

6. COOLING SYSTEM

SYSTEM FLOW PATTERN	6-0	THERMOSTAT	6-5
SERVICE INFORMATION	6-1	RADIATOR	6-8
TROUBLESHOOTING	6-2	WATER PUMP	6-13
SYSTEM TESTING	6-3	RADIATOR RESERVE TANK	6-16
COOLANT REPLACEMENT	6-4		

SERVICE INFORMATION

GENERAL

6

▲WARNING

- Wait until the engine is cool before slowly removing the radiator cap. Removing the cap while the engine is hot and the coolant is under pressure may cause serious scalding.
- Radiator coolant is toxic. Keep it away from eyes, mouth, skin and clothes.
 - If any coolant gets in your eyes, rinse them with water and consult a doctor immediately.
 - If any coolant is swallowed, induce vomiting, gargle and consult a physician immediately.
 - If any coolant gets on your skin or clothes, rinse thoroughly with plenty of water.
- KEEP OUT OF REACH OF CHILDREN.

CAUTION:

Using coolant with silicate inhibitors may cause premature wear of water pump seals or blockage of radiator passages. Using tap water may cause engine damage.

- Add cooling system at the reserve tank. Do not remove the radiator cap except to refill or drain the system.
- All cooling system services can be done with the engine in the frame.
- Avoid spilling coolant on painted surfaces.
- After servicing the system, check for leaks with a cooling system tester.
- Refer to section 19 for fan motor switch and coolant temperature sensor inspection.

SPECIFICATIONS

ITEM		SPECIFICATIONS
Coolant capacity	Radiator and engine	3.2 ℓ (3.4 US qt , 2.8 Imp qt)
	Reserve tank	0.5 ℓ (0.5 US qt , 0.4 Imp qt)
Radiator cap relief pressure		108 – 137 kPa (1.1 – 1.4 kgf/cm ² , 16 – 20 psi)
Thermostat	Begin to open	80 – 84 °C (176 – 183 °F)
	Fully open	95 °C (203 °F)
	Valve lift	8 mm (0.3 in) minimum
Recommended antifreeze		High quality ethylene glycol antifreeze containing corrosion protection inhibitors.
Standard coolant concentration		50% mixture with soft water

TORQUE VALUES

Water pump cover bolt	13 N·m (1.3 kgf·m , 9 lbf·ft)	CT bolt
ECT (Engine Coolant Temperature)/thermo sensor	23 N·m (2.3 kgf·m , 17 lbf·ft)	Apply sealant to the threads
Cooling fan nut	3 N·m (0.27 kgf·m , 2.0 lbf·ft)	Apply a locking agent to the threads
Fan motor nut	5 N·m (0.5 kgf·m , 3.6 lbf·ft)	
Fan motor switch	18 N·m (1.8 kgf·m , 13 lbf·ft)	Apply sealant to the threads