

AKB8 - Re-programming Instrument Cluster (Stop Delivery/Recall Campaign)

Model Line: **Panamera (971)**

Model Year: **As of 2017 up to 2020**

Subject: **Instrument cluster**

Important: **CRITICAL WARNING** - This campaign includes steps where control unit(s) in the vehicle will be programmed with the PIWIS Tester. The vehicle voltage must be maintained between 13.5 volts and 14.5 volts during this programming. Failure to maintain this voltage could result in damaged control unit(s). Damage caused by inadequate voltage during programming is not a warrantable defect. The technician must verify the actual vehicle voltage in the PIWIS Tester before starting the campaign and also document the actual voltage on the repair order.

Information: **The legally required display logic of the brake wear indicator cannot be sufficiently met at present.**

Only the yellow "Brake pad worn" warning, which can be acknowledged, would be displayed at present in the "Map" and "Night Vision Assist" submenus in the Car & Info display on the instrument cluster if a brake pad is worn. These display settings do not provide an additional permanent warning by displaying the brake pad wear symbol.

Remedial Action: Re-program the instrument cluster using the PIWIS Tester with test software version **38.900.010** (or higher) installed.

**Information**

Please note that the instrument cluster in some vehicles must be replaced before re-programming. Specific campaign scopes have therefore been defined for this purpose.

Every vehicle is **clearly assigned just one campaign scope**.

To find out which campaign scope is assigned to the relevant vehicle, see PCSS Vehicle Information.

For an overview of the campaign scopes, see ⇒ *Technical Information 'Warranty processing'*

- **Scope 1:** Re-programming instrument cluster (programming takes about 60 minutes)
- **Scope 2:** Not valid for this vehicle type.
- **Scope 3:** Replacing instrument cluster, checking software version and re-programming instrument cluster if necessary, depending on the software version
- **Scope 4:** Carry out workshop campaign WJ14 and submit warranty claim for recall campaign AKB8.*

* Vehicles for which **workshop campaign WJ14 is still open in addition to this recall campaign AKB8** are assigned Scope 4. **Workshop campaign WJ14 must therefore be carried out** as a remedial measure for both campaigns. The instrument cluster is re-programmed, for example, as part of campaign WJ14. For instructions, see ⇒ *Technical Information 'WJ14 Workshop campaign - Checking total mileage in instrument cluster'*. Once campaign WJ14 has been carried out, a warranty claim must only be submitted for this campaign AKB8 so that the campaign is flagged as completed, see ⇒ *Technical Information 'Warranty processing' - Scope 4*.

Affected Vehicles: Only the vehicles assigned to the campaign (see also PCSS Vehicle Information). There are 49,670 vehicles affected by this campaign in North America.

Required tools

- Tools:
- **9900 - PIWIS Tester 3** with PIWIS Tester software version **38.900.010** (or higher) installed
 - Battery charger with a current rating of **at least 90 A** and - if required - **also with a current and voltage-controlled charge map** for lithium starter batteries, e.g. **VAS 5908 - Battery charger, 90 A or equivalent**

Preparatory work**NOTICE**

Fault entry in the fault memory and control unit programming aborted due to low-voltage.

- **Increased current draw during diagnosis or control unit programming can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the programming process.**

⇒ **Before starting control unit programming, connect a suitable battery charger with a current rating of at least 90 A to the vehicle.**

NOTICE

Control unit programming will be aborted if the WLAN connection is unstable.

- An unstable WiFi connection can interrupt communication between the PIWIS Tester and the vehicle communication module (VCI). As a result, control unit programming may be aborted.
- ⇒ During control unit programming, always connect the PIWIS Tester to the vehicle communication module (VCI) via the USB cable.

NOTICE

Control unit programming will be aborted if the driver's key is not recognized

- If the driver's key is not recognized in the vehicle, programming cannot be started or will be interrupted.
- ⇒ Place the driver's key with the back facing down into the front left storage compartment in the center console to guarantee a continuous radio link between the vehicle and the driver's key.

Work Procedure: 1 Carry out general preliminary work for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*.



Information

Programming can cause the individual customer settings to be lost. Always check these and write them down if necessary before getting started.

- 2 Check customer settings in the instrument cluster and write them down if necessary.

Re-programming instrument cluster - vehicles with assigned Scope 1

Work Procedure: 1 **Re-program the instrument cluster.**

The basic procedure for control unit programming is described in the Workshop Manual ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*.

For specific information on control unit programming during this campaign, see table below.



Information

The procedure described here is based on the PIWIS Tester 3 software version **38.900.010**.

The PIWIS Tester instructions take precedence and in the event of a discrepancy, these are the instructions that must be followed.

A discrepancy may arise with later software versions for example.

Required PIWIS Tester software version:	38.900.010 (or higher)	
Type of control unit programming:	Control unit programming using the " Campaign " function in the Additional menu on the PIWIS Tester by entering a programming code.	
Programming code:	H9W3B	
Programming sequence:	<p>Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence.</p> <p>The instrument cluster is re-programmed and then re-coded automatically during the programming sequence.</p> <p>The display in the instrument cluster is switched off during programming. The ignition is still active in the background.</p> <p>The display in the instrument cluster will be switched on again automatically as soon as programming is complete.</p> <p>Switch the ignition off and then on again only when prompted to do so by the PIWIS Tester because otherwise, programming will be interrupted and will then have to be started again.</p>	
Programming time (approx):	60 minutes	
Software version programmed during this campaign:	Instrument cluster with hardware version 9 and original software version 01xx	0145
	Instrument cluster with hardware version 9 and original software version 02xx	0219
	Instrument cluster with hardware version 9 and original software version 03xx	0312
	Instrument cluster with hardware version 11 – irrespective of original software version	0255

Procedure in the event of abnormal termination of control unit programming:	<ul style="list-style-type: none"> • Switch ignition off and then on again. • Read out and erase fault memories ⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"</i>. • Repeat control unit programming by entering the programming code again.
Procedure in the event of error messages appearing during the programming sequence:	⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"</i> .

Once programming has been carried out successfully, continue with ⇒ *Technical Information '9X00IN Concluding work'*.

Replacing and re-programming instrument cluster - vehicles with assigned Scope 3

Work Procedure: 1 **Replace instrument cluster.**

For instructions, see ⇒ *Workshop Manual '9X00IN Replacing instrument cluster'*.



Information

The part number of the required **instrument cluster** can be determined based on the vehicle identification number (VIN) in the **Parts Catalog PET**.



Information

Once the instrument cluster has been replaced, use the PIWIS Tester to **check** the **software version** of the new instrument cluster by selecting the "Extended identification" menu for the instrument cluster.

Result of check	Action required
The instrument cluster software is 0145, 0219, 0255 or 0312	– End of action required – Continue with ⇒ <i>Technical Information '9X00IN Concluding work'</i> .
Software version is not any of the software versions specified above.	Continue with Step 2 – Re-program the instrument cluster.

2 **Re-program the instrument cluster.**

The basic procedure for control unit programming is described in the Workshop Manual ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*.

For specific information on control unit programming during this campaign, see table below.



Information

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Software version programmed during this campaign:	Instrument cluster with hardware version 9 and original software version 01xx	0145
	Instrument cluster with hardware version 9 and original software version 02xx	0219
	Instrument cluster with hardware version 9	0312

	and original software version 03xx	
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Procedure in the event of error messages appearing during the programming sequence:	⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"</i> .	

Concluding work

Work Procedure: 1 Carry out general subsequent work for control unit programming as described under ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*.



Information

The values for the Tire Pressure Monitoring (TPM) system may be lost during re-coding of the instrument cluster.

If the Tire Pressure Monitoring (TPM) system is reset, the wheel electronics must be re-taught and adapted to the system.

Preconditions and procedure for teaching the wheel electronics units:

- Vehicle is stationary for at least 5 minutes.
- Select the type of tires fitted (type and size) in the TPM menu in the instrument cluster. The message "No monitoring. System is learning from 15 mph (25 km/h)" then appears in the multi-function display.
- Drive at a speed of more than 15 mph (25 km/h) - ideally without stopping - until the tire pressure values are displayed (learning time: less than 2 minutes).

The system learns the wheel electronics only while driving. Intermediate stops and deviations from the described teaching procedure can result in a much longer learning time.

Teaching can be performed during the test drive or later while the customer is driving. Please inform your customer about this if necessary.

- 2 Restore customer settings if necessary.
- 3 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing



Information

The specified working times were determined specifically for carrying out this campaign and include all required preliminary and subsequent work.
The working times may differ from the working times published in the Labor Operation List in PIWIS.

Scope 1:

Re-programming instrument cluster

Working time:

Re-programming instrument cluster

Labor time: **73 TU**

Includes: Connecting and disconnecting battery charger
Connecting and disconnecting PIWIS Tester
Checking customer settings and restoring them if necessary
Reading out and erasing fault memories

⇒ **Damage Code AKB8 099 000 1**

Scope 2:

Not relevant for this vehicle type.

Scope 3:

Replacing instrument cluster and re-programming if necessary

Working time:

Replacing instrument cluster and re-programming if necessary

Labor time: **274 TU**

Includes: Connecting and disconnecting battery charger
Connecting and disconnecting PIWIS Tester
Removing and installing instrument cluster
Checking customer settings and restoring them if necessary
Reading out and erasing fault memories

⇒ **Damage Code AKB8 099 000 2**

Scope 4: **Submitting warranty claim**

- The required measure is carried out by completing workshop campaign WJ14.

Working time:

Warranty processing for recall campaign AKB8

Labor time: **5 TU**

⇒ **Damage Code AKB8 099 000 1**

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