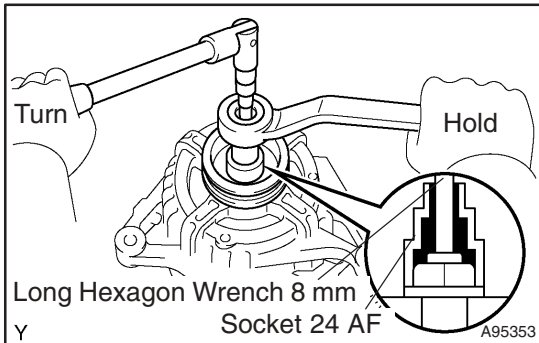
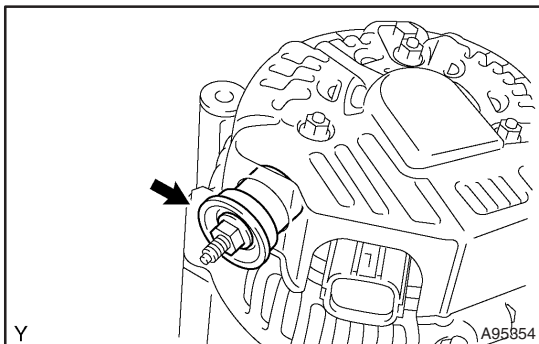


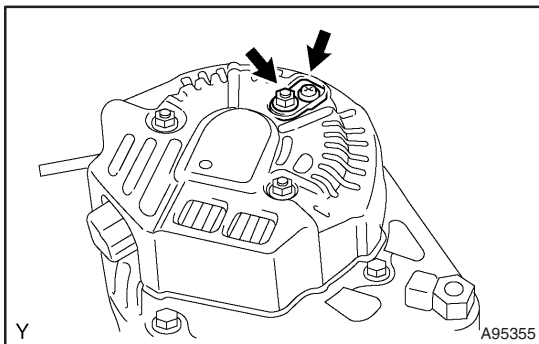
OVERHAUL

**1. REMOVE GENERATOR PULLEY**

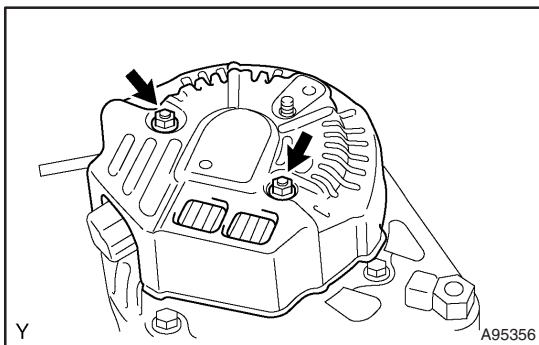
- (a) Using a socket 24 AF and long hexagon wrench 8 mm, remove the nut, then remove the washer and generator pulley.

**2. REMOVE TERMINAL INSULATOR**

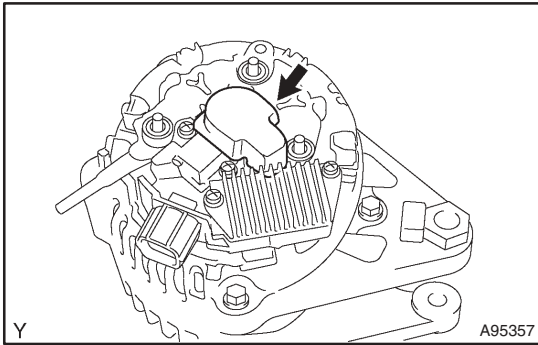
- (a) Remove the nut, then remove the terminal insulator.

**3. REMOVE TERMINAL PLATE**

- (a) Remove the screw and nut, then remove the terminal plate.

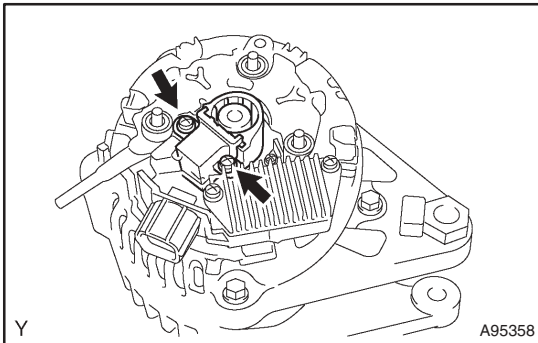
**4. REMOVE GENERATOR REAR END COVER**

- (a) Remove the 2 nuts, then remove the generator rear end cover.



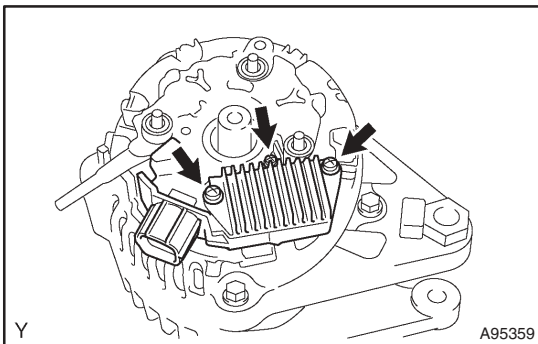
5. REMOVE GENERATOR BRUSH COVER

- (a) Remove the generator brush cover from the generator brush holder.



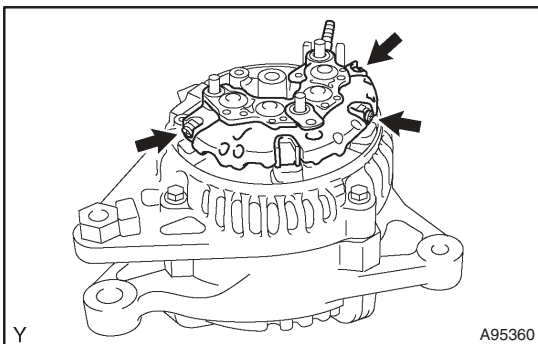
6. REMOVE GENERATOR BRUSH HOLDER ASSY

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



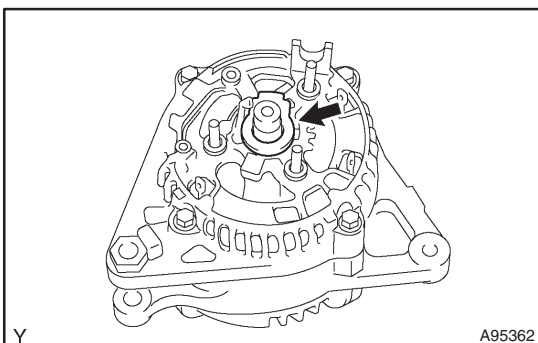
7. REMOVE GENERATOR REGULATOR ASSY

- (a) Remove the 3 screws, then remove the generator regulator.



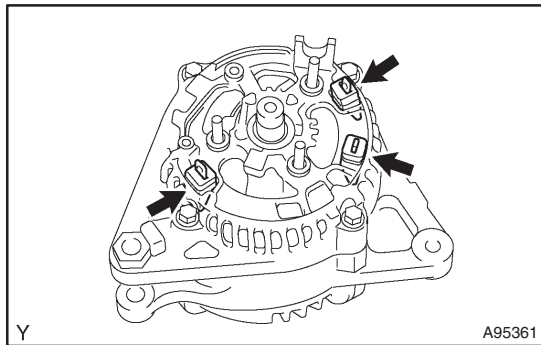
8. REMOVE GENERATOR HOLDER W/ RECTIFIER

- (a) Remove the 3 screws, then remove the generator holder with rectifier.

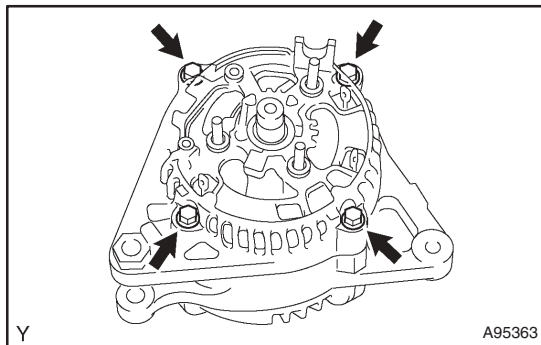


9. REMOVE GENERATOR PLATE SEAL

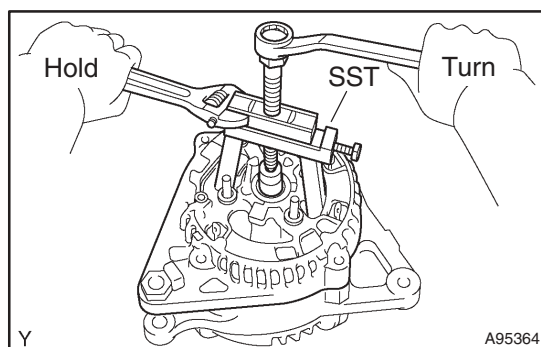
- (a) Remove the generator plate seal from the generator rectifier end frame.

**10. REMOVE GENERATOR ROTOR ASSY**

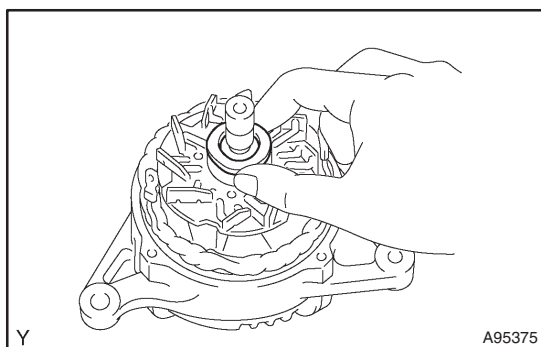
- (a) Remove the 3 terminal insulators from the generator rectifier end frame.



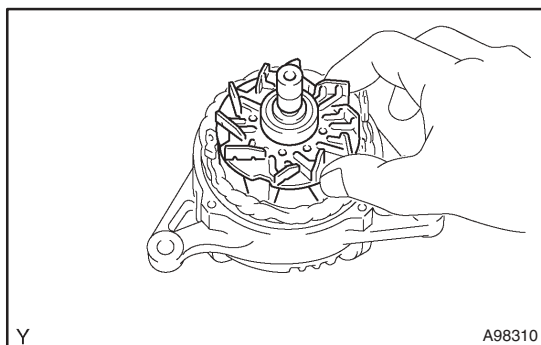
- (b) Remove the 4 bolts.



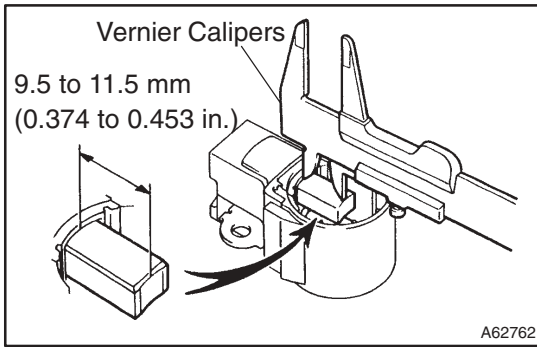
- (c) Using SST, remove the rectifier end frame.
SST 09286-46011



- (d) Remove the washer from the generator rotor.



- (e) Remove the generator rotor from the generator drive end frame.

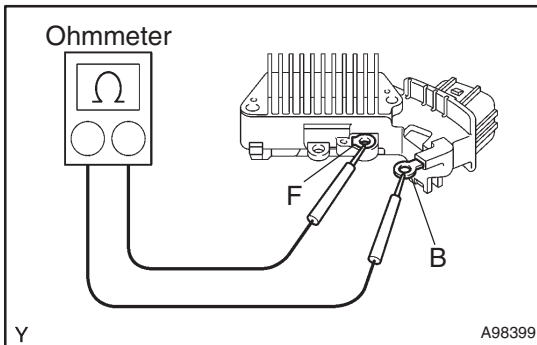


11. INSPECT GENERATOR BRUSH HOLDER ASSY

- (a) Inspect the brush length.
- (1) Using vernier calipers, measure the brush length.
- Standard: 9.5 to 11.5 mm (0.374 to 0.453 in.)**

Minimum: 4.5 mm (0.177 in.)

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



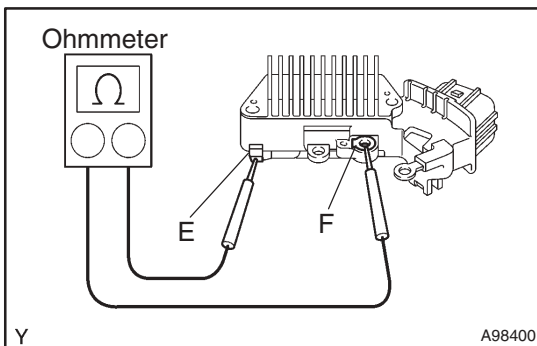
12. INSPECT GENERATOR REGULATOR ASSY

- (a) Inspect the resistance.
- (1) Using an ohmmeter, measure the resistance between terminals B and F.

Standard:

When the positive and negative poles of terminals F and B are switched over, there is a resistance of below 1 Ω in one direction but 10 k Ω or higher in the other direction.

If the result is not as specified, replace the generator regulator.

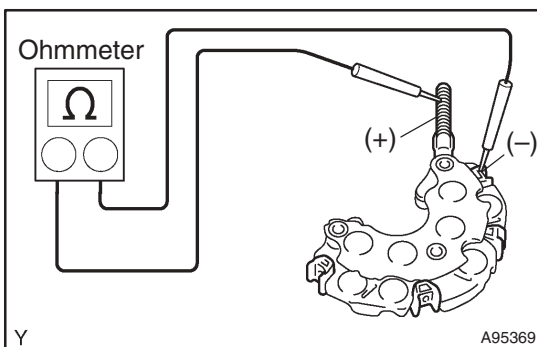


- (2) Using an ohmmeter, measure the resistance between terminals E and F.

Standard:

When the positive and negative poles of terminals F and E are switched over, there is a resistance of below 1 Ω in one direction but 10 k Ω or higher in the other direction.

If the result is not as specified, replace the generator regulator.



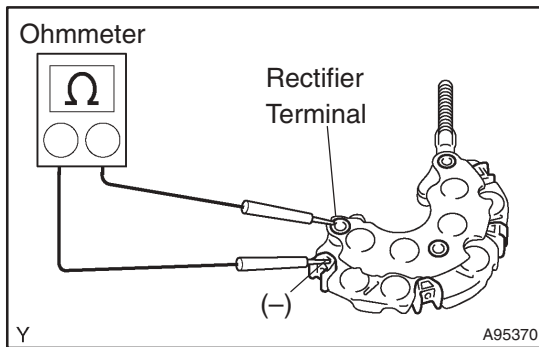
13. INSPECT GENERATOR HOLDER W/ RECTIFIER

- (a) Inspect the resistance.
- (1) Using an ohmmeter, measure the resistance between the positive (+) terminal and each rectifier terminal.

Standard:

When the positive and negative poles of the positive (+) terminal and each rectifier terminal are switched over, there is a resistance of below 1 Ω in one direction but 10 k Ω or higher in the other direction.

If the result is not as specified, replace the generator holder with rectifier.

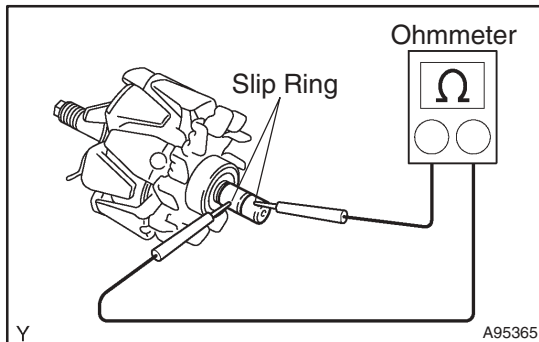


- (2) Using an ohmmeter, measure the resistance between the negative (-) terminal and each rectifier terminal.

Standard:

When the positive and negative poles of the negative (-) terminal and each rectifier terminal are switched over, there is a resistance of below 1 Ω in one direction but 10 k Ω or higher in the other direction.

If the result is not as specified, replace the generator holder with rectifier.

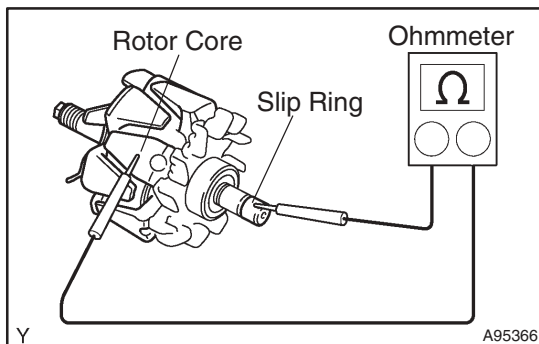
**14. INSPECT GENERATOR ROTOR ASSY**

- (a) Inspect the resistance.

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

Standard: 2.55 to 2.95 Ω at 20°C (68°F)

If the result is not as specified, replace the generator rotor shaft.



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

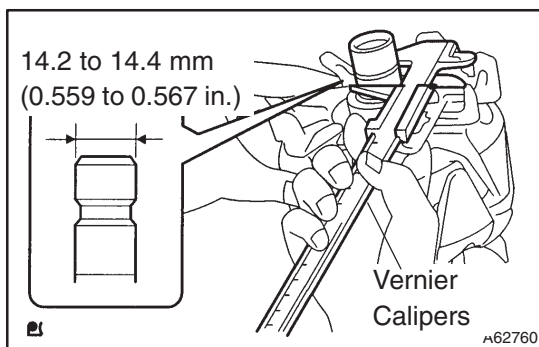
Standard: 10 k Ω or higher

If the result is not as specified, replace the generator rotor shaft.

- (b) Check the appearance.

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

If rough or scored, replace the generator rotor.



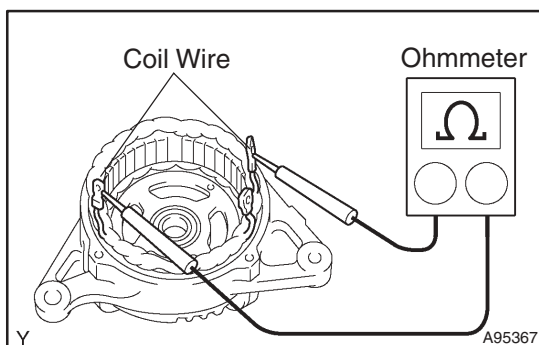
- (c) Inspect the slip ring diameter.

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

Standard: 14.2 to 14.4 mm (0.559 to 0.567 in.)

Minimum: 14 mm (0.551 in.)

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

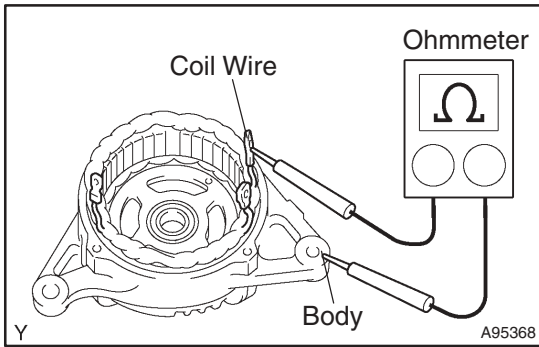
**15. INSPECT GENERATOR DRIVE END FRAME**

- (a) Inspect the resistance.

- (1) Using an ohmmeter, measure the resistance between the coil wires.

Standard: Below 1 Ω

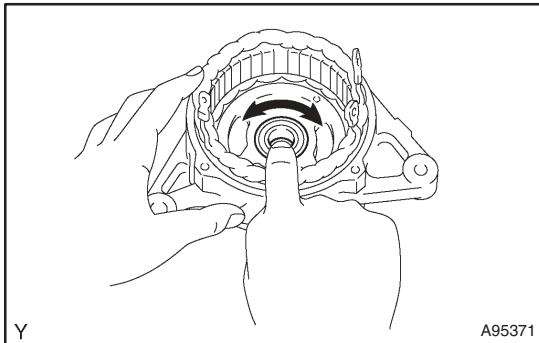
If the result is not as specified, replace the generator drive end frame.



- (2) Using an ohmmeter, measure the resistance between the coil wire and body.

Standard: 10 kΩ or higher

If the result is not as specified, replace the generator drive end frame.

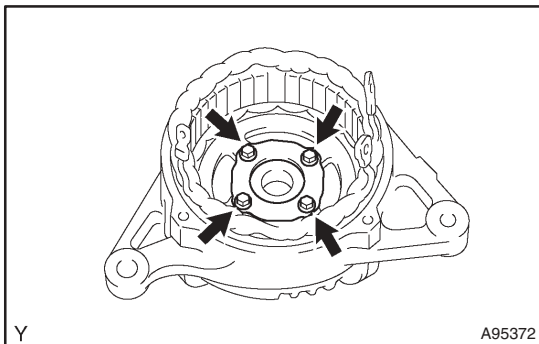


16. INSPECT GENERATOR DRIVE END FRAME BEARING

- (a) Check the appearance.

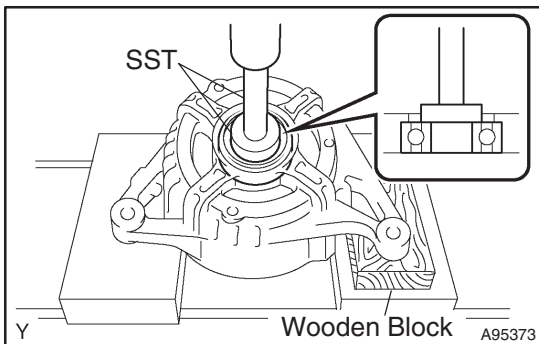
- (1) Check that the bearing is not rough or worn.

If necessary, replace the bearing.

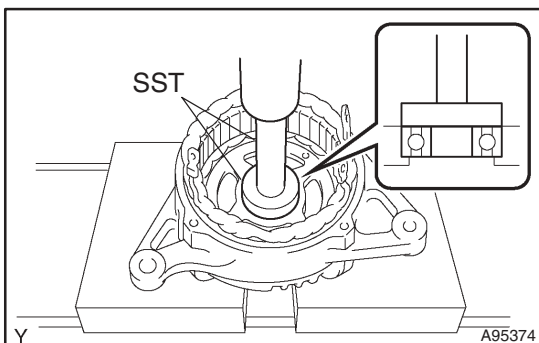


- (b) Replace the generator drive end frame bearing.

- (1) Remove the 4 screws, then remove the bearing retainer plate.

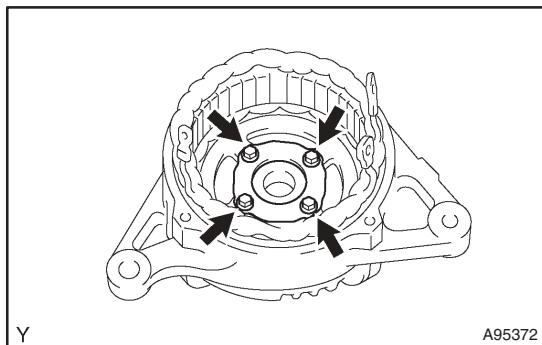


- (2) Using SST and a press, push out the bearing,
SST 09950-60010 (09951-00250), 09950-70010
(09951-07100)

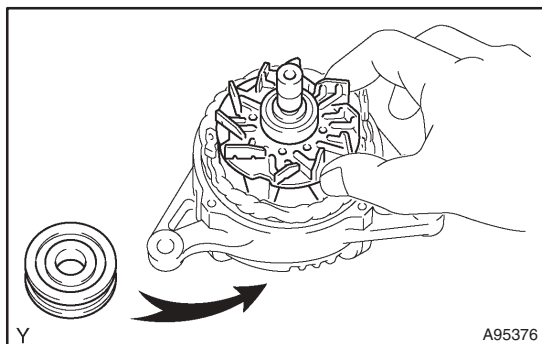


- (3) Using SST and a press, press a new bearing into the generator drive end frame.

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

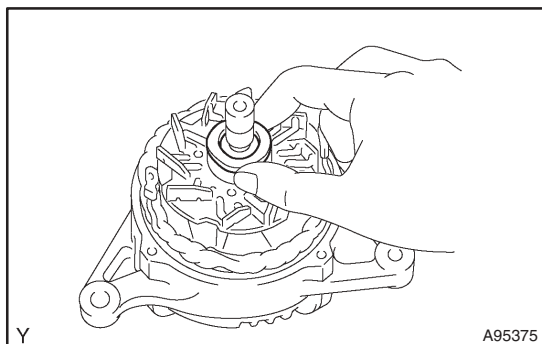


- (4) Install the bearing retainer plate with the 4 screws.
Torque: 2.94 N·m (30 kgf·cm, 26 in·lbf)

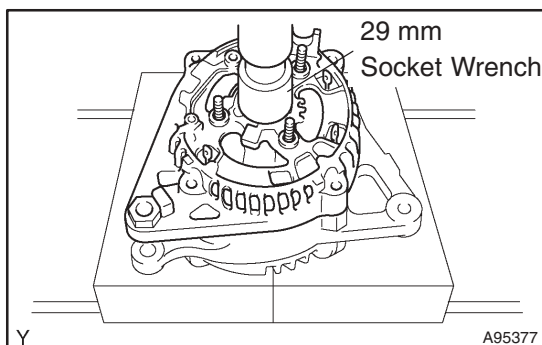


17. INSTALL GENERATOR ROTOR ASSY

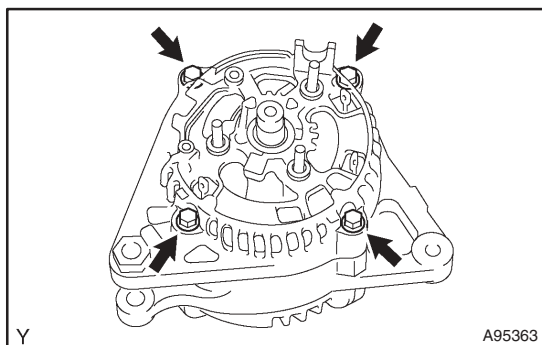
- (a) Place the generator drive end frame on the generator pulley.
(b) Install the generator rotor onto the generator drive end frame.



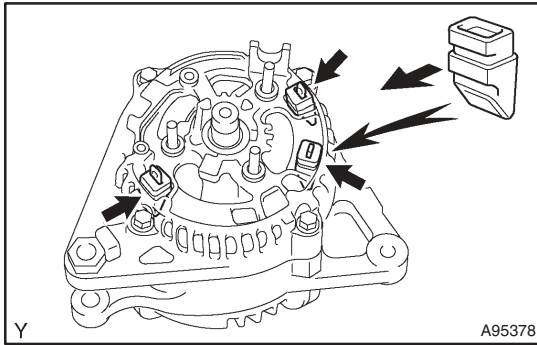
- (c) Install the washer onto the generator rotor.



- (d) Using a 29 mm socket wrench and press, slowly press the generator rectifier end frame onto the generator drive end frame.



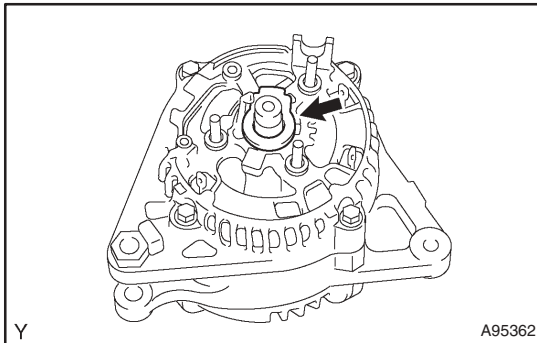
- (e) Tighten the 4 bolts.
Torque: 4.75 N·m (50 kgf·cm, 42 in·lbf)



- (f) Install the 3 terminal insulators onto the generator rectifier end frame.

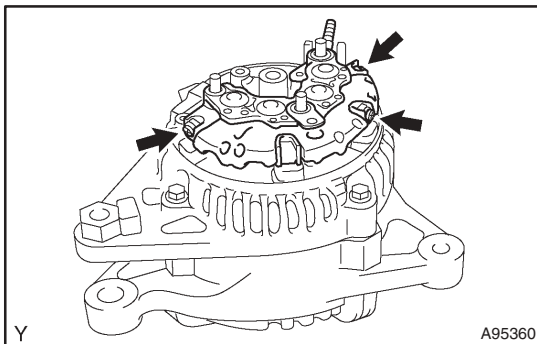
NOTICE:

Be careful of the installation direction of the terminal insulators.



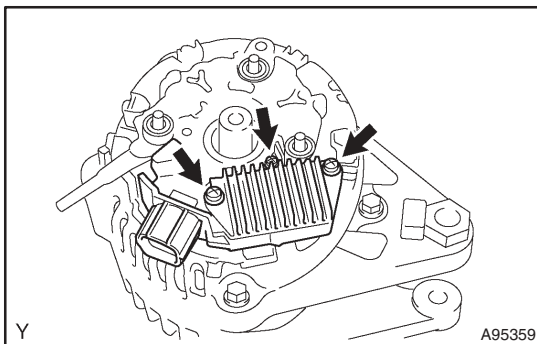
18. INSTALL GENERATOR PLATE SEAL

- (a) Install the generator plate seal onto the generator rectifier end frame.



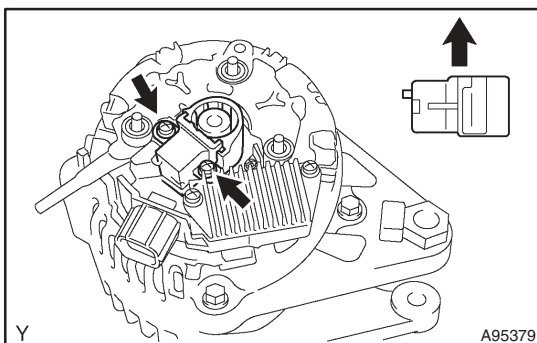
19. INSTALL GENERATOR HOLDER W/ RECTIFIER

- (a) Install the generator holder with rectifier with the 3 screws.
Torque: 2.94 N·m (30 kgf·cm, 26 in·lbf)



20. INSTALL GENERATOR REGULATOR ASSY

- (a) Install the generator regulator with the 3 screws.
Torque: 1.96 N·m (20 kgf·cm, 17 in·lbf)

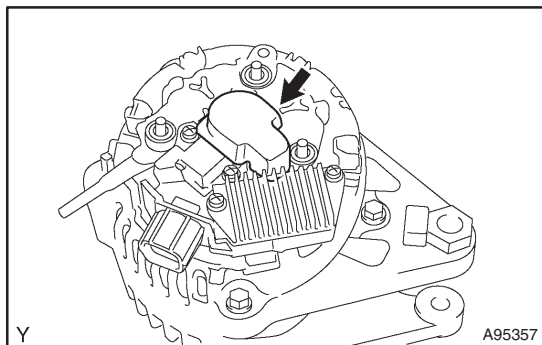


21. INSTALL GENERATOR BRUSH HOLDER ASSY

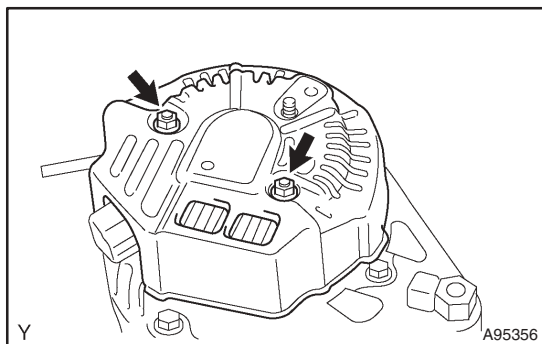
- (a) Install the generator brush holder with the 2 screws.
Torque: 1.96 N·m (20 kgf·cm, 17 in·lbf)

NOTICE:

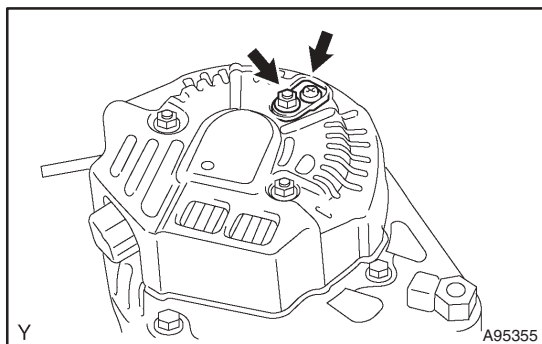
Pay attention to the position of the protrusion as shown in the illustration.

**22. INSTALL GENERATOR BRUSH COVER**

- (a) Install the generator brush cover onto the generator brush holder.

**23. INSTALL GENERATOR REAR END COVER**

- (a) Install the generator rear end frame cover with the 2 nuts.
Torque: 4.4 N·m (45 kgf·cm, 39 in·lbf)

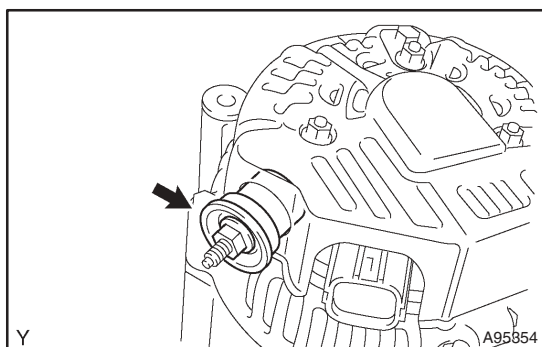
**24. INSTALL TERMINAL PLATE**

- (a) Install the terminal plate with the screw and nut.

Torque:

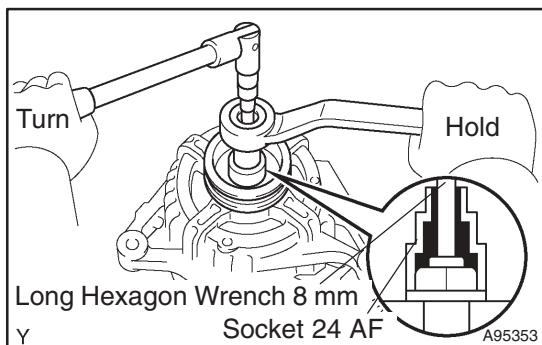
3.85 N·m (40 kgf·cm, 34 in·lbf) for screw

4.4 N·m (45 kgf·cm, 39 in·lbf) for nut

**25. INSTALL TERMINAL INSULATOR**

- (a) Install the terminal insulator with the nut.

Torque: 4.1 N·m (40 kgf·cm, 37 in·lbf)

**26. INSTALL GENERATOR PULLEY**

- (a) Using a socket 24 AF and long hexagon wrench 8 mm, remove the nut, then remove the washer and generator pulley.

Torque: 87.5 N·m (890 kgf·cm, 65 ft·lbf)

- (b) Rotate the generator pulley, then check that the generator pulley moves smoothly.