

GF83.20-P-2102-01GI	Heating water circulation pump function	GF
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Function

The quantity of coolant delivered to the heat exchanger when the engine is running is dependent on the coolant pump. The heating water circulation pump ensures that a constant and **bubble-free flow of water** is present at the heat exchanger during residual engine heat utilization, even at low engine speeds.

Initialization of the heating water circulation pump is carried out via the AAC pushbutton control module (N22).

Switch-on conditions

- **Ignition ON**
- Stationary heater/ON
- Enable conditions at residual engine heat complied with

Special conditions

At ambient temperatures of less than -20 °C several starting attempts are made, in order to ensure that the heating water circulation pump goes into operation.

To this end the heating water circulation pump is switched off in intervals of 1 minute for 5 seconds, until the coolant or blow-out temperature is +20 °C higher than the ambient temperature.

Switch-off conditions

- **Ignition OFF and overshoot time expired**
- Stationary heater OFF
- Residual engine heat OFF and overshoot time expired
- Enable conditions at residual engine heat no longer complied with

Enable conditions at residual engine heat

The heating water circulation pump runs in any event 1 minute after starting residual engine heat operation.

The overshoot conditions at least will be fulfilled.

Overshoot conditions

Coolant temperature ≤ 100 °C → overshoot time 5 minutes

Coolant temperature > 100 °C → overshoot time 10 minutes