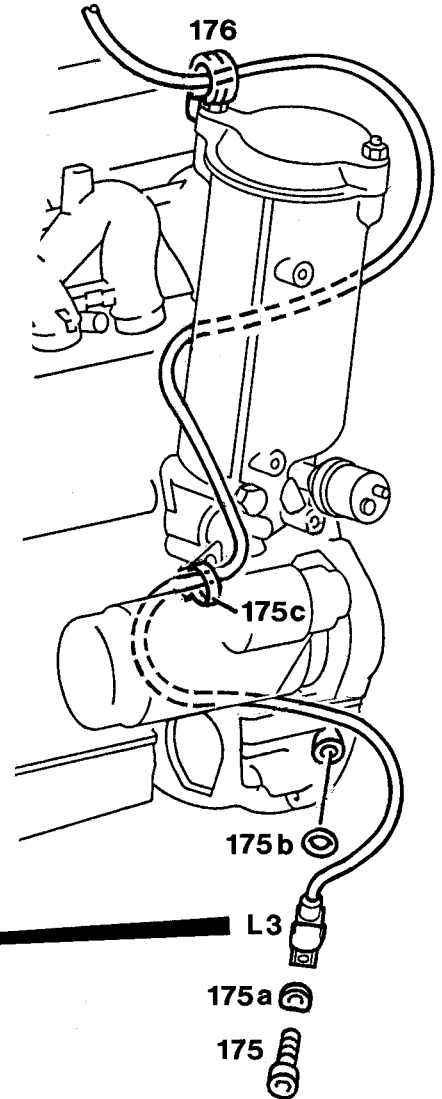
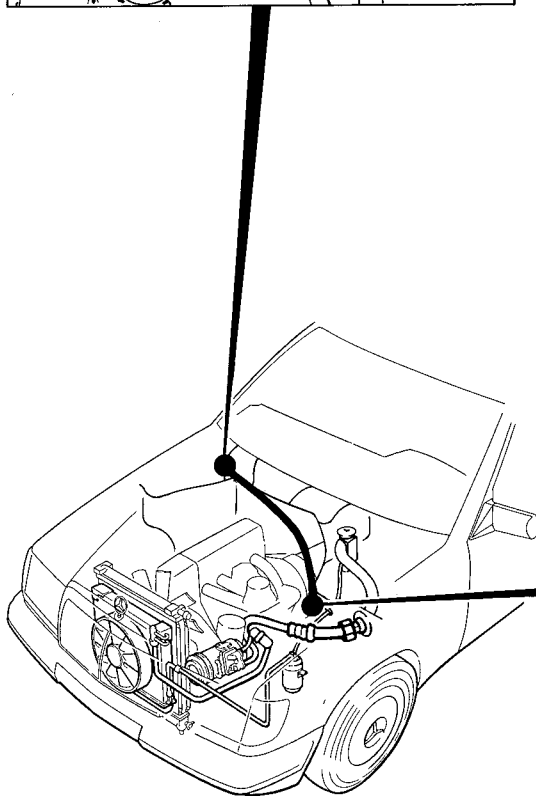
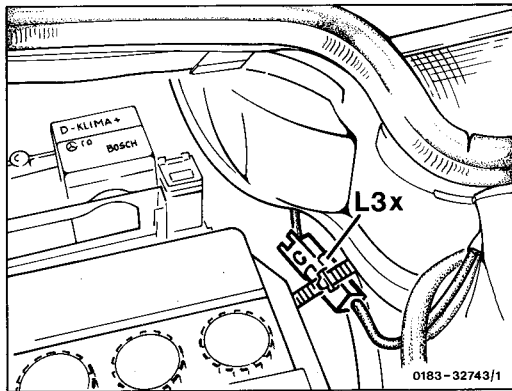


# 83-570 Testing, removal and installation of speed sensor on starter ring gear (model 124.1)

Operation no. of operation texts and work units or standard texts and flat rates ..... 83-0645



1834-16467

Cover on bulkhead .....	loosen.
2-pole plug connection (L3x) .....	disconnect.
Clamp (176) .....	loosen.
Clamp (175c) .....	unclip.
Lead from speed sensor downward .....	pull out.
Screw (175) .....	screw out and pull speed sensor (L3) out of oil pan.
Resistance of speed sensor .....	test; specification: $1.9 \pm 0.2 \text{ k}\Omega$
Reinstall in opposite order .....	replace O-ring (175b).

570/1

## Contents, programmed repairs, air conditioning system I

### Air conditioning/automatic temperature control model 124

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No.	Subject	Model or assembly	Notes
83-87071	A/C compressor does not switch on.	All models	-
83-87101	Imprecise customer complaint.	All models	-
83-87102	Air outlet temperature too low when maximum heating stage required.	All models	-
83-87103	Heater does not heat up passenger compartment to temperature of approx. 22 °C at head level with adjustment wheel set to 22 °C and at outside temperatures below 0 °C.	All models	-
83-87104	Heater does not heat up to comfortable temperature. Air outlet temperature increases and decreases slowly at regular intervals.	All models	-
83-87105	Heater only heats occasionally or heats continuously at maximum capacity.	All models	-
83-87108	Poor refrigeration capacity.	All models	-
83-87109	Refrigeration capacity decreases after longer period. Moreover air quantity from center and side nozzles decreases. Ice vapor comes out of center nozzles.	All models	-
83-87112	Screeching noise from area of evaporator at idle immediately after A/C compressor switches on.	All models	-

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## Programmed repairs, air conditioning system I

### Air conditioning/automatic temperature control model 124

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83-87071 A/C compressor does not switch on.


All models

-

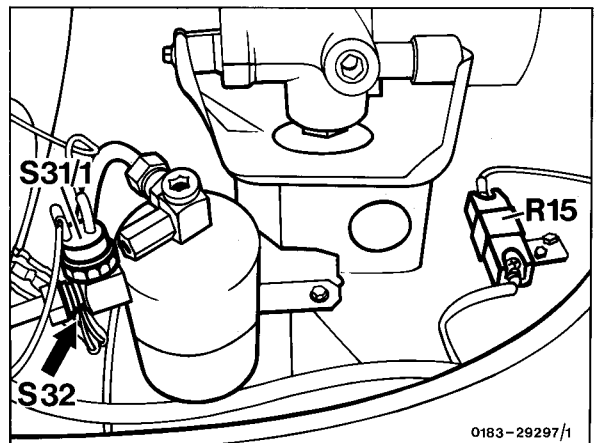
#### 1st cause

System not charged with sufficient quantity of A/C (R12) (possible leak) or pressure switch (S31) defective.

#### Remedy

Allow engine to run at idle. Switch on function switch , disconnect both plugs on pressure switch (S31/1) and connect with one another. If the compressor runs, check fluid level in air conditioner, eliminate leakage if required. If the fluid level is O.K., replace pressure switch (S31/1).

If the compressor does not run, see cause 2.



#### 2nd cause

Malfunction in actuation from control unit or control panel to compressor shutoff control unit.

#### Remedy

Check electrical components in air-conditioner/automatic temperature control (83-504).

#### 3rd cause

Compressor shutoff not functioning.

#### Remedy

Check compressor shutoff (83-505).

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83-87101 Imprecise customer complaint.

All models

-

#### Tests

Check control quality and heating capacity (83-502).

In the event of deviations from the specified functions check electrical components in air-conditioner/automatic temperature control (83-504).

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83-87102	Air outlet temperature too low when maximum heating stage required.	All models	-
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1st cause

Circulation pump not running.

Remedy

Check actuation and current consumption (max. 0.8 amps) of circulation pump, replace circulation pump if required.

2nd cause

Duo valve defective.

Remedy

Check duo valve, replace if required.

3rd cause

Heat exchanger dirty or defective.

Remedy

Flush cooling system (20-015), replace heat exchanger if required.

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83-87103	Heater does not heat up passenger compartment to temperature of approx. 22 °C at head level with adjustment wheel set to 22 °C and at outside temperatures below 0 °C.	All models	-
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1st cause

Electrical malfunction in system.

Remedy

Check electrical components in air-conditioner/automatic temperature control (83-504) and replace defective component, if required.

2nd cause

Heat exchanger dirty or defective.

Remedy

Flush heating system (83-502), flush cooling system if required (20-015) and replace heat exchanger if required.

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83-87104 Heater does not heat up to comfortable temperature. All models -  
Air outlet temperature increases and decreases slowly  
at regular intervals.

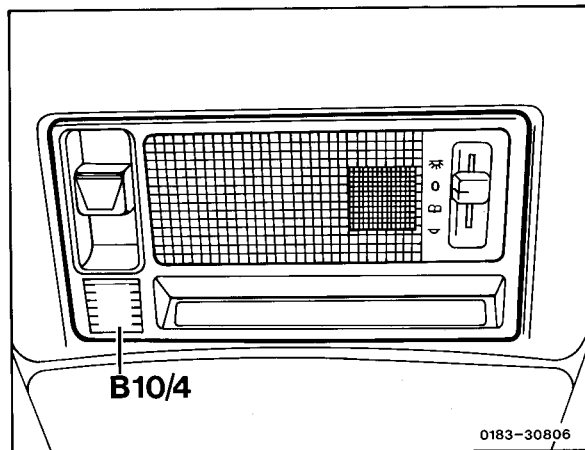
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Cause

Ventilation of interior air temperature sensor not functioning properly.

Remedy

Check ventilation blower for interior air temperature sensor. For this purpose switch on ignition and position a small piece of paper approx. 1 cm<sup>2</sup> (arrow) on grate for interior temperature sensor. The paper should remain in place. If not remove glove box, check ventilation blower and replace if required.



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83-87105 Heater only heats occasionally or heats continuously at maximum capacity. All models -

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1st cause

Discontinuity in one of the temperature sensors or leads.

Remedy

Check electrical components in airconditioner/automatic temperature control (93-504) and replace defective component, if required.

2nd cause

Poor contact due to widened sockets.

Remedy

Check all sockets from cable harness on control unit or control panel on temperature sensors (interior air, heat exchanger, outside air) and on duo valve individually and bend as required.

3rd cause (on vehicles up to 08/87)

Circulation pump current consumption too high (max. 0.8 amps).

Remedy

Check circulation pump current consumption; for this purpose set both adjustment wheels to MAX position, replace circulation pump if required.

1st cause

A/C agent quantity in system too low.

Remedy

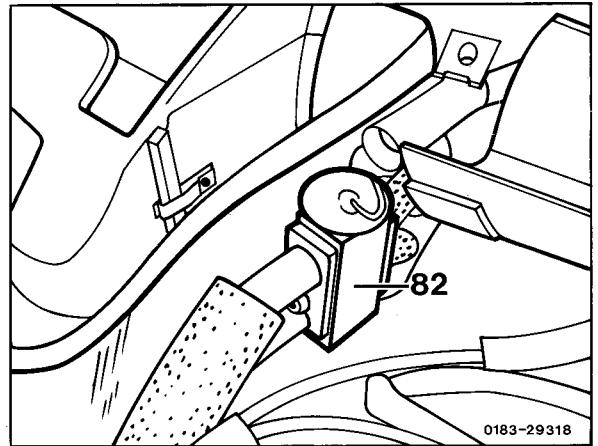
Check system for leakage, replace fluid reservoir and refill system.

2nd cause

Expansion valve (82) sticks, is dirty or defective; therefore vacuum too low or too high.

Remedy

Replace expansion valve and fluid reservoir.

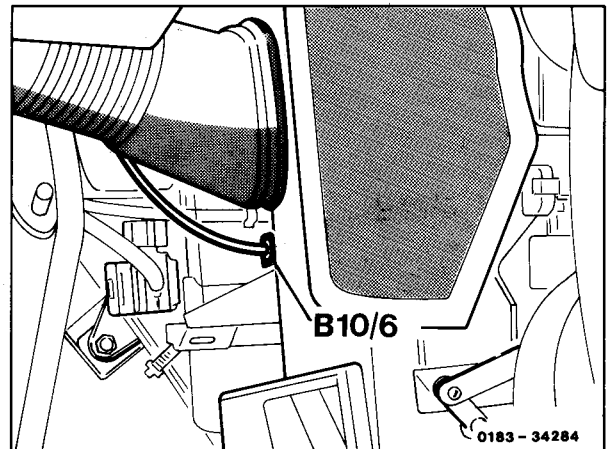


3rd cause

Evaporator temperature sensor (B10/6) defective, therefore A/C compressor switches off too early.

Remedy

Replace evaporator temperature sensor.



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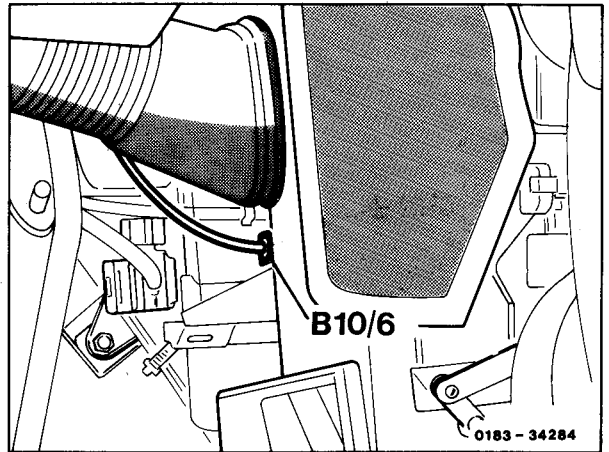
83-87109 Refrigeration capacity decreases after longer period. All models -  
Moreover air quantity from center and side nozzles  
decreases. Ice vapor comes out of center nozzles.

1st cause

Short circuit in evaporator temperature sensor  
(B10/6).

Remedy

Replace evaporator temperature sensor.

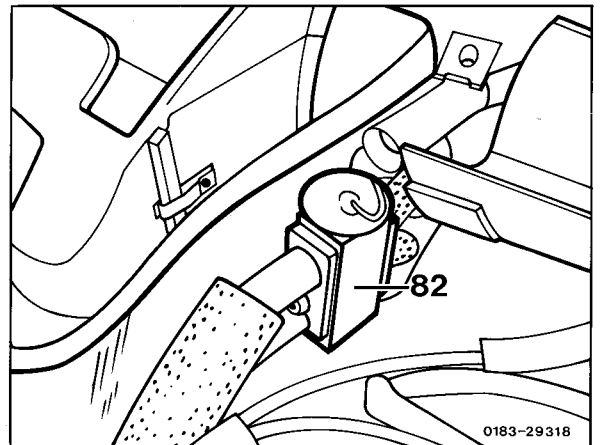


2nd cause

Expansion valve (82) defective.

Remedy

Replace expansion valve.



83-87112 Screeching noise from area of evaporator at idle All models -  
immediately after A/C compressor switches on.

Cause

Expansion valve (82) defective.

Remedy

Replace expansion valve.

