

1NZ-FE CHARGING**SERVICE DATA**

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|---------------------------------|---------------------|------------------------|--------------------------------------|
| Battery | Standard voltage | | 12.5 to 12.9 V at 20°C (68°F) |
| Charging circuit with load | Standard amperage | | 30 A or more |
| Generator brush holder assembly | Brush length | Standard length | 9.5 to 11.5 mm (0.374 to 0.453 in.) |
| | | Minimum length | 4.5 mm (0.177 in.) |
| Generator rotor assembly | Standard resistance | Slip ring | 2.1 to 2.5 Ω at 20°C (68°F) |
| | | Slip ring - Rotor core | 10 k Ω or higher |
| | Slip ring diameter | Standard diameter | 14.2 to 14.4 mm (0.559 to 0.567 in.) |
| | | Minimum diameter | 12.8 mm (0.504 in.) |

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TORQUE SPECIFICATIONS

| Part Tightened | N*m | kgf*cm | ft.*lbf |
|-------------------------------------|------------|---------------|----------------|
| Adjusting Bar x Cylinder Head | 11 | 112 | 8 |
| Generator Assembly x Adjusting Bar | 18.5 | 189 | 14 |
| Generator Assembly x Cylinder Head | 54 | 551 | 40 |
| Generator Wire x Generator Assembly | 9.8 | 100 | 7 |

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