TOYOTA

REPAIR MANUAL

1FS ENGINE

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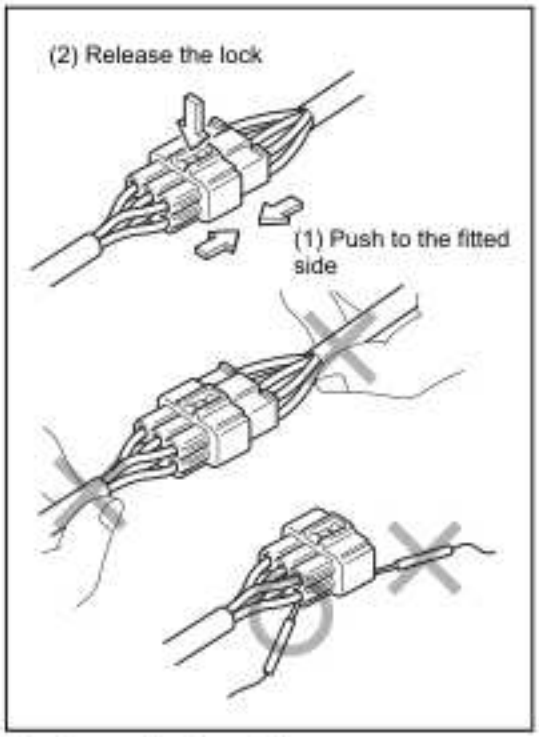
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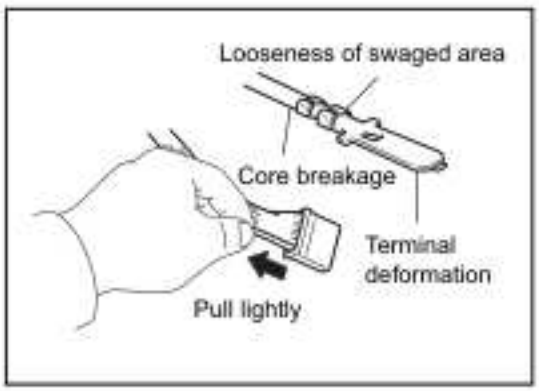
3. Handling the connectors



(1) To disconnect a connector with lock, push the connector to the fitted side to ease the tab of the lock and then release the lock.
(2) Hold the connector, not the harness, to disconnect the connector.
(3) Before connecting the connector, check it for deformation, damage or looseness of the terminal.
(4) Insert the connector with lock securely until it clicks.
(5) To inspect the connector using a tester, it should be performed at the back (harness side) using a mini test lead.

Caution:
- **Since the waterproof connector cannot be inspected at the back, a sub harness needs to be connected.**
- **Do not damage the terminal by carelessly moving a tester probe after inserting it.**

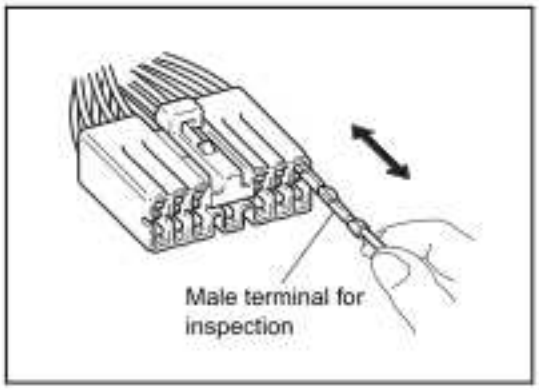
4. Connector inspection



(1) With the connector connected, hold the connector housing and check for insertion and locking conditions. (Fitting condition)
(2) With the connector disconnected, pull the wire harness lightly. (Check for terminal disconnection, condition of swaged area and core breakage)

Caution:
Always use a gold plated male terminal to test a gold plated female terminal.

(3) Visually check the connector for a presence of rust, metal chip or water, and bend of the terminal. (Check for corrosion, intrusion of foreign matter and terminal deformation)
(4) Check the terminal contact pressure by inserting a male terminal prepared for inspection into the female terminal to check the fitting and sliding conditions.

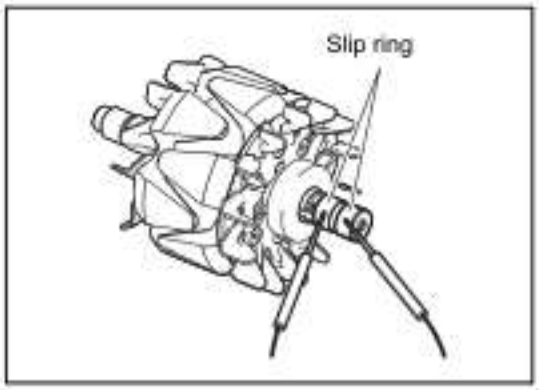


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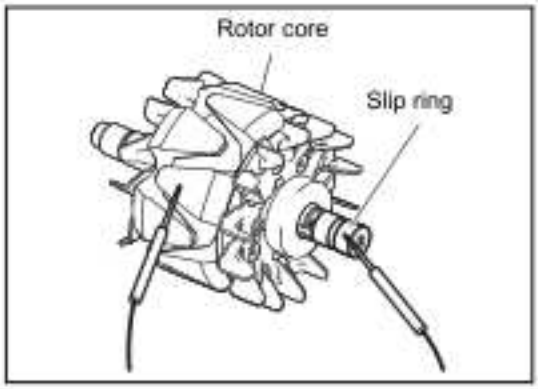
TROUBLESHOOTING

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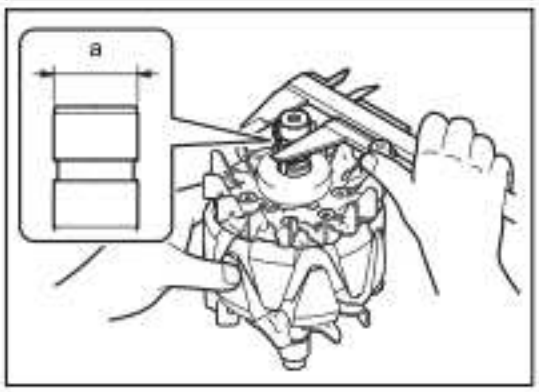
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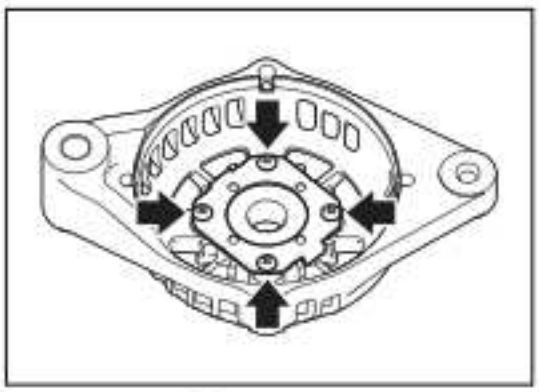
2. Measure the resistance of the alternator rotor assembly.
   (1) Measure the resistance between slip rings.
   Standard: 12V-70A
   specification: 2.46 to 2.86 kΩ
   (20 °C (68 °F))
   12V-80A
   specification: 1.85 to 2.25 kΩ
   (20 °C (68 °F))
   If the measured value does not meet the standard, replace the alternator rotor assembly.



   (2) Measure the resistance between the slip ring and rotor core.
   Standard: 10 MΩ
   If the measured value does not meet the standard, replace the alternator rotor assembly.



3. Measure the slip ring outside diameter a using a caliper.
   Standard: 14.2 to 14.8 mm (0.56 to 0.58 in.)
   Limit: 14.0 mm (0.55 in.)
   If the measured value does not meet the standard (slip ring surface gets rough), sand with sandpaper (#400).
   If the measured value is smaller than the limit, replace the alternator rotor assembly.

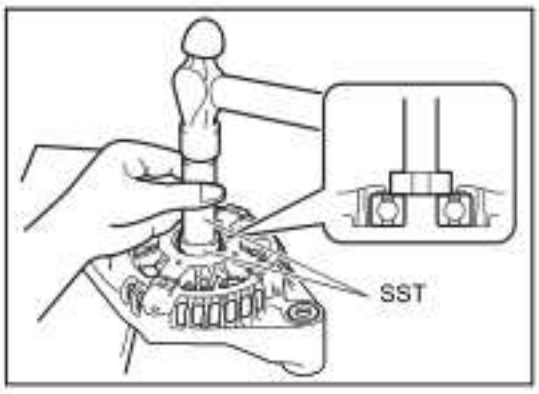


[Point 8]

Disassembly:

Remove the bearing retainer plate and bearing.

1. Remove four screws and remove the bearing retainer plate from the drive end frame assembly.



2. Remove the bearing from the drive end frame assembly using SST.
   SST (1) 09950-76018-71
   SST (2) 09950-76020-71

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