

Message "Lane Change Assist Not Available – Service Necessary" in the Instrument Cluster: Re-Programming Control Units for Lane Change Assist and Front Corner Radar (205/21)

Model Line: **Taycan (Y1A/Y1B)**

Model Year: **As of 2020 up to 2021**

Equipment: **Preparation of Rear Cross Traffic Alert/Lane Change Assist and Exit Alert for FOD function (M-no. 79J)
Dead-angle assist (M-no. 7Y8)**

Concerns: **Lane Change Assist control unit and radar sensor for front corner radar**

- Information:
- The white warning message with acoustic warning tone '**SWA / APW / ASW not available**' is displayed intermittently in the instrument cluster. The warning message disappears after a few seconds even though the ignition is not switched off and on again.
 - The fault memory entry '**B200FF9 – Control unit faulty**' is stored in the fault memory of the Lane Change Assist control unit. This can be caused by a software error in the control unit, which detects and calculates an excessive number of objects when driving in particularly high detection environments (e.g. high traffic volume on multi-lane roads), which can lead to a runtime overrun of the processors' computing time. The control unit then sets an error code and intermittently switches off the affected assistance systems until the error routine (self-healing) is completed.

Action required: If a customer complaint exists, reprogram the control units for the Lane Change Assist and for the radar sensors front corner radar with PIWIS Tester and installed test software version **40.750.000** (or higher).

- Radar sensor, left front corner radar (slave)
- Radar sensor, right front corner radar (master)
- Lane Change Assist, left (slave)
- Lane Change Assist, right (master)



Information

If control unit programming is performed for one of the affected control units, the other control units are also programmed automatically to the required level.



Information

The total time required for control unit programming is **approx. 12 minutes**.

Required tools



Information

The Taycan 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 '27061N General information on the 12-volt lithium-ion battery'*

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

Tool:

- Battery charger with a current rating of **at least 90 A** and a **current and voltage-controlled charge map** for lithium starter batteries, e.g. **VAS 5908 battery charger 90 A**
- **9900 - PIWIS Tester 3** with installed PIWIS Tester software version **40.750.000** (or higher)

Preparatory work

NOTICE

Fault entry in the fault memory and control unit programming aborted due to undervoltage.

- **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 getting started, connect a suitable battery charger with a current rating of at least 90 A to the jump-start terminals.**

NOTICE

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

- **An unstable WLAN connection can interrupt communication between PIWIS Tester II and the vehicle communication interface 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 in front of the lock opening for the center console cover to guarantee a permanent wireless 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 '9X001N Basic instructions and procedure for control unit programming - section on "Preliminary work"*.

Re-programming control units for Lane Change Assist and radar sensors for front corner radar

NOTICE

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

- Measure is ineffective
- ⇒ **Always use the specified version or a higher version of the PIWIS Tester software for control unit programming and coding.**

Work Procedure: 1 The basic procedure for programming a control unit is described in the Workshop Manual ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Programming"*.

Specific information on control unit programming in the context of this Technical Information:

Required PIWIS Tester software version:	40.750.000 (or higher)
Type of control unit programming:	<p>Control unit programming using the 'Automatic programming' function for the right Lane Change Assist control unit (master)/Lane Change Assist, left (slave)/radar sensor for front corner radar, right (master)/radar sensor for front corner radar, left (slave):</p> <p>'Lane Change Assist right (master)' control unit or 'Lane Change Assist, left (slave)' or 'Radar sensor for front corner radar, right (master)' or 'Radar sensor for front corner radar, left (slave)' – 'Coding/programming' menu – 'Automatic programming function'.</p> <p>If control unit programming is performed for one of the affected control units, the other control units are also programmed automatically to the required level.</p>

Programming sequence:	<p>Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence.</p> <p>During the programming sequence, the 'Lane Change Assist, right (master)', 'Lane Change Assist, left (slave)', 'Radar sensor for front corner radar, right (master)' and 'Radar sensor for front corner radar, left (slave)' control units are re-programmed and then re-coded automatically.</p> <p>Do not interrupt programming and coding.</p> <p>Once the control units have been programmed and coded, you will be prompted to switch the ignition off and then back on again after a certain waiting time.</p> <p>Backup documentation of the new software versions is then performed.</p>
Programming time (approx):	12 minutes
Software version programmed during programming:	<p>0588 (or higher)</p> <p>Following control unit programming, the software version can be read out of the relevant control unit in the ⇒ 'Extended identifications' menu using the PIWIS Tester.</p>
Procedure in the event of abnormal termination of control unit programming:	<ul style="list-style-type: none"> • Switch ignition off and then on again. • Reading out and erasing fault memories. ⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Rework"</i> • Repeat control unit programming by restarting programming.
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 "Troubleshooting"</i> .

Concluding work

Work Procedure: 1 Carry out general rework for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Rework"*.

Invoicing

For documentation and warranty invoicing, enter the working position and PCSS encryption specified below in the warranty claim:

APOS	Labor operation	I No.
91702501	Programming control units for Lane Change Assist and radar sensor for front corner radar	

PCSS encryption:

Location (FES5)	91700	Lane Change Assist control unit does
Damage type (SA4)	1613	not function at times

- References:
- ⇒ *Workshop Manual '2706IN General information on the 12-volt lithium-ion battery'*
 - ⇒ *Workshop Manual '270689 Charging battery/vehicle electrical system'*
 - ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*

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