Checking coolant temperature sender -G62-

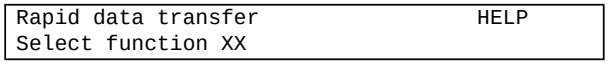
Special tools and workshop equipment required

- Fault reader -V.A.G 1551- or vehicle system tester -V.A.G 1552- with diagnosis cable -V.A.G 1551/3-
- Adapter -V.A.G 1598/22-
- Hand multimeter -V.A.G 1526C- or multimeter -V.A.G 1715-
- Adapter set -V.A.G 1594C-
- Current flow diagram

Test procedure

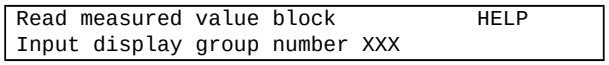
– Connect fault reader -V.A.G 1551- or vehicle system tester -V.A.G 1552- and select control unit for engine electronics with “address word 01”. Engine must be idling. (Connect fault reader and select engine electronics control unit → Chapter.)

Indicated on display:



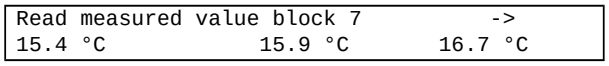
– Press keys 0 and 8 for function “Read measured value block” and confirm entry with Q key.

Indicated on display:



– Press keys 0, 0 and 7 for “Display group number 7” and confirm entry with Q key.

– Indicated on display:



– Check value for coolant temperature in display zone 4.

The temperature value must rise equally without interruption.

– In the event of a fault, the fuel temperature is displayed as a substitute.

– If no realistic display appears in display zone 4 or the fuel temperature is displayed as a substitute, check coolant temperature sender -G62- and wiring connections to sender as follows:

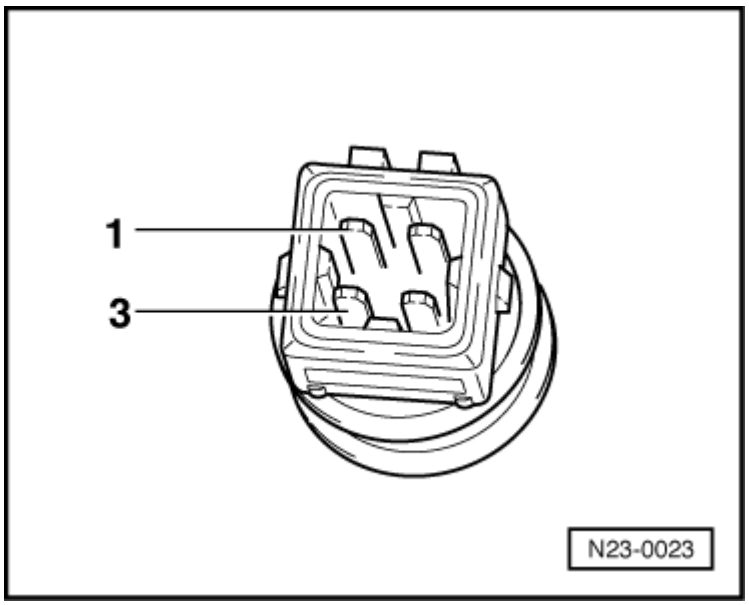
– Press → button.

– Press keys 0 and 6 for function “End data transfer” and confirm entry with Q key.

– Switch off ignition.

– Pull connector off coolant temperature sender -G62- → Chapter.

– Measure resistance between sender contacts 1+3.



For specification see diagram.

Scale A shows resistance values for temperature range 0..50 °C and scale B the values for temperature range 50..100 °C.

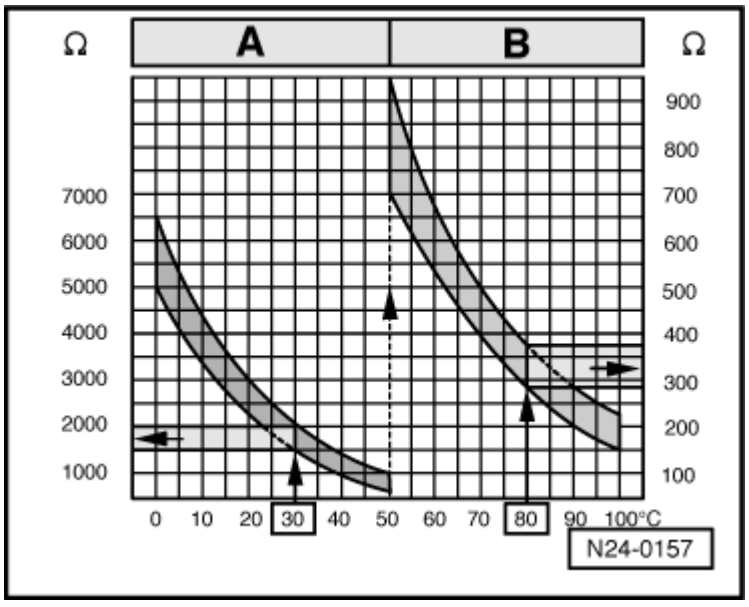
Examples:

- 30 °C corresponds to a resistance of 1500..2000 Ω
- 80 °C corresponds to a resistance of 275..375 Ω

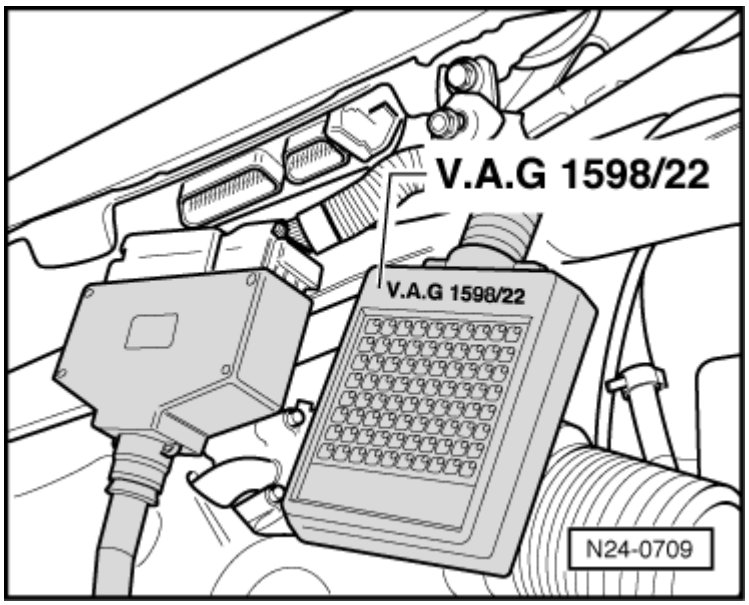
If the specification is not reached:

– Renew the coolant temperature sender -G62-.

If the specification is attained:



– Connect adapter -V.A.G 1598/22- to control unit wiring harness.



– Check wiring between adapter and 4-pin connector for open circuit using current

flow diagram. Contact 3+socket 54 contact 1+socket 70.

Cable resistance: max. 1.5 Ω.

– Also check wiring for short to one another, short to vehicle earth and short to battery positive.

Specification: ∞ Ω.

If no fault in lines is detected:

– Renew diesel direct injection system control unit -J248- → Chapter