

REMOVAL

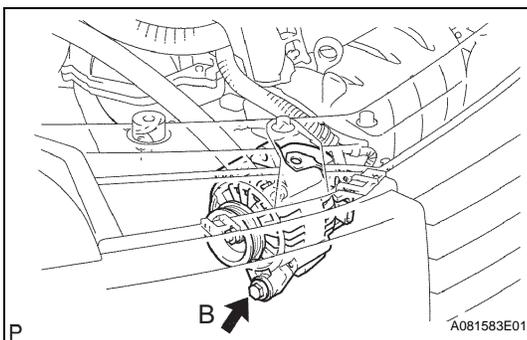
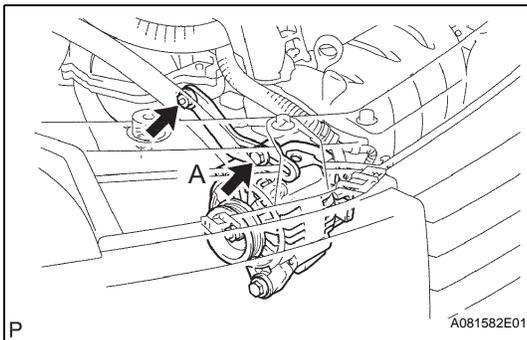
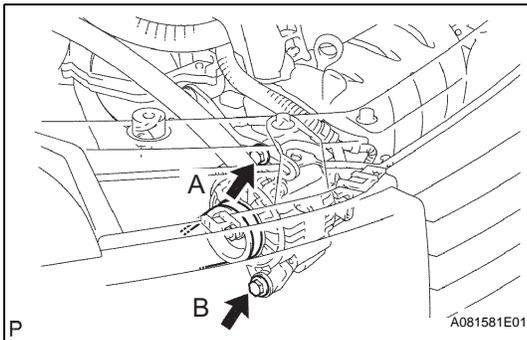
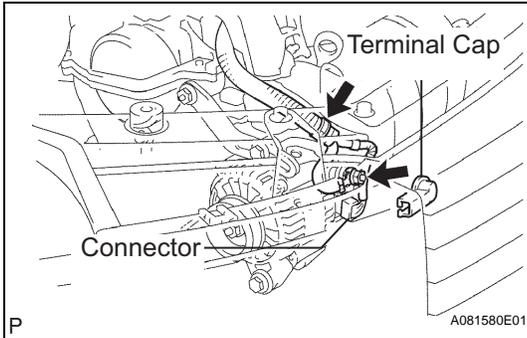
1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

2. REMOVE GENERATOR ASSEMBLY

- (a) Remove the terminal cap.
- (b) Remove the nut and generator wire.
- (c) Disconnect the generator connector.
- (d) Remove the wire harness clamp.
- (e) Loosen bolts A and B.
- (f) Release the generator V-belt tension, and remove the generator V-belt.



- (g) Remove bolt A, the nut and the adjusting bar.

- (h) Remove bolt B and generator.

DISASSEMBLY

1. REMOVE GENERATOR PULLEY

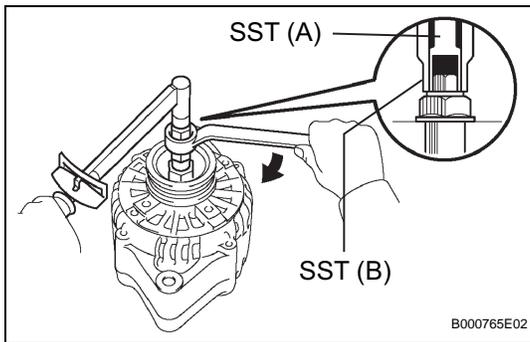
- (a) Hold SST (A) with a torque wrench, and tighten SST (B) clockwise to the specified torque.

SST 09820-63010 (09820-06010, 09820-06020)

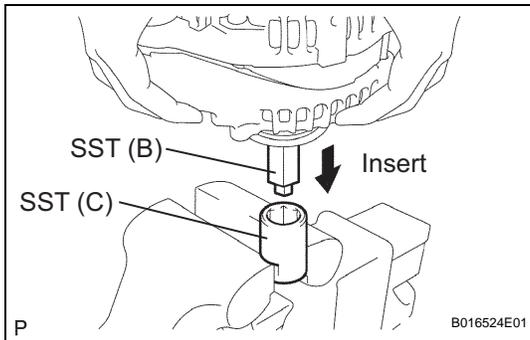
Torque: 39 N*m (400 kgf*cm, 29 ft.*lbf)

NOTICE:

Check that SST is secured to the rotor shaft.



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

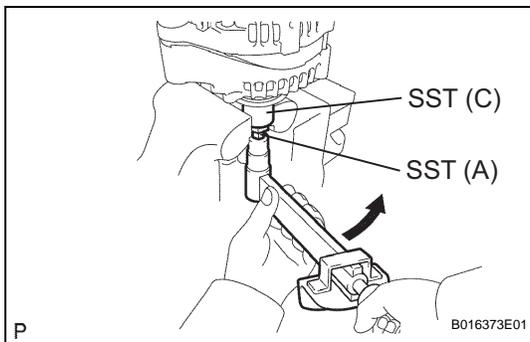


- (d) To loosen the pulley nut, turn SST (A) in the direction shown in the illustration.

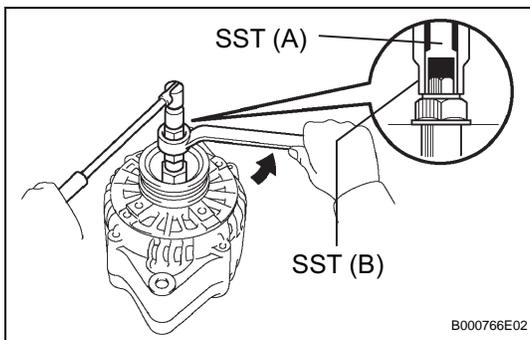
NOTICE:

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

- (e) Remove the generator from SST (C).

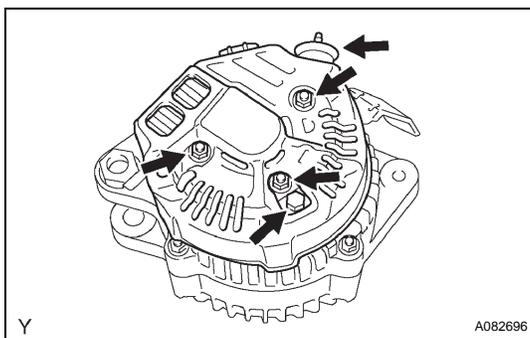


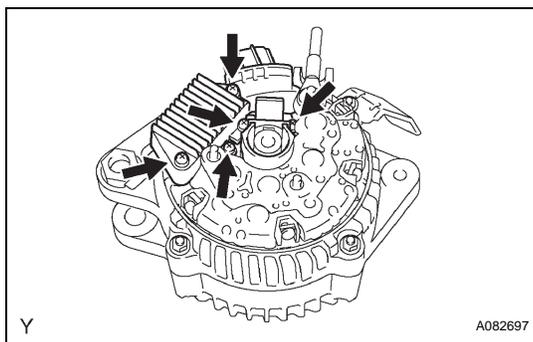
- (f) Turn SST (B), and remove SST (A and B).
 (g) Remove the pulley nut and pulley.



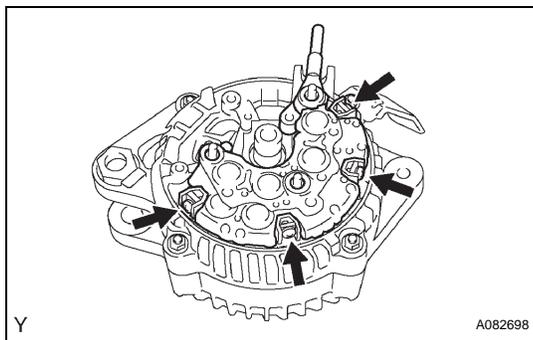
2. REMOVE REAR END COVER

- (a) Remove the nut and terminal insulator.
 (b) Remove the bolt, 3 nuts, plate terminal and end cover.

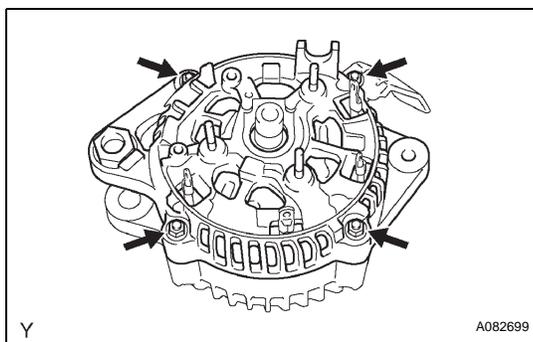


**3. REMOVE GENERATOR BRUSH HOLDER ASSEMBLY**

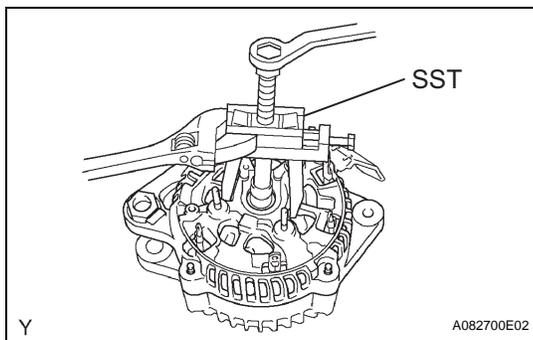
- (a) Remove the brush holder cover from the brush holder.
- (b) Remove the 2 screws and brush holder.

**4. REMOVE GENERATOR REGULATOR ASSEMBLY**

- (a) Remove the 3 screws and generator regulator.

**6. REMOVE GENERATOR RECTIFIER END FRAME**

- (a) Remove the 4 rubber insulators.
- (b) Remove the seal plate.
- (c) Remove the 4 nuts and cord clip.



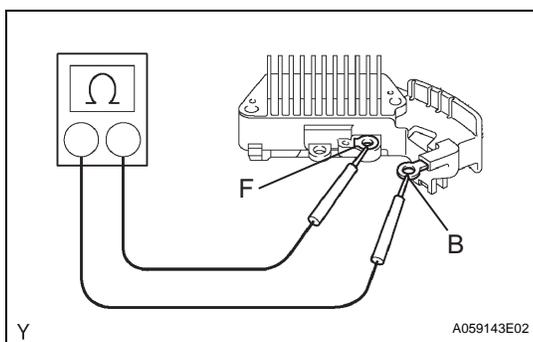
- (d) Using SST, remove the rectifier end frame.
SST 09286-46011

7. REMOVE GENERATOR ROTOR ASSEMBLY

- (a) Remove the generator washer from the rotor.
- (b) Remove the rotor from the drive end frame.

NOTICE:

Do not drop the rotor.

**INSPECTION****1. INSPECT GENERATOR REGULATOR ASSEMBLY**

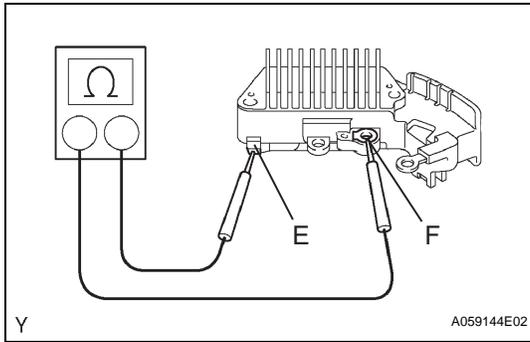
- (a) Measure the resistance between the regulator terminals (F) and (B).

Standard resistance:

Below 1 Ω or more than 10 k Ω

HINT:

When the ohmmeter's leads are initially touched to the regulator, one of the above values will be output. When the leads are reversed, the reading will change to the other value.



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

- (b) Measure the resistance between the regulator terminals (F) and (E).

Standard resistance:

Below 1 Ω or more than 10 k Ω

HINT:

When the ohmmeter's leads are initially touched to the regulator, one of the above values will be output. When the leads are reversed, the reading will change to the other value.

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

2. INSPECT GENERATOR ROTOR ASSEMBLY

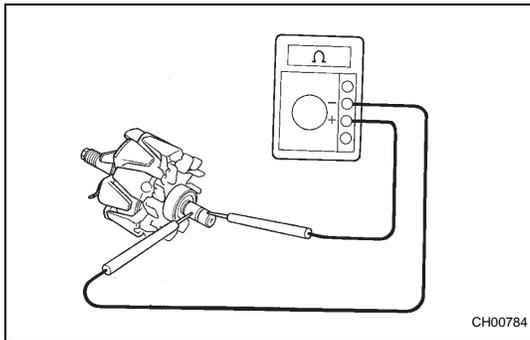
- (a) Check the rotor for an open circuit.

- (1) Measure the resistance between the slip rings.

Standard resistance:

2.1 to 2.5 Ω at 20°C (68°F)

If the result is not as specified, replace the rotor assembly.



- (b) Check if the rotor is grounded.

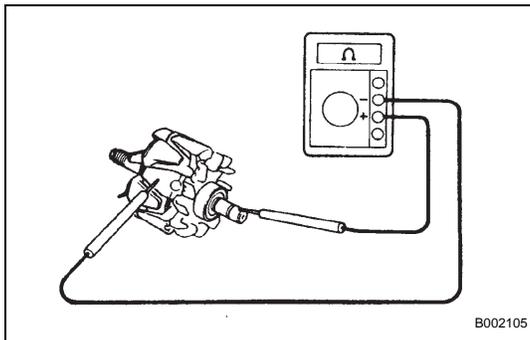
- (1) Measure the resistance between the slip ring and rotor.

Standard resistance:

10 k Ω or higher

If the result is not as specified, replace the rotor assembly.

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



- (d) Using a vernier caliper, measure the slip ring diameter.

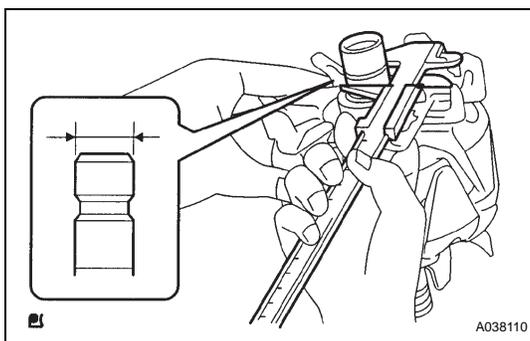
Standard diameter:

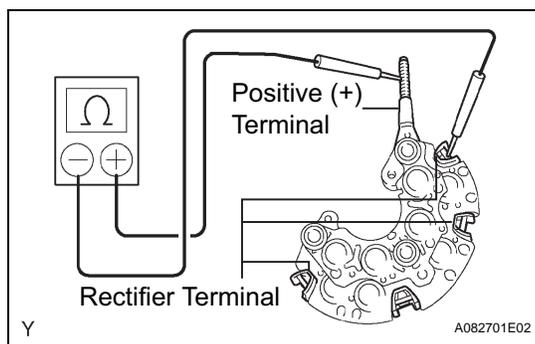
14.2 to 14.4 mm (0.559 to 0.567 in.)

Minimum diameter:

12.8 mm (0.504 in.)

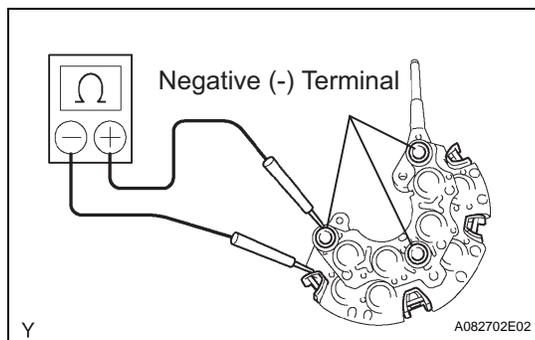
If the diameter is less than the minimum, replace the rotor assembly.



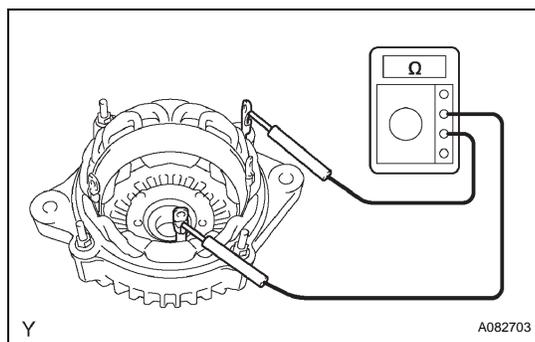


3. INSPECT GENERATOR HOLDER WITH RECTIFIER

- (a) Inspect the positive (+) rectifier.
- (1) Using an ohmmeter, connect one tester probe to the positive (+) terminal and the other to each rectifier terminal.
 - (2) Reverse the polarity of the tester probes and repeat the step above.
 - (3) Check that one shows a resistance of below $1\ \Omega$ and the other shows a resistance of $10\ \text{k}\Omega$ or higher.
If the result is not as specified, replace the rectifier holder.

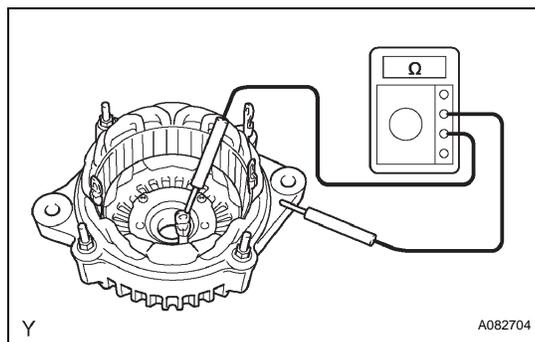


- (b) Inspect the negative (-) rectifier.
- (1) Using an ohmmeter, connect one tester probe to each negative (-) terminal and the other to each rectifier terminal.
 - (2) Reverse the polarity of the tester probes and repeat the step above.
 - (3) Check that one shows a resistance of below $1\ \Omega$ and the other shows a resistance of $10\ \text{k}\Omega$ or higher.
If the result is not as specified, replace the rectifier holder.

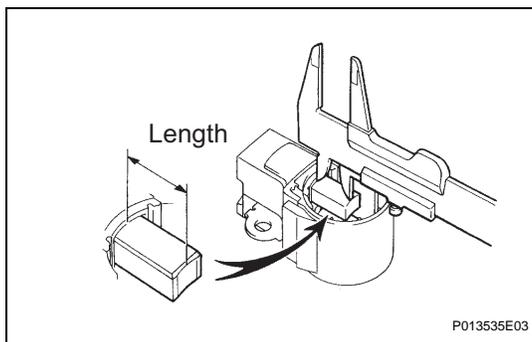


4. INSPECT DRIVE END FRAME

- (a) Check the stator coil for an open circuit.
- (1) Measure the resistance between the coil leads.
Standard resistance:
Below $1\ \Omega$
If the result is not as specified, replace the drive



- (b) Check the stator for ground.
- (1) Measure the resistance between the coil lead and drive end frame.
Standard resistance:
 $10\ \text{k}\Omega$ or higher
If the result is not as specified, replace the drive end frame.
- (c) Check that the bearing is not rough or worn.
If necessary, replace the generator assembly.

**5. INSPECT GENERATOR BRUSH HOLDER ASSEMBLY**

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

Standard exposed length:

9.5 to 11.5 mm (0.374 to 0.453 in.)

Minimum exposed length:

4.5 mm (0.177 in.)

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