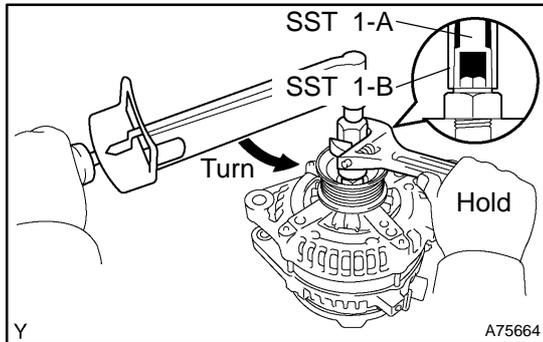


OVERHAUL



1. REMOVE GENERATOR PULLEY

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

HINT:

SST 1-A and B	09820 - 06010
SST 2	09820 - 06020

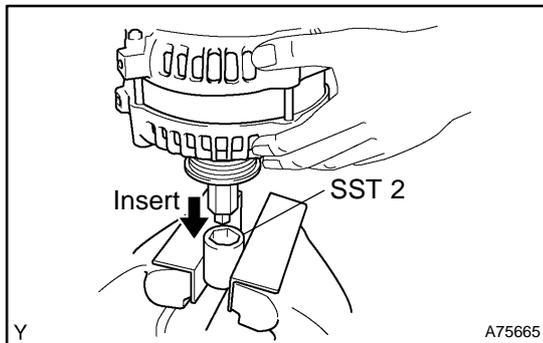
- (a) Hold SST 1-A with a torque wrench, and tighten SST 1-B clockwise with the specified torque.

Torque: 39 N·m (400 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 and B into SST 2, and attach the pulley nut to SST 2.

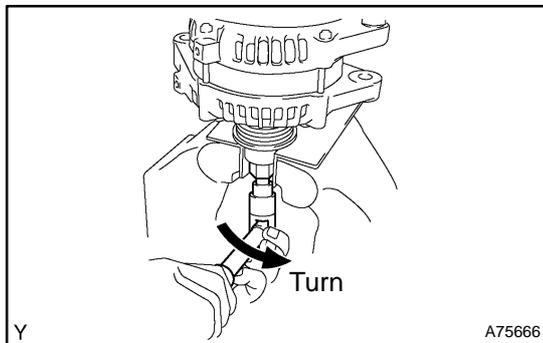


- (d) To loosen the pulley nut, turn SST 1-A in the direction shown in the illustration.

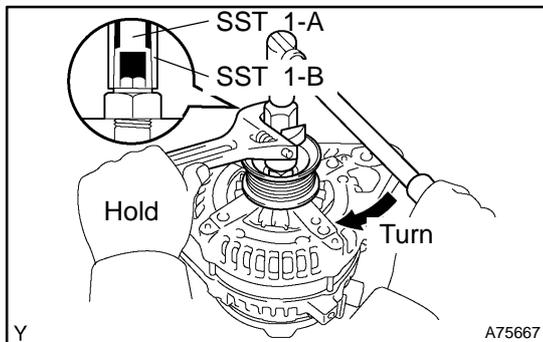
NOTICE:

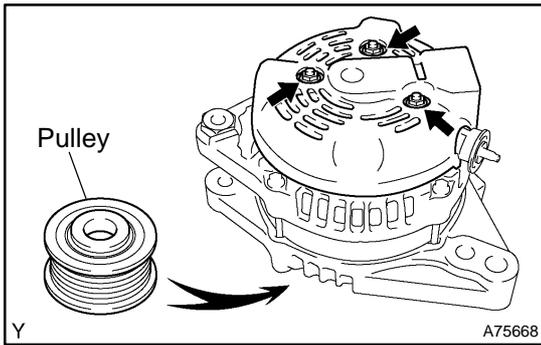
To prevent damage to the rotor shaft, do not loosen the pulley nut more than one-half turn.

- (e) Remove the generator from SST 2.



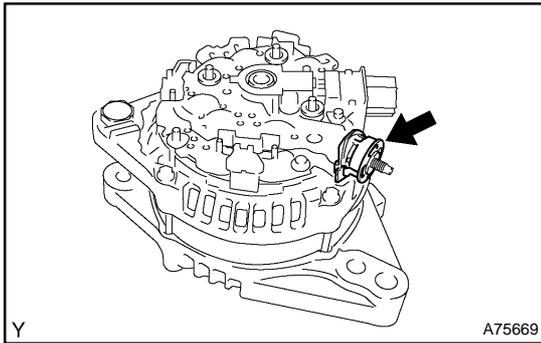
- (f) Turn SST 1-B, and remove SST 1-A and B.
- (g) Remove the pulley nut and pulley.



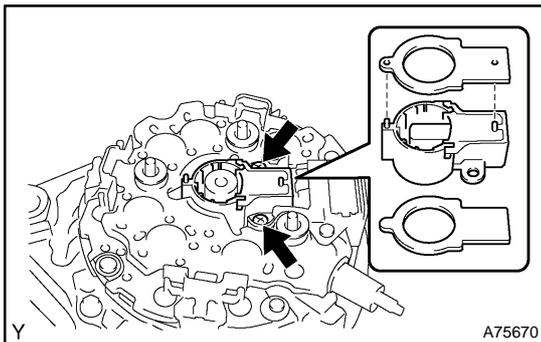


2. REMOVE GENERATOR REAR END COVER

- (a) Place the generator on the pulley.
- (b) Remove the 3 nuts and rear end cover.

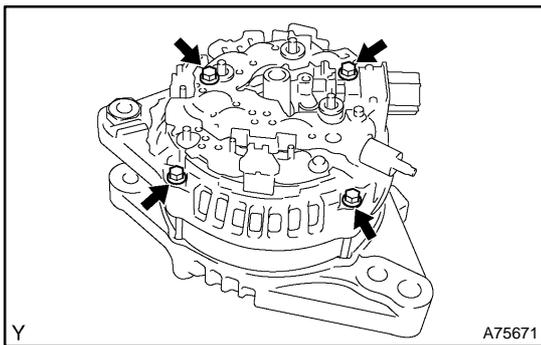


3. REMOVE TERMINAL INSULATOR



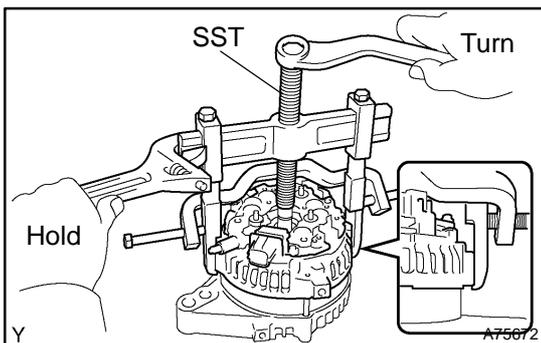
4. REMOVE GENERATOR BRUSH HOLDER ASSY

- (a) Remove the plate seal.
- (b) Remove the 2 nuts and brush holder.
- (c) Remove the plate seal.



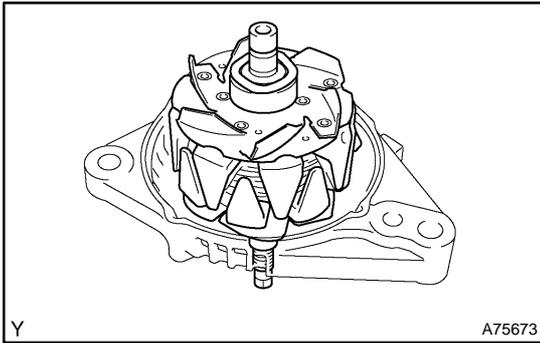
5. REMOVE GENERATOR COIL ASSY

- (a) Remove the 4 bolts.



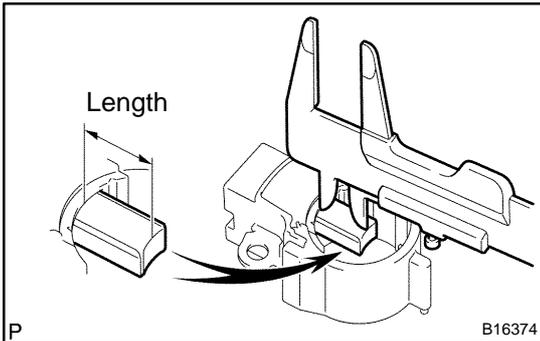
- (b) Using SST, remove the coil.

SST 09950-4001 1 (09951-04020, 09952-04010, 09953-04020, 09954-04010, 09955-04071, 09957-04010, 09958-04011)



6. REMOVE GENERATOR ROTOR ASSY

- (a) Remove the washer and rotor.



7. INSPECT GENERATOR BRUSH HOLDER ASSY

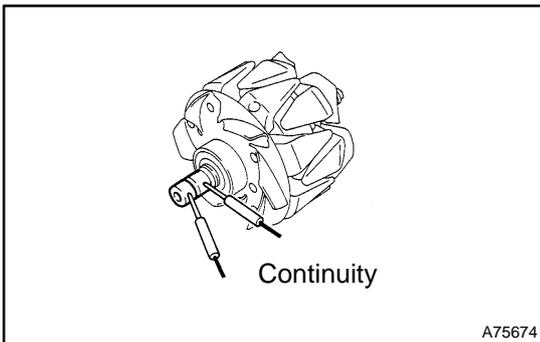
- (a) Using vernier calipers, measure the exposed brush length.

Standard exposed brush length:

10.5 mm (0.413 in.)

Minimum exposed brush length: 4.5 mm (0.177 in.)

If the exposed brush length is less than minimum, replace the brush holder.

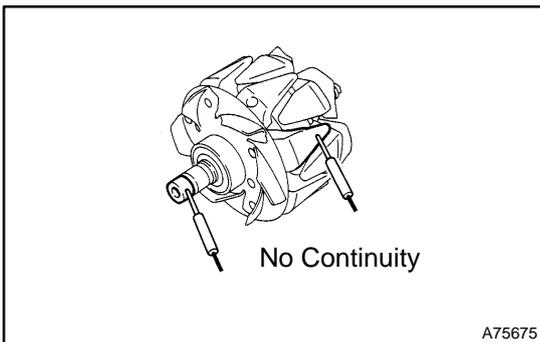


8. INSPECT GENERATOR ROTOR ASSY

- (a) Check the rotor open circuit.
 - (1) Using an ohmmeter, measure the resistance between the slip ring.

Resistance: 2.3 - 2.7Ω at 20°C (68°F)

If the resistance is not as specified, replace the rotor.

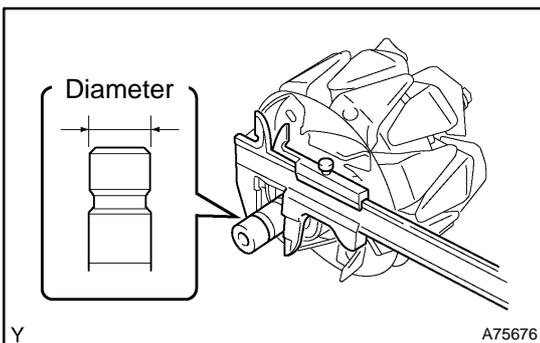


- (b) Check the rotor ground.
 - (1) Using an ohmmeter, check that there is no continuity between the slip ring and rotor.

If there is continuity, replace the rotor.

- (c) Inspect slip rings.
 - (1) Check that the slip rings are not rough or scored.

If rough or scored, replace the rotor.



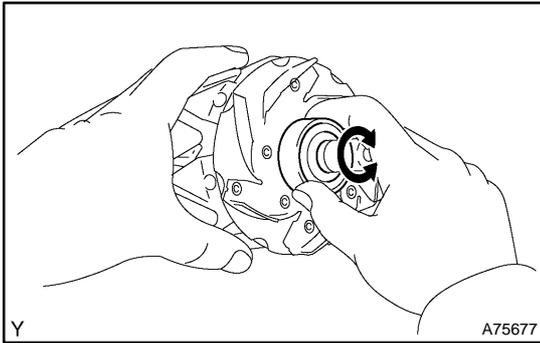
- (2) Using vernier calipers, measure the slip ring diameter.

Standard diameter:

14.2 - 14.4 mm (0.559 - 0.567 in.)

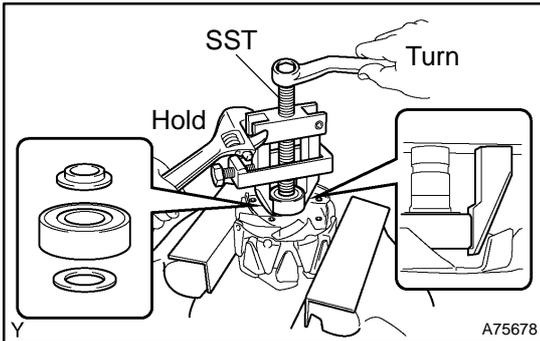
Minimum diameter: 14.0 mm (0.551 in.)

If the diameter is less than minimum, replace the rotor.



9. INSPECT GENERATOR ROTOR BEARING

- (a) Check the bearing is not rough or worn. If necessary, replace the bearing.



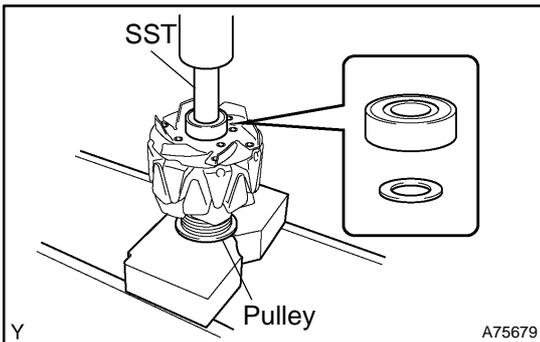
10. REMOVE GENERATOR ROTOR BEARING

- (a) Using SST, remove the bearing cover (outside) and bearing.
SST 09820-00021

NOTICE:

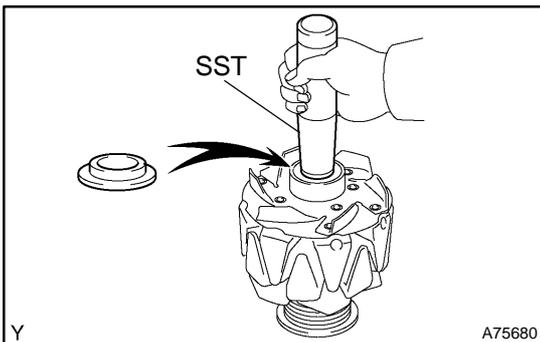
Be careful not to damage the fan.

- (b) Remove the bearing cover (Inside).

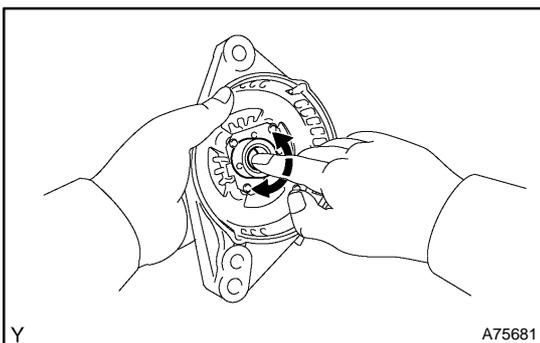


11. INSTALL GENERATOR ROTOR BEARING

- (a) Place the rotor on the pulley.
- (b) Install the bearing cover (Inside).
- (c) Using SST and a press, press in a new bearing.
SST 09820-00031

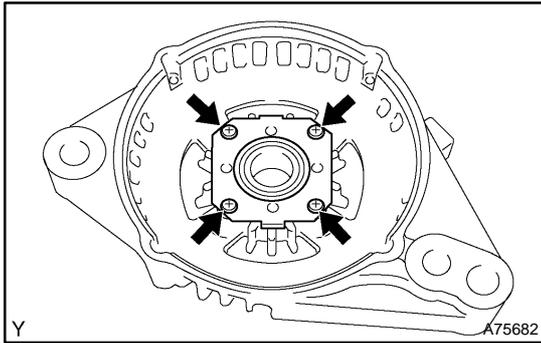


- (d) Using SST, push in the bearing cover (outside).
SST 09285-76010



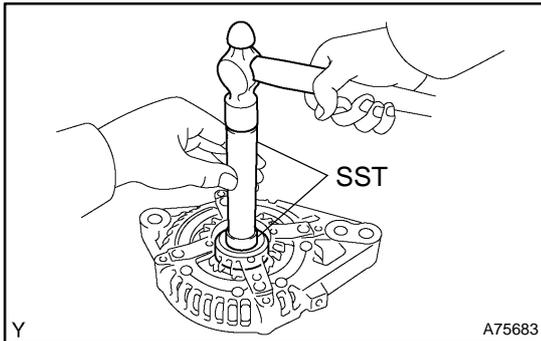
12. INSPECT GENERATOR DRIVE END FRAME BEARING

- (a) Check the bearing is not rough or worn. If necessary, replace the bearing.



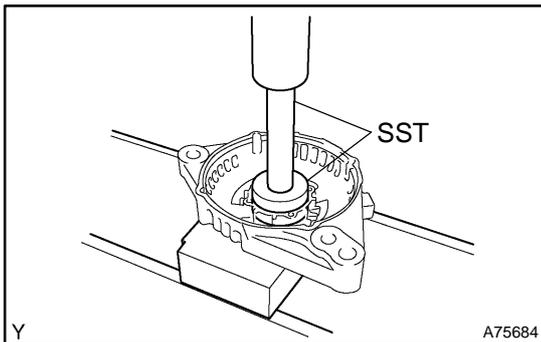
13. REMOVE GENERATOR DRIVE END FRAME BEARING

(a) Remove the 4 screws and retainer plate.



(b) Using SST, tap out the bearing.

SST 09950-60010 (09951-00250), 09950-70010 (09951-07100)



14. INSTALL GENERATOR DRIVE END FRAME BEARING

(a) Using SST and a press, press in a new bearing.

SST 09950-60010 (09951-00470), 09950-70010 (09951-07100)

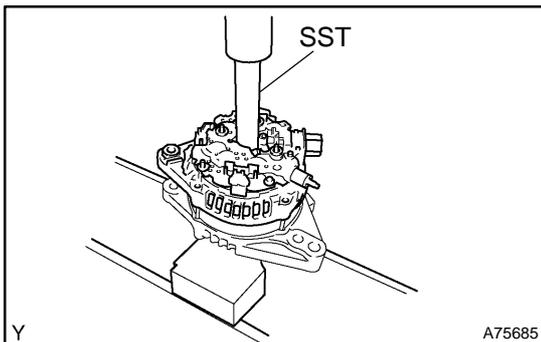
(b) Install the retainer plate with the 4 screws.

Torque: 2.6 N·m (27 kgf·cm, 23 in.-lbf)

15. INSTALL GENERATOR ROTOR ASSY

(a) Place the drive end frame on the rotor.

(b) Install the rotor and washer.



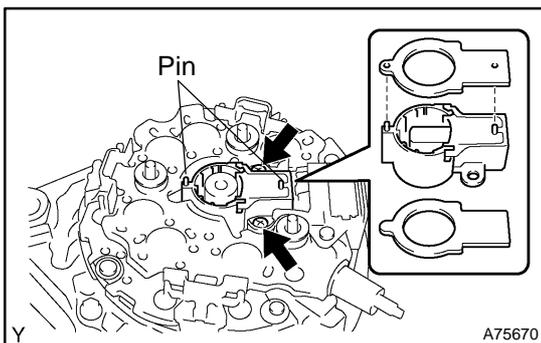
16. INSTALL GENERATOR COIL ASSY

(a) Using SST and a press, press in the coil carefully.

SST 09285-76010

(b) Install the 4 bolts.

Torque: 5.8 N·m (59 kgf·cm, 51 in.-lbf)



17. INSTALL GENERATOR BRUSH HOLDER ASSY

(a) Install the plate seal (Inside).

(b) Place the brush holder with the pin facing upward.

NOTICE:

Be careful of the brush holder installing direction.

(c) Install the 2 screws.

Torque: 1.8 N·m (18 kgf·cm, 16 in.-lbf)

(d) Align the pins of the brush holder with the holes of the plate seal (outside), and install the plate seal (outside).

18. INSTALL TERMINAL INSULATOR

19. INSTALL GENERATOR REAR END COVER

- (a) Install the rear end cover with the 3 nuts.
Torque: 4.6 N·m (47 kgf·cm, 41 in·lbf)

20. INSTALL GENERATOR PULLEY

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

HINT:

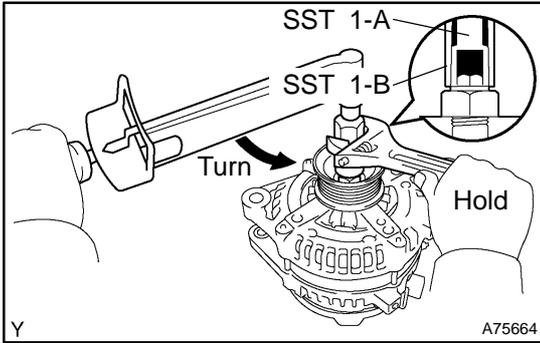
SST 1-A and B	09820 - 06010
SST 2	09820 - 06020

- (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 with the specified torque.

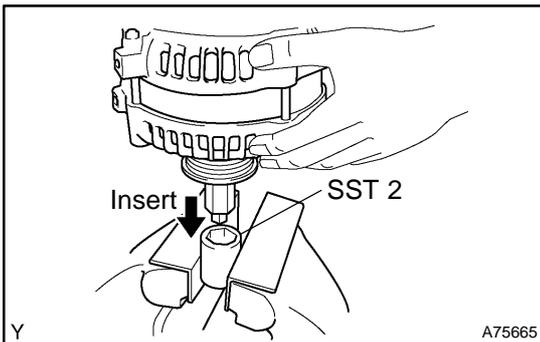
Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)

NOTICE:

Check that SST is secured to the rotor shaft.



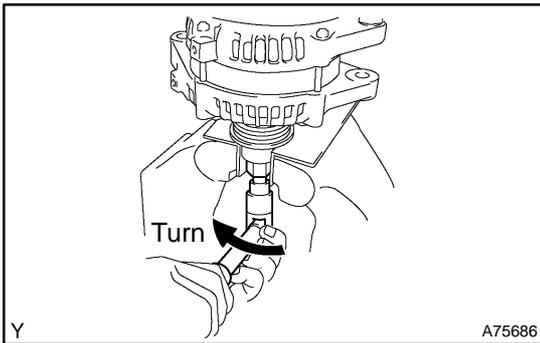
- (c) Mount SST 2 in a vise.
- (d) Insert SST 1-A and B into SST 2, and attach the pulley nut to SST 2



- (e) Tighten the pulley nut by turning SST 1-A in the direction shown in the illustration.

Torque: 111 N·m (1,125 kgf·cm, 81 ft·lbf)

- (f) Remove the generator 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.

