

Operation

Control of heating system comprises the following components:

- a) Pneumatic section (vacuum control)
- b) Mechanical section (heater valve)

a) Pneumatic section

The vacuum is controlled by the two vacuum changeover switches (9 and 10) which are screwed to control system.

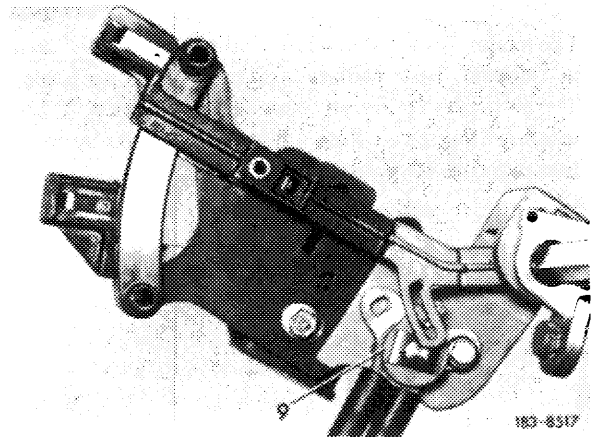
Both vacuum changeover switches (9 and 10) are similar in design. The vacuum lines are differently connected to changeover switches (9 and 10).

In position "heater closed" (both operating levers (15) for the heater are at bottom) both changeover switches (9 and 10) will activate the vacuum. The vacuum element (13) on heater valve (14) will then be attracted via vacuum line (12).

In position "heater open" (at least one operating lever (15) for the heater is far enough in direction of "heating" that one changeover switch will interrupt the vacuum) the vacuum element (13) on heater valve (14) is connected to atmosphere via vacuum line (12) and changeover switch (9 or 10). The heater valve (14) is opened by the spring force.

The vacuum line (6) establishes the connection between intake pipe and the supply tank (7). The supply tank (7) is behind partition at the left between the front wall pillar and the front fender.

If the vacuum system is defective, the heater valve (14) is opened by spring pressure. The arrangement of the mixing air flaps permits that in spite of an open heater valve only a slight amount of warm air will escape from heating system in position "heater closed". Only the heat exchanger is heated.



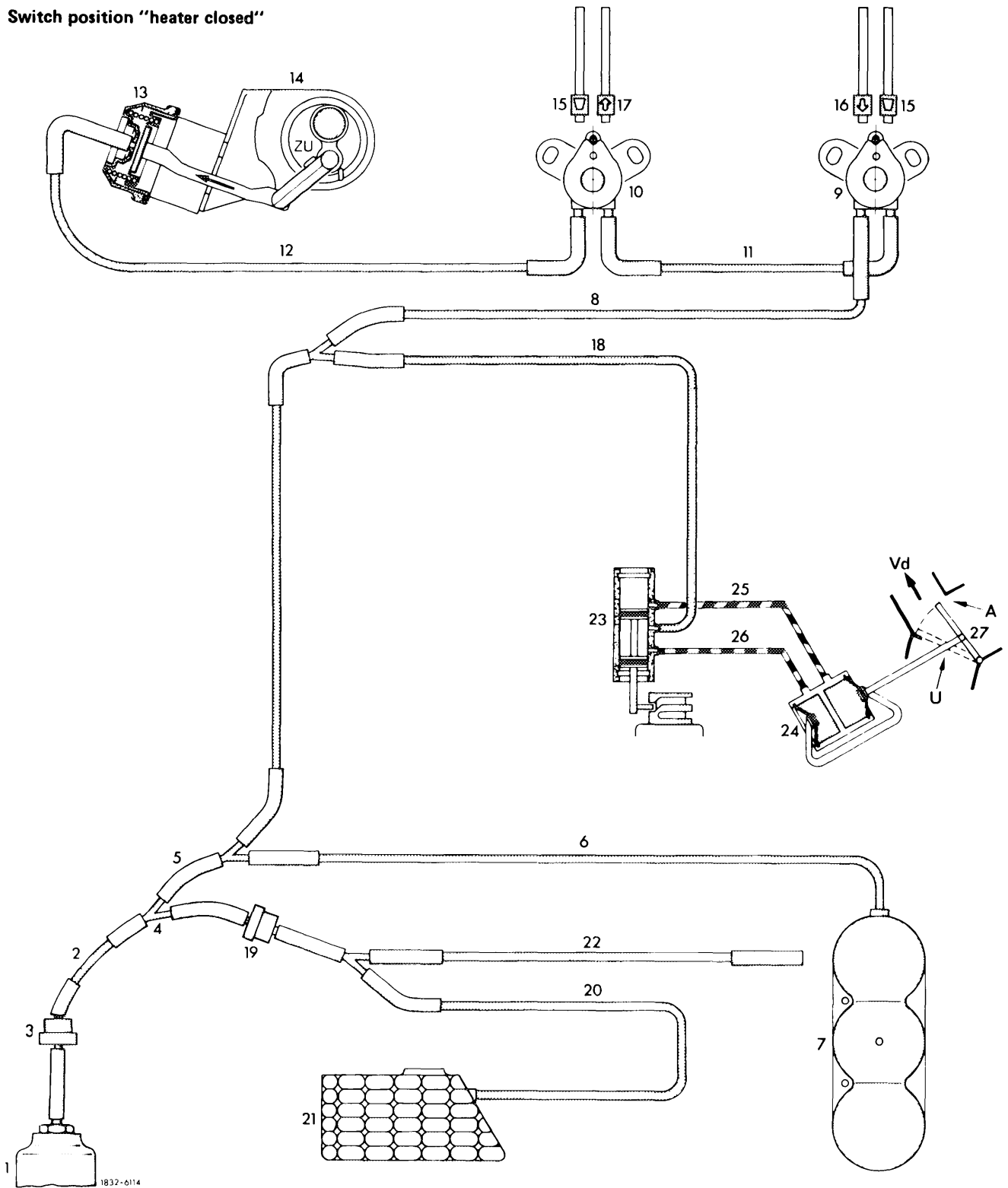
Color code of vacuum lines

	1st version	2nd version	3rd version
Line	Color		
2	white	grey	grey
6	medium green-white	grey-light blue	red-grey
8	medium green	red-green	red-green
11	red	red	red
12	red	red	red
18	medium green	green-yellow	green-yellow
20	yellow	grey-yellow	grey-yellow
22	yellow	yellow	yellow

b) Mechanical section

The heater valve (14) can be switched to position "open" or "closed". Intermediate positions are not possible. The air outlet temperature on heater is controlled by means of mixing air flaps which are actuated by the two outer heater control levers (15).

Switch position "heater closed"



Vacuum

Ventilation (connection to atmosphere)

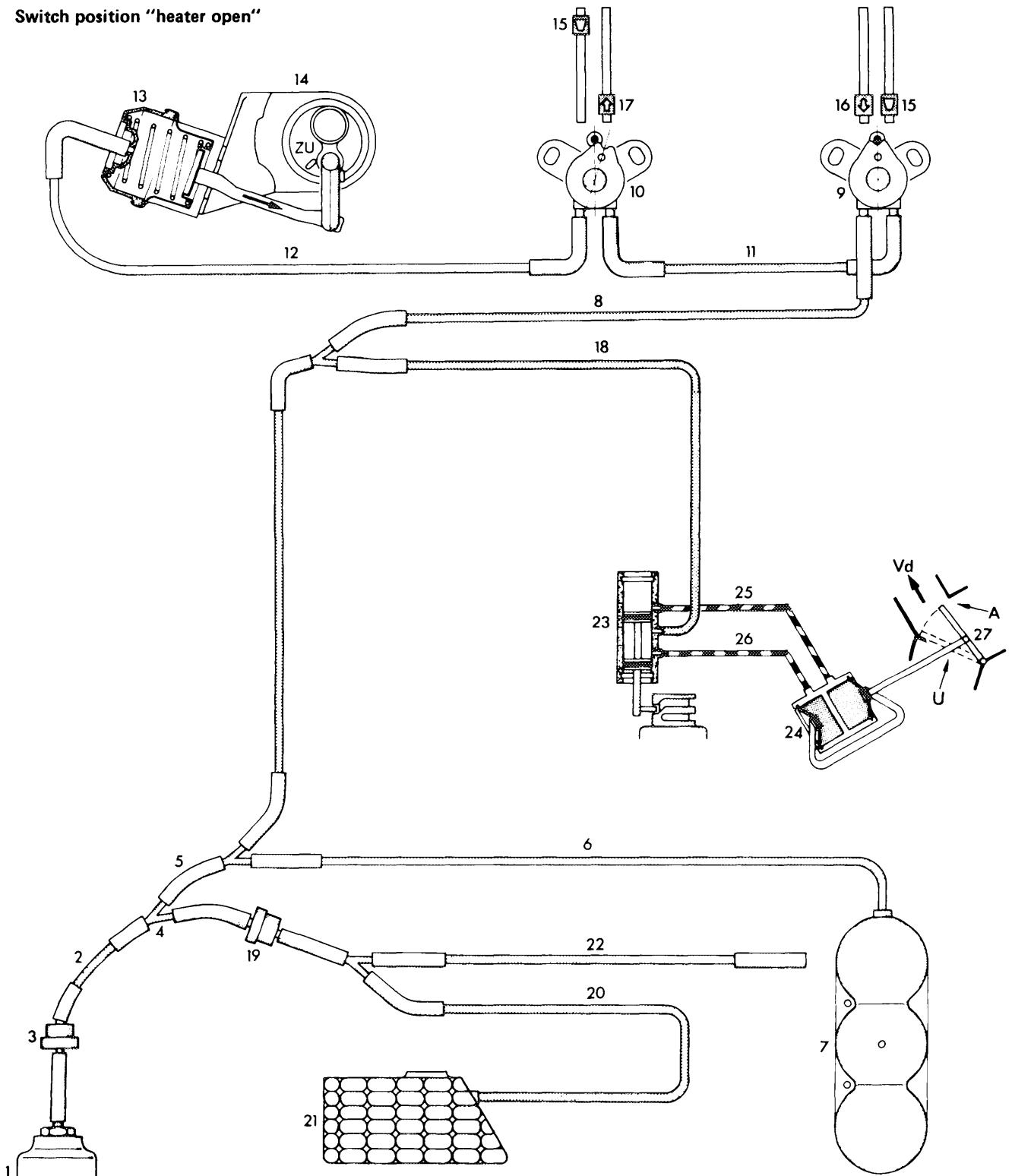
- 1 Vacuum connection on intake pipe
- 2 Vacuum line from check valve to distributor
- 3 Check valve
- 4 Distributor
- 5 Connection
- 6 Vacuum line to supply tank
- 7 Supply tank for heater/climate control
- 8 Vacuum line to right-hand vacuum changeover switch
- 9 Vacuum changeover switch right
- 10 Vacuum changeover switch left
- 11 Vacuum connecting line
- 12 Vacuum line to vacuum element red
- 13 Vacuum element (heater valve)

- 14 Heater valve
- 15 Operating lever for heater
- 16 Operating lever for ventilation (legroom and rear compartment)
- 17 Operating lever for air outlet at windshield
- 18 Vacuum line to temperature vacuum switch for climate control (option) medium green
- 19 Check valve for central locking system (option)
- 20 Vacuum line to supply tank (central locking system)
- 21 Supply tank (central locking system)
- 22 Vacuum line to switch for central locking system

- 23 Vacuum switch for climate control
- 24 Vacuum element
- 25 Vacuum line dark green
- 26 Vacuum line light green
- 27 Circulating air flap (flap position "circulating air" with share of approx. 20% fresh air)

- A Fresh air
- U Circulating air
- Vd Evaporator

Switch position "heater open"



▬ Vacuum **▬** Ventilation (connection to atmosphere)

- | | | |
|--|---|---|
| 1 Vacuum connection on intake pipe | 14 Heater valve | 23 Vacuum switch for climate control |
| 2 Vacuum line from check valve to distributor | 15 Operating lever for heater | 24 Vacuum element |
| 3 Check valve | 16 Operating lever for ventilation (legroom and rear compartment) | 25 Vacuum line dark green |
| 4 Distributor | 17 Operating lever for air outlet at windshield | 26 Vacuum line light green |
| 5 Connection | 18 Vacuum line to temperature vacuum switch for climate control (option) medium green | 27 Circulating air flap (flap position "circulating air" with share of approx. 20% fresh air) |
| 6 Vacuum line to supply tank | 19 Check valve for central locking system (option) | A Fresh air |
| 7 Supply tank for heating/climate control | 20 Vacuum line to supply tank (central locking system) | U Circulating air |
| 8 Vacuum line to right-hand vacuum changeover switch | 21 Supply tank (central locking system) | Vd Evaporator |
| 9 Vacuum changeover switch right | 22 Vacuum line to switch for central locking system | |
| 10 Vacuum changeover switch left | | |
| 11 Vacuum connecting line | | |
| 12 Vacuum line to vacuum element red | | |
| 13 Vacuum element (heater valve) | | |