

ELECTRICAL

Charging System - [1AR-FE] (Service Specifications) - Sienna

1AR-FE BATTERY / CHARGING

SERVICE DATA

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Battery	Standard voltage	12.5 to 12.9 V at 20°C (68° F)
Charging circuit without load	Standard current	Below 10 A
	Standard voltage	13.2 to 14.8 V
Charging circuit with load	Standard current	30 A or more
Generator brush holder assembly brush exposed length	Standard exposed length	9.5 to 11.5 mm (0.374 to 0.453 in.)
	Minimum exposed length	4.5mm (0.177 in.)
Generator rotor assembly resistance	Slip rings	1.5 to 1.9 ohms at 20°C (68° F)
	Slip ring - Rotor	1 Mohms or higher
Generator rotor assembly slip ring diameter	Standard diameter	14.2 to 14.4 mm (0.559 to 0.567 in.)
	Minimum diameter	14.0 mm (0.551 in.)

TORQUE SPECIFICATIONS

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Part Tightened	N*m	kgf*cm	ft.*lbf
Bearing retainer plate x Generator drive end frame	2.3	23	20 in.*lbf
Generator coil assembly x Generator drive end frame	5.9	60	52 in.*lbf
Generator brush holder assembly x Generator coil assembly	1.8	18	16 in.*lbf
Generator rear end cover x Generator coil assembly	4.6	47	40 in.*lbf
Generator pulley with clutch x Generator rotor assembly (): For use with SST	80 (61)	816 (621)	59 (45)
Generator assembly x Cylinder block	52	530	38
Generator wire x Terminal B	9.8	100	87 in.*lbf

Generator wire harness clamp stay x Generator assembly	8.4	85	74 in.*lbf
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