83–114 Checking vacuum element on heater tap and vacuum switches on control unit for leaks

Data

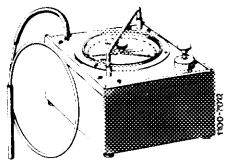
Permissible leaks of system (without vacuum reservoir)	6 mbar/min at 400 mbar vacuum
Permissible leaks of components	20 mbar/min at 300 mbar vacuum
Plug-on length of connections	12 ± 2

Color code of vacuum lines for heating system

Vacuum line	Color code 1st version	2nd version	3rd version
Control line from lefthand vacuum switch on control unit to vacuum element on water tap	red	red	red
Connection line from lefthand to righthand vacuum switch on control unit	red	red	red
Suction line from distributor in engine compartment to righthand vacuum switch on control unit	green/red	red/green	red/green
Suction line from distributor to vacuum reservoir (heating)	medium green[1)] white[2)]	grey/light blue	red/grey

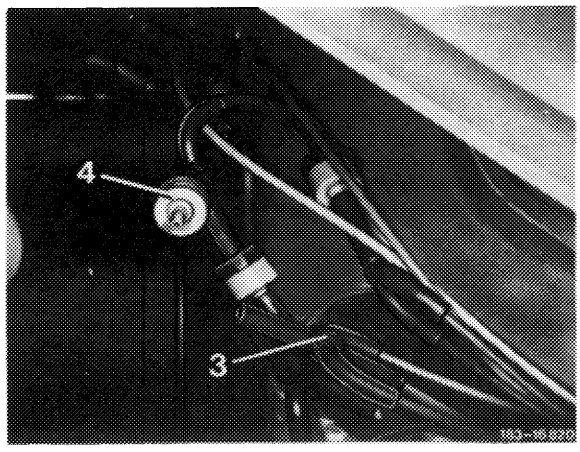
[1)] Without air conditioning system [2)] With air conditioning system

Special tool

Tester for vacuum systems		116 589 25 21 00

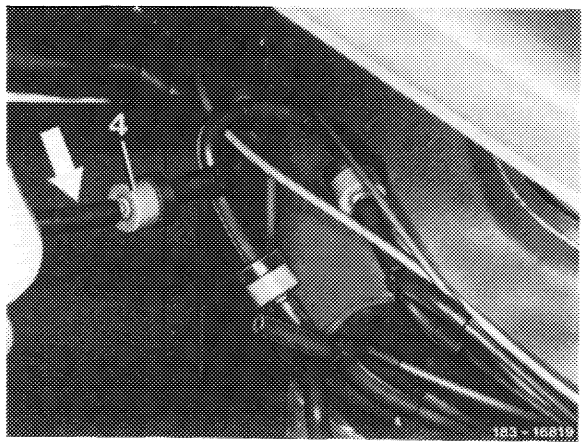
A. Testing check valve

1 Pull check valve (4) from connection (3).



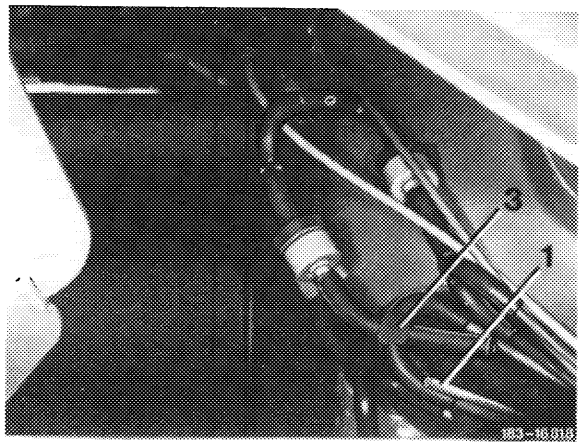
2 Connect tester to check valve (4) (refer to arrow), evacuate and read pressure gauge.

3 If pressure gauge shows a pressure increase, replace check valve (4).



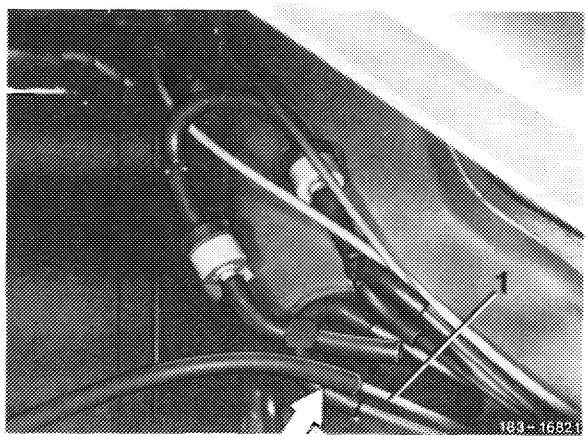
B. Testing vacuum supply tank for heating system

1 Pull suction line (1) from connection (3).



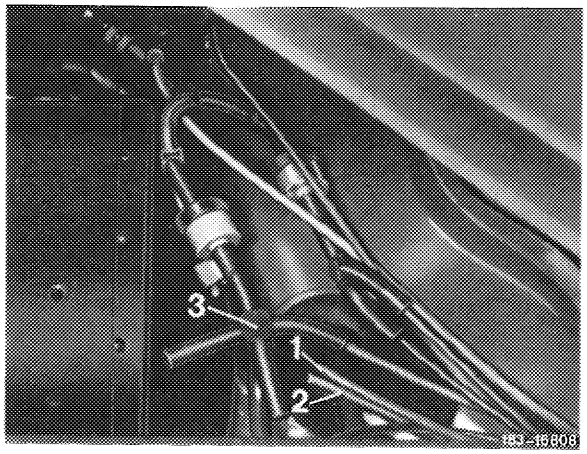
2 Connect tester to suction line (1) (refer to arrow) and evacuate (pay attention to supply volume).

3 If readout on pressure gauge changes, replace seal of vacuum reservoir or vacuum reservoir (heating).

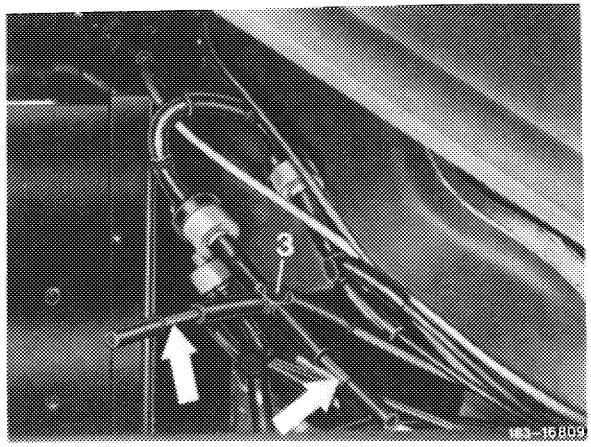


C. Testing control units and vacuum element on regulating valve

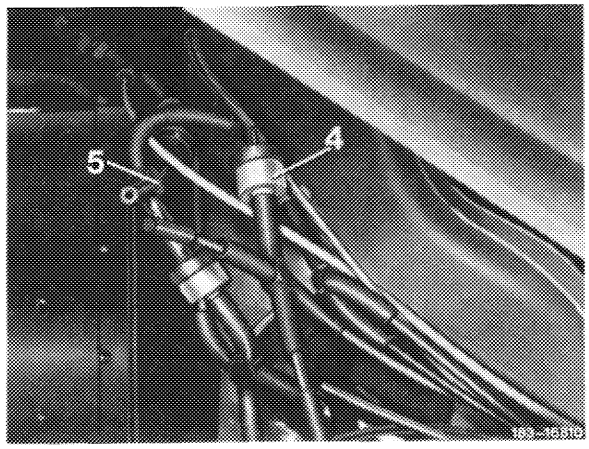
1 Pull suction line (1) for vacuum supply tank (heating) and suction line (2) for air conditioning system out of connection (3).



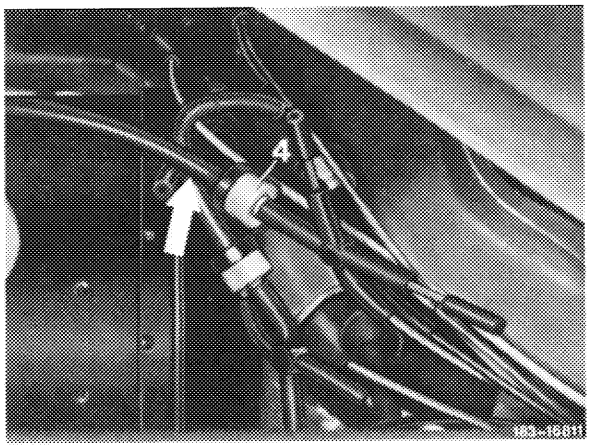
2 Close connection (3) with blind plug (refer to arrows).



3 Pull check valve (4) out of connection (5).

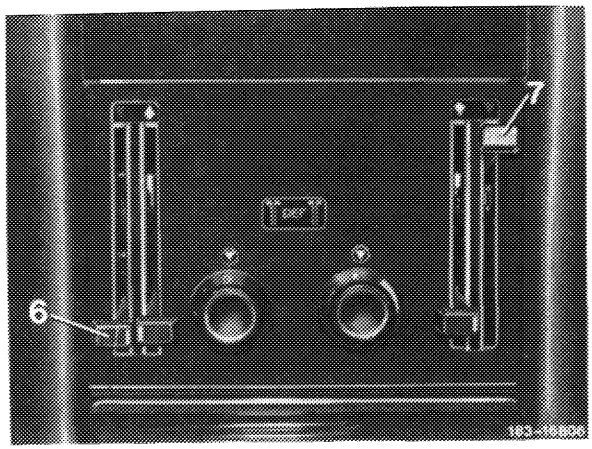


4 Connect tester to check valve (4) (refer to arrow).



5 Set lefthand control lever (6) to position "heating closed" and righthand control lever (7) to position "heating open".

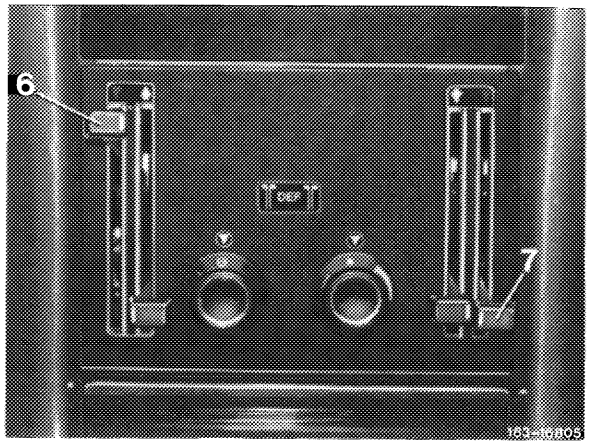
6 Evacuate tester and read pressure gauge.



7 In the event of leaks, replace vacuum switch on righthand control lever.

8 If righthand vacuum switch is sealtight, check lefthand vacuum switch.

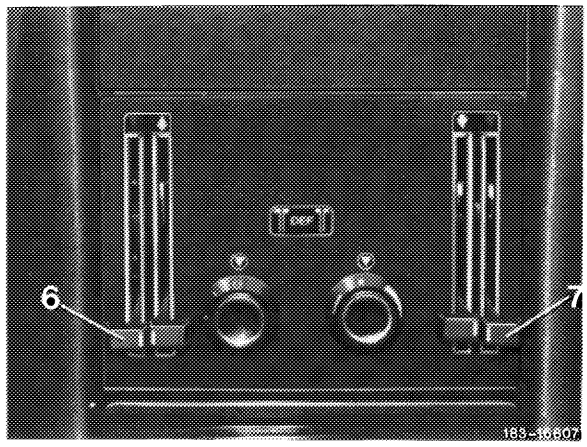
9 In such a case, set righthand control lever (7) to position "heating closed" and the lefthand control lever (6) to position "heating open".



10 Evacuate tester and read pressure gauge.

11 In the event of leaks, replace lefthand vacuum switch on control unit.

12 If lefthand vacuum switch is sealed, set both control levers (6) and (7) to position "heating closed".



13 Evacuate tester and read pressure gauge.

14 In the event of leaks, replace vacuum element on regulating valve.