Parts and Accessories Installation Instructions

Park Distance Control (PDC) Rear Retrofit
BMW Z4 (E85)

The installation time is approx. 4 hours, but this may vary depending on the condition of the car and the equipment in it.

Important information

Only for use in the BMW dealer organisation.

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

If the specified PIN numbers are occupied, bridges, double crimps or twin-lead terminals must be used.

Use cable ties when routing cables. Tie back any excess lengths.

Subject to technical modifications.

Before you install the retrofit system, test the control module status with the CIP (coding, customising, programming) test program. If the test detects incorrect statuses in one or more control modules, these must be updated first using the "Load software" function.

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 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.

Retrofit kit No. 66 20 0 301 292

See EPC for other retrofit kit part numbers.

Special tools required

00 9 317 Trim wedge

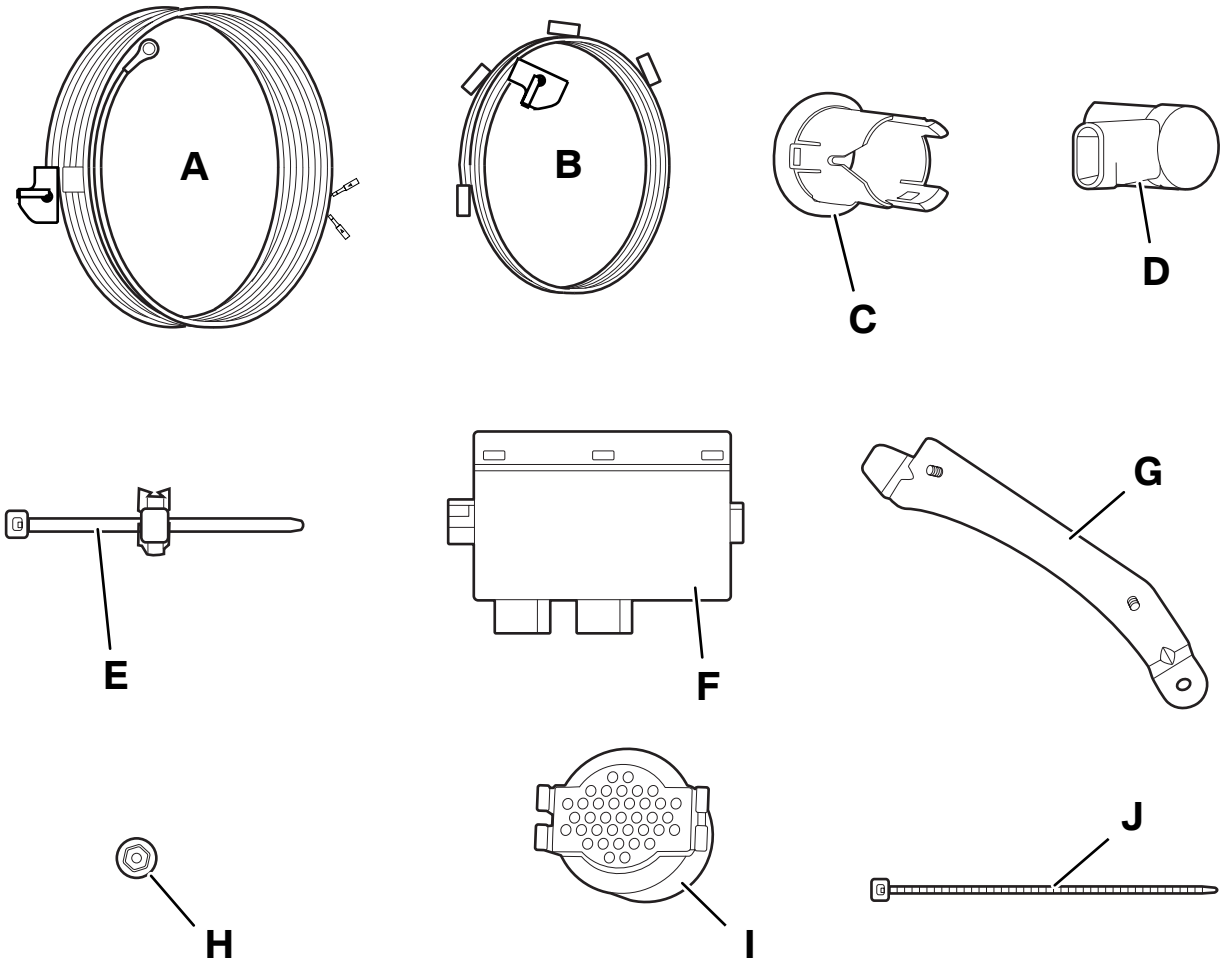
00 9 323 Cleaning wedge

Contents

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:	
Pedal trim	51 45 185
Side footwell trim on the left A pillar	51 43 070
Glove box with casing, right	51 16 367
Side footwell trim on the right A pillar	51 43 075
Side trim bottom part at rear right	51 43 010
Side trim top part at rear right	51 43 010
Right boot – wheel arch trim	51 47 161
Rear bumper trim	51 12 156

2. Parts kit

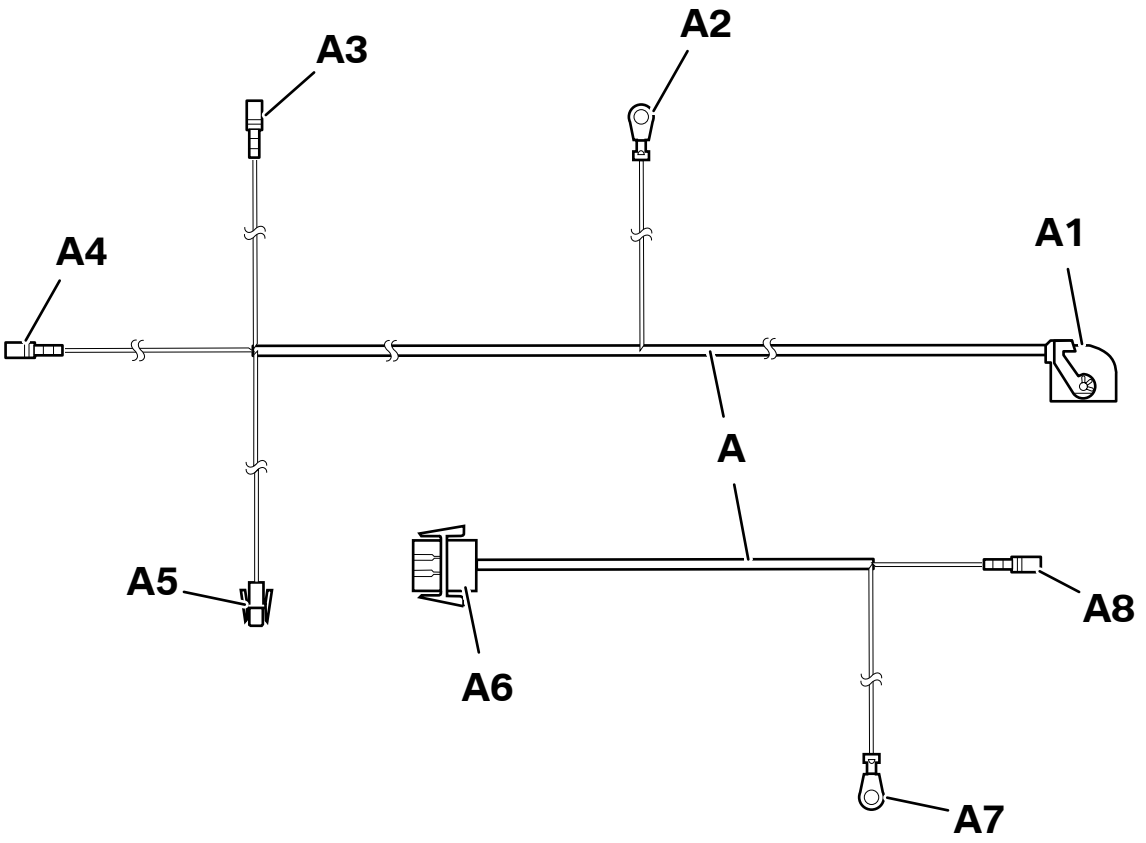


085 0017 V

Legend

A	PDC wiring harness (1x)	F	PDC control unit (1x)
B	Converter wiring harness (1x)	G	Holder (1x)
C	Holder for ultrasonic converter (4x)	H	Plastic nut (3x)
D	Ultrasonic converter (4x) (not included in kit)	I	Gong (1x)
E	Cable tie with holder (8x)	J	Cable tie (20x)

3. Connection overview



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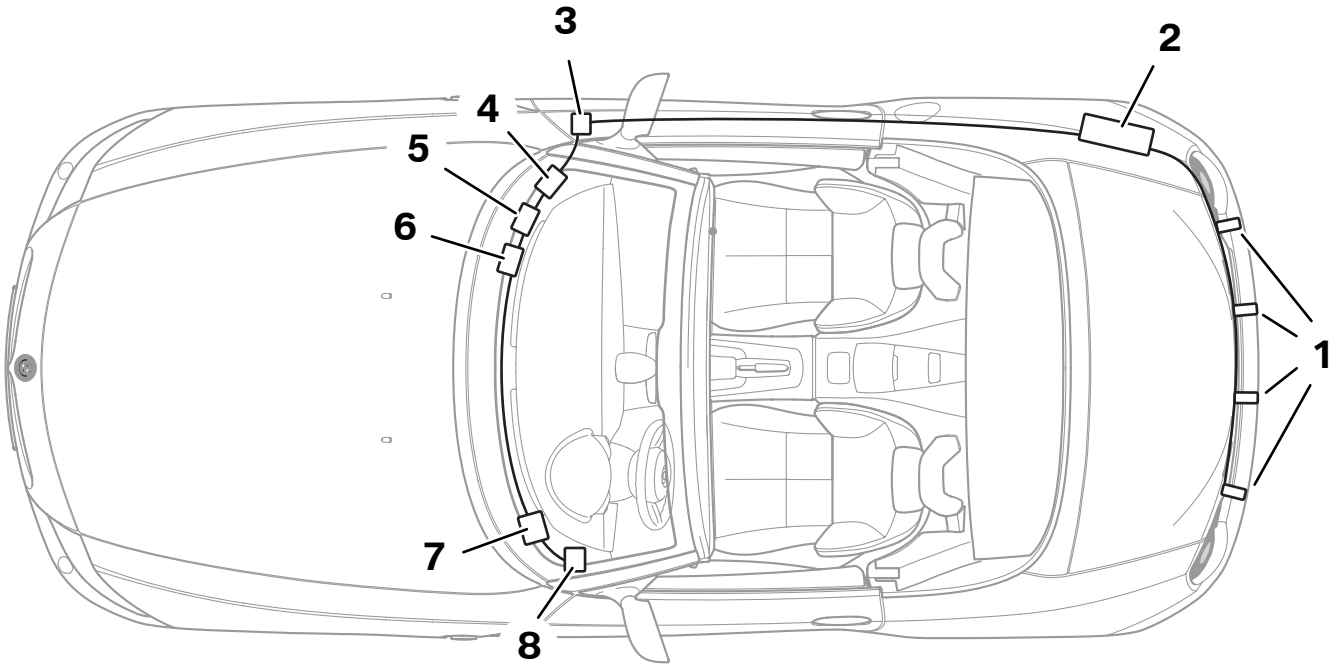
Item	Description	Signal	Cable colour/ Cross-section	Connection location in the car	Abbreviation/Slot
A	PDC wiring harness	---	---	---	---
A1	Black 12-pin socket casing	---	---	To PDC control unit A81	X300
A2	Cable lug A6	TL 31E	BRSW / 0.5 mm^2	To earth bolt A pillar right	X1106
A3	Joint connector contact	K-BUS	WSRTGE / 0.35 mm^2	To joint connector behind the glove compartment	X10116
A4	Socket contact	TL 15	GNBL / 0.5 mm^2	To black 32-pin socket casing on power distributor A41	X11007 PIN13
A5	Black 1-pin socket casing	---	BLGR / 0.35 mm^2	To gong H10	X363
A6	White 3-pin socket casing	---	BR / RTGNGE / 0.5 mm^2	To gong H10	X522
A7	Cable lug A6	TL 31L	BR / 0.5 mm^2	To earth bolt A pillar left	X9633
A8	Socket contact	VA2	RTGNGE / 0.5 mm^2	To black 26-pin socket casing on base module A1	X254 PIN22

4. Installation and cabling diagram

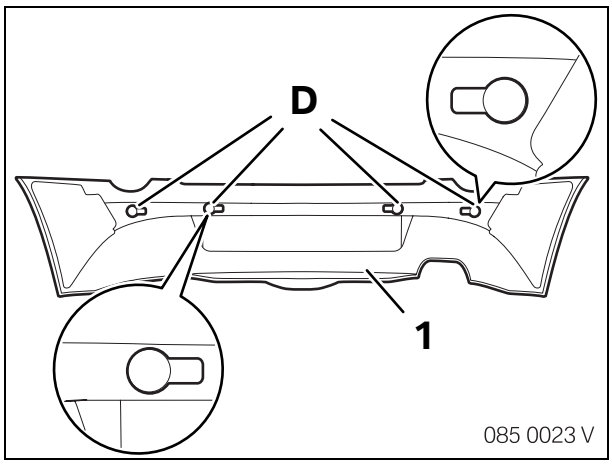


085 0019 V

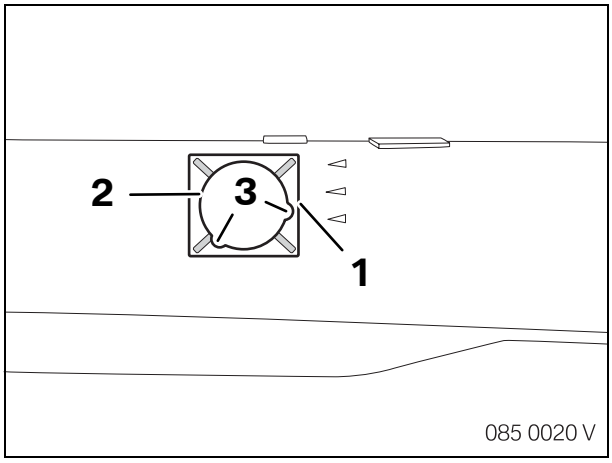
Legend

1	Ultrasonic converter in rear bumper trim
2	PDC control unit
3	Earth bolt on A pillar right
4	Power distributor
5	Joint connector behind the glove compartment
6	Base module
7	Gong
8	Earth bolt on A pillar left

5. To install the retrofit

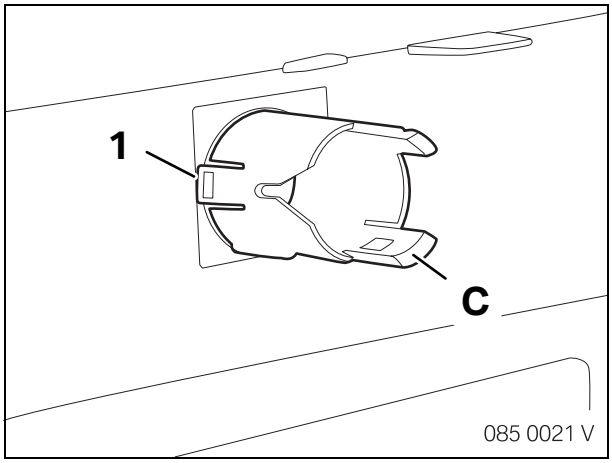


When fitting the ultrasonic converter holders and the ultrasonic converters **D**, make sure that the ultrasonic converters **D** are aligned with their connection sockets pointing towards the middle of the bumper trim (1). ◂



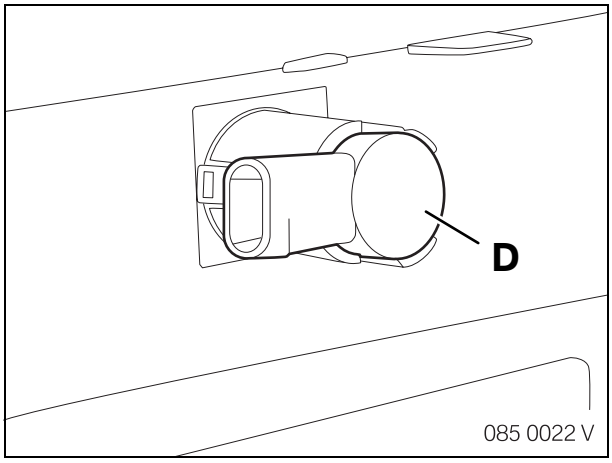
Mark the midpoint within the marks (1) and centrepunch it. Drill holes (2) (Ø27 mm).

Use a suitable tool to create anti-rotation locks (3), at the same time observing the prescribed alignment of the ultrasonic converters (see Fig. 085 0023 V).



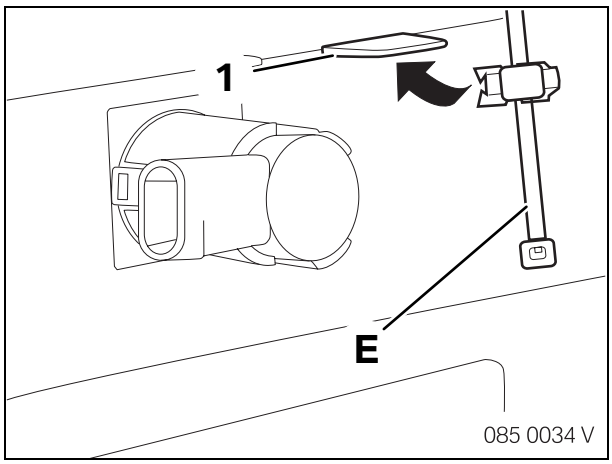
Insert the ultrasonic converter holders **C** into the holes.

The detents (1) must engage. If necessary, chamfer the holes from the inside of the bumper. ◂



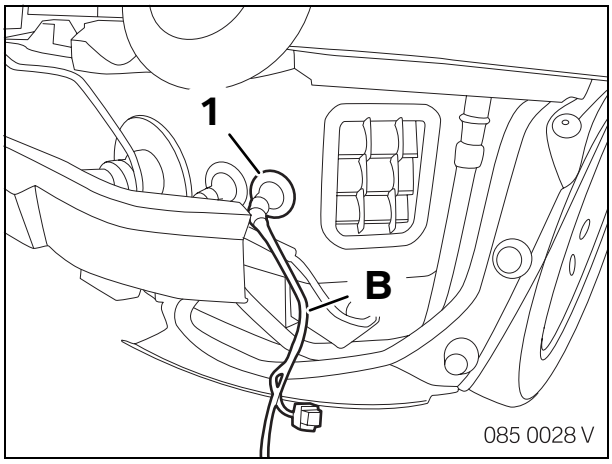
Insert the ultrasonic converters **D**.

The detent hooks on the ultrasonic converters **D** must engage. ◂



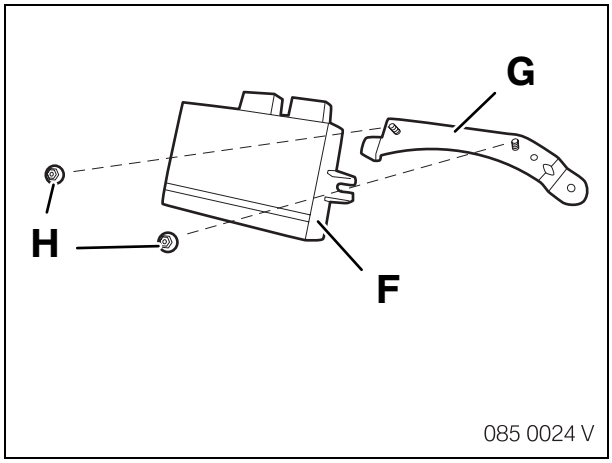
Push cable ties and holders **E** onto the plastic projections (1).

Then fit the converter wiring harness into the bumper trim and connect it to the ultrasonic converters (not illustrated).

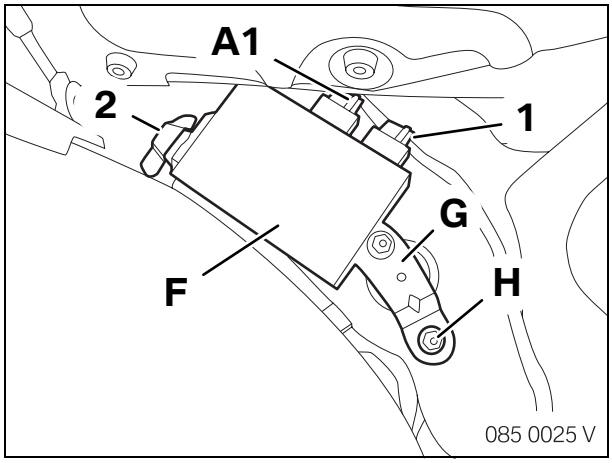


Insert the grommet (1) for the converter wiring harness **B** into the body recess.

Route the converter wiring harness **B** into the boot.



Use plastic nuts **H** to fit the PDC control unit **F** onto the holder **G**.

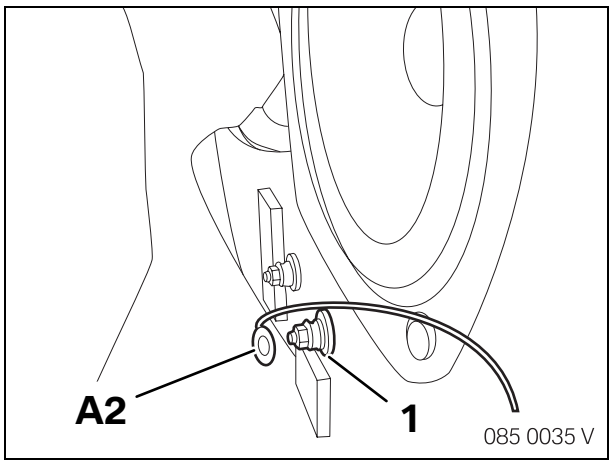


Connect the plug (1) of the converter wiring harness and branch **A1** of the PDC wiring harness into the same coloured plug casing on the PDC control unit **F**.

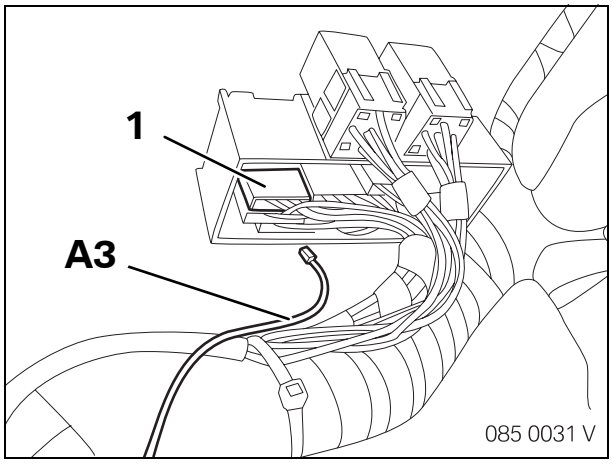
Thread the holder **G** into lug (2) and fasten it with a plastic nut **H**.

Route the PDC wiring harness along the right door sill to the front in the area below the A pillar on the right.

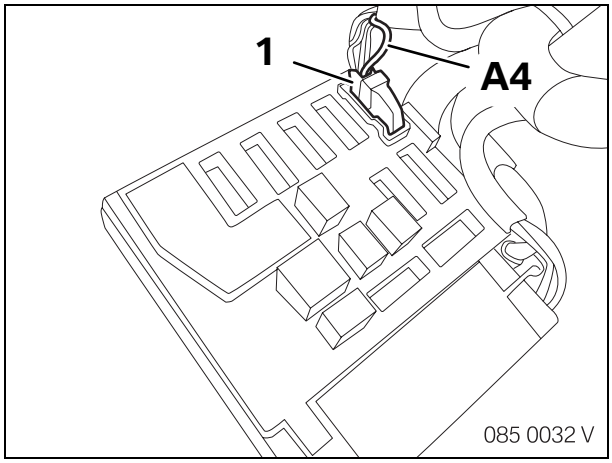
5. To install the retrofit



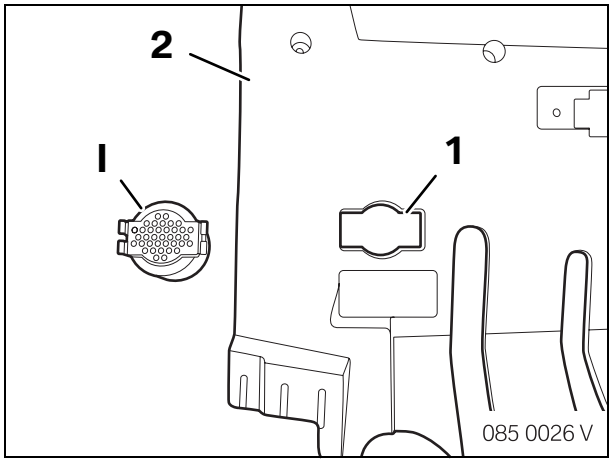
Connect branch **A2** to the earth bolt **X1106** (1).



Plug branch **A3** into the free slot in the joint connector **X10116** (1) with colour WSRTGE.

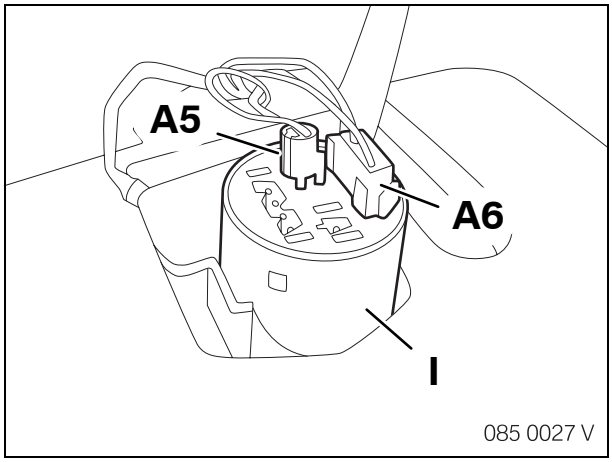


Connect branch **A4** to PIN 13 of plug **X11007** (1) on the power distributor.



In cars not fitted with a gong **I**, cut out the recess (1) along the embossed mark on the inside of the pedal trim (2). ◂

Clip the gong **I** into the recess (1) in the pedal trim (2).



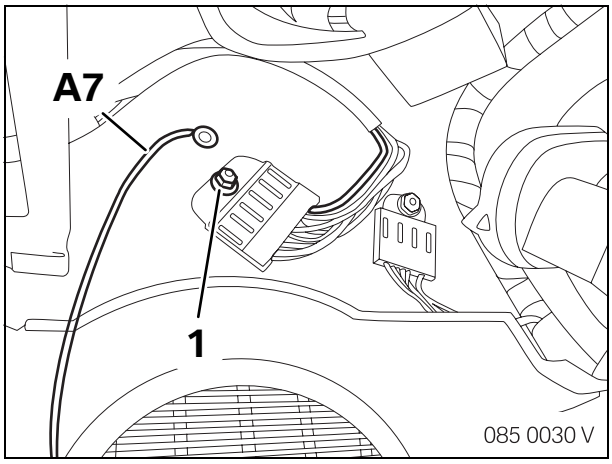
Attach the cable connectors and cables with cable ties. Select the installation route of the cable so that it cannot be damaged by moving parts. ◂

Route branch **A5** into the driver's footwell.

Plug branch **A5**, 1-pole socket casing, into slot T4 **X363**.

Plug branch **A6**, 3-pole socket casing, into slot T3 **X522**.

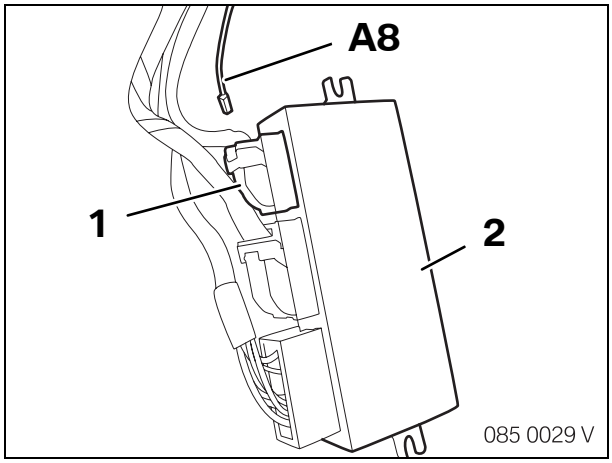
In cars with a gong **I** fitted, branch **A6** is not required and can be tied back.



Cars without a gong only

Connect branch **A7** to the earth bolt **X9633** (1).

Route branch **A8** into the passenger's footwell.



Cars without a gong only

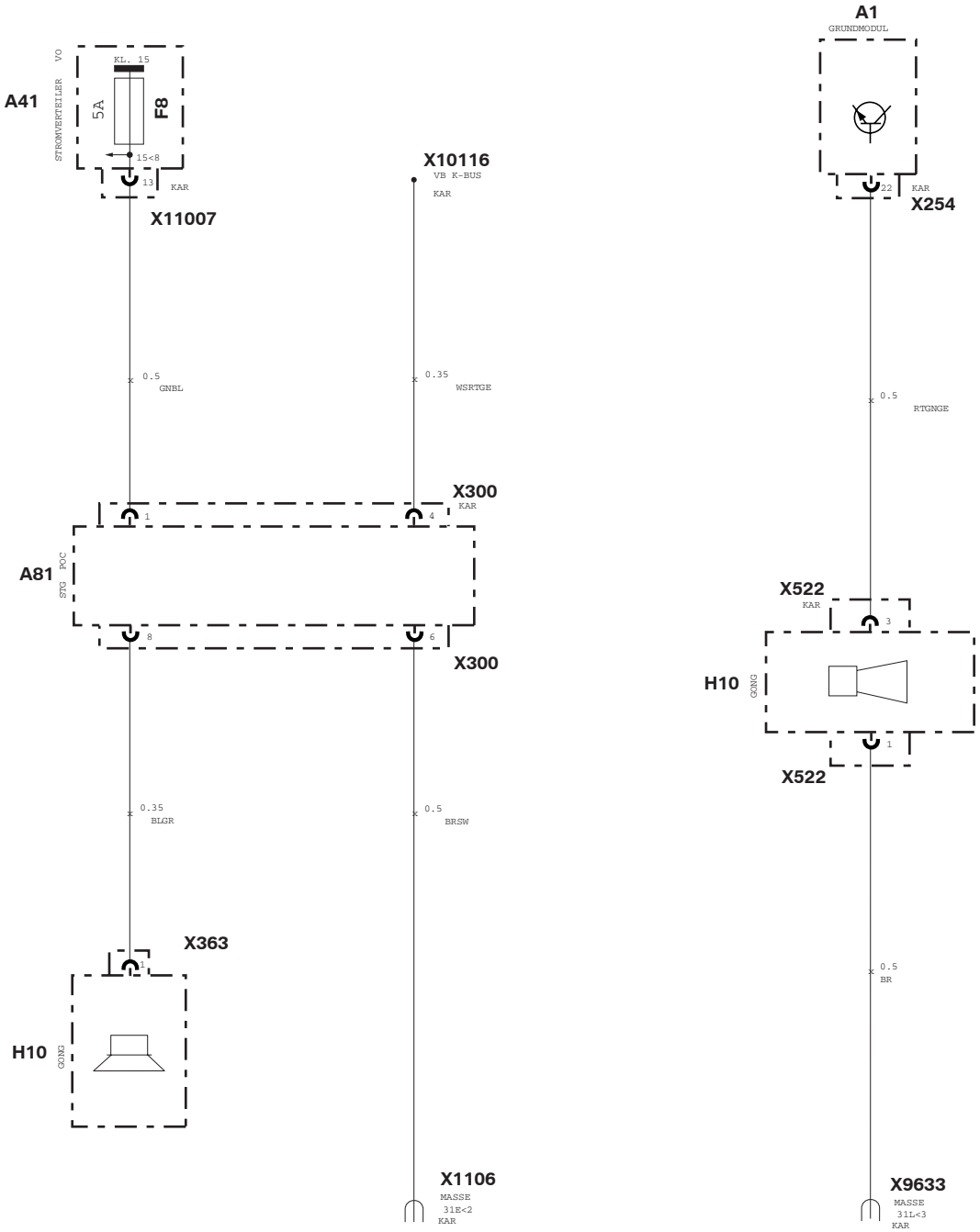
Connect branch **A8** to PIN 22 of plug **X254** (1) on the base module (2).

6. Concluding work and coding

The parking distance control (PDC) retrofit requires coding. ◂

- Connect the battery, connect a charger
- Program/code the parking distance control (PDC) retrofit with DISPlus or GT-1 using the CIP application and follow the instructions in the program
- Conduct a function test
- Re-assemble the car

7. Circuit diagram



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7. Circuit diagram

Legend

A1	Base module
A41	Power distributor
A81	PDC control unit
H10	Gong
X254	Black 26-pin socket casing on the base module C
X300	Black 12-pin socket casing on the PDC control unit
X363	Black 1-pin socket casing on the gong
X522	White 3-pin socket casing on the gong
X1106	Earth bolt on A pillar right
X9633	Earth bolt on A pillar left
X10116	17-pin joint connector K-BUS behind the glove compartment
X11007	Black 32-pin socket casing on the power distributor

Cable colours

GN	green
BL	blue
GR	grey
BR	brown
SW	black
WS	white
RT	red
GE	yellow