

## 83—532 Inspection or removal and installation of pressure switch or temperature switch in receiver dehydrator

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### Data

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Temperature switch in receiver dehydrator	Cutting-in point: $52^{\circ} \pm 3^{\circ}\text{C}$ (Diesel models 4/5 cylinders) Cutting-in point: $62^{\circ} \pm 3^{\circ}\text{C}$ or $52^{\circ}\text{C}$ starting 11/81 (Gasoline models 4/6 cylinders) Temp. tolerance: $7^{\circ} - 12^{\circ}\text{C}$
Pressure switch in receiver dehydrator	Cutting-out pressure: $2 \pm 0.2$ bar gauge pressure Cutting-in pressure: max. 0.6 bar above cutting-out pressure

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Tightening torques	Nm	(kpm)
Temperature switch	$8 \pm 4$	$(0.8 \pm 0.4)$
Pressure switch	$20 \pm 4$	$(2 \pm 0.4)$

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### Note

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Drain refrigerant of air-conditioning system to remove pressure switch (13).

The temperature switch (14) can be renewed with air-conditioning system filled.

### Inspection or removal and installation of temperature switch (14)

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- 1 Pull off electric plug and unscrew temperature switch (14) from receiver dehydrator.
- 2 Switch-on ignition and connect the two electric flat plugs with each other (short). If supplementary fan in front of condenser is not switching on, the fault is outside temperature switch (83—508).

3 Insert electric plug on temperature switch and immerse temperature switch in water in accordance with cutting-in temperature (55° C or 65° C). If temperature switch is defective, the supplementary fan in front of condenser will not switch on.

4 Let water bath cool down (max. by 12° C). Supplementary fan should switch off.

5 Switch off ignition and screw temperature switch into receiver dehydrator.

### **Inspection or removal and installation of pressure switch (13)**

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**Checking cutting-in pressure** (air-conditioning system filled with refrigerant).

6 Run engine and switch-on air-conditioning system (switch-on blower and temperature switch).

7 If the electromagnetic clutch of refrigerant compressor does not attract, check both flat plugs on pressure switch for voltage (do not pull plug from pressure switch).

8 If both plugs of pressure switch are energized, the fault is on coil of electromagnetic clutch or on electric line between pressure switch and clutch coil (83–508).

9 If only one flat plug of pressure switch is energized, there is either not enough refrigerant in air-conditioning system or the pressure switch is defective.

10 To check level of refrigerant, pull off both electric plugs on pressure switch and connect to each other (short). Run air conditioning system for approx. 2 – 3 minutes, then check shortly after switching-on electromagnetic clutch whether refrigerant flows free of bubbles past sight glass of receiver dehydrator.

11 If there is enough refrigerant, the fault is with pressure switch.

12 Switch off ignition.

## Checking cutting-out pressure

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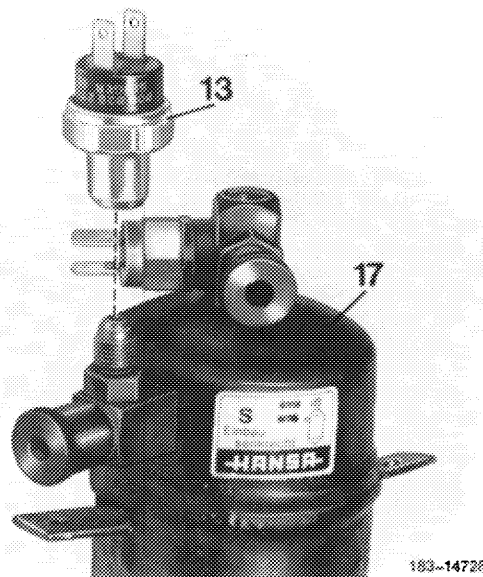
- 13 Connect pressure gauge (service unit or shop tool) to service valve (pressure end).
- 14 Pull both electric plugs from pressure switch and connect ohmmeter to pressure switch.
- 15 Drain refrigerant, at approx.  $2 \pm 0.2$  bar gauge pressure the cutout of the pressure switch must be indicated by ohmmeter (ohmmeter at infinite).

## Removing pressure switch

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- 16 Drain air-conditioning system (83–516).
- 17 Pull off electric lines and unscrew pressure switch (13) from receiver dehydrator (17).
- 18 Close connection on receiver dehydrator with plug.

Pressure switch with cone seal



## Installation

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

- 19 Moisten O-ring or sealing cone and threads with cold-flowing oil.
- 20 Screw pressure switch (13) into receiver dehydrator (17) and plug-on electric lines.
- 21 Evacuate air-conditioning system, refill and check for function (83–510 and 514).

Pressure switch with O-ring Seal

