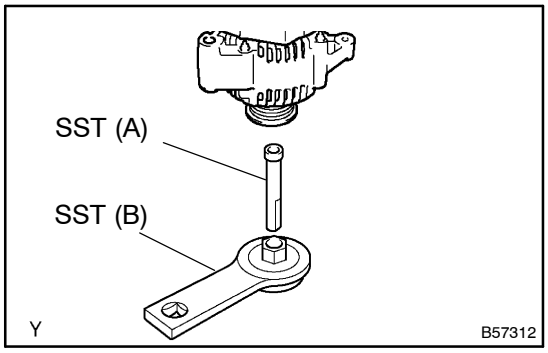
1912O–03

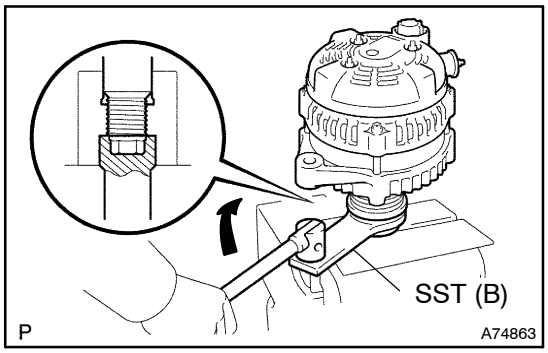
OVERHAUL



1. REMOVE GENERATOR PULLEY

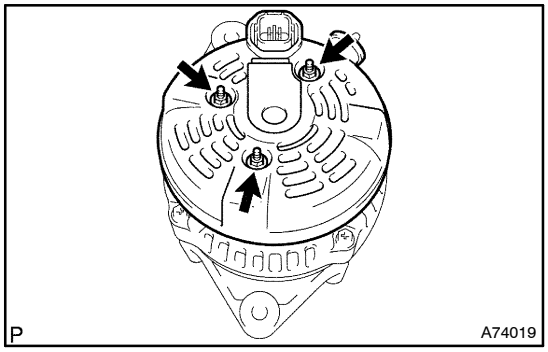
(a) Install SST (A and B) to the generator pulley.

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



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

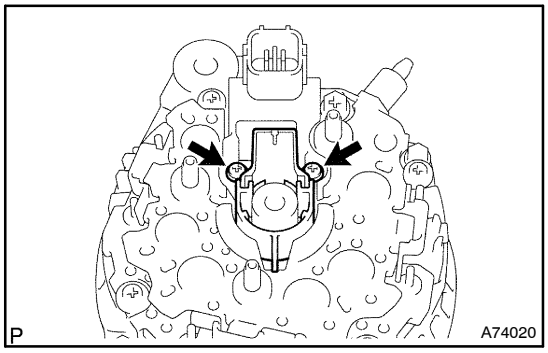
(d) Remove the generator pulley.



2. REMOVE GENERATOR REAR END COVER

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

(b) Remove the terminal insulator.

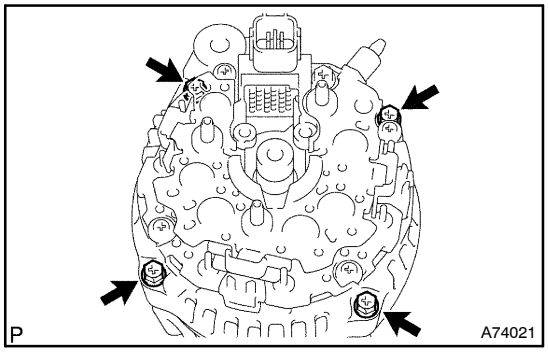


3. REMOVE GENERATOR BRUSH HOLDER ASSY

(a) Remove the plate seal from the generator brush holder assy.

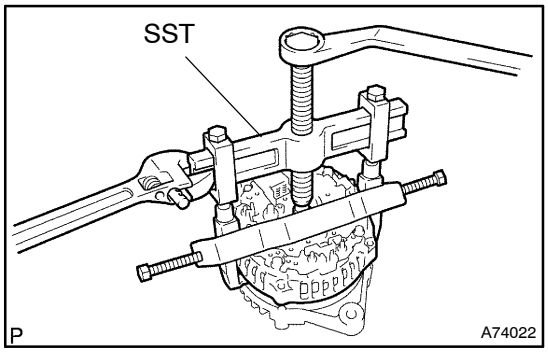
(b) Remove the 2 screws and generator brush holder assy.

(c) Remove the seal plate from the generator coil.



4. REMOVE GENERATOR COIL ASSY

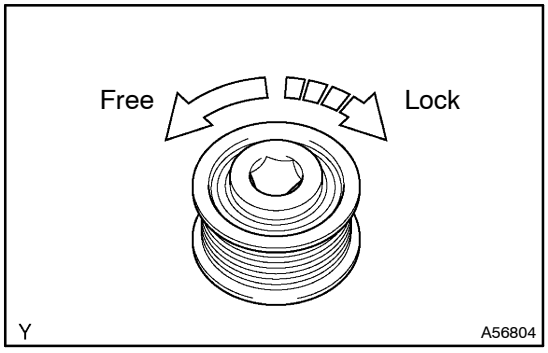
(a) Remove the 4 bolts.



(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)

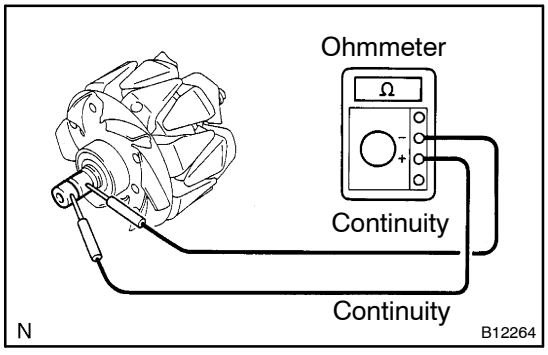
(c) Remove the generator washer.

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.



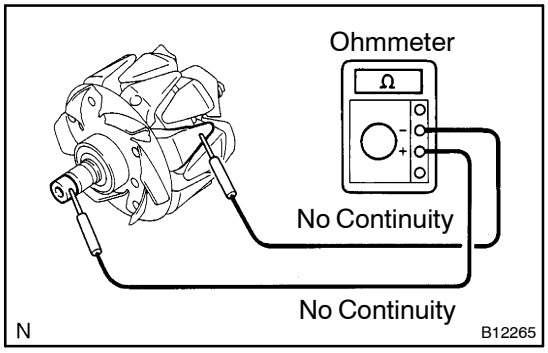
7. INSPECT GENERATOR ROTOR ASSY

(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.

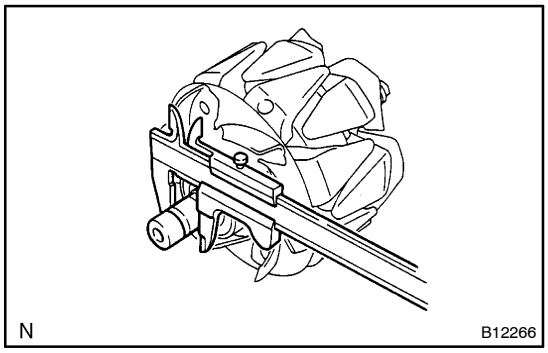


(b) Check the generator rotor for ground.
(1) Using an ohmmeter, check that there is no continuity between the slip ring and rotor.

If there is continuity, replace the generator rotor assy.

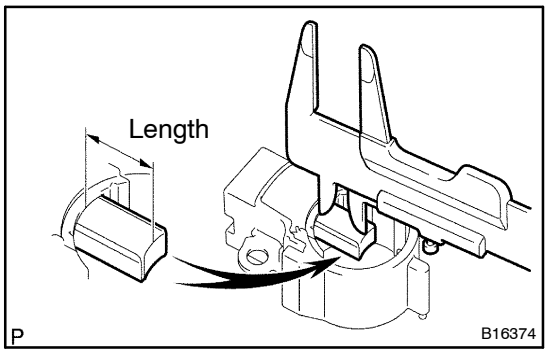
(c) Check that the slip rings are not rough or scored.

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.)
Minimum 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 brush holder assy.

9. INSPECT GENERATOR ROTOR BEARING

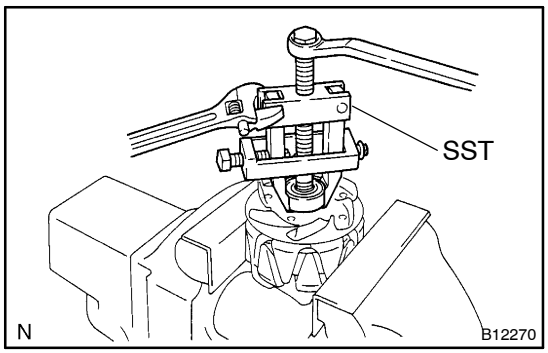
(a) Check the generator rotor bearing is not rough or worn.

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.

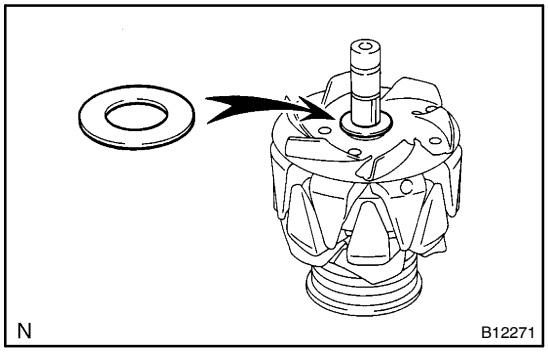


11. REMOVE GENERATOR ROTOR BEARING

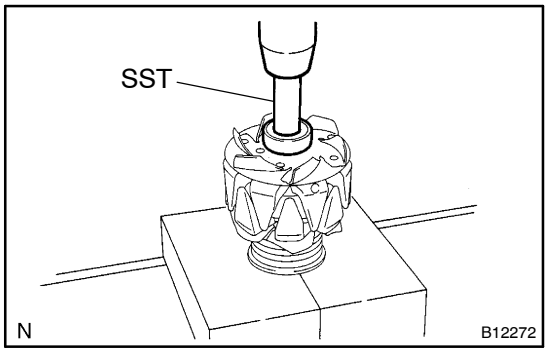
(a) Using SST, remove the bearing cover (outside) and generator rotor bearing.
SST 09820–00021

NOTICE:
Be careful not to damage the fan.

(b) Remove the bearing cover (inside).

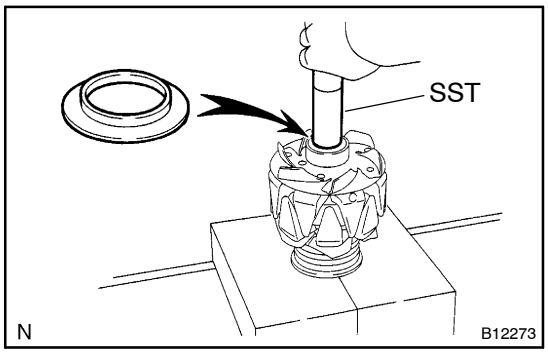


(c) Place the bearing cover (inside) on the generator rotor.

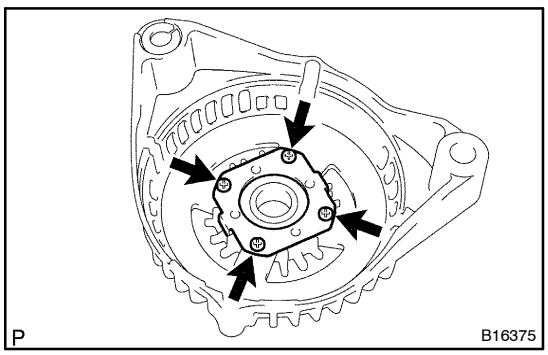


12. INSTALL GENERATOR ROTOR BEARING

(a) Using SST and a press, press in a new generator rotor bearing.
SST 09820–00031

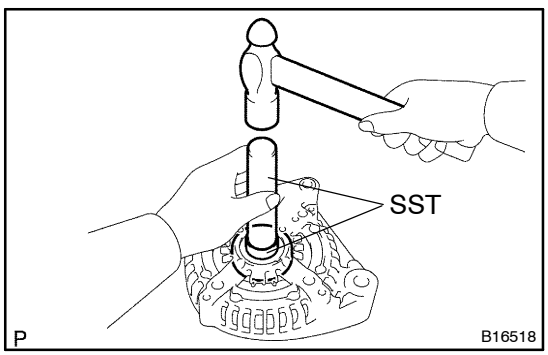


(b) Using SST, push in the bearing cover (outside).
SST 09285–76010

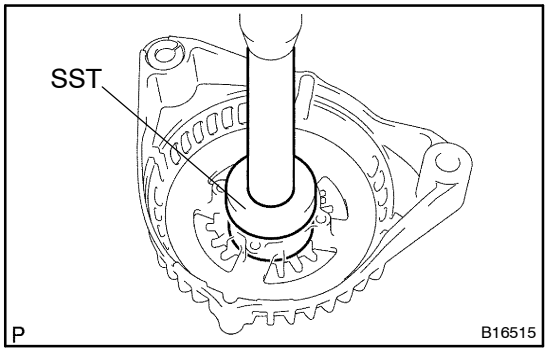


13. REMOVE GENERATOR DRIVE END FRAME BEARING

(a) Remove the 4 screws, retainer plate and generator drive end frame bearing.



(b) Using SST and a hammer, tap out the generator drive end frame bearing.
SST 09950–60010 (09951–00250), 09950–70010 (09951–07100)



14. INSTALL GENERATOR DRIVE END FRAME BEARING

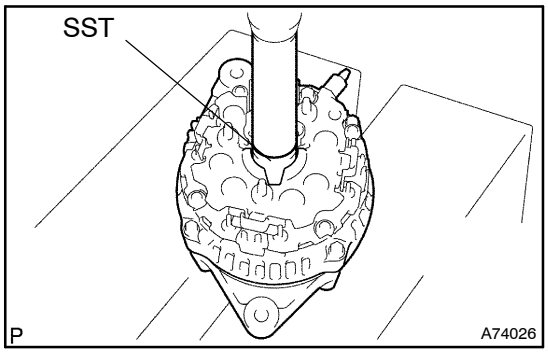
(a) Using SST and a press, press in a new generator drive end frame bearing.
SST 09950–60010 (09951–00470), 09950–70010 (09951–07100)

(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

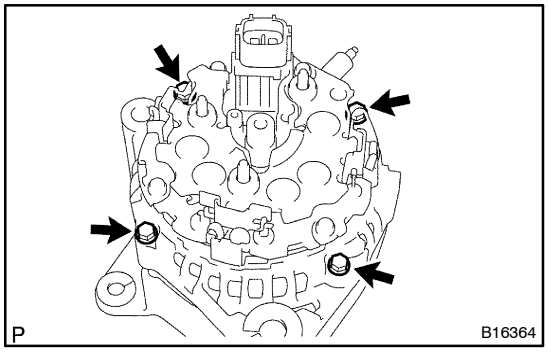
(a) Install the generator rotor assy to the drive end frame.

(b) Place the generator washer on the generator rotor assy.

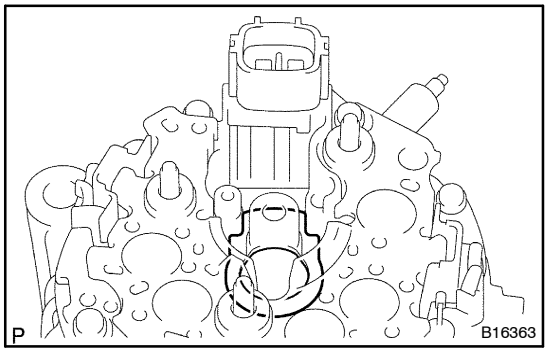


16. INSTALL GENERATOR COIL ASSY

(a) Using SST and a press, slowly press in the generator coil assy.
SST 09285–76010

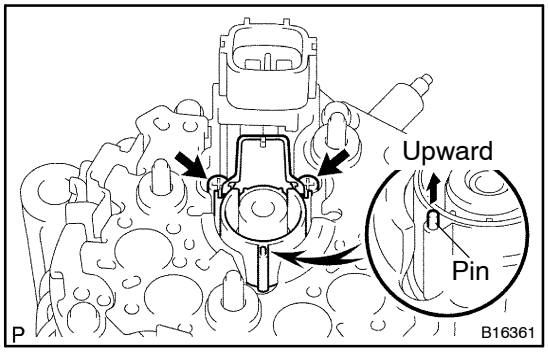


(b) Install the generator coil assy with the 4 bolts.
Torque: 5.8 N·m (59 kgf·cm, 51 in.·lbf)



17. INSTALL GENERATOR BRUSH HOLDER ASSY

(a) Place the plate seal on the generator coil.



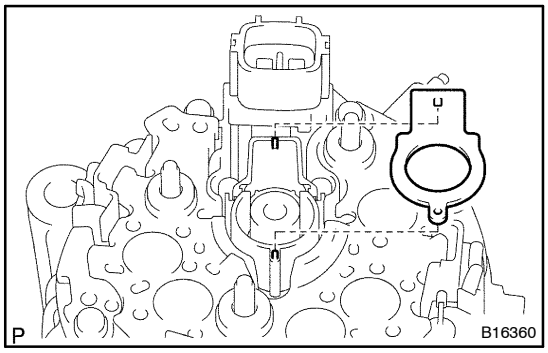
(b) Place the generator brush holder assy on the generator coil with the pin facing upward.

NOTICE:

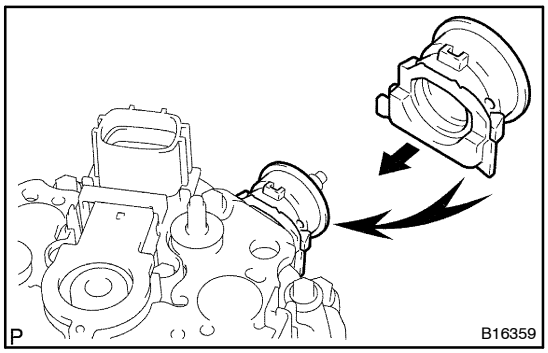
Be careful of the holder installation direction.

(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, and install the plate seal.

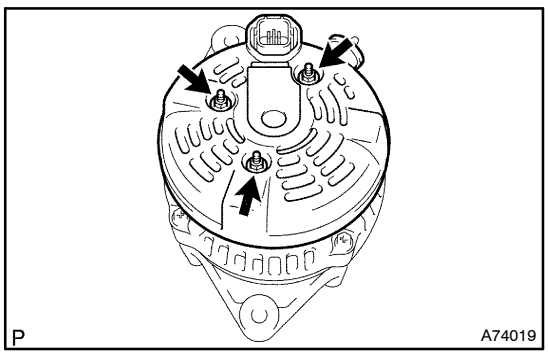


18. INSTALL GENERATOR REAR END COVER

(a) Install the terminal insulator.

NOTICE:

Be careful of the terminal insulator installation direction.

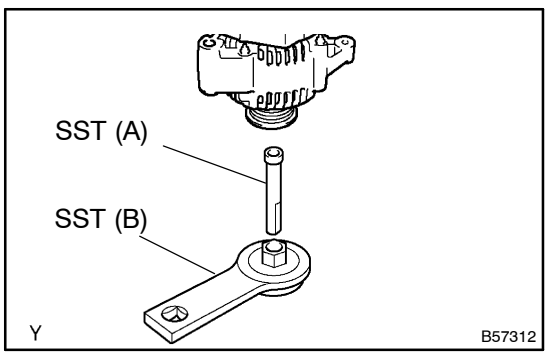


(b) Install the generator rear end cover with the 3 nuts.

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

19. INSTALL GENERATOR PULLEY

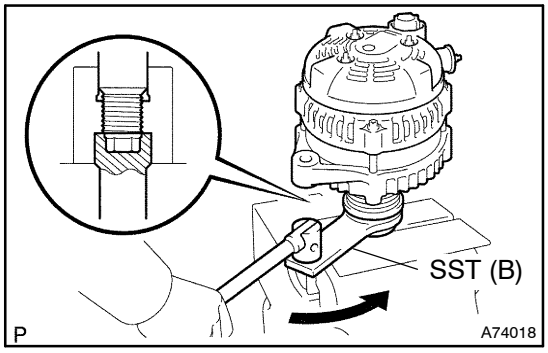
(a) Install the generator pulley by hand.



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

(c) Secure SST (A) in a vice.

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.