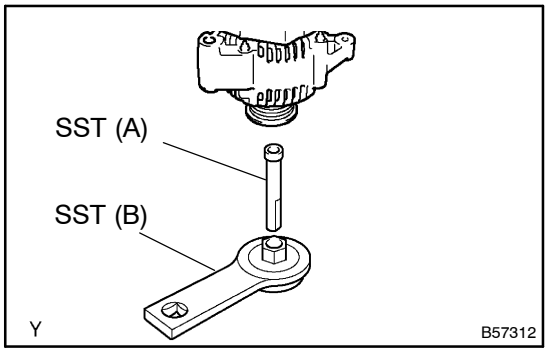
1912M–03

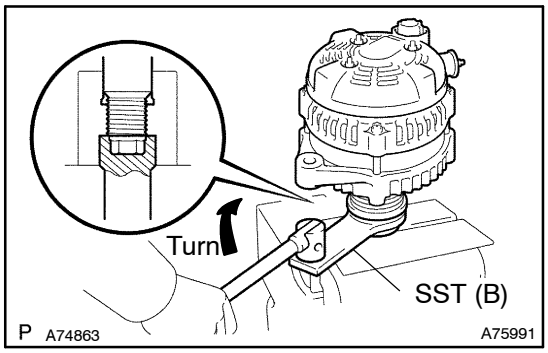
OVERHAUL



1. REMOVE GENERATOR PULLEY

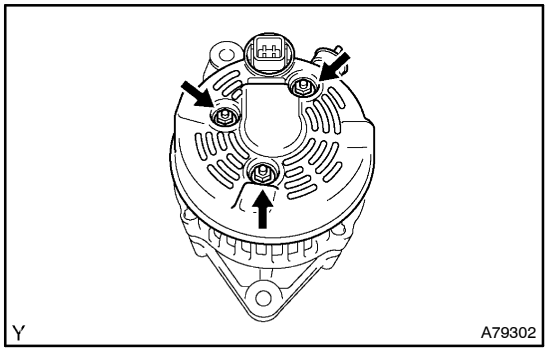
(a) Install SST (A and B) to the generator pulley.

(b) Secure SST (A) in a vise.
SST 09820–63020



(c) Turn SST (B) clockwise, and loosen the generator pulley.
SST 09820–63020

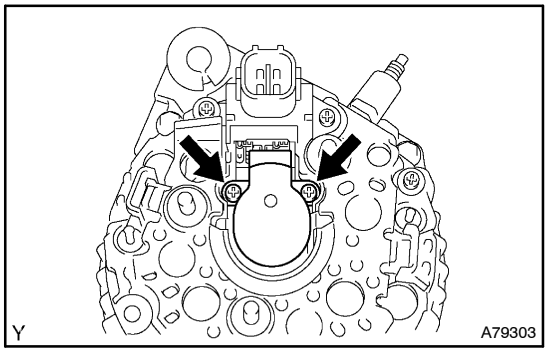
(d) Remove the generator pulley.



2. REMOVE GENERATOR REAR END COVER

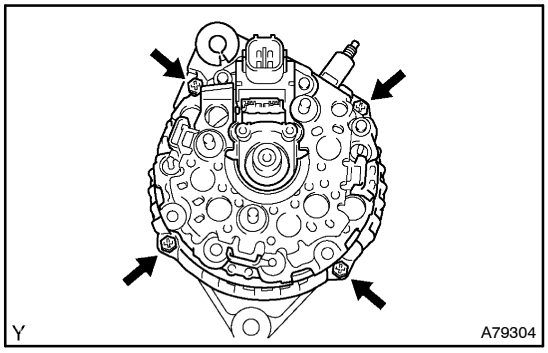
(a) Remove the 3 nuts and generator rear end cover.

(b) Remove the terminal insulator.



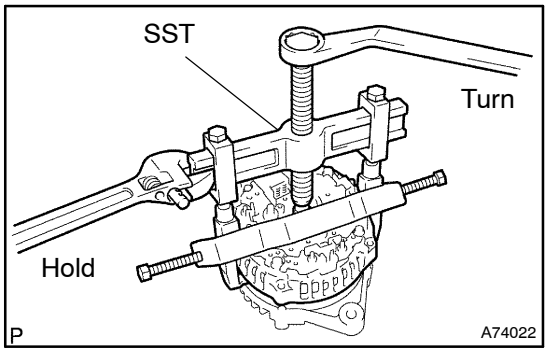
3. REMOVE GENERATOR BRUSH HOLDER ASSY

(a) Remove the 2 screws and generator brush holder assy.



4. REMOVE GENERATOR COIL ASSY

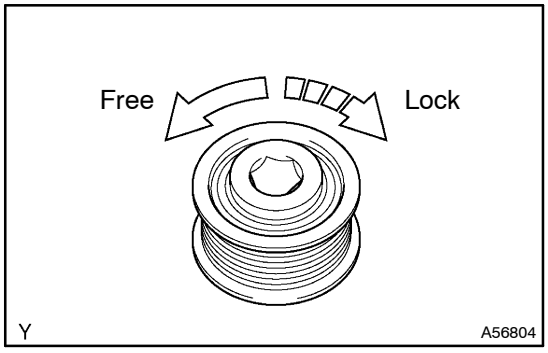
(a) Remove the 4 bolts.



(b) Using SST, remove the generator coil assy.
SST 09950–40011 (09951–04020, 09952–04010, 09953–04020, 09954–04010, 09955–04071, 09957–04010, 09958–04011)

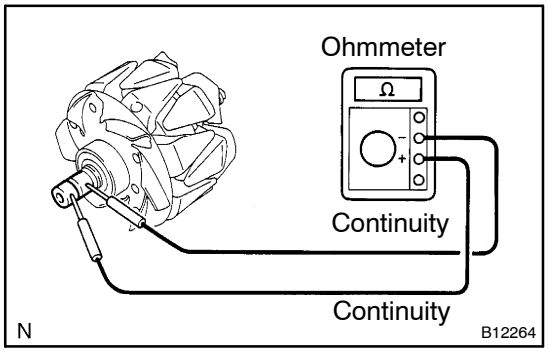
(c) Remove the generator washer.

5. REMOVE GENERATOR ROTOR ASSY



6. INSPECT GENERATOR PULLEY

(a) When rotating the generator pulley, check that it turns counterclockwise and it does not turn clockwise.



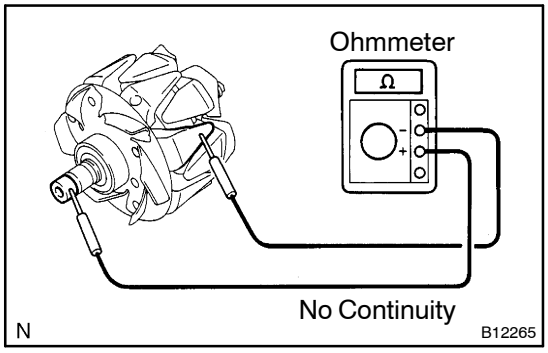
7. INSPECT GENERATOR ROTOR ASSY

(a) Check the rotor for open circuit.

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

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

If there is no continuity, replace the generator rotor assy.

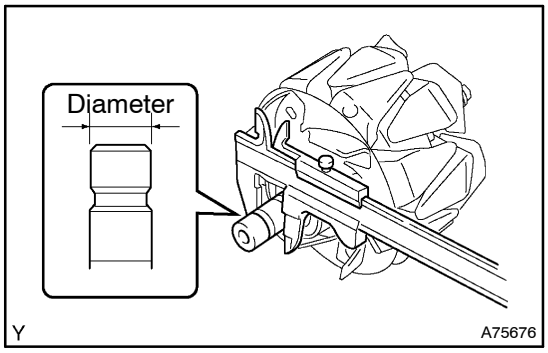


(b) Check the generator rotor for ground.
(1) Using an ohmmeter, check that there is no continuity between the slip ring and rotor.

If there is continuity, replace the generator rotor assy.

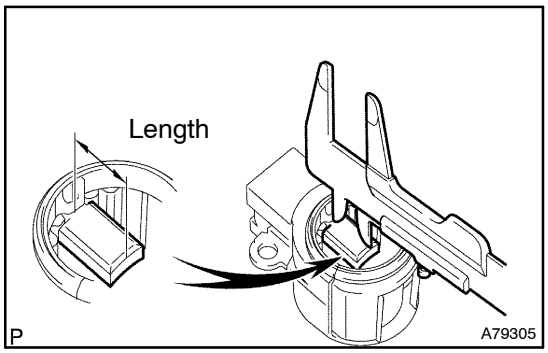
(c) Check that the slip rings are not rough or scored.

If rough or scored, replace the generator rotor assy.



(d) Using vernier calipers, measure the slip ring diameter.
Standard diameter: 14.2 to 14.4 mm (0.559 to 0.567 in.)
Minminum diameter: 14.0 mm (0.551 in.)

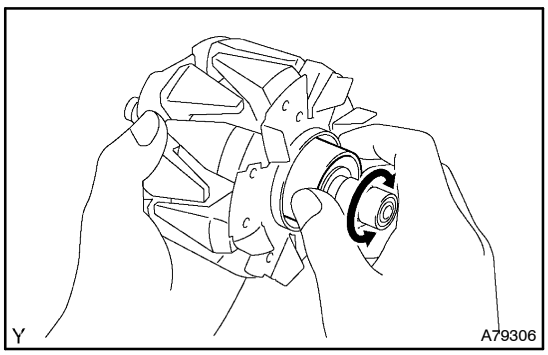
If the diameter is less than the minimum, replace the generator rotor assy.



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.)

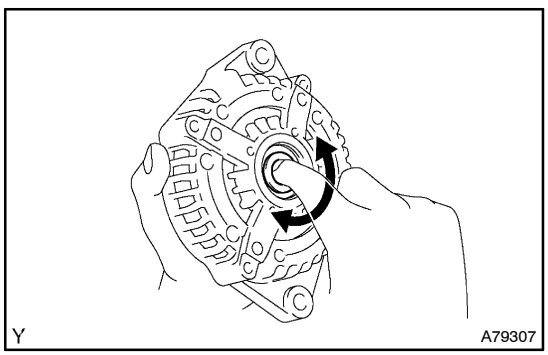
If the exposed length is less than the minimum, replace the generator rotor brush holder assy.



9. INSPECT GENERATOR ROTOR BEARING

(a) Check the generator rotor bearing is not rough or worn.

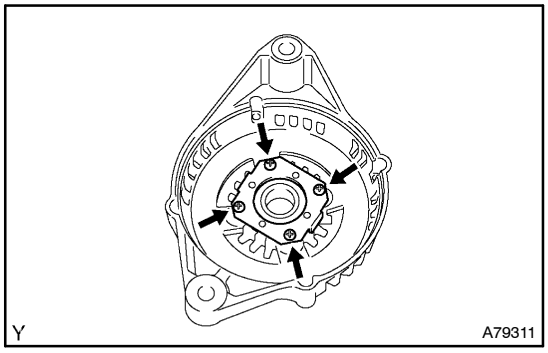
If necessary, replace the generator rotor bearing.



10. INSPECT GENERATOR DRIVE END FRAME BEARING

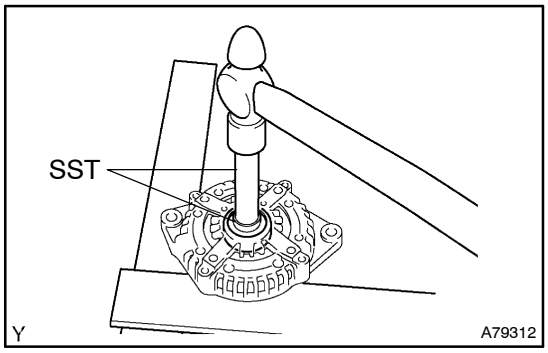
(a) Check the generator drive end frame bearing is not rough or worn.

If necessary, replace the generator drive end frame bearing.



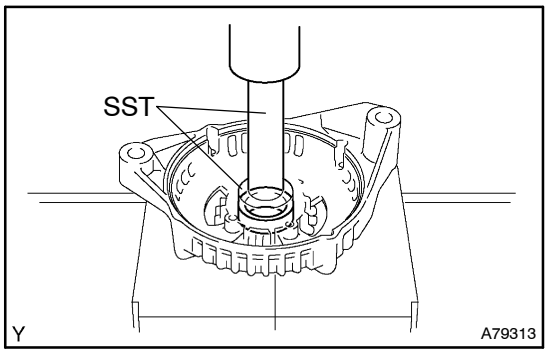
11. REMOVE GENERATOR DRIVE END FRAME BEARING

(a) Remove the 4 screws and bearing retainer.



(b) Using SST and a hammer, tap out the generator drive end frame 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 generator drive end frame bearing.

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

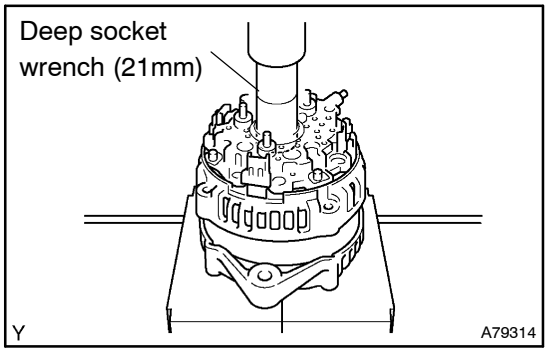
(b) Install the bearing retainer with the 4 screws.

Torque: 2.26 N·m (23 kgf·cm, 20 in.·lbf)

13. INSTALL GENERATOR ROTOR ASSY

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

(b) Install the generator rotor assy and generator washer.

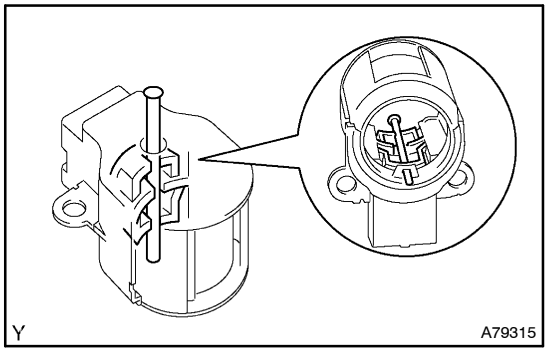


14. INSTALL GENERATOR COIL ASSY

(a) Using a deep socket wrench (21mm) and a press, slowly press in the generator coil assy.

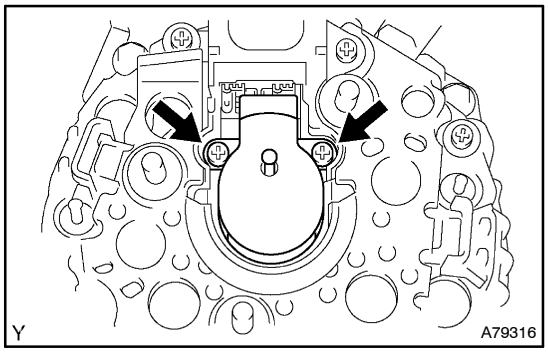
(b) Install the 4 bolts.

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



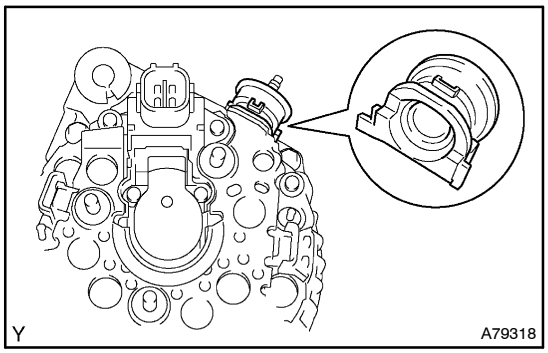
15. INSTALL GENERATOR BRUSH HOLDER ASSY

(a) While pushing the 2 brushes into the generator brush holder assy, insert a ϕ1.0 mm (0.039 in.) pin into the generator brush holder hole.



(b) Install the 2 screws and brush holder assy.
Torque: 1.8 N·m (18 kgf·cm, 16 in.·lbf)

(c) Pull out the pin from the brush holder assy.

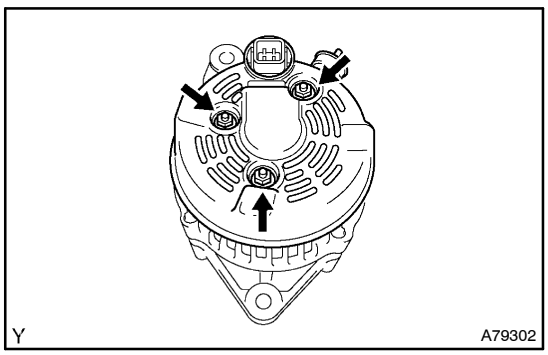


16. INSTALL GENERATOR REAR END COVER

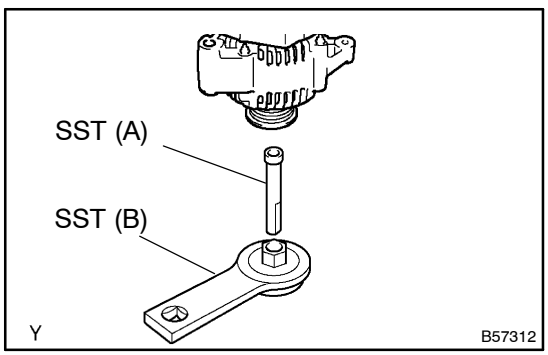
(a) Install the terminal insulator.

NOTICE:

Be careful of the mounting orientation of the terminal insulator.



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

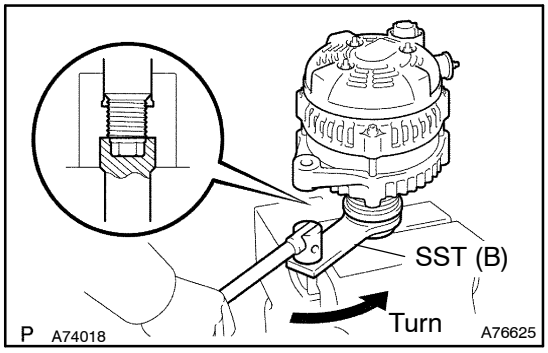


17. INSTALL GENERATOR PULLEY

(a) Install the generator pulley by hand.

(b) Install SST (A and B) to the generator pulley.

(c) Secure SST (A) in a vise.
SST 09820–63020



(d) Turn SST (B) counterclockwise, and tighten the generator pulley.
SST 09820–63020
Torque: 111 N·m (1,127 kgf·cm, 82 ft·lbf)

(e) Check that the generator pulley rotates smoothly.