

Figure 1 Arrangement of control system

- |                   |                                  |                                |
|-------------------|----------------------------------|--------------------------------|
| 1 Control valve 1 | 4 Vacuum element                 | 9 Vacuum line to supply tank   |
| 2 Control valve 2 | 5 Heater valve                   | 12 Vacuum line to suction pipe |
| 3 Check valve     | 7, 8 Venting line or vacuum line |                                |

The controls of the heating system include the following sections:

- electrical section (micro switch and magnetic valves),
- pneumatic section (vacuum control),
- mechanical section (heater valve).

## a) Electrical Section

The two outer operating levers of the heating system serve to actuate one micro switch (28) each.

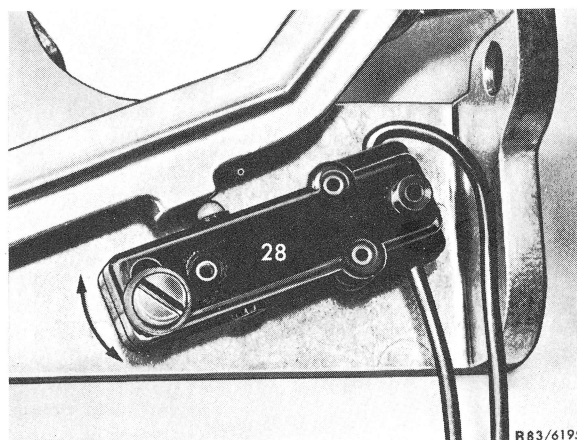


Figure 2

28 Micro switch on control system

If both outer levers are in their lowermost position (cold), the power circuit is interrupted (wiring diagram heater closed).

## Switch Position "Heater Closed"

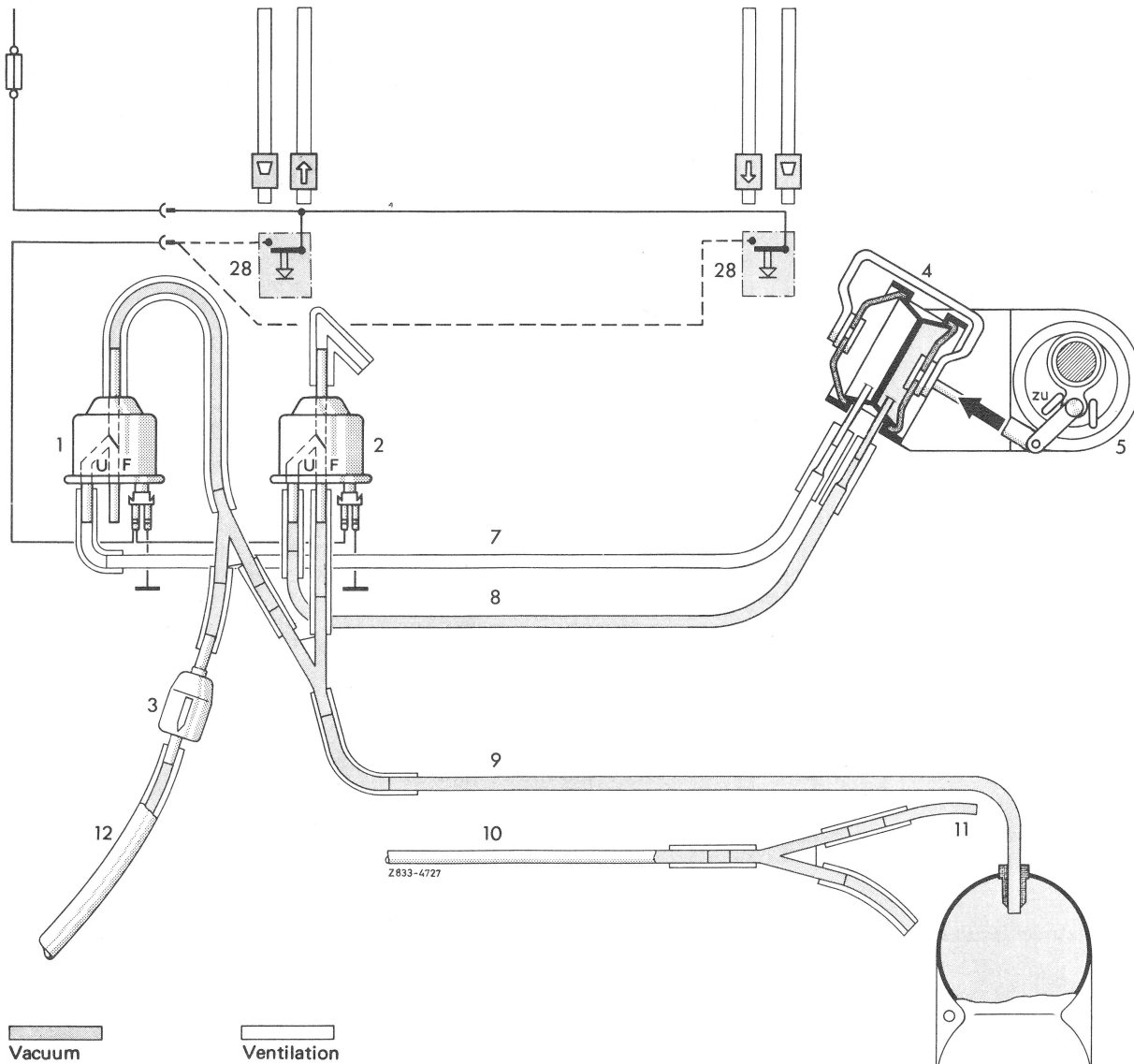


Figure 3

- |                   |  |
|-------------------|--|
| 1 Control valve 1 | 9 Vacuum line to supply tank   |
| 2 Control valve 2 | 10 Arrangement of vacuum line (9) with optional central interlock or air-conditioning system (branch 11) |
| 3 Check valve     | 11 Line to supply tank   |
| 4 Vacuum element  | 12 Vacuum line to suction pipe   |
| 5 Heater valve    | 28 Micro switch on control system  |
| 6 Supply tank     |  |
| 7 Venting line    |  |
| 8 Vacuum line     |  |

## Switch Position "Heater Open"

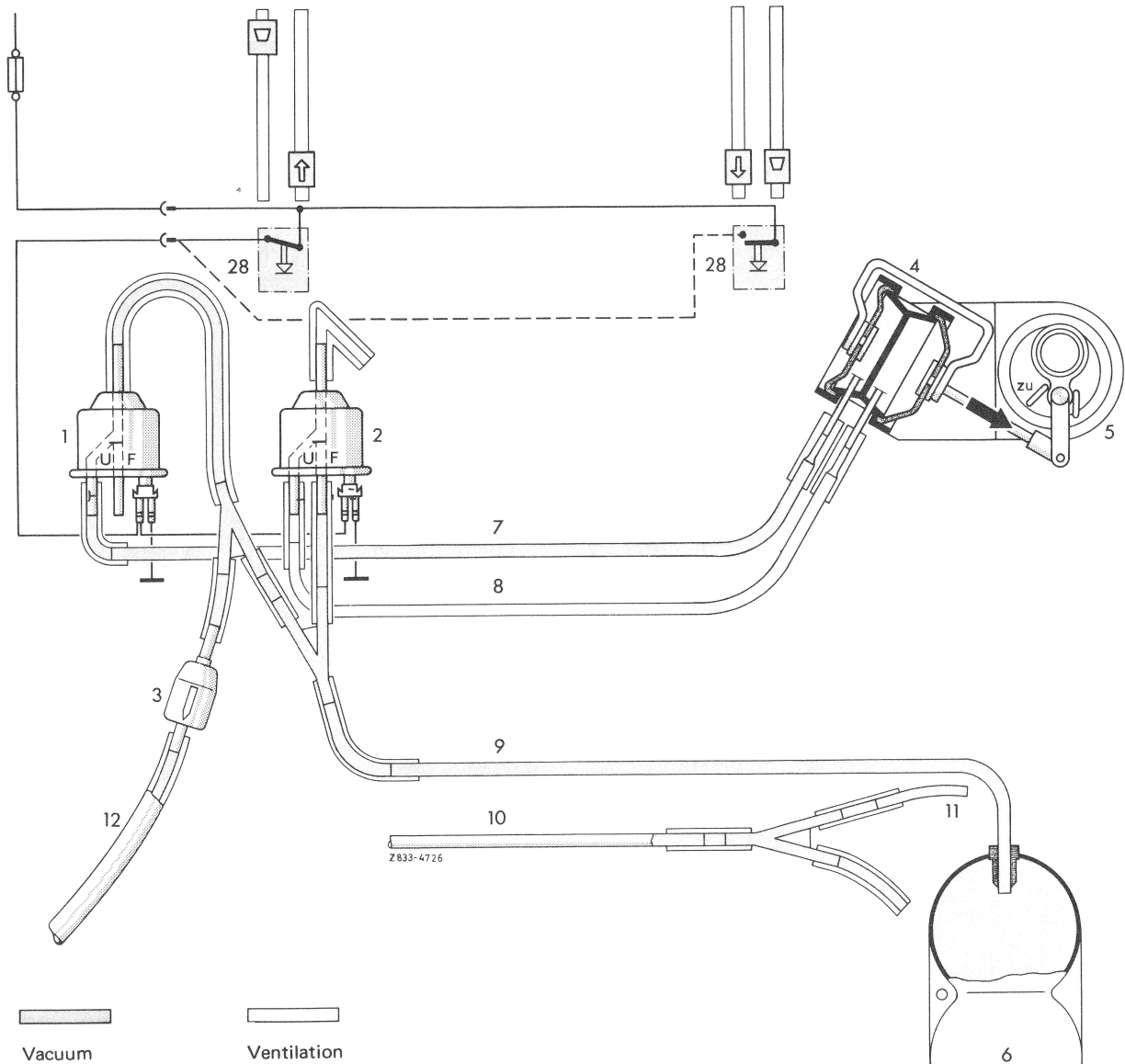


Figure 4

- |                   |   |
|-------------------|---|
| 1 Control valve 1 | 9 Vacuum line to supply tank                    |
| 2 Control valve 2 | 10 Arrangement of vacuum line (9) with optional |
| 3 Check valve     | central interlock or air-conditioning system    |
| 4 Vacuum element  | (branch 11)                                     |
| 5 Heater valve    | 11 Line to supply tank                          |
| 6 Supply tank     | 12 Line to suction pipe                         |
| 7 Vacuum line     | 28 Micro switch on control system               |
| 8 Venting line    |   |

# 83.1 Controls of Heating System

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Each of these micro switches is always used to control both control valves (1 and 2). Both valves are located at the front wall at the right in the engine compartment.

If one of the two outer levers is moved upwards, the micro switch is actuated and the circuit is closed. Valves (1 and 2) will change over.

## b) Pneumatic Section

The design of both valves is the same. The vacuum lines are connected differently to valves.

In the position "heater closed" (both operating levers for the heater are at bottom) valve 1 for the vacuum is closed.

Valve 2 opens the path for the vacuum to the vacuum element (4). There is now a connection between the line to the suction pipe via connection F of valve 2 to connection U and via line (8) to the vacuum element.

The vacuum element is vented via line (7) and connections U and F on valve 1.

In position "heater open" (at least one operating lever for the heater is moved in the direction of "heating" to the extent that the power circuit is

closed by the micro switch) the connection between the vacuum element and the line toward the suction pipe is established via the connection U of valve 1 and line (7). The vacuum element is vented via line (8), connection U and the upper connection on valve 2.

Lines 9 or 10 and 11 establish the connection between the suction pipe and the supply tank (6). This supply tank is in the legroom at the left, behind the panelling of the front wall pillar.

Color code:

Line	Color	Remarks
9	green	up to approx. August 1971
10	red	
9	red	as from approx. Sep 1971
10	green	
11	medium green	in version without option
	white	for air-conditioning system or central interlock

## c) Mechanical Section

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