## **1GR-FE COOLING**

## SERVICE DATA

Water inlet w/ thermostat	Valve opening temperature		80 to 84 °C (176 to 183 °F)	
	Valve lift	at 95 °C (203 °F)	8 mm (0.31 in.) or more	
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 of	13	130	9	
Water pump assembly x Timing chain or belt cover sub- assembly	10 mm (0.39 in.) head	9.0	92	80 in.*lbf
	12 mm (0.47 in.) head	23	235	17
Idler 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 w/ fluid coupling x Water pump	21	214	15	
V-bank cover x Intake air surge tank		7.5	76	66 in.*lbf
Engine under cover sub-assembly No. 1 x Frame assembly	30	306	22	
Water inlet w/ thermostat x Water inlet	9.0	92	80 in.*lbf	
Radiator x Radiator support	18	184	13	
Negative battery terminal	3.9	40	35 in.*lbf	

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