2TR-FE LUBRICATION SERVICE DATA

Oil pressure		at idle speed	29 kPa (0.3 kgf/cm ² , 4.3 psi) or more	
		at 3,000 rpm	160 to 490 kPa (1.6 to 5.3 kgf/cm ² , 23 to 75 psi)	
Oil pump	Tip clearance	STD	0.040 to 0.160 mm (0.0016 to 0.0063 in.)	
		Minimum	0.26 mm (0.0102 in.)	
	Side clearance	STD	0.025 to 0.075 mm (0.0010 to 0.0030 in.)	
		Minimum	0.130 mm (0.0051 in.)	
	Body clearance	STD	0.250 to 0.325 mm (0.0098 to 0.0128 in.)	
		Minimum	0.425 mm (0.0167 in.)	



TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf	
Oil pressure switch x Cylinder block sub-assembly	15	153	11	
Oil pan drain plug x Oil pan sub-assembly No. 2	38	382	28	
Timing chain cover x Head straight screw plug	17	170	12	
Timing chain cover x Cylinder head sub-assembly and Cylinder	Bolt A	46	469	34
block sub-assembly	Bolt B	21	214	15
	Bolt C	21	214	15
	Bolt D	21	214	15
	Bolt E	21	214	15
	Nut	21	214	15
Air cleaner case x Body	12	122	9	
Engine under cover No. 1 x Body	30	306	22	
Engine under cover No. 2 x Body	30	306	22	
Oil pump cover x Timing chain cover	9.0	92	80 in.*lbf	
Oil pump relief valve x Timing chain cover	49	500	36	

