

POWER STEERING

SERVICE DATA

Power steering fluid		
Fluid level rise	Maximum	5 mm (0.20 in.)
Fluid pressure at idle speed with valve closed		8,300 to 8,800 kPa (85 to 90 kgf/cm ² , 1,209 to 1280 psi)
Steering Wheel		
Steering effort at idle speed	(Reference)	6.0 N*m (60 kgf*cm, 53 in.*lbf) or less
Vane pump assembly		
Pulley shaft and vane pump housing front oil clearance	Standard Maximum	0.021 to 0.043 mm (0.0008 to 0.0017 in.) 0.07 mm (0.0028 in.)
Vane plate height	Minimum	7.7 mm (0.303 in.)
Vane plate thickness	Minimum	1.408 mm (0.0554 in.)
Vane plate length	Minimum	11.993 mm (0.4722 in.)
Vane pump rotor and vane plate clearance	Maximum	0.025 mm (0.0012 in.)
Compression spring free length	Minimum	36.9 mm (1.453 in.)
Vane pump rotating torque		0.27 N*m (2.8 kgf*cm, 2.4 in.*lbf) or less
Power steering link assembly (2WD)		
Tie rod end turning torque		0.83 to 3.43 N*m (8.5 to 35.0 kgf*cm, 7.35 to 30.36 in.*lbf)
Power steering rack runout	Maximum	0.3 mm (0.012 in.)
Power steering control valve turning torque		0.8 to 1.1 N*m (8.2 to 11.2 kgf*cm, 7.1 to 9.7 in.*lbf)
Steering rack boot No. 1 clamp clearance		3.0 mm (0.118 in.) or less
Power steering link assembly (4WD and Pre-Runner)		
Tie rod end turning torque		0.49 to 3.43 N*m (5.0 to 35.0 kgf*cm, 4.34 to 30.36 in.*lbf)
Power steering rack runout	Maximum	0.3 mm (0.012 in.)
Power steering control valve turning torque		0.9 to 1.5 N*m (9.2 to 15.3 kgf*cm, 8.0 to 13.3 in.*lbf)
Steering rack boot No. 1 clamp clearance		3.0 mm (0.118 in.) or less

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TORQUE SPECIFICATIONS

Part Tightened	N*m	kgf*cm	ft.*lbf
Steering wheel assembly x Steering column assembly	50	510	37
Vane pump housing rear x Vane pump housing front	22	224	16
Power steering oil pressure switch x Vane pump housing front	21	214	15
Pressure port union sub-assembly x Vane pump housing front	69	704	51
Vane pump oil reservoir sub-assembly x Vane pump housing front (2TR-FE)	9.0	92	80 in.*lbf
Vane pump assembly x Engine	21	214	15
Pressure feed tube assembly x Vane pump assembly	51	520	38
Battery negative terminal x Battery	3.9	40	35 in.*lbf
Engine under cover sub-assembly No. 1 x Frame	30	306	22
Power steering suction port union x Vane pump housing front (1GR-FE)	12	122	9
Wire harness clamp bracket x Vane pump assembly (1GR-FE)	8.0	82	71 in.*lbf
Control valve housing x Rack housing	18	184	13
Steering rack guide spring cap nut x Steering rack guide spring cap	43 (59)	440 (601)	32 (44)
Steering rack end sub-assembly x Power steering rack	61 (84)	619 (851)	45 (62)
Tie rod end lock nut x Steering rack end sub-assembly	55.5	566	41
Steering turn pressure tube x Control valve housing	14 (15)	141 (153)	10 (11)
Steering turn pressure tube x Rack housing	14 (15)	141 (153)	10 (11)
Steering gear outlet return tube x Control valve housing	22 (24)	222 (245)	16 (18)
Power steering link assembly x Suspension cross member	92	938	68
Pressure feed tube assembly union nut x Power steering link assembly	22 (24)	222 (245)	16 (18)
Pressure feed tube assembly bracket x Power steering link assembly	28	286	21
Tie rod end sub-assembly x Steering knuckle (2WD)	49	500	36
Steering intermediate shaft No. 2 x Power steering link assembly	35	357	26
Steering sliding yoke x Steering intermediate shaft No. 2	35	357	26
Steering sliding yoke x Steering intermediate shaft	35	357	26
Front wheel	113	1,152	83
Tie rod end sub-assembly x Steering knuckle (4WD and Pre-Runner)	91	928	67

(): For use without SST

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