WH30 - Re-programming the Airbag Control Unit (Workshop Campaign)

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. Please refer to Equipment Information EQ1401 for a list of suitable battery chargers/power supplies which should be used to maintain vehicle voltage.
Model Year:	**As of 2017 up to 2018**
Model Line:	**Panamera (971)**
Subject:	**Airbag control unit**
Information:	**Due to a software error, there is a possibility that the enhanced seat belt diagnostic function may not detect the driver's correctly fastened seat belt on the affected vehicles.** If this happens, the warning message "Driver seat belt not fastened, Fasten seat belt" will be displayed in the instrument cluster.
Remedial Action:	Re-program the airbag control unit using the PIWIS Tester with software version **35.650.010** (or higher) installed.
Affected Vehicles:	Only the vehicles assigned to the campaign (see also PIWIS Vehicle information). This campaign affects 4,236 vehicles in North America.

Required tools

NOTICE

Use of a PIWIS Tester software version that is older than the prescribed version

- **Measure is ineffective**

⇒ **Always use the prescribed version or a higher version of the PIWIS Tester software for control unit programming.**

Tools:	• **9900 - PIWIS Tester 3** with PIWIS Tester software version **35.650.010** (or higher) installed • **Battery Charger/Power Supply** - Suitable for AGM Type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V.

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 70A fixed voltage 13.5V to 14.5V.

> **NOTICE**
>
> **Completely dead vehicle battery**
>
> - The break in communication in the vehicle system during programming causes safety-relevant functions, e.g. driving light and brake light, to be switched on automatically. This results in an increased current draw, which will run down the vehicle battery.
>
> ⇒ Before starting control unit programming, connect a suitable battery charger or power supply, suitable for AGM type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V.

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

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'.*

Re-programming the airbag control unit

> ⚠ **WARNING**
>
> **Electrically moved side windows and rear spoiler**
>
> - Danger of limbs being trapped or severed
>
> - Risk of damage to components
>
> ⇒ Do not reach into the danger area.
>
> ⇒ Keep third parties away from the danger area.
>
> ⇒ Do not move components or tools into the danger area.

⇒ Retract roll-up sun blinds on the rear side windows before starting programming or coding.

NOTICE

Use of a PIWIS Tester software version that is older than the prescribed version

• **Measure is ineffective**

⇒ **Always use the prescribed version or a higher version of the PIWIS Tester software for control unit programming.**

Information

During this campaign, the airbag control unit is only **re-programmed** and does **not** then need to be coded.

Work Procedure: 1 **Re-program airbag control unit**.

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 the table below:

Required PIWIS Tester software version:	**35.650.010** (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:	**C9F7S**
Programming sequence:	Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. **Do not interrupt programming.**
Programming time (approx):	**4 minutes**
Software version programmed during this campaign:	**0603** Following control unit programming, the software version can be read out of the control unit for occupant protection 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"'.*

Reading out and erasing fault memory

ℹ️ Information

Brief breaks in communication between the control units during programming and coding can result in fault memory entries in all control units in the vehicle system, which might **not be deleted automatically**.

In addition to the automatic deletion of the fault memories during programming, the fault memories of all control units must therefore be **read out and deleted again** as described below **after each programming and coding process**.

Work Procedure: 1 Press •F7" in the control unit selection screen ('Overview' menu) to call up the Additional menu.

2 Select the function "Read all fault memories and erase if required" and press •F12" ('Next') to confirm your selection ⇒ *Erasing fault memories.*

The fault memories of the control units are read out.

3 Once you have read out the fault memories, check the fault memory entries.

ℹ️ Information

If control units are found to have faults that are **not** caused by control unit programming, these must first be **found** and **corrected**. This work **cannot** be invoiced under the workshop campaign number.

Erasing fault memories

4 Press •F8" to delete fault memory entries.

5 Press •F12" ('Yes') in response to the question as to whether you really want to delete all fault memory entries.

The faults stored in the fault memories of the various control units are deleted.
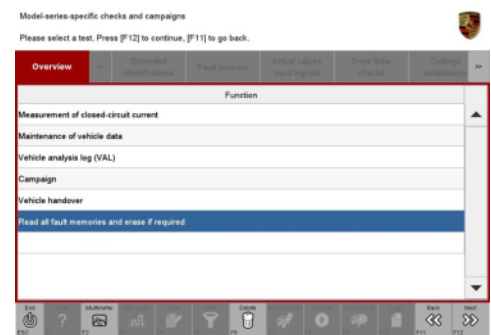
ℹ Information

If fault memory entries for individual control units cannot be deleted, proceed as follows:

- Switch off the ignition.

- Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.

- Lock the vehicle using the driver's key.

- Wait approx. 1 minute before unlocking the vehicle again.

- Start the engine, leave it running for a short time and then stop it again.

- Switch off the ignition and wait approx. 10 seconds before switching it back on again.

- Plug the PIWIS Tester diagnostic connector into the diagnostic socket again and restore communication with the vehicle.

- Read out the fault memory again and delete any fault memory entries that are stored.

6 Once you have erased the fault memories, select the **'Overview'** menu to return to the control unit selection screen ⇒ *Control unit selection*.

Control unit selection

Concluding work

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

2 Enter the campaign in the Warranty and Maintenance booklet.

Warranty processing

ℹ Information

The specified working time was determined specifically for carrying out this campaign and may differ from the working times published in the Labor Operation List in PIWIS.

Scope:

Working time:

Re-programming airbag control unit   Labor time: **40 TU**
Includes: Connecting and disconnecting battery charger
               Connecting and disconnecting PIWIS Tester
               Reading out and erasing fault memory

⇒ **Damage Code WH30 066 000 1**

Dealership Distribution Routing	Service Manager	_____	Shop Foreman	_____	Service Technician	_____	_____	_____	_____
	Asst. Manager	_____	Warranty Admin.	_____	Service Technician	_____	_____	_____	_____