

PDK Transmission: Fault Codes P172D, P17F1 P17F2, P18CA, P18CB (65/13)

Revision: Revision 1: December 11, 2013 amends 991 Grp 3, #65/13 dated November 19, 2013 to reflect that the correct version of PIWIS software is 13.100.

Model Year: **As of 2013 up to 2014**

Vehicle Type: **911 Carrera (991)/911 Carrera S (991)
911 Carrera 4 (991)/911 Carrera 4S (991)**

Equipment: PDK transmission (I-no. 250)

Concerns: **PDK transmission**

Information: There is a possibility of moisture condensing in the vent line of the PDK transmission under certain environmental influences and getting into the inside of the PDK transmission through the ventilation connections.

The transmission oil/water emulsion created as a result of this is deposited on the inner contacts of the multiple plug connection for the PDK transmission and causes electric shunt circuits there. If this happens, the PDK transmission can malfunction, e.g. switch to the reduced driving program (limp-home mode).

The fault type can be recognized by the following symptoms:

- Transmission warning message (yellow/red) in the instrument cluster
- At least one of the following fault memory entries or fault entry combinations is stored in the fault memory of the PDK control unit:
 - P172D – Transmission temperature sensor gradient error
 - P17F1 – Porsche Doppelkupplung (PDK) above limit value
 - P17F2 – Porsche Doppelkupplung (PDK) above limit value
 - P18CA – Hot mode 1 GQS
 - P18CB – Hot mode 2 GQS

Affected Vehicles:

Vehicle type	Part No. of PDK transmission	Transmission type	Up to transmission number
911 Carrera/ 911 Carrera S without regulated rear-differential lock	9G1.300.011.06	CG105	1012331

911 Carrera/ 911 Carrera S with regulated rear-differential lock (PTV Plus, I-no. 221)	9G1.300.031.07	CG105	3022839
911 Carrera 4/ 911 Carrera 4S without regulated rear-differential lock	9G1.300.011.36	CG135	1003920
911 Carrera 4/ 911 Carrera 4S with regulated rear-differential lock (PTV Plus, I-no. 221)	9G1.300.031.37	CG135	3011278
Vehicles manufactured between:	24.01.2013 – 08.08.2013		



Information

If the fault type described here occurs on a vehicle with a PDK transmission **outside** of the specified transmission number range, the fault type must first be corrected in accordance with the **Guided Fault Finding (GFF)** instructions on the PIWIS Tester.

Action
Required:

If this fault type occurs on a PDK transmission with a transmission number within the transmission number range specified above, the following measures must be carried out one after the other:

Remedial action 1:

- Heat the contacts in the connector housing for the electric multiple plug connection on the PDK transmission from the outside using a hot-air blower so that the condensation on the inner contacts (which are not visible) evaporates.
- Leave the PDK transmission for at least 4 hours (e.g. overnight) with the ventilation connection for the clutch chamber open so that any residual condensation can escape from the PDK transmission through the ventilation connection.

Remedial action 2:

- Replace the vent line installed on the PDK transmission with two short breather hoses.

Remedial action 3:

- Re-program PDK control unit.

Tools:

- Hot-air blower, e.g. **V.A.G. 1416 - hot-air blower** or **Nr.155-1 Pos.2 - hot-air blower**

- Temperature gauge, e.g. **Nr.164 Pos.1 - temperature gauge** or **VAs 6886 - temperature gauge**
- **Nr.72-2 Pos.1 - Assembly pliers**

Remedial action 1: Removing condensation on multiple plug connection for PDK transmission

Work
Procedure:

Preliminary work



Information

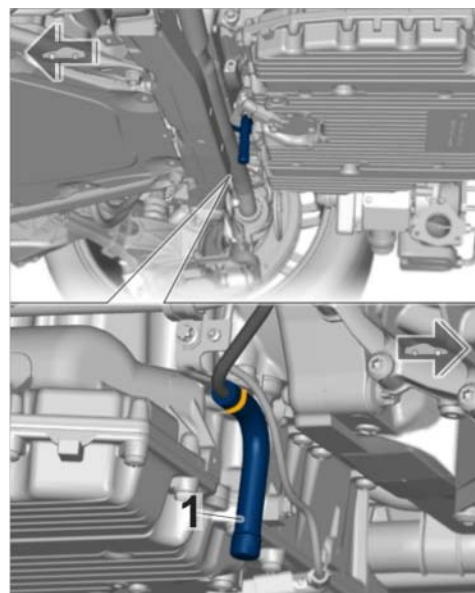
The breather hose (90° angled pipe) ⇒ *Breather hose (90° angled pipe) -1-* fitted to the lower end of the vent line for the PDK transmission must be re-used when replacing the vent line (Remedial action 2).

It is important therefore to make sure that the breather hose ⇒ *Breather hose (90° angled pipe) -1-* is not damaged when removing the PDK transmission.

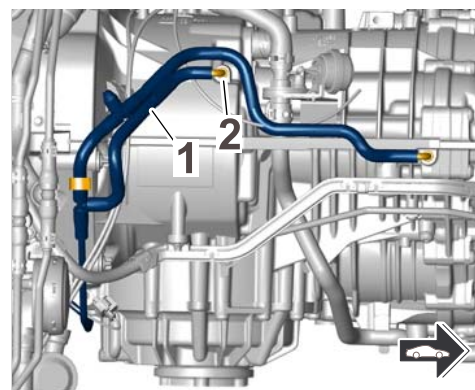
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1.1 Remove PDK transmission ⇒ *Workshop Manual '373419 Removing and installing Porsche Doppelkupplung (PDK)'*.

1.2 Disconnect vent line ⇒ *Disconnecting vent line -1-* for the PDK transmission at the connection (angled pipe) ⇒ *Disconnecting vent line -2-* for the clutch chamber. This is necessary in order to remove all the condensation.



Breather hose (90° angled pipe)

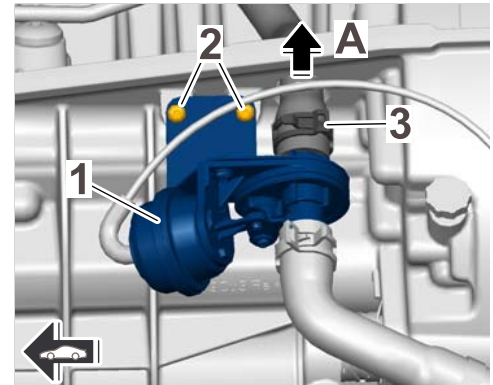


Disconnecting vent line

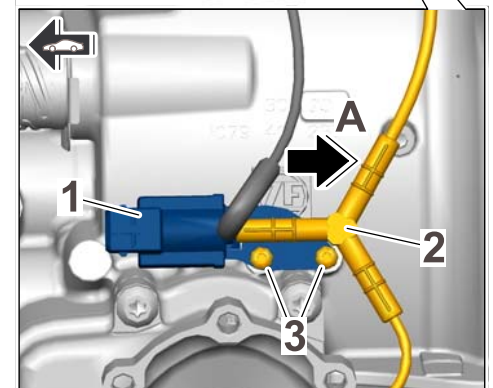
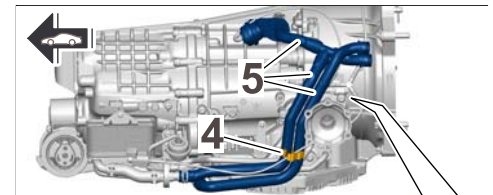
**Information**

To prevent damage to peripheral components on the PDK transmission as a result of excessive heat, the vacuum and coolant lines must be partially removed and set aside in the next steps.

- 1.3 Unscrew fastening screws ⇒ *Loosening disc valve -2-* on the retaining bracket for the upper disc valve ⇒ *Loosening disc valve -1-*.
- 1.4 Loosen spring band clamp ⇒ *Loosening disc valve -3-* and pull off the coolant hose at the upper disc valve ⇒ *Loosening disc valve -A-*.

*Loosening disc valve*

- 1.5 Remove Y-shaped distributor hose ⇒ *Setting coolant hoses aside -2-* at the electric change-over valve ⇒ *Setting coolant hoses aside -1-* for the clutch fluid heat exchanger ⇒ *Setting coolant hoses aside -A-* and set the vacuum lines aside.
- 1.6 Unscrew fastening screws ⇒ *Setting coolant hoses aside -3-* on the retaining bracket for the electric change-over valve ⇒ *Setting coolant hoses aside -1-*.
- 1.7 Open bracket for coolant hoses ⇒ *Setting coolant hoses aside -4-* and remove coolant hoses.
- 1.8 Move coolant hoses ⇒ *Setting coolant hoses aside -5-* together with the disc valve and electric change-over valve aside as far as required so that the top multiple plug connection on the PDK transmission is accessible.

*Setting coolant hoses aside*

Tie the coolant hoses to the side with a tie-wrap if necessary.

2 Remove condensation on multiple plug connection for PDK transmission

To remove condensation adhering to the inner contacts (which are not visible) of the multiple plug connection for the PDK transmission, the contacts in the connector housing must be heated from the outside using a hot-air blower.

The application of heat to the outer contacts removes (evaporates) the condensation on the inner contacts (which are not visible) of the multiple plug connection.

After heating the connector, also leave the transmission to dry off for **at least 4 hours** (e.g. overnight) with the **ventilation connection for the clutch chamber open** to make sure that all condensation is removed.

NOTICE

Excessive heat applied

- Risk of damage to components
- ⇒ Observe temperature specifications.
- ⇒ Monitor temperatures.



Information

To prevent damage to the connector housing as a result of excessive heat as well as **irreparable damage to the PDK transmission**, the specifications listed below must be strictly observed.

The temperature at the connector housing must also be checked at regular intervals using a temperature gauge.

Heat multiple plug connection for PDK transmission	Values
• Air flow temperature:	284° F (140° C) - 338° F (170° C)
• Duration of flow:	20 minutes
• Distance between hot-air blower and multiple plug connection:	15 – 20 mm
• Required temperature at connector housing (effectiveness of remedial action)	176° F (80° C) - 230° F (110° C)
• Maximum temperature at connector housing:	248° F (120° C)
• Setting on hot-air blower V.A.G. 1416 - hot-air blower :	Setting 2.5 *
• Setting on hot-air blower Nr.155-1 Pos.2 - hot-air blower :	Setting 1.5 - 2 * Blower setting 3 *

* The specified settings are only for the hot-air blower mentioned here.

If a **different hot-air blower** is used, please read the operating instructions for the particular hot-air blower to determine the air flow temperature settings to be used.

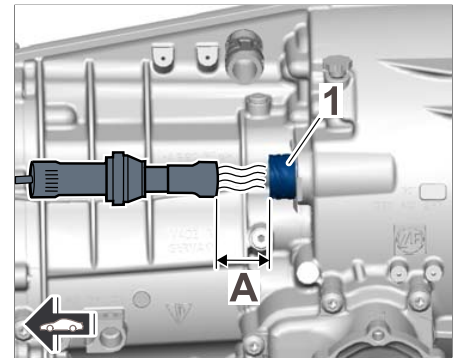
2.1 Set the air flow temperature on the hot-air blower and switch on the blower.

- 2.2 Position the hot-air blower at a distance of **15 - 20 mm** (\Rightarrow *Heating connector contacts -dimension A-*) in front of the top PDK multiple plug connection \Rightarrow *Heating connector contacts -1-* and hold it at this position.
Apply hot air to the contacts in the top PDK multiple plug connection **continuously** for **20 minutes** in accordance with the specifications in the table.

Check the temperature at the connector housing at regular intervals (first after 5 minutes, then every 5 minutes afterwards) using a temperature gauge.
To do this, remove the hot-air blower briefly (for max. 30 seconds) from the multiple plug connection to ensure that the air flow does not result in an incorrect temperature measurement.

The **maximum** temperature of **248° F (120° C)** at the connector housing must **not be exceeded**.

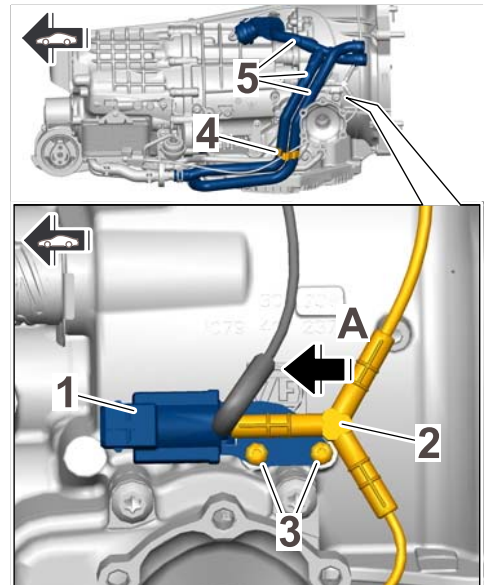
- 2.3 Switch off the hot-air blower and let it cool down.
2.4 Leave the PDK transmission to dry off for at least **4 hours** (e.g. overnight) with the ventilation connection for the clutch chamber open to ensure that all condensation is removed.



Heating connector contacts

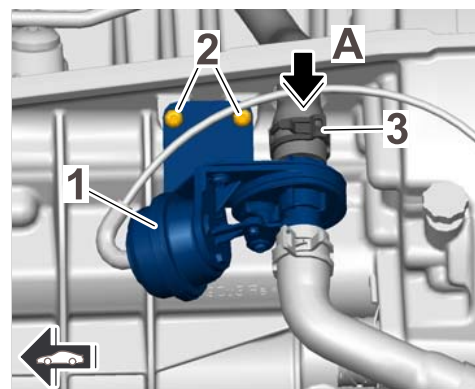
3 Subsequent work

- 3.1 Position coolant hoses \Rightarrow *Securing coolant hoses -5-* together with the upper disc valve and electric change-over valve for the clutch fluid heat exchanger on the PDK transmission.
3.2 Position coolant hoses \Rightarrow *Securing coolant hoses -5-* in the bracket \Rightarrow *Securing coolant hoses -4-* and close the bracket.
3.3 Secure retaining bracket for the electric change-over valve \Rightarrow *Securing coolant hoses -1-* on the PDK transmission with the fastening screws \Rightarrow *Securing coolant hoses -3-*.
3.4 Plug in Y-shaped distributor hose \Rightarrow *Securing coolant hoses -2-* on the electric change-over valve \Rightarrow *Securing coolant hoses -A-*.



Securing coolant hoses

- 3.5 Slide coolant hose onto the upper disc valve ⇒ *Fitting disc valve -1-* (⇒ *Fitting disc valve -A-*) and secure with the spring band clamp ⇒ *Fitting disc valve -3-*.
- 3.6 Position retaining bracket for the upper disc valve ⇒ *Fitting disc valve -1-* and secure it to the PDK transmission with the fastening screws ⇒ *Fitting disc valve -2-*.
- 3.7 Then, replace the vent line installed on the PDK transmission with two short breather hoses and re-program the PDK control unit. For a description of the procedure, see the following Remedial Actions 2 and 3.



Fitting disc valve

Working Time: Use for Remedial Action 1

97814950 – Reworking wire harness for PDK transmission

Labor time: **60 TU**

Preparatory work: PDK transmission removed

Without: Reading out fault memory
Creating Vehicle Analysis Log (VAL)

Invoicing: ⇒ **Damage code 3746 097 000 1**

Documentation: Document the work in the related PQIS job by specifying **37460** (Vent line) as the fault location and **9735** (Repair in accordance with PAG instructions) as the damage category.

References: ⇒ *Workshop Manual '373419 Removing and installing Porsche Doppelkupplung (PDK)'*

Remedial action 2: Replacing vent line for PDK transmission

Parts Info:	Part No.	Designation	Qty.
		- Location	
	000.043.110.30	⇒ PDK vent repair kit	1 ea.
	Contains:		
	9G1.321.011.03	Breather hose for PDK transmission	1 ea.*
	999.385.009.01	Hexagon round-head bolt, M12 x 1.5 x 55 - Transmission to engine flange	6 ea.

999.072.866.01	Hexagon round-head bolt, M12 x 1.5 x 95 – Rear-axle cross member to body	4 ea.
999.084.648.01	Hexagon nut, M10 – Transmission side member to body	2 ea.
900.385.164.01	Hexagon round-head bolt, M12 x 1.5 x 140 – Transmission side member to transmission	1 ea.
999.086.009.02	Torx nut, M12 x 1.5 – Transmission side member to transmission	1 ea.
999.072.869.01	Hexagon-head bolt, M12 x 1.5 x 40 – Diagonal brace to rear-axle cross member	2 ea.
999.073.443.01	Combination screw, M12 x 1.5 x 40 – Diagonal brace to body	2 ea.
997.111.240.30	Clip – Tailpipe on exhaust system	2 ea.

Also required:

000.043.301.47	⇒ Antifreeze (1-litre container)	approx. 0.5 litres per vehicle
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Also required for vehicles without PDCC:

999.084.123.09	⇒ Hexagon nut, M10 – Connecting link to anti-roll bar	2 ea.
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Also required for vehicles with PDCC (I-no. 031, 352):

999.084.445.01	⇒ Hexagon nut, M12 x 1.5 – PDCC actuator to anti-roll bar	2 ea.
000.043.206.56	⇒ Pentosin CHF 202 (1-litre container)	approx. 0.5 litres per vehicle

* During this measure, two short breather hoses will be fitted on the PDK transmission instead of the vent line. One of these breather hoses is an existing part of the vent line to be replaced and must be re-used following removal.

The repair kit therefore only contains **one** new breather hose.

Tools:

- **Nr.21 - Disassembly tool**
- Workshop lift, e.g. **WE1222 - transmission and unit jack Junior Jack 0.5** together with **VAS 6867 - mounting plate**

- **Nr.89 Pos.5 - Torque screwdriver** (1.5–3 Nm/1–2 ftlb.)
- **Nr.90 Pos.2 - Torque wrench** (4–20 Nm/3–15 ftlb.)
- **Nr.90 Pos.3 - Torque wrench** (10–60 Nm/7.5–44 ftlb.)
- **Nr.90 Pos.4 - Torque wrench** (25–130 Nm (19–96 ftlb.)
- **Nr.88 - Torque angle torque wrench** or **9768 - Electronic torque wrench, 2-100 Nm/1.5-74 ftlb.**
- **9696 - Filling device**

Work Procedure:

Remedial Action 1 is the Precondition

- PDK transmission removed (already removed during Remedial action 1 – Remove condensation on multiple plug connection for PDK transmission ⇒ *Technical Information '3734 PDK transmission: Fault codes P172D, P17F1 P17F2, P18CA, P18CB (65/13)*)

Replace vent line for PDK transmission with two short breather hoses

1 Remove vent line.

- 1.1 Open line bracket ⇒ *Removing vent line -2-* and remove vent line ⇒ *Removing vent line -1-*.



Information

The line brackets for the original vent line are no longer required after conversion and have to be removed.

- 1.2 Unclip line bracket ⇒ *Removing vent line -2-* from the PDK transmission and remove it.

- 1.3 Pull vent line ⇒ *Removing vent line -1-* off ventilation connection for gear wheel set ⇒ *Removing vent line -3-* and off ventilation connection for clutch chamber ⇒ *Removing vent line -4-*.

- 1.4 Remove vent line ⇒ *Removing vent line -1-*.

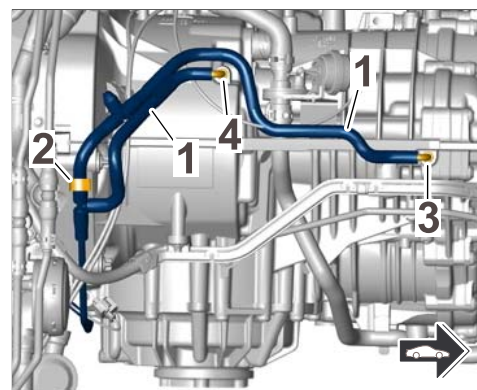


Information

The breather hose fitted at the lower end of the vent line (90° angled pipe) must be re-used as part of this procedure.

Make sure that the vent hose is not damaged during removal.

2 Disconnect breather hose from vent line.

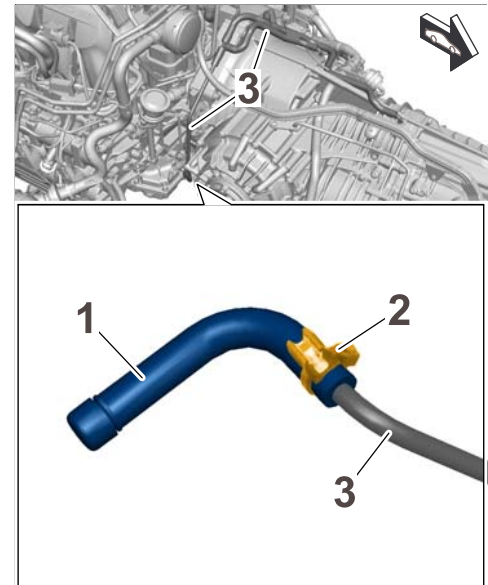


Removing vent line

**Information**

The line brackets for the original vent line are no longer required after conversion and have to be removed.

- 2.1 Carefully cut tie-wrap on the line bracket ⇒ *Removing breather hose -2-* and remove line bracket.
- 2.2 Carefully pull breather hose (90° angled pipe) ⇒ *Removing breather hose -1-* off the vent line ⇒ *Removing breather hose -3-* and store it safely.



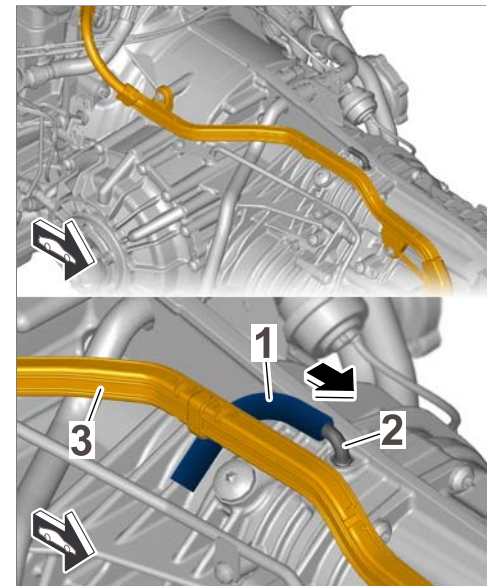
Removing breather hose

- 3 Fit breather hose for gear wheel set.

**Information**

The cable duct remains on the vehicle when the PDK transmission is removed.
As an example, the figure shows the required installation position of the breather hose after fitting the cable duct while re-installing the PDK transmission.

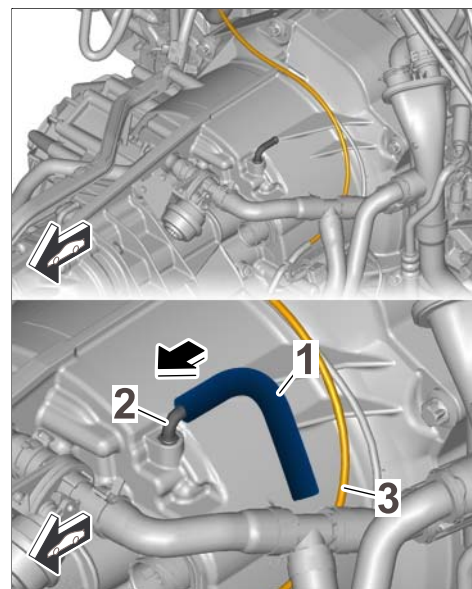
- 3.1 Position the breather hose (90° angled pipe) ⇒ *Installing breather hose for gear wheel set -1-* you removed previously from the vent line on the PDK transmission as shown in figure ⇒ *Installing breather hose for gear wheel set*. The breather hose must point to the **lower right in direction of travel**.
- 3.2 Slide the breather hose ⇒ *Installing breather hose for gear wheel set -1-* as far as it will go onto the ventilation connection for the gear wheel set ⇒ *Installing breather hose for gear wheel set -2-* (⇒ *Installing breather hose*



Installing breather hose for gear wheel set

for gear wheel set -**arrow**-). When re-installing the PDK transmission, make sure that the breather hose ⇒ *Installing breather hose for gear wheel set -1-* is routed under the cable duct ⇒ *Installing breather hose for gear wheel set -3-*.

- 4 Fit breather hose for clutch chamber.
 - 4.1 Position new breather hose ⇒ *Installing breather hose for clutch chamber -1-* from the repair kit, Part No. 000.043.110.30, on the PDK transmission as shown in figure ⇒ *Installing breather hose for clutch chamber*. The breather hose must point to the **lower left in direction of travel** and must be routed under the vacuum line ⇒ *Installing breather hose for clutch chamber -3-*. To do this, carefully press the vacuum line to one side.
 - 4.2 Slide the breather hose ⇒ *Installing breather hose for clutch chamber -1-* as far as it will go onto the ventilation connection for the clutch chamber ⇒ *Installing breather hose for clutch chamber -2-* (⇒ *Installing breather hose for clutch chamber -arrow-*).



Installing breather hose for clutch chamber

Subsequent work

- 1 Install PDK transmission ⇒ *Workshop Manual '373419 Removing and installing Porsche Doppelkupplung (PDK)'*.
- 2 Check engine coolant level and add coolant if necessary ⇒ *Workshop Manual '190101 Checking the cooling system'*.
- 3 Install cover for rear underbody ⇒ *Workshop Manual '519419 Removing and installing cover for rear underbody'*.

Then, carry out Remedial action 3 and re-program the PDK control unit.

Remedial action 3: Re-programming PDK control unit



Information

The procedure described here is based on the PIWIS Tester II software version **13.100**.

The PIWIS tester instructions take precedence and in the event of a discrepancy these are the instructions that must be followed. Deviations may occur with later software versions, for example.

- Tools:
- **9818 - PIWIS Tester II** with software version **13.100** (or higher) installed

- **Battery Charger/Power Supply** - Suitable for AGM Type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V. Refer to Equipment Information EQ-1105.

Work

Procedure:

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 battery charger or power supply, suitable for AGM type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V to the vehicle.

NOTICE

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

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

NOTICE

Control unit programming will be aborted if the vehicle key is not recognized

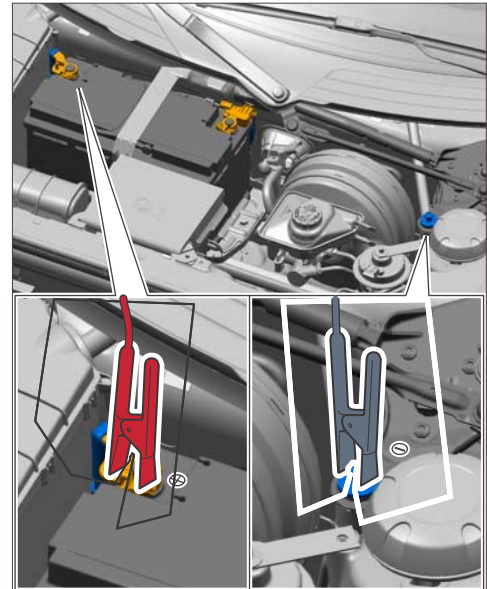
- If the vehicle key is not recognized in vehicles with Porsche Entry & Drive, programming cannot be started or will be interrupted.
- ⇒ Switch on the ignition using the original vehicle key. To do this, replace the original vehicle key in the ignition lock with the plastic key fob if it was previously removed at the start of this procedure.

**Information**

When the **PDK** control unit is programmed, the **DME** control unit is **also** re-programmed automatically.
Total programming time is approx. 12 minutes.

Preliminary work

- 1 Connect a battery charger or power supply, suitable for AGM type batteries, recommended current rating of 70A fixed voltage 13.5V to 14.5V. First connect the positive cable of the charger to the positive terminal of the battery and then connect the negative cable of the charger to the ground point for jump-lead starting ⇒ *External power supply*.



External power supply

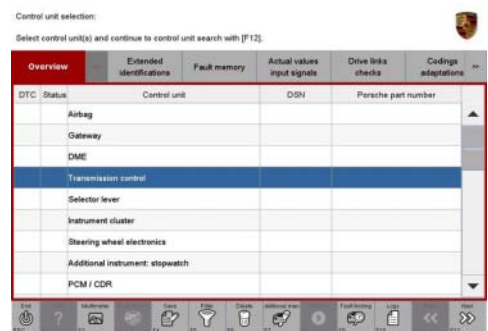
- 2 Switch on the ignition using the **original driver's key**. On vehicles with "Porsche Entry & Drive", do this by replacing the control panel in the ignition lock with the original driver's key if necessary.
- 3 **9818 - PIWIS Tester II** with software version **13.100** (or higher) installed must be connected to the vehicle communication module (VCI) via the **USB cable**. Then, connect the communication module to the vehicle and switch on the PIWIS Tester.

Re-programming PDK control unit

- 1 On the PIWIS Tester start screen, call up the ⇒ **'Diagnostics'** menu and select vehicle type ⇒ **'911' ⇒ '991'**.

The diagnostic application is then started and the control unit selection screen is populated.

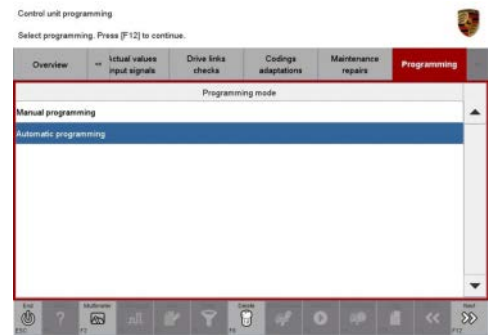
- 2 Select the control unit ⇒ **'Transmission control'** in the control unit selection screen (⇒ **"Overview"** menu) and press **•>>"** to confirm your selection.



Control unit selection - Transmission control

- 3 When the question "Create Vehicle Analysis Log (VAL)?" appears, either press **•F12"** to create a VAL or press **•F11"** if you do not want to create a VAL.

- 4 Press •>>” to acknowledge the message informing you that campaigns for the vehicle are stored in the PIWIS information system.
- 5 Once the PDK control unit has been found, select the ⇒ 'Programming' menu.
- 6 Select the ⇒ 'Automatic programming' function and press •>>” to confirm your selection ⇒ *Automatic programming*.



Automatic programming



Information

Read and follow the **information and instructions on the PIWIS Tester** during the guided programming sequence. Then press •>>” to continue.

First the **DME** control unit and then the **PDK** control unit is **programmed** using a new data record. Total programming time is **approx. 12 minutes**.

The control units are then **re-coded automatically**.

Do not interrupt programming and coding.

Once the control units have been re-coded, you will be prompted to switch the ignition off and then back on again after approx. 10 seconds.

When programming is complete, the message “Programming was completed successfully” will be displayed.

Once programming is completed successfully (message “Programming was completed successfully”), carry out the work described below.

- If programming is **interrupted** (e.g. due to a voltage drop or if communication is aborted, etc.) or if programming could **not be carried out successfully** (error message “Programming unsuccessful”), programming must be **repeated**.
- If **coding** is not carried out successfully during the guided programming sequence, the DME and PDK control units must be **re-coded again separately** once the guided programming sequence is complete. To do this, select the control units “DME” and “Transmission control” in the control unit selection screen (⇒ “Overview” menu) and press •>>” to confirm your selection. Once the control units have been found, select the “**Codings/adaptations**” menu and re-code the control units using the “**Automatic coding**” function.

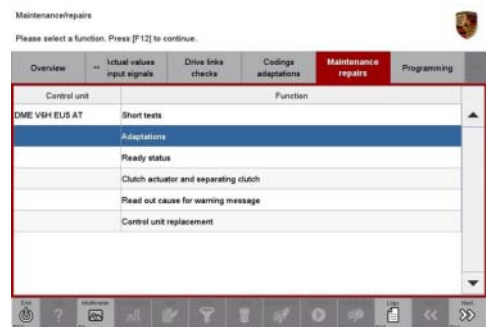
- 8 Once the control unit has been programmed and coded successfully, press •>>” to continue.
- 9 Select the ⇒ **'Overview'** menu and press •<<” to return to the control unit selection screen ⇒ *Control unit selection*.



Control unit selection

Performing throttle valve adaptation

- 1 Select the **'DME'** control unit in the control unit selection screen ('Overview' menu) and press •>>” to confirm your selection.
- 2 Once the DME control unit has been found and is displayed in the overview, select the ⇒ **'Maintenance/repairs'** menu.
- 3 Select menu item ⇒ **'Adaptations'** and press •>>” to confirm your selection ⇒ *DME - Adaptations*.



DME - Adaptations

- 4 Comply with the displayed preconditions
 - Engine off
 - Ignition on
 - Accelerator pedal not pressed
 - Parking brake on
 and press •>>” to confirm.

- 5 Select the ⇒ **'Throttle valve'** function so that the corresponding text line turns blue and press •F8" to start throttle valve adaptation ⇒ *Throttle valve adaptation*.



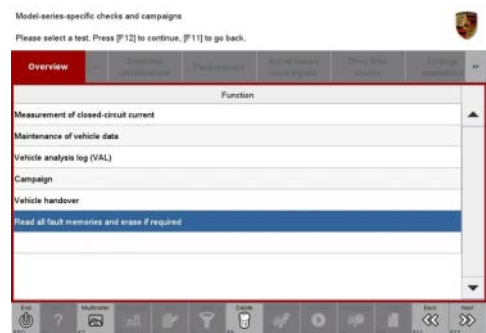
Throttle valve adaptation

- 6 Follow the instructions on the PIWIS Tester while throttle valve adaptation is being performed. Once throttle valve adaptation is complete, a tick will appear in the "Value" field on the PIWIS Tester display. If throttle valve adaptation is **not** completed successfully, adaptation must be **repeated**.
- 7 Press •F8" ("Stop") to end throttle valve adaptation.
- 8 Press •<<" to return to the start page of the ⇒ **'Maintenance/repairs'** menu.
- 9 Select the ⇒ **'Overview'** menu and press •<<" to return to the control unit selection screen.

Reading out and erasing fault memories

- 1 In the control unit selection screen (⇒ 'Overview' menu), press •F7" to call up the Additional menu.
- 2 Select the function "Read all fault memories and erase if required" and press •>>" to confirm ⇒ *Erasing fault memories*.

The fault memories of the control units are read out.



Erasing fault memories

- 3 Once you have read out the fault memories, delete the fault memory entries by pressing •F8" .
- 4 Press •F12" ("Yes") in response to the question as to whether you really want to erase all fault memory entries.

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



Information

If the fault memories of individual control units (e.g. DME, PDK, etc.) cannot be erased, start the engine briefly and then switch it off again. Wait for approx. 10 seconds before switching the ignition on again and re-establish the connection between the PIWIS Tester and the vehicle. Then read out and erase the fault memories of the affected control units again separately.

If the fault memory entries are still present, proceed as follows:

- Switch off ignition.
- Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.
- Lock the vehicle using the driver's key.
- Wait for approx. 1 minute before unlocking the vehicle again and then read out the fault memories of the control units again and erase them.

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

- 5 Once you have erased the fault memories, select the ⇒ **'Overview'** menu and press •<<“ to return to the control unit selection screen ⇒ *Control unit selection*.



Control unit selection

Subsequent work

- 1 Switch off ignition.
- 2 Disconnect the PIWIS Tester from the vehicle.
- 3 On vehicles with Porsche “Entry & Drive”, replace the original driver's key in the ignition lock with the control panel again.
- 4 Switch off and disconnect the battery charger.

Working Tme Use for Remedial Actions 2 and 3.

37461950 – Removing and installing breather hose

Labor time: **11 TU**

Preparatory work: PDK transmission removed
 Without: Re-programming PDK control unit
 Re-programming DME control unit

Invoicing: ⇒ **Damage code 3746 097 000 2**

Documentation: Document the work in the related PQIS job by specifying **37460** (Vent line) as the fault location and **9735** (Repair in accordance with PAG instructions) as the damage category.

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