

## SERVICE INFORMATION

### GENERAL

#### ⚠ CAUTION

Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

- The oil pump can be serviced with the engine installed in the frame.
- The service procedures in this section must be performed with the engine oil drained.
- When removing and installing the oil pump, use care not to allow dust or dirt to enter the engine.
- If any portion of the oil pump is worn beyond the specified service limits, replace the oil pump as an assembly.
- After the oil pump has been installed, check that there are no oil leaks.

### SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT
Engine oil capacity	After draining	0.7 liter (0.7 US qt, 0.6 Imp qt)	–
	After disassembly	0.8 liter (0.8 US qt, 0.7 Imp qt)	–
Recommended engine oil		API service classification: SG or higher (except oils labeled as energy conserving on the circular API service label) Viscosity: SAE 10W-30 JASO T 903 standard: MB	–
Oil pump rotor	Tip clearance	0.15 (0.006)	0.20 (0.008)
	Body clearance	0.15 – 0.21 (0.006 – 0.008)	0.35 (0.014)
	Side clearance	0.05 – 0.10 (0.002 – 0.004)	0.12 (0.005)

### TORQUE VALUES

Oil pump plate screw	3 N·m (0.31 kgf·m, 2.2 lbf·ft)
Oil pump mounting bolt	10 N·m (1.0 kgf·m, 7 lbf·ft)

## TROUBLESHOOTING

#### Engine oil level too low

- Oil consumption
- External oil leak
- Worn piston rings or incorrect piston ring installation (page 10-7)
- Worn cylinder (page 10-4)
- Worn valve guide or seal (page 9-14)

#### Oil contamination

- Oil not changed often enough
- Faulty cylinder head gasket
- Worn piston rings (page 10-7)