

GF83.20-P-2003R

Heater circuit function

6.4.01

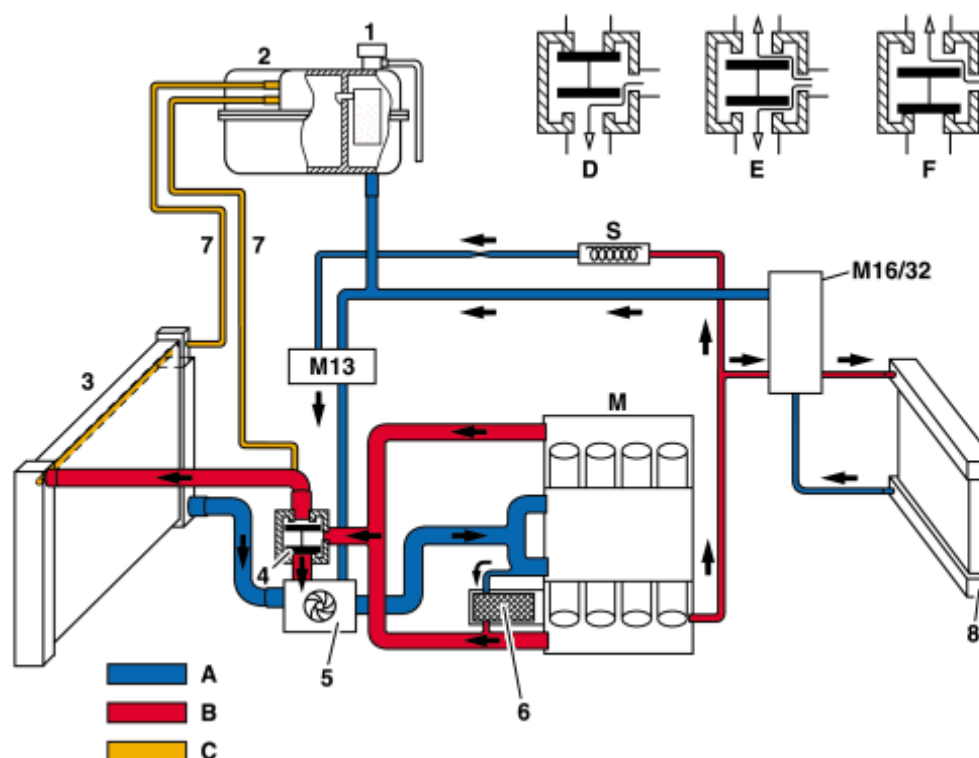
MODEL 230.4

- 1 Cap
- 2 Coolant expansion tank
- 3 Radiator
- 4 Coolant thermostat
- 5 Coolant pump
- 6 Oil-water heat exchanger
- 7 Ventilator line
- 8 Heating system heat exchanger

M13 Heating water circulation pump
M16/32 Heat exchanger shutoff motor

M Motor
S Washer fluid reservoir, heated

A Coolant return flow
B Coolant feed
C Bleeding lines



P83.20-2167-76

Function

The coolant pump (5) pumps cold coolant through the engine. The coolant absorbs the engine's heat and becomes heated. Shortly afterwards the heated coolant is routed through the heat exchanger (8), where the heat is dissipated to the passenger compartment air.

The heat exchanger (8) only has a specific volume of coolant flow through it, which is sufficient to fulfill the heating requirement. The AAC pushbutton control unit (N22) uses the heat exchanger shut-off motor (M16/32) to regulate the flow of temperature-controlled coolant to the heat exchanger.

The regulation, in dependence of the desired vehicle passenger compartment temperature, ensues via the blending air flaps, which are controlled via the blending air flap actuator motor, separated into left and right sides.

The coolant is routed over the coolant return (A), in which the heating water circulation pump (M13) is located, back to the coolant pump (5). By far the greater percentage of the coolant does not flow through the heater, but from the engine (M) to the coolant thermostat (4). Depending on the water temperature, this conducts the water through the radiator (3) or directly to the coolant pump (5).

Heating system heat exchanger, location/task/function

[GF83.20-P-2108R](#)

Heating water circulation pump, location/task/function	GF83.20-P-2109R
Blend air flap actuator motor, location/task/function	GF83.57-P-2112R
Shut-off motor heat exchanger, location/task/function	GF83.20-P-2112R