SS12J-01

## **TORQUE SPECIFICATION**

Part tightened	N.m	kgf.cm	ft.lbf
V-ribbed belt tensioner x Cylinder block	38	390	28
Idler pulley x V-ribbed belt tensioner	68	695	50
Idler pulley No.1 x Cylinder block	57	580	42
Idler pulley No.2 x Cylinder block	57	580	42
A/C compressor x Cylinder block	49	500	36
Oil pump x Cylinder block	19	195	14
Tensioner plate x Cylinder block	8.0	80	69 in.·lbf
Tensioner slipper x Cylinder block	24	245	18
Vibration damper No.1 x Cylinder block	20	205	15
Timing chain guide x Cylinder block	8.0	80	69 in.·lbf
Timing chain cover x Cylinder cover	30	305	22
Oil pan x Cylinder block Bolt A, Nut D	30	305	22
Bolt B	38	390	28
Bolt C	8.0	80	69 in.·lbf
Oil pump bracket x Oil pan	19	195	14
Oil strainer x Oil pump bracket	24	245	18
Oil pan No.2 x Oil pump	8.0	80	69 in.·lbf
Crank position sensor x Timing chain cover	8.0	80	69 in.·lbf
Crank shaft damper x Crankshaft	270	2,755	199
Intake air surge tank x Intake manifold	12	120	9
Throttle body x Intake air connector	21	215	15
Emission control valve set x Intake air connector	19	195	14
Camshaft bearing cap x Cylinder head	16	195	12
Cylinder head x Cylinder block 1st	54	550	40
2nd	Turn 90°	Turn 90°	Turn 90°
Cylinder head x Timing chain cover	21	215	16
Camshaft No.2 x Camshaft gear assembly	47	480	35
Exhaust manifold x Cylinder head	26	265	19
Water by-pass joint FR x Cylinder head	19	195	14
Water pump x Cylinder block	19	195	14
Exhaust manifold x Exhaust pipe	43	440	32
Intake manifold x Cylinder block	25	255	18
Connecting rod cap x Connecting rod 1st	20	205	15
2nd	Turn 90°	Turn 90°	Turn 90°
Main bearing cap x Cylinder head 1st	27	275	20 T 00°
2nd	Turn 90°	Turn 90°	Turn 90°
Cylinder block x Main bearing cap	27	275	20
Engine coolant drain union x Cylinder block	49	500	36
Engine mounting bracket x Cylinder block	36	370	27
Oil filter bracket x Cylinder block	19	195	14
Alternator bracket x Cylinder block	19	195	14
Water by–pass pipe No.3 x Cylinder block Bolt Nut	19 12	195 125	14 9
Drive plate x Crankshaft	83	850	61