

Checking components

Checking air mass meter

Special tools, workshop equipment, testers, measuring instruments and auxiliary items required

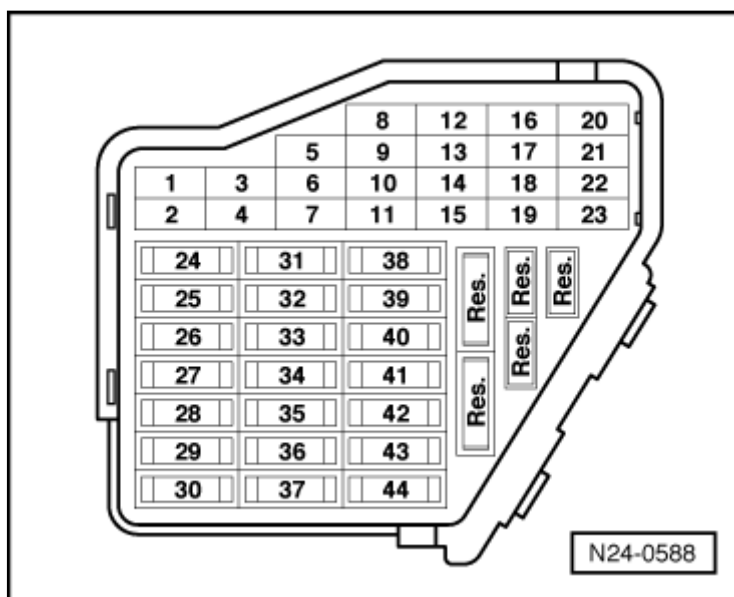
- ☐ Fault reader V.A.G 1551 or vehicle system tester V.A.G 1552 with cable V.A.G 1551/3
- ☐ Test box V.A.G 1598/31
- ☐ Hand multimeter V.A.G 1526 or multimeter V.A.G 1715
- ☐ Adapter set V.A.G 1594
- ☐ Current flow diagram

Check conditions

- → Fuse 43 must be OK.
- Coolant temperature must be at least 80 °C, => display group 04, display zone 3.
- All electrical consumers, e.g. lights and rear window heating must be switched off
- If the vehicle is equipped with an air conditioner, this must be switched off.
- On vehicles with automatic gearbox selector lever in "P" or "N" position

Test sequence

- Connect fault reader V.A.G 1551 (V.A.G 1552). Start engine and select "Address word" 01 of engine control unit.
(Connecting fault reader and selecting engine control unit => Page [01-12](#).)



→ Indicated on display:

Rapid data transfer HELP
Select function XX

- Press keys 0 and 8 for the function "Read measured value block" and confirm entry with Q key.

→ Indicated on display:

Read measured value block HELP
Input display group number XXX

- Press keys 0, 0 and 2 for "Display group number 2" and confirm entry with Q key.

→ Indicated on display:
(1...4 = Display zones)

Read measured value block 2 ☐
1 2 3 4

- Check the air mass drawn in in display zone 4
Specification: 2.0...4.5 g/s

If the specification is not obtained or there

is a fault in fault memory referring to air mass meter:

- Check the voltage supply for the air mass meter => Page [24-41](#).
- Check the signal and earth wires for the air mass meter => Page [24-42](#).

If the specification is obtained:

- Press the ☐ key.
- Press keys 0 and 6 for the "End output" function and confirm input with the Q key.
- Switch off ignition.

Checking voltage supply for air mass meter

- → Pull 4 pin connector -1- off air mass meter -2-.
- Connect multimeter to measure voltage on connector contacts 3 and engine earth.
- Start engine and run at idling speed.

Specification: 11...15 V

- Switch off ignition.
- If the voltage supply is OK, check the signal wire and earth wire => Page [24-42](#).

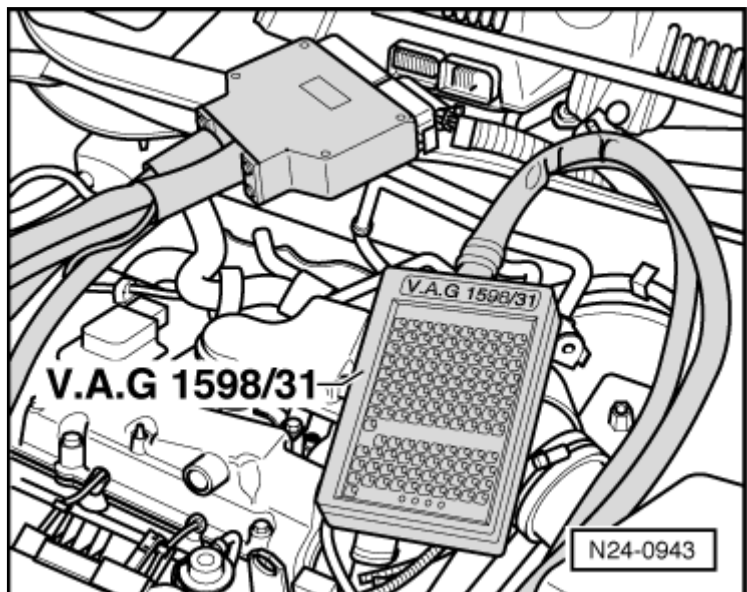
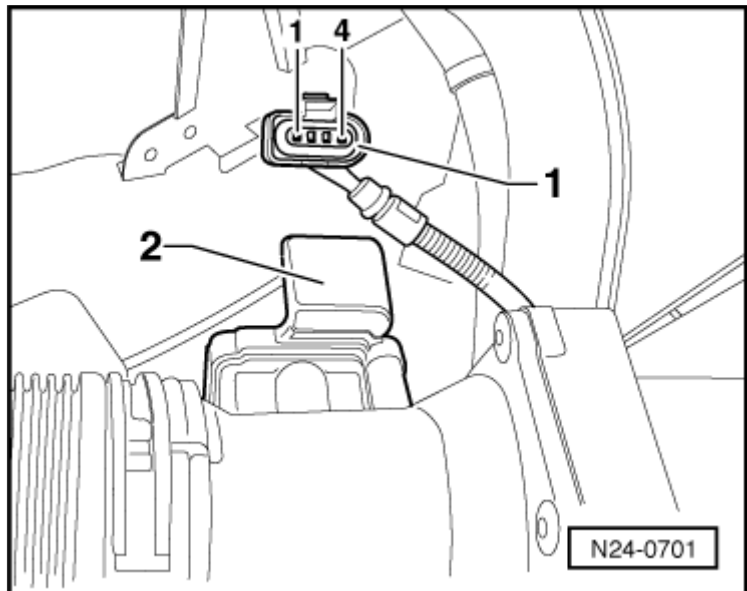
If no voltage is present:

- Check wiring from contact 3 to fuel pump relay (J17) according to current flow diagram.

=> Current flow diagrams, Electrical fault finding and Fitting locations binder

Testing signal and earth wires for air mass meter

- → Connect test box V.A.G 1598/31 to control unit wiring harness. The engine control unit remains disconnected.



- → Check wiring between test box and 4-pin connector for open circuit using current flow diagram.
Contact 1 and test box socket 10
Contact 2 and test box socket 11
Wire resistance: max. 1.5 ω
- Additionally check wiring for short to one another, and for short to positive or earth.

Note:

When servicing connectors only gold-plated contacts are to be used.

If no wiring fault is detected:

- Renew air mass meter (G70).

