OVERHAUL

1. **REMOVE GENERATOR PULLEY**
   SST 09820–63010 (09820–06010, 09820–06020)

   **HINT:**

   | SST1 – A, B | 09820–06010 |
   | SST2       | 09820–06020 |

   (a) Hold SST 1 – A with a torque wrench, and tighten SST 1 – B clockwise to the specified torque.
   **Torque: 39 N⋅m (398 kgf⋅cm, 29 ft⋅lbf)**

   **NOTICE:**
   Check that SST is secured to the rotor shaft.

   (b) Mount SST 2 in a vise.

   (c) Insert SST 1 – A, B into SST 2, and attach the pulley nut to SST 2.

   (d) To loosen the pulley nut, turn SST 1 – A in the direction shown in the illustration.

   **NOTICE:**
   To prevent damage to the rotor shaft, do not loosen the pulley nut more than one-half of a turn.

   (e) Remove the alternator from SST 2.

   (f) Turn SST 1 – B, and remove SST 1 – A, B.

   (g) Remove the pulley nut and pulley.
2. **REMOVE GENERATOR BRUSH HOLDER ASSY**
   (a) Remove the nut and terminal insulator.
   (b) Remove the screw, nut and terminal plate.
   (c) Remove the 2 nuts and rear end cover.
   (d) Remove the brush cover from the brush holder.
   (e) Remove the 2 screw and brush holder.
   (f) Remove the plate seal.

3. **REMOVE GENERATOR REGULATOR ASSY**
   (a) Remove the 3 screws and regulator.

4. **REMOVE GENERATOR HOLDER W/RECTIFIER**
   (a) Remove the 4 screws and holder w/ rectifier.

5. **REMOVE GENERATOR RECTIFIER END FRAME**
   (a) Remove the plate seal from the rectifier end frame.
   (b) Remove the 4 terminal insulator, 4 nuts and cord clip.
   (c) Using SST, remove the rectifier end frame.
      SST 09286–46011

6. **REMOVE GENERATOR ROTOR ASSY**
   (a) Remove the washer from the rotor.
   (b) Remove the rotor from drive end frame.

7. **INSPECT GENERATOR REGULATOR ASSY**
   (a) Using an ohmmeter, check the continuity between terminals F and B.
      **Standard:**
      When the positive and negative poles between terminals F and B are exchanged, there is continuity in one way but no continuity in another way.

   (b) Using an ohmmeter, check the continuity between terminals F and E.
      **Standard:**
      When the positive and negative poles between terminals F and E are exchanged, there is continuity in one way but no continuity in another way.
8. **INSPECT GENERATOR REGULATOR ASSY**
   (a) Using an ohmmeter, check that there is continuity between the slip rings.
   **Standard resistance:** $2.1 – 2.5 \, \Omega$ at $20^\circ C$ ($68^\circ F$)

   (b) Using an ohmmeter, check that there is no continuity between the slip ring and rotor.

   (c) Using a vernier calipers, measure the slip ring diameter.
   **Standard diameter:** $14.2 – 14.4 \, \text{mm} (0.559 – 0.567 \, \text{in.})$
   **Minimum diameter:** $12.8 \, \text{mm} (0.504 \, \text{in.})$

9. **INSPECT BRUSH**
   (a) Using a vernier calipers, measure the exposed brush length.
   **Standard exposed length:**
   $9.5 – 11.5 \, \text{mm} (0.374 – 0.453 \, \text{in.})$
   **Minimum exposed length:** $1.5 \, \text{mm} (0.059 \, \text{in.})$

10. **INSTALL GENERATOR ROTOR ASSY**
    (a) Install the rotor to the drive end frame.
    (b) Install the washer on the rotor.
11. INSTALL GENERATOR HOLDER W/RECTIFIER
   (a) Install the holder w/ rectifier with 4 screws.
       Torque: 2.9 N·m (30 kgf·cm, 26 in.·lbf)

12. INSTALL GENERATOR REGULATOR ASSY
   (a) Install the regulator with the 3 screw.
       Torque: 2.0 N·m (20 kgf·cm, 18 in.·lbf)

13. INSTALL GENERATOR BRUSH HOLDER ASSY
   (a) Place the plate seal on the brush holder.
   (b) Install the brush holder with the 2 screws.
       Torque: 2.0 N·m (20 kgf·cm, 18 in.·lbf)
   NOTICE:
   Pay attention to the holder installation direction.
   (c) Place the brush cover on the brush holder.
   (d) Install the rear end cover with the 2 nuts.
       Torque: 4.4 N·m (45 kgf·cm, 39 in.·lbf)
   (e) Install the terminal plate with the screw and nut.
       Torque:
       Bolt 3.9 N·m (40 kgf·cm, 35 in.·lbf)
       Nut 4.4 N·m (45 kgf·cm, 39 in.·lbf)
   (f) Install the terminal insulator with the nut.
       Torque: 4.1 N·m (42 kgf·cm, 36 in.·lbf)
19–22

STARTING & CHARGING – GENERATOR ASSY

14. INSTALL GENERATOR PULLEY

SST 09820–63010 (09820–06010, 09820–06020)

HINT:

<table>
<thead>
<tr>
<th>SST1 – A, B</th>
<th>09820–06010</th>
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<tr>
<td>SST2</td>
<td>09820–06020</td>
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(a) Install the pulley to the rotor shaft by tightening the pulley nut by hand.

(b) Hold SST 1 – A with a torque wrench, and tighten SST 1 – B clockwise to the specified torque.
   Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)

NOTICE:
Check that SST is secured to the pulley shaft.

(c) Mount SST 2 in a vise.

(d) Insert SST 1 – A, B into SST 2, and attach the pulley nut to SST 2.

(e) Tighten the pulley nut, turn SST 1 – A in the direction shown in the illustration.
   Torque: 111 N·m (1,132 kgf·cm, 82 ft·lbf)

(f) Remove the alternator from SST 2.

(g) Turn SST 1 – B, and remove SST 1 – A, B.

(h) Turn the pulley, and check that the pulley moves smoothly.