

SUSPENSION AND AXLE

SS1EC-02

SERVICE DATA

Cold tire inflation pressure	Tire size P275/70R 16	220 kPa (2.2 kgf/cm ² , 32 psi)
Follow spring and bumper stopper clearance	Follow spring clearance (Front) Bumper stopper clearance (Rear)	36 mm (1.42 in.) 104 mm (4.09 in.)
Front wheel alignment	Camber Left-right error	1° 00' ± 45' 45' or less
	Caster Left-right error	3° 00' ± 60' 45' or less
	Steering axis inclination	13° 00' ± 45'
	Toe-in (Total) Inspection STD Adjustment STD	0.2° ± 0.2° (2 ± 2 mm, 0.08 ± 0.08 in.) 0.2° ± 0.1° (2 ± 1 mm, 0.08 ± 0.04 in.)
	Wheel angle (Max.) Inside wheel Outside wheel	32° 00' – 35° 00' 31° 00'
Tire and wheel	Tire runout	3.0 mm (0.118 in.) or less
	Wheel balance (Unbalance after adjustment)	13.0 g (0.029 lb) or less
	Wheel bearing preload (at starting) Front	28 – 56 N (2.9 – 5.7 kgf, 6.4 – 12.6 lbf)
	(Rotating load at hub bolt) Rear	26 – 57 N (2.6 – 5.8 kgf, 5.7 – 12.8 lbf)
Front axle	Steering knuckle bearing preload (Rotating load at knuckle end, before installing dust seal)	25 – 44 N (2.5 – 4.5 kgf, 5.5 – 9.9 lbf)
Front differential	Drive pinion preload (at starting) New bearing Reused bearing	0.9 – 1.6 N·m (10 – 16 kgf·cm, 8.7 – 13.9 in.·lbf) 0.5 – 0.8 N·m (5 – 8 kgf·cm, 4.3 – 6.9 in.·lbf)
	Total preload (at starting)	Drive pinion preload plus 0.4 – 0.6 N·m (4 – 6 kgf·cm, 3.5 – 5.2 in.·lbf)
	Drive pinion to ring gear backlash	0.13 – 0.18 mm (0.0051 – 0.0071 in.)
	Pinion gear to side gear backlash	0.05 – 0.20 mm (0.0020 – 0.0079 in.)
	Ring gear runout Max.	0.10 mm (0.0039 in.)
	Companion flange runout Max. Radial Lateral	0.10 mm (0.0039 in.) 0.10 mm (0.0039 in.)
	Oil seal drive in depth	1.0 mm (0.039 in.)
	Side gear thrust washer thickness w/o Differential lock	1.6 mm (0.063 in.) 1.7 mm (0.067 in.) 1.8 mm (0.071 in.) 0.9 mm (0.035 in.)
	w/ Differential lock	1.0 mm (0.039 in.) 1.1 mm (0.043 in.) 1.2 mm (0.047 in.) 1.3 mm (0.051 in.)

SERVICE SPECIFICATIONS – SUSPENSION AND AXLE

Front differential (cont'd)	Drive pinion adjusting plate washer thickness	1.70 mm (0.0669 in.)
		1.73 mm (0.0681 in.)
		1.76 mm (0.0693 in.)
		1.79 mm (0.0705 in.)
		1.82 mm (0.0717 in.)
		1.85 mm (0.0728 in.)
		1.88 mm (0.0740 in.)
		1.91 mm (0.0752 in.)
		1.94 mm (0.0764 in.)
		1.97 mm (0.0776 in.)
		2.00 mm (0.0787 in.)
		2.03 mm (0.0799 in.)
		2.06 mm (0.0811 in.)
		2.09 mm (0.0823 in.)
		2.12 mm (0.0835 in.)
		2.15 mm (0.0846 in.)
		2.18 mm (0.0858 in.)
		2.21 mm (0.0870 in.)
		2.24 mm (0.0882 in.)
		2.27 mm (0.0894 in.)
		2.30 mm (0.0906 in.)
		2.33 mm (0.0917 in.)
Rear differential	Drive pinion preload (at starting)	New bearing Reused bearing
		1.3 – 2.0 N·m (13 – 20 kgf·cm, 11.3 – 17.4 in.·lbf) 0.7 – 1.0 N·m (7 – 10 kgf·cm, 6.1 – 8.7 in.·lbf)
	Total preload (at starting)	Drive pinion preload plus
	w/o Differential lock	0.4 – 0.6 N·m (4 – 6 kgf·cm, 3.5 – 5.2 in.·lbf)
	w/ Differential lock	0.3 – 0.7 N·m (3 – 7 kgf·cm, 2.6 – 6.1 in.·lbf)
	Drive pinion to ring gear backlash	0.15 – 0.20 mm (0.0059 – 0.0079 in.)
	Pinion gear to side gear backlash	0.02 – 0.20 mm (0.0008 – 0.0079 in.)
	Ring gear runout	Max. 0.10 mm (0.0039 in.)
	Companion flange runout	Max. Radial Lateral
		0.10 mm (0.0039 in.) 0.10 mm (0.0039 in.)
	Oil seal drive in depth	1.0 mm (0.039 in.)
	Side gear thrust washer thickness	1.60 mm (0.0630 in.) 1.75 mm (0.0689 in.) 1.90 mm (0.0748 in.) 2.05 mm (0.0807 in.)
	Drive pinion adjusting plate washer thickness	1.05 mm (0.0413 in.) 1.10 mm (0.0433 in.) 1.15 mm (0.0453 in.) 1.20 mm (0.0472 in.) 1.25 mm (0.0492 in.) 1.30 mm (0.0512 in.) 1.35 mm (0.0531 in.) 1.40 mm (0.0551 in.) 1.45 mm (0.0571 in.) 1.50 mm (0.0591 in.) 1.55 mm (0.0610 in.)

Rear differential (cont'd)	Side bearing adjusting plate thickness (w/ Differential lock only)	2.67 mm (0.1051 in.) 2.70 mm (0.1063 in.) 2.73 mm (0.1075 in.) 2.76 mm (0.1087 in.) 2.79 mm (0.1098 in.) 2.82 mm (0.1110 in.) 2.85 mm (0.1122 in.) 2.88 mm (0.1134 in.) 2.91 mm (0.1146 in.) 2.94 mm (0.1157 in.) 2.97 mm (0.1169 in.) 3.00 mm (0.1181 in.) 3.03 mm (0.1193 in.) 3.06 mm (0.1205 in.) 3.09 mm (0.1217 in.) 3.12 mm (0.1228 in.) 3.15 mm (0.1240 in.) 3.18 mm (0.1252 in.) 3.21 mm (0.1264 in.) 3.24 mm (0.1276 in.) 3.27 mm (0.1287 in.) 3.30 mm (0.1299 in.) 3.33 mm (0.1311 in.)
Rear axle	Rear axle shaft runout Max. Distance between top surface of axle housing and lock nut	0.8 mm (0.031 in.) -0.2 – 0.9 mm (-0.0079 – 0.0354 in.)