DIA9V–02

DTC	**P2111**	**Throttle Actuator Control System –Stuck Open**

DTC	**P2112**	**Throttle Actuator Control System –Stuck Closed**

CIRCUIT DESCRIPTION

Throttle motor is operated by the ECM and it opens and closes the throttle valve by a gear. The opening angle of the throttle valve is detected by the throttle position sensor which is mounted on the throttle body and it provides feedback to the ECM to control the throttle motor in order the throttle valve opening angle properly in response to driving condition. If this DTC is stored, the ECM shuts down the power for the throttle motor and the magnetic clutch, and the throttle valve is fully closed by the return spring. However, the opening angle of the throttle valve can be controlled by the accelerator pedal through the throttle cable.

DTC No.	DTC Detecting Condition	Trouble Area
P2111 P2112	Lock throttle control motor during control throttle control motor	• Throttle control motor circuit • Throttle control motor • Throttle body • Throttle valve

INSPECTION PROCEDURE

HINT:

Read freeze frame data using the hand–held tester or the OBD II scan tool, as freeze frame data records the engine conditions when a malfunction is detected. When troubleshooting, it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, the air–fuel ratio was lean or rich, etc. at the time of the malfunction.

1	**Visually check throttle valve.**

PREPARATION:

Remove the intake air connector.

CHECK:

Check whether or not a foreign body is caught between the throttle valve and the housing.

NG ⟩ **Remove a foreign body and clean throttle body.**

OK

2	Check throttle control motor (See page **SF–28**).

NG ⟩ Replace throttle control motor
(See page **SF–30**).

OK

3	Check for open and short in harness and connector between throttle control motor and ECM (See page **IN–28**).

NG ⟩ Repair or replace. harness or connector

OK

Check for intermittent problems
(See page **DI–218**).