

3MZ-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: 245 to 539 kPa (2.5 to 5.5 kgf/cm ² , 36 to 78 psi)
Oil pump	Standard tip clearance: 0.11 to 0.24 mm (0.0043 to 0.0094 in.) Maximum tip clearance: 0.35 mm (0.0138 in.) Standard body clearance: 0.125 to 0.162 mm (0.0050 to 0.0064 in.) Maximum body clearance: 0.30 mm (0.0118 in.) Standard side clearance: 0.03 to 0.09 mm (0.0012 to 0.0035 in.) Maximum side clearance: 0.15 mm (0.0059 in.)

SS

TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Engine oil pressure switch x Cylinder block	15	153	11
Oil pump assembly x Cylinder block (Bolt A)	8.0	82	71 in.*lbf
Oil pump assembly x Cylinder block (Bolt B)	20	199	14
Oil pump assembly x Cylinder block (Bolt C)	43	439	32
Crankshaft position sensor x Oil pump assembly	8.0	82	71 in.*lbf
Oil pan sub-assembly x Cylinder block (10 mm head)	8.0	82	71 in.*lbf
Oil pan sub-assembly x Cylinder block (12 mm head)	20	199	14
Oil pan sub-assembly x Cylinder block (14 mm head)	37	379	27
Fly wheel housing under cover x Automatic transaxle assembly	7.8	80	69 in.*lbf
Oil strainer sub-assembly x Oil pan sub-assembly	8.0	82	71 in.*lbf
Oil pan sub-assembly No.2 x Oil pan sub-assembly	8.0	82	71 in.*lbf
Engine mounting bracket RH x Cylinder block	54	551	40
Engine mounting bracket RH x PS pump bracket	43	439	32
Engine mounting insulator RH x Engine mounting bracket RH	95	969	70
Engine mounting insulator RH x Front frame assembly	87	887	64
Engine mounting insulator FR x Engine mounting bracket FR	87	887	64
Engine mounting insulator FR x Front frame assembly	52	530	38
Engine mounting insulator RR x Front frame assembly	52	530	38
Compressor mounting bracket No.1 x Cylinder block	25	250	18
Compressor and magnetic clutch x Compressor mounting bracket No.1	25	250	18
Generator belt adjusting bar x Cylinder block (Nut A)	43	438	32
Generator belt adjusting bar x Cylinder block (Bolt B)	18	184	13
Generator belt adjusting bar x Cylinder block (Bolt C)	8.4	85	74 in.*lbf
Oil pump rotor set x Oil pump assembly	10	105	8
Oil pump relief valve plug x Oil pump body	49	500	36
Oil pan drain plug x Oil pan sub-assembly No.2	45	459	33

SS