24-29

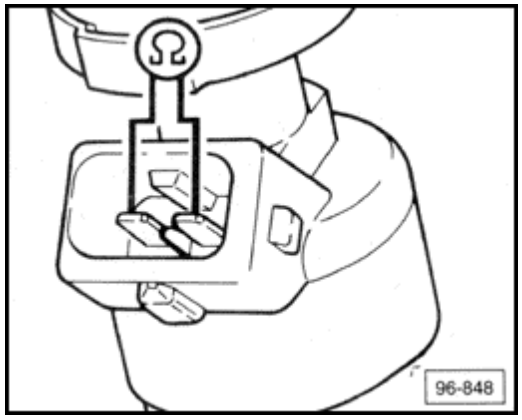
Fuel injectors, checking

CAUTION!

Fire hazard! Do not smoke, work near heaters or open flame, or have anything in the area that could ignite fuel.

Checking resistance

- Disconnect harness connector from fuel injector to be checked.



- Measure fuel injector resistance using multimeter (Fluke 83 or equivalent).

  Specified value:

  - Bosch: 15.0 to 17.0 Ω
  - Siemens: 13.5 to 14.5 Ω

- Replace any fuel injector for which resistance measurement does not fall within specified value.

Checking voltage supply

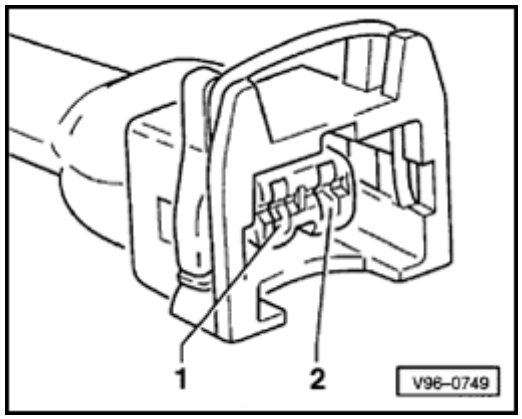
- Fuel pump relay OK ⇒ page 24-24
- Fuel pump OK:

⇒ *Repair Manual, 2.8 Liter V6 2V Engine Mechanical, Engine Code(s): AFC, Repair Group 20*

- Fuse for fuel injectors OK

24-30

- Disconnect harness connector from fuel injector to be checked.



- Connect VAG 1527B voltage tester between harness connector terminal 1 and Ground (GND).
- Use scan tool "Output Diagnostic Test Mode" function 03 to trigger fuel pump relay -J17- ⇒ Repair Group 01.

  Specified value: voltage tester must light up

If voltage tester does not light up:

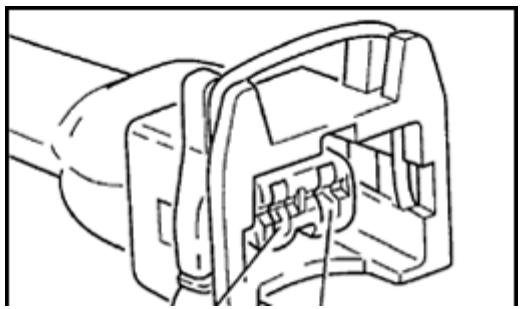
- Check wiring between terminal 1 and fuel injector fuse using wiring diagram.

If voltage tester does light up:

- Check fuel injector triggering.

Checking fuel injector triggering

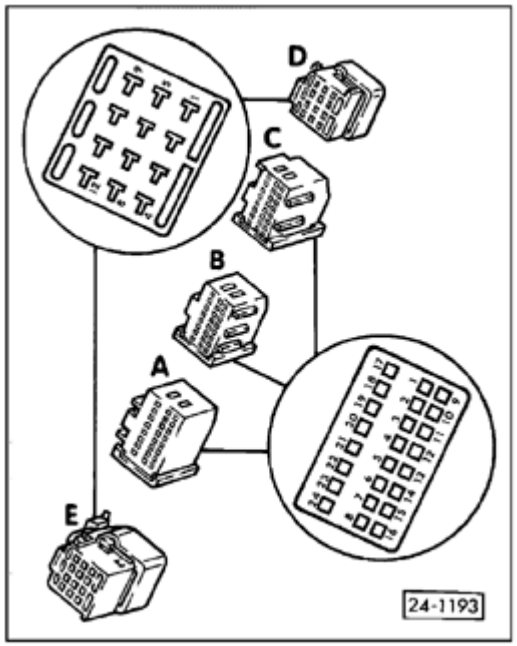
- Disconnect harness connector from fuel injector to be checked.



- Connect VAG 1527B voltage tester between terminal 2 and battery positive voltage (B+) using jumper wires from connector test kit VW 1594.
- Operate starter for several seconds (OK for engine to turn).

• Voltage tester must flash

24-31



If tester does not flash, check wiring between terminal 2 of the respective fuel injector and the ECM as follows:

- Connect VAG 1598/19 test box to ECM harness connector ⇒ Repair Group 01.
- Check fuel injector 1 signal wire for continuity between harness connector terminal 2 and test box socket D1.

  Specified value: max. 1 Ω
- Check fuel injector 2 signal wire for continuity between harness connector terminal 2 and test box socket D2.

  Specified value: max. 1 Ω
- Check fuel injector 3 signal wire for continuity between harness connector terminal 2 and test box socket D4.

  Specified value: max. 1 Ω
- Check fuel injector 4 signal wire for continuity between harness connector terminal 2 and test box socket D5.

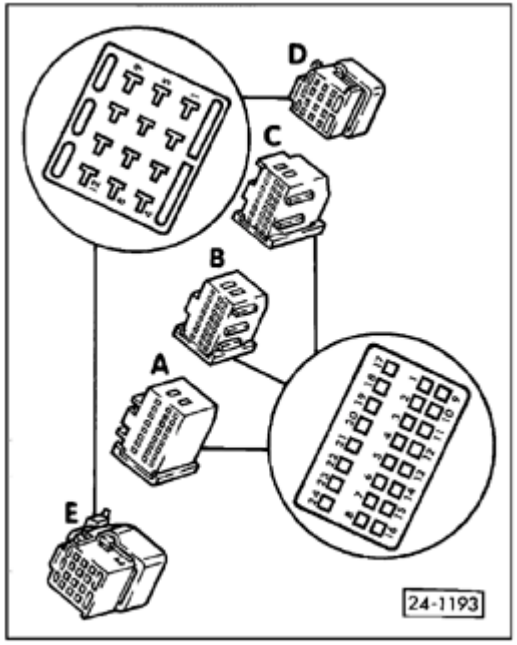
  Specified value: max. 1 Ω
- Check fuel injector 5 signal wire for continuity between harness connector terminal 2 and test box socket D6.

  Specified value: max. 1 Ω

- Check fuel injector 6 signal wire for continuity between harness connector terminal 2 and test box socket D8.

  Specified value: max. 1 Ω

If continuity is not obtained:



- Eliminate open or short circuit between terminal 2 of respective fuel injector connector, and ECM connector.

Cylinder number (fuel injector terminal 1)	Connector D terminal
1	1
2	2
3	4
4	5
5	6
6	8

If voltage tester does not flash for each fuel injector:

- Check voltage supply for ECM ⇒ page 28-27 .

If the voltage supply is OK:

- Replace ECM ⇒ Repair Group 01.