

LUBRICATION SYSTEM

Specifications

Engine oil capacity		See page A-29	
Oil pressure	at idle at 3,000 rpm	29 kPa (0.3 kgf/cm ² , 4.3 psi) or more 245 – 490 kPa (2.5 – 5.0 kgf/cm ² , 36 – 71 psi)	
Oil pump (4A-FE)	Body clearance	STD Limit	0.080 – 0.180 m m 0.0031 – 0.0071 in. 0.20 m m 0.0079 i n.
	Tip clearance	STD Limit	0.025 – 0.085 m m 0.0010 – 0.0033 in. 0.35 m m 0.0138 in.
	Side clearance	STD Limit	0.025 – 0.085 m m 0.0010 – 0.0033 in. 0.10 mm 0.0039 in.
Oil pump (3S-GTE and 5S-FE)	Body clearance	STD	0.100–0.160 mm 0.0039 – 0.0063 in.
	Tip clearance	Limit	0.20 m m 0.0079 in.
		STD Limit	0.040 – 0.160 m m 0.0016 – 0.0063 in. 0.20 m m 0.0079 i n.

Torque Specifications (4A-FE)

Part tightened	N- m	kgf-cm	ft-lbf
Engine pan x Drain plug	34	350	25
Oil pump x Cylinder block	21	218	16
Oil strainer x Cylinder block	9.3	95	82 in.-lbf
Oil strainer x Oil pump	9.3	95	82 in.-lbf
Oil pan x Cylinder block	4.9	55	43 in.-lbf
Oil pan x Oil pump	4.9	55	43 in.-lbf
Oil pan x Rear oil seal retainer	4.9	50	43 in.-lbf
Oil dipstick guide x Water pump	9.3	95	82 in.-lbf

Torque Specifications (3S-GTE and 5S-FE)

Part tightened		N·m	kgf·cm	ft·lbf
Engine pan x Drain plug		39	400	29
Oil pump body cover x Oil pump body		8.8	90	78 in.-lbf
Oil pump x Cylinder block	3S-GTE	7.8	80	69 in.-lbf
	5S-FE	9.3	95	82 in.-lbf
Oil strainer x Cylinder block		5.4	55	48 in.-lbf
Oil strainer x Oil pump		5.4	55	48 in.-lbf
Oil pan x Cylinder block		5.4	55	48 in.-lbf
Oil pan x Oil pump		5.4	55	48 in.-lbf
Stiffener plate x Cylinder block		37	380	27
Stiffener plate x Transaxle case		37	380	27
Oil cooler bracket x Cylinder block (3S-GTE)		7.8	80	69 in.-lbf
Oil cooler x Oil cooler bracket (3S-GTE)		78	800	58
Water by-pass pipe x Oil cooler (3S-GTE)		12	120	9
Water by-pass pipe x Oil cooler bracket (3S-GTE)		18	180	13
Oil cooler x Cylinder block (5S-FE)	Relief valve	78	800	58
	Nut	7.8	80	69 in.-lbf
Oil nozzle x Cylinder block		9.1	93	81 in.-lbf

IGNITION SYSTEM

Ignition timing		10° BTDC @ idle (w/ Terminals TE1 and E1 connected)
Firing order		1-3-4-2
Spark plug		See page A-2
High-tension cord	Resistance	25 kΩ per cord
Ignition coil	Primary coil resistance (Cold) 4A-FE 3S-GTE and 5S-FE Secondary coil resistance (Cold)	1.1-1.7 Ω 0.3-0.6 Ω 9-15Ω
Distributor	Air gap Signal generator (pickup coil) resistance (Cold) 4A-FE 3S-GTE G1 - G (-) G2 - G (-) NE -G (-) 5S-FE G (+)- G (-) NE (+) - NE (-)	0.2 - 0.4 m m 0.008-0.016 in. 185 - 265 Ω 125 - 190 Ω 125 - 190 Ω 155 - 240 Ω 185 - 265 Ω 370 - 530 Ω