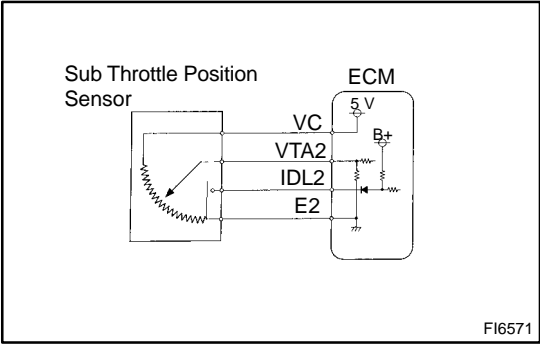


DTC	P1400	Sub Throttle Position Sensor Malfunction
-----	-------	--

CIRCUIT DESCRIPTION



The sub throttle position sensor is built and operates in the same way as the main throttle position sensor. This sensor is used for traction control. The sub throttle valve is opened and closed by the sub throttle actuator according to signals from the TRAC ECU to control the engine output.

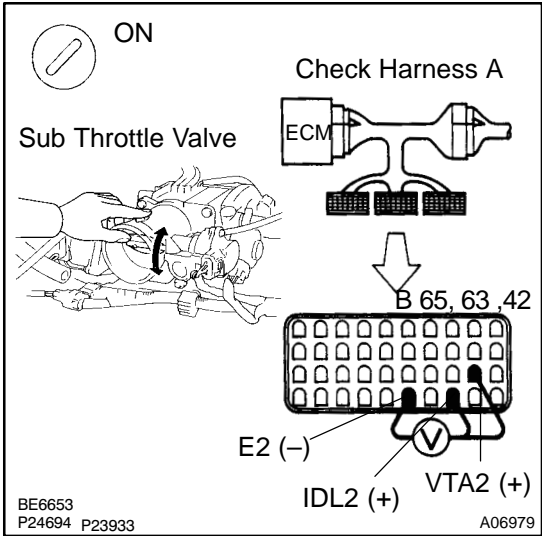
DTC No.	DTC Detecting Condition	Trouble Area
P1400	Condition (a) or (b) continues: (a) VTA 2 < 0.1 V, and closed sub throttle position switch is OFF (b) VTA 2 > 4.9 V	<ul style="list-style-type: none"><li>• Open or short in sub throttle position sensor circuit</li><li>• Sub throttle position sensor</li><li>• ECM</li></ul>

WIRING DIAGRAM

Refer to page [DI-39](#) for the WIRING DIAGRAM

# INSPECTION PROCEDURE

1	Check voltage between terminal VTA2, IDL2 and E2 of ECM.
---	--



## PREPARATION:

- Connect Check Harness A (See page [DI-18](#)).
- Turn ignition switch ON.
- Remove intake air connector pipe and disconnect sub throttle valve actuator connector.

## CHECK:

Measure voltage between terminals VTA2, IDL2 and E2 of ECM when the sub throttle valve is opened gradually from the closed condition.

## OK:

Throttle Valve	Terminal VTA2	Terminal IDL2
Fully Closed	0.3 – 0.8 V	0 – 3.0 V
Fully Open	3.2 – 4.9 V	9 – 14 V

## HINT:

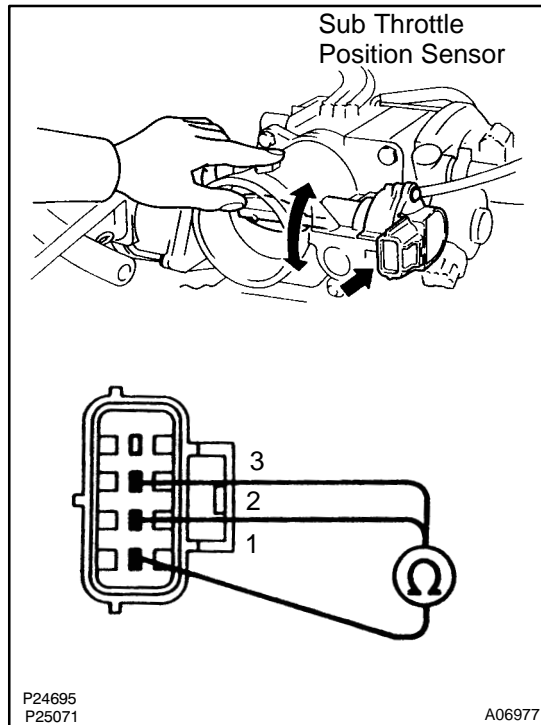
The voltage should increase steadily in proportion to the throttle valve opening angle.

OK

Check for intermittent problems  
(See page [DI-3](#)).

NG

## 2 Check sub throttle position sensor.



### PREPARATION:

Disconnect sub throttle position sensor connector.

### CHECK:

Measure resistance between terminals 3, 2 and 1 of sub throttle position sensor connector when the sub throttle valve is opened gradually from the closed condition.

### OK:

Throttle Valve	Terminal 3 – 1	Terminal 2 – 1
Fully Closed	0.34 – 6.3 kΩ	Less than 0.5 kΩ
Fully Open	2.4 – 11.2 kΩ	Infinity

### HINT:

Resistance between terminals 3 and 1 should increase gradually in accordance with the sub throttle valve opening angle.

NG

Adjust or replace sub throttle position sensor (See page SF-45).

OK

## 3 Check for open and short in harness and connector between ECM and sub throttle position sensor (See page IN-29).

NG

Repair or replace harness or connector.

OK

Check and replace ECM (See page IN-29).