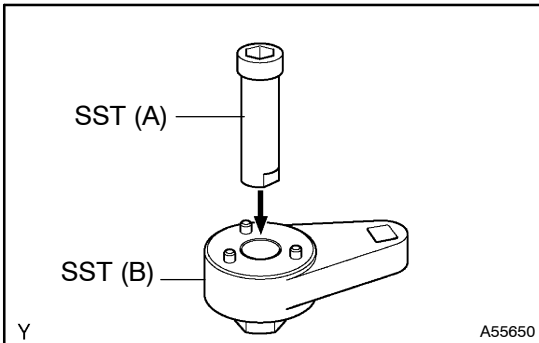
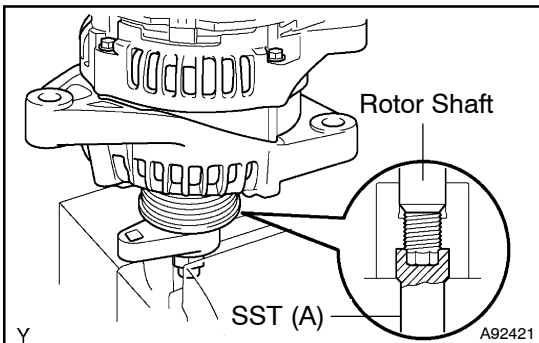


OVERHAUL



1. REMOVE GENERATOR W/CLUTCH PULLEY

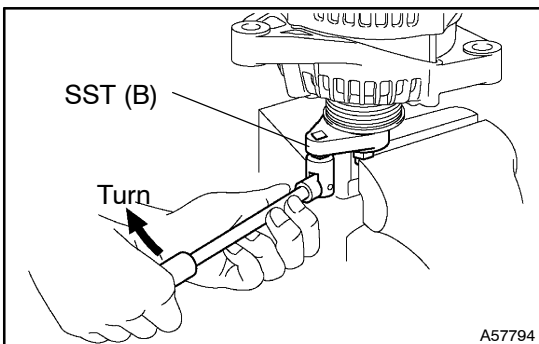
- (a) Remove the generator pulley cap.
- (b) Set SST (A) and (B).
SST 09820–63020



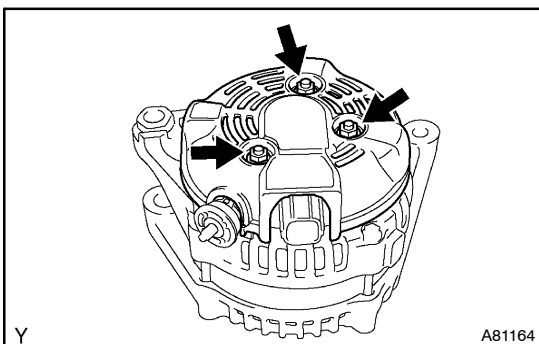
- (c) Clamp SST (A) in a vise.
- (d) Set the generator to SST.

NOTICE:

At this time, make sure that the generator and SST are perpendicular to one another.

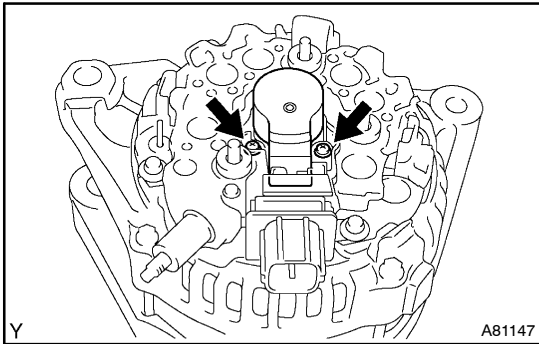


- (e) Insert the 3 tabs of SST (B) into the 3 holes on the pulley.
- (f) To loosen the pulley, turn SST (B) in the direction shown in the illustration.
- (g) Remove the generator from SST.
- (h) Remove the pulley from the rotor shaft.



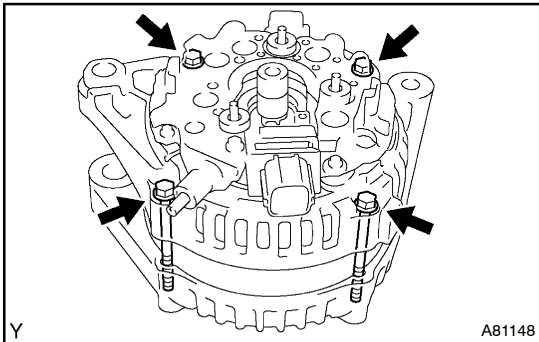
2. REMOVE GENERATOR REAR END COVER

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



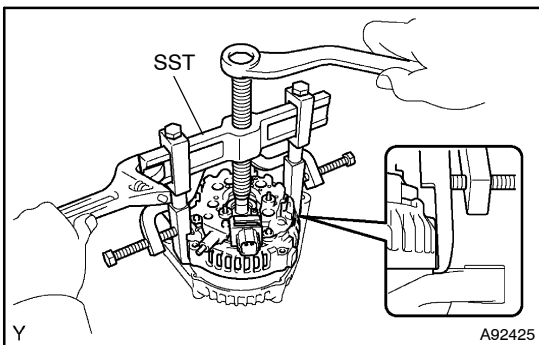
3. REMOVE GENERATOR BRUSH HOLDER ASSY

- (a) Remove the 2 screws, then remove the generator brush holder.



4. REMOVE GENERATOR COIL ASSY

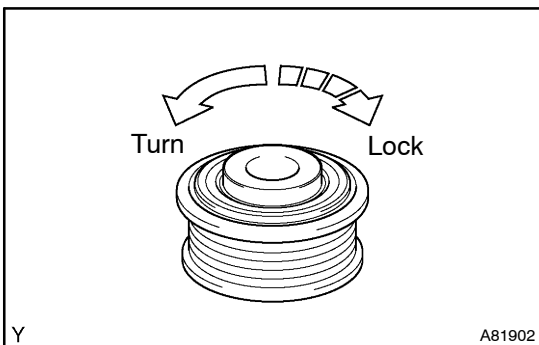
- (a) Remove the 4 bolts.



- (b) Using SST, remove the coil assembly.

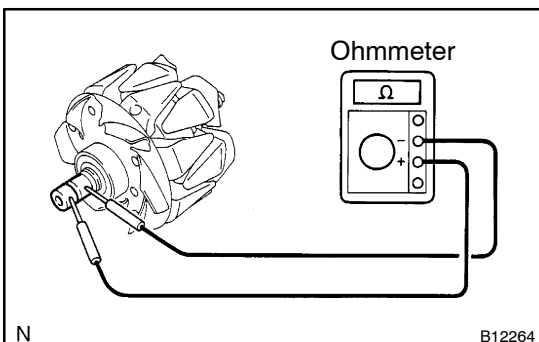
SST 09950-40011 (09951-04020, 09952-04010, 09953-04020, 09954-04010, 09955-04071, 09957-04010, 09958-04011)

5. REMOVE GENERATOR ROTOR ASSY



6. INSPECT GENERATOR W/CLUTCH PULLEY

- (a) Check that the pulley is locked when it is turned clockwise, and that the pulley rotates smoothly when it is turned counterclockwise.

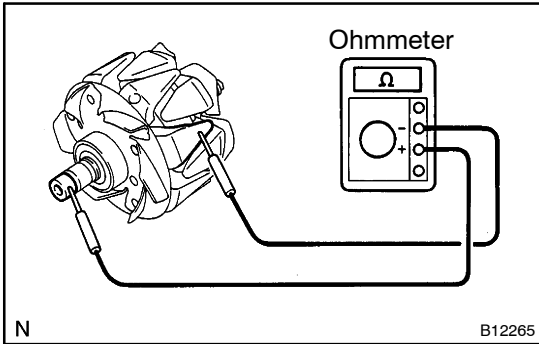


7. INSPECT GENERATOR ROTOR ASSY

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

Standard resistance: 2.3 to 2.7 Ω at 20°C (68°F)

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

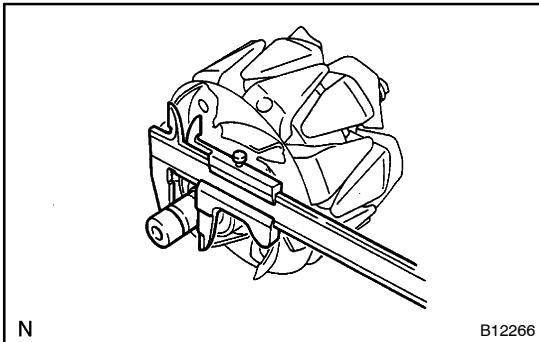


- (b) Inspect the resistance.
 (1) Using an ohmmeter, measure the resistance between the slip ring and rotor.

Standard: 1 MΩ or higher

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

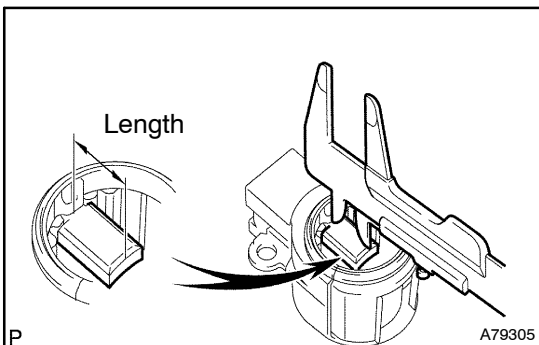
- (c) Check that the slip rings are not rough or scored.
 If rough or scored, replace the rotor.



- (d) Using vernier calipers, measure the slip ring diameter.
Standard diameter: 14.2 to 14.4 mm (0.559 to 0.567 in.)

Minimum diameter: 14.0 mm (0.551 in.)

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



8. INSPECT GENERATOR BRUSH HOLDER ASSY

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

Standard exposed length: 10.5 mm (0.413 in.)

Minimum exposed length: 4.5 mm (0.177 in.)

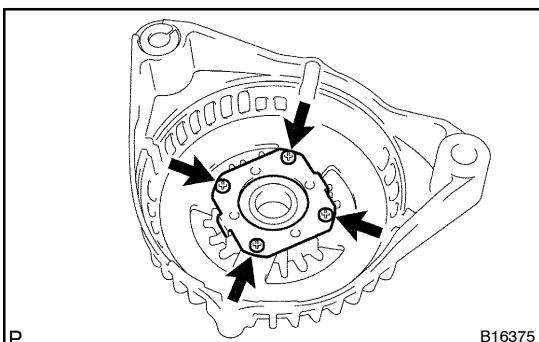
If the exposed length is less than minimum, replace the brushes and brush holder assembly.

9. INSPECT GENERATOR ROTOR BEARING

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

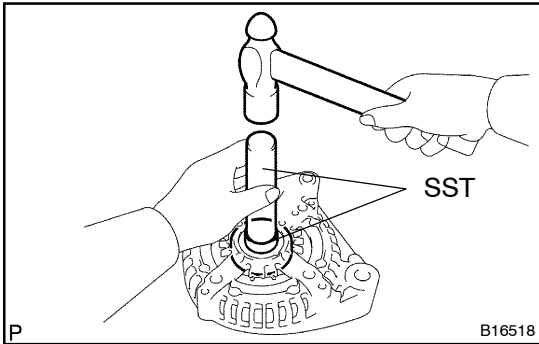
10. INSPECT GENERATOR DRIVE END FRAME BEARING

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

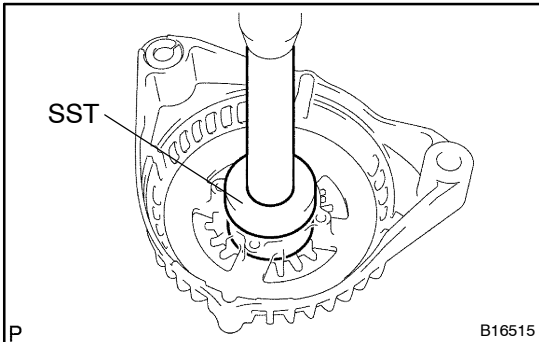


11. REMOVE GENERATOR DRIVE END FRAME BEARING

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

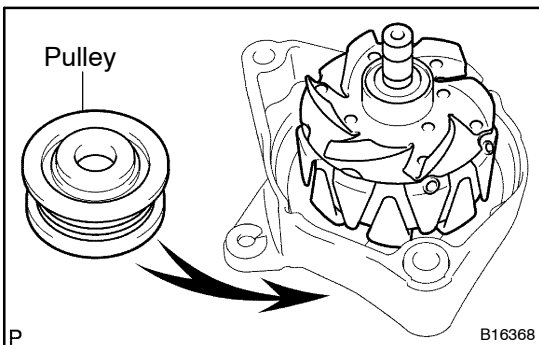


- (b) Using SST and a hammer, tap out the bearing.
 SST 09950-60010 (09951-00250), 09950-70010 (09951-07100)



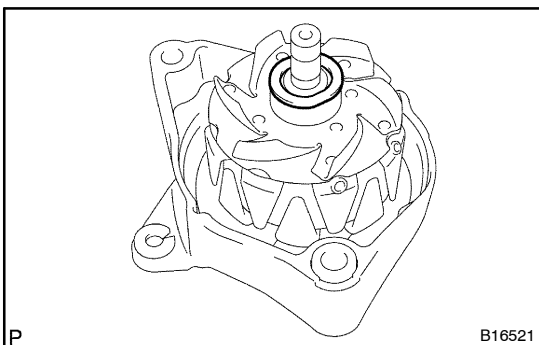
12. INSTALL GENERATOR DRIVE END FRAME BEARING

- (a) Using SST and a press, press in a new bearing.
 SST 09950-60010 (09951-00470), 09950-70010 (09951-07100)
 (b) Install the bearing retainer with the 4 screws.
Torque: 2.3 N·m (23 kgf·cm, 20 in·lbf)



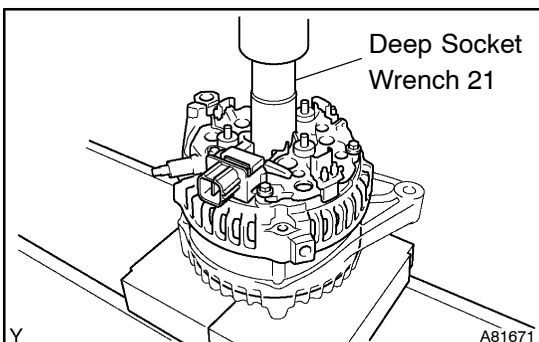
13. INSTALL GENERATOR ROTOR ASSY

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

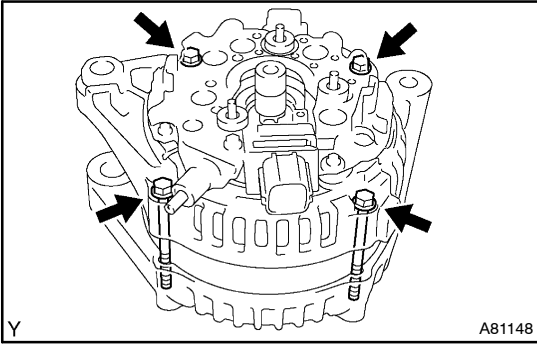


14. INSTALL GENERATOR COIL ASSY

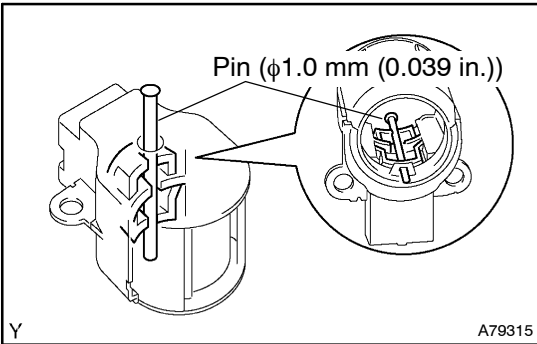
- (a) Place the generator washer on the rotor.



- (b) Using a 21 mm deep socket wrench and press, press in the coil carefully.

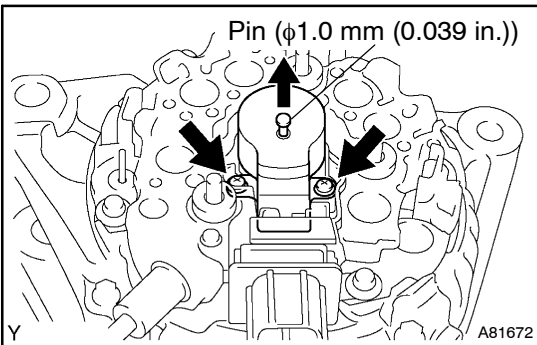


- (c) Install the coil assembly with the 4 bolts.
Torque: 5.8 N·m (59 kgf·cm, 51 in.·lbf)

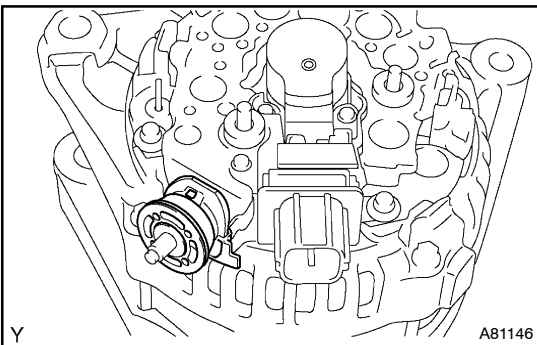


15. INSTALL GENERATOR BRUSH HOLDER ASSY

- (a) While pushing the 2 brushes to inside the brush holder, insert a pin ($\phi 1.0$ mm (0.039 in.)) into the brush holder hole.



- (b) Install the generator brush holder with the 2 screws.
Torque: 1.8 N·m (18 kgf·cm, 16 in.·lbf)
(c) Pull out the pin ($\phi 1.0$ mm (0.039 in.)) from the generator brush holder.

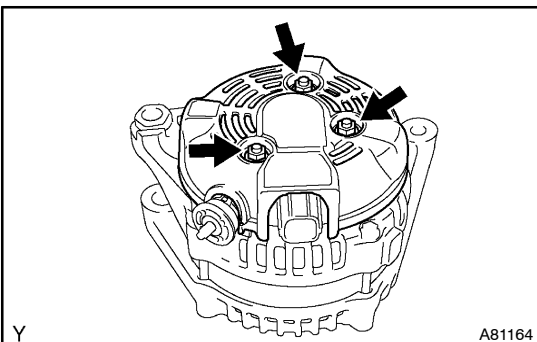


16. INSTALL GENERATOR REAR END COVER

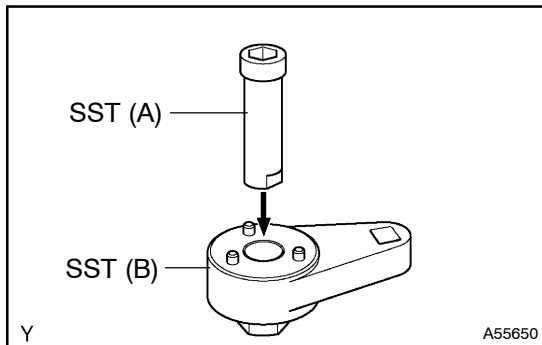
- (a) Install the terminal insulator.

NOTICE:

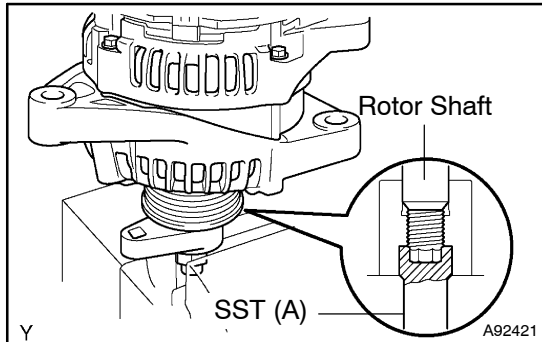
Be careful of the terminal insulator installation direction.



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

**17. INSTALL GENERATOR W/CLUTCH PULLEY**

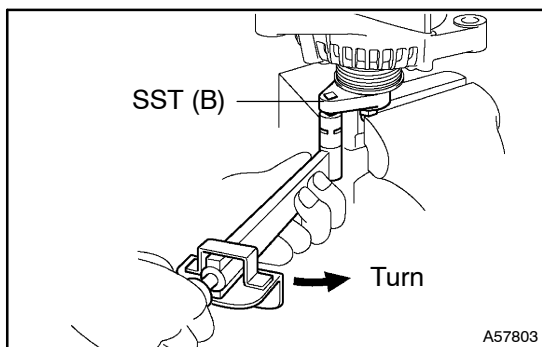
- (a) Temporarily install the pulley to the rotor shaft.
- (b) Set SST (A) and (B).
SST 09820-63020



- (c) Clamp SST (A) in a vise.
- (d) Set the generator to SST.

NOTICE:

At this time, make sure that the generator and SST are perpendicular to one another.



- (e) Insert the 3 tabs of SST (B) into the 3 holes on the pulley.
- (f) To torque the pulley, turn SST (B) in the direction shown in the illustration.

Torque: 111 N·m (1,132 kgf·cm, 82 ft·lbf)

HINT:

Use a torque wrench with the fulcrum length of 50 cm (19.69 in.).

- (g) Remove the generator from SST.
- (h) Check that the generator pulley rotates smoothly.
- (i) Install the generator pulley cap.