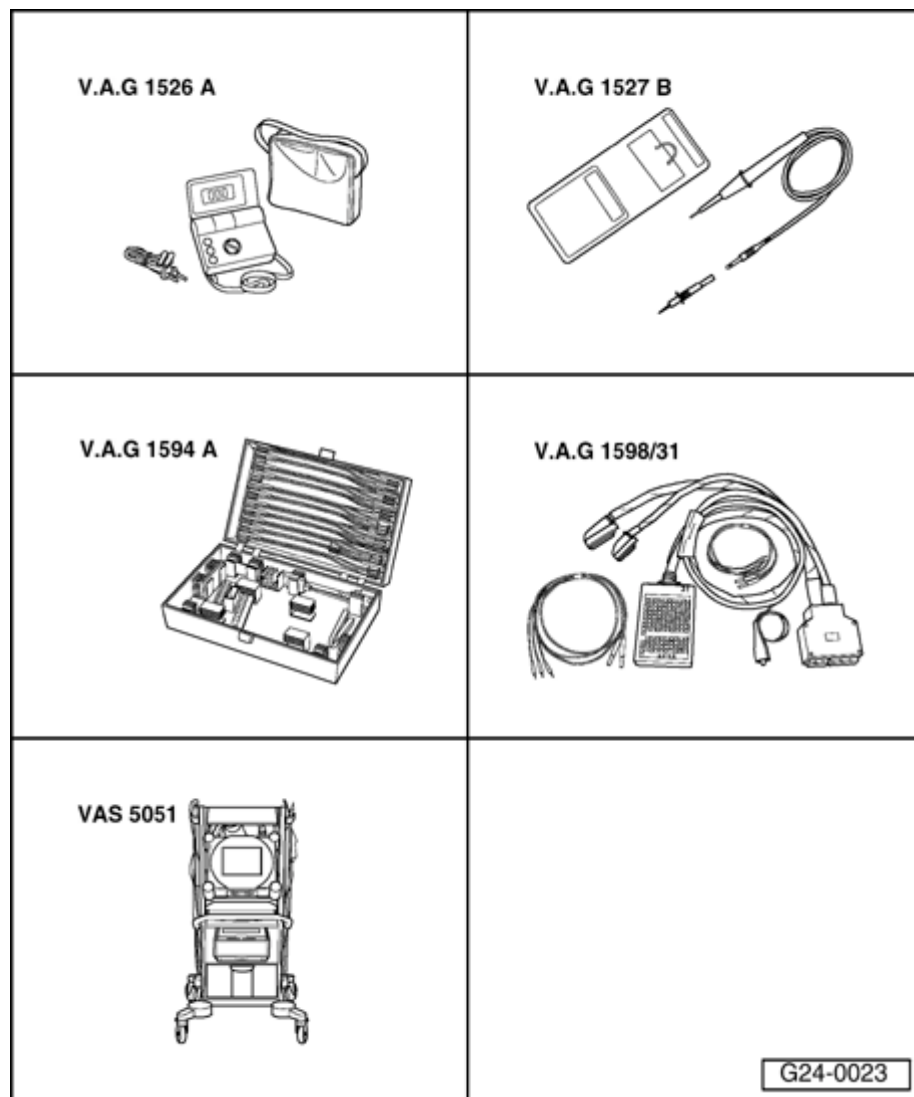


24-114



Tank ventilation, checking

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

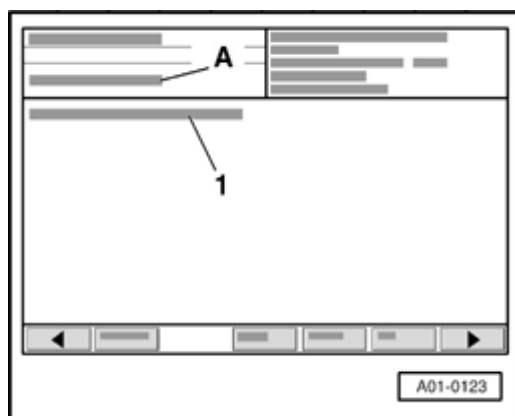
Special Tools and Equipment

- ◆ VAG1526A
- ◆ VAG1527B
- ◆ VAG1594A
- ◆ VAG1598/31
- ◆ VAS5051 with VAG5051/1

Checking for proper seal

When there is no current, the Evaporative Emission (EVAP) canister purge regulator valve - N80- is closed.

- Disconnect hoses from EVAP valve; harness connector remains connected.
- Attach assisting hose to one connection of EVAP valve.
- Connect VAS5051 tester ⇒ [Page 01-7](#) and select vehicle system "01 - Engine electronics". Ignition must remain switched on for this.
- Initiate output DTM and activate Evaporative Emission (EVAP) canister purge regulator valve -N80- ⇒ [Page 01-51](#) .



⏪ Display on VAS5051:

A - 1. Actuator in test

1 - EVAP canister purge regulator valve -N80-

- ◆ 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 or close properly:

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

Checking internal resistance

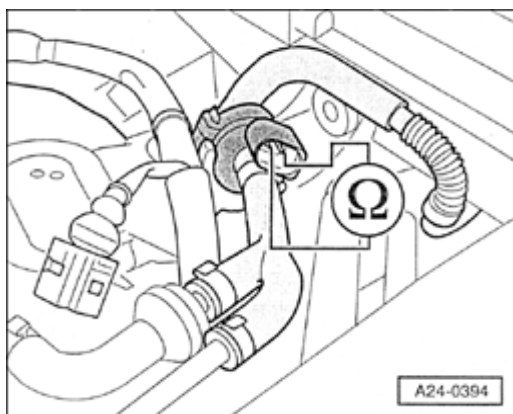
- Disconnect connector at EVAP valve.
- Connect multimeter at valve for resistance measurement.
 - ◆ Specification: 22 to 30 Ω

If specified value is not obtained:

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

If specified value is obtained:

- Check voltage supply ⇒ [Page 24-117](#) .



Checking voltage supply

Test requirements:

- Fuse for the EVAP valve OK.

⇒ *Electrical Wiring Diagrams, Troubleshooting & Component Locations*

- Fuel Pump (FP) relay OK; checking ⇒ [Page 24-52](#) .

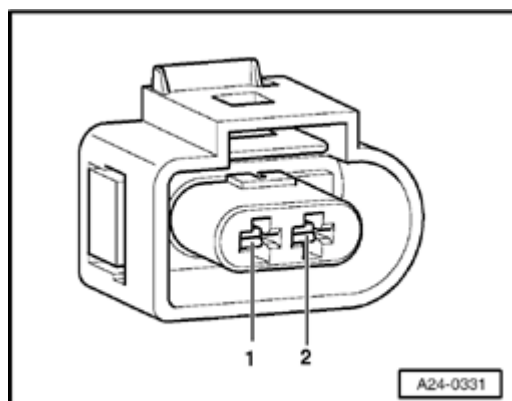
Note:

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 of connector to Fuel Pump (FP) relay via fuse for open circuit:

⇒ *Electrical Wiring Diagrams, Troubleshooting & Component Locations*

- Repair open circuit if necessary.

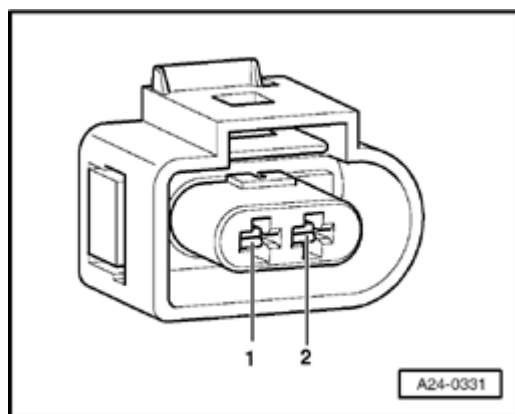
If LED lights up:

- Checking activation.

Checking activation

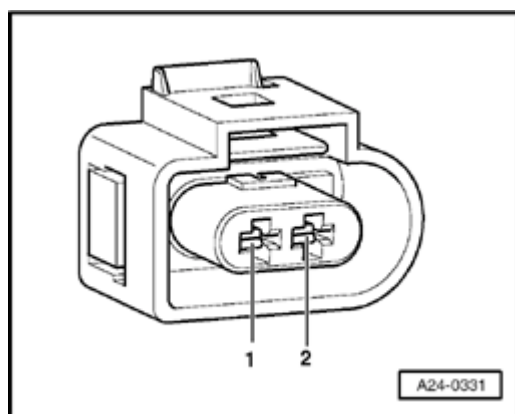


- Connect VAG1527B voltage tester to connector terminals 1 (B+) and 2.
- Initiate output DTM and activate Evaporative Emission (EVAP) canister purge regulator valve -N80- ⇒ [Page 01-51](#) .
 - ◆ LED must blink.



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

- Connect VAG1598/31 test box at wiring harness to Engine Control Module (ECM), do not connect ECM ⇒ [Page 24-19](#) .



A

- 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) ⇒ [Page 24-22](#)