SECTION 12 - ELECTRICAL COMPONENTS

A DANGER

• See General Warnings, Section 1, Page 1-1.

A WARNING

• See General Warnings, Section 1, Page 1-1.

STARTER/GENERATOR

See General Warnings, Section 1, Page 1-1.

See Test Procedure 8 – Starter/Generator (Starter Function) on page 11-22 and Test Procedure 10 – Starter/Generator (Generator Function) on page 11-24.

Starter/Generator Removal

1. Disconnect the battery cables as instructed. See WARNING "To avoid unintentionally starting ... " in

- 2. Disconnect spark plug wire from the spark plug. See WARNING "To avoid unintentionally starting..."
- in General Warnings, Section 1, Page 1-2.
- 3. Remove the access panel on the vehicle.





FIGURE 12-3

THE GENERATOR CIRCUIT (FIGURE 12-4)

The generator circuit consists of the starter/generator, voltage regulator, solenoid, the battery, and connecting wires.

When battery power is first supplied to the starter/generator, the starter/generator turns the engine at low RPM (approx. 700). Once the engine starts running, it then drives the starter/generator. At any engine RPM over 1215 (3000 starter/generator RPM), the starter/generator functions as a generator, supplying charging current to the battery. To prevent battery overcharging, the voltage regulator senses battery voltage, and by opening and closing an electronic switch, it controls the amount of charge going to the battery.



FIGURE 12-4

ENGINE IGNITION CIRCUIT

The engine ignition circuit is independent of all other circuits except the kill circuit. It consists of the igniter, ignition coil, spark plug, RPM limiter, and connecting wires (Figure 12-5). For vehicles serial no. 9624-502638 and later, the igniter is a part of the ignition coil (Figure 12-6).

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