

Pneumatic Test Program – Test (CL)

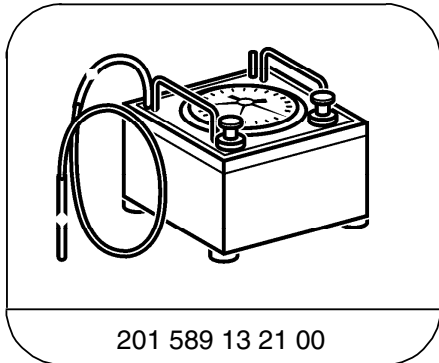
Preparation for Test:

1. Review section 0,
2. Review C/1, 11, 20, 21, 31

Data (mbar)

Test procedure	Permissible deviation
Allowable system leakage at 600 mbar pressure or 300 mbar vacuum in 1 minute.	30 mbar
Allowable leakage of actuators with lines at 600 mbar pressure or 300 mbar vacuum in 1 minute.	25 mbar

Special Tools



201 589 13 21 00

Tester

Pneumatic Test Program – Test (CL)

A. Entire system

Preparation for Test:

1. Provide access to PSE control module (A37) and disconnect pneumatic line with socket from PSE control module.
2. Connect tester to disconnected pneumatic line using with connector 129 805 03 44.



If an actuator does not operate correctly and no leakage is found, check the respective lines for kinks or blockages.

Parts Required for Test:

- | | | |
|---|-----------------------------|---------------|
| 1 | Connector | 202 805 03 44 |
| 2 | Connection hose, 50 mm long | 007 997 61 82 |
| 1 | Pneumatic line, 1 m long | 000 158 14 35 |

Note:

The connections on the PSE control module and pneumatic multiple connector are marked with their German acronyms. In other words:
ZV (German) = **CL** (English),
SRU (German) = **MVA** (English),
OSL (German) = **OSB** (English).

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
1.0	Complete system pressurized	Connector FT on PSE . Yellow connector on tester.	Apply 600 mbar pressure to entire system.	Pressure loss 30 mbar in 1 minute.	32 PSE/CL ⇒ 11.0, 32 PSE/CL ⇒ 13.0
2.0	Complete system evacuated	Connector FT on PSE . Black connector on tester.	Apply 300 mbar vacuum to entire system.	Vacuum loss 30 mbar in 1 minute.	32 PSE/CL ⇒ 12.0 32 PSE/CL ⇒ 14.0

Pneumatic Test Program – Test (CL)

A. Entire system (continued)

3.0	Complete system pressurized	Connector BFT or BFT/FOND on PSE . Yellow connector on tester.	Apply 600 mbar pressure to entire system.	Pressure loss 30 mbar in 1 minute.	32 PSE/CL ⇒ 9.0
4.0	Complete system evacuated	Connector BFT or BFT/FOND on PSE . Black connector on tester.	Apply 300 mbar vacuum to entire system.	Vacuum loss 30 mbar in 1 minute.	32 PSE/CL ⇒ 10.0
5.0	Complete system pressurized	Connector HD or HECK on PSE . Yellow connector on tester.	Apply 600 mbar pressure to entire system.	Vacuum loss 30 mbar in 1 minute.	32 PSE/CL ⇒ 9.0

Pneumatic Test Program – Test (CL)

A. Entire system (continued)

6.0	Complete system evacuated	Connector HD or HECK on PSE . Yellow connector on tester.	Apply 300 mbar vacuum to entire system.	Vacuum loss 30 mbar in 1 minute.	32 PSE/CL ⇒ 10.0
7.0	Complete system pressurized	Connector TK or Tank on PSE . Yellow connector on tester.	Apply 600 mbar pressure to entire system.	Vacuum loss 30 mbar in 1 minute.	32 PSE/CL ⇒ 9.0
8.0	Complete system evacuated	Connector TK or Tank on PSE . Black connector on tester.	Apply 300 mbar vacuum to entire system.	Vacuum loss 30 mbar in 1 minute.	32 PSE/CL ⇒ 10.0

Pneumatic Test Program – Test (CL)

B. Individual lines with actuators

Preparation for Test:

1. Disconnect pneumatic line leading to the non-operating pneumatic actuator at the pneumatic distributor. Letters on the distributor indicate to which of the CL actuators the pneumatic line leads.

- | | | | |
|-----|------------------|-----|-----------------------|
| A → | Left front door | D → | Right rear door |
| B → | Right front door | E → | Fuel tank filler flap |
| C → | Left rear door | F → | Trunk lid |



1. If an actuator does not operate correctly and no leakage is found, check the respective lines for kinks or blockages.
2. Disconnected pneumatic lines are to be reconnected to the distributor with connector 007 997 61 82.

Parts Required for Test:

- | | | |
|---|----------------------------|---------------|
| 1 | Pneumatic hose, 50 mm long | 007 997 61 82 |
|---|----------------------------|---------------|

Parts Required for Repair:

- | | | |
|---|-----------------------------|---------------|
| 1 | Pneumatic hose, (as needed) | 007 997 61 82 |
|---|-----------------------------|---------------|

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
9.0	Line and actuator pressurized	Yellow connector on tester.	Apply 600 mbar pressure to line and actuator.	Pressure drop 25 mbar in 1 minute.	32 PSE/CL ⇒ 11.0 32 PSE/CL ⇒ 13.0
10.0	Line and actuator evacuated	Black connector on tester.	Apply 300 mbar vacuum to line and actuator.	Vacuum loss 25 mbar in 1 minute.	32 PSE/CL ⇒ 12.0 32 PSE/CL ⇒ 14.0

Pneumatic Test Program – Test (CL)

C. Actuators

Preparation for Test:

1. Remove non functioning actuator.
2. Connect vacuum/pressure tester to pneumatic connection of actuator.

Parts Required for Test:

- | | | |
|---|----------------------------|---------------|
| 1 | Pneumatic line | 129 800 95 15 |
| 1 | Pneumatic line, 1 m long | 000 158 14 35 |
| 1 | Pneumatic hose, 50 mm long | 007 997 61 62 |
| 1 | Connector | 202 805 03 44 |

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
11.0	Actuator holds pressure	Yellow connector on tester.	Apply 600 mbar pressure to actuator.	Pressure drop 25 mbar in 1 minute.	Actuator leaks. Replace actuator.
12.0	Actuator holds vacuum	Black connector on tester.	Apply 300 mbar vacuum to actuator.	Vacuum loss 25 mbar in 1 minute.	Actuator leaks. Replace actuator.

Pneumatic Test Program – Test (CL)

D. Lines

Preparation for Test:

1. Connect tester to one end of pneumatic line and plug other end with cap 000 987 29 45.

Parts Required for Test:

- | | | |
|---|----------------------------|---------------|
| 1 | Cap | 000 987 11 45 |
| 1 | Pneumatic hose, 50 mm long | 007 997 61 82 |

⇒	Test scope	Test connection	Test condition	Nominal value	Possible cause/Remedy
13.0	Line holds pressure	Yellow connector on tester.	Apply 600 mbar pressure to lines.	Pressure drop 0 mbar in 1 minute.	Pneumatic line leaks, repair/replace line.
14.0	Line holds vacuum	Black connector on tester.	Apply 300 mbar vacuum to lines.	Vacuum loss 0 mbar in 1 minute.	Pneumatic line leaks, repair/replace line.