

Original BMW Accessory. Installation Instructions.



Retrofit iPod interface BMW 3 Series Saloon (E90)

These installation instructions are only valid for cars with SA 249 (multi-functional steering wheel), SA 662 (BMW Business CD radio) or SA 663 (BMW Professional radio) without SA 633 (Business mobile phone preparation), SA 638 (Professional car phone), SA 644 (universal charging/hands-free electronics) and SA 677 (Professional hi-fi system).

Retrofit kit No. 65 41 0 404 330

Installation time

The installation time is approx. 1.25 hours, but this may vary depending on the condition of the car and the equipment in it.

The car must be flash-upgraded with the latest I stage status before starting the conversion work. The required programming time depends on the production date of the car and the work that has already been carried out on it, which means that we cannot give a specific time for this work.

The time for the programming/encoding is not included in the installation time as it depends on the age 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.

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

All the figures show LHD cars, proceed accordingly on RHD cars.

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 occupied, bridges, double crimps or twin-lead terminals must be used.

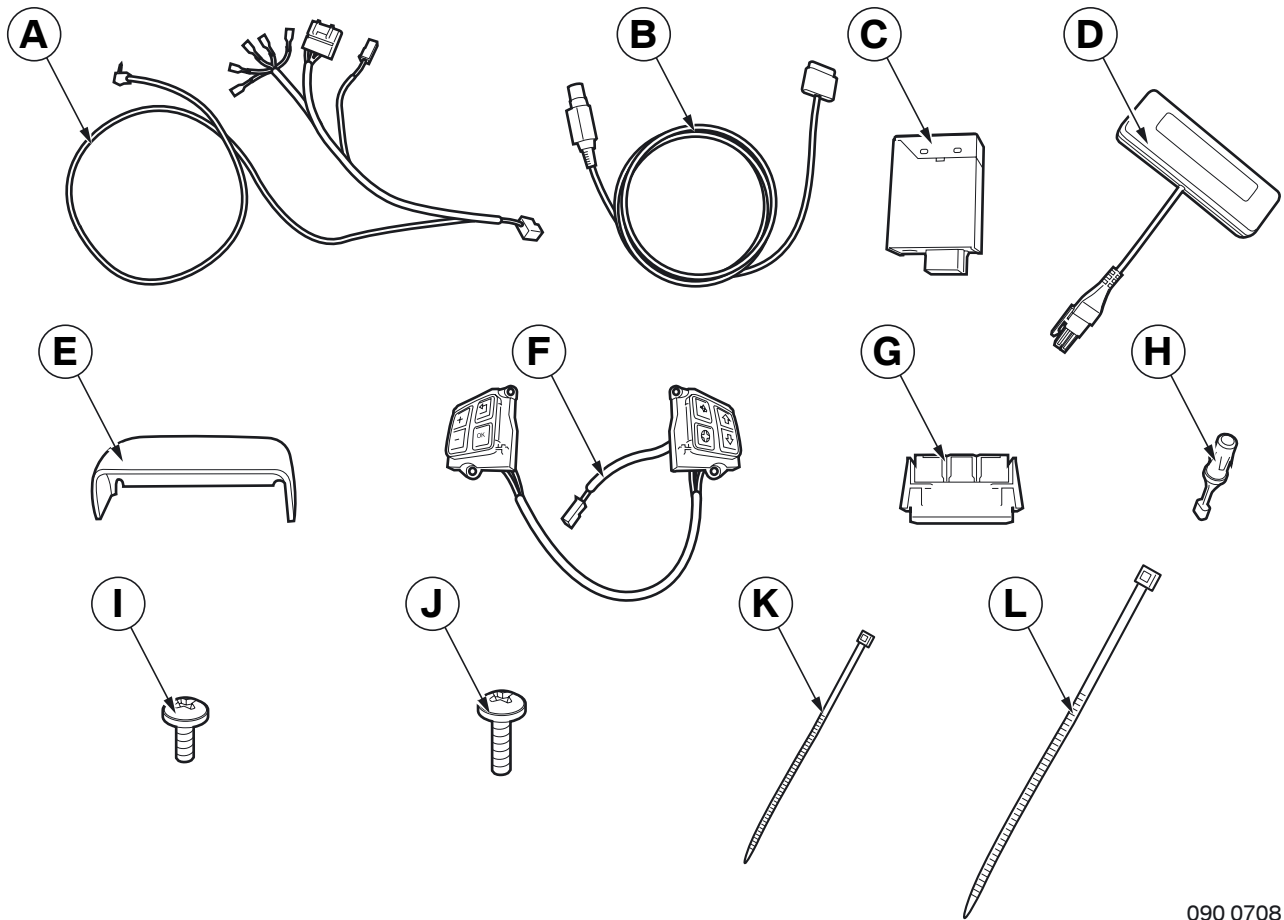
Special tools required

00 9 317 Trim wedge

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1. Parts list



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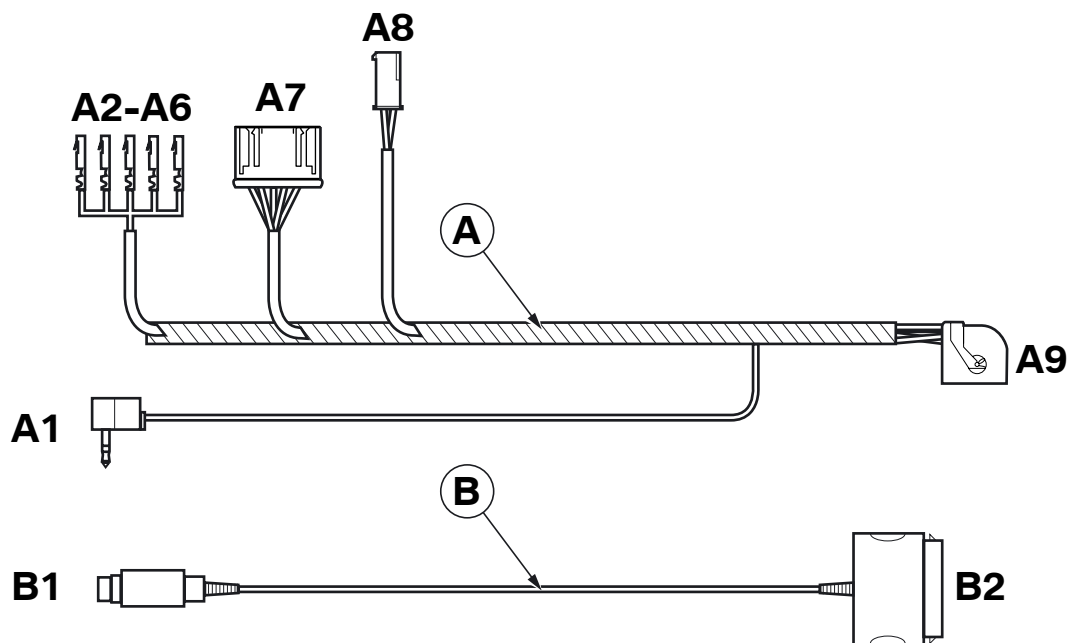
Legend

- A Wiring harness
- B iPod connection cable
- C iPod interface
- D Display
- E Display holder
- F Button unit
- G 6-pin SW socket casing
- H Socket contact (5x)
- I Screw (2x)
- J Self-tapping screw (2x)
- K Cable ties (10x)
- L Cable tie

2. Preparations

	TIS No.
Conduct a brief test	---
Disconnect the negative pole of the battery	12 00 ...
The following components must be removed first of all	
Radio receiver	65 11 080
Speaker cover	65 13 060
Centre fresh air grille	64 22 162
Trim for oddments box	51 16 212
Airbag unit on driver's side	32 34 020
Both switches on multi-functional steering wheel	61 31 221

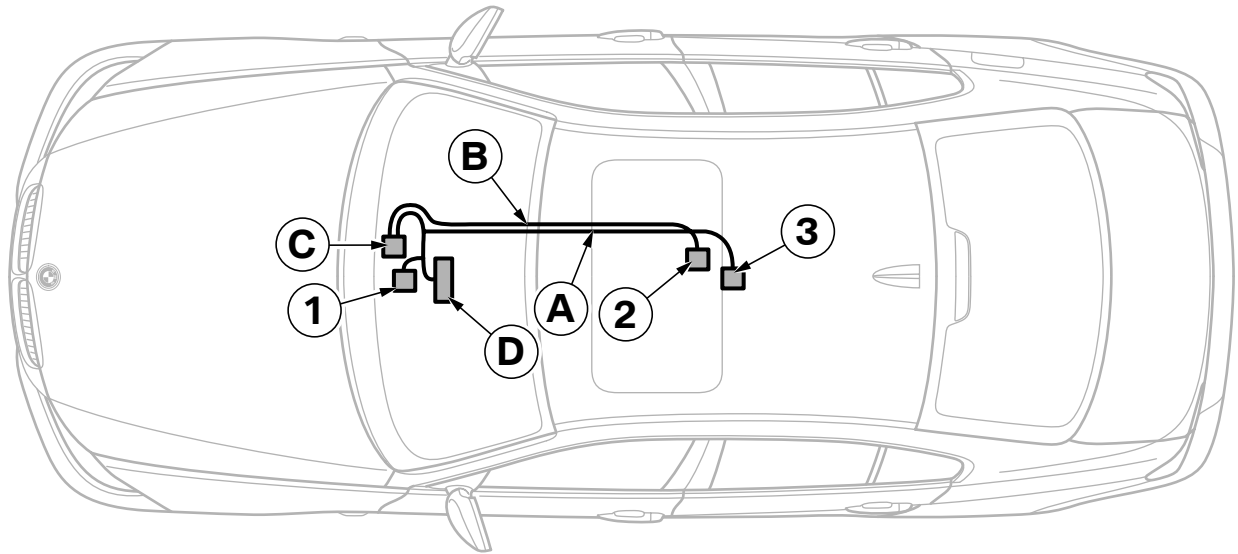
3. Connection diagram



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Item	Designation	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A	Wiring harness	---	---	---	---
A1	Angle plug	---	---	To AUX IN socket next to the rear cigarette lighter	X14118
A2	Socket contact	K-CAN_L	GN 0.35 mm ²	To radio plug X13812	X13812 PIN 9
A3	Socket contact	K-CAN_H	GE/GN 0.35 mm ²	To radio plug X13812	X13812 PIN 11
A4	Socket contact	Terminal 31	BR 0.75 mm ²	To radio plug X13812	X13812 PIN 12
A5	Socket contact	Radio_On	SW 0.75 mm ²	To radio plug X13812	X13812 PIN 13
A6	Socket contact	Terminal 30	RT/GN 0.75 mm ²	To radio plug X13812	X13812 PIN 15
A7	6-pin SW plug casing	---	---	To 6-pin socket casing SW G	---
A8	4-pin plug casing, WS	---	---	To display D	X4234
A9	12-pin SW socket casing	---	---	To iPod interface C	---
B	iPod connection cable	---	---	---	---
B1	8-pin WS socket casing	---	---	To iPod interface C	---
B2	iPod connection plug	---	---	To iPod	---

4. Installation and cabling diagram

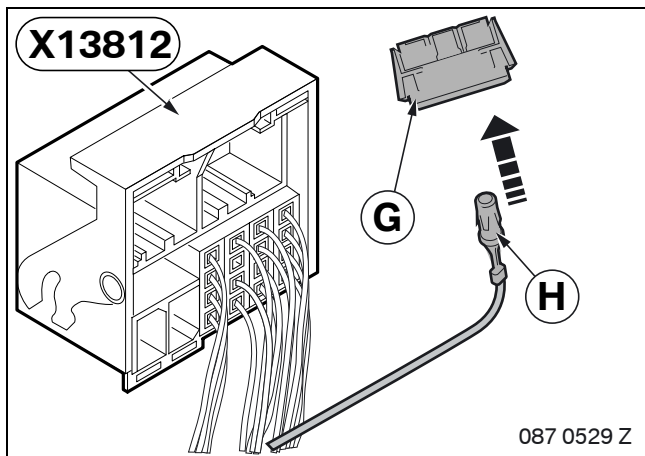


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Legend

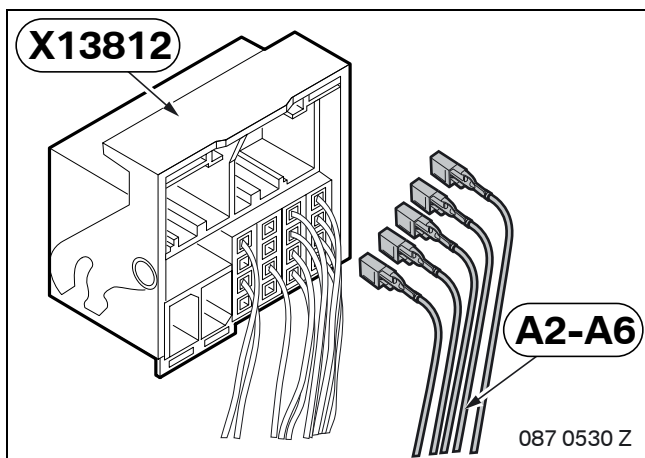
- A Wiring harness
 - B iPod connection cable
 - C iPod interface
 - D Display
-
- 1 Radio plug **X13812**
 - 2 iPod plug
 - 3 AUX IN socket

5. To install and connect the wiring harness and iPod connection cable



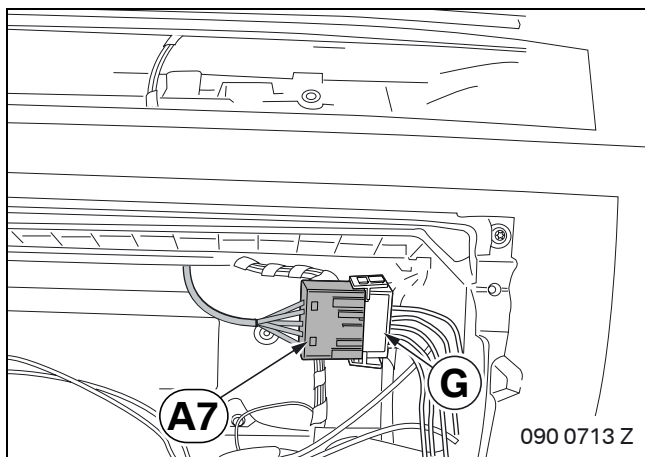
Disconnect the cable from radio plug **X13812** as follows, remove the socket contact, crimp on socket contact **H** and connect to socket casing **G**:

Plug X13812	Socket casing G
PIN 9, GN	PIN 5
PIN 11, OR/GN	PIN 4
PIN 12, BR	PIN 1
PIN 13, SW	PIN 3
PIN 15, RT/GN	PIN 2

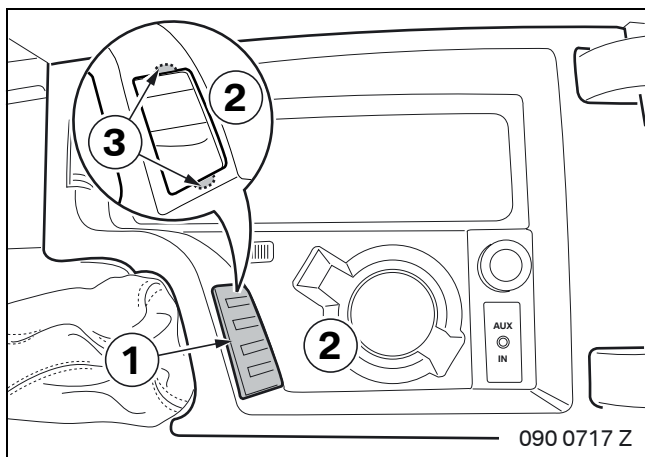


Connect branches **A2 – A6** to radio plug **X13812** as follows:

Branch	Plug X13812
A2 , GN	PIN 9
A3 , GE/GN	PIN 11
A4 , BR	PIN 12
A5 , SW	PIN 13
A6 , RT/GN	PIN 15



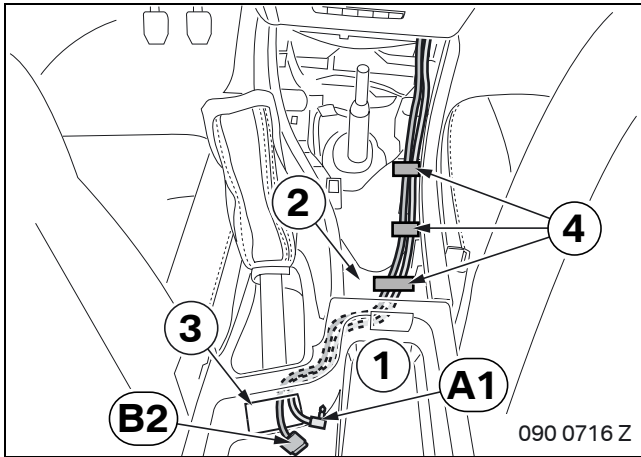
Connect branch **A7** to socket casing **G**.



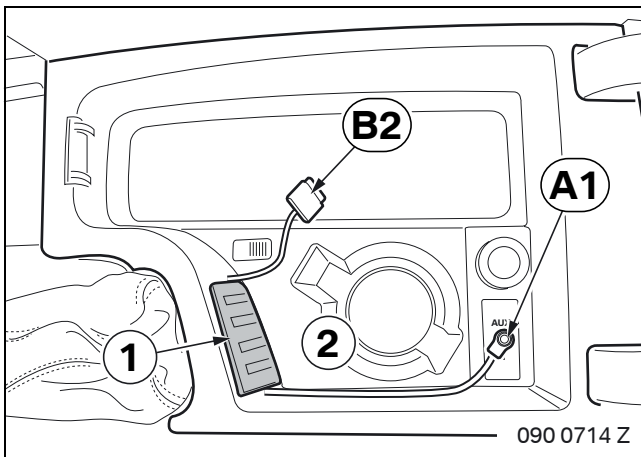
Unclip the coin holder (1) from the front armrest (2).

File a groove (3) into both sides of the front armrest (2) in which to place the cable as shown.

5. To install and connect the wiring harness and iPod connection cable

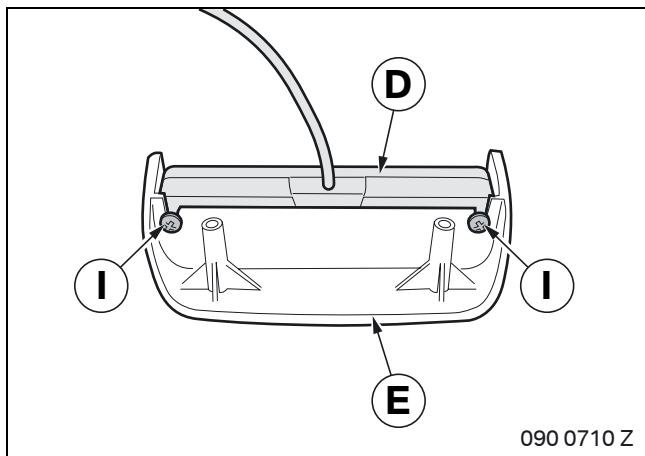


Route branches **A1** and **B2** on the oddments box (2) through the opening (3) in the front armrest (1) and secure it with textile adhesive tape (4).

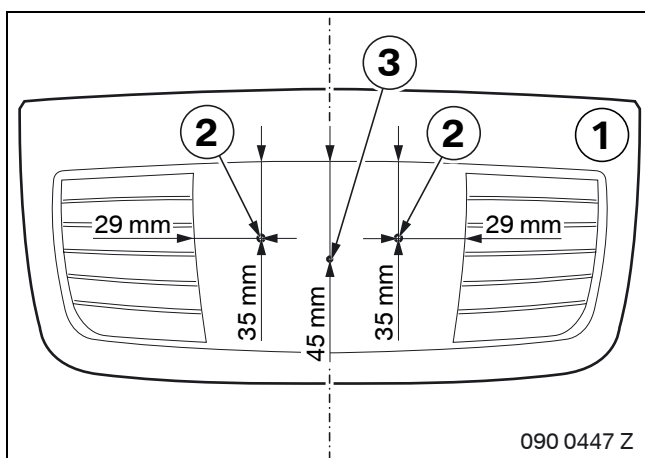


Connect branch **A1** to the AUX IN socket and keep branch **B2** available to connect the iPod. Clip the coin holder (1) into the front armrest (2).

6. To install and connect the display



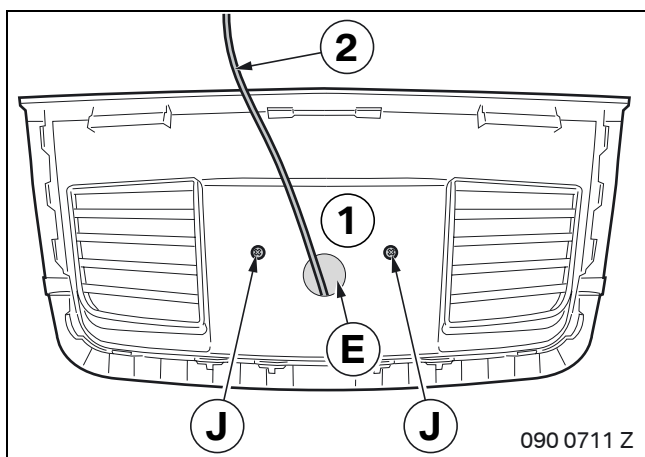
Secure the display **D** to the display holder **E** using screws **I**.



Mark the holes (2) and (3) on the speaker cover (1).

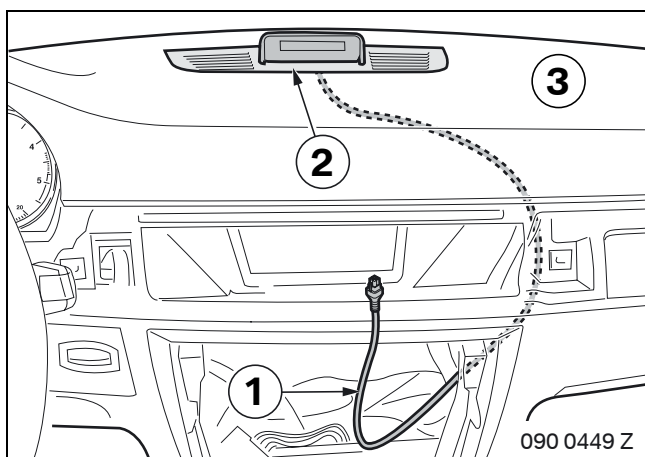
Drill the holes (2) using a 3.5 mm twist drill bit.

Enlarge the hole (3) to a diameter of 18 mm with a step drill.



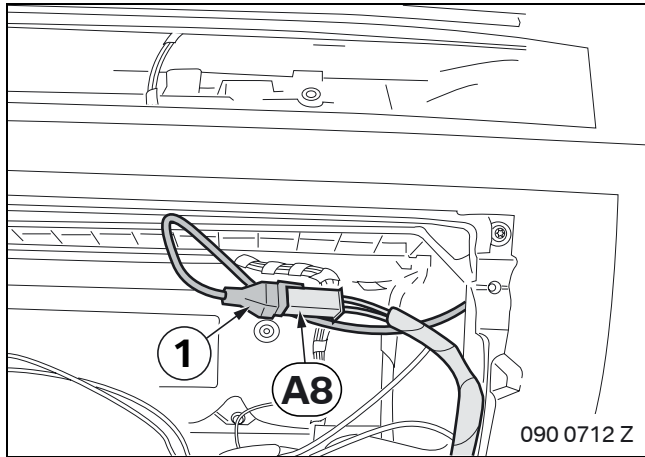
Route the display cable (2) through the hole in the speaker cover (1) and place the display holder **E** on the speaker cover (1).

Secure the screws **J** from the underside of the speaker cover (1) on the display holder **E**.



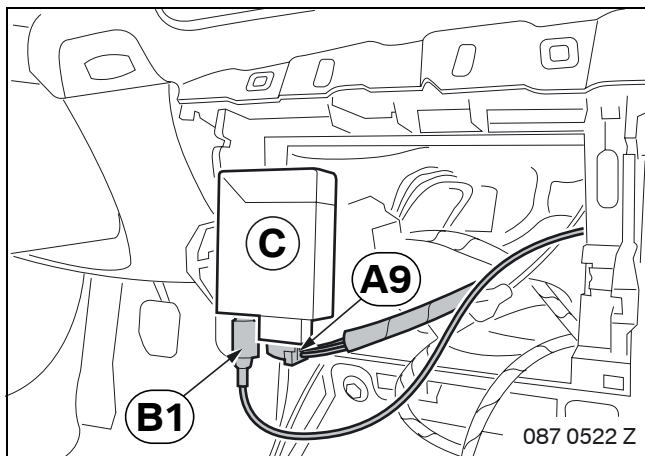
Route the display cable (1) downwards and clip the speaker cover (2) into the instrument panel (3).

6. To install and connect the display

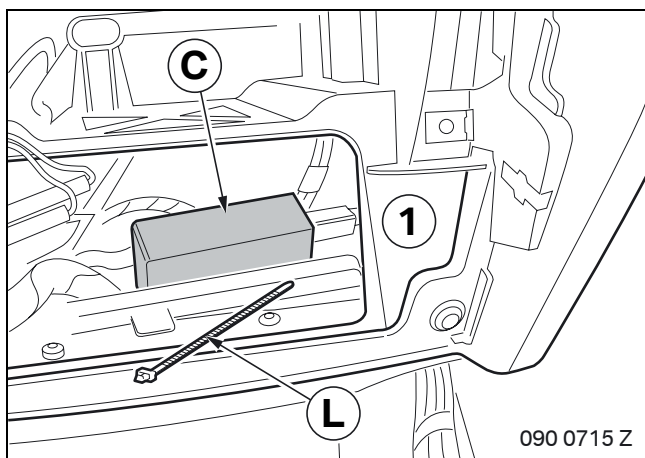


Connect branch **A8** to the display cable (1).

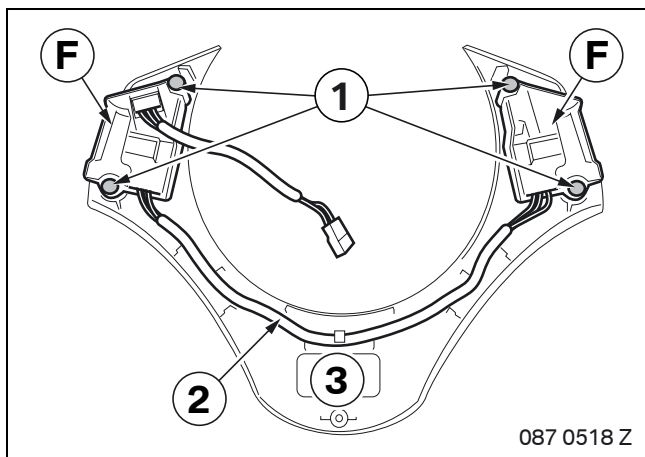
7. To install and connect the iPod interface and button unit



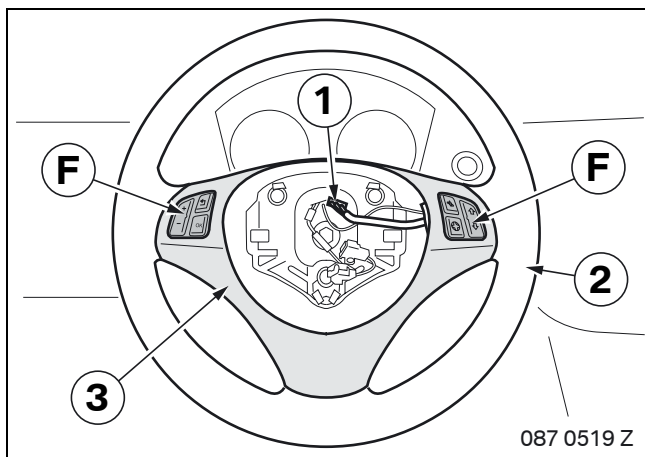
Connect branches **A9** and **B1** to the iPod interface **C**.



Tie back the iPod interface **C** behind the radio holder **1** to the standard wiring harness using cable tie **L**.



Secure the button unit **F** to the décor trim **3** using screw **1** and insert the cable **2** for the button unit **F** in the décor trim guides.



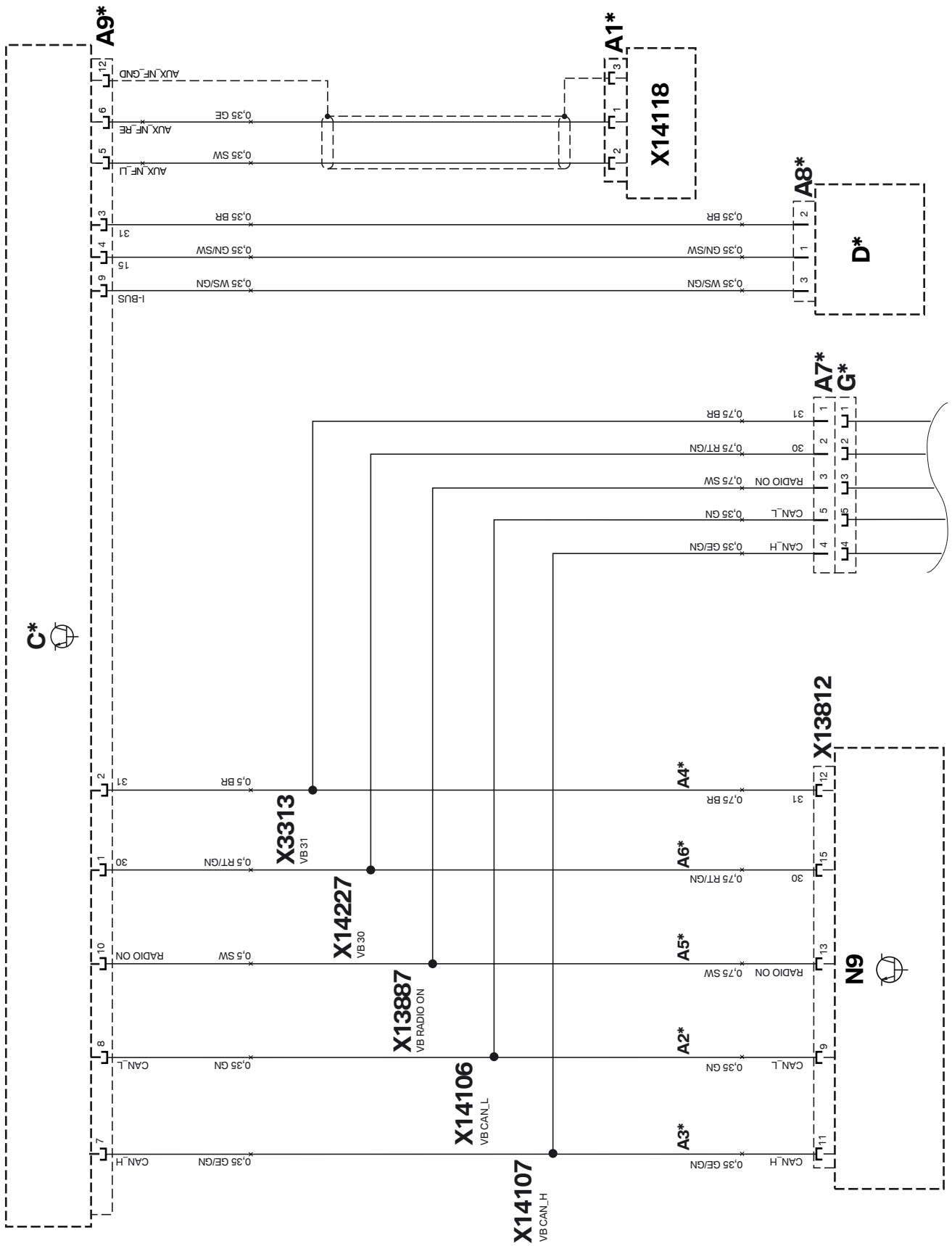
Connect the plug **1** on the button unit **F** to the steering wheel **2** and secure the décor trim **3** as described in TIS RA 61 31 221.

8. Concluding work and coding

This retrofit system does not require coding.

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

9. Circuit diagram



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9. Circuit diagram

Legend

A1*	Angle plug
A7*	6-pin plug casing
A8*	4-pin plug casing (X4234)
A9*	12-pin SW socket casing
C*	iPod interface
D*	Display
G*	6-pin socket casing
N9	Radio receiver
X3313	Connector terminal 31
X13812	16-pin radio plug
X13887	Radio On connector
X14106	CAN_L connector
X14107	CAN_H connector
X14118	AUX IN socket
X14227	Connector terminal 30

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

Cable colours

BR	Brown
GE	Yellow
GN	Green
RT	Red
SW	Black
WS	White