

DIAGNOSIS AND TESTING (Continued)

Diagnostic Trouble Code 53

Primary Crash Sensor Circuits Resistance To Ground Or Internal Diagnostic Monitor Failure

Normal Operation

The normal voltage on Pins 2, 6, 17, and 18 is controlled by an internal resistor inside the diagnostic monitor and is internally regulated to approximately 10 volts (± 1 volt). The resistance to ground these pins in the diagnostic monitor harness connector should be infinite. The resistance across the normally open contacts of the two primary crash sensors should also be infinite. The diagnostic monitor measures the voltage on Pins 2, 6, 17, and 18. If there is any resistance to ground on any of these pins or across the primary crash sensor contacts, it will cause the diagnostic voltage on these pins to drop below normal levels. If the diagnostic monitor measures that this voltage has dropped to between 5 and 10 volts, the monitor senses it has an internal voltage regulation failure and will flash code 53. Note that a direct short to ground in the primary crash sensor circuits will drop the voltage to less than 5 volts and the diagnostic monitor will flash code 14 on the air bag indicator (refer to Diagnostic Trouble Code 14 as outlined).

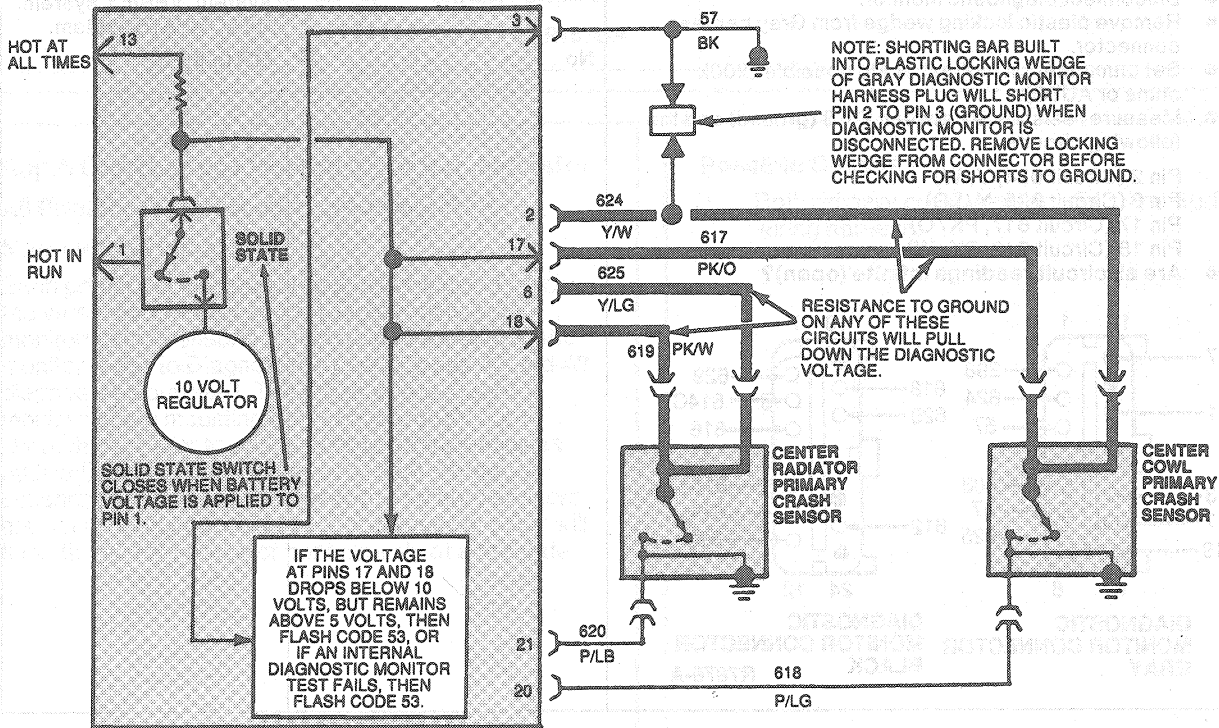
The diagnostic monitor also performs several on-board diagnostics every time the ignition switch is turned on. If any of these tests fail, the diagnostic monitor will flash code 53 on the air bag indicator.

Possible Causes

A voltage drop in the primary crash sensor circuits or an internal diagnostic monitor failure can be caused by:

1. A partial drop in voltage in the primary crash sensor circuits due to resistance to ground on the primary crash sensor wiring or any resistance across the normally open primary crash sensor contacts.
2. Internal diagnostic monitor on-board diagnostics failure.

Electrical Schematic—Diagnostic Trouble Code 53



R8128-A