SPECIFICATIONS 1VD-FTV INTAKE / EXHAUST TORQUE SPECIFICATIONS

## **SNORKEL AIR CLEANER**

Part Tightened	N*m	kgf*cm	in.*lbf
No. 1 air cleaner inlet bracket x No. 2 air cleaner inlet bracket	6.5	66	58
Cool air intake pipe x Body	6.5	66	58
No. 2 cool air intake duct x Body	6.5	66	58
Cool air inlet duct x No. 2 cool air intake duct	4.0	41	35
No. 2 air cleaner inlet bracket x Body	6.5	66	58

## INTAKE MANIFOLD

	Part Tightened	N*m	kgf*cm	ft.*lbf	in.*lbf
No. 2 intake	manifold x Cylinder head	21	214	15	
No. 1 intake	manifold x Starter hose bracket x Cylinder head	21	214	15	
No. 1 water b	y-pass pipe x Cylinder block	58.8	600	43	
No. 1 water b	y-pass pipe x Cylinder head	10	102	7	
No. 3 intake intake intake	manifold x No. 1 intake manifold and No. 2	21	214	15	
Intake pipe x	No. 3 intake manifold	21	214	15	
Intake pipe x	No. 4 EGR pipe	21	214	15	
No. 3 EGR pip	pe x No. 4 EGR pipe	21	214	15	
Fuel filter to i	njection pipe sub-assembly x Cylinder head	10	102	7	
No. 5 fuel pipe sub-	for union bolt	12.3	125	9	
assembly x Fuel supply pump	for nut	10	102	7	
No. 2 injectio	n pipe clamp x No. 5 fuel pipe sub-assembly	5.0	51		44
No. 6 injection pipe sub- assembly x Common rail	Specified tightening torque	34	347	25	
	for use with union nut wrench	29.1	297	21	
Injection pipe LH x Common rail and fuel injection	Specified tightening torque	34	347	25	
	for use with union nut wrench	29.1	297	21	
Injection pipe RH x	Specified tightening torque	34	347	25	
Common rail and fuel injection	for use with union nut wrench	29.1	297	21	
No. 3 interco	oler support bracket x Intake pipe	21	214	15	
Engine wire x	Engine Engine	10	102	7	
Fuel pump m	otor wire x No. 3 intake manifold	10	102	7	
No. 4 water b	y-pass pipe x Cylinder head	10	102	7	
Vacuum pump to connector tube	for bolt A	21	214	15	
	for bolt B	10	102	7	
No. 2 engine	wire x Cylinder head	13	133	10	
Vacuum reservoir	for bolt A	21	214	15	
connect tube x Cylinder head	for bolt B	10	102	7	
No. 4 water b	y-pass pipe x Cylinder head	10	102	7	
	oil dipstick guide x Cylinder head cover	10	102	7	

### **EXHAUST MANIFOLD W/ TURBOCHARGER**

	Part Tightened	N*m	kgf*cm	ft.*lbf	in.*lbf
Stud bolt x Tu	urbocharger	20	204	15	
Inlet compres	ssor elbow x Turbocharger	21	214	15	
No. 1 turbo o	il pipe x Turbocharger	10	102	7	
Inlet turbo oil pipe sub-	for union bolt	24	245	18	
assembly x Turbocharger	for bolt	10	102	7	
Exhaust mani	fold RH x Cylinder head RH	36	367	27	
Turbocharger	x Exhaust manifold LH	69	704	51	
Exhaust mani	fold LH x Cylinder head LH	36	367	27	
Exhaust crossover pipe sub- assembly x No. 1 stay	Bolt labeled A	43	438	32	
Exhaust crossover pipe sub- assembly x No. 2 stay	Bolt labeled E	50	510	37	
No. 1 stay x Cylinder head RH	Bolt labeled B	43	438	32	
No. 2 stay x Cylinder head LH	Bolt labeled D	50	510	37	
Exhaust crossover pipe sub- assembly x Exhaust manifold LH and RH	Nut labeled C	47	479	35	
No. 1 turbo w Cylinder head	rater pipe sub-assembly x Turbocharger x	10	102	7	
No. 1 air tube	e x Turbocharger	21	214	15	
No. 3 air hose	e x Hose clamp	6.3	64		56
No. 2 air tube	e x Hose clamp	6.3	64		56
No. 2 air tube	e x Cylinder block	21	214	15	
No. 1 exhaus	t manifold heat insulator x Exhaust manifold RH	25	255	18	
No. 2 exhaus	t manifold heat insulator x Exhaust manifold LH	25	255	18	
	be bracket x Vehicle body tioning System)	5.4	55		48
Fuel tube bra	cket x Vehicle body	5.4	55		48
Monolithic co	nverter assembly x Outlet turbine elbow	47	479	35	
Center conve	rter protector stay x Transmission assembly	43	438	32	
Front exhaust assembly	t pipe assembly x Monolithic converter	43	438	32	

#### **INTERCOOLER**

Part Tightened	N*m	kgf*cm	ft.*lbf	in.*lbf
Intercooler protector x Intercooler assembly	8.0	82		71
Intercooler support bracket x Intercooler assembly	21	214	15	
No. 1 cool inlet x Intercooler assembly	21	214	15	
No. 2 cool inlet x Intercooler assembly	21	214	15	
No. 1 air hose x Intercooler assembly	5.0	51	4	
Outlet heater water pipe B x Intercooler assembly	21	214	15	

## **EXHAUST PIPE (for 5 Door)**

Part Tightened	N*m	kgf*cm	ft.*lbf	in.*lbf

Part Tightened	N*m	kgf*cm	ft.*lbf	in.*lbf
Upper catalytic converter insulator x Monolithic converter assembly	21	214	15	
Monolithic converter assembly x Outlet turbine elbow	47	479	35	
Center converter protector stay x Transmission assembly	43	438	32	
Center converter protector stay x Monolithic converter assembly	43	438	32	
Exhaust pipe support cushion x Front exhaust pipe assembly	5.5	56		49
Exhaust pipe support cushion x Vehicle body	5.5	56		49
Front exhaust pipe assembly x Monolithic converter assembly	43	438	32	
Exhaust pipe support cushion x Tailpipe assembly	5.5	56		49
Tailpipe assembly x Front exhaust pipe assembly	48	489	35	

# **EXHAUST PIPE** (except 5 Door)

Part Tightened	N*m	kgf*cm	ft.*lbf	in.*lbf
Upper catalytic converter insulator x Monolithic converter assembly	21	214	15	
Monolithic converter assembly x Outlet turbine elbow	47	479	35	
Center converter protector stay x Transmission assembly	43	438	32	
Center converter protector stay x Monolithic converter assembly	43	438	32	
Exhaust pipe support cushion x Front exhaust pipe assembly (for Double Cab)	5.5	56		49
Exhaust pipe support cushion x Vehicle body	5.5	56		49
Front exhaust pipe assembly x Monolithic converter assembly	43	438	32	
Exhaust pipe support cushion x Support bracket	5.5	56		49
Exhaust pipe support cushion x Muffler clamp bracket	5.5	56		49
Exhaust pipe support cushion x Center exhaust pipe assembly (except Double Cab)	5.5	56		49
Center exhaust pipe assembly x Front exhaust pipe assembly	48	489	35	
Exhaust pipe support cushion x Tailpipe assembly	5.5	56		49
Tailpipe assembly x Center exhaust pipe assembly	48	489	35	

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