Important information
Subject to technical modifications.

Installation time
The installation time is approx. 3.5 – 4 hours, which may vary according to the condition of the car and the equipment in it. This installation time is for each seat.

Retrofit kit No.
82 30 0 000 047
82 30 0 302 299

Target group
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 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.

Ordering instructions
The seat and backrest covers must be ordered separately in the appropriate colours (see EPC for part numbers).

Installation information
Ensure that the cables/lines are not kinked or damaged as you install them in the car.
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 the figures show LHD cars, proceed in exactly the same way on RHD cars.
This active seat ventilation retrofit system does not require coding.
Pictograms

![ ] denotes instructions that draw your attention to special features.

⚠️ Denotes instructions of warnings that you must observe.

▲ Denotes the end of the instruction or caution text.

Refer to the Technical Information System (TIS) for more information.
- See the EBA CD or ASAP (After Sales Assistance Portal) for explanations of the pictograms.
- Do not archive the hard copy of these installation instructions since daily updates are made by ASAP.

Special tools required

Pliers (52 0 050)
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<th>Page</th>
</tr>
</thead>
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</table>
1. Preparations

Refer to the safety instructions for handling airbag modules and pyrotechnical belt tensioners. Incorrect handling may cause the pyrotechnical belt tensioner or side airbag to deploy and thus cause injuries.

Conduct a brief test

Disconnect the negative pole of the battery

The following components must be removed first of all:

<table>
<thead>
<tr>
<th>Component</th>
<th>TIS instruction No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glove compartment</td>
<td>51 16 360</td>
</tr>
<tr>
<td>Footwell trim on the passenger side</td>
<td>51 45 181</td>
</tr>
<tr>
<td>Front seat, left or right</td>
<td>52 13 000</td>
</tr>
<tr>
<td>Backrest cover, left or right</td>
<td>52 13 405</td>
</tr>
<tr>
<td>Seat cover, left or right</td>
<td>52 13 400</td>
</tr>
<tr>
<td>Pedal trim</td>
<td>51 45 185</td>
</tr>
</tbody>
</table>
2. Parts list

Legend

A  Power supply wiring harness
B  Seat wiring harness
C  Backrest wiring harness
D  Blower motor (8x)
E  Toggle switch
F  Backrest cover with microperforations
G  Seat cover with microperforations
H  Miniature connector (2x)
3. Retrofit wiring harness connection diagram

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Signal</th>
<th>Cable colour / Cross-section</th>
<th>Connection location in the car</th>
<th>Abbreviation / Slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Power supply wiring harness</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>A1</td>
<td>SW 2-pin plug</td>
<td>---</td>
<td>---</td>
<td>On seat wiring harness, branch B1</td>
<td>X13528</td>
</tr>
<tr>
<td>A2</td>
<td>Joint connector contact</td>
<td>Terminal 31</td>
<td>BR 0.75 mm²</td>
<td>In the joint connector behind the glove compartment</td>
<td>X18726</td>
</tr>
<tr>
<td>A3</td>
<td>Cable branch</td>
<td>Terminal 15</td>
<td>VI 0.75 mm²</td>
<td>Connect to the existing GN/WS cable with a miniature connector on the fuse box</td>
<td>X1429</td>
</tr>
<tr>
<td>B</td>
<td>Seat wiring harness</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>B1</td>
<td>SW 2-pin plug</td>
<td>---</td>
<td>---</td>
<td>On power supply wiring harness, branch A1</td>
<td>X13528</td>
</tr>
<tr>
<td>B2</td>
<td>Blade terminal contact</td>
<td>Terminal 15</td>
<td>VI 0.75 mm²</td>
<td>On the toggle switch</td>
<td>X3158 PIN 1</td>
</tr>
<tr>
<td>B3</td>
<td>Blade terminal contact</td>
<td>Terminal 15</td>
<td>VI 0.75 mm²</td>
<td>On the toggle switch</td>
<td>X3472 PIN 2</td>
</tr>
<tr>
<td>B4</td>
<td>SW 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On seat blower motor</td>
<td>X13673</td>
</tr>
<tr>
<td>B5</td>
<td>SW 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On seat blower motor</td>
<td>X13674</td>
</tr>
<tr>
<td>B6</td>
<td>SW 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On seat blower motor</td>
<td>X13675</td>
</tr>
<tr>
<td>B7</td>
<td>SW 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On seat blower motor</td>
<td>X13676</td>
</tr>
<tr>
<td>B8</td>
<td>WS 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On backrest wiring harness, branch C1</td>
<td>X13530</td>
</tr>
</tbody>
</table>
3. Retrofit wiring harness connection diagram

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Signal</th>
<th>Cable colour / Cross-section</th>
<th>Connection location in the car</th>
<th>Abbreviation / Slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Backrest wiring harness</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>C1</td>
<td>WS 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On seat wiring harness, branch B8</td>
<td>X13530</td>
</tr>
<tr>
<td>C2</td>
<td>SW 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On backrest blower motor</td>
<td>X13669</td>
</tr>
<tr>
<td>C3</td>
<td>SW 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On backrest blower motor</td>
<td>X13670</td>
</tr>
<tr>
<td>C4</td>
<td>SW 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On backrest blower motor</td>
<td>X13671</td>
</tr>
<tr>
<td>C5</td>
<td>SW 3-pin plug</td>
<td>---</td>
<td>---</td>
<td>On backrest blower motor</td>
<td>X13672</td>
</tr>
</tbody>
</table>
4. Installation and cabling diagram

Legend

1. Joint connector X18726
2. Fuse box
A. Power supply wiring harness
B. Seat wiring harness
C. Backrest wiring harness
D. Seat blower motor (4x)
D. Backrest blower motor (4x)
E. Toggle switch
5. To install the power supply wiring harness

Connect branch A3, VI cable, to the black plug X1429 on the GN/WS cable (1) using a miniature connector H.

Connect branch A2, BR cable, to joint connector X18726.

Connection on left-hand side of the car
Route branch A1 behind the heater under the centre console and carpet to the seat.

Connection on right-hand side of the car
Route branch A1 under the centre console and carpet to the seat.
6. To install and connect the blower motors

Position the blower motors D as shown on the backrest padding (2) and mark the contours.

Cut out the backrest padding (1) accordingly in a cylindrical shape.

Affix the blower motors D flush with the surface.

Cut cone-shaped pieces (2) out of the foam cylinders (1) you cut out earlier.

Seal all passive ventilation holes (3) with foam cones (2).

Pull the trimming wires (1) out of the old backrest cover and insert them into the new backrest cover F.

TIS Modify the belt guide. See RA 52 13 405.

Fit the new backrest cover F on to the backrest padding and seat frame.

Install wiring harness C as shown in the backrest frame (1) and connect branches C2 – C5 to the blower motors.

Secure the wiring harness C to the seat frame (1) with cable ties.
6. To install and connect the blower motors

On the passenger seat the blower motors must be positioned in the cavities in the seat occupation mat.

Position the blower motors D on the seat padding (1) and mark the contours.

Dimension \( \text{a} \): 75 mm

Cut out the seat padding (1) accordingly in a cylindrical shape.

Affix the blower motors D flush with the surface.

Cut cone-shaped pieces (2) out of the foam cylinders (1) you cut out earlier.

Seal all passive ventilation holes (3) with foam cones (2).

Pull the trimming wires (1) out of the old seat cover and insert them into the new seat cover G.

Fit the new seat cover G on the seat padding and seat frame.

Install wiring harness B as shown in the seat frame (1) and connect branches B4 – B7 to the blower motors.

Connect branch B8 to branch C1.

Secure wiring harness B to the seat frame (1) with cable ties.
6. To install and connect the blower motors

Mark the seat trim (1) and cut out the marked area (2).
Dimension a: 19.5 mm
Dimension b: 6.8 mm

Thread branches B2 - B3 through the seat trim (1) and connect the toggle switch E.
Clip the toggle switch E into the seat trim (1).

Connect branch A1 to branch B1.
Secure the plug connection A1/B1 to the seat isolation switch (1) using a cable tie.
7. **Concluding work**

This system does not require coding

- Re-assemble the car
- Conduct a brief test
- Conduct a function test
8. Circuit diagram for the active seat ventilation system E85

Diagram showing connections and labels for components M163, M162, M161, M160, M164, M165, M166, M167, X3369, X13672, X13671, X13670, X13669, X13530, S1, Y2, Y1, X1429, X18751, X18726, X18750, X3472, X13528, X13528, X13673, X13674, X13675, X13676.
8. Circuit diagram for the active seat ventilation system E 85

Legend

M160  Backrest blower motor
M161  Backrest blower motor
M162  Backrest blower motor
M163  Backrest blower motor
M164  Seat blower motor
M165  Seat blower motor
M166  Seat blower motor
M167  Seat blower motor

S1  Toggle switch

X1429  SW 12-pin plug
X3368  Terminal 15 connector
X3369  Terminal 15 connector
X3472  Toggle switch
X13528  SW 2-pin plug
X13530  WS 3-pin plug
X13669  SW 3-pin plug, backrest blower motor
X13670  SW 3-pin plug, backrest blower motor
X13671  SW 3-pin plug, backrest blower motor
X13672  SW 3-pin plug, backrest blower motor
X13673  SW 3-pin plug, seat blower motor
X13674  SW 3-pin plug, seat blower motor
X13675  SW 3-pin plug, seat blower motor
X13676  SW 3-pin plug, seat blower motor
X18726  Terminal 31 joint connector
X18750  Terminal 31 connector
X18751  Terminal 31 connector

Y1  Miniature connector
Y2  To standard wiring harness

Cable colours

BL  blue  BR  brown  GE  yellow
GN  green  VI  violet  WS  white