
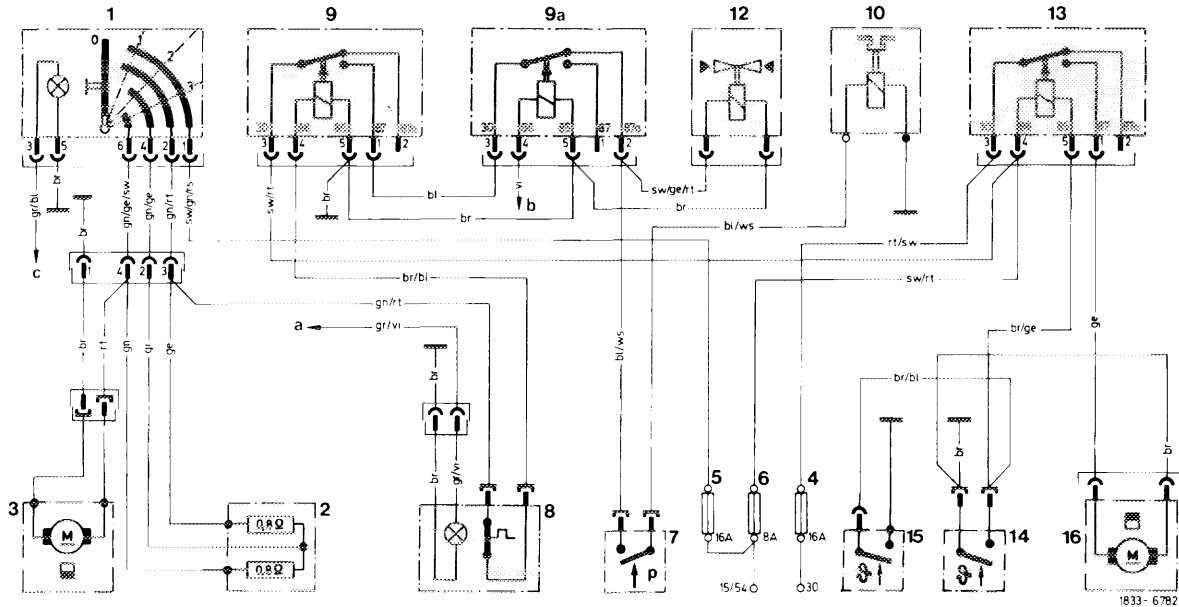

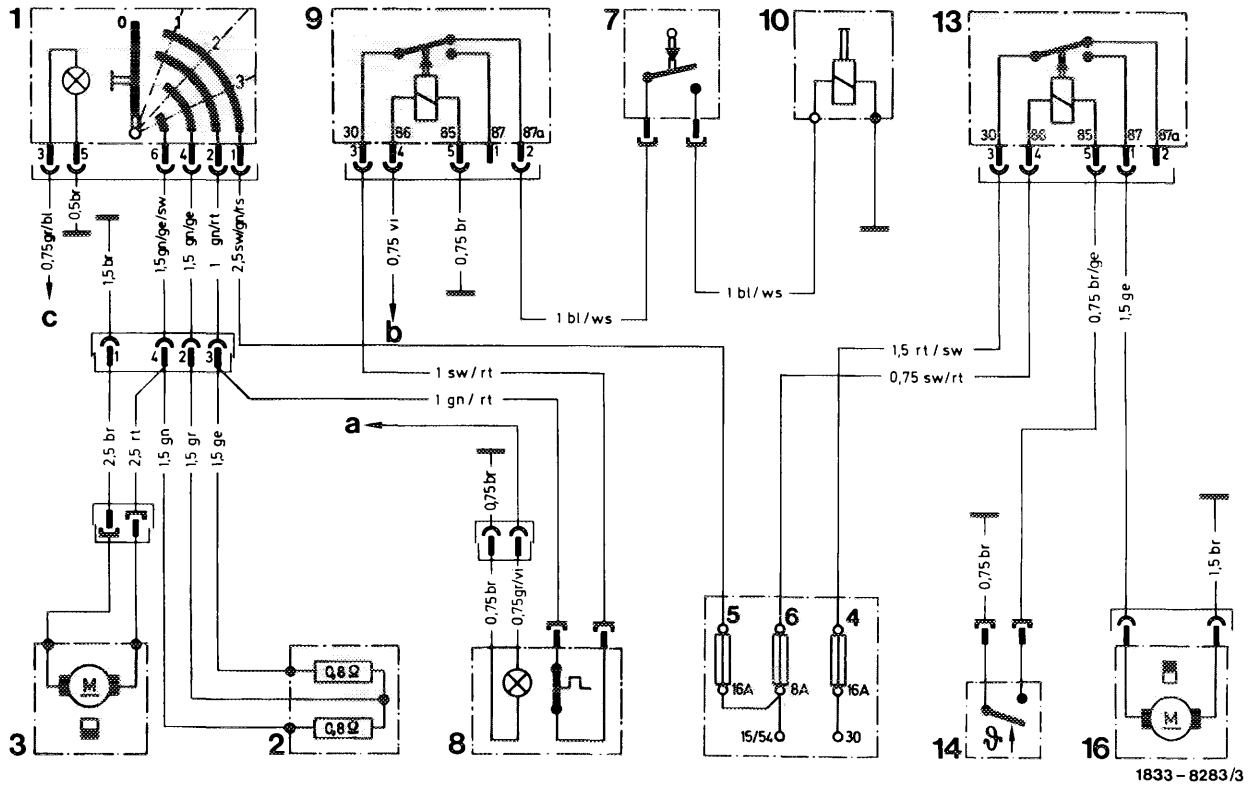


A. Electrical function of air-conditioning system, standard version and 



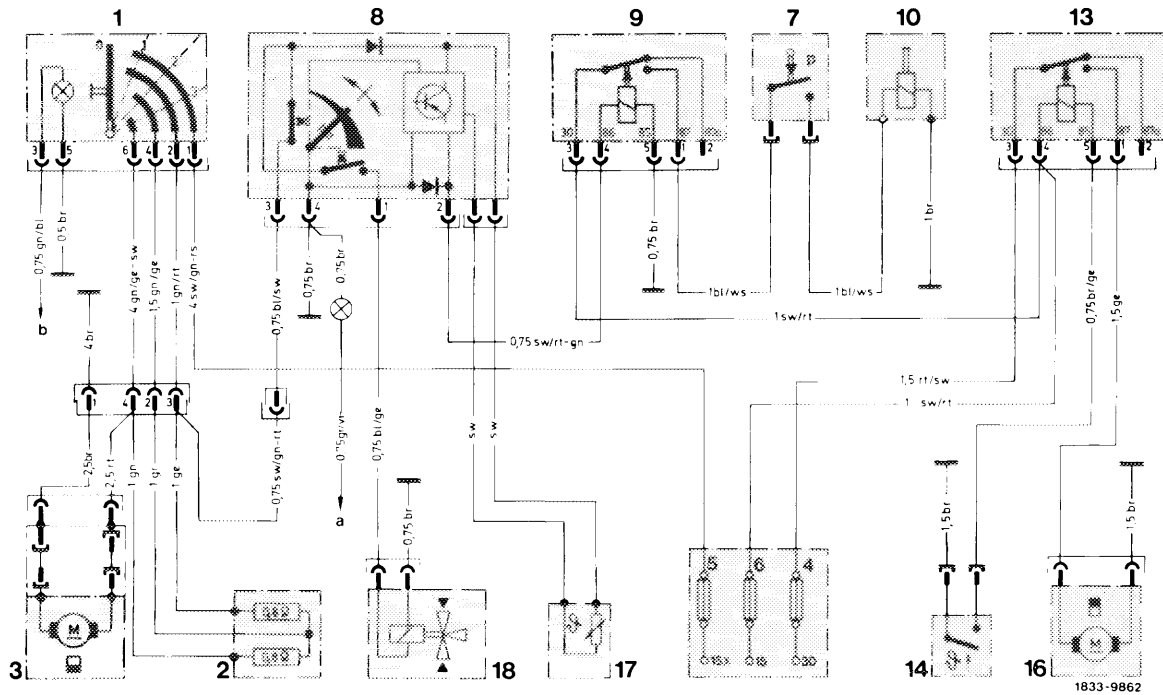
Elektrical wiring diagram air-conditioning system 1st version with York refrigerant compressor, standard version and 

- | | |
|--|---|
| <ul style="list-style-type: none"> 1 Blower switch with light 2 Pre-resistors 3 Blower 4 Main fuse box supplementary fuse C (16 amps., with supplementary heater 25 amps.) 5 Main fuse box fuse no. 10 (16 amps.) 6 Main fuse box fuse no. 12 (8 amps.) 7 Pressure switch receiver dehydrator (clutch refrigerant compressor) 8 Temperature regulator with light 9 Relay I air-conditioning system (code no. 12) 9a Relay II air-conditioning system (without code no.) 10 Electromagnetic clutch | <ul style="list-style-type: none"> 12 Changeover valve for speed stabilization (model 123.033) 13 Relay supplementary fan (code no. 6) 14 Temperature switch (4-cylinder models 52 °C, other models 62 °C) 15 Temperature switch (100 °C) 16 Supplementary fan a Rotary light switch terminal K b 1st version and USA model 123.023 Starter or cable connector terminal 50
2nd version, coupler terminal 4, for supplementary harness backup lamp switch - transmission tunnel c Instrument cluster terminal 58 d |
|--|---|



Electric wiring diagram air conditioning system 2nd version with Delco refrigerant compressor, up to 08/80 model 123.1 standard version and (USA) up to model year 1980

- | | |
|---|--|
| <ul style="list-style-type: none"> 1 Blower switch with light 2 Pre-resistors 3 Blower 4 Main fuse box supplementary fuse C (16 amps., with supplementary heater 25 amps.) 5 Main fuse box fuse no. 10 (16 amps.) 6 Main fuse box fuse no. 12 (8 amps.) 7 Pressure switch receiver dehydrator (clutch refrigerant compressor) 8 Temperature regulator with light 9 Relay I air-conditioning system (code no. 12) | <ul style="list-style-type: none"> 10 Electromagnetic clutch 13 Relay supplementary fan (code no.6) 14 Temperature switch (4-cylinder models 52°C) 16 Supplementary fan <p style="margin-top: 10px;"> <ul style="list-style-type: none"> a Rotary light switch terminal K b Coupling terminal 4, for auxiliary back-up lamp switch-transmission tunnel c Instrument cluster terminal 58d </p> |
|---|--|

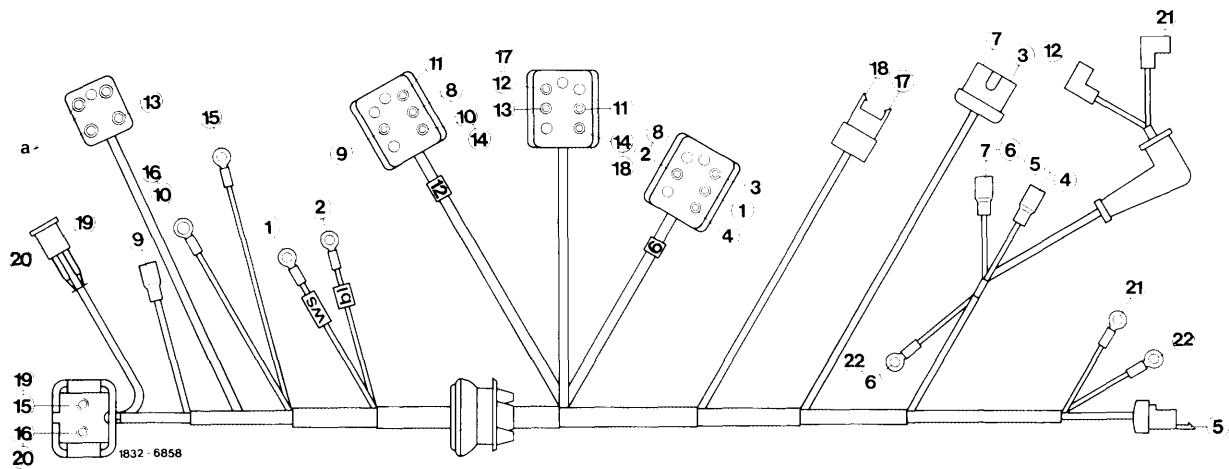


Electric wiring diagram air-conditioning system 3rd version with Delco refrigerant compressor starting 08/80, model 123.1 standard version and (USA) starting model year 1981

- | | |
|--|--|
| 1 Blower switch with light | 9 Relay I air-conditioning system (code no. 12) |
| 2 Pre-resistors | 10 Electromagnetic clutch |
| 3 Blower | 13 Relay supplementary fan (code no. 6) |
| 4 Main fuse box supplementary fuse C (16 amps. with supplementary heater 25 amps.) | 14 Temperature switch (52 °C) |
| 5 Main fuse box fuse no. 8 (16 amps.) | 16 Supplementary fan |
| 6 Main fuse box fuse no. 12 (8 amps.) | 17 Temperature sensor air-conditioning system |
| 7 Pressure switch receiver dehydrator (clutch refrigerant compressor) | 18 Switchover valve for fresh air-recirculating air flap |
| 8 Temperature dial with light | a Rotary light switch terminal 8 |
| | b Instrument cluster terminal 58 d |


B. Electrical function of supplementary fan

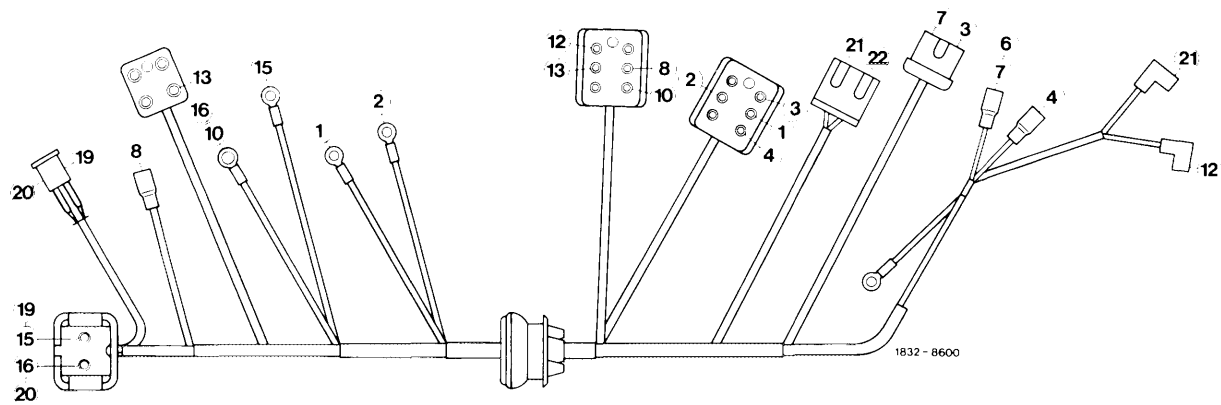
Supplementary harness for air-conditioning system and supplementary fan 1st version with York refrigerant compressor standard version and (USA)



Color code of supplementary harness

Line no.	Harness from	to	Color code	Cross section mm ²
a	Connecting bushings			
1	Main fuse box terminal 30 supplementary fuse C, 16 amps. (with supplementary heater 25 amps.)	6-pole coupling terminal 3 (relay fan [13] terminal 30)	red/black	1.5
2	Main fuse box terminal 15 fuse no. 12, 8 amps.	6-pole coupling terminal 4 (relay fan [13] terminal 86)	black/red	1.0
3	6-pole coupling terminal 1 (relay fan [13] terminal 87)	2-pole coupling supplementary fan	yellow	1.5
4	6-pole coupling terminal 5 (relay fan [13] terminal 85)	Temperature switch 62 °C (receiver dehydrator)	brown/yellow	0.75
5	Temperature switch 62 °C (receiver dehydrator)	Temperature switch 100 °C (coolant temperature)	brown/blue	0.75
6	Ground	Temperature switch (receiver dehydrator)	brown	1.5
7	Temperature switch 62 °C (receiver dehydrator) ground	2-pole coupling supplementary fan	brown	1.5
8	6-pole coupling complete (relay fan [13] terminal 86)	6-pole coupling terminal 3 (relay I air-conditioning system [9] terminal 30)	black/red	1.0
9	Temperature regulator (8)	6-pole coupling terminal 4 (relay I air-conditioning system [9] terminal 86)	brown/blue	0.75
10	Ground	6-pole coupling terminal 5 (relay I air-conditioning system [9] terminal 85)	brown	0.75
11	6-pole coupling terminal 5 (relay I air-conditioning system [9] terminal 87)	6-pole coupling terminal 3 (relay II air-conditioning system [9a] terminal 30)	blue	1.0
12	6-pole coupling terminal 2 (relay II refrigerant compressor [9a] terminal 87a)	Pressure switch (7)	blue/white	1.0
13	Intermediate plug terminal 4 (4-pole coupling backup light switch)	6-pole coupling terminal 4 (relay II air-conditioning system [9a] terminal 86)	violet	0.75
14	6-pole coupling terminal 5 (relay I air-conditioning system [9] terminal 85)	6-pole coupling terminal 5 (relay II air-conditioning system [9a] terminal 85)	brown	0.75
15	Rotary light switch terminal k	2-pole coupling temperature regulator (8)	gray/violet	0.75
16	Ground	2-pole coupling temperature regulator (8)	brown	0.75
17	6-pole coupling terminal 2 (relay II air-conditioning system [9a] terminal 85)	2-pole coupling switch-over valve (12)	black/red yellow	0.75
18	6-pole coupling terminal 5 (relay II air-conditioning system [9a] terminal 85)	2-pole coupling switch-over valve (12)	brown	0.75
19	2-pole coupling temperature regulator (8)	Light socket	brown	0.75
20	2-pole coupling temperature regulator (8)	Light socket	brown	0.75
21	Pressure switch (7)	Refrigerant compressor cable connector (10)	blue/white	1.0
22	Ground	Refrigerant compressor (10) ground	brown	1.0

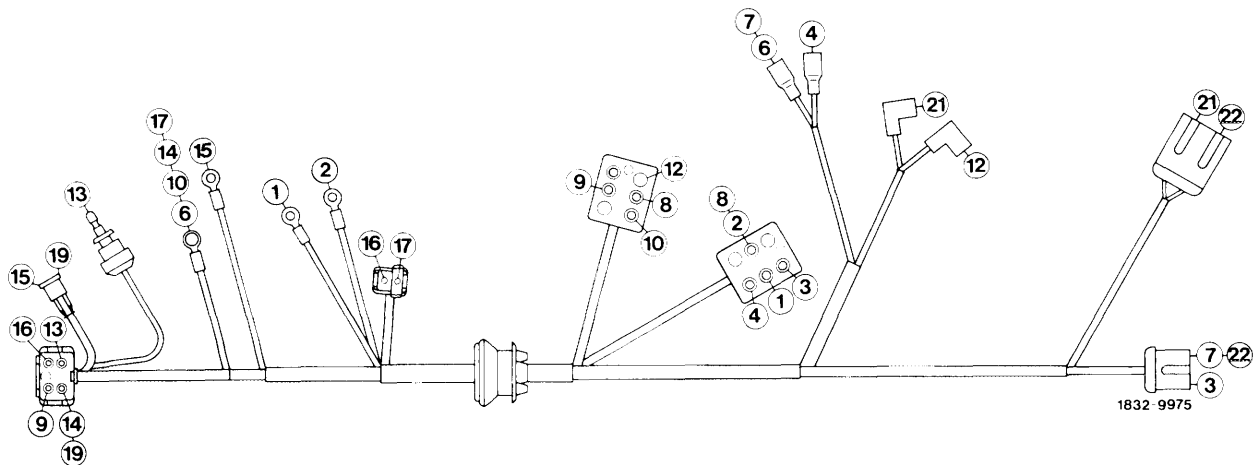
Supplementary harness for air-conditioning system and supplementary fan 2nd version with Delco refrigerant compressor model 123.1 standard version and 



Color code of supplementary harness

Line no.	Harness from	to	Color code	Cross section mm ²
a	Connecting bushings			
1	Main fuse box, terminal 30 supplementary fuse C, 16 amps. (with supplementary heater 25 amps.)	6-pole coupling terminal 3 (relay fan [13] terminal 30)	red/black	1.5
2	Main fuse box, terminal 15 fuse no. 12, 8 amps.	6-pole coupling terminal 4 (relay fan [13] terminal 86)	black/red	1.0
3	6-pole coupling terminal 1 (relay fan [13] terminal 87)	2-pole coupling supplementary fan	yellow	1.5
4	6-pole coupling terminal 5 (relay fan [13] terminal 85)	Temperature switch 52 °C (receiver dehydrator)	brown/yellow	0.75
6	Ground	Temperature switch (receiver dehydrator)	brown	1.5
7	Temperature switch 52 °C (fluid reservoir) ground	2-pole coupling supplementary fan	brown	1.5
8	Temperature regulator (8)	6-pole coupling terminal 3 (relay air-conditioning system [9] terminal 30)	black/red	1.0
10	Ground	6-pole coupling terminal 5 (relay air-conditioning system [9] terminal 85)	brown	0.75
12	6-pole coupling terminal 2 (relay refrigerant compressor terminal 87a)	Pressure switch (7)	blue/white	1.0
13	Intermediate plug terminal 4 (starter terminal 50)	6-pole coupling terminal 4 (relay air-conditioning system [9] terminal 86)	violet	0.75
15	Rotary light switch terminal K	2-pole coupling temperature regulator (8)	gray/violet	0.75
16	Ground	2-pole coupling temperature regulator (8)	brown	0.75
19	2-pole coupling temperature regulator (8)	Light socket	brown	0.75
20	2-pole coupling temperature regulator (8)	Light socket	brown	0.75
21	Pressure switch (7)	Refrigerant compressor (10) cable connector	blue/white	1.0
22	Ground	Refrigerant compressor (10) ground	brown	1.0

Supplementary harness or air-conditioning system and supplementary fan, 3rd version with Delco refrigerant compressor starting 08/80 model 123.1 standard version and (USA) starting model year 1981



Color code of supplementary harness

Line no.	Electric line from	to	Color code	Cross section mm ²
1	Fuse C terminal 30	Relay supplementary fan terminal 30	red/black	1.5
2	Fuse 12 terminal 15	Relay supplementary fan terminal 86	black/red	1.0
3	Relay supplementary fan terminal 87	Supplementary fan	yellow	1.5
4	Relay supplementary fan terminal 85	Temperature switch 52 °C	brown/yellow	0.75
6	Ground	Temperature switch 52 °C	brown	1.5
7	Temperature switch 52 °C	Supplementary fan	brown	1.5
8	Relay supplementary fan terminal 86	Relay refrigerant compressor term. 30	black/red	1.0
9	Temperature dial terminal 2	Relay refrigerant compressor term. 86	black/red/green	0.75
10	Ground	Relay refrigerant compressor term. 85	brown	0.75
12	Relay refrigerant compressor term. 85	Pressure switch refrigerant compressor	blue/white	1.0
13	Resistor group	Temperature dial terminal 3	blue/black	0.75
14	Temperature dial terminal 4	Ground	brown	0.75
15	Rotary light switch terminal K	Socket, bulb	gray/purple	0.75
16	Switchover valve fresh air-recirculating air	Temperature dial terminal 1	blue/yellow	0.75
17	Switchover valve fresh air-recirculating air	Ground	brown	0.75
19	Temperature dial terminal 4	Socket bulb	brown	0.75
21	Pressure switch refrigerant compressor	Refrigerant compressor	blue/white	1.0
22	Ground	Refrigerant compressor	brown	1.0

C. Pneumatic function of air-conditioning system

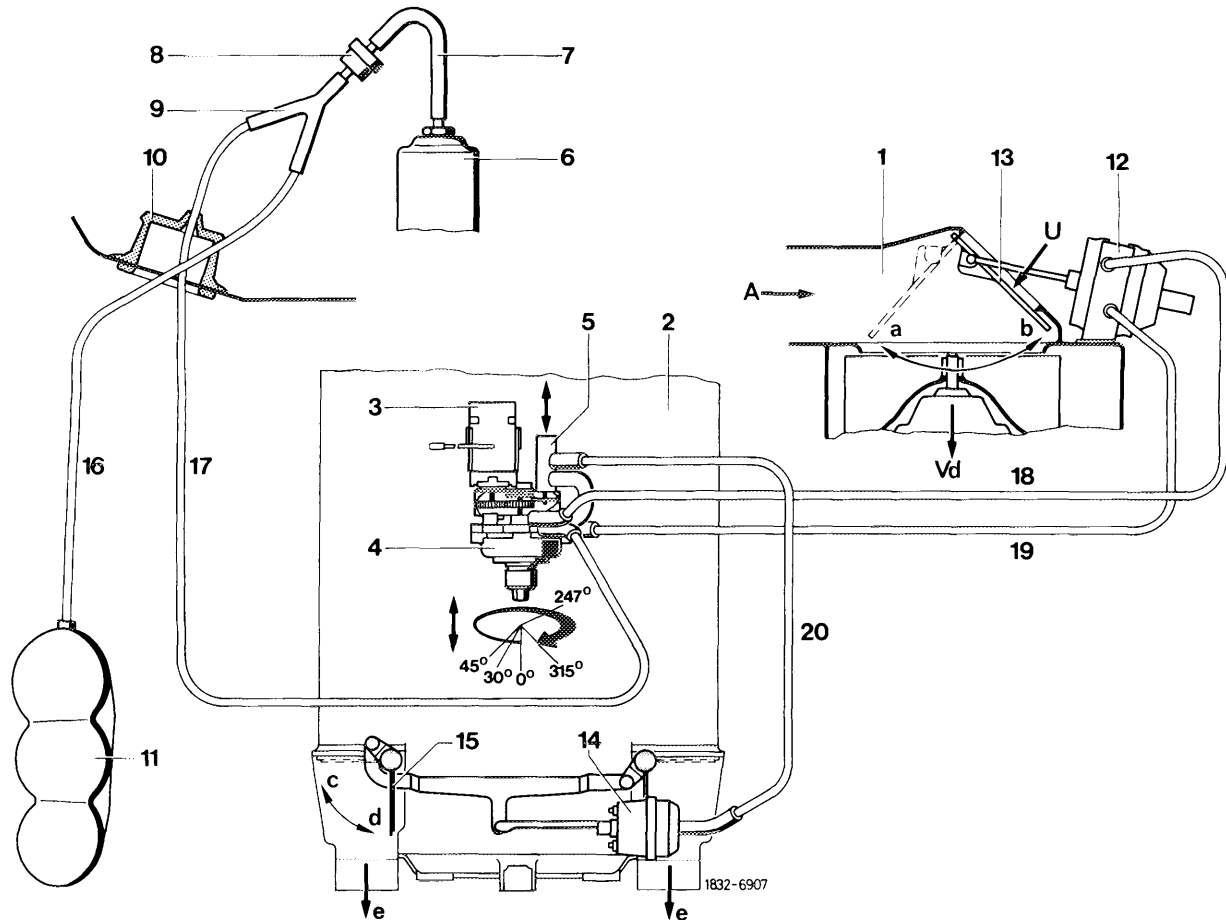


Diagram vacuum control air-conditioning system 123 (1st version) lefthand steering up to 02/79, righthand steering up to 10/79

- | | | | |
|----|---|----|---|
| 1 | Evaporator housing with blower | 16 | Vacuum line color code gray-light blue |
| 2 | Heater box | 17 | Vacuum line color code medium green-yellow |
| 3 | Temperature switch | 18 | Vacuum line color code medium green-light blue |
| 4 | Vacuum rotary switch for recirculating air flap | 19 | Vacuum line color code medium green-orange |
| 5 | Vacuum pull switch for legroom flap | 20 | Vacuum line color code medium green-white |
| 6 | Intake manifold or on diesel engines vacuum line from vacuum pump to brake unit | A | Fresh air |
| 7 | Rubber hose | U | Recirculating air |
| 8 | Check valve | Vd | to evaporator |
| 9 | Distributor | a | Recirculating air flap (13) in position "recirculating air" |
| 10 | Rubber grommet in front wall | b | Recirculating air flap (13) in position "fresh air" |
| 11 | Reservoir | c | Legroom flaps (15) in position "closed" |
| 12 | Vacuum element for recirculating air flap | d | Legroom flaps (15) in position "open" |
| 13 | Recirculating air flap | e | Air outlet legroom or rear compartment legroom |
| 14 | Vacuum element for legroom flap | | |
| 15 | Driver's or rear compartment legroom flap | | |

Cutting-in angle and function of temperature vacuum switch

Cutting-in angle		Cutting-in angle	
0 – 30°	Air conditioner off – leg room flaps open	247 – 315°	Recirculating air open – outside air closed (with outside air share)
30°	Switchover point of leg room flaps	315°	End – max. cooling capacity = end stop
30 – 45°	Leg room flaps closed	45 – 315°	Leg room flaps can be opened by pulling on knob
45°	Air conditioner on – minimum cooling capacity	0 – 315°	Total rotary range
45 – 247°	Outside air open – recirculating air closed		
247°	Switchover point recirculating air – outside air		

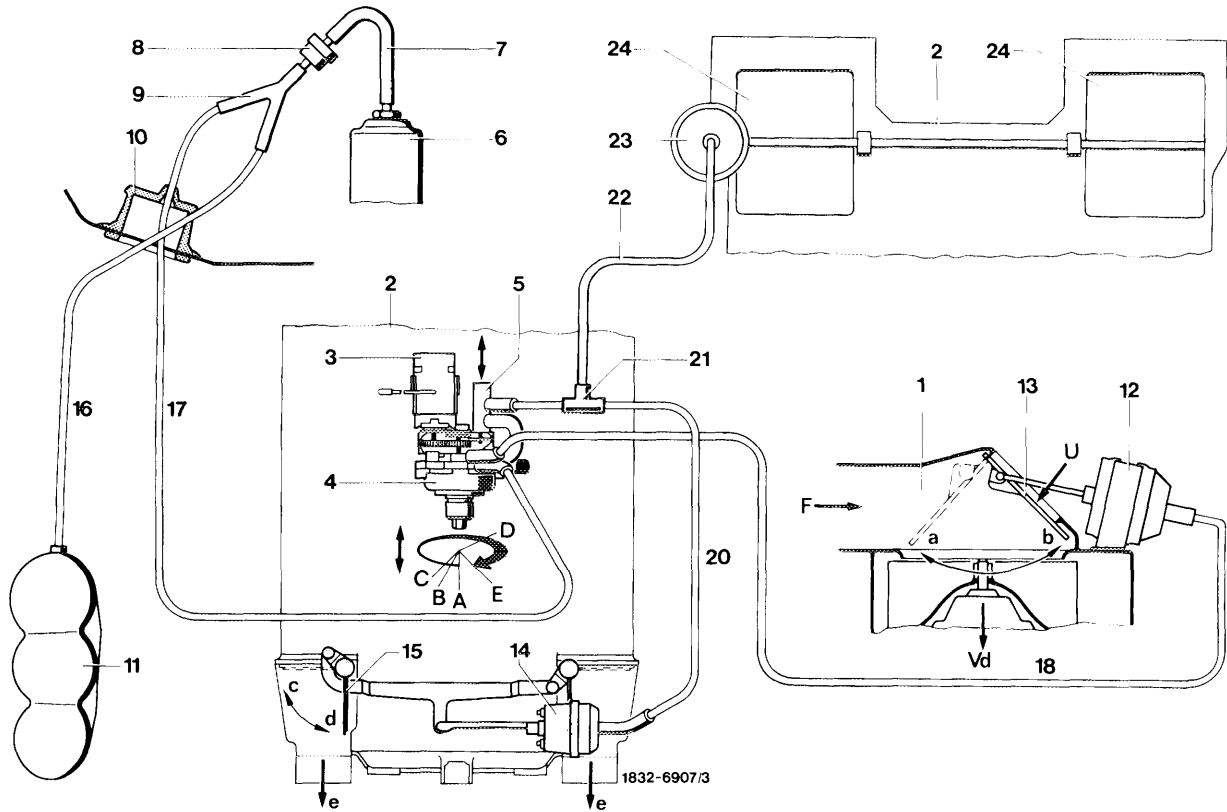


Diagram vacuum control air-conditioning system 123 (2nd version, lefthand steering) lefthand steering starting 03/79, righthand steering starting 11/79 up to 08/80

- | | |
|--|---|
| 1 Evaporator housing with blower | 18 Vacuum line color code green-light blue |
| 2 Heater box | 20 Vacuum line color code green-white |
| 3 Temperature switch | 21 Distributor |
| 4 Vacuum rotary switch for recirculating air flap 20 | 22 Vacuum line color code green-white |
| 5 Vacuum pull switch for legroom flap | 23 Vacuum element for defroster nozzle flaps |
| 6 Intake manifold or on diesel engine vacuum line from vacuum pump to brake unit | 24 Defroster nozzle flaps |
| 7 Rubber hose | A Outside air (fresh air) |
| 8 Check valve | U Recirculating air |
| 9 Distributor | Vd to evaporator |
| 10 Rubber grommet in front wall | a Recirculating air flap (13) in position "recirculating air" |
| 11 Reservoir | b Recirculating air flap (13) in position "outside air" |
| 12 Vacuum element for recirculating air flap | c Leg room flaps (15) in position "closed" |
| 14 Vacuum element for legroom flap | d Leg room flaps (15) in position "open" |
| 15 Driver's or rear compartment legroom flap | e Air outlet leg room or rear compartment leg room |
| 16 Vacuum line color code red-gray | |
| 17 Vacuum line color code green-yellow | |

Cutting-in angle and function of temperature vacuum switch

Cutting-in angle		Cutting-in angle	
0-30°	Air conditioner off - leg room flaps open	247-315°	Recirculating air open - outside air closed (with outside air share)
30°	Switchover point of leg room flaps	315°	End - max. cooling capacity = end stop
30-45°	Leg room flaps closed	45-315°	Leg room flaps can be opened by pulling on knob
45°	Air conditioner on - minimum cooling capacity	0-315°	Total rotary range
45-247°	Outside air open - recirculating air closed		
247°	Switchover point recirculating air - outside air		

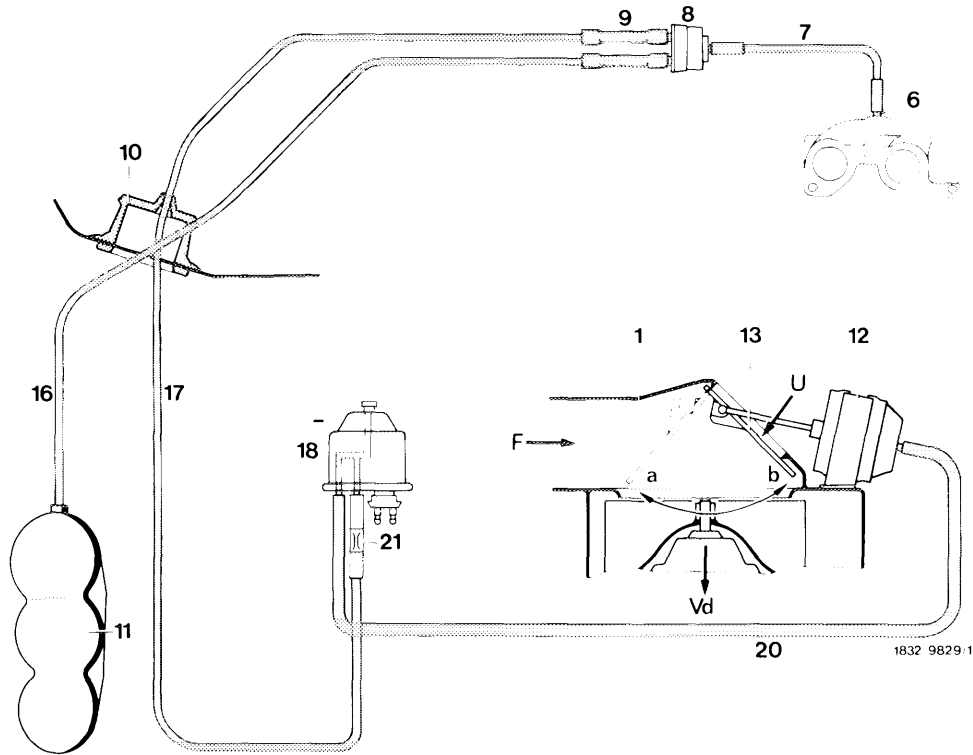
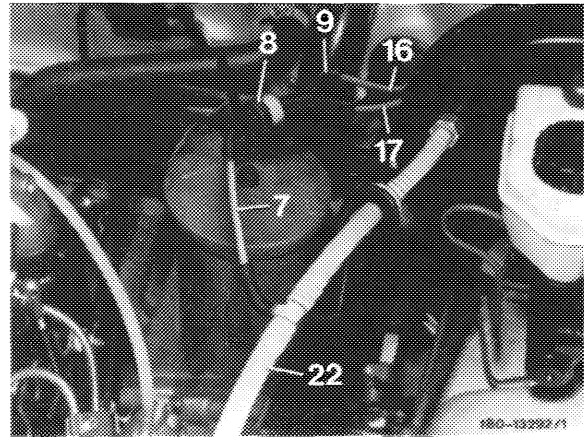


Diagram vacuum control air-conditioning system 123 (3rd version) starting 08/80

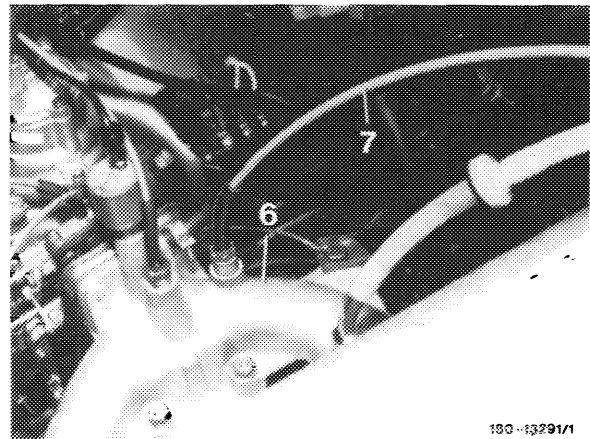
- | | | | |
|----|---|----|---|
| 1 | Evaporator housing with blower | 15 | Driver's or rear compartment leg room flap |
| 6 | Intake manifold or on diesel engines vacuum line from vacuum pump to brake unit | 16 | Vacuum line color code gray-light blue (not on model 123.1) |
| 7 | Rubber hose | 17 | Vacuum line color code medium green-yellow |
| 8 | Check valve | 18 | Switchover valve fresh air-recirculating air (position fresh air) |
| 9 | Distributor | 20 | Vacuum hose color code black |
| 10 | Rubber grommet in front wall | 21 | Orifice (on model 123.1 only) |
| 11 | Reservoir (not on model 123.1) | A | Fresh air |
| 12 | Vacuum element for recirculating air flap | U | Recirculating air |
| 13 | Recirculating air flap (position fresh air) | Vd | to evaporator |
| 14 | Vacuum element for leg room flap | a | Recirculating air flap (13) in position "recirculating air" |
| | | b | Recirculating air flap (13) in position "fresh air" |

1 The required vacuum for controlling the air flaps is taken from vacuum line (22) on vehicles with diesel engine and from intake pipe (6) on vehicles with gasoline engines.

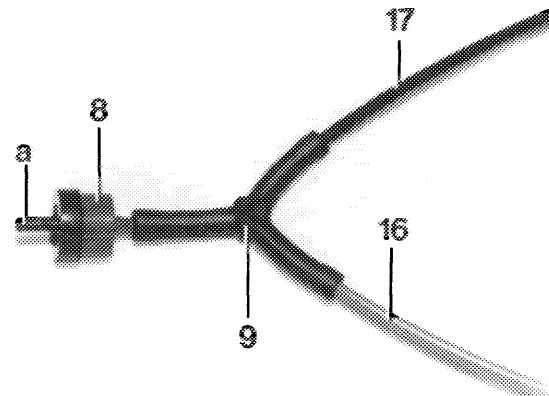
Vacuum connection on vehicles with diesel engine



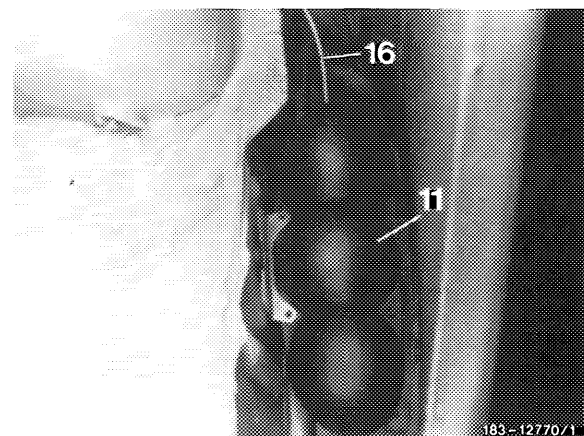
Vacuum connection on vehicles with gasoline engine



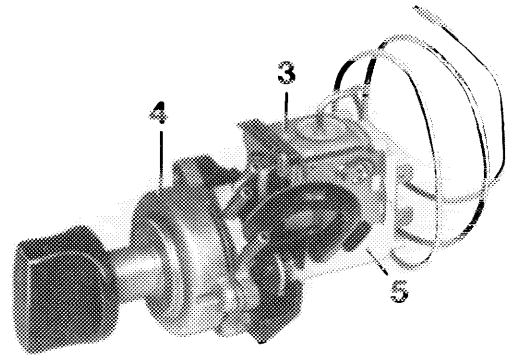
- a To intake pipe or vacuum line (22)
- 8 Check valve
- 9 Distributor (branch)
- 16 Vacuum line to reservoir
- 17 Vacuum line to temperature vacuum switch



2 Vacuum reservoir (11) guarantees operation of vacuum system for air conditioning system with engine stopped as well as at insufficient vacuum volume in given speed ranges (not on vehicles with diesel engines starting march 1979).

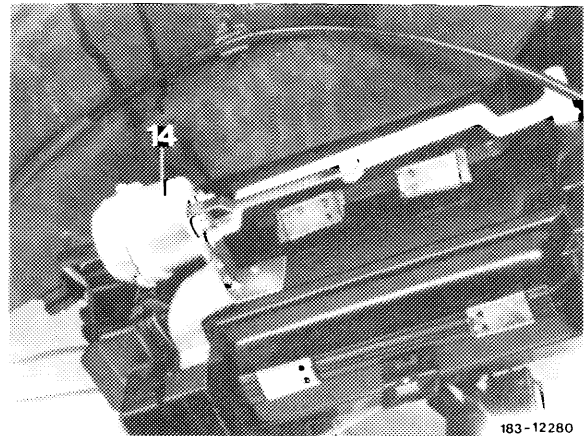


3 By switching-on temperature vacuum switch (starting at approx. 30° cutting-in angle) the vacuum pull switch which is set to passage (knob of temperature vacuum switch pushed) is operated via the vacuum rotary switch (4) so that the vacuum element (14) is activated and the leg room flaps are closed.

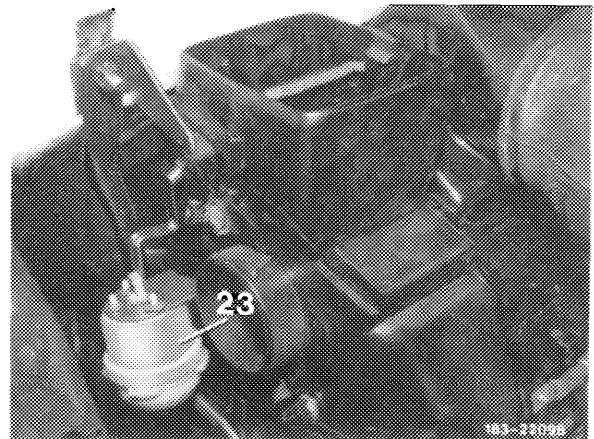


183-11367/3

4 As soon as knob of temperature vacuum switch is pulled, the vacuum pull switch (5) will interrupt the vacuum connection and will vent the vacuum element (14), as well as vacuum element (23) starting from 2nd version. The leg room flaps and the defroster nozzle flaps are opened by spring force.

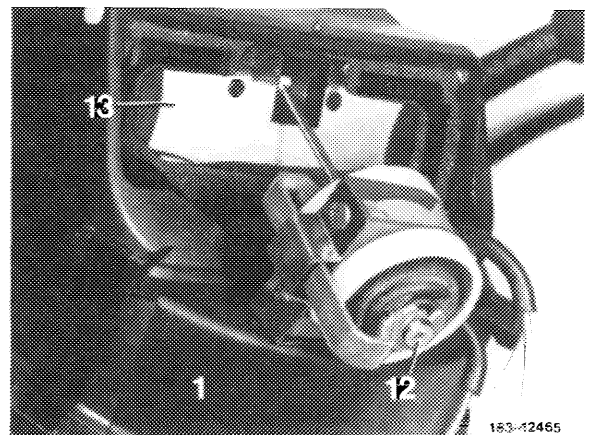


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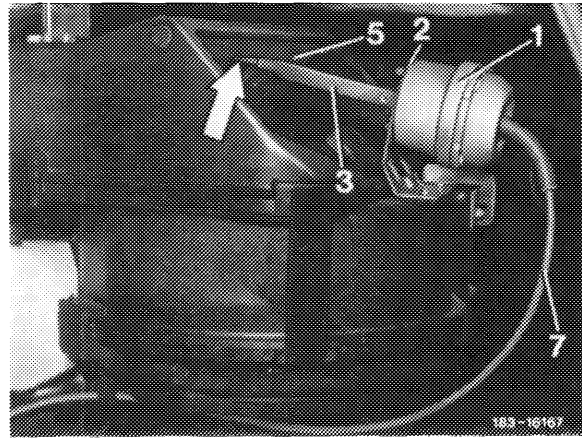
5 The air-conditioning system operates in range up to 3/4 refrigerant capacity (knob to mark on blue scale of approx. 247° cutting-in angle) with outside air. The rear chamber of the double-acting vacuum element (12) or the single-acting vacuum element (12) is activated by means of vacuum rotary switch (4).



183-42465

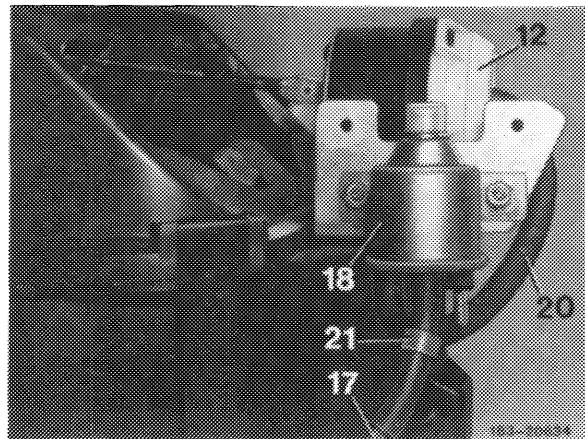
1st version
12 double-acting vacuum element

6 Starting at 3/4 cooling capacity, the vacuum rotary switch will activate the front chamber of vacuum element (12) (1st version) or, in the case of the 2nd version, this will be done by spring force, flap (13) will open so that approx. 80 % vehicle inside air and approx. 20 % outside air will be drawn-in through a leak of recirculating air flap.



2nd version

7 Since 08/80 the vacuum element for fresh air-recirculating air flap is controlled by an electromagnetic switchover valve (18). If the temperature dial is engaged at "Max.", the switchover valve is supplied with plus and will vent the vacuum-element (12). The recirculating air flap is set to recirculating air under spring force.



3rd version