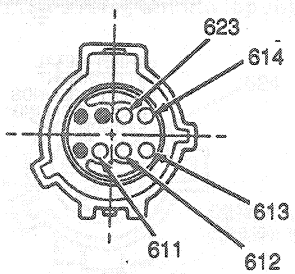
DIAGNOSIS AND TESTING (Continued)

DIAGNOSTIC TROUBLE CODE 21 (Continued)

TEST STEP	RESULT	ACTION TO TAKE
21-3 MEASURE RESISTANCE • Disconnect LH kick panel safing sensor. • Measure resistance of Circuit 613 (DB/W) in the sensor connector to sensor mounting sheet metal. The sheet metal ground must be bare and clean. • **Is resistance greater than 2 ohms?**	Yes ▶ No ▶	GO to **21-4.** LOCATE and SERVICE open in wiring harness Circuit 613 (DB/W). RECONNECT system. VERIFY system. REACTIVATE system.
21-4 MEASURE RESISTANCE • Remove LH kick panel safing sensor from mounting to vehicle. • Thoroughly clean the sensor's mounting surface. • Remount sensor. • Measure resistance of Circuit 613 (DB/W) wire in the sensor connector to ground. • **Is resistance greater than 2 ohms?**	Yes ▶ No ▶	REPLACE safing sensor. RECONNECT system. VERIFY system. REACTIVATE system. RECONNECT system. VERIFY system. REACTIVATE system.



LH KICK PANEL SAFING SENSOR CONNECTOR

R7581-A

Diagnostic Trouble Code 22

Safing Sensor Output Circuit Shorted to Battery Voltage

Normal Operation

The diagnostic monitor measures voltage at Pins 11 (Circuit 614, GY/O) and 12 (Circuit 623, P/W). The voltage at these pins is controlled by two resistors inside the diagnostic monitor and the voltage varies with charging system voltage (the expected voltages at Pins 11 and 12 are shown in the chart below). If the voltage at both of these pins exceeds 5 volts, the diagnostic monitor will flash out code 22.

Possible Causes

High voltage at Pins 11 and 12 can be caused by:

1. **A short in the wiring harness between Circuits 614 (GY/O) or 623 (P/W) and another wire** can cause high voltage on these circuits.

   NOTE: The wiring harness leading to the safing sensor carries higher voltage circuits that may short to Circuits 614 and 623.

2. **A short in the clockspring** between Circuit 614 or 615 and some of the horn or speed control wiring.
3. **A short across the normally open contacts of the safing sensor.**

   NOTE: The voltage on Circuits 611 and 612 inside the safing is usually battery voltage or higher. There should be an open circuit across the contacts of the safing sensor if the sensor is operating normally. If the sensor contacts are closed, the voltage on Circuits 614 and 623 would be high (at least battery voltage).
4. **Vehicle charging system voltage too high.** If the generator output voltage is too high (greater than 17 volts) it may cause a code 22 to occur.