# Idle Air Control (IAC) valve, checking

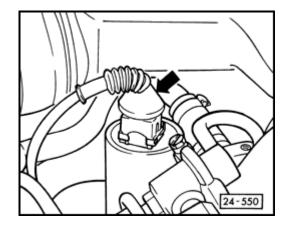
#### Note:

To functionally check the idle speed control system ⇒ "Read Measuring Value Block" function 08, display groups 004 through 018.

#### **Electrical checks**



- Disconnect Idle Air Control (IAC) valve harness connector.



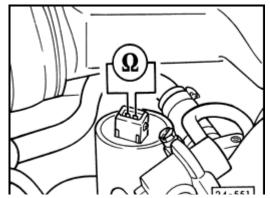
4

 Measure IAC valve resistance by connecting multimeter (Fluke 83 or equivalent) between connector terminals using jumper wires from connector test kit VW 1594.

Specified value: 7 to 11  $\Omega$ 

If the specified resistance is not obtained:

- Replace Idle Air Control (IAC) valve.



## Note:

At room temperature, the resistance value will be lower. The resistance value will be higher if the Idle Air Control (IAC) valve is measured at under-hood operating temperatures.

# **Checking mechanical function**

- Remove Idle Air Control (IAC) valve.



- Visually check surface of rotary slide (arrow) for signs of wear.

### **CAUTION!**

Do not check for ease of movement by prying on the rotary slide using a screwdriver or other tools that could potentially cause scratching.

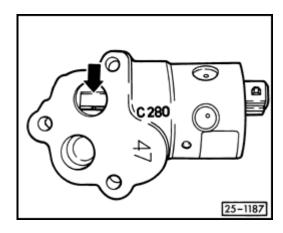
- Re-connect valve (still removed) to harness connector.
- Switch ignition ON.
- Use scan tool "Output Diagnostic Test Mode" function 03 to trigger Idle Air Control (IAC) valve -N71- ⇒ Repair Group 01.
- Check whether rotary slide moves smoothly and freely from stop to stop.

If there are signs of scoring that impair free movement, or if the rotary slide does not move freely (sticks, moves slowly or does not move fully in both directions):

- Replace Idle Air Control (IAC) valve.

If the valve does not react (not triggered) during the output Diagnostic Test Mode:

- Check triggering.



# **Checking Idle Air Control (IAC) valve triggering**

- Idle Air Control (IAC) valve electrically OK
- Slide up boot on Idle Air Control (IAC) valve connector.
- Use scan tool "Output Diagnostic Test Mode" function 03 to trigger Idle Air Control (IAC) valve
  N71- ⇒ Repair Group 01.



- Connect VAG 1527B voltage tester between connector terminal 1 and engine Ground (GND).

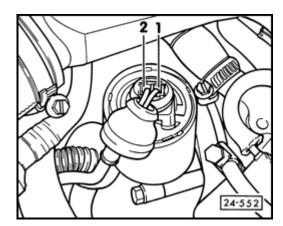
Specified result: voltage tester must flash

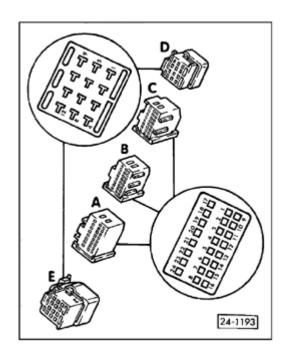
- Connect voltage tester between connector terminal 2 and battery positive voltage (B+).

Specified result: voltage tester must light up

If specified results are not obtained:

 Connect VAG 1598/19 test box to ECM harness connector (ECM is left disconnected) ⇒ Repair Group 01.







 Check wiring between harness connector terminal 1 (in engine compartment) to test box socket D11, then check wiring between harness connector terminal 2 and test box socket D9 using wiring diagram; correct as necessary.

If the wiring is OK but triggering still does NOT occur:

- Replace ECM ⇒ Repair Group 01.

If the triggering signal and the wiring are OK and the valve still does not react:

- Replace Idle Air Control (IAC) valve.