2GR-FE LUBRICATION

SERVICE DATA

OIL PRESSURE

Condition	Specified Condition
Idle	80 kPa (0.8 kgf/cm^2, 11.6 psi) or more
3000 rpm	380 kPa (3.9 kgf/cm^2, 55.5 psi) or more

OIL PUMP

Item	Condition	Specified Condition
Oil pump rotor	Standard side clearance	0.030 to 0.090 mm (0.0012 to 0.0035 in.)
	Maximum side clearance	0.090 mm (0.0035 in.)
	Standard tip clearance	0.060 to 0.160 mm (0.0024 to 0.0063 in.)
	Maximum tip clearance	0.160 mm (0.0063 in.)
	Standard body clearance	0.250 to 0.325 mm (0.0098 to 0.0128 in.)
	Maximum body clearance	0.325 mm (0.0128 in.)

TORQUE SPECIFICATIONS

Part Tightened		N*m	kgf*cm	ft.*lbf
Oil pressure switch x Oil pan		15	153	11
Oil filter cap x Oil pan		25	255	18
Oil filter drain plug x Oil filter cap		13	127	10
Oil pan drain plug x No. 2 oil pan		40	408	30
Oil pump cover x Timing chain cover		9.1	93	81 in.*lbf
Plug X Oil pump cover		49	500	37
By-pass hose clamp x Cylinder block		10	102	7
Oil cooler assembly x Union bolt		68	693	50
Oil cooler pipe x Oil pan sub-assembly		21	214	16
Timing chain cover x Cylinder block, Cylinder head, Oil pan	Area 1, 2 Bolt	21	214	15
	Area 3 bolt, nut	21	214	15
	Area 4 Bolt A	43	438	32
	Area 4 except bolt A	21	214	15