

Original BMW Accessories. Installation Instructions.



Portable Navigation Retrofit BMW 1 Series (E81, E82, E87)

These installation instructions only apply to cars without an on-board monitor.

Retrofit kit no. 65 90 0 441 655 Portable navigation retrofit kit

Installation time

The installation time is **approx. 0.75 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, circuit diagrams, servicing manuals and work instructions in a rational order using the prescribed tools (special tools) and observing current health and safety regulations.

If you experience installation or function problems, limit troubleshooting to approx. 0.5 hours for mechanical or 1.0 hour for electrical work.

In order to reduce costs and avoid any additional expense, send a query immediately to the Technical Parts Support via the Aftersales Assistance Portal (ASAP).

Specify the following information:

- Chassis number
- Part number of the retrofit kit
- A precise description of the problem
- Work steps already carried out

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

Pictograms



Denotes instructions that draw your attention to special features.



Denotes the end of the instruction or other text.

Installation information

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

Ensure that the cables and/or lines are not kinked or damaged as you install them in the car. The costs thereby incurred 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.

Ordering instructions

The miniature connectors **P** are not part of the retrofit kit and must be ordered separately.

Special tools required

00 9 340 Removal tool (2x)

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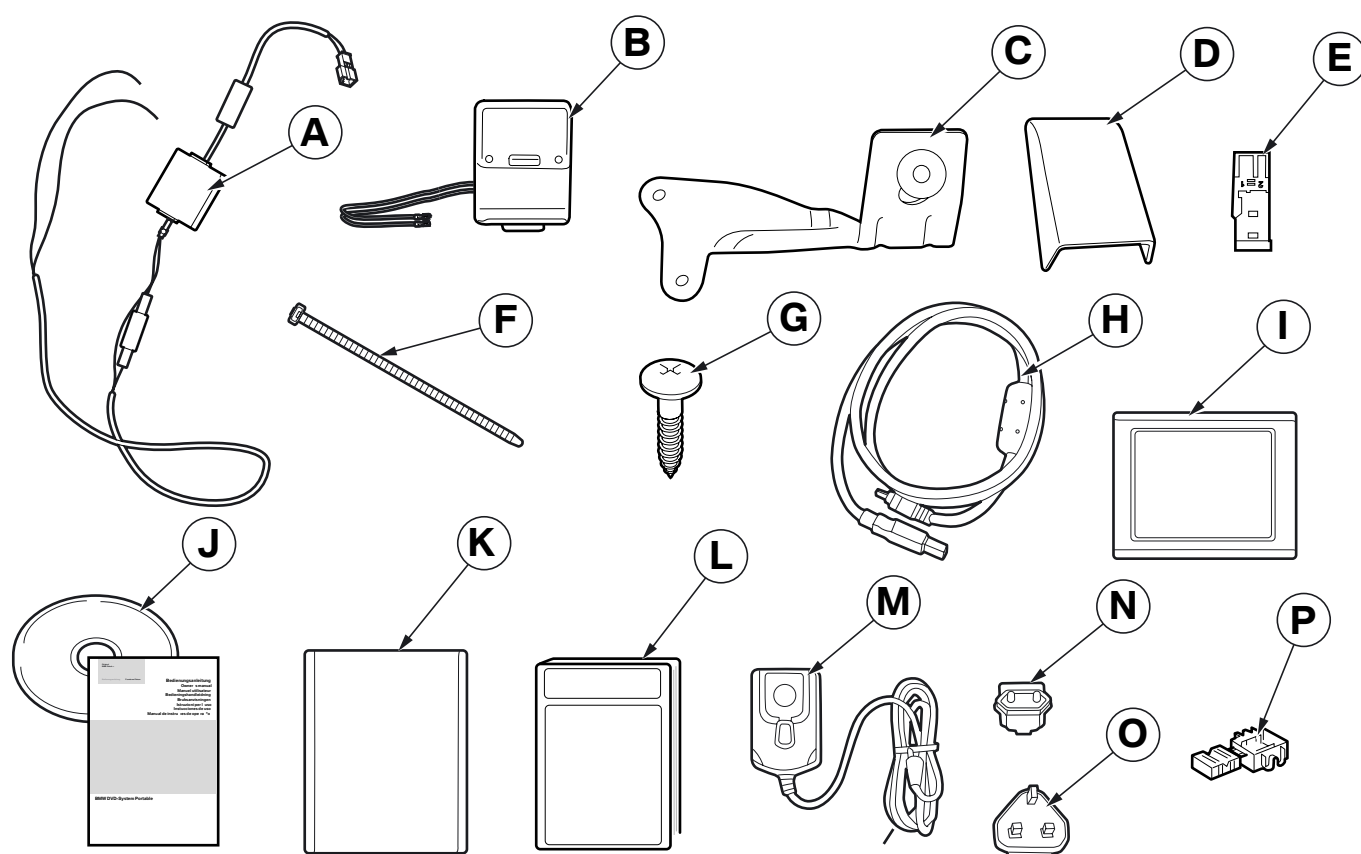
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1. Parts list



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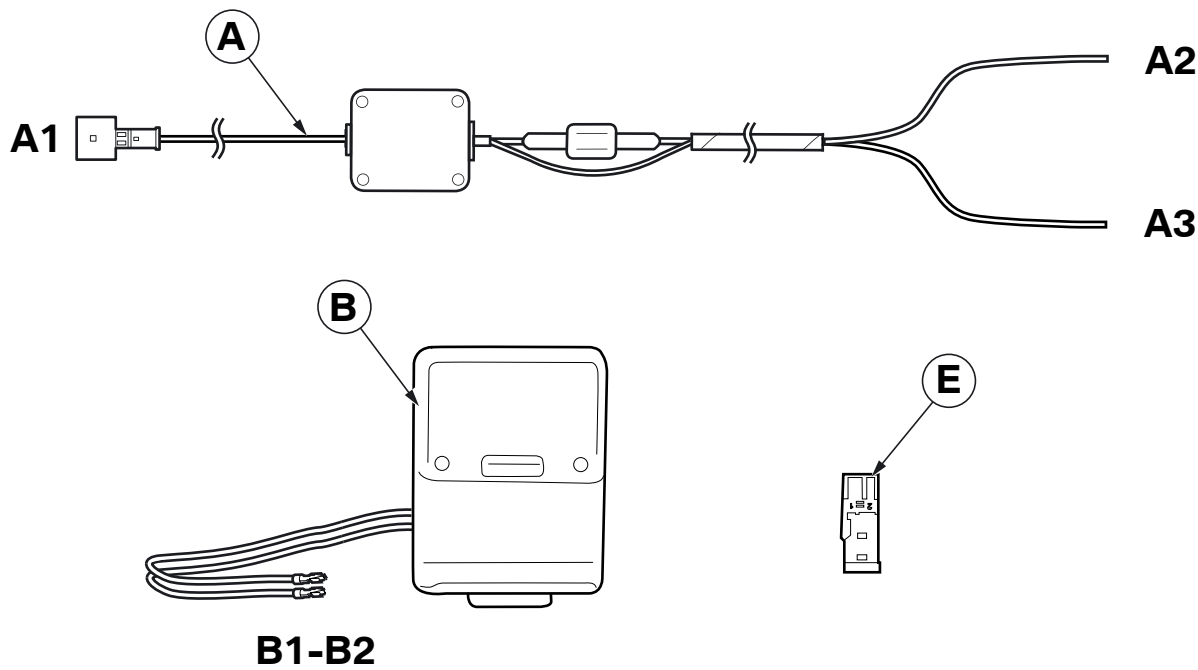
Legend

- A** Wiring harness
- B** Navigation device holder
- C** Base plate
- D** Cap
- E** GN 2-pin socket casing
- F** Cable tie (5 x)
- G** Philips screw (2x)
- H** USB cable
- I** Navigation device
- J** Owner's manual, quick guide, security code, information
- K** Cover for navigation device holder
- L** Pocket for navigation unit
- M** Charging cable
- N** Adapter EU (not for US)
- O** Adapter UK (not for US)
- P** Miniature connectors (2 x, not supplied with retrofit kit)

2. Preparatory work

	TIS no.
Conduct a brief test	---
Disconnect negative pole of battery	12 00 ...
The following components must be removed first of all	
Instrument cluster	62 11 280
Instrument cluster trim	---
Pedal trim	51 45 185

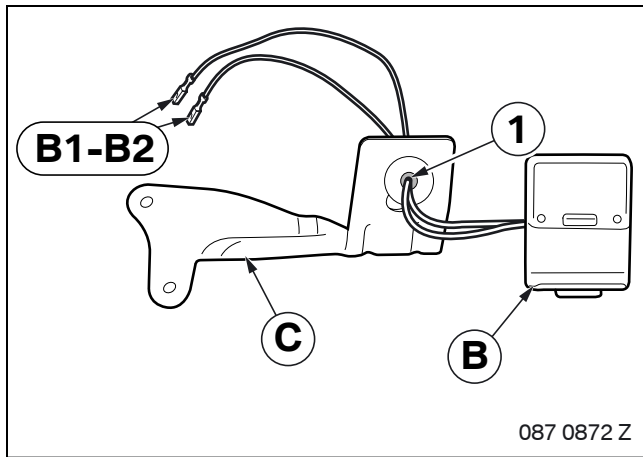
3. Connection diagram



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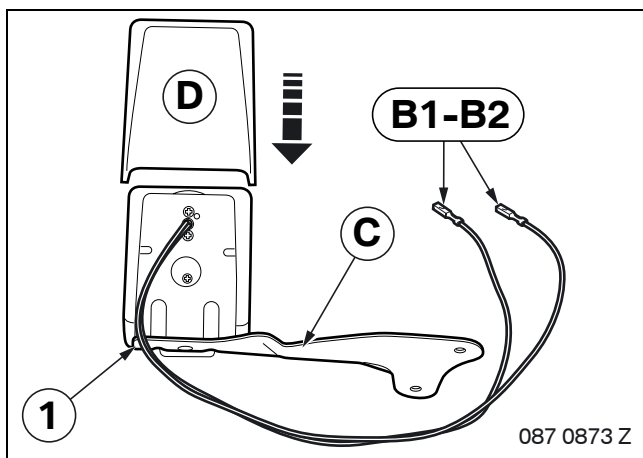
Branch/ Item	Designation	Signal	Cable colour/ Cross-section	Connection site in the car	Abbreviation/ Slot
A	Wiring harness	---	---	---	---
A1	GN 2-pin plug casing	---	---	On socket casing E	---
A2	Cable open	Terminal 31	SW 0.5 mm ²	On the CAS, with miniature connector P to BR cable	X13376 PIN 25
A3	Cable open	Terminal 15	RT 0.5 mm ²	On the CAS, with miniature connector P to GN cable	X13376 PIN 8
B	Navigation device holder	---	---	---	---
B1	Socket contact	Terminal 31	SW 0.5 mm ²	With socket casing E on branch A1	PIN 2
B2	Socket contact	Terminal 15	RT 0.5 mm ²	With socket casing E on branch A1	PIN 1

4. To install the Portable navigation system



Route branches **B1-B2** through the joint (1).

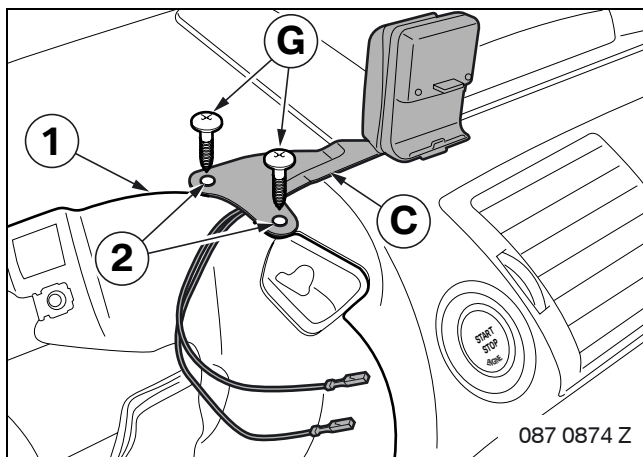
Clip navigation device holder **B** onto base plate **C**.



Route branches **B1-B2** as shown.

▶ Ensure that branches **B1-B2** are located in the cut-out part (1) of the navigation device holder **C**. ◀

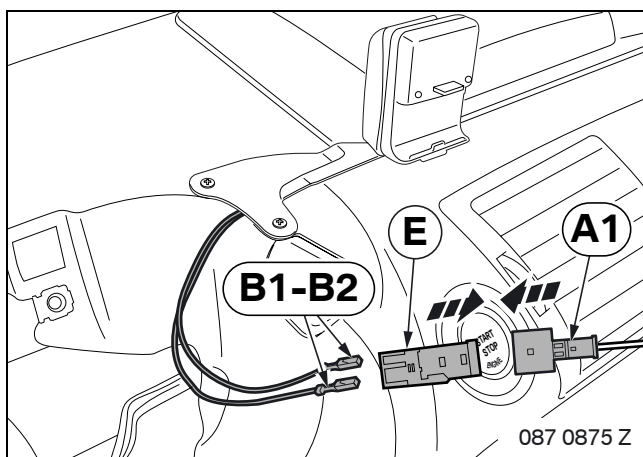
Push cover **D** onto the navigation device holder **C**.



Position base plate **C** flush to the edge (1). Mark the securing points (2).

Drill through the securing points (2) using a 3 mm twist drill bit. Secure base plate **C** using Philips screws **G**.

▶ Ensure that the wiring harness is under base plate **C**. ◀

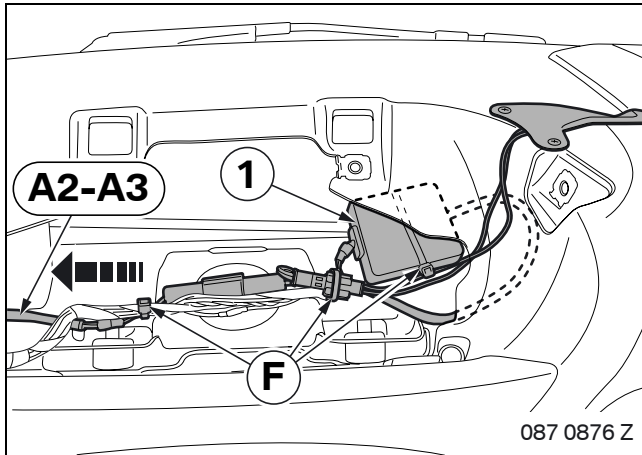


Connect branches **B1-B2** to socket casing **E** (GN 2-pin), as follows:

- Branch **B1**, SW cable, to PIN 2
- Branch **B2**, RT cable, to PIN 1

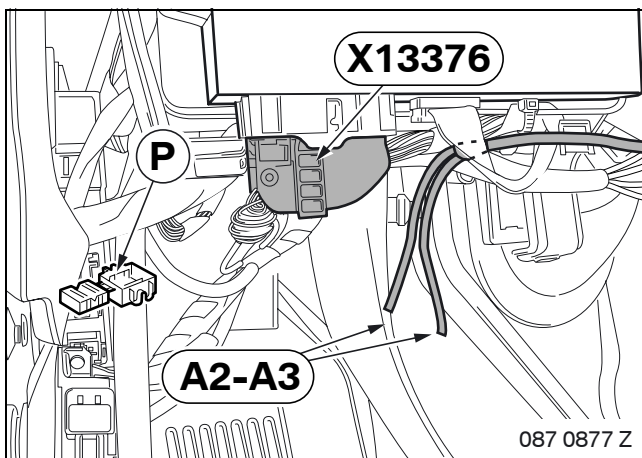
Connect socket casing **E** to branch **A1**.

4. To install the Portable navigation system



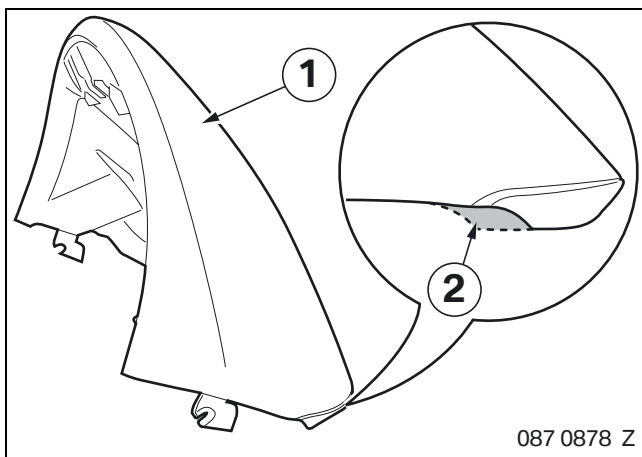
Fasten the voltage converter (1) and wiring harness with cable tie **F** to the original wiring harness.

Route branches **A2-A3** to the CAS control module.



Use miniature connectors **P** to connect branches **A2-A3** to plug **X13376** (black 41-pin) as follows:

- Branches **A2**, SW cable, to PIN 25 (cable colour BR)
- Branches **A3**, RT cable, to PIN 8 (cable colour GN)



Cut the marked area (2) out of the instrument cluster trim (1).

▶ Ensure that the instrument cluster trim (1) is aligned precisely with the edge of the dashboard. ◀

5. Concluding work and coding

This retrofit system does not require coding.

- Conduct a brief test
 - Conduct a function test
 - Re-fit the car components as required
-  Give all remaining items in the retrofit kit to the customer. ◀