

SUSPENSION AND AXLE

Specifications

Cold tire inflation pressure kg/cm ² (psi, kPa)		Tire size		Front	Rear	
	STD seat	R235/75R 15		2.0 (29,200)	2.0 (29,200)	
		Ex. load				
	w/3rd seat	31 x 10.50R 15LT (C)		2.1 (30,210)	2.1 (30,210)	
Chassis ground clearance mm (in.)	All model	R235/75R 15		335.1 (13.193)	335.1 (13.193)	
		Ex. load				
		31 x 10.50R 15LT (C)		360.5 (14.193)	360.5 (14.193)	
Front wheel alignment	Camber	Inspection standard		1° ± 45'		
		Left-right error		30' or less		
	Steering axis inclination	Inspection standard		13° 30' ± 45'		
		Left-right error		30' or less		
	Caster	Inspection standard P235/75R 15		3° 00' ± 60'		
		31 X 10.50R 15		0° 45' ± 30'		
	Toe-in	Left-right error		30' or less		
		Inspection STD		Adjustment STD		
	Wheel angle	2 ± 2 mm (0.08 ± 0.08 in.)		1 ± 2 mm (0.04 ± 0.08 in.)		
Disc wheel lateral runout	Limit	1.2 mm		0.047 in.		
	Wheel bearing preload (starting) (rotating load at hub bolt)	2.8 – 5.7 kg		6.2 – 12.6 lb		
				27 – 56 N		
Steering knuckle bearing preload (rotating load at knuckle end, before installing dust seal)	Limit	2.5 – 4.5 kg		5.5 – 9.9 lb		
				25 – 44 N		

Specifications (Cont'd)

Front differential	Drive pinion bearing preload	at starting	
	New bearing		10 – 16 kg-cm 8.7 – 13.9 in.-lb 0.9 – 1.6 N·m
	Reused bearing		5 – 8 kg-cm 4.3 – 6.9 in.-lb 0.5 – 0.8 N·m
	Total preload	at starting	Add drive pinion bearing preload
	New and reused bearing		4 – 6 kg-cm 3.5 – 5.2 in.-lb 0.4 – 0.6 N·m
	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	Limit	0.10 mm 0.0039 in.
	Companion flange runout	Limit	
		Radial	0.10 mm 0.0039 in.
		Lateral	0.10 mm 0.0039 in.
	Oil seal drive in depth		1.0 mm 0.039 in.
	Side gear thrust washer thickness		1.58 – 1.62 mm 0.0622 – 0.0638 in.
			1.68 – 1.72 mm 0.0661 – 0.0677 in.
			1.78 – 1.82 mm 0.0701 – 0.0717 in.
	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.

Specifications (Cont'd)

Rear differential	Drive pinion bearing preload	at starting		
	New bearing		13 – 20 kg-cm	11.3 – 17.4 in.-lb 1.3 – 2.0 N·m
	Reused bearing		7 – 10 kg-cm	6.1 – 8.7 in.-lb 0.7 – 1.0 N·m
	Total preload	at starting	Add drive pinion bearing preload	
	New and reused bearing		4 – 6 kg-cm	3.5 – 5.2 in.-lb 0.4 – 0.6 N·m
	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	Limit	0.10 mm	0.0039 in.
	Companion flange runout	Limit		
		Radial	0.10 mm	0.0039 in.
		Lateral	0.10 mm	0.0039 in.
	Oil seal drive in depth		1.0 mm	0.039 in.
	Side gear thrust washer thickness		1.55 – 1.65 mm	0.0610 – 0.0650 in.
			1.70 – 1.80 mm	0.0669 – 0.0709 in.
			1.85 – 1.95 mm	0.0728 – 0.0768 in.
			2.00 – 2.10 mm	0.0787 – 0.0827 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 axle shaft	Maximum runout		0.8 mm	0.031 in.

Torque Specifications

Part tightened	kg-cm	ft-lb	N·m
FRONT AXLE AND SUSPENSION			
Front axle hub x Rotor disc	750	54	74
Front axle hub bearing lock nut	650	47	64
Flange x Axle hub	360	26	35
Disc brake cylinder x Axle carrier	1,250	90	123
Disc brake cylinder x Brake tube	155	11	15
Knuckle arm x Steering knuckle	980	71	96
Third arm x Steering knuckle	980	71	96
Bearing cap x Steering knuckle	980	71	96
Knuckle arm x Tie rod	925	67	91
Oil seal set retainer x Steering knuckle	55	48 in.-lb	5.4
Steering knuckle x Knuckle spindle	475	34	47

Torque Specifications (Cont'd)

Part tightened	kg-cm	ft-lb	N·m
FRONT AXLE AND SUSPENSION (Cont'd)			
Propeller shaft x Companion flange	750	54	74
Side bearing cap x Differential carrier	800	58	78
Ring gear x Differential case	985	71	97
Drive pinion x Companion flange	2,000 – 3,500	145 – 253	196 – 343
Differential carrier x Axle housing	250	18	25
Adjusting nut lock x Bearing cap	130	9	13
Spring follow x Frame	94	82 in.-lb	9.2
Stabilizer bar x Axle housing	260	19	25
Shock absorber x Axle housing	700	51	69
Shock absorber x Body	700	51	69
Stabilizer bracket x Bracket	185	13	18
Stabilizer bracket x Frame	185	13	18
Lateral control rod x Frame	1,750	127	172
Lateral control rod x Body	1,750	127	172
Leading arm x Body	1,750	127	172
Leading arm x Axle housing	1,750	127	172
Hub nut	1,500	108	147
REAR AXLE AND SUSPENSION			
Pinion shaft x Differential case	275	20	27
Differential cover x Axle housing	130	9	13
Parking brake cable clamp x Differential cover	130	9	13
Propeller shaft x Companion flange	900	65	88
Side bearing cap x Differential carrier	800	58	78
Ring gear x Differential case	1,125	81	110
Drive pinion x Companion flange	2,500 – 4,500	181 – 325	245 – 441
Differential carrier x Axle housing	475	34	47
Adjusting nut lock x Bearing cap	130	9	13
LSPV shackle bracket x Differential cover	195	14	19
Spring follow x Frame	155	11	15
Lateral control rod x Axle housing	2,500	181	245
Shock absorber x Bracket	700	51	69
Shock absorber bracket x Frame	510	37	50
Shock absorber x Axle housing	650	47	64
Stabilizer bar bracket x Axle housing	185	13	18
Lateral control x Frame	1,800	130	177
Upper control rod x Frame	1,800	130	177
Upper control rod x Axle housing	1,800	130	177
Stabilizer bar clamp x Frame	150	11	15
Stabilizer bar x Clamp	260	19	25
Hub nut	1,500	108	147
Lower control arm x Frame	1,800	130	177
Lower control arm x Axle housing	1,800	130	177