

DTC	P0402	Exhaust Gas Recirculation Flow Excessive Detected
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CIRCUIT DESCRIPTION

Refer to DTC P0401 (Exhaust Gas Recirculation Flow Insufficient Detected) on page [DI-69](#).

DTC No.	DTC Detecting Condition	Trouble Area
P0402	EGR gas temp. sensor value is high during EGR cut-off when engine is cold (Race engine at about 4,000 rpm without load so that vacuum is applied to port E) (2 trip detection logic)	• EGR valve stuck open • EGR VSV open malfunction • Open in VSV circuit for EGR • Short in EGR gas temp. sensor circuit
	EGR valve is always open (2 trip detection logic)	• ECM

Refer to DTC P0401 (Exhaust Gas Recirculation Flow Insufficient Detected) for the System Check Driving Pattern and Wiring Diagram.

INSPECTION PROCEDURE

TOYOTA hand-held tester

1	Connect the TOYOTA hand-held tester and read EGR gas temp. value.
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PREPARATION:

- Remove the fuse cover on the instrument panel.
- Connect the TOYOTA hand-held tester to the DLC3.
- Turn ignition switch ON and push the TOYOTA hand-held tester main switch ON.

CHECK:

Read EGR gas temp. on the TOYOTA hand-held tester.

OK:

EGR gas temp.: 150°C (302°F) or less (Not immediately after driving)

HINT:

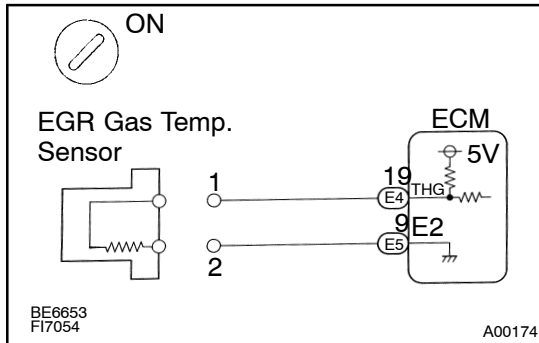
If there is a short circuit, the TOYOTA hand-held tester indicates Approx. 157.5°C (315.5°F).

OK

Go to step 4.

NG

2 Check for short in harness and ECM.



PREPARATION:

Disconnect the EGR gas temp. sensor connector.

CHECK:

Read EGR gas temp. on the TOYOTA hand-held tester.

OK:

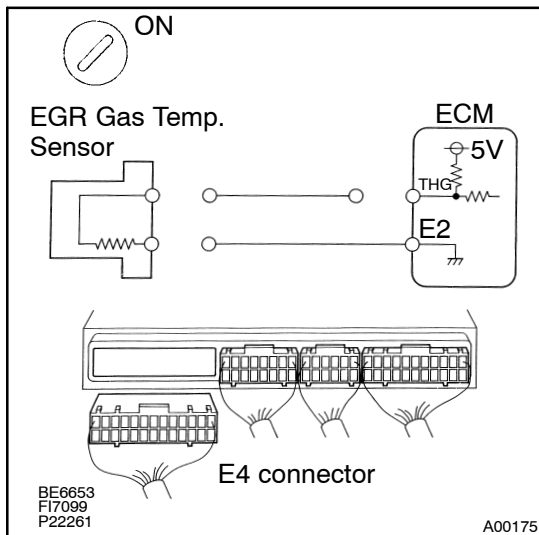
EGR gas temp.: 3.1°C (37.6°F)

OK

Replace EGR gas temp. sensor.

NG

3 Check for short in harness or ECM.



PREPARATION:

(a) Remove the instrument panel speaker No.1 panel.

(See page [SF-64](#)).

(b) Disconnect the E4 connector of ECM.

HINT:

EGR gas temp. sensor is disconnected.

CHECK:

Read EGR gas temp. on the TOYOTA hand-held tester.

OK:

EGR gas temp.: 3.1°C (37.6°F)

OK

Repair or replace harness or connector.

NG

Check and replace ECM (See page [IN-27](#)).

4 Check the VSV for EGR (See page [DI-69](#)).

OK

Check EGR valve (See page [EC-11](#)).

NG

5 Check operation of the VSV for EGR (See page [SF-59](#)).

NG

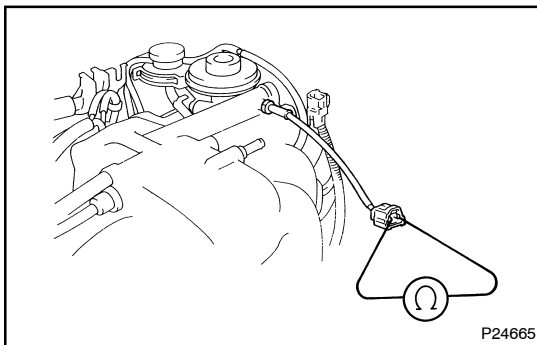
Replace VSV for EGR.

OK

Check for short in harness and connector between VSV and ECM (See page [IN-27](#)).

OBD II scan tool (excluding TOYOTA hand-held tester)

1 Check resistance of EGR gas temp. sensor (See page [DI-106](#)).



PREPARATION:

Disconnect EGR gas temp. sensor connector.

CHECK:

Measure resistance between terminals of EGR gas temp. sensor connector.

OK:

Resistance: 2.5 k Ω or more
(Not immediately after driving)

HINT:

If there is short circuit, ohmmeter indicates 200 Ω or less.

NG

Replace EGR gas temp. sensor.

OK

2 Check for short in harness and connector between EGR gas temp. sensor and ECM (See page [IN-27](#)).

NG

Repair or replace harness or connector.

OK

3 Check the VSV for EGR (See page [DI-69](#), step 5).

OK

Check EGR valve (See page [EC-11](#)).

NG

4 Check operation of the VSV for EGR (See page [SF-59](#)).

NG

Replace VSV for EGR.

OK

5 Check for short in harness and connector between VSV and ECM (See page [IN-27](#)).

NG

Repair or replace harness or connector.

OK

Check and replace ECM (See page [IN-27](#)).