

Tank ventilation, checking

Evaporative Emission (EVAP) canister purge regulator valve -N80-, checking

Special Tools and Equipment

- VAG1526A
- ◆ VAG1527B
- VAG1594A
- VAG1598/31
- VAS5051 with VAG5051/1
- or
- VAG1551 with VAG1551/3B

Note:

The Evaporative Emission (EVAP) canister purge regulator valve is also called the Tank Ventilation Valve (TVV) and is sometimes referred to as the EVAP valve.

Checking for proper seal

Solenoid valve is closed when no voltage is present.

- Disconnect hoses from EVAP valve; harness connector remains connected.
- Attach assisting hose to one connection of EVAP valve.
- Connect VAS5051 tester or VAG1551 scan tool and select the control module for engine electronics using "address word" $01 \Rightarrow \underline{Page \ 01-} \underline{9}$.

Ignition must remain switched on for this.

 Initiate output DTM and activate Evaporative Emission (EVAP) canister purge regulator valve
-N80- ⇒ Page 01-56.

Output Diagnostic Test Mode

Indicated on display:

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Valve must click...

...and must open and close (can be tested by blowing into assisting hose).

If valve does not click:

- Check internal resistance of EVAP valve.

If valve does not open and close properly:

- Replace Evaporative Emission (EVAP) canister purge regulator valve -N80-.

Checking internal resistance

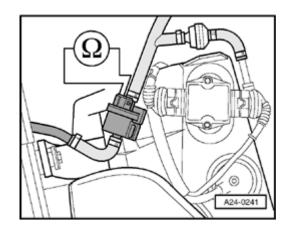
- Disconnect connector at EVAP valve.
- Connect multimeter at valve for resistance measurement.
 - Specification: 22 to 30 Ω

If specified value is not obtained:

- Replace Evaporative Emission (EVAP) canister purge regulator valve - N80-.

If specified value is obtained:

- Check voltage supply $\Rightarrow \underline{\text{Page 24-131}}$.



Checking voltage supply

Test requirements:

• Fuse for the EVAP valve OK.

⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations binder

• Fuel Pump (FP) OK, checking $\Rightarrow \frac{Page 24}{49}$.

Note:

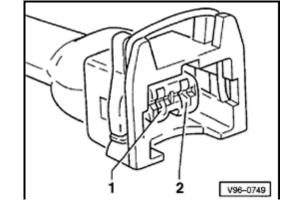
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Voltage is supplied to the EVAP valve via the Fuel Pump (FP) relay.

- Disconnect connector at EVAP valve.
- Connect VAG1527B voltage tester as follows:

| Harness connector | Measure to |
|-------------------|---------------------|
| Terminal | |
| 1 | Engine Ground (GND) |

- Operate starter briefly (engine can also start).
 - LED must light up.

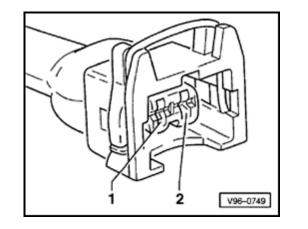


If LED does not light up:

- Check wire connection from terminal 1 to Fuel Pump (FP) relay via fuse for open circuit.
- ⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations binder
- Repair open circuit if necessary.
- If LED lights up:
- Checking activation.

Checking activation

- Connect VAG1527B voltage tester to connector terminals 1 (B+) and 2.
 - Initiate output DTM and activate Evaporative Emission (EVAP) canister purge regulator valve -N80- ⇒ <u>Page 01-56</u>.
 - LED must blink.



If LED does not blink or if it remains constantly lit:

- Connect VAG1598/31 test box at wiring harness to ECM, do not connect ECM \Rightarrow Page 24-17.
- Check the following wire connection for open circuit and short circuit to Ground (GND) and B+:

| Harness connector | VAG1598/31 test box |
|-------------------|---------------------|
| Terminal | Socket |
| 2 | 64 |

- Repair open circuit or short circuit if necessary.

If wire connection is OK:

- Replace Engine Control Module (ECM) \Rightarrow <u>Page 24-21</u> .

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