

# SUSPENSION AND AXLE

## SERVICE DATA

SS000-01

Cold tire inflation pressure	Tire size P225/60R16 97 V	Front	200 kPa (2.0 kgf/cm <sup>2</sup> , 29 psi)	
		Rear	200 kPa (2.0 kgf/cm <sup>2</sup> , 29 psi)	
Front wheel alignment	Vehicle height			
	Coil suspension	Front	264 mm (10.39 in.)	
		Rear	243 mm (9.57 in.)	
	Air suspension	Front	250 ± 10 mm (9.84 ± 0.39 in.)	
		Left-right error	10 mm (0.39 in.) or less	
		Rear	222.5 ± 10 mm (8.76 ± 0.39 in.)	
		Left-right error	10 mm (0.39 in.) or less	
	H <sub>F</sub> – F <sub>R</sub>		27.5 ± 15 mm (1.08 ± 0.59 in.)	
	Camber	Coil suspension	Left-right error	0° 20' ± 45' (0.33° ± 0.75°)
				30' (0.5°) or less
	Air suspension	Coil suspension	Left-right error	0° 05' ± 45' (0.08° ± 0.75°)
				30' (0.5°) or less
	Caster	Coil suspension	Left-right error	7° 00' ± 45' (7° ± 0.75°)
				30' (0.5°) or less
Air suspension		Coil suspension	Left-right error	7° 25' ± 45' (7° 42' ± 0.75°)
				30' (0.5°) or less
Steering axis inclination (Reference)	Coil suspension	Left-right error	8° 25' ± 45' (8.42° ± 0.75°)	
			30' (0.5°) or less	
	Air suspension	Coil suspension	Left-right error	8° 40' ± 45' (8.66° ± 0.75°)
				30' (0.5°) or less
Toe-in (total)	Coil suspension		0° 18' ± 12' (0.3° ± 0.2°, 2 ± 2 mm, 0.12 ± 0.08 in.)	
		Air suspension	0° 06' ± 12' (0.1° ± 0.2°, 1 ± 2 mm, 0.04 ± 0.08 in.)	
Wheel angle	Inside wheel		42° 00' ± 1° 30' (42° ± 1.5°)	
		Outside wheel (Reference)	Coil suspension	34° 20' (34.33°)
			Air suspension	34° 00' (34°)
Rear wheel alignment	Camber	Coil suspension	Left-right error	-0° 50' ± 45' (-0.83° ± 0.75°)
				30' (0.5°) or less
	Air suspension	Coil suspension	Left-right error	-1° 25' ± 45' (-1.42° ± 0.75°)
				30' (0.5°) or less
Toe-in (total)	Coil suspension		0° 12' ± 12' (0.2° ± 0.2°, 2 ± 2 mm, 0.08 ± 0.08 in.)	
		Air suspension	0° 18' ± 12' (0.3° ± 0.2°, 3 ± 2 mm, 0.12 ± 0.08 in.)	
Front axle	Wheel bearing backlash		0.05 mm (0.0020 in.) or less	
	Axle hub deviation		0.05 mm (0.0020 in.) or less	
Front suspension	Upper ball joint turning torque		1.0 – 3.4 N·m (10 – 35 kgf·cm, 9 – 30 in.-lbf)	
	Lower ball joint turning torque		1.0 – 2.5 N·m (10 – 25 kgf·cm, 9 – 21.7 in.-lbf)	
	Lower ball joint excessive play		0.3 mm (0.0118 in.) or less	
	Stabilizer bar ball joint turning torque		0.05 – 1.5 N·m (0.5 – 15 kgf·cm, 0.4 – 13 in.-lbf)	

H<sub>F</sub>: Measured value of the front vehicle height

F<sub>R</sub>: Measured value of the rear vehicle height

Rear axle	Wheel bearing backlash		0.05 mm (0.0020 in.) or less
	Axle hub deviation		0.07 mm (0.0028 in.) or less
Rear drive shaft	Drive shaft length	RH	619.5 mm (24.390 in.)
		LH	573.5 mm (22.579 in.)
Rear suspension	Upper ball joint turning torque		1.0 – 3.4 N·m (10 – 35 kgf·cm, 9 – 30 in.·lbf)
	No.1 lower suspension arm ball joint turning torque		0.8 – 3.4 N·m (8.5 – 35 kgf·cm, 7.4 – 30 in.·lbf)
	Stabilizer bar link ball joint turning torque		0.05 – 1.5 N·m (0.5 – 15 kgf·cm, 0.4 – 13 in.·lbf)
Rear differential	Drive pinion shaft runout	Maximum	0.08 mm (0.0031 in.)
	Ring gear runout	Maximum	0.05 mm (0.0020 in.)
	Ring gear backlash		0.08 – 0.13 mm (0.0031 – 0.0051 in.)
	Drive pinion bearing	New bearing	1.5 – 1.8 N·m (15 – 18 kgf·cm, 13.0 – 15.6 in.·lbf)
		Reused bearing	0.5 – 0.8 N·m (5 – 8 kgf·cm, 4.3 – 6.9 in.·lbf)
	Total preload		Drive pinion preload plus 0.5 – 0.8 N·m (5 – 8 kgf·cm, 4.3 – 6.9 in.·lbf)
	Pinion gear backlash	Maximum	0.15 mm (0.0059 in.)
Pinion gear backlash adjusting thrust washer		1.50 mm (0.059 in.) 1.55 mm (0.061 in.) 1.60 mm (0.063 in.) 1.65 mm (0.065 in.) 1.70 mm (0.067 in.) 1.75 mm (0.069 in.) 1.80 mm (0.071 in.) 1.85 mm (0.073 in.) 1.90 mm (0.075 in.)	

## SERVICE SPECIFICATIONS - SUSPENSION AND AXLE

Rear differential (cont'd)	Ring gear backlash adjusting washer	No.	
		02	2.02 mm (0.0795 in.)
		04	2.04 mm (0.0803 in.)
		06	2.06 mm (0.0811 in.)
		08	2.08 mm (0.0819 in.)
		10	2.10 mm (0.0827 in.)
		12	2.12 mm (0.0835 in.)
		14	2.14 mm (0.0843 in.)
		16	2.16 mm (0.0850 in.)
		18	2.18 mm (0.0858 in.)
		20	2.20 mm (0.0866 in.)
		22	2.22 mm (0.0874 in.)
		24	2.24 mm (0.0882 in.)
		26	2.26 mm (0.0890 in.)
		28	2.28 mm (0.0898 in.)
		30	2.30 mm (0.0906 in.)
		32	2.32 mm (0.0913 in.)
		34	2.34 mm (0.0921 in.)
		36	2.36 mm (0.0929 in.)
		38	2.38 mm (0.0937 in.)
		40	2.40 mm (0.0945 in.)
		42	2.42 mm (0.0953 in.)
		44	2.44 mm (0.0961 in.)
		46	2.46 mm (0.0969 in.)
		48	2.48 mm (0.0976 in.)
		50	2.50 mm (0.0984 in.)
		52	2.52 mm (0.0992 in.)
		54	2.54 mm (0.1000 in.)
		56	2.56 mm (0.1008 in.)
		58	2.58 mm (0.1016 in.)
		60	2.60 mm (0.1024 in.)
		62	2.62 mm (0.1031 in.)
		64	2.64 mm (0.1039 in.)
		66	2.66 mm (0.1047 in.)
		68	2.68 mm (0.1055 in.)
		70	2.70 mm (0.1063 in.)
	72	2.72 mm (0.1071 in.)	
	74	2.74 mm (0.1079 in.)	
	76	2.76 mm (0.1087 in.)	
	78	2.78 mm (0.1094 in.)	
	80	2.80 mm (0.1102 in.)	
	82	2.82 mm (0.1094 in.)	
	84	2.84 mm (0.1118 in.)	
	86	2.86 mm (0.1126 in.)	

Rear differential (cont'd)	Tooth contact pattern adjusting washer	No.	
		87	1.87 mm (0.0736 in.)
		88	1.88 mm (0.0740 in.)
		89	1.89 mm (0.0744 in.)
		90	1.90 mm (0.0748 in.)
		91	1.91 mm (0.0752 in.)
		92	1.92 mm (0.0756 in.)
		93	1.93 mm (0.0760 in.)
		94	1.94 mm (0.0764 in.)
		95	1.95 mm (0.0768 in.)
		96	1.96 mm (0.0772 in.)
		97	1.97 mm (0.0776 in.)
		98	1.98 mm (0.0780 in.)
		99	1.99 mm (0.0784 in.)
		00	2.00 mm (0.0788 in.)
		01	2.01 mm (0.0791 in.)
		02	2.02 mm (0.0795 in.)
		03	2.03 mm (0.0799 in.)
		04	2.04 mm (0.0803 in.)
		05	2.05 mm (0.0807 in.)
		06	2.06 mm (0.0811 in.)
		07	2.07 mm (0.0815 in.)
		08	2.08 mm (0.0819 in.)
		09	2.09 mm (0.0823 in.)
		10	2.10 mm (0.0827 in.)
		11	2.11 mm (0.0831 in.)
		12	2.12 mm (0.0835 in.)
		13	2.13 mm (0.0839 in.)
	14	2.14 mm (0.0843 in.)	
	15	2.15 mm (0.0846 in.)	
	16	2.16 mm (0.0850 in.)	
	17	2.17 mm (0.0854 in.)	
	18	2.18 mm (0.0858 in.)	
	19	2.19 mm (0.0862 in.)	
	20	2.20 mm (0.0866 in.)	
	21	2.21 mm (0.0870 in.)	
	22	2.22 mm (0.0874 in.)	
	23	2.23 mm (0.0878 in.)	
	24	2.24 mm (0.0882 in.)	
	25	2.25 mm (0.0886 in.)	
	26	2.26 mm (0.0890 in.)	
	27	2.27 mm (0.0894 in.)	
	28	2.28 mm (0.0898 in.)	