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## **Preventive maintenance**

### **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. Use the periods which are shortest. 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.

## Schedule

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

- |   |                               |   |                               |
|---|-------------------------------|---|-------------------------------|
| A | Daily                         | E | Every 3000 hours or 24 months |
| B | Every 250 hours or 12 months  | F | Every 3000 hours or 36 months |
| C | Every 500 hours or 12 months  | G | Every 5000 hours              |
| D | Every 1000 hours or 24 months |   |                               |

A	B	C	D	E	F	G	Operation
●							Check the coolant level
●							Check the air cleaner service indicator
●							Check the lubricating oil level
●							Drain water/sediment from the primary fuel filter
●							Visual inspection of the engine systems
●							Drain water/sediment from the fuel tank
	●						Check battery electrolyte level
		●					Perform a diagnostics check
		●					Renew the element in the primary fuel filter
		●					Renew the element in the secondary fuel filter
		●					Renew the engine lubricating oil <sup>(1)</sup> <sup>(2)</sup>
		●					Renew the element in the lubricating oil filter
		●					Inspect/adjust/renew the alternator and fan drive belts
		●					Inspect the crankshaft vibration damper
		●					Inspect/clean/tighten the earth stud
		●					Inspect/renew the coolant hoses, air hoses and hose clips
		●					Inspect and, if necessary, clean the exterior of the radiator/charge cooler
		●					Inspect the engine mountings
			●				Check/adjust the tappet clearances and the electronic unit injectors <sup>(3)</sup>
				●			Check the engine protection devices <sup>(3)</sup>
				●			Renew the thermostats in the coolant system
				●			Check/clean the engine speed/timing sensors
				●			Inspect the turbochargers <sup>(3)</sup>
						●	Drain and flush the coolant system and renew the coolant mixture
						●	Inspect the battery charging alternator <sup>(3)</sup>
						●	Inspect the starter motor <sup>(3)</sup>
						●	Inspect the coolant pump

<sup>(1)</sup> Oil sample analysis may be used to monitor the condition of the lubricating oil, but the lubricating oil must be replaced at 500 hours/12 months.

<sup>(2)</sup> If fuel with a high sulphur content is used, the lubricating oil may have to be replaced at more frequent intervals. Contact the Applications Department (Stafford) at Perkins Engines Company Limited.

<sup>(3)</sup> This procedure must be done by a person who has had the correct training.