

ENGINE MECHANICAL

SERVICE DATA

030F4-03

1AZ-FE

Battery specific gravity	at 20°C (68°F)	1.25-1.29
Ignition timing	w/ Terminals TC and CG of DLC3 connected w/ Terminals TC and CG of DLC3 disconnected	8 - 12° BTDC 5 - 15° BTDC
Idle speed		610 - 710 r/min.
Compression	Compression pressure Minimum pressure Difference between each cylinder	1.360 MPa (13.9 kgf/cm ² , 198 psi) 0.98 MPa (10 kgf/cm ² , 142 psi) 100 kPa (1.0 kgf/cm ² , 14 psi)
Cylinder head set bolt Bolt length	Standard Maximum	161.3 - 162.7 mm (6.350 - 6.406 in.) 164.2 mm (6.465 in.)
Valve clearance	(Cold)	
Intake		0.19 - 0.29 mm (0.0075 - 0.0114 in.)
Exhaust		0.30 - 0.40 mm (0.0118 - 0.0157 in.)

2AZ-FE

Battery specific gravity	at 20°C (68°F)	1.25-1.29
Ignition timing	w/ Terminals TC and CG of DLC3 connected w/ Terminals TC and CG of DLC3 disconnected	8 - 12° BTDC 5 - 15° BTDC
Idle speed	A/T M/T	610 - 710 r/min. 650 - 750 r/min.
Compression	Compression pressure Minimum pressure Difference between each cylinder	1.360 MPa (13.9 kgf/cm ² , 198 psi) 0.98 MPa (10 kgf/cm ² , 142 psi) 100 kPa (1.0 kgf/cm ² , 14 psi)
Cylinder head set bolt Bolt length	Standard Maximum	161.3 - 162.7 mm (6.350 - 6.406 in.) 164.2 mm (6.465 in.)
Valve clearance	(Cold)	
Intake		0.19 - 0.29 mm (0.0075 - 0.0114 in.)
Exhaust		0.30 - 0.40 mm (0.0118 - 0.0157 in.)

1MZ-FE

Battery specific gravity	at 20°C (68°F)	1.25-1.29
New drive belt deflection	Pressing force: 98 N (10 kgf, 22 lbf) For fan and generator For vane pump	9.1 - 10.5 mm (0.358 - 0.413 in.) 7.0 - 9.0 mm (0.276 - 0.354 in.)
Used drive belt deflection	Pressing force: 98 N (10 kgf, 22 lbf) For fan and generator For vane pump	11.0 - 13.5 mm (0.433 - 0.531 in.) 10.0 - 12.0 mm (0.394 - 0.472 in.)
New drive belt tension	For fan and generator For vane pump	617 - 853 N (63 - 87 kgf, 139 - 192 lbf) 647 - 843 N (66 - 86 kgf, 146 - 190 lbf)
Used drive belt tension	For fan and generator For vane pump	294 - 490 N (30 - 50 kgf, 66 - 110 lbf) 323 - 519 N (33 - 53 kgf, 73 - 117 lbf)
Ignition timing	w/ Terminals TC and CG of DLC3 connected w/ Terminals TC and CG of DLC3 disconnected	8 - 12° BTDC 7 - 25° BTDC
Idle speed		550 - 650 r/min.
Compression pressure		1.47 MPa (15 kgf/cm ² , 213 psi)
Minimum pressure		0.98 MPa (10 kgf/cm ² , 142 psi)
Difference between each cylinder		100 kPa (1.0 kgf/cm ² , 14 psi)

12 pointed head cylinder head set bolt diameter at tension portion	Standard	8.95 – 9.05 mm (0.3524 – 0.3563 in.)
	Minimum	8.75 mm (0.3775 in.)
Valve clearance at cold	Intake	0.15 – 0.25 mm (0.006 – 0.010 in.)
	Exhaust	0.25 – 0.35 mm (0.010 – 0.014 in.)