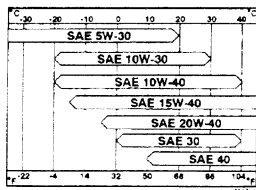


22. Lubrication system

Engine oil, type and quality



CCMC Service classification:
 D19T, B18FT/FT(M) engines: G5
 Other engines, min. requirement: G4
 API Service classification: SG/CD

Do not use SAE 5W30 in D19T engines.

SAE 15W/40 or SAE 20W/40 is recommended for extreme driving conditions. Always bear in mind the lowest temperature limit. Volvo does not recommend the use of oil additives on account of possible damage to the engine.

Oil capacity	Type	Oil change capacity, incl. oil filter (l)	Difference between MAX-MIN (l)
'92	400	5.3	1.7
'93	400	5.0*	1.4
'94-	B16,B18	4.6	1.4
	B20	5.7	2.2
	D19T	5.0	1.7

* CH401000- (440/460) , CH585000- (480); 4.6 l.

Oil cooler

Thermostat starts to open at °C
 Thermostat fully open at °C
 Maximum opening mm

D19T with air-conditioning

95
 110
 10.5

Minimum oil pressure with a new filter and a hot engine:

	Others	B18U,B20F, all versions from '95-
Number of teeth on oil pump gears	8	13
13r/s (1000 r/min) \geq kPa(Bar)	200(2)	150(1.5)
50r/s (3000 r/min) \geq kPa(Bar)	350(3.5)	350(3.5)

Oil pressure switch

Colour white green
 Switching pressure kPa(Bar) 35(0.35) 21(0.21)

Tightening torques

	Nm
Oil pan, drain plug	25
Oil pump cover	10
Threaded sleeve, oil cooler attachment	15
Oil pan bolts	13
M6 bolts, oil pump body and cover	9
M8 bolts, oil pump body and cover	22
Oil filter	14
Nipple, oil cooler/filter body	60
Oil jets for under-crown cooling	19
D19T with air-conditioning	
Oil cooler attachment	20
Union nuts on oil cooler	20
Union nuts on oil pipe	40
Socket-head screw, thermostat housing	40