

DTC	P1405	Turbo Pressure Sensor Circuit Malfunction
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CIRCUIT DESCRIPTION

The sensor detects the air intake chamber pressure and converts the pressure reading into a voltage which is used to control the turbo pressure by the ECM.

If the ECM detects the below diagnosis conditions, it operates the fail safe function to open the waste gate valve fully.

DTC No.	DTC Detecting Condition	Trouble Area
P1405	Open or short in turbo pressure sensor circuit	<ul style="list-style-type: none"> • Open or short in turbo pressure sensor circuit • Turbo pressure sensor • ECM

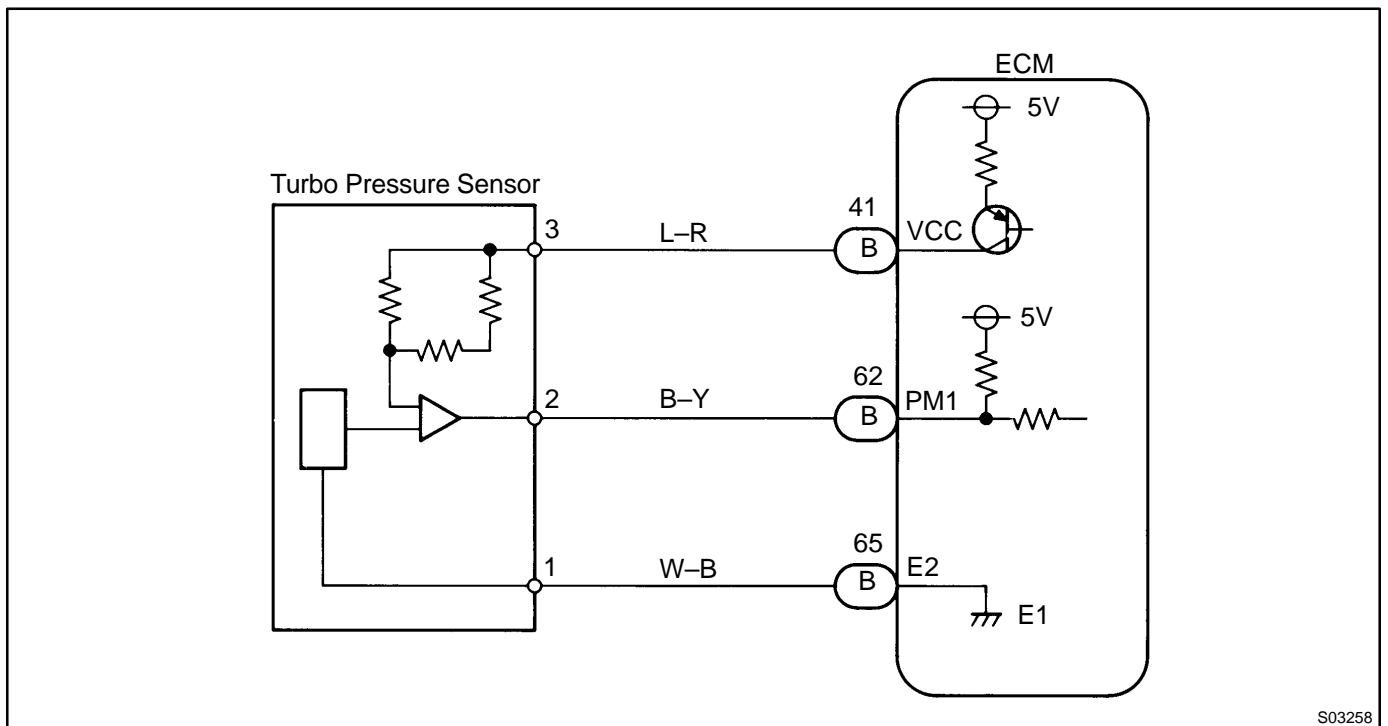
If the ECM detects DTC "P1405" it operates the fail safe function, keeping the ignition timing and injection volume constant and making it possible to drive the vehicle.

HINT:

After confirming DTC P1405 use the OBD II scan tool or TOYOTA hand-held tester to confirm the turbo absolute pressure from "CURRENT DATA".

Turbo Absolute Pressure	Malfunction
0 kPa	PIM circuit short
130 kPa or more	VC circuit open or short PIM circuit open E2 circuit open

WIRING DIAGRAM



S03258

INSPECTION PROCEDURE

1	Connect the OBD II scan tool or TOYOTA hand-held tester, and read value of manifold absolute pressure.
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PREPARATION:

- (a) Connect the OBD II scan tool or TOYOTA hand-held tester to the DLC3.
- (b) Turn ignition switch ON and push the OBD II scan tool or TOYOTA hand-held tester main switch ON.

CHECK:

Read value of turbo absolute pressure on the OBD II scan tool or TOYOTA hand-held tester.

OK:

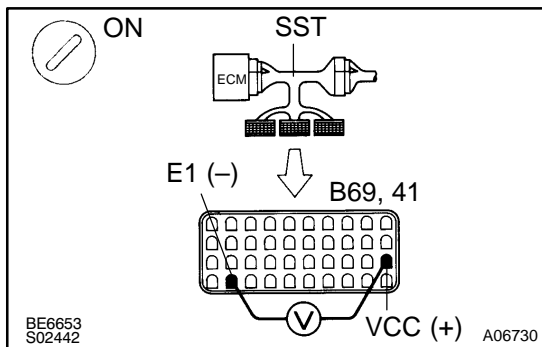
Same as atmospheric pressure.

OK

Check for intermittent problems (See page [DI-147](#)).

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2	Check voltage between terminals VCC and E2 of ECM connector.
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PREPARATION:

- (a) Connect Check Harness A (See page [DI-164](#)).
- (b) Turn ignition switch ON.

CHECK:

Measure voltage between terminals VCC and E2 of ECM connector.

OK:

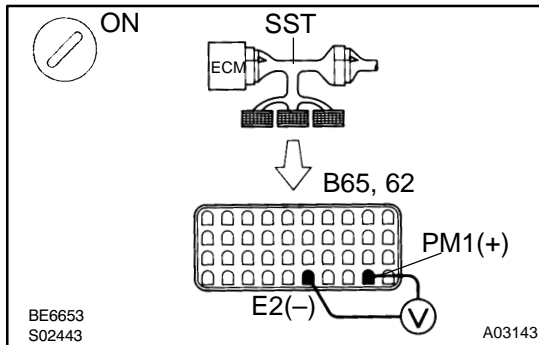
Voltage: 4.5 – 5.5 V

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Check and replace ECM (See page [IN-28](#)).

OK

3 Check voltage between terminals PM1 and E2 of ECM connector.



PREPARATION:

- Connect Check Harness A (See page [DI-164](#)).
- Turn ignition switch ON.

CHECK:

Measure voltage between terminals PM1 and E2 of ECM connector.

OK:

Voltage: 2.3 – 3.0 V

OK

Check and replace ECM (See page [IN-28](#)).

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4 Check for open and short in harness and connector between turbo pressure sensor and ECM.

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Repair or replace harness or connector.

OK

Replace turbo pressure sensor.