

INSPECTION

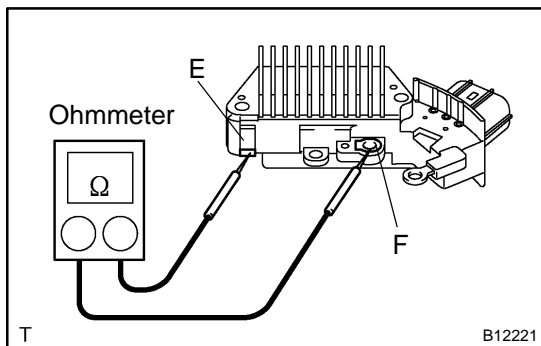
1. INSPECT VOLTAGE REGULATOR

- (a) Using an ohmmeter, check the continuity between terminals F and B.

Standard:

When the positive and negative poles between terminals F and B are exchanged, there is continuity in one way but no continuity in another way.

If the continuity is not as specified, replace the voltage regulator.

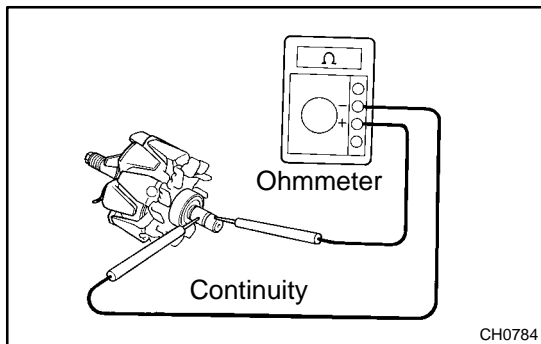


- (b) Using an ohmmeter, check the continuity between terminals F and E.

Standard:

When the positive and negative poles between terminals F and E are exchanged, there is continuity in one way but no continuity in another way.

If the continuity is not as specified, replace the voltage regulator.



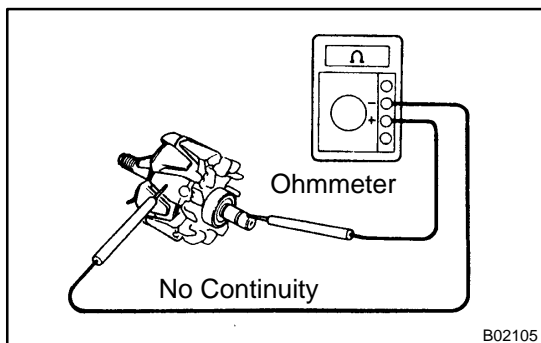
2. INSPECT ROTOR FOR OPEN CIRCUIT

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

Standard resistance:

2.7 - 3.1 Ω at 20°C (68°F)

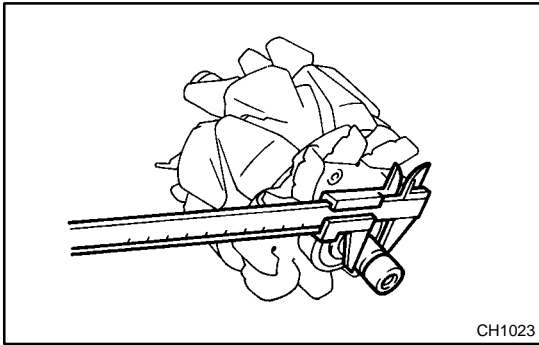
If there is no continuity, replace the rotor.



3. INSPECT ROTOR FOR GROUND

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

If there is continuity, replace the rotor.



4. INSPECT SLIP RINGS

- (a) Check that the slip rings are not rough or scored. If rough or scored, replace the rotor.
- (b) Using a vernier caliper, measure the slip ring diameter.

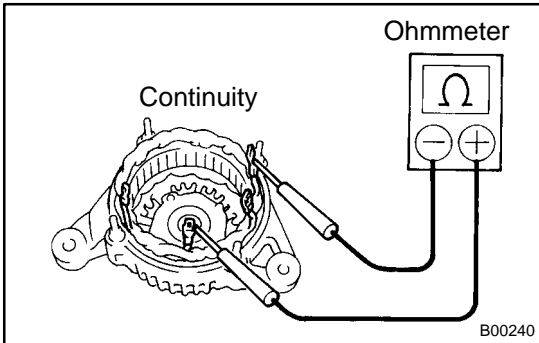
Standard diameter:

14.2 - 14.4 mm (0.559 - 0.567 in.)

Minimum diameter:

12.8 mm (0.504 in.)

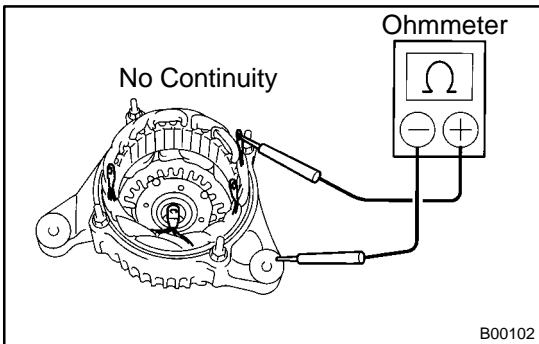
If the diameter is less than minimum, replace the rotor.



5. INSPECT STATOR (DRIVE END FRAME) FOR OPEN CIRCUIT

Using an ohmmeter, check that there is continuity between the coil leads.

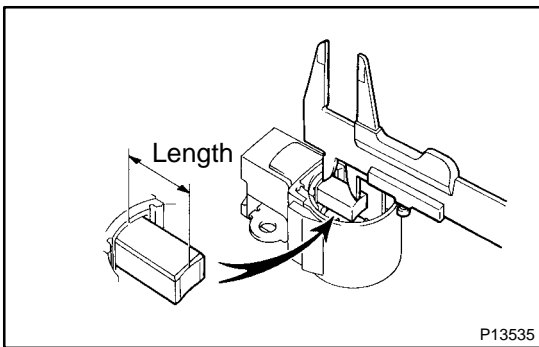
If there is no continuity, replace the drive end frame assembly



6. INSPECT STATOR (DRIVE END FRAME) FOR GROUND

Using an ohmmeter, check that there is no continuity between the coil lead and drive end frame.

If there is continuity, replace the drive end frame assembly



7. INSPECT EXPOSED BRUSH LENGTH

Using vernier calipers, measure the exposed brush length.

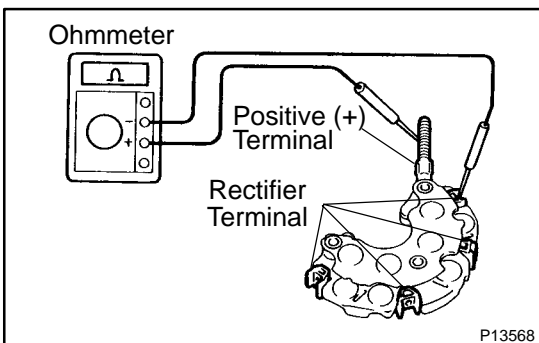
Standard exposed length:

9.5 ~ 11.5 mm (0.374 ~ 0.453 in.)

Minimum exposed length:

1.5 mm (0.059 in.)

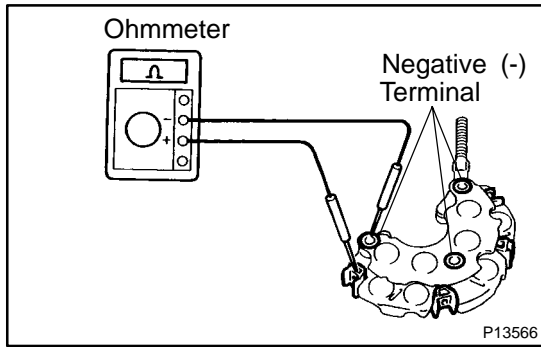
If the exposed length is less than minimum, replace the brush holder assembly.



8. INSPECT POSITIVE RECTIFIER HOLDER

- (a) Using an ohmmeter, connect one tester probe to the positive (+) terminal and the other to each rectifier terminal.
- (b) Reverse the polarity of the tester probes and repeat step (a).
- (c) Check that one shows continuity and the other shows no continuity.

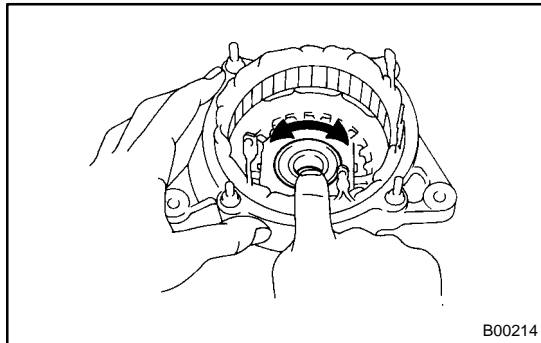
If continuity is not as specified, replace the rectifier holder.



9. INSPECT NEGATIVE RECTIFIER HOLDER

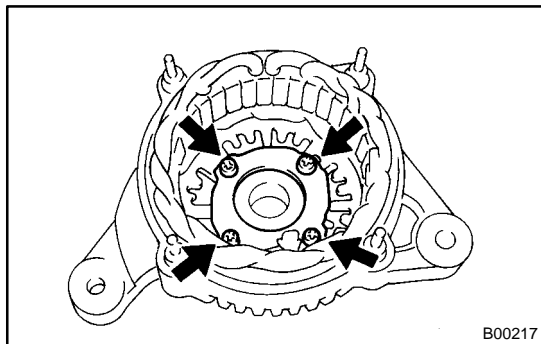
- (a) Using an ohmmeter, connect one tester probe to each negative (-) terminal and the other to each rectifier terminal.
- (b) Reverse the polarity of the tester probes and repeat step (a).
- (c) Check that one shows continuity and the other shows no continuity.

If continuity is not as specified, replace the rectifier holder.



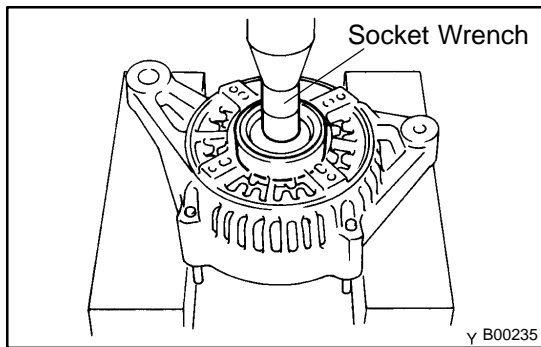
10. INSPECT FRONT BEARING

Check that the bearing is not rough or worn.

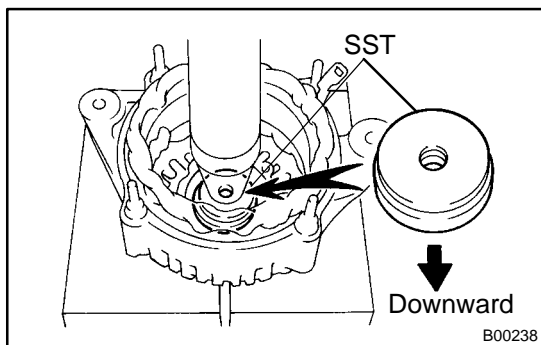


11. IF NECESSARY, REPLACE FRONT BEARING

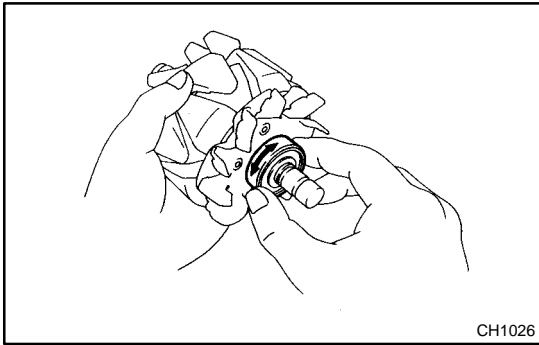
- (a) Remove the 4 screws, bearing retainer and bearing.



- (b) Using a socket wrench and press, press out the bearing.

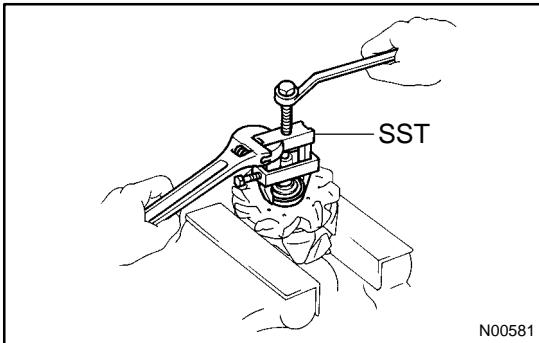


- (c) Using SST and a press, press in a new bearing.
SST 09950-60010 (09951-00500)
- (d) Install the bearing retainer with the 4 screws.
Torque: 3.0 N·m (31 kgf·cm, 27 in.-lbf)



12. INSPECT REAR BEARING

Check that the bearing is not rough or worn.



13. IF NECESSARY, REPLACE REAR BEARING

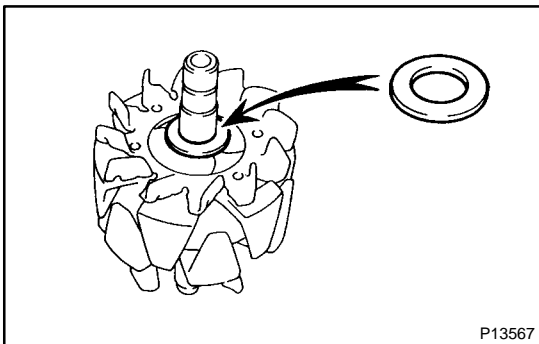
- (a) Using SST, remove the bearing cover (outside) and bearing.

SST 09820-00021

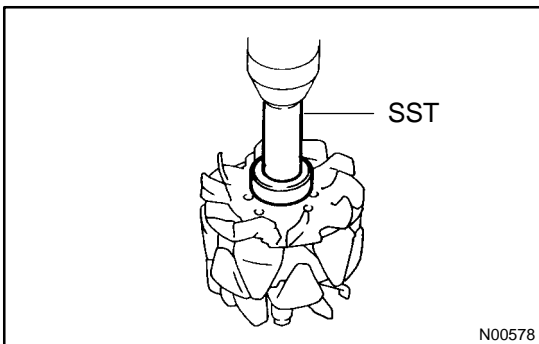
NOTICE:

Be careful not to damage the fan.

- (b) Remove the bearing cover (inside).

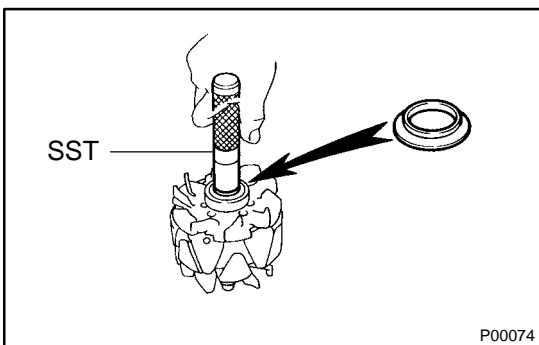


- (c) Place the bearing cover (inside) on the rotor.



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

SST 09820-00031



- (e) Using SST, push in the bearing cover (outside).

SST 09285-76010