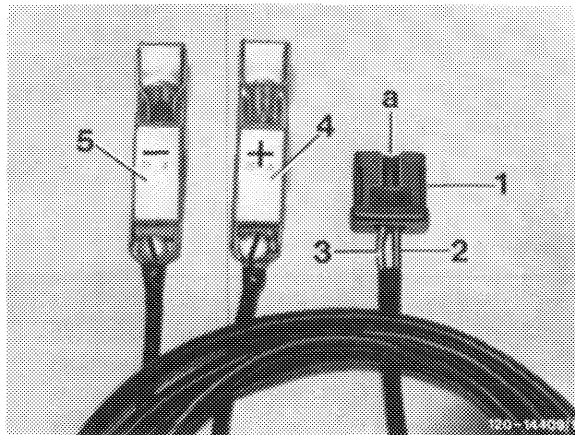


Self-made tools

- 1 Coupling part no. 002 545 49 28
- 2 Line black 1.5 mm dia. approx. 1 m long
- 3 Line brown 1.5 mm dia. approx. 1 m long
- 4 Cable terminal +
- 5 Cable terminal –
- a Locating groove

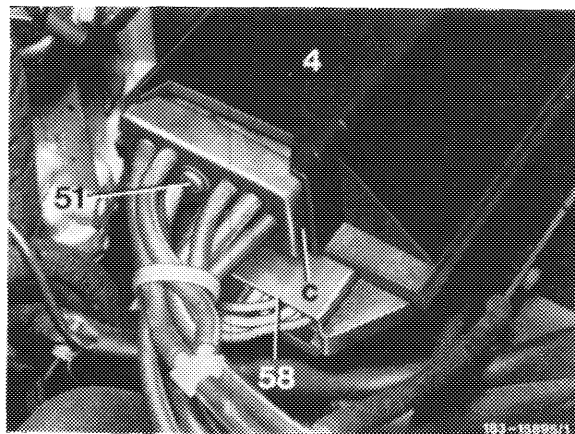


A. Regulating valve

Removal

- 1 Drain coolant.
- 2 Unscrew screw (51) from vacuum plug (c) and pull off vacuum plug.
- 3 Pull off electrical plug (58), paying attention to safety hooks. Hooks are located at bottom of plug.

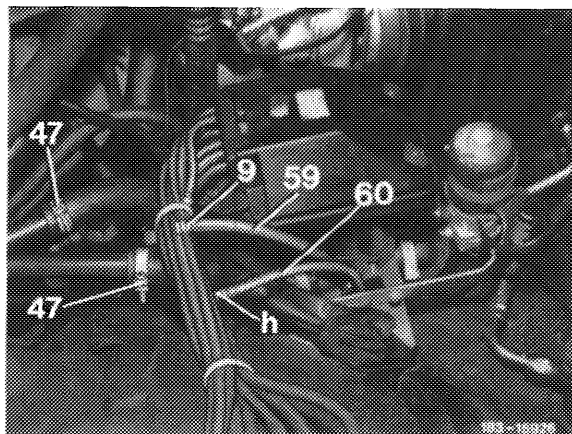
- 4 Regulating valve
- 51 Screw
- 58 Electrical plug
- c Vacuum plug



- 4 Loosen hose clips (47) and pull water hoses from pipe line.

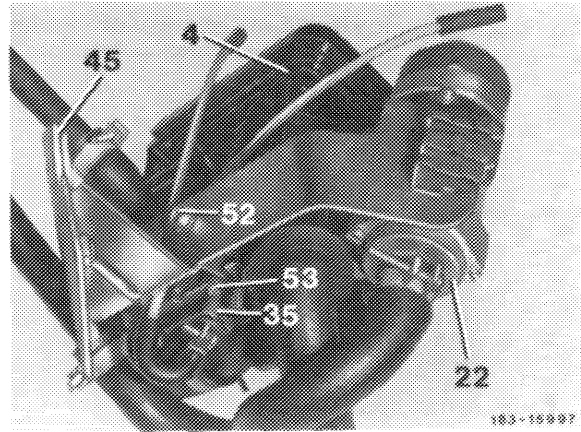
- 5 Pull off vacuum lines (59 and 60) to temperature switch (35) at distributors (g and h).

- 35 Temperature switch
- 47 Hose clips
- 59 Vacuum lines
- 60 Vacuum lines
- g Distributor
- h Distributor



6 Unscrew holder (45) on wheel housing panel. Then unscrew screws (52) and remove regulating valve from holder.

7 Remove vacuum lines from temperature switch (35).

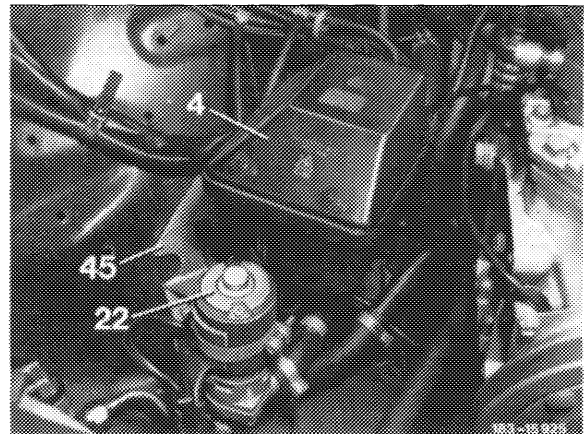


Installation

8 Attach vacuum lines to temperature switch (35). Pay attention to varying thickness of vacuum lines.

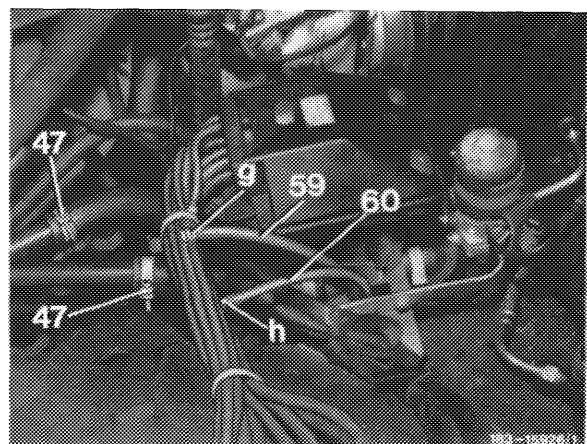
9 Screw regulating valve to holder (45) by means of screws (52).

10 Attach holder (45) with regulating valve (4) and heating water pump (22) to wheel house panel.



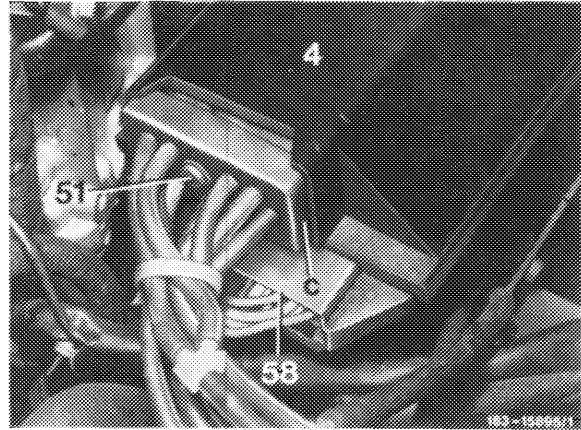
- 4 Regulating valve
- 22 Heating water pump
- 45 Holder

11 Mount hose lines on pipe line and tighten hose clips (47).



- 35 Temperature switch
- 47 Hose clip
- 59 Vacuum line (red)
- 60 Vacuum line (red/green)
- g Distributor
- h Distributor

12 Mount electrical plug (58) and vacuum plug (c).



- 51 Screw
- 58 Electrical plug
- c Vacuum plug

13 Add coolant and check hose connections for leaks.

14 Bleed cooling system, while bridging temperature switch (21) for heating water pump (83-690) or by connecting heating water pump directly to vehicle battery by means of self-made harness. Push "DEF" button and run engine at approx. 2000/min until operating temperature of engine is attained.

15 Check operation of automatic climate control.

B. Temperature switch (cold engine lock)

Data

Switch-on point

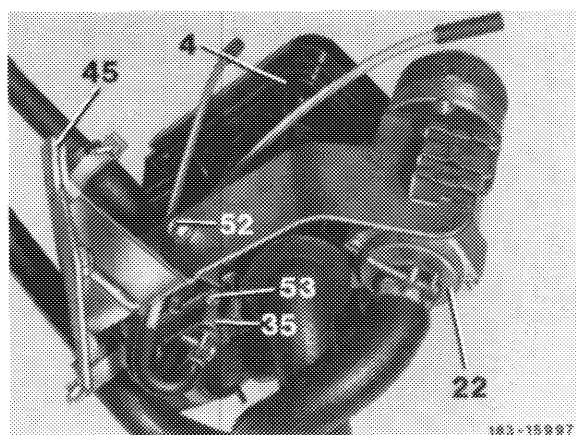
40 °C (104 °F) coolant temperature

Removal

1 Remove regulating valve (refer to section A).

2 Unscrew screws (53).

3 Remove temperature switch (35).



- 4 Regulating valve
- 45 Holder
- 22 Heating water pump
- 53 Screw
- 35 Temperature switch

Installation

- 4 Check gasket and replace, if required.
- 5 Screw temperature switch (35) to regulating valve with screws (53), paying attention to locating cam.
- 6 Install regulating valve (refer to section A).

Heating water circuit

