

MAF Sensor Range/Performance Monitor Description

MONITOR SUMMARY

The mass airflow (MAF) sensor measures the amount of air flowing through the throttle valve. The engine control module (ECM) uses this information to determine the fuel injection time and provide a proper air/fuel ratio. Inside the MAF sensor, there is a heated platinum wire exposed to the flow of intake air. By applying a specific current to the wire, the ECM heats this wire to a given temperature. The flow of incoming air cools the wire and an internal thermistor, changing their resistance. To maintain a constant current value, the ECM varies the voltage applied to these components in the MAF sensor. The voltage level is proportional to the airflow through the sensor and the ECM interprets this voltage as the intake air amount.

In order to confirm that the output voltage of MAF sensor corresponds to the actual intake air amount, the ECM checks the output voltage of the MAF sensor under the following conditions:

- During idle (small intake air volume)
- While driving under a high load condition (large intake air volume)

If the ECM detects that the output voltage of the MAF sensor is high while the engine is idling or the output voltage is low while driving under a high load condition, the ECM interprets this as a malfunction in the MAF sensor and sets a DTC.

RELATED DTC

Related DTCs	P0101	MAF sensor malfunction
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MODEL YEAR CHART

Model Year	See Page
1996 and 1997	Ce-7
1998 to 2000	Ce-8
2001	Ce-9
2002	Ce-10
2003 and 2004	Ce-11