

DTC	P0402	Exhaust Gas Recirculation Flow Excessive Detected
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CIRCUIT DESCRIPTION

Refer to DTC P0401 on page [DI-67](#).

DTC No.	DTC Detection Condition	Trouble Area
P0402	EGR gas temp. sensor value is high during EGR cut-off when engine is cold (Race engine at about 4.000rpm 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 • ECM
	EGR valve is always open (2 trip detection logic)	

CONFIRMATION DRIVING PATTERN

Refer to DTC P0401 on page [DI-67](#).

WIRING DIAGRAM

Refer to DTC P0401 on page [DI-67](#).

INSPECTION PROCEDURE

LEXUS hand-held tester:

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

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

CHECK:

Read the EGR gas temperature on the LEXUS hand-held tester.

OK:

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

HINT:

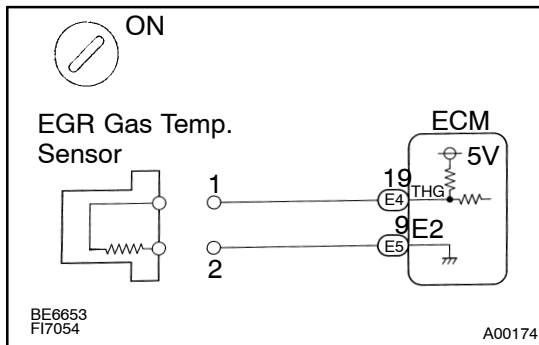
If there is a short circuit, the LEXUS hand-held tester indicates Approx. 157.6°C (315.5°F).

OK

Go to step 4.

NG

2 Check for short in harness and ECM.



PREPARATION:

Disconnect the EGR gas temperature sensor connector.

CHECK:

Read the EGR gas temperature on the LEXUS hand-held tester.

OK:

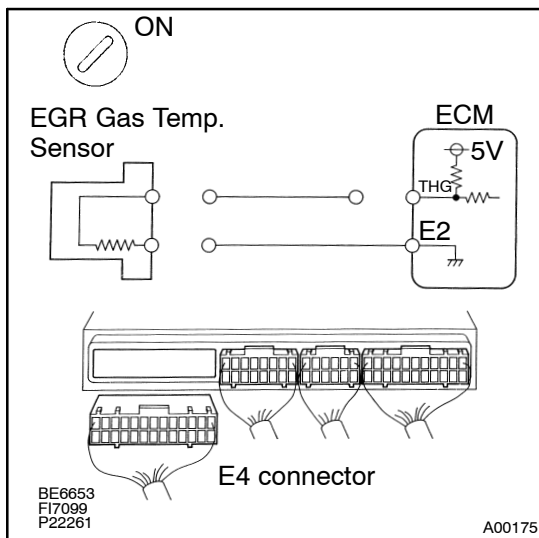
EGR gas temperature: 3.1°C (37.6°F)

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-63](#)).

(b) Disconnect the E4 connector of ECM.

HINT:

EGR gas temperature sensor is disconnected.

CHECK:

Read EGR gas temperature on the LEXUS hand-held tester.

OK:

EGR gas temperature: 3.1°C (37.6°F)

OK

Repair or replace harness or connector.

NG

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

4 Check for VSV for EGR (See page [DI-67](#)).

OK

Check EGR valve (See page [EC-10](#)).

NG

5 Check operation of the VSV for EGR (See page [SF-57](#)).

NG

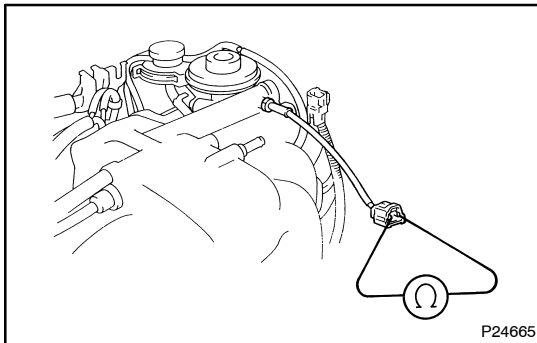
Replace VSV for EGR.

OK

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

OBD II scan tool (excluding LEXUS hand-held tester):

1 Check resistance of EGR gas temp. sensor .



PREPARATION:

Disconnect EGR gas temperature sensor connector.

CHECK:

Measure the resistance between terminals of EGR gas temperature 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 EGR gas temp. sensor and ECM (See page [IN-27](#)).

NG

Repair or replace harness or connector.

OK

3 Check for VSV for EGR (See page [DI-67](#)).

OK

Check EGR valve (See page [EC-10](#)).

NG

4 Check operation of VSV for EGR (See page [SF-57](#)).

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](#)).