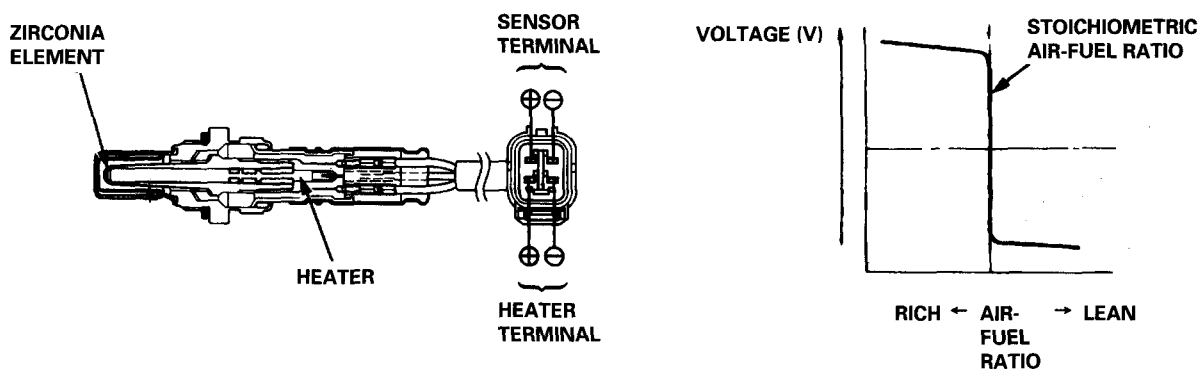




Primary Heated Oxygen Sensor (HO2S) (Sensor 1)

The Heated Oxygen Sensors (HO2S) detect the oxygen content in the exhaust gas and signal the PCM. In operation, the PCM receives the signals from the sensor and varies the duration during which fuel is injected. To stabilize the sensor's output, the sensor has an internal heater. The Right Primary HO2S (Bank 1, Sensor 1) is installed in the right exhaust manifold, and the Left Primary HO2S (Bank 2, Sensor 1) is installed in the left exhaust manifold.



P0133 The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P0133: A slow response problem in the Right Primary Heated Oxygen Sensor (Right Primary HO2S) (Bank 1, Sensor 1) circuit.

P0153 The HDS or the scan tool indicates Diagnostic Trouble Code (DTC) P0153: A slow response problem in the Left Primary Heated Oxygen Sensor (Left Primary HO2S) (Bank 2, Sensor 1) circuit.

Description

By controlling the air/fuel ratio with a Primary HO2S (Sensor 1) and a Secondary HO2S (Sensor 2), the deterioration of the Primary HO2S (Sensor 1) can be evaluated by its feedback period. When the feedback period of the HO2S exceeds a certain value during stable driving conditions, the sensor will be judged as deteriorated. When deterioration has been detected during two consecutive trips, the MIL comes on and DTC P0133 or P0153 will be stored.

NOTE: If DTC P2195, P0134, P2297 and/or P0135 are stored at the same time as DTC P0133, troubleshoot those DTCs first, then troubleshoot DTC P0133. If DTC P2197, P0154, P2298 and/or P0155 are stored at the same time as DTC P0153, troubleshoot those DTCs first, then troubleshoot DTC P0153.

Possible Cause

- Primary HO2S (Sensor 1) Deterioration
- Primary HO2S Heater (Sensor 1) Deterioration
- Exhaust system leakage

(cont'd)

PGM-FI System

Primary Heated Oxygen Sensor (HO2S) (Sensor 1) (cont'd)

Troubleshooting Flowchart

