### PORSCHE

### **Technical Information**

Service **43/12** EN WC35

### WC35 Workshop campaign - Checking relays for engine-compartment blower

Vehicle Type:	911 Carrera (991)/911 Carrera S (991) – Coupé			
Model Year:	2012			
Concerns:	Relay for engine-compartment blower			
Situation:	There is a possibility that the relay for setting 1 of the engine-compartment blower is not inserted correctly in the relay carrier on the affected vehicles. If the relay is not inserted correctly, the function of setting 1 of the engine-compartment blower cannot be guaranteed and the driver will see a warning to this effect in the multi-function display.			
Action Required:	Check that the engine-compartment blower relay is seated correctly in the relay carrier.			
Affected Vehicles:	Only the vehicles assigned to the campaign (see also PIWIS Vehicle Information).			
Part Nos.:	Only required if the flat plugs of the relay are damaged: 999.657.014.90 $\Rightarrow$ Relay for engine-compartment blower (	As many as required max. 2)		
Tools:	PIWIS Tester II 9818 Deutronic Battery Charging Computer DBL1600-14 1391			

### Information

The engine-compartment blower relays to be checked are in relay carrier 2 in the passenger compartment, between the rear backrest at the right and the engine bulkhead  $\Rightarrow$  *Installation position of relays for engine-compartment blower*.



Installation position of relays for engine-compartment blower

#### Procedure: Check relays for engine-compartment blower.

- 1 Switch off ignition and remove ignition key.
- 2 Move front seat as far forward as it will go and fold the seat backrest forward.
- 3 Release the rear backrest and fold it forward.
- 4 Pull rear cover out slightly sideways  $\Rightarrow$  Figure 1 -arrow A- and swivel it upwards  $\Rightarrow$  Figure 1 -arrows B-.



Figure 1

### **Technical Information**

5 Remove both engine-compartment blower relays  $\Rightarrow$  Figure 2 -1- from the relay carrier  $\Rightarrow$  Figure 2 -2-.



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Figure 2

6 Check both engine-compartment blower relays. If one of the flat plugs on the relay is bent  $\Rightarrow$  *Fig*-

ure 3 -arrow-, the relay must be replaced.

If a flat plug is bent, check the **plug sockets** in the relay carrier  $\Rightarrow$  Figure 4 -arrow - for **defor**mation and bend them into shape again using a

suitable tool if necessary.



Figure 3

Figure 4

7 Press both engine-compartment blower relays  $\Rightarrow$  Figure 5 -1- into the defined slot on the relay carrier  $\Rightarrow$  Figure 5 -2- and check that they are seated correctly.



Figure 5

8 Swivel rear cover downwards  $\Rightarrow$  Figure 6 -arrow A-, align it and press it sideways into the side trim panel  $\Rightarrow$  Figure 6 -arrow B-.



Figure 6

- Procedure: Perform on-board diagnosis on relays for engine compartment purge fan.
  - Preliminary work. 1

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## **Technical Information**

1.1 Connect a battery charger with a current rating of **at least 40 A**. 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  $\Rightarrow$  External power connection.

- 1.2 PIWIS Tester II 9818 must be connected to the vehicle communication module (VCI). Then, connect the communication module to the vehicle and switch on the PIWIS Tester.
- 1.3 On the PIWIS Tester start screen, call up the  $\Rightarrow$  'Diagnostics' menu and select the vehicle type.

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

External power connection

- 2 Perform drive links test on engine compartment purge fan setting 1 and setting 2.
  - 2.1 In the control unit selection screen  $\Rightarrow \Rightarrow$ '**Overview**' menu), select "DME" control unit and press **F12** to confirm your selection.
  - 2.2 Skip the question as to whether you want to create a vehicle analysis log (VAL) by pressing F11.
  - 2.3 Once the DME control unit has been found, select the  $\Rightarrow$  'Drive links/checks' menu.
  - 2.4 Select the  $\Rightarrow$  'Drive links' function and press F12 to confirm.
  - 2.5 Select drive link  $\Rightarrow$ 'Engine compartment purge fan setting 1 (Low)' and press (F12) to confirm your selection.
  - 2.6 Start drive link for engine compartment purge fan setting 1 (Low)' by pressing F8 ("Execute").

Both engine compartment purge fans are activated and the value **'100%'** appears in the 'Results' field. Activation of the engine compartment purge fan is signalled acoustically.

- 2.7 Once the test is completed successfully, replace the value '**100%**' with the value '**0%**' and continue by pressing **F**8 to stop the activation of the drive links.
- 2.8 As soon as the drive links test on engine compartment purge fan setting 1 (Low) has been completed, press **F11** to go back and perform the drive links test on **engine compartment purge fan setting 2 (High)** in accordance with Steps 2.5 to 2.7.
- 2.9 Once the drive links test is completed successfully, press **F11** to return to the control unit selection screen ( $\Rightarrow$  'Overview' menu).
- 3 Read out and erase fault memories.

- 3.1 In the control unit selection screen ( $\Rightarrow$  'Overview' menu), press **F7** to call up the Additional menu.
- 3.2 Select the function  $\Rightarrow$  'Read all fault memories and erase if required' and press >> to confirm.

The fault memories of the control units are read out.

- 3.3 Once you have read out the fault memories, erase the fault memory entries by pressing **F8**.
- 3.4 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.

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#### Information

If control units are found to have faults, which cannot be erased and are not associated with checking the engine-compartment blower relay, these faults must be found and corrected. This work **cannot** be invoiced under the workshop campaign number.

3.5 Once you have erased the fault memories, select the  $\Rightarrow$  '**Overview**' menu and press  $\leq \leq$  to return to the control unit selection screen.

### 4 Subsequent work.

- 4.1 Switch off ignition.
- 4.2 Disconnect the PIWIS Tester from the vehicle.
- 4.3 Switch off and disconnect the battery charger.
- 5 Enter the campaign in the Warranty and Maintenance booklet.



# Checking relays for engine-compartment blower – 911 Carrera (991)/911 Carrera S (991) - Coupé

Working time:							
Checking rel Includes:	ays for engine-compartment blower Connecting and disconnecting battery charger Connecting and disconnecting PIWIS Tester Performing drive links test on engine compartment purge fan Reading out and erasing fault memories	Labor time: <b>32 TU</b>					
Parts requi	red (only if necessary):						
999.657.01	4.90 Relay for engine-compartment blower	2 ea.					

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I	nvoicing: ⇒ Damage code <mark>WC35 66 00</mark>	0, Repair code 1		