SERVICE SPECIFICATIONS

SERVICE DATA

ST01E-1B

Starter	Rated voltage and output power			12 V 2.5 kW, 24 V 4.5 kW
	No-load characteristics	Current	12 V type	180 A or less at 11.0 V
			24 V type	90 A or less at 23.0 V
			rpm	3,500 rpm or more
	Brush length		STD	20.5 — 21.0 mm (0.807 — 0.827 in.)
			Minimum	13.0 mm (0.512 in.)
	Spring installed load			31 — 39 N (3.2 — 4.0 kgf, 7.1 — 8.8 lbf)
	Commutator			
	Diameter		STD	36.0 mm (1.417 in.)
			Minimum	35.0 mm (1.378 in.)
	Undercut depth		STD	0.7 — 0.9 mm (0.028 — 0.035 in.)
			Minimum	0.2 mm (0.008 in.)
	Circle runout		Maximum	0.05 mm (0.0020 in.)
	Magnetic switch			
	Contact plate for wear		Maximum	0.9 mm (0.035 in.)

ST01G-0N

TORQUE SPECIFICATIONS

Part tightened	N·m	kgf·cm	ft·lbf
Intake manifold x Glow plaug resistor	34	350	25
Cylinder head x Glow plaug	12.7	130	9.4
Cylinder block x Water temperature sensor	17.5	178	13
Starter housing x Magnetic switch	9.3	95	82 in.-lbf
End cover x Starter housing	9.3	95	82 in.-lbf
Lead wire x Terminal 50	3.6	41	32 in.-lbf
Lead wire x Terminal C	21.1	215	16
Terminal 30 , Terminal C x Terminal Bolt	29.9	305	22.1
End cover x Magnetic housing	2.55	26	23