

Pneumatic Test Program - Test

Preparation for Test

1. Review 11, 12, 14, 15, 20, 21, 22, 31, 32, 41
2. Disconnect all vacuum lines at vacuum distributor block (36).
3. Check gray vacuum line to intake manifold for leaks.

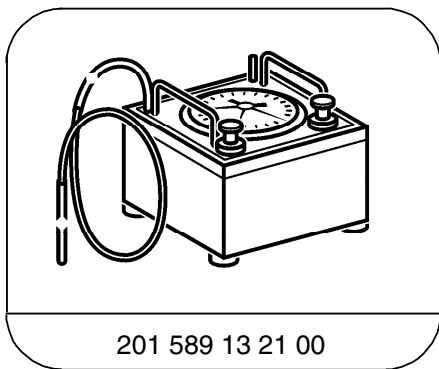


Permissible leakage of the elements with vacuum lines at 400 mbar vacuum per minute is 30 mbar.

Test equipment; See MBUSA Standard Service Equipment Program

Description	Brand, model, etc.
Connector	129 805 04 44

Special Tools



201 589 13 21 00

Tester

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A. Vacuum Distributor Block, Vacuum 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)	Ignition: OFF medium green line (connection 5) on vacuum tester	Evacuate system with 300 mbar vacuum	30 mbar pressure increase in 1 minute	Vacuum lines, Y11

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B. Vacuum system

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

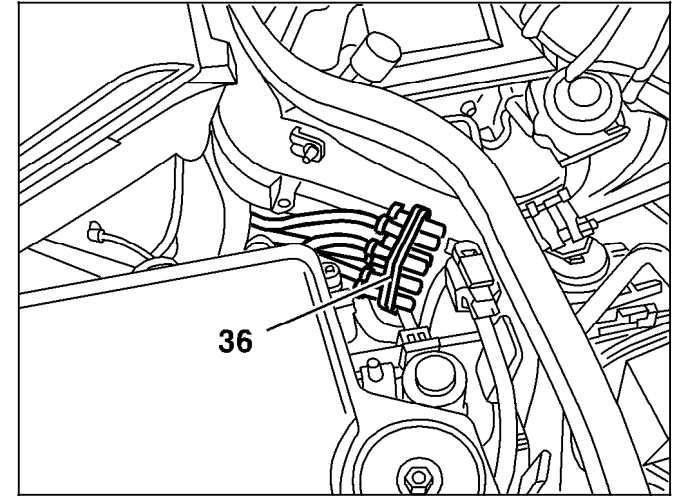







Figure 2

P83.40-2049-01



36 Vacuum distribution block

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B. Vacuum system Test

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	Defroster air outlet vacuum actuator, long stroke	Medium green line 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 air outlet vacuum actuator, long and short stroke	Medium green line 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 air outlet	Medium green line on vacuum tester	Ignition: ON Press  Temperature selector "L0" Evacuate system with 300 mbar vacuum	30 mbar pressure increase in 1 minute	Vacuum line, Vacuum actuator 41
3.0	Blend air flap - center air outlet	Medium green line 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 on vacuum tester	Ignition: ON Press  Evacuate system with 300 mbar vacuum	30 mbar pressure increase in 1 minute	Vacuum line, Vacuum actuator 39

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⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
4.1	Footwell flap vacuum actuator, long and short stroke.	Medium green line 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 actuator.	Medium green line on vacuum tester	Ignition: ON  Illuminates Evacuate system with 300 mbar vacuum	30 mbar pressure increase in 1 minute	Vacuum line, Vacuum actuator 42
6.0	Left air outlet vacuum actuator.	Medium green line on vacuum tester	Ignition: ON Left side air outlet adjuster closed. Evacuate system with 300 mbar vacuum	30 mbar pressure increase in 1 minute	Vacuum line, Vacuum actuator 46
7.0	Center air outlet vacuum actuator.	Medium green line on vacuum tester	Ignition: ON Center air outlet adjuster closed. Evacuate system with 300 mbar vacuum	30 mbar pressure increase in 1 minute	Vacuum line, Vacuum actuator 47.

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⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
8.0	Right side air outlet vacuum actuator.	Medium green line on vacuum tester	Ignition: ON Right side air outlet adjuster closed. Evacuate system with 300 mbar vacuum	30 mbar pressure increase in 1 minute	Vacuum line, Vacuum actuator 48
9.0	Center air outlet, “Cold” pushbutton	Medium green line on vacuum tester	Ignition: ON “Cold” function indicator lamp in “cold” pushbutton (blue) illuminates. Evacuate system with 300 mbar vacuum	30 mbar pressure increase in 1 minute	Vacuum line, Vacuum actuator 41
10.0	Center air outlet, “Warm” pushbutton	Medium green line on vacuum tester	Ignition: ON “Warm” function indicator lamp in “warm” pushbutton (red) illuminates. Evacuate system with 300 mbar vacuum	30 mbar pressure increase in 1 minute	Vacuum line, Vacuum actuator 45