

B. Operating principle with function diagram

Note

As of approx. 08/86 the control unit (N33) Webasto no. 439.789 was replaced by the control unit (N33) with Webasto no. 105.499. Temperature-switching points and the after-running of the new control unit (N33) have been modified (refer to function diagrams).

To enable the car heater heated by the auxiliary heater to supply warm air to the interior, blower switch and heater switch must be moved into the following positions:

On models 124, 126 with automatic heater control and on model 201, **blower switch** to position 1 so that the main air vent opens.

On models 124 and 126, the temperature selector(s) do not need to be turned (normal position approx. 22°C).

On model 201 **heater switch** to max. heat so that the blending flaps direct the cold air drawn in over the heat exchanger.

Operating principle with control unit (N33) Webasto no. 439.789

If the auxiliary heater is switched on with the timer, the green operating indicator lamp comes on and at the same time the circulating pump and glow plugs are switched on. Approx. 30 s after switching on the heater, the fuel metering pump begins to deliver fuel. After a further approx. 5 s, the combustion air blower starts and combustion commences. A flame monitor monitors combustion and switches off the glow plug after combustion has stabilized. If perfect combustion is not achieved, the starting operation is automatically repeated after approx. 120 s.

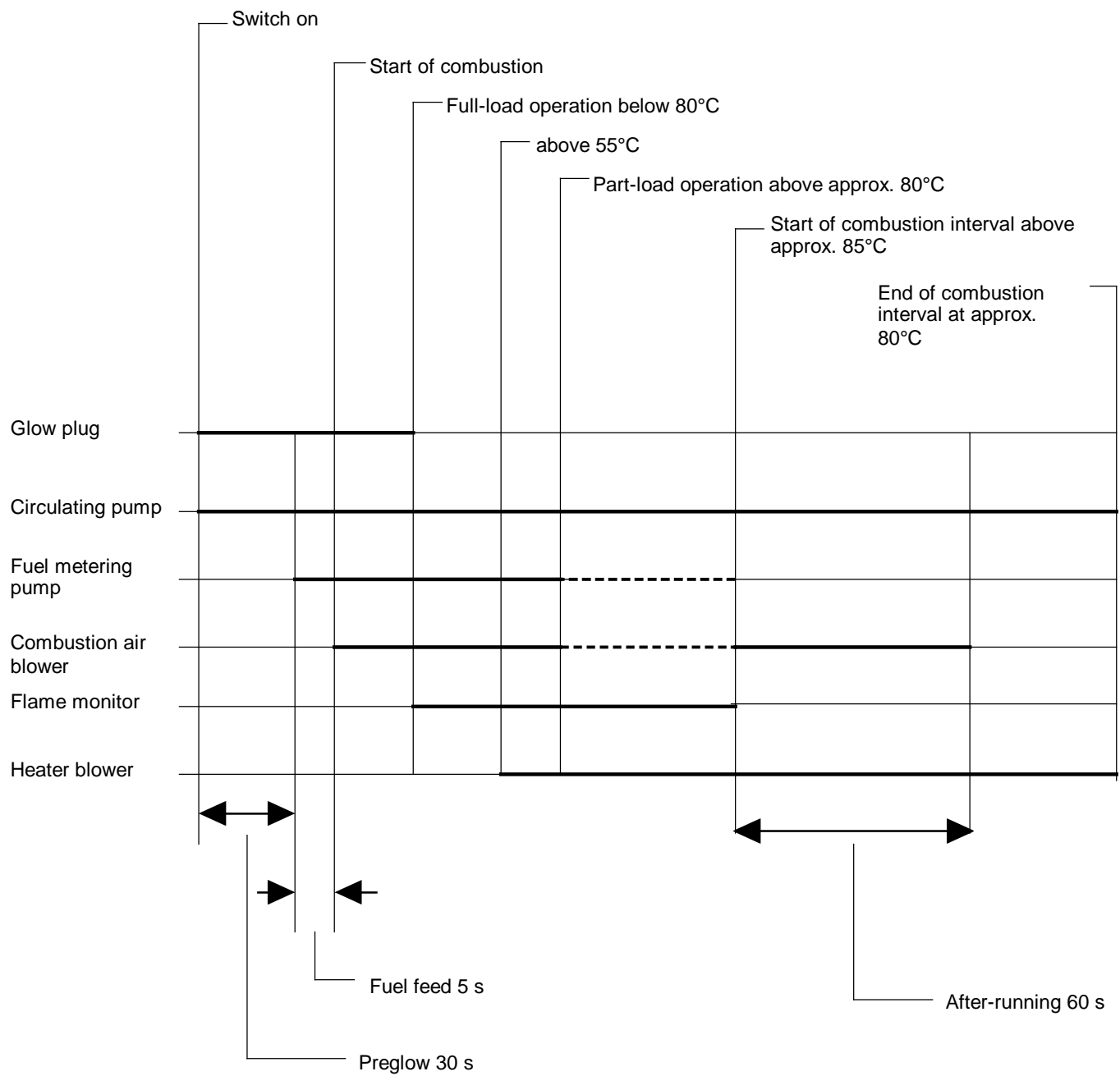
If proper combustion is still not achieved within 120 s during the repeat start, the control unit (N33) switches off the auxiliary heater without any after-running and moves into the fault mode. After the cause of the fault has been eliminated, the automatic cutout is deactivated by switching the auxiliary heater off and on again.

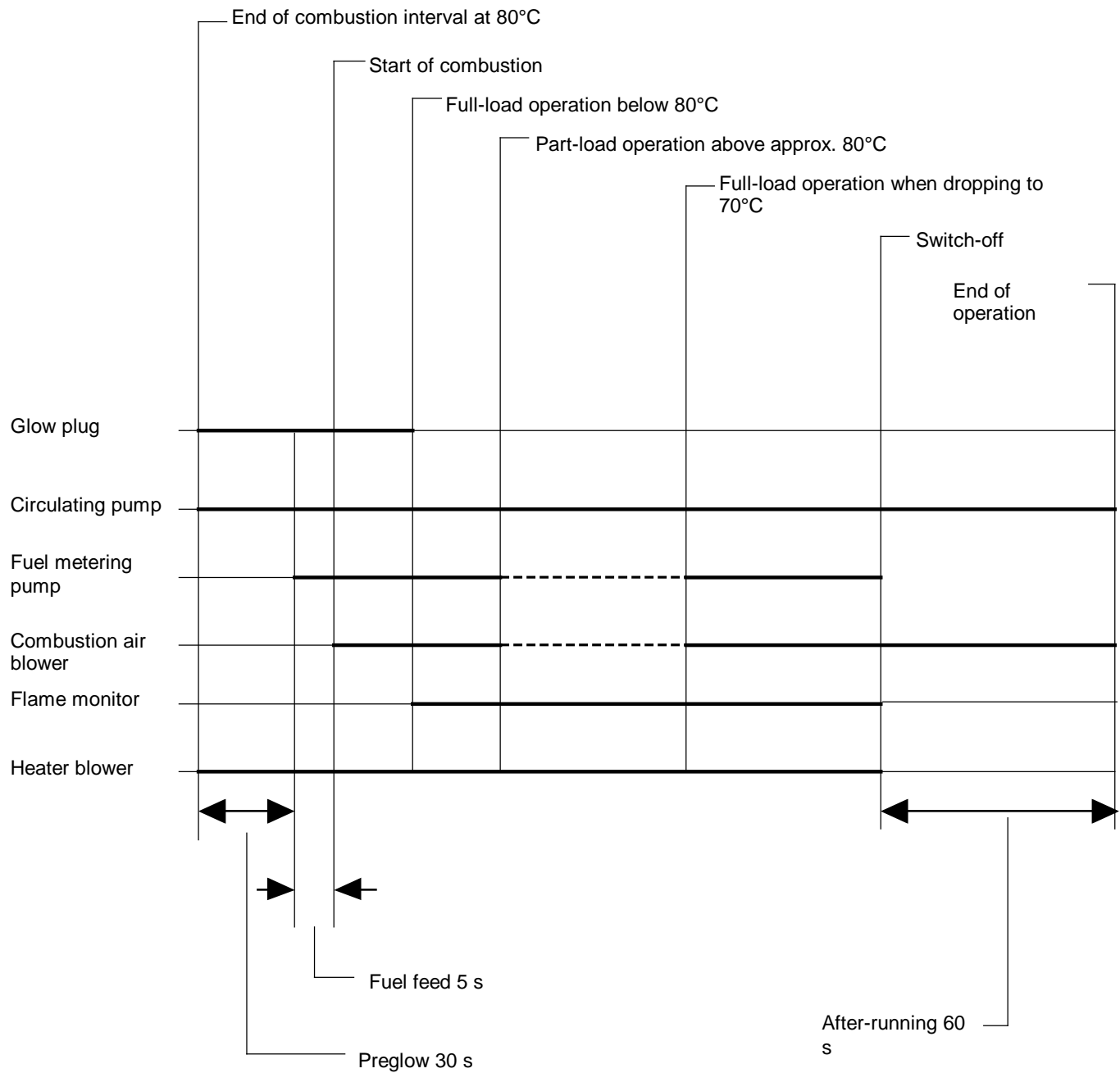
Once the coolant in the heater has reached a temperature of approx. 55°C, the heater blower switches on automatically.

If the coolant temperature in the heater reaches approx. 80°C, heating output is reduced to approx. half. If this causes the coolant temperature to drop to approx. 70°C, the system switches back again to full heating capacity. If, however, a coolant temperature of approx. 85°C is reached in the heater at half heating capacity, the control unit (N33) switches off the fuel metering pump and 60 s later (after-running) also the combustion air blower. This after-running is performed at an increased speed. The circulating pump and heater blower remain running.

Once the coolant temperature has dropped to approx. 80°C, the glow plug, fuel metering pump and combustion air blower again operate as during the switch-on phase. The start phase is performed at full heating capacity; after the flame monitor has taken over the control, the heater is reduced back to half heating capacity. This alternating cycle of switching combustion on and off is repeated until the system cuts out automatically after max. 1 hour or is switched off manually with the timer before 1 hour has elapsed.

Function diagram, control unit (N33) up to approx. 07/86 (Webasto no. 439.789)





Function diagram, control unit (N33) as of approx. 08/86 (Webasto no. 105.499)

