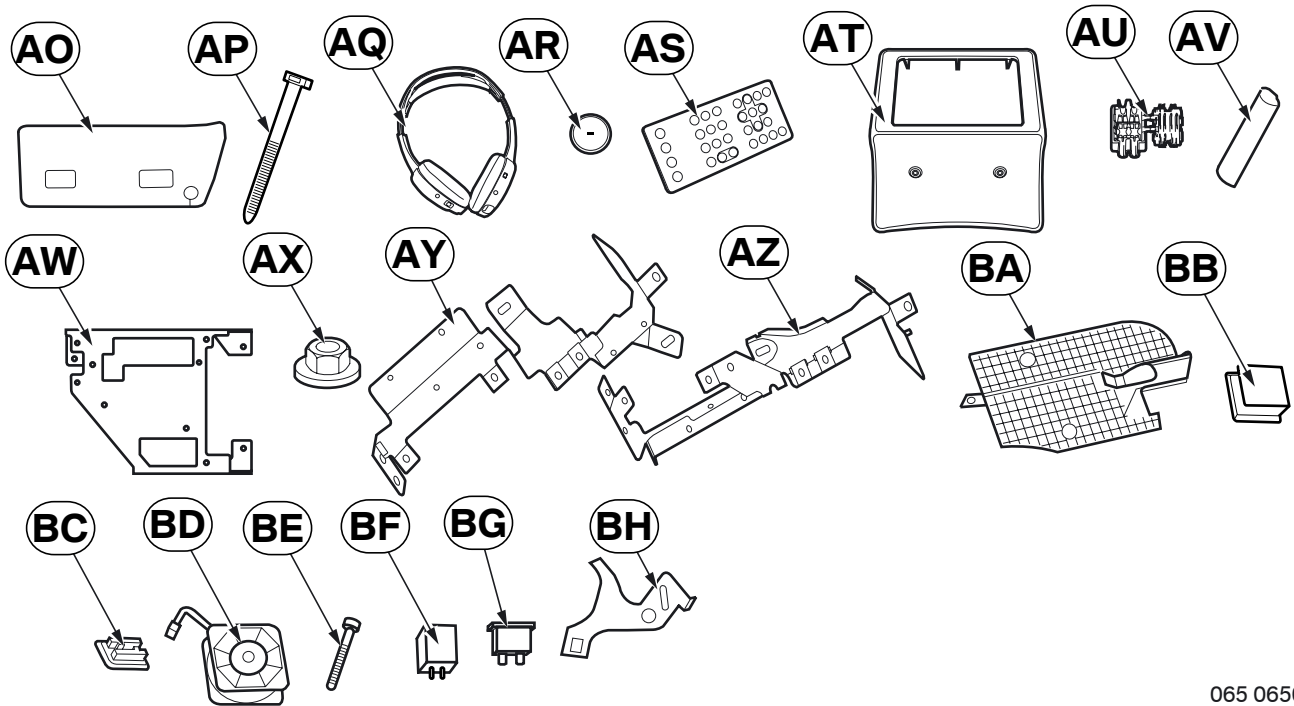


065 0649 Z

### Legend

- Q Countersunk screw M5 x 12 mm (5x)
- R Hexagonal screw M5 x 12 mm (15x)
- S Hexagonal lock nut M5 (5x)
- T Speed nut M5 (9x)
- U AV switcher
- V Top spacer bolt 42 mm (4x)
- W Top spacer bolt 39 mm (4x)
- X Bottom spacer bolt 33 mm (4x)
- Y Hexagonal nut with washer M6 (2x)
- Z Torx bolt M5 x 14 mm (8x)
- AA Monitor (not supplied with the retrofit kit)
- AB Rear vent
- AC Rear monitor trim (not supplied with the retrofit kit)
- AD Radial fan
- AE Filter
- AF Fabric hose (4x)
- AG Rivet nut M6 (8x)
- AH Self-tapping screw 5 x 12 mm (4x)
- AI Self-tapping screw 5 x 16 mm (not supplied with the retrofit kit)
- AJ Holder
- AK Fillister head screw M4 x 20 mm (2x)
- AL Grommet (4x)
- AM Information sticker
- AN Washer A6 (20x)

## 1. Parts list



065 0650 Z

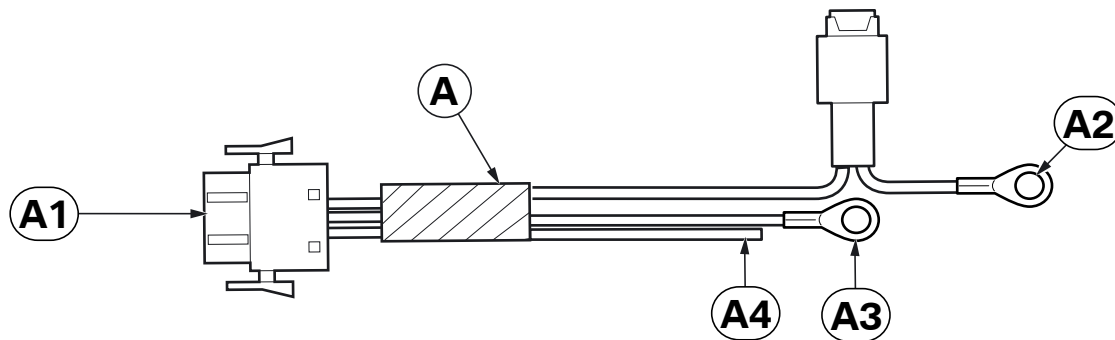
### Legend

- AO Insulation
- AP Cable tie 3 x 200 mm (35x)
- AQ Headphones (2x)
- AR Button cell (2x)
- AS Remote control (2x)
- AT Front monitor trim (not supplied with the retrofit kit)
- AU Miniature connector
- AV Batteries (4x)
- AW Headphone module holder
- AX Hexagonal nut with washer M5 (3x)
- AY Front module holder
- AZ Rear module holder
- BA Cover
- BB Plug holder (white)
- BC Plug holder
- BD Axial fan
- BE Allen bolt M4 x 30 mm (2x)
- BF Relay
- BG Fusible link 5 A
- BH Holder

## 2. Preparations

	TIS No.
Conduct a brief test	---
Disconnect negative pole of battery	12 00 ...
<b>The following components must be removed first of all</b>	
Sear, right and left	52 14 000
Rear panel on front seat backrest, right and/or left	52 14 198
Front right door sill strip	51 47 000
B pillar cover at bottom right and left	51 43 150
Door sill strip, rear right and left	51 47 030
Rear seat bench	52 24 005
Rear seat backrest, left, in cars with a split rear seat	52 24 015
Rear boot floor trim	51 47 101
Boot wheel arch trim on both sides	51 47 161
Left rear vent	---
Release the rear fuse holder	---

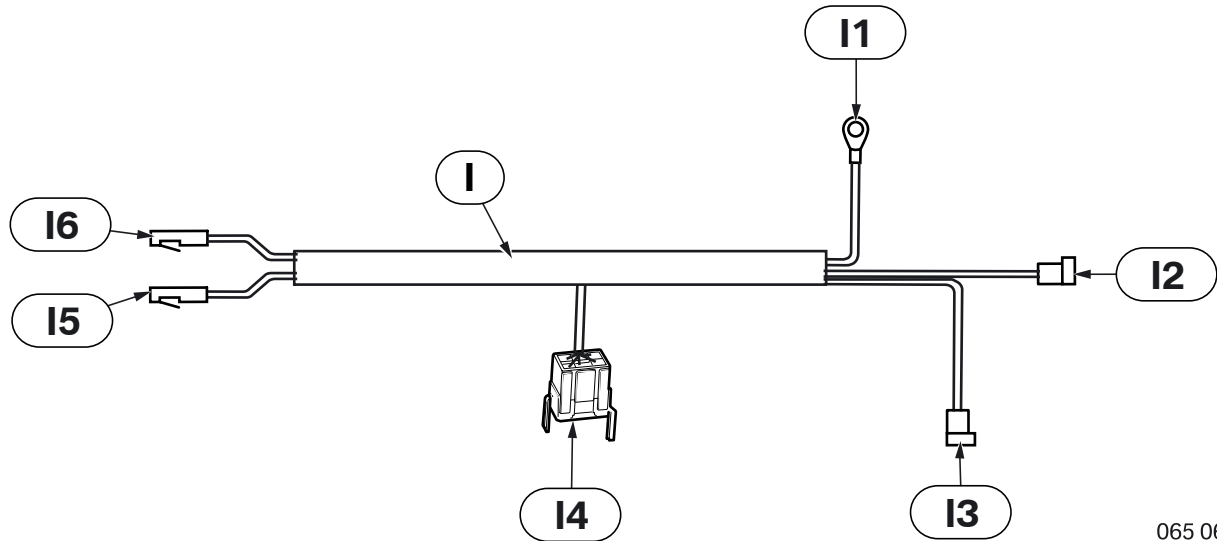
### 3. Connection diagram



060 0732 Z

Branch /Item	Designation	Signal	Cable colour / Cross-section	Connection/Installation site in car	Abbreviation / Slot
A	Connection cable	---	---	---	---
A1	4-pin plug WS	Pin 1 Terminal 31 Pin 2 Terminal VA Pin 3 Terminal 30	BR 0.75 mm <sup>2</sup> VI/WS 0.75 mm <sup>2</sup> RT 0.75 mm <sup>2</sup>	To branch <b>B1</b>	---
A2	Cable eyelet A8	Terminal 30	RT 0.75 mm <sup>2</sup>	To car battery	---
A3	Cable eyelet A6	Terminal 31	BR 0.75 mm <sup>2</sup>	To the earth post in the boot on the left	X13094
A4	Open cable	Terminal VA	VI/WS 0.75 mm <sup>2</sup>	With miniature connector <b>AU</b> to standard cable, terminal VA, RT/GE cable, on rear fuse holder.	X1856 Pin 17

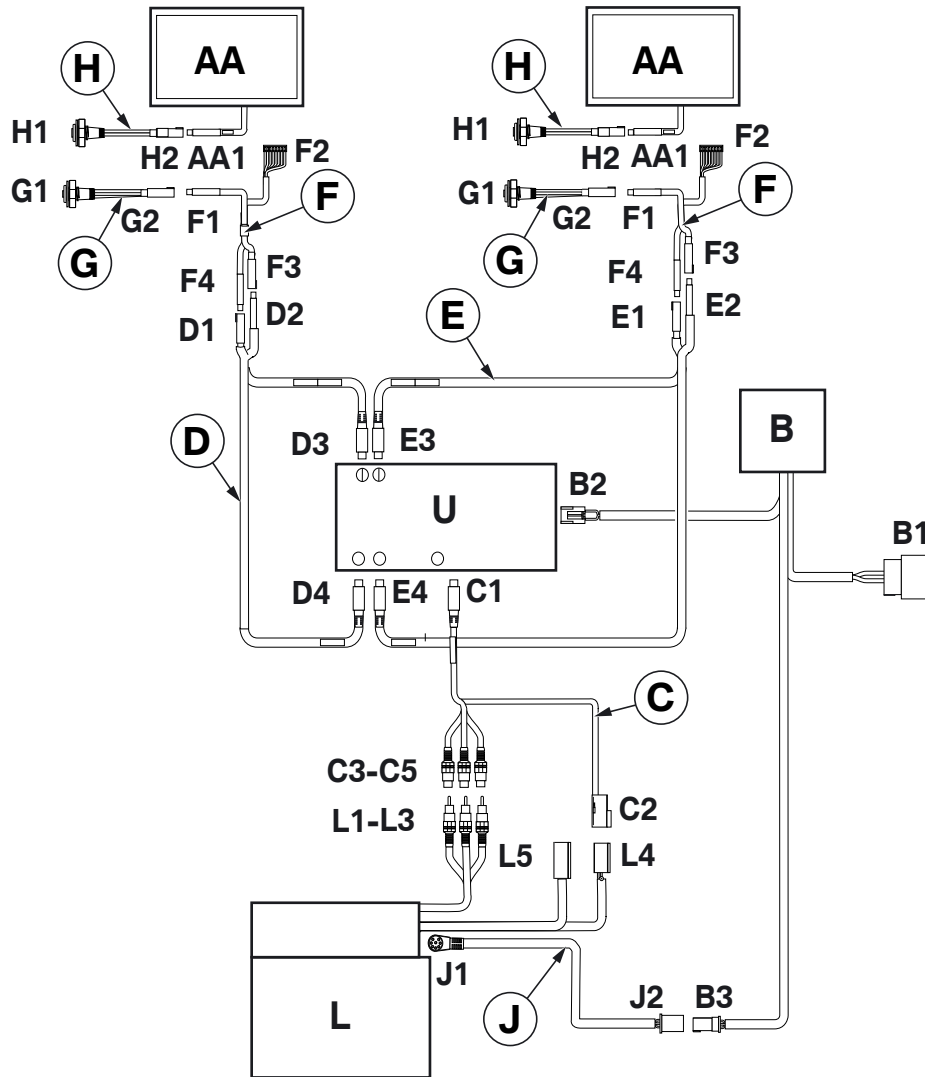
### 3. Connection diagram



065 0656 Z

Item	Designation	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
I	Fan cable	---	---	For cars without an additional fan in the boot only	---
I1	Cable eyelet A6	Terminal 31	BR/SW 0.75 mm <sup>2</sup>	To joint connector terminal 31 under the left tail light	X13094
I2	3-pin SW socket casing			To axial fan <b>BD</b>	X2915
I3	4-pin SW socket casing			To radial fan <b>AD</b>	X14322
I4	Relay socket	---	---	---	---
I5	Socket contact	Terminal 30	RT/BL 0.5 mm <sup>2</sup>	To the rear fuse holder, 5-pin SW socket casing	X4844 PIN 1
I6	Socket contact	Terminal R	GE/RT 0.5 mm <sup>2</sup>	To power module, SW 32-pin plug	X1856 PIN 18

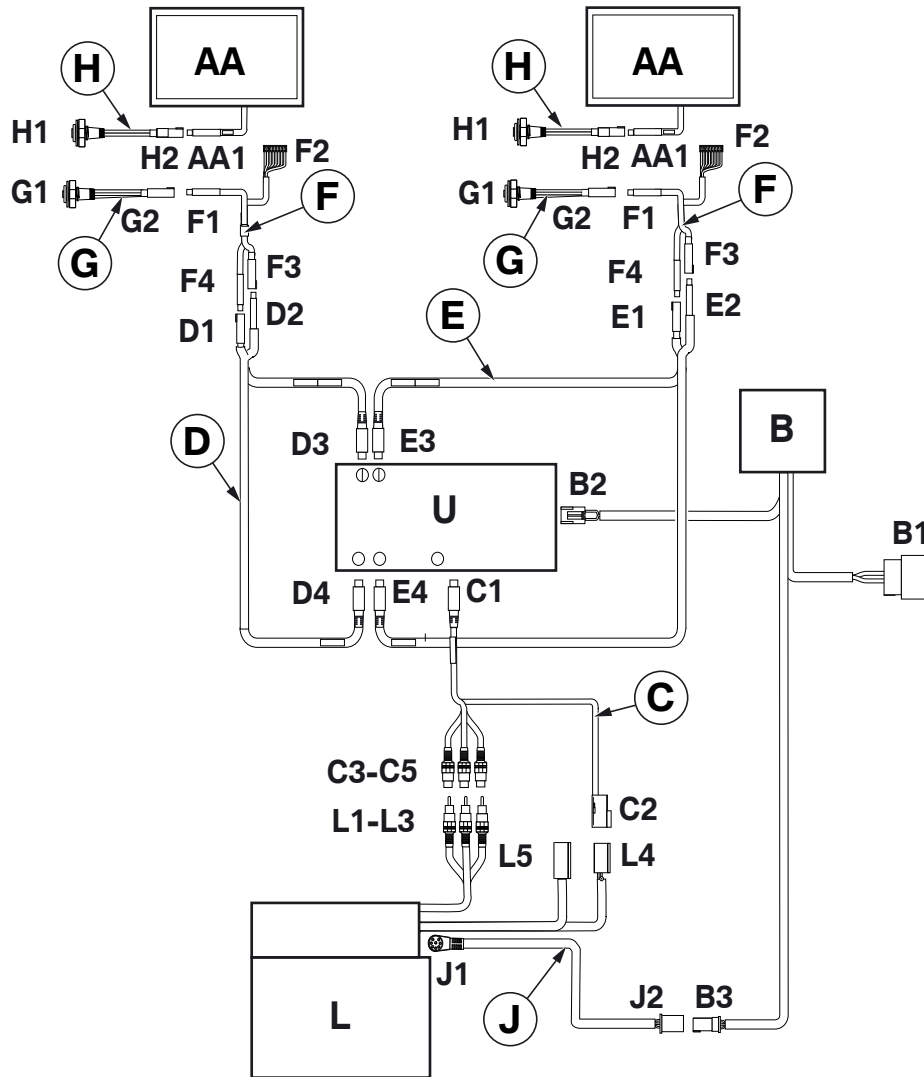
### 3. Connection diagram



061 0235 Z

<b>B</b>	Voltage supply	<b>D</b>	Connection wiring harness (left seat)
<b>B1</b>	WS 4-pin plug	<b>D1</b>	8-pin round plug, SW
<b>B2</b>	WS 4-pin plug	<b>D2</b>	8-pin round plug, SW
<b>B3</b>	WS 3-pin plug	<b>D3</b>	8-pin round plug GE/BL
<b>C</b>	Multimedia changer AV adapter	<b>D4</b>	8-pin round plug, BL
<b>C1</b>	8-pin round plug, GN	<b>E</b>	Connection wiring harness (right seat)
<b>C2</b>	Black 4-pin plug	<b>E1</b>	8-pin round plug, SW
<b>C3</b>	Cinch socket GE	<b>E2</b>	8-pin round plug, SW
<b>C4</b>	Cinch socket RT	<b>E3</b>	8-pin round plug RT/GE
<b>C5</b>	Cinch socket WS	<b>E4</b>	8-pin round plug RT

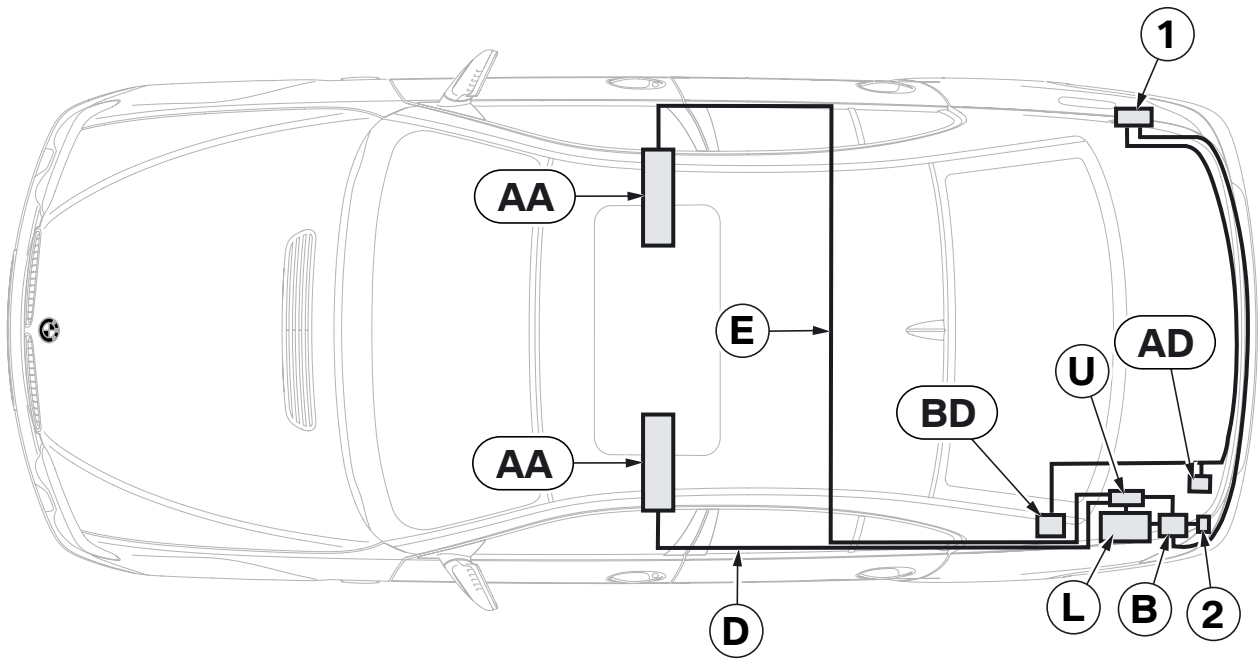
### 3. Connection diagram



061 0235 Z

<b>F</b>	Seat wiring harness	<b>L</b>	Multimedia changer
<b>F1</b>	8-pin round plug, SW	<b>L1</b>	Cinch plug, WS
<b>F2</b>	WS 10-pin plug	<b>L2</b>	Cinch plug, RT
<b>F3</b>	8-pin round plug, SW	<b>L3</b>	Cinch plug, GE
<b>F4</b>	8-pin round plug, SW	<b>L4</b>	Black 4-pin plug
<b>G</b>	Auxiliary cable	<b>L5</b>	Black 4-pin plug
<b>G1</b>	Auxiliary jack (2.5 mm)	<b>U</b>	AV switcher
<b>G2</b>	8-pin round plug, SW	<b>AA</b>	Monitor
<b>H</b>	Headphone cable	<b>AA1</b>	8-pin round plug RT
<b>H1</b>	Headphone jack (3.5 mm)		
<b>H2</b>	8-pin round plug RT		
<b>J</b>	Multimedia changer power supply cable		
<b>J1</b>	8-pin round plug, SW		
<b>J2</b>	WS 3-pin plug		

## 4. Installation and cabling diagram

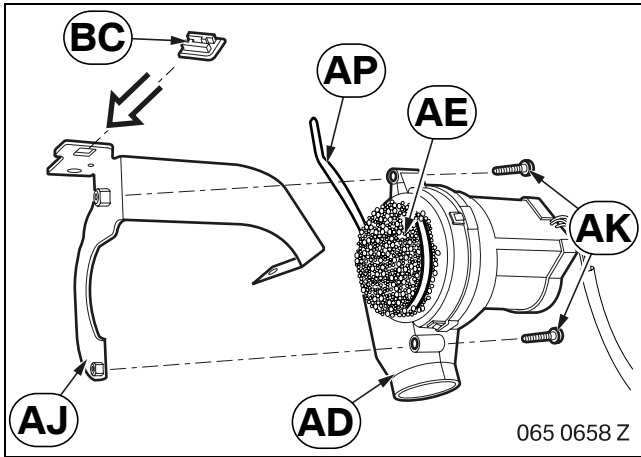


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### Legend

B	Voltage supply
D	Connection wiring harness (left seat, length 5200 mm)
E	Connection wiring harness (right seat, length 6700 mm)
L	Multimedia changer
U	AV switcher
AA	Monitor
AD	Radial fan
BD	Axial fan
1	Power distributor <b>A50</b>
2	Earth post <b>X13094</b>

## 5. To install the fan and module holder

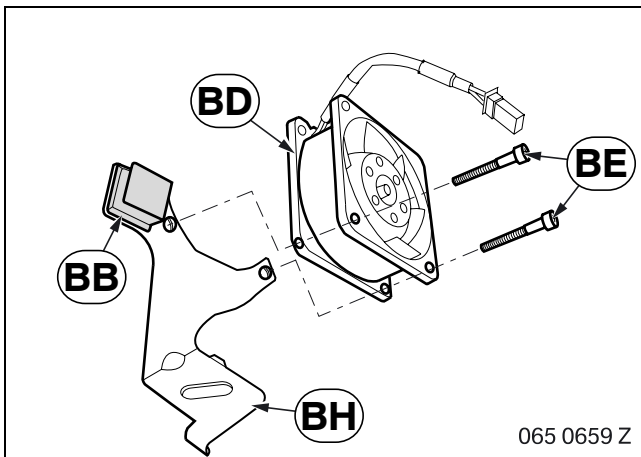


**For cars without an additional fan in the boot only**

Use cable tie **AP** to secure filter **AE** on radial fan **AD**.

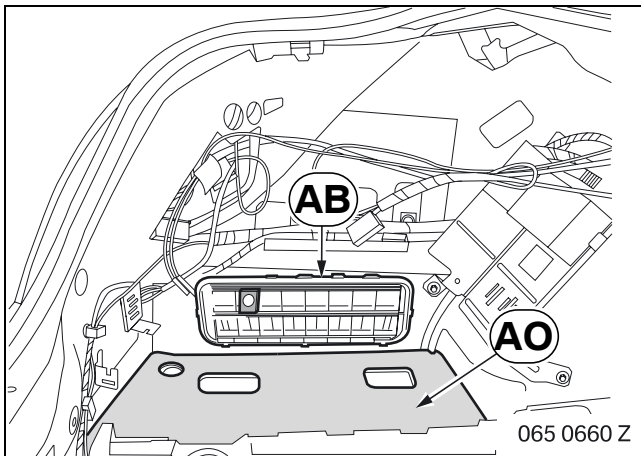
Secure radial fan **AD** to holder **AJ** using Philips screws **AK**.

Connect plug holder **BC** to holder **AJ**.



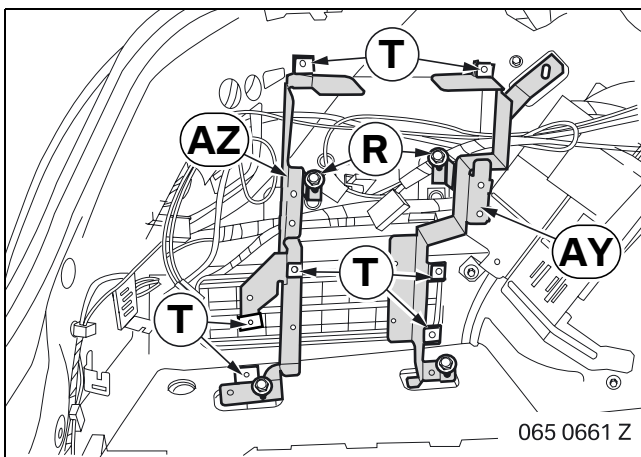
Use Allen bolts **BE** to secure axial fan **BD** to holder **BH**.

Connect plug holder (white) **BB** to holder **BH**.



Insert rear vent **AB** into the side panel.

Affix insulation **AO** to the boot floor.

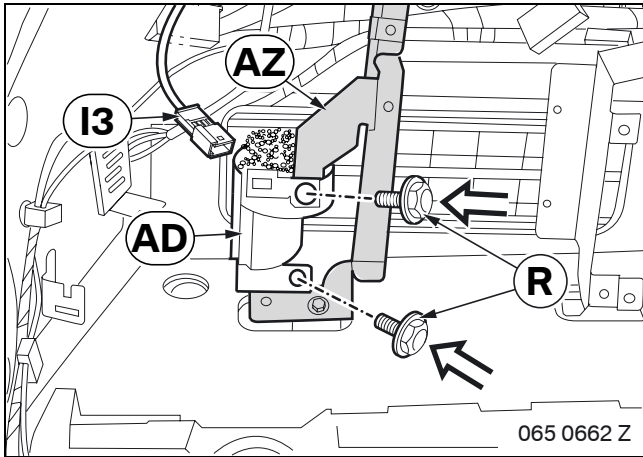


**Cars without module holder only**

Secure rear module holder **AZ** and front module holder **AY** using hexagonal screws **R**.

Fit speed nuts **T** to rear module holder **AZ** and front module holder **AY**.

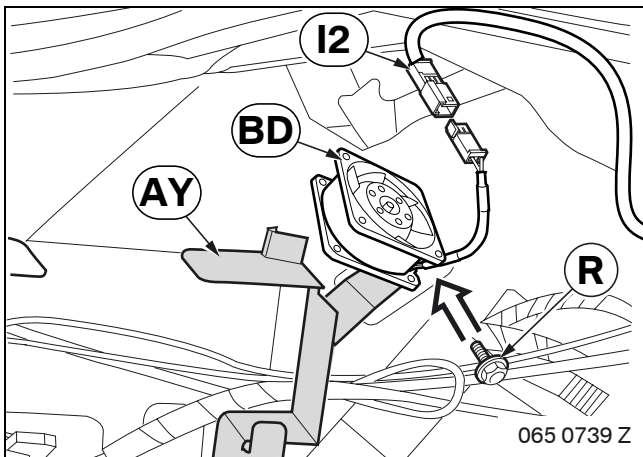
5. To install the fan and module holder



**For cars without an additional fan in the boot only**

Use hexagonal screws **R** to secure radial fan **AD** to rear module holder **AZ**.

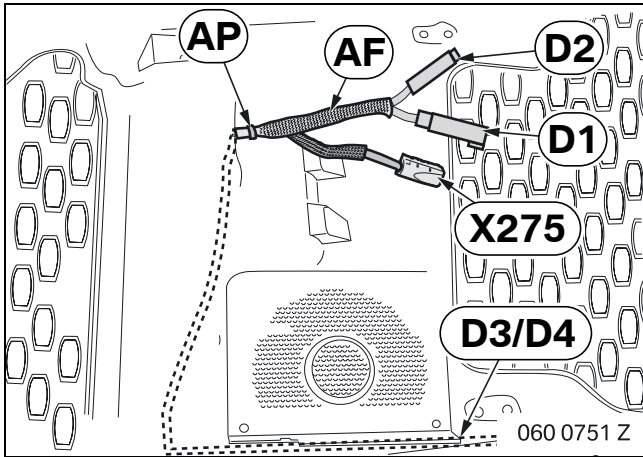
Connect branch **I3** to radial fan **AD**.



Use hexagonal screws **R** to secure axial fan **BD** to front module holder **AY**.

Connect branch **I2** to radial fan **BD**.

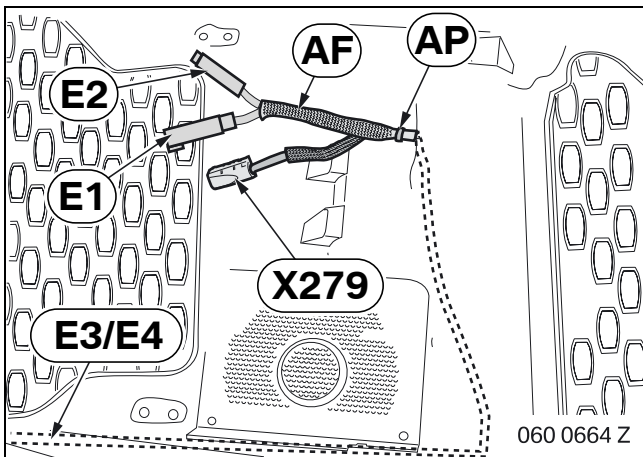
## 6. To install the connection cable and multimedia changer



Push the fabric hose **AF** over branches **D1** and **D2**.

Route branches **D1** and **D2** parallel to plug **X275** and secure them with a cable tie **AP**.

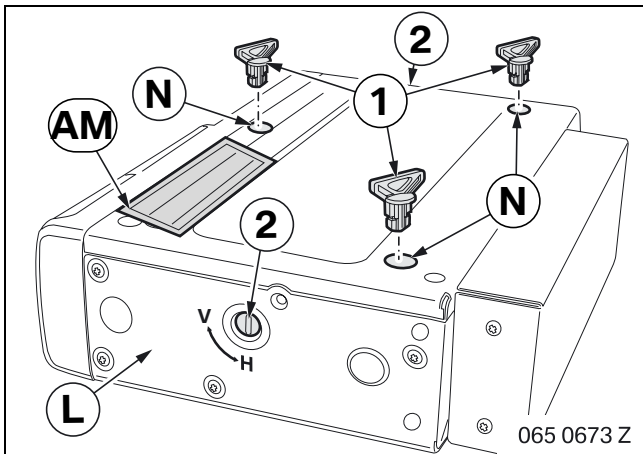
Route branches **D3** and **D4** to the boot at the rear left.



Push the fabric hose **AF** over branches **E1** and **E2**.

Route branches **E1** and **E2** parallel to plug **X279** and secure them with a cable tie **AP**.

Route branches **E3** and **E4** to the boot at the rear left.

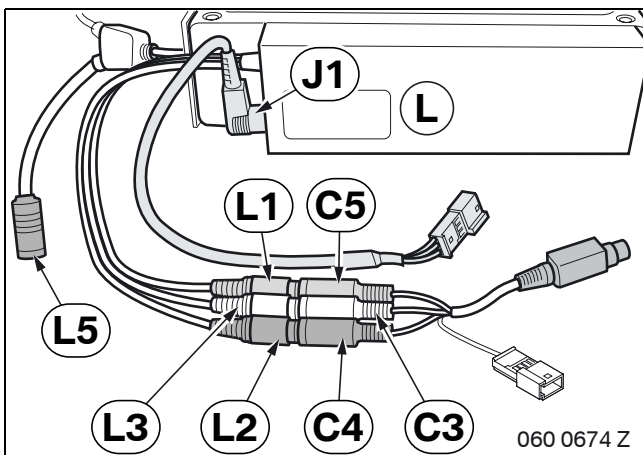


Remove the transport safety devices (1).

Close the openings with gluing points **N**.

Set the position of the multimedia changer **L** to "H" using the setting screws (2).

Affix information sticker **AM** to the multimedia changer **L**.

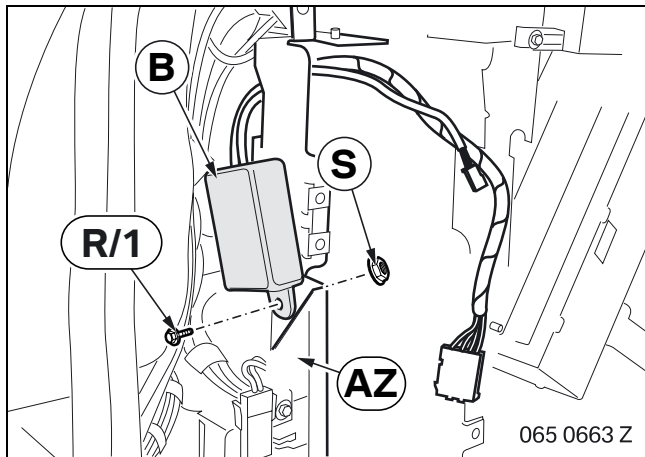


Tie back and insulate branch **L5**.

Connect branches **C3**, **C4** and **C5** to the same coloured cables on branches **L1**, **L2** and **L3** on the multimedia changer **L**.

Connect branch **J1** to the multimedia changer **L**.

6. To install the connection cable and multimedia changer

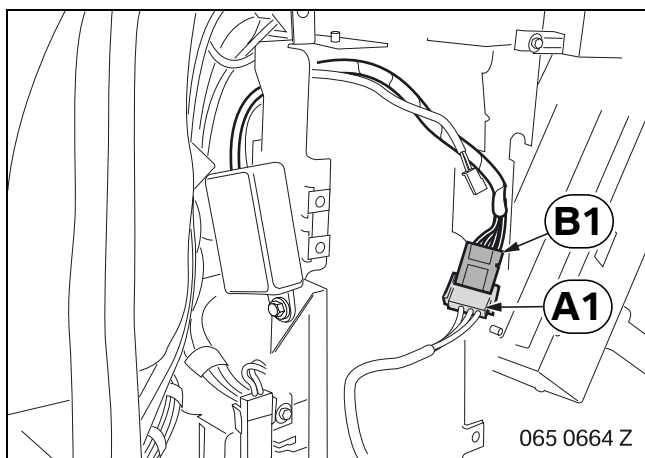


**Cars without SA 601 only**

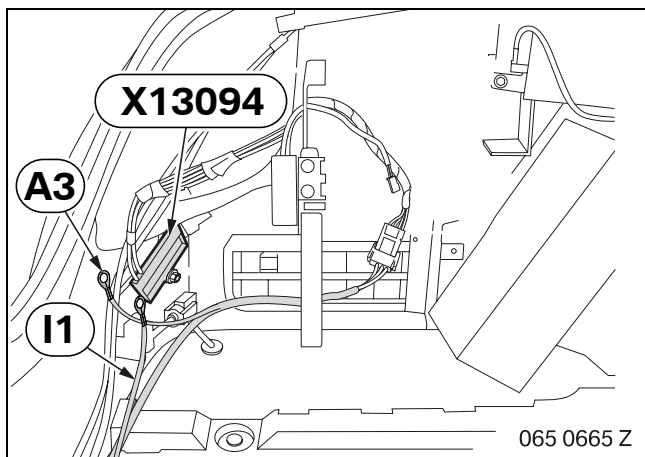
Secure voltage supply **B** to rear module holder **AZ** using hexagonal screw **R** and hexagonal nut **S**.

**Cars with SA 601 only**

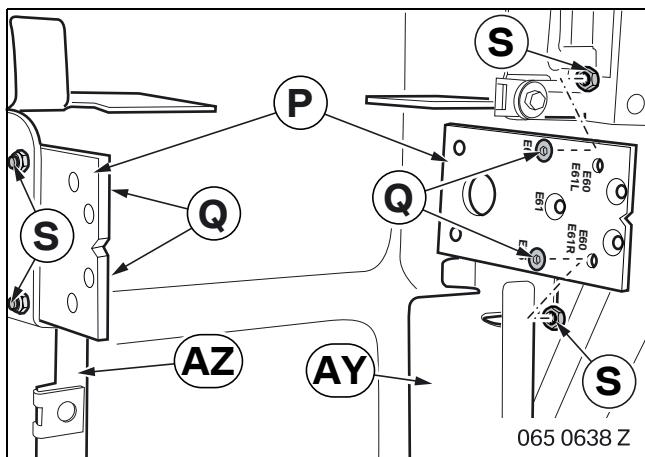
Secure voltage supply **B** to rear module holder **AZ** using the existing hexagonal screw (1).



Connect branch **A1** to branch **B1**.



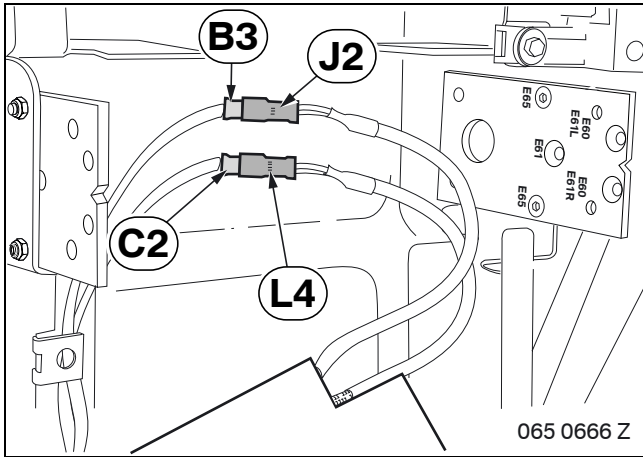
Connect branch **A3**, BR cable, and branch **I1**, BR cable, to earth post **X13094**.



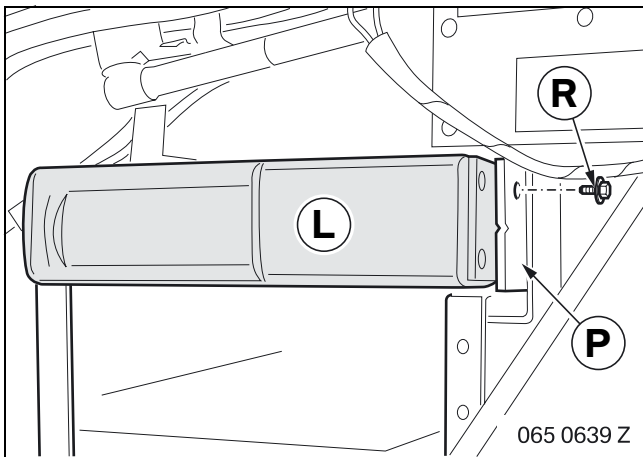
Secure spacer plate **P** to front module holder **AZ** using countersunk screws **Q** and hexagonal nuts **S**.

Secure spacer plate **P** to rear module holder **AY** using countersunk screws **Q** and hexagonal nuts **S**.

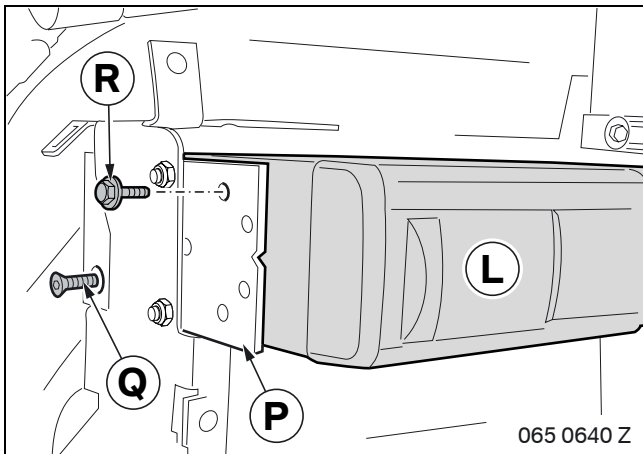
6. To install the connection cable and multimedia changer



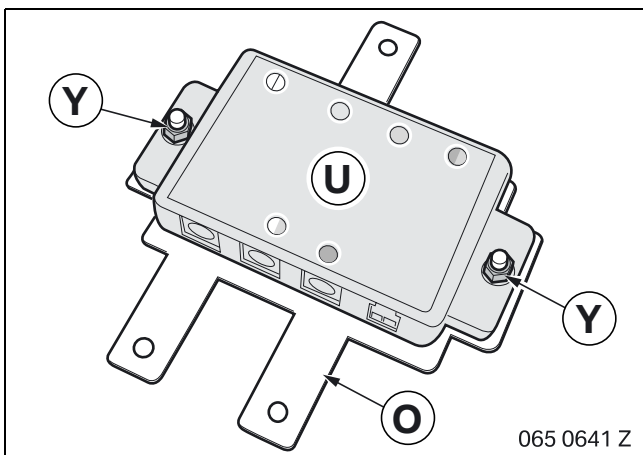
Connect branch **B3** to branch **J2**.  
Connect branch **C2** to branch **L4**.



Secure multimedia changer **L** to spacer plate **P** using hexagonal screw **R**.

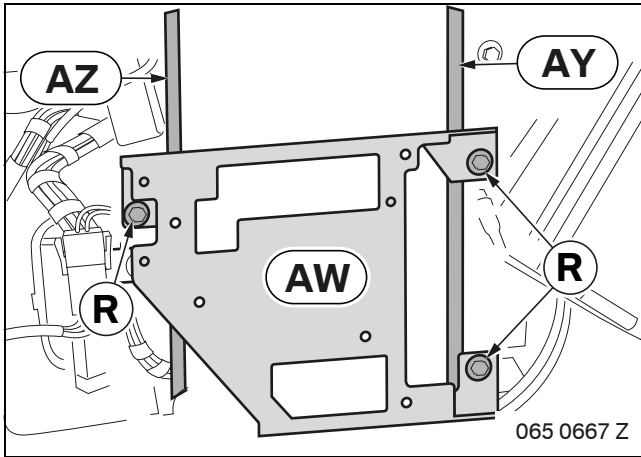


Secure multimedia changer **L** to spacer plate **P** using hexagonal screw **R** and countersunk screw **Q**.

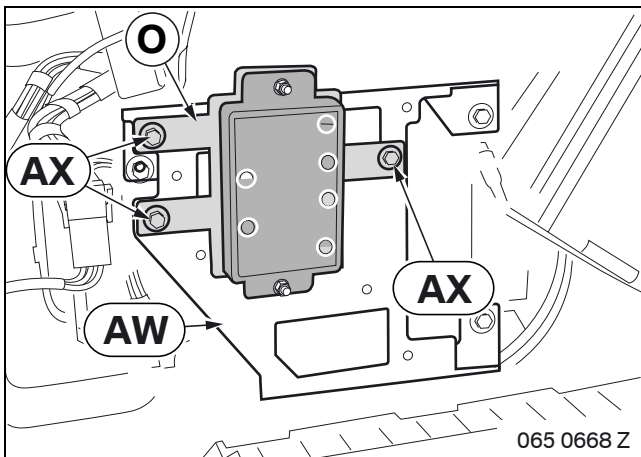


Secure AV switcher **U** to mounting plate **O** using hexagonal nuts **Y**.

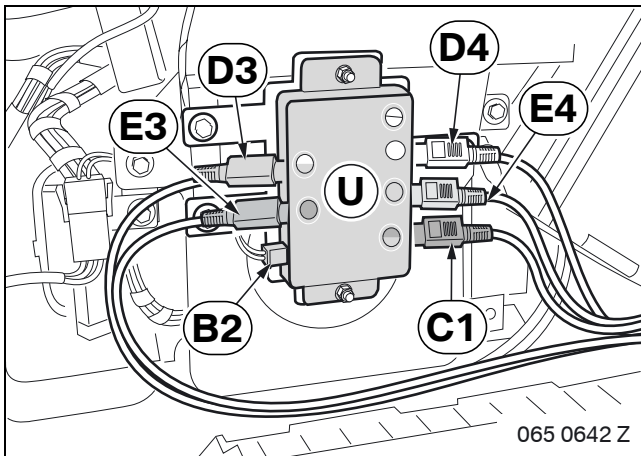
6. To install the connection cable and multimedia changer



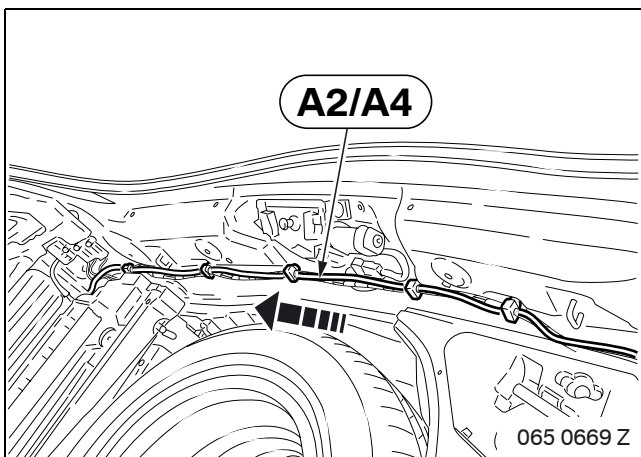
Secure headphone module holder **AW** to front module holder **AY** and rear module holder **AZ** using hexagonal screws **R**.



Secure mounting plate **O** to headphone module holder **AW** using hexagonal nuts **AX**.

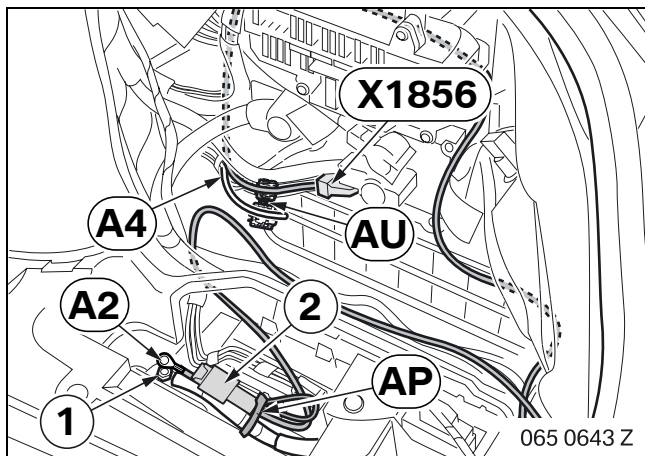


Connect branches **B2**, **C1**, **D3**, **D4**, **E3** and **E4** to the cables of the same colour on the AV switcher **U**.



Route branches **A2** and **A4** to the right-hand side of the boot.

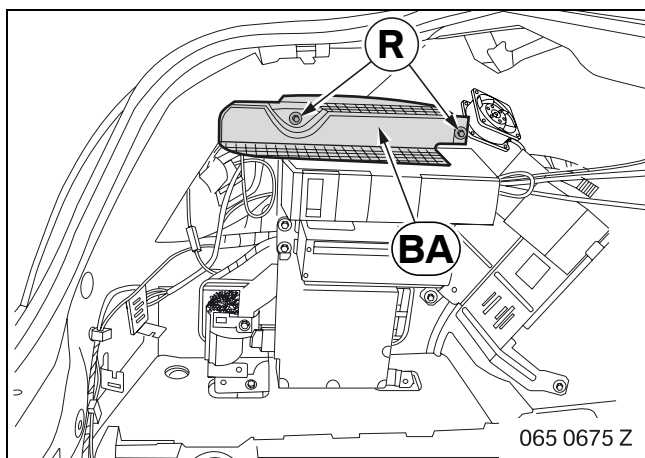
6. To install the connection cable and multimedia changer



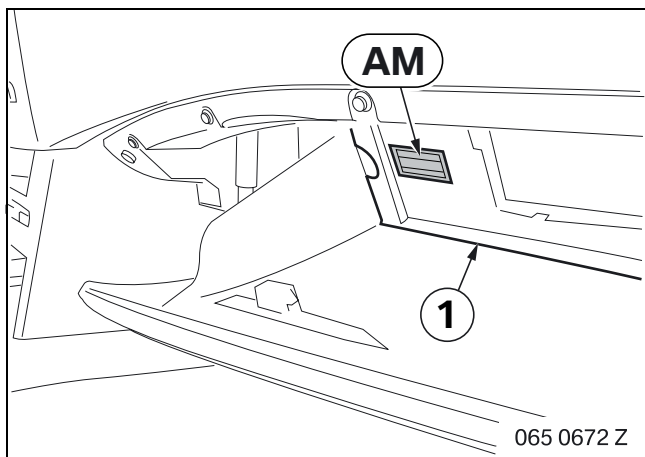
Connect branch **A2**, RT cable, to B+ distributor (1).

Secure the fusible link holder (2) to the standard cable using a cable tie **AP**.

Connect branch **A4**, VI/WS cable, to plug **X1856**, PIN 17, RT/GE cable, using miniature connector **AU**.

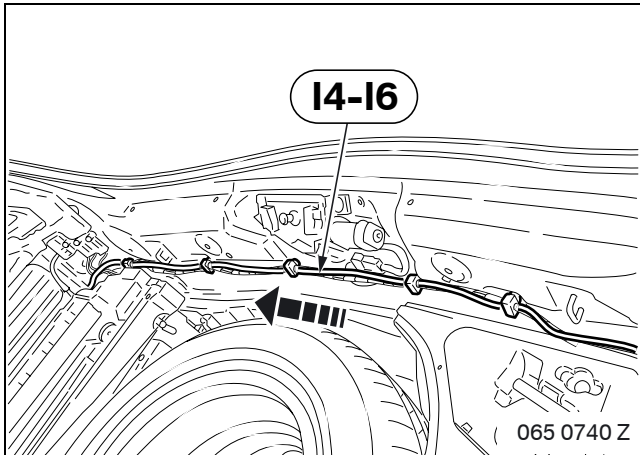


Use hexagonal screws **R** to secure cover **BA**.

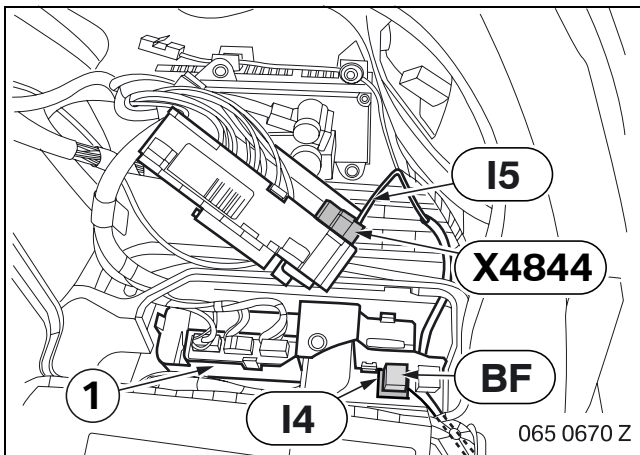


Affix information sticker **AM** in the glove compartment (1).

## 7. To install the fan cable (cars without an additional fan in the boot only)



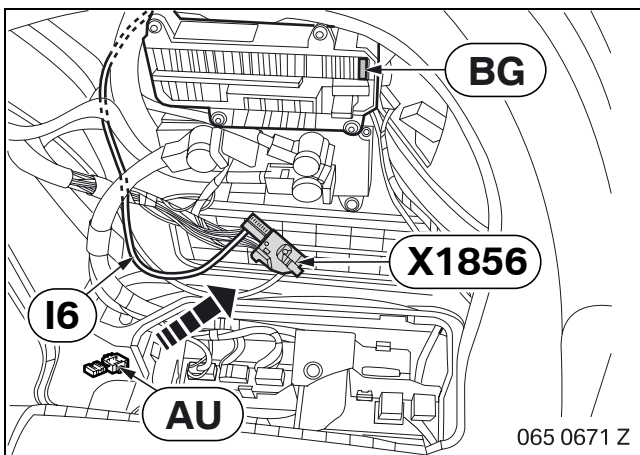
Route branches **I4** and **I6** to the right-hand side of the boot.




Connect branch **I4** to the control module holder (1).

Connect relay **BF** to branch **I4**.

Connect branch **I5**, RT/BL cable, to PIN 1 of plug **X4844**, 5-pin SW.

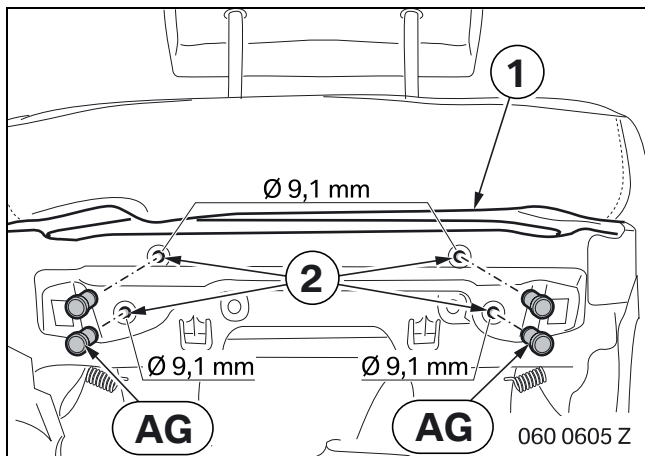


Connect branch **I6**, GE/RT cable, to PIN 18 of plug **X1856**, 32-pin SW.

 If pin chamber 18 is occupied, use a miniature connector **AU** to connect branch **I6** to the GE/RT cable from PIN 18. ◀

Insert fusible link **BG** into slot 71.

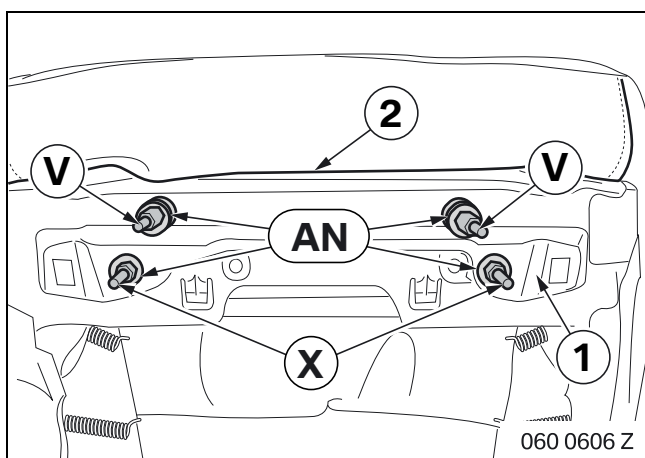
## 8. To install the monitor



Slide the seat backrest cover (1) upwards.

Enlarge the existing holes (2) using a 9.1 mm twist drill bit.

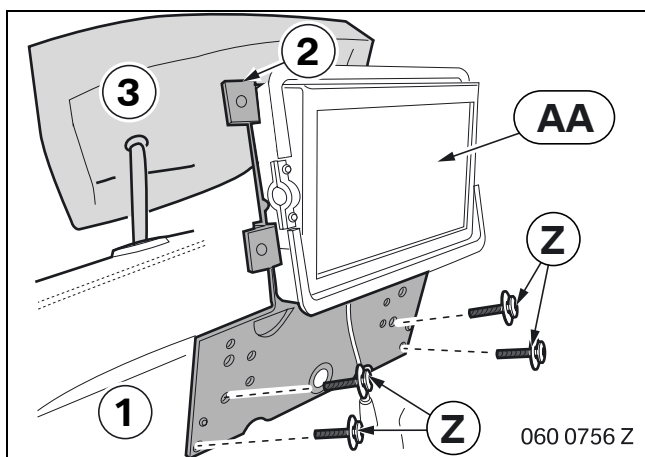
Insert rivet nuts **AG**.



Secure spacer bolts **X** to the seat backrest (1) with **one washer each AN** and spacer bolts **V** to the seat backrest (1) with **four washers each AN**.


Move the seat cover (2) to its initial position.

Cut the seat cover (2) around the spacer bolts using a knife.

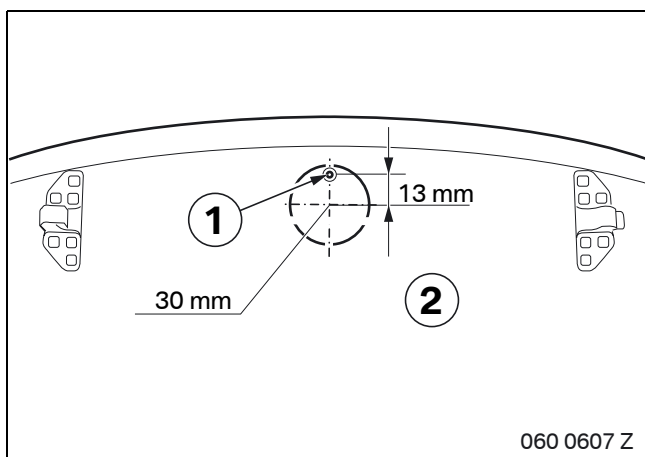


Secure the monitor **AA** to the seat backrest (1) using Torx screws **Z**.

The distance from the top of the monitor support plate (2) to the headrest (3) must be approx. 10 mm.

 The distance can be adjusted by removing the washers **AN** or replacing the spacer bolts **V** with spacer bolts **W**. **At least one washer AN** must be fitted for each spacer bolt **V** or **W**. ◀

Unscrew the monitor **AA** again

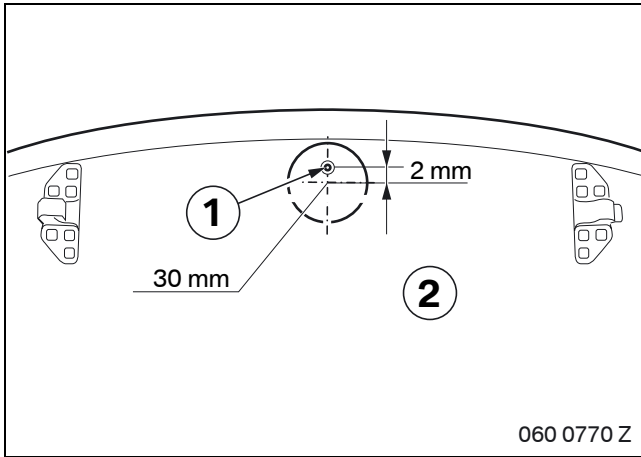


### Cars without SA 456 only

Mark the hole at marking (1) on the inside of the front seat rear panel (2) using the dimensions shown.

Drill the hole using a 30 mm step drill.

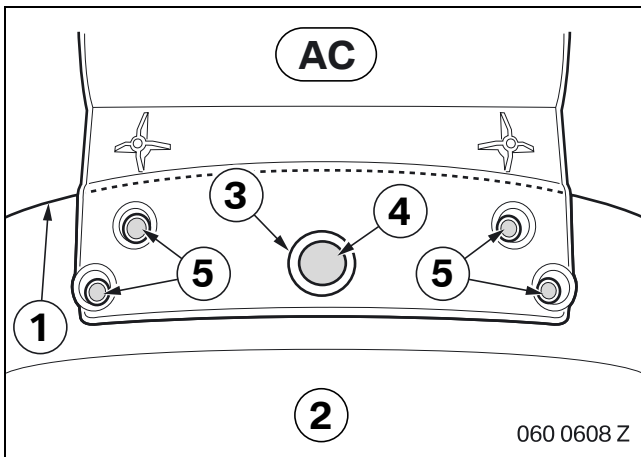
8. To install the monitor



**Cars with SA 456 only**

Mark the hole at marking (1) on the inside of the front seat rear panel (2) using the dimensions shown.

Drill the hole using a 30 mm step drill.

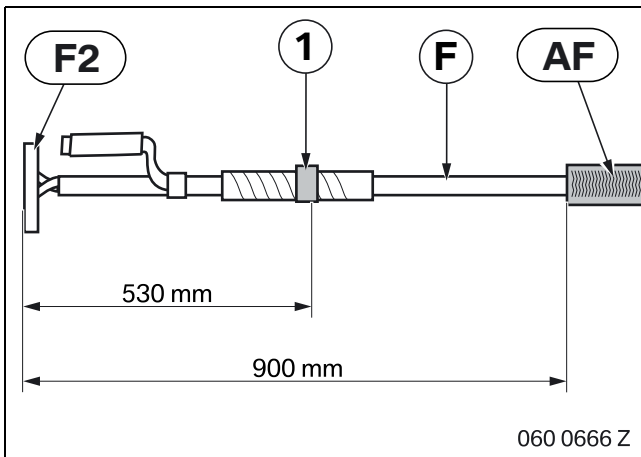


**All cars**

Place the rear monitor trim **AC** on the top edge (1) of the outside of the front seat rear panel (2).

The hole (3) in the rear of the monitor trim **AC** must line up with the hole (4) in the front seat rear panel.

Mark the holes (5) and drill them using a 15 mm step drill.




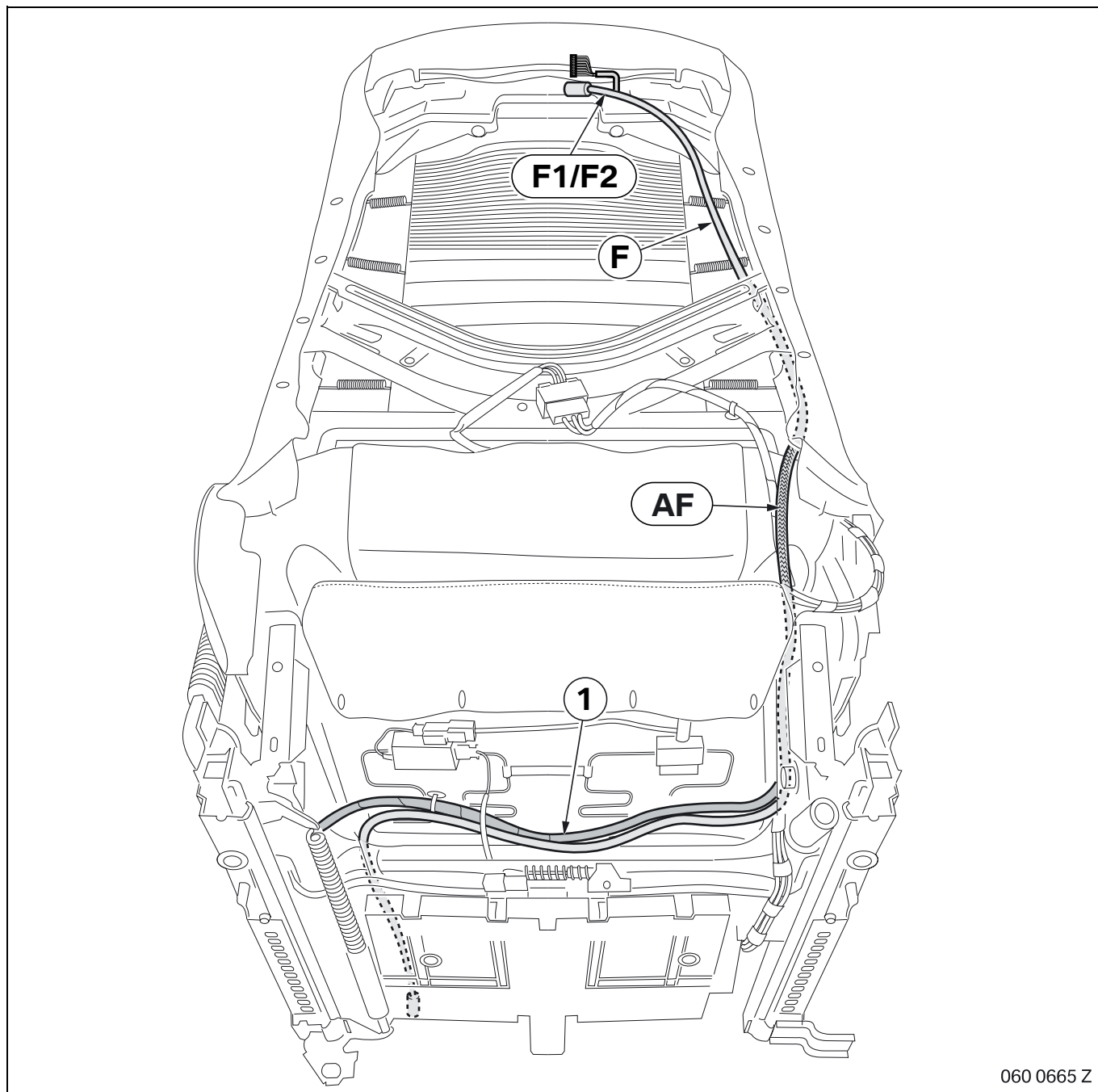
Measure the dimensions of branch **F2**.

Push fabric hose **AF** over seat wiring harness **F** and secure it with adhesive tape using the dimensions shown.

Affix the marking (1) with adhesive tape using the dimensions.

8. To install the monitor

-  As you install the seat wiring harness **F** check for sharp edges, reworking the edges if necessary. After installation check that the seat wiring harness **F** moves easily when the backrest is adjusted. The fitted fabric hose **AF** must be within the adjustment range of the backrest. ◀

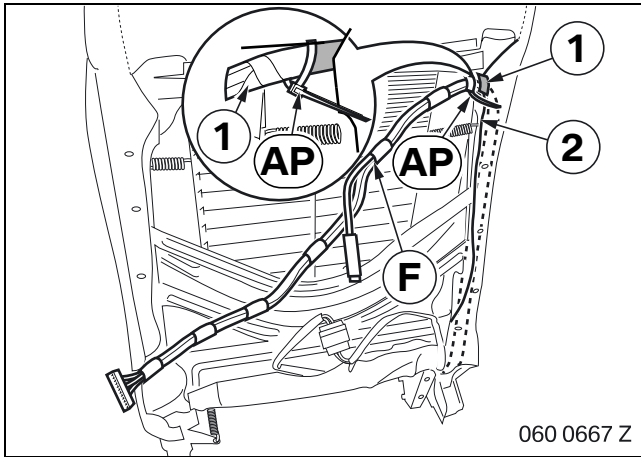


060 0665 Z

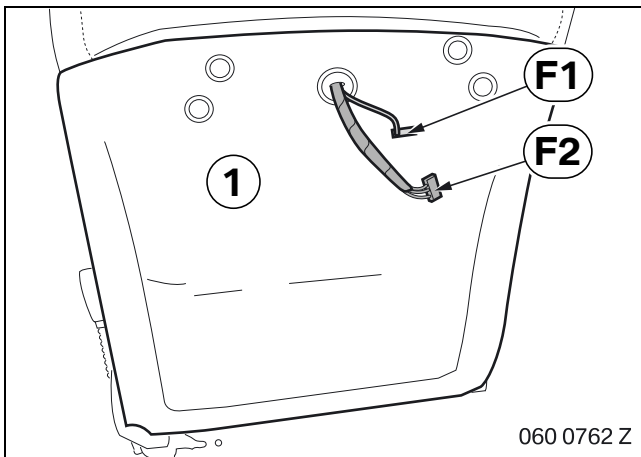
Route branches **F1** and **F2** as shown.

Route seat wiring harness **F** along the seat wiring harness (1).

8. To install the monitor

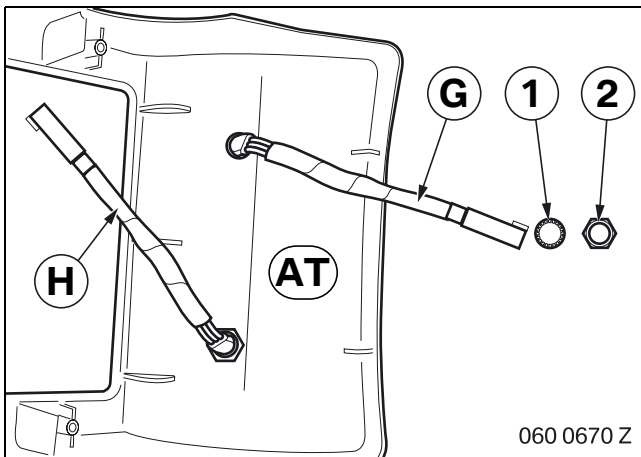


Secure the adhesive marking (1) that you previously fitted on the seat wiring harness **F** to the seat backrest (2) as shown using a cable tie **AP**.



Thread branches **F1** and **F2** through the front seat rear panel (1).

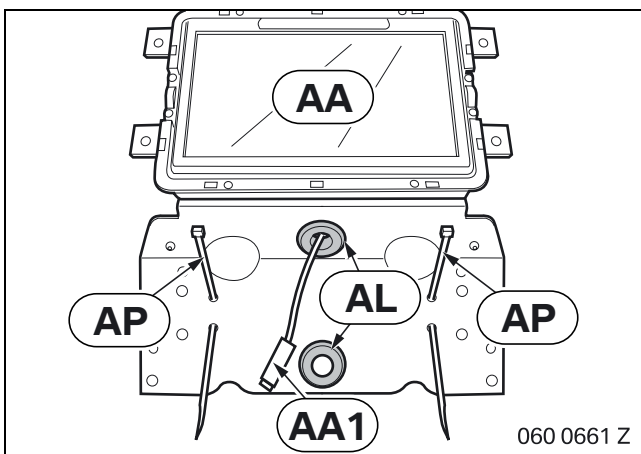
Install the front seat rear panel (1) as described in TIS RA 52 15 198.



Unscrew the tooth washer (1) and hexagonal nut (2) from the auxiliary cable **G** and headphone cable **H**.

Insert the auxiliary cable **G** into the front monitor trim **AT** on the left and secure it with a toothed washer (1) and hexagonal nut (2).

Insert the headphone cable **H** into the front monitor trim **AT** on the right and secure it with a toothed washer (1) and hexagonal nut (2).

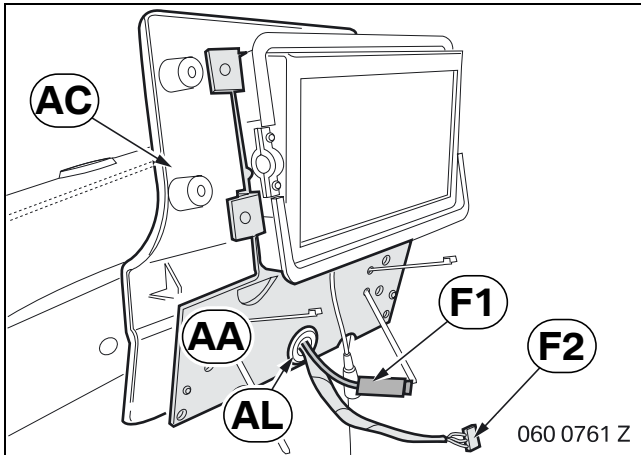


Insert grommets **AL** into the monitor **AA**.

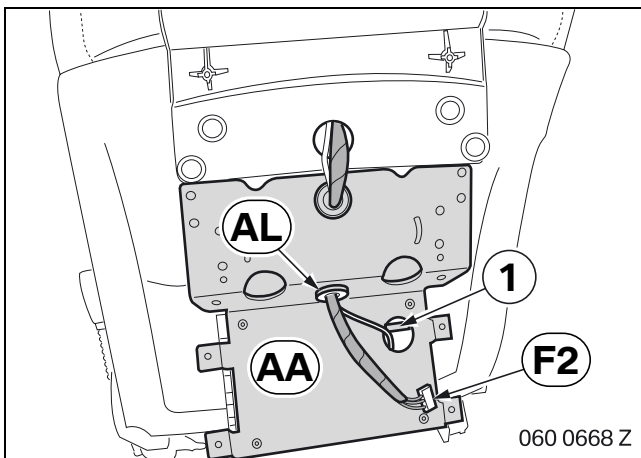
Thread headphone connector **AA1** for the monitor **AA** through the top grommet **AL**.

Insert cable ties **AP** into the existing holes.

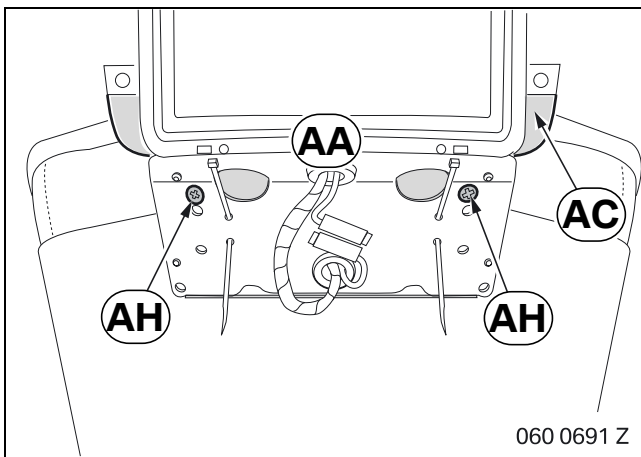
8. To install the monitor



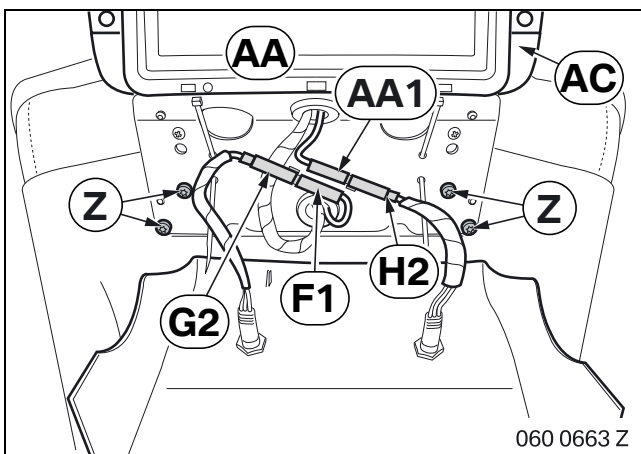
Route branches **F1** and **F2** through the rear monitor trim **AC** and the bottom grommet **AL** in the monitor **AA**.



Route branch **F2** through the top grommet **AL**.  
Connect branch **F2** to the connection plug (1) of the monitor **AA**.



Secure the monitor **AA** to the rear monitor trim **AC** using self-tapping screws **AH**.

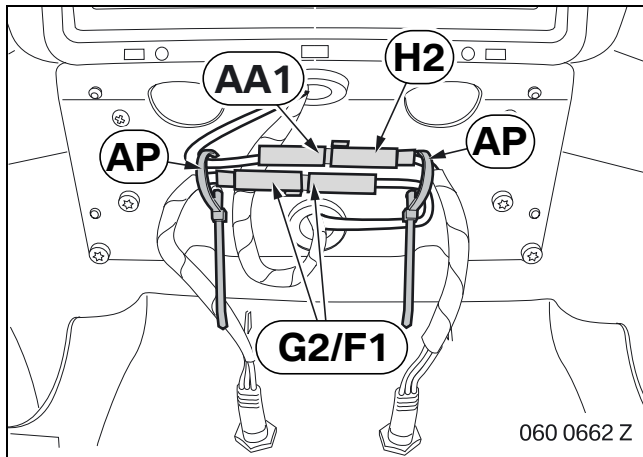


Secure the monitor **AA** and rear monitor trim **AC** to the seat using Torx screws **Z**.

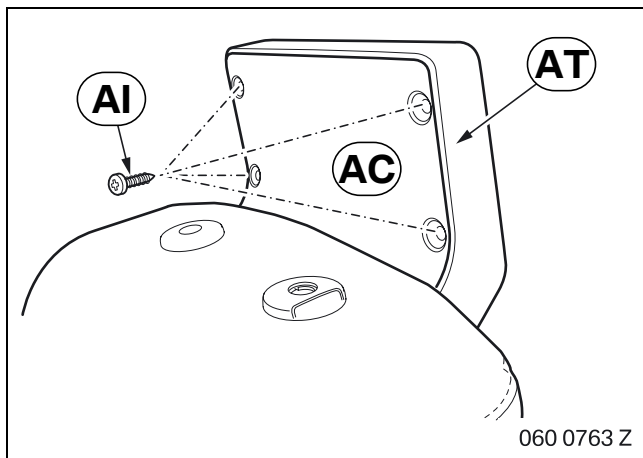
Connect branch **G2** to branch **F1**.

Connect branch **H2** to headphone connector **AA1** on the monitor **AA**.

8. To install the rear monitor



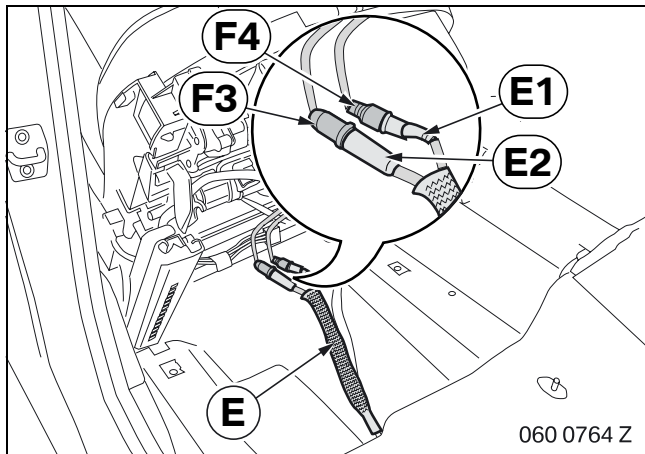
Secure branches **G2, F1, H2** and monitor head-phone connector **AA1** using cable ties **AP**.



Clip front monitor trim **AT** to rear monitor cover **AC**.

Secure the rear monitor trim **AC** to the front monitor trim **AT** with self-tapping screws **AI**.

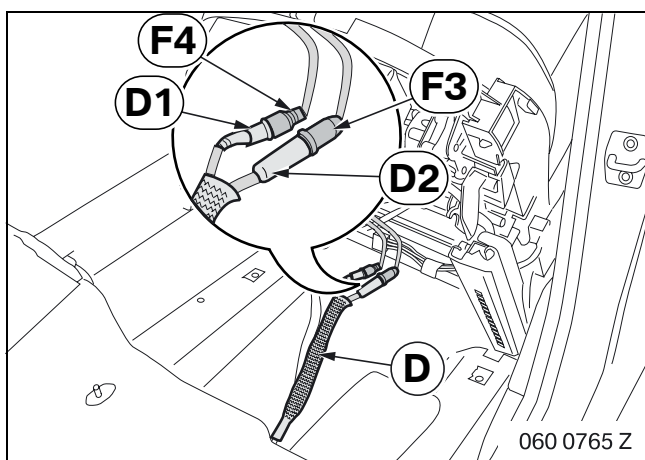
## 9. To connect the seat



Connect the right seat to the connection wiring harness **E** as follows:

- Branch **E1** to branch **F4**
- Branch **E2** to branch **F3**

Secure branches **E1**, **F4**, **E2** and **F3** with insulating tape to prevent them coming loose.

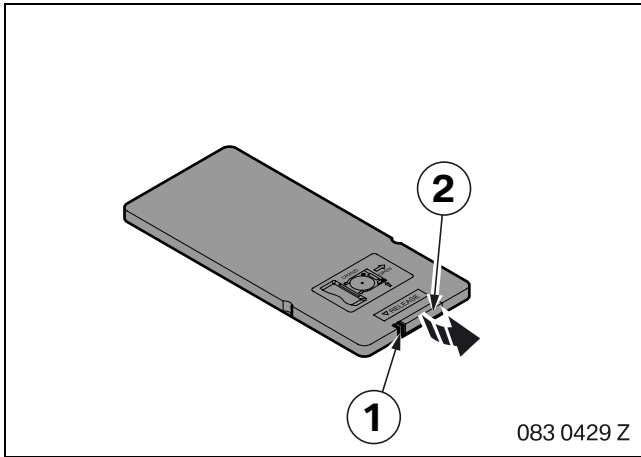


Connect the left seat to the connection wiring harness **D** as follows:

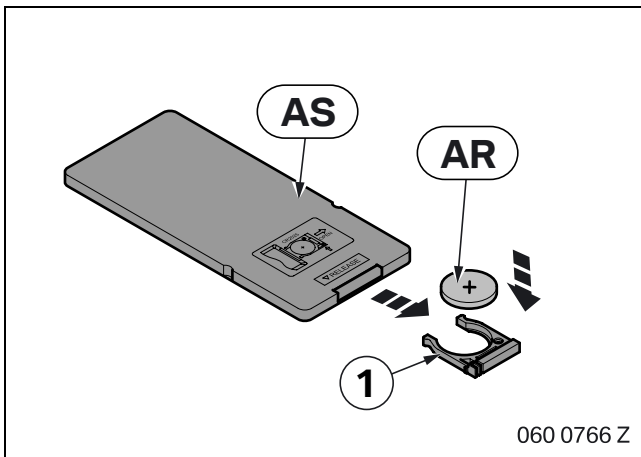
- Branch **D1** to branch **F4**
- Branch **D2** to branch **F3**

Secure branches **D1**, **F4**, **D2** and **F3** with insulating tape to prevent them coming loose.

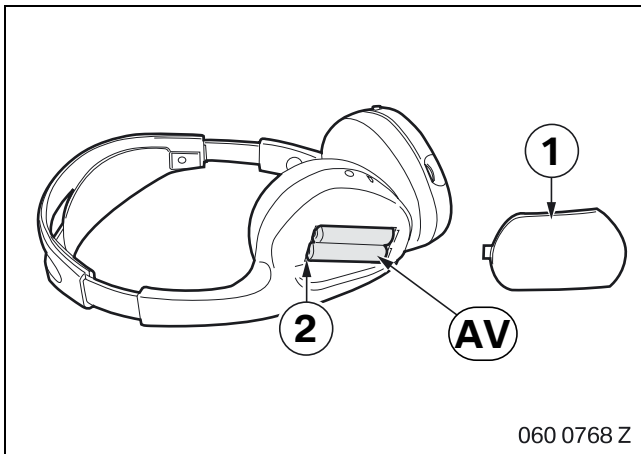
## 10. Concluding work and coding



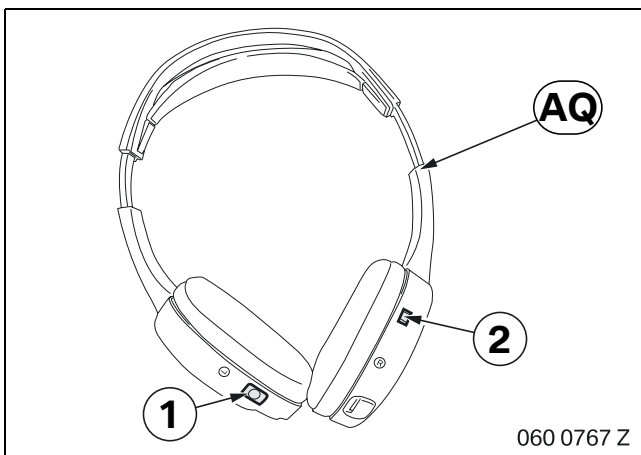
Push back the lock (1) and pull out the holder (2).



Insert button cell **AR** into the holder (1) and push it into the remote control **AS**.



Open the battery compartment cover (1).  
Insert the batteries **AV** into the battery compartment (2) as set out in the owner's manual.  
Close the battery compartment cover (1).



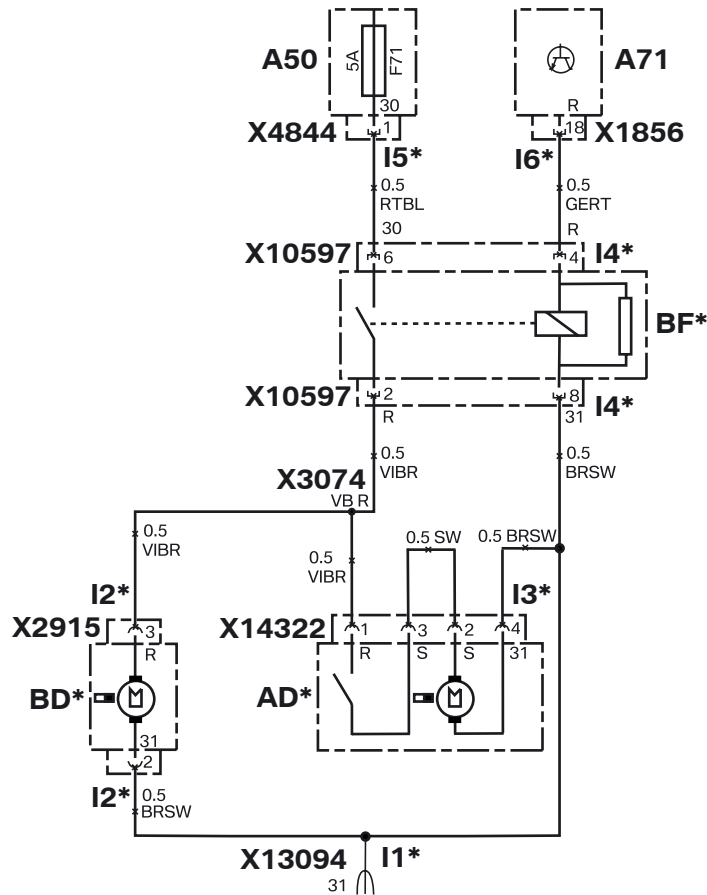
Switch on the headphones **AQ** at the switch (1).  
Set the channel on the switch (2) as set out in the owner's manual.

## 10. Concluding work and coding

This retrofit system does not require coding.

- Connect the battery
- Conduct a brief test
- Function test
- Re-assemble the car.

## 11. Fan wiring harness circuit diagram



065 0674 Z

### Legend

<b>A50</b>	Power distributor, rear right	<b>X1856</b>	SW 32-pin plug (I6*)
<b>A71</b>	Power module	<b>X2915</b>	Socket casing, 3-pin SW (I2*)
<b>AD*</b>	Radial fan	<b>X3074</b>	Terminal R connector
<b>BD*</b>	Axial fan	<b>X4844</b>	SW 5-pin plug (I5*)
<b>BF*</b>	Relay	<b>X10597</b>	Relay socket (I4*)
<b>I1*</b>	Cable eyelet A6	<b>X13094</b>	Earth post I1*
<b>I2*</b>	Socket casing, 3-pin SW	<b>X14322</b>	SW 4-pin plug (I3*)
<b>I3*</b>	Socket casing, 4-pin SW		
<b>I4*</b>	Relay socket		
<b>I5*</b>	Socket contact		
<b>I6*</b>	Socket contact		

### Cable colours

BR	Brown	RT	Red
BL	Blue	SW	Black
GE	Yellow	VI	Violet

All the designations marked with an asterisk (\*) apply only to these installation instructions or this circuit diagram.