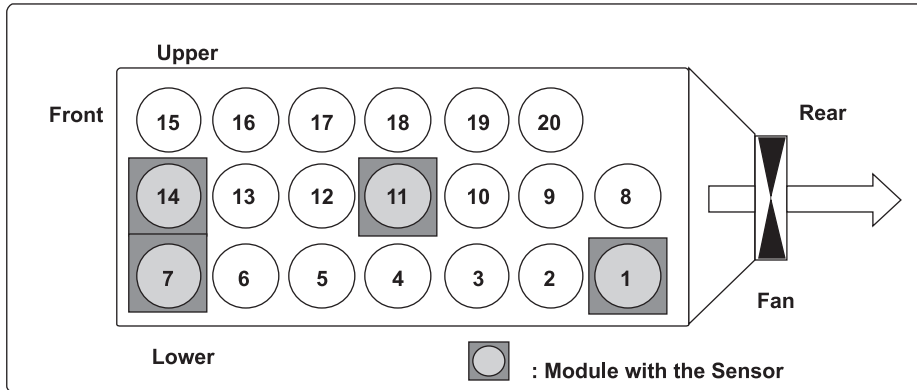


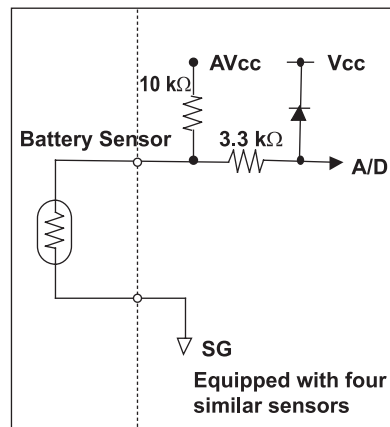
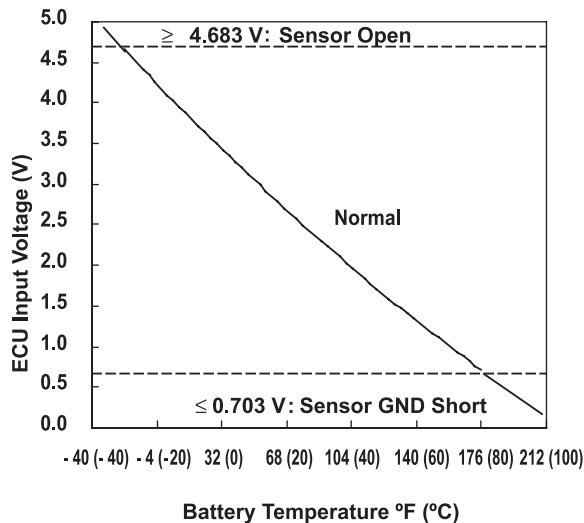
Advanced Diagnostics

DTC P1568 (67): Battery Module Temperature Signal Circuit Problem

Layout in the Battery Module



Temperature Sensor Circuit



Sensor characteristics

- 22 °F (- 30 °C) : 136 kΩ
- 77 °F (25 °C) : 10 kΩ
- 176 °F (80 °C) : 1.66 kΩ

P1568-0072

General Description

The battery module temperature sensor is used for various controls in the IMA (integrated motor assist) system. If the sensor output voltage is out of its normal range, exhaust emissions, fuel economy, or drivability may be adversely affected, and a malfunction in the sensor is detected and the MIL comes on. The battery temperature is measured by the thermistor that is attached to four out of 20 modules in the battery module. By using the temperature sensor built in the battery, the maximum and minimum temperature in the battery module can be measured to within $\pm 1.8^\circ\text{F}$ ($\pm 1^\circ\text{C}$). Monitoring is done through the upper and lower limit of output voltage from four channels in the sensor.

If the voltage is higher than the upper threshold, an open is detected, and if it is less than the lower threshold, a malfunction is detected. If the individual temperature problem is detected in all four channels, a malfunction is detected and a DTC is stored.

Monitor Execution, Sequence, Duration, DTC Type

Execution	Continuous
Sequence	None
Duration	2 seconds or more
DTC Type	One drive cycle, MIL ON, IMA system indicator ON

Enable Conditions

Condition	Minimum	Maximum
BCM power-supply voltage	15 V	—
No active DTCs	BCM	
Ignition switch	ON	

Malfunction Threshold

The sensor input voltage is 4.69 V or more, or 0.70 V or less, for at least 2 seconds.

Diagnosis Details

Conditions for illuminating the MIL

When a malfunction is detected, the MIL comes on and the DTC and the freeze frame data are stored in the ECM memory.

Conditions for clearing the MIL

The MIL will be cleared if the malfunction does not recur during three consecutive trips in which the diagnostic runs.

The MIL, the DTC, and the freeze frame data can be cleared by using the scan tool Clear command or by disconnecting the battery.