

# 1GR-FE COOLING

## SERVICE DATA

Water inlet with thermostat	Valve opening temperature		80 to 84 °C (176 to 183 °F)
	Valve lift		8 mm (0.31 in.) or more at 95 °C (203 °F)
Radiator cap	Relief valve opening pressure	Standard	93 to 123 kPa (0.95 to 1.25 kgf/cm <sup>2</sup> , 13.5 to 17.8 psi)
		Minimum	78 kPa (0.8 kgf/cm <sup>2</sup> , 11.4 psi)

## TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Cylinder block water drain cock plug x Cylinder block water drain cock	13	130	9
Water pump assembly x Timing chain or belt cover sub-assembly	Bolt A	9.0	92
	Bolt B	23	235
Idle pulley sub-assembly No. 2 x Timing chain or belt cover sub-assembly	39	398	29
Water inlet x Timing chain or belt cover sub-assembly	9.0	92	80 in.*lbf
Fan shroud x Radiator	5.0	51	44 in.*lbf
Fan x Fluid coupling	9.0	92	80 in.*lbf
Fan with fluid coupling x Water pump	21	214	15
Reserve tank x Radiator	5.0	51	44 in.*lbf
V-bank cover x Intake air surge tank	7.5	76	66 in.*lbf
Engine under cover sub-assembly No. 1 x Frame assembly	29	296	21
Water inlet with thermostat x Water inlet	9.0	92	80 in.*lbf
Radiator x Radiator support	21	184	44
Negative battery terminal	3.9	40	35 in.*lbf

**SS**