POWER STEERING SERVICE DATA

030FH-03

POWER STEERING FLUID		
Fluid level rise	Maximum	5 mm (0.20 in.)
Fluid pressure at idle speed with valve closed		7,800 - 8,300 kPa (80 - 85 kgf/cm², 1,138 - 1,209 psi)
STEERING WHEEL		
Steering effort at idle speed	(Reference)	6 N-m (60 kgf-cm, 53 inlbf)
POWER STEERING VANE PUMP (2AZ-FE)		
Vane pump rotating torque		0.27 N·m (2.8 kgf·cm, 2.4 in.·lbf) or less
Vane pump shaft and vane pump housing seal clearance	STD Maximum	0.009 – 0.031 mm (0.00035 – 0.00122 in.) 0.07 mm (0.0028 in.)
Vane plate height	Minimum	7.7 mm (0.303 in.)
Vane plate thickness	Minimum	1.408 mm (0.05543 in.)
Vane plate length	Minimum	11.993 mm (0.47216 in.)
Vane plate and vane rotor groove clearance	Maximum	0.03 mm (0.0012 in.)
Spring free length	Minimum	35.8 mm (1.409 in.)
POWER STEERING VANE PUMP (1MZ-FE/3MZ-FE)		
Vane pump rotating torque		0.27 N⋅m (2.8 kgf⋅cm, 2.4 in.·lbf) or less
Vane pump shaft and vane pump housing oil clearance	STD Maximum	0.027 – 0.054 mm (0.00106 – 0.00213 in.) 0.07 mm (0.0028 in.)
Vane plate height	Minimum	8.7 mm (0.343 in.)
Vane plate thickness	Minimum	1.4 mm (0.055 in.)
Vane plate length	Minimum	14.991 mm (0.59020 in.)
Clearance between the rotor groove and plate	Maximum	0.03 mm (0.0012 in.)
Spring free length	Minimum	32.24 mm (1.2693 in.)
POWER STEERING GEAR		
Steering rack runout	Maximum	0.3 mm (0.012 in.)
Total preload (Tie rod rotating torque)	(Turning)	0.83 – 3.43 N·m (7.3 – 30.4 kgf·cm, 7.3 – 30.4 in.·lbf)
Total preload (Control valve rotating torque)	(Turning)	1.2 – 1.5 N·m (12.2 – 15.3 kgf·cm, 10.6 – 13.3 in.·lbf)