STANDARD BOLT HOW TO DETERMINE BOLT STRENGTH

Bolt Type			-			
Hexagon Head Bolt		I	Stud Bolt	Weld Bolt	Class	
Normal Recess Bolt	1	Deep Recess Bolt				
4	No Mark	No Mark	No Mark		4T	SS
5					5T	
6	w/ Washer	w/ Washer	۲		6T	
7					7T	
	8		() () () ()		8T	
	9				9Т	
	0				10T	
	1				11T	

SPECIFIED TORQUE FOR STANDARD BOLTS

Class	Diameter Pi	Pitch	Specified torque					
	(mm)	(mm)	Hexagon head bolt			Hexagon	flange bolt	
			N*m	kgf*cm	ft.*lbf	N*m	kgf*cm	ft.*lbf
4T	6	1	5	55	48 in.*lbf	6	60	52 in.*lbf
	8	1.25	12.5	130	9	14	145	10
	10	1.25	26	260	19	29	290	21
	12	1.25	47	480	35	53	540	39
	14	1.5	74	760	55	84	850	61
	16	1.5	115	1,150	83	-	-	-
5T	6	1	6.5	65	56 in.*lbf	7.5	75	65 in.*lbf
	8	1.25	15.5	160	12	17.5	175	13
	10	1.25	32	330	24	36	360	26
	12	1.25	59	600	43	65	670	48
	14	1.5	91	930	67	100	1,050	76
	16	1.5	140	1,400	101	-	-	-
6T	6	1	8	80	69 in.*lbf	9	90	78 in.*lbf
	8	1.25	19	195	14	21	210	15
	10	1.25	39	400	29	44	440	32
	12	1.25	71	730	53	80	810	59
	14	1.5	110	1,100	80	125	1,250	90
	16	1.5	170	1,750	127	-	-	-
7T	6	1	10.5	110	8	12	120	9
	8	1.25	25	260	19	28	290	21
	10	1.25	52	530	38	58	590	43
	12	1.25	95	970	70	105	1,050	76
	14	1.5	145	1,500	108	165	1,700	123
	16	1.5	230	2,300	166	-	-	-
8T	8	1.25	29	300	22	33	330	24
	10	1.25	61	620	45	68	690	50
	12	1.25	110	1,100	80	120	1,250	90
9T	8	1.25	34	340	25	37	380	27
	10	1.25	70	710	51	78	790	57
	12	1.25	125	1,300	94	140	1,450	105
10T	8	1.25	38	390	28	42	430	31
	10	1.25	78	800	58	88	890	64
	12	1.25	140	1,450	105	155	1,600	116
11T	8	1.25	42	430	31	47	480	35
	10	1.25	87	890	64	97	990	72
	12	1.25	155	1,600	116	175	1,800	130

HOW TO DETERMINE NUT STRENGTH

Nut Type	Γ		
Present Standard Hexagon Nut	Old Standard Hexagon Nut	I	Class
	Cold Forging Nut	Cutting Processed Nut	
No Mark			4N
\bigcirc			
No Mark (w/ Washer)	No Mark (w/ Washer)	No Mark	5N (4T)
\bigcirc	\bigcirc		
			6N
	\bigcirc		7N (5T)
			8N
		No Mark	10N (7T)
			11N
			12N

HINT:

- *: Nut with 1 or more marks on one side surface of the nut.
- Use the nut with the same number of the nut strength classification or greater than the bolt strength classification number when tightening parts with a bolt and nut. Example:
- Bolt = 4T
- Nut = 4N or more

1NZ-FE ENGINE CONTROL SYSTEM

SERVICE DATA

Camshaft timing oil control valve assembly Standard resistance		6.9 to 7.9 Ω at 20 °C (68°F)
Camshaft position sensor	Standard resistance	1,630 to 2,740 Ω at cold 2,065 to 3,225 Ω at hot
Crankshaft position sensor	Standard resistance	985 to 1,600 Ω at cold 1,265 to 1,890 Ω at hot
Engine coolant temperature sensor	Standard resistance	2.32 to 2.59 k Ω Approximately 20°C (68°F) 0.310 to 0.326 k Ω Approximately 80°C (176°F)
Throttle with motor body assembly	Standard resistance 1 (M-) - 2 (M+)	0.3 to 100 Ω at 20°C (68°F)
EFI (20A) fuse	Standard resistance 1 - 2	Below 1 Ω
Knock sensor	Standard resistance	120 to 280 kΩ at 20°C (68°F)
	A1 - C1	Below 1 Ω
	A1 - A4	10 k Ω or higher
	A4-C1	10 k Ω or higher
Integration relay	A1 - A4	Below 1 Ω (Apply battery voltage between terminals A2 and A3)
	A4 - C1	Below 1 Ω (Apply battery voltage between terminals A2 and A3)
Accelerator pedal position No. 1 standard voltage	Standard resistance Accelerator pedal released Accelerator pedal depressed	0.5 to 1.1 V 2.6 to 4.5 V
Accelerator pedal position No. 2 standard voltage	Standard resistance Accelerator pedal released Accelerator pedal depressed	1.2 to 2.0 V 3.4 to 5.0 V

TORQUE SPE	CIFICATIONS
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Part tightened	N*m	kgf*cm	ft.*lbf
Camshaft timing oil control valve assembly x Cylinder head assembly	7.5	76	66 in.*lbf
Fan belt adjusting bar x Oil pump assembly	11	112	8.1
Camshaft position sensor x Cylinder head assembly	8.0	82	71in.*lbf
Crankshaft position sensor x Oil pump assembly	7.5	76	66 in.*lbf
Engine coolant temperature sensor x Cylinder head assembly	20	204	15
Throttle with motor body assembly x Intake manifold	9.0	92	80 in.*lbf
Water filler sub-assembly x Throttle with motor body assembly	7.5	76	66 in.*lbf
Throttle with motor body assembly x Wire harness with bracket	9.0	92	80 in.*lbf
Air cleaner cap sub-assembly x Air cleaner hose No. 1	3.0	31	27 in.*lbf
Knock sensor x Cylinder block assembly	20	204	15
Intake manifold x Cylinder block assembly	30	304	22
ECM x body	8.0	82	71
Accelerator pedal assembly x body	5.4	55	48
Battery negative terminal x Battery negative cable	5.4	55	48

SERVICE DATA

New V belt deflection		7.0 to 8.5 mm (0.28 to 0.33 in.)
Used V belt deflection		11.0 to 13.0 mm (0.43 to 0.51 in.)
New V belt tension		539 to 637 N (55 to 65 kgf, 121 to 143 lb)
Used V belt tension		245 to 392 N (25 to 40 kgf, 55 to 88 lb)
Ignition timing		8 to 12 °BTDC
Idle speed	Manual transaxle Automatic transaxle	600 +- 50 rpm 700 +- 50 rpm
Compression pressure		1,471 kPa (15.0 kgf/cm 2213 psi)
Minimum pressure		1,079 kPa (11.0 kgf/cm 2156 psi)
Difference between each cylinder		98 kPa (1.0 kgf/cm 214 psi)
Valve clearance (cold)	Intake Exhaust	0.15 to 0.25 mm (0.006 to 0.010 in.) 0.25 to 0.35 mm (0.010 to 0.014 in.)
Chain elongation	Maximum	123.2 mm (4.850 in.)
Camshaft timing gear diameter (w/ chain)	Minimum	96.2 mm (3.787 in.)
Camshaft timing sprocket diameter (w/ chain)	Minimum	96.2 mm (3.787 in.)
Chain tensioner slipper thickness	Maximum	1.0 mm (0.039 in.)
Chain vibration damper thickness	Maximum	1.0 mm (0.039 in.)
Cylinder head set holt length	Standard	143.5 mm (5.6496 in.)
	Maximum	144.2 mm (5.6772 in.)
Cylinder head warpage	Maximum cylinder block surface Intake manifold surface Exhaust manifold surface	0.05 mm (0.0020 in.) 0.10 mm (0.0039 in.) 0.10 mm (0.0039 in.)
Intake valve overall length	Standard Minimum	89.25 mm (3.5138 in.) 88.75 mm (3.4941 in.)
Intake valve stem diameter		4.970 to 4.985 mm (0.1957 to 0.1963 in.)
Intake valve margin thickness	Standard Minimum	1.0 mm (0.039 in.) 0.5 mm (0.020 in.)
Exhaust valve overall length	Standard Minimum	87.90 mm (3.4606 in.) 87.40 mm (3.4409 in.)
Exhaust valve stem diameter		4.965 to 4.980 mm (0.1955 to 0.1961 in.)
Exhaust valve margin thickness	Standard Minimum	1.15 mm (0.045 in.) 0.5 mm (0.020 in.)
Valve spring free length		45.05 to 45.15 mm (1.774 to 1.778 in.)
Valve spring deviation	Maximum	1.6 mm (0.063 in.)
Valve spring angle (reference)	Maximum	2°
Valve spring installed tension at 32.5 mm (1.280 in.)		149 to 165 N (15.2 to 16.8 kgf, 33.5 to 37.1 lbf)
Valve spring working tension at 23.9 mm (0.941 in.)	Maximum	286 to 316N (29.1 to 32.2 kgf, 64.2 to 71.0 lbf)
Bushing inside diameter		5.010 to 5.030 mm (0.1972 to 0.1980 in.)
	Standard intake Standard exhaust	0.025. to 0.060 mm (0.0010 to 0.0024 in.) 0.030. to 0.065 mm (0.0012 to 0.0026 in.)
valve guide pushing on clearance	Maximum intake Maximum exhaust	0.08 mm (0.0032 in.) 0.10 mm (0.039 in.)
Valve guide bush diameter	Standard O/S	9.685 to 9.706 mm (0.3813 to 0.3821 in.) 9.735 to 9.755 mm (0.3833 to 0.3841 in.)
Bushing Protrusion height		9.0 to 9.4 mm (0.354 to 0.370 in.)
Lifter diameter		30.966 to 30.976 mm (1.291 to 1.2195 in.)

	Lifter bore diameter		31.000 to 31.025 mm (1.2205 to 1.2215 in.)
	Lifter oil clearance	Standard Maximum	0.024 to 0.059 mm (0.0009 to 0.0023 in.) 0.1 mm (0.0039 in.)
	Camshaft circle runout	Maximum	0.03 mm (0.0012 in.)
	Camshaft cam lobe height	Standard Minimum	44.617 to 44.717 mm (1.7566 to 1.7605 in.) 43.16 mm (1.6992 in.)
	Camshaft No. 1 journal diameter		34.449 to 34.465 mm (1.3563 to 1.3569 in.)
	Camshaft other journals diameter		22.949 to 22.965 mm (0.9035 to 0.9041 in.)
	No. 2 camshaft circle runout	Maximum	0.03 mm (0.0012 in.)
SS	No. 2 camshaft cam lobe height	Standard Minimum	44.666 to 44.766 mm (1.7585 to 1.7624 in.) 44.52 mm (1.7528 in.)
	No. 2 camshaft No. 1 journal diameter		34.449 to 34.465 mm (1.3563 to 1.3569 in.)
	No. 2 camshaft other journal diameter		22.949 to 22.965 mm (0.9035 to 0.9041 in.)
	Camshaft thrust clearance	Standard Maximum	0.040 to 0.095 mm (0.0016 to 0.0037 in.) 0.11 mm (0.0043 in.)
	Camshaft oil clearance	Standard Maximum	0.035 to 0.072mm (0.0014 to 0.0028 in.) 0.08 mm (0.0031 in.)
	Camshaft bearing cap setting ring pin protrusion height		8.5 to 9.5 mm (0.335 to 0.374 in.)
	Connection rod thrust clearance	Standard Maximum	0.16 to 0.36 mm (0.0063 to 0.0142 in.) 0.36 mm (0.0142 in.)
	Connecting rod oil clearance	Standard Maximum	0.012 to 0.038 mm (0.00047 to 0.0015 in.) 0.058 mm (0.0028 in.)
	Crankshaft thrust clearance	Standard Maximum	0.09 to 0.19 mm (0.0035 to 0.0075 in.) 0.03 mm (0.0118 in.)
	Cylinder block warpage	Maximum	0.05 mm (0.0020 in.)
	Cylinder bore diameter	Standard Difference limit	75.000 to 75.013 mm (2.9528 to 2.9533 in.) 0.10 mm (0.0039 in.)
	Piston diameter		74.935 to 74.945 mm (2.9502 to 2.9506 in.)
	Piston pin hole diameter at 20°C (68°F)		18.013 to 18.016 mm (0.7092 to 0.7093 in.)
	Piston pin diameter		18.001 to 18.004 mm (0.7087 to 0.7088 in.)
	Piston pin oil clearance	Standard Maximum	0.009 to 0.015 mm (0.0004 to 0.0006 in.) 0.050 mm (0.0020 in.)
	Piston clearance	Standard	0.045 to 0.068 mm (0.0018 to 0.0027 in.)
	Connecting misalignment	Maximum	0.05 mm (0.0020 in.) per 100 mm (3.94 in.)
	Connecting rod twist	Maximum	0.05 mm (0.0020 in.) per 100 mm (3.94 in.)
	Piston ring groove clearance	No. 1 No. 2	0.03 to 0.07 mm (0.0012 to 0.0028 in.) 0.02 to 0.06 mm (0.0008 to 0.0024 in.)
	Piston ring end gap	Standard No. 1 No. 2 Oil (Side rail) Maximum No. 1 No. 2 Oil (Side rail)	0.25 to 0.35 mm (0.0098 to 0.0138 in.) 0.35 to 0.50 mm (0.0138 to 0.0197 in.) 0.10 to 0.35 mm (0.0039 to 0.0138 in.) 0.91 mm (0.0358 in.) 1.60 mm (0.0417 in.) 0.82 mm (0.0323 in.)
	Connecting rod bolt diameter	Standard Maximum	6.6 to 6.7 mm (0.260 to 0.264 in.) 6.4 mm (0.252 in.)
	Crankshaft circle runout	Maximum	0.03 mm (0.0012 in.)
	Crankshaft main journal diameter		45.988 to 46.000 mm (1.8106 to 1.8110 in.)
	Crankshaft main journal taper and out- of-round	Maximum	0.02 mm (0.0008 in.)
	Crank pin diameter		39.992 to 40.000 mm (1.5745 to 1.5748 in.)
	Crank pin taper and out-of- round	Maximum	0.02 mm (0.0008 in.)
	Crankshaft timing sprocket diameter (w/ chain)	Standard Minimum	51.72 mm (2.0362 in.) 50.5 mm (1.988 in.)
	Crankshaft bearing cap set bolt diameter	Standard Minimum	7.3 to 7.5 mm (0.287 to 0.295 in.) 7.2 mm (0.283 in.)

Cronkohoft oil degrappo	Standard	0.01 to 0.023 mm (0.0004 to 0.0009 in.)
Clairkshall on clearance	Maximum	0.07 mm (0.0028 in.)

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Part tightened	Part tightened		kgf*cm	ft.*lbf
Spark plugs x Cylinder head assembly		18	184	13
Camshaft bearing cap No. 2 x Cylinder head assembly		13	129	9.4
Camshaft bearing cap No. 1 x Cylinder head assembly		23	235	17
Camshaft No. 2 x Camshaft timing sprocket		64	653	47
Screw plug x Oil pump assembly		5	153	11
Chain vibration damper No. 1 x Cylinder head & block		9.0	92	80 in.*lbf
Chain tensioner slipper x Cylinder block assembly		9.0	92	80 in.*lbf
Camshaft timing gear assembly x Camshaft		64	653	47
	Bolt A	10	102	7.4
	Bolt B	4.0	41	35 in.*lbf
Stud bolt x Cylinder head assembly	Bolt C	10	102	7.4
	Bolt D	9.0	92	80 in.*lbf
Taper screw plug x Cylinder head assembly	1	30	306	22
Taper screw plug x Cylinder head assembly		44	449	33
Fuel delivery pipe subassembly x Cylinder head	Bolt A	19	194	14
assembly	Bolt B	9.0	92	80 in.*lbf
Cylinder head assembly x Harness bracket		13	131	9.5
Engine coolant temperature sensor x Cylinder head asse	embly	20	204	15
Camshaft position sensor x Cylinder head assembly		8.0	82	71 in.*lbf
Booster vacuum tube x Cylinder head assembly		9.0	92	80 in.*lbf
Exhaust manifold x Cylinder head assembly		27	275	20
Exhaust manifold heat insulator No. 1 x Exhaust manifol	d	8.0	82	71 in.*lbf
	1st	29	300	22
Cylinder head assembly x Cylinder block assembly	2nd 3rd	Turn 90° Turn 90°	Turn 90° Turn 90°	Turn 90° Turn 90°
Manifold support bracket x Cylinder block & exhaust ma	nifold	44	449	33
Exhaust front nine assembly x Exhaust manifold		43	439	32
Cylinder head assembly x Wire harness		13	133	10
Cylinder head assembly x Water by-pass pipe No. 1		90	92	80 in *lbf
Oil level gauge quide x Cylinder block assembly		90	92	80 in *lbf
Intake manifold x Cylinder head assembly		30	306	22
Water filler sub-assembly x Throttle with motor body ass	ombly	7.5	76	66 in *lbf
Cylinder block accombly x Crankshaft bearing can	embly	22	224	16
	Dolt A	22 E.O	224	10 44 in *lbf
Stud bolts x Cylinder block assembly	Bolt A Bolt B	5.0	51	44 in. 101 44 in. 101
	Bolt C	11	112	8.1
	Bolt D	5.0	51	44 in.*lbf
Connecting rod assembly x Connecting rod cap		15	153	11
Oil pan sub-assembly x Stud bolt		5.0	51	44 in.*lbf
Cylinder block assembly x Oil pan sub-assembly		24	245	18
Oil pan sub-assembly x Oil strainer		11	112	8.1
Oil pan sub-assembly x Oil pan sub-assembly No. 2		9.0	92	80 in.*lbf
Oil pan sub-assembly No. 2 x Drain plug		38	382	28
Oil pan sub-assembly x Oil filter union		30	306	22
Cylinder head assembly x Camshaft position sensor		8.0	82	71 in.*lbf
Cylinder block assembly x Chain tensioner assembly No	. 1	9.0	92	80 in.*lbf
	Bolt A	32	326	24
oil pump assembly x Cylinder head & block	Bolt B	11	112	8.1
	Nut D	24	245	18
Bolt E		24	245	18

Part tightened		N*m	kgf*cm	ft.*lbf]
Oil pump assembly x Water pump assembly		11	112	8.1	
Transverse engine mounting bracket x Cylinder head & b	55	561	41		
Water pump assembly x Pump pulley		15	153	11	
Crankshaft damper sub-assembly x Crankshaft		128	1305	95	
Camshaft timing oil control valve x Cylinder head assemi	bly	7.5	76	66 in.*lbf	
Cylinder head cover sub-assembly x Cylinder head asse	mbly	10	102	7.0	
Ventilation valve sub-assembly x Cylinder head cover su	b-assembly	27	275	20	
Crankshaft position sensor x Oil pump assembly		7.5	76	66 in.*lbf	00
Water inlet x Cylinder block assembly		9.0	92	80 in.*lbf	33
Oil pressure switch x Cylinder block assembly		15	153	11	
Knock sensor x Cylinder block assembly		20	204	15	
Front wheel hub nut		103	1050	912	
Battery terminal x Cable		5.4	55	48 in.*lbf	
Battery x Battery clamp		3.5	36	31 in.*lbf	
Cowl top panel outer x Body		6.5	66	57 in.*lbf	
Air cleaner hose No.1 x Throttle with motor body assemb	bly	4.0	41	35 in.*lbf	
Air cleaner case with air cleaner inlet No.1 x Air cleaner	bracket	7.8	80	69 in.*lbf	
Air cleaner bracket x Body		19	194	14	
Battery carrier x Body	17	173	13		
Drive plate and torque converter clutch setting bolt x Drive plate and ring gear sub-assembly		27	275	20	
	Bolt A	70	714	52	
Front suspension crossmember x Body	Bolt B	160	1631	118	
	Bolt C	95	969	70	
	Bolt A	45	459	33	
Engine mounting insulator RH x Body (for Hatchback)	Bolt B	52	530	38	
Engine mounting insulator RH x Body (for Sedan)		52	530	38	
Engine mounting insulator LH x Engine mounting bracke	t LH	52	530	38	
Front suspension crossmember sub-assembly x Engine control rod	moving	120	1224	89	
Oxygen sensor wiring bracket x Cylinder head sub-asser	mbly	60	612	44	
Radio setting condenser x Cylinder head sub-assembly		40	408	30	
Water filler sub-assembly x Radiator sub-assembly		7.5	76	66 in.*lbf	
	1 st	49	500	38	
Flywheel sub-assembly x Crankshaft	2 nd	Turn 90°	Turn 90°	Turn 90°	
Automatic transaxle assembly x Engine block sub-assembly		30	301	22	
Drive plate and ring gear sub-assembly x Crankshaft	88	900	65		
Water by-pass pipe No.1 x Cylinder head sub-assembly sub-assembly	9.0	92	80 in.*lbf		
Booster vacuum tube x Cylinder head sub-assembly		9.0	92	80 in.*lbf	1
Wire harness clamp bracket x Cylinder head sub-assem	bly	10	102	89 in.*lbf	
Drive shaft heat insulator sub-assembly x Cylinder block assembly	sub-	18	183	13	

1NZ-FE FUEL SERVICE DATA

Fuel pressure	Standard fuel pressure	304 to 343 kPa (3.1 to 3.5 kgf/cm ² , 44.1 to 49.7 psi)
Fuel pressure : at fuel while the engine idles	Standard fuel pressure	304 to 343 kPa (3.1 to 3.5 kgf/cm ² , 44.1 to 49.7 psi)
Fuel pressure : at fuel pressure remains for 5 minutes after engine has stopped	Standard fuel pressure	147 kPa (1.5 kgf/cm ² , 21 psi) or more
	Standard resistance	11.6 to 12.4 Ωat 20°C (68°F)
Fuel injector assembly	Injection volume	47 to 58 cm ³ (2.9 to 3.5 cu in.) per 15 seconds Connect
	Difference between each injector	11 cm ³ (0.6 cu in.) or less
	Fuel drop	1 drop or less every 12 minutes
Fuel pump	Standard resistance	0.2 to 3.0 Ω at 20°C (68°F)

Part tightened		N*m	kgf*cm	ft.*lbf
Fuel delivery pipe sub-assembly x Cylinder head assembly	bolt A bolt B	19 9.0	194 92	14 80 in.*lbf
Cylinder head cover sub-assembly x Cylinder head assembly		10	102	7.0
Cylinder head cover sub-assembly x Wire harness bracket		13	133	9.6
			•	•
Fuel tank assembly x Floor panel		14	146	10
Fuel tank cover vent case sub-assembly x Floor panel		5.4	55	48 in.*lbf
Front heat insulator No. 4 x Floor panel		5.4	55	48 in.*lbf
Battery negative battery x Battery negative cable		5.4	55	48 in.*lbf



1NZ-FE EMISSION CONTROL

SERVICE DATA

	VSV	Standard resistance 1 - 2	23 to 26 Ω at 20°C (68°F)
	Air fuel ratio sensor	Standard resistance 1 - 2 1 - 4	1.8 to 3.4 Ω at 20°C (68°F) 10 kΩ or higher
)	Heated oxygen sensor	Standard resistance 1 - 2 1 - 4	11 to 16 Ω at 20°C (68°F) 10 kΩ or higher



Part Tightened	N*m	kgf*cm	ft.*lbf
Canister x Floor assembly	19	194	14
Ventilation valve x Cylinder head cover sub-assembly	27	275	20
Air fuel ratio sensor x Exhaust manifold assembly	44	449	32
Heated oxygen sensor x Front exhaust pipe	44	449	32
Battery negative terminal x Battery negative cable	5.4	55	48 in.*lbf

Minimum length Front side	40.5 mm (1.594 in.)
Minimum length Rear side	38.5 mm (1.516 in.))

Part Tightened	N*m	kgf*cm	ft.*lbf
Exhaust front pipe assembly x Exhaust manifold	43	439	32
Heated oxygen sensor (for sensor 2) x Exhaust front pipe assembly	44	449	32
Battery negative terminal x Battery negative cable	5.4	55	48 in.*lbf

1NZ-FE COOLING SERVICE DATA

Thormostat	Valve opening temperature	80 to 84°C (176 to 183°F)
memostat	Valve lift	8.5 mm (0.335 in.) or more at 95°C (203°F)
	Standard resistance B5 - B8	10 k Ω or higher
Cooling fan relay No.2	Standard resistance B5 - B8	Below 1 Ω (Apply battery voltage between terminals B6 and B7)
Cooling fan motor	w/ A/C	7.3 to 9.3A (at 12V)
	w/o A/C	5.2 to 8.2A (at 12V)
	3-4	Below 1Ω
	3-4(When battery voltage applied to terminals 1 and 2)	10K Ω or higher
	3-5	10K Ω or higher
	3-5 (When battery voltage applied to terminals 1 and 2)	Below 1Ω
Radiator cap sub-assembly	Standard valve (for brand new cap)	93.3 to 122.7 kpa (0.95 to 1.25 kgf/cm ² , 13.5 to 17.8 psi)
	Minimum standard valve (after using cap)	78.5 kpa (0.8 kgf/cm ² , 11.4 psi)
Cooling fan resistor	at 20°C (68°F)	1.17 to 1.43 Ω

Part tightened	N*m	kgf*cm	ft.*lbf
Water pump assembly x Oil pump assembly	11	112	8.1
Water pump pulley x Water pump assembly	15	153	11
Water inlet x Radiator hose	9.0	92	80 in.*lbf
Negative battery terminal x Cable	5.4	55	48 in.*lbf
Air cleaner hose No.1 x Throttle with motor body assembly	4.0	41	35 in.*lbf
Air cleaner case with air cleaner inlet No.1 x Air cleaner bracket	7.8	80	69 in.*lbf
Hood lock assembly x Radiator support sub-assembly upper	7.5	76	66 in.*lbf
Radiator support sub-assembly upper x Body	5.5	56	49 in.*lbf
Cooling fan resistor x Body	5.1	52	45 in.*lbf

oil pressure	Standard oil pressure	29 kPa (0.3 kgf/cm ² , 4.3 psi) or more at idling 150 to 550 kPa (1.5 to 5.6 kgf/cm ² , 22 to 80 psi) or more at 3,000 rpm
Oil pump rotor set	Standard tip clearance Maximum tip clearance Standard body clearance Maximum body clearance	0.060 to 0.180 mm (0.0024 to 0.0071 in.) 0.28 mm (0.0110 in.) 0.250 to 0.325 mm (0.0098 to 0.0128 in.) 0.425 mm (0.0167 in.)

	Part tightened N		Kgi cili	IC. 101
Oil pressure switch x Cylinder block assembly	ylinder block assembly 1		153	11
Oil pump cover x Oil pump relief valve plug		25	255	18
oil pump cover x Oil pump assembly	Bolt Screw	8.8 10	90 105	78 in.*lbf 7.6
Oil pump assembly x Cylinder head & block	Bolt A Bolt B Bolt C Nut D Bolt E	32 11 11 24 24	326 112 112 245 245	24 8.1 8.1 18 18
Transverse engine engine mounting bracket x Cylinder block	assembly	5	561	41
Crankshaft damper sub-assembly x Crankshaft		128	1,305	95
Engine mounting insulator sub-assembly RH x Transverse engine engine mounting bracket & Body (for Hatchback)	Bolt A Bolt B Nut	45 52 52	459 530 530	33 38 38
Engine mounting insulator sub-assembly RH x Transverse en mounting bracket & Body (for Sedan)	gine engine	52	530	38
Oil pan drain plug		37.5	382	27.6
Oil filter sub-assembly		13	133	9.5
Oil pan drain plug		37.5	382	27.6
Oil filter sub-assembly		13	133	9.5

S

1NZ-FE IGNITION

SERVICE DATA

		Standard resistance	10 M Ωor more
		Recommended spark plug	SK16R 11 DENSO made IFR5A 11 NGK made
	Spark plug	Maximum electrode gap	1.3 mm (0.051 in.) for used spark plug
S		Electrode gap	1.0 to 1.1mm (0.039 to 0.043 in.) for new spark plug

Part tightened	N*m	kgf*cm	ft.*lbf
Spark plugs x Cylinder head assembly	18	184	13
Ignition coil x Cylinder head cover	9.0	92	80 in.*lbf
Cylinder head cover No. 2 x Cylinder head cover	7.0	71	62 in.*lbf

SS-15

1NZ-FE STARTING SERVICE DATA

for 0.8 kW

Starter assembly	Standard current	90 A or less at 11.5 V
Starter relay	Standard resistance	Below 1 Ω (when battery voltage applied to terminals 1 and 2)
	5-5	10 k Ω or higher
	Standard registeres	Below 1 Ω
	3 - 4	10 k Ω or higher (when battery voltage applied to terminals 1 and 2)
ACC cut relay	Standard resistance	Below 1 Ω (when battery voltage applied to terminals 1 and 2)
		10 k Ω or higher
AM2 fuse	Standard resistance 1 - 2	Below 1 Ω
	Standard resistance B1 - C1	Below 1 Ω
IG2 relav		10 k Ω or higher
	Standard resistance B4 - C1	Below 1 Ω (Apply battery voltage between terminals B2 and B3)
Ignition relay	Standard resistance	Below 1 Ω (when battery voltage applied to terminals 1 and 2)
	3-5	10 k Ω or higher
	Standard resistance Between all terminals	10 kΩ or higher (LOCK)
	Standard resistance 2 - 4	Below 1 Ω (ACC)
Ignition or starter quitab accomply	Standard resistance 1 - 2 - 4	Below 1 Ω
ignition of starter switch assembly.	Standard resistance 5 - 6	(ON)
	Standard resistance 1 - 3 - 4	Below 1 O
	Standard resistance 5 - 6 - 7	(START)
	Segments	Below 1 Ω
Starter armature assembly resistance	Commutator - Armature coil	$10k\Omega$ or higher
Starter armature assembly commutator circumference runout	Maximum runout	0.05 mm (0.0020 in.)
Starter armature assembly commutator	Standard diameter	28.0 mm (1.1024 in.)
diameter	Minimum diameter	27.0 mm (1.0630 in.)
	Standard undercut depth	0.6 mm (0.0236 in.)
Starter armature assembly undercut portion	Minimum undercut depth	0.2 mm (0.0079 in.)
	Terminal C - Field coil brush lead	Below 1 Ω
Stanter yoke assembly resistance	Brush lead - starter yoke	10 k Ω or higher
Brush length	Standard length	14 mm (0.5511 in.)
	Minimum length	9 mm (0.3543 in.)
Starter brush holder assembly resistance	Standard resistance	10k Ω or higher
Magnet starter switch assembly resistance	Terminal C - Terminal 50	Below 1 Ω
magnet starter switch assembly resistance	Terminal 50 - Magnet starter switch assembly	Below 2 Ω

for 1.6 kW

Starter assembly	Standard current	90 A or less at 11.5 V

	Starter relay	Standard resistance	Below 1 Ω (when battery voltage applied to terminals 1 and 2)
		3 - 5	10 k Ω or higher
			Below 1 Ω
		Standard resistance 3 - 4	10 k Ω or higher (when battery voltage applied to terminals 1 and 2)
	ACC cut relay	Standard resistance	Below 1 Ω (when battery voltage applied to terminals 1 and 2)
		5-5	10 k Ω or higher
SS	AM2 fuse	Standard resistance 1 - 2	Below 1 Ω
		Standard resistance B1 - C1	Below 1 Ω
		Standard resistance B1 - B4	10 k Ω or higher
		Standard resistance B4 - C1	10 k Ω or higher
		Standard resistance B2 - B3	Below 1 Ω
	IG2 relay	Standard resistance B1 - B4	Below 1 Ω (Apply battery voltage between terminals B2 and B3)
		Standard resistance B4 - C1	Below 1 Ω (Apply battery voltage between terminals B2 and B3)
		Standard resistance	Below 1 Ω (when battery voltage applied to terminals 1 and 2)
			10 k Ω or higher
		Standard resistance Between all terminals	10 kΩ or higher (LOCK)
		Standard resistance 2 - 4	Below 1 Ω (ACC)
	Ignition or starter switch assembly.	Standard resistance 1-2-4 Standard resistance	Below 1 Ω (ON)
		5 - 6	
		Standard resistance 1 - 3 - 4	Below 1 Ω
		Standard resistance 5 - 6 - 7	(START)
	Starter armature assembly resistance	Segments	1 kΩ ro lower
		Commutator - Armature coil	10 kΩ or higher
	Starter armature assembly commutator length	Standard length	3.1 mm (0.122 in.)
		Maximum length	3.8mm (0.150 in.)
	Starter commutator end frame assembly	Standard length	9.0 mm (0.354 in.)
	brush length	Maximum length	4.0 mm (0.158 in.)
	Starter commutator end frame assembly	Standard resistance	10 kΩ or higher
		Terminal C - Terminal 50	1 Ω or lower
	Magnet switch body resistance	Terminal 50 - Magnet switch body	1 Ω or lower

for 0.8 kW Type

Part Tightened	N*m	kgf*cm	ft.*lbf
Starter assembly x Transaxle housing	37	377	27
Starter assembly x Terminal 30	9.8	100	7.2
Negative battery terminal x Negative battery cable	5.4	55	48 in.*lbf
Starter brush holder assembly x Commutator end frame	1.5	15	13 in.*lbf
Starter yoke assembly x Commutator end frame	5.9	60	52 in.*lbf
Magnet starter switch assembly x Starter housing	8.3	85	73 in.*lbf
Terminal C x Lead wire	9.8	100	87 in.*lbf

for 1.6kW Type

Part Tightened	N*m	kgf*cm	ft.*lbf
Starter assembly x Transaxle housing	37	377	27
Starter assembly x Terminal 30	9.8	100	7.2
Negative battery terminal x Negative battery cable	5.4	55	48 in.*lbf
Starter yoke assembly x Starter commutator end frame assembly	6	61	53 in.*lbf
Magnet switch body x Starter drive housing assembly	7.5	76	66 in.*lbf
Terminal C x Lead wire	10	102	7.4

1NZ-FE CHARGING SERVICE DATA

Battery	Standard specific gravity:	1.25 to 1.29 at 20°C (68°F)
Charging arouit without load	Standard amperage	10 A or less
	Standard voltage	13.2 to 14.8 V
Charging circuit with load	Standard amperage	30 A or more
Generator brush holder assembly brush	Standard exposed length	9.5 to 11.5mm (0.374 to 0.453 in.)
exposed length	Minimum exposed length	1.5mm (0.059 in.)
Generator regulator assembly resistance	F-B	When the positive and negative poles between terminals F and B are exchanged, there is continuity in one direction but no continuity in the other direction.
	F-E	When the positive and negative poles between terminals F and E are exchanged, there is continuity in one direction but no continuity in the other direction.
Concreter drive and frame registence	Coil wires	Below 1Ω
Generator drive end frame resistance	Coil wire and body	$10k\Omega$ or higher
Generator holder with rectifier resistance	P1, P2, P3 -B	When the positive and negative poles among terminals P1, P2, P3 and B are exchanged, there is continuity in one direction but on continuity in the other direction.
	P1, P2, P3 -E	When the positive and negative poles among terminals P1, P2, P3 and E are exchanged, there is continuity in one direction but on continuity in the other direction.
Generator rotor assembly resistance	Slip rings	1.7 to 2.1Ω at 20°C (68°F)
	Slip ring and rotor	$10k\Omega$ or higher
Concrator rotor accombly clip ring diameter	Standard diameter	14.2 to 14.4mm (0.559 to 0.564 in.)
Generator rotor assembly slip ring diameter	Minimum diameter	12.8 mm (0.5.4 in.)

TORQUE SPECIFICATIONS

Part Tightened		N*m	kgf*cm	ft.*lbf
Fan belt adjusting slider x Cylinder head assembly		11	112	8.1
Generator assembly x Wire harness clamp		9.8	100	7.2
Generator assembly x Cylinder block sub-assembly		54	551	40
Generator assembly x Fan belt adjusting slide		19	189	14
Negative battery terminal x Negative battery cable		5.4	55	48
Generator pulley x Generator rotor assembly		133	1356	98
Generator brush holder assembly x Generator holder with rectifier		2	20	17 in.*lbf
Rear end cover x Generator rectifier end frame		4.4	45	39 in.*lbf
Rectifier plate x Rear end cover for nut for bolt for bolt		4.4	45	39 in.*lbf
		3.8	39	34 in.*lbf
Terminal insulator x Generator regulator assembly		4.1	42	36 in.*lbf
Generator regulator assembly x Generator rectifier end frame		2	20	17 in.*lbf
Generator holder with rectifier x Generator rectifier end frame		2	20	17 in.*lbf
Generator rectifier end frame x Generator drive end frame		4.5	46	40 in.*lbf

U340E AUTOMATIC TRANSAXLE SERVICE DATA

AUTOMATIC TRANSAXLE

Line pressure (Wheel locked)						
Engine idling	D position	372 to 412 kPa				
		(3.8 to 4.2 kgf/cm ² , 54 to 60 psi)				
	R position	553 to 623 kPa				
		(5.6 to 6.4 kgf/cm ² , 80 to 90 psi)				
	D position	1,126 to 1,226 kPa				
AT stall (Throttle valve fully opened)		(11.5 to 12.5 kgf/cm ² , 163 to 178 psi)				
	R position	1,664 to 1,864 kPa				
En sins stell en velution	Dataitian	(17.0 to 19.0 kgf/cm ⁻ , 241 to 270 psi)				
	D position	1,850 to 2,450 rpm				
Time lag	$N \rightarrow D$ position	Less than 1.2 seconds				
	$N \rightarrow R$ position	Less than 1.5 seconds				
Engine idle speed (A/C OFF)	N position	650 to 750 rpm				
Shift schedule (Tire size: 175/65R14)						
	$1 \rightarrow 2$	30 to 33 mph (48 to 53 km/h)				
	$2 \rightarrow 3$	57 to 62 mph (91 to 99 km/h)				
Throttle valve fully opened	$3 \rightarrow 4$	88 to 94 mph (142 to 151 km/h)				
	$4 \rightarrow 3$	85 to 90 mph (137 to 145 km/h)				
	$3 \rightarrow 2$	53 to 58 mph (86 to 93 km/h)				
	$2 \rightarrow 1$	25 to 27 mph (40 to 44 km/h)				
Throttle valve fully closed	$3 \rightarrow 4$	24 to 27 mph (39 to 43 km/h)				
	$4 \rightarrow 3$	18 to 21 mph (29 to 33 km/h)				
2 position						
	$1 \rightarrow 2$	30 to 33 mph (48 to 53 km/h)				
Throttle valve fully opened	$3 \rightarrow 2$	53 to 58 mph (86 to 93 km/h)				
	$2 \rightarrow 1$	25 to 27 mph (40 to 44 km/h)				
L position						
Throttle valve fully opened	$3 \rightarrow 2$	53 to 58 mph (86 to 93 km/h)				
	$2 \rightarrow 1$	27 to 30 mph (43 to 47 km/h)				
Lock-up point (Throttle valve opening 5 %)						
D position						
Ath goot	Lock-up ON	33 to 35 mph (53 to 57 km/h)				
4th gear	Lock-up OFF	31 to 34 mph (50 to 54 km/h)				
3 position	·					
	Lock-up ON	57 to 62 mph (91 to 99 km/h)				
3rd gear	Lock-up OFF	53 to 58 mph (86 to 93 km/h)				
Flex lock-up point (Throttle valve opening 5 %) D position	- i					
	Lock-up ON	24 to 27 mph (39 to 43 km/h)				
4th gear	Lock-up OFF	23 to 26 mph (37 to 42 km/h)				
	Lock-up ON	17 to 20 mph (28 to 32 km/h)				
3rd gear	Lock-up OFF	17 to 19 mph (27 to 31 km/h)				
Shift schedule (Tire size: 185/60R15)						
D position						
Shift schedule (Tire size: 185/60R15)	Lock-up OFF	17 to 19 mph (27 to 31 km/h)				

	$1 \rightarrow 2$	30 to 34 mph (49 to 55 km/h)
	$2 \rightarrow 3$	58 to 63 mph (93 to 101 km/h)
Throttle velve fully energed	$3 \rightarrow 4$	91 to 96 mph (146 to 154 km/h)
Throttle valve fully opened	$4 \rightarrow 3$	88 to 93 mph (141 to 149 km/h)
	$3 \rightarrow 2$	55 to 59 mph (88 to 95 km/h)
	$2 \rightarrow 1$	25 to 28 mph (41 to 45 km/h)
Throttle velve fully closed	$3 \rightarrow 4$	25 to 27 mph (40 to 44 km/h)
Throttle valve rully closed	$4 \rightarrow 3$	18 to 21 mph (29 to 33 km/h)
2 position		· ·
	$1 \rightarrow 2$	30 to 34 mph (49 to 55 km/h)
Throttle valve fully opened	$3 \rightarrow 2$	55 to 59 mph (88 to 95 km/h)
	$2 \rightarrow 1$	25 to 28 mph (41 to 45 km/h)
L position		
Throttle velve fully energed	$3 \rightarrow 2$	55 to 59 mph (88 to 95 km/h)
Throttle valve rully opened	$2 \rightarrow 1$	27 to 30 mph (44 to 48 km/h)
Lock-up point (Throttle valve opening 5 %)		· ·
D position		
4th goor	Lock-up ON	34 to 36 mph (54 to 58 km/h)
401 geal	Lock-up OFF	32 to 35 mph (51 to 56 km/h)
3 position		
2rd appr	Lock-up ON	58 to 63 mph (93 to 101 km/h)
Sid geal	Lock-up OFF	55 to 59 mph (88 to 95 km/h)
Flex lock-up point (Throttle valve opening 5 %) D position		
Ath appr	Lock-up ON	25 to 27 mph (40 to 44 km/h)
4ui yeai	Lock-up OFF	24 to 27 mph (38 to 43 km/h)
2rd goor	Lock-up ON	18 to 21 mph (29 to 33 km/h)
Siù geai	Lock-up OFF	17 to 19 mph (27 to 31 km/h)

Transmission revolution sensor resistance	Standard	560 to 680 Ω 20°C (68°F)
Park/neutral position switch resistance	Standard P (2 - 6 AND 4 - 5) Except P (2 - 6 AND 4 - 5) R (2 - 1) Except R (2 - 1) N (2 - 9 AND 4 - 5) Except N (2 - 9 AND 4 - 5) D and 3 (2 - 7) Except D and 3 (2 - 7) 2 (2 - 3) Except 2 (2 - 3) L (2 - 8) Except L (2 - 8)	- Below 1 Ω 10 kΩ or higher Below 1 Ω 10 kΩ or higher
Transmission wire resistance	Standard 1 (OT+) - 6 (OT-) 10°C (50°F) 110°C (230°F)	- - 6.4 kΩ 0.2 kΩ
Front transaxle case oil seal	Drive in depth	1.5 to 2.5 mm (0.059 to 0.098 in.)
Transaxle case oil seal	Drive in depth	5.4 to 6.4 mm (0.213 to 0.252 in.)
Drive plate runout	Maximum	0.20 mm (0.0079 in.)
Input shaft end play	Standard	0.37 to 1.29 mm (0.0146 to 0.0508 in.)
Intermediate shaft clearance	Standard	0.204 to 0.966 mm (0.008 to 0.038 in.)
1st and reverse brake return spring free length	Standard	13.96 mm (0.5496 in.)

Differential case tapered roller bearing preload	New bearing Used bearing	0.98 to 1.57 N*m (10.0 to 16.0 kgf*cm, 8.7 to 13.9 in.*lbf) 0.49 to 0.78 N*m (5.0 to 8.0 kgf*cm, 4.3 to 6.9 in.*lbf)
Transaxle case side adjusting shim	Mark 01 Mark 02 Mark 03 Mark 04 Mark 05 Mark 06 Mark 07 Mark 08 Mark 09 Mark 10 Mark 10 Mark 11 Mark 12 Mark 13 Mark 14 Mark 15 Mark 16 Mark 17 Mark 18 Mark 19	1.90 mm (0.0748 in.) 1.95 mm (0.0768 in.) 2.00 mm (0.0787 in.) 2.05 mm (0.0807 in.) 2.10 mm (0.0827 in.) 2.15 mm (0.0846 in.) 2.20 mm (0.0866 in.) 2.25 mm (0.0885 in.) 2.30 mm (0.0906 in.) 2.35 mm (0.0925 in.) 2.40 mm (0.0945 in.) 2.45 mm (0.0965 in.) 2.55 mm (0.1004 in.) 2.55 mm (0.1004 in.) 2.66 mm (0.1024 in.) 2.75 mm (0.1082 in.) 2.75 mm (0.1082 in.) 2.80 mm (0.1102 in.)
Manual valve lever shaft oil seal	Drive in depth	-0.5 to 0.5 mm (-0.020 to 0.020 in.)
Differential drive pinion plug clearance	Standard	2.5 to 2.6 mm (0.0984 to 0.1023 in.)
1st and reverse brake pack clearance	Standard	0.806 to 1.206 mm (0.0317 to 0.0475 in.)
1st and reverse brake flange thickness	Mark - 3.4 mm (0.134 in.) flange thickness Mark 1 3.6 mm (0.142 in.) Mark 2 3.8 mm (0.150 in.) Mark 3 4.0 mm (0.157 in.)	
2nd brake pack clearance	Standard	0.847 to 1.247 mm (0.0333 to 0.0491 in.)
2nd brake flange thickness	Mark - Mark 1 Mark 2 Mark 3	3.0 mm (0.118 in.) 3.2 mm (0.126 in.) 3.4 mm (0.134 in.) 3.6 mm (0.142 in.)
2nd coast and overdrive brake pack clearance	Standard	2.091 to 2.491 mm (0.0823 to 0.0981 in.)
2nd coast and overdrive brake flange thickness	Mark 4 Mark 5 Mark 6 Mark 7	4.0 mm (0.1575 in.) 4.2 mm (0.1654 in.) 4.4 mm (0.1732 in.) 4.6 mm (0.1811 in.)
C-2 accumulator spring	Free length Outer diameter	66.90 mm (2.6339 in.) 17.20 mm (0.6772 in.)
C-3 accumulator spring	Free length Outer diameter	80.20 mm (3.1575 in.) 18.70 mm (0.7362 in.)
B-2 accumulator spring	Free length Outer diameter	66.90 mm (2.6339 in.) 15.50 mm (0.6102 in.)
Stator shaft inside diameter	Standard Maximum	21.500 to 21.526 mm (0.84646 to 0.84748 in.) 21.526 mm (0.84748 in.)
Oil pump gear clearance (Driven gear to drive gear clearance)	Standard Maximum	0.07 to 0.15 mm (0.0028 to 0.0059 in.) 0.15 mm (0.0059 in.)
Oil pump gear clearance (Driven gear to oil pump body clearance)	Standard Maximum	0.10 to 0.15 mm (0.0039 to 0.0059 in.) 0.15 mm (0.0059 in.)
Oil pump clearance (Side clearance)	Standard Maximum	0.02 to 0.05 mm (0.0008 to 0.0020 in.) 0.05 mm (0.0020 in.)
Front oil pump body inside diameter	Standard Maximum	38.113 to 38.138 mm (1.5005 to 1.50149 in.) 38.138 mm (1.50149 in.)
Front oil pump oil seal	Drive in depth	-0.15 to 0.15 mm (-0.006 to 0.006 in.)
Forward clutch return spring free length	Standard	21.69 mm (0.8540 in.)
Forward clutch pack clearance	Standard	1.406 to 1.806 mm (0.05535 to 0.07110 in.)

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Forward clutch flange thickness	Mark - Mark 1 Mark 2 Mark 3	3.0 mm (0.118 in.) 3.2 mm (0.126 in.) 3.4 mm (0.134 in.) 3.6 mm (0.142 in.)
2nd brake piston return spring free length	Standard	14.65 mm (0.5768 in.)
Direct clutch return spring free length	Standard	32.9 mm (1.2953 in.)
Reverse clutch pack clearance	Standard	0.86 to 1.26 mm (0.0339 to 0.0496 in.)
Reverse clutch flange thickness Mark - Mark 1 3.0 mm (0.118 in 3.2 mm (0.126 in Mark 2 Mark 1 3.2 mm (0.126 in 0.134 in Mark 3 3.4 mm (0.134 in 3.6 mm (0.142 in		3.0 mm (0.118 in.) 3.2 mm (0.126 in.) 3.4 mm (0.134 in.) 3.6 mm (0.142 in.)
Direct clutch pack clearance	Standard	0.62 to 1.02 mm (0.0244 to 0.0402 in.)
Direct clutch flange thickness	Mark - Mark 1 Mark 2 Mark 3	3.0 mm (0.118 in.) 3.2 mm (0.126 in.) 3.4 mm (0.134 in.) 3.6 mm (0.142 in.)
Overdrive brake return spring free length	Standard	17.88 mm (0.7039 in.)
Transaxle rear cover needle roller bearing depth	over needle roller bearing Standard 25.2 mm (0.992 in.)	
Shift solenoid valve S1 resistance	Standard	11 to 15 Ω at 20°C (68°F)
Shift solenoid valve S2 resistance	Standard	11 to 15 Ω at 20°C (68°F)
Shift solenoid valve ST resistance	Standard	11 to 15 Ω at 20°C (68°F)
Shift solenoid valve SLT resistance	Standard	5.0 to 5.6 Ω at 20°C (68°F)
Shift solenoid valve SLU resistance	Standard	5.0 to 5.6 Ω at 20°C (68°F)
Side gear backlash	Standard	0.05 to 0.20 mm (0.0020 to 0.0079 in.)
Thrust washer thickness		0.95 mm (0.0374 in.) 1.00 mm (0.0394 in.) 1.05 mm (0.0413 in.) 1.10 mm (0.0433 in.) 1.15 mm (0.0453 in.) 1.20 mm (0.0472 in.)

Part Tightened	N*m	kgf*cm	ft.*lbf
Speedometer sensor x Automatic transaxle	7.0	71	62 in.*lbf
Transmission revolution sensor x Automatic transaxle	5.4	55	48 in.*lbf
Park/neutral position switch assembly x Automatic transaxle	5.4	55	48 in.*lbf
Lock plate x Park/neutral position switch assembly	6.9	70	61 in.*lbf
Control shaft lever x Park/neutral position switch assembly	13	130	9
Transmission control cable assembly x Control shaft lever	12	122	9
Battery negative terminal x Battery	5.4	55	48 in.*lbf
Drain plug x Automatic transaxle oil pan sub-assembly	49	500	36
Transmission wire x Automatic transaxle case	5.4	55	48 in.*lbf
Transmission valve body assembly x Automatic transaxle	11	110	8
Manual detente spring sub-assembly x Transmission valve body assembly	11	110	8
Valve body oil strainer sub-assembly x Transmission valve body assembly	11	110	8
Automatic transaxle oil pan sub-assembly x Automatic transaxle case	7.8	80	69
Transmission control cable assembly x Body	5.0	51	44 in.*lbf
Front No. 1 floor heat insulator	5.5	56	49 in.*lbf
Floor shift assembly x Body	12	122	9
Front wheel	103	1,050	76
Transmission oil filler tube sub-assembly x Automatic transaxle	5.5	56	49 in.*lbf
No. 2 oil cooler tube clamp x Transmission oil filler tube sub-assembly	5.5	56	49 in.*lbf
Inlet No. 1 oil cooler tube x Automatic transaxle	34	347	25
Outlet No. 1 oil cooler tube x Automatic transaxle	34	347	25
No. 1 transmission control cable bracket x Automatic transaxle	12	122	9
Automatic transaxle assembly x Engine	30	306	22
Torque converter set bolt x Drive plate	27	280	20
Engine mounting bracket LH x Automatic transaxle	64	653	47
Engine mounting insulator LH x Engine mounting bracket LH	52	530	38
Engine moving control rod bracket x Automatic transaxle	39	398	29
Engine moving control rod x Engine moving control rod bracket	120	1,224	89
Wire harness clamp bracket x Automatic transaxle	5.0	51	44 in.*lbf
No. 3 engine wire x Automatic transaxle	7.4	75	65 in.*lbf
Transaxle housing x Transaxle case (Bolt A)	29	300	22
Transaxle housing x Transaxle case (Bolt B)	22	225	16
Bearing lock plate x Transaxle housing	11	115	8
Parking lock pawl bracket x Transaxle case	20	205	15
Rear transaxle cover assembly x Transaxle case	25	250	18
Oil pump assembly x Transaxle housing	22	225	16
No. 1 transaxle case plug x Automatic transaxle	7.4	75	65 in.*lbf
Screw plug x Automatic transaxle	7.4	75	65 in.*lbf
Oil cooler tube union x Automatic transaxle	27	275	20
Stator shaft assembly x Front oil pump body	9.8	100	7
Rear transaxle cover plug x Rear transaxle cover	7.4	75	65 in.*lbf
Shift solenoid valve x Valve body	11	110	8
Differential case x Front differential ring gear	88	900	65

CLUTCH

SERVICE DATA

SS	Pedal height from dash panel	-	133.0 to 143.0 mm (5.236 to 5.630 in.)
	Pedal free play	-	5.0 to 15.0 mm (0.197 to 0.591 in.)
	Push rod play at pedal top	-	1.0 to 5.0 mm (0.039 to 0.197 in.)
	Clutch release point from pedal full stroke end position	-	25 mm (0.98 in.) or more
	Clutch disc rivet depth	Maximum	0.3 mm (0.012 in.)
	Clutch disc runout	Minimum	0.8 mm (0.031 in.)
	Diaphragm spring fingerwear	Maximum depth Maximum width	0.5 mm (0.020 in.) 6.0 mm (0.236 in.)
	Flywheel runout	Maximum	0.1 mm (0.004 in.)
	Diaphragm spring tip non-alignment	Maximum depth	0.5 mm (0.020 in.)

Part tightened	N*m	kgf*cm	ft.*lbf
Clutch pedal stopper bolt x Lock nut	16	160	12
Clutch master cylinder push rod clevis lock nut	12	120	8.7
Clutch pedal sub-assembly x Clutch pedal support	37	375	27
Clutch start switch assembly x Clutch pedal support	16	160	12
Clutch pedal support x Body	24	241	17
Clutch master cylinder x Clutch pedal support	9.0	92	80 in.*lbf
Clutch master cylinder to flexible hose tube x Clutch master cylinder	15	153	11
Release cylinder bleeder plug x Clutch release cylinder	8.3	85	73 in.*lbf
Clutch release cylinder x Manual transaxle case	12	120	8.7
Clutch release cylinder to flexible hose tube x Clutch release cylinder	15	153	11
Clutch cover assembly x Flywheel sub-assembly	19	195	14
Release fork support x Manual transaxle	37	375	27

C50 MANUAL TRANSAXLE

SERVICE DATA

5th gear thrust clearance	Standard Maximum	0.10 to 0.55 mm (0.0039 to 0.0217 in.) 0.55 mm (0.0217 in.)
5th gear radial clearance	KOYO made Standard Maximum NSK made Standard Maximum	0.015 to 0.058 mm (0.0006 to 0.0023 in.) 0.058 mm (0.0023 in.) 0.015 to 0.056 mm (0.0006 to 0.0022 in.) 0.056 mm (0.0022 in.)
Synchronizer ring No. 3 back and 5th gear spline end clearance	Minimum	0.75 mm (0.0295 in.)
Transmission hub sleeve No. 3 and gear shift fork No. 3 clearance	Standard	0.3 to 0.5 mm (0.012 to 0.020 in.)
5th gear inner diameter	Standard Maximum	29.915 to 29.931 mm (1.1778 to 1.1783 in.) 29.931 mm (1.1783 in.)
Reverse idler gear inner diameter	Standard Maximum	18.040 to 18.058 mm (0.7102 to 0.7109 in.) 18.058 mm (0.7109 in.)
Reverse idler gear outer diameter	Standard Minimum	17.966 to 17.984 mm (0.7073 to 0.7080 in.) 17.966 mm (0.7073 in.)
Front transaxle case oil seal drive in depth	-	15.6 mm to 16.0 mm (0.6141 to 0.6299 in.)
Input shaft front bearing drive in depth	-	0 to 0.3 mm (0 to 0.0118 in.)
Shift and select lever shaft needle roller bearing drive in depth	-	0 to 0.5 mm (0 to 0.020 in.)
Shift and select lever shaft oil seal drive in depth	-	9.7 to 10.3 mm (0.382 to 0.406 in.)
Front differential case tapered roller bearing preload	New bearing Used bearing	0.78 to 1.57 N*m (7.95 to 16.0 kgf*cm, 6.9 to 13.89 in.*lbf) 0.49 to 0.98 N*m (5.0 to 10.0 kgf*cm, 4.34 to 8.67 in.*lbf)
Front differential case shim thickness	AA BB CC DD EE FF GG HH J KK LL MM NP Q R SS T J	2.10 mm (0.0827 in.) 2.15 mm (0.0846 in.) 2.20 mm (0.0866 in.) 2.25 mm (0.0866 in.) 2.35 mm (0.0906 in.) 2.35 mm (0.0925 in.) 2.40 mm (0.0945 in.) 2.45 mm (0.0965 in.) 2.50 mm (0.0984 in.) 2.55 mm (0.1004 in.) 2.66 mm (0.1024 in.) 2.65 mm (0.1043 in.) 2.75 mm (0.1063 in.) 2.75 mm (0.1083 in.) 2.80 mm (0.1102 in.) 2.80 mm (0.1122 in.) 2.95 mm (0.1161 in.) 3.00 mm (0.1181 in.)
Transmission case oil seal drive in depth	-	9.6 to 10.2 mm (0.378 to 0.402 in.)
Transaxle case oil seal drive in depth	-	1.6 to 2.2 mm (0.063 to 0.087 in.)
Reverse restrict pin slotted pin drive in depth	-	15.5 to 16.5 mm (0.6102 to 0.6496 in.)
Transmission clutch hub No. 3 snap ring thickness	A B C D E F G	2.25 mm (0.0886 in.) 2.31 mm (0.0909 in.) 2.37 mm (0.0933 in.) 2.43 mm (0.0957 in.) 2.49 mm (0.0980 in.) 2.55 mm (0.1004 in.) 2.61 mm (0.1028 in.)
Control shaft cover oil seal drive in depth	-	0.2 to 1.2 mm (0.0079 to 0.0472 in.)
4th gear thrust clearance	Standard Maximum	0.1 to 0.55 mm (0.0039 to 0.0217 in.) 0.55 mm (0.0217 in.)

3rd gear thrust clearance	Standard Maximum	0.1 to 0.35 mm (0.0039 to 0.0138 in.) 0.35 mm (0.0138 in.)
4th gear radial clearance	Standard Maximum	0.009 to .050 mm (0.0004 to 0.0020 in.) 0.050 mm (0.0023 in.)
3rd gear radial clearance	KOYO made Standard Maximum NSK made Standard Maximum	0.015 to 0.058 mm (0.0006 to 0.0023 in.) 0.058 mm (0.0023 in.) 0.015 to 0.056 mm (0.0006 to 0.0022 in.) 0.056 mm (0.0022 in.)
Input shaft runout	Maximum	0.015 mm (0.0006 in.)
Input shaft outer diameter	Standard Part A Part B Part C Part D Minimum Part A Part B Part C Part D	24.885 to 24.900 mm (0.9797 to 0.9803 in.) 28.991 to 29.006 mm (1.1414 to 1.1420 in.) 30.985 to 31.000 mm (1.2198 to 1.2204 in.) 24.985 to 25.000 mm (0.9836 to 0.9842 in.) 24.885 mm (0.9797 in.) 28.991 mm (1.1414 in.) 30.985 mm (1.2198 in.) 24.985 mm (0.9836 in.)
4th gear inside diameter	Standard Maximum	34.015 to 34.031 mm (1.3391 to 1.3398 in.) 34.031 mm (1.3398 in.)
3rd gear inside diameter	Standard Maximum	36.015 to 36.031 mm (1.4179 to 1.4185 in.) 36.031 mm (1.4185 in.)
3rd gear synchronizer ring back and 3rd gear spline end clearance	Standard Minimum	0.75 to 1.65 mm (0.0295 to 0.0649 in.) 0.75 mm (0.0295 in.)
4th gear synchronizer ring back and 4th gear spline end clearance	Standard Minimum	0.75 to 1.65 mm (0.0295 to 0.0649 in.) 0.75 mm (0.0295 in.)
Gear shift fork No. 2 claw and glove of the transmission hub sleeve No. 2 clearance	-	0.15 to 0.35 mm (0.0059 to 0.0137 in.)
Transmission clutch hub No. 2 snap ring thickness	0 1 2 3 4 5	2.30 mm (0.0906 in.) 2.36 mm (0.0929 in.) 2.42 mm (0.0953 in.) 2.48 mm (0.0976 in.) 2.54 mm (0.1000 in.) 2.60 mm (0.1024 in.)
Input shaft rear bearing shaft snap ring clearance	-	0.1 mm (0.0039 in.) or less
Input shaft rear bearing shaft snap ring thickness	A B C D E F	2.29 mm (0.0901 in.) 2.35 mm (0.0925 in.) 2.41 mm (0.0948 in.) 2.47 mm (0.0972 in.) 2.53 mm (0.0996 in.) 2.59 mm (0.1019 in.)
1st gear thrust clearance	Standard Maximum	0.10 to 0.40 mm (0.0039 to 0.0157 in.) 0.40 mm (0.0157 in.)
2nd gear thrust clearance	Standard Maximum	0.10 to 0.55 mm (0.0039 to 0.0217 in.) 0.55 mm (0.0217 in.)
1st gear radial clearance	KOYO made Standard Maximum NSK made Standard Maximum	0.015 to 0.058 mm (0.0006 to 0.0023 in.) 0.058 mm (0.0023 in.) 0.015 to 0.056 mm (0.0006 to 0.0022 in.) 0.056 mm (0.0022 in.)
2nd gear radial clearance	KOYO made Standard Maximum NSK made Standard Maximum	0.015 to 0.058 mm (0.0006 to 0.0023 in.) 0.058 mm (0.0023 in.) 0.015 to 0.056 mm (0.0006 to 0.0022 in.) 0.056 mm (0.0022 in.)
Output shaft runout	Maximum	0.015 mm (0.0006 in.)
Output shaft outer diameter	Part A Part B Part C	31.985 to 32.000 mm (1.2592 to 1.2598 in.) 37.985 to 38.000 mm (1.4955 to 1.4961 in.) 32.985 to 33.000 mm (1.2986 to 1.2992 in.)
2nd gear inside diameter	Standard Maximum	38.015 to 38.031 mm (1.4967 to 1.4972 in.) 38.031 mm (1.4972 in.)
1st gear inside diameter	Standard Maximum	44.015 to 44.031 mm (1.7328 to 1.7335 in.) 44.031 mm (1.7335 in.)
1st gear thrust washer thickness	Standard Minimum	5.975 to 6.025 mm (0.2352 to 0.2372 in.) 5.975 mm (0.2352 in.)
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Synchronizer ring set No. 2 back and 2nd gear spline end clearance	Standard Minimum	0.70 to 1.3 mm (0.0276 to 0.0512 in.) 0.70 mm (0.0276 in.)
Synchronizer ring set No. 1 back and 1st gear spline end clearance	Standard Minimum	0.75 to 1.65 mm (0.0295 to 0.0650 in.) 0.75 mm (0.0295 in.)
Reverse gear glove and reverse gear shift fork claw clearance	-	0.15 to 0.35 mm (0.0059 to 0.0138 in.)
Clutch hub No. 1 shaft snap ring clearance	-	0.1 mm (0.039 in.) or less
Clutch hub No. 1 shaft snap ring thickness	A B C D E F	2.50 mm (0.0984 in.) 2.56 mm (0.1008 in.) 2.62 mm (0.1031 in.) 2.68 mm (0.1055 in.) 2.74 mm (0.1079 in.) 2.80 mm (0.1102 in.)
Shift lever slotted pin (for select inner lever) drive in depth	-	3.0 to 4.0 mm (0.1181 to 01575 in.)
Shift lever slotted pin (for shift lever inner No. 1) drive in depth	-	-0.5 to 0.5 mm (-0.197 to 0.0197 in.)
Shift lever slotted pin (for shift lever inner No. 2) drive in depth	-	1.0 to 2.0 mm (0.0394 to 0.0787 in.)
Front differential side gear backlash	-	0.05 to 0.20 mm (0.0020 to 0.0079 in.)
Front differential pinion thrust washer	Minimum	0.94 mm (0.03701 in.)
Front differential pinion shaft No. 1 outer diameter	Minimum	16.982 mm (0.6685 in.)

Part tightened	N*m	kgf*cm	ft.*lbf
Filler plug x Manual transmission case	39	400	29
Floor shift lever assembly x Body	12	122	8.9
Transmission control cable x Body	5.0	51	44 in.*lbf
Front floor heat insulator x Body	5.5	56	49 in.*lbf
Engine hanger x Cylinder head	40	408	29
Manual transaxle assembly x Engine	33	336	24
Transverse engine engine mounting bracket x Transmission case cover	64	653	47
Transverse engine engine mounting insulator x Body	52	530	38
Transverse engine engine mounting control bracket x Transaxle case	39	398	29
Wire harness x Transmission case	26	260	19
Control cable bracket x Transaxle case	25	255	18
Clutch release cylinder x Transaxle case	12	120	8.7
Clutch pipe x Transmission case	12	122	8.9
Battery carrier x Body	17	175	13
Air cleaner bracket x Body	19	194	14
Bearing lock plate x Transaxle case	11	115	8.3
Oil receiver pipe No.1 x Transmission case	17	175	13
Oil receiver pipe No.2 x Transmission case	17	175	13
Reverse restrict pin plug x transmission case	13	130	9.3
Transaxle case receiver x Transaxle case	11	115	8.3
Gear shift fork No. 1 x Gear shift fork shaft No. 1	16	160	12
Gear shift fork No. 2 x Gear shift fork shaft No. 2	16	160	12
Gear shift head No. 1 x Gear shift fork shaft No. 2	16	160	12
Reverse shift arm bracket x Transaxle case	17	175	13
Transmission case x Transaxle case	29	300	22
Reverse idler gear shaft bolt x Transmission case	29	300	22
Lock ball assembly No. 2 x Transmission case	29	300	22
Shift detent ball plug x Transmission case	22	224	16
Shift detent ball plug x Transaxle case	22	224	16
Bearing retainer rear x Transmission case	27	280	20
Gear shift fork No. 3 x Gear shift fork shaft No. 3	16	160	12
Transmission output shaft rear set nut x Output shaft	118	1,200	87
Transmission case cover x Transmission case	18	185	14
Control shaft cover x Transmission case	20	200	14
Shift gate pin x Transmission case	11	112	8.1
Lock ball assembly No. 1 x Transmission case	29	300	22
Shift lever damper x Shift and select lever shaft assembly	12	120	8.7
Floor shift control shift lever x Shift and select lever shaft assembly	12	120	8.7
Selecting bell crank assembly x Transmission case for bolt	25	250	18
Selecting bell crank assembly x Transmission case for nut	12	120	8.7
Back-up light switch x Transmission case	40	410	30
Speedometer driven hole cover x Transaxle case	11	115	8.3
Front differential ring gear x Front differential case	77	790	57

DRIVE SHAFT

TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Automatic transmission case protector x Automatic transaxle	23	235	17
Front lower suspension arm x Steering knuckle	98	1,000	72
Front stabilizer link assembly x Front shock absorber assembly	74	755	55
Tie rod end sub-assembly x Steering knuckle	49	500	36
Front speed sensor x Steering knuckle	8.5	87	75 in.*lbf
Front speed sensor x Front flexible hose	29	300	22
Front axle hub nut x Front drive shaft	216	2,203	160
Front wheel	103	1,050	76
Battery negative terminal x Battery	5.4	55	48 in.*lbf

AXLE

SERVICE DATA

Front axle hub bearing backlash	Maximum	0.05 mm (0.0020 in.)
Front axle hub bearing runout	Maximum	0.05 mm (0.0020 in.)
Rear axle hub and bearing backlash	Maximum	0.05 mm (0.0020 in.)
Rear axle hub and bearing runout	Maximum	0.07 mm (0.0028 in.)



Part Tightened	N*m	kgf*cm	ft.*lbf
Front wheel	103	1,050	76
Rear wheel	103	1,050	76
Steering knuckle x Front shock absorber assembly	164	1,672	121
Front disk brake caliper assembly x Steering knuckle	107	1,089	79
Rear axle hub and bearing assembly x Rear axle beam	90	918	67
Battery negative terminal x Battery	5.4	55	48 in.*lbf

SUSPENSION

SERVICE DATA

Hatchback (Except Rough Road Package)

Front suspension			
Vehicle height		A-B C-D	88 mm (3.46 in.) 20 mm (0.79 in.)
Toe-in		A+B C-D Rack end length difference	0°09' +- 0°13' (0.15°+- 0.22°) 1.5 +- 2.0 mm (0.06 +- 0.08 in.) 1.5 mm (0.059 in.) or less
Wheel turning angle		Inside wheel Outside wheel (Reference)	40°57' +- 2°(40.95°+- 2°) 35°17' (35.29°)
Camber			-0°10' +- 45' (-0.17°+- 0.75°)
Caster			4°46' +- 45' (4.77°+- 0.75°)
Steering Axis Inclination (Reference)			11°18' (11.30°)
Front suspension lower arm		Lower ball joint turning torque	0.78 to 3.43 N*m (8 to 35 kgf*cm, 6.9 to 30 in.*lbf)
Front stabilizer link assembly		Front stabilizer link turning torque	1.0 N*m (10 kgf*cm, 8.9 in.*lbf) or less
Rear suspension			
Toe-in	175/65R14	A+B C-D	0°17' +- 0°20' (0.28°+- 0.33°) 2.8 +- 3.0 mm (0.11 +- 0.12 in.)
	185/60R15	A+B C-D	0°17' +- 0°20' (0.28°+- 0.33°) 2.9 +- 3.0 mm (0.11 +- 0.12 in.)
Camber			-0°57' +- 45' (-0.95°+- 0.75°)

Hatchback (Rough Road Package)

Front suspension A-B 68 mm (2.68 in.) Vehicle height C-D 0 mm (0 in.) A+B 0°09' +- 0°13' (0.15°+- 0.22°) Toe-in C-D 1.5 +- 2.0 mm (0.06 +- 0.08 in.) Rack end length difference 1.5 mm (0.059 in.) or less Inside wheel 41°22' +- 2°(41.37°+- 2°) Wheel turning angle 35°45' (35.75°) Outside wheel (Reference) Camber 0°06' +- 45' (0.10°+- 0.75°) 4°27' +- 45' (4.45°+- 0.75°) Caster Steering Axis Inclination (Reference) 10°47' (10.78°) 0.78 to 3.43 N*m (8 to 35 kgf*cm, 6.9 to 30 Front suspension lower arm Lower ball joint turning torque in.*lbf) Front stabilizer link assembly Front stabilizer link turning torque 1.0 N*m (10 kgf*cm, 8.9 in.*lbf) or less Rear suspension A+B 0°13' +- 0°20' (0.22°+- 0.33°) Toe-in C-D 2.2 +- 3.0 mm (0.09 +- 0.12 in.) Camber -0°54' +- 45' (-0.90°+- 0.75°)

Sedan (Except Rough Road Package)

Front suspension A-B 87 mm (3.43 in.) Vehicle height C-D 16 mm (0.63 in.) A+B 0°12' +- 0°06' (0.20°+- 0.10°) Toe-in C-D 2.0 +- 2.0 mm (0.08 +- 0.08 in.) Rack end length difference 1.5 mm (0.059 in.) or less 40°57' +- 2°(40.95°+- 2°) Inside wheel Wheel turning angle Outside wheel (Reference) 35°17' (35.29°) Camber -0°10' +- 45' (-0.17°+- 0.75°) Caster 4°39' +- 45' (4.65°+- 0.75°)

Steering Axis Inclination (Reference)			11°16' (11.27°)
Front suspension lower arm		Lower ball joint turning torque	0.78 to 3.43 N*m (8 to 35 kgf*cm, 6.9 to 30 in.*lbf)
Front stabilizer link assembly		Front stabilizer link turning torque	1.0 N*m (10 kgf*cm, 8.9 in.*lbf) or less
Rear suspension			
Toe-in	175/65R14	A+B C-D	0°17' +- 0°20' (0.28°+- 0.33°) 2.8 +- 3.0 mm (0.11 +- 0.12 in.)
	185/60R15	A+B C-D	0°17' +- 0°20' (0.28°+- 0.33°) 2.9 +- 3.0 mm (0.11 +- 0.12 in.)
Camber			-0°56' +- 45' (-0.93°+- 0.75°)

SS

Sedan (Rough Road Package)

Front suspension			
Vehicle height		A-B C-D	67 mm (2.64 in.) -2 mm (-0.08 in.)
Toe-in		A+B C-D Rack end length difference	0°12' +- 0°06' (0.20°+- 0.10°) 2.0 +- 2.0 mm (0.08 +- 0.08 in.) 1.5 mm (0.059 in.) or less
Wheel turning angle		Inside wheel Outside wheel (Reference)	41°22' +- 2°(41.37°+- 2°) 35°45' (35.75°)
Camber			0°06' +- 45' (0.10°+- 0.75°)
Caster			4°23' +- 45' (4.38°+- 0.75°)
Steering Axis Inclination (Reference)			10°47' (10.78°)
Front suspension lower arm		Lower ball joint turning torque	0.78 to 3.43 N*m (8 to 35 kgf*cm, 6.9 to 30 in.*lbf)
Front stabilizer link assembly		Front stabilizer link turning torque	1.0 N*m (10 kgf*cm, 8.9 in.*lbf) or less
Rear suspension			
Teo in	175/65R14	A+B C-D	0°13' +- 0°20' (0.22°+- 0.33°) 2.1 +- 3.0 mm (0.08 +- 0.12 in.)
	185/60R15	A+B C-D	0°13' +- 0°20' (0.22°+- 0.33°) 2.2 +- 3.0 mm (0.09 +- 0.12 in.)
Camber			-0°54' +- 45' (-0.90°+- 0.75°)

Part Tightened	N*m	kgf*cm	ft.*lbf
Tie rod end lock nut	75	760	55
Front shock absorber assembly x Steering knuckle	164	1,672	121
Front speed sensor x Front flexible hose	29	300	22
Front wheel	103	1,050	76
Front support to front shock absorber nut x Front shock absorber assembly	33	340	25
Front flexible hose x Front shock absorber assembly	29	300	22
Front stabilizer link assembly x Front shock absorber assembly	74	755	55
Front shock absorber with coil spring x Body	55	561	41
Battery negative terminal x Battery	5.4	55	48 in.*lbf
Front lower suspension arm x Steering knuckle	98	1,000	72
Front lower suspension arm x Front suspension crossmember sub- assembly	137	1,397	101
Front lower suspension arm x Body	160	1,631	118
Front stabilizer bracket x Front suspension crossmember sub-assembly	47	479	35
Rear flexible hose x Rear brake tube	14 (15)	143 (155)	10 (11)
Skid control sensor wire x Rear axle beam	6.0	61	53 in.*lbf
Rear wheel	103	1,050	76
Rear support to rear shock absorber nut x Rear shock absorber	25	250	18
Rear shock absorber x Rear axle beam	49	500	36
Parking brake cable x Rear axle beam	6.0	61	53 in.*lbf
Rear brake tube x Rear axle beam	5.0	51	44 in.*lbf
Rear axle beam x Body	90	918	67

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SS

TIRE AND WHEEL

SERVICE DATA

Tire runout	1.4 mm (0.055 in.) or less
Imbalance after adjustment	8 g (0.018 lb) or less

Hatchback (Cold tire inflation pressure)

Destination	Tire Size	Vehicle Speed	Front kPa (kgf/cm ² , psi)	Rear kPa (kgf/cm ² , psi)
North Amorico	P175/65R14 81S	Driving below 160 km/h (100 mph)	220 (2.2, 32)	220 (2.2, 32)
P185/60R15 84T	Driving over 160 km/h (100 mph)	240 (2.4, 35)	240 (2.4, 35)	
Mexico 185/6		Driving below 160 km/h (100 mph)	220 (2.2, 32)	220 (2.2, 32)
	185/60R15 84H	Driving over 160 km/h (100 mph)	230 (2.3, 33)	230 (2.3, 33)

Sedan (Cold tire inflation pressure)

Destination	Tire Size	Vehicle Speed	Front kPa (kgf/cm ² , psi)	Rear kPa (kgf/cm ² , psi)
North Amorico	P175/65R14 81S	Driving below 160 km/h (100 mph)	220 (2.2, 32)	220 (2.2, 32)
P185/60	P185/60R15 84T	Driving over 160 km/h (100 mph)	240 (2.4, 35)	240 (2.4, 35)
Mexico 175/65R14 82T 185/60R15 84H	175/65R14 82T	Driving below 160 km/h (100 mph)	220 (2.2, 32)	220 (2.2, 32)
	185/60R15 84H	Driving over 160 km/h (100 mph)	230 (2.3, 33)	230 (2.3, 33)

BRAKE CONTROL

TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Brake actuator bracket assembly x Brake actuator	5.4	55	48 in.*lbf
Brake actuator x Body	19	194	14
Brake tube x Brake actuator	14 (15)	143 (155)	10 (11)
Brake tube x Brake master cylinder	14 (15)	143 (155)	10 (11)
Brake tube x No. 1 brake tube way	14 (15)	143 (155)	10 (11)
Brake tube x Front flexible hose	14 (15)	143 (155)	10 (11)
Front speed sensor x Steering knuckle	8.5	87	75 in.*lbf
Front speed sensor x Front flexible hose	29	300	22
Front speed sensor x Body	6.0	61	53 in.*lbf
Front wheel	103	1,050	76
Battery negative terminal x Battery	5.4	55	48 in.*lbf
Rear wheel	103	1,050	76

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BRAKE

SERVICE DATA

Proportioning valve	Front brake caliper pressure 1,500 kPa (15.3 kgf/cm ² , 218 psi) 5,000 kPa (51.0 kgf/cm ² , 725 psi) 8,000 kPa (81.6 kgf/cm ² , 1,160 psi)	Rear wheel cylinder pressure 1,500 kPa (15.3 kgf/cm ² , 218 psi) 2,350 kPa (24.0 kgf/cm ² , 341 psi) 3,100 kPa (31.6 kgf/cm ² , 450 psi)
Brake pedal height (from floor)	w/ ABS w/o ABS	107.3 to 117.3 mm (4.224 to 4.618 in.) 107.8 to 117.8 mm (4.244 to 4.638 in.)
Stop light switch clearance		0.5 to 2.6 mm (0.020 to 0.102 in.)
Brake pedal free play		1.0 to 6.0 mm (0.039 to 0.236 in.)
Brake pedal reserve distance (from floor) at 294 N (30 kgf, 66.1 lbf)	w/ ABS w/o ABS	More than 73 mm (2.87 in.) More than 70 mm (2.75 in.)
Brake booster push rod to piston clearance		-0.21 to 0 mm (-0.0083 to 0 in.)
Front disc brake pad lining thickness	Standard Minimum	12.0 mm (0.472 in.) 1.0 mm (0.039 in.)
Front disc thickness	Standard Minimum	22.0 mm (0.866 in.) 19.0 mm (0.748 in.)
Front disc runout	Maximum	0.05 mm (0.0020 in.)
Rear brake drum inside diameter	Standard Maximum	200 mm (7.874 in.) 201 mm (7.913 in.)
Rear drum brake shoe lining thickness	Standard Minimum	4.0 mm (0.157 in.) 1.0 mm (0.039 in.)
Rear brake shoe and drum clearance		0.6 mm (0.024 in.)

Part Tightened	N*m	kgf*cm	ft.*lbf	
Push rod lock nut x Brake booster push rod	26	265	19	
Brake tube x Brake master cylinder	14 (15)	143 (155)	10 (11)	
Front disc brake bleeder plug x Disc brake cylinder assembly	8.3	85	73 in.*lbf	
Rear drum brake bleeder plug x Rear wheel brake cylinder assembly	8.3	85	73 in.*lbf	
Brake pedal x Brake pedal support	37	375	27	
Brake pedal support x Instrument panel reinforcement assembly	24	241	17	
Brake pedal support x Brake booster	9.0	92	80 in.*lbf	SS
Battery negative terminal x Battery	5.4	55	48 in.*lbf	
Piston stopper bolt x Master cylinder body	10	102	7	
Brake master cylinder x Brake booster	13	127	9	
Brake tube x Brake tube way	14 (15)	143 (155)	10 (11)	
Brake tube x Proportioning valve	14 (15)	143 (155)	10 (11)	
Front wheel	103	1,050	76	
Front disc brake cylinder mounting x Steering knuckle	107	1,089	79	
Disc brake cylinder assembly x Front disc brake cylinder mounting	34	347	25	
Front flexible hose x Disc brake cylinder assembly	30	310	22	
Front flexible hose x Front speed sensor	29	300	22	
Front flexible hose x Front shock absorber assembly	29	300	22	
Front flexible hose x Brake tube	14 (15)	143 (155)	10 (11)	
Rear wheel	103	1,050	76	
Rear wheel brake cylinder assembly x Backing plate	9.8	100	7	
Brake tube x Rear wheel brake cylinder assembly	14 (15)	143 (155)	10 (11)	
Rear flexible hose x Brake tube	14 (15)	143 (155)	10 (11)	7
Proportioning valve x Proportioning valve bracket	5.4	55	48 in.*lbf	7
Proportioning valve bracket x Body	19	194	14	

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PARKING BRAKE

SERVICE DATA

Parking brake lever travel at 200 N (20 kgf, 45 lbf)		6 to 9 clicks
Parking brake switch	Released Pushed in	Below 1 Ω 10 k Ω or higher



Part Tightened	N*m	kgf*cm	ft.*lbf
Rear wheel	103	1,050	76
Lock nut x Parking brake pull rod sub-assembly	5.4	55	48 in.*lbf
Parking brake switch x Parking brake lever	0.9	9	8 in.*lbf
Parking brake lever x Body	13	127	9
Battery negative terminal x Battery	5.4	55	48 in.*lbf
Parking brake cable x Backing plate	8.0	82	71 in.*lbf
Parking brake cable	6.0	61	53 in.*lbf
Front No. 4 floor heat insulator x Body	5.5	56	49 in.*lbf

STEERING COLUMN

SERVICE DATA

Steering wheel free play

Maximum

30 mm (1.18 in.)

	Part tightened	N*m	kgf*cm	ft.*lbf
	Steering wheel assembly x Steering column assembly	50	510	37
	Steering sliding yoke sub-assembly x Steering gear assembly	28	290	21
	Steering sliding yoke sub-assembly x Steering intermediate shaft assembly No. 2	28	290	21
	Steering intermediate shaft assembly No. 2 x Steering column assembly	28	290	21
92	Brake pedal x Brake pedal support sub-assembly	37	375	27
30	Steering column x Instrument panel reinforcement assembly	25	255	18
	Steering wheel assembly x Steering column assembly	50	510	37

POWER STEERING

SERVICE DATA

Steering wheel		
Steering effort	Reference	5.5 N*m (56 kgf*cm, 49 in.*lbf)
Steering wheel free play	Maximum	30 mm ('1.18 in.)

Part Tightened		N*m	kgf*cm	ft.*lbf
Steering sliding yoke sub-assembly x Steering intermediate shaft assembly No, 2		28	290	21
Steering sliding yoke sub-assembly x Power steering gear		28	290	21
Engine mounting x Engine moving control rod		120	1,224	89
Front suspension crossmember sub-assembly x Body Bolt A Bolt B Bolt C		70 160 95	714 1,631 969	52 118 70
Power steering gear x Front suspension crossmember sub-assembly		96	979	71
Power steering ECU x Instrument panel reinforcement assembly		5.0	51	44 in.*lbf



AIR CONDITIONING

SERVICE DATA

Refrigerant charge volume	330 to 390 g (11.64 to 13.76 oz.)
PTC heater assembly	1 - 2 : Below 1Ω 2 - 3 : Below 1Ω 1 - 3 : Below 1Ω
Blower resistor	1 - 4 : 3.12 to 3.60 Ω 3 - 4 : 1.45 to 1.67 Ω 2 - 4 : 0.52 to 0.60 Ω
Compressor and pulley	10.1 to 11.1 Ω at 25 °C (77°F)
Heater blower motor relay	3 - 4 : Below 1 Ω 3 - 4 : 10k Ω or higher (Apply battery voltage to terminals 1 and 2) 3 - 5 : 10k Ω or higher 3 - 5 : Below 1 Ω (Apply battery voltage to terminals 1 and 2)
PTC heater relay	3 - 5 : 10k Ω or higher 3 - 5 : Below 1 Ω (Apply battery voltage to terminals 1 and 2)

for Manual transaxle

Idling speed Switch A/C OFF	550 to 650 rpm
Idling speed Switch A/C ON (A/C Lo \rightarrow Hi)	$700 \rightarrow 850 \text{ rpm}$

for Automatic transaxle

Idling speed Switch A/C OFF	650 to 750 rpm
Idling speed Switch A/C ON (A/C Lo \rightarrow Hi)	700 → 850 rpm

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
AIR CONDITIONING UNIT			
Part Tightened	N*m	kgf*cm	ft.*lbf
Cooler expansion valve x NO. 1 Cooler evaporator sub-assembly	3.5	36	31 in.*lbf
Air conditioning unit x Body	9.8	100	87 in.*lbf
Air conditioning unit x Instrument panel reinforcement	4.0	41	35 in.*lbf
Ground wire x Instrument panel reinforcement	3.2	33	28 in.*lbf
Ground wire x Instrument panel brace sub-assembly	8.0	82	71 in.*lbf
Connector holder x Instrument panel reinforcement	3.2	33	28 in.*lbf
Main body ECU x Instrument panel reinforcement	3.2	33	28 in.*lbf
Instrument panel brace sub-assembly x Instrument panel reinforcement : for bolt	9.8	100	87 in.*lbf
Instrument panel brace sub-assembly x Instrument panel reinforcement : for nut	9.8	100	87 in.*lbf
Instrument panel brace sub-assembly x Air conditioning unit : for screw	9.8	100	87 in.*lbf
Steering sliding yoke sub-assembly x Steering column assembly : for bolt B	28	286	21
Steering sliding yoke sub-assembly x Power Steering assembly : for bolt A	28	286	21
Suction tube and liquid tube x Cooler expansion valve	9.8	100	87 in.*lbf

COMPRESSOR AND PULLEY

Part Tightened	N*m	kgf*cm	ft.*lbf
Compressor and pulley x Oil pan sub-assembly	25	255	18
NO. 1 cooler refrigerant discharge hose x Compressor and pulley	9.8	100	87 in.*lbf
NO. 1 cooler refrigerant suction hose x Compressor and pulley	9.8	100	87 in.*lbf

CONDENSER

Part Tightened	N*m	kgf*cm	ft.*lbf
Cooler dryer x Condenser	2.9	30	25 in.*lbf
Liquid tube assembly A x Condenser	5.4	55	48 in.*lbf
NO. 1 cooler discharge hose x Condenser	5.4	55	48 in.*lbf

SUPPLEMENTAL RESTRAINT SYSTEM

SERVICE DATA

Spiral cable	A1(D-) - D2(D-)	Below 1 Ω	
Standard	A2(D+) - D1(D+)	Below 1 Ω	
	B1(D2-) - D3(D2-)	Below 1 Ω	
	A2(D2+) - D4(D2+)	Below 1 Ω	

Part Tightened		N*m	kgf*cm	ft.*lbf
Steering pad x Steering wheel assembly		8.8	90	78 in.*lbf
Steering wheel assembly x Steering column assembly		50	510	37
Driver side knee airbag assembly x Instrument panel reinforcement		10	102	7
Front passenger airbag assembly x Instrument panel reinforcement		20	204	15
Roof side rail bracket x Body		9.8	100	7
Curtain shield airbag bracket x Body		9.8	100	7
Curtain shield airbag x Body	Bolt A Bolt D	14 9.8	145 100	10 7
Center airbag sensor assembly x Body		18	180	13
Front airbag sensor x Body		9.0	90	80 in.*lbf
Side airbag sensor x Body		9.0	90	80 in.*lbf
Rear airbag sensor x Body		9.0	90	80 in.*lbf

Sedan:

Part Tightened	N*m	kgf*cm	ft.*lbf
Steering pad x Steering wheel assembly	8.8	90	78 in.*lbf
Steering wheel assembly x Steering column assembly	50	510	37
Driver side knee airbag assembly x Instrument panel reinforcement	10	102	7
Front passenger airbag assembly x Instrument panel reinforcement	20	204	15
Roof side rail bracket x Body	14	143	10
Curtain shield airbag bracket x Body	14	143	10
Curtain shield airbag x Body	14	143	10
Center airbag sensor assembly x Body	18	180	13
Front airbag sensor x Body	9.0	90	80 in.*lbf
Side airbag sensor x Body	9.0	90	80 in.*lbf
Rear airbag sensor x Body	9.0	90	80 in.*lbf

SS

SEAT BELT

SERVICE DATA

FRONT SEAT INNER BELT ASSEMBLY (for Sedan):

ltem	Position	Tester Connection	Condition	Specified Condition
	Drivor sido	2 /	Tongue plate fastened	10 k Ω or higher
Standard registeres	Driver side	5-4	Tongue plate released	Below 1 Ω
Sidnuaru resisiance	Front popponger side	1 0	Tongue plate fastened	10 k Ω or higher
	From passenger side	1-2	Tongue plate released	Below 1 Ω

FRONT SEAT INNER BELT ASSEMBLY (for Hatchback):

ltem	Position	Tester Connection	Condition	Specified Condition		
	Driver side	2 /	Tongue plate fastened	10 k Ω or higher		
Standard registance	Driver side			Below 1 Ω		
Stanuaru resistance	Front pocoongor side	1 0	Tongue plate fastened	10 k Ω or higher		
	Front passenger side 1 - 2		Front passenger side 1 - 2		Tongue plate released	Below 1 Ω

FRONT PASSENGER SEAT BELT WARNING LIGHT (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FRONT PASSENGER SEAT BELT WARNING LIGHT (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FRONT SEAT INNER BELT ASSEMBLY (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front seat inner belt assembly x Front seat adjuster frame assembly	42	43	31
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FRONT SEAT INNER BELT ASSEMBLY (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front seat inner belt assembly x Front seat adjuster frame assembly	42	43	31
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FRONT SEAT OUTER BELT ASSEMBLY (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front shoulder belt anchor adjuster assembly x Body	42	43	31
Front seat outer belt assembly (for Retractor Upper) x Body	4.9	50	43 in.*lbf
Front seat outer belt assembly (for Retractor Lower) x Body	42	430	31
Front seat outer belt assembly (for Through Anchor) x Body	42	430	31
Front seat outer belt assembly (for Anchor Plate) x Body	42	430	31
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FRONT SEAT OUTER BELT ASSEMBLY (for Hatchback 5 Door):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front shoulder belt anchor adjuster assembly x Body	42	43	31
Front seat outer belt assembly (for Retractor Upper) x Body	4.9	50	43 in.*lbf
Front seat outer belt assembly (for Retractor Lower) x Body	42	430	31
Front seat outer belt assembly (for Through Anchor) x Body	42	430	31
Front seat outer belt assembly (for Anchor Plate) x Body	42	430	31
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FRONT SEAT OUTER BELT ASSEMBLY (for Hatchback 3 Door):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front seat outer belt assembly (for Retractor Upper) x Body	4.9	50	43 in.*lbf
Front seat outer belt assembly (for Retractor Lower) x Body	42	430	31
Front seat outer belt assembly (for Through Anchor) x Body	42	430	31
Front seat outer belt assembly (for Anchor Plate) x Body	42	430	31
Negative battery terminal x Battery	5.4	55	48 in.*lbf

REAR SEAT INNER BELT ASSEMBLY (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat inner belt assembly x Body	42	430	31

REAR SEAT INNER BELT ASSEMBLY (for Hatchback LH Side):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat inner belt assembly x Rear seat back frame sub-assembly (for 60/ 40 Split Seat Type)	42	430	31
Rear seat inner belt assembly x Body (for Hold Down Seat Type)	42	430	31

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Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat cushion assembly x Body (for 60/40 Split Seat Type)	37	375	27

REAR SEAT INNER BELT ASSEMBLY (for Hatchback RH Side):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat inner belt assembly x Rear seat back frame sub-assembly (for 60/ 40 Split Seat Type)	42	430	31
Rear seat inner belt assembly x Body (for Hold Down Seat Type)	42	430	31

REAR SEAT OUTER BELT ASSEMBLY (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat outer belt assembly (for Retractor) x Body	42	430	31
Rear seat outer belt assembly (for Anchor Plate) x Body	42	430	31

REAR SEAT OUTER BELT ASSEMBLY (for 5 Hatchback Door):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat outer belt assembly (for Retractor) x Body	42	430	31
Rear seat outer belt assembly (for Through Anchor) x Body	42	430	31
Rear seat outer belt assembly (for Anchor Plate) x Body	42	430	31
Negative battery terminal x Battery (for LH Side)	5.4	55	48 in.*lbf

REAR SEAT OUTER BELT ASSEMBLY (for Hatchback 3 Door):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat outer belt assembly (for Retractor) x Body	42	430	31
Rear seat outer belt assembly (for Through Anchor) x Body	42	430	31
Rear seat outer belt assembly (for Anchor Plate) x Body	42	430	31
Negative battery terminal x Battery (for LH Side)	5.4	55	48 in.*lbf

REAR CENTER SEAT INNER BELT ASSEMBLY (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear center seat inner belt assembly x Body	42	430	31

REAR CENTER SEAT INNER BELT ASSEMBLY (for Hatchback LH Side):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear center seat inner belt assembly x Rear seat back frame sub-assembly (for 60/40 Split Seat Type)	42	430	31
Rear center seat inner belt assembly x Body (for Hold Down Seat Type)	42	430	31
Rear seat cushion assembly x Body (for 60/40 Split Seat Type)	37	375	27

REAR CENTER SEAT INNER BELT ASSEMBLY (for Hatchback RH Side):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear center seat inner belt assembly x Rear seat back frame sub-assembly (for 60/40 Split Seat Type)	42	430	31
Rear center seat inner belt assembly x Body (for Hold Down Seat Type)	42	430	31

REAR CENTER SEAT OUTER BELT ASSEMBLY (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear center seat outer belt assembly (for Retractor) x Body	42	430	31
Rear center seat outer belt assembly (for Anchor Plate) x Body (for Hold Down Seat Type)	42	430	31

REAR CENTER SEAT OUTER BELT ASSEMBLY (for 5 Hatchback Door):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear center seat outer belt assembly (for Retractor) x Body	42	430	31
Rear center seat outer belt assembly (for Bracket) x Body	42	430	31
Rear center seat outer belt assembly (for Through Anchor) x Body	42	430	31

SERVICE SPECIFICATIONS – SEAT BELT

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery (for LH Side)	5.4	55	48 in.*lbf

REAR CENTER SEAT OUTER BELT ASSEMBLY (for Hatchback 3 Door):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery (for LH Side)	5.4	55	48 in.*lbf

THEFT DETERRENT SYSTEM TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Hood lock assembly x Radiator support	7.5	76	66 in.*lbf
Security horn x Body	8.0	82	71 in.*lbf
Luggage compartment lock cylinder x Back door panel	4.9	50	43 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf



CRUISE CONTROL

TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbft.*lbf
Cruise control main switch x Steering wheel	2.4	24	21 in.*lbf
Clutch switch assembly x Clutch pedal	16	160	12
Negative battery terminal x Battery	5.4	55	48 in.*lbf

Turn signal flasher relay	7 - Body ground: Below 1 Ω
Headlight relay	3 - 5: 10 k Ω higher 3 - 5: Below 1 Ω (Battery voltage applied to terminals 1 and 2)
Fog light relay (for Sedan)	3 - 5: 10 k Ω higher 3 - 5: Below 1 Ω (Battery voltage applied to terminals 1 and 2)
Fog light relay (for Hatchback)	3 - 5: 10 k Ω higher 3 - 5: Below 1 Ω (Battery voltage applied to terminals 1 and 2)

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TORQUE SPECIFICATIONS

HEADLIGHT ASSEMBLY (for Sedan):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Headlight assembly x Body	5.9	60	52 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
HEADLIGHT ASSEMBLY (for Hatchback):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
SIDE TURN SIGNAL LIGHT ASSEMBLY (for Hatch	back):		
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
FOG LIGHT ASSEMBLY (for Sedan):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
FOG LIGHT ASSEMBLY (for Hatchback)		I	
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
REAR COMBINATION LIGHT ASSEMBLY (for Sed	an)-	I	
Part Tightened	N*m	kgf*cm	ft.*lbf
Rear combination light assembly x Body	4.9	50	43 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
REAR COMBINATION LIGHT ASSEMBLY (for Hatc	hback):	·	·
Part Tightened	N*m	kgf*cm	ft.*lbf
Rear combination light assembly x Body	5.4	55	48 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
LICENSE LIGHT ASSEMBLY (for Sedan):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Luggage compartment door outside garnish x Back door panel	4.9	50	43 in.*lbf
Luggage compartment door lock cylinder x Back door panel	4.9	50	43 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
LICENSE LIGHT ASSEMBLY (for Hatchback):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
HIGH MOUNTED STOP LIGHT ASSEMBLY (for Sec	an with Rear	Spoiler):	·
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
HIGH MOUNTED STOP LIGHT ASSEMBLY (for Sec	an without R	ear Spoiler)	
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
	chback).	I	I
		kaf*cm	ft.*lbf
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MAP LIGHT:			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
ROOM LIGHT:			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
LUGGAGE COMPARTMENT ROOM LIGHT (for	Sedan):	·	·
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
LUGGAGE COMPARTMENT ROOM LIGHT (for	Hatchback):	·	
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
Part Tightened	N*m	kaf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
	I	I	I
HAZARD WARNING SWITCH (for Sedan):	NI¥	leaft and	£4 +11-£
Part Tightened	N m	55	18 in *lbf
Negative battery terminar & battery	5.4	55	40 111. 101
HAZARD WARNING SWITCH (for Hatchback):	I	Γ	
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
STOP LIGHT SWITCH (for Sedan):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
STOP LIGHT SWITCH (for Hatchback):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
FRONT DOOR COURTESY SWITCH (for Sedan)):		
Part Tightened	N*m	kgf*cm	ft.*lbf
Front door courtesy switch x Body	3.7	38	33 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
FRONT DOOR COURTESY SWITCH (for Hatchb	back):		
Part Tightened	, N*m	kgf*cm	ft.*lbf
Front door courtesy switch x Body	3.7	38	33 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
REAR DOOR COURTESY SWITCH:			
Part Tightened	N*m	kgf*cm	ft.*lbf
Rear door courtesy switch x Body	3.7	38	33 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
Part Tightened	N*m	kaf*cm	ft.*lbf
	1		

Part lightened	N^m	ĸgr∘cm	tt.^IDf
Luggage compartment door lock assembly x Back door panel	7.5	76	66 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

BACK DOOR COURTESY SWITCH (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Back door lock assembly x Back door panel	7.5	76	66 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FOG LIGHT RELAY (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FOG LIGHT RELAY (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf



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WIPER AND WASHER

TORQUE SPECIFICATIONS

FRONT WIPER MOTOR (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front wiper motor x Front wiper link	5.5	56	49 in.*lbf
Front wiper motor and link x Cowl top panel outer	5.5	56	49 in.*lbf
Front wiper arm and blade assembly x Front wiper motor and link	26	265	19
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FRONT WIPER MOTOR (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front wiper motor x Front wiper link	5.4	55	48 in.*lbf
Front wiper motor and link x Cowl top panel outer	5.5	56	49 in.*lbf
Front wiper arm and blade assembly x Front wiper motor and link	26	265	19
Negative battery terminal x Battery	5.4	55	48 in.*lbf

REAR WIPER MOTOR (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear wiper motor x Back door panel	5.5	56	49 in.*lbf
Rear wiper arm and blade assembly x Rear wiper motor	5.5	56	49 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

WIPER SWITCH (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

WIPER SWITCH (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

WASHER MOTOR (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Windshield washer jar assembly x Batter	5.5	56	49 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

WASHER MOTOR (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Windshield washer jar assembly x Batter	5.5	56	49 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

WASHER LEVEL WARNING SWITCH (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Windshield washer jar assembly x Batter	5.5	56	49 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

DOOR LOCK

TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Front door lock assembly x Front door panel	5.0	51	44 in.*lbf
Rear door lock assembly x Rear door panel	5.0	51	44 in.*lbf
Back door lock actuator assembly x Back door panel	7.0	71	62 in.*lbf
Back door lock assembly x Back door panel	7.5	76	66 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

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SS-53

METER

SERVICE DATA

Fuel sender gauge assembly	F (Upper End): 12.0 to 18.0 Ω
	E (Lower End): 405.0 to 415.0 Ω

Part Tightened	N*m	kgf*cm	ft.*lbft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf
AUDIO / VISUAL

SERVICE DATA

FRONT NO. 1 SPEAKER (for Sedan):

Item	Tester Connection	Specified Condition
Standard resistance	1 - 2	Approximately 4 Ω

FRONT NO. 1 SPEAKER (for Hatchback):

Item	Tester Connection	Specified Condition	C
Standard resistance	1 - 2	Approximately 4 Ω	

REAR SPEAKER (for Sedan):

Item Tester Connection		Specified Condition
Standard resistance	1 - 2	Approximately 4 Ω

REAR SPEAKER (for Hatchback 5 Door):

Item	Tester Connection	Specified Condition
Standard resistance	1 - 2	Approximately 4 Ω

REAR SPEAKER (for Hatchback 3 Door):

Item	Tester Connection	Specified Condition
Standard resistance	1 - 2	Approximately 4 Ω

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Negative battery terminal x Battery

TORQUE SPECIFICATIONS

RADIO RECEIVER (for Sedan):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*l
RADIO RECEIVER (for Hatchback):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*l
FRONT NO. 1 SPEAKER (for Sedan):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*l
FRONT NO. 1 SPEAKER (for Hatchback):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*l
REAR SPEAKER (for Sedan):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*l
REAR SPEAKER (for Hatchback 5 Door)		•	
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*I
REAR SPEAKER (for Hatchback 3 Door):	I	1	1
Part Tightened	N*m	kaf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*I
PADIO ANTENNA COPD (for Sodan):			
Part Tightened	N*m	kaf*cm	ft *lbf
Negative battery terminal x Battery	54	55	48 in *l
	0.1		10 111 1
RADIO ANTENNA CORD (for Hatchback 5 Door):	N 14		6 AU
Part lightened	N*m	kgt*cm	ft.*lb1
Negative battery terminal x Battery	5.4	55	48 In."I
RADIO ANTENNA CORD (for Hatchback 3 Door):			1
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*l
AMPLIFIER ANTENNA (for Sedan):		1	
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*l
AMPLIFIER ANTENNA (for Hatchback 5 Door):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Amplifier antenna assembly x Body	4.5	46	40 in.*l
Negative battery terminal x Battery	5.4	55	48 in.*l
AMPLIFIER ANTENNA (for Hatchback 3 Door):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Amplifier antenna assembly x Body	4.5	46	40 in.*I

5.4

48 in.*lbf

55

HORN

SERVICE DATA

HORN RELAY (for Sedan):

Item	Tester Connection	Specified Condition
		10 k Ω or higher
Standard resistance	A8 - T6	Below 1 Ω (Battery voltage applied to terminals A7 and T6)

HORN RELAY (for Hatchback):

Item	Tester Connection	Specified Condition
		10 k Ω or higher
Standard resistance	A8 - T6	Below 1 Ω (Battery voltage applied to terminals A7 and T6)

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TORQUE SPECIFICATIONS

HORN RELAY (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.5	55	48 in.*lbf

HORN RELAY (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.5	55	48 in.*lbf

SS LOW PITCHED HORN (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Low pitched horn assembly x Body	19.5	200	14
Negative battery terminal x Battery	5.5	55	48 in.*lbf

LOW PITCHED HORN (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Low pitched horn assembly x Body	19.5	200	14
Negative battery terminal x Battery	5.5	55	48 in.*lbf

OTHER SYSTEM

TORQUE SPECIFICATIONS

CIGARETTE LIGHTER ASSEMBLY (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

POWER OUTLET SOCKET (for Sedan):

$\mathbf{c}\mathbf{c}$	Part Tightened	N*m	kgf*cm	ft.*lbf
33	Negative battery terminal x Battery	5.4	55	48 in.*lbf

POWER OUTLET SOCKET (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

WINDSHIELD / WINDOWGLASS

TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Power window regulator motor assembly front x Front door window regulator sub-assembly	5.4	55	48 in.*lbf
Power window regulator motor assembly rear x Rear door window regulator sub-assembly	5.4	55	48 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf



MIRROR

TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Outer rear view mirror assembly x Front door panel	8.0	82	71 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Front passenger airbag assembly x Instrument panel reinforcement	20	204	15
Negative battery terminal x Battery	5.4	55	48 in.*lbf

SEAT

TORQUE SPECIFICATIONS

FRONT SEAT ASSEMBLY:

Part Tightened	N*m	kgf*cm	ft.*lbf
Front seat side airbag assembly x Front seat frame adjuster assembly	5.5	55	49 in.*lbf
Front seat assembly x Body	37	375	27
Negative battery terminal x Body	5.4	55	48 in.*lbf

SS REAR SEAT ASSEMBLY (for 60/40 Slide Reclining Hold Down Seat Type LH Side):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat track assembly x Rear seat back frame sub-assembly	33	335	24
Rear seat belt hook x Rear seat back frame sub-assembly	5.0	50	44 in.*lbf
Rear seat cushion assembly x Rear seat back frame sub-assembly (for Nut)	20	205	15
Rear seat cushion assembly x Rear seat back frame sub-assembly (for Bolt)	21	215	16
Rear seat inner belt assembly x Rear seat back adjuster sub-assembly	42	430	31
Rear center seat inner belt assembly x Rear seat back adjuster sub- assembly	42	430	31
Rear seat assembly x Body	37	375	27

REAR SEAT ASSEMBLY (for 60/40 Slide Reclining Hold Down Seat Type RH Side):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat track assembly x Rear seat back frame sub-assembly	33	335	24
Rear seat cushion assembly x Rear seat back frame sub-assembly	21	215	16
Rear seat inner belt assembly x Rear seat back adjuster sub-assembly	42	430	31
Rear seat assembly x Body	37	375	27

REAR SEAT ASSEMBLY (for Bench Reclining Hold Down Seat Type):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear seat leg sub-assembly x Rear seat back frame sub-assembly	42	430	31
Rear seat belt hook x Rear seat back frame sub-assembly	5.0	50	44 in.*lbf
Rear seat back assembly x Body	37	375	27

Part Tightened	N*m	kgf*cm	ft.*lbf
Hood x Hood hinge	13	133	10
Hood lock x Radiator support	7.5	76	66 in.*lbf
Front door hinge assembly upper x Body	26	265	19
Front door hinge assembly upper x Front door panel	26	265	19
Front door hinge assembly lower x Body	26	265	19
Front door hinge assembly lower x Front door panel	26	265	19
Front door lock striker plate assembly x Body	23	235	17
Front door stiffener cushion x Front door panel	8.0	82	71 in.*lbf
Front door outside handle frame sub-assembly x Front door panel	4.0	41	35 in.*lbf
Front door lock assembly x Front door panel	5.0	51	44 in.*lbf
Front door outside handle cover x Front door outside handle frame sub- assembly	4.0	41	35 in.*lbf
Front door frame sub-assembly front lower x Front door panel	6.2	63	54 in.*lbf
Front door frame sub-assembly rear lower x Front door panel	6.2	63	54 in.*lbf
Front door check assembly x Front door panel	5.5	56	49 in.*lbf
Front door check assembly x Body	30	306	22
Power window regulator motor assembly front x Front door window regulator sub-assembly	5.4	55	48 in.*lbf
Front door window regulator sub-assembly x Front door panel	8.0	82	71 in.*lbf
Front door glass sub-assembly x Front door window regulator sub-assembly	8.0	82	71 in.*lbf
Rear door hinge assembly upper x Body	26	265	19
Rear door hinge assembly upper x Body	26	265	19
Rear door hinge assembly lower x Rear door panel	26	265	19
Rear door hinge assembly lower x Rear door panel	26	265	19
Rear door lock striker plate assembly x Body	23	235	17
Rear door outside handle frame sub-assembly x Rear door panel	4.0	41	35 in.*lbf
Rear door lock assembly x Rear door panel	5.0	51	44 in.*lbf
Rear door outside handle cover x Rear door outside handle frame sub- assembly	4.0	41	35 in.*lbf
Power window regulator motor assembly rear x Rear door window regulator sub-assembly	5.4	55	48 in.*lbf
Rear door window regulator sub-assembly x Rear door panel	8.0	82	71 in.*lbf
Rear door window division bar sub-assembly x Rear door panel	6.2	63	54 in.*lbf
Rear door check assembly x Rear door panel	5.5	56	49 in.*lbf
Rear door check assembly x Body	30	306	22
Back door hinge sub-assembly x Back door panel	12	122	8.9
Back door lock striker assembly x Body	12	122	8.9
Back door lock actuator assembly x Back door panel	7.0	71	62 in.*lbf
Back door lock cylinder assembly x Back door panel	7.0	71	62 in.*lbf
Luggage compartment door hinge arm sub-assembly x Back door panel	7.0	71	62 in.*lbf
Luggage compartment door striker x Body	5.5	56	49 in.*lbf
Luggage compartment lock cylinder x Back door panel	4.9	50	43 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

EXTERIOR

TORQUE SPECIFICATIONS

FRONT BUMPER (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front bumper arm sub-assembly x Body	40	410	30
Windshield washer jar assembly x Front bumper arm sub-assembly RH	5.5	55	49 in.*lbf
Front Bumper stone deflector bracket x Body	5.5	55	49 in.*lbf
Front bumper reinforcement sub-assembly x Front bumper arm sub- assembly	40	410	30
Front bumper reinforcement sub-assembly x Front bumper stone deflector bracket	5.5	55	49 in.*lbf
Front bumper side retainer x Body	5.0	51	44 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FRONT BUMPER (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front bumper arm sub-assembly x Body	40	410	30
Windshield washer jar assembly x Front bumper arm sub-assembly RH	5.5	55	49 in.*lbf
Front Bumper stone deflector bracket x Body	5.5	55	49 in.*lbf
Front bumper reinforcement sub-assembly x Front bumper arm sub- assembly	40	410	30
Front bumper reinforcement sub-assembly x Front bumper stone deflector bracket	5.5	55	49 in.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

REAR BUMPER (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear bumper arm sub-assembly x Body	19	195	14
Rear bumper reinforcement x Rear bumper arm sub-assembly	19	195	14
Negative battery terminal x Battery	5.4	55	48 in.*lbf

REAR BUMPER (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Rear bumper arm sub-assembly x Body	19	195	14
Rear bumper reinforcement x Rear bumper arm sub-assembly	19	195	14
Negative battery terminal x Battery	5.4	55	48 in.*lbf

NAME PLATE (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

NAME PLATE (for Hatchback):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

REAR SPOILER (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery	5.4	55	48 in.*lbf

FRONT DOOR BELT MOULDING (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery (w/ Power Window)	5.4	55	48 in.*lbf

Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery (w/ Power Window)	5.4	55	48 in.*lbf
REAR DOOR BELT MOULDING (for Hatchback):			
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery (w/ Power Window)	5.4	55	48 in.*lbf
NO. 1 BLACK OUT TAPE (for Sedan):	· · · ·		
Part Tightened	N*m	kgf*cm	ft.*lbf
Negative battery terminal x Battery (w/ Power Window)	5 /	55	48 in *lhf
Negative battery terminar x battery (w/ 1 ower window)	5.4	55	40 111. 101
NO. 1 BLACK OUT TAPE (for Hatchback):	5.4		
NO. 1 BLACK OUT TAPE (for Hatchback): Part Tightened	N*m	kgf*cm	ft.*lbf
NO. 1 BLACK OUT TAPE (for Hatchback): Part Tightened Negative battery terminal x Battery (w/ Power Window)	N*m 5.4	kgf*cm 55	ft.*lbf 48 in.*lbf
NO. 1 BLACK OUT TAPE (for Hatchback): Part Tightened Negative battery terminal x Battery (w/ Power Window) NO. 2 BLACK OUT TAPE (for Sedan):		kgf*cm 55	ft.*lbf 48 in.*lbf
NO. 1 BLACK OUT TAPE (for Hatchback): Part Tightened Negative battery terminal x Battery (w/ Power Window) NO. 2 BLACK OUT TAPE (for Sedan): Part Tightened		kgf*cm 55 kgf*cm	ft.*lbf 48 in.*lbf ft.*lbf
No. 1 BLACK OUT TAPE (for Hatchback): Part Tightened Negative battery terminal x Battery (w/ Power Window) NO. 2 BLACK OUT TAPE (for Sedan): Part Tightened Negative battery terminal x Battery (w/ Power Window)	N*m 5.4 N*m 5.4 N*m 5.4	kgf*cm 55 kgf*cm 55	ft.*lbf 48 in.*lbf ft.*lbf 48 in.*lbf
NO. 1 BLACK OUT TAPE (for Hatchback): Part Tightened Negative battery terminal x Battery (w/ Power Window) NO. 2 BLACK OUT TAPE (for Sedan): Part Tightened Negative battery terminal x Battery (w/ Power Window) NO. 2 BLACK OUT TAPE (for Hatchback):	N*m 5.4 N*m 5.4	kgf*cm 55 kgf*cm 55	ft.*lbf 48 in.*lbf ft.*lbf 48 in.*lbf 48 in.*lbf

5.4

55

48 in.*lbf

		-	

Negative battery terminal x Battery (w/ Power Window)

INTERIOR

TORQUE SPECIFICATIONS

ROOF HEADLINING (for Sedan):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front seat outer belt assembly (for Through Anchor) x Front shoulder belt anchor adjuster assembly	42	430	31
Negative battery terminal x Battery	5.4	55	48 in.*lbf

SS ROOF HEADLINING (for Hatchback 5 Door):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front seat outer belt assembly (for Through Anchor) x Front shoulder belt anchor adjuster assembly	42	430	31
Rear center seat outer belt assembly (for Through Anchor) x Body	42	430	31
Rear seat outer belt assembly (for Anchor Plate) x Body	42	430	31
Negative battery terminal x Battery	5.4	55	48 in.*lbf

ROOF HEADLINING (for Hatchback 3 Door):

Part Tightened	N*m	kgf*cm	ft.*lbf
Front seat outer belt assembly (for Through Anchor) x Body	42	430	31
Rear seat outer belt assembly (for Anchor Plate) x Body	42	430	31
Negative battery terminal x Battery	5.4	55	48 in.*lbf