

TORQUE SPECIFICATION

Part tightened		N·m	kgf·cm	ft·lbf
Air cleaner assy x Body		5.0	51	44 in.·lbf
ECM cover x ECM box		5.0	51	44 in.·lbf
Vane pump assy x Cylinder head	Bolt	39.2	400	29
	Nut	43.1	440	32
Engine mounting bracket front LH x Cylinder block		36	367	27
Engine mounting bracket front No. 1 RH x Cylinder block		36	367	27
Exhaust manifold sub-assy LH x Cylinder head		44	449	32
Exhaust manifold sub-assy RH x Cylinder head		44	449	32
Oil filter bracket sub-assy x Cylinder block		18	184	13
Ignition coil assy x Cylinder head cover		7.5	77	66 in.·lbf
Engine hanger No. 1 x Cylinder head		37	377	27
Engine hanger No. 2 x Cylinder head		37	377	27
Oil level gauge guide x Cylinder head		7.5	77	66 in.·lbf
Water by-pass pipe joint RR x Cylinder head		18	184	13
Water by-pass pipe joint FR x Cylinder block		18	184	13
Water inlet housing x Water pump assy		18	184	13
Intake manifold assy x Cylinder head		18	184	13
V-bank cover fastener x Surge tank		7.5	77	66 in.·lbf
V-bank cover bracket No. 1 x Surge tank		7.5	77	66 in.·lbf
V-bank cover bracket No. 2 x Surge tank		7.5	77	66 in.·lbf
V-bank cover bracket No. 3 x Surge tank		7.5	77	66 in.·lbf
Drive plate & ring gear sub-assy x Crankshaft	1st	49	500	36
	2nd	Turn 90°	Turn 90°	Turn 90°
Automatic transmission assy x Cylinder block		72	734	53
Automatic transmission assy x Oil pan sub-assy		37	377	27
Front suspension crossmember x Engine mounting insulator		68	693	50
Steering sliding w/shaft yoke sub-assy x Steering intermediate shaft		35	357	26
Cooler compressor assy x Idler pulley assy		49	500	36
Cooler compressor stay x Oil filter bracket		29	296	21
Camshaft drive gear x Camshaft timing tube assy		7.5	77	66 in.·lbf
Camshaft timing tube assy x Camshaft		78	795	58
Screw plug x Camshaft timing tube assy		15	153	11
Engine rear oil seal retainer x Cylinder block		8.0	82	71 in.·lbf
Water pump assy x Cylinder block	for bolt	21	214	16
	for stud bolt and nut	18	184	13
Cylinder head LH x Cylinder block	1st	59	602	44
	2nd	Turn 90°	Turn 90°	Turn 90°
Cylinder head RH x Cylinder block	1st	59	602	44
	2nd	Turn 90°	Turn 90°	Turn 90°
Camshaft bearing cap x Cylinder head	Front bearing cap (w/o seal washer)	7.5	77	66 in.·lbf
	Others	16	163	12
Timing belt plate RR RH x Cylinder head		7.5	77	66 in.·lbf
Timing belt plate RR RH No. 2 x Cylinder head		7.5	77	66 in.·lbf
Timing belt plate RR LH x Cylinder head		7.5	77	66 in.·lbf

Timing belt plate RR LH No. 2 x Cylinder head	7.5	77	66 in.·lbf
Camshaft timing pulley x Camshaft timing tube assy	7.5	77	66
Camshaft timing pulley LH x Camshaft timing tube assy	7.5	77	66
Timing belt idler sub-assy No. 1 x Oil pump	34.5	352	25
Timing belt idler sub-assy No. 2 x Oil pump	34.5	352	25
Timing belt tensioner x Oil pump	26	265	19
Crankshaft damper sub-assy x Crankshaft	245	2,500	181
V ribbed belt tensioner assy x Cylinder block	16	163	12
Timing belt cover sub-assy No. 2 x Cylinder block	16	163	12
Idler pulley sub-assy No. 2 x Idler pulley assy	39	398	29
Idler pulley assy x Cylinder block	12 mm head	16	163
	14 mm head	32	330
Timing belt cover sub-assy No. 3 LH x Cylinder block	7.5	77	66
Timing chain or belt cover No. 2 x Cylinder head	7.5	77	66
Cylinder head cover sub-assy LH x Cylinder head	6.0	61	53 in.·lbf
Cylinder head cover sub-assy x Cylinder head	6.0	61	53 in.·lbf
Timing belt No. 1 cover x Cylinder block	7.5	77	66 in.·lbf
Crankshaft bearing cap x Cylinder block	2 progressive type 1st	27	275
	2nd	Turn 90°	Turn 90°
	Others	49	500
Connecting rod cap x Connecting rod	1st	24.5	250
	2nd	Turn 90°	Turn 90°
Water seal plate x Cylinder block	14	145	10
Cylinder block water drain cock sub-assy x Cylinder block	49	500	36
Drive plate & ring gear sub-assy x Torque converter clutch	48	490	35
Flywheel housing under cover x Transmission	18	184	13
Power steering gear housing assy x Front suspension crossmember	65	663	48
Pneumatic front LH w/ shock absorber cylinder assy x Lower arm	156.8	1,599	116
Pneumatic front RH w/ shock absorber cylinder assy x Lower arm	156.8	1,599	116
V-bank cover x Intake manifold	5.0	51	44 in.·lbf
Radiator upper support x Body	13.5	135	10
PS oil hose bracket x Generator	5.0	51	44 in.·lbf
Height control sensor link sub-assy front x Lower arm	5.4	55	48 in.·lbf
Stabilizer bar x Frame assy	23	235	17
Engine rear mounting insulator x Body	for bolt	25.5	260
	for nut	13.5	138
Propeller w/ center bearing shaft assy x Body	37	377	27
Propeller w/ center bearing shaft assy x Transmission assy	79	806	58
Propeller w/ center bearing shaft assy x Differential	79	806	58
Heated oxygen sensor (Bank 1, 2 Sensor 2) x Exhaust pipe assy	44	449	32
w/ Catalyst converter assy x Exhaust manifold	62	632	46
Exhaust pipe assy x w/ Catalyst converter assy	44	449	32
Pipe support bracket x Body	44	449	32
Front floor brace center x Body	13	133	10
Throttle body assy x Intake manifold	18	184	13
Engine wire protector x Engine	5.0	51	44 in.·lbf
Engine oil level sensor x Oil pan sub-assy	6.9	70	61 in.·lbf

SERVICE SPECIFICATIONS - ENGINE MECHANICAL

Camshaft timing oil control valve assy RH x Cylinder head	7.5	77	60 in.·lbf	
Camshaft timing oil control valve assy LH x Cylinder head	7.5	77	60 in.·lbf	
Knock sensor (Bank 1, 2) x Cylinder block	20	204	14	
Wire harness heat insulator No. 2 x Cylinder block	7.5	77	60 in.·lbf	
Oil strainer x sub-assy x Cylinder block	7.5	77	60 in.·lbf	
Oil pan baffle plate x Oil pan sub-assy	7.5	80	66 in.·lbf	
Oil pan sub-assy No. 2 x Oil pan sub-assy	7.5	80	66 in.·lbf	
Oil pump assy x Cylinder block	12 mm head	15.5	160	11
	14 mm head and 6 mm hexagon head	30.5	310	22
Oil pan sub-assy x Cylinder block	10 mm head	7.5	80	66 in.·lbf
	12 mm head	28	290	21