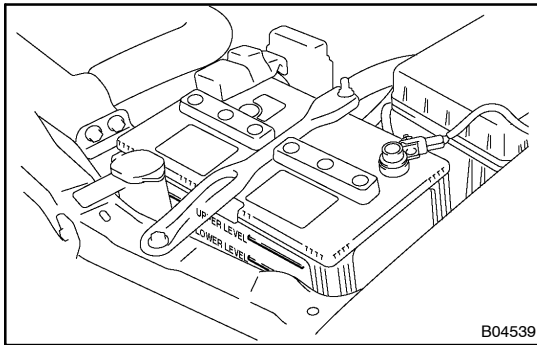




## ON-VEHICLE INSPECTION

### 1. CHECK BATTERY ELECTROLYTE LEVEL

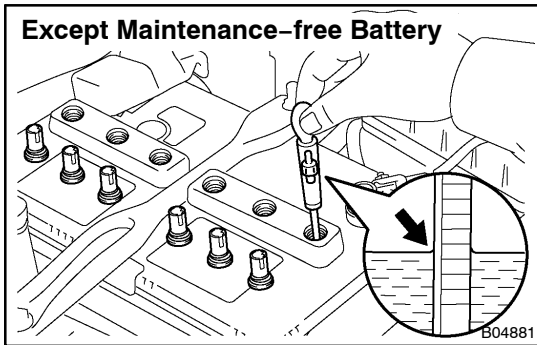
Check the electrolyte quantity of each cell.

Maintenance-free Battery:

If the electrolyte level is under the LOWER LEVEL, replace the battery (or add distilled water if possible), and check the charging system.

Except Maintenance-free Battery:

If under the LOWER LEVEL, add distilled water.



### 2. Except Maintenance-free Battery:

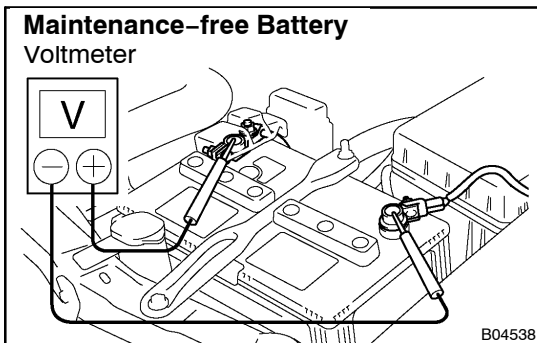
#### CHECK BATTERY SPECIFIC GRAVITY

Check the specific gravity of each cell.

**Standard specific gravity:**

**1.25 to 1.29 at 20°C (68°F)**

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



### 3. Maintenance-free Battery:

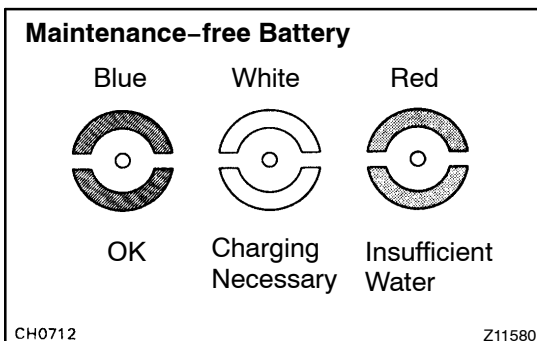
#### CHECK BATTERY VOLTAGE

- Drive the vehicle and then turn off the engine.
- Remove the surface charge.
  - Within 20 minutes, turn the ignition switch ON.
  - Turn on electrical systems (headlamp dimmer switch, heater blower switch, rear defogger, etc.) for 60 seconds.
- Turn the ignition switch OFF and turn off the electrical systems.
- 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)**

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



#### HINT:

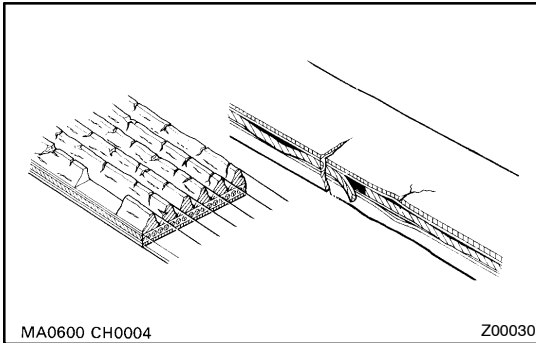
Check the indicator as shown in the illustration.

### 4. CHECK BATTERY TERMINALS, FUSIBLE LINK AND FUSES

- Check that the battery terminals are not loose or corroded.
- Check the fusible link and fuses for resistance.

**5. INSPECT DRIVE BELT****HINT:**

Manual belt tension adjustment is not necessary. The belt tensioner automatically adjusts belt tension.



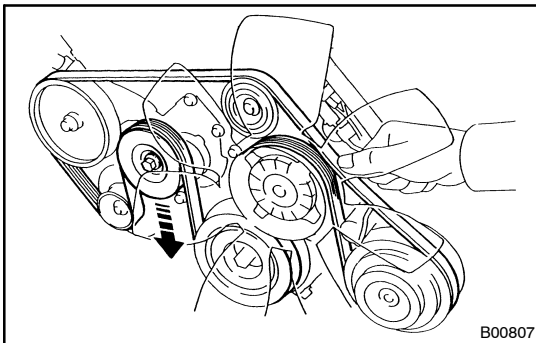
- (a) Check the belt for wear, cracks and other signs of damage.

If any defect is found, replace the drive belt.

**HINT:**

Replace the drive belt if the following defects are found:

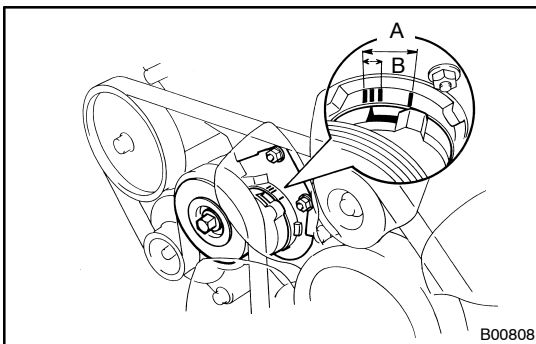
- If the belt has worn out until the wire can be seen.
- If the cracks reach the wire in more than one place.
- If the belt has chunks missing from the ribs.



- (b) Check the belt tensioner operation.

- Check that the belt tensioner moves downward when the drive belt is pressed down at the points indicated in the illustration with a force of approximately 98 N (10 kgf, 22.0 lbf).
- Check the alignment of the belt tensioner pulley to make sure the drive belt has not slipped off the pulley.

If necessary, replace the belt tensioner.

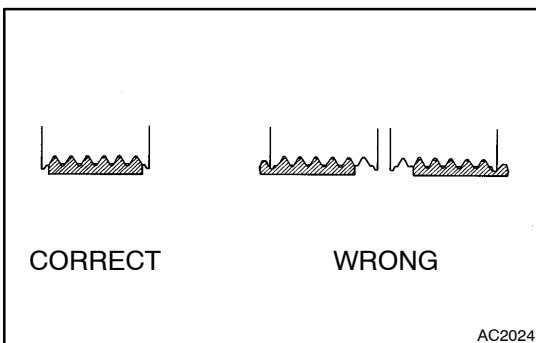


- Check that the arrow mark on the belt tensioner is within area A in the illustration.

If the arrow mark is not within area A, replace the drive belt.

**HINT:**

- When a new belt is installed, the arrow mark should be within area B. If not, the drive belt is installed incorrectly.



- After installing a belt, check that it fits properly in the ribbed grooves.
- Check by hand to confirm that the belt has not slipped out of the groove on the bottom of the pulley.

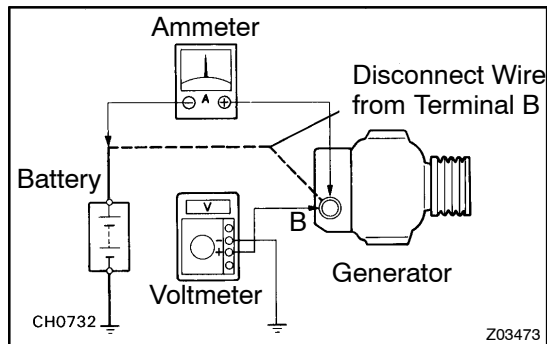
**6. REMOVE ENGINE UNDER COVER NO.1****7. VISUALLY CHECK GENERATOR WIRING AND LISTEN FOR ABNORMAL NOISES**

- (a) Check that the wiring is in good condition.
- (b) Check that there is no abnormal noise from the generator while the engine is running.

**8. CHECK CHARGE WARNING LIGHT CIRCUIT**

- Warm up the engine and then turn it off.
- Switch off all accessories.
- Turn the ignition switch ON, and check that the charge warning light is illuminated.
- Start the engine, and check that the light turns off.

If the light does not turn off, troubleshoot the charge light circuit.

**9. INSPECT CHARGING CIRCUIT WITHOUT LOAD**

**HINT:**

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

- If a tester is not available, connect a voltmeter and ammeter to the charging circuit as follows:
  - Disconnect the wire from terminal B of the generator, and connect it to the negative (–) tester probe of the ammeter.
  - Connect the positive (+) tester probe of the ammeter to terminal B of the generator.
  - Connect the positive (+) tester probe of the voltmeter to terminal B of the generator.
  - Ground the negative (–) tester probe of the voltmeter.
- Check the charging circuit as follows:  
With the engine running from idling to 2,000 rpm, check the reading on the ammeter and voltmeter.

**Standard amperage:**

**10 A or less**

**Standard voltage:**

**13.2 to 14.8 V**

If the value is not specified, check the generator.

**10. INSPECT CHARGING CIRCUIT WITH LOAD**

- With the engine running at 2,000 rpm, turn on the high beam headlights and turn the heater blower switch to HI.
- Check the reading on the ammeter.

**Standard amperage:**

**30 A or more**

If the ammeter reading is less than the standard amperage, repair the generator.

**HINT:**

If the battery is fully charged, the indication will sometimes be less than the standard amperage.

**11. REINSTALL ENGINE UNDER COVER NO.1**