

AKA7 - Checking Control Unit for Air-Conditioning Blower and Replacing it if Necessary (Recall Campaign)

Revision: **October 1, 2019**

This revision amends AKA7 as follows:

All references to "right hand drive" were removed, Remedial Action was revised, and new scopes were added.

Model Year: **2010 - 2016**

Model Line: **Panamera (970)**

Subject: **Control unit for air-conditioning blower**

Concern: **There is a possibility that moisture can get into the control unit for the air-conditioning blower on the affected vehicles and cause short circuits there.**

Depending on how much moisture gets in, this can cause malfunctions and short circuits in the air-conditioning blower control system.

These short circuits can lead to an increased risk of fire.

Remedial Action: Check control unit for air-conditioning blower (blower regulator) and replace it if necessary.



Information

If the **interim solution WKEO** has not yet been carried out on a vehicle in addition to this campaign, **WKEO must not be carried out.**

On vehicles on which the **interim solution** was carried out, the blower regulator must be replaced during campaign AKA7 and the **relay** that was installed temporarily in the **electric wire harness must be removed again.** There will then no longer be any loss of comfort.

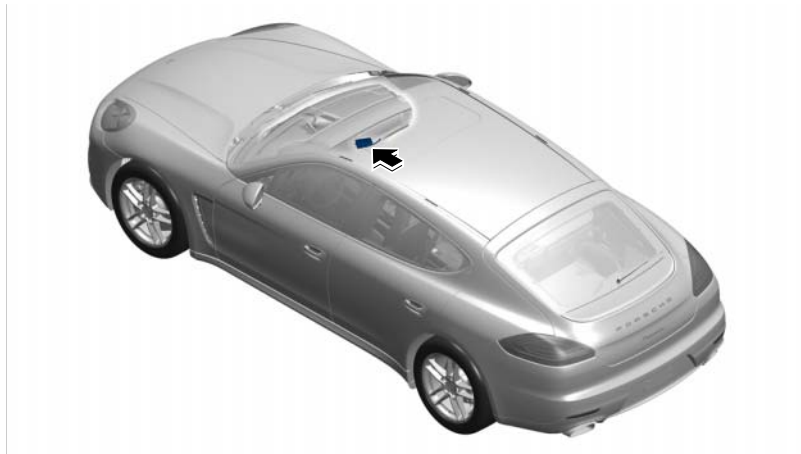
The work required for this must be performed as described under ⇒ *Technical Information 'Removing relay for activating control unit for air-conditioning blower and replacing blower regulator'*.

For warranty processing for both campaigns, proceed as follows in this case:

- Mark **campaign WKEO** as **Recall Update** with the reason **"Other"** in PQIS. The **"Warranty relevance"** flag must be activated in order to be able to set a warranty claim and close the campaign.
- A warranty claim must be submitted for **campaign WKEO** in which **0 TU** is entered as the specified **working time** and **no material items** are specified.
- Invoice **campaign AKA7** in the usual way using a **regular warranty claim** as described under ⇒ *Technical Information 'Warranty processing'*.

Affected Vehicles: Only the vehicles assigned to the campaign (see also PCSS Vehicle Information).

Installation position:



Installation position of control unit for air-conditioning blower

Required parts and materials

Parts Info: **No parts** are required for **checking** the control unit for air-conditioning blower.

Parts required if the **control unit for air-conditioning blower must be replaced**:

Part No.	Designation	Qty.
00004330450	⇒ Regulator	1 ea.

Expendable items: **Additional** materials required for vehicles on which the interim solution **WKEO** was carried out:

Required materials (usually already available in the Porsche dealer).

- Insulating tape
- Fabric adhesive tape (fleece)
- Tie-wrap
- Clean, lint-free cloth
- De-greasing cleaning agent

For warranty processing, the Part No. **AKA70000001** with the designation "expendable items" can be invoiced as an **additional part** in the warranty claim. Maximum cost: \$2.50.

Required tools

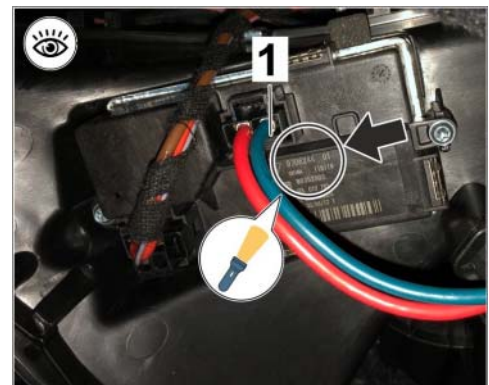
- Tools:
- **VAS 1978/35-33 - Release Tool Set**
 - Torque wrench, 2 – 10 Nm (1.5 – 7.5 ftlb.), e.g. **V.A.G 1783 - Torque wrench, 2-10 Nm (1.5-7.5 ftlb.)**
 - Torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.), e.g. **V.A.G 1331A - Torque wrench, 6-50 Nm (4.5-37 ftlb.)**
 - Suitable knife, e.g. scalpel or small utility knife
 - Soldering iron

Scope 1 and 2: Checking control unit for air-conditioning blower and replacing it if necessary

Important: If Interim Solution WKE0 has already been performed on this vehicle, proceed to Scope 3 on page 8 of this TI, section: "Removing relay for activating control unit for air-conditioning blower and replacing blower regulator". If Interim solution WKE0 has not been performed previously and both WKE0 and AKA7 are still open on this vehicle, continue to complete the steps on this page : "Checking control unit for air-conditioning blower and replacing it if necessary".

Work Procedure: 1 Preparatory work

- 1.1 Remove cover in the footwell on the passenger's side ⇒ *Workshop Manual '702219 Removing and installing cover under dashboard'*.
- 1.2 Remove footwell outlet vent on passenger's side ⇒ *Workshop Manual '805519 Removing and installing front footwell outlet vent'*.
- 2 Illuminate control unit for air-conditioning blower ⇒ *Reading off part number -1-* using a hand lamp so that the part number is visible.



Reading off part number



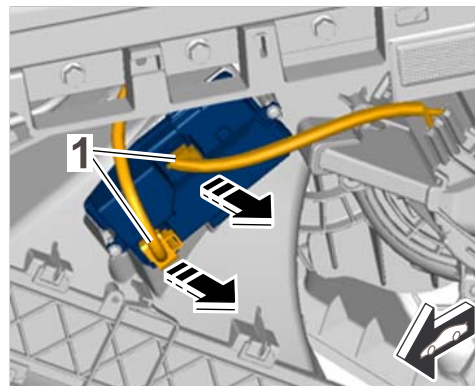
Comparing part number

Part number that was read off	Next steps
97062442301	Control unit for air-conditioning blower does not have to be replaced. -End of action required- Continue with Step 4.
9706244 01 or 97062442302 or 97062442303	Control unit for air-conditioning blower must be replaced. To do this, continue with Step 3.

3 Replace control unit for air-conditioning blower (blower regulator).

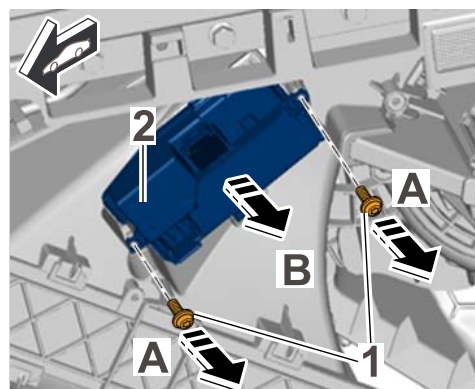
3.1 Remove control unit for air-conditioning blower (blower regulator).

3.1.1 Release and disconnect electric plug connections ⇒ *Disconnecting plug connection on fan control-1-* on the blower regulator ⇒ *Disconnecting plug connection on fan control-arrow-*.



Disconnecting plug connection on fan control

3.1.2 Unscrew fastening screws ⇒ *Pulling out fan control-1-* (⇒ *Pulling out fan control-arrows A-*) and pull out blower regulator ⇒ *Pulling out fan control-2-* (⇒ *Pulling out fan control-arrow B-*).



Pulling out fan control

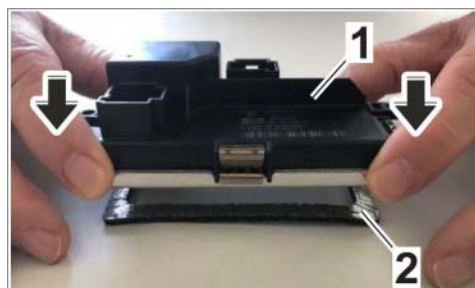
3.1.3 Remove seal on the heating/fresh-air fan if necessary and dispose of it.

3.2 Install new control unit for air-conditioning blower (blower regulator).

3.2.1 Clean the sealing face on the heating/fresh-air unit to remove all residue using cleaning solution (isopropanol).

3.2.2 Place seal ⇒ *Fitting seal-2-* with bonding surface facing up on the work area, pull off protective paper and align the seal evenly

3.2.3 Hold the blower regulator ⇒ *Fitting seal-1-* upside down over the seal and align it with the bonding surface without making contact.



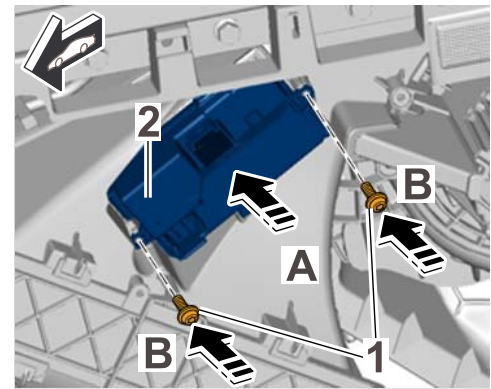
Fitting seal

- 3.2.4 Lower the regulator straight onto the seal, check its position and then press it on ⇒ *Fitting seal -Arrows-*.
 ⇒ Inner contour of seal ⇒ *Fitting seal-2-* is aligned with inner contour of blower regulator ⇒ *Fitting seal-1-*.
 ⇒ It must not project by more than 1 mm at the sides all the way around ⇒ *Fitting seal-arrow-*.



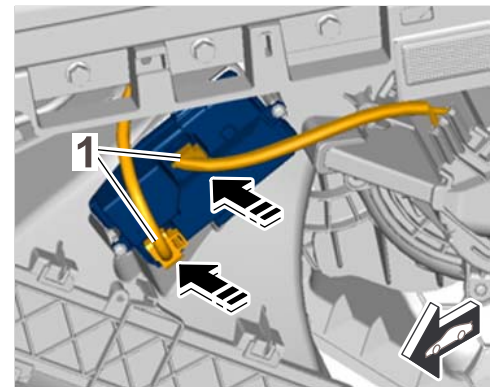
Fitting seal

- 3.2.5 Position blower regulator ⇒ *Installing blower regulator-2-* on the heating/fresh-air unit ⇒ *Installing blower regulator -arrow A-* and screw in screws ⇒ *Installing blower regulator-1-* (⇒ *Installing blower regulator -arrows B-*).



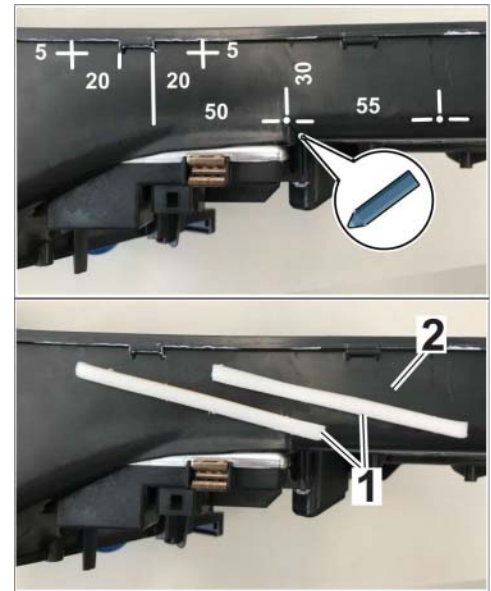
Installing blower regulator

- 3.2.6 Plug in electric plug connections ⇒ *Inserting connector-1-* on the blower regulator until they engage securely ⇒ *Inserting connector -Arrows-*.



Inserting connector

- 3.2.7 Mark upper guide points for drain strips at 20 mm to the left and right of the clip point above the blower regulator and 5 mm below the lower groove contour ⇒ *Fitting drain strips*.
- 3.2.8 Mark lower guide points as shown ⇒ *Fitting drain strips*.
- 3.2.9 Remove protective film.
- 3.2.10 Position drain strips with the top left corner on the respective top guide points and with the lower edge on the respective bottom guide point and press them on.



Fitting drain strips

- 4 Concluding work
 - 4.1 Install footwell outlet vent on passenger's side ⇒ *Workshop Manual '805519 Removing and installing front footwell outlet vent'*.
 - 4.2 Install cover in the footwell on the passenger's side ⇒ *Workshop Manual '702219 Removing and installing cover under dashboard'*.
 - 4.3 Perform function test on air conditioning system.
 - 4.3.1 Switch on the ignition.
 - 4.3.2 Press the relevant buttons on the center console to check whether the vehicle interior starts cooling and heating.
 - 4.3.3 Switch off the ignition.
- 5 Enter the campaign in the Warranty and Maintenance booklet.

Scope 3: Removing relay for activating control unit for air-conditioning blower and replacing blower regulator



Information

The procedure described here shows the work to be carried out in the footwell on the passenger's side of a left-hand drive vehicle.



Information

Always exercise extreme care during the individual work steps for stripping insulation from, crimping and shrinking/insulating the electric lines.

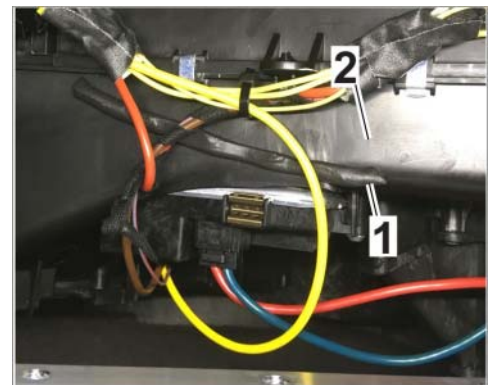
The procedure for stripping insulation from, crimping, and shrinking/insulating the electric lines must be observed and complied with. The procedure is described in detail in the **VAS 1978/35-33 - release tool set**.

Work Procedure: 1 Preparatory work

- 1.1 Remove glove compartment ⇒ *Workshop Manual '681519 Removing and installing glove compartment'*.
- 1.2 Loosen fuse box on passenger's side ⇒ *Workshop Manual '978409 Loosening and securing fuse box'*.

2 Remove relay for activating control unit for air-conditioning blower.

- 2.1 Pull off sealing strip (butyl cord) ⇒ *Removing sealing strip -1-* on the heating/fresh-air unit ⇒ *Removing sealing strip -2-*.
- 2.2 Remove residues of the butyl cord on the heating/fresh-air unit and clean with cleaning solution (isopropanol).



Removing sealing strip

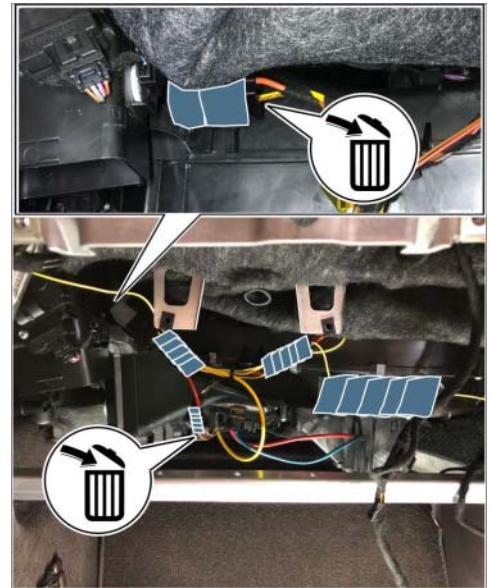
2.3 Disconnect lines from the relay repair kit.

2.3.1 Remove tie-wraps that were fitted to secure the repair kit.



Loosening wire harness

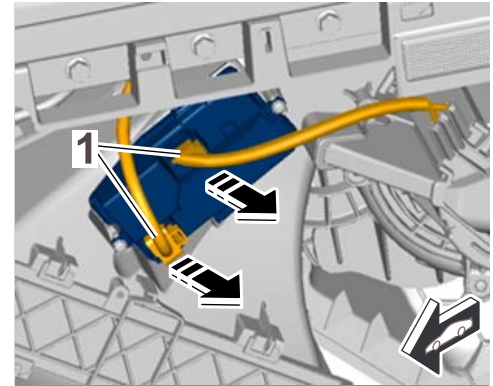
2.3.2 Remove strips of adhesive tape that were affixed.



Loosening wire harness

2.4 Remove control unit for air-conditioning blower (blower regulator).

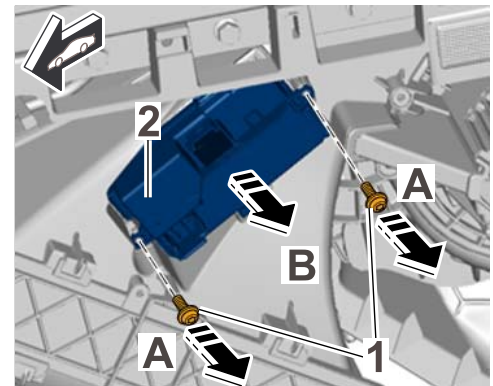
2.4.1 Release and disconnect electric plug connections ⇒ *Disconnecting plug connection on fan control-1-* on the blower regulator ⇒ *Disconnecting plug connection on fan control-arrow-*.



Disconnecting plug connection on fan control

2.4.2 Unscrew screws ⇒ *Pulling out fan control-1-* (⇒ *Pulling out fan control-arrows A-*) and pull out blower regulator ⇒ *Pulling out fan control-2-* (⇒ *Pulling out fan control-arrow B-*).

2.5 Remove residues of the butyl cord on the heating/fresh-air unit and clean with cleaning solution (isopropanol).

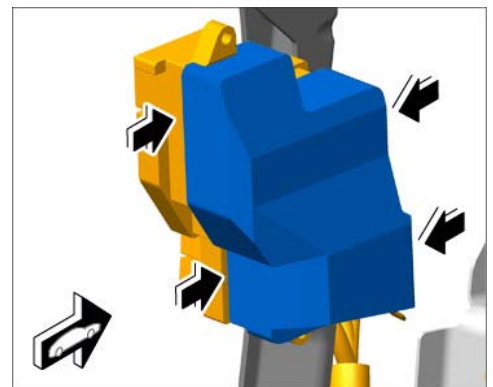


Pulling out fan control

2.6 **Disconnect yellow 0.5 mm² line from relay repair kit, PIN 1 at the slot (terminal 15) in the fuse box on the passenger's side; function: ignition.**

2.6.1 Unclip cover on the back of the fuse box ⇒ *Unclipping cover on fuse box-Arrows-*.

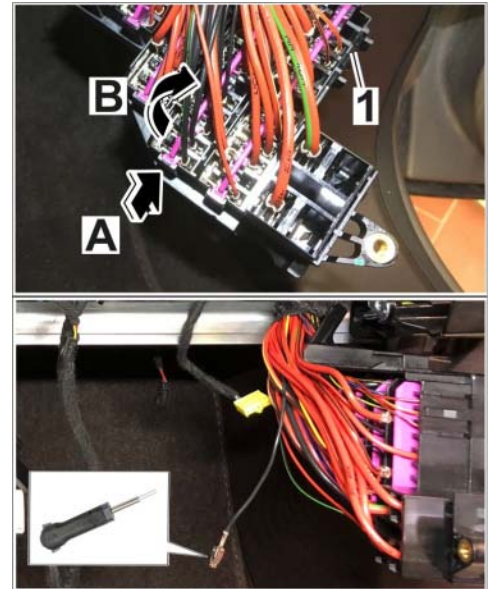
2.6.2 **Remove fuse** from slot 18.



Unclipping cover on fuse box

2.6.3 On the back of the fuse box ⇒ *Disconnecting terminal 15-1-*, release the locking element at the side of the second row ⇒ *Disconnecting terminal 15-arrow A-* and bend it up ⇒ *Disconnecting terminal 15-arrow B-*.

2.6.4 **Unpin black line** at slot 18 (**terminal 15**) using the release tool.



Disconnecting terminal 15

CAUTION

Sharp, pointed edge on the knife

- Danger of pricks or cuts
- ⇒ Wear personal protective gear.
- ⇒ Handle knife with care.

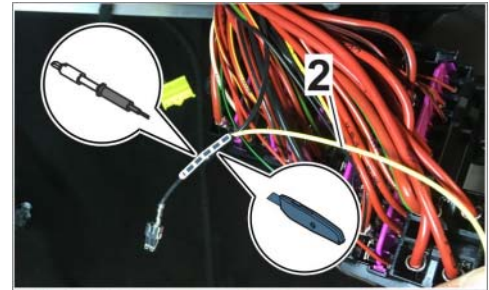
CAUTION

Hot components

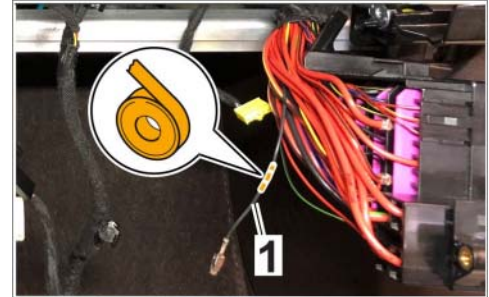
- Risk of burns
- ⇒ Let hot components cool down.
- ⇒ Wear personal protective gear.

- 2.6.5 Carefully cut open protective sleeve (adhesive tape) on the black and yellow line ⇒ *Removing terminal 15-2-* lengthways using a suitable knife.

To do this, gradually cut open the protective sleeve with the cutting edge pointing outwards to avoid damaging the electric lines.



- 2.6.6 Disconnect soldered joint between both lines (black and yellow line). To do this, switch on the soldering iron and set it to **Temperature 662° F (350°C)**.



- 2.6.7 Wrap adhesive tape around the **black line** ⇒ *Removing terminal 15-1-* until the protective sleeve is fully restored.

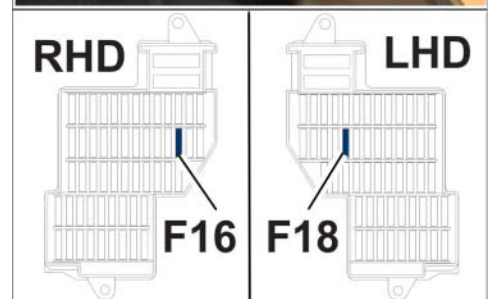
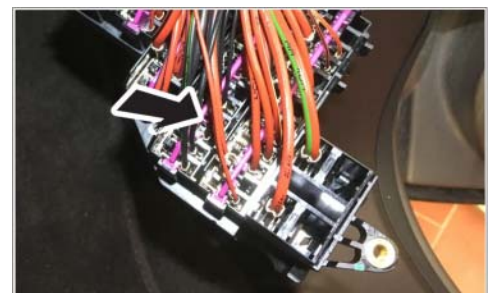
Removing terminal 15

- 2.6.8 **Insert black line** at slot 18 and secure again with the locking element.

F18 – Left-hand drive (LHD) = front right fuse carrier

- 2.6.9 **Insert fuse** in slot 18.

- 2.6.10 Clip in cover on the back of the fuse box.

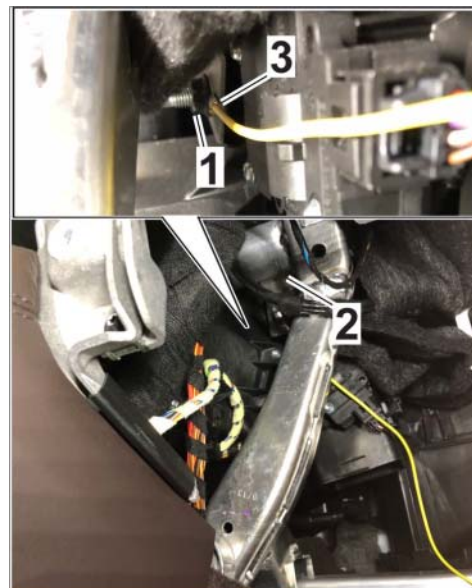


Terminal 15 slot

2.7 **Disconnect yellow 1 mm² line from relay repair kit, PIN 2** (ground point) at the dashboard bracket ⇒ *Disconnecting ground point.*

2.7.1 Loosen fastening screw ⇒ *Disconnecting ground point -1-* on the dashboard bracket ⇒ *Disconnecting ground point -2-.*

2.7.2 Remove ground line (**yellow 1 mm line with eyelet**) ⇒ *Pulling out fan control -3-* and screw in the fastening nut again.

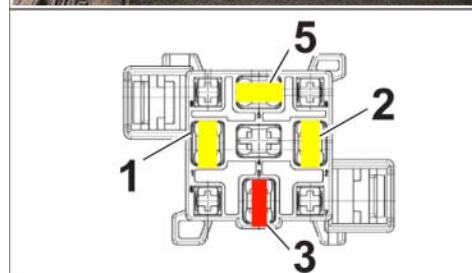
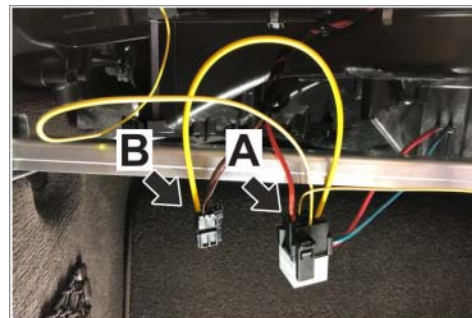


Disconnecting ground point

2.8 Disconnect **terminal 30** on the vehicle side of the wire harness for the blower regulator at the relay ⇒ *Connecting terminal 30.*

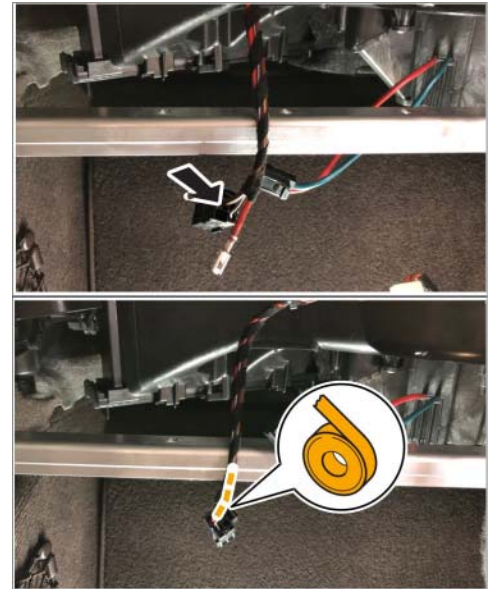
2.8.1 Unpin red line on the vehicle side at **PIN 3 of the relay socket** using the release tool ⇒ *Connecting terminal 30 -arrow A-.*

2.8.2 **Unpin yellow 4 mm² line from relay repair kit, PIN 5** at the connector for the blower regulator using the release tool ⇒ *Connecting terminal 30 -arrow B-.*



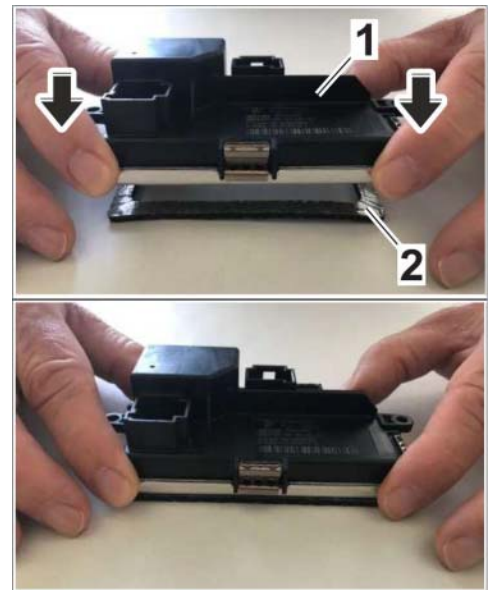
Connecting terminal 30

- 2.8.3 **Insert red line on the vehicle side** at the same slot as the previously disconnected yellow 4 mm² line from the repair kit on the connector for the blower regulator ⇒ *Connecting terminal 15 -arrow-*.
- 2.8.4 Wrap fabric adhesive tape around the **red line** on the wire harness until the protective sleeve is fully restored.



Connecting terminal 15

- 2.9 Install control unit for air-conditioning blower (blower regulator).
- 2.9.1 Place seal ⇒ *Fitting seal-2-* with bonding surface facing up on the work area, pull off protective paper and align the seal evenly
- 2.9.2 Hold the blower regulator ⇒ *Fitting seal-1-* upside down over the seal and align it with the bonding surface without making contact.



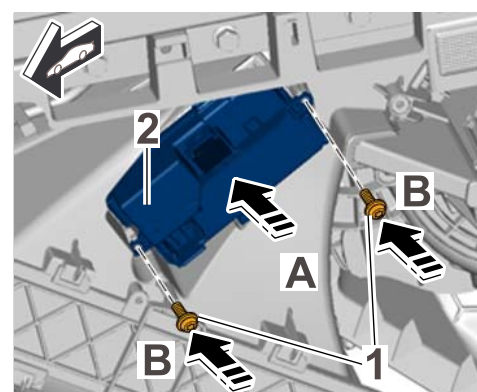
Fitting seal

- 2.9.3 Lower the regulator straight onto the seal, check its position and then press it on ⇒ *Fitting seal -Arrows-*.
 ⇒ Inner contour of seal ⇒ *Fitting seal-2-* is aligned with inner contour of blower regulator ⇒ *Fitting seal-1-*.
 ⇒ It must not project by more than 1 mm at the sides all the way around ⇒ *Fitting seal-arrow-*.



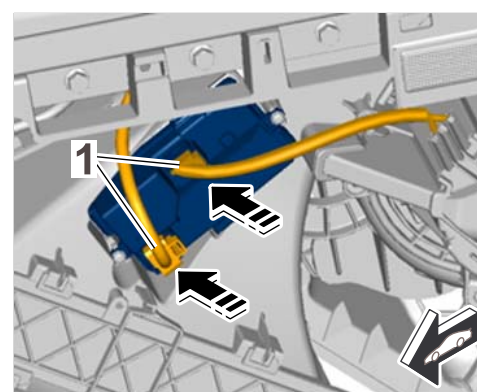
Fitting seal

- 2.9.4 Position blower regulator ⇒ *Installing blower regulator-2-* on the heating/fresh-air unit ⇒ *Installing blower regulator -arrow A-* and screw in screws ⇒ *Installing blower regulator-1-* (⇒ *Installing blower regulator -arrows B-*).



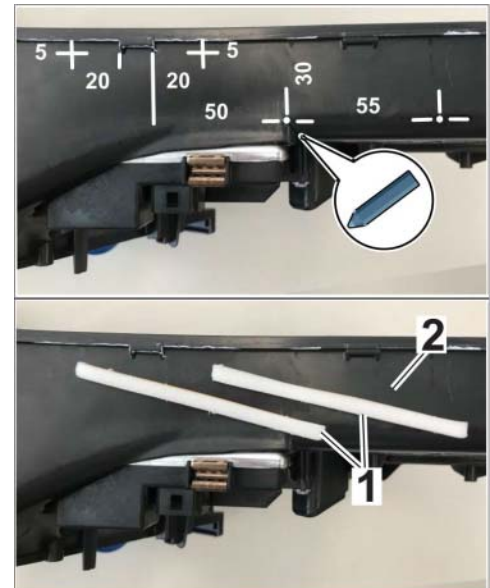
Installing blower regulator

- 2.9.5 Plug in electric plug connections ⇒ *Inserting connector-1-* on the blower regulator until they engage securely ⇒ *Inserting connector -Arrows-*.



Inserting connector

- 2.9.6 Mark upper guide points for drain strips at 20 mm to the left and right of the clip point above the blower regulator and 5 mm below the lower groove contour ⇒ *Fitting drain strips*.
- 2.9.7 Mark lower guide points as shown ⇒ *Fitting drain strips*.
- 2.9.8 Remove protective film.
- 2.9.9 Position drain strips with the top left corner on the respective top guide points and with the lower edge on the respective bottom guide point and press them on.



Fitting drain strips

3 Concluding work

- 3.1 Secure fuse box on passenger's side ⇒ *Workshop Manual '978409 Loosening and securing fuse box'*.
- 3.2 Install glove compartment ⇒ *Workshop Manual '681519 Removing and installing glove compartment'*.



Information

After carrying out the interim solution WKEO, an **inactive fault** was set in the gateway control unit (**fault code C12097**) on vehicles with **hybrid drive**. This fault entry did not cause any functional restriction while driving and could be **ignored** for the duration of the interim measure.

The fault memory entry must be deleted in the fault memory after installing the new control unit for air-conditioning blower.

- 3.3 Perform function test on air conditioning system.
 - 3.3.1 Switch on the ignition.
 - 3.3.2 Press the relevant buttons on the center console to check whether the vehicle interior starts cooling and heating.
 - 3.3.3 Switch off the ignition.
- 4 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

Scope 1: **Checking control unit for air-conditioning blower**

- Vehicles **without WKEO** previously performed

Working time:

Checking control unit for air-conditioning blower

Labor time: **28 TU**

Includes:

Removing and installing front footwell outlet vent
Removing and installing cover under dashboard

⇒ **Damage Code AKA7 099 000 1**

Scope 2: **Checking and replacing control unit for air-conditioning blower**

- Vehicles **without WKEO** previously performed

Working time:

Checking and replacing control unit for air-conditioning blower

Labor time: **62 TU**

Includes:

Removing and installing front footwell outlet vent
Removing and installing cover under dashboard
Removing and installing control unit for air-conditioning blower

Parts required:

00004330450 Regulator 1 ea.

⇒ **Damage Code AKA7 099 000 2**

Scope 3: **Removing relay for activating control unit for air-conditioning blower and replacing control unit for air-conditioning blower**

- Vehicles **with WKE0** previously performed

Working time:

Removing relay for activating control unit for air-conditioning blower and replacing control unit for air-conditioning blower Labor time: **163 TU**

Includes:

Removing and installing front footwell outlet vent
 Removing and installing cover under dashboard
 Removing and installing relay for activating control unit for air-conditioning blower
 Removing and installing control unit for air-conditioning blower

Parts required:

00004330450 Regulator 1 ea.

Required materials:

AKA70000001* Expendable items 1 ea.
 (for warranty invoicing only)

* For warranty processing, the Part No. **AKA70000001** with the "expendable items" designation can be invoiced as an **additional part** in the warranty claim. Maximum cost: \$2.50.

⇒ **Damage Code AKA7 099 000 2**

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