



CIRCUIT OPERATION

- The volume airflow sensor power is supplied from the MFI relay (terminal No. 4), and the ground is provided on the ECM (terminal No. 40).
- 5-volt power is applied to the volume airflow sensor output terminal (terminal No. 3) from the ECM (terminal No. 90). The volume airflow sensor generates a pulse signal when the output terminal and ground are opened/closed (opened/short).
- The volume airflow reset signal is input by the ECM (terminal No. 19) to the volume airflow sensor (terminal No. 7).

TECHNICAL DESCRIPTION

- While the engine is running, the volume airflow sensor outputs a pulse signal which corresponds to the volume of airflow.
- The ECM checks whether the frequency of this signal output by the volume airflow sensor while the engine is running is at or above the set value.
- When the throttle position sensor output voltage is low, the ECM causes the power transistor to be "ON" to send an airflow sensor reset signal to the airflow sensor. In response to the reset signal, the airflow sensor resets the filter circuit and improves the ability of the airflow sensor to measure the amount of air in a small air intake region.

DTC SET CONDITIONS

Check Conditions

- Throttle position sensor output voltage is 1.5 volts or higher.
- Engine speed is higher than 2,000 r/min.

Judgement Criteria

- Volume airflow sensor output frequency has continued to be 60 Hz or lower for 2 seconds.

Check Conditions

- Throttle position sensor output voltage is 2 volts or lower.
- Engine speed is lower than 2,000 r/min.

Judgement Criteria

- Volume airflow sensor output frequency has continued to be 1,000 Hz or higher for 2 seconds.

TROUBLESHOOTING HINTS (The most likely causes for this code to be set are:)

- Volume airflow sensor failed.
- Open or shorted volume airflow sensor circuit, harness damage, or connector damage.
- ECM failed.
- Air leak between volume airflow sensor and throttle body.