

Original BMW Accessories. Installation Instructions.



Alpine HiFi System Retrofit BMW 1 Series (F20)

These installation instructions do not apply to cars with the SA 674 Harman Kardon HiFi speaker system or the SA 676 HiFi speaker system.

Retrofit kit number

65 41 2 220 058 Alpine HiFi system retrofit kit

Installation time

The installation time is **approx. 2.5 hours**. This may vary, depending on the 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, wiring diagrams, servicing manuals and work instructions, in a rational order, using the prescribed tools (special tools) and observing current health and safety regulations.

In the event of any installation or functional problems, restrict the troubleshooting session to about 0.5 hours for mechanical work or 1 hour for electrical work.

To avoid unnecessary extra work and/or costs, an inquiry is to be sent straight away to the technical parts support via the After Sales Assistance Portal (ASAP).

Quote the following information:

- Chassis number,
- Retrofit kit part number,
- A detailed description of the problem,
- Any work already carried out.

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

Pictograms



Denotes instructions that draw your attention to dangers.



Denotes instructions that draw your attention to special features.



Denotes the end of the instruction or warning text.

Information for the customer

Print out the "Customer information" section at the end of the installation instructions and give it to the customer.

Installation information

Ensure that the cables and/or lines are not kinked or damaged as you install them in the car. Costs arising from 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 occupied, bridges, double crimps or twin-lead terminals must be used.

All pictures show LHD cars; proceed accordingly on RHD cars.

Ordering instructions

The left window frame cover **N** and right window frame cover **O** are not included in the retrofit kit and must be ordered separately (for part number and instructions, see EPC).

List of special equipment

The following special equipment must be taken into consideration during installation:

- SA 606** BMW Business navigation system
- SA 609** BMW Professional navigation system
- SA 663** Professional radio

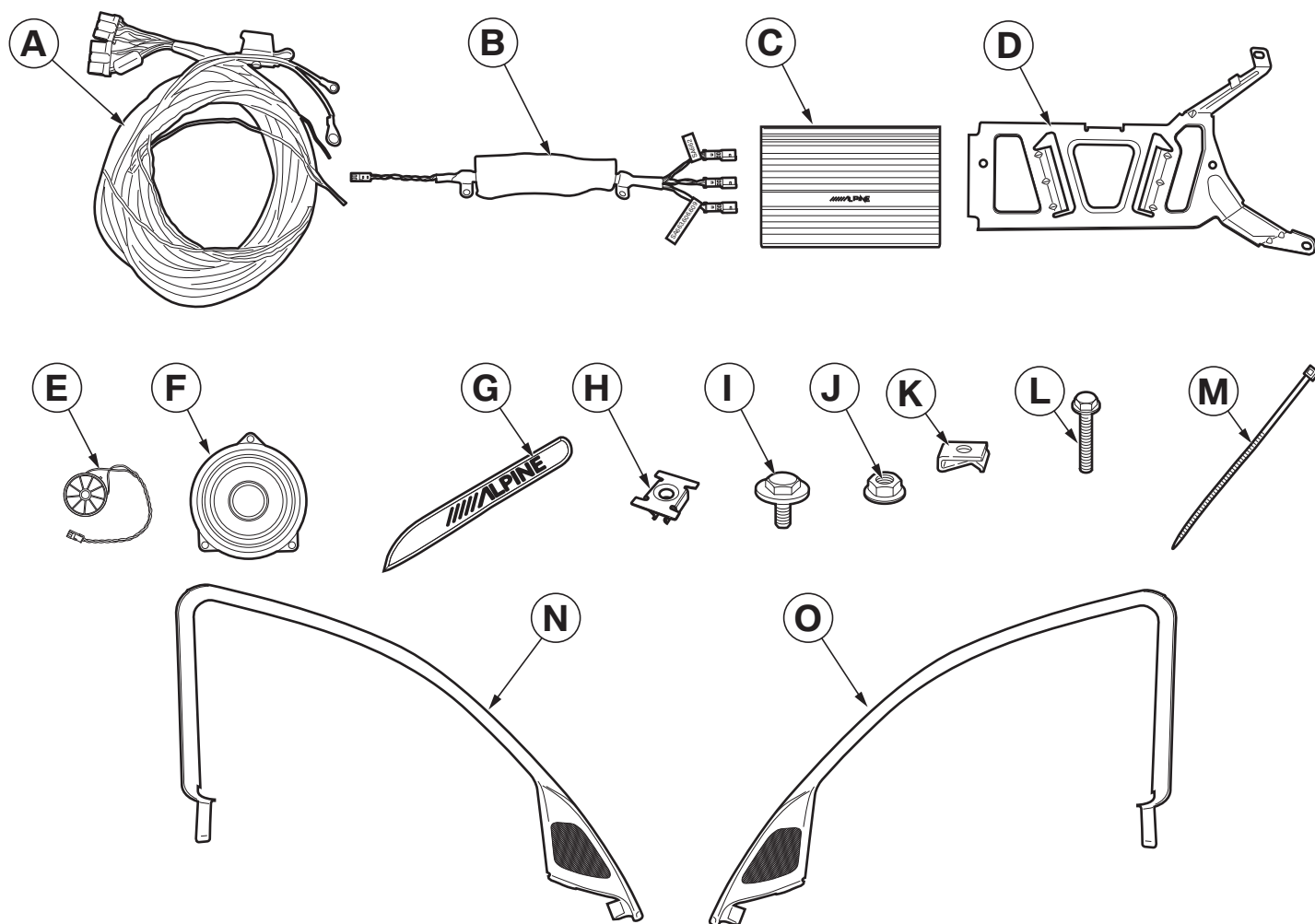
Special tools required

- 00 9 325, Trim wedge
- 64 1 020, Unlocking hooks

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1. Parts list



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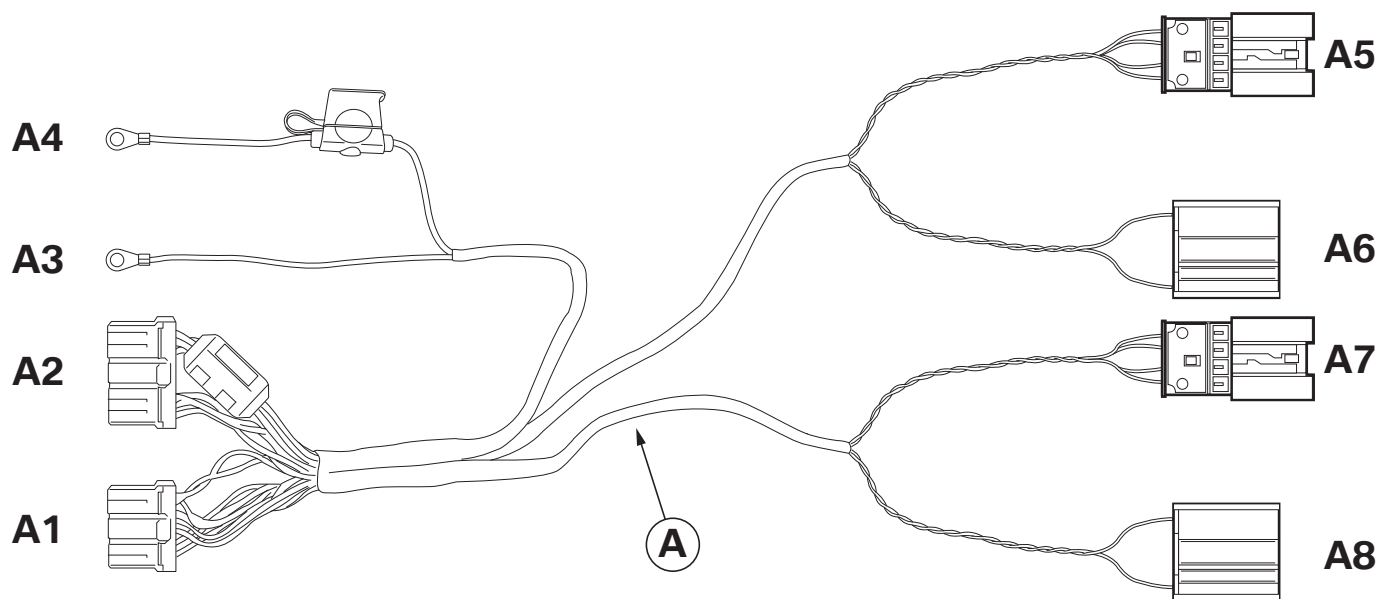
Legend

- A** Retrofit wiring harness
- B** Diplexer (2 x)
- C** Audio amplifier
- D** Audio amplifier holder
- E** Tweeter (2x)
- F** Mid-range speaker (2x)
- G** Emblem (2x)
- H** Prestol cage
- I** Hexagon screw with M6 washer
- J** Hexagon nut M6
- K** Sheet metal nut M5
- L** Hexagon screw M5
- M** Cable tie (15 x)
- N** Left window frame cover (not supplied with the retrofit kit)
- O** Right window frame cover (not supplied with the retrofit kit)

2. Preparatory work

	ISTA No.
Conduct a brief test	
Information about disconnecting the battery	12 00 ...
Disconnect the negative pole of the battery	61 20 900
The following components must be removed first of all	
Front door trim, left and right	51 41 000
Cover on door window frame interior left and right	51 32 160
Mid-range speaker	65 13 070
Rear seat	52 26 005
Front door sill strip (interior) on both sides	51 47 000
Rear door sill strip (interior) on both sides	51 47 030
Right and left front seat	52 13 001
Remove the bass speaker cover	65 12 050
Luggage compartment floor trim	51 47 101
Luggage compartment wheel arch trim, left	51 47 151

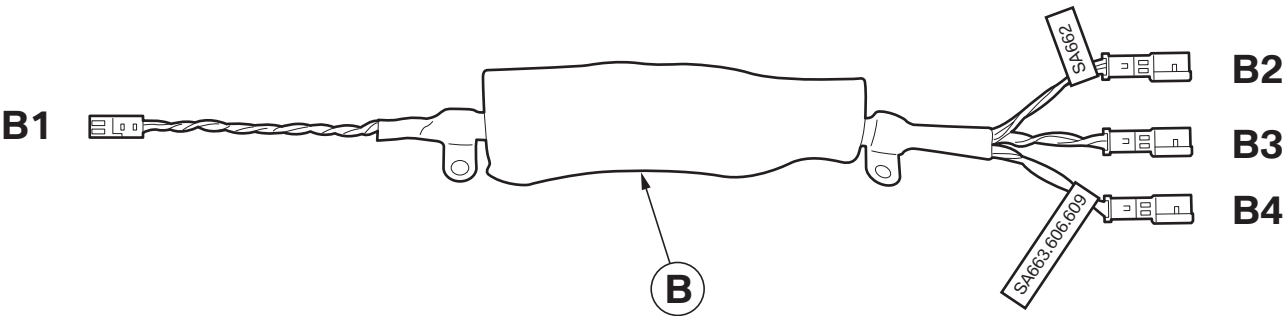
3. Retrofit wiring harness connection diagram



F20 0101 Z

Item	Designation	Signal	Cable colour/ cross-section	Connection location in the car	Abbreviation/ Slot
A	Retrofit wiring harness	---	---	---	---
A1	WS 10-pin socket casing	---	---	To audio amplifier C	---
A2	WS 14-pin socket casing	---	---	To audio amplifier C	---
A3	Eyelet	Terminal 31	BR 4.0 mm²	To ground support point in left luggage compartment	Z10*11B
A4	Eyelet	Terminal 30	RT 4.0 mm²	To the backup battery terminal in the luggage compartment	B73
A5	SW 4-pin pin housing	---	---	To the car plug on the right bass speaker	B64*1B
A6	SW 4-pin socket casing	---	---	To right bass speaker	B64
A7	SW 4-pin pin housing	---	---	To the car plug on the left bass speaker	B63*1B
A8	SW 4-pin socket casing	---	---	To left bass speaker	B63

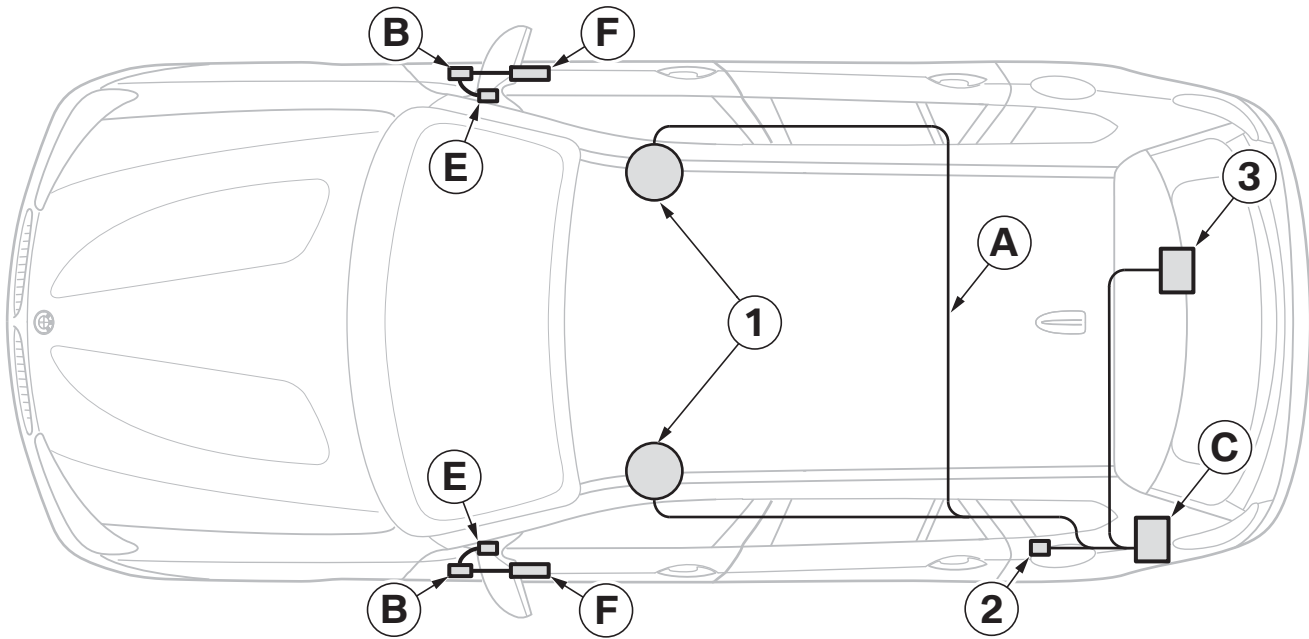
4. Diplexer connection diagram



F20 0082 Z

Item	Designation	Signal	Cable colour/ cross-section	Connection location in the car	Abbreviation/ Slot
B	Diplexer	---	BL/WS BL/SW	---	---
B1	BL 2-pin socket casing	---	GE/RT GE	To mid-range speaker F	---
B2	BL 2-pin pin housing	---	BL/WS BL/SW	Cars with Business radio only To tweeter E	---
B3	BL 2-pin pin housing	---	GE/RT GE	On original socket casing to door speaker	---
B4	BL 2-pin pin housing	---	BL/WS BL/SW	Only cars with SA606, SA609, SA663 To tweeter E	---

5. Installation and cabling diagram



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A Retrofit wiring harness

B Diplexer

C Audio amplifier

E Tweeter

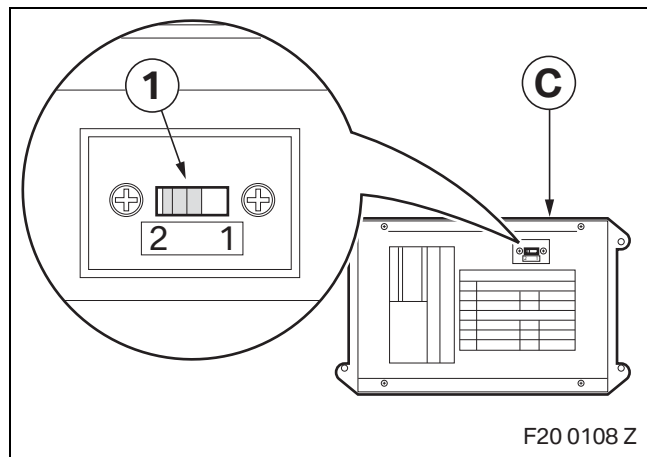
F Mid-range speaker

1 Left and right bass speaker **B63, B64**

2 Ground support point **Z10*11B**

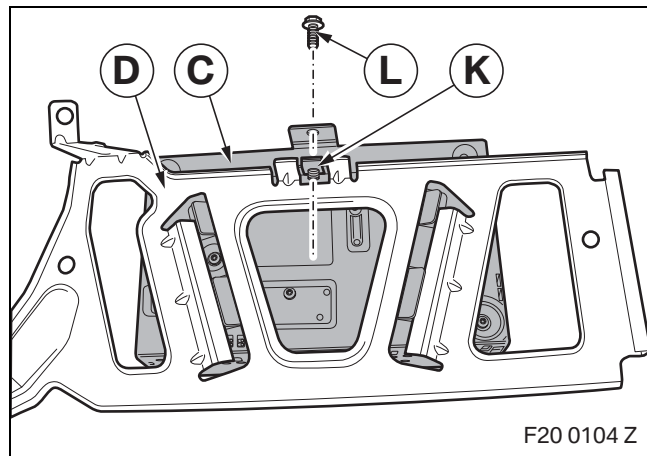
3 Backup battery terminal **B73**

6. Installing and connecting the retrofit kit



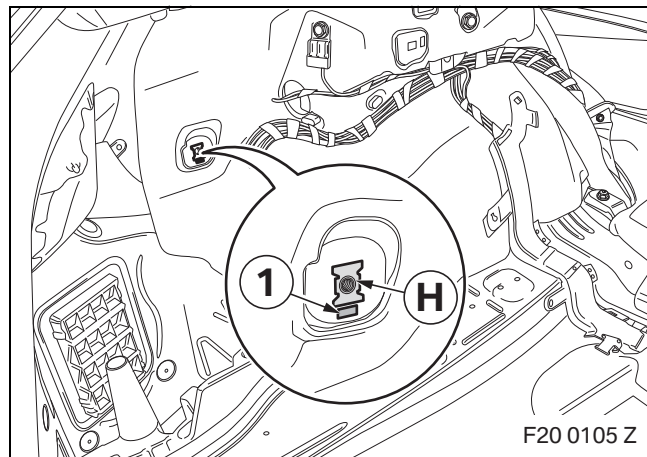
▶ Before installing audio amplifier **C**, set switch (1). ◀

Set the switch (1) to position 2.

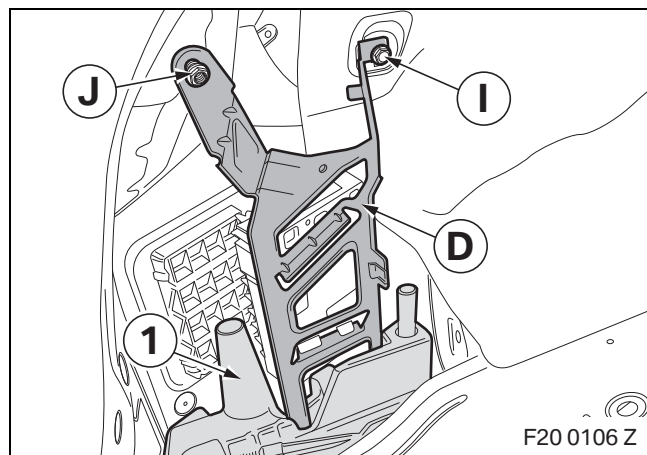


Insert sheet metal nut **K** in audio amplifier holder **D**.

Insert audio amplifier **C** in audio amplifier holder **D** and secure in place with hexagon screw **L**.

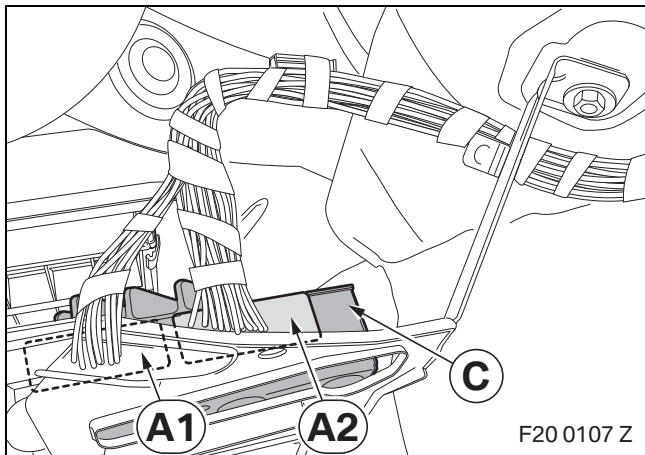


Insert Presto cage **H** in the hole provided (1).

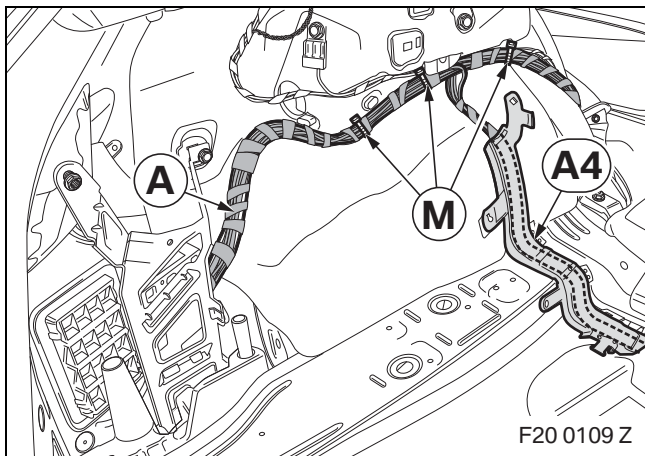


Place audio amplifier holder **D** in support (1) and secure using hexagon nut **J** and hexagon screw with washer **I**.

6. Installing and connecting the retrofit kit

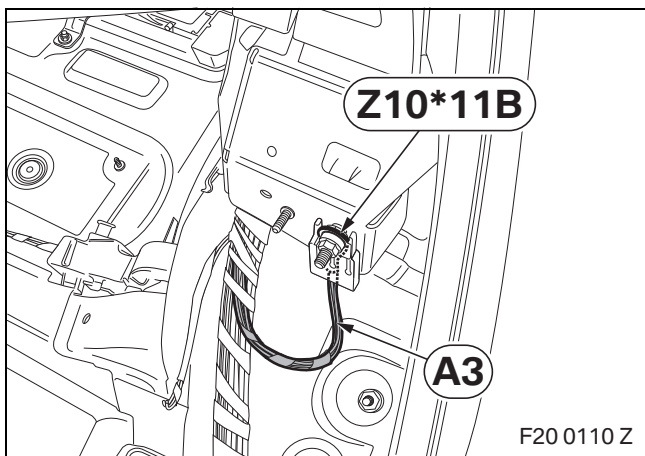


Connect branches **A1** and **A2** to audio amplifier **C**.

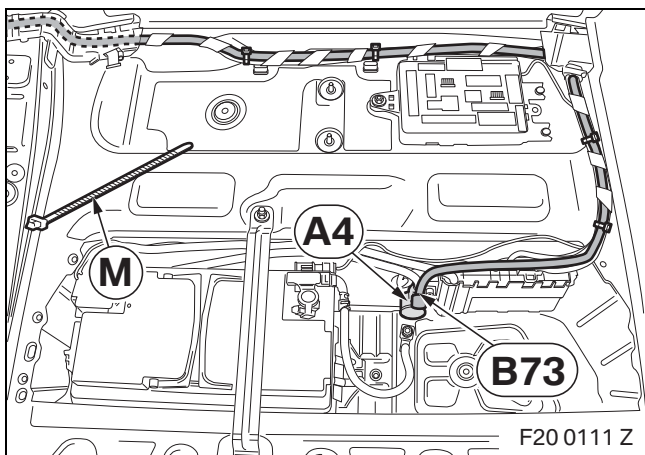


Route retrofit wiring harness **A** to the C pillar and secure with cable ties **M**.

Route branch **A4** to the installation point of the backup battery terminal.



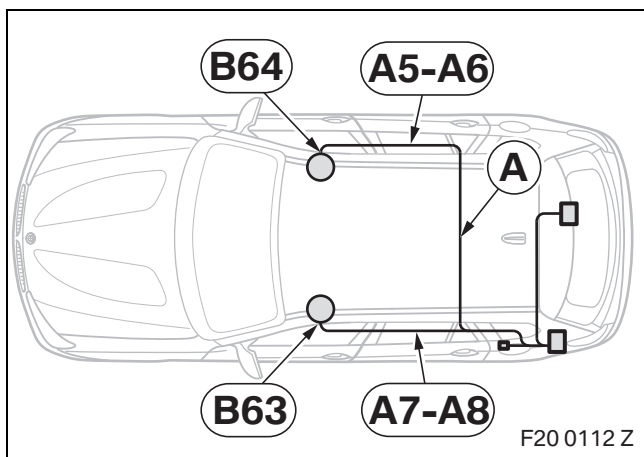
Screw branch **A3** to ground support point **Z10*11B**.



Screw branch **A4** to backup battery terminal **B73**.

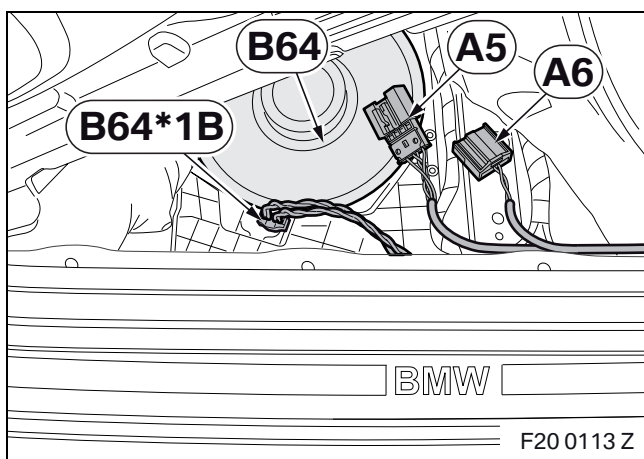
Secure branch **A4** using cable ties **M** to the standard wiring harness.

6. Installing and connecting the retrofit kit



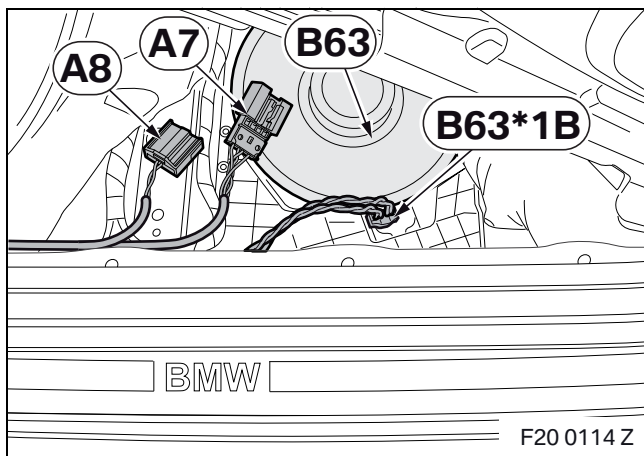
Route branches **A5-A8** of retrofit wiring harness **A** as follows:

- Branches **A5** and **A6** to the installation point of right bass speaker **B64**
- Branches **A7** and **A8** to the installation point of left bass speaker **B63**



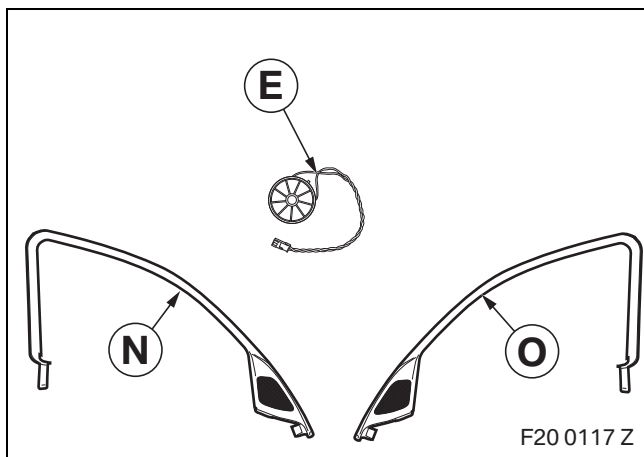
Disconnect plug **B64*1B** from left bass speaker **B64** and connect to branch **A5**.

Connect branch **A6** to left bass speaker **B64**.



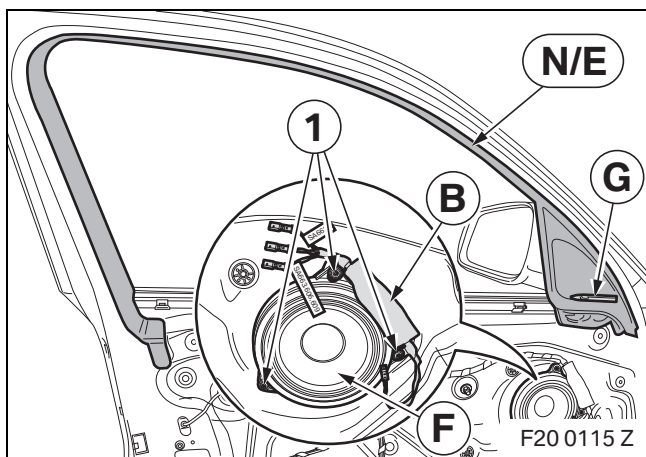
Disconnect plug **B63*1B** from right bass speaker **B63** and connect to branch **A7**.

Connect branch **A8** to right bass speaker **B63**.



Place tweeter **E** in window frame cover **N** and **O**.

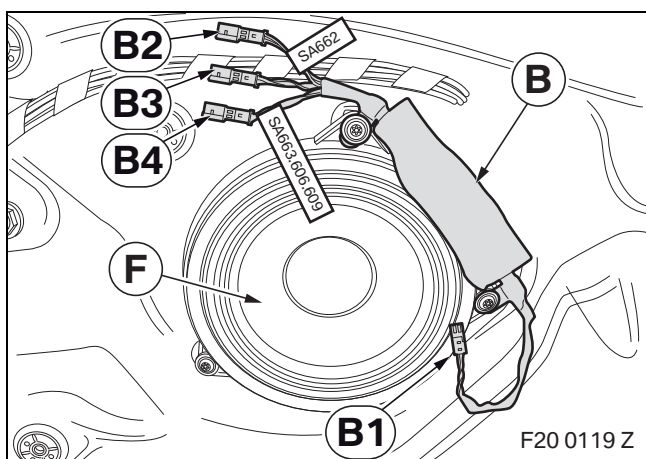
6. Installing and connecting the retrofit kit



▶ The installation of diplexer **B**, tweeter **E** and mid-range speaker **F** is shown only on the left-hand side of the car. Proceed in a similar fashion on the right-hand side of the car. ◀

Install window frame cover **N** with tweeter **E** and attach emblem **G**.

Install diplexer **B** and mid-range speaker **F** using the existing screws (1).



▶ The connection of the diplexer **B** is shown only on the left-hand side of the car. Proceed in a similar fashion on the right-hand side of the car. ◀

Connect diplexer **B** as follows:

- Connect branch **B1** to mid-range speaker **F**
- Connect branch **B3** to the original socket casing for the door speaker

Cars with Business radio only

Connect branch **B2** to the tweeter.

Only cars with SA 606, SA 609 or SA 663

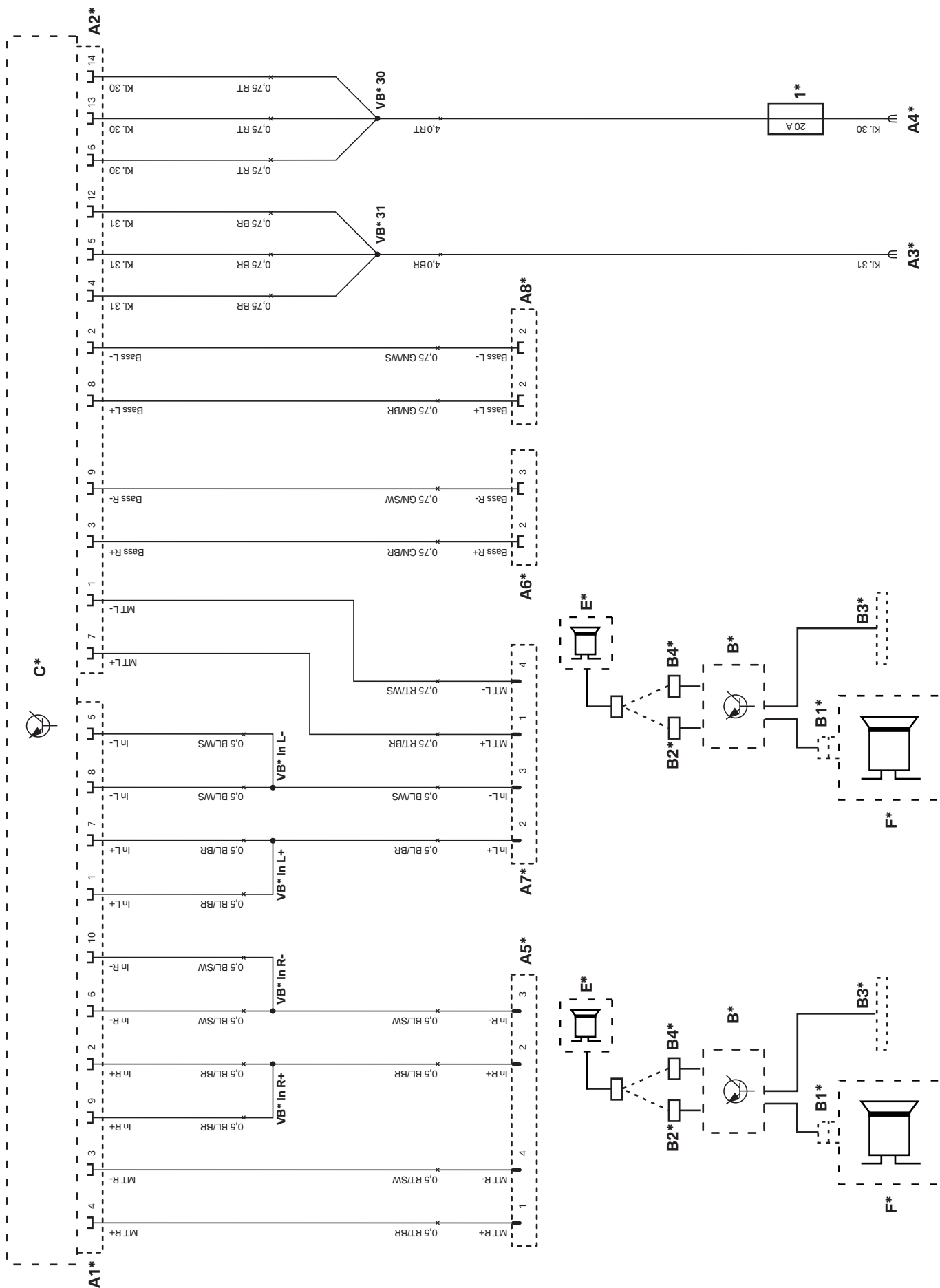
Connect branch **B4** to the tweeter.

7. Concluding work and programming / coding

The retrofit system does not require programming / coding.

- Connect the battery
- Carry out a vehicle test using the ISTA system and note or work through any entered error memory.
- Delete the fault memory
- Carry out a functional test of the HiFi system
- Re-fit the car components as required

8. Wiring diagram



8. Wiring diagram

Legend

A1*	WS 10-pin socket casing, to audio amplifier C
A2*	WS 14-pin socket casing, to audio amplifier C
A3*	Screw eyelet M8 to ground support point Z10*11B
A4*	Screw eyelet M8 to backup battery terminal
A5*	SW 4-pin pin housing, to the standard plug of the right bass speaker
A6*	SW 4-pin socket casing, to right bass speaker
A7*	SW 4-pin pin housing, to the standard plug of the left bass speaker
A8*	SW 4-pin socket casing, to left bass speaker
B*	Diplexer
B1*	BL 2-pin socket casing, to mid range speaker F
B2*	BL 2-pin pin housing, to tweeter E (only cars with Business radio)
B3*	BL 2-pin pin housing, to the original socket casing of the speaker
B4*	BL 2-pin pin housing, to tweeter E (only cars with SA 606, SA 609, SA 663)
C*	Audio amplifier
E*	Tweeter
F*	Mid-range speaker
1*	Fuse holder with fuse (20 A)

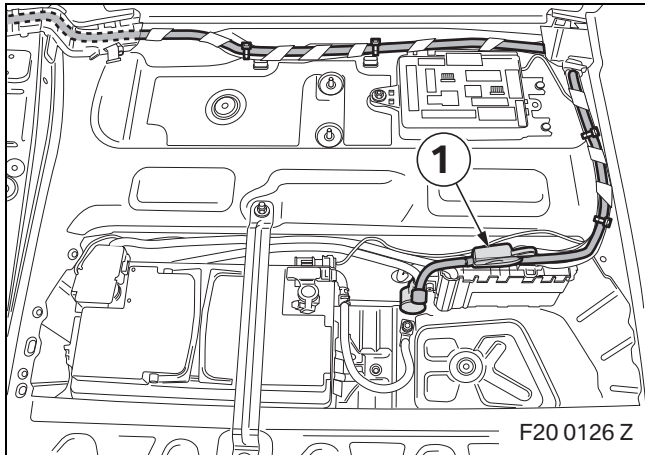
All the designations marked with an asterisk (*) apply only to these installation instructions or this wiring diagram.

Cable colours

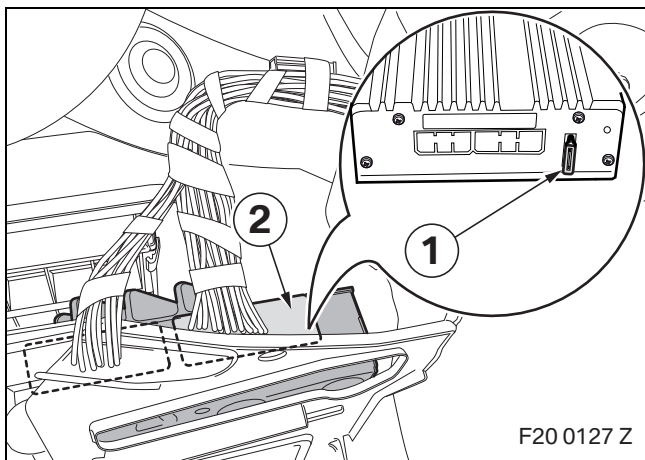
BL	Blue	GR	Grey	RT	Red
BO	Bordeaux	L-GN	Light green	SW	Black
BR	Brown	NT	Natural	TR	Transparent
GE	Yellow	OR	Orange	VI	Violet
GN	Green	RO	Pink	WS	White

9. Customer information

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



- Remove the luggage compartment floor trim
- Check the fuse (1) on the fuse holder
- If necessary, replace with a new 20 Amp fuse



- Open the luggage compartment side trim on the left
- Check the fuse (1) on audio amplifier (2)
- If necessary, replace with a new 7.5 Amp fuse