ORIGINAL MINI ACCESSORIES.
INSTALLATION INSTRUCTIONS.

Park Distance Control Retrofit

MINI COUNTRYMAN (R60)
MINI PACEMAN (R61)

Retrofit kit number
66 20 2 183 710 Rear Park Distance Control (PDC) retrofit kit

Installation time
The installation time is **approx. 2.0 hours**. This may vary depending on the condition of the car and the equipment in it.

The installation time shown does not include any time spent on programming / coding.

The calculation of the total costs for the programming time must be factored into the calculation of retrofitting costs (no charges may be made through the warranty).

Important information
These installation instructions are primarily designed for use within the BMW dealership organisation and by authorised MINI service companies.

In any event the target group for these installation instructions is specialist personnel trained on MINI cars with the appropriate specialist knowledge.

All work must be completed using the latest MINI repair manuals, wiring 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, restrict troubleshooting to approx. 0.5 hours for mechanical work and 1.0 hour for electrical work.

To avoid unnecessary extra work and/or costs, send an inquiry straight away to the technical parts support team via the Aftersales Assistance Portal (ASAP).

Quote the following information:

- Vehicle identification number,
- Retrofit kit part number,
- A detailed description of the problem,
- Any work already carried out.

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

Pictograms

 Denotes instructions that draw your attention to dangers.

 Denotes instructions that draw your attention to special features.

◀ Denotes the end of the instruction or other text.

Installation information

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

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

After the installation work, the retrofit must be programmed / coded via the **Retrofit** path.

Ordering instructions

PDC control unit **B** and PDC sensors **K** are not supplied in the retrofit kit and must be ordered separately (see EPC for part numbers and details).

Centre spoiler **L** is not included in the retrofit kit and must be ordered separately on a car equipment-specific basis (see EPC for part number and further details).

Information regarding operation

The PDC is only active when reverse gear and terminal 15 are selected.

Special tools required

00 9 317, Panel wedge

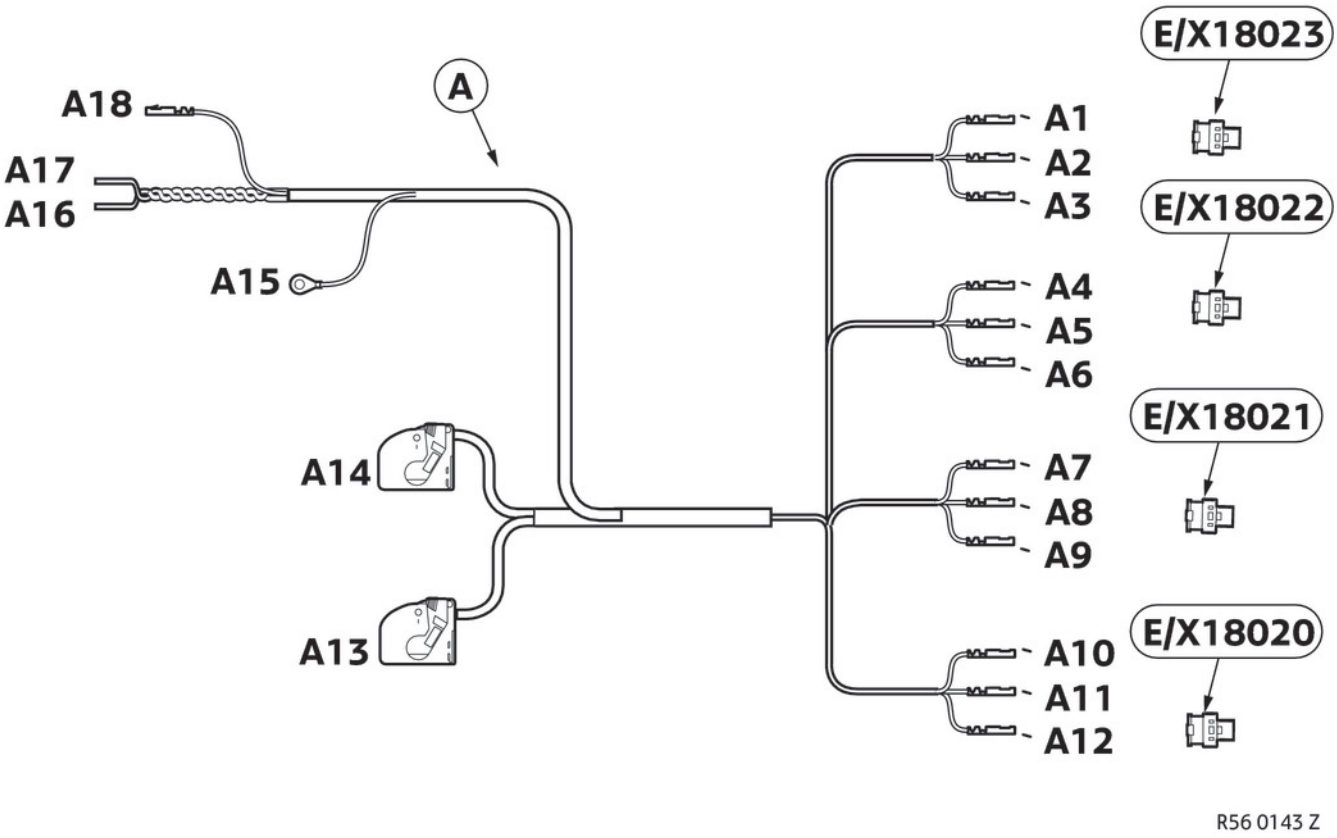
Table of contents

Section		Page
1.	Preparatory work	4
2.	Connection diagram	5
3.	Installation and cabling diagram for LHD cars	7
4.	Installation and cabling diagram for RHD cars	8
5.	Installing the retrofit wiring harness and PDC control unit	9
6.	Installing the PDC sensors	11
7.	Concluding work and coding	13
8.	Wiring diagram	14

1. Preparatory work

	ISTA No.
Conduct a brief test	---
Disconnect the negative pole of the battery	61 20 900 ...
The following components must be removed first of all	
Rear bumper trim	51 12 156
Support for bumper trim	51 12 050
Rear left wheel arch trim	51 71 041
Finisher on the top tail panel	51 46 050
Luggage compartment floor trim	51 47 101
Luggage compartment wheel arch trim, right	51 47 161
Luggage compartment wheel arch trim, left	51 47 151
Rear right door sill strip	51 43 ...
Front right door sill strip	51 43 ...
Only cars R61	
Rear centre spoiler	51 12 825

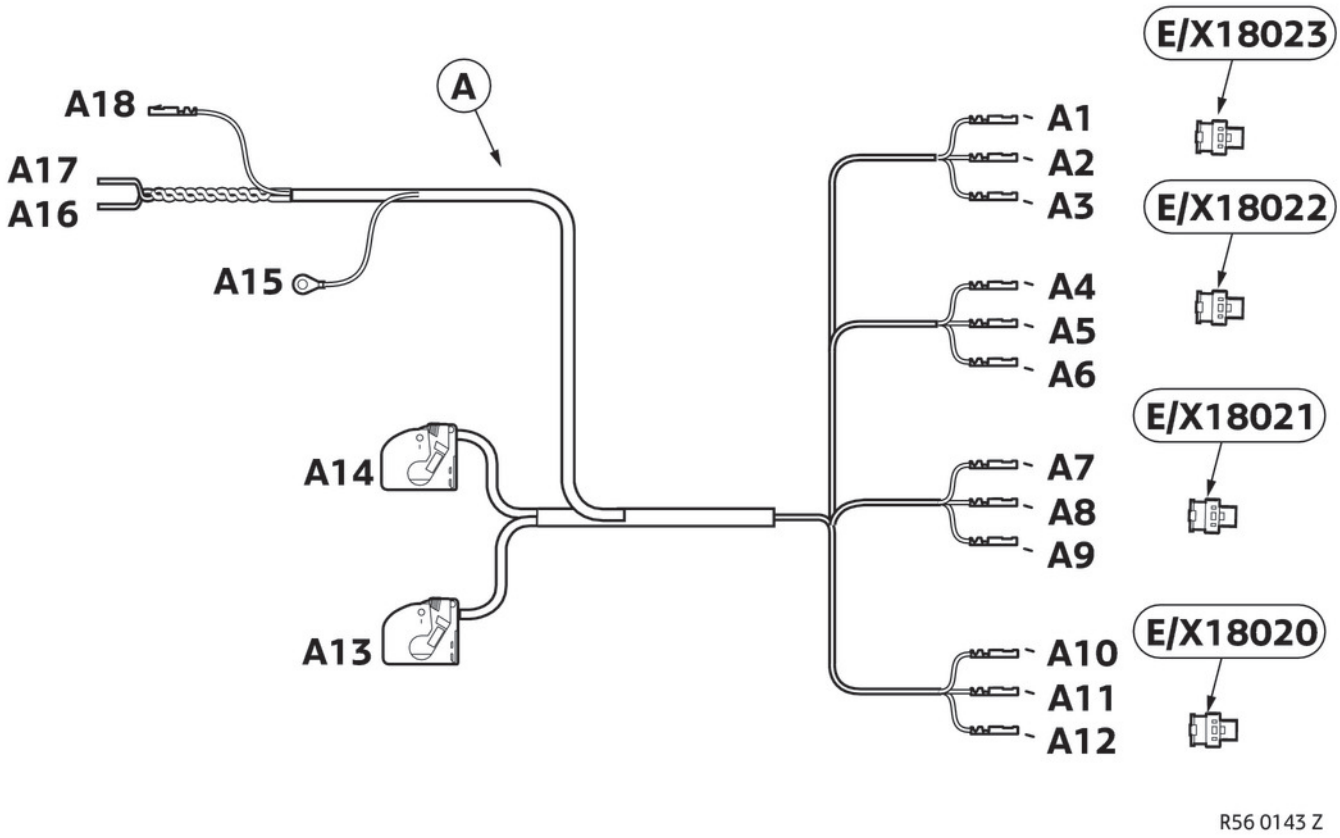
2. Connection diagram



R56 0143 Z

Item	Designation	Signal	Cable colour/ Cross-section	Connection location in the car	Abbreviation/ Slot
A	Retrofit cable	---	---	---	---
A1	Socket casing	D_WHR	GE/BR 0.35 mm²	At RR (HR) sensor with socket casing **E**	X18023 PIN 2
A2	Socket contact	M_WHR	BR/GE 0.35 mm²	At RR (HR) sensor with socket casing **E**	X18023 PIN 2
A3	Socket contact	U_WHR	GN/VI 0.35 mm2	At RR (HR) sensor with socket casing **E**	X18023 PIN 3
A4	Socket contact	D_WHMR	GE/SW 0.35 mm²	At RCR (HMR) sensor with socket casing **E**	X18022 PIN 1
A5	Socket contact	M_WHMR	BR/BL 0.35 mm²	At RCR (HMR) sensor with socket casing **E**	X18022 PIN 2
A6	Socket contact	U_WHMR	GN/GR 0.35 mm²	At RCR (HMR) sensor with socket casing **E**	X18021 PIN 3
A7	Socket contact	D_WHML	GE/GN 0.35 mm²	At RCL (HML) sensor with socket casing **E**	X18021 PIN 1
A8	Socket contact	M_WHML	BR/SW 0.35 mm²	At RCL (HML) sensor with socket casing **E**	X18021 PIN 2
A9	Socket contact	U_WHML	GN/BR 0.35 mm²	At RCL (HML) sensor with socket casing **E**	X18021 PIN 3
A10	Socket contact	D_WHL	GE/GR 0.35 mm²	At RL (HL) sensor with socket casing **E**	X18020 PIN 1
A11	Socket contact	M_WHL	BR/WS 0.35 mm²	At RL (HL) sensor with socket casing **E**	X18020 PIN 2
A12	Socket contact	U_WHL	GN/SW 0.35 mm²	At RL (HL) sensor with socket casing **E**	X18020 PIN 3

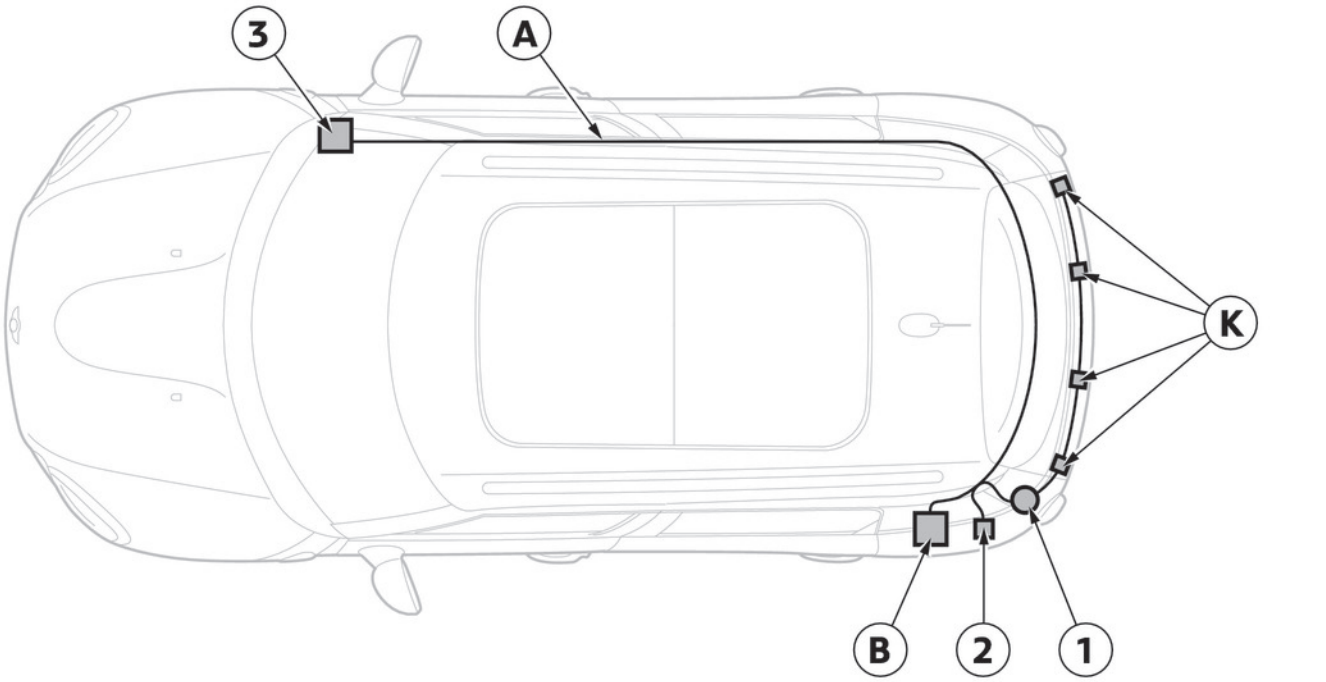
2. Connection diagram



R56 0143 Z

Item	Designation	Signal	Cable colour/ Cross-section	Connection location in the car	Abbreviation/ Slot
A13	SW 12-pin socket casing	---	---	At PDC control unit **B**	X300
A14	NT 18-pin socket casing	---	---	At PDC control unit **B**	X18013
A15	Ring eyelet M6	Terminal 31	BR 0.5 mm²	Rear left luggage compartment ground support point	X13795
A16	Cable open	CAN-H	OR/GN 0.75 mm²	With miniature connector **F** to the cable of the same colour on fuse holder (SPEG)	X14272 PIN 6
A17	Cable open	CAN-L	GN 0.75 mm²	With miniature connector **F** to the cable of the same colour on fuse holder (SPEG)	X14272 PIN 5
A18	Socket contact	Terminal 15	GN/WS 0.5 mm²	To fuse holder (SPEG)	X11001 PIN 6
E/X18020	SW 3-pin socket casing	---	---	To PDC sensor **D** RL (HL)	X18020
E/X1801	SW 3-pin socket casing	---	---	To PDC sensor **D** RCL (HML)	X18021
E/X18022	SW 3-pin socket casing	---	---	To PDC sensor **D** RCR (HMR)	X18022
E/X18023	SW 3-pin socket casing	---	---	To PDC sensor **D** RR (HR)	X18023

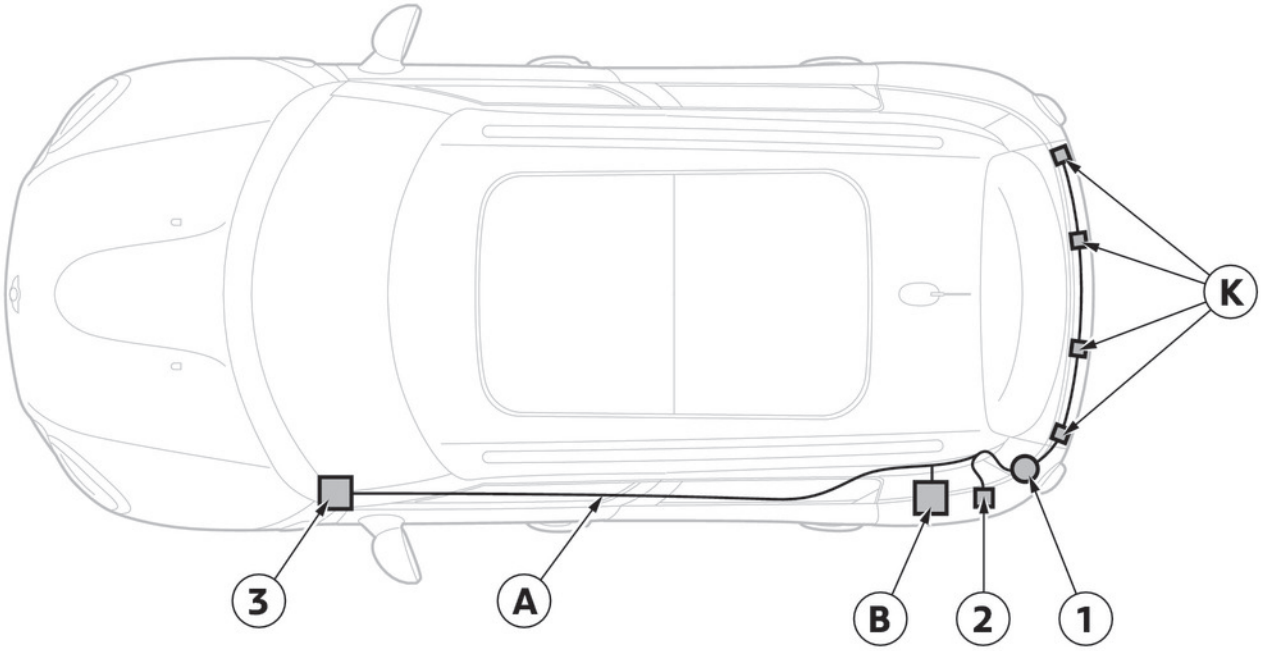
3. Installation and cabling diagram for LHD cars



A Retrofit cable set
B PDC control unit
K PDC sensors

1 Rubber grommet
2 Ground support point **X13795**
4 Fuse holder (SPEG)

4. Installation and cabling diagram for RHD cars

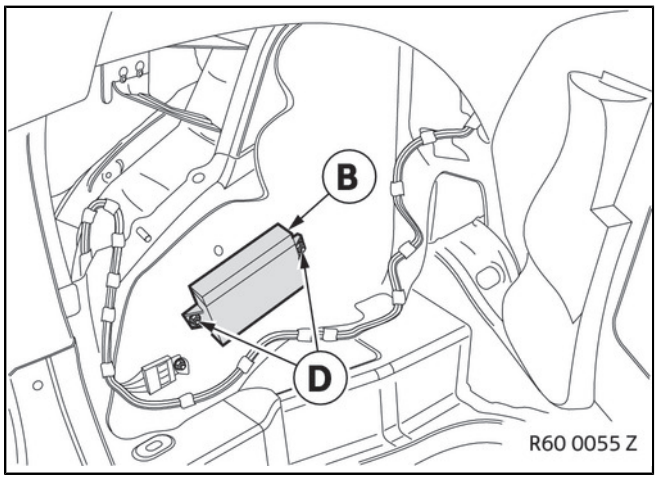


R60 0051Z

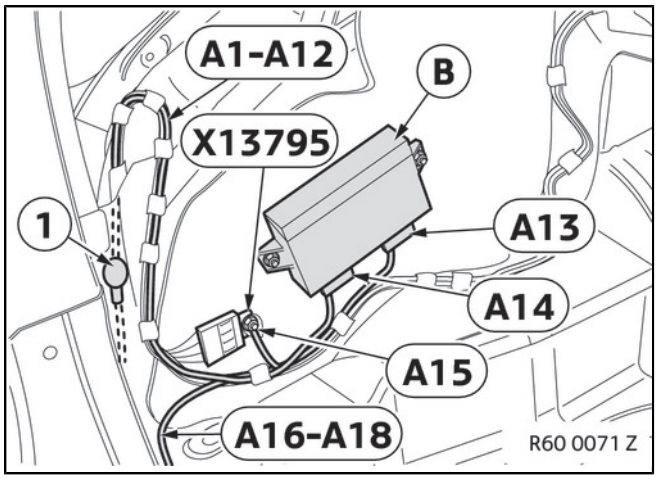
A Retrofit cable set
B PDC control unit
K PDC sensors

1 Rubber grommet
2 Ground support point **X13795**
4 Fuse holder (SPEG)

5. Installing the retrofit wiring harness and PDC control unit



Screw PDC control unit **B** using cap nuts **D** to the existing coarse thread stud bolts (1).



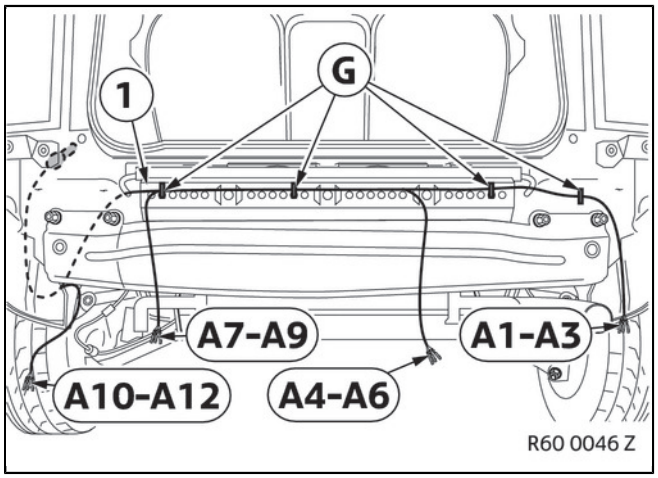
Guide branches **A1-A12** through the existing rubber grommets (1).

Connect branches **A13-A14** to PDC control unit **B**.

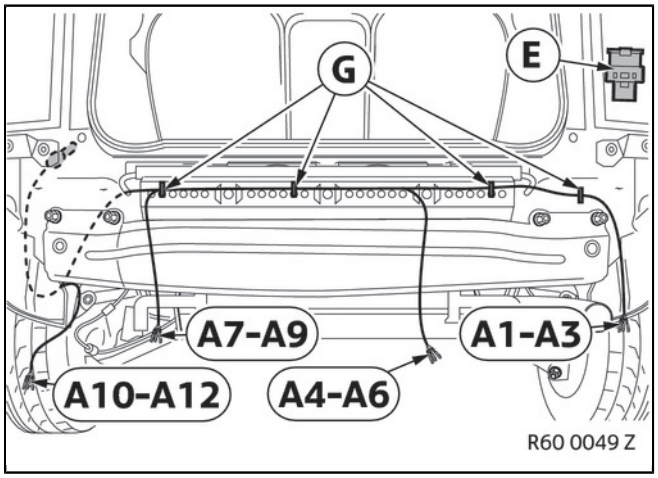
Screw branch **A15** to ground support point **X13795** .

LHD cars only:
route branches **A16-A18** along the right-hand side of the car to the fuse holder (SPEG).

RHD cars only:
route branches **A16-A18** along the left-hand side of the car to the fuse holder (SPEG).



All cars
A1-A12 along the guide (1) already installed and secure with cable ties **G**.



Connect branches **A1-A12** as follows to socket casing **E**:

- Branch **A1**, GE/BR cable, to PIN 1
- Branch **A2**, BR/GE cable, to PIN 2
- Branch **A3**, GN/VI cable, to PIN 3

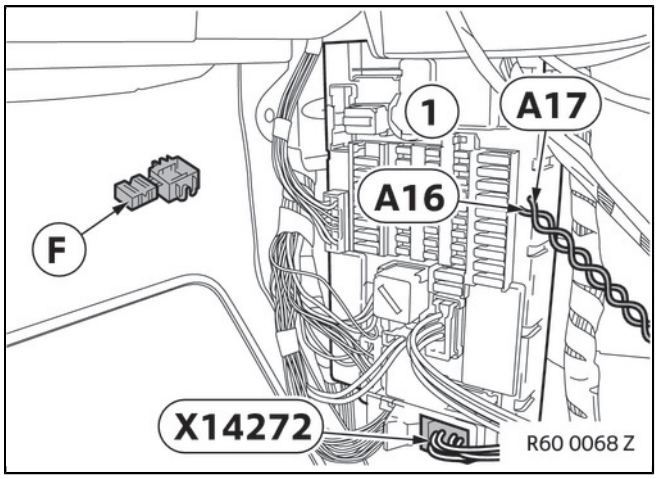
- Branch **A4**, GE/SW cable, to PIN 1
- Branch **A5**, BR/BL cable, to PIN 2
- Branch **A6**, GN/GR cable, to PIN 3

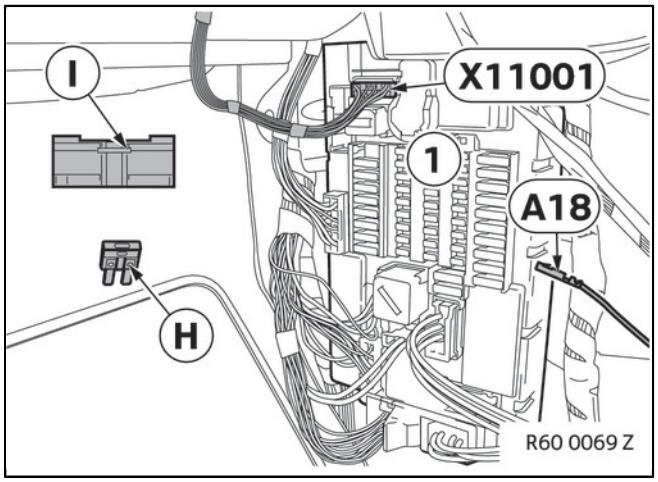
- Branch **A7**, GE/GN cable, to PIN 1
- Branch **A8**, BR/SW cable, to PIN 2
- Branch **A9**, GN/BR cable, to PIN 3

- Branch **A10**, GE/GR cable, to PIN 1
- Branch **A11**, BR/WS cable, to PIN 2
- Branch **A12**, GN/SW cable, to PIN 3

Connect branches **A16-A17** using miniature connector **F** to the branches of the same colour on the cable of plug **X14272**, SW 24-pin, on fuse holder (1):

- Branch **A16**, OR/GN cable, from PIN 6
- Branch **A17**, GN cable, from PIN 5



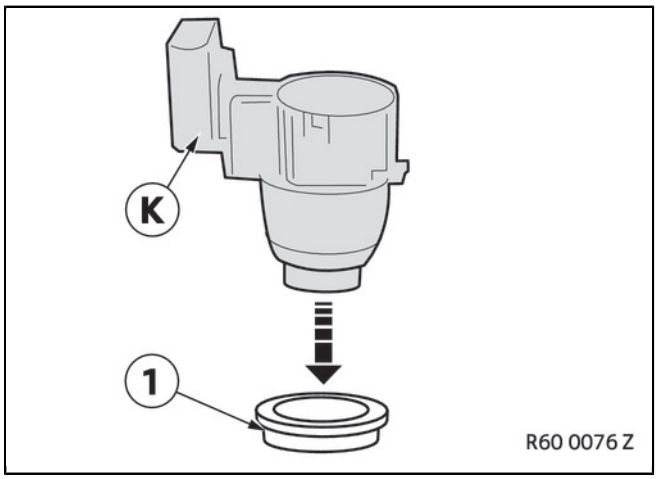


If socket casing **X11001** is not present, use socket casing **I**.

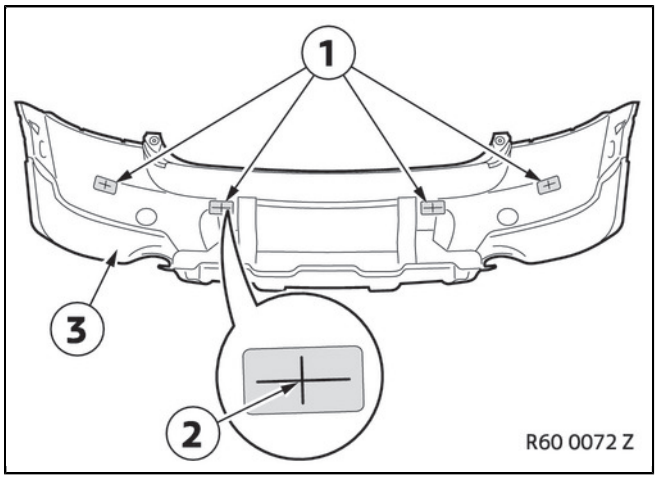
Connect branch **A18**, GN/WS cable, to PIN 6 of socket casing **X11001**, SW 10-pin, on fuse holder (1).

Insert fuse **H** into slot F32 of the fuse holder (1).

6. Installing the PDC sensors



Ensure that decoupling rings (1) are connected to PDC sensors **K**. ◀



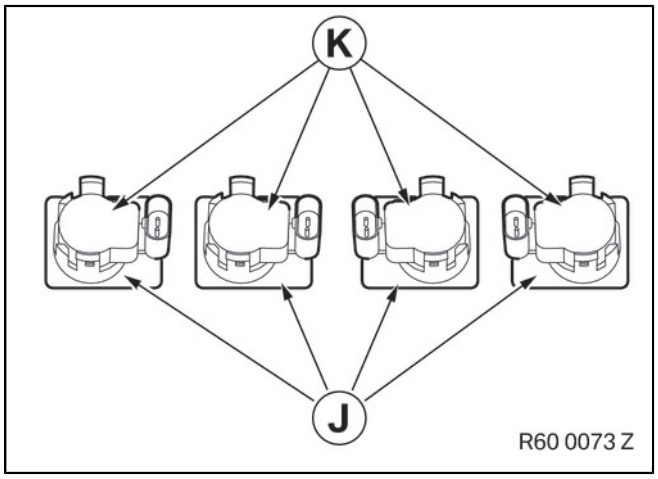
R60 cars only

The pre-punched bonding surfaces (1) must be clean and free from grease to guarantee a good adhesive effect. ◀

Draw on drilling points (2) on the bumper trim (3) and pre-drill with a 3 mm spiral drill bit.

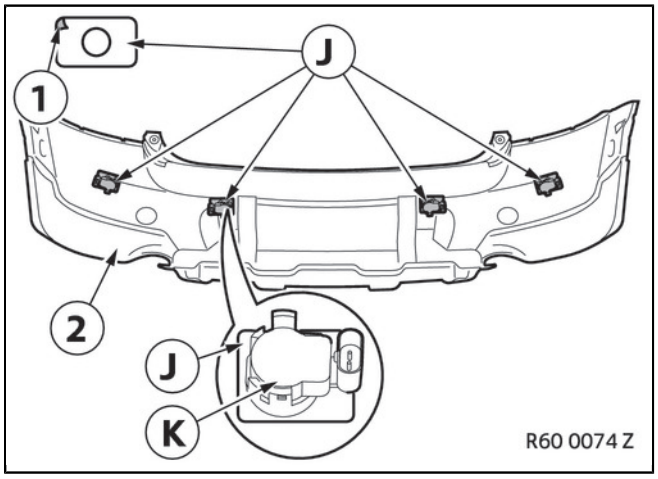
Complete the holes with a step drill to a diameter of 27 mm.

Carefully deburr the holes.



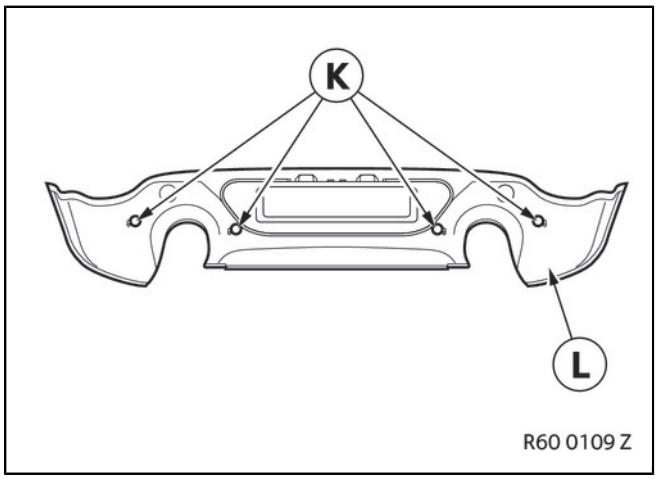
PDC sensor holders **J** are coded. Be aware of the coding when installing PDC sensors **K**. ◀

Press PDC sensors **K** into PDC sensor holder **J**. Ensure that PDC sensors **K** audibly engage.



Remove the adhesive backing films (1) and stick PDC sensor holder **J** with PDC sensors **K** on the pre-punched markings and drill holes onto the bumper trim (2).

6. Installing the PDC sensors



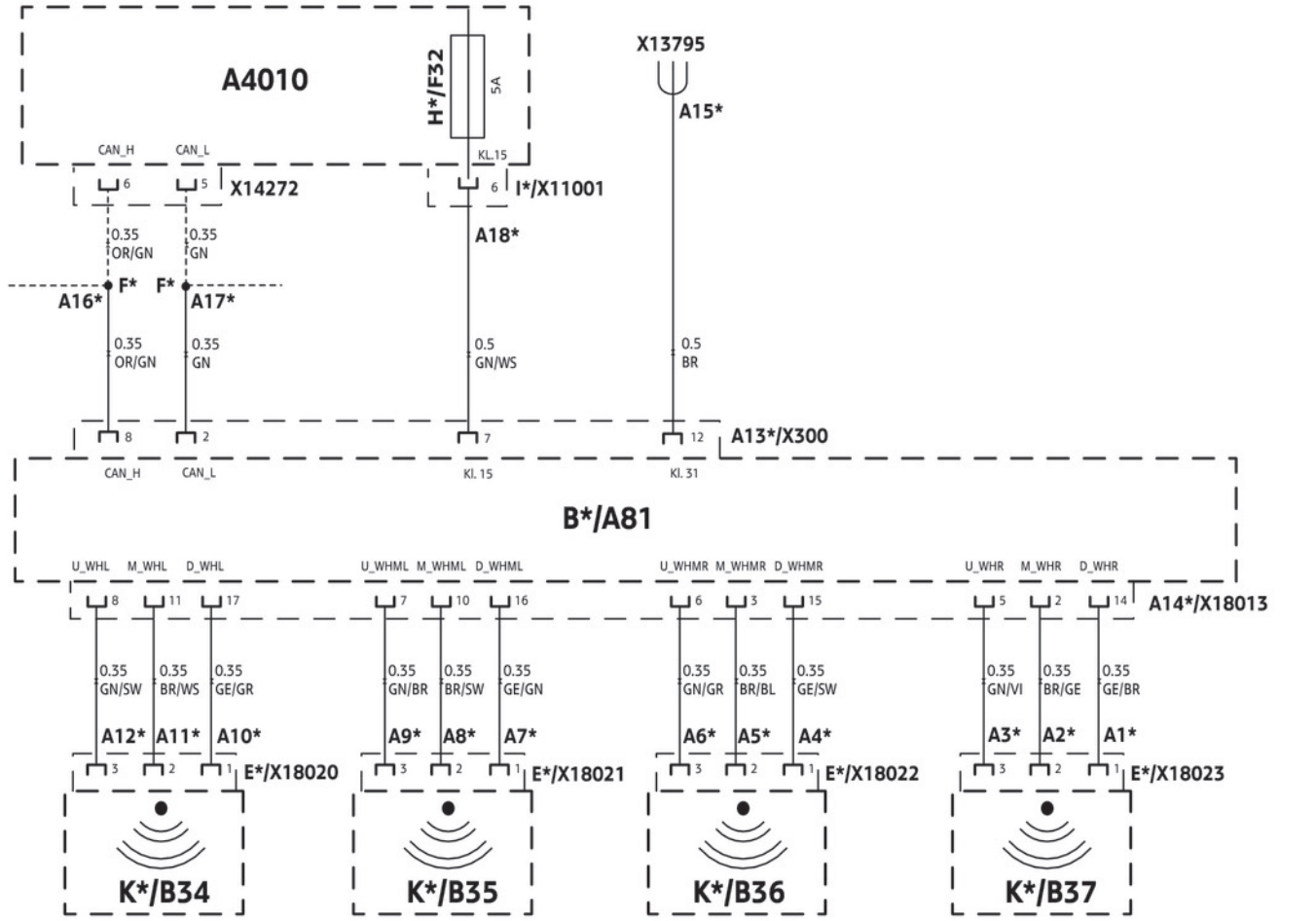
R61 cars only
Clip PDC sensors **K** into centre spoiler **L** .

7. Concluding work and coding

The retrofit system requires coding.

- Connect the battery
- Carry out a vehicle test using the ISTA system and note or work through any entered error memory.
- Change in the ISTA/P car programming
- Select the "Park Distance Control" retrofit via the – **Conversion** – path and work through the created action plan
- If using ISTA/P, please note the instructions provided in the ISTA/P application documentation
- Conduct a function test
- Re-assemble the car in a logical manner

8. Wiring diagram



R60 0075 Z

Legend

A1	Socket contact, to socket casing **E**
A2	Socket contact, to socket casing **E**
A3*	Socket contact, to socket casing **E**
A4*	Socket contact, to socket casing **E**
A5*	Socket contact, to socket casing **E**
A6*	Socket contact, to socket casing **E**
A7*	Socket contact, to socket casing **E**
A8*	Socket contact, to socket casing **E**
A9*	Socket contact, to socket casing **E**
A10*	Socket contact, to socket casing **E**
A11*	Socket contact, to socket casing **E**
A12*	Socket contact, to socket casing **E**
A13*	NT 12-pin socket casing **X300**
A13*	SW 12-pin socket casing **X18013**
A15*	Ring eyelet M6, to ground support point **X13795**, rear left luggage compartment
A16*	Cable open, with miniature connector **F** to **X14272** CAN high on fuse holder (SPEG)
A17*	Cable open, with miniature connector **F** to **X14272** CAN low on fuse holder (SPEG)
A18*	Socket contact, to socket casing **X11001/I** on fuse holder (SPEG)
B*/A81	PDC control unit
D*/B34	Rear left PDC sensor
D*/B35	Rear centre left PDC sensor
D*/B36	Rear centre right PDC sensor
D*/B37	Rear right PDC sensor
E*/X18020	SW 3-pin socket casing to rear left PDC sensor
E*/X18021	SW 3-pin socket casing to rear centre left PDC sensor
E*/X18022	SW 3-pin socket casing to rear centre right PDC sensor
E*/X18023	SW 3-pin socket casing to rear right PDC sensor
H*	Insert 5A fuse into slot **F32** of the fuse holder (SPEG)
I*	SW 10-pin socket casing
A4010	Fuse holder (SPEG)
X11001	SW 10-pin socket casing to fuse holder (SPEG)
X13795	Ground support point in rear left luggage compartment
X14272	SW 24-pin socket casing to fuse holder (SPEG)

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

Cable colours

BL	Blue	RT	Red
BR	Brown	SW	Black
GE	Yellow	WS	White
GN	Green	VI	Violet
NT	Natural		