

## 83–531 Checking, removing and installing pressure switch in receiver dehydrator

### Data

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|--|---|
| Pressure switch in receiver dehydrator | cut-out pressure: 2 + 0.2 bar gauge pressure<br>cut-in pressure: max 0.6 bar above cut-out pressure |
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### Tightening torque

|                 | Nm     | (kpm)       |
|-----------------|--------|-------------|
| Pressure switch | 20 ± 4 | (2.0 ± 0.4) |

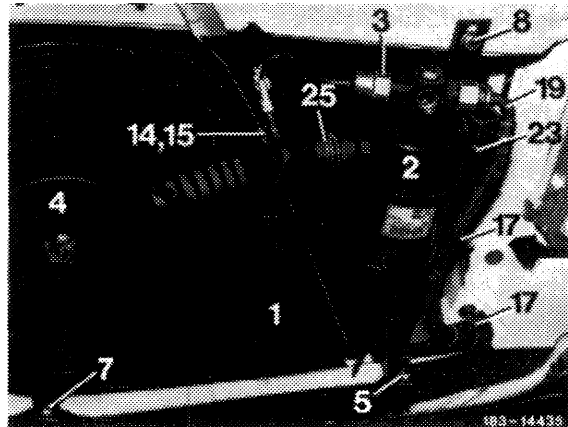
### Note

Drain refrigerant of air conditioning system when removing pressure switch (25).

### Checking, removing and installing pressure switch (25)

**Check-cut-in pressure** (air conditioning system filled with refrigerant).

- 1 Run engine and switch-on air conditioning system (switch-on blower and temperature switch).
- 2 If the electromagnetic clutch of refrigerant compressor is not attracting, test the two flat plugs on pressure switch for voltage (do not pull plug from pressure switch).
- 3 If both plugs of pressure switch are carrying voltage, the fault is on coupler (coil) of electromagnetic clutch or on electric line between pressure switch and clutch coupler (83–508).
- 4 If only one flat plug of pressure switch carries voltage, the refrigerant charge in air conditioning system is not adequate or the pressure switch is defective.



5 To check refrigerant level, pull the two electric plugs from pressure switch and connect to each other (short-circuit). Run air conditioning system for approx. 2 – 3 minutes, then check immediately after engaging the electromagnetic clutch whether the refrigerant is flowing past receiver dehydrator free of bubbles.

6 If the refrigerant charge is adequate, the fault is on pressure switch.

7 Switch-off ignition.

#### Checking cut-out pressure

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8 Connect pressure gauge (service unit or the like) to service valve (pressure end).

9 Pull both electric plugs from pressure switch and connect ohmmeter to pressure switch.

10 Drain refrigerant, at approx.  $2 \pm 0.2$  bar gauge pressure the cut-out point of pressure switch should be indicated by ohmmeter (ohmmeter to infinite).

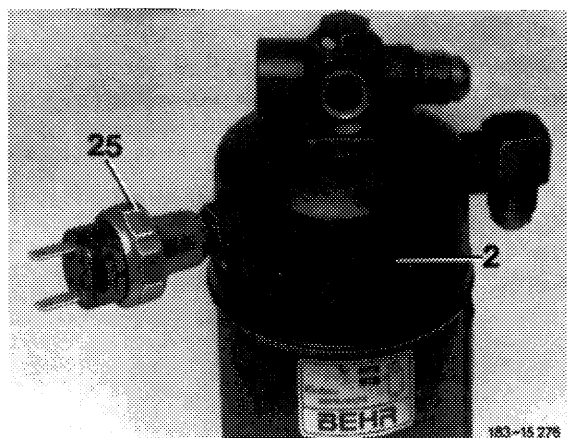
#### Removing pressure switch

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11 Drain air conditioning system (83–516).

12 Pull-off electric lines and unscrew pressure switch (25) from receiver dehydrator (2).

13 Close connection on receiver dehydrator with plug.



Pressure switch with conical seal

## Installation

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**Note:** For reliable sealing of pressure switch 1st version (conical seal) a copper sealing ring (13) 7/16" (part no. 000 835 05 98) may be used.

14 Moisten O-ring or sealing cone and threads with cold-flowing oil.

15 Screw pressure switch (25) into receiver dehydrator (2) and plug-on electric lines.

16 Evacuate air conditioning system fill up again and check for function (83–510, 512 and 514).

