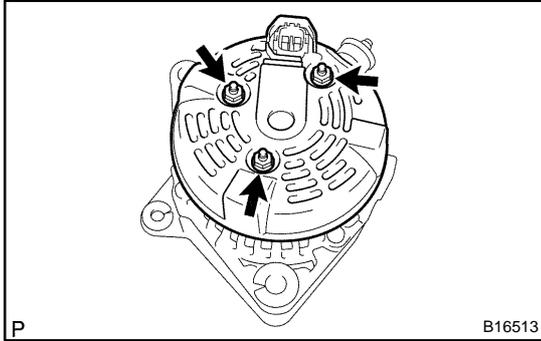
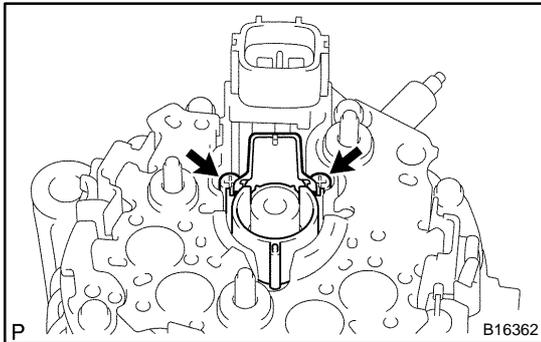


## OVERHAUL



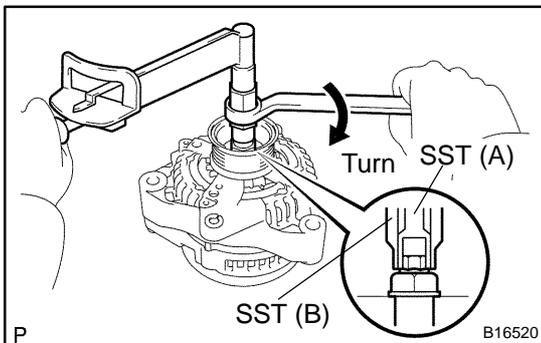
### 1. REMOVE GENERATOR REAR END COVER

- (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 assembly.



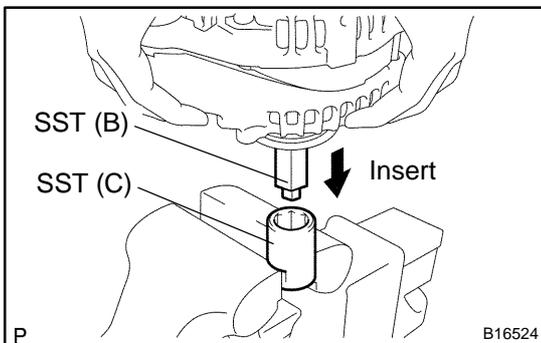
### 3. REMOVE GENERATOR PULLEY

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

SST 09820-6301 1

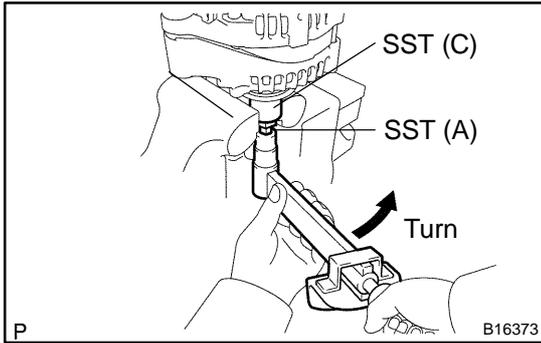
**Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)**

- (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).

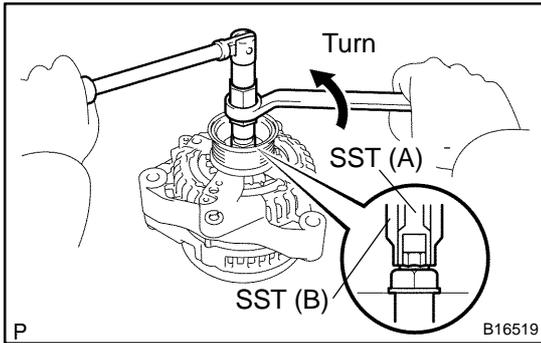


(e) To loosen the pulley nut, turn SST (A) in the direction shown in the illustration.

**NOTICE:**

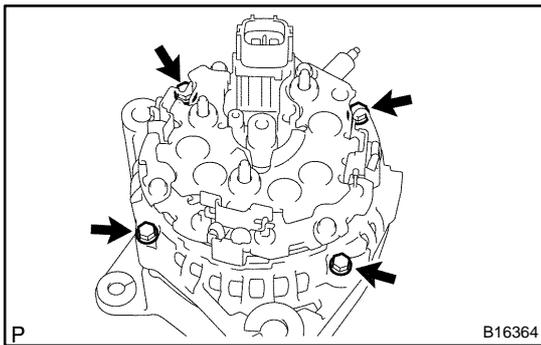
To prevent damage to the rotor shaft, do not loosen the pulley nut more than one-half of a turn.

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



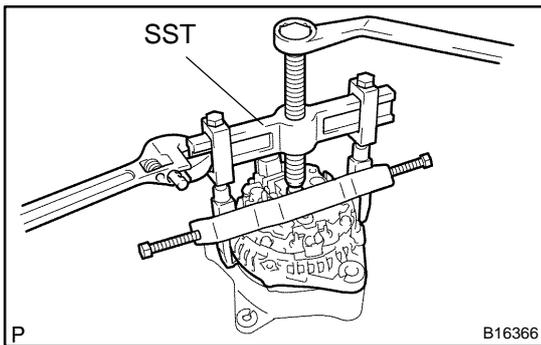
(g) Turn SST (B), and remove SST (A and B).

(h) Remove the pulley nut and pulley.



**4. REMOVE GENERATOR COIL ASSY**

(a) Remove the 4 bolts.

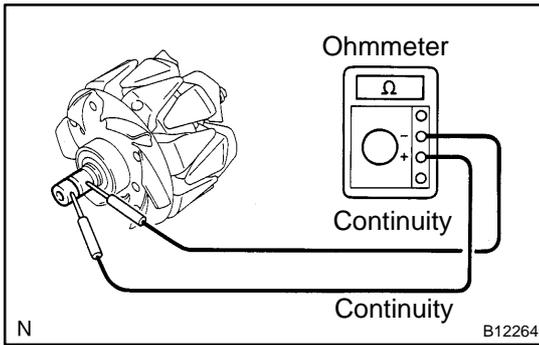


(b) Using SST, remove the coil assembly.

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

(c) Remove the generator washer.

**5. REMOVE GENERATOR ROTOR ASSY**



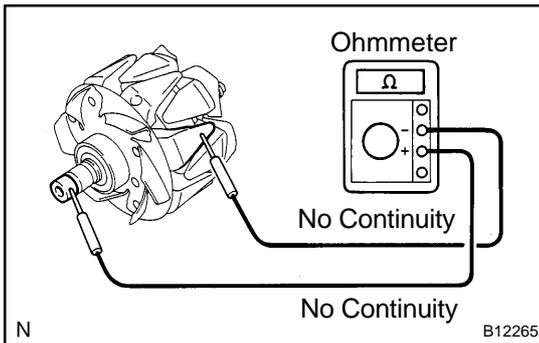
## 6. INSPECT GENERATOR ROTOR ASSY

(a) Check the rotor for open circuit.

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

**Standard resistance: 2.3 - 2.7  $\Omega$  at 20°C (68°F)**

If there is no continuity, replace the rotor.

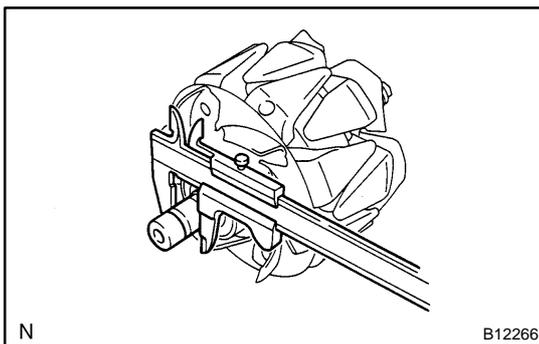


(b) Check the rotor for ground.

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

If there is continuity, replace the rotor.

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

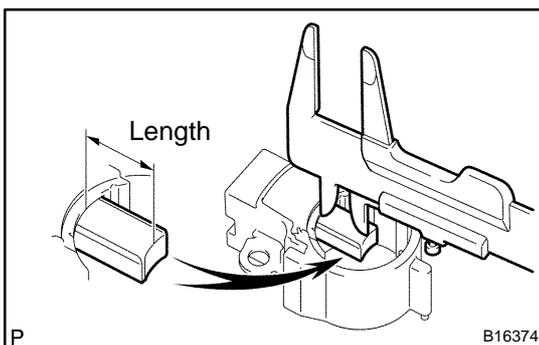


(d) Using vernier calipers, measure the slip ring diameter.

**Standard diameter: 14.2 - 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.



## 7. INSPECT GENERATOR BRUSH HOLDER ASSY

(a) Using vernier caliper, 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.

## 8. INSPECT GENERATOR ROTOR BEARING

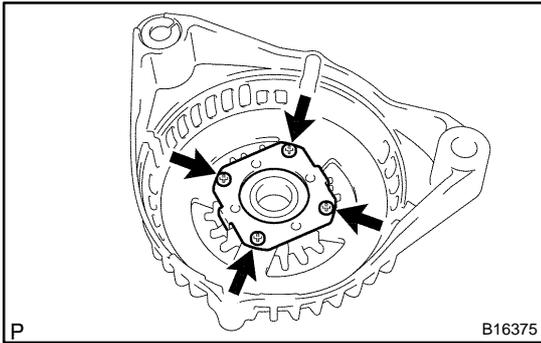
(a) Check the bearing is not rough or worn.

If necessary, replace the bearing.

## 9. INSPECT GENERATOR DRIVE END FRAME BEARING

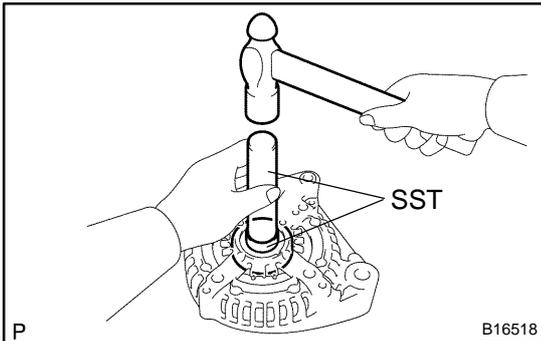
(a) Check the bearing is not rough or worn.

If necessary, replace the bearing.



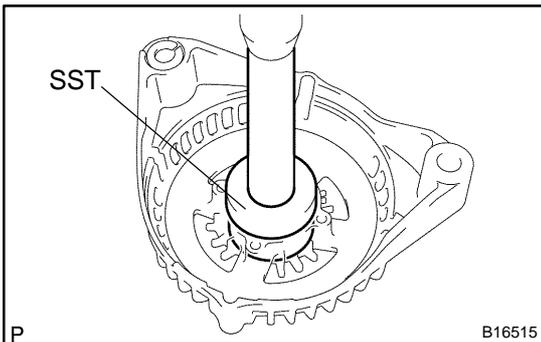
**10. REMOVE GENERATOR ROTOR BEARING**

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



(b) Using SST and a hammer, tap out the bearing.

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



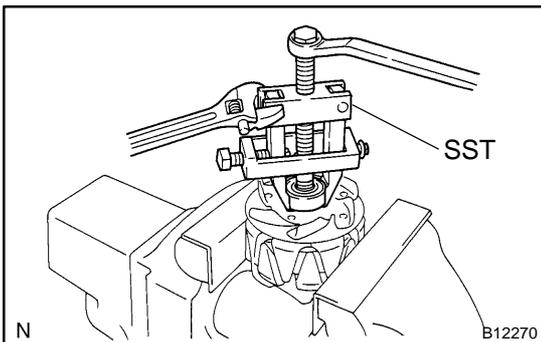
**11. INSTALL GENERATOR ROTOR BEARING**

(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: 2.6 N·m (27 kgf·cm, 23 in.-lbf)**



**12. REMOVE GENERATOR DRIVE END FRAME BEARING**

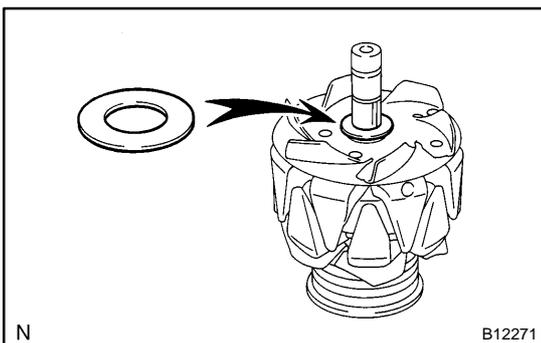
(a) Using SST, remove the bearing cover (outside) and bearing.

SST 09820-00021

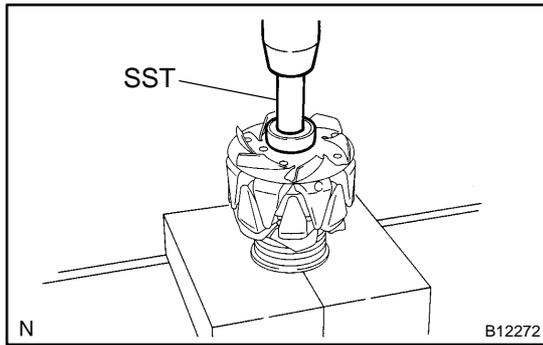
**NOTICE:**

**Be careful not to damage the fan.**

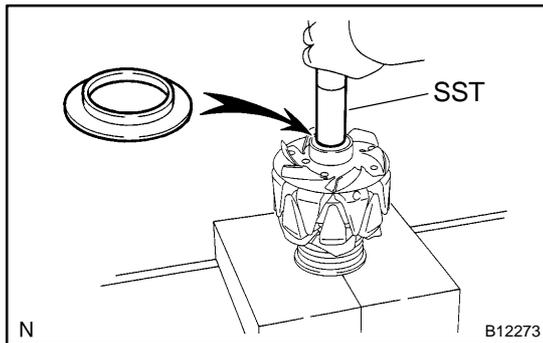
(b) Remove the bearing cover (inside).



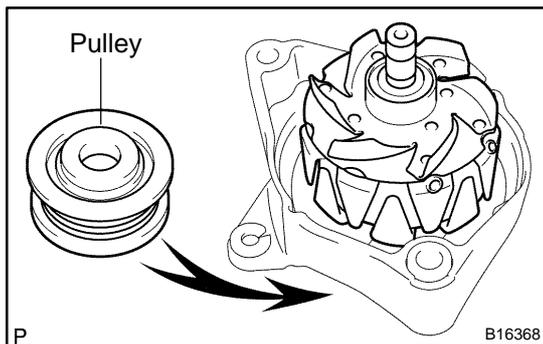
(c) Place the bearing cover (inside) on the rotor.

**13. INSTALL GENERATOR DRIVE END FRAME BEARING**

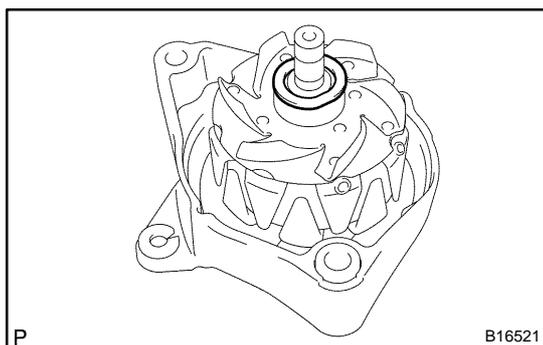
- (a) Using SST and a press, press in a new bearing.  
SST 09820-00031



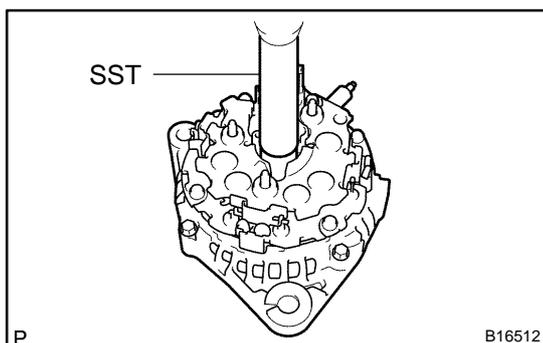
- (b) Using SST, push in the bearing cover (outside).  
SST 09285-76010

**14. INSTALL GENERATOR ROTOR ASSY**

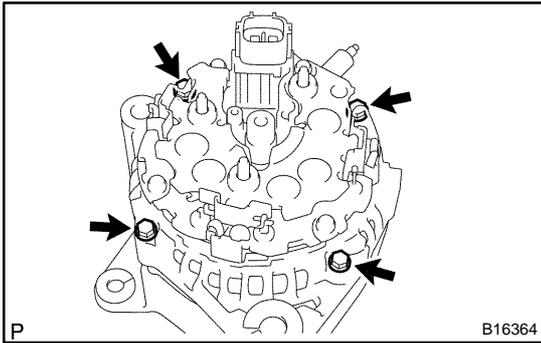
- (a) Place the drive end frame on the pulley.  
(b) Install the rotor to the drive end frame.

**15. INSTALL GENERATOR COIL ASSY**

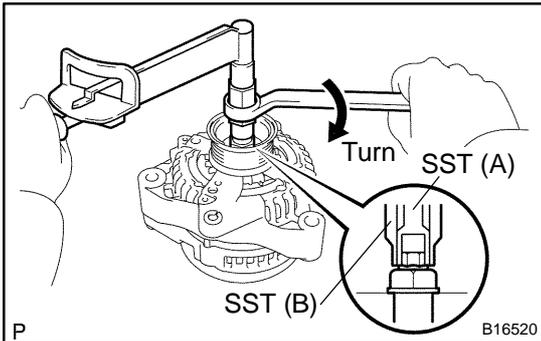
- (a) Place the generator washer on the rotor.



- (b) Using SST and a press, slowly press in the coil assembly.  
SST 09285-76010

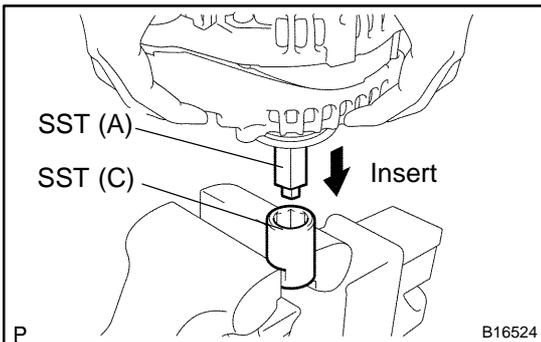


- (c) Install the coil assembly with the 4 bolts.  
**Torque: 5.8 N·m (59 kgf·cm, 51 in.-lbf)**

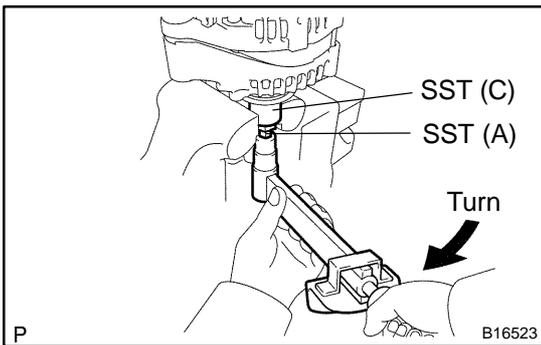


**16. INSTALL GENERATOR PULLEY**

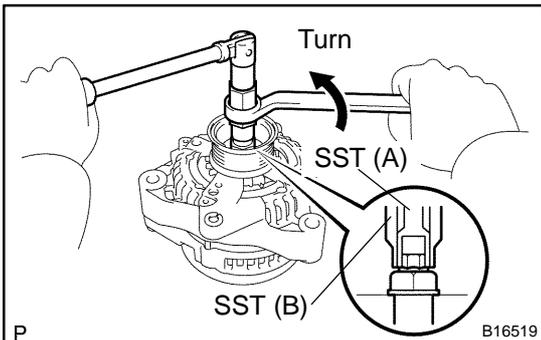
- (a) Install the pulley to the rotor shaft by tightening the pulley nut by hand.
- (b) Hold SST (A) with a torque wrench, and tighten SST (B) clockwise to the specified torque.  
SST 09820-6301 1  
**Torque: 39 N·m (400 kgf·cm, 29 ft·lbf)**
- (c) Check that SST (A) is secured to the pulley shaft.



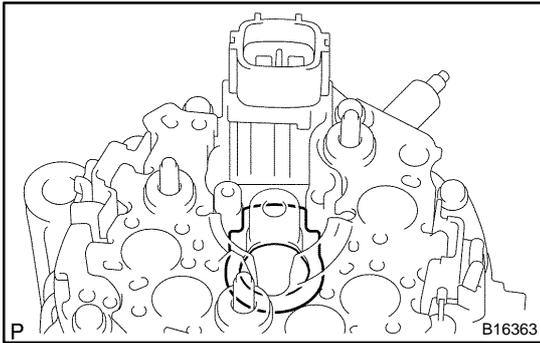
- (d) Mount SST (C) in a vise.
- (e) Insert SST (B) into SST (C), and attach the pulley nut to SST (C).



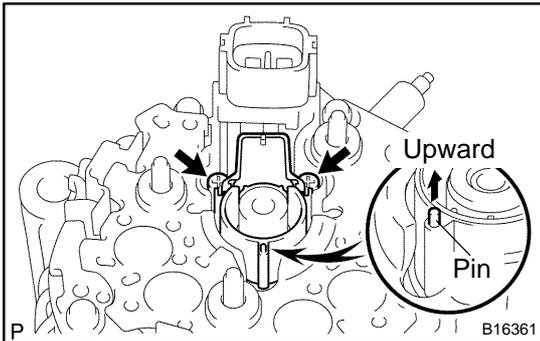
- (f) To torque the pulley nut, turn SST (A) in the direction shown in the illustration.  
**Torque: 111 N·m (1,125 kgf·cm, 81 ft·lbf)**
- (g) Remove the generator from SST (C).



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

**17. INSTALL GENERATOR BRUSH HOLDER ASSY**

- (a) Place the front seal plate on the coil assembly.



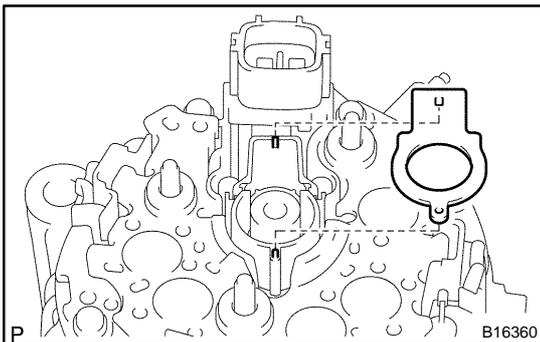
- (b) Place the brush holder on the coil assembly with the pin facing upward.

**NOTICE:**

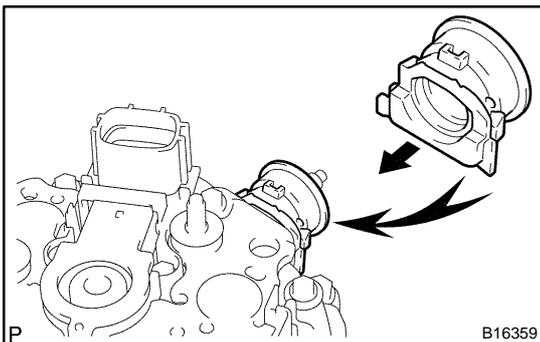
**Be careful of the holder installation direction.**

- (c) Install the 2 screws.

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



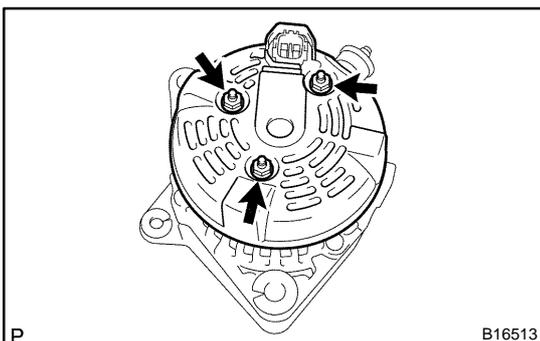
- (d) Align the pins of the brush holder with the holes of the rear seal plate, and install the rear seal plate.

**18. 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)**