

WKEO - Retrofitting Relay for Activating Control Unit for Air-Conditioning Blower (Workshop Campaign)

Model line: **Panamera (970)**

Model Year: **As of 2010 up to 2016**

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

Information: **Optimized control units for the air-conditioning blower that are needed as part of campaign AKA7 are currently not available yet in the quantity required for retrofitting all affected vehicles immediately.**

To remedy this situation immediately, an interim measure is required.

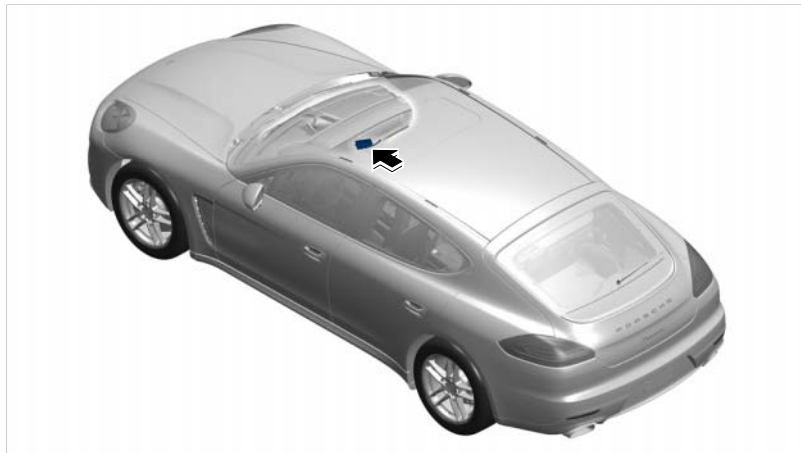
Remedial Action: As part of the interim measure, the previously installed blower regulator must be additionally sealed using a sealing cord, thereby preventing further moisture from seeping in. An additional relay will also be installed in the electric wire harness for the blower regulator. This will interrupt the power supply for the blower regulator immediately after switching off the ignition, thereby ruling out the possibility of short circuits in the blower regulator when the vehicle is parked.

- Customer is contacted by PCNA via first class mail that **Recall AKA7** is open on their vehicle and to contact their nearest dealer to carry out the recall..
- PCNA has offered to pay for towing the vehicle in for the Recall if the customer is not comfortable driving the vehicle in themselves. This service is to not be offered unless requested. To arrange vehicle tow, the dealer should call the dedicated phone number 1-(866)-777-9647 and notify the agent that they are requesting a tow to the dealer on behalf of the customer for recall AKA7. Please note that the customer will be responsible for retrieving their vehicle when it is ready.
- Customer arranges an appointment with the Porsche dealership for carrying out campaign AKA7.
- Once at the Porsche dealership, the **blower regulator part number in the vehicle will be checked** as outlined in **campaign AKA7**.
- If the **result of the part number check is OK** (blower regulator does not have to be replaced), the measure is complete and warranty invoicing is performed using the **campaign number AKA7** under **campaign scope 1**. After carrying out campaign AKA7, campaign WKEO must be closed by performing a recall update (warranty claim with 0 material units and 0 time units).
- If the **blower regulator has to be replaced**, this **interim measure WKEO must be carried out** for as long as required until optimized blower regulators are available.

As a procedural safeguard and for control purposes, this measure will involve a **two-fold implementation**. This means that if the **result of the part number check is not OK**, all required tasks (checking and reworking blower regulator and installing relay) will be implemented by carrying out **workshop campaign WKEO** and the status of **recall campaign AKA7 will only be set to complete** when the **optimized blower regulator has been installed** in the vehicle.

**Affected
Vehicles:**

Only the vehicles assigned to the campaign (see also PCSS Vehicle Information) if these are checked and found not to be OK during campaign AKA7 and for as long as there are no optimized blower regulators available. This campaign affects 33,206 vehicles in North America.

**Installation
position:**

Installation position of control unit for air-conditioning blower

Required parts and materials**Information****Ordering WKEO Relay repair kit**

Please do not order WKEO Relay Repair Kits. These kits will be automatically allocated to each dealer and should not be ordered directly by dealers. Part number PNA0000WKEO will be billed through the warranty system as WKE00000001. The sum of parts WKE00000001 and WKE00000002 will total normal warranty part reimbursement.

Please read the following information about processing the campaign:

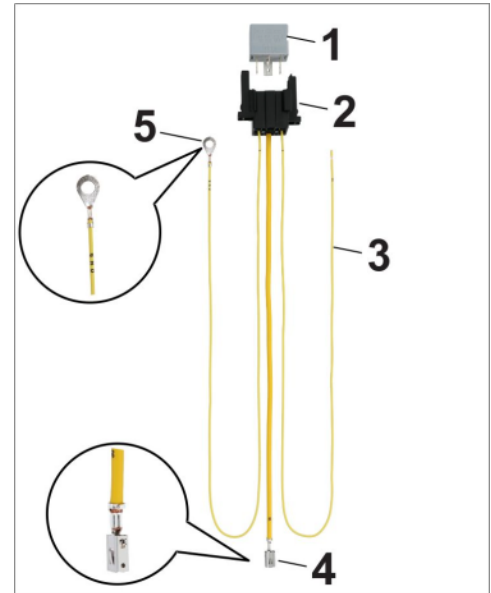
- For warranty processing, the **Part No. WKE00000001** with the designation "WKEO Relay repair kit" can be invoiced as a **local part** in the warranty claim. Amount: \$15.75.
- Handling costs are fixed, and can be invoiced during warranty processing by specifying **Part No. WKE00000002** with the designation "Handling costs" as a **local part**. Amount: \$20.94.

Parts Info:

Part No.	Designation	Qty.
WKE00000001	WKEO Relay repair kit	1 ea.

The **WKEO Relay** repair kit includes the following individual parts:

- 1 – Relay
- 2 – Relay socket
- 3 – Cable (0.5 mm²)
- 4 – Cable (4 mm²) with flat contact
- 5 – Cable (1 mm²) with cable shoe



Overview of relay repair kit

Expendable items:

Required materials (usually already available in the Porsche dealership):

- Butyl sealing cord (commercially available), e.g. Part No.: 00004310100
- Insulating tape
- Fabric adhesive tape (fleece)
- Tie-wrap
- Soldering tin
- Clean, lint-free cloth
- De-greasing cleaning agent

For warranty processing, the Part No. **WKE00000003** with the designation "expendable items" can be invoiced as a **local part** in the warranty claim. Maximum cost: \$3.75.

Required tools

Tools:

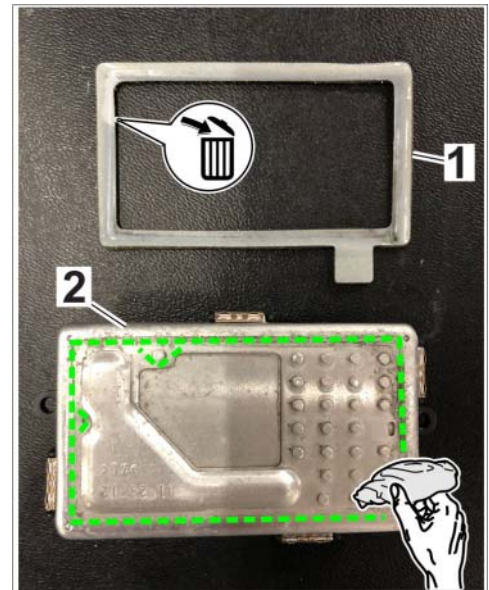
- **VAS 1978/35-33 - Release Tool Set**
- Torque wrench, 2 – 10 Nm (1.5 – 7.5 ftlb.), e.g. **V.A.G 1783 - Torque wrench, 2-10 Nm (1.5-7.5 ftlb.)**
- Torque wrench, 6 – 50 Nm (4.5 – 37 ftlb.), e.g. **V.A.G 1331A - Torque wrench, 6-50 Nm (4.5-37 ftlb.)**
- Suitable knife, e.g. scalpel or small Stanley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

Retrofit relay for activating control unit for air-conditioning blower**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 Rework control unit for air-conditioning blower.

- 2.1 Remove control unit for air-conditioning blower (blower regulator) ⇒ *Workshop Manual '877819 Removing and installing blower regulator'*.
- 2.2 Remove seal ⇒ *Reworking blower regulator -1-* on the blower regulator ⇒ *Reworking blower regulator -2-* or on the heater/air-conditioning unit and dispose of it.
- 2.3 Clean contact surface of the seal on the blower regulator and on the heater/air-conditioning unit using cleaning solution (isopropanol).

*Reworking blower regulator*

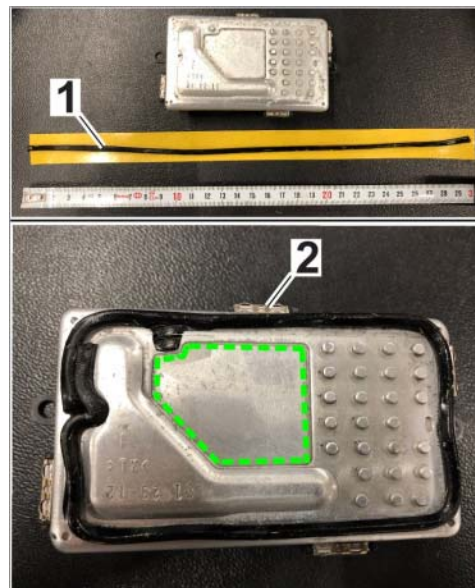
- 2.4 Cut 300 mm of butyl cord \Rightarrow *Reworking blower regulator -1-* (Ø 3 mm) from the roll and affix it all the way around the blower regulator as shown \Rightarrow *Reworking blower regulator -2-*. Make sure not to affix any butyl on the marked area.
- 2.5 Position blower regulator on the heater/air-conditioning unit and secure with the fastening screws.



Information

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

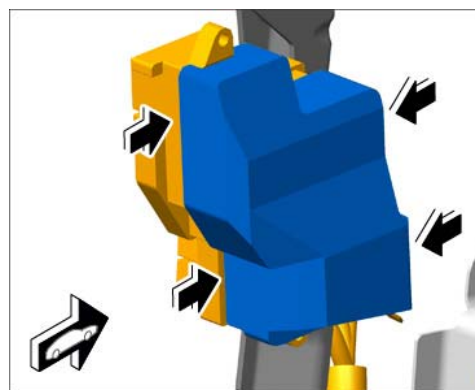
The procedure for stripping insulation from, crimping, and shrinking/insulating the electric lines must be observed and complied with. The procedure is described in detail in the **VAS 1978/35-33 - release tool set**.



Reworking blower regulator

3 Install relay for activating the blower regulator.

- 3.1 **Connect yellow 0.5 mm² line from relay repair kit, PIN 1 to slot 18 (F5A, terminal 15) in the fuse box; function: ignition .**
 - 3.1.1 Unclip cover on the back of the fuse box \Rightarrow *Unclipping cover on fuse box -Arrows-*.

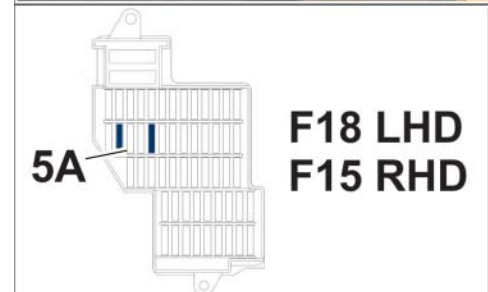
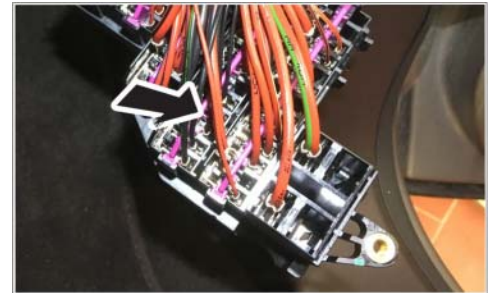


Unclipping cover on fuse box

- 3.1.2 **Route terminal 15 line (yellow 0.5 mm² line) to the fuse box at the front right.**

F15 – Right-hand drive (RHD)
F18 – Left-hand drive (LHD)

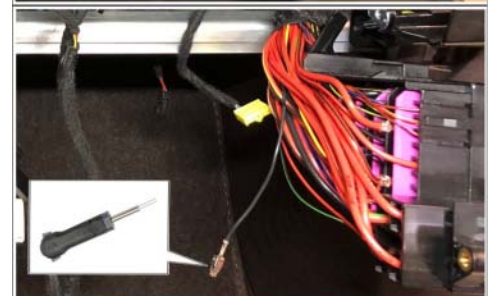
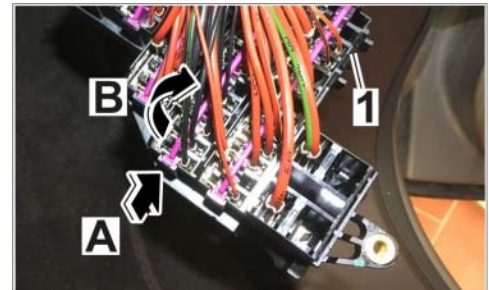
- 3.1.3 **Remove fuse 5A from slot 18 (LHD) or slot 15 (RHD).**



Slot F18, terminal 15

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

- 3.1.5 **Disconnect black line from slot 18 (F5A, terminal 15) using the release tool.**



Connecting terminal 15



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.

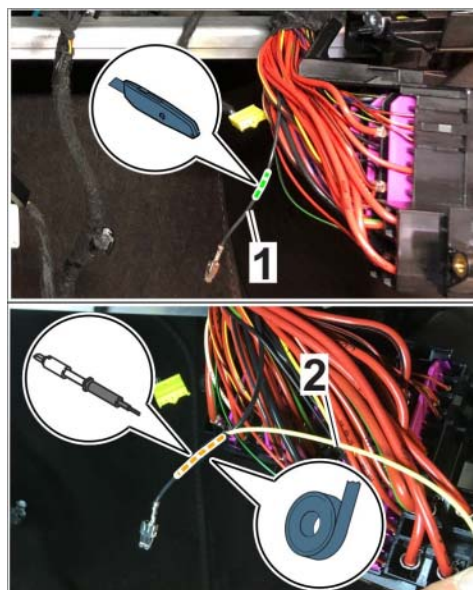
3.1.6 Carefully cut open protective sleeve on the black line ⇒ *Connecting terminal 15-1*- lengthways using a suitable knife.

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

3.1.7 Solder the stripped line **and the new yellow line** ⇒ *Connecting terminal 15-2*- together. To do this, switch on the soldering iron and set it to **Temperature 662° F (350° C)**.

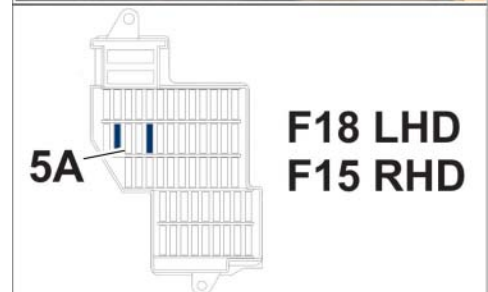
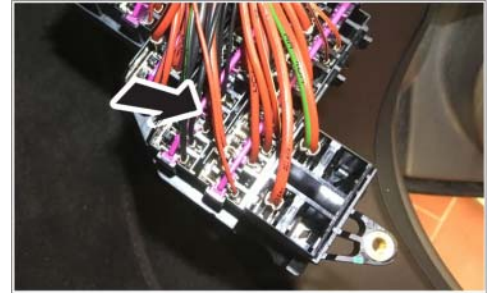
3.1.8 Wrap adhesive tape around both lines until the protective sleeve is fully restored.

3.1.9 Clip in cover on the back of the fuse box.



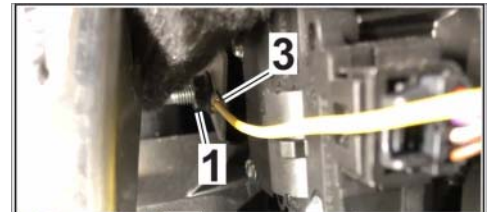
Connecting terminal 15

- 3.1.10 **Insert black line** at slot 18 on LHD vehicles or slot 15 on RHD vehicles (**F5A, terminal 15**) and secure again with the lock.
- 3.1.11 **Insert fuse 5A** in slot 18 (LHD) or slot 15 (RHD).



Slot F18, terminal 15

- 3.2 **Connect yellow 1 mm² line from relay repair kit, PIN 2** (ground point) to the dashboard bracket \Rightarrow *Connecting ground point*.
- 3.2.1 Loosen fastening screw \Rightarrow *Connecting ground point -1-* on the dashboard bracket \Rightarrow *Connecting ground point -2-*.
- 3.2.2 Route ground line (**yellow 1 mm line with eyelet**) and secure it to the screw-on point (ground) using the eyelet \Rightarrow *Connecting ground point -3-*.



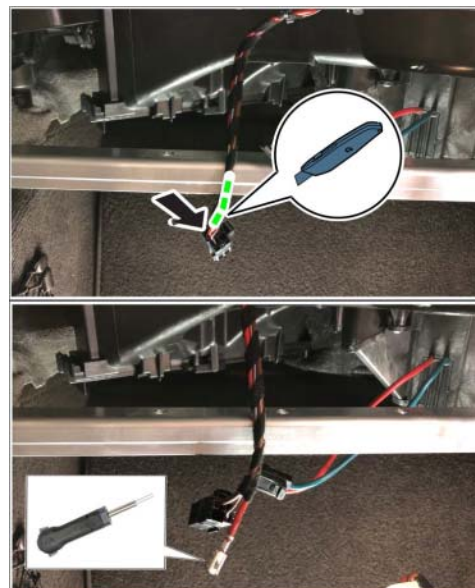
Connecting ground point

3.3 Connect **terminal 30** on vehicle side of the wire harness for the blower regulator to the relay \Rightarrow *Loosening wire harness*.

3.3.1 Detach protective sleeve on the wire harness slightly in the marked area.

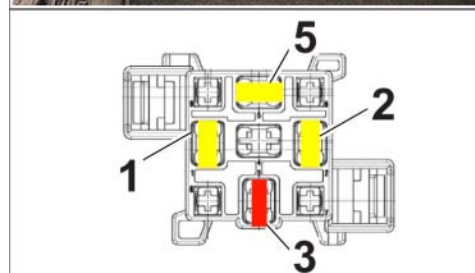
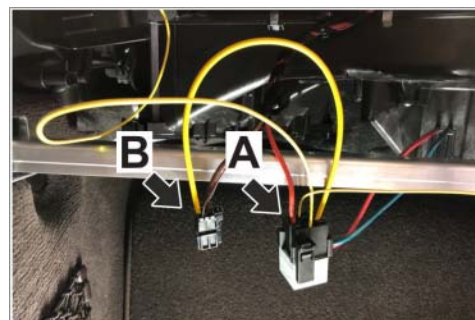
To do this, gradually cut open the protective sleeve with the cutting edge pointing outwards to avoid damaging the electric lines.

3.3.2 **Disconnect red 4 mm² line** on the connector for the blower regulator using the release tool.



Loosening wire harness

3.3.3 Insert red line on vehicle side at **PIN 3 of the relay socket** (\Rightarrow *Connecting terminal 30 -arrow A-*).



Connecting terminal 30

Pin assignment
on relay socket

PIN	Color of wire	Clamp
1	Yellow, 0.5 mm ²	15
2	Yellow, 1 mm ²	Weight

3	Red, 4 mm ²	30
5	Yellow, 4 mm ²	30

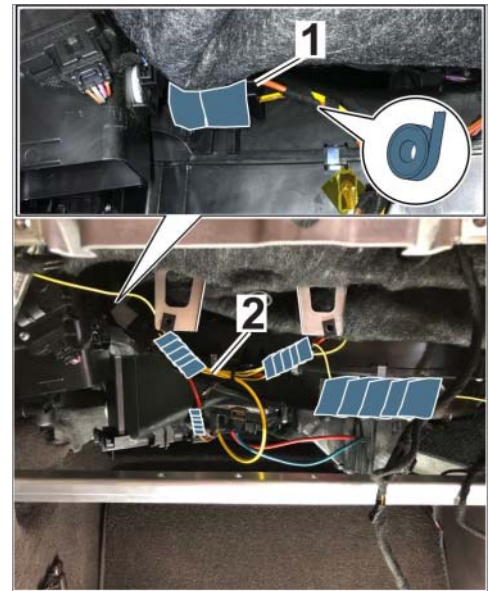
3.3.4 **Insert yellow 4 mm² line from relay repair kit, PIN 5** at the same slot as the previously disconnected terminal 30 PIN on the blower regulator ⇒ *Connecting terminal 30 -arrow B-*.

3.3.5 Insert connector into blower regulator until it engages securely.

3.4 Secure new lines from the relay repair kit.

3.4.1 Wrap fabric adhesive tape all around the relay ⇒ *Securing wire harness -1-* once (in order to reduce noise).

3.4.2 Wrap fabric adhesive tape tightly around the new wire harnesses ⇒ *Securing wire harness -2-* at as many points as possible on the main wire harness so that the lines cannot become chafed.



Securing wire harness

- 3.4.3 Pull the tie-wraps you cut while loosening the wire harness out of the retaining sockets and remove them.
- 3.4.4 Attach new tie-wraps at the retaining sockets and secure the main wire harness as shown
⇒ *Securing wire harness.*

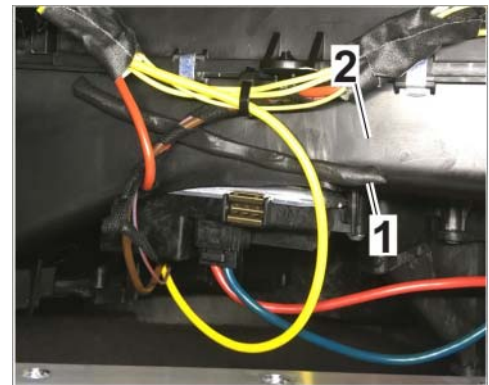


Securing wire harness

- 3.5 Affix sealing strip ⇒ *Affixing sealing strip -1-* on the heater/air-conditioning unit ⇒ *Affixing sealing strip -2-*. To do this, cut approx. 130 mm of sealing cord (butyl) and stick it on the heater/air-conditioning unit as shown.

4 Concluding work

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



Affixing sealing strip

**Information**

After carrying out the interim solution, an **inactive fault** will be set in the gateway control unit (**fault code C12097**) on vehicles with **hybrid drive**. This fault entry does not cause any functional restriction while driving and can be **ignored** for the duration of the interim measure WKEO. The fault memory entry must only be deleted from the fault memory when implementing the final solution for campaign AKA7.

After carrying out the campaign, please inform customers that the auxiliary air conditioning or auxiliary heating function will be temporarily unavailable after implementing this measure on vehicles with hybrid drive or auxiliary heating.

Warranty processing

Scope 1: Only valid for USA and Canada

Working time:

Retrofitting relay for activating control unit for air-conditioning blower

Labor time: **147 TU**

Includes:

- Removing and installing dashboard trim panel
- Removing and installing glove compartment
- Loosening and securing fuse box on passenger's side
- Removing and installing control unit for air-conditioning blower (blower regulator)
- Performing function test on air conditioning system
- Checking control unit for air-conditioning blower

Parts required:

WKE00000001*	WKEO Relay repair kit	1 ea. (for warranty invoicing only)
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Required materials:

WKE00000002**	Handling costs	1 ea. (for warranty invoicing only)
WKE00000003***	Expendable items	1 ea. (for warranty invoicing only)

Additional costs:

WKE00000004****	External Vehicle storage	Amount on invoice
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* For warranty processing, the **Part No. WKE00000001** with the designation "WKEO Relay repair kit" can be invoiced as a **local part** in the warranty claim. Cost: \$15.75.

** Handling costs are fixed, and can be invoiced during warranty processing by specifying **Part No. WKE00000002** with the designation "Handling costs" as a **local part**. Amount: \$20.94.

*** For warranty processing, the Part No. **WKE00000003** with the "expendable items" designation can be invoiced as a **local part** in the warranty claim. Maximum cost: \$3.75.

**** For warranty processing, the **Part No. WKE00000004** can be invoiced in the warranty claim as a **local part** with the designation "Parts" and with the amount as per invoice. **Please document a copy of the invoice in WWS.**

⇒ Damage Code WKE0 066 000 1

Invoicing of any additional costs incurred as part of WKE0

Invoicing:

Costs for vehicle storage

If external parking spaces outside of dealer property are required for storage of the affected vehicles, the costs incurred can be claimed as an additional part in the warranty claim for workshop campaign WKE0 under "local parts" using the part number WKE00000004. An amount of up to \$12.50 can be invoiced per day for which the vehicle is parked. Please attach a copy of the invoice of the external parking facility in WWS.

Costs for customer mobility

If requested, customer mobility can be offered until the interim measure WKE0 has been carried out. The current policies and procedures for the customer mobility program apply. Costs are processed using the standard Customer Mobility process in accordance with the currently applicable rules governing the Customer Mobility Program.

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