

Color code
Vacuum lines

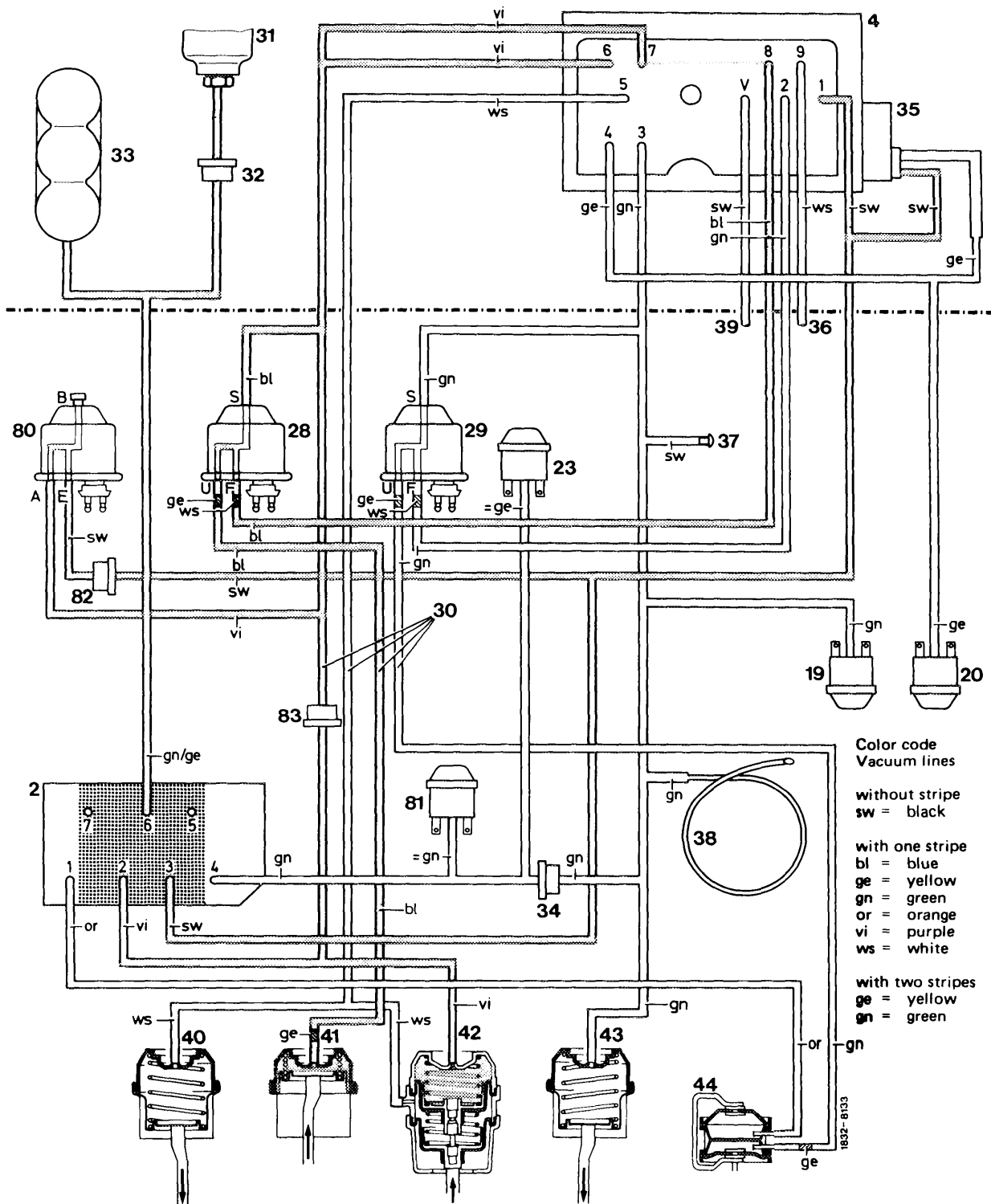
without stripe
 sw = black

with one stripe
 bl = blue
 ge = yellow
 gn = green
 or = orange
 vi = purple
 ws = white

with two stripes
 ge = yellow
 gn = green

Function diagram 1 Pushbutton switch at "OFF", "ON/OFF" switch refrigerant compressor at "ON"

- | | | |
|---|--|---|
| 2 Pushbutton switch | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 4 Regulating valve | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap "closed" no fresh air supply) |
| 19 Vacuum switch (main switch, green) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 23 Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 37 Vacuum connection for tester | 82 Check valve |
| 28 Switchover valve (legroom flaps) | 38 Specified leak point | 83 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 39 Vent line for regulating valve | |
| 30 Vacuum lines | 40 Vacuum element for center nozzles (flap "open") | |
| 31 Vacuum connection at intake pipe | 41 Vacuum element for legroom flaps (flaps "closed") | |
| 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "closed") | |

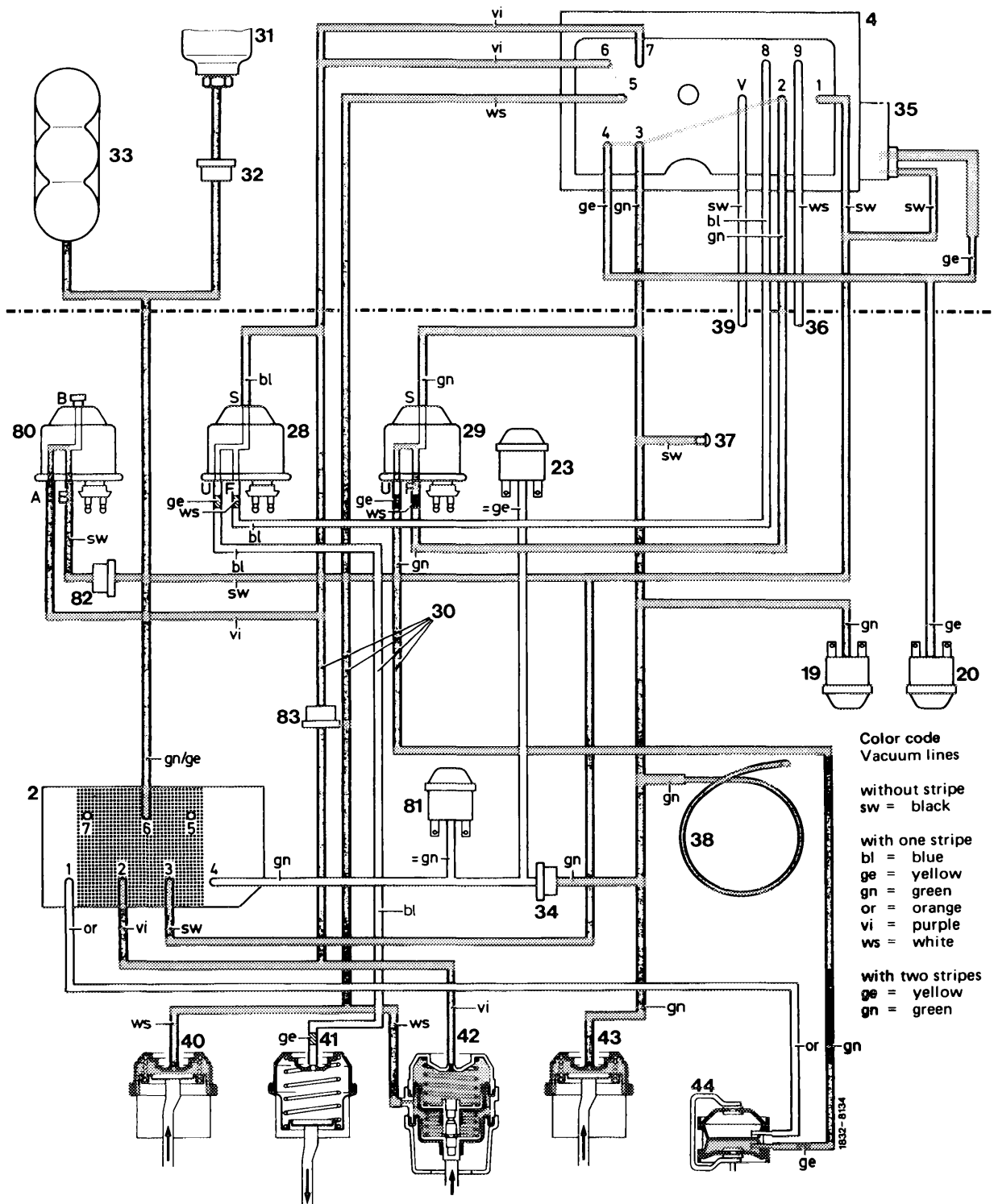


Function diagram 1a

Pushbutton switch at "AUTO-LO" or "AUTO-HI", "ON/OFF" switch refrigerant compressor at "ON"

Regulating valve in position "heating", coolant temperature < 104 °F (< 40 °C)

- | | | |
|---|--|---|
| 2 Pushbutton switch | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 4 Regulating valve | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap "closed" no fresh air supply) |
| 19 Vacuum switch (main switch, green) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 23 Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 37 Vacuum connection for tester | 82 Check valve |
| 28 Switchover valve (legroom flaps) | 38 Specified leak point | 83 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 39 Vent line for regulating valve | |
| 30 Vacuum lines | 40 Vacuum element for center nozzles (flap "closed") | |
| 31 Vacuum connection at intake pipe | 41 Vacuum element for legroom flaps (flaps "open") | |
| 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "closed" with leak air portion) | |

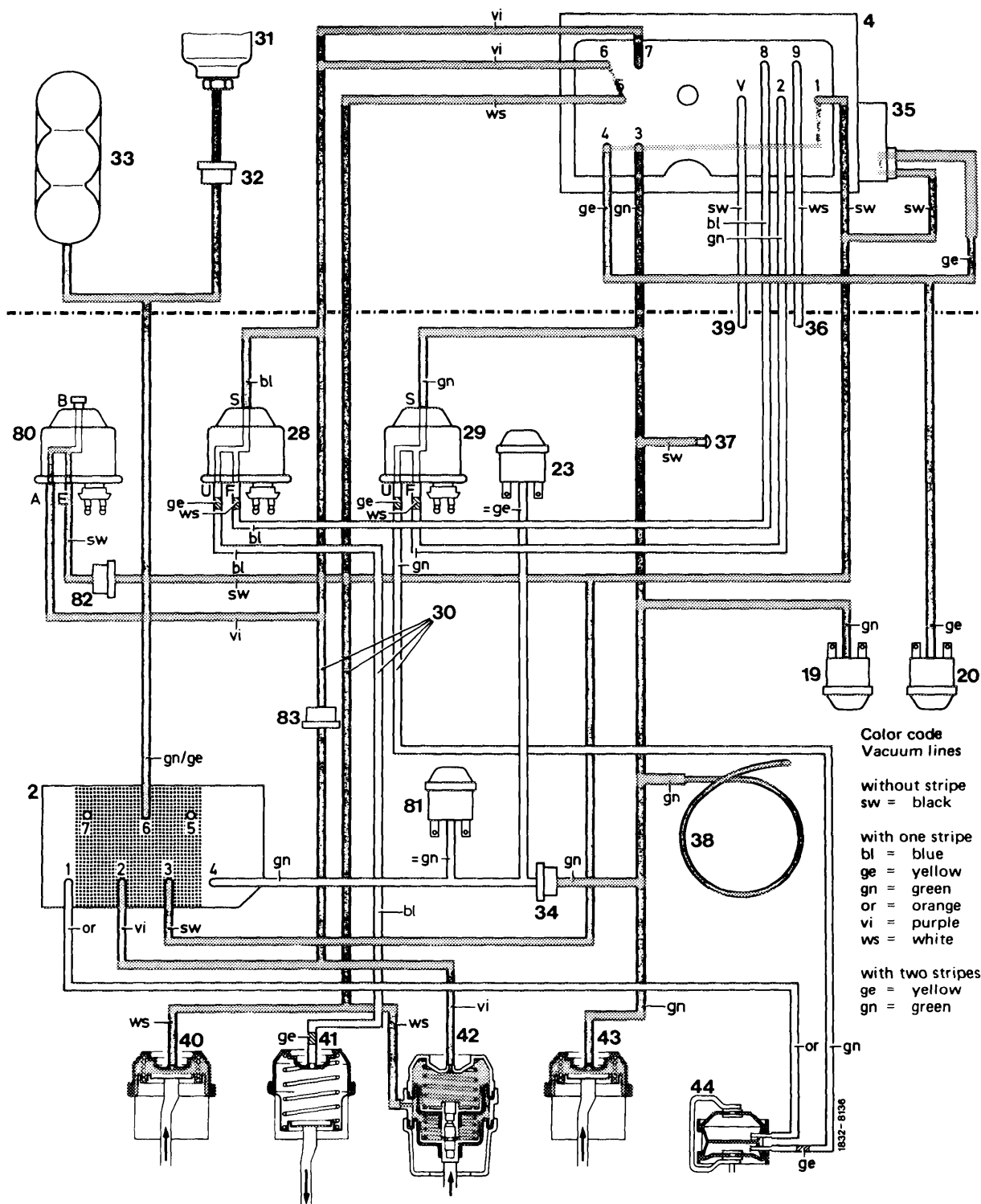


Function diagram 2

Pushbutton switch at "AUTO-LO" or "AUTO-HI", "ON/OFF" switch refrigerant compressor at "ON"

Regulating valve in position "cooling" (fresh air), coolant temperature $> 104^{\circ}\text{F}$ ($> 40^{\circ}\text{C}$)

- | | | |
|---|--|---|
| 2 Pushbutton switch | 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "closed") |
| 4 Regulating valve | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 19 Vacuum switch (main switch, green) | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap "open" 100% fresh air supply) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 23 Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 28 Switchover valve (legroom flaps) | 37 Vacuum connection for tester | 82 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 38 Specified leak point | 83 Check valve |
| 30 Vacuum lines | 39 Vent line for regulating valve | |
| 31 Vacuum connection at intake pipe | 40 Vacuum element for center nozzles (flap "open") | |
| | 41 Vacuum element for legroom (flaps "closed") | |



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with one stripe
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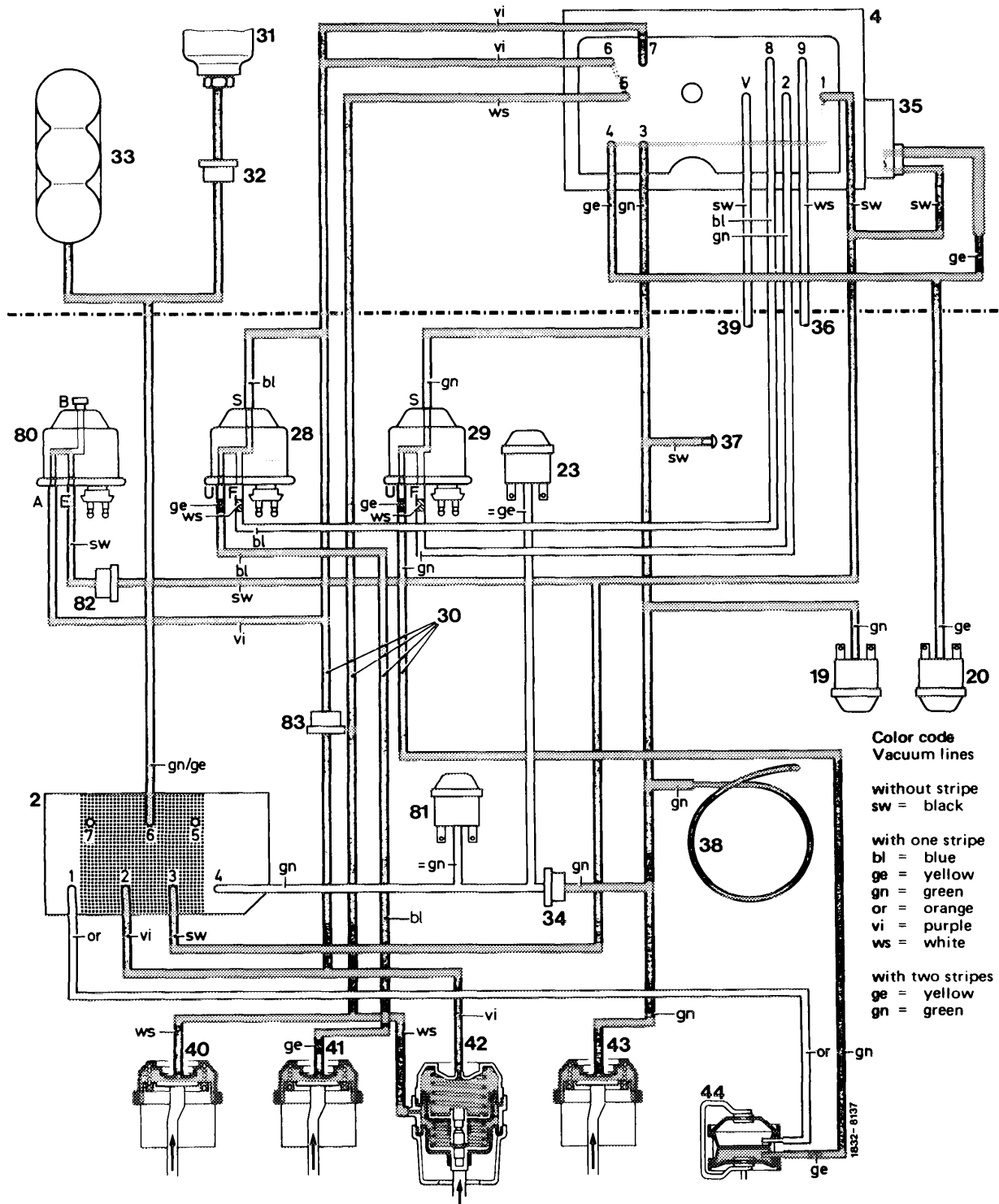
with two stripes
ge = yellow
gn = green

Function diagram 3

Pushbutton switch at "AUTO-LO" or "AUTO-HI", "ON/OFF" switch refrigerant compressor at "ON"

Regulating valve in position max "cooling" (recirculating air, coolant temperature > 104 °F (> 40 °C))

- | | | |
|---|--|---|
| 2 Pushbutton switch | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 4 Regulating valve | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap in position "recirculating air", 20 % fresh air/80 % recirculating air, flap is maintained in this position by vacuum element (43)) |
| 19 Vacuum switch (main switch, green) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 23 Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 37 Vacuum connection for tester | 82 Check valve |
| 28 Switchover valve (legroom flaps) | 38 Specified leak point | 83 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 39 Vent line for regulating valve | |
| 30 Vacuum lines | 40 Vacuum element for center nozzles (flap "open") | |
| 31 Vacuum connection at intake pipe | 41 Vacuum element for legroom (flaps "closed") | |
| 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "closed") | |

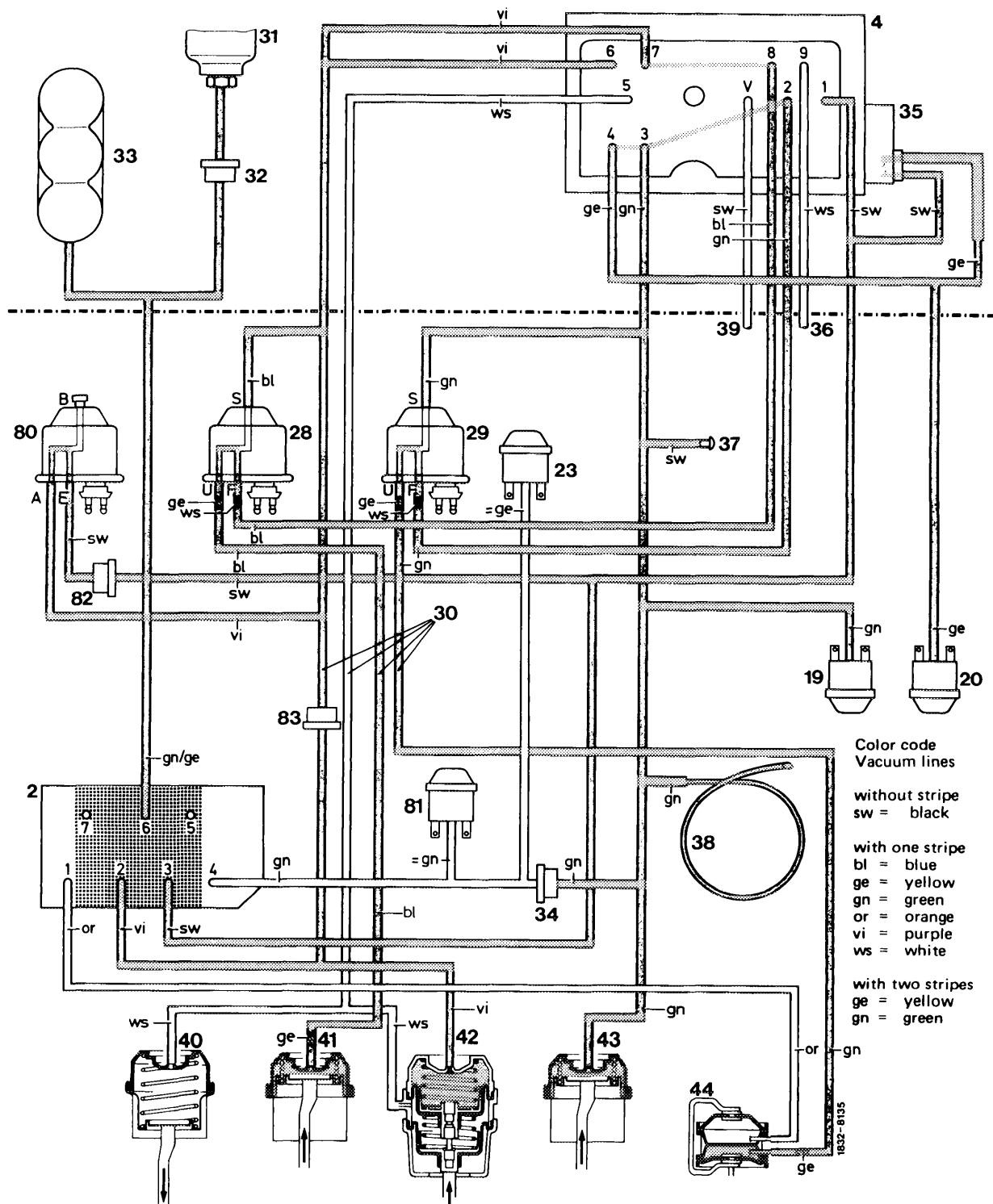


Function diagram 4

Pushbutton switch at "AUTO-LO" or "AUTO-HI", "ON/OFF" switch refrigerant compressor at "OFF"

Regulating valve in position max "cooling" (fresh air), coolant temperature $> 104^{\circ}\text{F}$ ($> 40^{\circ}\text{C}$)

- | | | |
|---|--|---|
| 2 Pushbutton switch | 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "closed") |
| 4 Regulating valve | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 19 Vacuum switch (main switch, green) | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap "open" 100% fresh air supply) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 23 Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 28 Switchover valve (legroom flaps) | 37 Vacuum connection for tester | 82 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 38 Specified leak point | 83 Check valve |
| 30 Vacuum lines | 39 Vent line for regulating valve | |
| 31 Vacuum connection at intake pipe | 40 Vacuum element for center nozzles (flap "open") | |
| | 41 Vacuum element for legroom flaps (flaps "open") | |

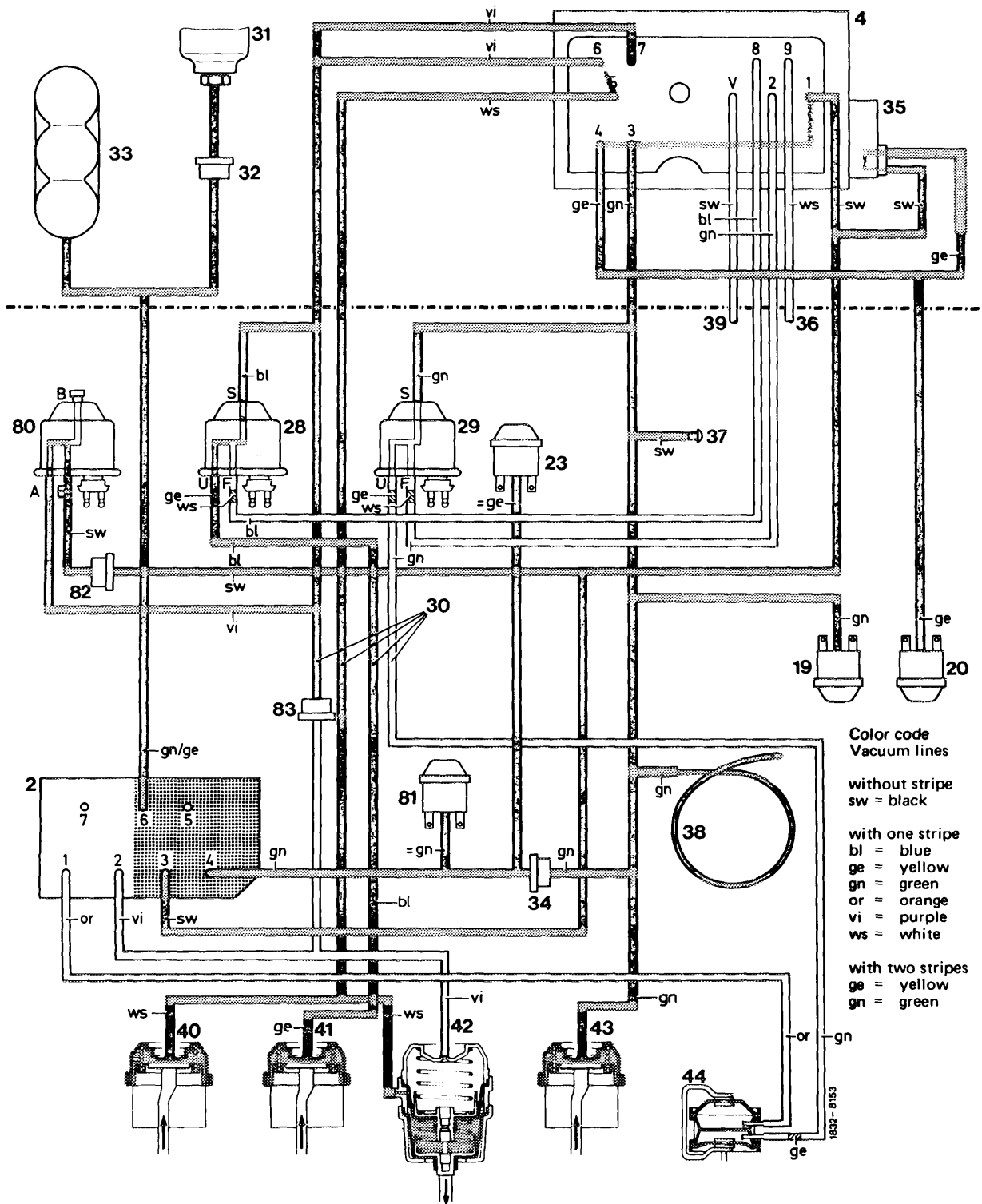


Function diagram 5

Pushbutton switch at "AUTO-LO" or "AUTO-HI", "ON/OFF" switch refrigerant compressor at "ON"

Regulating valve in position "heating", coolant temperature $> 104^{\circ}\text{F}$ ($> 40^{\circ}\text{C}$)

- | | | |
|---|--|---|
| 2 Pushbutton switch | 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "closed" with leak air portion) |
| 4 Regulating valve | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 19 Vacuum switch (main switch, green) | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap "open" 100% fresh air supply) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 23 Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 28 Switchover valve (legroom flaps) | 37 Vacuum connection for tester | 82 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 38 Specified leak point | 83 Check valve |
| 30 Vacuum lines | 39 Vent line for regulating valve | |
| 31 Vacuum connection at intake pipe | 40 Vacuum element for center nozzles (flap "closed") | |
| | 41 Vacuum element for legroom flaps (flaps "open") | |



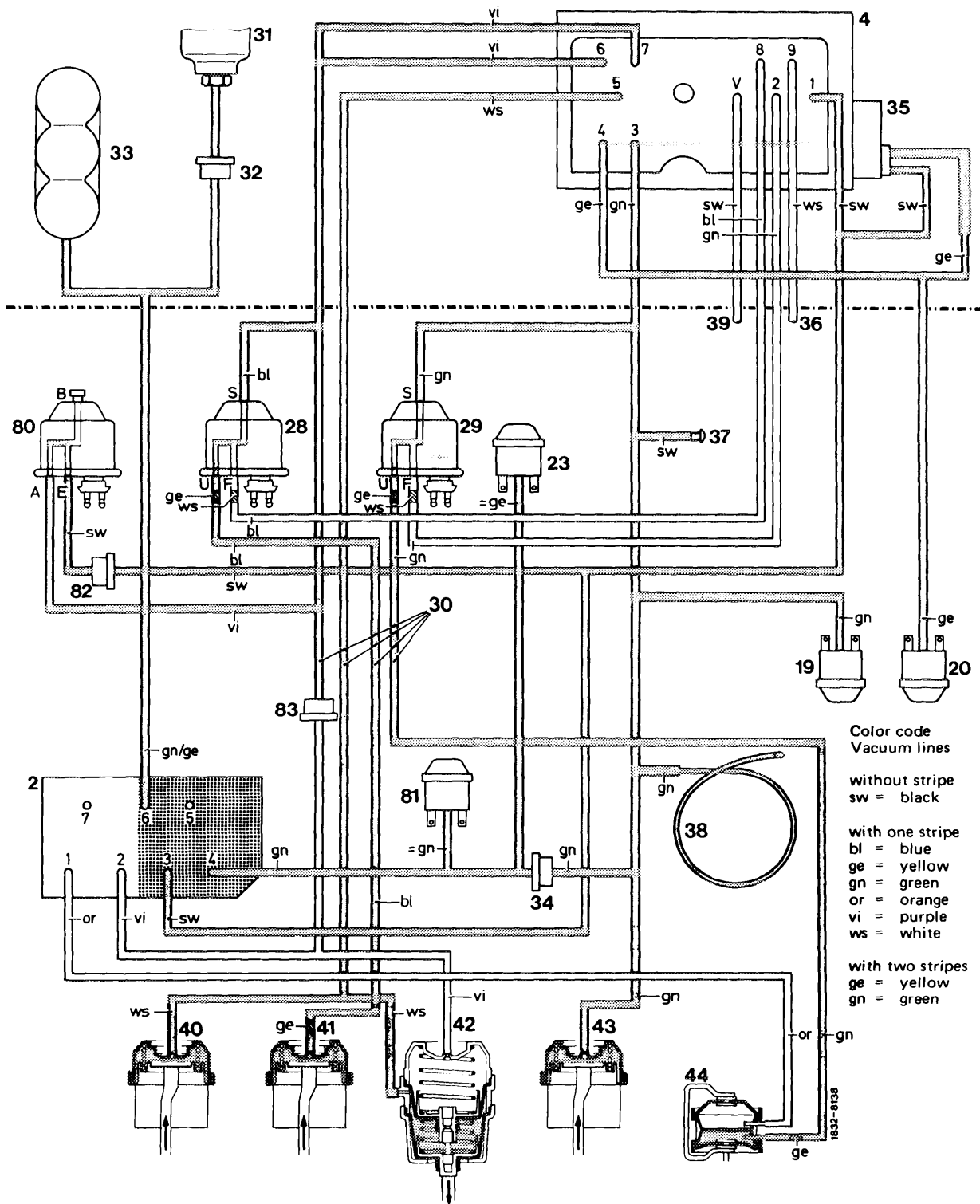
Function diagram 6

Pushbutton switch at "BI-LEVEL", "ON/OFF" switch refrigerant compressor at "ON"

Regulating valve in position max "cooling" (recirculating air), coolant temperature $> 104^{\circ}\text{F}$ ($> 40^{\circ}\text{C}$),

(temperature switch [35] without influence)

- | | | |
|---|--|--|
| 2 Pushbutton switch | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 4 Regulating valve | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap in position "recirculating air", 20 % fresh air/80 % recirculating air), flaps is maintained in this position by vacuum element (43) |
| 19 Vacuum switch (main switch, green) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 23 Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 37 Vacuum connection for tester | 82 Check valve |
| 28 Switchover valve (legroom flaps) | 38 Specified leak point | 83 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 39 Vent line for regulating valve | |
| 30 Vacuum lines | 40 Vacuum element for center nozzles (flaps "open") | |
| 31 Vacuum connection at intake pipe | 41 Vacuum element for legroom flaps (flaps "open") | |
| 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "open") | |



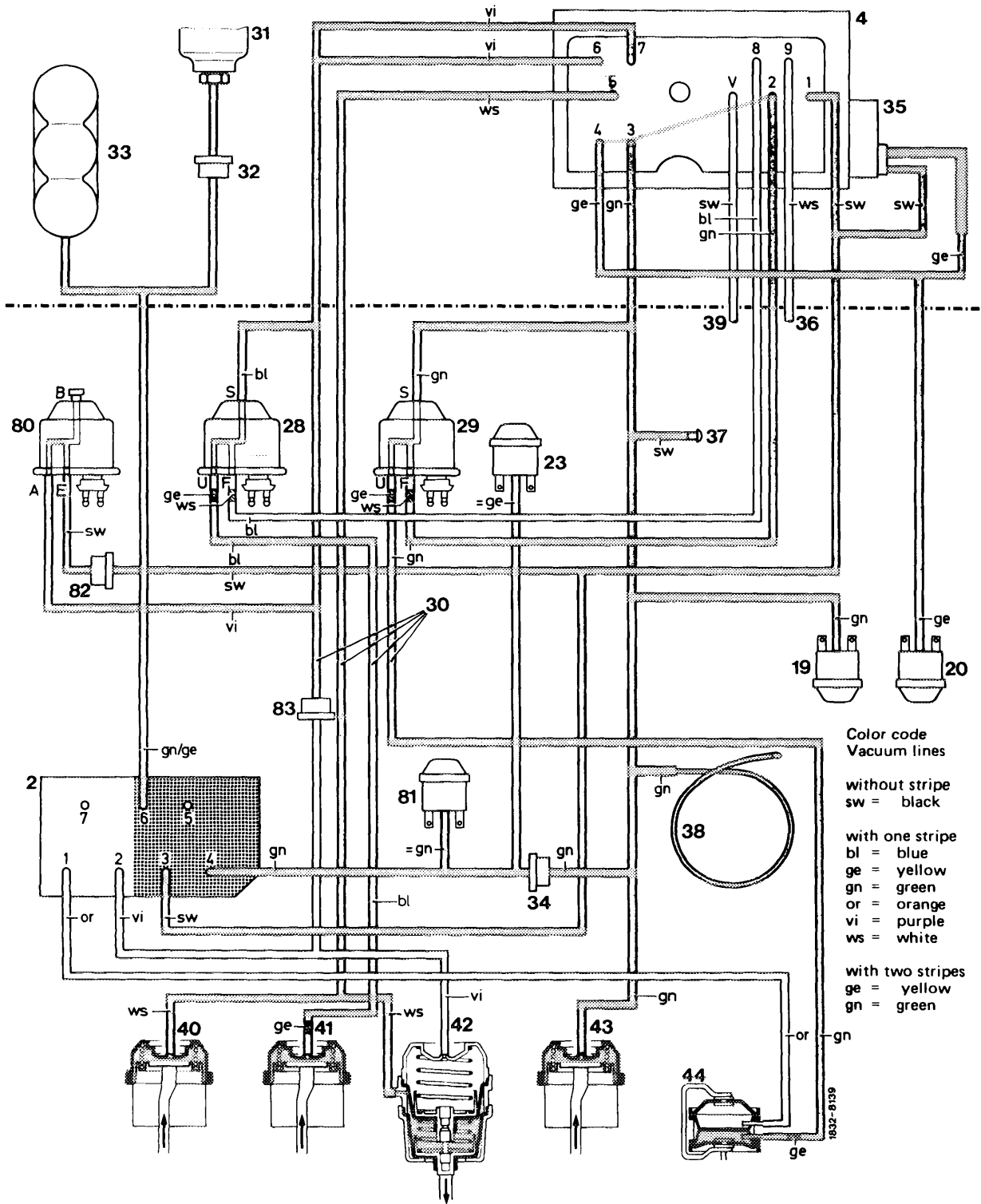
Function diagram 7

Pushbutton switch at "BI-LEVEL", "ON/OFF" switch refrigerant compressor at "OFF"

Regulating valve in position max "cooling" (fresh air), coolant temperature > 104 °F (> 40 °C),

(temperature switch [35] without influence)

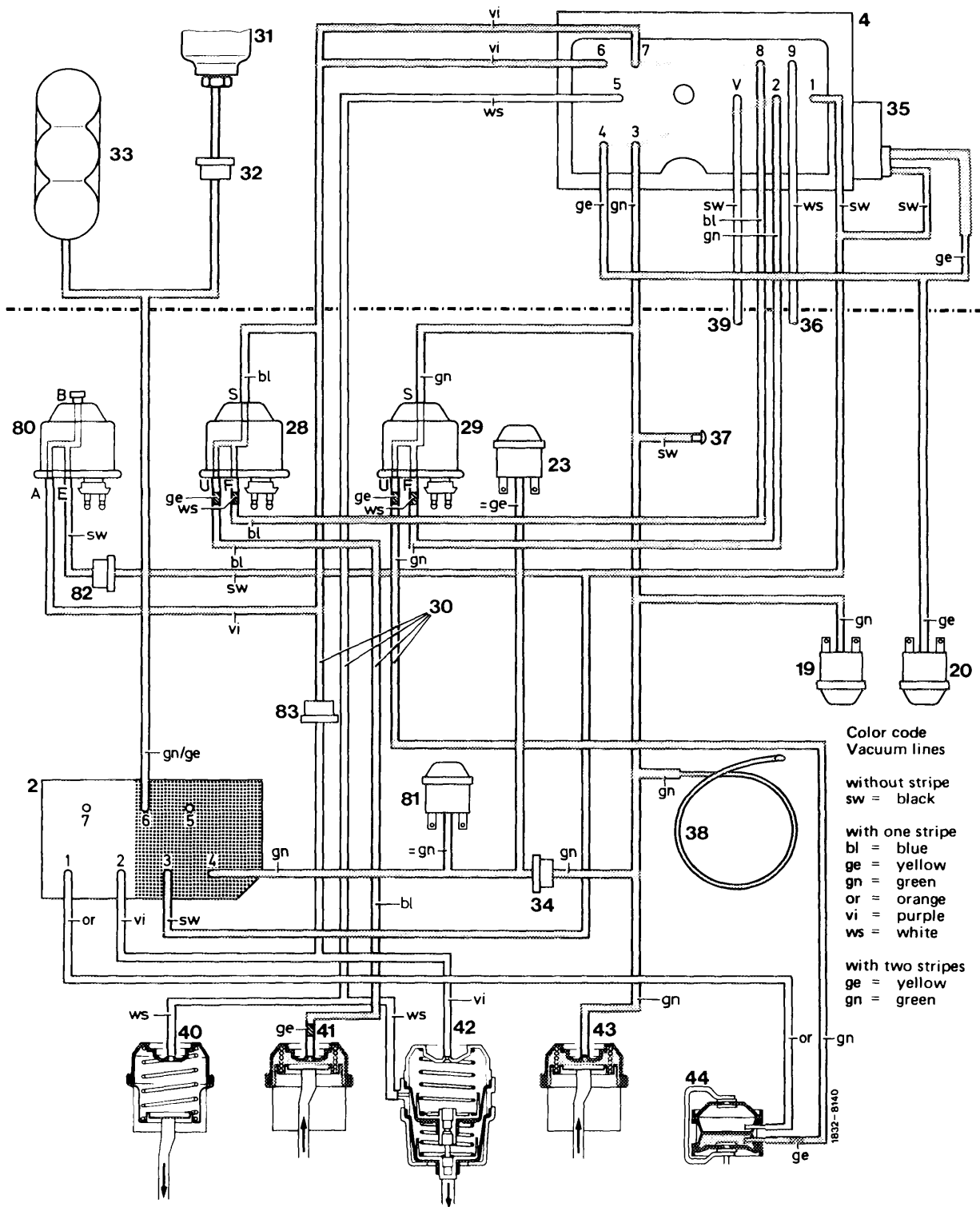
- | | | |
|---|--|--|
| 2 Pushbutton switch | 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "open") |
| 4 Regulating valve | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 19 Vacuum switch (main switch, green) | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap "open" 100 % fresh air supply) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 23 Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 28 Switchover valve (legroom flaps) | 37 Vacuum connection for tester | 82 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 38 Specified leak point | 83 Check valve |
| 30 Vacuum lines | 40 Vacuum element for center nozzles (flap "open") | |
| 31 Vacuum connection at intake pipe | 41 Vacuum element for legroom flaps (flaps "open") | |



Function diagram 8

Pushbutton switch at "BI-LEVEL", "ON/OFF" switch refrigerant compressor at "ON"
 Regulating valve in position "cooling", coolant temperature $> 104^{\circ}\text{F}$ ($> 40^{\circ}\text{C}$),
 (temperature switch [35] without influence)

- | | | | | | |
|----|--|----|---|----|---|
| 2 | Pushbutton switch | 32 | Check valve | 62 | 2-stage vacuum element for defroster nozzles (flaps "open") |
| 4 | Regulating valve | 33 | Vacuum reservoir | 63 | Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 19 | Vacuum switch (main switch, green) | 34 | Check valve | 64 | Vacuum element for fresh air-recirculating air changeover switch (flap "open" 100 % fresh air supply) |
| 20 | Vacuum switch (refrigerant compressor, yellow) | 35 | Temperature switch | 80 | Switchover valve "BI-LEVEL" (at "DEF" only) |
| 23 | Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 36 | Vent line for legroom flaps | 81 | Vacuum switch (at "BI-LEVEL" only) |
| 28 | Switchover valve (legroom flaps) | 37 | Vacuum connection for tester | 82 | Check valve |
| 29 | Switchover valve (fresh air-recirculating air changeover switch) | 38 | Specified leak point | 83 | Check valve |
| 30 | Vacuum lines | 39 | Vent line for regulating valve | | |
| 31 | Vacuum connection at intake pipe | 40 | Vacuum element for center nozzles (flap "open") | | |
| | | 41 | Vacuum element for legroom flaps (flaps "open") | | |
| | | 42 | 2-stage vacuum element for defroster nozzles (flaps "open") | | |
| | | 43 | Vacuum element for fresh air portion of fresh air-recirculating air changeover switch | | |
| | | 44 | Vacuum element for fresh air-recirculating air changeover switch (flap "open" 100 % fresh air supply) | | |



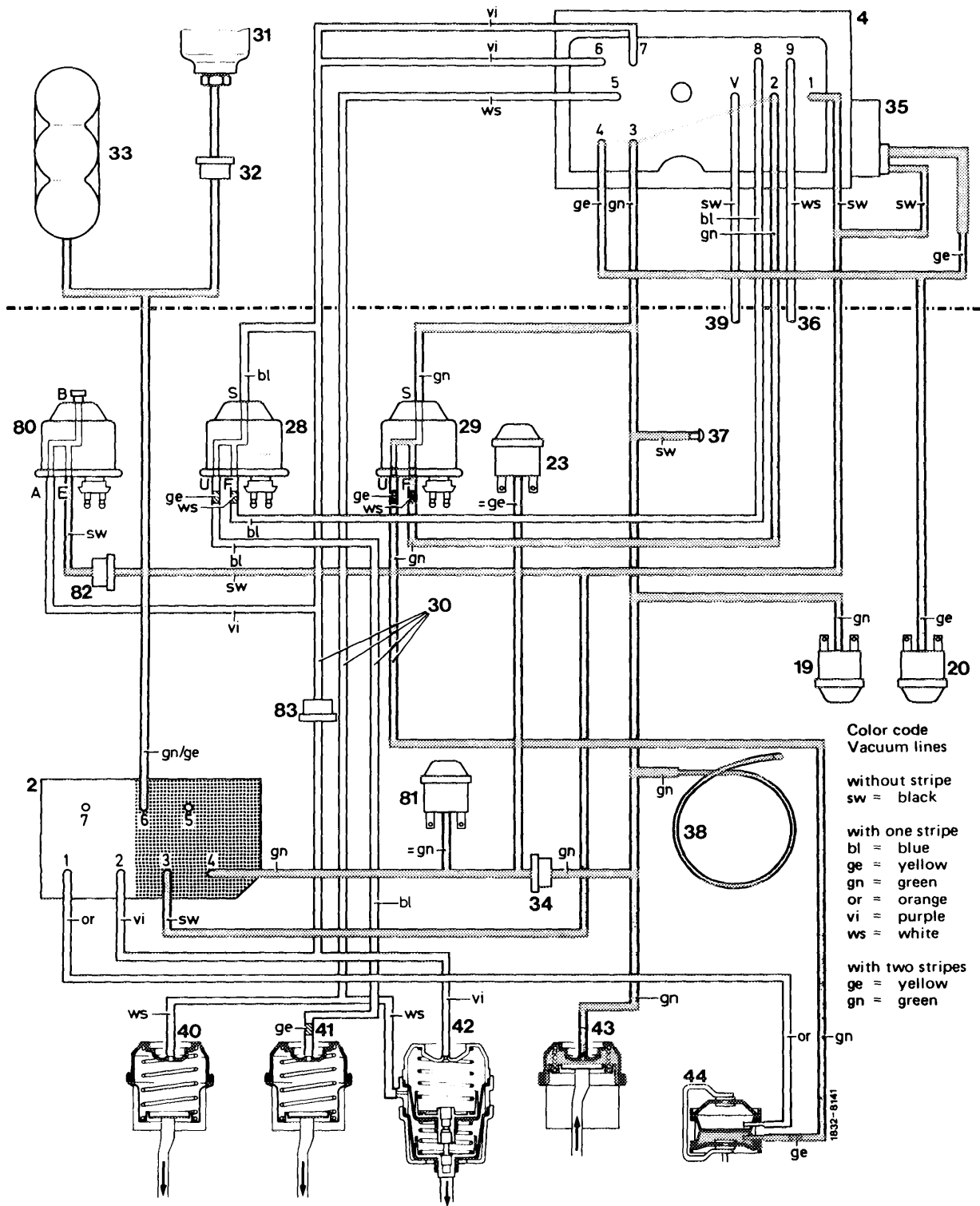
Function diagram 9

Pushbutton switch at "BI-LEVEL", "ON/OFF" switch refrigerant compressor at "ON"

Regulating valve in position "heating", coolant temperature $> 104^{\circ}\text{F}$ ($> 40^{\circ}\text{C}$),

(temperature switch [35] without influence)

- | | | |
|---|--|---|
| 2 Pushbutton switch | 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "open") |
| 4 Regulating valve | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 19 Vacuum switch (main switch, green) | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap "open" 100% fresh air supply) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 23 Vacuum switch (for refrigerant compressor at "BI-LEVEL" only) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 28 Switchover valve (legroom flaps) | 37 Vacuum connection for tester | 82 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 38 Specified leak point | 83 Check valve |
| 30 Vacuum lines | 39 Vent line for regulating valve | |
| 31 Vacuum connection at intake pipe | 40 Vacuum element for center nozzles (flap "closed") | |
| | 41 Vacuum element for legroom flaps (flaps "open") | |



Function diagram 10

Pushbutton switch at "DEF", "ON/OFF" switch refrigerant compressor at "ON"
 Regulating valve in position "heating", coolant temperature > 104 °F (> 40 °C),
 (temperature switch [35] without influence)

- | | | |
|---|--|--|
| 2 Pushbutton switch | 32 Check valve | 42 2-stage vacuum element for defroster nozzles (flaps "open") |
| 4 Regulating valve | 33 Vacuum reservoir | 43 Vacuum element for fresh air portion of fresh air-recirculating air changeover switch |
| 19 Vacuum switch (main switch, green) | 34 Check valve | 44 Vacuum element for fresh air-recirculating air changeover switch (flap "open" 100 % fresh air supply) |
| 20 Vacuum switch (refrigerant compressor, yellow) | 35 Temperature switch | 80 Switchover valve "BI-LEVEL" (at "DEF" only) |
| 23 Vacuum switch (for refrigerant compressor, at "BI-LEVEL" only) | 36 Vent line for legroom flaps | 81 Vacuum switch (at "BI-LEVEL" only) |
| 28 Switchover valve (legroom flaps) | 37 Vacuum connection for tester | 82 Check valve |
| 29 Switchover valve (fresh air-recirculating air changeover switch) | 38 Specified leak point | 83 Check valve |
| 30 Vacuum lines | 39 Vent line for regulating valve | |
| 31 Vacuum connection at intake pipe | 40 Vacuum element for center nozzles (flap "closed") | |
| | 41 Vacuum element for legroom flaps (flaps "closed") | |