

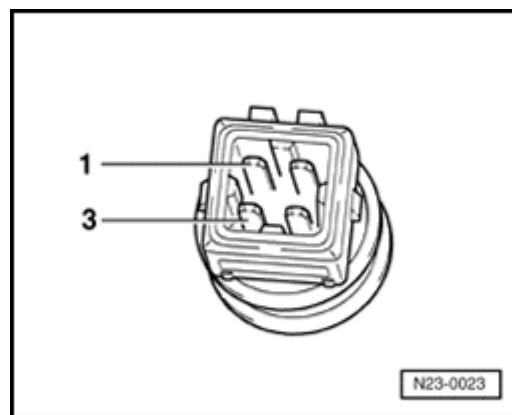
28-25

Engine Coolant Temperature (ECT) sensor, checking

Notes:

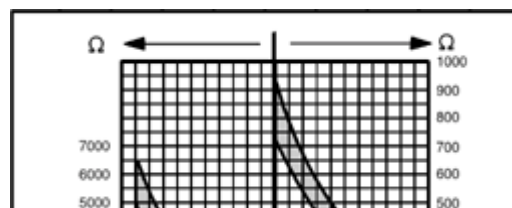
- ◆ To functionally check the Engine Coolant Temperature (ECT) sensor ⇒ Repair Group 01, Read measuring value block, display group 001, display field 1.
- ◆ Component locations ⇒ [page 28-1](#) .

- Disconnect ECT sensor harness connector.



A

- Switch Fluke 83 multimeter to resistance range and measure between ECT sensor terminals 1 (signal) and 3 (GND).



A

Specified values:

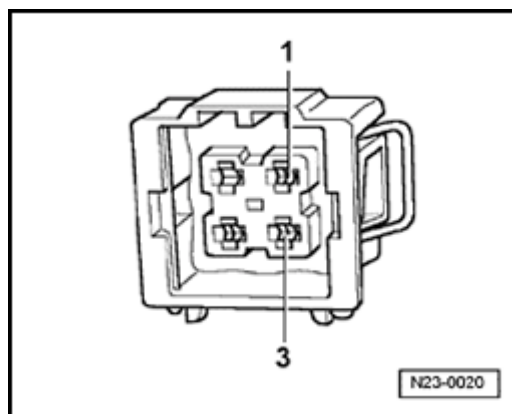
- ◆ At approx. 20 °C (68 °F): approx. 2500 Ω
- ◆ At approx. 80 °C (176 °F): approx. 330 Ω

If the specified value is not obtained:

- Replace ECT sensor.

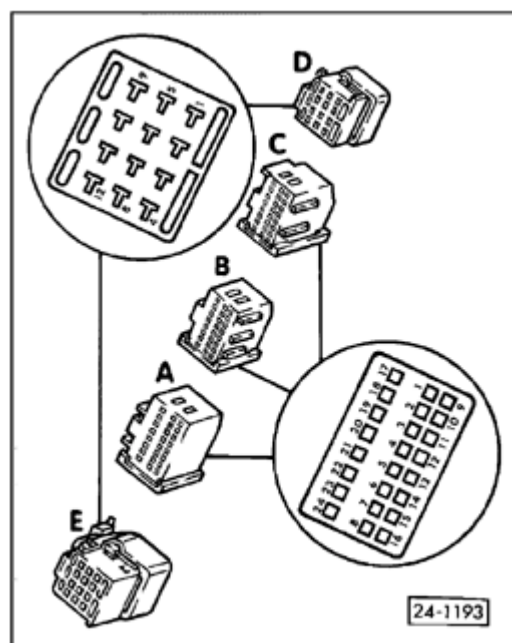
If the specified value is obtained:

- Check wiring between ECT sensor and ECM as follows:
- Connect VAG 1598/19 test box to ECM harness connector ⇒ [page 01-255](#) .



- A**
- Check wiring for continuity between terminal 3 of ECT sensor harness connector and engine Ground (GND).
Specified value: max. 1 Ω
 - Check signal wire for continuity between ECT sensor harness connector terminal 1 and test box socket 16A.
Specified value: max. 1 Ω
 - Check both wires for short circuit to each other.

If the specified values are not obtained:



- A**
- Eliminate short or open circuit in wiring between ECT sensor and ECM connector -A- or engine Ground (GND).

ECT sensor terminal number	ECM Connector A or engine Ground (GND)
1	16A
3	Engine Ground (GND)

If wiring is OK and the ECT sensor is OK:

- Replace the ECM ⇒ [page 01-265](#) .