

Parts and Accessories. Installation Instructions.



DVD navigation system retrofit with on-board monitor BMW 3 Series Convertible (E46/C)

These installation instructions are only valid for cars with SA 534 (automatic air-conditioning system) and SA 550 (on-board computer) and without SA 358 (climate comfort windscreen)

Retrofit kit No. 65 90 0 393 010

Installation time

The installation time is 5.5 hours, but 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, 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), an inquiry is to be sent straight away to the technical parts support via the Aftersales Assistance Portal (ASAP), quoting the chassis number, the part number of the retrofit kit and a precise description of the problem.

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.

After the installation work the retrofit must be coded using DISPlus or GT-1 via the **Retrofit** path.

See ASAP for details of the pictograms.

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

Pictograms

 Denotes instructions that draw your attention to special features.

◀ denotes the end of the instruction or other text.

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

Ordering instructions

In cars with a BMW Business CD radio up to 09/01 and in all other cars up to 03/01, the aerial booster must be replaced by an aerial booster for cars from 09/01 or 03/01 onwards, respectively. This aerial booster is not included in the retrofit kit and must be ordered separately (see EPC for part number and further details).

The left boot wheel arch trim must be replaced in cars without a CD changer (see section 1). This boot wheel arch trim is not included in the retrofit kit and must be ordered separately (see EPC for part number and documentation).

The on-board monitor **B** and the support **E** are not included in the retrofit kit since there are different versions. It must be ordered separately (see EPC for part number and further details).

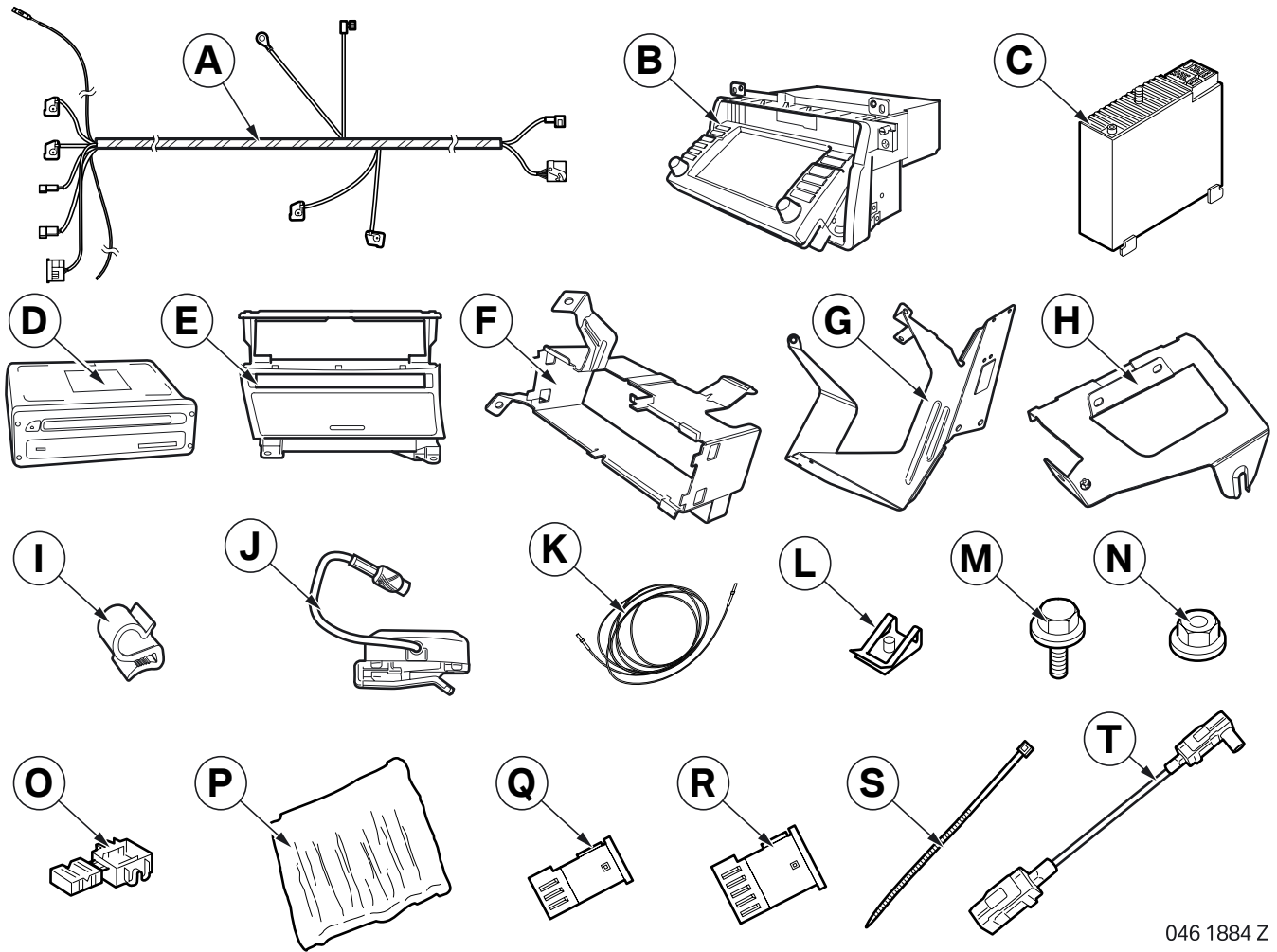
Special tools required

None

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1. Parts list

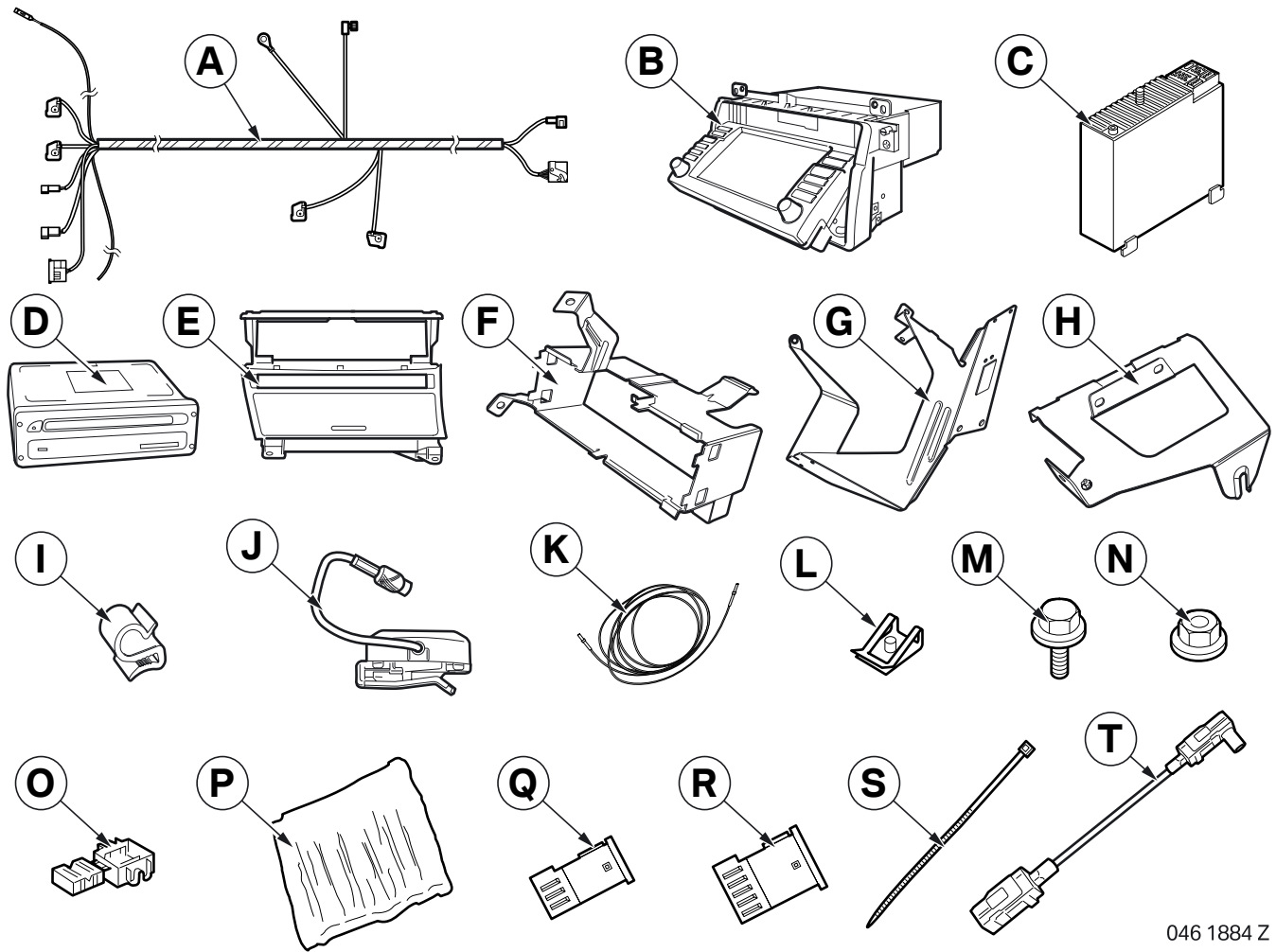


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Legend

- A Retrofit wiring harness
- B On-board monitor (not supplied with the retrofit kit)
- C Radio receiver
- D Navigation computer
- E Holder (not supplied with the retrofit kit)
- F Navigation computer holder
- G CD changer holder
- H Radio receiver holder
- I Cable clip
- J GPS aerial
- K GPS aerial cable

1. Parts list



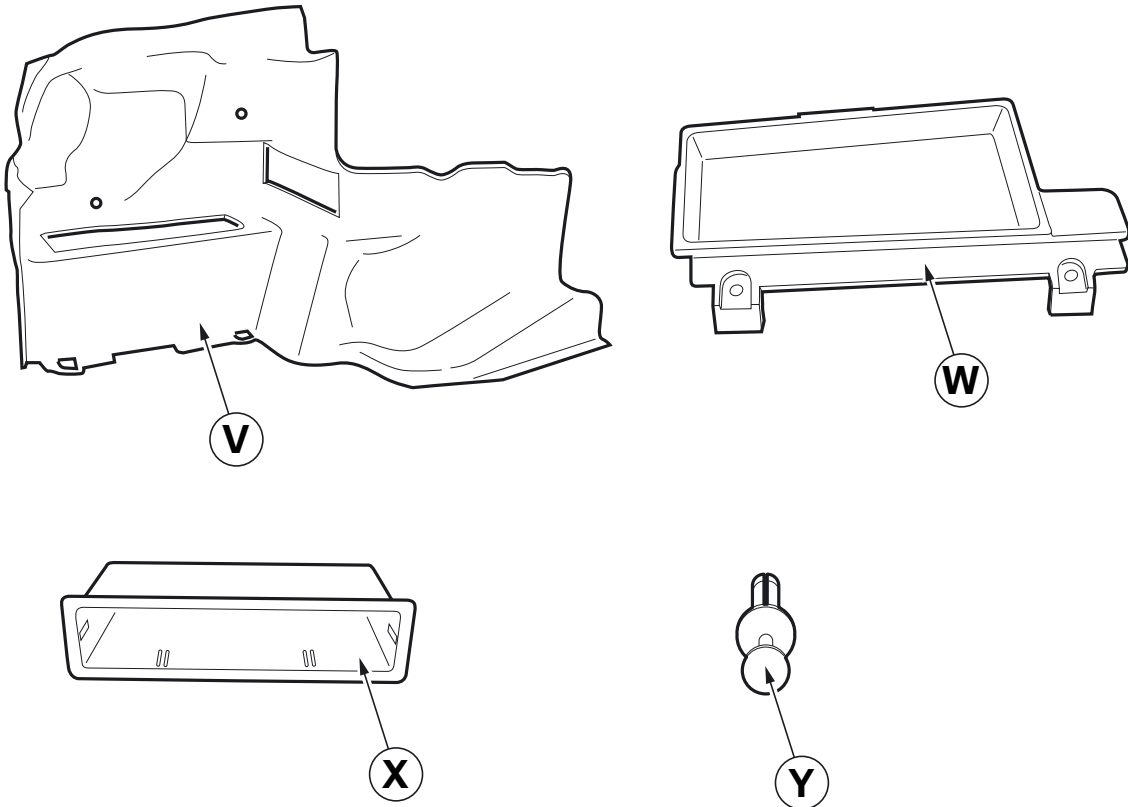
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Legend

- L Speed nut M5 (7x)
- M Hexagonal screw M5 x 14 (10x)
- N Hexagonal nut M5
- O Miniature connector (2x)
- P Protective strip
- Q SW 3-pin socket casing
- R SW 6-pin socket casing
- S Cable tie (15x)
- T Radio aerial cable

1. Parts list

The following parts are also required on cars without a CD changer SA 672 or without CD changer preparation SA 692 and must be ordered separately.



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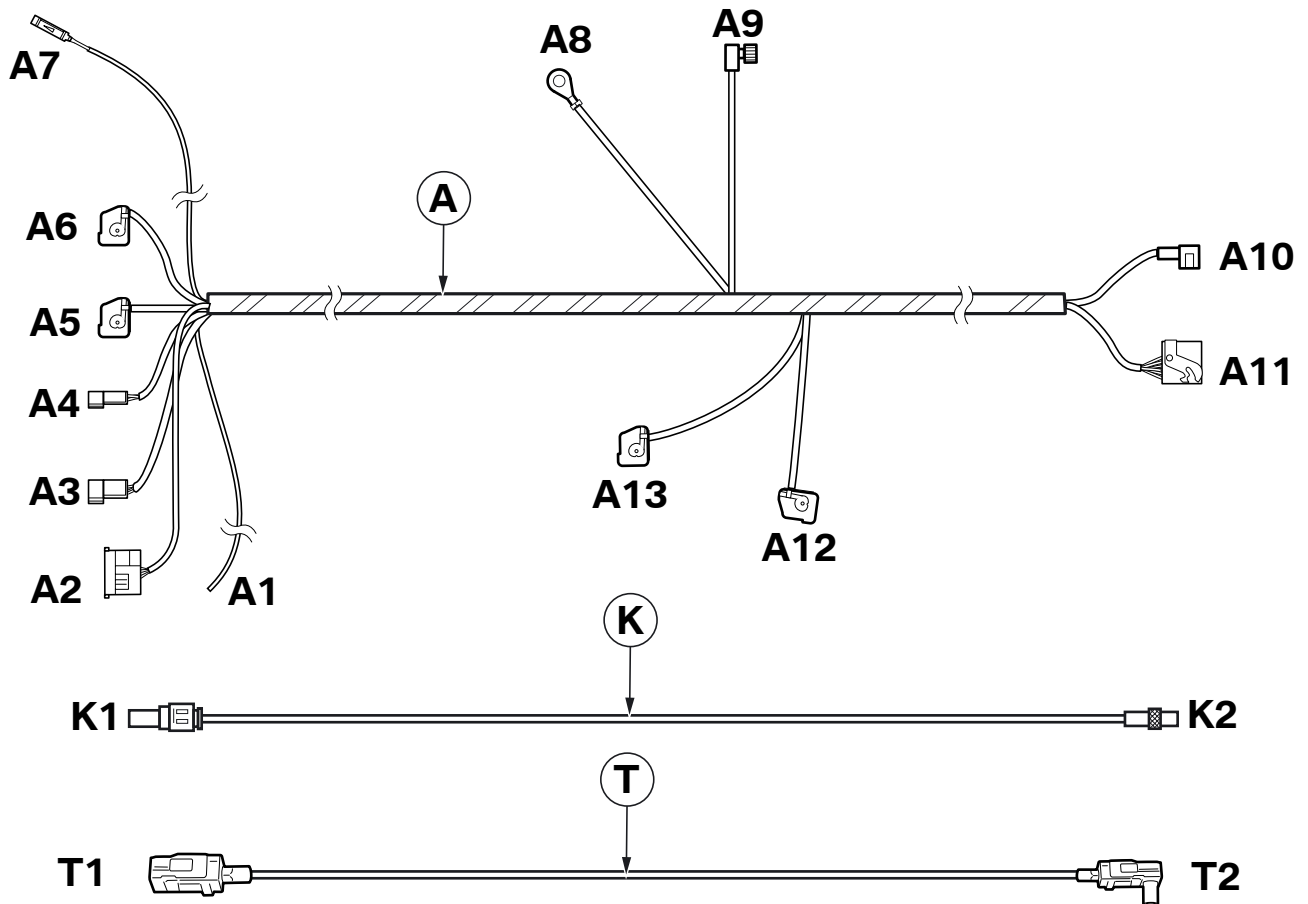
Legend

- V Boot trim on the left
- W Utility box in the boot on the left
- X Oddments box for CD changer opening
- Y Expanding rivet (2x)

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	
Centre fresh air grille	64 22 162
Radio receiver (no longer required)	65 11 030
Air-conditioning control	64 11 749
Replace the holder in the oddments box with holder E	51 16 ...
Instrument carrier	62 21 000
Glove compartment	51 16 366
Driver's seat	52 13 000
Inside door sill strip, left	51 47 000
Rear seat bench	52 26 005
Rear seat backrest	52 24 010
Rear left side trim	51 43 012/114
Gearshift lever cover	51 16 211
Boot floor trim	51 47 101
Left boot wheel arch trim	51 47 151

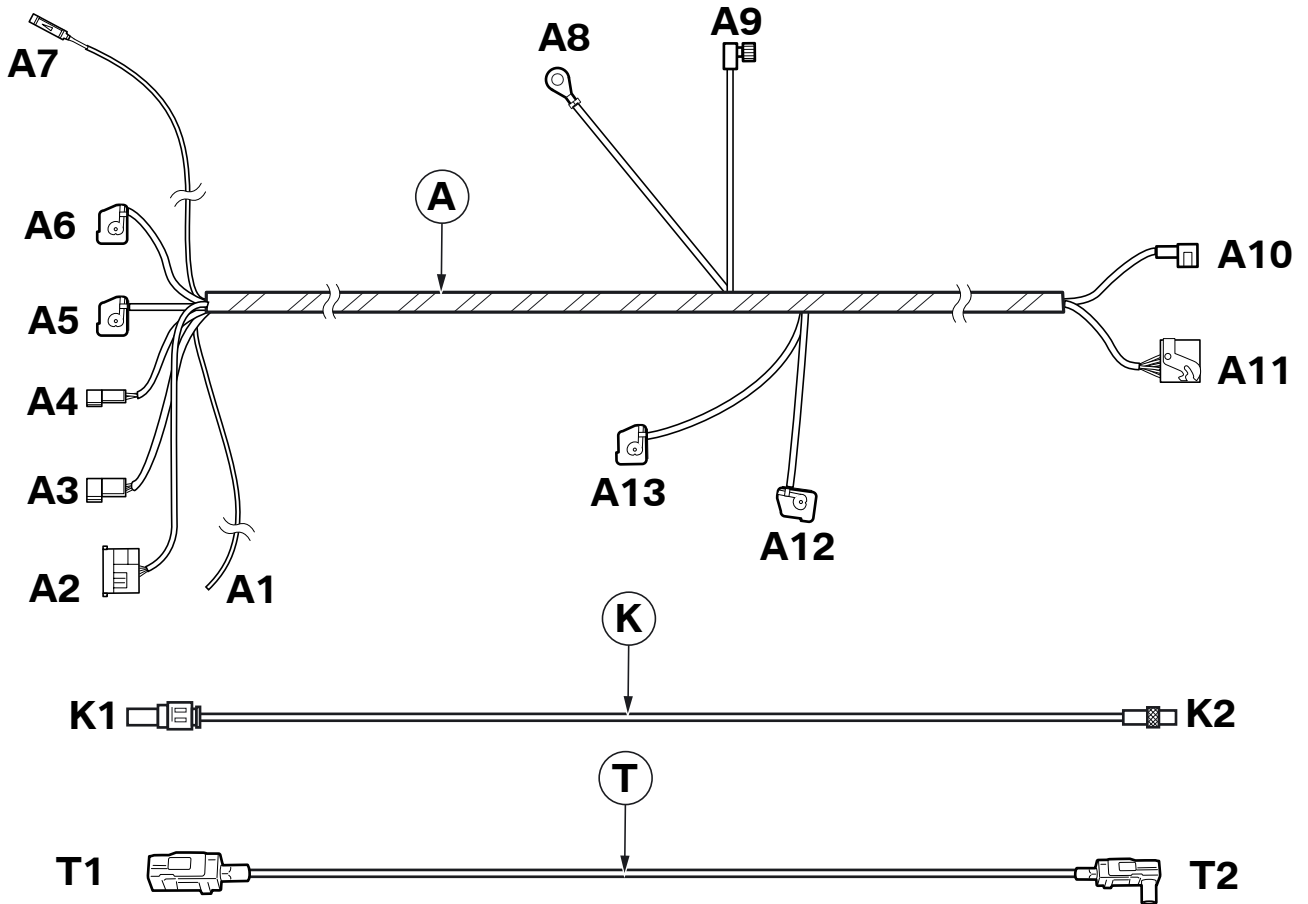
3. Connection diagram



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Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
A	Retrofit wiring harness	---	---	---	---
A1	Open cable end	TAA	BR/RT 0.35 mm ²	Connect to black/white cable of black 26-pin plug X11175 on instrument cluster using miniature connector R	X11175 PIN 8
A2	17-pin SW plug casing	---	---	To the radio plug	X18126
A3	6-pin SW plug casing	---	---	For optional CD changer retrofit and/or hands-free kit	X13321
A4	SW 3-pin socket casing	---	---	For optional AUX connection retrofit	X14118
A5	BL 12-pin socket casing	---	---	To on-board monitor B	X18801
A6	WS 12-pin socket casing	---	---	To on-board monitor B	X18802
A7	Joint connector contact	Reversing signal	BL/GE 0.35 mm ²	To joint connector above the fuse holder	X428
A8	Cable eyelet	Terminal 31	BR 2.5 mm ²	To earth post above the left rear wheel arch	X13016
A9	Coaxial plug casing	---	---	Insulate and tie back	---
A10	Fakra socket casing	---	---	Insulate and tie back	---
A11	SW 16-pin socket casing	---	---	To radio receiver C	X18126
A12	Violet 18-pin socket casing	---	---	To navigation computer D	X1312
A13	BL 18-pin socket casing	---	---	To navigation computer D	X1313

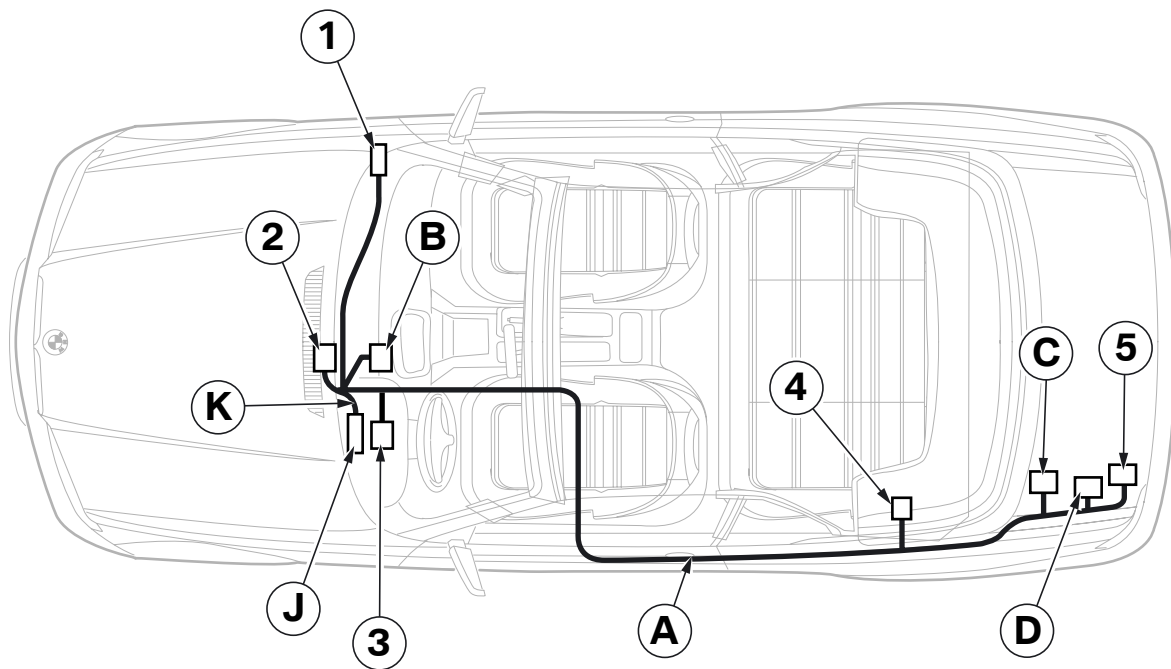
3. Connection diagram



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Item	Description	Signal	Cable colour / Cross-section	Connection location in the car	Abbreviation / Slot
K	GPS aerial cable	---	---	---	---
K1	Coaxial socket casing	---	---	To navigation computer D	---
K2	Coaxial plug casing	---	---	To GPS aerial J behind the instrument holder	---
		---	---		---
T	Radio aerial cable	---	---		---
T1	Fakra socket	---	---	To aerial booster in the side section on the left	X13344
T2	Fakra socket, angled	---	---	To radio receiver C	X13342

4. Installation and cabling diagram



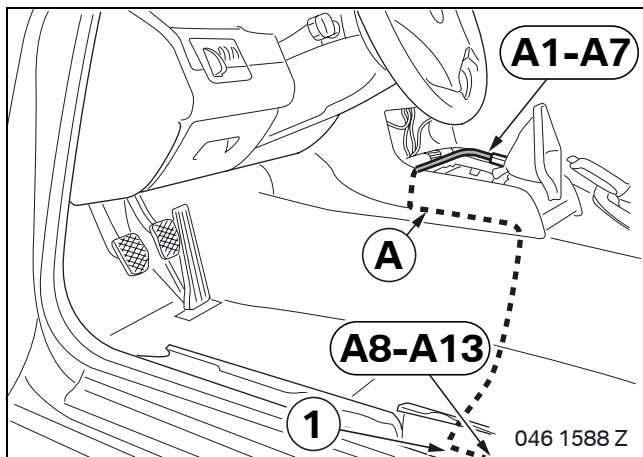
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Legend

- A Retrofit wiring harness
- B On-board monitor
- C Radio receiver
- D Navigation computer
- J GPS aerial
- K GPS aerial cable

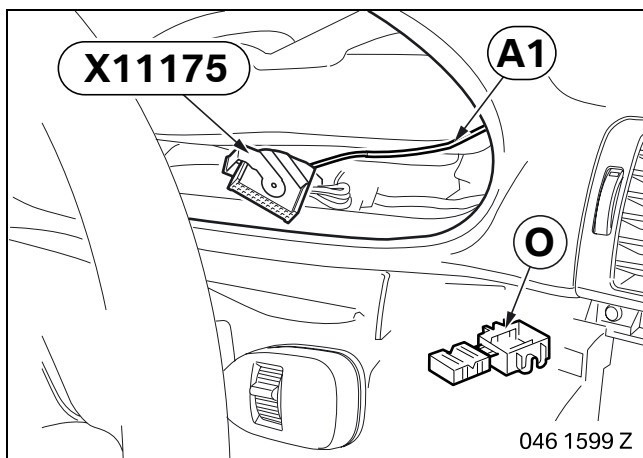
- 1 Joint connector **X428**
- 2 Radio plug **X18126**
- 3 Instrument cluster, plug **X11175**
- 4 Earth post **X13016**
- 5 Aerial booster

5. To install and connect the retrofit wiring harness

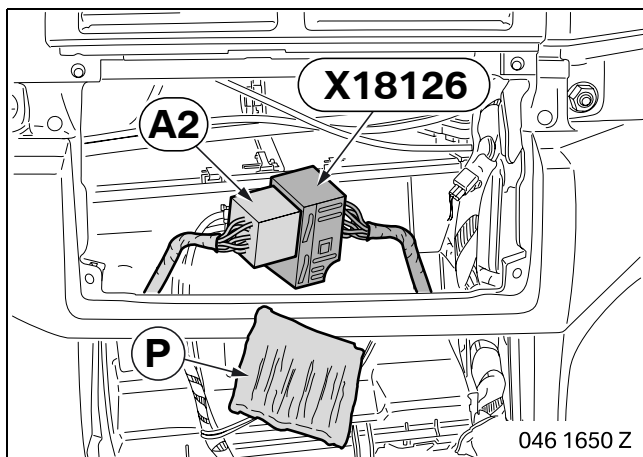


Route retrofit wiring harness **A** from the side skirt (1) as follows along the standard wiring harness:

- Branches **A1 – A7** to the centre console
- Branches **A8 – A13** into the boot on the left

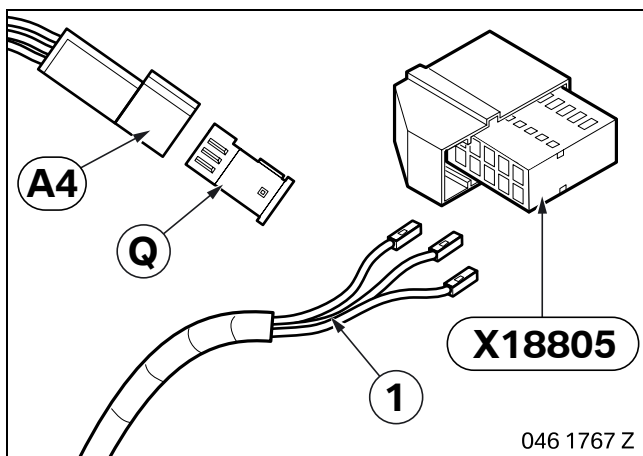


Route branch **A1** along the standard wiring harness to the instrument cluster and use miniature connector **O** to connect it to the SW/WS cable at PIN 8 in plug **X11175**.



Connect branch **A2** to radio plug **X18126**.

Wrap the plug connectors in the protective strip **P**.



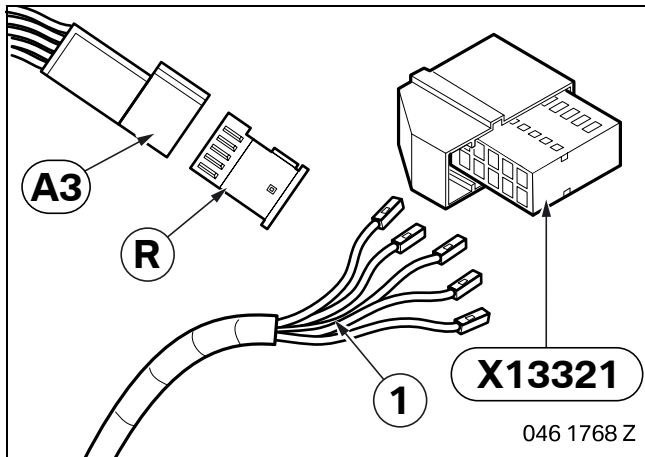
Only for cars with retrofitted auxiliary connection for external audio sources

Disconnect cables (1) from plug **X18805** and connect them to socket casing **Q** as follows:

- WS/BL cable to PIN 1 (AUX R+)
- WS/GE cable to PIN 2 (AUX L+)
- WS/BR cable to PIN 3 (AUX -)

Connect branch **A4** to socket casing **Q**.

5. To install and connect the retrofit wiring harness



Only for cars with CD changer or hands-free kit

Disconnect cables (1) from plug X13321 and connect them to socket casing R as follows:

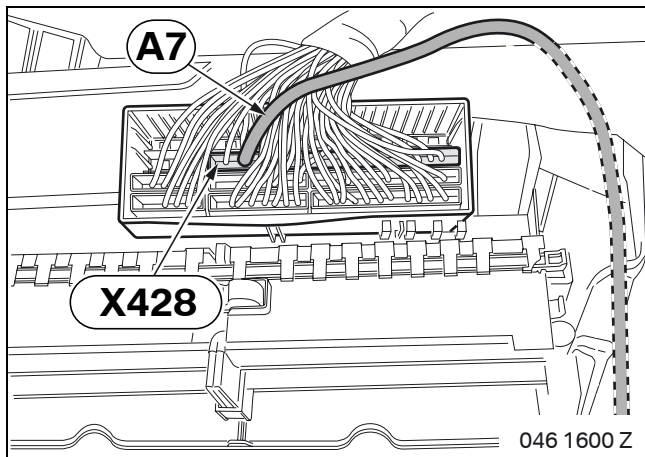
- SW cable to PIN 1 (Tel NF+)
- GE cable to PIN 2 (Tel NF-)
- WS/BL cable to PIN 4 (CD NF RE+)
- WS/RT cable to PIN 5 (CD NF LI+)
- WS/BR cable to PIN 6 (CD NF -)

Connect branch A3 to socket casing R.

All cars

Route branch A7 along the standard wiring harness to the glove compartment and connect to joint connector X428.

- ▶ If joint connector X428 is fully occupied, disconnect the contact and connect branch A7 using miniature connector O. ◀

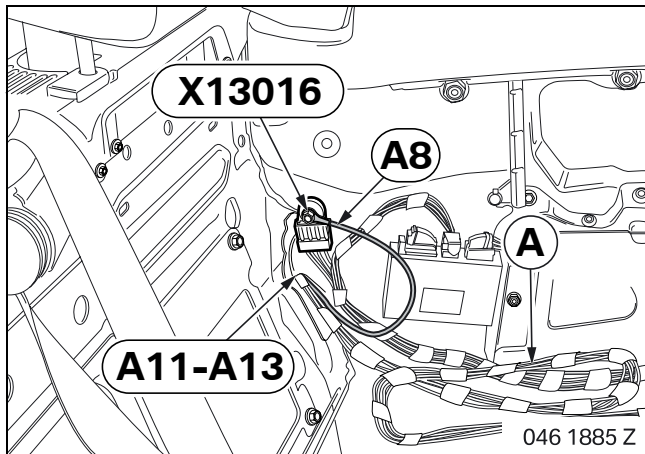


Route branch A8 to the earth post X13016 and secure it.

Tie back branch A9.

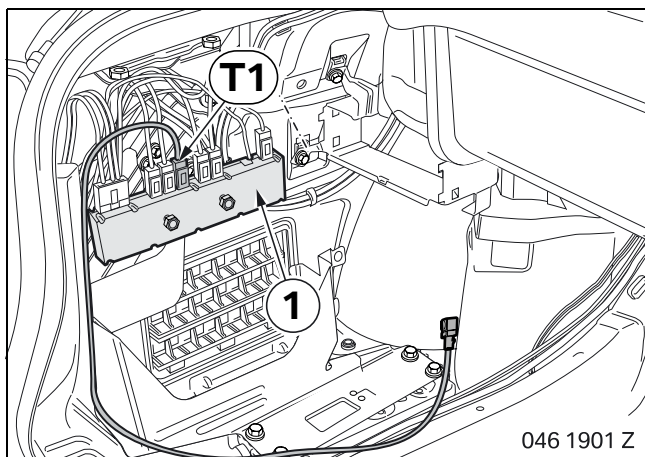
Tie back the excess lengths of the retrofit wiring harness A approx. 50 cm in the side section.

Route branches A11-A13 along the standard wiring harness into the boot.

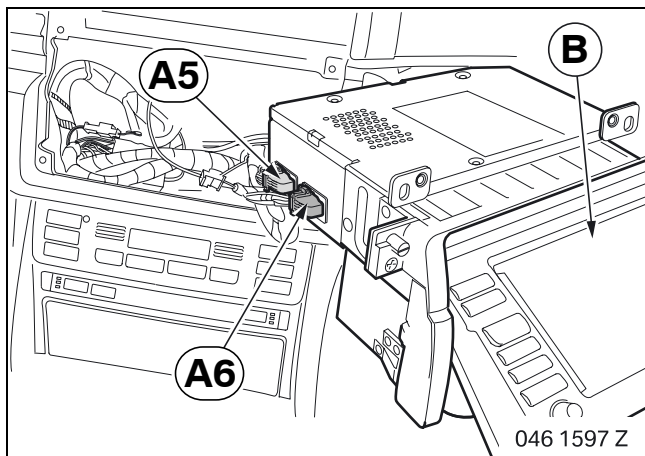


- ▶ In cars with a BMW Business CD radio up to 09/01 and in all other cars up to 03/01, the aerial booster (1) must be replaced by an aerial booster (1) for cars from 09/01 or 03/01 onwards respectively. ◀

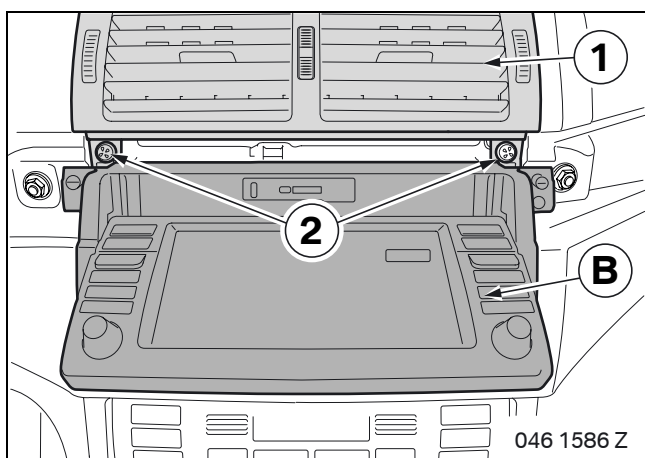
Connect branch T1 to the aerial booster (1)



6. To install and connect the on-board monitor and GPS aerial

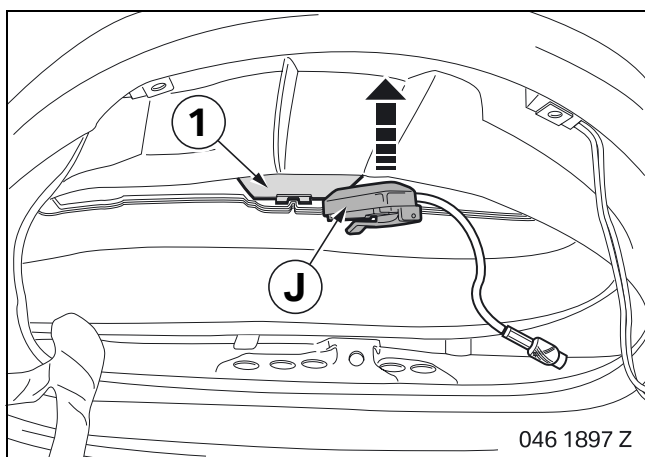


Connect branch **A5** and branch **A6** to the on-board monitor **B**.

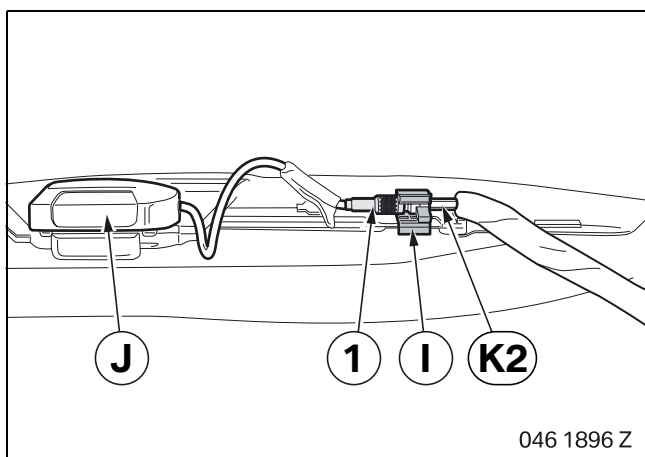


Insert the on-board monitor **B** into the instrument panel.

Clip in the centre fresh air grille (1) and use screws (2) to secure it.



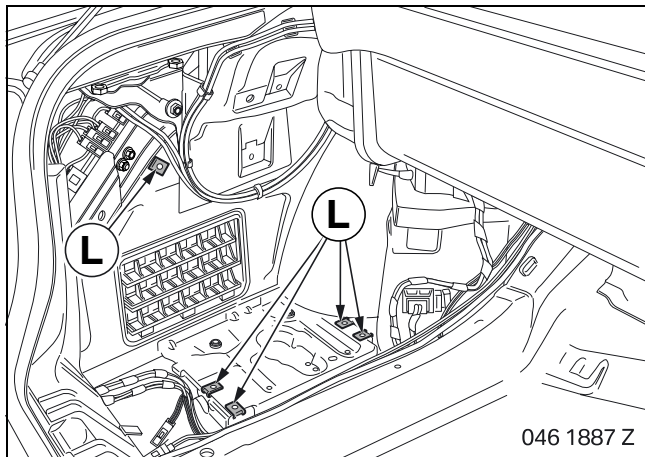
Place the GPS aerial **J** on the existing lug (1) behind the instrument holder.



Connect branch **K2** to the cable (1) of the GPS aerial **J** and secure it with a cable clip **I**.

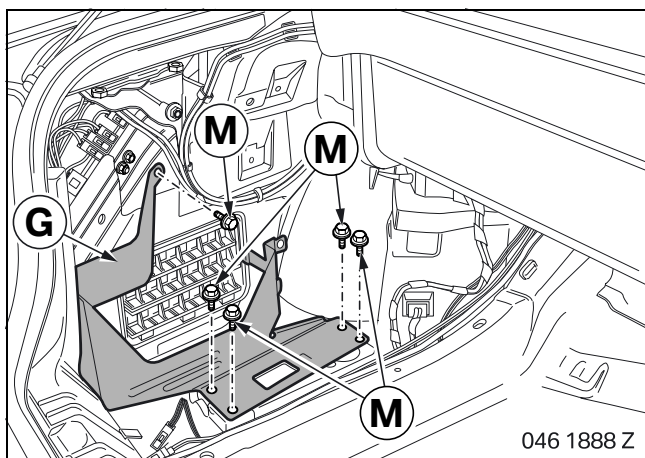
Route branch **K1** to the left side of the boot.

7. To install and connect the navigation computer and radio receiver

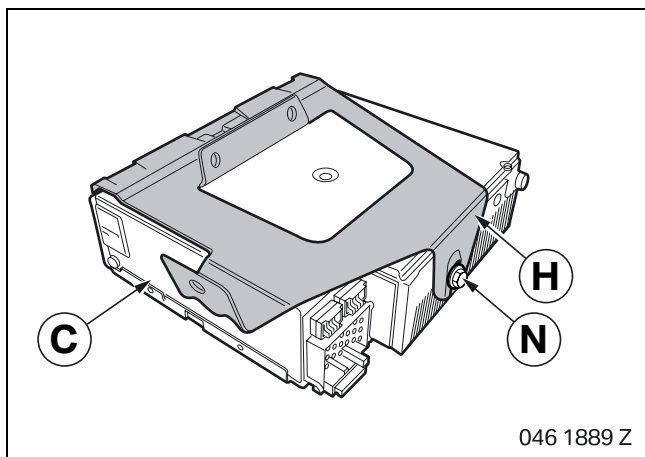


Cars without SA 672 / SA 692 only

Clip speed nuts **L** into the body around the boot on the left-hand side.

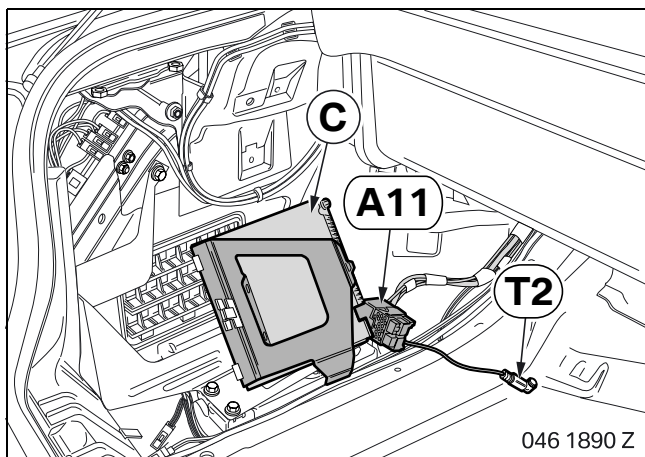


Use hexagonal screws **M** to secure the CD changer holder **G**.



All cars

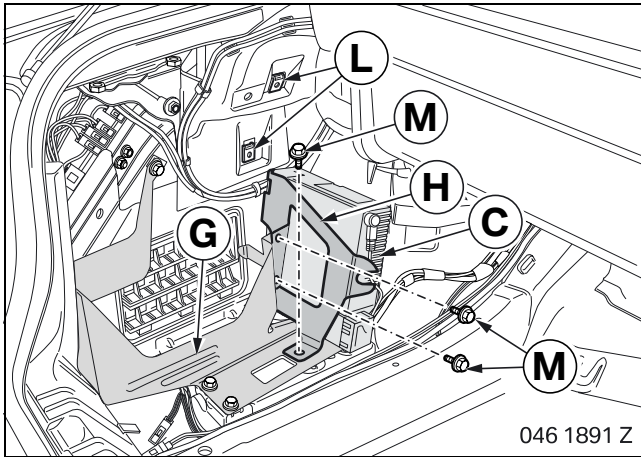
Push the radio receiver **C** into the radio receiver holder **H** and use hexagonal nut **N** to secure it.



Connect branches **A11** and **T2** to the radio receiver **C**.

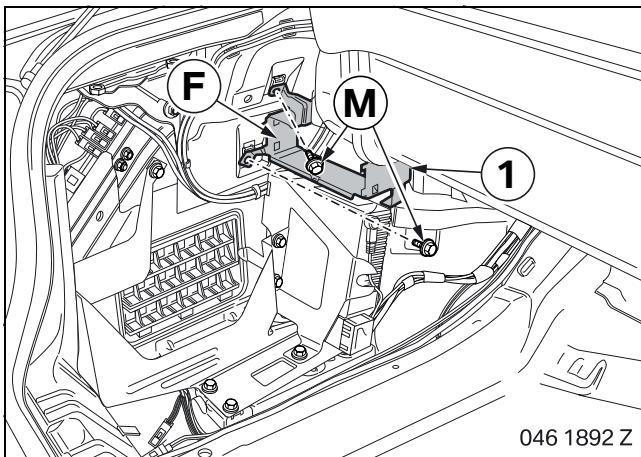
Tie back branch **A10**.

7. To install and connect the navigation computer and radio receiver



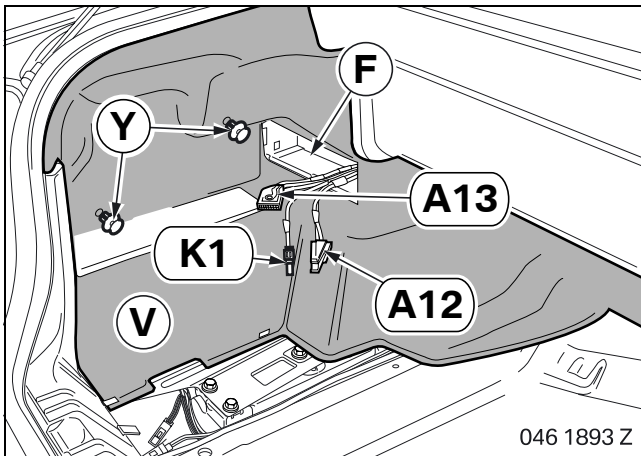
Secure the radio receiver **C** with the radio receiver holder **H** to the CD changer holder **G** using the hexagonal screws **M**.

Clip speed nuts **L** into the body openings.



Push the holding lug (1) for the navigation computer holder **F** into the body.

Secure the navigation computer holder **F** using hexagonal screws **M**.



Route branches **A12**, **A13** and **K1** through the navigation computer holder **F**.

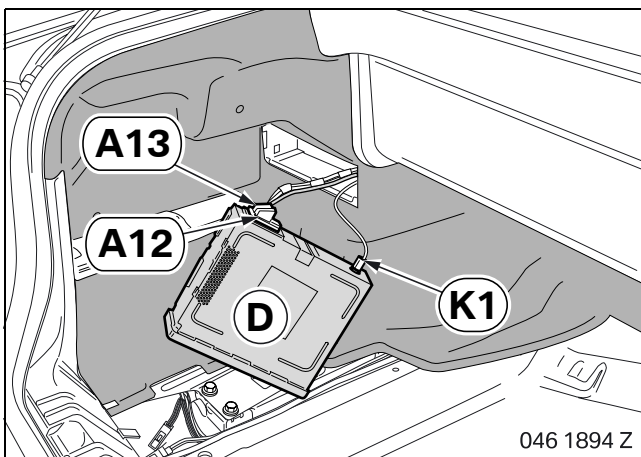
Install the boot trim **V** and secure it with expanding rivets **Y**.

Cars with SA 672 (CD changer) only

Install the CD changer again

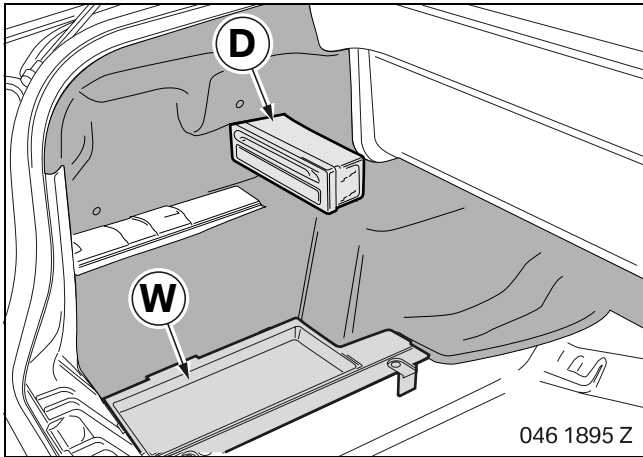
Cars without SA 672 (CD changer) only

Install the CD changer opening oddments box **X** into the boot trim **V**.



Connect branches **A12**, **A13** and **K1** to the navigation computer **D**.

7. To install and connect the navigation computer and radio receiver



Slide in the navigation computer **D** until it engages.

Install the oddments box in the boot on the left **W**.

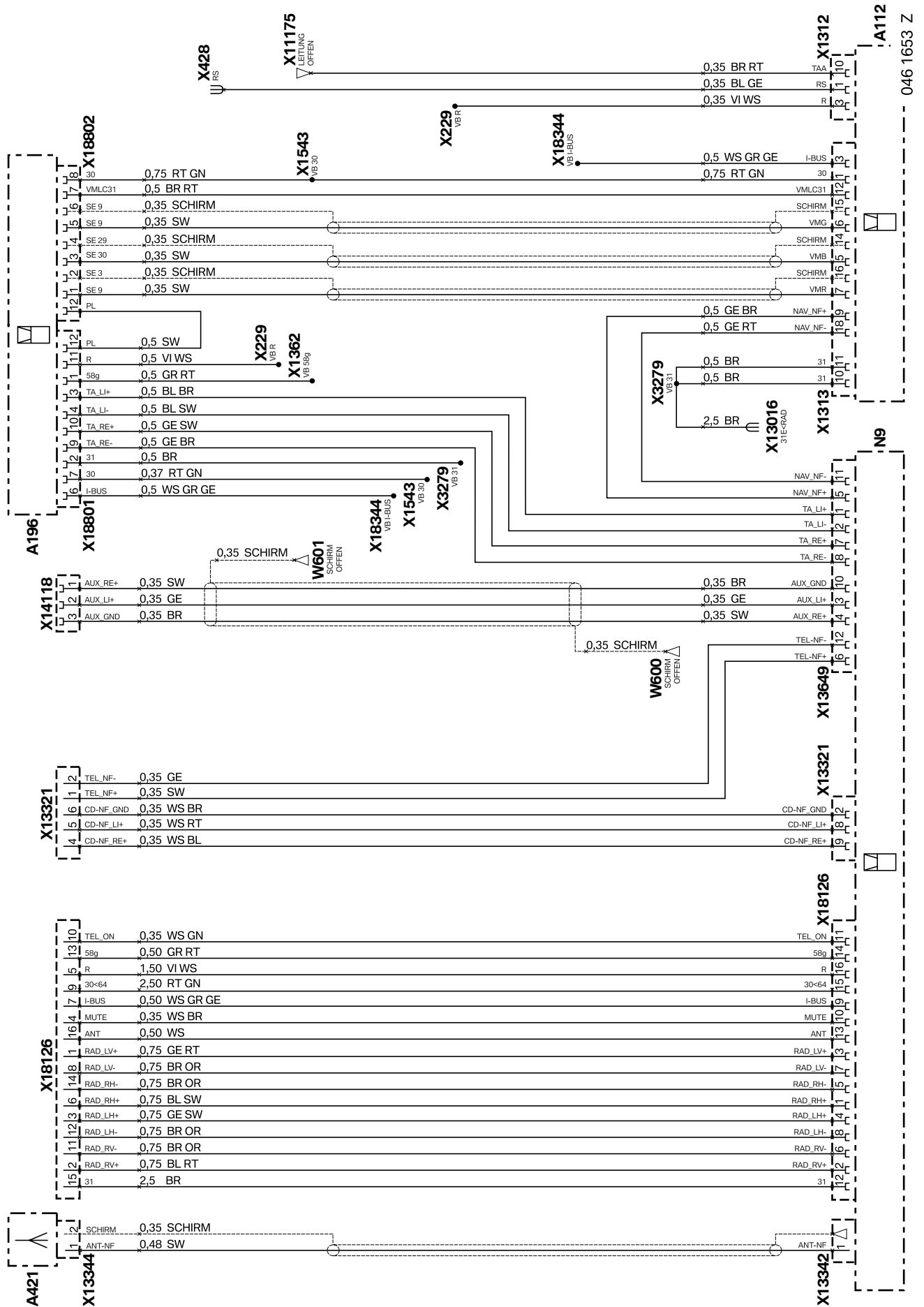
8. Concluding work and coding



Do not insert the software CD into the navigation computer until prompted to do so during the coding procedure (risk of damaging the navigation computer). ◀

- Connect the battery
- Encode the retrofit using DISPlus or GT-1 via path **Retrofit**
- Conduct a brief test
- Conduct a function test
- Re-assemble the car

9. Circuit diagram



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9. Circuit diagram

Legend

A112	Navigation computer
A196	On-board monitor
A421	Aerial booster
N9	Radio receiver
W600	Screen open
W601	Screen open
X229	Terminal R connector
X428	Joint connector contact, reversing signal
X1312	Violet 18-pin plug, navigation computer
X1313	Blue 18-pin plug, navigation computer
X1362	58g connector
X1543	Terminal 30 connector
X3279	Terminal 31 connector
X11175	SW 26-pin plug, instrument cluster
X13016	Earth, stereo/Hi Fi
X13321	Radio III
X13342	Aerial Radio LF
X13344	Aerial Diversity LF
X13649	Radio IV
X14118	Black 3-pin plug, AUX preparation
X18126	Radio plug
X18344	I bus connector
X18801	Blue 12-pin plug, on-board monitor
X18802	White 12-pin plug, on-board monitor

Cable colours

BL	Blue	OR	Orange
BR	Brown	RT	Red
GE	Yellow	SW	Black
GN	Green	VI	Violet
GR	Grey	WS	White