| DTC | P2119/89 | THROTTLE ACTUATOR CONTROL THROTTLE BODY RANGE/PERFORMANCE |
|---|---|---|

## CIRCUIT DESCRIPTION

The ETCS (Electronic Throttle Control System) is composed of the throttle actuator, the Throttle Position (TP) sensor, the Accelerator Pedal Position (APP) sensor, and the ECM. This system is the one valve type throttle body. In order to deliver the proper opening angle of the throttle valve in response to the driving condition, the TP sensor mounted on the throttle body detects the actual throttle valve opening angle, and provides feedback to the ECM in order that the ECM controls the actuator.

If the ETCS has a malfunction, the ECM shuts down the power for the actuator, and the throttle valve is locked at a certain angle by the return spring. Also, the whole electronically controlled throttle operation is cancelled until the system returns to normal and the ignition switch is turned to OFF.

| DTC No. | DTC Detection Condition | Trouble Area |
|---|---|---|
| P2119/89 | Throttle valve opening angle continues to vary greatly from target opening angle | • ETCS<br>• ECM |

## WIRING DIAGRAM

Refer to DTC P2102 on page 05–143.

## INSPECTION PROCEDURE

HINT:

Read freeze frame data using the intelligent tester II. Freeze frame data record the engine condition when malfunctions are detected. When troubleshooting, freeze frame data can help determine if the vehicle was moving or stationary, 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(IN ADDITION TO DTC P2119) |
|---|---|

(a) Connect the intelligent tester II to the DLC3.
(b) Turn the ignition switch to ON and turn the intelligent tester ll ON.
(c) Select the following menu items: Powertrain / Engine and ECT / DTC.
(d) Read DTCs.

**Result:**

| Display (DTC Output) | Proceed To |
|---|---|
| P2119 | A |
| P2119 and other DTCs | B |

HINT:

If any DTCs other than P2119 are output, troubleshoot those DTCs first.

B → **GO TO DTC CHART (See page 05–29)**

A

| 2 | CHECK IF DTC OUTPUT RECURS(DTC P2119) |
|---|---|

(a) Clear DTC (see page 05–18).
(b) Allow the engine to idle for 15 seconds.
(c) Securely apply the parking brake, and place the shift position in D.
(d) Depress the brake pedal securely and the accelerator pedal fully for 5 seconds.
(e) Connect the intelligent tester II to the DLC3.
(f) Turn the ignition switch to ON and turn the intelligent tester ll ON.
(g) Select the following menu items: Powertrain / Engine and ECT / DTC.
(h) Read DTCs.

HINT:

Actual throttle valve angle can be confirmed in Throttle POS under the Data List menus on the intelligent tester II.

**OK: No DTC output.**

**NG** → **REPLACE THROTTLE W/MOTOR BODY ASSY (See page 10–7)**

**OK**

**NORMAL**