

WNA5 - Power Electronics and DME Software Update - Service Campaign

Revision: This bulletin replaces bulletin Group 2 19/22 WNA5, dated February 25, 2022.

Model Year: **As of 2020 up to 2022**

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.

Model Line: **Taycan (Y1A)
Taycan Cross Turismo (Y1B)
Taycan Sport Turismo (Y1C)**

Concerns: **Power electronics and engine electronics (DME)**

Information: **Porsche is conducting a Service Campaign to update the power electronics and engine electronics (DME) software on affected MY2020-MY2022 Taycan vehicles.**

Action required: Re-program the power electronics and engine electronics (DME) using the PIWIS Tester with software version **40.800.010** (or higher) installed.

Affected Vehicles: Only vehicles assigned to the campaign (see also PCSS Vehicle Information)

Scope overview:



Information

Vehicles in model year 20 for which sequence 5 of WMA5 or AMB5 has not been carried out are also assigned to Scope 2.

Scope 2 must **always** be carried out for those vehicles.

Allocation	Scope of control unit programming	Action
Scope 1:	<ul style="list-style-type: none"> Programming power electronics and engine electronics (DME) 	⇒ Technical Information 'Re-programming power electronics and engine electronics (DME) - Scope 1'
Scope 2:	<ul style="list-style-type: none"> Programming power electronics and engine electronics (DME) Component protection commissioning Function release Automatic coding of all control units 	⇒ Technical Information 'Re-programming power electronics and engine electronics (DME) - Scope 2'



Information

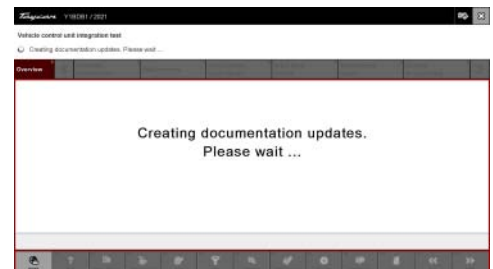
If recall campaign AMB5 must be carried out at the same time as campaign WNA5, WNA5 must be carried out as a recall update and must be charged with 0 time units.

Required tools

- Tool:
- 9900 - PIWIS Tester 3 with PIWIS Tester software version **40.800.010** (or higher) installed
 - Battery charger with a current rating of **at least 90 A**, e.g. **VAS 5908 battery charger 90A**

Re-programming power electronics and engine electronics (DME) - Scope 1

- Work Procedure: 1 The basic procedure for control unit programming is described in the Workshop Manual ⇒ *Workshop Manual 'Basic instructions and procedure for control unit programming using the PIWIS Tester'*.
- 2 It is **not** necessary to create a Vehicle Analysis Log (VAL) for the campaign.
- 3 The Vehicle Control Unit Integration Test is started automatically after the backup documentation process. Alternatively, the system test can also be started manually by pressing **•F3** ⇒ *Backup documentation*.



Backup documentation

- After the test has ended, the overview shows the update of the power electronics unit and the DME ⇒ *Programming required*.



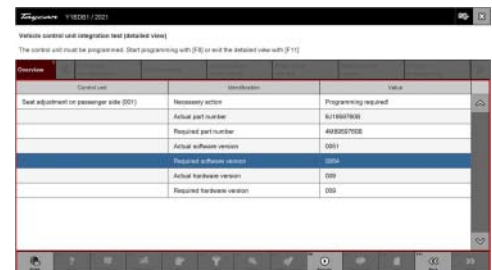
Programming required

- Click on the affected control unit to view further details and start programming . The step-by-step instructions then start ⇒ *Detailed view of integration test - software version*.



Information

Programming takes approx. 10 minutes to complete.



Detailed view of integration test - software version

- When programming is complete, backup documentation including the Vehicle Control Unit Integration Test is performed again. All affected control units should now be successfully re-programmed or checked in the control unit overview and with the status ⇒ *Vehicle integration test complete*.



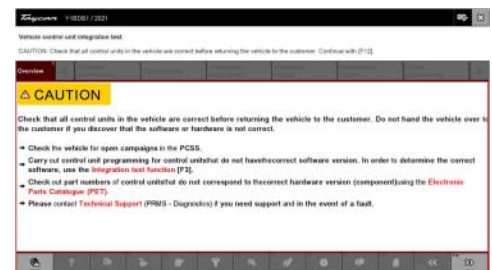
Vehicle integration test complete



Information

The vehicle must not be handed back to the customer until all control units have been checked and the system is thus compliant ⇒ *Conformity of the vehicle system*

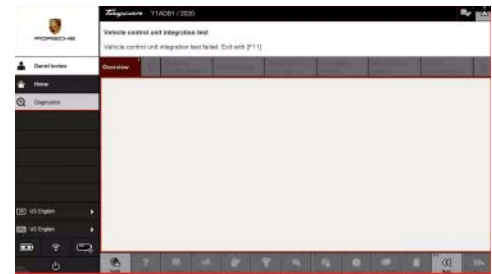
- In the event of a fault - Performance of the integration test



Conformity of the vehicle system

If the integration test fails, this is displayed as a result
⇒ *Vehicle control unit integration test failed*. Then complete the following steps:

- 7.1 In the Additional menu (F7), execute the "Maintenance of vehicle data with PIWIS ONLINE" function and write the current vehicle data record from the online system into the vehicle.
- 7.2 Carry out the integration test again.
- 7.3 In the event of a further fault, contact Technical Support.



Vehicle control unit integration test failed

- 8 Read out all **fault memories**, process and delete existing faults if necessary.



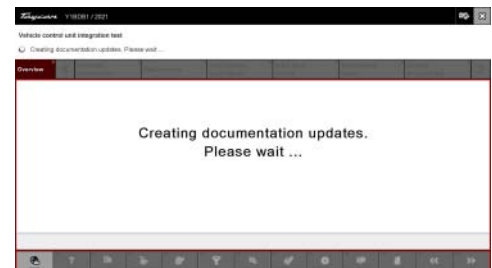
Information

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.

- 9 Manually retract the rear spoiler, which extended automatically during programming.
- 10 Exit the diagnostic application. Switch off ignition. Disconnect the Tester from the vehicle.
- 11 Switch off and disconnect the battery charger.
- 12 Enter the campaign in the Guarantee and Maintenance booklet.
For warranty processing, see ⇒ *Technical Information 'Warranty processing'*.

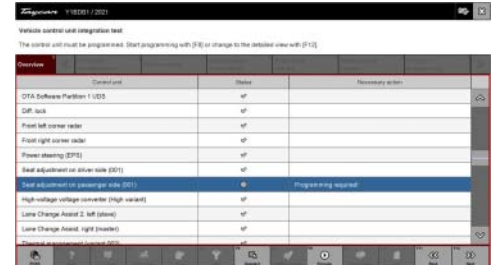
Re-programming power electronics and engine electronics (DME) - Scope 2

- Work Procedure: 1 The basic procedure for control unit programming is described in the Workshop Manual ⇒ *Workshop Manual 'Basic instructions and procedure for control unit programming using the PIWIS Tester'*.
- 2 It is **not** necessary to create a Vehicle Analysis Log (VAL) for the campaign.
 - 3 The Vehicle Control Unit Integration Test is started automatically after the backup documentation process. Alternatively, the system test can also be started manually by pressing •F3" ⇒ *Backup documentation*.



Backup documentation

- After the test has ended, the overview shows the update of the power electronics unit and the DME ⇒ *Programming required*.



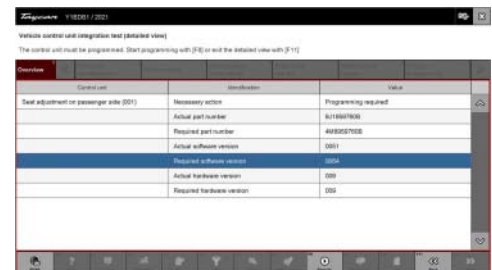
Programming required

- Click on the affected control unit to view further details and start programming . The step-by-step instructions then start ⇒ *Detailed view of integration test - software version*.



Information

Programming takes approx. 10 minutes to complete.



Detailed view of integration test - software version

- When programming is complete, backup documentation including the Vehicle Control Unit Integration Test is performed again. All affected control units should now be successfully re-programmed or checked in the control unit overview and with the status ⇒ *Vehicle integration test complete*.



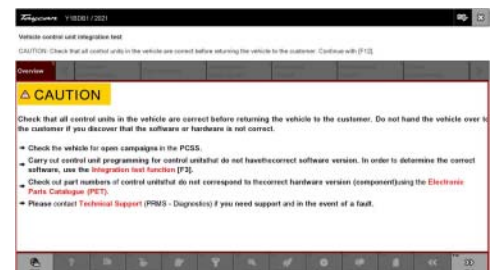
Vehicle integration test complete



Information

The vehicle must not be handed back to the customer until all control units have been checked and the system is thus compliant ⇒ *Compliance of the vehicle system*

- In the event of a fault - Performance of the integration test



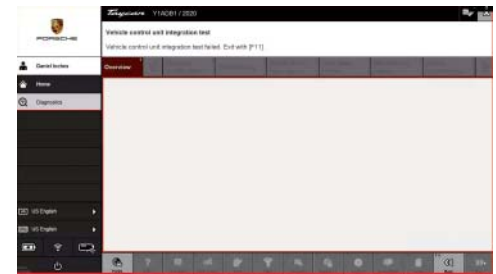
Compliance of the vehicle system

If the integration test fails, this is displayed as a result ⇒ *Vehicle control unit integration test failed*. Then complete the following steps:

7.1 In the Additional menu (F7), execute the "Maintenance of vehicle data with PIWIS ONLINE" function and write the current vehicle data record from the online system into the vehicle.

7.2 Carry out the integration test again.

7.3 In the event of a further fault, contact Technical Support.



Vehicle control unit integration test failed

- 8 Switch back to the **Overview** menu.
- 9 In the **Overview**, press •F7" to switch to the **Additional menu**.
- 10 Select **Component protection commissioning**.
 - 10.1 Read and follow the information and instructions on the Tester.
 - 10.2 Teach component protection according to menu guidance.
 - 10.3 Select the control unit for **assistance systems (zFAS)** in the guided procedure.
 - 10.4 The tester displays the message: Component protection taught.
- 11 Select **Function release**.
 - 11.1 Select **Update functions**. Press •F12" to continue.
 - 11.2 Read and follow the instructions and indications on the tester.
 - 11.3 Execute the activation menu-guided.
- 12 Select all control units in the **Overview**.
- 13 Performing automatic coding of **all** control units
- 14 Select all control units in the **Overview**.
- 15 Read out all **fault memories**, process and delete existing faults if necessary.



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.

- 16 Manually retract the rear spoiler, which extended automatically during programming.

- 17 Exit the diagnostic application. Switch off ignition. Disconnect the Tester from the vehicle.
- 18 Switch off and disconnect the battery charger.
- 19 Enter the campaign in the Guarantee and Maintenance booklet.

Software overview

Taycan (Y1A):

Type	Model year	Control unit	Software part number	Software version
Taycan (RWD)	2020 - 2021	DME	9J1909101DC	0015
		Power electronics (rear axle)	9J1907121BE	0013
Taycan (4S)	2020 - 2021	DME	9J1909101DD	0015
		Power electronics (rear axle)	9J1907121BE	0013
		Power electronics (front axle)	9J1907124AK	0013
Taycan (Turbo)	2020 - 2021	DME	9J1909101DE	0015
		Power electronics (rear axle)	9J1907121BF	0013
		Power electronics (front axle)	9J1907124AK	0013
Taycan (Turbo S)	2020 - 2021	DME	9J1909101DF	0015
		Power electronics (rear axle)	9J1907121BF	0013
		Power electronics (front axle)	9J1907122AD	0013
Taycan (RWD)	2022	DME	9J1909101CL	0020
		Power electronics (rear axle)	9J1907121BG	0021
Taycan (4S)	2022	DME	9J1909101CH	0020
		Power electronics (rear axle)	9J1907121BG	0021
		Power electronics (front axle)	9J1907124AM	0021
Taycan (Turbo)	2022	DME	9J1909101CJ	0020
		Power electronics (rear axle)	9J1907121BH	0021
		Power electronics (front axle)	9J1907124AM	0021
Taycan (Turbo S)	2022	DME	9J1909101CK	0020
		Power electronics (rear axle)	9J1907121BH	0021
		Power electronics (front axle)	9J1907122AE	0021

Taycan
(Y1B/Y1C):

Type	Model year	Control unit	Software part number	Software version
Taycan (Basic 4)	2020 - 2021	DME	9J0909101AN	0015
		Power electronics (rear axle)	9J1907121BE	0013
		Power electronics (front axle)	9J1907124AK	0013
Taycan (Basic 4S)	2020 - 2021	DME	9J0909101AL	0015
		Power electronics (rear axle)	9J1907121BE	0013
		Power electronics (front axle)	9J1907124AK	0013
Taycan (Turbo)	2020 - 2021	DME	9J0909101AM	0015
		Power electronics (rear axle)	9J1907121BF	0013
		Power electronics (front axle)	9J1907124AK	0013
Taycan (Turbo S)	2020 - 2021	DME	9J0909101AP	0015
		Power electronics (rear axle)	9J1907121BF	0013
		Power electronics (front axle)	9J1907122AD	0013
Taycan (Basic 4)	2022	DME	9J0909101AB	0020
		Power electronics (rear axle)	9J1907121BG	0021
		Power electronics (front axle)	9J1907124AM	0021
Taycan (Basic 4S)	2022	DME	9J0909101S	0020
		Power electronics (rear axle)	9J1907121BG	0021
		Power electronics (front axle)	9J1907124AM	0021
Taycan (Turbo)	2022	DME	9J0909101T	0020
		Power electronics (rear axle)	9J1907121BH	0021
		Power electronics (front axle)	9J1907124AM	0021
Taycan (Turbo S)	2022	DME	9J0909101AA	0020
		Power electronics (rear axle)	9J1907121BH	0021
		Power electronics (front axle)	9J1907122AE	0021
Taycan (GTS)	2022	DME	9J1909101BM	0020
		Power electronics (rear axle)	9J1907121BH	0021
		Power electronics (front axle)	9J1907124AM	0021

Warranty processing

Scope 1: **Re-programming power electronics and engine electronics (DME)**

Labor time:	
Re-programming power electronics and engine electronics (DME)	Labor time: 72 TU
Includes:	<ul style="list-style-type: none"> Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester Retract the rear spoiler manually Reading out and erasing fault memories Carry out the integration test
⇒ Damage code WNA5 066 000 1	

Scope 2: **Re-programming power electronics and engine electronics (DME)**

Labor time:	
Re-programming power electronics and engine electronics (DME)	Labor time: 114 TU
Includes:	<ul style="list-style-type: none"> Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester Retract the rear spoiler manually Carry out the integration test Component protection commissioning Function release Performing automatic coding of all control units Reading out and erasing fault memories
⇒ Damage code WNA5 066 000 1	

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