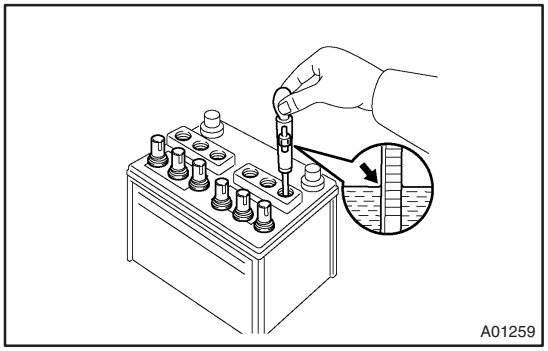
190LC–03

ON–VEHICLE INSPECTION

1. CHECK BATTERY ELECTROLYTE LEVEL

(a) Check the electrolyte quantity of each cell (Maintenance–Free Battery).
  (1) If the quantity level is low, replace the battery (or add distilled water if possible) and check the charging system.

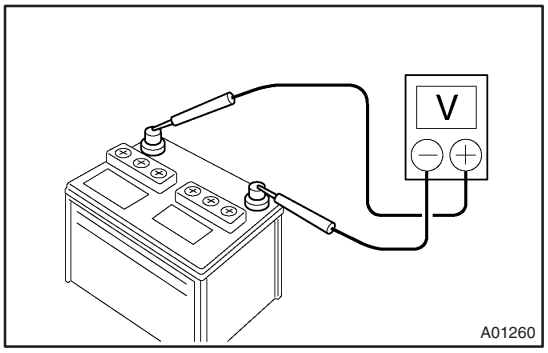
(b) Check the electrolyte quantity of each cell (Except Maintenance–Free Battery).
  (1) If the quantity level is low, add distilled water.


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2. CHECK BATTERY SPECIFIC GRAVITY (Except Maintenance–Free Battery)

(a) Check the specific gravity of each cell.
  Standard specific gravity: 1.25 to 1.29 at 20°C (68°F)

HINT:
If the specific gravity is less than specification, charge the battery.



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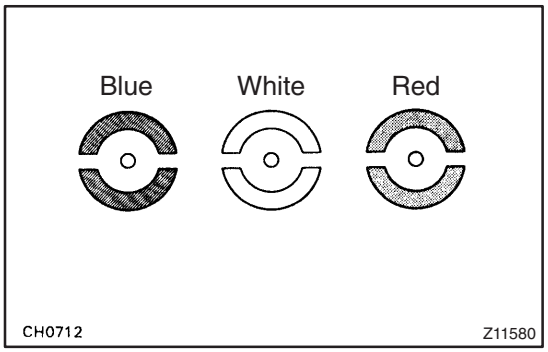
3. CHECK BATTERY VOLTAGE

(a) If 20 minutes have not elapsed after driving the vehicle or stopping the engine, turn the ignition switch and the electrical system (headlight, blower motor, rear defogger etc.) to on for 60 seconds. This will remove the surface charge of the battery.

(b) Turn the ignition switch off and turn off the electrical systems.

(c) Measure the battery voltage between the negative (–) and positive (+) terminals of the battery.
  Standard voltage: 12.5 to 12.9 V at 20°C (68°F)

HINT:
If the voltage is less than specification, charge the battery.



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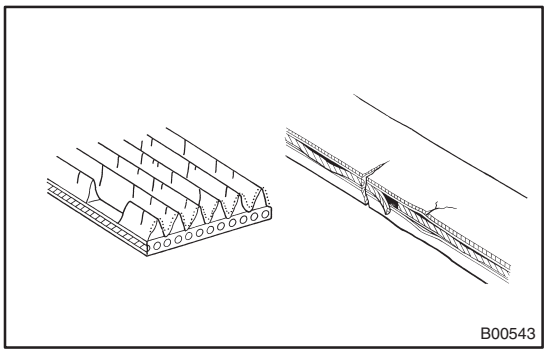
(d) Check the indicator as shown in the illustration.

HINT:
- Blue: OK
- White: Charging Necessary
- Red: Insufficient Water

4. CHECK BATTERY TERMINALS, FUSIBLE LINK AND FUSES

(a) Check that the battery terminals are not loose or corroded.

(b) Check the fusible links, high–current fuses and regular fuses for continuity.



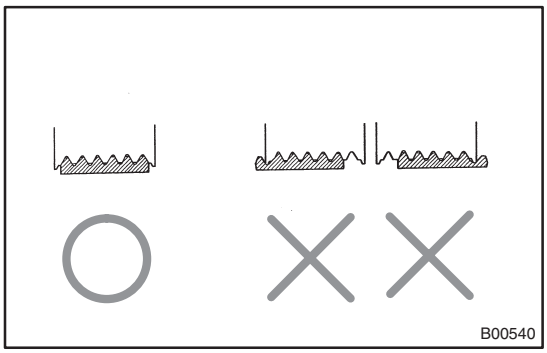
5. INSPECT DRIVE BELT

(a) Visually check the belt for excessive wear, frayed cords, etc.

HINT:

- If any defect has been found, replace the drive belt.
- Cracks on the rib side of the belt are considered acceptable.

  If the belt has chunks or missing from the ribs, it should be replaced.



(b) Check that it fits properly in the ribbed grooves.

HINT:

Confirm that the belt has not slipped out of the groove on the bottom of the pulley by hand.

6. VISUALLY CHECK GENERATOR WIRING

(a) Check that the wiring is in good condition.

7. LISTEN TO ABNORMAL NOISE FROM GENERATOR

(a) Check that there is no abnormal noise from the generator while the engine is running.

8. INSPECT CHARGE WARNING LIGHT CIRCUIT

(a) Turn the ignition switch ON. Check that the charge warning light comes on.

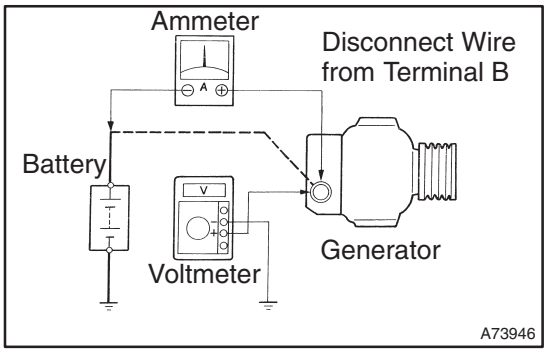
(b) Start the engine. Check that the light goes off.

HINT:

If the light does not operate as specified, troubleshoot the charge warning light circuit.

9. INSPECT CHARGING CIRCUIT WITHOUT LOAD

(a) If a battery/generator tester is available, connect the tester to the charging circuit referring to manufacturer's instructions.



(b) If a tester is not available, connect a voltmeter to the charging circuit as follows:

(1) Disconnect the wire from terminal B of the generator and connect it to the negative (–) lead of the ammeter.

(2) Connect the positive (+) lead of the ammeter to terminal B of the generator.

(3) Connect the positive (+) lead of the voltmeter to terminal B of the generator.

(4) Ground the negative (–) lead of the voltmeter.

(c) Check the charging circuit.

(1) The engine running, from idling to 2,000 rpm, check the readings on the ammeter and the voltmeter.

Standard amperage: 10 A or less

Standard voltage: 13.2 to 14.8 V

HINT:

- If the voltmeter reading is more than the standard voltage, replace the voltage regulator.
- If the battery is not fully charged, the indication will sometimes be more than standard amperage.

10. INSPECT CHARGING CIRCUIT WITH LOAD

(a) With the engine running at 2,000 rpm, turn on the high beam headlights and set the heater blower switch at "HI".

(b) Check the reading on the ammeter.

Standard amperage: 30 A or more

HINT:

- If the ammeter reading is less than the standard amperage, repair the generator.
- If the battery is fully charged, the indication may be less than the standard amperage.