
STARTING SYSTEM

SERVICE SPECIFICATIONS ST- 2

**REFER TO 3S-GE ENGINE REPAIR MANUAL
(Pub. No. RM396E)**

ST

NOTE: The above pages contain only the points
which differ from the above listed manual.

ST-2

STARTING SYSTEM — SERVICE SPECIFICATIONS

SERVICE SPECIFICATIONS

SERVICE DATA

ST018-OK

Starter	Rated voltage and output power		12 V 1.2 kW
	No-load characteristics	Current	90 A or less at 11.5 V
		rpm	3,000 rpm or more
	Brush length	STD	15.0 mm (0.591 in.)
		Limit	8.0 mm (0.315 in.)
	Spring installed load		10 – 16 N (1.0 – 1.6 kgf, 2.2 – 3.6 lbf)
	Commutator		
	Diameter	STD	30 mm (1.18 in.)
		Limit	29 mm (1.14 in.)
	Undercut depth	STD	0.6 mm (0.024 in.)
		Limit	0.2 mm (0.008 in.)
	Circle runout	Limit	0.05 mm (0.0020 in.)

ST

TORQUE SPECIFICATIONS

ST018-OJ

Part tightened	N·m	kgf·cm	ft·lbf
End cover x Brush holder	1.5	15	13 in·lbf
Starter housing x Magnetic switch	5.9	60	52 in·lbf
End cover x Starter housing	5.9	60	52 in·lbf
Lead wire of field frame x Magnetic switch	7.9	81	70 in·lbf