

SUSPENSION AND AXLE

SERVICE DATA

SS1EC-01

Cold tire inflation pressure	Tire size P275/70R16	Front	220 kPa (2.2 kgf/cm ² , 32 psi)
		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)*
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° – 35° 31°
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)	Front	28 – 56 N (2.9 – 5.7 kgf, 6.4 – 12.6 lbf)
	(Roading 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 to ring gear backlash		0.13 – 0.18 (0.0051 – 0.0071 in.)
	Drive pinion preload (at starting)	New bearing Reused bearing	0.4 – 0.6 N·m (4 – 6 kgf·cm, 3.5 – 5.2 in.·lbf) 0.4 – 0.6 N·m (4 – 6 kgf·cm, 3.5 – 5.2 in.·lbf)
	Total preload (at starting)		Drive pinion preload plus 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.)
	Front differential oil seal drive in depth		1.5 mm (0.059 in.)
	Side gear thrust washer thickness	w/o differential lock w/ differential lock	1.60 mm (0.063 in.) 1.70 mm (0.067 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

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 (7.0 – 10.0 kgf·cm, 6.1 – 8.7 in.·lbf)
	Total preload (at starting)	w/o differential lock w/ differential lock	Add drive pinion bearing preload 0.40 – 0.60 N·m (4.0 – 6.0 kgf·cm, 3.5 – 5.2 in.·lbf) 0.30 – 0.70 N·m (3.0 – 7.0 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		1.60 mm (0.063 in.) 1.75 mm (0.069 in.) 1.90 mm (0.075 in.) 2.05 mm (0.081 in.)
	Drive pinion adjusting plate washer thickness		1.050 mm (0.04134 in.) 1.100 mm (0.04331 in.) 1.150 mm (0.04528 in.) 1.200 mm (0.04724 in.) 1.225 mm (0.04823 in.) 1.300 mm (0.05118 in.) 1.350 mm (0.05315 in.) 1.400 mm (0.05512 in.) 1.450 mm (0.05709 in.) 1.500 mm (0.05906 in.) 1.550 mm (0.06102 in.)
Rear differential (w/ Diff. lock only)	Side bearing adjusting plate thickness		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.)