

Fitting instruction

Audi A4 2008 ➤, Audi A5 2008 ➤

Body
Retrofitting a keyswitch to deactivate the front passenger front airbag
Edition 7.08

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1 Notes and safety instructions

1.1 General information

Please read and take note of these DANGER, Caution and Note descriptions before carrying out maintenance or repair work.

WARNING!

- ◆ *Text with this symbol contains information concerning your safety and how you can reduce the risk of serious and fatal injuries.*
- ◆ *Pay special attention to the DANGER symbol. Ensure that you read the relevant texts thoroughly.*

Caution!

- ◆ *Text with this symbol contains information on how to avoid damage to the vehicle.*
- ◆ *A Caution symbol indicates that failure to follow information could lead to damage to the vehicle. (e.g.: Ensure that the ignition has been switched off before the battery is connected, otherwise the engine control unit could be damaged.)*

Note

- ◆ *Text with this symbol contains additional useful information.*
- ◆ *A Note symbol also contains special and additional notes on repair measures and associated information.*

Special tools are required for assembly. Improper installation can cause damage to the vehicle or the add-on components.

Audi AG will not accept responsibility in the event of failure to comply with these assembly instructions.

1.2 General safety instructions for pyrotechnical, electrical and mechanical components of the restraint system

Note

Pyrotechnical components comprise:

- ◆ Airbag units
- ◆ Belt pretensioner
- ◆ Seatbelt load limiter (depending on fixtures)
- ◆ Battery disconnecting elements (depending on fixtures)

General

- ◆ Testing, installation and maintenance tasks must only be carried out by trained personnel.
- ◆ Do not check using circuit tester, voltmeter, or ohmmeter under any circumstances.



- ◆ Pyrotechnical components must only be checked when installed using suitable vehicle diagnostics, measurement and information systems. For example Vehicle diagnostics system, measurement and information system -VAS 5051B-.
- ◆ Before handling pyrotechnical components of the restraint systems (for example, before disconnecting the electrical connector), the person carrying out the task must discharge any static electricity. This can be done by briefly touching the door latch, for example.
- ◆ The power supply to the system must always be disconnected when working on the pyrotechnical components of the restraint system.
- ◆ A8 2003 >, A5 2008 > and A4 2008 >: The battery must be disconnected when the ignition is SWITCHED ON. This differs from the instructions in ⇒ Rep. Gr. 27. The negative terminal must subsequently be covered.
- ◆ For all other model series, the battery must be disconnected when the ignition is SWITCHED OFF ⇒ Rep. Gr. 27. The negative terminal must subsequently be covered.
- ◆ No waiting time is necessary after the battery has been disconnected.
- ◆ The battery must be connected when the ignition is SWITCHED ON. Unintentional activation of the system can result after the battery has been connected if repair work on the pyrotechnical components of the restraint system is carried out improperly. There must not be anybody inside the vehicle when the battery is connected.
- ◆ Observe the measures that apply following connection of the battery ⇒ Rep. Gr. 27.
- ◆ When connecting pyrotechnical components of the restraint system, only the person performing the work may be present inside the vehicle.
- ◆ Storage and transportation are subject to the applicable national laws.

Airbag units - airbag modules

- ◆ When they are not installed, airbag units must be stored with the cushioned side facing upwards.
- ◆ If the fabric becomes contaminated with substances such as oil, grease, paint, colour or solvents, the airbag unit must be replaced.
- ◆ There is no replacement interval for airbag units.

When replacing airbag units, the following sequence is to be observed:

- 1 - Remove the old airbag unit and place it down with the cushioned side facing upwards.
- 2 - Remove the new airbag unit from the transport container and place it with the cushioned side facing upwards.
- 3 - Put the old airbag unit in the transport container immediately.
- 4 - Install the new airbag unit in the vehicle.

Belt tensioner and belt force limiter

- ◆ Mechanically damaged belt pretensioner units (dents, cracks) must always be replaced.
- ◆ The open end of the belt pretensioner must never be directed towards a person.
- ◆ When connecting the belt pretensioner unit, all mechanical parts, including those of the three-point seat belt, must be secured correctly.

2 Parts overview

Note

- ◆ Check in the ⇒ Electronic parts catalogue "ETKA" for the specified part number to ensure suitability for installation in your vehicle.
- ◆ Note that the front passenger front airbag deactivated warning lamp -K145- is also designated as the "PASSENGER AIRBAG OFF" lamp.
- ◆ The necessary parts generally have two different designations in the following assembly instructions:

Designation without parenthesis: ⇒ Electronic spare part catalogue "ETKA",

Designation with parenthesis: ⇒ Current flow diagrams, Electrical fault finding and Fitting locations.

Parts required:

Retrofit kit for A4/A5 left-hand drive vehicle -8K1 098 237-

Units	Part number	Description
1	1K0 919 237 C	Key switch (key-operated switch for deactivation of front passenger front airbag -E224-)
1	8K1 941 509 A	Hazard warning light switch with airbag off lamp (front passenger front airbag deactivated warning lamp -K145-)
1	8K0 971 679 C	Glove compartment wiring harness
1	8K1 971 762	Adapter cable
1	8K0 012 175	Installation instructions

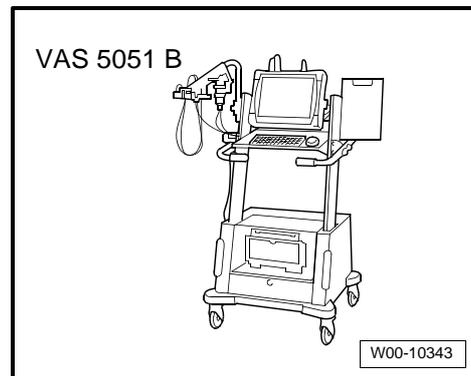
Retrofit kit for A4/A5 right-hand drive vehicle -8K2 098 237-

Units	Part number	Description
1	1K0 919 237 C	Key switch (key-operated switch for deactivation of front passenger front airbag -E224-)
1	8K2 941 509 A	Hazard warning light switch with airbag off lamp (front passenger front airbag deactivated warning lamp -K145-)
1	8K0 971 679 C	Glove compartment wiring harness
1	8K2 971 762	Adapter cable
1	8K0 012 175	Installation instructions

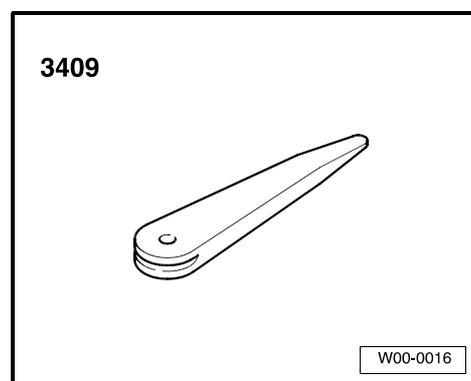
3 Retrofitting a key switch

Special tools and workshop equipment required

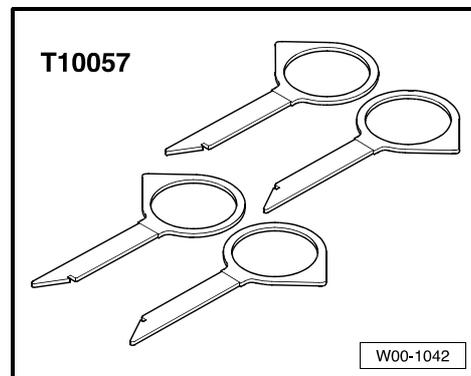
- ◆ Example: vehicle diagnostics system, measurement and information system -VAS 5051B-



- ◆ Removal wedge -3409-



- ◆ Release tool for the radio -T10057-



- ◆ Protective cap for wiring harness connector -VAS 6223/9-



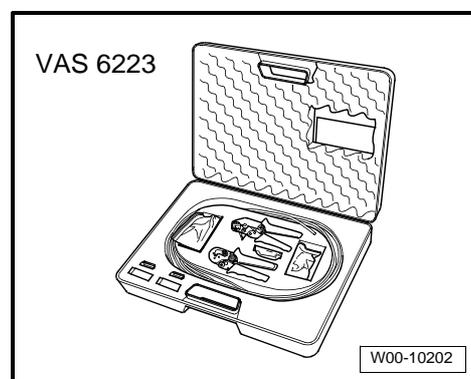
WARNING!

Observe the safety measures in place for working on the airbag when retrofitting the key switch for deactivation of the front passenger front airbag -E224- and the front passenger front airbag deactivated warning lamp -K145-⇒ [page 1](#).



WARNING!

Before handling airbag components (for example, before disconnecting the electrical connector), the person carrying out the task must discharge any static electricity. This can be done by briefly touching the door latch for example.

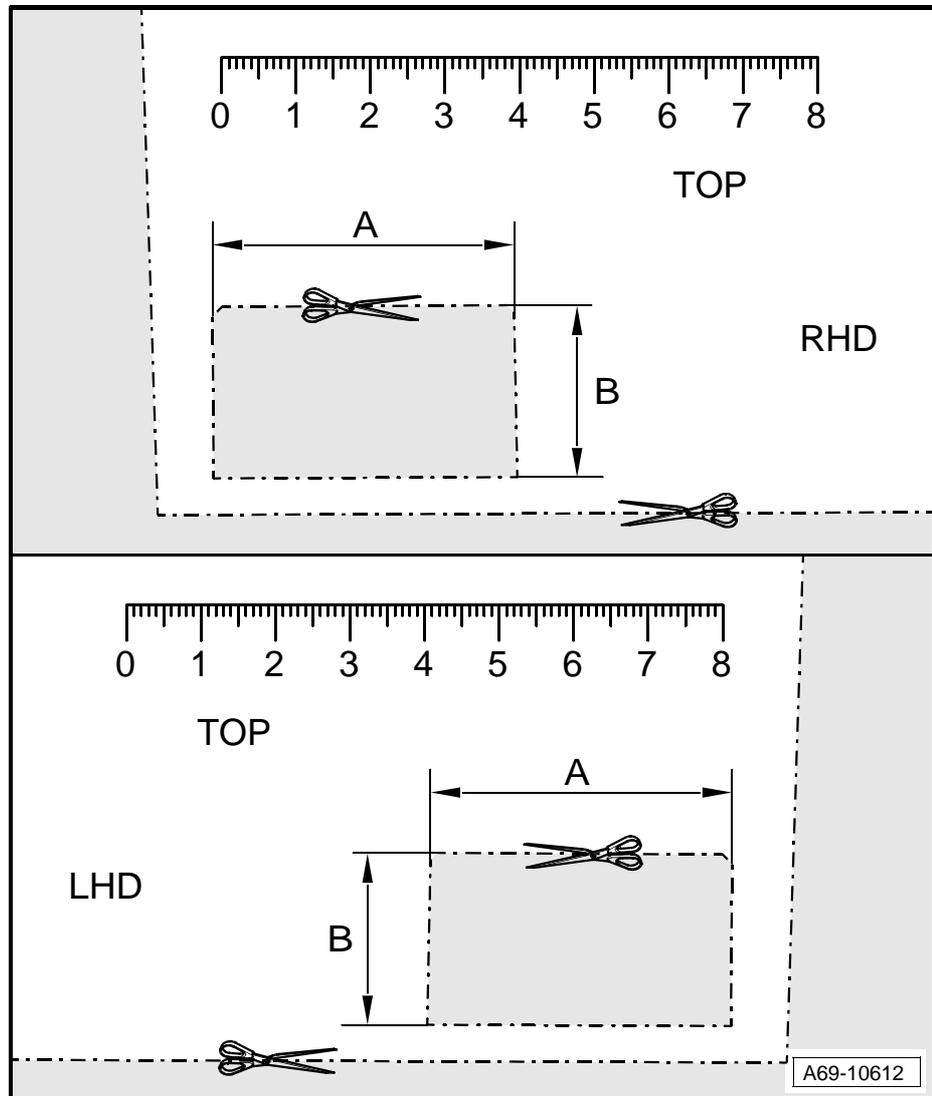


3.1 Making templates

 **Note**

Take note of the printer setting regarding printing in original size when printing the "Template master".

- LHD-Left-hand drive vehicles
- RHD-Right-hand drive vehicles
- A - 40.0 mm
- B - 22.5 mm



- Make sure that page adaptation has not been chosen in the printer settings/printer options (100% printing).
- Print the "Template master".

 **Note**

The printed ruler serves as a guide to check the original size.

- Transfer the "Template master" onto a transparent sheet for colour laser printers and make the template from that.

 **Note**

A correctly prepared template is necessary to ensure exact positioning of the key switch for deactivation of the front passenger front airbag -E224-.

3.2 Disconnecting the battery

 **Caution!**

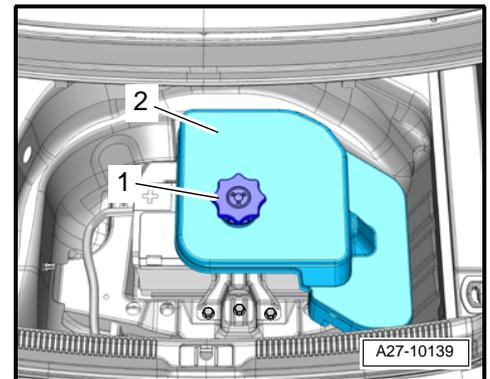
Risk of accident.

◆ *When working on pyrotechnic components (for example airbags, belt tensioners), in contrast to the general rule the battery must be disconnected when the engine is switched on as described below.*

- Turn on the ignition.

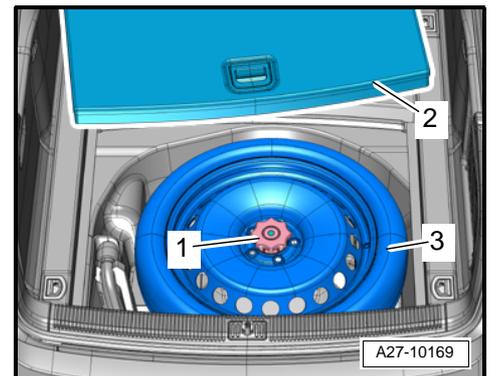
Audi A4 saloon and Audi A5:

- Lift the luggage compartment floor cover and attach to the body.
- Unscrew nut -1- and detach cover -2- for vehicle tool kit.



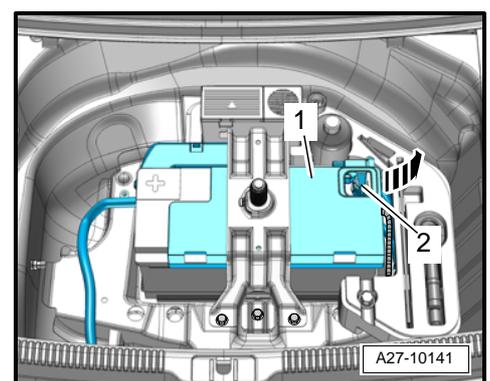
Audi A4 Avant:

- Take out the luggage compartment floor -2-.
- Unscrew nut -1- and, if present, take out temporary spare wheel -3-.



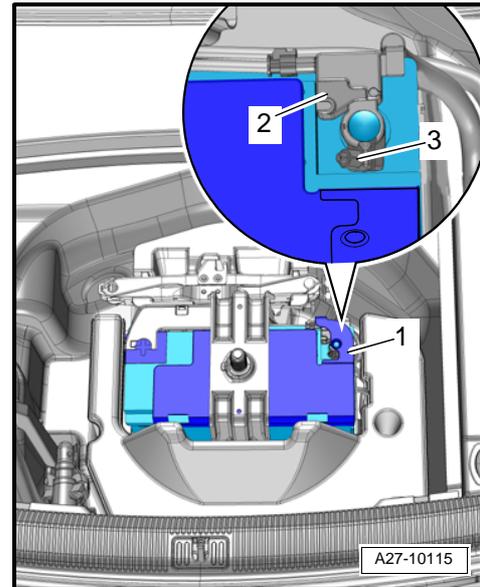
Battery negative terminal cover - Version I:

- Pull the cover -1- over the battery negative terminal and upwards slightly -arrow-.
- Loosen the nut by a few turns and remove the battery clamp -2- of the earth wire from the battery terminal.



Battery negative terminal cover - Version II:

- Open the cover -1- over the battery negative terminal.
- Loosen the nut -3- by a few turns and remove the battery clamp -2- of the earth wire from the battery terminal.



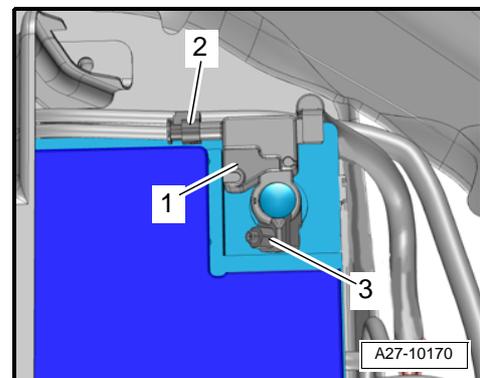
Notes on connection

- Tightening torque: 6 Nm

WARNING!

The battery must be connected when the ignition is switched on. Incorrect repairs on pyrotechnic components (e.g. airbag, pretensioners) can cause undesired activation after the battery has been connected. There must not be anybody inside the vehicle when the battery is connected.

- Detach electrical connector -2- on the battery monitor control unit -J367- -1-.
- To connect, manually place the battery clamp of the earth wire on the battery negative terminal “-” and tighten the nut -3-.
- Re-connect the electrical connector on the battery monitor control unit -J367-.



When the battery is being reconnected, the following steps must be taken:

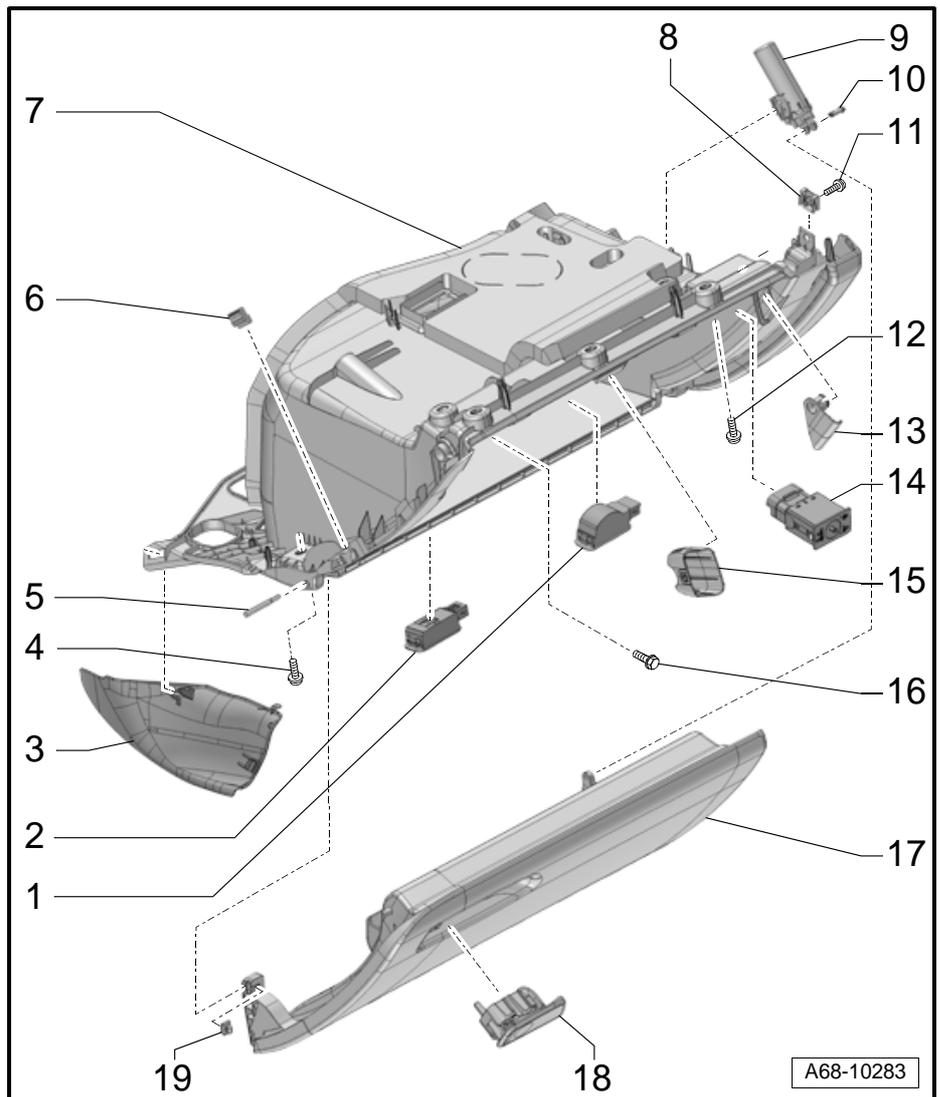
- ◆ Activate the one-touch opening/closing of the electric windows ⇒ Operating Manual.
- ◆ Call up the fault memory of all control units and delete “undervoltage” fault shown ⇒ Vehicle diagnosis, testing and information system VAS 5051.

Note

After reconnecting the power supply, the ESP warning light can only extinguish after a few metres have been driven.

3.3 Installation overview of glove compartment

- 1 - Glove compartment light -W6-
- 2 - Foot well lighting
- 3 - Dash panel cover (passenger side)
- 4 - Bolt
 - 2 units
 - 3 Nm
- 5 - Hinge pin
 - For fixing glove compartment cover in place
- 6 - Rubber pad for glove box
 - 6 units
- 7 - Glove compartment
 - Removal and installation ⇒ [page 10](#)
- 8 - Snap nut
- 9 - Glove box cover restraint element
- 10 - Hinge pin
- 11 - Bolt
 - 3 Nm
- 12 - Bolt
 - 5 units
 - 3 Nm
- 13 - Fixture for catch bolt
- 14 - Key-operated switch for deactivation of passenger-side airbag -E224-



⚠ WARNING!
 Observe the safety instructions for pyrotechnical components ⇒ [page 1](#).

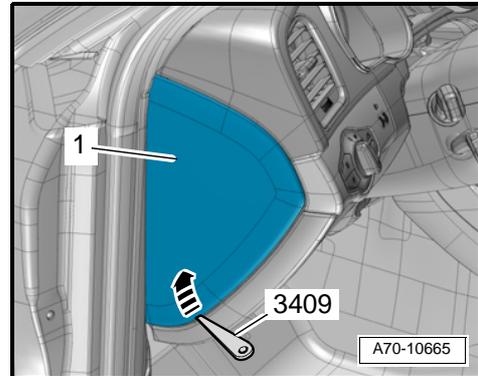
- Equipment variant
- Installation ⇒ [page 11](#)
- 15 - Holder
- 16 - Bolt
 - 2 units
 - 3 Nm
- 17 - Glove compartment cover
- 18 - Handle for opening glove box
- 19 - Impact buffer for glove box cover

3.4 Removing the right-hand side dash panel cover

 **Note**

The cover is shown on the left in the diagram. Installation and removal are identical on both the right and left.

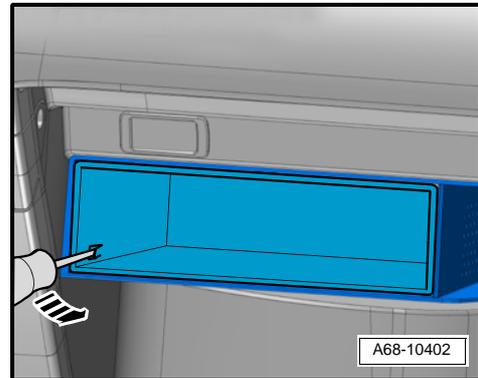
- Use the removal wedge -3409- to prise off and remove -arrow- the right-hand side dash panel cover -1-.



3.5 Removing the glove box

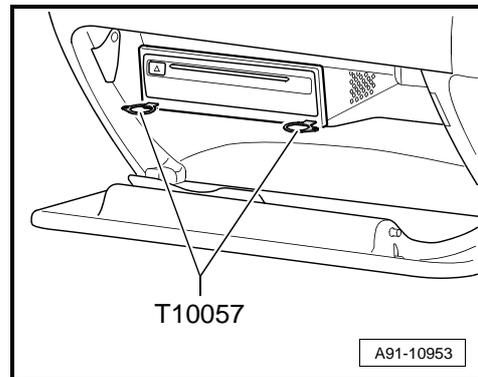
- Battery disconnected ⇒ "3.2 Disconnecting the battery" on page 7

- Equipment variant with storage compartment in glove compartment: Detach the left and right support hooks using a screwdriver -arrow- and remove the storage compartment from the glove box.



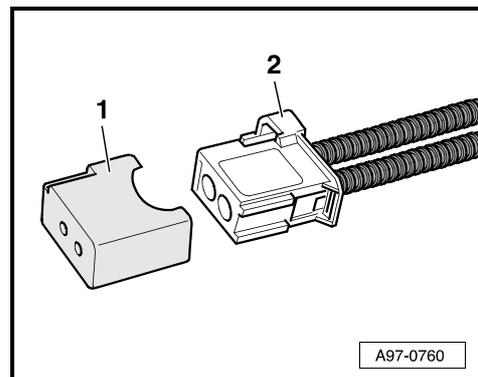
Equipment variant with CD drive:

- Insert two clips from the release tool for the radio -T10057- in the release slot on the navigation system with CD drive control unit -J401- until they engage. The tips on the gripping eyes of the tools should be facing upwards.
- Remove the navigation system with CD drive control unit -J401- from the assembly frame.
- Disconnect all of the connectors on the navigation system with CD drive control unit -J401-.

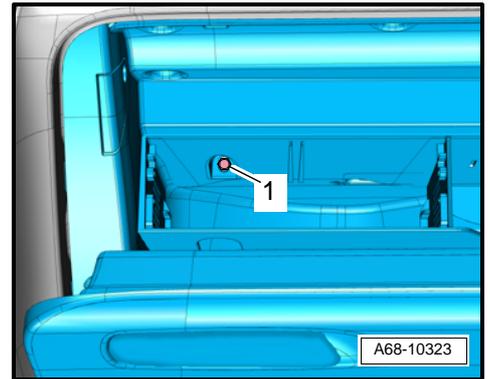


- Connect the protective cap for wiring harness connector -VAS 6223/9- -1- to the MOST-bus connector-2-.

All vehicles:



- Screw out bolt -1-, upper slant.



- Open the glove compartment cover and remove the bolts-arrow-.

 **WARNING!**

Before handling pyrotechnical components and restraint systems (for example, before disconnecting the electrical connector), the person carrying out the task must discharge any static electricity.™ This can be done by briefly touching the door latch, for example.

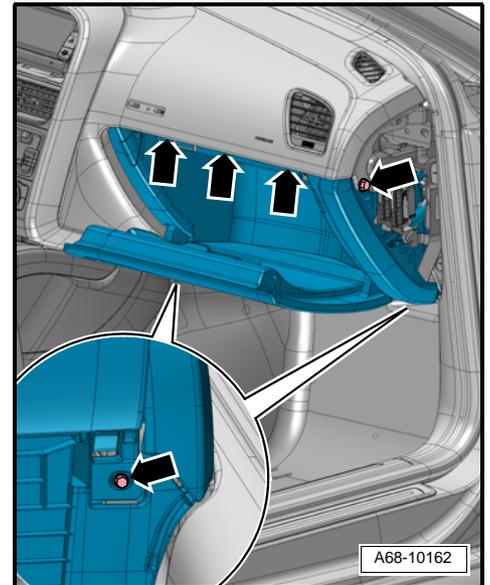
- Pull the glove box so far out that you are able to detach the electrical connector from the central socket.

Notes on installation

Installation is carried out in reverse order. Please note the following points:

- Press the electrical connector together until it snaps into place audibly.

Tightening torque ⇒ [page 9](#).



3.6 Installing the keyswitch for deactivation of the front passenger front airbag -E224-

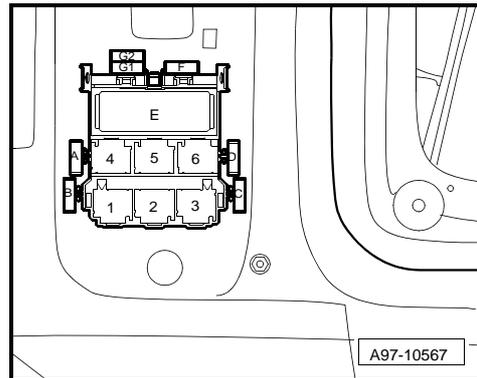
 **WARNING!**

Observe the safety instructions for pyrotechnical components ⇒ [page 1](#).

Before handling the pyrotechnical components (e.g. disconnecting the electrical connector), the personnel working on the system must first carry out an “electrostatic discharge” of their person. This can be done by briefly touching the door latch, for example.

3.6.1 Adapting the vehicle wiring harness

- Detach the 17-pin connector, black -T17g- -4- on the A-pillar in the front passenger footwell behind the side trim (see diagram).
- Insert the retrofit wiring harness as follows:
 - The short wiring harness is for left-hand drive vehicles
 - The long wiring harness is for right-hand drive vehicles

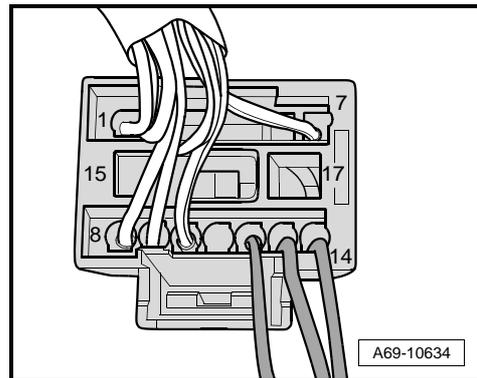


17-pin connector, black, A-pillar connector point front passenger side:

- 12- brown
- 13- lilac-white
- 14- yellow-grey

12-pin connector, brown -T12k- on glove compartment

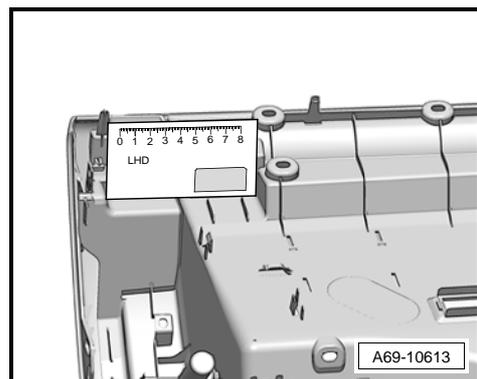
- 3 - lilac-white
- 5 - brown
- 6 - yellow-grey



- After inserting the retrofitted wiring harness, surround it with fabric adhesive tape -000 9790 950- and insert in to the vehicle wiring harness.

3.6.2 Installing the key switch for deactivation of front passenger front airbag -E224-

- Stick masking tape to the surfaces to be worked on to enable easy identification.
- Place the template on the glove compartment as shown in the diagram.
- Transfer the cutting edges onto the glove compartment with a pencil and remove the template-1-.
- Check the central position of the marking on the embossed surface. If necessary correct the template.
- Prepare a cut out for the key switch for deactivation of the front passenger front airbag -E224- with workshop materials.



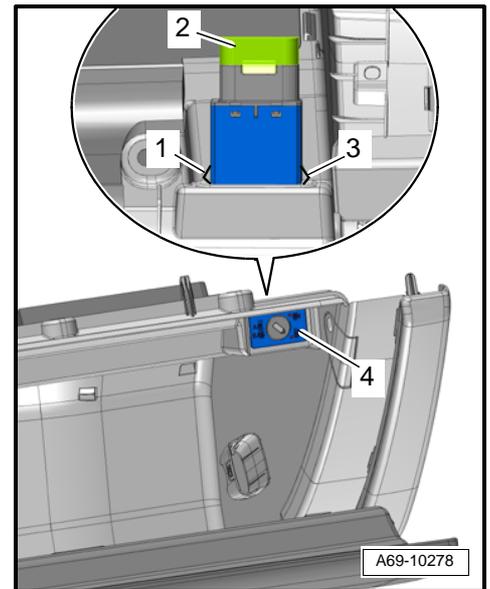
- Put the key switch for deactivation of the front passenger front airbag -E224- -4- in the assembly opening. Make sure that the retaining springs -1- and -3- engage in the housing.
- Exchange the glove compartment wiring harness for the wiring harness from the retrofit kit. Secures the wire of the key switch for deactivation of the front passenger front airbag -E224- in the guides provided and secure/tie back any unnecessary cable ends/plugs neatly.
- Push the electrical connector -2- to the stop and make sure it engages audibly.

 **Note**

Ensure that the wires are not trapped.

 **WARNING!**

The battery must be connected when the ignition is switched on. Incorrect repairs on pyrotechnic components (e.g. airbag, pretensioners) can cause undesired activation after the battery has been connected. There must not be anybody inside the vehicle when the battery is connected.



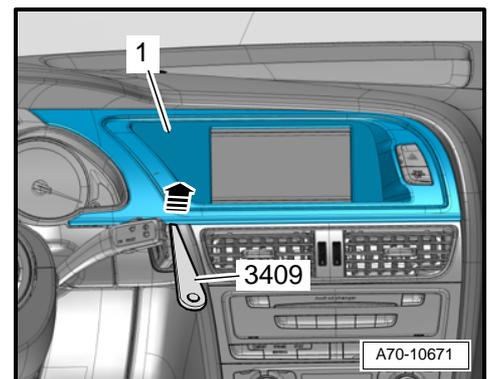
3.6.3 Reassembling the vehicle

Installation of components is carried out in reverse order to removal. Please note the following points:

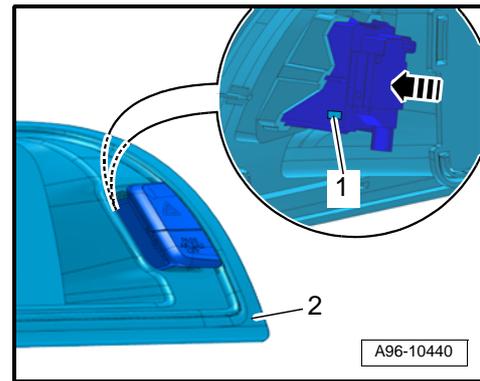
- Press the electrical connector together until it snaps into place audibly.

3.7 Installing front passenger front airbag deactivated warning lamp -K145-

- Use the removal wedge -3409- to prise the MMI screen cover -1- away at the corners -arrow- and detach.
- Disconnect the electrical connector for the hazard warning lights button -E229- and remove the cover.



- Push the hazard warning lights button -E229- -1- out of the assembly frame -2- -arrow-.
- Push the hazard warning lights button -E229-/front passenger front airbag deactivated warning lamp -K145- until it engages audibly into the assembly frame.
- Attach the hazard warning lights button -E229-/front passenger front airbag deactivated warning lamp -K145- and ensure that it engages audibly.
- Check the retaining clips for damage or deformation and replace as necessary.
- Insert the MMI screen cover and press until it engages audibly.
- Switch on ignition.
- Connecting the battery ⇒ [page 7](#).



 **WARNING!**

The battery must be connected when the ignition is switched on. Incorrect repairs on pyrotechnic components (e.g. airbag, pretensioners) can cause undesired activation after the battery has been connected. There must not be anybody inside the vehicle when the battery is connected.

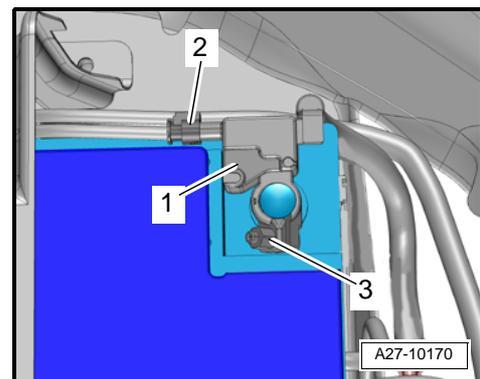
3.8 Connecting the battery

Connection notes

 **WARNING!**

The battery must be connected when the ignition is switched on. Incorrect repairs on pyrotechnic components (e.g. airbag, pretensioners) can cause undesired activation after the battery has been connected. There must not be anybody inside the vehicle when the battery is connected.

- Detach electrical connector -2- from the battery monitor control unit -J367- -1-.
- To connect, manually place the battery clamp of the earth wire on the battery negative terminal “-” and tighten the nut -3-.
- Tightening torque: 6 Nm
- Re-connect the electrical connector to the battery monitor control unit -J367-.



When the battery is being reconnected, the following steps must be taken:

- ♦ Activate the one-touch opening/closing of the electric windows ⇒ Operating Manual.
- ♦ Call up the fault memory of all control units and delete “undervoltage” fault shown ⇒ Vehicle diagnosis, testing and information system VAS 5051.

 **Note**

After reconnecting the power supply, the ESP warning light can only extinguish after a few metres have been driven.

3.9 Adapting airbag control unit -J234-

- Connect a suitable vehicle diagnostics, measurement and information system with online connection to the vehicle, e.g. the vehicle diagnostics system, measurement and information system -VAS 5051/-.
- Select “Guided Functions”.
- Choose vehicle.
- Choose “15 - Airbag”.
- Choose “J234 - Airbag Control Unit Key Switch One”.
- Execute test plan.

Carry out the functional check as follows:

- Deactivate the front passenger front airbag with the key switch for deactivation of the front passenger front airbag -E224-.

The front passenger front airbag deactivated warning lamp -K145- must be on at all times.

- Activate the front passenger front airbag with the key switch for deactivation of the front passenger front airbag -E224-.

The front passenger front airbag deactivated warning lamp -K145- must go out.

- Call up the fault memory again.