

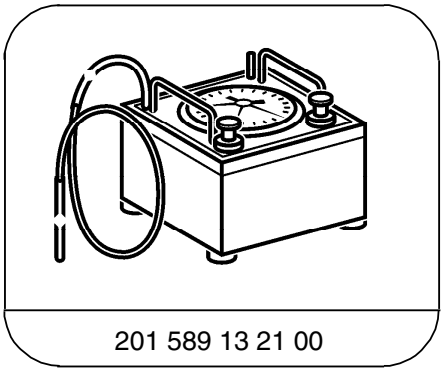
Pneumatic Test Program - Test

Preparation for Test

- 1. Review 11, 12, 14, 15, 20, 21, 31, 32, 41
- 2. Disconnect all vacuum lines at vacuum distributor block (36).
- 3. Check gray vacuum line to intake manifold for leaks.

Note:
Permissible leakage of the elements with vacuum lines at 400 mbar vacuum per minute is 30 mbar.

Special Tools



Tester

Test equipment; See MBUSA Standard Service Equipment Program

Description	Brand, model, etc.
Connector	124 805 04 44

Pneumatic Test Program – Test

A. Vacuum Distributor Block, Vakuum Reservoir, Switchover Valve Block (Y11/3) Test

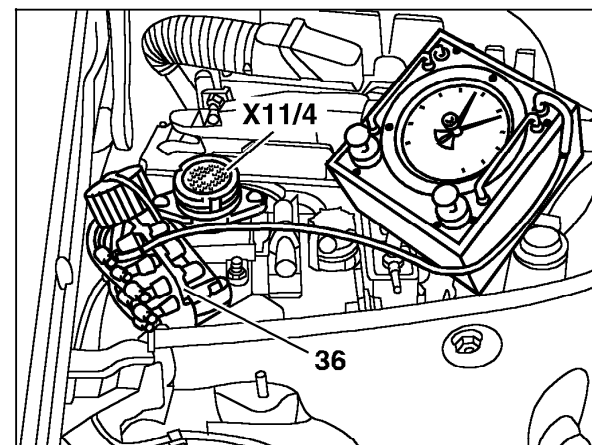
⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	Entire vacuum distributor block	Connection “P” on vacuum tester.	Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute	Vacuum distributor block, ⇒ 1.1
1.1	Vacuum distributor block, check valve “a”	Connection “1” on vacuum tester.	Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute	Vacuum distributor block, ⇒ 1.2
1.2	Vacuum distributor block, check valve “b”	Connection “4” on vacuum tester.	Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute	Vacuum distributor block.
2.0	Vacuum reservoir with vacuum line	Red/gray vacuum line (connection 3) on vacuum tester.	Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute	Vacuum lines, Vacuum reservoir.
3.0	Switchover valve block (Y11/3)	Ignition: OFF medium green line (connection 5) on vacuum tester.	Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute	Vacuum line, Y11/3.

Pneumatic Test Program – Test

Preparation for Test

B. Vacuum system

1. Ignition: **ON**
2. Medium green line (connection “5”) on vacuum tester.









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Figure 2




36 Vacuum distribution block

Pneumatic Test Program – Test

B. Vacuum system Test

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	Defroster flap vacuum actuator, long stroke	Medium green line (connection 5) on vacuum tester.	Ignition: ON Press  Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute.	Vacuum line, Vacuum actuator 38
1.1	Defroster flap vacuum actuator, short and long stroke	Medium green line (connection 5) on vacuum tester.	Ignition: ON Press  Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute.	Vacuum line, Vacuum actuator 38
2.0	Diverter valve flap center vent	Medium green line (connection 5) on vacuum tester.	Ignition: ON Press  Temperature selector “  “ Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute.	Vacuum line, Vacuum actuator 41
3.0	Blend air flap center vent	Medium green line (connection 5) on vacuum tester.	Ignition: ON Press  Evacuate with 300 mbar vacuum.	30 mbar pressure increase in 1 minute.	Vacuum line, Vacuum actuator 45 and 46
4.0	Footwell flap, long stroke	Medium green line (connection 5) on vacuum tester.	Ignition: ON Press  Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute.	Vacuum line, Vacuum actuator 39

Pneumatic Test Program – Test

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
4.1	Footwell flap vacuum element, long and short stroke.	Medium green line (connection 5) on vacuum tester.	Ignition: ON Press  Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute.	Vacuum line, Vacuum actuator 39
5.0	Fresh/recirculating air flap vacuum element, long stroke.	Medium green line (connection 5) on vacuum tester.	Ignition: ON  Illuminates Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute.	Vacuum line, Vacuum actuator 44
5.1	Fresh/recirculating air flap vacuum element, short and long stroke.	Medium green line (connection 5) on vacuum tester.	Ignition: ON  Illuminates Evacuate system with 300 mbar vacuum.	30 mbar pressure increase in 1 minute.	Vacuum line, Vacuum actuator 44