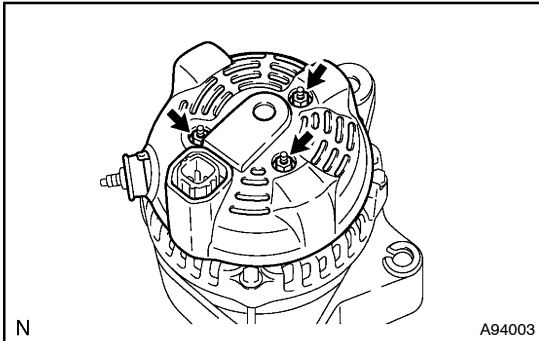
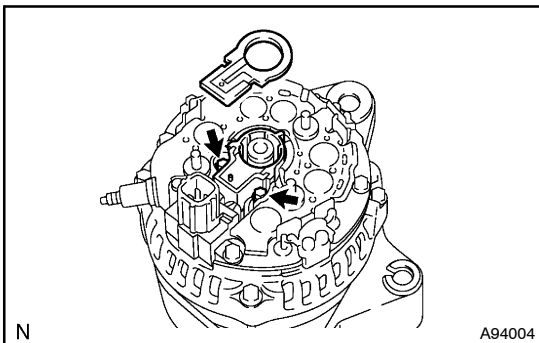


OVERHAUL



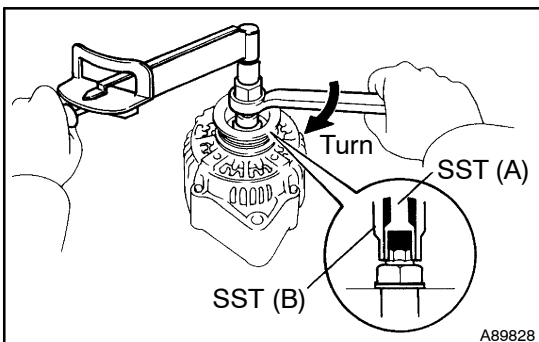
1. REMOVE GENERATOR REAR END COVER

- (a) Remove the 3 nuts and end cover.
- (b) Remove the terminal insulator.



2. REMOVE GENERATOR BRUSH HOLDER ASSY

- (a) Remove the rear seal plate from the brush holder.
- (b) Remove the 2 screws and brush holder.
- (c) Remove the front seal plate from the coil.



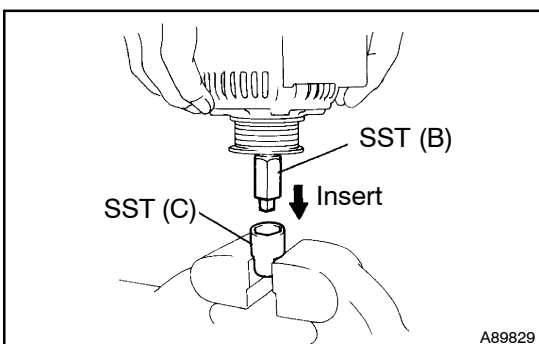
3. REMOVE GENERATOR PULLEY

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

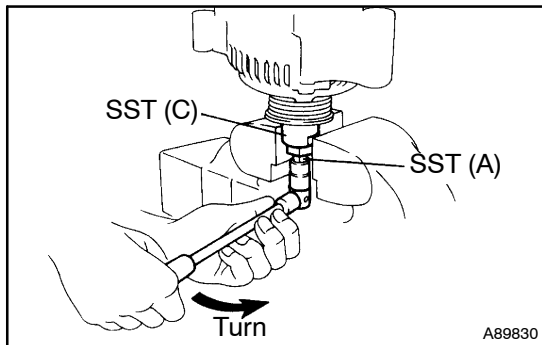
SST 09820-63011

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

- (b) Check that SST (A) is secured to the rotor shaft.



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

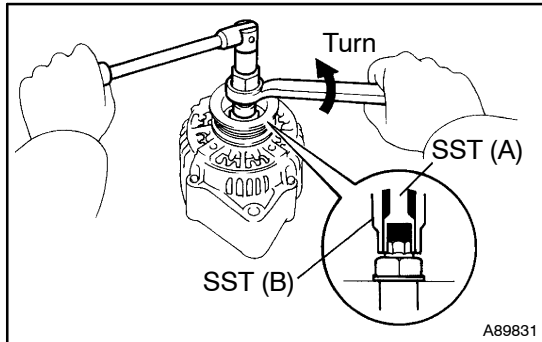


- (e) To loosen the pulley nut, turn SST (A) in the direction shown in the illustration.

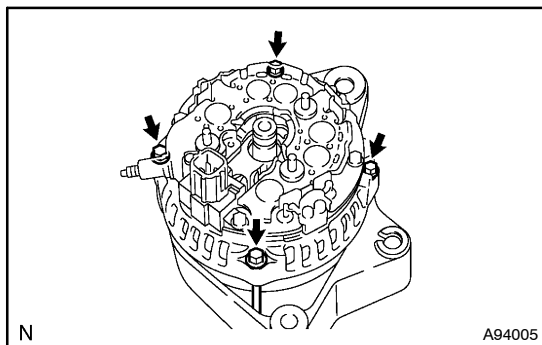
NOTICE:

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

- (f) Remove the generator from SST (C).

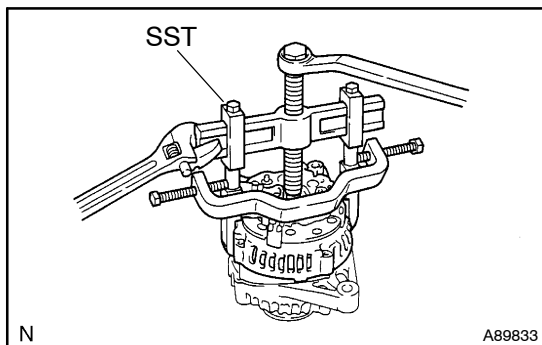


- (g) Turn SST (B) and remove SST (A and B).
(h) Remove the pulley nut and pulley.



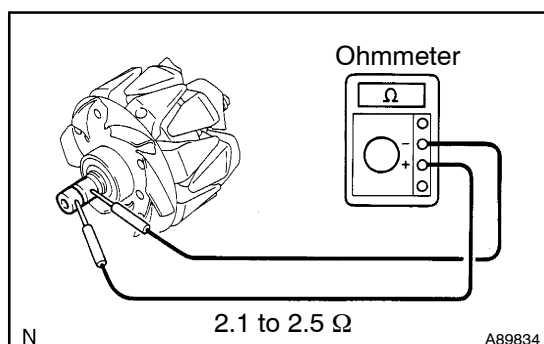
4. REMOVE GENERATOR COIL ASSY

- (a) Remove the 4 bolts.



- (b) Using SST, remove the coil.
SST 09950-40011 (09951-04020, 09952-04010, 09953-04020, 09954-04010, 09955-04071, 09958-04011)
(c) Remove the generator washer.

5. REMOVE GENERATOR ROTOR ASSY



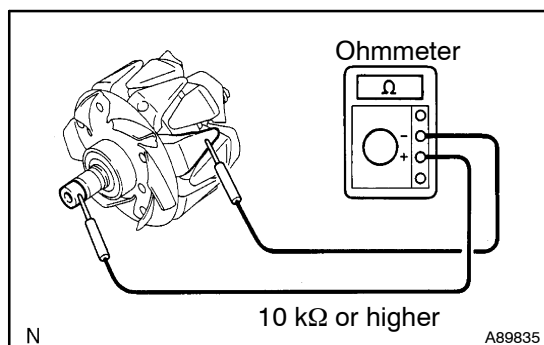
6. INSPECT GENERATOR ROTOR ASSY

- (a) Check if the rotor has an open circuit.

- (1) Using an ohmmeter, measure the resistance between the slip rings.

Standard resistance: 2.1 to 2.5 Ω at 20°C (68°F)

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

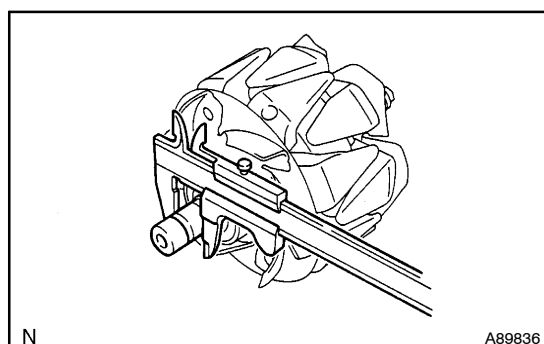


- (b) Check if the rotor is grounded.

- (1) Using an ohmmeter, measure the resistance between the slip ring and the rotor core.

Standard: 10 k Ω or higher

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



- (c) Inspect slip rings.

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

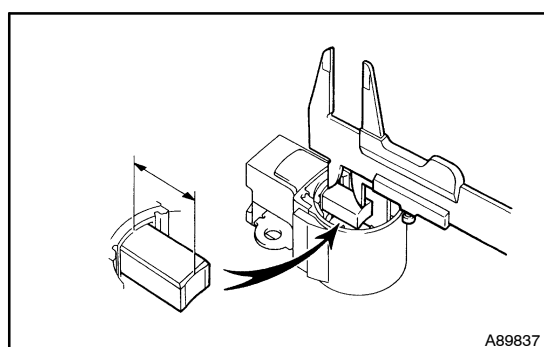
If rough or scored, replace the rotor assy.

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

Specified diameter:

12.8 to 14.4 mm (0.504 to 0.567 in.)

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



7. INSPECT GENERATOR BRUSH HOLDER ASSY

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

Specified exposed length:

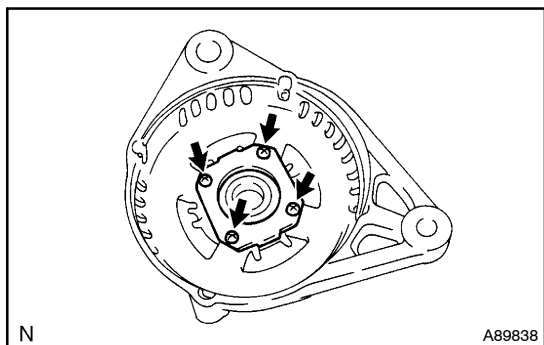
1.5 to 11.5 mm (0.059 to 0.453 in.)

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

8. INSPECT BEARING

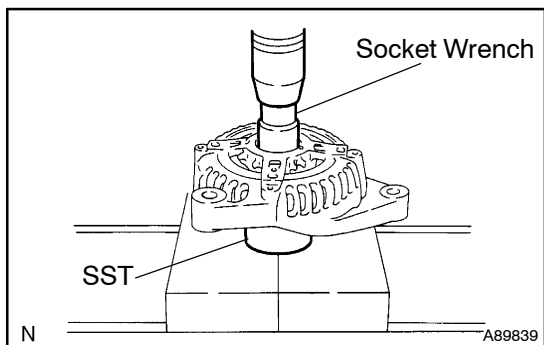
- (a) Check that the bearing is not rough or worn.

If necessary, replace the bearing.

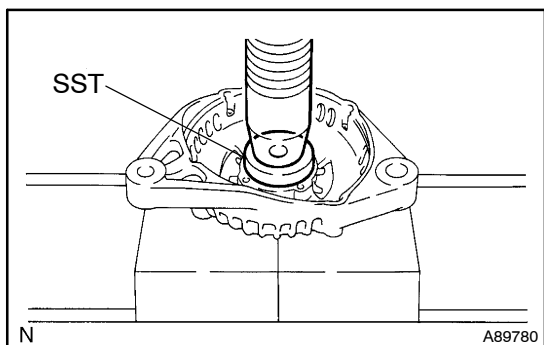


9. REPLACE BEARING FOR FRONT

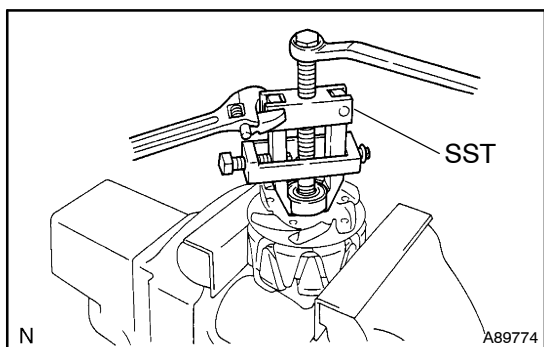
- (a) Remove the 4 screws, bearing retainer and bearing.



- (b) Using SST and a press, press out the bearing.
SST 09223-00010



- (c) Using SST and a press, press in a new bearing.
SST 09950-60010 (09951-00480)
(d) Install the bearing retainer with the 4 screws.
Torque: 2.3 N·m (24 kgf·cm, 20 in.·lbf)



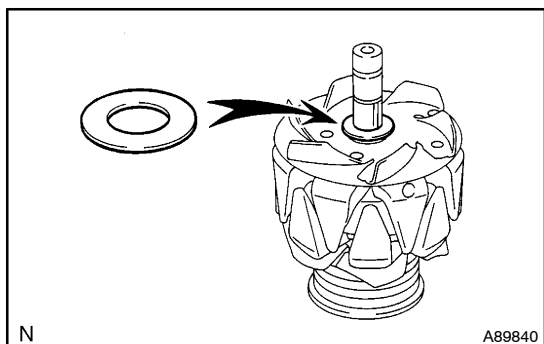
10. REPLACE BEARING FOR REAR

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

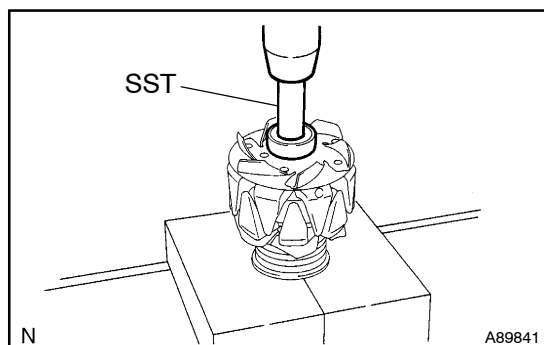
NOTICE:

Be careful not to damage the fan.

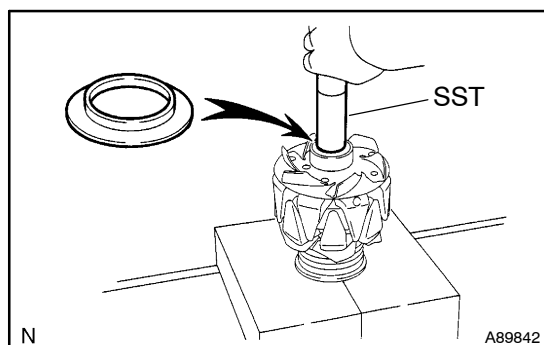
- (b) Remove the bearing cover (inside).



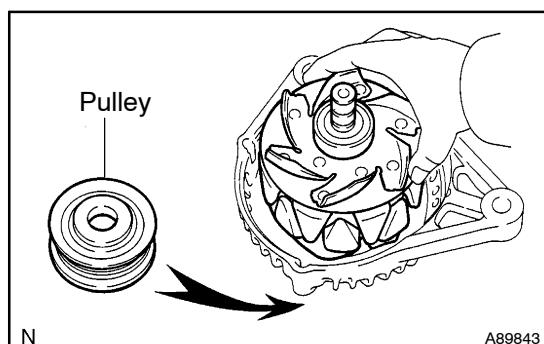
- (c) Place the bearing cover (inside) on the rotor.



- (d) Using SST and a press, press in a new bearing.
SST 09820-00031

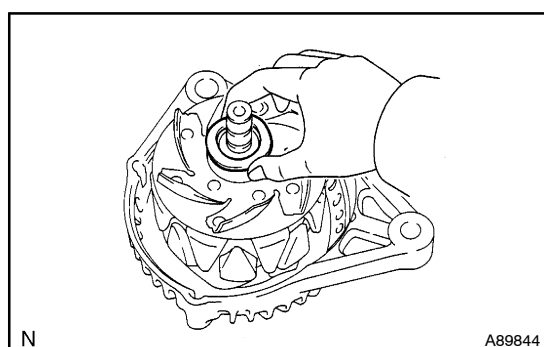


- (e) Using SST, push in the bearing cover (outside).
SST 09285-76010



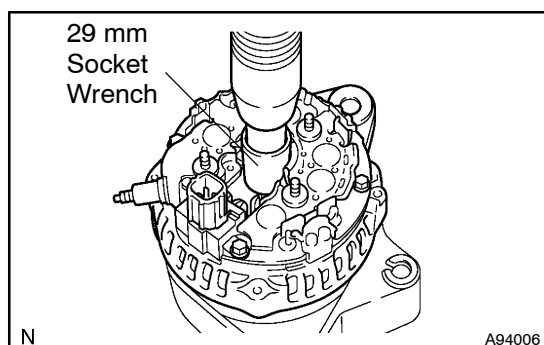
11. INSTALL GENERATOR ROTOR ASSY

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

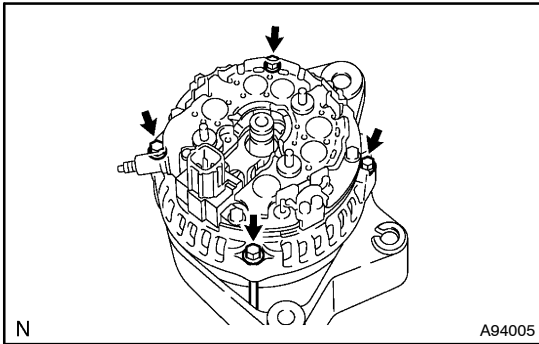


12. INSTALL GENERATOR COIL ASSY

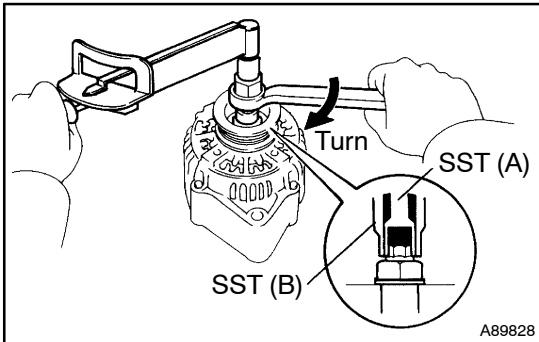
- (a) Place the generator washer on the rotor.



- (b) Using a 29 mm socket wrench and press, slowly press in the coil.

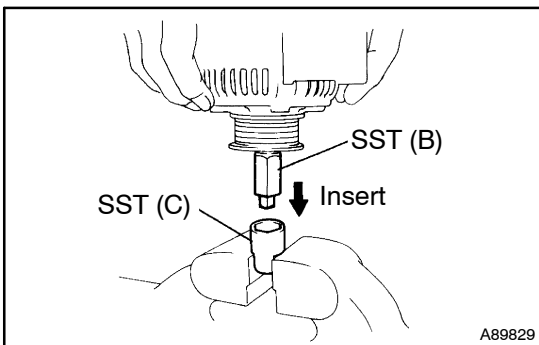


- (c) Install the coil assembly with the 4 bolts.
Torque: 5.8 N·m (59 kgf·cm, 51 in·lbf)

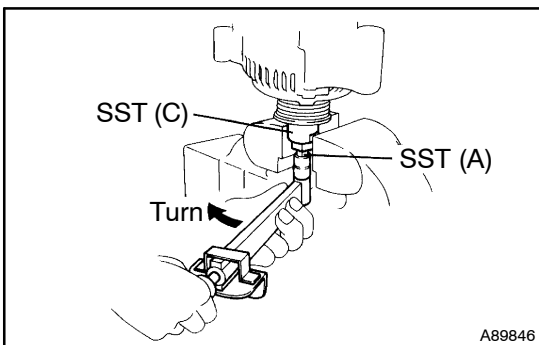


13. INSTALL GENERATOR PULLEY

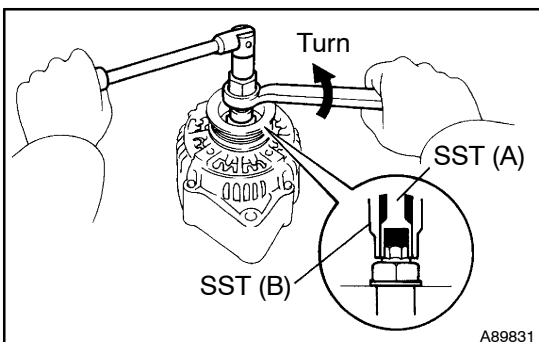
- (a) Install the pulley to the rotor shaft by tightening the pulley nut by hand.
 (b) Hold SST (A) with a torque wrench, and tighten SST (B) clockwise to the specified torque.
 SST 09820-63010
Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)
 (c) Check that SST (A) is secured to the pulley shaft.



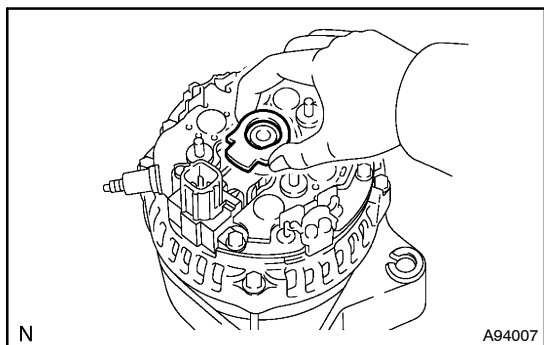
- (d) Mount SST (C) in a vise.
 (e) Insert SST (B) into SST (C), and attach the pulley nut to SST (C).



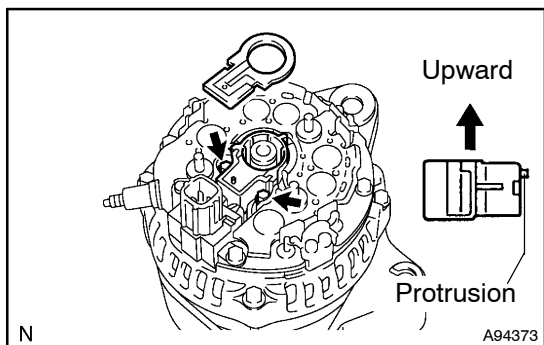
- (f) To tighten the pulley nut, turn SST (A) in the direction shown in the illustration.
Torque: 111 N·m (1,132 kgf·cm, 82 ft·lbf)
 (g) Remove the generator from SST (C).



- (h) Turn SST (B) and remove SST (A and B).

**14. INSTALL GENERATOR BRUSH HOLDER ASSY**

- (a) Place the front seal plate onto the coil.



- (b) Place the brush holder on the coil.

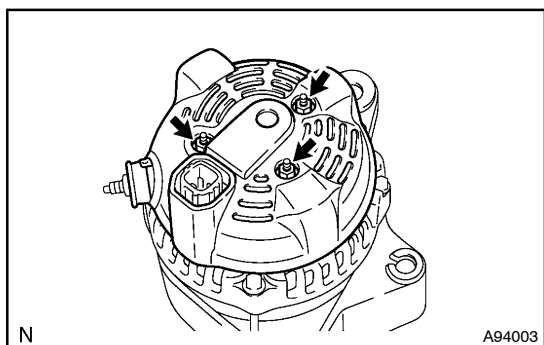
NOTICE:

Be careful of the holder's installation direction.

- (c) Install the 2 screws.

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

- (d) Place the rear seal plate on the brush holder.

**15. INSTALL GENERATOR REAR END COVER**

- (a) Install the terminal insulator.

- (b) Install the end cover with the 3 nuts.

Torque: 4.6 N·m (47 kgf·cm, 41 in·lbf)

16. CHECK THAT ROTOR ROTATES SMOOTHLY