

## **Technical Information**

Service

177/20 ENU 9125

9

# Complaint - 12 Volt Battery Discharging Due to Closed-Circuit Current: Re-Program Connect Control Unit (177/20)

Model Line: 911 Carrera (992)

Model Year: As of 2020

Concerns: Connect control unit (external communication control unit)

Symptom: The Porsche Vehicle Tracking System (PVTS) is activated. After standing idle for three to four days, the

vehicle electrical system battery is completely discharged by the closed-circuit current and the vehicle

cannot be started.

Cause: A Porsche Vehicle Tracking System (PVTS) alarm triggered in connection with lack of reception (in an

underground parking lot, for example) can cause this fault. The Connect control unit (external commu-

nication control unit) tries to send the alarm message until the battery is fully discharged.

Remedial Action:

In the event of a customer complaint, check the software version and reprogram the Connect control unit (external communication control unit) with the appropriate programming code.



#### Information

The total time required for control unit programming is **approx**. **15 minutes**.

### Required tools and parts



#### Information

The 911 (992) may be equipped with a lithium-ion 12V battery (I-no. J2A).

**Lithium starter batteries** must only be charged using a **suitable battery charger** that has a current and voltage-controlled charge map.

For further information about the battery chargers to be used, see *⇒ Workshop Manual '270689 Charging battery/vehicle electrical system'*.

Tools:

- 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
- 9900 PIWIS Tester 3 with PIWIS Tester software version 39.900.040 (or higher) installed

Parts Info: Parts required (if necessary):

Part No.	Designation	Qty.
	- Use	
9Y0915107HY	⇒ Battery (I-no. J2A)	1 ea.*
	Vehicle electrical system	
9A7915989A	⇒ Battery for emergency power operation	1 ea.*
	(I-no. IV2)	
	Connect control unit	
9A7907729	⇒ Battery cover	1 ea.*
	Connect control unit	

<sup>\*</sup> Replace parts only if necessary

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

Work Procedure: 1 Charging vehicle electrical system battery, see ⇒ Workshop Manual '270689 Charging battery/vehicle electrical system'.

- Once the vehicle electrical system battery is charged, continue with step 2.
- If the battery cannot be charged, follow TI 31/20 section Charging, see ⇒ Technical Information '270689 Information Handling 12 Volt Lithium-Ion Battery (Vehicle Electrical System Battery) (31/20)'. If a defective vehicle electrical system battery is subsequently detected, replace the vehicle electrical system battery, see ⇒ Workshop Manual '270655 Replacing battery/vehicle electrical system'.
- 2 Carry out general preliminary work for control unit programming as described in ⇒ Workshop Manual '9X00IN Basic instructions and procedure for control unit programming section on "Preliminary work".

177/20 ENU

9125

- Read out the software version.
  - 3.1 Select 'Connect' control unit.
  - 3.2 Select the **"Extended identifications"** tab.
  - 3.3 Check the software version.
    - If the software version is older than '0412', re-program the Connect control unit.
    - If the software version is already '0412', end of action required.

### Reprogramming the Connect control unit (external communication control unit)



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 and coding.
  - 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 section on "Programming".

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

Required PIWIS Tester software version:	<b>39.900.040</b> (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:	A4V7H
Programming sequence:	Read and follow the <b>information and instructions on the PIWIS Tester</b> during the guided programming sequence.  During the programming sequence, the Connect control unit (external communication control unit) is <b>re-programmed</b> and then automatically <b>re-coded</b> . <b>Do not interrupt programming</b> .
Programming time (approx.):	15 minutes

Software version programmed during this campaign:	O412 Following control unit programming, the software version can be read out of the Connect control unit in the ⇒ 'Extended identification' menu using the PIWIS Tester.
Procedure in the event of error messages appearing during the programming sequence:	⇒ Workshop Manual '9X00IN Basic instructions and procedure for control unit programming - section on "Fault finding".
Procedure in the event of abnormal termination of control unit programming:	Repeat control unit programming by restarting programming.

2 Check the external communication control unit battery and replace battery if necessary, see ⇒ Workshop Manual '912501 Checking external communication control unit battery'.

### Concluding work

Work Procedure: 1

Carry out general subsequent work for control unit programming as described in  $\Rightarrow$  *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Subsequent work"'*.

### Invoicing

Invoicing:

Depending on the required scope of the actions to be taken for documentation and billing in the event of warranty, indicate the following labor operations, PQIS coding and part numbers in the warranty application:

Depending on the required scope of the measures to be carried out, in a warranty case the appropriate labor operations, PQIS coding and part numbers must be selected and indicated in the warranty application:

APOS	Labor operation	I No.
91250140	Checking external communication control unit (checking software)	
91252540	Programming external communication control unit	
91252553	Programming external communication control unit battery (checking battery)	
91255503	Replacing external communication control unit battery	
27065500	Replacing vehicle electrical system battery	

# **Technical Information**

Service

177/20 ENU 9125

9

### PQIS coding:

Location (FES5)	91250	External communication control unit
Damage type (SA4)	1614	Function not as specified

Parts Info: Parts required (if necessary):

Part No.	Designation	Qty.
	- Use	
9Y0915107HY	Battery (I-no. J2A)	1 ea.*
	Vehicle electrical system	
9A7915989A	Battery for emergency power operation (I-no.	1 ea.*
	IV2)	
	Connect control unit	
9A7907729	Battery cover	1 ea.*
	Connect control unit	

<sup>\*</sup> Replace parts only if necessary

### References:

6000011712

- ⇒ Technical Information '9X00IN Information Handling 12-volt lithium-ion batteries (vehicle electrical system battery) (31/20)'
- ⇒ Workshop Manual '270689 Charging battery/vehicle electrical system'
- ⇒ Workshop Manual '270655 Replacing battery/vehicle electrical system'
- ⇒ Workshop Manual '912555 Replacing battery on control unit for external communication'
- ⇒ Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'

Important Notice: Technical Bulletins issued by Porsche Cars North America, Inc. are intended only for use by professional automotive technicians who have attended Porsche service training courses. They are written to inform those technicians of conditions that may occur on some Porsche vehicles, or to provide information that could assist in the proper servicing of a vehicle. Porsche special tools may be necessary in order to perform certain operations identified in these bulletins. Use of tools and procedures other than those Porsche recommends in these bulletins may be detrimental to the safe operation of your vehicle, and may endanger the people working on it. Properly trained Porsche technicians have the equipment, tools, safety instructions, and know-how to do the job properly and safely. Part numbers listed in these bulletins are for reference only. The work procedures updated electronically in the Porsche PIWIS diagnostic and testing device take precedence and, in the event of a discrepancy, the work procedures in the PIWIS Tester are the ones that must be followed.

© 2021 Porsche Cars North America, Inc.