

SUSPENSION AND AXLE

SERVICE DATA

SS1FA-02

Cold tire inflation pressure	Tire size P275/70R16	Front Rear	220 kPa (2.2 kgf/cm ² , 32 psi) 220 kPa (2.2 kgf/cm ² , 32 psi) 220 kPa (2.2 kgf/cm ² , 32 psi) 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 Right-left error		1°00' ± 45' (1° ± 0.75°) 45' (0.75°) or less
	Caster Right-left error		3°00' ± 60' (3° ± 1°) 45' (0.75°) or less
	Steering axis inclination		13°00' ± 45' (13° ± 0.75°)
	Toe-in (total)		0°12' ± 12' (0.2° ± 0.2°, 2 ± 2 mm, 0.08 ± 0.08 in.)
	Wheel angle Inside wheel Outside wheel: Reference		32°00' – 35°00' (32.0° – 35.0°) 31°00' (31.0°)
Tire and wheel	Tire runout		3.0 mm (0.118 in.) or less
	Wheel balance (unbalance adjustment)		13.0 g (0.029 lb) or less
	Wheel bearing preload (Starting) (Road load at hub bolt)	Front Rear	28 – 56 N (2.9 – 5.7 kgf, 6.4 – 12.6 lbf) 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 to ring gear backlash		0.13 – 0.18 (0.0051 – 0.0071 in.)
	Drive pinion bearing 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)		Add drive pinion bearing preload 0.4 – 0.6 N·m (4 – 6 kgf·cm, 3.5 – 5.3 in.·lbf)
	Ring gear runout	Max.	0.10 mm (0.0039 in.)
	Pinion gear to side gear backlash		0.05 – 0.20 mm (0.0020 – 0.0079 in.)
	Companion flange runout	Maximum Radial Lateral	0.10 mm (0.0039 in.) 0.10 mm (0.0039 in.)
	Oil seal drive depth		1.0 mm (0.039 in.)
	Side gear thrust washer thickness	w/o Differential lock w/ Differential lock	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.) 0.9 mm (0.035 in.) 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)	Add drive pinion bearing preload
	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	Maximum 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	1.55 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.)
		1.95 mm (0.077 in.)
		2.00 mm (0.079 in.)
		2.05 mm (0.081 in.)
		2.10 mm (0.083 in.)

Rear differential (cont'd)	Drive pinion adjusting plate washer thickness	1.050 mm (0.0413 in.)
		1.075 mm (0.0423 in.)
		1.100 mm (0.0433 in.)
		1.125 mm (0.0443 in.)
		1.150 mm (0.0453 in.)
		1.175 mm (0.0463 in.)
		1.200 mm (0.0472 in.)
		1.225 mm (0.0482 in.)
		1.250 mm (0.0492 in.)
		1.275 mm (0.0502 in.)
		1.300 mm (0.0512 in.)
		1.325 mm (0.0522 in.)
		1.350 mm (0.0531 in.)
		1.375 mm (0.0541 in.)
		1.400 mm (0.0551 in.)
		1.425 mm (0.0561 in.)
		1.450 mm (0.0571 in.)
		1.475 mm (0.0581 in.)
		1.500 mm (0.0591 in.)
		1.525 mm (0.0600 in.)
		1.550 mm (0.0610 in.)
	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. 0.8 mm (0.031 in.)
	Distance between top surface of axle housing and lock nut	-0.2 – 0.9 mm (-0.0079 – 0.0354 in.)