

Checking additional coolant heating system, manual transmission only, engine code AHH

Function:

The additional coolant heater is an electrical heater in the engine coolant circuit. It's function is to additionally heat the coolant after a cold start, during the warm up phase and in heavy city traffic or traffic jams.

The additional coolant heating system is controlled by the Diesel Direct Fuel Injection (DFI) Engine Control Module (ECM) / (J248).

The driver has no influence on the activation or deactivation of the coolant heating system.

The switching conditions and heater output are dependant on the outside temperature, coolant temperature and electrical load of the generator.

Required for troubleshooting:

- ◆ *Multimeter Fluke 83*
- ◆ *Connector Test Kit VW 1594*
- ◆ *Test Box 1598 A*
- ◆ *Valid wiring diagram*

Before starting troubleshooting, battery negative terminal must be securely tightened.

Test conditions:

- ◆ Battery voltage OK
- ◆ S102 Fuse (15A) OK
- ◆ S109 Fuse (25A) OK
- ◆ S143 Fuse (50A) OK
- ◆ Diagnostic Trouble Code (DTC) memory of Diesel Direct Fuel Injection (DFI) Engine Control Module (ECM) / (J248) checked, all malfunctions eliminated, DTC memory checked again ⇒ Repair Group 01.

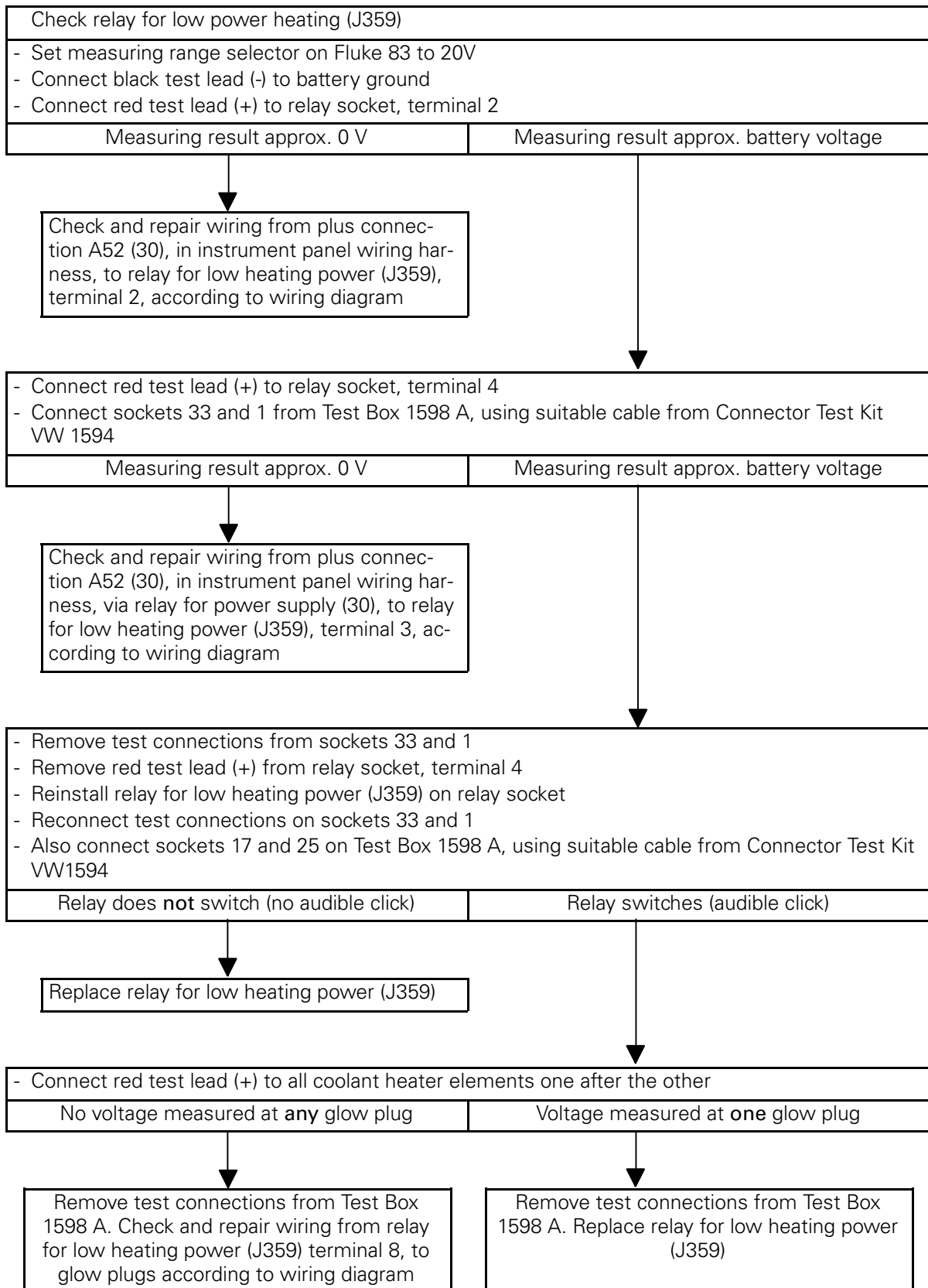
CAUTION!

DO NOT damage, enlarge or bend connector terminals or cavities by forcing probes into them when performing electrical checks. Always use connector test kit VW 1594 to make the necessary electrical connections.

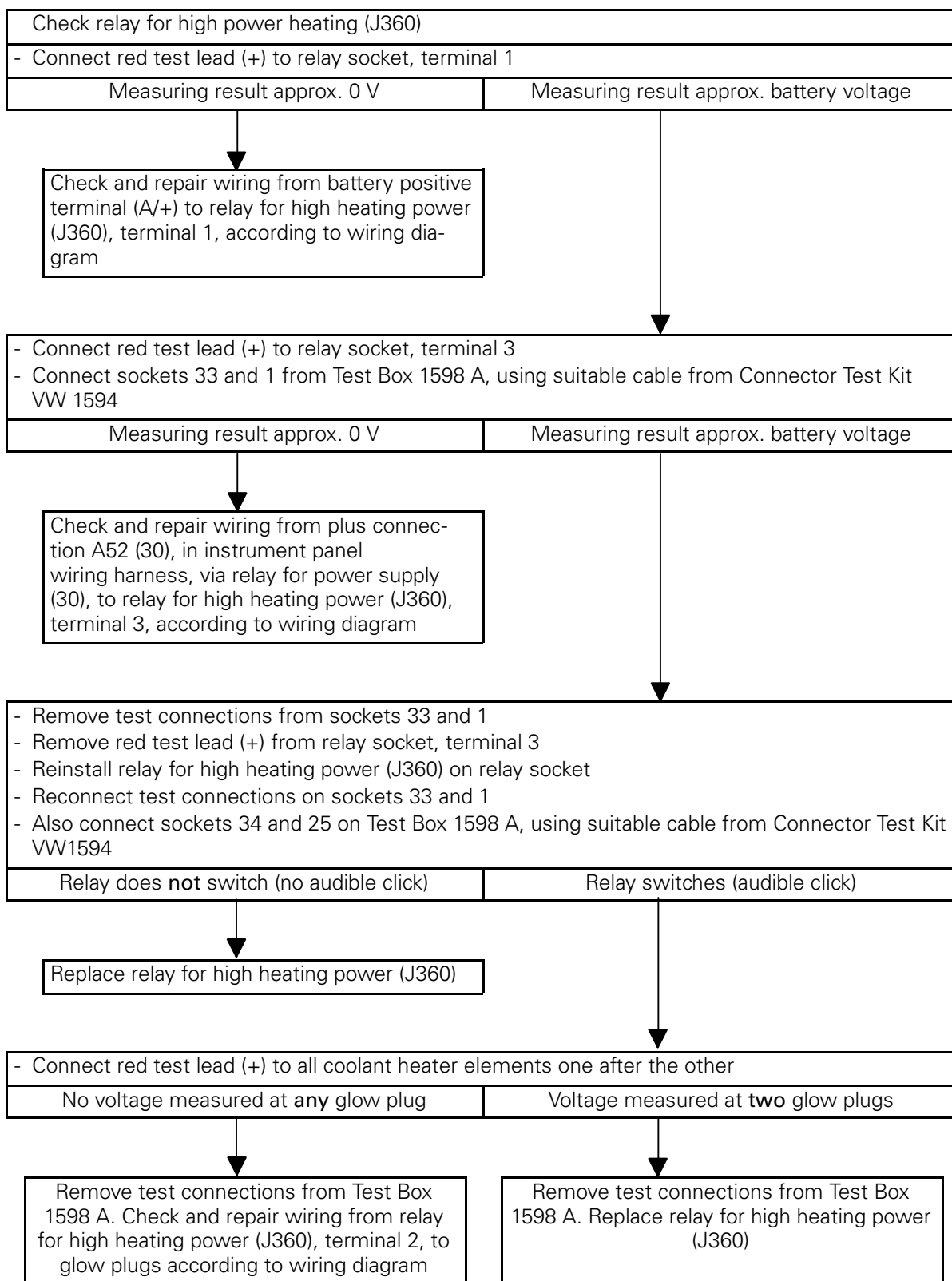
Preparation:

- Switch ignition OFF
- Disconnect connector, 80-point, from Diesel Direct Injection Control Module (DFI) Engine Control Module (ECM) / (J248), in protective housing for control module and connect to Test Box 1598/22
- Remove relay for low heating power (J359) and relay for high heating power (J360) from their relay locations in protective housing for control module

Troubleshooting starts on next page.



Rectify any wiring malfunctions determined above and **continue test** ⇒ next page



END