VW T6 - engine does not reach operating temperature

Data sheet	
Manufacturer	Volkswagen
Vehicle model	Transporter T6
Engine	2.0 16V TDI BlueMotion
Year of manufacture	2016
Symptoms	Engine does not reach its operating temperature
Recommended tool	mega macs X

Important safety note

Failure to reach operating temperature caused by defective directional control valve or way valve in the coolant circuit

With the above-mentioned vehicle model, the engine temperature display may stop at approx. 70 °C. No errors are stored in the engine control unit.

 As a result of the thermal management of modern engines, there are several coolant circuits present, for example to quickly reach the operating temperature of the engine. These circuits are controlled by means of several thermostatic valves. In addition, electric auxiliary water pumps are installed including those for EGR cooling and charge air cooling. This is why fault analysis is usually more complex with modern thermal management concepts than with conventional coolant circuits.

If the above-mentioned complaint is present, first check all parameters in connection with the engine temperature on a diagnostic drive. If no faults are detected in the peripherals as part of the diagnosis and air bubbles in the cooling system are ruled out, special attention should be paid to the directional control valves/way valves installed in the coolant circuit.

 A defect in the directional control valve, which is responsible for the transmission oil cooler, can be particularly

conspicuous. If this does not close, the coolant circuit for the transmission oil cooler is flushed with coolant right from a cold start. As a result, the engine cannot reach its operating temperature. The directional control valve should be checked. If abnormalities are detected here, replacing the directional control valve for the transmission oil cooler can help.

 Once the cause of the fault has been rectified, delete the error memory and then carry out a test drive.

 This fault profile may also occur in other vehicle models with comparable equipment variants. Please always observe the maintenance and repair notes provided by the vehicle manufacturer when carrying out such work and checks!

Please note

Repair and maintenance work on the cooling system must be carried out in accordance with the manufacturer's instructions. Some manufacturers stipulate special venting routines that must be adhered to.

 For your own safety and the safety of other road users, test and trial drives must always be carried out with a second person (driver) present.

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