

Engine, Mechanics

Special features with auxiliary heater



A special feature of the Audi A8 W12 with auxiliary heater is the division of the heating circuit into a "small and large heating circuit".

With the engine stopped and the auxiliary heater in operation, the coolant shutoff valve -N279 activates the so-called "small heating circuit" (until a defined temperature value is attained in the auxiliary heater).

In the small heating circuit, the coolant leaving the heat exchangers of the air-conditioner unit via the pump/valve unit is drawn in directly by the recirculating pump -V55 (auxiliary heater). This results in a rapid increase in passenger compartment temperature. The engine is initially not warmed.

The large heating circuit is activated by -N279 as a function of the coolant temperature in the auxiliary heater (internal temperature sender in heater control unit -J162). In the large heating circuit, -V55 draws in coolant from the small engine cooling circuit, thus warming the engine as well.

To prevent a loss of heat output on switching from small to large heating circuit, actuation of -N279 is pulsed as of a defined temperature in the auxiliary heater.

This ensures uniform heat distribution and warming of both the passenger compartment and engine.

Attention should be paid to the special notes on filling/bleeding cooling circuit with auxiliary heater in the Auxiliary/Additional Heater Workshop Manual.

