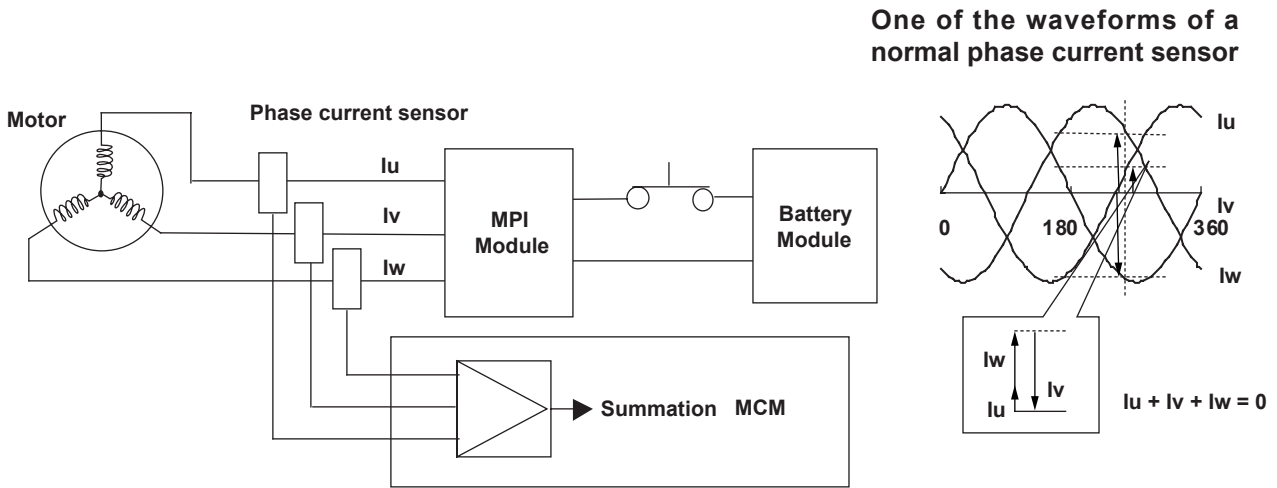


Advanced Diagnostics

DTC P1585 (30): Motor Current Signal Circuit Problem



P1585-0071

General Description

If the output voltage is drifting or freezing due to a faulty phase current sensor, the motor output torque may not be properly controlled. If three phase current sensors (I_u , I_v , I_w) work normally, the summation value is always 0 A. However, if one of the three sensors is drifting or freezing, the summation is not 0 A. By using a built-in circuit which calculates the sum of the three phase current sensor's amperage in the MCM (motor control module), the output from the counting circuit can be monitored. If the output is beyond a set value, a malfunction is detected and a DTC is stored.

Monitor Execution, Sequence, Duration, DTC Type

Execution	Continuous
Sequence	None
Duration	0.5 second or more (depending on changes in motor speed)
DTC Type	One drive cycle, MIL ON, IMA system indicator ON

Enable Conditions

Condition	Minimum	Maximum
MCM power-supply voltage	10.5 V	—
Ignition switch	ON	
No active DTCs	U/V/W phase signal circuit, MPI, BM, MCM	

Malfunction Threshold

The MCM internal counting circuit output voltage is less than 2.1 V or more than 2.9 V for at least 0.5 second.

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.