

Data

Angle of rotation temperature switch	315° ± 5°
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Conventional tools

1 Suction pressure gauge	1 bar vacuum (atü) up to
or assembly tester	10 bar gauge pressure (atü)
1 High-pressure gauge	0–40 bar gauge pressure (atü)

5 Thermometers	–20 °C to + 70 °C
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1 Hygrometer	
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Note

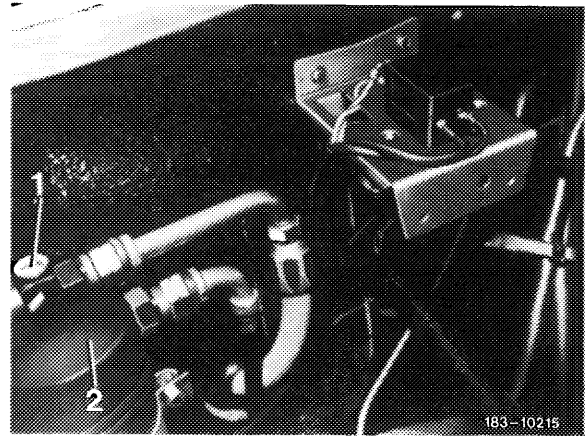
When working on air conditioning system, pay attention to safety rules (83–504).

For a workshop check with regard to complaints about insufficient refrigerating capacity during a trouble diagnosis on air conditioning system, proceed according to the following test method which applies to ambient temperatures from + 20 °C to + 40 °C. All check data can be read after 15 minutes of continuous operation.

Test conditions

- 1 Vehicle should not be exposed to sunlight before and during test.
- 2 Check tension of V-belt for driving compressor. Then run engine at approx. 2000/min.

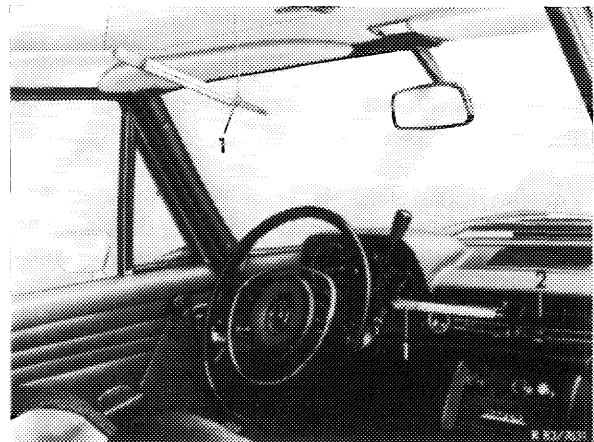
3 Engage air conditioning system, adjust to full blower speed and refrigerating capacity. Set cooling air outlet center (8) and inserts of lateral ventilation (9) at left and right in such a manner that the out-coming cold air is blown horizontally into interior of vehicle. Then check on sightglass (1) in receiver dehydrator (2) whether refrigerant flows through free of bubbles.



4 Check coupling on refrigerant compressor for function (83-586).

5 Close air volume regulating lever for legroom, switch-off heater, close vehicle doors and windows.

6 Attach one thermometer (1) each at center air outlet for air outlet temperature and run thermometer (1) for in-car temperature of vehicle approx. 500 mm behind upper edge of windshield and 100 mm from headlining.



- 1 Thermometer
- 2 Shutters (cooling air outlet)

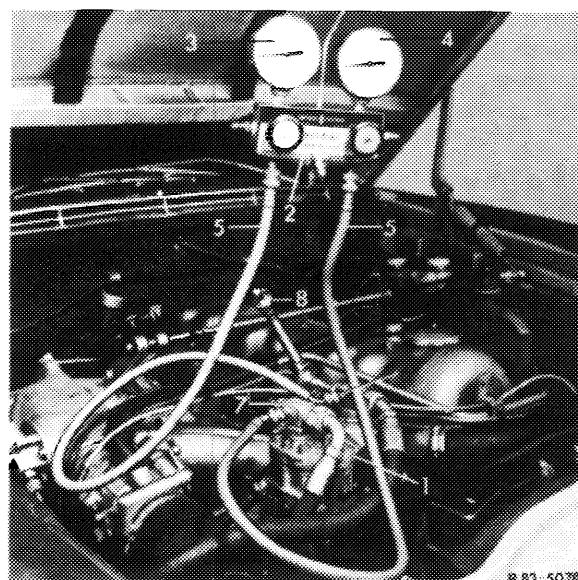
7 On service valve (6), connect suction pressure gauge (3) to pressure and temperature scale for R 12.

8 On service valve (7), connect pressure gauge (4).

9 Turn spindle of service valves inwards by one turn; this will connect the pressure gauge to the system (not required on service valves with Schrader valves).

Assembly tester on service valves

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|--------------------------|--------------------------------|
| 1 Refrigerant compressor | 6 Service valve (suction end) |
| 2 Assembly tester | 7 Service valve (pressure end) |
| 3 Suction pressure gauge | 8 Ratchet wrench |
| 4 High pressure gauge | |
| 5 Hose line | |



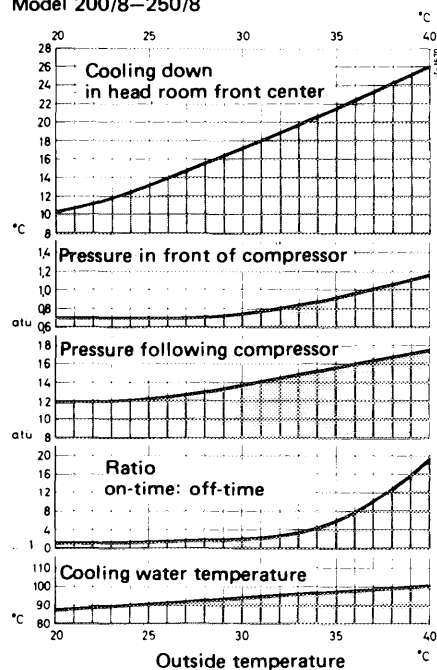
10 Measure ambient temperature in venting direction in front of vehicle.

11 Shortly before air conditioner switches off via temperature switch in evaporator housing, read values of pressure gauges and thermometers and compare with values named in table.

12 Measure ratio of on-time in relation to off-time of compressor with stop watch.

13 If the values named in table for suction and high-pressure end correspond after approx. 25 to 30 minutes, but the outlet temperature and the cooling-down data in vehicle are not attained, adjust temperature switch accordingly. The fuel outlet temperature should not be less than 0 °C and the difference between the coldest and the warmest outlet temperature should not exceed 3 °C.

Check values Model 200/8—250/8



For making adjustments, remove temperature vacuum switch (83—542). Then adjust adjusting screw on temperature switch in direction of “colder”. One full turn corresponds to approx. 2 °C.

14 Unscrew spindle of service valves completely up to stop; this will disconnect pressure gauge from system (not required for service valves with Schrader valves).

15 Remove hose lines on service valves and close service valves again by means of closing caps.

16 Take thermometer and hygrometer out of vehicle.