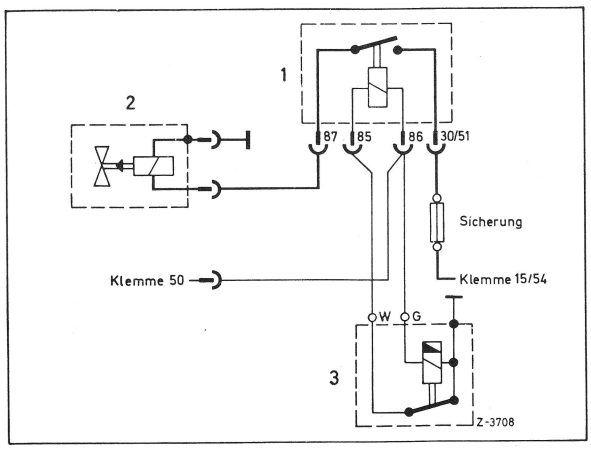

Fig. 1 Wiring diagram of starting device

1 Relay
2 Starting valve
3 Thermal time switch

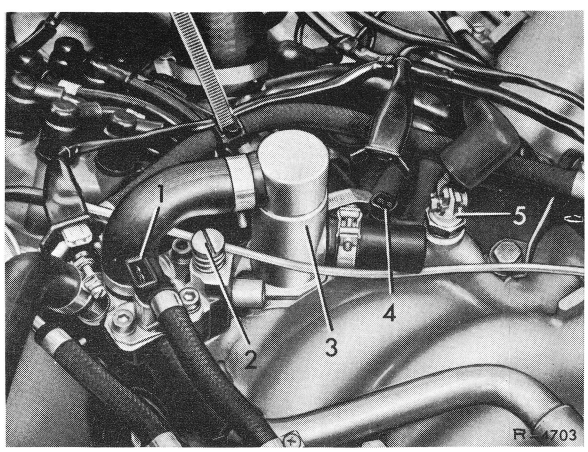

Fig. 2

1 Starting valve (plug pulled)
2 Idling speed adjusting screw
3 Supplementary air valve
4 Cooling water temperature sensor (plug pulled off)
5 Thermal time switch

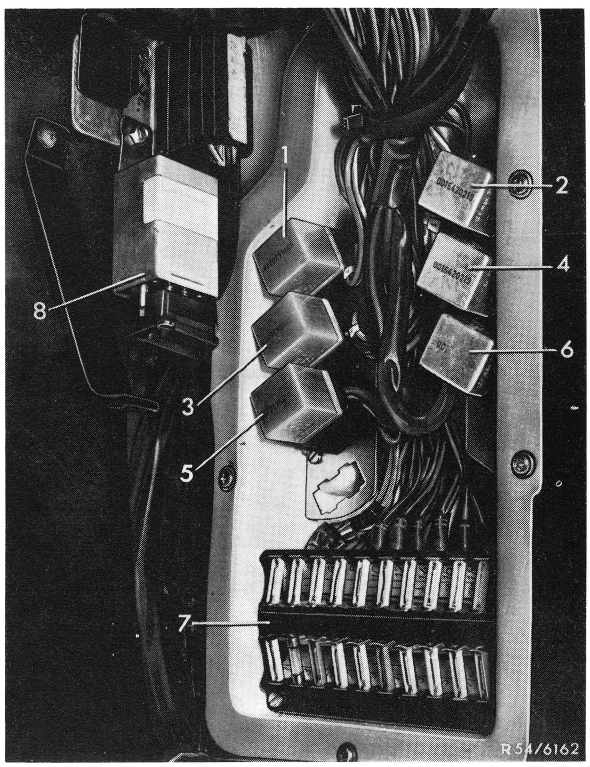

Fig. 3

1 Relay for fuel pump
2 Relay for starting valve
3 Relay for electronic system
4 Relay for starter terminal 50
5 Relay for air-conditioning system (optional)
6 Relay for supplementary fan (optional)
7 Fuses
8 Time switch for heatable rear window

Cooling water temperature	Controlled element	Controlled by	Duration of control
below + 35° C	starting valve	thermal time switch via relay	increases with increasing temperature approx. 12 sec. at −20° C

The starting valve is actuated only at cooling water temperatures below + 35° C by the closed thermal time switch via the relay.

The actuating time increases with decreasing temperature and amounts to approx. 12 seconds at −20° C.

Above + 35° C Cooling Water Temperature

1 Connect voltmeter to connection of starting valve.

2 Connect terminal W (cable colour pink) of thermal time switch to ground (switch housing).

3 Actuate starter. The voltmeter should then indicate approx. 10 V.
This test does not include the function of the thermal time switch.

The thermal time switch is checked with an ohmmeter.

Test values above 35° C:

Connection W-ground = approx. 100 Ω
Connection G-ground = approx. 60 Ω
Connection G-W = approx. 40 Ω

Test values below 35° C:

Connection G-ground = approx. 20 Ω
Connection W-ground = approx. 0 Ω
(contacts in switch closed)

Below + 35° C Cooling Water Temperature

4 Connect voltmeter to connection of starting valve.

5 Actuate starter. After a given period the voltmeter should indicate 10 V (depending on cooling water temperature).

The control period increases with decreasing temperature by approx. 1 sec. per 5°C.

For example + 35° C = 0 sec.
+ 20° C = 3 sec.

It is recommended to test the thermal time switch additionally with an ohmmeter.