DIDYJ–01

DTC	P1121/19	Accel. Position Sensor Circuit (IDL SW/ Range)

CIRCUIT DESCRIPTION

Refer to DTC P1120/19 on page DI–67.

DTC No.	DTC Detection Condition	Trouble Area
P1121/19	Condition (a) or (b) continues 0.05 sec. or more: (a) IDL ON and VA > 1.4 V (b) IDL ON and VAS > 1.4 V	• Open or short in accelerator pedal position sensor circuit • Accelerator pedal position sensor • Engine ECU
	Condition (a) or (b) continues 0.5 sec. or more: (a) IDL OFF and VA < 0.6 V (b) IDL OFF and VAS < 0.6 V	
	Conditions (a) and (b) continue 0.05 sec. or more: (a) 0.6 V < VA < 4.4 V and 0.6 V < VAS < 4.4 V (b) VA – VAS > 0.5 V	

WIRING DIAGRAM

Refer to DTC P1120/19 on page DI–67.

INSPECTION PROCEDURE

When using intelligent tester II:

1	Connect intelligent tester II and read IDL signal.

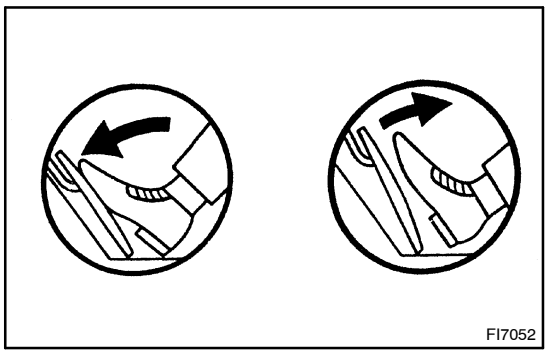
PREPARATION:

(a) Connect the intelligent tester II to the DLC3.

(b) Turn the ignition switch ON and push the intelligent tester II main switch ON.

CHECK:

Read the IDL signal.



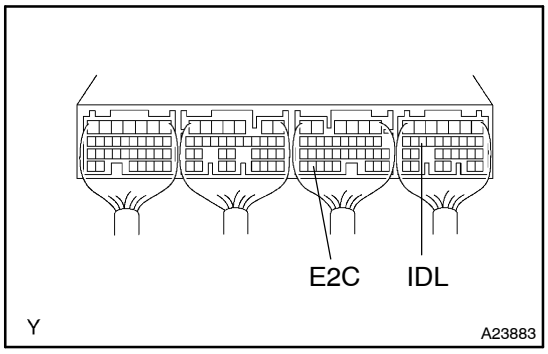
OK:

Accelerator pedal	IDL signal
Fully open	OFF
Fully closed	ON

OK → Go to step 4.

NG

2	Check voltage between terminals IDL and E2C of engine ECU.



PREPARATION:

(a) Remove the glove compartment door.

(b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminals IDL and E2C of the engine ECU.

OK:

Accelerator pedal	Voltage
Fully closed	9 to 14 V
Fully open	0 to 3 V

OK → **Check and replace engine ECU (See page IN–19).**

NG

3	Check for open and short in harness and connector between engine ECU and accelerator pedal position sensor (IDL line) (See page IN–19).

NG → **Repair or replace harness or connector.**

OK

Replace accelerator pedal position sensor.

4	**Connect intelligent tester II, and read accelerator pedal operating percentage.**

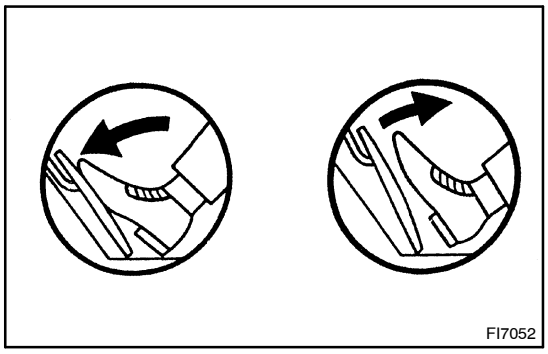
PREPARATION:

(a) Connect the intelligent tester II to the DLC3.

(b) Turn the ignition switch ON and push the intelligent tester II main switch ON.

CHECK:

Read the accelerator pedal opening percentage.



OK:

Accelerator pedal	Accelerator pedal opening position expressed as percentage
Fully open	Approx. 65%
Fully closed	Approx. 18%

OK → **Check for intermittent problems (See page DI–4).**

NG

5	**Check voltage between terminal VCC of wire harness side connector and body ground (See page DI–67, Step 2).**

NG → **Go to step 8.**

OK

6	**Check voltage between terminals VA, VAS and E2C of engine ECU (See page DI–67, Step 3).**

OK → **Check and replace engine ECU (See page IN–19).**

NG

7	**Check for open and short in harness and connector between engine ECU and accelerator pedal position sensor (VA, VAS line) (See page IN–19).**

NG → **Repair or replace harness or connector.**

OK

Replace accelerator pedal position sensor.

8	**Check voltage between terminals VCC and E2C of engine ECU (See page DI–67, Step 5).**

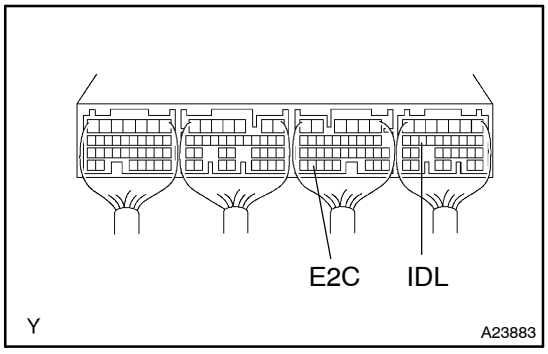
NG → **Check and replace engine ECU (See page IN–19).**

OK

Check for open in harness and connecter between engine ECU and accelerator pedal position sensor (VCC line) (See page IN–19).

When not using intelligent tester II:

1	**Check voltage between terminals IDL and E2C of engine ECU.**



PREPARATION:

(a) Remove the glove compartment door.

(b) Turn the ignition switch ON.

CHECK:

Measure the voltage between terminals IDL and E2C of the engine ECU.

OK:

Accelerator pedal	Voltage
Fully closed	9 to 14 V
Fully open	0 to 3 V

OK → **Go to step 3.**

NG

2	**Check for open and short in harness and connector between engine ECU and accelerator pedal position sensor (IDL line) (See page IN–19).**

NG → **Repair or replace harness or connector.**

OK

Replace accelerator pedal position sensor.

3	Check voltage between terminal 4 of wire harness side connector and body-ground (See page DI−67, Step 2).

NG → Go to step 6.

OK

4	Check voltage between terminals VA, VAS and E2C of engine ECU (See page DI−67, Step 3).

OK → Check and replace engine ECU (See page IN−19).

NG

5	Check for open and short in harness and connector between engine ECU and accelerator pedal position sensor (VA, VAS line) (See page IN−19).

NG → Repair or replace harness or connector.

OK

Replace accelerator pedal position sensor.

6	Check voltage between terminals VCC and E2C of engine ECU (See page DI−67, Step 5).

NG → Check and replace engine ECU (See page IN−19).

OK

Check for open in harness and connector between engine ECU and accelerator pedal position sensor (VCC line) (See page IN−19).