

Diag. Code 45, 46 Main Throttle Position Sensor Circuit

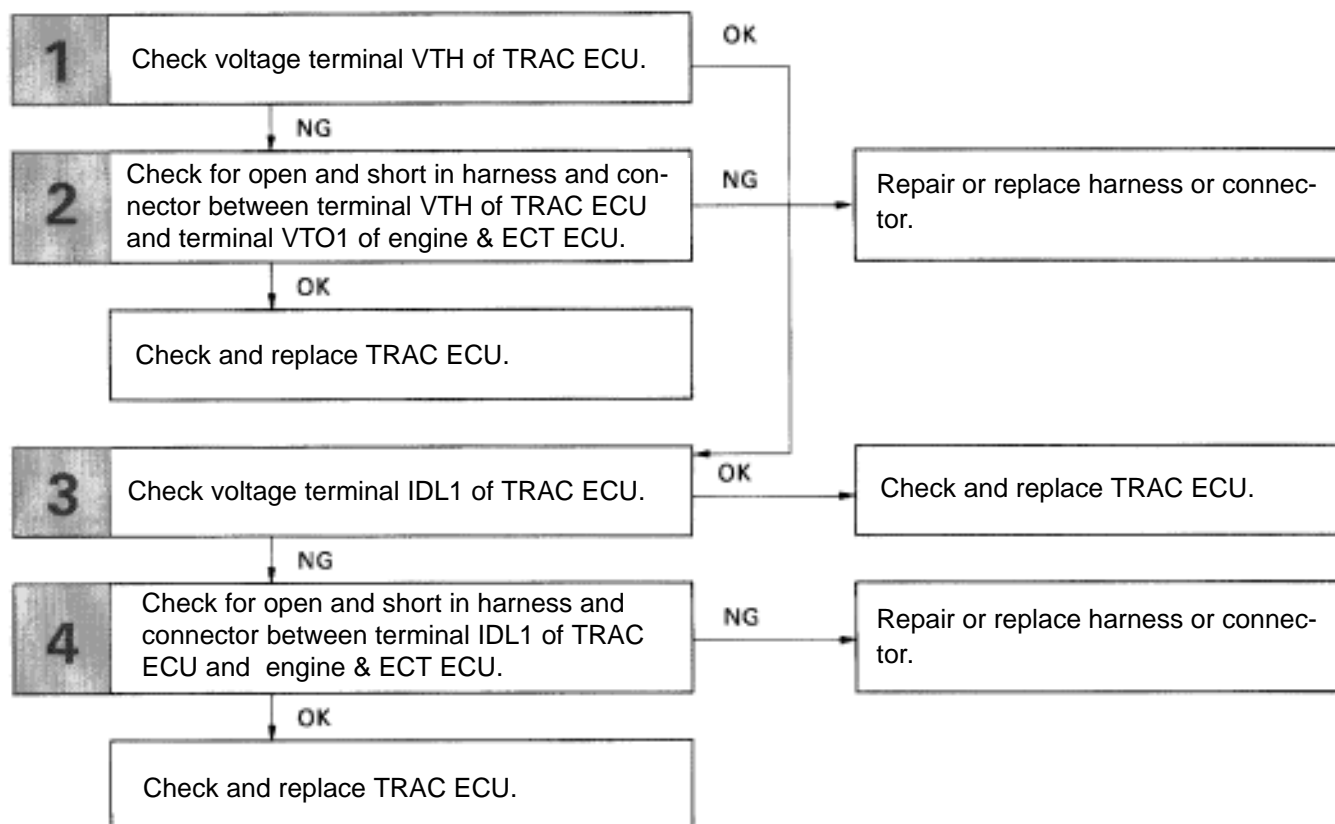
— CIRCUIT DESCRIPTION —

This circuit is not directly related to the TRAC control, but as it has an influence on TRAC control when trouble occurs in this circuit, it is used to switch off the TRAC system as a fail safe function.

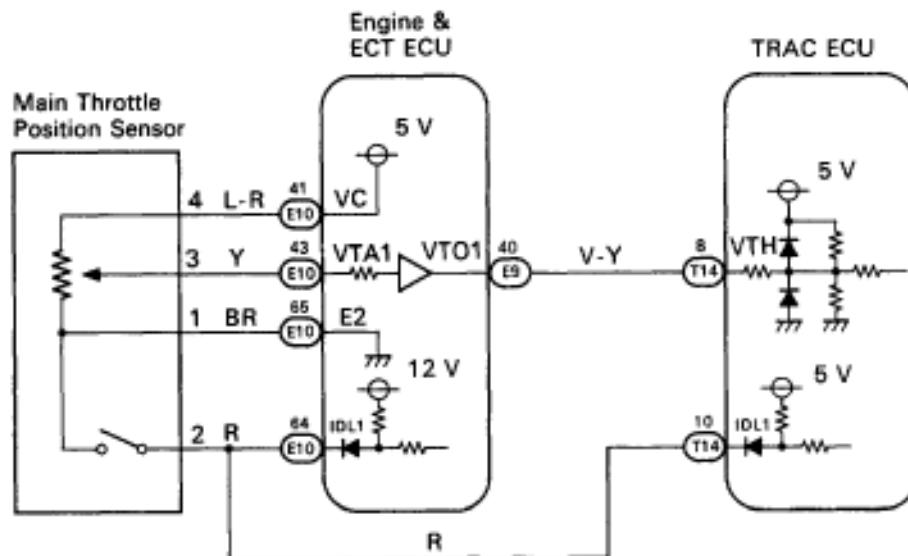
Code No.	Diagnostic Code Detecting Condition	Trouble Area
45	Either of the following (1) or (2) continues for 0.12 sec.: (1) IDL switch of main throttle position sensor is ON. (2) Input voltage of TRAC ECU terminal VTH: 1.45 V or more.	<ul style="list-style-type: none"> •Main throttle position sensor •Open in VTH circuit •Engine & ECT ECU •TRAC ECU
46	Either of the following (1) or (2) continues for 0.12 sec. while engine speed is 500 rpm or more: (1) Input voltage of TRAC ECU terminal VTH: 4.3 V or more. (2) Input voltage of TRAC ECU terminal VTH while IDL1 switch is OFF: 0.2 V or less.	<ul style="list-style-type: none"> •Main throttle position sensor •Short in VTH circuit •Engine & ECT ECU •TRAC ECU

— DIAGNOSTIC CHART —

HINT: The main throttle position sensor signal is input to the TRAC ECU from engine & ECT ECU, so if an error occurs at the engine side, the TRAC ECU also detects it.
If diagnosis code No. 41 is being output for the engine, conduct engine side troubleshooting first.



WIRING DIAGRAM

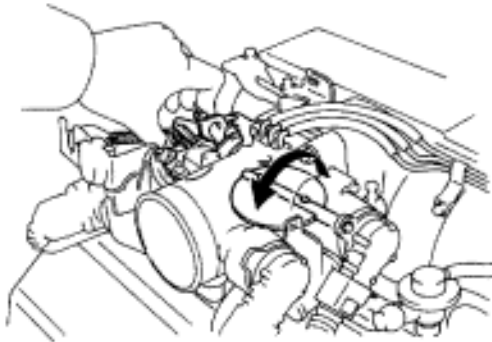


BR5401

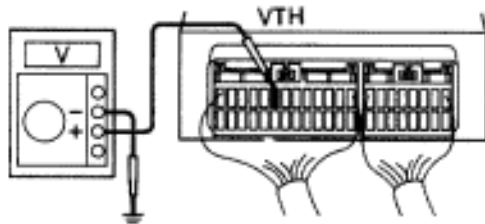
INSPECTION PROCEDURE

1

Check voltage between terminal VTH of TRAC ECU and body ground.



ON
IG ON



BR3721
BE6653
BN5457

P

1. Remove TRAC ECU with connectors still connected.
2. Remove intake air duct.
3. Turn ignition switch ON.

C

Measure voltage between terminal VTH of TRAC ECU and body ground, when the main throttle valve is turned from fully closed position to fully opened position by hand.

OK

Throttle valve position	Voltage
Fully closed	Below 1.5 V
Fully opened	3 – 4.5 V

In addition, as the main throttle valve is turned, the voltage should increase gradually without interruption.

NG**OK**

Go to step [3].

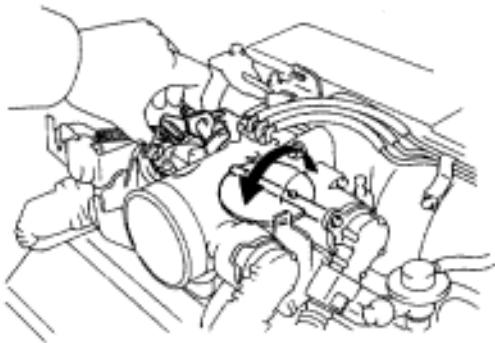
2

Check for open and short in harness and connector between terminal VTH of TRAC ECU and terminal VTO1 of engine & ECT ECU (See page [IN-27](#)).

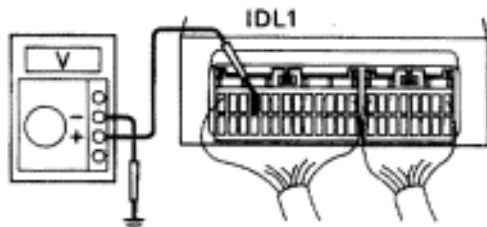
OK**NG**

Repair or replace harness or connector.

Check and replace TRAC ECU.

3**Check voltage between terminal IDL1 of TRAC ECU and body ground.**

ON
IG ON



BR3721
BR6663
BR5408

P

Turn ignition switch on.

C

Measure voltage between terminal IDL1 of TRAC ECU and body ground, when the main throttle valve is fully closed and fully opened.

OK

Main throttle valve position	Voltage
Fully closed	Below 1.0 V
Fully opened	10 – 14 V

NG**OK**

Check and replace TRAC ECU.

4**Check for open and short in harness and connector between terminal IDL1 of TRAC ECU and engine & ECT ECU (See page [IN-27](#)).****OK****NG**

Repair or replace harness or connector.

Check and replace TRAC ECU.