

ENGINE MECHANICAL

SERVICE DATA

030AO-01

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		650 - 750 r/min.
Compression pressure		1.270 MPa (13 kgf/cm ² , 184 psi)
Minimum pressure		1 MPa (10 kgf/cm ² , 145 psi)
Difference between each cylinder		100 kPa (1.0 kgf/cm ² , 14 psi)
Valve clearance		
Intake	(cold)	0.19 - 0.29 mm (0.0075 - 0.0114 in.)
Exhaust		0.30 - 0.40 mm (0.0118 - 0.0157 in.)
Cylinder head set bolt		
Bolt length	Standard Maximum	161.3-162.3 mm (6.350-6.390 in.) 164.2 mm (6.465 in.)

1CD-FTV

New drive belt deflection	Pressing force: 98 N (10 kgf, 22 lbf) For vane pump (w/ compressor) For vane pump (w/o compressor)	9.5 - 11.5 mm (0.37 - 0.45 in.) 10 - 11 mm (0.39 - 0.43 in.)
Used drive belt deflection	Pressing force: 98 N (10 kgf, 22 lbf) For vane pump (w/ compressor) For vane pump (w/o compressor)	12.5 - 15.5 mm (0.49 - 0.61 in.) 15 - 18 mm (0.59 - 0.71 in.)
New drive belt tension	For vane pump (w/ compressor) For vane pump (w/o compressor)	519 - 755 N (53 - 77 kgf, 117 - 170 lbf) 647 - 843 N (66 - 86 kgf, 146 - 190 lbf)
Used drive belt tension	For vane pump (w/ compressor) For vane pump (w/o compressor)	196 - 392 N (20 - 40 kgf, 44 - 88 lbf) 323 - 519 N (33 - 53 kgf, 73 - 117 lbf)
Idle speed		600 - 700 r/min.
Maximum speed		5,100 - 5,250 rpm
Compression pressure	at 250 rpm Minimum	2,746 kPa (28.0 kgf/cm ² , 398 psi) or more 2,256 kPa (23.0 kgf/cm ² , 327 psi) or more
Difference between each cylinder		490 kPa (5.0 kgf/cm ² , 71 psi) or less

Valve clearance		
Intake	(cold)	0.20 – 0.30 mm (0.008 – 0.012 in.)
Exhaust		0.35 – 0.45 mm (0.014 – 0.018 in.)
Adjusting shim thickness	Mark 2.500	2.500 mm (0.0984 in.)
	Mark 2.550	2.550 mm (0.1004 in.)
	Mark 2.600	2.600 mm (0.1024 in.)
	Mark 2.650	2.650 mm (0.1043 in.)
	Mark 2.700	2.700 mm (0.1063 in.)
	Mark 2.750	2.750 mm (0.1083 in.)
	Mark 2.800	2.800 mm (0.1102 in.)
	Mark 2.850	2.850 mm (0.1122 in.)
	Mark 2.900	2.900 mm (0.1142 in.)
	Mark 2.950	2.950 mm (0.1161 in.)
	Mark 3.000	3.000 mm (0.1181 in.)
	Mark 3.050	3.050 mm (0.1201 in.)
	Mark 3.100	3.100 mm (0.1220 in.)
	Mark 3.150	3.150 mm (0.1240 in.)
	Mark 3.200	3.200 mm (0.1260 in.)
	Mark 3.250	3.250 mm (0.1280 in.)
	Mark 3.300	3.300 mm (0.1299 in.)
Cylinder head set bolt		
Outside diameter	Standard	10.75 – 11.00 mm (0.4232 – 0.4331 in.)
	Minimum	10.40 mm (0.4904 in.)