

STEERING

Specifications

Steering	Steering wheel freeplay		40 mm (1.57 in.) or less		
	Snap ring thickness	Color	None	1.175 – 1.225 mm	0.0463 – 0.0482 in.
			Brown	1.225 – 1.275 mm	0.0482 – 0.0502 in.
			Blue	1.275 – 1.325 mm	0.0502 – 0.0522 in.
	Spider bearing axial play			0.05 mm (0.0020 in.) or less	
Tilt steering	No. 1 collar outer diameter			17.989 – 17.996 mm	0.7082 – 0.7085 in.
				17.996 – 18.003 mm	0.7085 – 0.7088 in.
				18.003 – 18.010 mm	0.7088 – 0.7091 in.
				18.010 – 18.017 mm	0.7091 – 0.7093 in.
				18.017 – 18.024 mm	0.7093 – 0.7096 in.
	No. 2 collar outer diameter			17.982 – 18.000 mm	0.7080 – 0.7087 in.
				18.000 – 18.018 mm	0.7087 – 0.7094 in.
	Tilt steering support	Mark			
	Shim thickness	None		0.197 – 0.203 mm	0.0078 – 0.0080 in.
		5		0.495 – 0.505 mm	0.0195 – 0.0199 in.
		8		0.795 – 0.805 mm	0.0313 – 0.0317 in.
Power steering	Drive belt tension	New belt		145 ± 25 lb	
		Used belt		100 ± 20 lb	
	Maximum rise of oil level			Below 5 mm (0.20 in.)	
	Oil pressure at idle speed			75 kg/cm ² (1,067 psi, 7,355 kPa) or more	
	Steering effort			4 kg (8.8 lb, 39 N) or less	
Power steering pump	Rotor to cam ring clearance			0.06 mm (0.0024 in.) or less	
	Vane plate to rotor groove clearance			0.03 mm (0.0012 in.) or less	
	Valve plate				
		Minimum length		14.97 mm	0.5894 in.
		Minimum height		8.1 mm	0.3189 in.
		Minimum thickness		1.77 mm	0.0697 in.
	Vane plate length				
		Rotor and cam ring mark			
		Non		14.996 – 14.998 mm	0.5904 – 0.5905 in.
		1		14.994 – 14.996 mm	0.5903 – 0.5904 in.
		2		14.992 – 14.994 mm	0.5902 – 0.5903 in.
		3		14.990 – 14.992 mm	0.59016 – 0.59024 in.
		4		14.988 – 14.990 mm	0.5901 – 0.5902 in.
	Flow control valve spring length	STD		50 mm	1.97 in.
		Minimum		47 mm	1.85 in.
	Pump rotating torque			2.8 kg-cm (2.4 in.-lb, 0.3 N-m) or less	
Steering gear housing	Cross shaft adjusting screw thrust clearance			0.03 – 0.05 mm	0.0012 – 0.0020 in.
	Worm bearing preload	at starting		4.0 – 6.5 kg-cm	3.5 – 5.6 in.-lb
	Total preload	at starting		7.5 – 11.0 kg-cm	6.5 – 9.5 in.-lb
Steering linkage	Ball joint rotating torque			10 – 30 kg-cm	8.7 – 26.0 in.-lb

Torque Specifications

Tilt steering	Part tightened	kg-cm	ft-lb	N-m
	Pawl set bolt	185	13	18
	Tilt lever retainer	185	13	18
	Tilt steering support x Breakaway bracket	185	13	18
	Tilt steering support stopper bolt	100	7	10
	Tilt steering support x Upper bracket	75	65 in.-lb	7.4
	Breakaway bracket x Column tube	185	13	18
	Column hole cover x Column tube	185	13	18
	Main shaft x Intermediate shaft	250	18	25
	Column hole cover x Body	130	9	13
	Breakaway bracket x Body	250	18	25
	Steering wheel x Main shaft	350	25	34
	No. 1 intermediate shaft x No-2	360	26	35
Power steering	Pressure port union x Rear housing	700	51	69
	Front housing x Rear housing	470	34	46
	Suction port union x Rear housing	130	9	13
	PS pump x Bracket	400	29	39
	PS pump pulley x Rotor shaft	480	35	47
	Pressure tube x Pressure port union	370	27	36
	Ball guide clamp set screw	30	26 in.-lb	2.9
	Valve body x Gear housing	470	34	46
	Worm bearing adjusting screw lock nut	430	31	42
	End cover x Gear housing	470	34	46
	Pitman arm x Cross shaft	1,800	130	177
	Cross shaft adjusting screw lock nut	470	34	46
	Gear housing x Frame	1,450	105	142
	Pressure tube x Valve body	450	33	44
	Intermediate shaft x Worm shaft	360	26	35
	Joint protector bolt	65	56 in.-lb	6.4
	Pitman arm x Relay rod	925	67	91
Steering linkage	Tie rod x Knuckle arm	925	67	91
	Relay rod x Tie rod	925	67	91
	Tie rod end clamp bolt	450	33	44
	Relay rod clamp bolt	450	33	44
	Relay rod x Pitman arm	925	67	91
	Steering damper x Relay rod	750	54	74
	Steering damper x Bracket	750	54	74