DTC	P2119	THROTTLE ACTUATOR CONTROL THROTTLE BODY RANGE/PERFORMANCE

CIRCUIT DESCRIPTION

The Electrical Throttle Control System (ETCS) is composed of a throttle actuator (motor) that operates the throttle valve, a Throttle Position (TP) sensor that detects the opening angle of the throttle valve, an Accelerator Pedal Position (APP) sensor that detects the APP, and the ECM that controls the ETCS system.
The ECM operates the throttle actuator to position the throttle valve for proper response to driver inputs. The TP sensor detects the opening angle of the throttle valve and provides this signal to the ECM so that the ECM can regulate the throttle actuator.

DTC No.	DTC Detection Condition	Trouble Area
P2119	Throttle opening angle continues to vary greatly from target throttle opening angle (1 trip detection logic)	• ETCS • ECM

MONITOR DESCRIPTION

The ECM determines the "actual" throttle angle based on the throttle position sensor signal. The "actual" throttle position is compared to the "target" throttle position commanded by the ECM. If the difference of these two values exceeds a specified limit, the ECM interprets this as a fault in the ETCS system. The ECM turns on the MIL and sets a DTC.
Start the engine, fully depress the accelerator pedal until the engine reaches 5,000 rpm (full open the throttle valve), and quickly release the accelerator pedal (close the throttle valve).

FAIL–SAFE

If the ETCS has a malfunction, the ECM shuts off current to the throttle actuator. The throttle control valve returns to a predetermined opening angle (approximately 16°) by the force of the return spring. The ECM then adjusts the engine output by controlling the fuel injection (intermittent fuel–cut) and ignition timing in accordance with the accelerator pedal opening angle to enable the vehicle to continue at a minimal speed. If the accelerator pedal is depressed firmly and slowly, the vehicle can be driven slowly.
If a "pass" condition is detected and then the ignition switch is turned OFF, the fail–safe operation will stop and the system will return to normal.

WIRING DIAGRAM

Refer to DTC P2102 on page 05–200.

INSPECTION PROCEDURE

HINT:
Read freeze frame data using the Intelligent Tester II. Freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, freeze frame data can help determine if the vehicle was running or stopped, if the engine was warmed up or not, if the air–fuel ratio was lean or rich, and other data from the time the malfunction occurred.

1	CHECK OTHER DTC OUTPUT

Display (DTC output)	Proceed to
P2119	A
P2119 and other DTCs	B

B → GO TO RELEVANT DTC CHART (See page 05–36)

A

2	CHECK IF DTC OUTPUT RE-OCCUR

(a) Clear the DTC. Enter the following menus: Enter/ Power train/ Engine and ECT/ DTC/ Clear.
(b) Allow the engine to idle for 15 seconds.
(c) Pull up the hand brake and move the shift lever to the D position.
(d) Fully depress the brake pedal and the accelerator pedal for 5 seconds.
(e) Read the DTC.

HINT:

Actual TP sensor voltage can be confirmed using with the Intelligent Tester II. Enter the following menus: Data List/ Throttle Sensor Positioning.

OK: No DTC output.

NG → **REPLACE THROTTLE BODY ASSY**
(See page 10–9)

OK

NORMAL