

Section 1 Service and maintenance

Group 16 Lubrication

Engine

USA, Canada and Japan

Petrol engines

Diesel engines

Oil quality, acc. to API

min. SG*

min. CD**

Other markets

Oil quality, acc. to API
acc. to CCMC

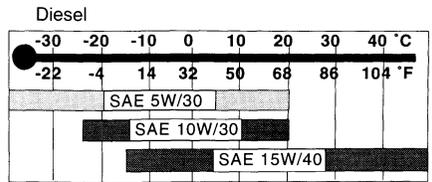
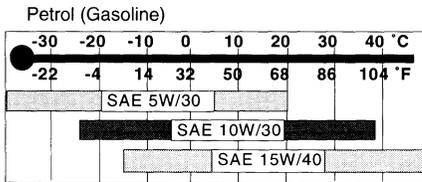
min. SG*
class G4/G5*

min. CD**
class D2/PD1*

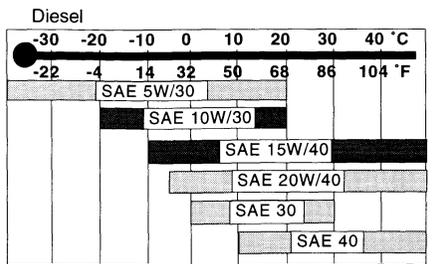
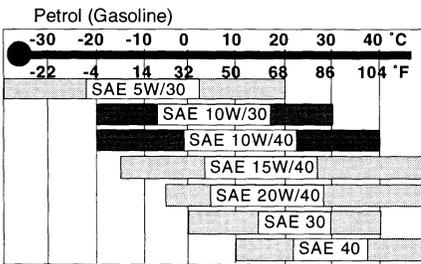
* Oils with designation SG/CC and SG/CD meet this requirement.

** Oils with designation SE/CD and SF/CD meet this requirement.

Viscosity (constant air temperature) USA, Canada and Japan



Viscosity (constant air temperature) Other markets



Synthetic or semi-synthetic oils may be used if they meet the requirements above.

Volvo does not recommend the use of oil additives since they may impair the engine's service life.

Note! Under extreme driving conditions resulting in abnormally high oil consumption, such as mountainous roads with considerable engine braking and continuous driving at high speed, we recommend SAE 15W/40 or SAE 20W/40. However, note the lower temperature limit.

| Oil capacity in litres | Excl. oil filter | Incl. oil filter | Volume diff., max - min, approx |
|---------------------------|---------------------|---------------------|------------------------------------|
| B 200, B 230* | 3.35 | 3.85 | 1.0 |
| B 204, B 234* | 3.50 | 4.00 | 1.0 |
| B 280 | 5.50 | 6.00 | 1.0 |
| B 6304 | 5.25 | 5.75 | 1.0 |
| D 24, D 24 T, D 24 TIC** | 5.00 | 6.00 | 1.0 |

* Turbo: When system is fully drained, there is an additional 0.6 litres for the oil cooler.

** On the D 24 TIC there is an additional 0.7 litres (air cooled oil cooler)

Transmission, manual

Lubricating oil, type:

ATF-oil F or G*

Note! Do not use ATF-oil type Dexron.

Dampers and overdrive may slip causing premature failure.

Oil change volume:

| | | |
|------|--------|------|
| M 46 | litres | 2.6 |
| M 47 | litres | 1.6 |
| M 90 | litres | 1.75 |

Tightening torque

for oil plugs Nm 27- 40
ft l b 20 - 29

Transmission, automatic

Lubricating oil, type:

Dexron II D or E,
Ford Mercon

Oil change volume:
(draining only)

| | |
|---------------------|--------------------|
| AW 70/AW 71 /AW 72. | litres, approx 3.9 |
| AW 30-40 | litres, approx 3.0 |
| AW 30-43 | litres, approx 3.0 |
| ZF 4 HP 22 | litres, approx 2.0 |

* For cars driven in areas where ambient temperature is lower than - 10°C (+14°F), or cars driven a lot (eg taxis) we recommend Volvo thermal oil, P/N 11 61 243-9.

Note! The different oil types may not be mixed.

Final drive

Lubricating oil,

| | |
|---|--|
| type | Final drive oil |
| quality, without diff. brake | API-GL-5(6) or MIL-L-2105 B(C) |
| or with automatic differential lock (Eaton) | Low-friction oil. Volvo P/N 11 61 329-6 (0.5 litres) |
| with diff. brake (Dana) | API-GL-5(6) or MIL-L-2105 B(C), equipped with additive for diff. brake. Volvo P/N 11 61 129-0 (0.5 litres) |
| viscosity, above - 10°C (14°F) | SAE 90 |
| below - 10°C (14°F) | SAE 80 |

Oil change volume,

| | | |
|------|--------|------|
| 1030 | litres | 1.30 |
| 1031 | litres | 1.75 |
| 1035 | litres | 1.40 |
| 1041 | litres | 1.45 |
| 1045 | litres | 1.30 |

Steering gear

Lubricant:

| | | |
|-------|-------------------|-------------|
| type: | Grease, Volvo P/N | 11 61 001-1 |
| qty.: | approx, grams | 100 |

Hydraulic oil, servo gear:

ATF-oil type A, F or G;

Dexron D/E, Ford Mercon;

(at temps. below - 20 °C (-4 °F), Volvo oil

P/N 11 61 317-1 can be used)

| | | | |
|-------|------------------------|--------|-----|
| qty., | B 200, B 230 | litres | 0.8 |
| | B 280 | litres | 0.8 |
| | B 6304 | litres | 0.8 |
| | D 24, D 24 T, D 24 TIC | litres | 0.5 |