### Technical Bulletin

911 C2/4 911 turbo

Model

Group 8

Subject:

**Climate Control Troubleshooting** 

Part Identifier 8702

Number 9105

### Troubleshooting (cont.):

Code | Fault area

Repair steps

Note: On turbo vehicles, the following codes 43 and 44 refer to the right, and 46 and 47 the left rear fan motor. 911 Carrera 2/4: All codes refer to one rear blower motor. From Part Number 964 659 047 01 control units are identical for 911 turbo and 911 Carrera 2/4. Therefore, on 911 Carrera 2/4, two codes are displayed for one fault. The same text is displayed with different fault codes. For instance, code 43 and 46 or code 44 and 47.

Codes in parenthesis are displayed on 911 Carrera 2/4 in pairs if contol unit 964 659 047 01 is installed. One code is displayed on 911 turbos depending if fault is one left or right rear fan.

## 43 (46) Rear fan motor speed "1" seized; present

Rear fan only operates at speed 2 and fresh air fan only operates at switch position "max. cold." Open circuit in rear fan motor resistor. (Voltage less than 44% battery voltage).

## 43 (46) Rear fan motor speed "1" seized; not present

Fault indicates previous, temporary fan binding or seizure from outside influences. Erase fault memory.

## 43 (46) Rear fan motor speed "1" positive short; present

Voltage on rear fan motor is higher than 93% battery voltage while operating at speed "1". Rear fan motor, wiring plug or fuse defective. Open circuit on fan motor ground connection. Fault usually occurs in conjunction with code 44 (47).

## 43 (46) Rear fan motor speed "1" positive short; not present

Check for loose contact.,

Code | Fault area

Repair steps

43 (46) Rear fan motor speed "1" positive short/ground short

Combination of both.

## 44 (47) Rear fan speed "2" seized; present

Rear fan does not operate. Check fuse and wiring plug for fan motor. If both OK, check fan motor. Fault usually occurs in combination with fault for "speed 1".

## 44 (47) Rear fan speed "2" seized; not present

"Not present" can be displayed even if fault is present if fan motor was not activated when switched off. (Will be changed with future update). Follow same steps as above. If fan is operating (indicates previous, temporary binding) erase fault memory.

# 45 Inside temperature sensor fan motor signal unplausible; present

Inside temperature fan motor does not operate. Possibly mechanical damage. Replace fan motor.

# 45 Inside temperature sensor fan motor signal unplausible; not present

Usually temporary fault only relevant if customer complains about inside temperature going down after approx. 15 min. driving time. Turn ignition on-off several times and check operation of fan.

Note: If ignition is switched on less than 30 sec., fan run on is 10 seconds. If ignition is switched on longer, fan run on is approx. 20 minutes.

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### Troubleshooting (cont.):

Code | Fault area

Repair steps

46, 47 Rear fan speed "1" or speed "2" seized; present

In position "heating" left heater fan operates with half value: control unit Part Number "...01" is installed in vehicle model year '89 (K) or '90 (L). Install wire bridge between G1 and G19. Refer to 911 Carrera 2/4 Workshop Manual Volume VI, page 87–27.

### C. Location of Wiring Plugs

T5 – 14 pin plug under instrument panel right T30 – 14 pin plug relay carrier plate engine compartment left

T34 – 14 pin plug in luggage compartment on right heater fan housing

## D. Symptoms of Some Faults Diagnosable from Operating Pattern

### 1. Fuse for rear fan motor defective

Starting position: Heater fan switch position 3-4 and temperature switch "max cold".

Test Step: Set temperature switch to "max

heat".

Result: Heater fan off. Cars with control

unit part number "...01": fan switches to half value. 911 turbo: Fan speed decreases only on side of the defective rear fan.

Remark: To determine acoustically

reduced fan speed, open only the two side air vents. Close all

other vents.

Switch back temperature control

to "max cold.". Heater fan

switches on again.

Fault Memory: Rear fan speed "1" seized; present Code 43/46 and Rear

fan speed "2" seized; (not) present. Code 44 (47)

### 2. Rear Fan Motor or Wiring Plug Defective

Starting position: Heater fan switch position 3-4 and temperature switch "max. cold".

Test Step: Set temperature switch to "max.

heat"

Result: Heater fan off. Cars with control

unit part number "...01": fan switches to half value. 911 turbo: fan speed decreases only on side of the defective rear fan. Switch back temperature control

to "max. cold". Heater fan

switches on again.

Fault Rear fan motor speed "1"

Memory: positive short; present. Code 43

(46) and Rear fan speed "2" seized; (not) present. Code 44

(47).

### 3. Rear Fan - Resistor Open Circuit

Starting Position: Heater fan switch position 1, 4, temperature switch "max. cold", all air vents closed, only one center vent open.

Test Step: Set temperature switch to "max.

heat".

Result: Heater fan off. Rear fan motor

speed "2". After 5 seconds, rear fan switches off for 1 second. After an additional 5 seconds, heater fan switches on again.

Fault Rear fan speed "1" seized (not)

Memory: present. Code 43 (46)

### 4. Rear Fan Motor - NTC Open Circuit

Starting position: Engine cold, fan switch position "1", temperature switch "max. cold".

Result Rear fan operates in speed "1"

only.

Fault Temperature sensor, rear fan Memory: motor open circuit; present.

Code 15

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