

## Preventive maintenance periods

These preventive maintenance periods apply to average conditions of operation. Check the periods given by the manufacturer of the equipment in which the engine is installed. If necessary, use the shorter periods. When the operation of the engine must conform to the local regulations these periods and procedures may need to be adapted to ensure correct operation of the engine.

It is good preventive maintenance to check for leakage and loose fasteners at each service.

These maintenance periods apply only to engines that are operated with fuel and lubricating oil which conform to the specifications given in this handbook.

## Schedules

The schedules which follow must be applied at the interval (hours or months) which occurs first.

First service at 20/40 hours	
Every day or every 8 hours	
Every week	
Every month	
Every 400 hours or 6 months	
Every 800 hours or 12 months	
Every 1,600 hours or 24 months	
Every 2,000 hours or 30 months	
	Operation
•	Check the amount of coolant
•	Check the concentration of the coolant
•	Renew the coolant
•	Check the drive belt of the alternator
•	Renew the drive belt of the alternator
•	Drain water from the fuel filter and/or the fuel pre-filter (or earlier if your fuel supply is contaminated)
•	Renew the canister of the fuel filter
•	Clean the sediment chamber and the strainer of the fuel lift pump
•	Check the amount of lubricating oil in the sump
•	Check the lubricating oil pressure at the gauge (1)
•	Renew the engine lubricating oil (4)
•	Renew the canister of the lubricating oil filter
•	In extremely dusty conditions, clean the air cleaner or empty the dust bowl of the air filter (1)
•	Clean the air cleaner or empty the dust bowl of the air filter – frequency variable with dust conditions
•	Clean or renew the air filter element – if not indicated earlier
•	Clean the engine breather system
•	Check the performance of the glow plugs
•	Ensure that the idle speed is checked and adjusted, if it is necessary (2)
•	Ensure that the tappet clearances are checked and adjusted, if it is necessary (2)
•	Ensure that the timing belt is checked for wear, damage and correct tension (2)
•	Ensure that the timing belt is renewed (2)
•	Ensure that the alternator, starter motor, turbocharger, etc. are checked (2)

- (1) If there is one fitted. (2) By a person who has had the correct training. (3) First 400 hours (6 months) only.  
 (4) The oil change interval will change with the sulphur content of the fuel (see the table below and the Fuel Specification in section 5).  
 The interval to change the canister of the lubricating oil filter is not affected.

Sulphur content of fuel %	Oil change interval	
	Hours	Months
<0,5	400	6
0,5-1.0	300	4,5
1,0>	200	3

Perkins 500 Series