0325G–01

TORQUE SPECIFICATION

Part Tightened		N·m	kgf·cm	ft·lbf
A/C compressor V belt tensioner	Nut A	28.5	291	21
A/C compressor V belt tensioner	Bolt B	5.9	60	52 in.·lbf
Fan and generator V belt	Bolt A	28.5	291	21
Fan and generator V belt	Bolt B	55	561	41
Fan and generator V belt	Bolt C	5.9	60	52 in.·lbf
Adjusting screw lock nut		29.5	300	22
Front side cover RH x Body		11.5	119	9
Front side cover LH x Body		11.5	119	9
Mudguard RH x Body		11.5	119	9
Mudguard LH x Body		11.5	119	9
Vacuum reservoir x Body		18	184	13
Rear arch x Frame		18	184	13
Fan x Water pump assy		11	112	8
Exhaust pipe assy front x Exhaust manifold		69	704	51
Ventilation pipe No. 2 x Engine assy		28.5	291	21
Propeller shaft assy x Transmission assy		74.5	760	55
A/C compressor assy x Compressor bracket		24.5	250	18
Radiator support No. 2 x Radiator		7.5	76.5	66 in.·lbf
Radiator assy x Frame		18	184	13
Intake air connector pipe x Body		18	184	13
Charge air cooler assy x Radiator assy		7.5	76.5	66 in.·lbf
Air hose assy x Body		18	184	13
Air hose No. 1 x Body		18	184	13
Floor shift cable transmission control shift x Transmission assy		17.5	178	13
Floor shift cable transmission control select x Transmission assy		17.5	178	13
Starter assy x Flywheel housing		154	1,570	113
Engine mounting x Frame		98	1,000	72
Clutch release cylinder assy x Transmission assy		11.8	120	9
Injection pipe x Injector assy		44	449	32
Injection pipe x Supply pump		44	449	32
Breather pipe x Intake manifold		28.5	291	21
Water by–pass pipe x Cylinder head	for union bolt	24.5	250	18
Water by–pass pipe x Cylinder head	for bolt	28.5	291	21
Venturi assy x Intake manifold		28.5	291	21
Bracket x Venturi assy		28.5	291	21
Turbo water pipe No. 1 x Turbocharger sub–assy		24.5	250	18
Turbine outlet elbow x Turbocharger sub–assy		36	367	27
Turbocharger sub–assy x Exhaust manifold		69	704	51
Intake pipe x Turbocharger sub–assy		28	286	21
Turbo oil outlet pipe x Turbocharger sub–assy		28.5	291	21
Turbo oil outlet pipe x Cylinder block		28.5	291	21
Turbo insulator No. 1 x Turbocharger sub–assy		28.5	291	21
Turbo oil inlet pipe sub–assy x Turbocharger sub–assy		24.5	250	18
Turbo oil inlet pipe sub–assy x Cylinder block		24.5	250	18
Turbo water pipe No. 1 x Cylinder block		24.5	250	18
Exhaust manifold x Cylinder head		59	602	44
Water inlet housing x Water outlet housing		28.5	291	21
ECT sensor x Water outlet housing		29.4	300	22
Oil pressure switch x Oil cooler assy		29.4	300	22
Oil cooler assy x Cylinder block		28.5	291	21

Part Tightened		N·m	kgf·cm	ft·lbf
Generator sub bracket x Cylinder block		125	1,275	92
Generator bracket x Cylinder block		55	561	41
Compressor bracket x Cylinder block		55	561	41
Intake manifold x Cylinder head		28.5	291	21
Water by–pass pipe x Timing chain or belt cover sub–assy		28.5	291	21
Crankshaft position sensor x Timing chain or belt cover sub–assy		12	122	9
Camshaft position sensor x Timing chain or belt cover sub–assy		12	122	9
Radiator pipe x Timing chain or belt cover sub–assy		18	184	13
Idler pulley bracket x Timing chain or belt cover sub–assy		55	561	41
Heater pipe x Timing chain or belt cover sub–assy		28.5	291	21
Water pump assy x Cylinder block		28.5	291	21
Vacuum pipe x Vacuum pump assy		24.5	250	18
Injection pump drive housing shaft oil pipe sub–assy x Vacuum pump assy		12.7	130	9
Vacuum pump assy x Timing chain or belt cover sub–assy		55	561	41
Fuel pipe support x Cylinder block		28.5	291	21
Common rail assy x Fuel pipe support		28.5	291	21
Timer cover x Supply pump assy		28.5	291	21
Supply pump x Timing chain or belt cover sub–assy		28.5	291	21
Supply pump drive gear x Supply pump assy		64	652	47
Fuel pipe No. 4 x Common rail assy		20	204	15
Fuel pipe No. 4 x Feed valve		24.5	250	18
Fuel pipe sub–assy x Supply pump assy		24.5	250	18
Vane pump hose x Vane pump assy		44	449	32
Thrust plate x Cylinder block		28.5	291	21
Timing chain or belt cover sub–assy x Front end plate		28.5	291	21
Crankshaft pulley x Crankshaft		519	5,294	383
Oil pan sub–assy x Cylinder block		28.5	291	21
Cylinder head x Cylinder block (1 to 18 head bolt)	1st 2nd	60 Turn 90°	612 Turn 90°	44 Turn 90°
Cylinder head x Cylinder block (19 to 22 head bolt)		55	561	41
Valve rocker shaft sub–assy No. 1 x Cylinder head		69	704	51
Flywheel housing x Cylinder block	(M14) (M8)	132 28.5	1,346 291	97 21
Flywheel sub–assy x Crankshaft		190	1,938	140