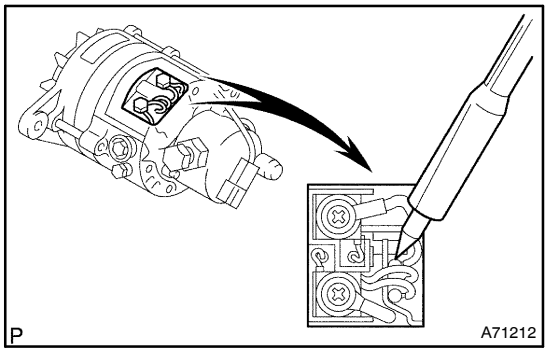
190KI–01

OVERHAUL

HINT:

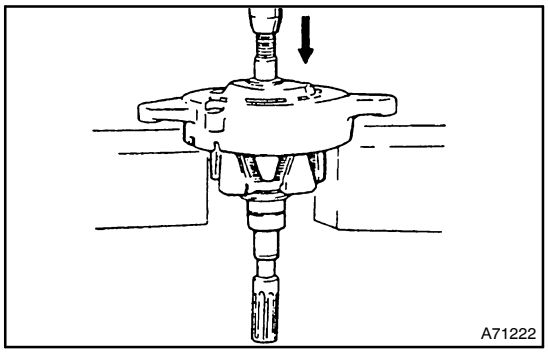
The following procedure is published important points for the generator overhaul.



1. REMOVE GENERATOR BRUSH HOLDER ASSY

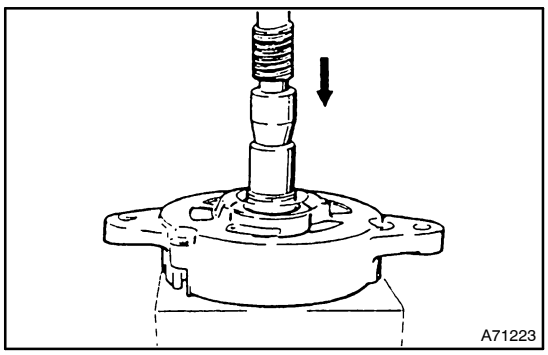
(a) Unsolder the lead wire from the regulator.

(b) Remove the brush holder assembly.



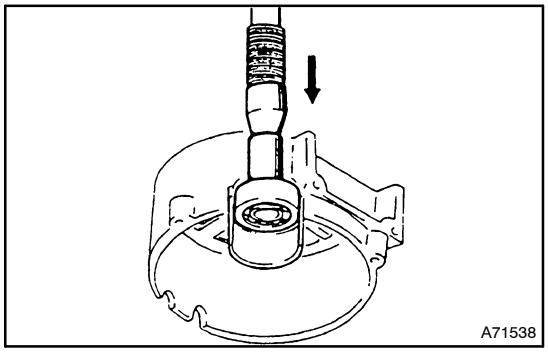
2. REMOVE GENERATOR ROTOR ASSY

(a) Using a press, press out the rotor.

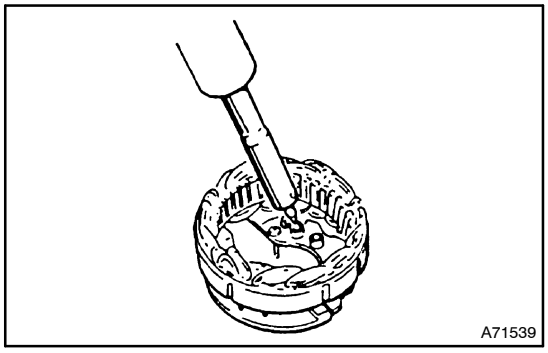


3. REMOVE GENERATOR ROTOR BEARING

(a) Using a press, press out the front ball bearing.

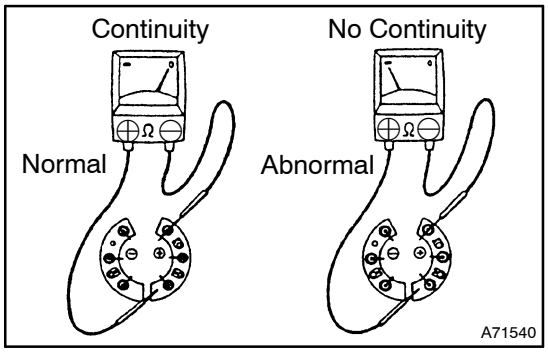


(b) Using a press, press out the rear ball bearing.



4. REMOVE STATOR COIL

(a) Unsolder the each terminal of the stator coil and remove the stator coil.

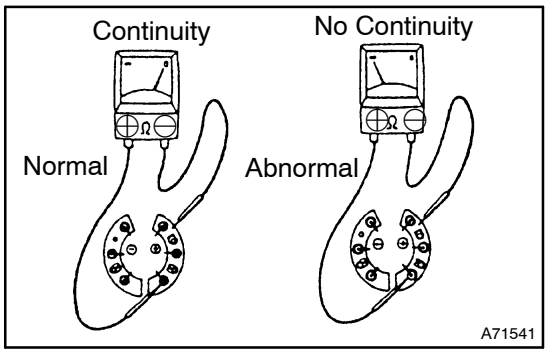


5. INSPECT RECTIFIER

(a) Check the positive side rectifier.

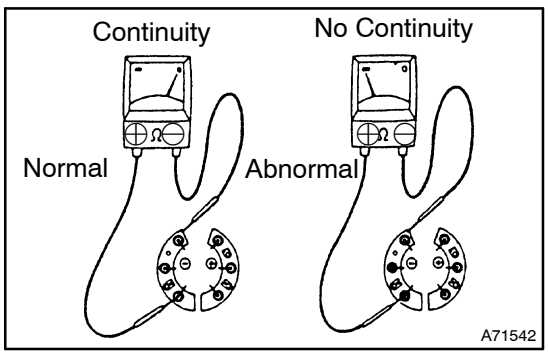
(1) Connect the ohmmeter positive (+) lead to the rectifier holder and the (–) lead to the rectifier terminal.

If there is no continuity, replace the rectifier.



(2) Connect the ohmmeter positive (+) lead to the rectifier terminal and the (–) lead to the rectifier holder.

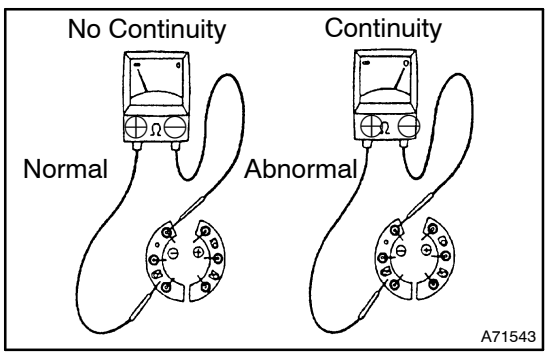
If there is no continuity, replace the rectifier.



(b) Check the negative side rectifier.

(1) Connect the ohmmeter positive (+) lead to the rectifier terminal and the (–) lead to the rectifier holder.

If there is no continuity, replace the rectifier.



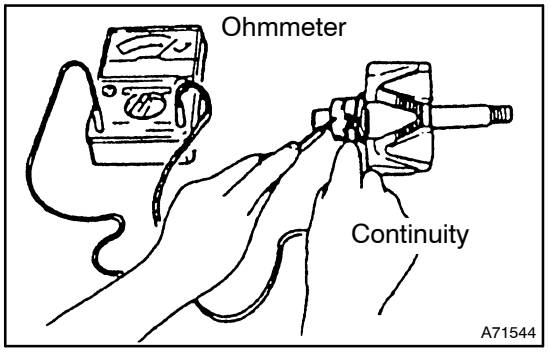
(2) Connect the ohmmeter positive (+) lead to the rectifier terminal and the (–) lead to the rectifier holder.

If there is continuity, replace the rectifier.

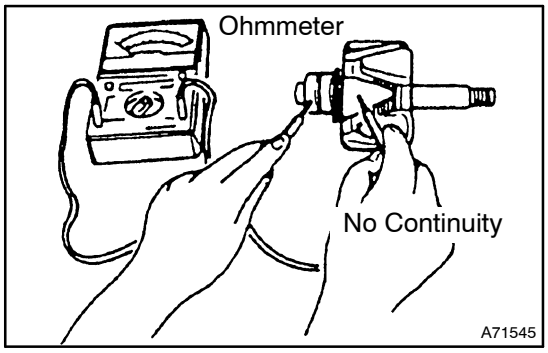
6. INSPECT GENERATOR ROTOR ASSY

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

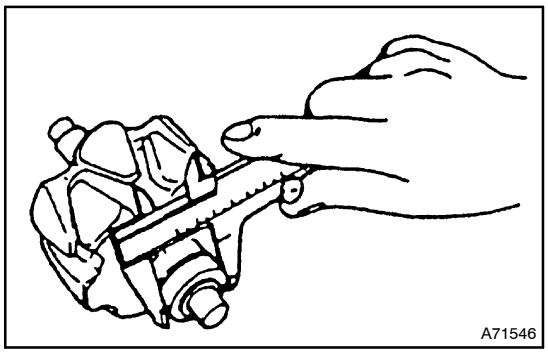
If rough or scored, replace the rotor assy.



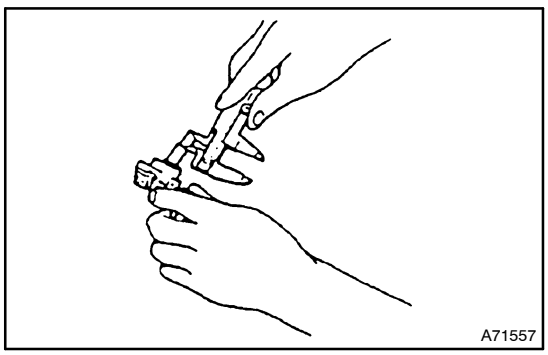
(b) Check for open circuit.
(1) Using an ohmmeter, check that there is continuity between the slip rings.
Standard resistance: 12.5 Ω at 20˚C (68˚F)
If there is no continuity, replace the rotor assy.



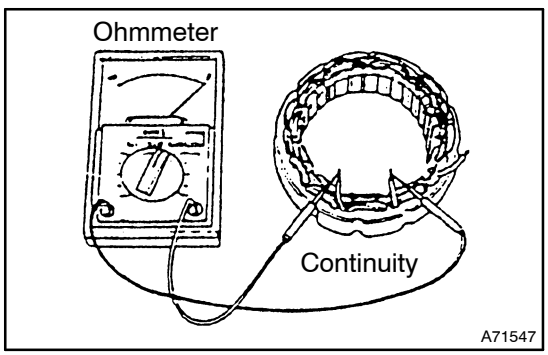
(c) Check for ground.
(1) Using an ohmmeter, check that there is no continuity between the slip ring and rotor body.
Standard resistance: 1 MΩ or more at 20°C (68°F)
Minimum resistance: 0.5 MΩ or more at 20°C (68°F)
If there is continuity, replace the rotor assy.



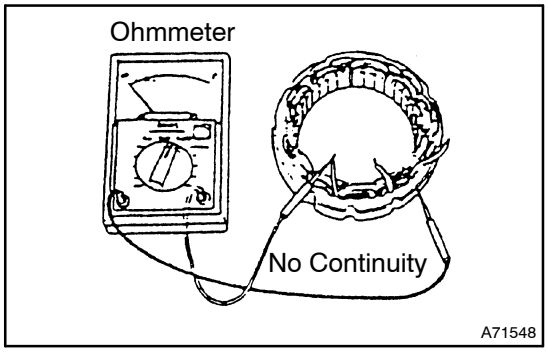
(d) Using vernier calipers, measure the slip ring diameter.
Standard diameter: 34.5 mm (1.358 in.)
Minimum diameter: 33.5 mm (1.319 in.)
If the diameter is less than minimum, replace the rotor assy.



7. INSPECT GENERATOR BRUSH HOLDER ASSY
(a) Using vernier calipers, measure the exposed brush length.
Standard exposed length: 21.0 mm (0.827 in.)
Minimum exposed length: 7.0 mm (0.276 in.)
If the exposed length is less than minimum, replace the brush holder assy.

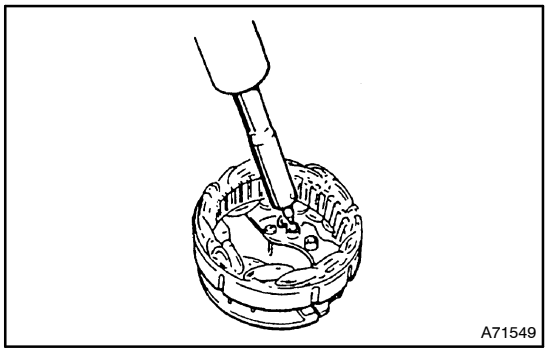


8. INSPECT STATOR COIL
(a) Check for open circuit.
(1) Using an ohmmeter, check that there is continuity between the coil leads.
If there is no continuity, replace the stator coil.



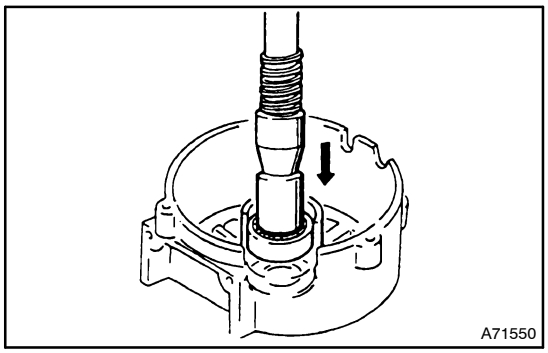
(b) Check for ground.
(1) Using an ohmmeter, check that there is no continuity between the coil lead and stator coil body.

If there is continuity, replace the stator coil.



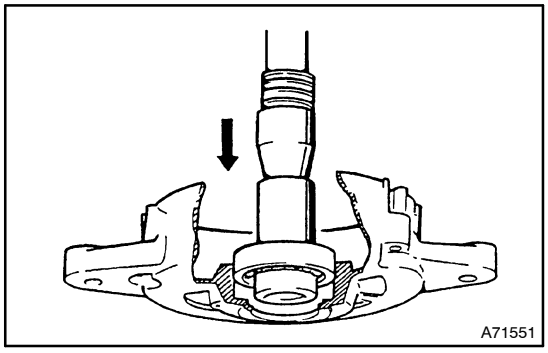
9. INSTALL STATOR COIL

(a) Install the stator coil and solder each terminal of the stator coil.

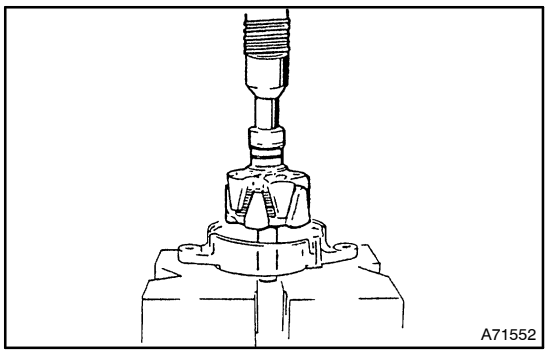


10. INSTALL GENERATOR ROTOR BEARING

(a) Using a press, press in a new rear ball bearing.

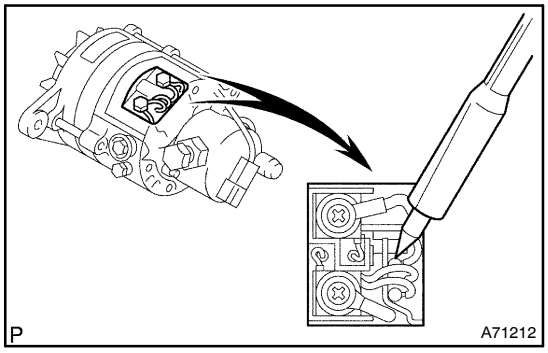


(b) Using a press, press in a new front ball bearing.



11. INSTALL GENERATOR ROTOR ASSY

(a) Using a press, press in the rotor into the front bracket.



12. INSTALL GENERATOR BRUSH HOLDER ASSY

(a) Install the brush holder assembly.

(b) Solder the lead wire to the regulator.