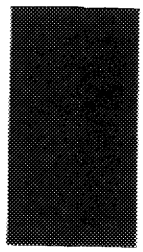
Supplement B
Automatic Climate Control
starting Model Year 1986



Automatic climate control

Model 107

Modifications as compared with model year 1985

Switch for fresh/recirculating air

After switching on the ignition, the switch (S24) can be engaged for 80 % recirculating air. The change back to fresh air is made when the switch (S24) or the ignition is switched off (refer to Figs. 83/13 and 83/14).

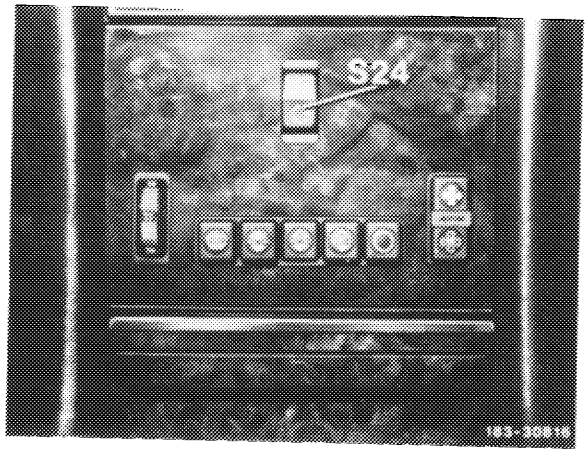


Fig. 83/1

S 24 Switch for fresh/recirculating air (80 %)

Switchover valve unit

A switchover valve unit with 4 switchover valves is installed (access with glove box removed). It is a single unit and can be replaced only as an assembly.

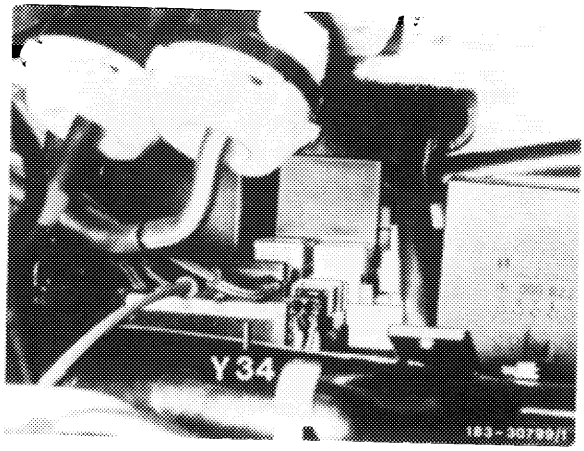


Fig. 83/2

Y 34 Switchover valve unit with 4 connections

Auxiliary fan

The fan known from model 126 is installed. Current draw at max. speed and 13 V is approx. 17.5 amps.

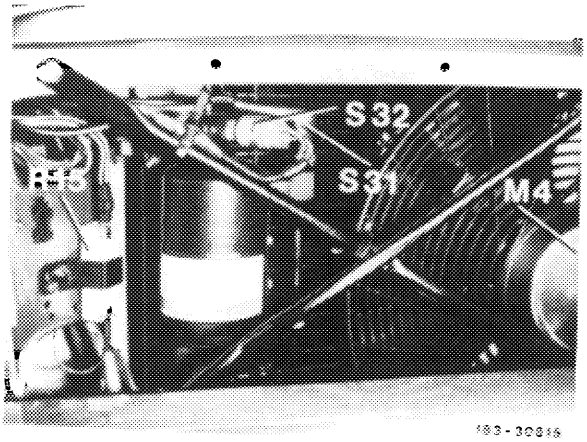


Fig. 83/3

M 4 Auxiliary fan
S 32 Refrigerant high pressure switch for auxiliary fan and R15 pre-resistor for auxiliary fan

The auxiliary fan is activated in 2 steps:

- Low speed with high pressure switch (S32) instead of temperature switch (52 °C) known previously. The switch engages the relay K10 at a refrigerant pressure of approx. 20 bar and the low speed via preresistor (R15). It disengages at approx. 15 bar.

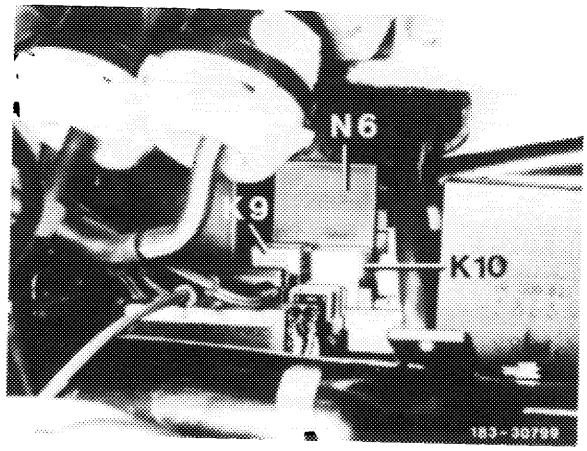


Fig. 83/4

K 9 Relay, auxiliary fan (high speed)
K 10 Relay, auxiliary fan (low speed)

- High speed is directly activated with battery voltage by means of temperature switch (S 25/5) at 105 °C coolant temperature via relay (K9) and off again at approx. 97 °C.

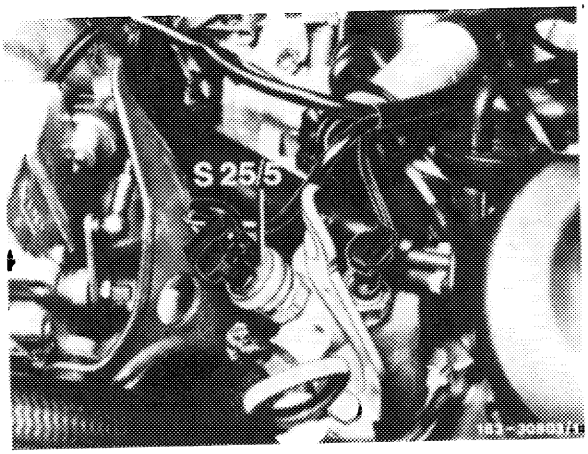


Fig. 83/5
S 25/5 Coolant temperature switch 105/115°C

Pushbutton switch unit

The switching procedure of the unit (N 22/2) has been modified. After engaging one of the function selections , or a ground (—) signal is routed to control unit for compressor cutout (N6). Until now, the relay for refrigerant compressor had been activated with a (+) connection.

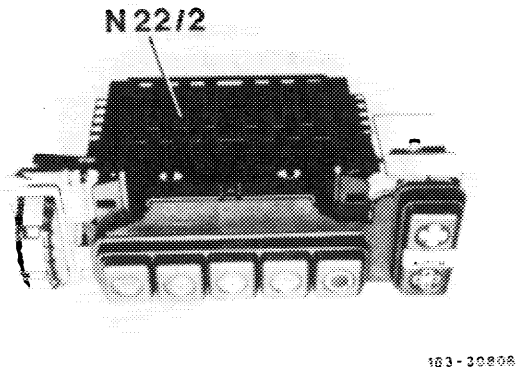


Fig. 83/6
N 22/2 Pushbutton switch unit

Air conditioning compressor cutout

For faster stabilization of engine speed after starting, the A/C compressor is activated, by the control unit (N6) from an engine speed of approx. 600 rpm only after approx. 10 seconds.

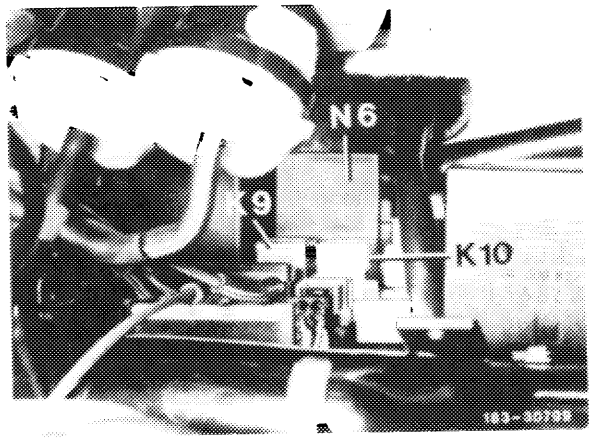


Fig. 83/7
N6 Control unit for compressor cutout

A/C compressor overheating cutout

To prevent overheating of the engine, the control unit for compressor cutout (N6) is provided with an integrated emergency cutout. At approx. 115°C coolant temperature the temperature switch (S 25/5, 1-pole connection) switches to ground, so that the A/C compressor will be switched off via control unit (N6). The temperature switch (S 25/5) opens at approx. 108°C and the A/C compressor will again be switched on via control unit (N6). In addition, the A/C compressor:

- switches off above 5750 rpm
- and on again below 5550 rpm

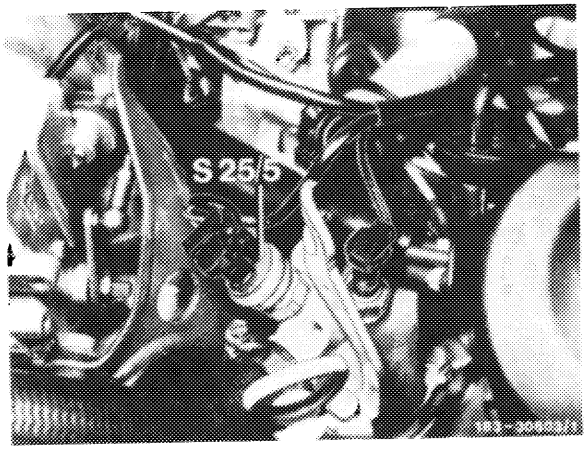


Fig. 83/8
S 25/5 Coolant temperature switch 105/115 °C

Plug connection climate control harness/engine harness (X 85)

The plug connection (X 85) is located on relay holder for relay (K 9) and (K 10).

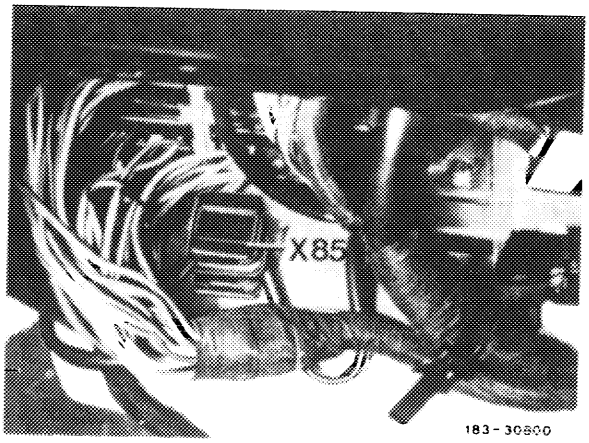


Fig. 83/9

X 85 Plug connection climate control harness/engine harness

Air conditioning compressor

The swash plate air conditioning compressor is made by Nippondenso and carries the designation 10 P 17. The oil filling capacity of the air conditioning compressor amounts to 120 cc.

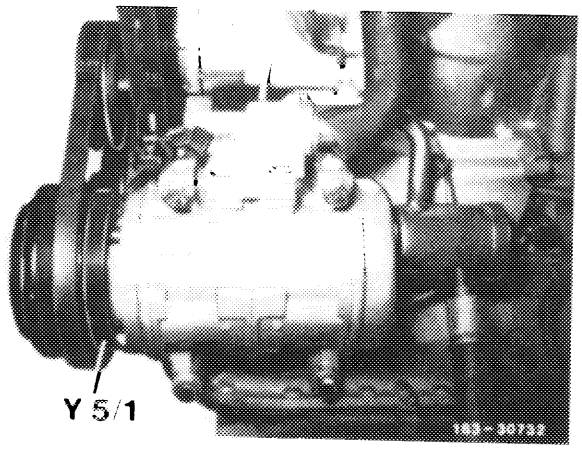


Fig. 83/10

Cold engine lock-out

The location of the cold engine lock-out has been changed. It is now on the right cylinder head, rear.

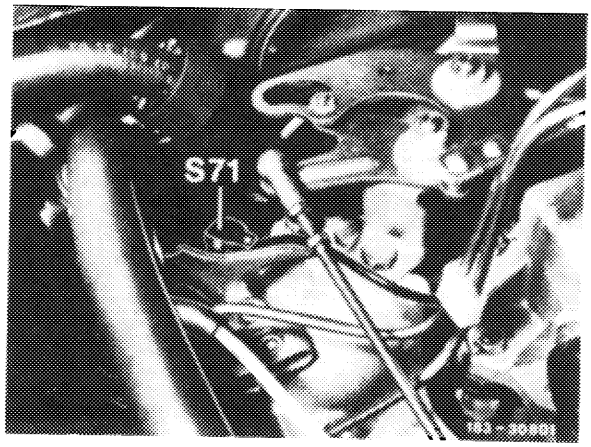


Fig. 83/11

S 71 Cold engine lock-out

Wiring diagram

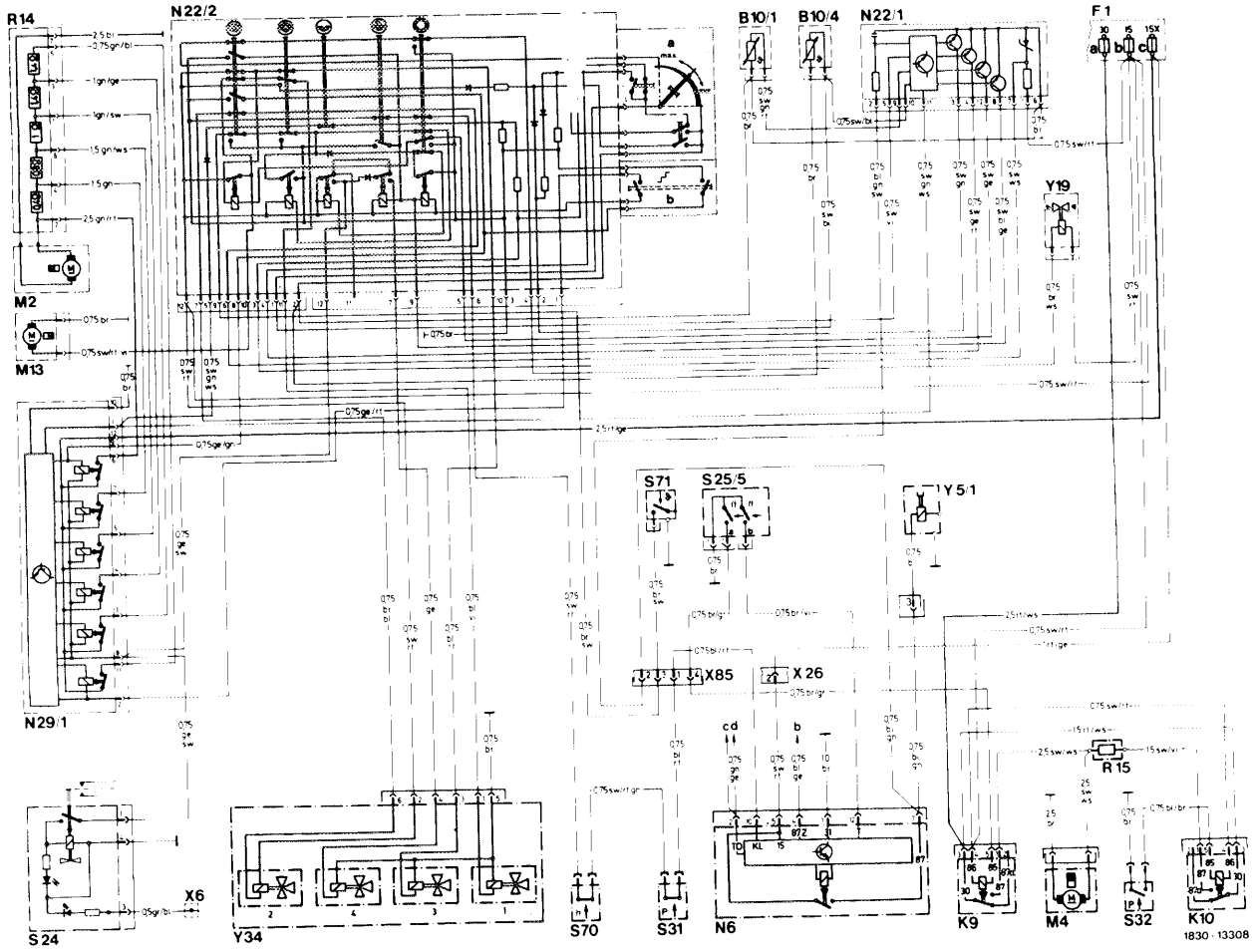


Fig. 83/12 Wiring diagram, automatic climate control, model 107

B	10/1	Temperature sensor heat exchanger	R	14	Blower motor pre-resistor group	Y	5/1	Electromagnetic clutch air conditioning compressor
B	10/4	In-car temperature sensor	R	15	Auxiliary fan pre-resistor	Y	19	Monovalve
F	1	Fuse box a Fuse 14:16 amps b Fuse 7: 8 amps c Fuse 6:16 amps	S	24	Switch for fresh/recirculating air	Y	34	Switchover valve unit, 4 connections 1 Switchover valve for legroom flaps 2 Switchover valve for defroster flaps (short stroke) and center air flap 3 Switchover valve for defroster flaps (long stroke) 4 Switchover valve for main air flaps
			S	25/5	Coolant temperature switch 105/115 °C a 105°C for auxiliary fan b 115°C for compressor engine overheat cutout			
K	9	Auxiliary fan relay						
K	10	Auxiliary fan pre-resistor relay	S	31	Refrigerant low pressure switch, closed 2.6 bar/open 2.0 bar			
M	2	Blower motor						
M	4	Auxiliary fan	S	32	Refrigerant high pressure switch, closed 20 bar/open 15 bar			
M	13	Auxiliary coolant pump						
N	6	Compressor cutout control unit	S	70	ETR switch	b		To idle speed control unit, pin socket 3
N	22/1	Electronic control unit for temperature control	S	71	Temperature switch (cold engine lock-out)	c		To fuel pump relay, pin socket 10
N	22/2	Pushbutton switch unit a Temperature selector wheel b Blower switch	X	6	Connector terminal 58 d	d		To idle speed control unit, pin socket 10
			X	26	Plug connection, engine harness			
N	29/1	Electronic control unit for blower	X	85	Plug connection, climate control harness/engine harness, 4-terminal			

Vacuum function diagram

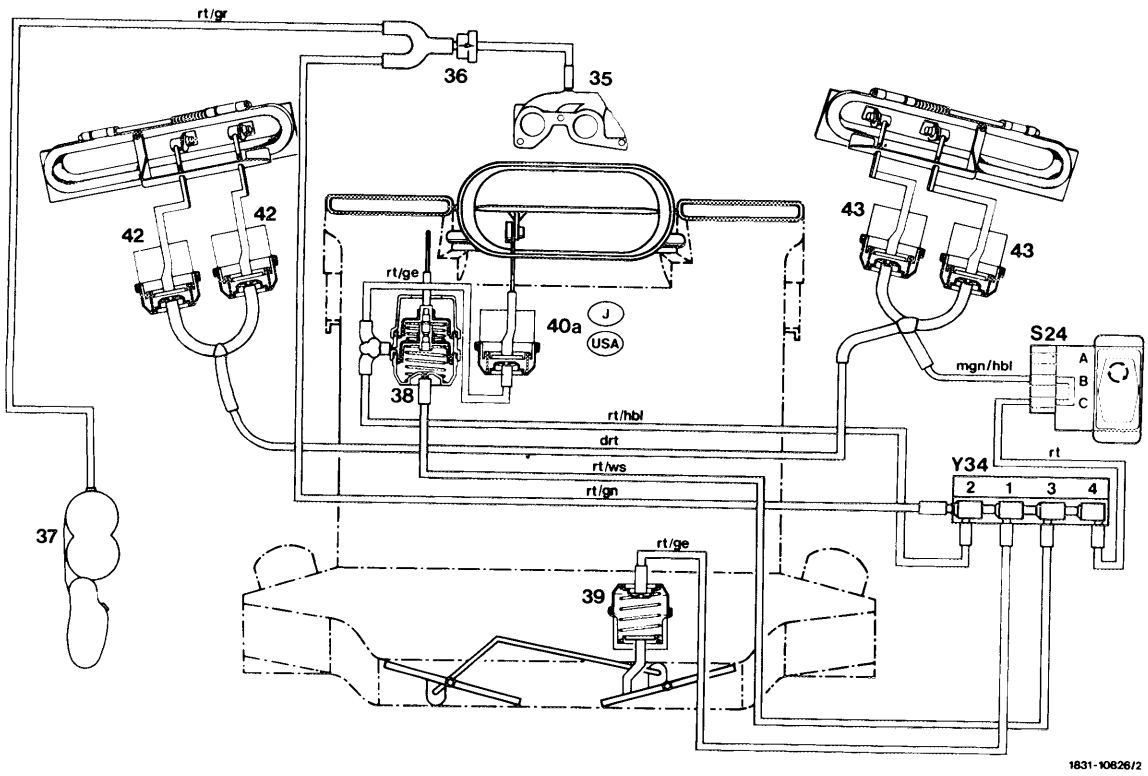


Fig. 83/13 Vacuum diagram, automatic climate control model 107, function selection ❄ cooling mode, fresh air. Fresh/recirculating air switch (S 24) off.

S 24	Fresh/recirculating air switch	35	Vacuum connection on intake manifold
Y 34	Switchover valve unit, 4 connections	36	Check valve
	1 Switchover valve for legroom flaps	37	Vacuum supply tank
	2 Switchover valve for defroster flaps (short stroke) and center air flap	38	Vacuum element for defroster flaps (flaps "closed")
		39	Vacuum element for legroom flaps (flaps "closed")
	3 Switchover valve for defroster flaps (long stroke)	40 a	Vacuum element for center outlet flap (flap "open")
		42	Vacuum element for main air flap left (flap "open")
	4 Switchover valve for main air flaps	43	Vacuum element for main air flap right (flap "open")

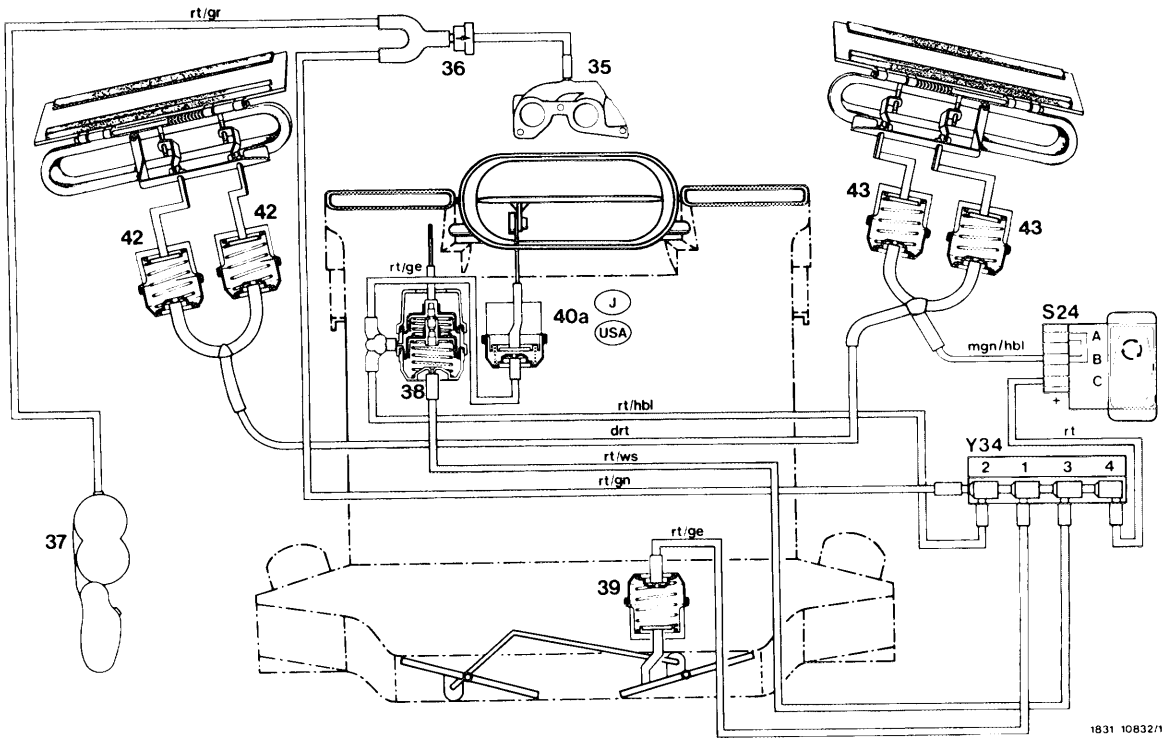


Fig. 83/14 Vacuum diagram, automatic climate control model 107, function selection ❄ cooling mode, fresh air. Fresh/recirculating air switch (S 24) on.

S 24	Fresh/recirculating air switch
Y 34	Switchover valve unit, 4 connections
	1 Switchover valve for legroom flaps
	2 Switchover valve for defroster flaps (short stroke) and center air flap
	3 Switchover valve for defroster flaps (long stroke)
	4 Switchover valve for main air flaps
35	Vacuum connection on intake manifold
36	Check valve
37	Vacuum supply tank
38	Vacuum element for defroster flaps (flaps "closed")
39	Vacuum element for legroom flaps (flaps "closed")
40 a	Vacuum element for center flap (flap "open")
42	Vacuum element for main air flap left (flap "closed" with 80% recirculated air)
43	Vacuum element for main air flap right (flap "closed" with 80% recirculated air)