DI8J6–02

DTC	19 (2)	Accelerator Pedal Position Sensor Circuit Malfunction (IDL Switch/Range)

CIRCUIT DESCRIPTION

Refer to DTC 19 (1) on page DI–32.

DTC No.	DTC Detecting Condition	Trouble Area
19 (2)	Withe the ECU sensor completed learning and when the electric potential difference of No. 1 and No. 2 sensors has become more than 1.2 V or less than 0.4 V.	• Open or short in accelerator pedal position sensor circuit • Accelerator pedal position sensor • Engine ECU
	Either one of the followings continues for more than 2.0 seconds. (a) When the electrical potential difference of No. 1 and No. 2 sensors is over the specified value. (b) VPA2 ≧ 4.9 V (c) Accelerator idling criterion voltage of No. 1 and No. 2 is less than 0.04 V.	

WIRING DIAGRAM

Refer to DTC 19 (1) on page DI–32.

INSPECTION PROCEDURE

HINT:

Read freeze frame data on the hand–held tester. Because freeze frame data records the engine conditions when the malfunction is detected. When troubleshooting it is useful for determining whether the vehicle was running or stopped, the engine was warmed up or not, etc. at the time of the malfunction.

1	Check voltage between terminal VCP1 and VCP2 of wire harness side connector and body ground (See page DI–32).

NG → Go to step 4.

OK

2	Check voltage between terminals VPA1–EP1 and VPA2 and EP2 of engine ECU connector (See page DI–32).

OK → Check and replace engine ECU (See page IN–20).

NG

3	Check for open and short in harness and connector in VPA circuit between engine ECU and accelerator pedal position sensor (See page IN–20).

NG → Repair or replace harness or connector.

OK →

Replace accelerator pedal.

4	Check voltage between terminals VCP1–EP1 and VCP2–EP2 of engine ECU connector (See page DI–32 on step 5).

NG → Check and replace engine ECU (See page IN–20).

OK →

Check for open in harness and connecter in VCP circuit between engine ECU and accelerator pedal position sensor (See page IN–20).