

Original BMW Accessories. Installation Instructions.



Park Distance Control retrofit BMW 5 Series Saloon (E60) BMW 5 Series Touring (E61)

Retrofit kit No. 66 20 0 304 550 Park Distance Control retrofit kit

Installation time

The installation time is 3.75 hours, but this may vary depending on the condition of the car and the equipment in it.

In general the car must be upgraded to the latest I stage status by flashing before starting the work. Depending on the production age of the car and the work already carried out on the car, the programming times will vary, which means that we cannot quote a specific time at this point.

The installation time does not include any time for programming/encoding, as this depends on the age 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), contact the following:

- 1. Either your national subsidiary or your regional office**
- 2. The Support team via the Aftersales Assistance Portal (ASAP) using the optional technical parts support application.**

Quote the VIN and the part number of the retrofit kit and provide a detailed description of the problem.

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

See ASAP for details of the pictograms.

All the figures show LHD cars, proceed in exactly the same way on RHD cars.

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.

Subject to technical modifications!

Installation information

After the installation work the retrofit must be programmed/coded using SSS (software service station) via the **Retrofit** path.

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.

Ordering instructions

The bumpers, the ultrasonic converters and the oddments box switch unit are not included in the installation kit and must be ordered separately (see EPC for part numbers and details).

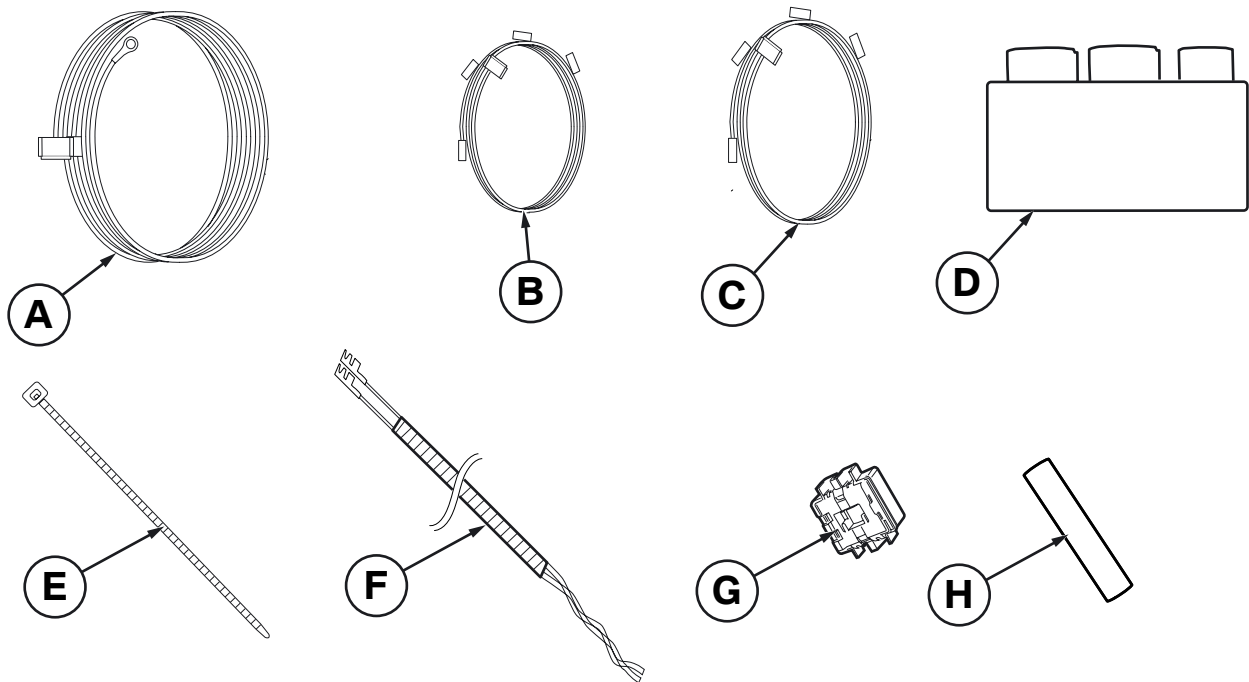
Special tools required

None

Contents

Section	Page
1. Parts list	4
2. Preparations.....	5
3. Connection diagram.....	6
4. Installation and cabling diagram	9
5. Installation work	10
6. Concluding work and coding	14
7. Circuit diagram	15

1. Parts list



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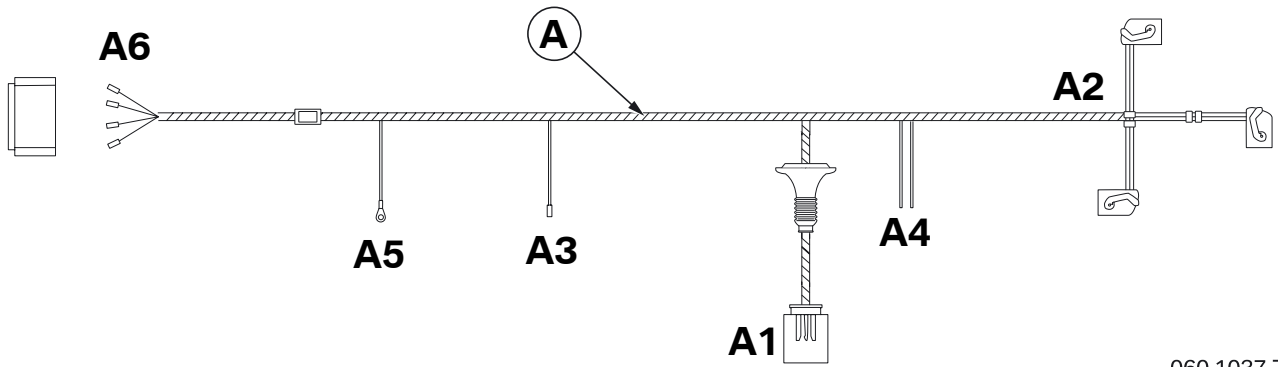
Legend

- A PDC wiring harness
- B Rear bumper wiring harness
- C Front bumper wiring harness
- D PDC control unit
- E Cable tie (20x)
- F K-CAN H/L wiring harness (for cars built after 09/05 only; not supplied in the retrofit kit)
- G Miniature connector (2x, for cars built after 09/05 only; not supplied in the retrofit kit)
- H Shrink hose (2x, for cars built after 09/05 only; not supplied in the retrofit kit)

2. Preparations

	TIS No.
Conduct a brief test	---
Disconnect negative pole of battery	12 00 ...
The following components must be removed first of all	
Remove the front bumper	51 11 156
Remove the rear bumper	---
Remove the passenger's footwell trim	51 45 181
Replace the switch unit on the oddments box	61 31 057
Remove the boot trim in the centre and on the right	---
Remove the A pillar side trim at the bottom	---
Remove the B pillar side trim on the right	---
Remove the air engine compartment air ducts on the right	---
Remove the side section of the backrest	52 26 008

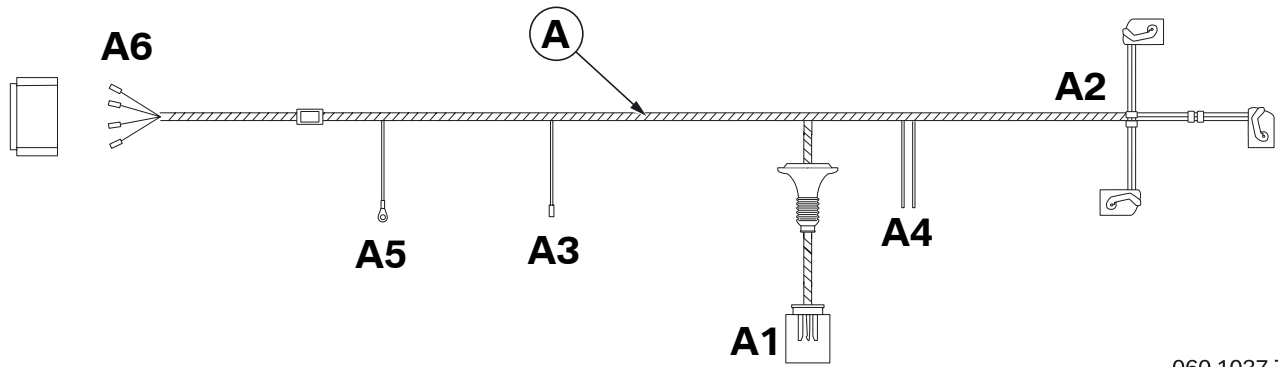
3. Connection diagram



060 1037 Z

Item	Designation	Signal	Cable colour/ Cross-section	Connection location in the car	Abbreviation/Slot
A	Wiring harness	---	---	---	---
A1	Plug contacts	---	SWWS 0.35 mm ² GEWS 0.35 mm ² BRWS 0.35 mm ² SWGR 0.35 mm ² GEGR 0.35 mm ² BRGR 0.35 mm ² SWBL 0.35 mm ² GEBL 0.35 mm ² BRBL 0.35 mm ² SWGE 0.35 mm ² GEGN 0.35 mm ² BRGE 0.35 mm ²	To rear bumper Black 12-pin plug	X13698 PIN 1 X13698 PIN 2 X13698 PIN 3 X13698 PIN 4 X13698 PIN 5 X13698 PIN 6 X13698 PIN 7 X13698 PIN 8 X13698 PIN 9 X13698 PIN 10 X13698 PIN 11 X13698 PIN 12
A2	Socket casing, BLACK, NATURAL, BLACK	---	---	On PDC control unit	X300 X18013 X18362

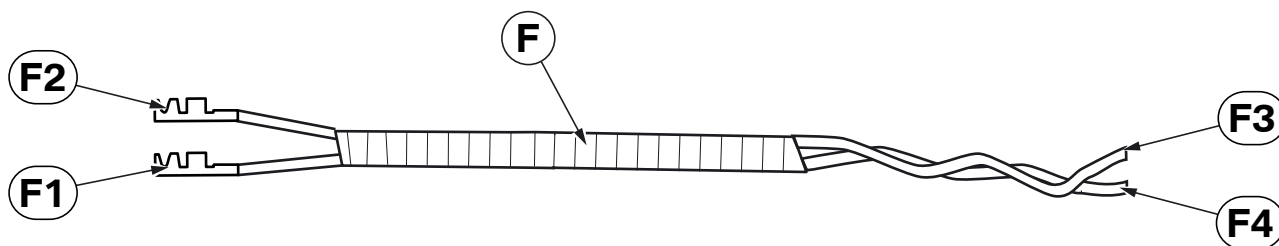
3. Connection diagram



060 1037 Z

Item	Designation	Signal	Cable colour/ Cross-section	Connection location in the car	Abbreviation/Slot
A3	Socket contact	Terminal 15	GNBL 0.5 mm ²	Cars before 09/03 only On fuse distributor, black 32-pin plug Cars built between 09/03 and 09/05 only On fuse distributor, black 32-pin plug Cars built after 09/05 only On fuse distributor, black 16-pin plug	X11012 PIN 16 X11012 PIN 32 X11015 PIN 13
A4	Open cable	K-CAN H K-CAN L K-CAN H K-CAN L	SW 0.5 mm ² GE 0.5 mm ² SW 0.5 mm ² GE 0.5 mm ²	Cars built before 09/05 only On boot standard wiring harness Cars built after 09/05 only To branch F1 To branch F2	X15013 X15014 --- ---
A5	Socket contact	Terminal 31	BR 0.5 mm ²	To earth in rear right wheel arch	X13790
A6	Socket contacts	---	SWWS 0.35 mm ² GEWS 0.35 mm ² BRWS 0.35 mm ² SWGR 0.35 mm ² GEGR 0.35 mm ² BRGR 0.35 mm ² SWBL 0.35 mm ² GEBL 0.35 mm ² BRBL 0.35 mm ² SWGE 0.35 mm ² GEGN 0.35 mm ² BRGE 0.35 mm ²	On front bumper, black 12-pin plug	X10647 PIN 1 X10647 PIN 2 X10647 PIN 3 X10647 PIN 4 X10647 PIN 5 X10647 PIN 6 X10647 PIN 7 X10647 PIN 8 X10647 PIN 9 X10647 PIN 10 X10647 PIN 11 X10647 PIN 12

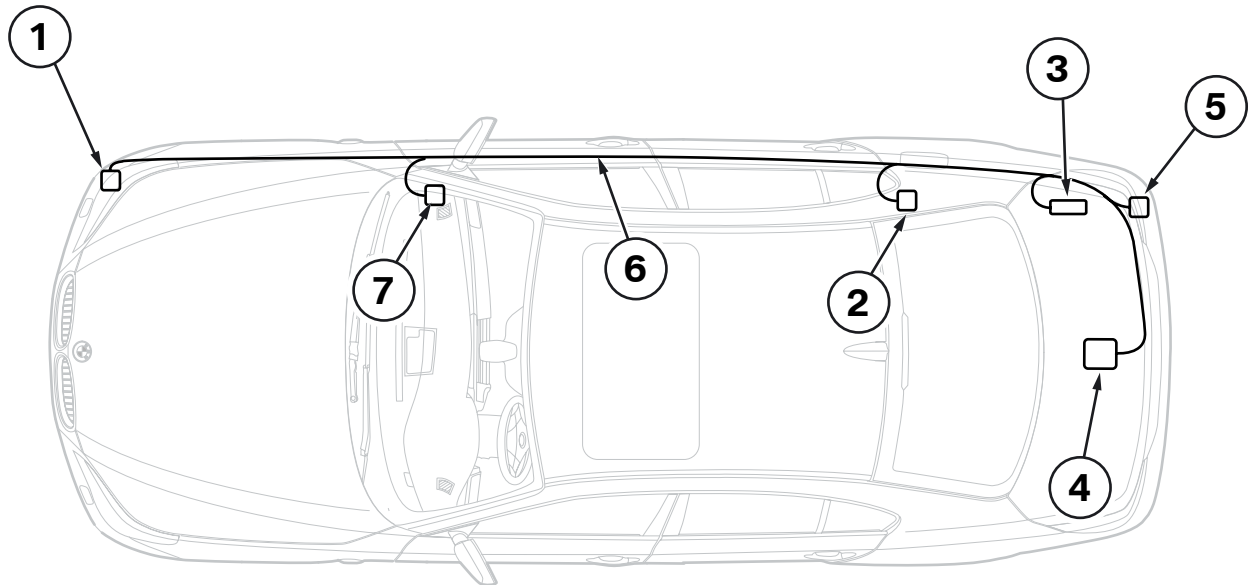
3. Connection diagram



060 1041 Z

Item	Designation	Signal	Cable colour/ Cross-section	Connection location in the car	Abbreviation/Slot
F	K-CAN wiring harness	---	---	---	---
F1	Butt-joint connector	K-CAN H	SW 0.5 mm ²	To branch A4 with same colour	---
F2	Butt-joint connector	K-CAN L	GE 0.5 mm ²	To branch A4 with same colour	---
F3	Open cable	K-CAN H	SW 0.5 mm ²	With miniature connector G on standard wiring harness of body base module A1a	X13252 Pin 38
F4	Open cable	K-CAN L	GE 0.5 mm ²	With miniature connector G on standard wiring harness of body base module A1a	X13252 Pin 39

4. Installation and cabling diagram

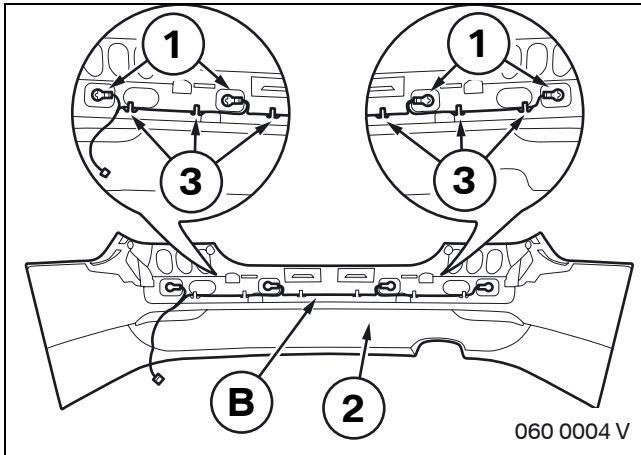


060 1039 Z

Legend

- 1 Front bumper connector
- 2 Wheel arch earth
- 3 Fuse distributor
- 4 PDC control unit
- 5 Rear bumper connector
- 6 Wiring harness
- 7 Body base module **A1a** (for cars built after 09/05 only)

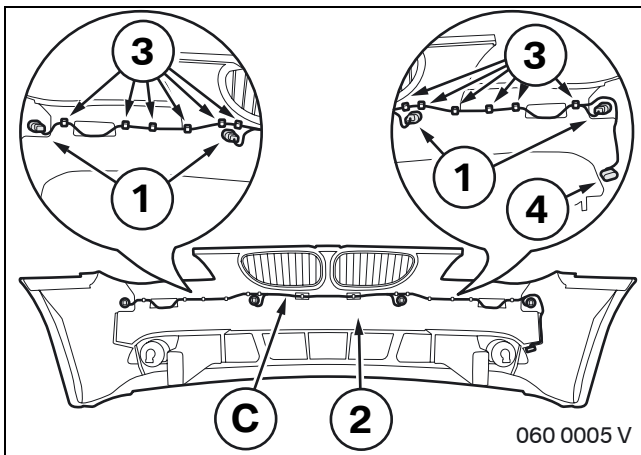
5. Installation work



☑ Ensure that the ultrasonic converters (1) are aligned correctly. ◀

Insert the ultrasonic converters (1) into the holders on the rear bumper (2) as shown until they engage.

Connect wiring harness **B** to the ultrasonic converters (1) and route it behind the plastic holders (3).

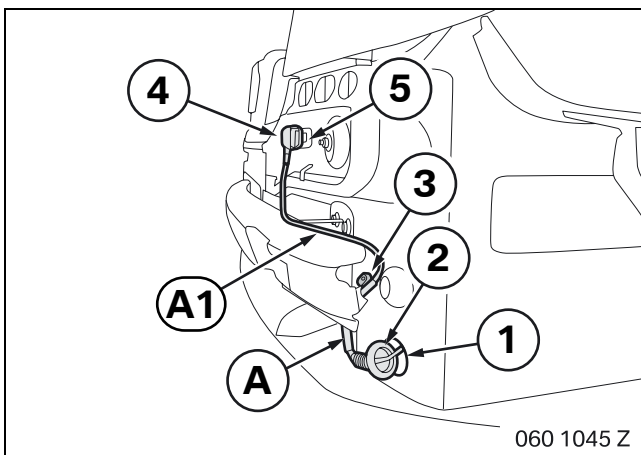


☑ Ensure that the ultrasonic converters (1) are aligned correctly. ◀

Insert the ultrasonic converters (1) into the holders on the front bumper (2) as shown until they engage.

Connect wiring harness **C** to the ultrasonic converters (1) and route it behind the plastic holders (3).

Connect the plug (4) of wiring harness **C** to the bumper.

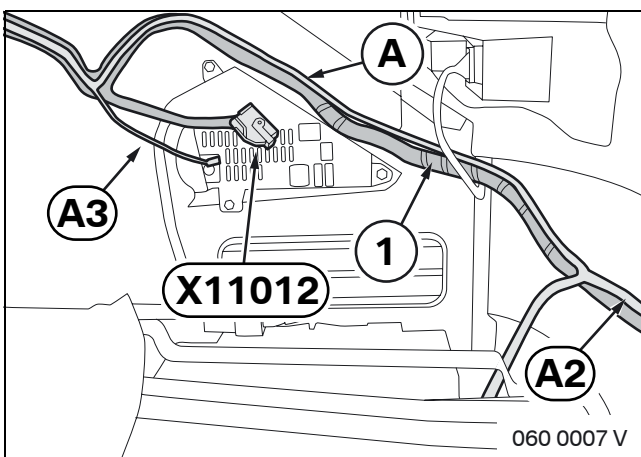


☑ On cars with a towing hitch, remove the grommet (2) and thread wiring harness **A** through the existing grommet. ◀

Thread wiring harness **A** through the opening (1) into the interior. Fit the grommet (2) to the opening (1).

Secure branch **A1** to the car using the holder (3).

Connect branch **A1** to the plug (4) as shown in the connection diagram. Connect the plug (4) to the holder (5).



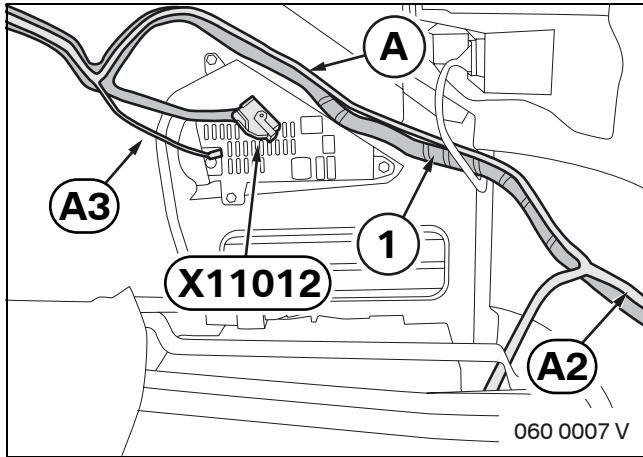
Cars before 09/03 only

Route wiring harness **A** along the existing wiring harness (1) to the front.

Route branch **A2** to the centre of the boot.

Connect branch **A3** to plug **X11012**, PIN 16.

5. Installation work

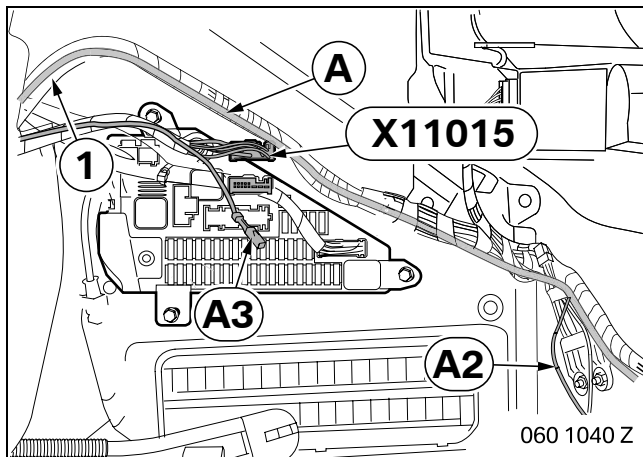


Cars built between 09/03 and 09/05 only

Route wiring harness **A** along the existing wiring harness (1) to the front.

Route branch **A2** to the centre of the boot.

Connect branch **A3** to plug **X11012**, PIN 32.

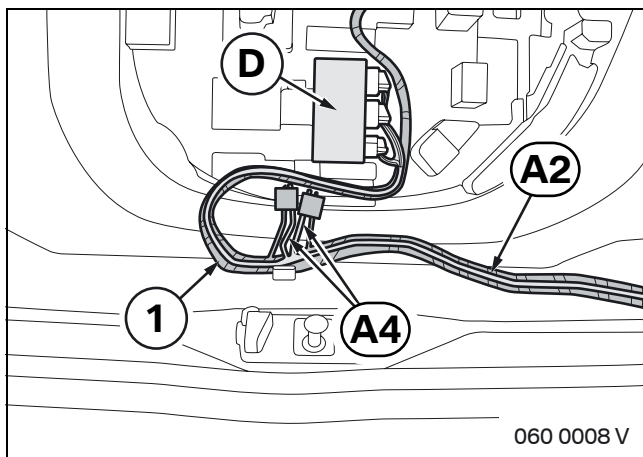


Cars built after 09/05 only

Route wiring harness **A** along the existing wiring harness (1) to the front.

Route branch **A2** to the centre of the boot.

Connect branch **A3** to plug **X11015**, PIN 13.

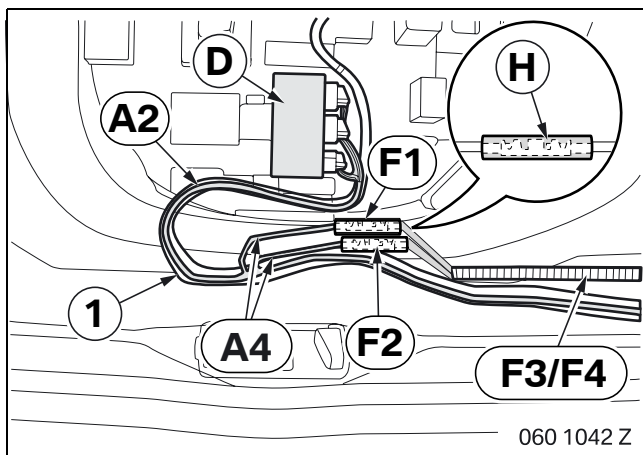


Cars built before 09/05 only

Place control unit **D** in the recess provided.

Route branch **A2** along the wiring harness (1) to control unit **D**. Connect the plug to control unit **D**.

Undo the wrapping on the existing wiring harness (1) at the top. Connect branch **A4** to the cables of the same colour using insulation-piercing connectors.



Cars built after 09/05 only

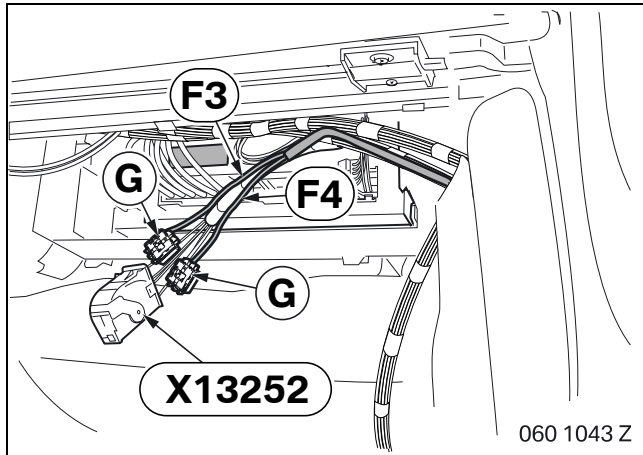
Place control unit **D** in the recess provided.

Route branch **A2** along the wiring harness (1) to control unit **D**. Connect the plug to control unit **D**.

Use shrink hose **H** to crimp branch **A4** onto the same colour on branches **F1** and **F2**.

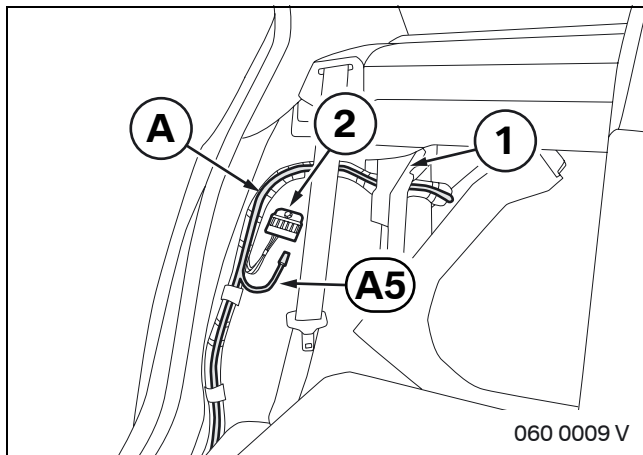
Route branches **F3** and **F4** along the standard wiring harness to the body base module.

5. Installation work



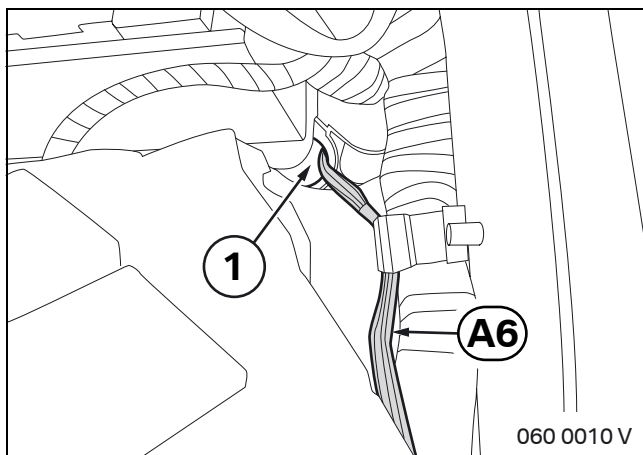
Use miniature connector **G** to connect branches **F3**, black cable, and **F4**, yellow cable, to the same coloured cable lines of plug **X13252**:

- Branch **F3** to **X13252**, pin 38
- Branch **F4** to **X13252**, pin 39

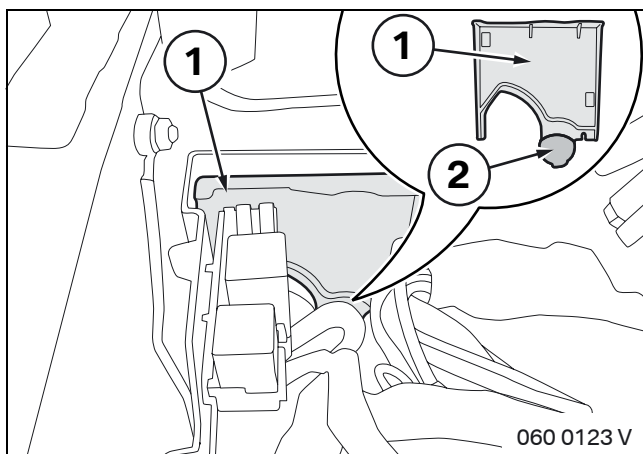


All cars

Route wiring harness **A** under the cover (1) and along the standard wiring harness to the front. Connect branch **A5** to the wheel arch earth (2).



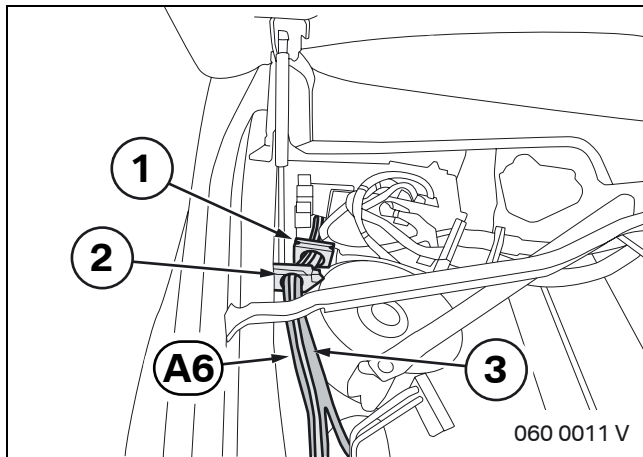
Route branch **A6** in the passenger footwell through the grommet (1) into the engine compartment.



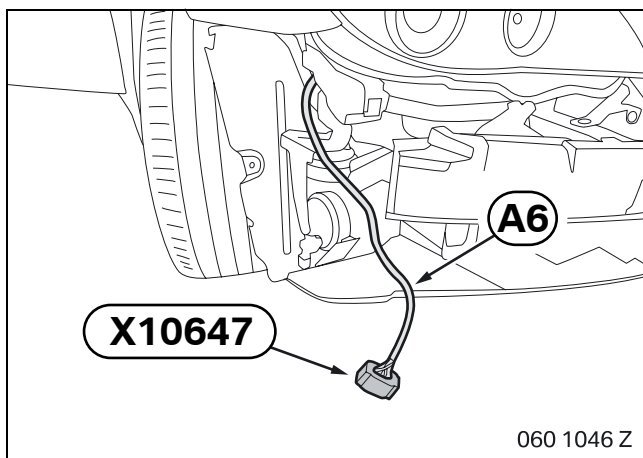
Only for E 61

Pull out the slide (1) and remove the tongue (2). Route branch **A6** through the gap thus created and into the engine compartment.

5. Installation work



Route branch **A6** through the grommet (1) and the holder (2) along the wiring harness (3) to the front bumper.



Connect branch **A6** to plug **X10647** as shown in the connection diagram.

Fit the bumper.

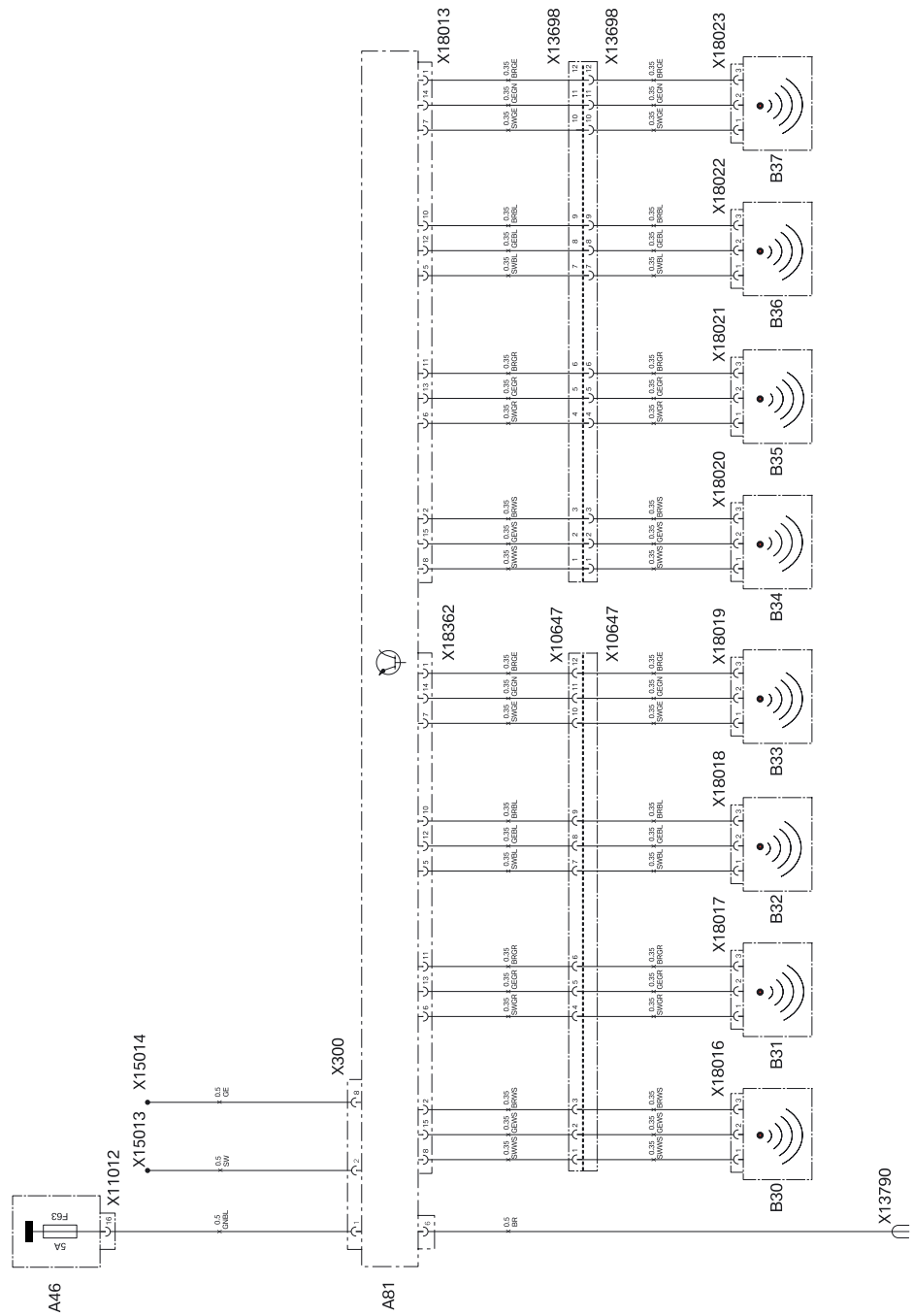
6. Concluding work and coding

This retrofit system requires coding.

- Connect the battery
- Encode/program the retrofit with SSS (software service station) via the **Retrofit** path
- Conduct a brief test
- Conduct a function test
- Re-assemble the car

7. Circuit diagram

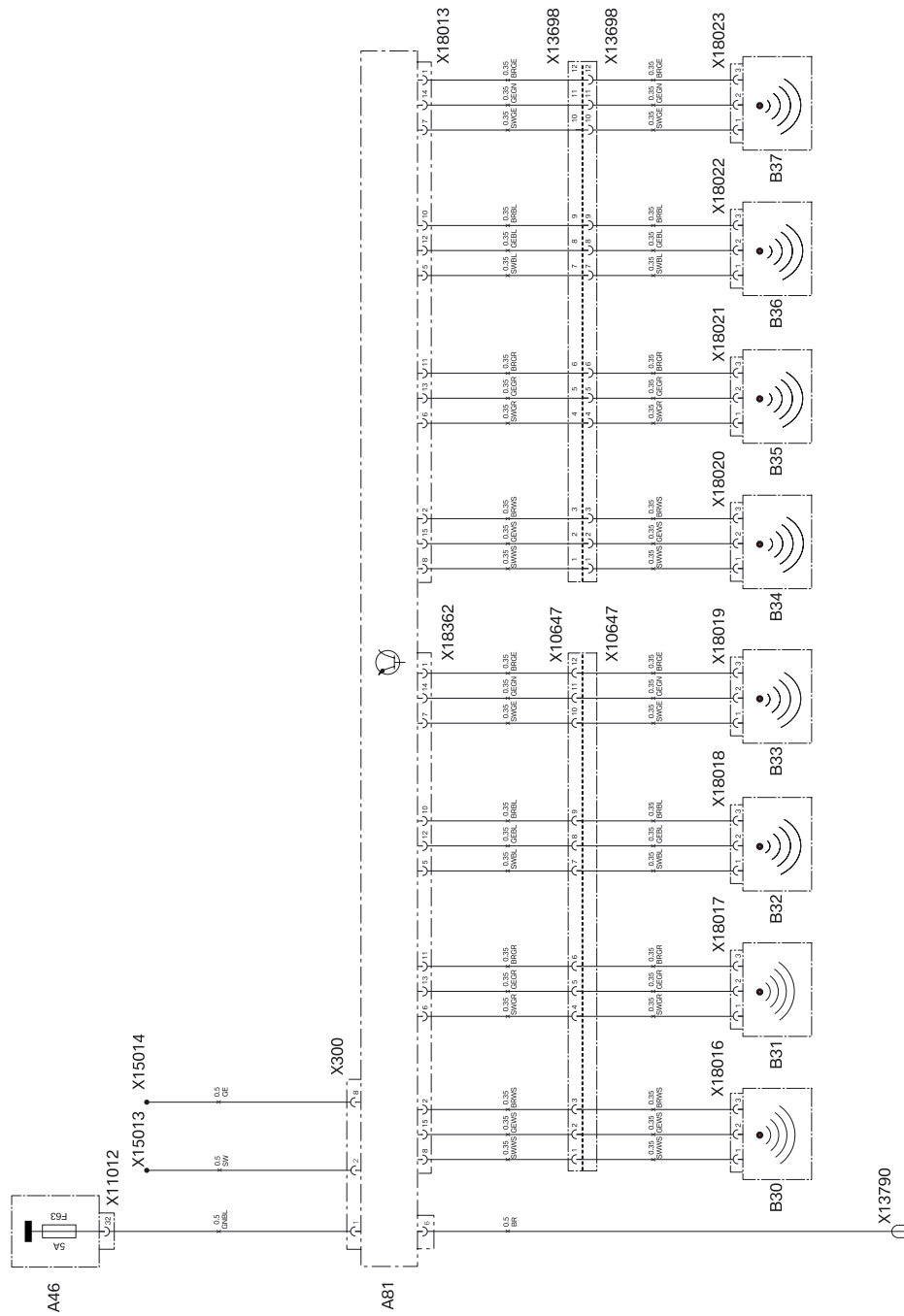
Cars before 09/03 only



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7. Circuit diagram

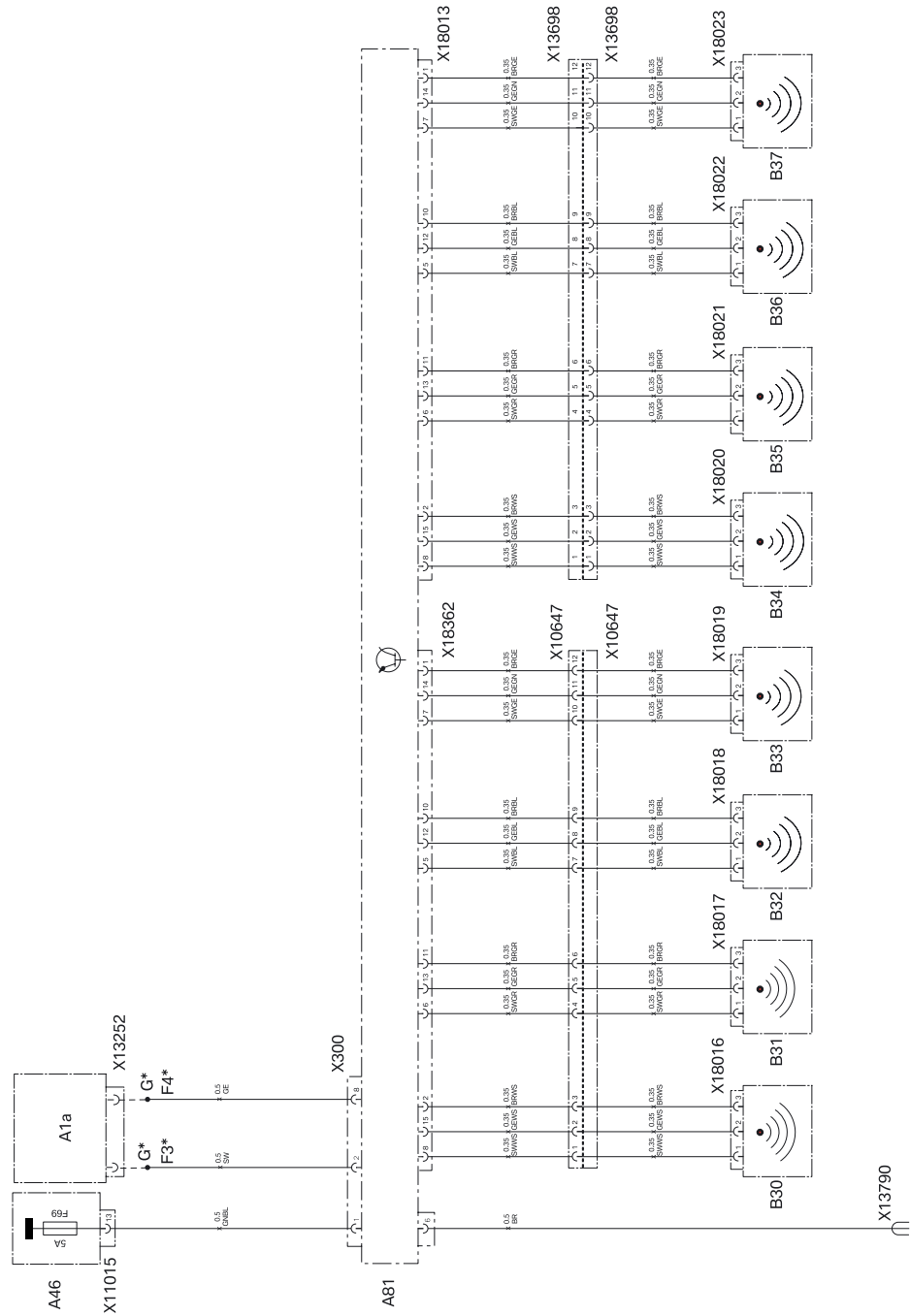
Cars built between 09/03 and 09/05 only



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7. Circuit diagram

Cars built after 09/05 only



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7. Circuit diagram

Legend

A1a	Body base module
A46	Fuse distributor
A81	PDC control unit
B30	Ultrasonic converter front
B31	Ultrasonic converter front
B32	Ultrasonic converter front
B33	Ultrasonic converter front
B34	Ultrasonic converter rear
B35	Ultrasonic converter rear
B36	Ultrasonic converter rear
B37	Ultrasonic converter rear
F3*	Open cable (cars built after 09/05 only)
F4*	Open cable (cars built after 09/05 only)
G*	Miniature connector (cars built after 09/05 only)
X300	12-pin PDC plug
X10647	12-pin front PDC converter plug
X11012	32-pin fuse distributor plug
X13252	Black 54-pin body base module plug
X13698	12-pin rear PDC converter plug
X13790	Earth in rear right wheel arch
X15013	K-CAN high
X15014	K-CAN low
X18013	18-pin PDC plug
X18016	Black 3-pin plug
X18017	Black 3-pin plug
X18018	Black 3-pin plug
X18019	Black 3-pin plug
X18020	Black 3-pin plug
X18021	Black 3-pin plug
X18022	Black 3-pin plug
X18023	Black 3-pin plug
X18362	18-pin PDC plug

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

7. Circuit diagram

Cable colours

BR	Brown
GE	Yellow
GN	Green
GR	Grey
BL	Blue
SW	Black
WS	White