

Servicing electrical additional heater - Vehicles with TDI engine

06.94 ä

Checking function of electrical additional heater

Electrical additional heater is activated by control unit for diesel direct injection system -J248 when following conditions occur at the same time:

- Ambient or intake manifold air temperature measured (at start of engine) less than 5 °C
- Refrigerant temperature less than 70 °C
- Engine speed above 800 rpm
- Other actuation conditions:

=> Relevant Workshop Manual Diesel Direct Injection and Glow Plug System; Repair group 01; Reading measured value block

Test sequence

- Check low heating output relay -J359 or high heating output relay -J360:

=> Relevant Workshop Manual for Diesel Direct Injection and Glow Plug System (TDI 4-cyl.); Repair group 01; Final control diagnosis

If the relays are OK:

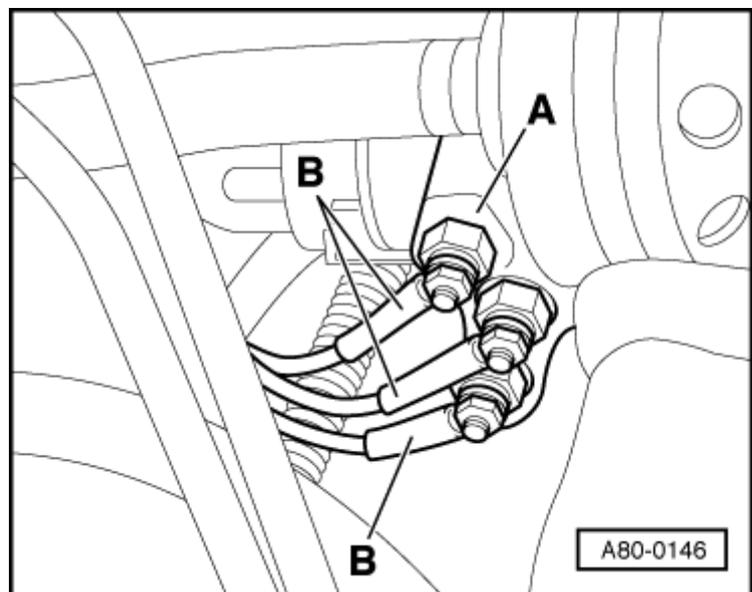
- Test wiring for open circuit and short to positive or earth.

=> Current Flow Diagrams, Electrical Fault-finding and Fitting Locations binder

- → Check earth wiring to refrigerant stump -A- (in which the glow lamps are screwed into) to the cylinder head.

If no wiring fault is detected:

- Check glow plugs:
- Remove the electrical wiring -B- from the glow plugs.
- Connect multimeter for resistance measurement to the glow plug and measure resistance between glow plug and refrigerant stud -A-.
 - Specified value: 0.5...0.7 wat room temperature



If specified value is not attained:

- Replace glow plug.
- Check refrigerant level:

=> Relevant Workshop Manual Engine, Mechanical Components; Repair group 19