031VR–01

TORQUE SPECIFICATION

Part Tightened		N·m	kgf·cm	ft·lbf
Spark plug x Cylinder head sub–assy		18	184	13
Ignition coil No. 1 x Cylinder head sub–assy		9.0	92	80 in. lbf
Idler pulley assy x Engine mounting bracket		40	408	30
Camshaft x Camshaft bearing cap No.2		13	130	9.6
No. 2 camshaft x Camshaft bearing cap No.1		23	235	17
Oil pump assy x Service hole screw plug		15	153	11
Brake reservoir bracket x Body		8.5	87	75 in. lbf
Brake master cylinder reservoir sub–assy x Brake reservoir bracket		8.5	87	75 in. lbf
Air cleaner assy x Cylinder head cover sub–assy		7.0	71	62 in. lbf
Air cleaner assy x Intake manifold		3.0	31	27 in. lbf
Battery negative terminal x Battery negative cable		6.0	61	53 in. lbf
Engine hanger x Cylinder head sub–assy		40	408	30
E. F. I. water temperature sensor x Cylinder head sub–assy		20	204	15
Radio setting condenser x Cylinder head sub–assy		9.0	92	80 in. lbf
Exhaust manifold x Cylinder head sub–assy		27	275	20
Exhaust manifold x Exhaust manifold heat insulator No. 1		8.0	82	71 in. lbf
Water by–pass pipe No. 1 x Cylinder block sub–assy		9.0	92	80 in. lbf
Water by–pass pipe No. 1 x Cylinder head sub–assy		9.0	92	80 in. lbf
Oil level gage guide x Intake manifold		9.0	92	80 in. lbf
Flywheel x Crankshaft	1st 2nd	49 Turn 90°	500 Turn 90°	36 Turn 90°
Transmission input damper assy x Fly wheel		20	204	15
Starter hole insulator x Hybrid vehicle transaxle assy		32	326	24
Engine mounting bracket RH x Engine mounting insulator RH		52	530	38
Engine mounting insulator bracket LH x Engine mounting insulator LH		80	816	59
Front suspension crossmember sub–assy x Body	Bolt A Bolt B	113 157	1152 1602	83 116
Engine moving control rod x Front suspension crossmember		56	571	41
Engine moving control rod x Hybrid vehicle transaxle assy		100	1020	74
Steering sliding yoke sub–assy x Steering gear assy		35	357	26
Compressor assy x Cylinder block sub–assy		25	255	18
Vacuum switching valve assy No. 2 x Engine mounting insulator RH		7.5	76	5.5 in. lbf
Air cleaner inlet No. 1 x Air cleaner case		3.0	31	27 in. lbf
Front wheel x Front axle		103	1050	76
Oil pan sub–assy x Stud bolt		5.0	51	44 in. lbf
Oil pan sub–assy x Cylinder block sub–assy		24	245	18
Oil pan sub–assy x Oil strainer sub–assy		11	112	8.1
Oil pan sub–assy x Oil pan sub–assy No. 2		9.0	92	80 in. lbf
Oil pan sub–assy No. 2 x Oil pan drain plug		38	387	28
Oil filter union x Oil pan sub–assy		30	306	22
Cylinder head sub–assy x Cylinder block sub–assy	1st 2nd 3rd	29 Turn 90° Turn 90°	296 Turn 90° Turn 90°	21 Turn 90° Turn 90°
Camshaft timing gear assy x Camshaft		64	653	47
Camshaft timing gear x No. 2 Camshaft		64	653	47
Chain vibration damper x Cylinder head sub–assy		9.0	92	80 in.·lbf
Chain vibration damper x Cylinder block sub–assy		9.0	92	80 in.·lbf
Chain tensioner x Cylinder block sub–assy		9.0	92	80 in.·lbf

Part Tightened		N·m	kgf·cm	ft·lbf
Oil pump assy x Cylinder head & block	Bolt A	32	326	24
	Bolt B, C	11	112	8.1
	Nut D	24	245	18
	Bolt E	24	245	18
Crankshaft damper sub–assy x Crankshaft		128	1305	95
Water pump assy x Cylinder block sub–assy		11	112	8.1
Engine mounting bracket x Cylinder block sub–assy		55	561	41
Fuel delivery pipe sub–assy x Cylinder head sub–assy	Bolt A	19	194	14
	Bolt B	9.0	92	80 in.·lbf
Cylinder head cover sub–assy x Cylinder head sub–assy		10	102	7.4
Ventilation valve sub–assy x Cylinder head cover sub–assy		27	275	20
Water pump pulley x Water pump assy		15	153	11
Crank position sensor x Oil pump assy		7.5	76	66 in.·lbf
Water inlet x Cylinder block sub–assy		9.0	92	80 in.·lbf
Camshaft timing oil control valve assy x Cylinder block sub–assy		7.5	76	66 in.·lbf
Cam position sensor x Cylinder head sub–assy		8.0	82	71 in. lbf
Stud bolt x Cylinder head (See page 14–128)	Bolt A	10	102	7.4
	Bolt B	4.0	41	35 in.·lbf
	Bolt C	10	102	7.4
	Bolt D	9.0	92	80 in.·lbf
Oil control valve filter plug × Cylinder head		30	306	22
w/Head taper screw plug No.1 x Cylinder head		44	449	32
Connecting rod cap × Connecting rod	1st	15	153	11
	2nd	Turn 90°	Turn 90°	Turn 90°
Bearing cap × Cylinder block	1st	22	224	16
	2nd	Turn 90°	Turn 90°	Turn 90°
Stud bolt × Cylinder block		5.0	51	44 in.·lbf
Stud bolt (For knock sensor) × Cylinder block		11	112	8
Cylinder block water drain cock plug × Cylinder block		35	357	26