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

Model Line: **Cayenne (9YA/9YB)**

Model Year: **As of 2018 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 **38.900.015** (or higher) installed.

i   **Information**

During the campaign, the instrument cluster is re-programmed and then coded **automatically**.
It takes **about 60 minutes** to **program and code** the instrument cluster.

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 **38.900.015** (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**

ℹ Information

The Cayenne is equipped as standard with a **lithium starter battery**, which must only be charged using suitable battery chargers.

For further information about the battery chargers to be used, see:

• ⇒ *Workshop Manual '2706IN General information on the 12-volt lithium-ion battery'*

• ⇒ *Workshop Manual '270689 Charging vehicle electrical system battery'*

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 or power supply, suitable for AGM type batteries, recommended current rating of 90A fixed voltage 13.5V to 14.5V.**

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 diagnosis will be aborted if the driver's key is not recognized

• **If the driver's key is not recognized in the vehicle, control unit diagnosis cannot be started or will be interrupted.**

⇒ **Position the driver's key in the rear area of the left cupholder in the center console between the holding struts (emergency start tray) in order to guarantee a permanent radio link between the vehicle and 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

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 **38.900.015**.

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:	**38.900.015** (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:	**Y5L2W**
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. The **instrument cluster** is **re-programmed** and then **re-codedautomatically** during the programming sequence.
	The display in the instrument cluster is switched off during programming. The ignition is still active in the background.
	The display in the instrument cluster will be switched on again automatically as soon as programming is complete.

	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.	
Programming time (approx):	**60 minutes**	
Software version programmed during this campaign:	Instrument cluster with **hardware version 9** and original software version **05xx**	**0523**
	Instrument cluster with **hardware version 11** and original software version **05xx** or **07xx**	**0713**
	Instrument cluster with **hardware version 11** and original software version **08xx** or **09xx**	**0907**
	Following control unit programming, the software version can be read out of the instrument cluster in the 'Extended identification' menu using the PIWIS Tester.	
Procedure in the event of abnormal termination of control unit programming:	• Switch ignition off and then on again. • Read out and erase fault memories ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"'.* • Repeat control unit programming by entering the programming code again.	
Procedure in the event of error messages appearing during the programming sequence:	⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Fault finding"'.*	

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'*.

ℹ️ 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

ℹ️ Information

The specified working times were determined specifically for carrying out this campaign and include all necessary preliminary and subsequent work.
The working time may differ from the working time published in the Labour Operation List in the PCSS.

Scope 1:   Not relevant for this vehicle type.

Scope 2:   **Re-programming instrument cluster**

Working time:

Re-programming instrument cluster   Labor time: **74 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**