

Original BMW Accessories. Installation Instructions.



Retrofit HiFi System Alpine

BMW 1 Series (E81, E82, E87, E88) built after 3/09

BMW 3 Series (E90, E91, E92, E93) built after 3/09

BMW X1 (E84)

Installation instructions not valid for vehicles with HiFi system

Retrofit kit No.: 65 41 2 163 268 Retrofit kit - HiFi System Alpine
65 41 2 167 061 Retrofit kit - HiFi System Alpine

Installation time

The installation time is **approx. 2.0 hours**. The installation time increases by **0.25 hours** on vehicles with option SA 662 built after 9/09. The specified time may vary depending on the vehicle's condition and equipment.

The total costs for the programming time should be taken into account when calculating retrofitting costs (reimbursement through warranty is not permissible).

The installation time does not include the time required for programming/encoding which depends on the vehicle's age and equipment.

Important information

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

The target group of these installation instructions are technical personnel trained on BMW vehicles with corresponding technical know-how.

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

In the event of installation or functional problems, limit troubleshooting to 0.5 hours for mechanical jobs and 1.0 hours for electrical jobs.

To avoid unnecessary work and costs, send a corresponding enquiry via the Aftersales Assistance Portal (ASAP) using the technical parts support application.

Please quote the following:

- Vehicle identification number
- Part number of retrofit kit
- Exact description of the problem
- Work already carried out

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

Pictograms



Denotes information that draws attention to specific requirements.

◀ Denotes the end of an instruction text.

Customer information

The "Customer Information on the HiFi System Alpine" at the end of the installation instructions should be printed out and handed over to the customer.

Installation information

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

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

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

Only these installation instructions should be used for troubleshooting purposes. The information shown on the amplifier **C** does not correspond to the connection in the vehicle.

Vehicles equipped with option SA 662 do not require encoding.

Ordering information

The corner trim covers on the mirror triangle **I, J** or the covers on the window frame **K, L** are not included in the retrofit kit and must be ordered separately (see EPC for part number and details).

The connecting cable for central bass, right **M**, the central bass **N** and hexagon nuts **O** are additionally required for vehicles with option SA 662 built after 9/09. They are not included in the retrofit kit and must be ordered separately (see EPC for part number and details).

List of optional extras

The following optional extras must be taken into account when installing the retrofit kit:

- SA 606** Navigation system Business
- SA 609** Navigation system Professional
- SA 662** Radio BMW Business CD
- SA 663** Radio BMW Professional

Special tools required

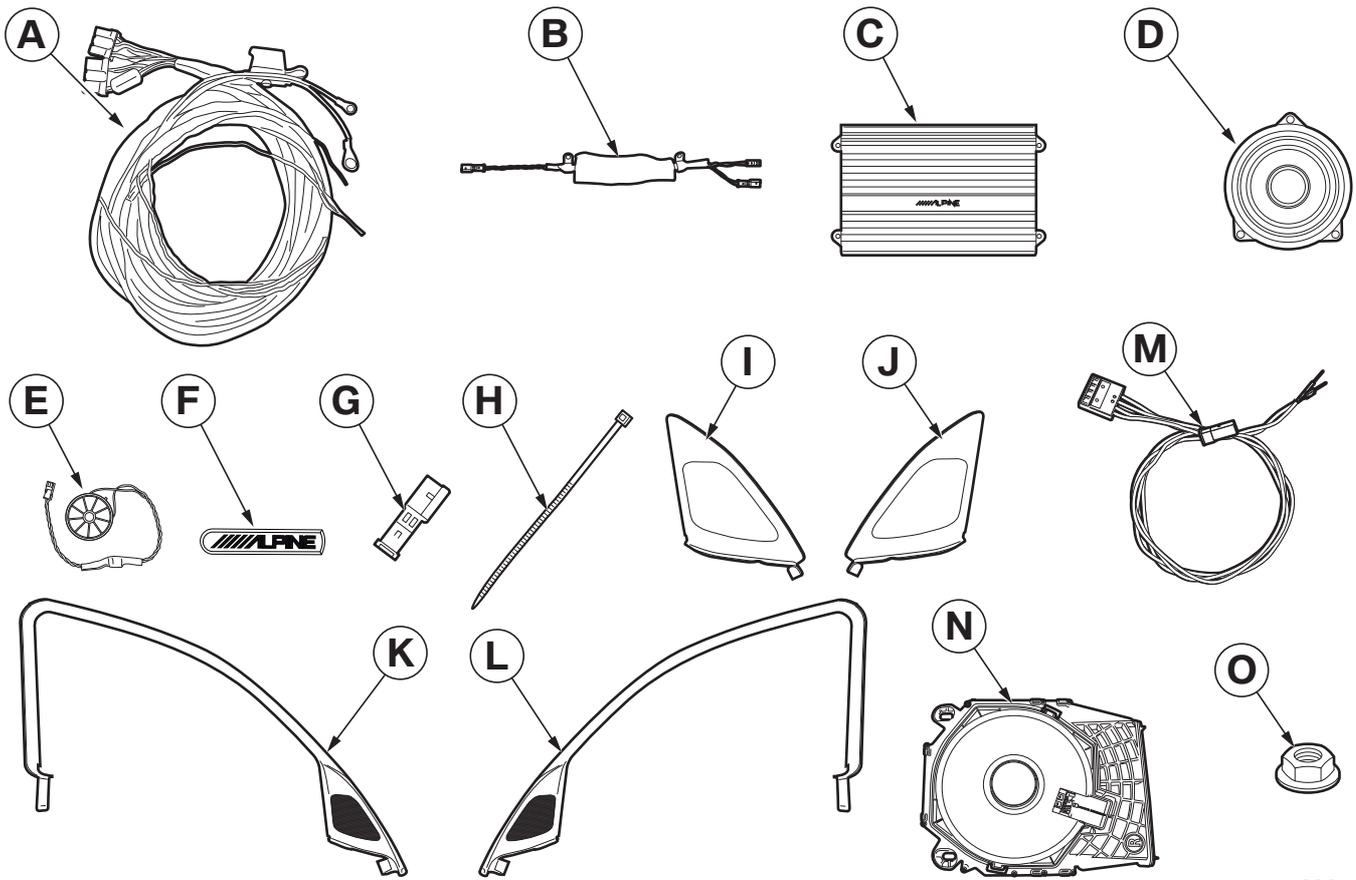
- 00 9 310, Mounting wedge
- 00 9 317, Panel wedge

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1. Parts overview



090 1510 Z

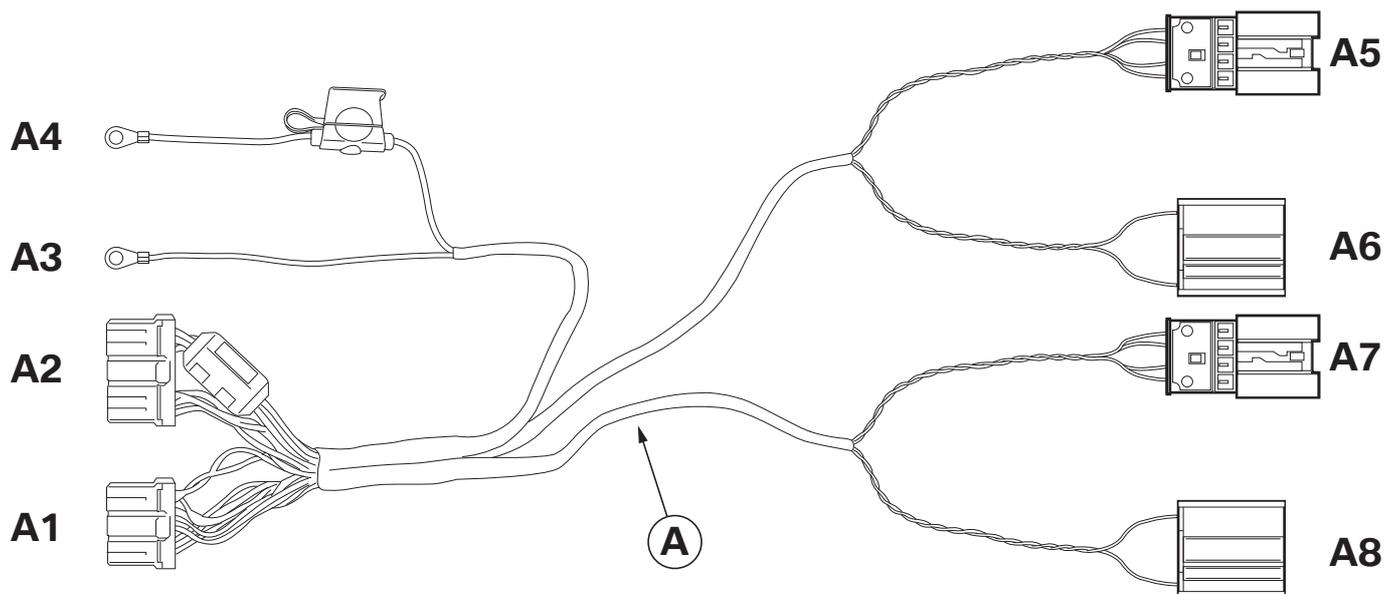
Legend

- A** Retrofit wiring loom
- B** Diplexer (2x)
- C** Amplifier
- D** Mid-range speaker (2x)
- E** Tweeter (2x)
- F** Badge (2x)
- G** 2-pin BL pin housing (only for vehicles with option SA 662 built after 9/09)
- H** Cable tie (15x)
- I** Corner trim cover on mirror triangle, left (only for E82, E88, E92, E93 vehicles, not included in retrofit kit)
- J** Corner trim cover on mirror triangle, right (only for E82, E88, E92, E93 vehicles, not included in retrofit kit)
- K** Cover for window frame, left (only for E81, E87, E90, E91 vehicles, not included in retrofit kit)
- L** Cover for window frame, right (only for E81, E87, E90, E91 vehicles, not included in retrofit kit)
- M** Connecting cable for central bass, right (not included in retrofit kit, only for vehicles with option SA 662 built after 9/09)
- N** Central bass, right (not included in retrofit kit, only for vehicles with option SA 662 built after 9/09)
- O** Hexagon nut (2x, not included in retrofit kit, only for vehicles with option SA 662 built after 9/09)

2. Preparatory work

	ISTA No.
Perform quick test	---
Disconnect negative terminal of battery	61 20 900
Remove the following components	
Sill cover panel, front (inner), left and right	51 47 000
Sill cover panel, rear (inner) left and right (only E87, E90, E91 vehicles)	51 47 030
Rear seat	52 26 005
Luggage compartment floor trim panel	51 47 101
Door trim panel, front left and right	51 41 000
Additionally for E81, E87, E90, E91, E92 vehicles	
Side section of rear seat backrest, left and right	52 26 008
Additionally for E81, E87, E90, E91 vehicles	
Cover on door window frame, inner left and right	51 32 160
Additionally for E82, E88, E92, E93 vehicles	
Inner trim cover on mirror triangle, left and right	51 16 000
Additionally for vehicles built after 3/09	
Loosen front seats	52 13 000
Remove central bass cover	65 12 050
Additionally for vehicles with option SA 662 built after 9/09	
Open door disconnecter, right	---
Door pillar trim panel, bottom right	51 43 150

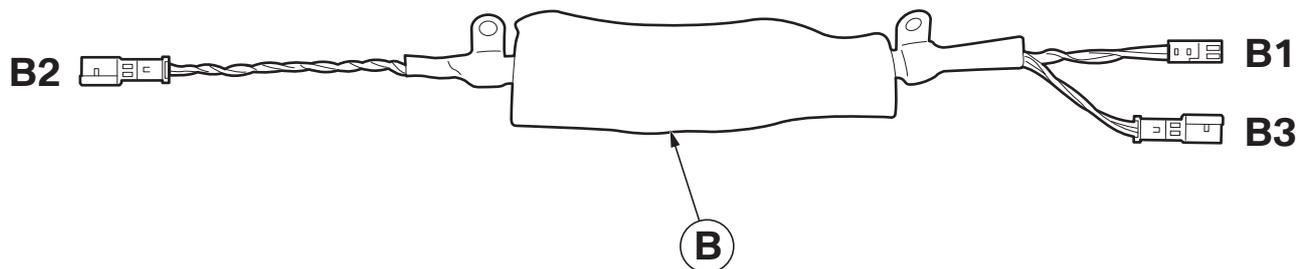
3. Connections diagram



090 1507 Z

Branch/ Position	Designation	Signal	Cable colours/ cross section	Plug-in location in vehicle	Designation/ plug-in location
A	Retrofit wiring loom	---	---	---	---
A1	10-pin WS socket housing	---	---	At amplifier C	---
A2	14-pin WS socket housing	---	---	At amplifier C	---
A3	Eyelet	Kl. 31	BR 4.0 mm ²	At ground terminal on right in luggage compartment	X498
A4	Eyelet	Kl. 30	RT 4.0 mm ²	Only E81, E82, E87, E88, E84 vehicles At positive pin of battery terminal in luggage compartment well Only E90, E91, E92, E93 vehicles At positive pin of rear fuse box	---
A5	4-pin SW pin housing	---	---	Only vehicles built before 9/09 or without option SA 662 built after 9/09 At vehicle-side connector of central bass, right Only vehicles with option SA 662 built after 9/09 At branch M1	X10373 ---
A6	SW 4-pin socket housing	---	---	At central bass, right	X10373
A7	4-pin SW pin housing	---	---	At vehicle-side connector of central bass, left	X10372
A8	SW 4-pin socket housing	---	---	At central bass, left	X10372

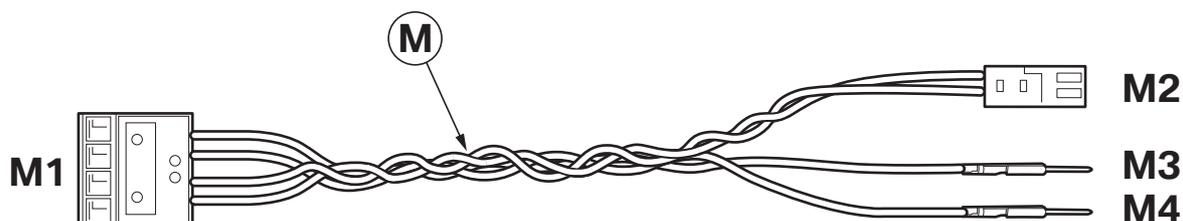
4. Connections diagram, diplexer



090 1508 Z

Branch/ Position	Designation	Signal	Cable colours/ cross section	Plug-in location in vehicle	Designation/ plug-in location
B	Diplexer	---	---	---	---
B1	BL 2-pin socket housing	---	---	At mid-range speaker D	---
B2	2-pin BL pin housing	---	---	At tweeter E	---
B3	2-pin BL pin housing	---	---	At original socket housing to door speaker	---

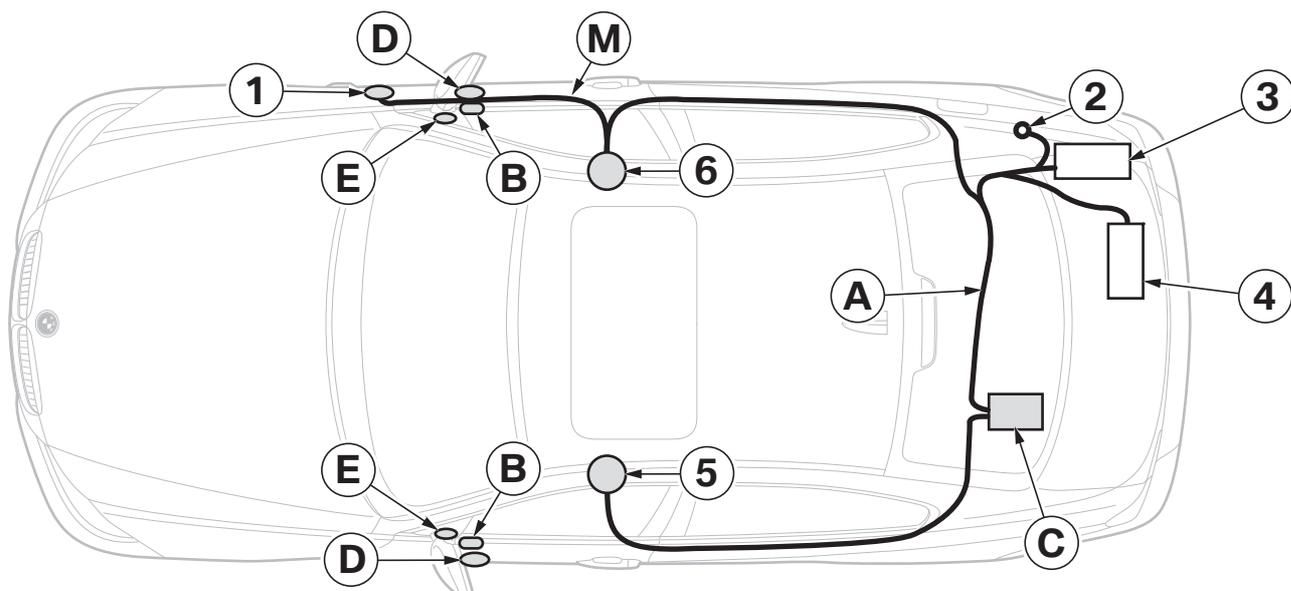
Only vehicles with option SA 662 built after 9/09



084 0084 Z

Branch/ Position	Designation	Signal	Cable colours/ cross section	Plug-in location in vehicle	Designation/ plug-in location
M	Connecting cable for central bass, right	---	---	---	---
M1	SW 4-pin socket housing	---	---	At branch A5	X10373
M2	BL 2-pin socket housing	---	---	At pin housing G	---
M3	Pin contact	NF+	BL/BR 0.5 mm ²	At door disconnector, right	X256 PIN 33
M4	Pin contact	NF-	BL/SW 0.5 mm ²	At door disconnector, right	X256 PIN 34

5. Installation and cabling diagram



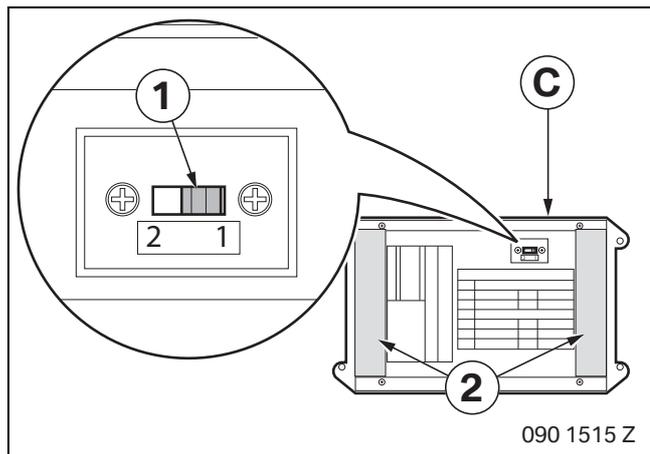
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Legend

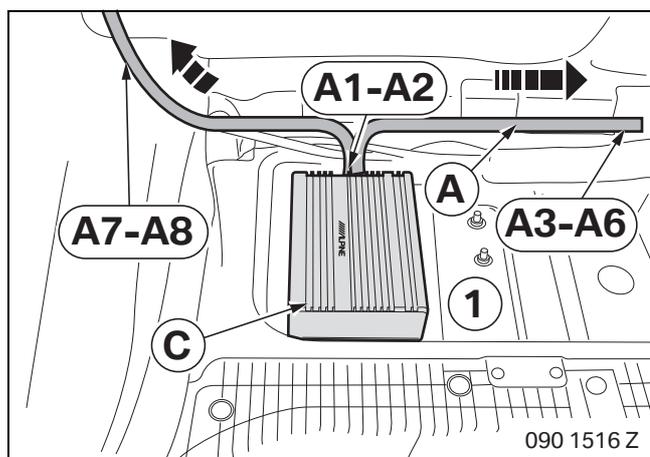
- A** Retrofit wiring loom
- B** Diplexer
- C** Amplifier
- D** Mid-range speaker
- E** Tweeter
- M** Connecting cable for central bass, right (only vehicles with option SA 662 built after 9/09)

- 1** Door disconnecter, right **X256**
- 2** Ground terminal point **X498**
- 3** Battery (only E90, E91, E92, E93 vehicles)
- 4** Battery (only E81, E82, E87, E88, E84 vehicles)
- 5** Central bass, left, connector **X10372**
- 6** Central bass, right, connector **X10373**

6. Installing and connecting retrofit kit



Before installing amplifier **C** set switch (1) to position 1.
Remove protective film from adhesive strips (2).



Do not install retrofit wiring loom **A** close to amplifier **C**.

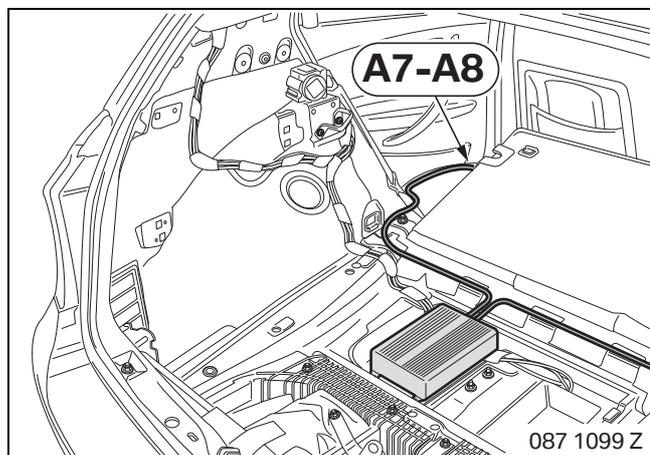
Adhere amplifier **C** in luggage compartment well (1).

Connect branches **A1** and **A2** to amplifier **C**.

Route branches **A3** and **A4** to the battery.

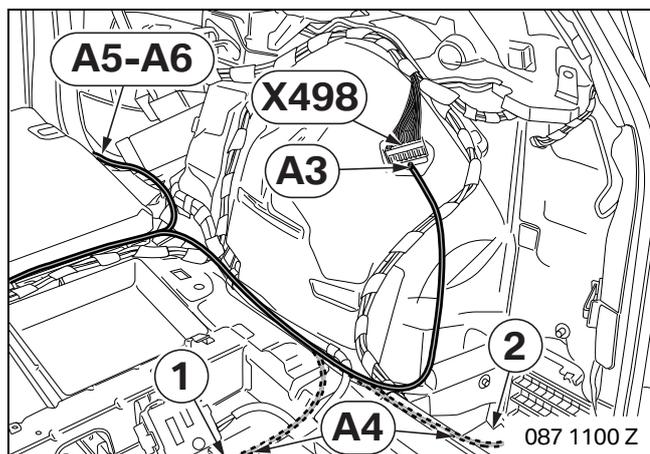
Route branches **A5** and **A6** to the right-hand side of the vehicle.

Run branches **A7** and **A8** to the left-hand side of the vehicle.



Install wiring harness as illustrated.

Route branches **A7** and **A8** under driver's seat.



Install wiring harness as illustrated.

Route branches **A5** and **A6** under passenger's seat.

Route branch **A3** to ground terminal **X498**.

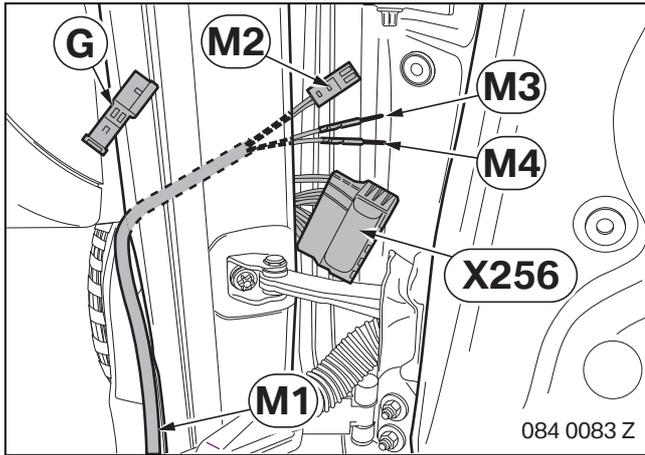
Only E81, E82, E87, E88, E84 vehicles

Route branch **A4** to positive pin of battery terminal (1).

Only E90, E91, E92, E93 vehicles

Route branch **A4** to rear fuse box (2).

6. Installing and connecting retrofit kit



Only vehicles with option SA 662 built after 9/09
Unplug lines from door disconnector **X256** and plug in at pin housing **G** as follows:

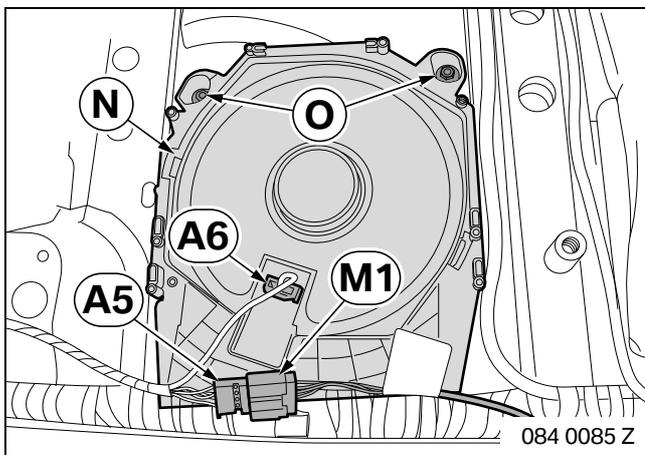
- BL/BR wire from PIN 33 at PIN 1
- BL/SW wire from PIN 34 at PIN 2

Plug in branches **M3** and **M4** at connector **X256** as follows:

- Branch **M3**, BL/BR wire, at PIN 33
- Branch **M4**, BL/SW wire, at PIN 34

Plug in branch **M2** at pin housing **G**.

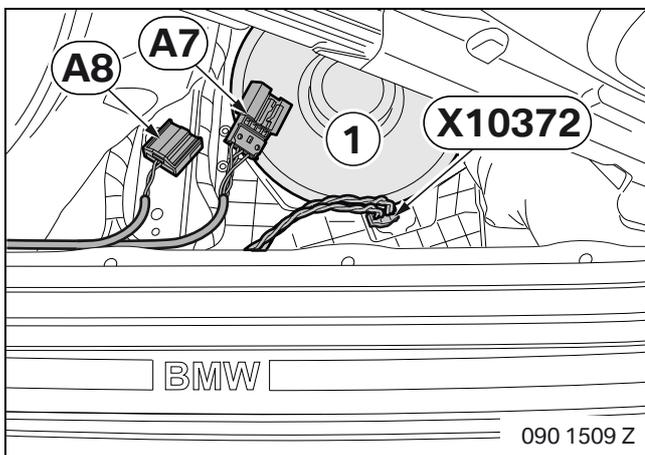
Route branch **M1** under passenger's seat.



Install central bass **N** with hexagon nuts **O** as described in ISTA No. 65 12 050.

Connect branch **M1** to branch **A5**.

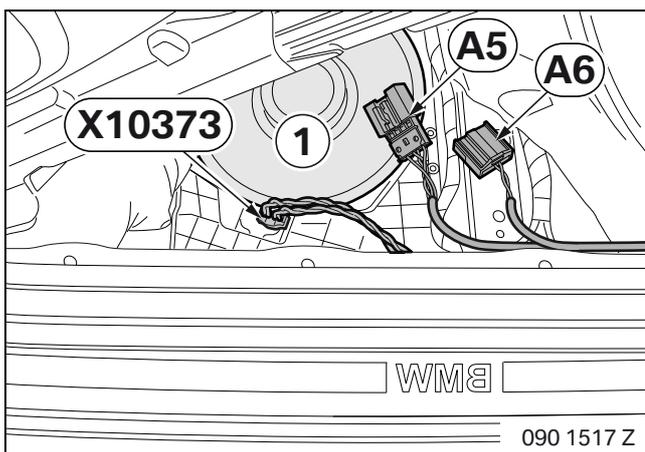
Connect branch **A6** to central bass **N**.



Only vehicles built before 9/09 or without option SA 662 built after 9/09

Unplug connector **X10372** from central bass, left (1) and connect to branch **A7**.

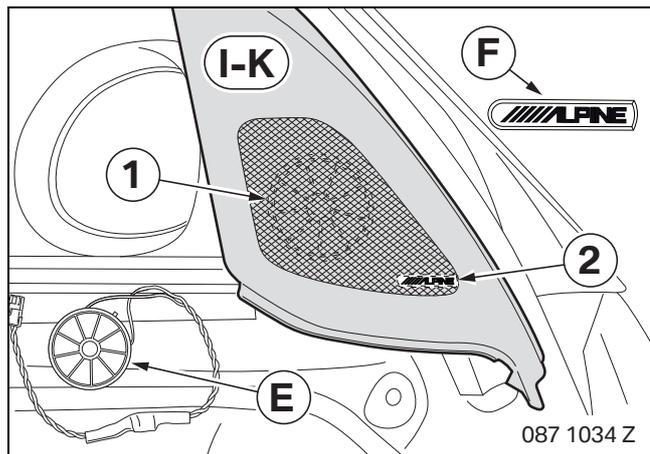
Connect branch **A8** to central bass (1).



Unplug connector **X10373** from central bass, left (1) and connect to branch **A5**.

Connect branch **A6** to central bass (1).

6. Installing and connecting retrofit kit



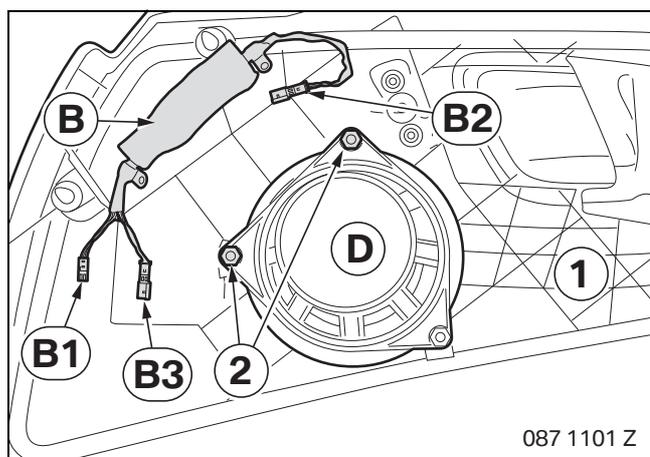
All vehicles

 If necessary, fit corner trim cover on mirror triangle **I** or cover on window frame **K**. ◀

Replace tweeter in mirror triangle (1) by tweeter **E** (see ISTA-RA 65 13 050).

Attach badge **F** to speaker grille (2) and adhere.

Follow the same procedure on the right-hand side.



All E81, E82, E87, E88, E84 vehicles

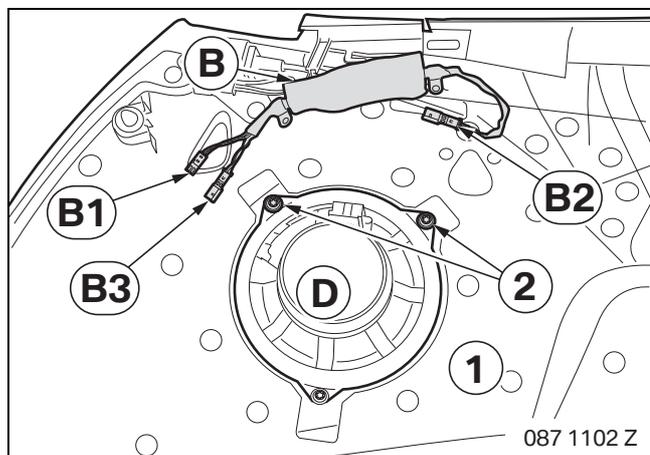
Replace original speaker in door trim panel (1) by mid-range speaker **D**, see ISTA-RA 65 13 070.

Secure diplexer **B** to mid-range speaker **D** with nuts (2).

Connect branch **B1** to mid-range speaker **D**.

Connect branch **B2** to tweeter **E**.

Connect branch **B3** to original socket housing for door speaker.



All E90, E91, E92, E93 vehicles

Replace original speaker in door trim panel (1) by mid-range speaker **D**, see ISTA-RA 65 13 070.

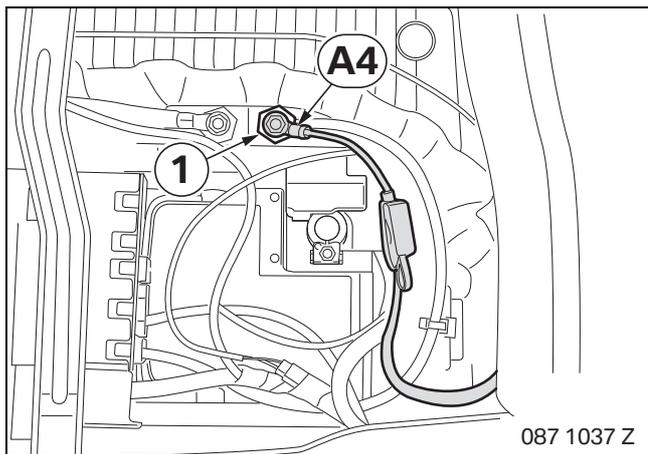
Secure diplexer **B** to mid-range speaker **D** with screws (2).

Connect branch **B1** to mid-range speaker **D**.

Connect branch **B2** to tweeter **E**.

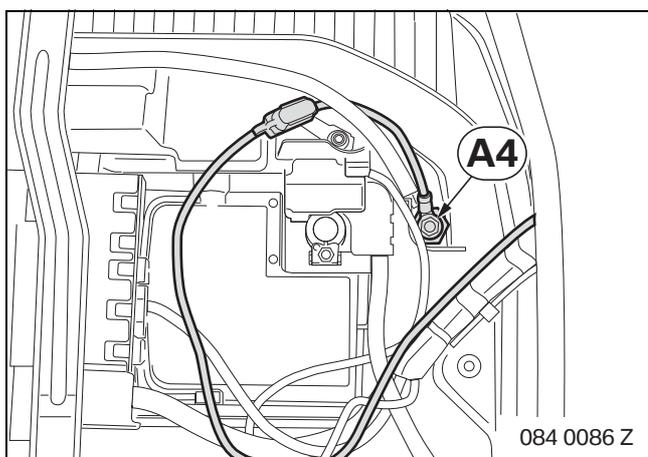
Connect branch **B3** to original socket housing for door speaker.

6. Installing and connecting retrofit kit



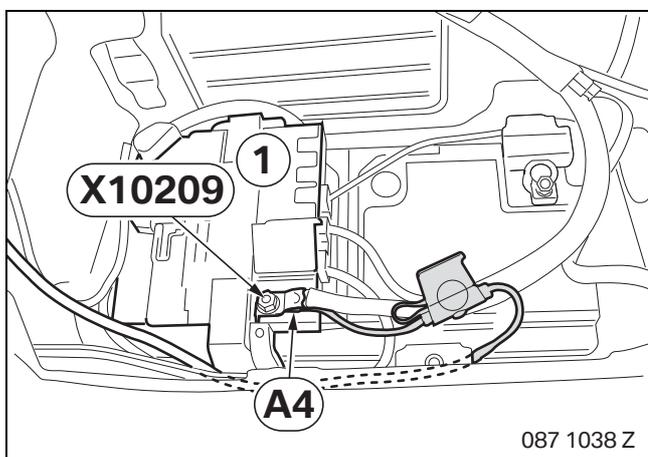
Only E81, E82, E87, E88 vehicles

Screw down branch **A4** at positive pin at battery terminal in luggage compartment well (1).



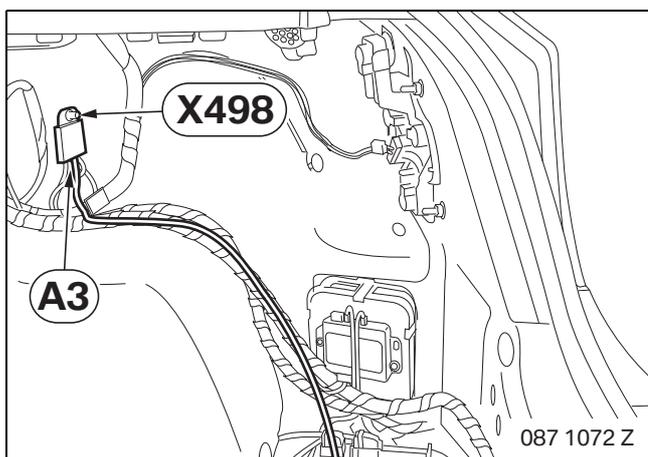
Only E84 vehicles

Screw down branch **A4** at positive pin at battery terminal in luggage compartment well (1).



Only E90, E91, E92, E93 vehicles

Screw down branch **A4** at terminal **X10209** in rear fuse box (1).



All vehicles

Screw down branch **A3** at ground terminal **X498** on right-hand wheel arch.

7. Finishing off and coding



Vehicles equipped with option SA 662 do not require encoding.

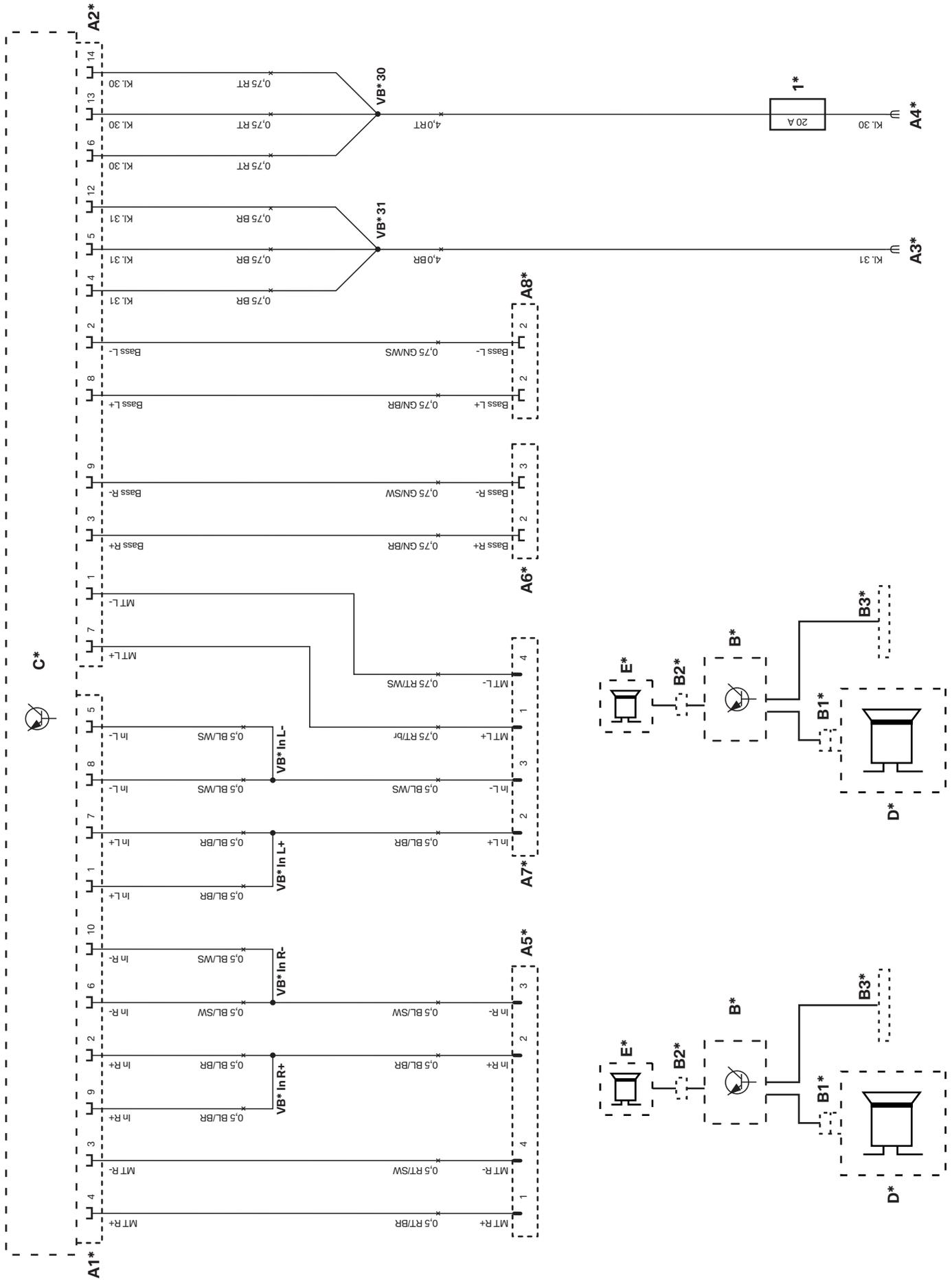
The retrofit system requires encoding.

- Reconnect vehicle battery
- Test vehicle using ISTA system and pay attention to fault codes entered in the memories and work through as required
- Go to ISTA/P vehicle programming
- Select "HiFi System Alpine" via the – **Conversion** – path and work through action plan
- Please refer to the information provided in the ISTA/P application documentation when working with ISTA/P
- Reassemble vehicle in reverse order of removal

Customer information

The "Customer Information on the HiFi System Alpine" at the end of the installation instructions should be printed out and handed over to the customer.

8. Circuit diagram



Legend

- A1*** 10-pin WS pin housing
A2* 14-pin WS pin housing
A3* Eyelet M6, connection point terminal 31 at ground terminal point **X498**
A4* Eyelet M8, connection point terminal 30
A5* 4-pin SW pin housing, at vehicle-side connector **X10373** of central bass, right
A6* SW 4-pin socket housing at central bass, right
A7* 4-pin SW pin housing, at vehicle-side connector **X10372** of central bass, left
A8* SW 4-pin socket housing at central bass, left
- B*** Diplexer
- B1*** At mid-range speaker **D**
B2* At tweeter **E**
B3* At original socket housing of speaker
- C*** Amplifier
- D*** Mid-range speaker
- E*** Tweeter
- 1*** Fuse holder (20 amp)

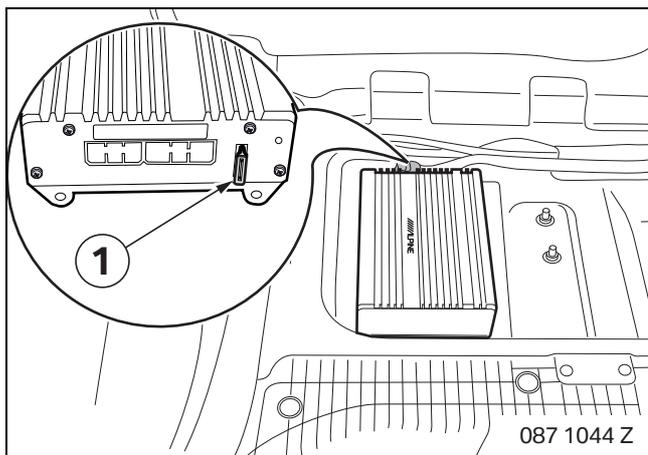
All designations marked * only apply to these installation instructions or this circuit diagram.

Cable colours

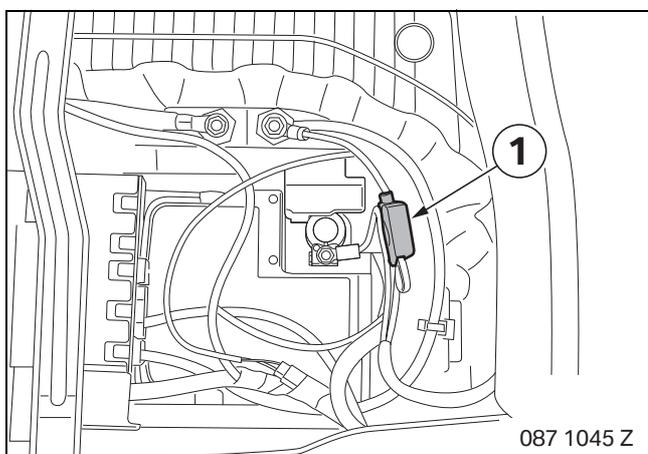
BL	Blue	RT	Red
BR	Brown	SW	Black
GN	Green	WS	White

9. Customer information on HiFi System Alpine

In the event of the system failing, check the power supply as follows:

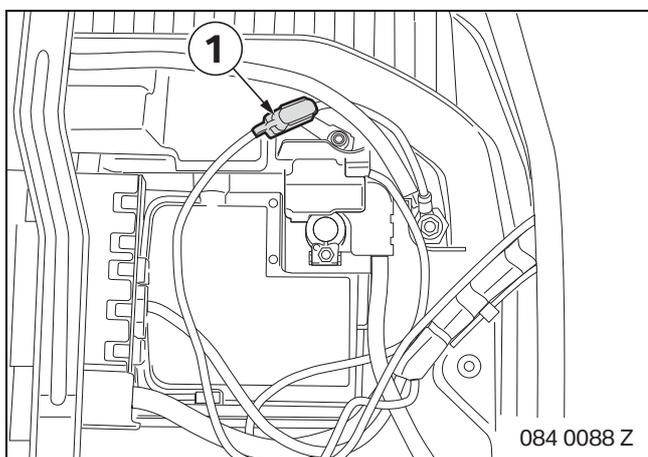


- Remove floor panel in luggage compartment
- Check fuse (1) at the amplifier
- If necessary, replace by a new 20 amp fuse



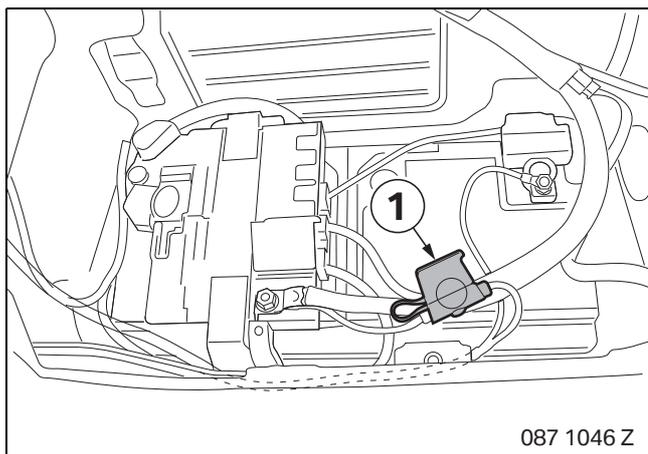
Only on 1 Series vehicles

- Remove floor panel in luggage compartment
- Check fuse in fuse holder (1)
- If necessary, replace by a new 20 amp fuse



Only on X1 vehicles

- Remove floor panel in luggage compartment
- Check fuse in fuse holder (1)
- If necessary, replace by a new 20 amp fuse



Only on 3 Series vehicles

- Remove flap on right in luggage compartment trim panel
- Check fuse in fuse holder (1)
- If necessary, replace by a new 20 amp fuse