031EC–05

TORQUE SPECIFICATION

Part Tightened		N·m	kgf·cm	ft·lbf
Engine rear oil seal retainer x Cylinder block		13	133	10
Oil filter bracket union x Oil filter bracket sub–assy		25	255	18
Oil filter union x Oil filter bracket sub–assy		43	439	32
Oil filter bracket union x Cylinder block		25	255	18
Oil filter bracket sub–assy x Cylinder block		25	255	18
Oil filter bracket sub–assy x Screw plug		49	500	36
Oil filter x Oil filter bracket sub–assy		17	175	13
Teper screw plug No. 1 x Cylinder block		25	250	18
Cylinder head x Cylinder block	1st	39	398	29
	2nd	Turn 90°	Turn 90°	Turn 90°
	3rd	Turn 90°	Turn 90°	Turn 90°
Camshaft Timing gear assy x Camshaft		78	795	58
Camshaft Timing gear or sprocket x Camshaft No. 2		78	795	58
Camshaft bearing cap x Cylinder head	Bolt A	12	122	9
	Others	16	160	11
Chain vibration damper No. 1 x Cylinder block		21	214	15
Chain tensioner slipper x Cylinder block		21	214	15
Chain tensioner No. 1 x Cylinder block		10	102	7
Timing chain guide x Cylinder head		10	102	7
Water pump assy x Timing chain cover		9.0	92	80 in.·lbf
Timing chain cover x Cylinder block	Bolt A	46	469	34
	Others	21	214	15
Oil pan sub–assy x Cylinder block		26	265	19
Oil strainer sub–assy x Oil pan sub–assy		26	265	19
Oil pan sub–assy No. 2 x Oil pan sub–assy		9.0	92	80 in.·lbf
Drain plug x Oil pan sub–assy No. 2		38	382	28
Crankshaft pulley x crankshaft		260	2,650	192
Cylinder head cover x Cylinder head		9.0	92	80 in.·lbf
Ventilation valve sub–assy x Cylinder head cover		5.0	51	44 in.·lbf
Camshaft position sensor x Timing chain cover		8.5	87	75 in.·lbf
Crankshaft position sensor x Timing chain cover		8.5	87	75 in.·lbf
Camshaft timing control valve x Timing chain cover		8.0	82	71 in.·lbf
Chain vibration damper No. 2 x Cylinder block		27	270	20
Chain vibration damper No. 3 x Cylinder block		18	185	13
Chain vibration damper No. 4 x Cylinder block		18	185	13
Chain tensioner No. 2 x Cylinder block		18	185	13
Balanceshaft drive gear sub–assy x Cylinder block		25	255	18
Stud bolt x Oil pan sub–assy	Bolt A	7.5	76	66 in.·lbf
	Bolt B	3.0	31	27 in.·lbf
Straight screw plug No. 1 x Cylinder head		44	449	32
Straight screw plug No. 2 x Cylinder head		90	918	66
Stud bolt x Cylinder head	Bolt A	3.0	31	27 in.·lbf
	Bolt B	7.5	76	66 in.·lbf
	Bolt C	9.5	97	84 in.·lbf
Screw plug x Cylinder head		30	306	22
Oil nozzle No. 1 sub–assy x Cylinder block		7.0	71	62 in.·lbf
Water drain cock sub–assy x Cylinder block		25	250	18
Water Drain cook sub–assy x Water Drain cook plug		13	130	9
Crankshaft bearing cap x Cylinder block	1st	39	398	29
	2nd	Turn 90°	Turn 90°	Turn 90°

Part Tightened		N·m	kgf·cm	ft·lbf
Connecting rod cap x Connecting rod	1st	25	255	18
	2nd	Turn 90°	Turn 90°	Turn 90°
Balanceshaft driven gear No. 1 x No .1 balanceshaft		36	365	26
Balanceshaft driven gear No. 2 x No .2 balanceshaft		36	365	26
Balanceshaft thrust washer No. 1 x Cylinder block		18	184	13
Balanceshaft thrust washer No. 2 x Cylinder block		18	184	13