

4. LUBRICATION SYSTEM

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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 and that oil pressure is correct.

SPECIFICATIONS

Unit: mm (in)

ITEM		STANDARD	SERVICE LIMIT
Engine oil capacity	After draining	3.5 liter (3.7 US qt, 3.1 Imp qt)	—
	After draining/filter change	3.6 liter (3.8 US qt, 3.2 Imp qt)	—
	After disassembly	4.4 liter (4.6 US qt, 3.9 Imp qt)	—
Recommended engine oil		Pro Honda GN4 or HP4 (without molybdenum additives) 4-stroke oil (USA & Canada), or Honda 4-stroke oil (Canada only), or an equivalent motor oil API service classification SG or Higher except oils labeled as energy conserving on the API service label. JASO T903 standard MA Viscosity: SAE 10W-40	—
Oil pressure at oil pressure switch		490 kPa (5.0 kgf/cm ² , 71 psi) at 6,000 min ⁻¹ (rpm)/(80°C/176°F)	—
Oil pump rotor	Tip clearance	0.15 (0.006)	0.20 (0.008)
	Body clearance	0.15 – 0.22 (0.006 – 0.009)	0.35 (0.014)
	Side clearance	0.02 – 0.07 (0.001 – 0.003)	0.10 (0.004)

TORQUE VALUES

Oil main gallery sealing bolt (20 mm)	29 N•m (3.0 kgf•m, 22 lbf•ft)	Apply a locking agent to the threads
Oil pump cover bolt	8 N•m (0.8 kgf•m, 5.8 lbf•ft)	CT bolt
Oil cooler bolt (filter boss)	64 N•m (6.5 kgf•m, 47 lbf•ft)	Apply oil to the threads and flange surface
Engine oil filter cartridge	26 N•m (2.7 kgf•m, 20 lbf•ft)	Apply oil to the threads and flange surface and O-ring
Engine oil drain bolt	29 N•m (3.0 kgf•m, 22 lbf•ft)	