

1GR-FE LUBRICATION**SERVICE DATA**

Oil pressure		at idle speed	29 kPa (0.3 kgf/cm ² , 4.2 psi) or more
		at 3,000 rpm	294 to 588 kPa (3.0 to 6.0 kgf/cm ² , 43 to 85 psi)
Oil pump	Tip clearance	Standard	0.06 to 0.16 mm (0.0024 to 0.0063 in.)
		Maximum	0.16 mm (0.0063 in.)
	Side clearance	Standard	0.03 to 0.09 mm (0.0012 to 0.0035 in.)
		Maximum	0.09 mm (0.0035 in.)
	Body clearance	Standard	0.250 to 0.325 mm (0.0098 to 0.0128 in.)
		Maximum	0.325 mm (0.0128 in.)

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TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Oil pressure switch x Oil filter bracket sub-assembly	15	153	11
Oil pan drain plug x Oil pan sub-assembly No. 2	40	408	30
Timing chain or belt cover sub-assembly x Cylinder head and block	23	235	17
Oil filter bracket sub-assembly x Timing chain or belt cover sub-assembly	19	194	14
V-bank cover x Intake air surge tank	7.5	76	66 in.*lbf
Oil pump relief valve x Oil pump cover	49	500	36
Oil pump cover x Timing chain or belt cover sub-assembly	9.0	92	80 in.*lbf
Oil cooler assembly x Oil filter bracket sub-assembly	68	693	50
Oil filter sub-assembly	18	184	13

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