

SUSPENSION AND AXLE

SS000-07

SERVICE DATA

Cold tire inflation pressure	Tire size	P225/60R16 97H	Front, Rear *1 Front, Rear *2	210 kPa (2.1 kgf/cm ² , 30 psi) 240 kPa (2.4 kgf/cm ² , 35 psi)
	Tire size	P225/55R17 95H	Front, Rear *1 Front, Rear *2	220 kPa (2.2 kgf/cm ² , 32 psi) 240 kPa (2.4 kgf/cm ² , 35 psi)
	Tire size	P225/55R17 97W	Front, Rear *1 Front, Rear *2	240 kPa (2.4 kgf/cm ² , 35 psi) 250 kPa (2.5 kgf/cm ² , 36 psi)
Front wheel alignment	Vehicle height			
	w/o Electronic modulated air suspension:			
	P225/60R16	Front *3 Rear *4	212 mm (8.35 in.) 229 mm (9.02 in.)	
	P225/55R17	Front *3 Rear *4	215 mm (8.46 in.) 232 mm (9.13 in.)	
	w/o Electronic modulated air suspension (Sports package):			
	225/60R16	Front *3 Rear *4	213 mm (8.39 in.) 239 mm (9.41 in.)	
	w/ Electronic modulated air suspension:			
	P225/60R16	Front *3 Left-right error Rear *4	203 ± 10 mm (8.00 ± 0.39 in.) 10 mm (0.39 in.) or less 209 ± 10 mm (8.23 ± 0.39 in.)	
	P225/55R17, 225/55R17	Left-right error Front *3 Left-right error Rear *4 Left-right error H _f - H _r	10 mm (0.39 in.) or less 206 ± 10 mm (8.11 ± 0.39 in.) 10 mm (0.39 in.) or less 212 ± 10 mm (8.35 ± 0.39 in.) 10 mm (0.39 in.) or less 27.5 ± 15 mm (1.08 ± 0.59 in.)	
	Camber			
	w/o Electronic modulated air suspension	Left-right error	-0°05' ± 45' (-0.08° ± 0.75°) 30' (0.5°) or less	
	w/ Electronic modulated air suspension	Left-right error	0°15' ± 45' (0.25° ± 0.75°) 30' (0.5°) or less	
	Caster			
w/o Electronic modulated air suspension	Left-right error	6°45' ± 45' (6.75° ± 0.75°) 30' (0.5°) or less		
w/o Electronic modulated air suspension (Sports package)	Left-right error	6°40' ± 45' (6.67° ± 0.75°) 30' (0.5°) or less		
w/ Electronic modulated air suspension	Left-right error	7°15' ± 45' (7.25° ± 0.75°) 30' (0.5°) or less		
Steering axis inclination (Reference)				
w/o Electronic modulated air suspension	Left-right error	9°00' ± 45' (9° ± 0.75°) 30' (0.5°) or less		
w/o Electronic modulated air suspension (Sports package)	Left-right error	9°05' ± 45' (9.08° ± 0.75°) 30' (0.5°) or less		
w/ Electronic modulated air suspension	Left-right error	9°15' ± 45' (9.25° ± 0.75°) 30' (0.5°) or less		
Toe-in (total)			0°06' ± 12' (0.1° ± 0.2°, 1 ± 2 mm, 0.04 ± 0.08 in.)	
Rack end length difference			1 mm (0.04 in.) or less	
Wheel angle				
Inside wheel			43°30' (43.5°)	
Outside wheel (Reference)			37°20' (37.33°)	

*1: Under 200 km/h (124 mph)

*2: 200 km/h (124 mph) or over

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H_f: Measured value of the front vehicle height

H_r: Measured value of the rear vehicle height

*3: Front measure point

Measure from the ground to the center of the lower suspension arm mounting bolt.

*4: Rear measure point

Measure from the ground to the center of the lower suspension arm No. 2 mounting bolts.

Rear wheel alignment	Camber w/o Electronic modulated air suspension		-1°00' ± 45' (-1.00° ± 0.75°)	
		Left-right error	30' (0.5°) or less	
	w/ Electronic modulated air suspension		-1°33' ± 45' (-1.55° ± 0.75°)	
		Left-right error	30' (0.5°) or less	
	Toe-in (total)		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		0.5 - 3.5 N·m (5 - 36 kgf·cm, 4.5 - 31 in.·lbf)	
	Stabilizer bar ball joint turning torque		0.05 - 1.5 N·m (0.5 - 15 kgf·cm, 0.4 - 13 in.·lbf)	
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	623.5 mm (24.547 in.)	
		LH	577.5 mm (22.736 in.)	
Rear suspension	Upper ball joint turning torque		1.0 - 3.4 N·m (10 - 35 kgf·cm, 9 - 30 in.·lbf)	
	lower suspension arm ball joint turning torque		0.5 - 3.4 N·m (5.0 - 35 kgf·cm, 4.4 - 30 in.·lbf)	
	Toe control link ball joint turning torque		0.9 - 3.2 N·m (9.0 - 33 kgf·cm, 8.0 - 28 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 preload (at starting)	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 (at starting)		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.)		

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 (0.1100 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.)	

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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 (0.0787 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.)	