

8. Bodywork and equipment

84 Glass

Specifications

Sun roof, measurements:	
- height above roof	1.0 mm
- depth at front	0.5 mm

Interior trim

Specifications

Electrical data for seat heater pad

Seat heater:	
Switches on / off at	<8 - >27 °C <46 - >81 °F
Resistance, heater pad in backrest	0.8 - 1.2 Ω
Resistance, heater pad in seat cushion	2 - 3 Ω

8. Bodywork and equipment

Tightening torques

Tightening torques

Mechanical component:	Nm
Screws, front fenders	6
Hinge door / bodywork	21
Door stop	10
Window mechanism	8
Inner door lock	6
Window, lift mechanism	4
Boot, hinges on the bodywork	21
Rear door, V40, hinges	24
Tail lamp unit	5
Bumper, bodywork	50
Front seat	40
Rear seats	23
Safety screws, all	48
Lock facing, doors	21
Lock facing, V40, rear door	10
Sun roof, bodywork	10
Side window, window mechanism	5

87 Heater system

Specifications

Resistance, blower fan motor –2000. Does not apply to ECC blower fan motor

Between terminal pin:	Value:
1-3	1.2 Ω
3-2	0.7 Ω
2-4	0.4 Ω

Technical data

Refrigerant:	-1997 All engines	1998- All engines except B4184SM	-1998 B4184SM
Type	R134a	R134a	R134a
Capacity, weight g	900 ¹	900	750

¹ Install a new label.

Technical data

Refrigerant:	99-00 D4192T B4184SM/SJ	99-00 Petrol engines. Except B4184SM/SJ	2001- All engines
Type	R134a	R134a	R134a
Capacity, weight g	850	900	850

8. Bodywork and equipment

Specifications

Compressor data

Pressure controlled functions:	Engine variants except B4194T B4204T	B4194T B4204T ¹
Pressure switch high / low: Location	On the receiver drier (receiver)	On the receiver drier (receiver)
Engage low pressure compressor Bar	2.00-2.50	1.10 ²
Disengage low pressure compressor Bar	1.80-2.20	1.10 ²
Disengage high pressure compressor Bar	27.50-31.50	30
Engage high pressure compressor Bar	19.50-27.50	18
Auxiliary fan starts at Bar	17.00-18.50	-
Auxiliary fan stops at Bar	14.00-15.50	-
Auxiliary fan (fan 1) step 1, starts at Bar	-	10.00
Auxiliary fan (fan 1) step 1, stops at Bar	-	8.00
Auxiliary fan (fan 2) step 1, starts at Bar	-	16.00
Auxiliary fan (fan 2) step 1, stops at Bar	-	12.00
Auxiliary fan (fan 2) step 2, starts at Bar	-	20.00
Auxiliary fan (fan 2) step 2, stops at Bar	-	16.00

¹ All pressure measurements given are within 0.1 bar.

² Prior to May 1998 2.05 bar applied.

Technical compressor data

Technical data:	Zexel	Sanden SD7V16	MSC90	Sanden SD7H15
Piston diameter mm	36	29.3	-	29.3
Stroke mm	24	34.2	-	32.8
..... mm	-	2.2	-	-
Volume cc/rev	147	1613	90	154.9
..... cc/rev	-	10.4	-	-
Number of cylinders	6 (fixed)	7 (wobble)	1 (scroll)	7 (fixed)
Engagement, minimum voltage	V 7.5	7.5	7.5	7.5

Compressor oil

Oil grade	Volvo P/N: 11 61 627	
Volume compressor oil:		
Petrol engines, except B4184SM/SJ	cm ³	180
SD7V16, diesel engine	cm ³	135
SD7H15, diesel engine	cm ³	135
B4184SM	-98 cm ³	120-140
B4184SM/SJ	99- cm ³	150-180

Thermo switch

Component / value:	Zexel Petrol engine MSC90	Sanden Diesel engine
Location: On evaporator housing		
Thermostat controlled switch switches on / off air conditioning at	On: 4 °C Off: 3 °C	On: 2 °C Off: 1 °C
Thermistor value	3300 Ω	3400 Ω
Temperature sensors at 20°C:		
Outer temperature	4.8 Ω	4.8 Ω
Water temperature	4.8 Ω	4.8 Ω
Evaporator sensor	4.8 Ω	4.8 Ω
Relays	130 Ω	130 Ω
Resistance meass measured over the position "step" engine	400 Ω - 4600 Ω	

8. Bodywork and equipment
Specifications

Compressor connection

Technical data:	ZEXEL Petrol engine	Sanden Diesel engine	MSC90
Clearance, flange and coupling mm	0.3-0.6	0.3-0.6	0.3-0.5
Power consumption	45 W	49 W	47 W
Engagement minimum voltage	7.5 V	7.5 V	7.5 V

Relief valve

Data for relief valve: Located on the rear of the compressor	
Zexel, petrol engine:	
Release pressure, minimum	3.4 MPa
Release pressure, maximum	4.0 MPa
Sanden, diesel engine:	
Release pressure, minimum	3.6 MPa
Release pressure, maximum	4.3 MPa
MSC90	
Release pressure, minimum	3.5 MPa
Release pressure, maximum	4.1 MPa

Performance testing

Operating conditions:	Measurement values:		
Outside temperature	20°C	30°C	40°C
Air temperature measured at the centre air vent	7-10°C	10-17°C	20-27°C
Low pressure	0.25-0.4 MPa	0.4-0.5 MPa	0.5-0.6 MPa
High pressure	1.1-1.5 MPa	1.7-2.3 MPa	2.3-2.6 MPa

The lowest values are noted when the humidity is low.

The highest values are noted when the humidity is high.

The values in the table measured at sea level, can vary.

Tightening torques

Mechanical component:	ZEXEL Petrol engine	Sanden Diesel engine	MSC90
	Nm	Nm	Nm
Hose, rear side of compressor	22	45	25
Screws, blower fan motor mounting bracket	10	21	10
Mounting bracket, condenser	10	10	10
Screws, compressor	'-99 45	21	25
Screws, compressor	'2000- 25	21	25
Mounting bracket, compressor, on the engine ...	25	43	50
Filler plug, compressor oil	-	15	-
Nuts / screw, pulley	12	18	16
Compressor, relief valve	10	10	-
Nuts, receiver drier, mounting bracket	10	10	10
Screw, mounting bracket, receiver drier	10	10	10
Screw, coupling, compressor	10	-	-
Hose and pipe -M6	10	10	10
couplings: -M8	25	25	25
Pressure switches, receiver drier	18	18	18
Screws, bracket for hoses, bodywork	10	10	10
Connections, connecting pipes	13	13	13
Expansion valve, sensor	12	12	12
Small diameter pipe	20	20	20
Large diameter pipe	15	15	15

8. Bodywork and equipment

88 SRS, steering wheel module, passenger side airbag and seat belt tensioners

88 SRS, steering wheel module, passenger side airbag and seat belt tensioners

Specifications

SRS, electrical data:

Electrical data:	
Internal resistance, collision sensor	47 k Ω
Capacitor in connector	0.46-0.48 μ F
Special tool resistance	1.8-2.5 Ω

SRS system, tightening torques:

Tightening torques	Nm
Screws, airbag, steering wheel	10
Airbag, dashboard	9
Seat belt tensioner, B-post	48
SIPS unit, side impact air bag, seat	3
SIPS sensor, side impact air bag, seat	5