03166–02

TORQUE SPECIFICATION

3RZ–FE:

Part Tightened		N·m	kgf·cm	ft·lbf
Fuel delivery pipe sub–assy x Cylinder head sub–assy		21	210	15
Fuel pipe sub–assy No. 1 x Fuel delivery pipe sub–assy		29	300	22
Fuel pressure regulator assy x Fuel delivery pipe sub–assy		8.0	80	69 in.·lbf
EFI Fuel filter x Body		7.0	71	62 in.·lbf
Fuel tank plug x Fuel tank	3 door fuel tank 5 door fuel sub tank	6.5	66	57
Fuel tank to canister tube x Fuel tank	3 door fuel tank 5 door fuel sub tank	1.5	15	13
Fuel tank filler pipe x Fuel tank	3 door fuel tank 5 door fuel sub tank	3.0	31	27
Fuel suction tube w/ pump x Fuel tank	3 door fuel tank	3.5	36	31
Fuel sender gage x Fuel tank	3 door fuel tank 5 door fuel sub tank	1.5	15	13
Fuel tank vent tube x Fuel tank	5 door fuel sub tank	3.5	36	31
Fuel tank x Body		40	408	30
Fuel tank protector sub–assy No. 1 x Body	3 door fuel tank 5 door single tank	20	204	15
Fuel tank protector sub–assy No. 2 x Body	5 door fuel sub tank	20	204	15

5L–E:

Part Tightened		N·m	kgf·cm	ft·lbf
Nozzle holder and nozzle set x Cylinder head		64	650	47
Nozzle leakage pipe assy x Nozzle holder and nozzle set		30	300	22
Injection pipe set x Nozzle holder and nozzle set		25	250	18
Injection pipe set x Injection pump assy		25	250	18
Clamp x Injection pipe set		5	50	44 in.·lbf
Injection pump assy x Timing gear case		21	210	15
Injection pump stay No. 1 x Injection pump assy		26	270	19
Injection pump stay No. 1 x Cylinder block		26	270	19
Injection pump drive pulley x Injection pump assy		64	650	47
Fuel filter assy x Body		18	184	13
Fuel tank plug x Fuel tank	3 door fuel tank 5 door fuel sub tank	6.5	66	57
Fuel tank to canister tube x Fuel tank	3 door fuel tank 5 door fuel sub tank	1.5	15	13
Fuel tank filler pipe x Fuel tank	3 door fuel tank 5 door fuel sub tank	3.0	31	27
Fuel tank vent tube x Fuel tank	3 door fuel tank 5 door fuel sub tank	3.5	36	31
Fuel sender gage x Fuel tank	3 door fuel tank 5 door fuel sub tank	1.5	15	13
Fuel tank x Body		40	408	30
Fuel tank protector sub–assy No. 1 x Body	Single fuel tank	20	204	15
Fuel tank protector sub–assy No. 2 x Body	5 door fuel sub tank	20	204	15

1KZ–TE:

Part Tightened		N·m	kgf·cm	ft·lbf
Nozzle holder and nozzle set x Cylinder head		54	540	40
Nozzle leakage pipe assy x Nozzle holder and nozzle set		30	306	22
Injection pipe set x Nozzle holder and nozzle set		15	150	11
Pipe clamp x Cylinder head		6	65	53 in.·lbf
Injection or supply pump assy x Timing gear case		21	210	15
Injection pump stay x Cylinder block	Bolt A	21	210	15
	Bolt B	21	210	15
	Bolt C	32	330	24
Injection or supply pump assy x Drive gear nut		64	650	47
Camshaft timing pulley flange x Camshaft drive gear		13	130	9
Vane pump oil reservoir x Cylinder head		18	184	13
Fuel filter assy x Body		18	184	13
Fuel tank plug x Fuel tank	Sub tank	6.5	66	57
Fuel sender gage x Fuel tank	Sub tank	1.5	15	13
Fuel tank to canister tube x Fuel tank	Sub tank	1.5	15	13
Fuel tank vent tube x Fuel tank	Sub tank	3.5	36	31
Fuel tank filler pipe x Fuel tank	Sub tank	3.0	31	27
Fuel tank x Body		40	408	30
Fuel tank protector sub–assy No. 1 x Body		20	204	15
Fuel tank protector sub–assy No. 2 x Body	Sub tank	20	204	15

1KD–FTV:

Part Tightened		N·m	kgf·cm	ft·lbf
Fuel tank plug x Fuel tank	3 door	6.5	66	57
Fuel tank to canister tube x Fuel tank	3 door	1.5	15	13
Fuel tank filler pipe x Fuel tank	3 door	3.0	31	27
Fuel tank vent tube x Fuel tank	3 door	3.5	36	31
Fuel sender gage x Fuel tank	3 door	1.5	15	13
Fuel tank x Body		40	408	30
Fuel tank protector sub–assy No. 1 x Body		20	204	15
Fuel filter assy x Body		18	178	13
Nozzle holder clamp x Cylinder head		22	220	16
Nozzle leakage pipe x Injector assy	Hollow screw	16	163	12
	Union bolt	13	128	9.0
Nozzle leakage pipe assy No. 2 x Cylinder head	SST	21	214	16
Cylinder head x Cylinder head cover		9.0	92	80 in.·lbf
Injection pipe No. 2 x Injection pipe clamp No. 2 and No. 3		5.0	51	44 in.·lbf
Injection pipe x Injection assy and common rail		35	357	26
	for use with SST	32	326	24
Injection pipe x Injection pipe clamp No. 1		5.0	51	44 in.·lbf
E–VRV w/ bracket x Intake manifold		20	204	15
Intercooler protector x Intarcooler assy		6.0	61	53 in.·lbf
Nozzle leakage pipe assy No. 2 x Common rail and Cylinder head				
	Check valve	21	214	16
	Union bolt	13	129	9.0
	Bolt	13	129	9.0
Fuel inlet pipe x Common rail and Supply pump		35	357	26
	for use with SST	32	326	24
Supply pump x Supply gear set nut		103	1,050	76

Part Tightened	N·m	kgf·cm	ft·lbf
Supply pump stay x Supply pump and Cylinder block	21	214	16
Supply pump x Timing gear case	21	214	16
Pump drive shaft x Supply pump	31	316	23
Vane pump oil reservoir x Timing gear case assy and Intake manifold	18	184	13
Timing belt No. 1 cover x Timing belt No. 1 cover	6.0	61	53 in.·lbf
Water hose clamp x Cylinder head	18	184	13
Fanshroud x Radiator assy	5.0	51	44 in.·lbf
Fan w/ fluid coupling x Water pump assy	18	184	13
Radiator reserve tank x Radiator assy and Fanshroud	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
Fuel temperature sensor x Supply pump	22	225	16