SS0ZF–02

TORQUE SPECIFICATION

Part tightened		N·m	kgf·cm	ft·lbf
Timing gear case x Injection pump		18	185	13
Injection pump x Injection pipe union nuts		24.5	250	18
Injection pipe x Injection pump		14.7	150	11
Injection pump x Distributive head plug		16.7	170	12
Injection pump x Injection pump stay		69	700	51
Camshaft x No.1 camshaft timing pulley		98	1,000	72
Timing gear cover x Timing belt tensioner		13	130	10
Injection pump drive gear x No.2 camshaft timing pulley		31	315	23
Timing gear cover x Idler pulley		34.5	350	25
Injection pump drive gear x Injection pump		103	1,050	76
Timing gear case x Cylinder block		19.6	200	14
Oil pipe x Cylinder block, Vacuum pump		18	185	13
Vacuum pump x Timing gear cover		39	400	29
Crankshaft x Crankshaft pulley		430	4,400	317
Cylinder head x Cylinder block	1st 2nd 3rd	68.6 Turn 90° Turn90°	700 Turn 90° Turn 90°	51 Turn 90° Turn 90°
Cylinder head x bearing cap	No.1 journal Other journal	25 18	250 185	18 13
Camshaft oil seal retainer x Cylinder head		19.6	200	14
Cylinder head cover x Cylinder head		6.4	65	57 in.·lbf
Water outlet x Cylinder head		19.6	200	14
Nozzle leakage pipe x Injection nozzle		29	300	22
Glow plug x Cylinder head		12.7	130	9
Intake manifold assembly x Cylinder head		19.6	200	14
Intake pipe assembly x Intake manifold	Europe Bolt Nut	19.6 39.2	200 400	14 29
Intake pipe x Intake manifold	Except Europe	19.6	200	14
Exhaust manifold x Cylinder head		41.7	425	31
Main bearing cap x Cylinder block	12 pointed head 1st 2nd 6 pointed head	103 Turn 90° 18	1,050 Turn 90° 185	76 Turn 90° 13
Connecting rod cap x Connecting rod	1st 2nd	36.8 Turn 90°	375 Turn 90°	27 Turn 90°
Engine mounting brackets x Cylinder block		68.6	700	51
Injection pump stay x Cylinder block		68.6	700	51
Alternator bracket x Cylinder block		68.6	700	51
Rear oil seal retainer x Cylinder block		6.4	65	57 in.·lbf
Rear end plate x Cylinder block		18	185	13
Flywheel x Crankshaft		127.4	1,300	94
Oil pan x Cylinder block		15.7	160	12
Oil strainer x Main bearing cap		8.8	90	78 in.·lbf
Check valve x Cylinder block		27	275	20
Oil cooler assembly x Cylinder block		19.6	200	14