Parts and Accessories Installation Instructions

Auxiliary connector retrofit for external audio sources BMW 3 Series (E46), 5 Series (E39) and X5 (E53)

These installation instructions are only valid for cars with SA 602/609/661+650/663 from 09/02

Important information

The retrofit kit is for use within the BMW dealership organisation only.

Subject to technical modifications.

Target group

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.

Installation information

Ensure that the cables/lines are not kinked or damaged as you install them in the car.

The installed cables are to be secured with cable ties.

Installation time

Approx. 1,5 hours, but this may vary depending on the condition of the car and the equipment in it.

Pictograms

- riangle denotes instructions that draw your attention to special features. \blacktriangleleft
- ◀ denotes the end of the instruction or caution text.

List of special equipment

The following special equipment must be taken into consideration when installing the retrofit kit. The various sections contain corresponding information.

- SA 602 On-board monitor
- SA 609 Navigation system
- SA 661+650 BMW Business radio with CD drive
- SA 663 BMW Professional radio

Retrofit kit No.

65 12 0 153 501 65 12 0 153 502 65 12 0 153 503

Special tools required

E46 installation wedge (00 9 321) E39 radio puller (65 1 100) Special E46 radio tool (65 1 110) for SA 602 only

Contents

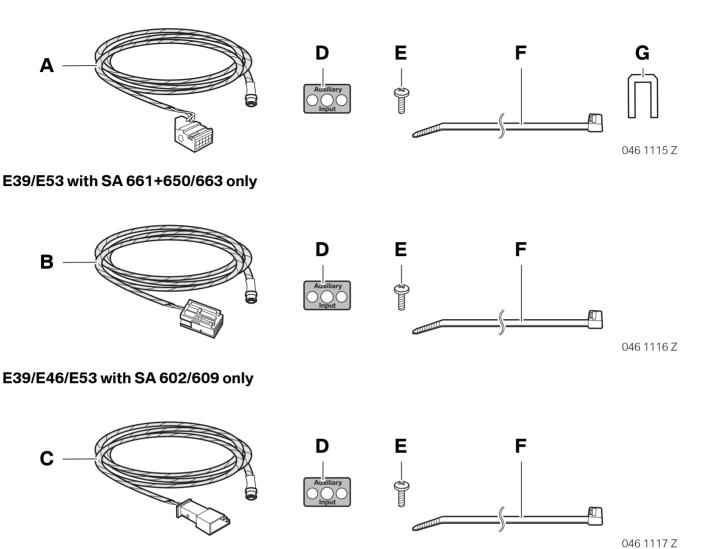
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1. Preparations

	TIS instruction No.
Conduct a brief test	
Disconnect the negative pole of the battery	12 00
The following components must be removed first of all:	
Glove compartment on the right	51 16 360
Radio receiver (cars with SA 661+650/663 only)	65 11 030
Multi Information Display (E39/E53 cars with SA 661+650/663 only)	65 81 010
On-board monitor (cars with SA 602/609 only)	65 52 013

2. Parts list

E46 with SA 661+650/663 only

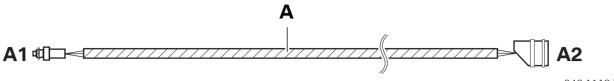


Legend

- A E46 AUX wiring harness with SA 661+650/663
- **B** E39/E53 AUX wiring harness with SA 661+650/663
- C E46/E39/E53 AUX wiring harness with SA 602/609
- **D** Mounting plate
- E Philips screw (2x)
- **F** Cable tie (5x)
- **G** Locking bar (E46 with SA 661+650/663 only)

2. Connection diagram

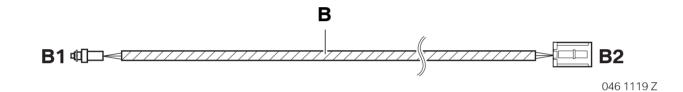
E46 with SA 661+650/663 only



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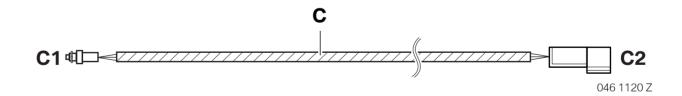
Item	Description	Signal	Cable colour / Cross- section	Connection location in the car	Abbreviation / Slot
А	AUX connector wiring harness			E46 with SA 661+650/663 only	
A1	Pawl socket 3.5 mm			In glove compartment	
A2	10-pin GR socket casing			To radio plug X18126	X18805

E39/E53 with SA 661+650/663 only



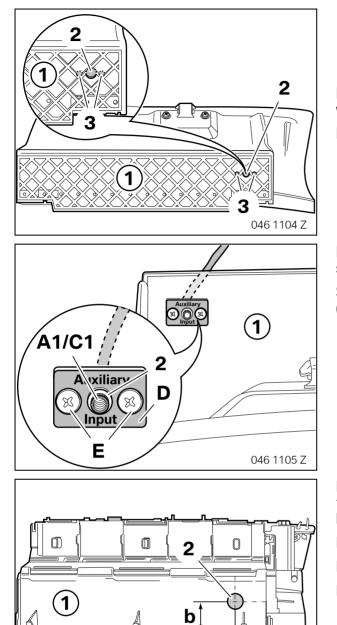
Item	Description	Signal	Cable colour / Cross- section	Connection location in the car	Abbreviation / Slot
В	AUX connector wiring harness			E39/E53 with SA 661+650/663 only	
B1	Pawl socket 3.5 mm			In glove compartment	
B2	SW 12-pin socket casing			To radio plug X18126	X13598

E39/E46/E53 with SA 602/609 only



Item	Description	Signal	Cable colour / Cross- section	Connection location in the car	Abbreviation / Slot
С	AUX connector wiring harness			E39/E46/E53 with SA 602/609 only	
C1	Pawl socket 3.5 mm			In glove compartment	
C2	SW 3-pin plug casing			To plug X14118	X14118

3. To install and connect the AUX connector wiring harness in E46 cars



All holes must be drilled precisely as shown in the illustration. ◀

Drill a hole (2) in the rear of the glove compartment (1) with an 8 mm twist drill bit.

Drill the holes (3) using a 3 mm twist drill bit.

Insert branch **A1/C1** in the glove compartment (1) and secure it to the mounting plate **D** with a knurled nut (2).

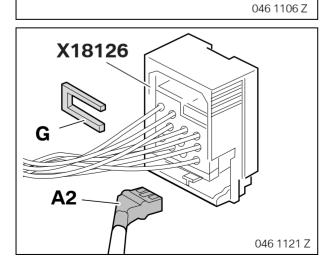
Secure the mounting plate **D** to the glove compartment (1) using Philips screws **E**.

Drill a hole (2) in the trim (1) with a 3 mm twist drill bit through which you can thread the AUX connector wiring harness.

Dimension **a** 40 mm

Dimension **b** 45 mm

Enlarge the hole (2) to a diameter of 20 mm.

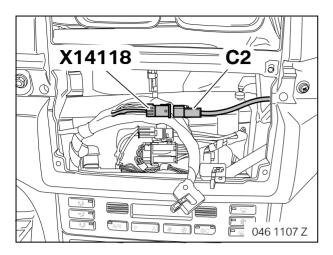


а

Cars with SA 661+650/663 only

Connect branch **A2** to plug **X18126** and secure it with the locking bar **G**.

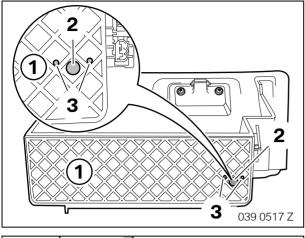
3. To install and connect the AUX connector wiring harness in E46 cars



Cars with SA 602/609 only

Connect branch C2 to tied back plug X14118.

4. To install and connect the AUX connector wiring harness in E39 cars



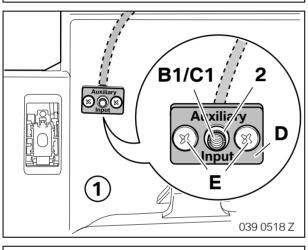
All holes must be drilled precisely as shown in the illustration.

Drill a hole (2) in the rear of the glove compartment (1) with an 8 mm twist drill bit.

Drill the holes (3) using a 3 mm twist drill bit.

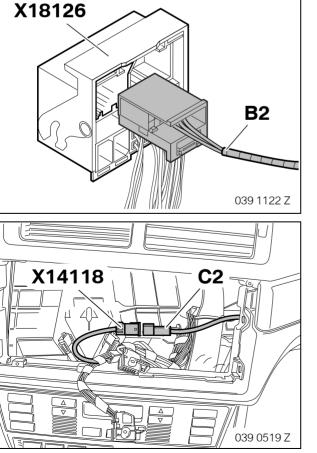
Insert branch **B1/C1** in the glove compartment (1) and secure it to the mounting plate **D** with a knurled nut (2).

Secure the mounting plate **D** to the glove compartment (1) using Philips screws **E**.



Cars with SA 661+650/663 only

Connect branch **B2** to plug **X18126**.

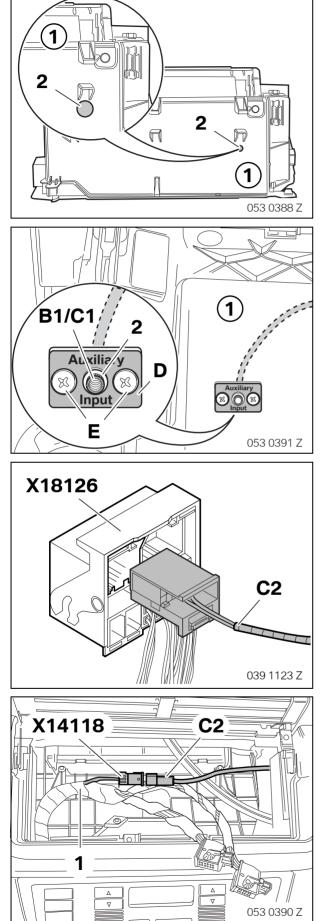


If the plug X13321 is already in the car, the cables from branch B2 must be disconnected and connected to the same pins in the plug in the car X13321.

Cars with SA 602/609 only

Connect branch C2 to tied back plug X14118.

5. To install and connect the AUX connector wiring harness in E53 cars



All holes must be drilled precisely as shown in the illustration.

Drill a hole (2) in the trim (1) through the rear of the glove compartment with an 8 mm twist drill bit.

Open the glove compartment and enlarge the hole (2) to a diameter of 20 mm.

Insert branch **B1/C1** in the glove compartment (1) and secure it to the mounting plate **D** with a knurled nut (2).

Mark the mounting holes and drill them with a 3 mm twist drill bit.

Secure the mounting plate ${\bf D}$ to the glove compartment (1) using Philips screws ${\bf E}.$

Cars with SA 661+650/663 only

Connect branch **C2** to plug **X18126**.

If the plug **X13321** is already in the car, the two cables from branch **C2** must be disconnected and connected to the same pins in the plug in the car **X13321**. ◀

Cars with SA 602/609 only

Connect branch C2 to tied back plug X14118.

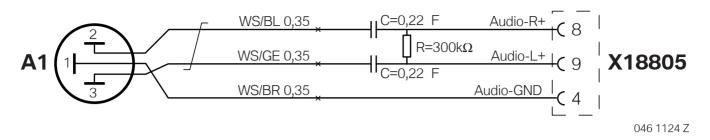
6. Concluding work and coding

This retrofit system does not require coding.

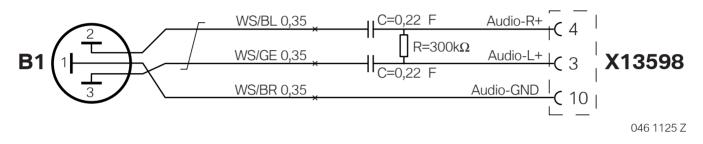
- Connect battery
- Conduct a brief test with DIS/GT1
- Conduct a function test
- Re-assemble the car

7. Circuit diagram

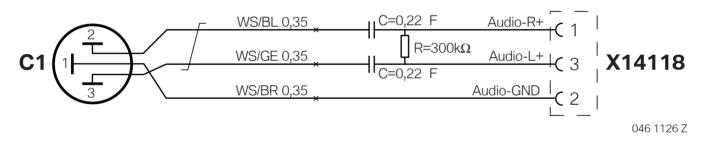
E46 with SA 661+650/663 only



E39/E53 with SA 661+650/663 only



E39/E46/E53 with SA 602/609 only



Legend

- A1 Pawl plug 3.5 mm
- X18805 10-pin GR socket casing
- B1 Pawl plug 3.5 mm
- X13598 SW 12-pin socket casing
- C1 Pawl plug 3.5 mm
- X14118 SW 3-pin plug casing

Cable colours

BL	blue
BR	brown

- GE yellow
- GR grey
- SW black
- WS white