0316A–01

TORQUE SPECIFICATION

1KZ–TE:

Part Tightened		N·m	kgf·cm	ft·lbf
Compressor inlet elbow x Turbocharger sub–assy		19	195	14
Turbocharger sub–assy x Exhaust manifold		52	530	38
Turbo oil inlet pipe x Turbocharger sub–assy		19	195	14
Exhaust manifold x Cylinder head		52	530	38
Turbo oil inlet pipe x Cylinder block	Union bolt	26	260	19
	Bolt	12	125	9
Turbocharger stay		24	245	18
Turbine outlet elbow x Turbocharger sub–assy		39	390	28
Turbo water pipe sub–assy No. 1 x Turbocharger sub–assy	Nut	12	120	9
	Bolt	8	80	69 in.·lbf
Exhaust manifold insulator No. 1 x Exhaust manifold		6	65	56 in.·lbf
Turbo insulator No. 1 x Exhaust manifold		6	65	56 in.·lbf
Intercooler assy x Cylinder head		12	122	9
Intake air connector x Intercooler assy		10	100	7
Intercooler protector x Intercooler assy		8	82	71 in.·lbf
Turbo pressure sensor x Intercooler assy		8	82	71 in.·lbf
Gas filter bracket x Intercooler assy		8	82	71 in.·lbf

1KD–FTV:

Part Tightened		N·m	kgf·cm	ft·lbf
Inlet air temperature sensor x Intarcooler assy		29	300	22
Intarcooler assy x Cylinder head and Intake manifold	Bolt A	20	204	15
	Bolt B and C	12	122	9.0
Intake air connector x Intercooler assy		10	102	7.0
Air hose No. 1 x Intercooler assy and Diesel throttle body		6.0	61	53 in.·lbf
Intercooler protector x Intarcooler assy		6.0	61	53 in.·lbf
Turbo water pipe No. 1 x Turbocharger assy	Nut	12	122	9.0
	Bolt	8.0	82	71 in.·lbf
Compressor inlet elbow x Turbocharger assy		19	194	14
Turbo oil inlet pipe x Turobocharger assy		24	245	18
Turbocharger assy x Exhaust manifold		52	530	38
Exhaust manifold w/ Turbocharger assy x cylinder block	Nut A	52	530	38
Turbo oil inlet pipe x Cylinder block	Bolt B	12	122	9.0
	Bolt C	26	265	19
	Bolt D	24	245	18
Turbocharger assy x Turbine outlet elbow		39	398	29
Exhaust manifold heat insulator No. 1 x Exhaust manifold		12	122	9.0
Turbo insulator No. 1 x Turbocharger assy		12	122	9.0
TRANSMISSION oil filler tube sub–assy x Turbocharger assy and TRANSMISSION assy		12	122	9.0
Oil level gage guide x Water inlet		8.0	82	71 in.·lbf
Ventilation pipe x Cylinder head		20	204	15
Compressor mounting bracket No. 1 x Cylinder block		21	214	16
Compressor mounting bracket No. 1 x Idle pulley assy		45	459	33
Viscous heater bracket sub–assy x Cylinder head		47	479	35
Cooler compressor assy x Compressor mounting bracket No. 1		25	250	18
Viscous w/ magnet clutch heater assy x Viscous heater assy		45	459	33
Viscous heater assy x Viscous heater bracket No. 2		45	459	33
Intercooler protector x Intercooler assy		6.0	61	53 in.·lbf
Fan shroud x Radiator assy		5.0	51	44 in.·lbf
Fan w/fluid coupling assy x Water pump assy		18	184	13

Part Tightened	N·m	kgf·cm	ft·lbf
Radiator reserve tank x Radiator assy	5.0	51	44 in.·lbf
Engine under cover assy rear x Frame assy	29	296	21
Engine under cover sub–assy No. 1 x Frame assy	29	296	21