

DIAGNOSIS AND TESTING (Continued)

Diagnostic Trouble Code 24**LH Kick Panel Safing Sensor Output Feed/Return Circuit Open****Normal Operation**

The diagnostic monitor tightly controls the voltage at Pins 11 (Circuit 614, GY/O) and 12 (Circuit 623, P/W) by using two resistors inside the diagnostic monitor. Circuits 614 and 623 are connected together inside the safing sensor. Therefore, the voltage on both circuits should be identical. The voltage at Pins 11 and 12 varies with changes in the vehicle charging system voltage (the expected voltages at Pins 11 and 12 are shown in the chart below). The diagnostic monitor measures the vehicle system charging voltage at Pin 13 (battery input). By measuring the voltage at Pin 13, the diagnostic monitor can accurately predict what the voltage at Pins 11 and 12 should be in a normally functioning system. The diagnostic monitor measures the voltages at Pins 11 and 12 and compares them to the voltage at Pin 13, (battery input). If the voltages at Pins 11 and 12 are low in comparison to Pin 13 or if the voltage at Pin 11 is high and the voltage at Pin 12 is low, the diagnostic monitor will flash a code 24.

Possible Causes

Low voltage at Pins 11 and 12 or high voltage at Pin 11 and low voltage at Pin 12 can be caused by:

1. An open circuit or high resistance in the wiring harness in Circuit 614 (GY/O) or 623 (P/W).
2. An open circuit or high resistance inside the safing sensor across the GY/O and P/W wires.
3. Resistance to ground on Circuit 614 or 623. Circuits 614 and 623 should be open circuits to ground when the diagnostic monitor is disconnected from the harness. Resistance to ground on these circuits can cause a drop in the diagnostic voltage on both circuits.
4. Intermittent battery voltage at Pin 13 can cause the reference voltage inside the diagnostic monitor to fluctuate and can cause diagnostic trouble code 24 in some circumstances.

CHARGING SYSTEM VOLTAGE

PIN No.	9.0	9.5	10.0	10.5	11.0	11.5	12.0	12.5	13.0	13.5	14.0	14.5	15.0	15.5	16.0
11	2.3	2.4	2.5	2.7	2.8	3.0	3.1	3.2	3.4	3.5	3.7	3.8	4.0	4.1	4.3
12	2.3	2.4	2.5	2.7	2.8	3.0	3.1	3.2	3.4	3.5	3.7	3.8	4.0	4.1	4.3