

80–260 Checking central interlock

A. Sedan and coupe

Data

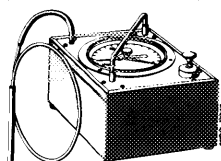
Permissible leaks in system (without vacuum supply tank)	6 mbar/min at 400 mbar vacuum
Permissible leaks of individual components	6 mbar/min at 300 mbar vacuum
Plug-on length of connections	12 ± 2

Color code of vacuum lines for central interlock

Vacuum line	color code	
	1st version	2nd version
Suction line from distributor in engine compartment to vacuum supply tank (96)	grey-yellow	yellow-grey
Interlocking line (25, 85, 86, 90, 92, 94)	yellow-red	yellow-red
Unlocking line (26, 88, 89, 91, 93, 95)	yellow-green	yellow-green

Special tool

Tester for vacuum systems



116 589 25 21 00

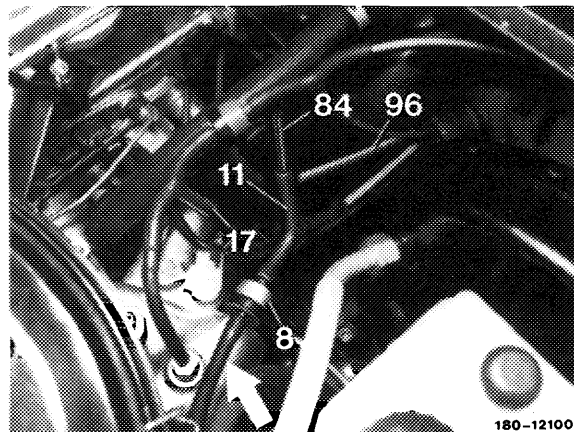
Note

When checking vacuum elements, flap for tank filler neck, trunk lid and front passenger's door on models 123.043/050/053, remove carpet and cover rail in leg-room front right.

Checking central interlock without vacuum reservoir

1 Pull suction line (96) out of distributor (11) and close distributor with blind plug (84).

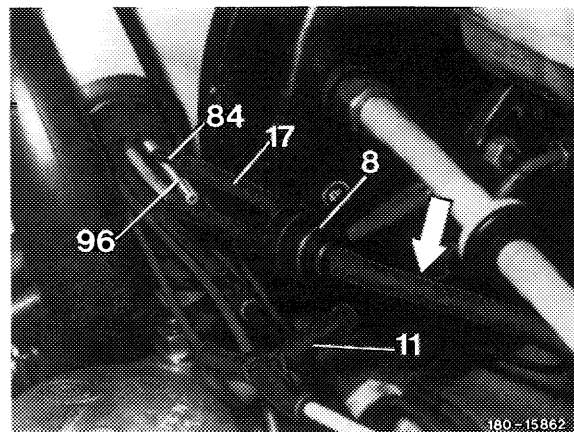
Version 1 – check valve



2 Pull suction line (96) out of connection (17) and close connection with blind plug (84).

3 Pull check valve (8) out of distributor (11) and connect tester (refer to arrow).

Version 2 – check valve



4 Evacuate system in unlocked condition and read pressure increase on pressure gauge of tester. Analogously, check in interlocked condition. Depending in which condition (interlocked or unlocked) a pressure increase occurs, continue with test "Leaking interlocking or unlocking circuit". If a leak shows up in interlocked and unlocked condition, continue with test „Leaking interlocking and unlocking circuit“.

Attention!

On circuit shown leaking, check hose lines and their connections prior to replacing vacuum element.

Leaking interlocking or unlocking circuit

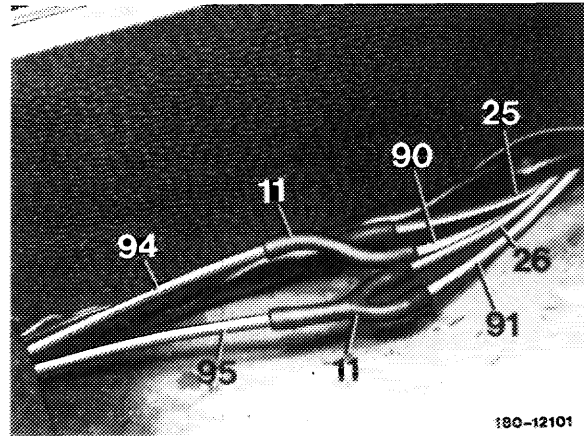
Note: If one circuit is leaking (the interlocking circuit or the unlocking circuit), systematically check the individual vacuum elements of this circuit one after the other. Upon replacement of a leaking vacuum element, check the circuit found leaking once again for leaks, starting at engine compartment.

5 Remove carpet at front left in leg room.

6 Remove covering rail at front left in leg room, which will make the distributors (11) for checking vacuum element of lefthand rear door accessible.

7 Check vacuum element of lefthand rear door on line (94 or 95) of respective circuit.

8 In the event of a leak in one of these lines, renew vacuum element (80–220).



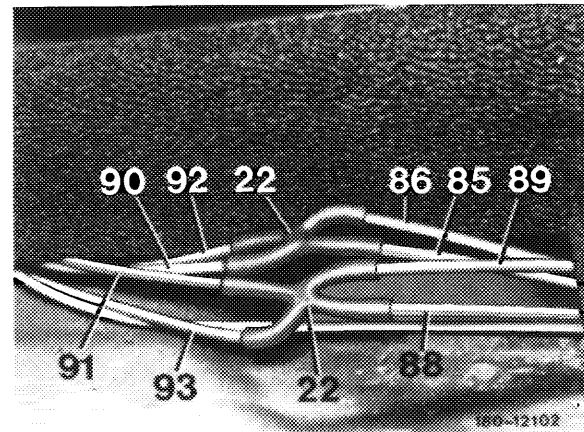
180-12101

9 If both circuits of the lefthand rear door are tight, continue checking vacuum elements for righthand driver's door, righthand rear door, flap for tank filler neck and trunk lid in leg room front right.

10 Remove carpet in leg room front right.

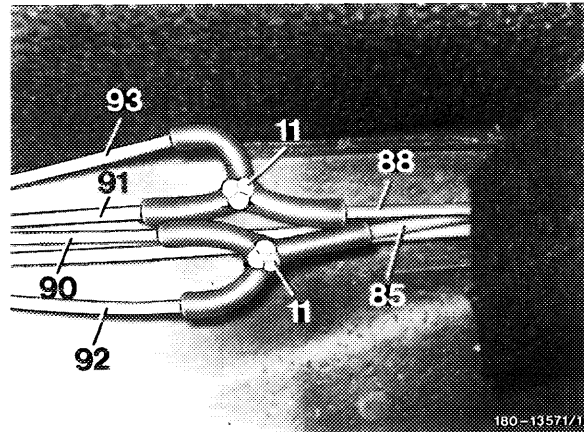
11 Remove cover rail.

12 Check interlocking circuit of flap for tank filler neck and trunk lid with line (85).



180-12102

Layout in sedans



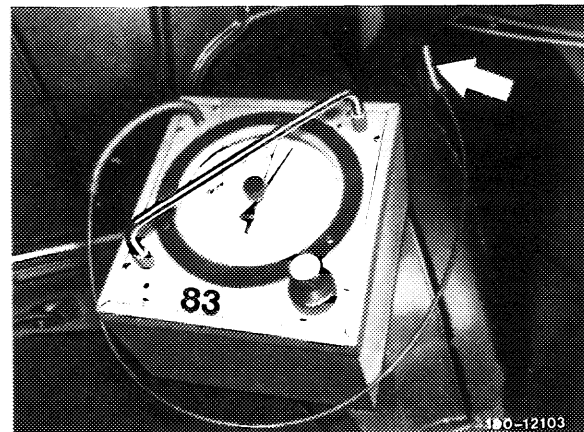
180-13571/1

Layout in coupe

13 In the event of a leak in this scope, remove cover in trunk at rear right.

14 Connect tester (83) to vacuum element of flap for tank filler neck (refer to arrow) and evacuate.

15 In the event of a leak, renew vacuum element of flap for tank filler neck (80–230).



180-12103

16 If the readout is not changing, the vacuum element of flap for tank filler neck is tight. The prevailing leak is therefore in vacuum element for trunk lid.

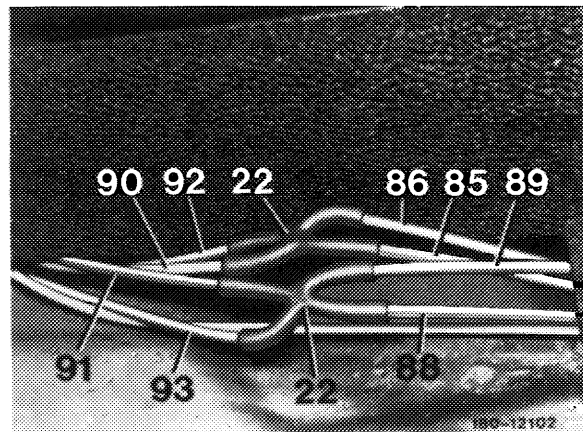
17 Renew vacuum element for trunk lid (80–240).

18 If the unlocking circuit line (88) is leaking, the leak is caused by the vacuum element for the trunk lid only.

19 Check righthand rear door on line (86 or 89) of respective circuit.

20 In the event of a leak in one of these lines, renew vacuum element of rear door (80–220).

21 Check righthand driver's door on line (92 or 93) of respective circuit.

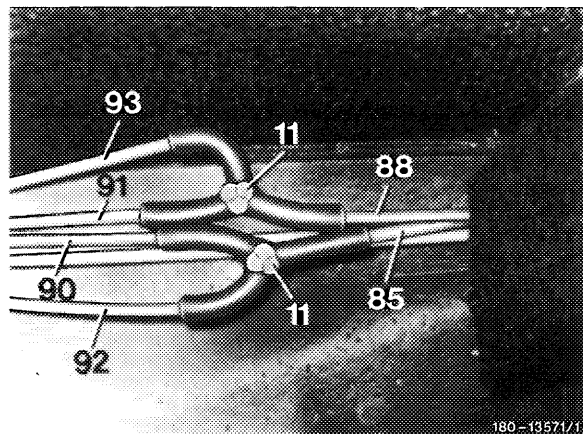


Layout in sedans

22 Connect tester and evacuate.

23 If readout on pressure gauge is changing during tests, renew vacuum element of righthand driver's door (80–210).

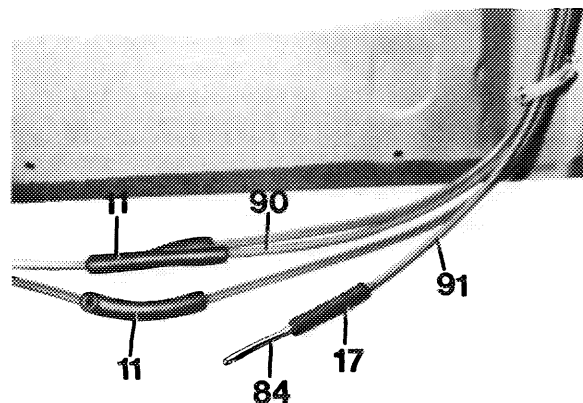
24 If both circuits of righthand driver's door are tight, the leak is caused by the connecting lines (90 or 91).



Layout in coupe

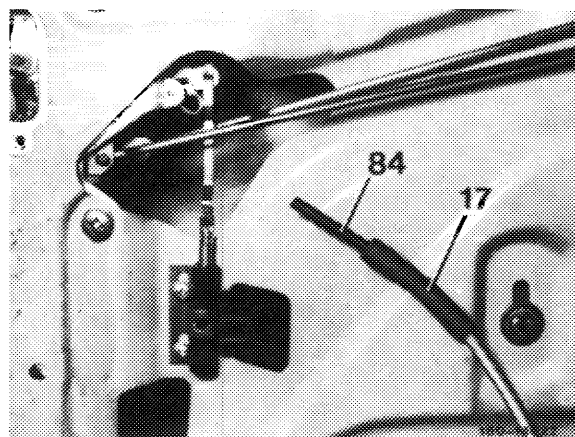
25 On sedans, in such a case, pull out line (90 or 91) of distributor (11) in leg room front left.

26 Close one connection (17) with blind plug (84) and slip on line (90 or 91).



Layout in sedans

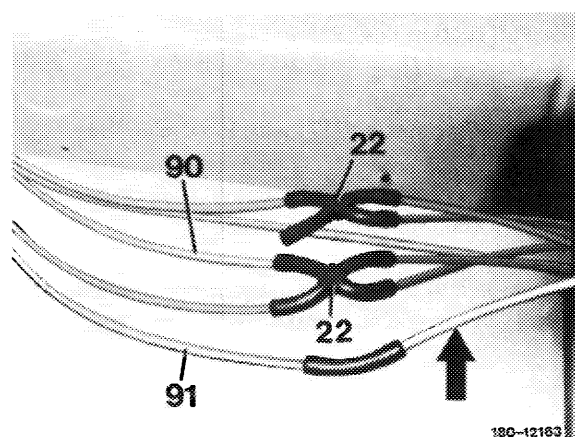
27 On coupes, in such a case, remove door covering. Pull off connecting line and close connection (17) with blind plug (84).



Layout in coupe

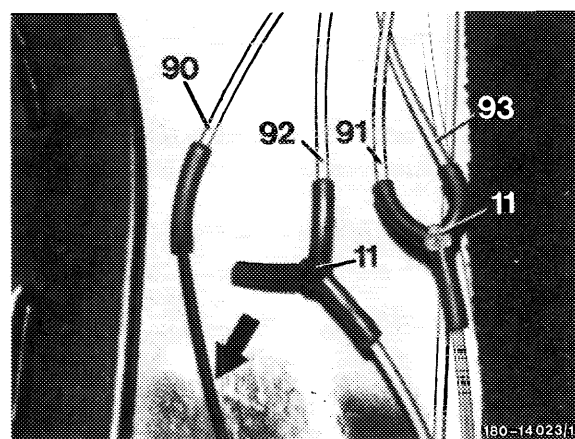
28 Connect tester with connecting hose (refer to arrow) to line (90 or 91) at front right in leg room and evacuate.

29 If readout changes when the pressure gauge is tested, renew connecting line (90 or 91).



Layout in sedans

Note: Any other vacuum line system can be checked for leaks as described under item 25 to 29.



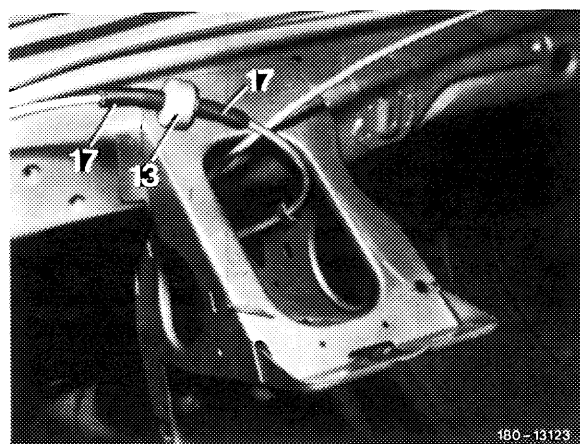
Layout in coupe

Leaking locking and unlocking circuit

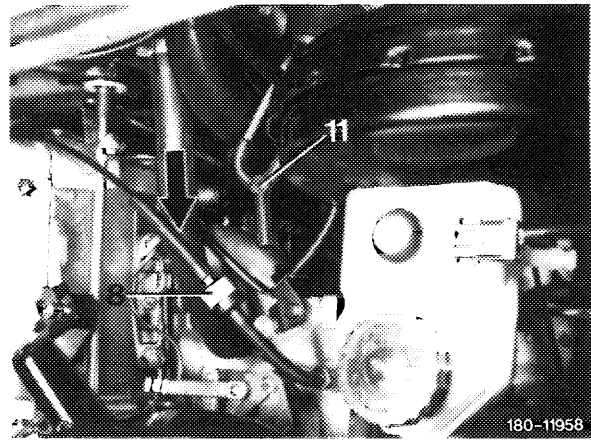
30 If both circuits are leaking, check valves may be leaking.

Attention!

Since August 1976, the yellow suction line under instrument panel is additionally provided with a check valve (white-black). Never use the additional check valve at any other point of the vacuum system, since the correct function of the system is then no longer ensured.



31 Pull check valve (8) in engine compartment out of distributor (11) and connect tester with connecting hose (refer to arrow), evacuate and read pressure gauge.



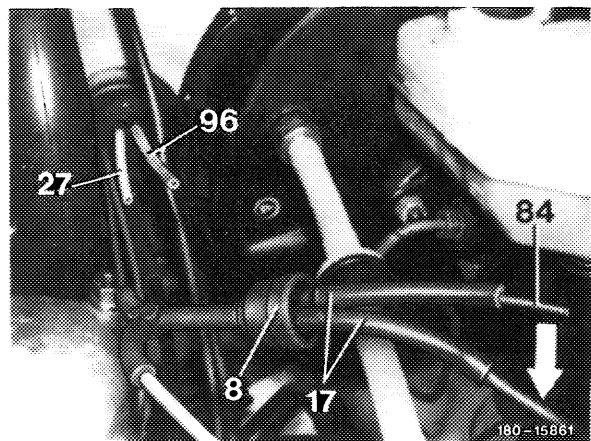
Version 1 – check valve

32 Pull suction line (27) and suction line (96) out of connections (17).

33 Close connection (17) with blind plug (84).

34 Connect tester (refer to arrow) to connection, evacuate and read pressure gauge.

35 If readout on pressure gauge is not changing, the check valve in engine compartment is sealtight.



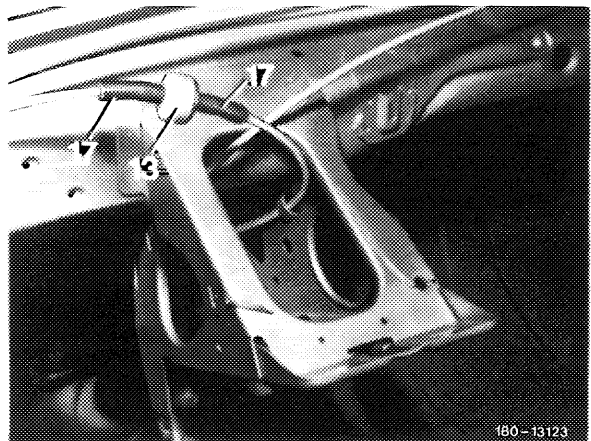
Version 2 – check valve

36 In such a case, remove cover at left under instrument panel.

37 Pull check valve (13) out of connecting piece (17) and connect tester, evacuate and read pressure gauge.

38 If readout on pressure gauge changes, replace check valve (13).

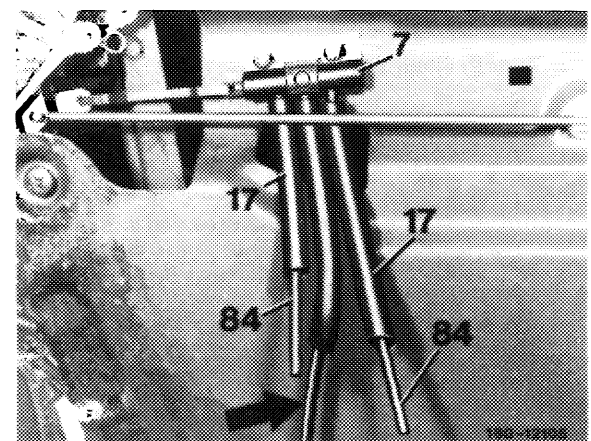
39 If both check valves are leaktight, the fault is at vacuum switch in driver's door.



40 In such a case, remove door lining and check vacuum switch.

41 For this purpose, pull off locking and unlocking line on vacuum switch (7) and close connecting pieces (17) with blind plugs (84).

42 Pull off suction line, connect tester (refer to arrow) to center connection of vacuum switch and evacuate.

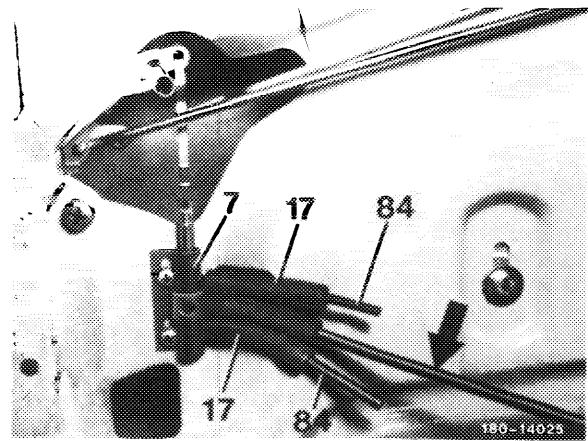


Layout in sedans

43 If the vacuum switch is leaking, readout on pressure gauge will change.

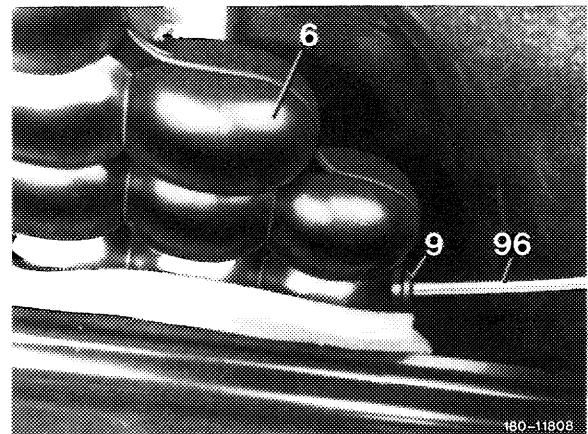
44 Replace vacuum switch (80–200).

Layout in coupe



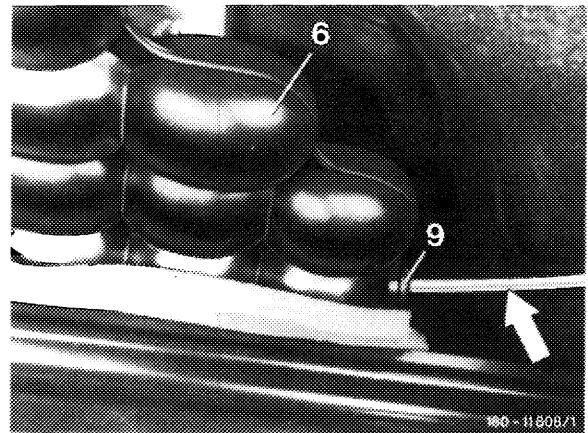
Checking vacuum reservoir

45 Pull suction line (96) out of sealing (9).



46 Connect tester (refer to arrow) to seal (9) and evacuate.

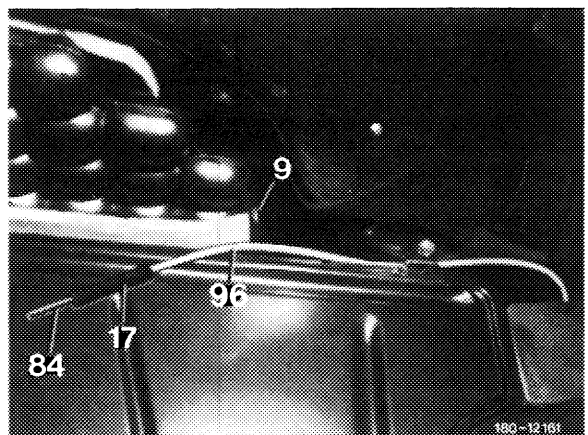
47 If readout on pressure gauge changes, renew seal (9) of vacuum supply tank as well as vacuum supply tank (6), if required (80–250).



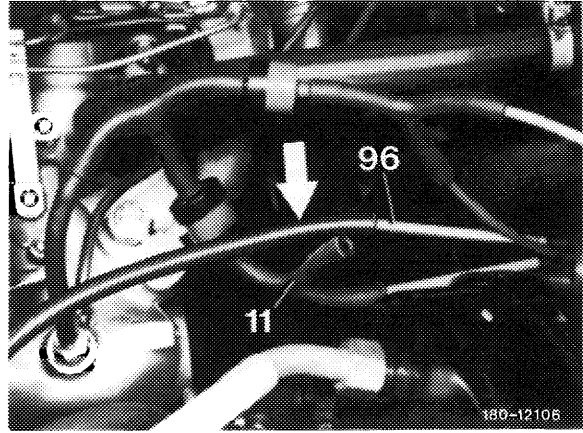
Checking suction line for vacuum supply tank

48 Pull suction line (96) out of seal (9).

49 Close connection (17) with blind plug (84) and slip on suction line (96).



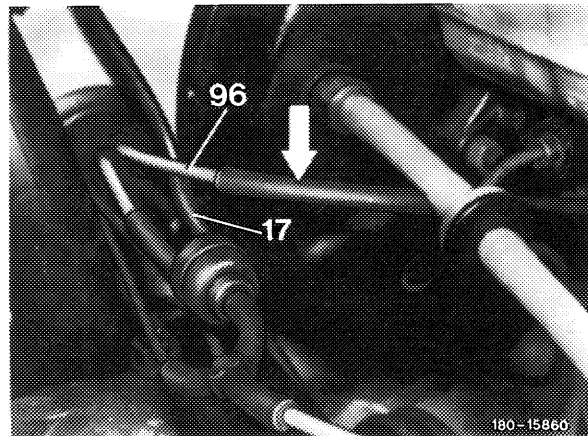
50 Pull suction line (96) out of distributor (11) in engine compartment, connect tester (refer to arrow) and evacuate.



Version 1 — check valve

51 Pull suction line (96) out of connection (17), connect tester (refer to arrow) and evacuate.

52 If readout changes, renew suction line.



Version 2 — check valve

B. T-sedan

Data

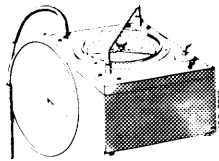
Permissible leaking of system (without vacuum reservoir)	6 mbar/min at 400 mbar vacuum
Permissible leaking of components	5 mbar/min at 300 mbar vacuum
Plug-on length of connections	12 ± 2

Color code of vacuum lines for central interlock

Vacuum line	color code
Suction line from distributor in engine compartment to vacuum reservoir (96)	yellow-grey
Interlocking line (25, 85, 86, 90, 92, 94)	yellow-red
Unlocking line (26, 88, 89, 91, 93, 95)	yellow-green

Special tool

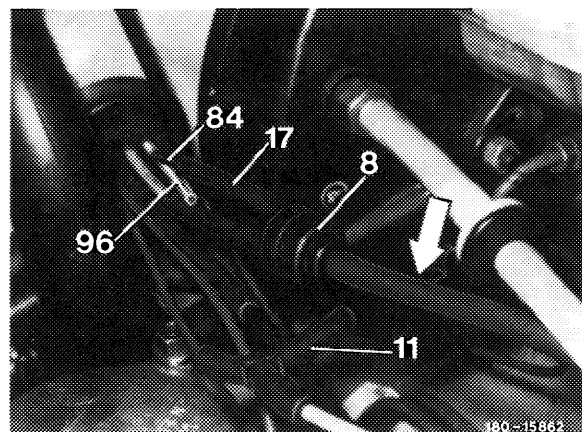
Tester for vacuum system



116 589 25 21 00

Checking central interlock without vacuum reservoir

- 1 Pull suction line (96) out of connection (17) and close connection with blind plug (84).
- 2 Pull check valve (8) out of distributor (11) and connect tester (refer to arrow).



3 Evacuate system in unlocked condition and read pressure increase at pressure gauge of tester. Check analogously in locked condition. Depending in which condition (locked or unlocked) the pressure rises, continue test "Leaking locking or unlocking circuit". If a leak shows up in locked and unlocked condition, continue test "Leaking locking and unlocking circuit".

Attention!

Prior to exchanging vacuum elements of leaking circuit, check both hose lines and their connections.

Leaking locking or unlocking circuit

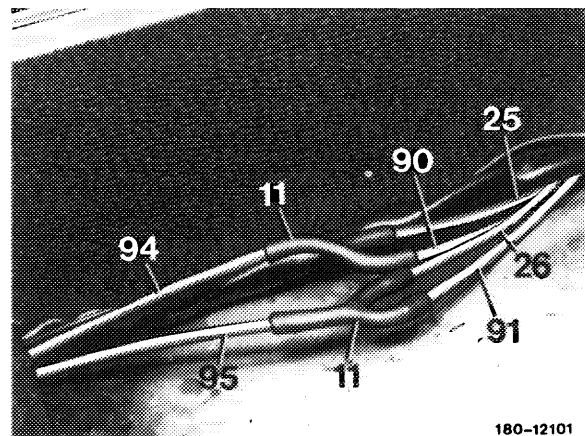
Note: If one circuit is leaking (the interlocking circuit or the locking circuit), systematically check the individual vacuum elements of this circuit one after the other. After replacing a leaking vacuum element, check circuit found leaking once again for leaks starting at engine compartment.

4 Remove carpet at front left in leg room.

5 Remove covering strips at front left in leg room to make the distributors (11) for checking vacuum element of lefthand rear door accessible.

6 On line (94 or 95) of respective circuit, check vacuum element of lefthand rear door.

7 If one of these lines leaks, replace vacuum element (80–220).



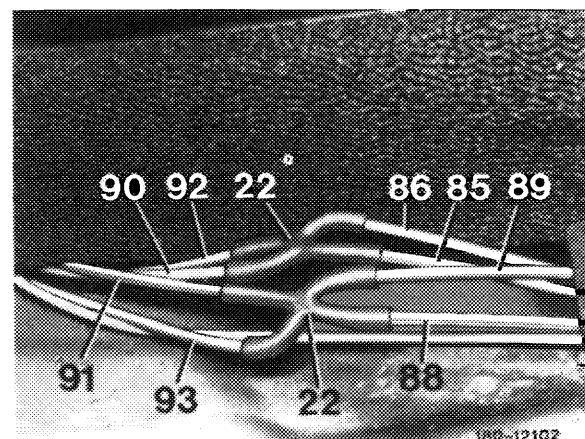
180-12101

8 If both circuits of lefthand rear door are leaking, check vacuum elements for righthand driver's door, righthand rear door, flap for tank filler neck and rear door in leg room at front right.

9 Remove carpet in leg room front right.

10 Remove covering strip.

11 Check interlocking circuit of flap for tank filler neck and rear door by means of line (85).



180-12102

12 If a leak shows up here, open paneling in trunk space at rear right.

13 Connect tester (refer to arrow) on vacuum element of flap for tank filler neck and evacuate.

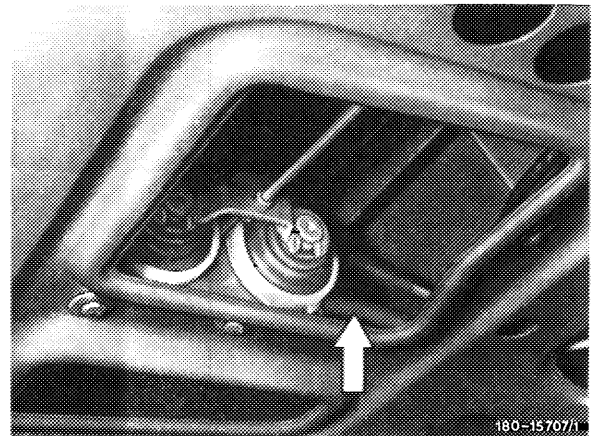
14 In the event of a leak, replace vacuum element of flap for tank filler neck (80-230 section B).



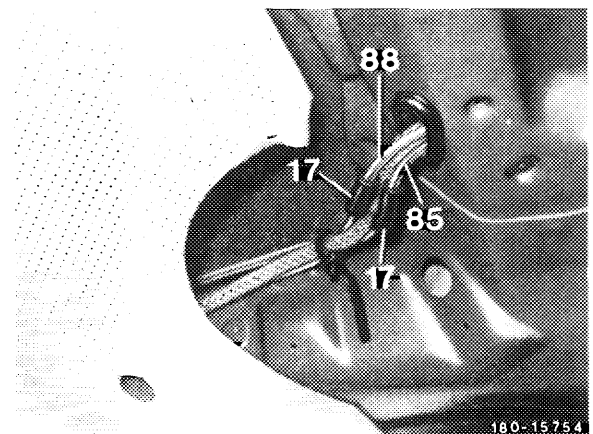
15 If the readout is not changing, the vacuum element of flap for tank filler neck is sealtight. The prevailing leak may be at vacuum element for rear door, on connection under covering of roof frame rear right or on distributor under covering of wheel house at rear right.

16a Check vacuum element for rear door. For this purpose, pull off interlocking line, connect tester (refer to arrow) and evacuate. In the event of a leak, replace vacuum element (80-241).

If readout is not changing, continue checkup at 16b.

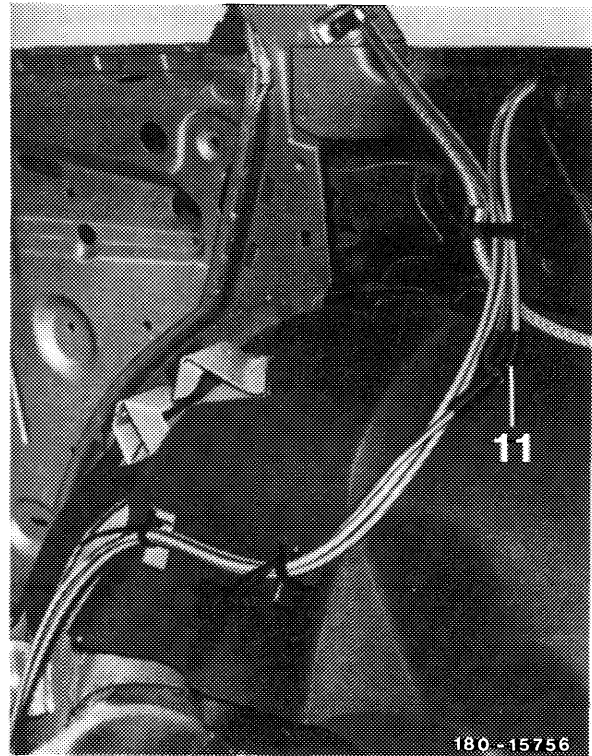


16b Check connection on roof frame rear right. For this purpose, remove roof frame at the rear. Check line for correct seat in connection (17). Depending on condition, replace connection or continue checkup at 16c.



16c Check covering member under covering of wheel house rear right.

For this purpose, remove wheel house section at rear right. Check lines for correct seat in distributor (11). Replace distributor depending on condition.



17 If the unlocking circuit line (88) is leaking, the leak is at vacuum element of rear door or at connection under covering of roof frame rear right.

18 Check as described under item 16a and b.

19 Check righthand rear door and line (86 or 89) of respective circuit.

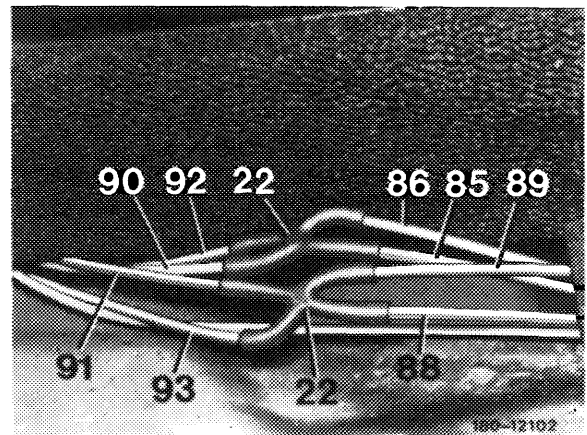
20 If one of these lines is leaking, replace vacuum element of rear door (80-220).

21 Check righthand driver's door on line (92 or 93) of respective circuit.

22 Connect tester and evacuate.

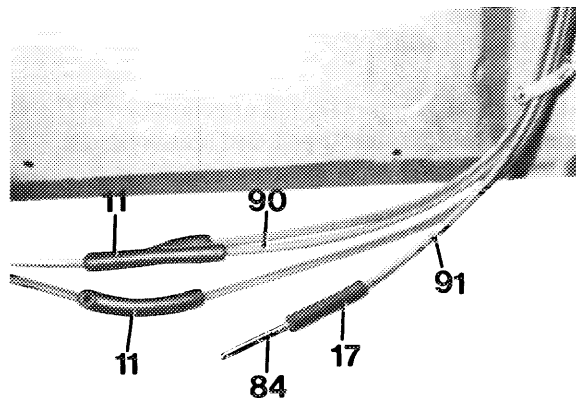
23 If readout on pressure gauge changes during check-up, replace vacuum element of righthand driver's door (80-210).

24 If both circuits of righthand driver's door are seal-tight, the leak is at connecting lines (90 or 91).



25 In this case, pull line (90 or 91) out of distributor (11) in leg room front left.

26 Close one connection (17) with blind plug (84) and slip on line (90 or 91).

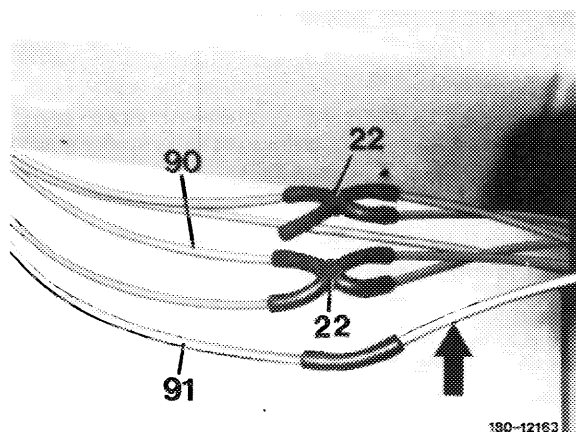


180-12162

27 Connect tester with connecting hose (refer to arrow) to line (90 or 91) at front right in leg room and evacuate.

28 If readout on pressure gauge changes during test, replace connecting line (90 or 91).

Note: Any other vacuum line in system can be tested for leaks as described under item 25 to 28.



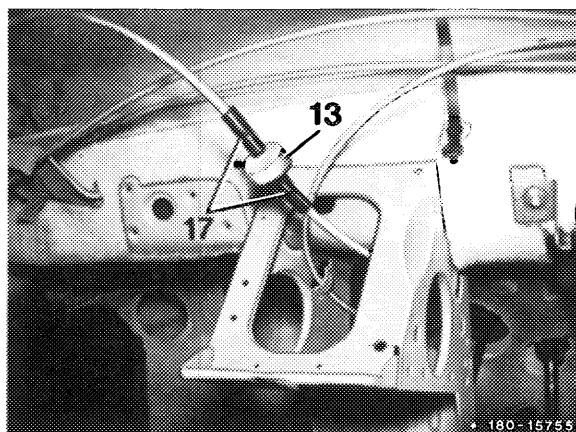
180-12163

Leaking interlocking and unlocking circuit

29 If both circuits are leaking, the leak may be on check valves.

Attention!

Never use additional check valve (white-black) under instrument panel at any other spot of vacuum system, since operation of system is then no longer assured.



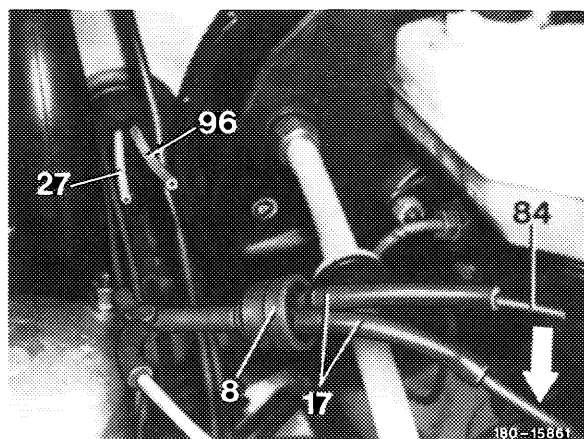
180-15755

30 Pull suction line (27) and suction line (96) out of connections (17).

31 Close connection (17) with blind plug (84).

32 Connect tester (refer to arrow) to connection, evacuate and read pressure gauge.

33 If readout on pressure gauge is not changing, the check valve in engine compartment is sealtight.



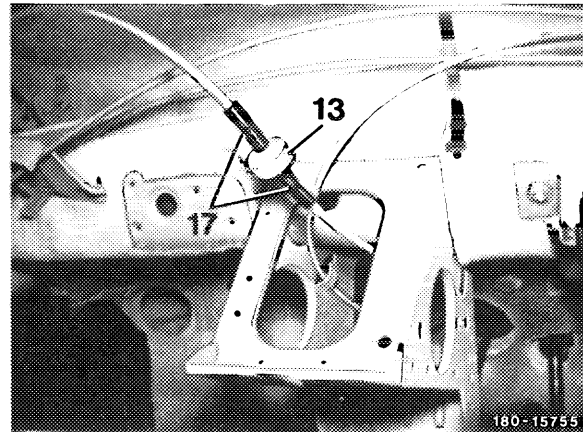
180-15861

34 In such a case, remove covering at left under instrument panel.

35 Pull check valve (13) out of connection (17) and connect tester, evacuate and read pressure gauge.

36 If readout on pressure gauge changes, replace check valve (13).

37 If both check valves are leaktight, the fault is at vacuum switch in driver's door.



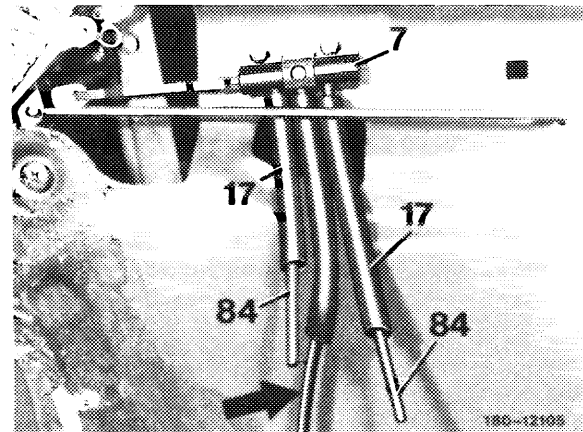
38 In such a case, remove door covering and check vacuum switch.

39 For this purpose, pull off interlocking and unlocking line on vacuum switch (7) and close connections (17) with blind plugs (84).

40 Pull off suction line, connect tester (refer to arrow) to center connection of vacuum switch and evacuate.

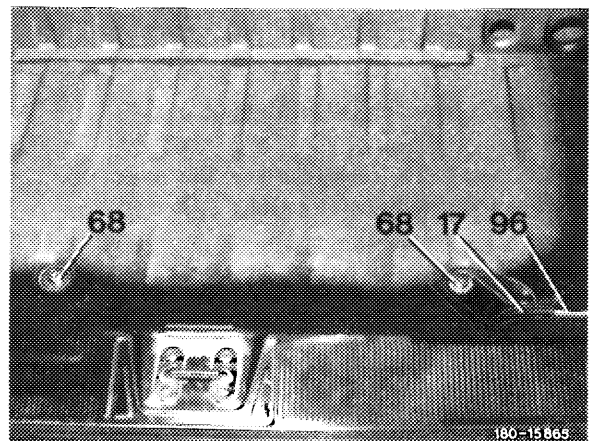
41 If vacuum switch is leaking, readout on pressure gauge will change.

42 Replace vacuum switch (80-200).

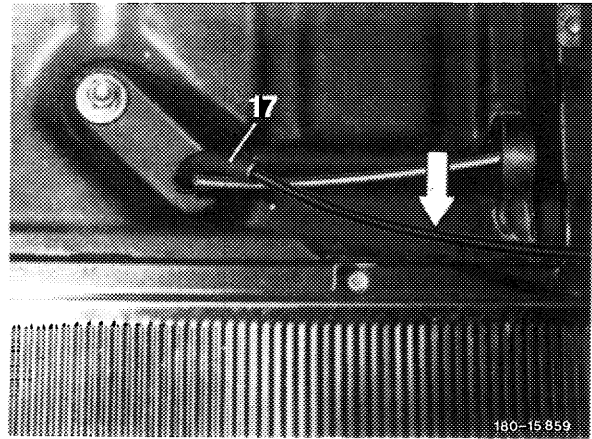


Checking vacuum reservoir

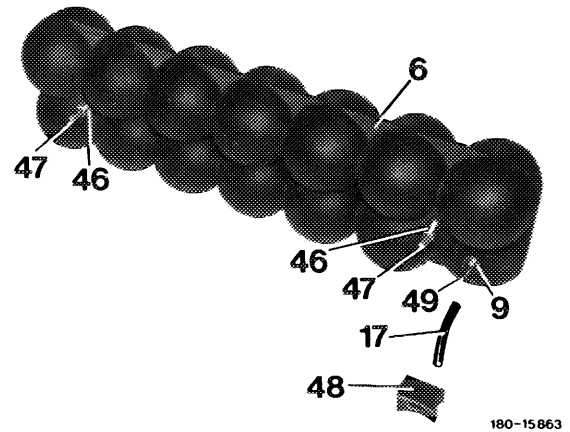
43 Pull suction line (96) out of connection (17).



44 Connect tester (refer to arrow) to connection (17) and evacuate.



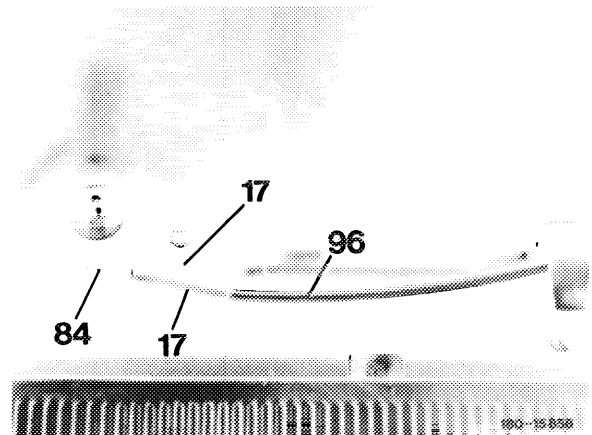
45 If readout on pressure gauge changes, replace connection (17), connection (49) and sealing (9) of vacuum reservoir (or vacuum reservoir itself, if required) (80–250, section B).



Checking suction line to vacuum reservoir

46 Pull suction line (96) out of connection (17).

47 Close connection (17) with blind plug (84) and slip on suction line (96).



48 Pull suction line (96) out of connection (17), connect tester (refer to arrow) and evacuate.

49 Replace suction line if readout changes.

