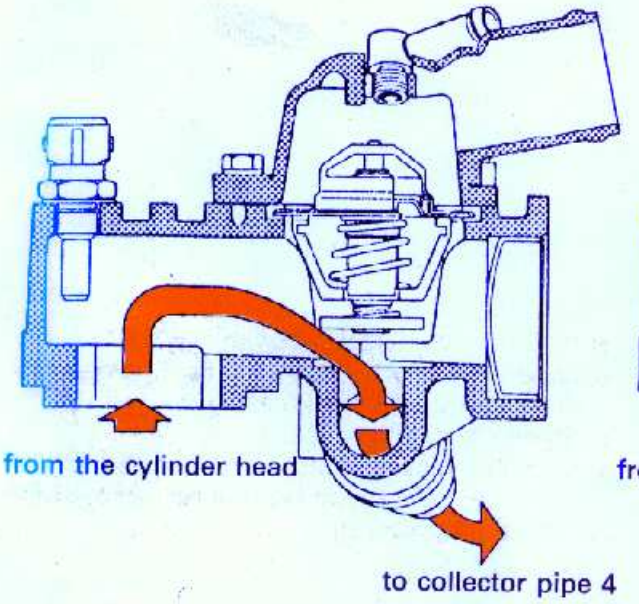
10.

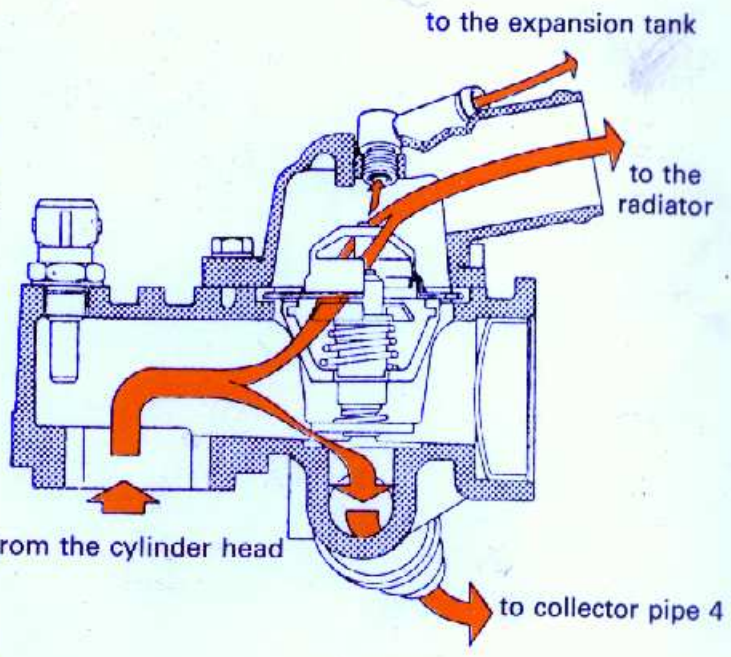
COOLING CIRCUIT (2000 IE ENGINE)

The water pump (1) as it is driven by the engine creates a vacuum which draws in the coolant coming from the cylinder unit via collector pipe (4).
After having flown around the walls of the cylinder block the coolant flows out from the thermostat (3) via an internal by-pass continuously flowing into the collector pipe (4) via which it is circulated to the heater radiator and to the throttle mechanism (5). To make it easier for the coolant to circulate in the throttle mechanism and in the heater radiator, and to prevent it being immediately drawn in by the pump, there is a bulkhead with a hole in located inside the collecting pipe (4). Until the engine temperature reaches between 81° and 85°C the coolant circulates as described above.
Thereafter, at higher temperatures, there is a temperature-sensitive valve in the thermostat which opens to allow coolant to flow to the radiator and to the expansion tank.
There is a continuous circulation of coolant in the heater radiator (with the coolant flowing in from the collector pipe and flowing back out into the same pipe on its way to the pump) since there is no device for closing it off.
When the temperature of the coolant in the lower part of the radiator reaches between 85° and 89°C a heat sensitive switch turns on the fan in order to lower the temperature of the coolant more quickly.
The expansion tank (2) has a valve-operated pressure cap which pressurizes the cooling circuit. There is always coolant circulating in the expansion tank (2) when the thermostat in open. Should it prove necessary to refill the cooling circuit, the plastic cap located on the top part of the radiator should be opened to make it easier to bleed off the air.

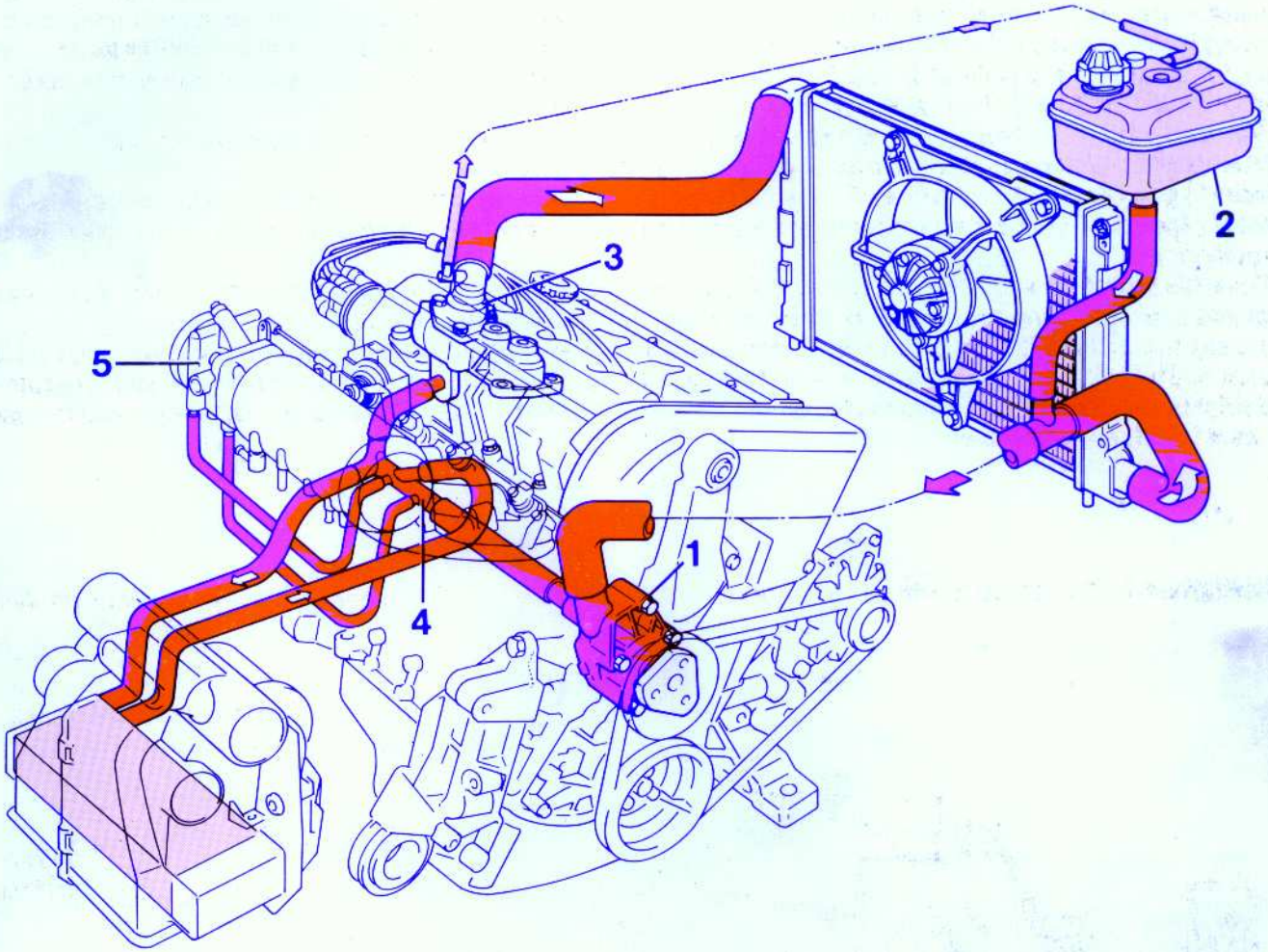
Thermostat in the closed position

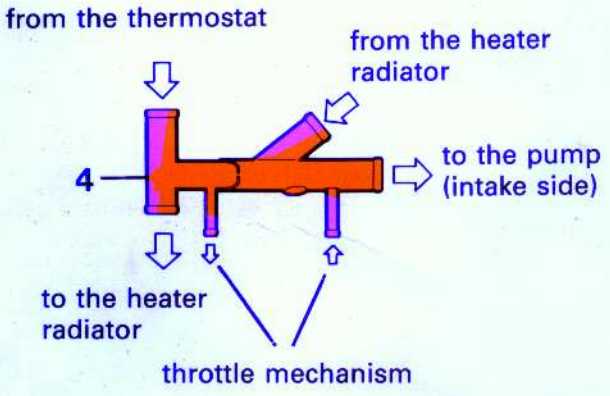


Thermostat in the open position



ENGINE COOLING SYSTEM DIAGRAM: 2000 IE ENGINE





1) Pump for circulating engine coolant.
2) Expansion tank with engine coolant level indicator to the pump (intake side).
3) Thermostat with by-pass.
4) Collector pipe for circulating coolant to the heater radiator and to the throttle mechanism.
5) Throttle mechanism.