

Motronic injection and ignition system

Checking air mass meter

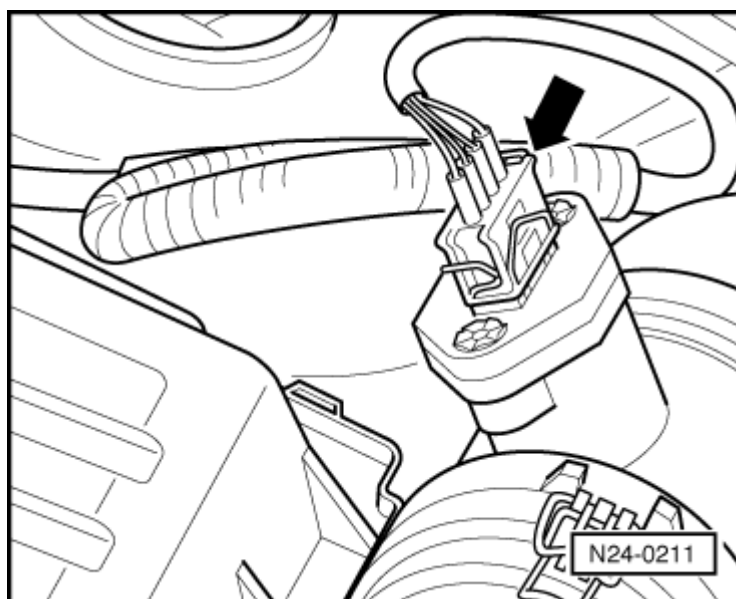
Special tools, testers, measuring instruments and auxiliary items required

- ☐ 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 1598/18
- ☐ Hand multimeter V.A.G 1526 or multimeter V.A.G 1715
- ☐ Adapter set V.A.G 1594
- ☐ Current flow diagram

Checking voltage supply

Check conditions

- Battery voltage at least 11.5 V
 - Fuel pump relay OK
- → Separate 4 pin connector to air mass meter -arrow-.

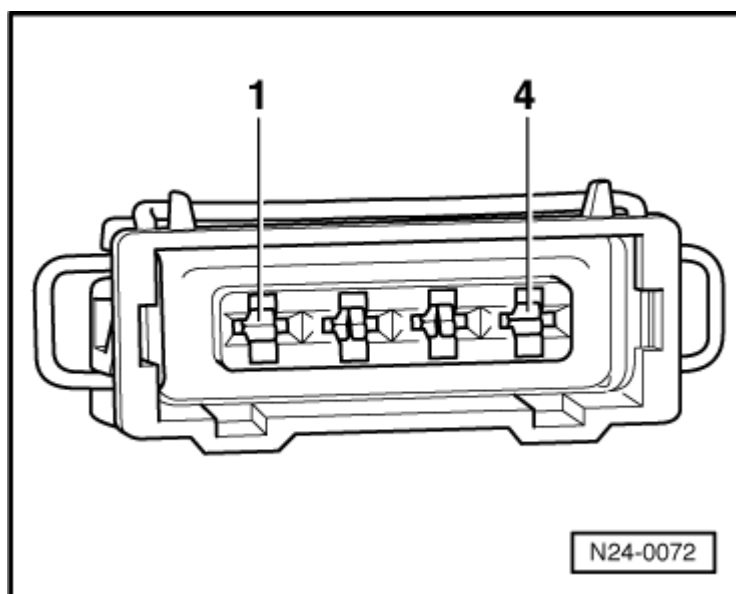


- → Connect multimeter to measure voltage at contacts 1+3 of connector.
- Start engine and run at idling speed
Specification: At least 11.5 V.
- Switch off ignition

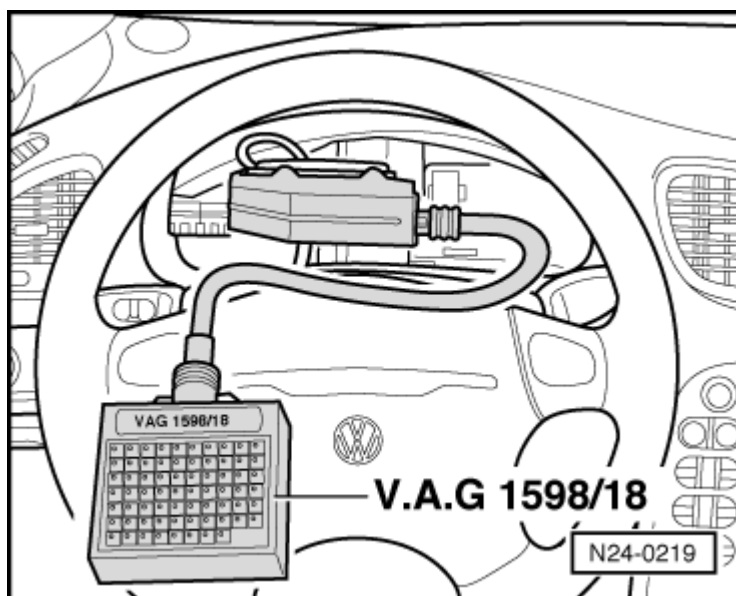
If no voltage is present:

- Remove dash panel insert:

[=> Electrical system; Repair group 90](#)



- → Connect test box V.A.G 1598/18 to control unit wiring loom.



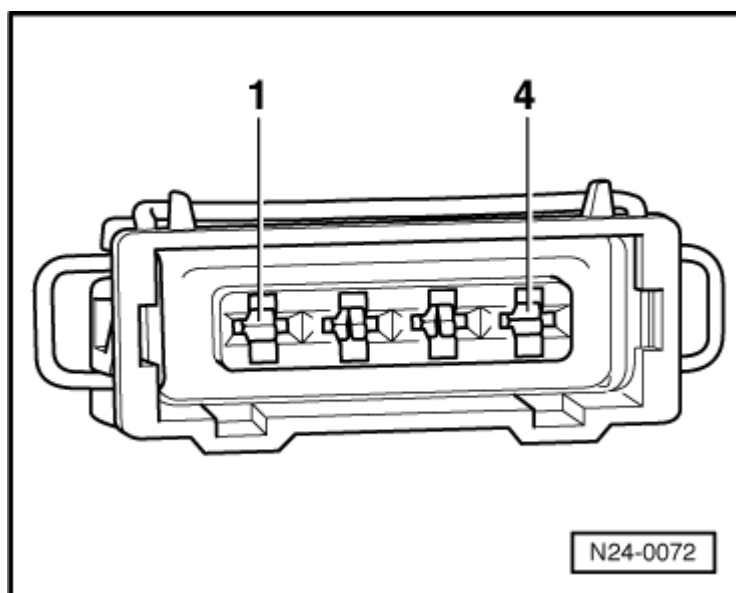
- Check wiring between test box and 4 pin connector for open circuit according to current flow diagram.
Contact 1+socket 1
Wire resistance: Max. 1.5 ω

If the specification is attained:

- Check wiring from contact 3 to relay plate according to current flow diagram.
- Reconnect connector.

Test sequence

- Connect fault reader V.A.G 1551 (V.A.G 1552) and select engine electronics control unit (address word 01); carry out selection at idling.
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→ Indicated on display:

Rapid data transfer HELP
Select function XX

- Input 08 for "Read measured value block" function and confirm with Q.

→ Indicated on display:

Read measured value block HELP
Input display group number XX

- Input 01 for "Display group number" and confirm with Q.

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

Read measured value block 1 ☐
1 2 3 4

Only continue with the test when

- The coolant temperature is above 80 °C
- Display zone 2-
- Press C key.
- Enter 03 for "Display group number" and confirm with Q.

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

Read	measured value block 3	<input type="checkbox"/>	
1	2	3	4

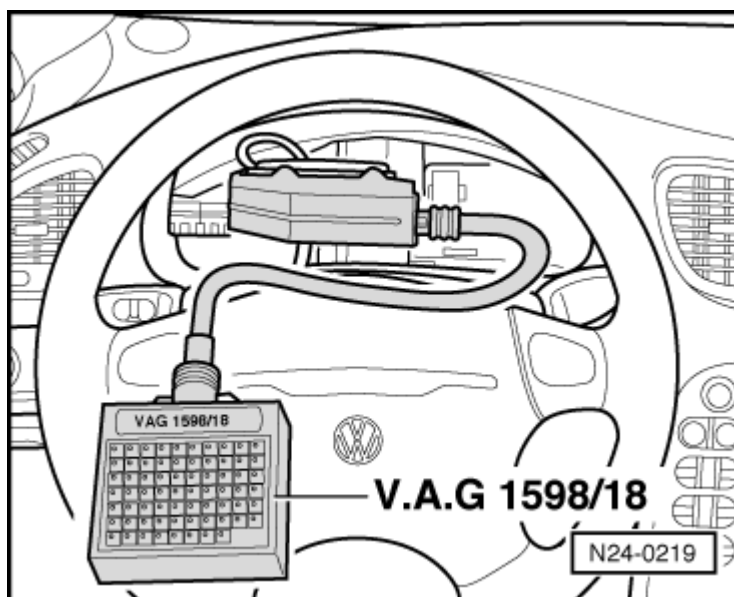
- Check engine load signal in display zone 2:
Specification: 1.2...2.3 ms
- Press ☐ key.
- Input 06 for "End output" and confirm with Q.
- Switch off ignition

If the specification is not attained:

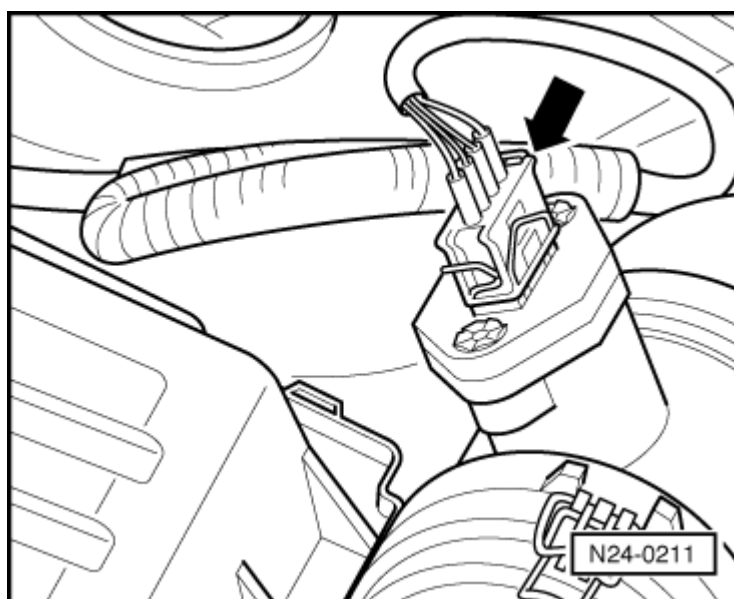
- Remove dash panel insert:

=> [Electrical system: Repair group 90](#)

- → Connect test box V.A.G 1598/18 to control unit wiring loom.



- → Pull off 4 pin connector from air mas meter -arrow-.



- → Check wiring between test box and 4 pin connector for open circuit according to current flow diagram.
Contact 1+socket 1

Contact 2+socket 16

Contact 4+socket 17

Wire resistance: Max. 1.5 ω

- Check wiring at 4 pin connector for short to one another.

Contact 1+socket 16

Contact 1+socket 17

Contact 2+socket 1

Contact 2+socket 17

Specification: $\infty\omega$

If no wiring fault is detected:

- Replace air mass meter (G70)
=>Page [24-22](#), item [4](#).

