

ON—VEHICLE INSPECTION

CH045-01

1. CHECK BATTERY SPECIFIC GRAVITY AND ELECTROLYTE LEVEL

- (a) Check the electrolyte quantity of each cell. If insufficient, refill with distilled (or purified) water.

- (b) Check the specific gravity of each cell.

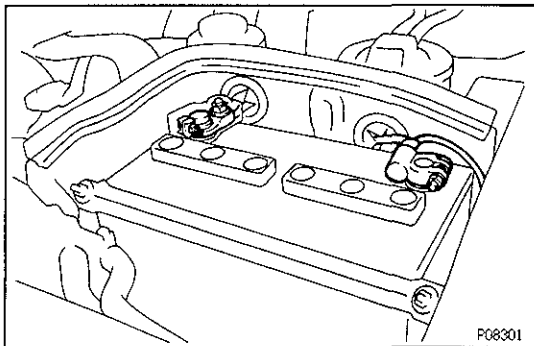
Standard specific gravity at 20°C (68°F):

1.27 — 1.29 105D31L Battery

1.25 — 1.27 others

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

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2. CHECK BATTERY TERMINALS, FUSIBLE LINK AND FUSES

- (a) Check that the battery terminals are not loose or corroded.
- (b) Check the fusible link, H—fuses and fuses for continuity.

Fusible link:

MAIN 2.0 L

AM1 1.25 B

AM2 0.3 P

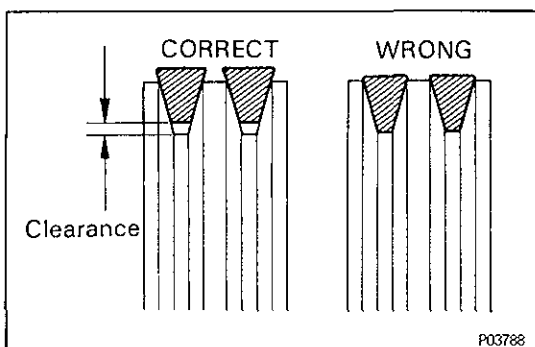
H—Fuse:

AM1 50A

Fuse:

IGN 7.5A

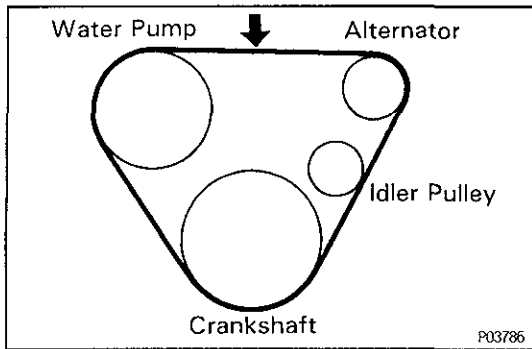
CHARGE 7.5A



3. INSPECT DRIVE BELTS

- (a) Visually check the drive belt for cracks, oiliness or wear. Check that the belt does not touch the bottom of the pulley groove.

If necessary, replace the drive belts as a set.



- (b) Check the drive belt deflection by pressing on the belt at the points indicated in the illustration with 98 N (10 kgf, 22 lbf) of pressure.

Drive belt deflection:

New belt

11 – 15 mm (0.43 – 0.59 in.)

Used belt

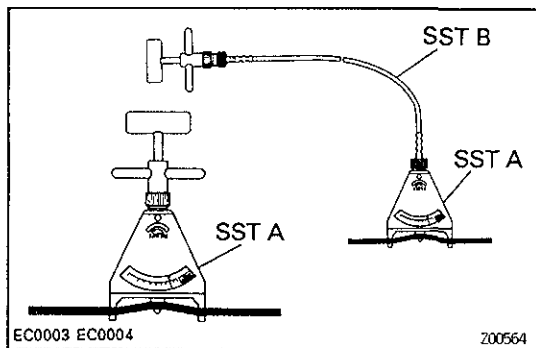
15 – 20 mm (0.59 – 0.79 in.)

If necessary, adjust the drive belt deflection.

HINT:

- "New belt" refers to a belt which has been used less than 5 minutes on a running engine.
- "Used belt" refers to a belt which has been used on a running engine for 5 minutes or more.
- After installing a new belt, run the engine for about 5 minutes and recheck the deflection.

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Reference

Using SST, check the drive belt tension.

SST A 09216-00020

SST B 09216-00030

Drive belt tension:

New belt

33 – 57 kgf

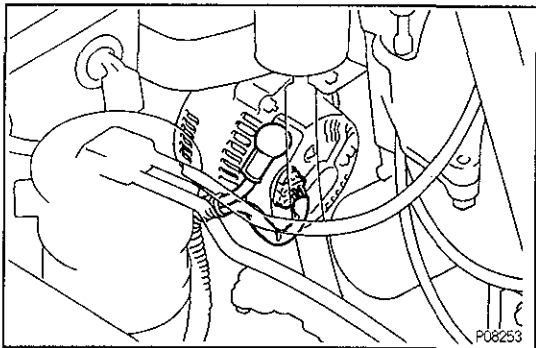
Used belt

15 – 35 kgf

If the belt tension is not as specified, adjust it.

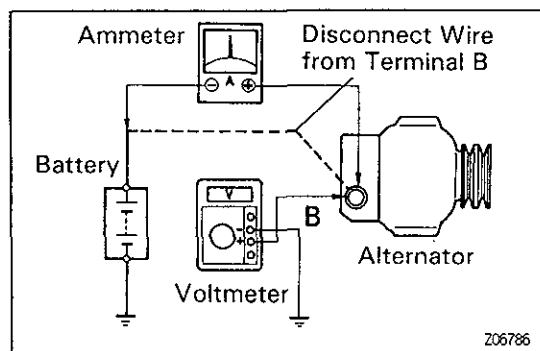
4. VISUALLY CHECK ALTERNATOR WIRING AND LISTEN FOR ABNORMAL NOISES

- Check that the wiring is in good condition.
- Check that there is no abnormal noise from the alternator while the engine is running.



5. INSPECT DISCHARGE WARNING LIGHT CIRCUIT

- Turn the ignition switch "ON". Check that the discharge warning light comes on.
 - Start the engine. Check that the light goes off.
- If the light does not operate as specified, troubleshoot the discharge warning light circuit.

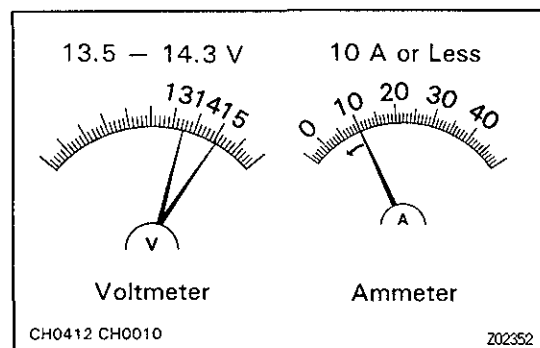


6. INSPECT CHARGING CIRCUIT WITHOUT LOAD

HINT: If a battery / alternator tester is available, connect the tester to the charging circuit as per the manufacturer's instructions.

- (a) 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 alternator and connect it to the negative (—) lead of the ammeter.
- Connect the positive (+) lead of the ammeter to terminal B of the alternator.
- Connect the positive (+) lead of the voltmeter to terminal B of the alternator.
- Ground the negative (—) lead of the voltmeter.



- (b) Check the charging circuit as follows:

With the engine running from idle to 2,000 rpm, check the reading on the ammeter and voltmeter.

Standard amperage:

10 A or less

Standard voltage:

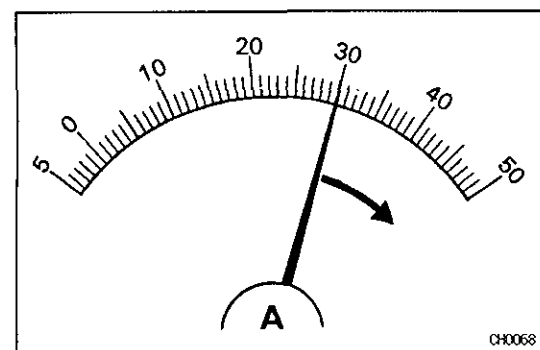
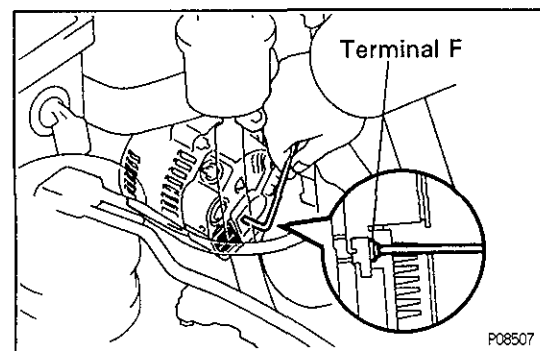
14.0 — 15.0 V at 25°C (77°F)

13.5 — 14.3 V at 115°C (239°F)

If the voltmeter reading is more than standard voltage, replace the IC regulator.

If the voltmeter reading is less than the standard voltage, check the IC regulator and alternator as follows:

- With terminal F grounded, start the engine and check the voltmeter reading of terminal B.
- If the voltmeter reading is more than standard voltage, replace the IC regulator.
- If the voltmeter reading is less than standard voltage, check the alternator.



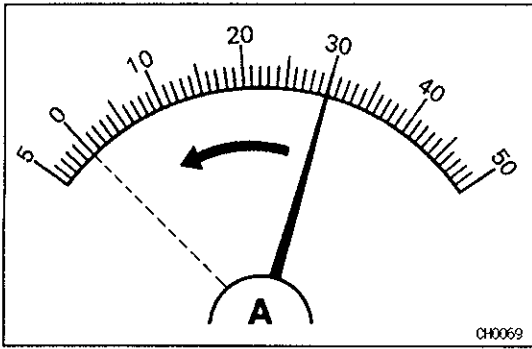
7. INSPECT CHARGING CIRCUIT WITH LOAD

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

- (b) Check the reading on the ammeter.

Standard amperage:

30 A or more



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

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