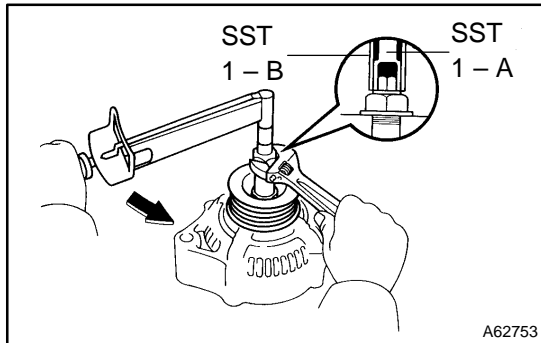


## OVERHAUL

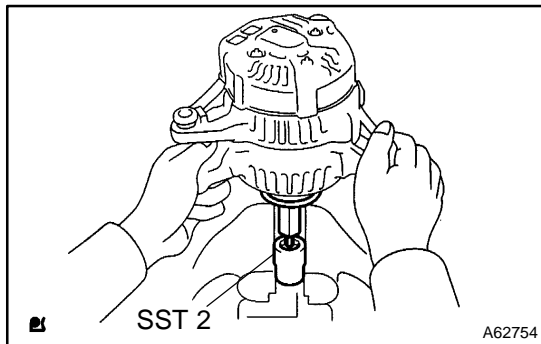
**1. REMOVE GENERATOR PULLEY**

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

HINT:

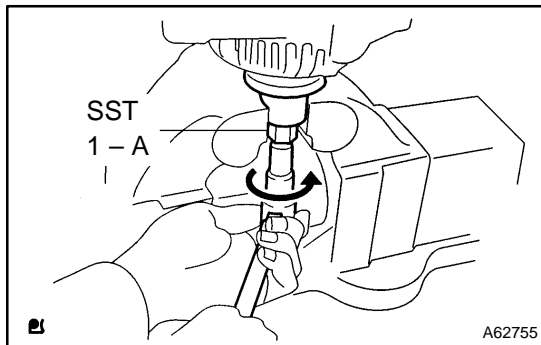
SST1 - A, B	09820-06010
SST2	09820-06020

- (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.

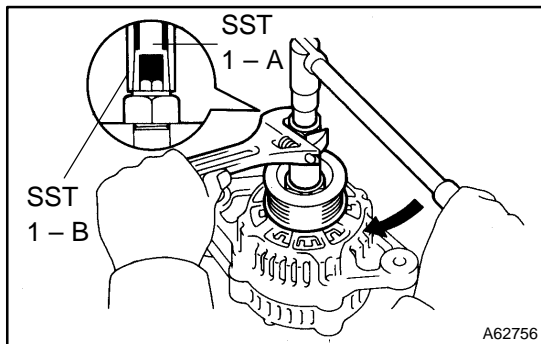
- (c) Insert SST 1 - A, B into SST 2, and attach the pulley nut to SST 2.



- (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 form 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**

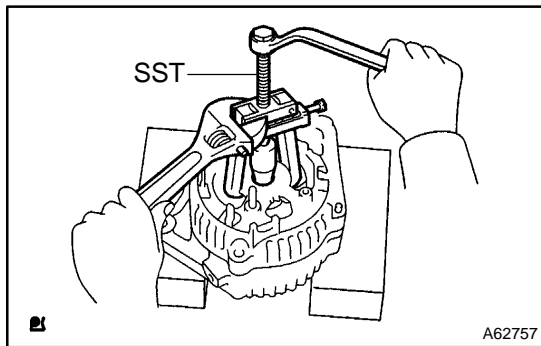
- (a) Remove the nut and terminal insulator.
- (b) Remove the screw, nut and terminal plate.
- (c) Remove the 2 nuts and rear end cover.
- (d) Remove the brush cover from the brush holder.
- (e) Remove the 2 screw and brush holder.
- (f) Remove the plate seal.

**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.

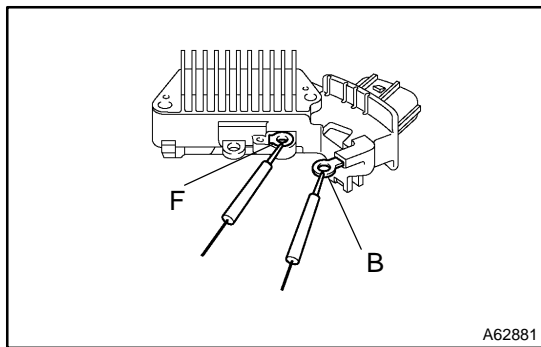


**5. REMOVE GENERATOR RECTIFIER END FRAME**

- (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.

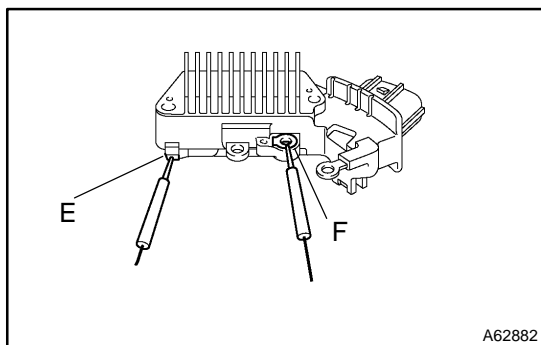


**7. INSPECT GENERATOR REGULATOR ASSY**

- (a) Using an ohmmeter, check the continuity between terminals F and B.

**Standard:**

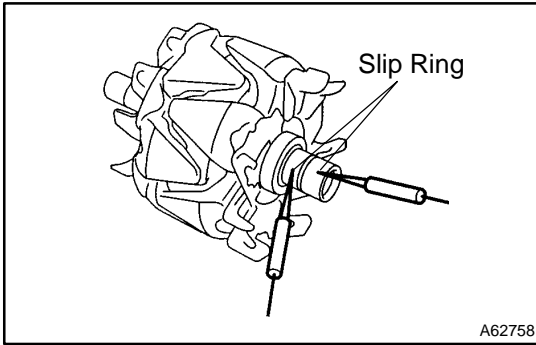
**When the positive and negative poles between terminals F and B are exchanged, there is continuity in one way but no continuity in another way.**



- (b) Using an ohmmeter, check the continuity between terminals F and E.

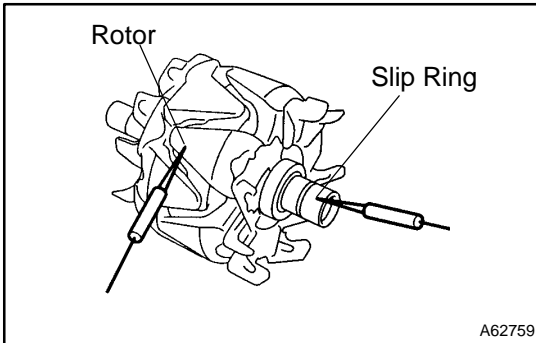
**Standard:**

**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.**

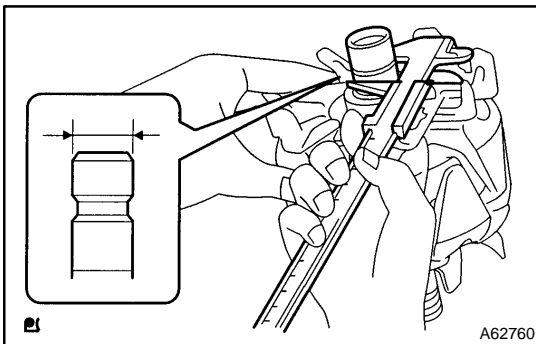
**8. INSPECT GENERATOR REGULATOR ASSY**

- (a) Using an ohmmeter, check that there is continuity between the slip rings.

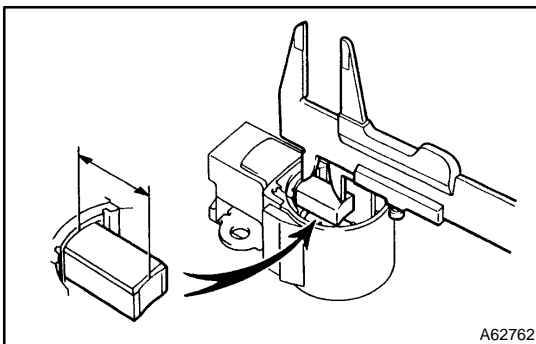
**Standard resistance: 2.1 – 2.5  $\Omega$  at 20°C (68°F)**



- (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 mm (0.559 – 0.567 in.)**  
**Minimum diameter: 12.8 mm (0.504 in.)**

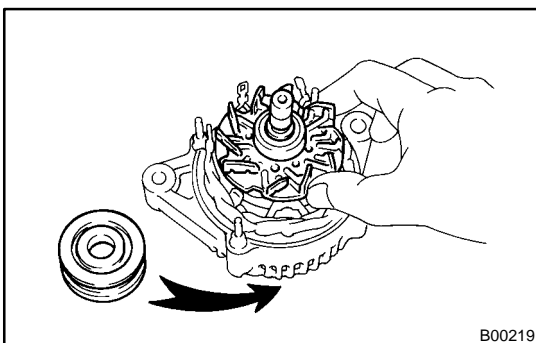
**9. INSPECT BRUSH**

- (a) Using a vernier calipers, measure the exposed brush length.

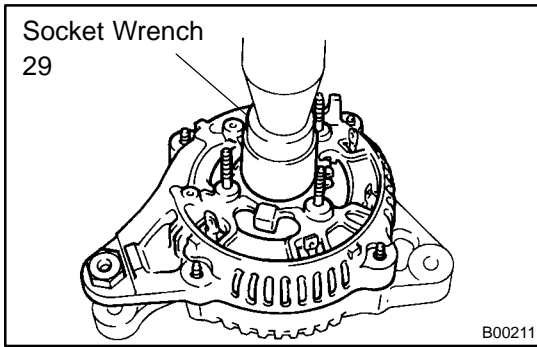
**Standard exposed length:**

**9.5 – 11.5 mm (0.374 – 0.453 in.)**

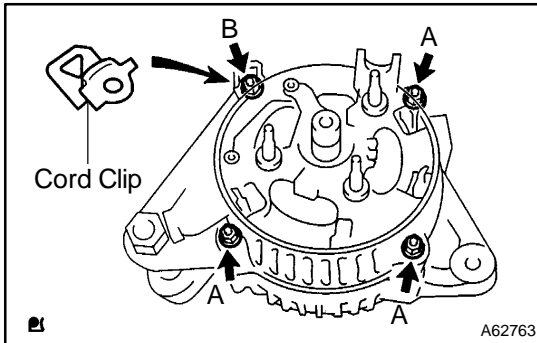
**Minimum exposed length: 1.5 mm (0.059 in.)**

**10. INSTALL GENERATOR ROTOR ASSY**

- (a) Install the rotor to the drive end frame.  
 (b) Install the washer on the rotor.



(c) Using a socket wrench 29 and press, slowly press in the rectifier end frame.



(d) Install the cord clip and 4 nuts.

**Torque:**

**Nut A 4.5 N·m (46 kgf·cm, 40 in·lbf)**

**Nut B 5.4 N·m (55 kgf·cm, 48 in·lbf)**

**11. INSTALL GENERATOR HOLDER W/RECTIFIER**

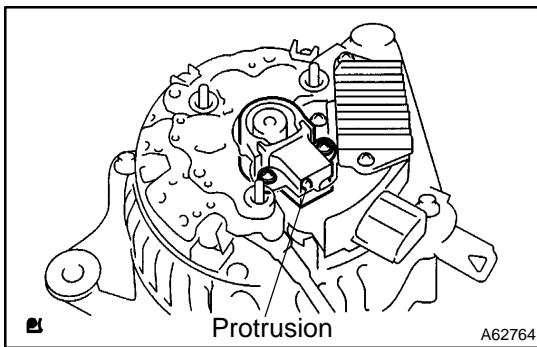
(a) Install the holder w/ rectifier with 4 screws.

**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.

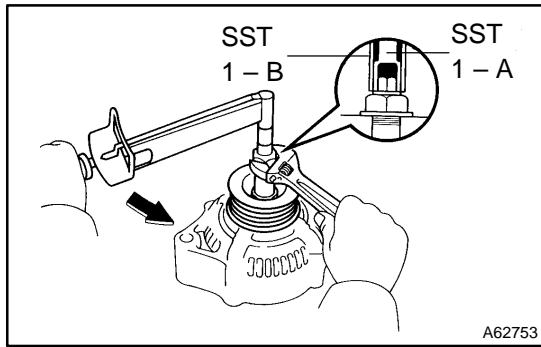
**Torque:**

**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)**



**14. INSTALL GENERATOR PULLEY**

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

HINT:

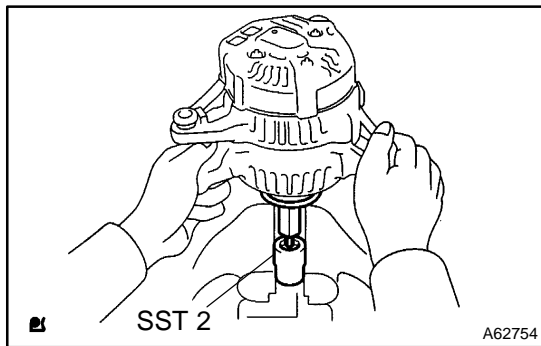
SST1 - A, B	09820-06010
SST2	09820-06020

- (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.

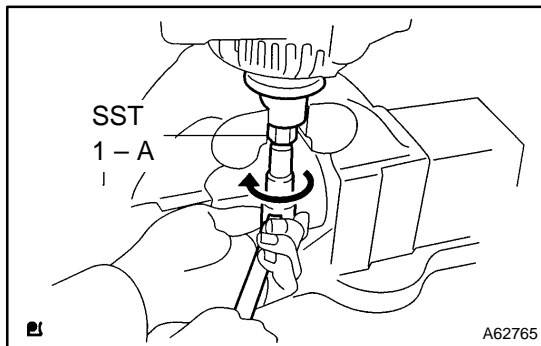
**Torque: 39 N·m (398 kgf·cm, 29 ft·lbf)**

**NOTICE:**

**Check that SST is secured to the pulley shaft.**



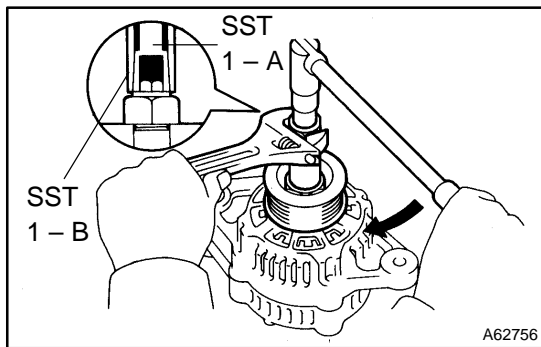
- (c) Mount SST 2 in a vise.
- (d) Insert SST 1 - A, B into SST 2, and attach the pulley nut to SST 2.



- (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.