

When the valve is closed, the cooling water circulation from the engine to the radiator is interrupted. The whole amount of cooling water is returned to the engine via the completely open by-pass line.

When the valve is fully opened, the by-pass line is completely closed and the cooling water inlet to the radiator is completely open.

In the various intermediate positions of the valve the cooling water flows both to the radiator and via the by-pass line to the engine.

As a result the same amount of cooling water flows through the thermostat independent of its varying operating positions and the cooling water in the cylinder crankcase and the cylinder head is heated rapidly and at a uniform rate.

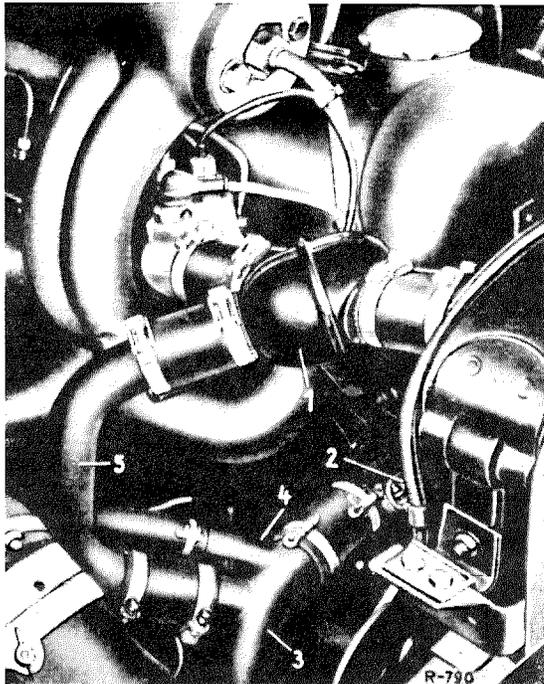


Fig. 50-6/4

Wax thermostat with by-pass control
(Fig. shows Model 220 SE)

- 1 Thermostat
- 2 Connection to heat feeler on injection pump
- 3 Cooling water line from radiator to engine
- 4 Heater connection
- 5 By-pass line

C. Subsequent Installation of a Wax Thermostat with By-Pass Control

I. Model 180 D

The cooling water line from the radiator to the engine (3) must be replaced by the cooling water line Part No. 636 200 12 53 (see Fig. 50-6/4). When this line is installed, the diameter of the pipe socket of the line is 28 mm. The thermostat is connected to the cooling water system by two hoses and the new by-pass line (5) Part No. 635 501 00 24 which has to be installed.

II. Model 180 a

The arrangement of the wax thermostat with by-pass control (1) and the by-pass line (5) is shown in Fig. 50-6/4. The subsequent installation requires the cooling water line (3) Part No. 121 500 14 91 from the radiator to the engine with a diameter of the connection for the by-pass line of 32 mm and the by-pass line (5) Part No. 121 500 15 91.