Original BMW Accessories.
Installation Instructions.

Park Distance Control (PDC) Retrofit Kit
BMW 3 Series Coupé (E92)
BMW 3 Series Convertible (E93)

These installation instructions are not valid for cars with the aerodynamics package or M sport package SA 337)

Retrofit kit No.: 66 20 0 418 636 Park Distance Control retrofit kit, rear
66 20 0 418 637 Park Distance Control retrofit kit, front
66 20 0 428 637 Park Distance Control retrofit kit, rear

Installation time
The installation time for the rear PDC retrofit and the front PDC upgrade/retrofit is **approx. 3.5 hours** each.
If the rear PDC retrofit and the front PDC upgrade are installed at the same time, the installation time is **approx. 5.5 hours**. The installation time may vary depending on condition of the car and the equipment in it.
The installation time given does not include time needed for programming/encoding.
The total costs for the programming time should be taken into account when calculating retrofitting costs (reimbursement through warranty is not permissible).

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
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.
After the installation work, the retrofit must be programmed / coded via the Retrofit or Conversion path.
All pictures show LHD cars; proceed accordingly on RHD cars.

Ordering instructions
Check colour versions and technical equipment. The following parts are not supplied in the kits and must be ordered separately (see EPC for part number and details).
For rear PDC retrofit
- Control unit D
- Sensors I
For front PDC upgrade/retrofit
- Control unit P
- Sensors T
- Clip trim Y
- Centre console switch centre Z

List of special equipment
The following special equipment must be taken into consideration when installing the retrofit kit:

SA 235  Towing hitch
SA 507  Park Distance Control (PDC), rear
SA 606  Business navigation system
SA 609  Professional navigation system
SA 663  BMW Professional radio

Special tools required
00 9 317, Installation wedges
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1. Rear PDC retrofit parts list (E92 only)

Legend

A Rear PDC wiring harness
B Supply cable
C Signal generator cable (for cars built before 09/07 without SA 606/609/663 only)
D Control unit (not supplied in the retrofit kit)
E Module holder
F Speed nut (3x)
G Self-tapping screw 4.8 x 16 mm (3x)
H Rear signal generator (for cars built before 09/07 without SA 606/609/663 only)
I Sensor (4x, not supplied in the retrofit kit)
J Disconnecting ring (4x)
K Sensor holder (4x, different coding)
L Fusible link 5 A
M Miniature connector (3x)
N Cable tie 200 x 3.6 mm (20x)
2. Rear PDC retrofit parts list (E93 only)

Legend
A Rear PDC wiring harness
B Supply cable
C Signal generator cable (for cars built before 09/07 without SA 606/609/663 only)
D Control unit (not supplied in the retrofit kit)
E Module holder
F Part deleted
G Screw M5 x 12 mm (2x)
H Rear signal generator (for cars built before 09/07 without SA 606/609/663 only)
I Sensor (4x, not supplied in the retrofit kit)
J Disconnecting ring (4x)
K Sensor holder (4x, different coding)
L Fusible link 5 A
M Miniature connector (3x)
N Cable tie 200 x 3.6 mm (20x)
3. Front PDC upgrade/retrofit parts list

Legend

O Cable tie 200 x 3.6 mm (20x)
P Control unit (not supplied in the upgrade kit)
Q Front signal generator (for cars built before 09/07 without SA 606/609/663 only)
R Adapter (for cars built before 09/07 without SA 606/609/663 only)
S Front PDC wiring harness
T Sensor (4x, not supplied in the upgrade kit)
U Disconnecting ring (4x)
V SW 18-pin socket casing
W SW 2-pin socket casing (for cars built before 09/07 without SA 606/609/663 only)
X Sensor holder (4x, different coding)
Y Trim (for cars without centre console switch centre, not supplied in upgrade kit)
Z Centre console switch centre (not supplied in the retrofit kit)
### 4. Preparatory work (E92 only)

<table>
<thead>
<tr>
<th>Conduct a brief test</th>
<th>TIS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disconnect negative pole of battery</td>
<td>12 00 ...</td>
</tr>
</tbody>
</table>

#### The following components must be removed first of all

**Rear PDC retrofit**

<table>
<thead>
<tr>
<th>Component</th>
<th>TIS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rear bumper trim</td>
<td>51 12 000</td>
</tr>
<tr>
<td>Luggage compartment floor trim</td>
<td>51 47 101</td>
</tr>
<tr>
<td>Right luggage compartment wheel arch trim</td>
<td>51 47 161</td>
</tr>
<tr>
<td>Side trim at rear right</td>
<td>51 43 002</td>
</tr>
<tr>
<td>(for cars built before 09/07 without SA 606/609/663 only)</td>
<td></td>
</tr>
<tr>
<td>Backrest side section, rear seat, right</td>
<td>52 26 008</td>
</tr>
<tr>
<td>Door sill strip, rear (interior) right</td>
<td>51 47 030</td>
</tr>
<tr>
<td>Door sill strip, front (interior) right</td>
<td>51 47 000</td>
</tr>
<tr>
<td>Side footwell trim on right A pillar</td>
<td>51 43 070</td>
</tr>
<tr>
<td>Trim at the bottom right of the dashboard</td>
<td>51 45 181</td>
</tr>
<tr>
<td>Glovebox</td>
<td>51 16 366</td>
</tr>
<tr>
<td>Release fuse holder</td>
<td>---</td>
</tr>
</tbody>
</table>

**Front PDC upgrade/retrofit**

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</tr>
<tr>
<td>Pedal trim</td>
<td>51 45 185</td>
</tr>
<tr>
<td>(for cars built before 09/07 without SA 606/609/663 only)</td>
<td></td>
</tr>
<tr>
<td>Side footwell trim on right A pillar</td>
<td>51 43 070</td>
</tr>
<tr>
<td>Heating/air-conditioning control</td>
<td>64 11 377</td>
</tr>
<tr>
<td>Switch centre, centre console</td>
<td>61 31 052/054</td>
</tr>
<tr>
<td>Door sill strip, front (interior) right</td>
<td>51 47 000</td>
</tr>
<tr>
<td>Door sill strip, rear (interior) right</td>
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</tr>
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<td>51 47 161</td>
</tr>
<tr>
<td>Rear seat</td>
<td>52 24 005</td>
</tr>
<tr>
<td>Rear seat backrest</td>
<td>52 24 010</td>
</tr>
<tr>
<td>Rear backrest partition</td>
<td>---</td>
</tr>
<tr>
<td>Side trim bottom part at rear right (for cars built before 09/07 without SA 606/609/663 only)</td>
<td>51 43 015</td>
</tr>
<tr>
<td>Door sill strip, front (interior) right</td>
<td>51 47 000</td>
</tr>
<tr>
<td>Side footwell trim on right A pillar</td>
<td>51 43 070</td>
</tr>
<tr>
<td>Trim at the bottom right of the dashboard</td>
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</tr>
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</tr>
</tbody>
</table>

**Front PDC upgrade/retrofit**

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</tr>
<tr>
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<td>52 24 005</td>
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</tr>
<tr>
<td>Rear backrest partition</td>
<td>---</td>
</tr>
</tbody>
</table>
### 6. Rear PDC retrofit connection diagram

![Diagram of the connection diagram]

<table>
<thead>
<tr>
<th>Branch/Item</th>
<th>Designation</th>
<th>Signal</th>
<th>Cable colour / Cross-section</th>
<th>Connection site in the car</th>
<th>Abbreviation / Slot</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Rear PDC wiring harness</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>A1</strong></td>
<td>Natural 18-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On control unit <strong>D</strong></td>
<td>X18013</td>
</tr>
<tr>
<td><strong>A2</strong></td>
<td>SW 3-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On sensor <strong>I</strong>, rear right outside</td>
<td>X18023</td>
</tr>
<tr>
<td><strong>A3</strong></td>
<td>SW 3-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On sensor <strong>I</strong>, rear right inside</td>
<td>X18022</td>
</tr>
<tr>
<td><strong>A4</strong></td>
<td>SW 3-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On sensor <strong>I</strong>, rear left inside</td>
<td>X18021</td>
</tr>
<tr>
<td><strong>A5</strong></td>
<td>SW 3-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On sensor <strong>I</strong>, rear left outside</td>
<td>X18020</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>Supply cable</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>B1</strong></td>
<td>Double flat spring contact</td>
<td>Terminal 15</td>
<td>GN/WS 0.50 mm²</td>
<td><strong>Cars built before 03/07 only</strong></td>
<td>To fuse holder <strong>A4010</strong>, 15-pin BL plug</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Cars built after 03/07 only</strong></td>
<td>To fuse holder <strong>A4010</strong>, 15-pin BL plug</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X11001</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PIN 7</td>
</tr>
<tr>
<td><strong>B2</strong></td>
<td>Eyelet M6</td>
<td>Terminal 31</td>
<td>Brown/black 0.50 mm²</td>
<td>To fuse holder <strong>A4010</strong>, 15-pin BL plug</td>
<td>X10012</td>
</tr>
<tr>
<td><strong>B3</strong></td>
<td>Twisted cable</td>
<td>CAN high</td>
<td>OR/GN 0.35 mm²</td>
<td>To standard wiring harness, in footwell on passenger side</td>
<td>X15001</td>
</tr>
<tr>
<td><strong>B4</strong></td>
<td>Twisted cable</td>
<td>CAN low</td>
<td>GN 0.35 mm²</td>
<td>To standard wiring harness, in footwell on passenger side</td>
<td>X15002</td>
</tr>
<tr>
<td><strong>B5</strong></td>
<td>SW 12-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On control unit <strong>D</strong></td>
<td>X300</td>
</tr>
<tr>
<td><strong>C</strong></td>
<td>Signal generator cable</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>C1</strong></td>
<td>SW 2-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On rear signal generator <strong>H</strong></td>
<td>X14279</td>
</tr>
<tr>
<td><strong>C2</strong></td>
<td>Socket contact</td>
<td>LS_HI+</td>
<td>BL/GN 0.35 mm²</td>
<td>With branch <strong>B5</strong> on control unit <strong>D</strong></td>
<td>X300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PIN 4</td>
</tr>
<tr>
<td><strong>C3</strong></td>
<td>Socket contact</td>
<td>LS_HI-</td>
<td>SW/GN 0.35 mm²</td>
<td>With branch <strong>B5</strong> on control unit <strong>D</strong></td>
<td>X300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PIN 10</td>
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</table>
### 7. Front PDC upgrade/retrofit connection diagram

<table>
<thead>
<tr>
<th>Branch/Item</th>
<th>Designation</th>
<th>Signal</th>
<th>Cable colour / Cross-section</th>
<th>Connection site in the car</th>
<th>Abbreviation / Slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>Front PDC wiring harness</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>S1</td>
<td>SW 3-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On sensor T, front right outside</td>
<td>X18019</td>
</tr>
<tr>
<td>S2</td>
<td>SW 3-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On sensor T, front right inside</td>
<td>X18018</td>
</tr>
<tr>
<td>S3</td>
<td>SW 3-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On sensor T, front left inside</td>
<td>X18017</td>
</tr>
<tr>
<td>S4</td>
<td>SW 3-pin socket casing</td>
<td>---</td>
<td>---</td>
<td>On sensor T, front left outside</td>
<td>X18016</td>
</tr>
<tr>
<td>S5</td>
<td>Socket contact, 2.5 mm LS_VO+</td>
<td>BL/GR 0.35 mm²</td>
<td>Only for cars built before 09/07 without SA 606/609/663</td>
<td>X14278 PIN 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>With socket casing W on front signal generator Q</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Only for cars built after 09/07 or with SA 606/609/663</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Insulate and tie back</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>Socket contact, 2.5 mm LS_VO-</td>
<td>SW/RT 0.35 mm²</td>
<td>Only for cars built before 09/07 without SA 606/609/663</td>
<td>X14278 PIN 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>With socket casing W on front signal generator Q</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Only for cars built after 09/07 or with SA 606/609/663</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Insulate and tie back</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>S7</td>
<td>Socket contact</td>
<td>LS_VO+</td>
<td>BL/GR 0.35 mm²</td>
<td>Only for cars built before 09/07 without SA 606/609/663</td>
<td>X300 PIN 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>With branch B5 to the control module P</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Only for cars built after 09/07 or with SA 606/609/663</td>
<td>---</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Insulate and tie back</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>S8</td>
<td>Socket contact</td>
<td>LS_VO-</td>
<td>SW/RT 0.35 mm²</td>
<td>Only for cars built before 09/07 without SA 606/609/663</td>
<td>X300 PIN 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>With branch B5 to the control module P</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
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<tbody>
<tr>
<td>S9</td>
<td>Socket contact</td>
<td>U_WVR</td>
<td>GN/GI 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 8</td>
</tr>
<tr>
<td>S10</td>
<td>Socket contact</td>
<td>M_WVR</td>
<td>BR/GE 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 11</td>
</tr>
<tr>
<td>S11</td>
<td>Socket contact</td>
<td>D_WVR</td>
<td>GE/BR 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 17</td>
</tr>
<tr>
<td>S12</td>
<td>Socket contact</td>
<td>U_WVRM</td>
<td>GN/GR 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 7</td>
</tr>
<tr>
<td>S13</td>
<td>Socket contact</td>
<td>M_WVRM</td>
<td>BR/BL 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 10</td>
</tr>
<tr>
<td>S14</td>
<td>Socket contact</td>
<td>D_WVRM</td>
<td>GE/SW 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 16</td>
</tr>
<tr>
<td>S15</td>
<td>Socket contact</td>
<td>U_WVML</td>
<td>GN/BR 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 6</td>
</tr>
<tr>
<td>S16</td>
<td>Socket contact</td>
<td>M_WVML</td>
<td>Brown/black 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 3</td>
</tr>
<tr>
<td>S17</td>
<td>Socket contact</td>
<td>D_WVML</td>
<td>GE/GN 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 15</td>
</tr>
<tr>
<td>S18</td>
<td>Socket contact</td>
<td>U_WVL</td>
<td>GN/SW 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 5</td>
</tr>
<tr>
<td>S19</td>
<td>Socket contact</td>
<td>M_WVL</td>
<td>BR/WS 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 2</td>
</tr>
<tr>
<td>S20</td>
<td>Socket contact</td>
<td>D_WVL</td>
<td>GE/GR 0.35 mm²</td>
<td>With socket casing V to control unit P</td>
<td>X18362 PIN 14</td>
</tr>
</tbody>
</table>

V SW 18-pin socket casing --- --- To control unit P X18362

W SW 2-pin socket casing --- --- For cars built before 09/07 without SA 606/609/663 only On front signal generator Q X14278
8. Rear PDC retrofit installation and cabling diagram (E92 only)

Legend
A  Rear PDC wiring harness
B  Supply cable
C  Signal generator cable (for cars built before 09/07 without SA 606/609/663 only)
D  Control unit
H  Rear signal generator (for cars built before 09/07 without SA 606/609/663 only)
I  Sensors

1  LHD cars only
   Terminal 15 pick-up on fuse holder, plug X11003 or X11003
   Terminal 31 pick-up on joint connector X10012
   CAN high and CAN low pick-up on standard wiring harness X15001 and X15002

1* RHD cars only
   Terminal 15 pick-up on fuse holder, plug X11003 or X11003
   Terminal 31 pick-up on joint connector X10012
   CAN high and CAN low pick-up on standard wiring harness X15001 and X15002
9. Rear PDC retrofit installation and cabling diagram (E93 only)

Legend

A  Rear PDC wiring harness
B  Supply cable
C  Signal generator cable (for cars built before 09/07 without SA 606/609/663 only)
D  Control unit
H  Rear signal generator (for cars built before 09/07 without SA 606/609/663 only)
I  Sensors

1  LHD cars only
Terminal 15 pick-up on fuse holder, plug X11001
Terminal 31 pick-up on joint connector X10012
CAN high and CAN low pick-up on standard wiring harness X15001 and X15002

1*  RHD cars only
Terminal 15 pick-up on fuse holder, plug X11001
Terminal 31 pick-up on joint connector X10012
CAN high and CAN low pick-up on standard wiring harness X15001 and X15002
10. Front PDC upgrade/retrofit installation and cabling diagram (E92 only)

Legend

P  Control unit
Q  For LHD cars built before 09/07 without SA 606/609/663 only
   Signal generator front
Q* For RHD cars built before 09/07 without SA 606/609/663 only
   Signal generator front
S  Front PDC wiring harness
T  Sensors
Z  Switch centre, centre console
11. Front PDC upgrade/retrofit installation and cabling diagram (E93 only)

Legend

- **P**: Control unit
- **Q**: For LHD cars built before 09/07 without SA 606/609/663 only
  - Signal generator front
- **Q***: For RHD cars built before 09/07 without SA 606/609/663 only
  - Signal generator front
- **S**: Front PDC wiring harness
- **T**: Sensors
- **Z**: Switch centre, centre console
12. Installing the sensors at the rear (rear PDC retrofit)

Clean and degrease the bumper trim (1) at the glueing points (2).
Drill through the bumper trim (1) in the centre of the marked holes (3) using a 3 mm twist drill bit.
Enlarge the holes in the bumper trim (1) using a 18 mm step drill.
Deburr the edges of the holes.

Fit sensors I into disconnecting rings J.

Fit sensors I into sensor holders K.

Sensor holders K are coded. Check the descriptions on sensor holders K.
The connection plugs for sensors I point towards the inside of the bumper trim (1).
Affix sensor holders K to the bumper trim (1) as per the descriptions:
- HI to the inside
- HA to the outside
13. Installing the front sensors (front PDC upgrade/retrofit)

Clean and degrease the bumper trim (1) at the gluing points (2).

Drill through the bumper trim (1) in the centre of the marked holes (3) using a 3 mm twist drill bit.

Enlarge the holes in the bumper trim (1) using a 18 mm step drill.

Deburr the edges of the holes.

Fit sensors **T** into disconnecting rings **U**.

Fit sensors **T** into sensor holders **X**.

Sensor holders **X** are coded. Check the descriptions on sensor holders **X**. The connection plugs for sensors **T** point towards the inside of the bumper trim (1).

Affix sensor holders **X** to the bumper trim (1) as per the descriptions:
- VLI to the left inside
- VRI to the right inside
- VA to the outside
14. Installing the signal generator (for cars built before 09/07 without SA 606/609/663 only)

Rear PDC retrofit

E92 only
Fit rear signal generator H into the side trim (1). Connect branch C1 to rear signal generator H.
Install the side trim (1) as described in TIS RA 51 43 002.
Route signal generator cable C along the standard wiring harness to the right-hand side of the boot.

E93 only
Fit rear signal generator H into the side trim (1). Connect branch C1 to rear signal generator H.
Install the side trim (1) as described in TIS RA 51 43,015.
Route signal generator cable C to right partition.

Front PDC upgrade/retrofit

All cars
Clip front signal generator Q into adapter R.
Clip the adapter R into the pedal trim (1).

The interlocks on front signal generator Q, adapter R and pedal trim (1) are coded.
They will only fit into one position. ▶
15. To install the control module (E92 only)

Rear PDC retrofit
Place speed nuts F into the right-hand boot side section (1).

Insert control unit D into module holder E.

Front PDC upgrade/retrofit
Insert the control module P into the module holder E.

Insert module holder E into the right-hand boot side section and secure it with self-tapping screws G.
16. To install the control module (E93 only)

**Rear PDC retrofit**

- The module holder guide (1) **E** must be inserted into the brace (2).

Insert module holder **E** into brace (2) and secure with screws **G**.

**Front PDC upgrade/retrofit**

Insert control unit **D** into module holder **E**.

Insert the control module **P** into the module holder **E**.
17. To install and connect the rear PDC wiring harnesses (E92 only)

Cars without SA 235 only
Remove the sealing stopper (1) from the right rear closing panel (2).

Cars with SA 235 only
Mark the specified dimensions on the rear closing panel (1).
Drill through the rear closing panel (1) at the drilling point (2) and enlarge the hole using a 40 mm step drill bit.
Deburr the hole and coat the bare surfaces with preservative.

All cars
Route branch A1 to the boot and insert the grommet (2).
Route rear PDC wiring harness A into the holding lugs on the holder (1).
Connect branches A2–A5 to sensors I (not shown).
Fit the bumper trim.

For cars built before 09/07 without SA 606/609/663 only
Route signal generator cable C to control unit D.
Connect branches C2 and C3 to branch B5 as follows:
- Branch C2, BL/GN cable, to PIN 4
- Branch C3, SW/GN cable, to PIN 10

All cars
Connect branch A1 and branch B5 to the control module D.
18. To install and connect the rear PDC wiring harnesses (E93 only)

Cars without SA 235 only
Remove the sealing stopper (1) from the right rear closing panel (2).

Cars with SA 235 only
- Remove the battery to prevent any damage when drilling.
- Drill through the rear closing panel (1) at the circular gradation (2) using a 40 mm step drill bit.
- Deburr the hole (3) and prime the bare surfaces.

All cars
- Route branch A1 to the boot and insert the grommet (2).
- Route rear PDC wiring harness A into the holding lugs on the holder (1).
- Connect branches A2–A5 to sensors I (not shown).
- Fit the bumper trim.

- Route branch A1 in the cable duct (1) along the standard wiring harness to the installation site of the control module D (not shown).
18. To install and connect the rear PDC wiring harnesses (E93 only)

For cars built before 09/07 without SA 606/609/663 only

Route signal generator cable C to control unit D. Connect branches C2 and C3 to branch B5 as follows:
- Branch C2, BL/GN cable, to PIN 4
- Branch C3, SW/GN cable, to PIN 10

All cars

Connect branch A1 and branch B5 to the control module D.
19. To connect power supply

**E92 only**
Route branches B1–B4 along the standard wiring harness to the fuse holder (1).

**E93 only**
Route branches B1–B4 along the standard wiring harness to the fuse holder (1).

**Cars built before 03/07 only**
Connect branch B1, GN/WS cable, to PIN 8 of plug X11003 (BL 15-pin).
If PIN 8 is already occupied, disconnect socket contact from branch B1 and with miniature connector M connect to existing cable.

**Cars built after 03/07 only**
Connect branch B1, GN/WS cable, to PIN 7 of plug X11001 (BL 15-pin).
If PIN 7 is already occupied, disconnect socket contact from branch B1 and with miniature connector M connect to existing cable.

**All cars**
Route branch B2, brown/black cable, to the footwell on the passenger side.
Secure branch B2 to joint connector X10012 (cable colours BR/SW).
19. To connect power supply

Connect branch \textbf{B3}, orange/green cable, and branch \textbf{B4}, green cable, to the cables of the same colours on the twisted cables (1) on the standard wiring harness using miniature connectors \textbf{M}.

**Cars built before 03/07 only**

Fit the fuse holder (1).
Insert fusible link \textbf{L} into slot F 28.

**Cars built after 03/07 only**

Fit the fuse holder (1).
Insert fusible link \textbf{L} into slot F 28.
20. To install and connect the front PDC wiring harness (all cars)

Connect front PDC wiring harness A to the holder (1) with cable ties and route it to behind the right headlight.

Connect branches S1–S4 to sensors T (not shown).

Fit the bumper trim.

Route front PDC wiring harness S along the standard wiring harness through grommets (1) and (2) into the interior.

**Only cars built after 09/07 or with SA 606/609/663**

Insulate and tie back branch S5, blue/grey cable, and branch S6, black/red cable.

**For cars built before 09/07 without SA 606/609/663 only**

Route branch S5, blue/grey cable, and branch S6, black/red cable, along the standard wiring harness to the pedal trim (1).

Connect branches S5 and S6 to socket casing W as follows:
- Branch S5, blue/grey cable, to PIN 1
- Branch S6, black/red cable, to PIN 2

Connect socket casing W to front signal generator Q.

Fit the pedal trim (1).
21. To install and connect the front PDC wiring harnesses (E92 only)

Route branches S7–S20 along the standard wiring harness to control unit P.

Connect branches S9–S20 to socket casing V as follows:
- Branch S9, green/violet cable, to PIN 8
- Branch S10, brown/yellow cable, to PIN 11
- Branch S11, yellow/brown cable, to PIN 17
- Branch S12, green/grey cable, to PIN 7
- Branch S13, brown/blue cable, to PIN 10
- Branch S14, yellow/black cable, to PIN 16
- Branch S15, green/brown cable, to PIN 6
- Branch S16, blue/black cable, to PIN 3
- Branch S17, yellow/green cable, to PIN 15
- Branch S18, green/black cable, to PIN 5
- Branch S19, blue/white cable, to PIN 2
- Branch S20, yellow/grey cable, to PIN 14

In cars with an existing SA 507, branch B5 corresponds to plug X300 already fitted in the car.

Only cars built after 09/07 or with SA 606/609/663

Insulate and tie back branches S7 and S8.

For cars built before 09/07 without SA 606/609/663 only

Connect branches S7 and S8 to branch B5 as follows:
- Branch S7, blue/grey cable, to PIN 5
- Branch S8, black/red cable, to PIN 11

All cars

Connect branch B5 and socket casing V on control unit P.
22. To install and connect the front PDC wiring harnesses (E93 only)

Route branches **S7–S20** along the standard wiring harness to control unit **P**.

Connect branches **S9–S20** to socket casing **V** as follows:
- Branch **S9**, green/violet cable, to PIN 8
- Branch **S10**, brown/yellow cable, to PIN 11
- Branch **S11**, yellow/brown cable, to PIN 17
- Branch **S12**, green/grey cable, to PIN 7
- Branch **S13**, brown/blue cable, to PIN 10
- Branch **S14**, yellow/black cable, to PIN 16
- Branch **S15**, green/brown cable, to PIN 6
- Branch **S16**, blue/black cable, to PIN 3
- Branch **S17**, yellow/green cable, to PIN 15
- Branch **S18**, green/black cable, to PIN 5
- Branch **S19**, blue/white cable, to PIN 2
- Branch **S20**, yellow/grey cable, to PIN 14

In cars with an existing SA 507, branch **B5** corresponds to plug **X300** already fitted in the car.

**Only cars built after 09/07 or with SA 606/609/663**

Insulate and tie back branches **S7 and S8**.

**For cars built before 09/07 without SA 606/609/663 only**

Connect branches **S7 and S8** to branch **B5** as follows:
- Branch **S7**, blue/grey cable, to PIN 5
- Branch **S8**, black/red cable, to PIN 11

**All cars**

Connect branch **B5** and socket casing **V** on control unit **P**.
23. To install the centre console switch centre (front PDC upgrade/retrofit)

Clip the centre console switch centre Z into the trim Y.

Clip trim Y into the trim for the centre instrument panel.
Connect the plug (1) from centre console switch centre Z to the heating/air-conditioning control (2).
Clip in the heating/air-conditioning control (2).
24. Concluding work and coding

These retrofit systems require encoding.
- Connect the battery

Cars with an existing rear PDC only
- Encode/program the front PDC retrofit via path Conversion

All cars
- Encode/program the retrofit via path Retrofit
- Conduct a brief test
- Conduct a function test
- Re-fit the car components as required
25. Front and rear PDC circuit diagram

Legend

A81 Control unit, D* rear PDC and P* front PDC
A4010 Fuse holder
B30- Front sensors, T*
B33
B34- Rear sensors, I*
B37
H40 Front signal generator, Q* (for cars built before 09/07 without SA 606/609/663 only)
H45 Rear signal generator, H* (for cars built before 09/07 without SA 606/609/663 only)

X300 12-pin SW socket casing, B5*
X10012 Terminal 31 pick-up joint connector contact, B2*
X11001 15-pin BL socket casing, B1* (cars built after 03/07 only)
X11003 15-pin BL socket casing, B1* (cars built before 03/07 only)
X14278 2-pin SW socket casing, W* (cars built before 09/07 without SA 606/609/663 only)
X14279 2-pin SW socket casing, C1* (cars built before 09/07 without SA 606/609/663 only)
X15001 Open cable, CAN high pick-up, B3*
X15002 Open cable, CAN low pick-up, B4*
X18013 18-pin natural socket casing, A1*
X18016 3-pin SW socket casing, S4*
X18017 3-pin SW socket casing, S3*
X18018 3-pin SW socket casing, S2*
X18019 3-pin SW socket casing, S1*
X18020 SW 3-pin socket casing, A5*
X18021 3-pin SW socket casing, A4*
X18022 Black 3-pin socket casing, A3*
X18023 3-pin SW socket casing, A2*
X18362 18-pin SW socket casing, V*

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

Cable colours

<table>
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<tr>
<th>BL</th>
<th>Blue</th>
<th>OR</th>
<th>Orange</th>
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<td>Brown</td>
<td>RT</td>
<td>Red</td>
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