

SERVICE SPECIFICATIONS

ST015-08

SERVICE DATA

Starter (1.4 kW type)	Rated voltage and output power No-load characteristics	Current rpm STD Limit	12 V 1.4 kW 90 A or less at 11.5 V 3,000 rpm or more 15.5 mm (0.610 in.) 10.0 mm (0.394 in.) 18 – 24 N (1.79 – 2.41 kgf, 3.9 – 5.3 lbf)
	Brush length		
	Spring installed load Commutator Diameter	STD Limit STD Limit	30.0 mm (1.181 in.) 29.0 mm (1.412 in.) 0.6 mm (0.024 in.) 0.2 mm (0.008 in.) 0.05 mm (0.0020 in.)
	Under-cut depth		
	Circle runout		
Starter (2.0 kW type)	Rated voltage and output power No-load characteristics	Current rpm STD Limit	12 V 2.0 kW 100 A or less at 11.5 V 2,500 rpm or more 15.5 mm (0.610 in.) 10.0 mm (0.394 in.) 12.7–24.5N(1.3–2.5kgf,2.7 –5.31bf)
	Brush length		
	Spring installed load Commutator Diameter	STD Limit STD Limit	35.0 mm (1.38 in.) 34.0 mm (1.34 in.) 0.7 mm – 0.9 mm (0.024 in. – 0.035 in.) 0.2 mm (0.008 in.) 0.05 mm (0.0020 in.)
	Undercut depth		
	Circle runout		

TORQUE SPECIFICATIONS

ST016-07

Part tightened		N-m	kgf-cm	ft-lbf
Starter mounting bolt		39	400	29
Starter mounting nut		39	400	29
Starter wire mounting nut		8.8	90	78 in.-lbf
End cover x Field frame	1.4 k W type	1.5	15	13 in.-lbf
	2.0 kW type	3.8	38	34 i n.-1 bf
Starter housing x Magnetic switch	1.4 k W type	5.9	60	52 in.-lbf
	2.0 k W type	9.3	93	82 in.-lbf
Field frame x Armature assembly	1.4 kW type	5.9	60	52 in.-lbf
	2.0 kW type	9.3	93	82 i n.-lbf
Lead wire x Terminal C of starter	1.4 kW type	7.9	79	70 in.-lbf
	2.0 kW type	5.4	54	48 in.-lbf