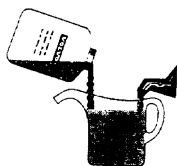


26. Cooling system

General data



Coolant composition

The coolant should be changed every second autumn. After this period the corrosion-protective additives will have lost some of their effect.

Never fill the cooling system with water alone. Use genuine Volvo coolant diluted with clean water in the proportions shown below.

Coolant mixture

Nordic countries:

1 part Volvo coolant to 1 part water.

Europe and Overseas-

1 part Volvo coolant to 2 parts water.

B18FT(M):

1 part Volvo coolant to 1 part water.

Cooling system

Type	closed
Capacity	litres 6-7
Capacity when refilling	litres 4.5-5

Expansion tank

The pressure valve in the filler cap opens at:

positive pressure	kPa(Bar) 150 (1.5)
vacuum	kPa(Bar) 7 (0.07)

Thermostat

	B18FT(M)	Others	D19T	D19T
Chassis number	-	-	-617103	617104-
Starts to open at	°C 89	92	83	89
Fully open at	°C 104	106	95	101
Min. opening	mm 7	8.5	7.5	8

Thermal sensor for instrument panel

Location relative to thermostat housing	left	right:	on housing	on housing
Type	NTC			
Resistance at 20°C	ohms 950-1050			

Thermal switch, engine cooling fan	480 excl. AC E/F/EP/FP B18KP,K B16F,B20F D19T	440/460 480 FT(M) 480 incl. AC injector cooling yes / no 1st stage 2nd stage
Engaging temperature	$\pm 2^{\circ}\text{C}$ 92	95 / 92 101
Disengaging temperature	$\pm 2^{\circ}\text{C}$ 87	90 / 87 96

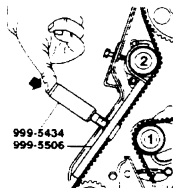
Auxiliary water pump

Delivery at 10 kPa (0.1 bar)	Litres/hour	700
Operating voltage	V	11-14.4
Operating pressure	kPa(Bar)	20-80 (0.2-0.8)
Engaging temperature*	$^{\circ}\text{C}$	100
Disengaging temperature*	$^{\circ}\text{C}$	95

* On the B18EP/FP and FT/FTM engines, CH 567600- (480), CH 205700-(440,460), operation of the auxiliary water pump is controlled via the ECU.

V-belts

Timing belt (cold engine)	Position of tensioner	
	2. upper	1. lower
Special tools	999-5434, 999-5506	999-5197
When checking	7.5 mm	12.5 units
When adjusting	7.5 mm	13 units

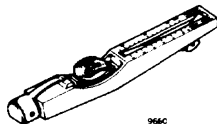


Poly V-belt 6-grooves	When checking*	When adjusting*	
		old	new
Standard	4.5 mm	4 mm	3-4 mm
With air-conditioning and/or power steering	3.5 mm	3 mm	2-3 mm

* Special tools: 999-5434, 999-5436

Poly v-belt	When checking*	When adjusting*	
		old	new
3-grooves	20 kg	30-35 kg	45-50 kg

* Special tools: 115-9660



Tightening torques

	Nm
Thermal switch (radiator)	20
Coolant temperature sensor (fuel injection) .	20
Temperature sensor in cylinder head	20
Water pump	12.5
Water pump pulley	20
Thermostat housing to cylinder head	9
Radiator securing bolts	20
Radiator drain plug	4
Coolant return pipe on cylinder head	7
Hose clips	2
Auxiliary water pump attachment	8
Air breather in hose	6