

Diag. Code 24 Intake Air Temp. Sensor Circuit

— CIRCUIT DESCRIPTION —

The intake air temp. sensor is built into the air flow meter and senses the intake air temperature.

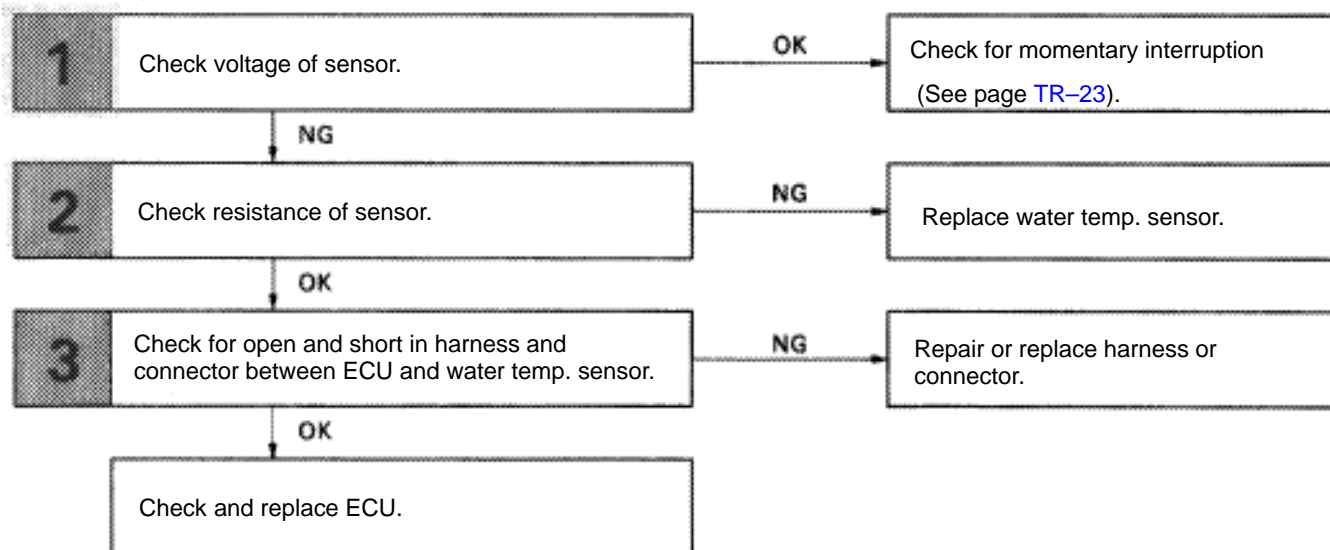
The structure of the sensor and connection to the ECU is the same as in the water temp. sensor shown on page [TR-68](#).

If the ECU records the diagnostic code "24", it operates the fail safe function, keeping the intake air temperature at a constant 20°C (68°F).

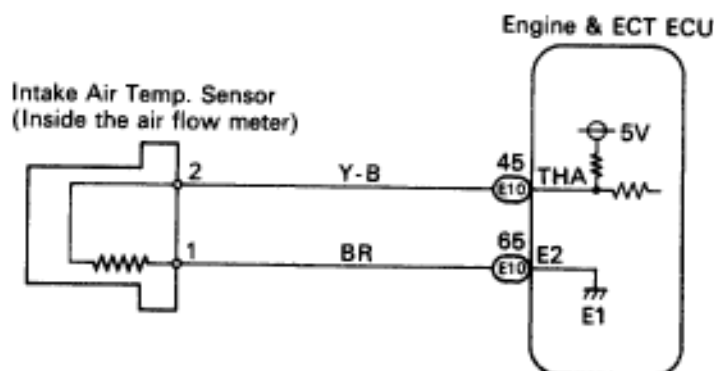
Code No.	Diagnostic Code Detecting Condition	Trouble Area
24	Open or short in intake air temp. sensor circuit for 0.5 sec. or more.	<ul style="list-style-type: none"> •Open or short in intake air temp. sensor circuit. •Intake air temp. sensor •ECU

— DIAGNOSTIC CHART —

HINT: If diagnostic codes "22" (water temperature sensor circuit), "24" (intake air temperature sensor circuit) and "41" (throttle position sensor circuit) are output simultaneously, E2 (sensor ground) may be open.

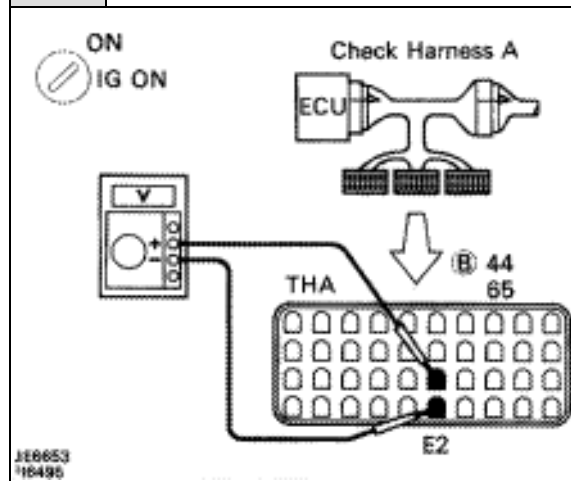


WIRING DIAGRAM



INSPECTION PROCEDURE

1 Check voltage between terminals THA and E2 of engine & ECT ECU connector.



P (2) Connect the Check Harness A.
(See page TR-30)

(2) Turn ignition switch on.

C Measure voltage between terminals THA and E2 and engine & ECT ECU connector.

OK

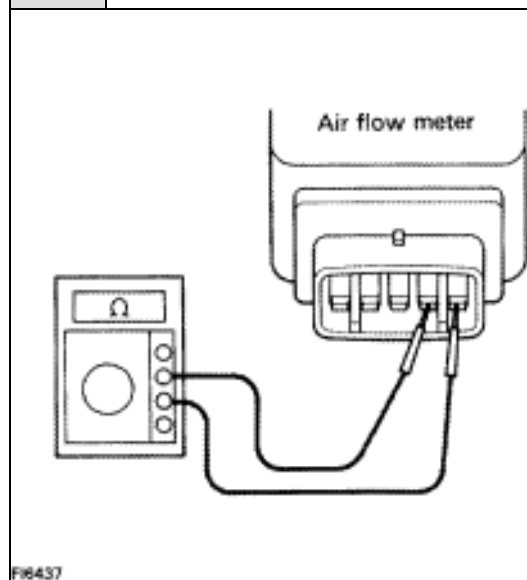
Intake air temp. °C (°F)	Voltage
20 (68)	1 – 3 V
60 (140)	0.5 – 1.0 V

NG

OK

Check for momentary Interruption
(See page TR-23).

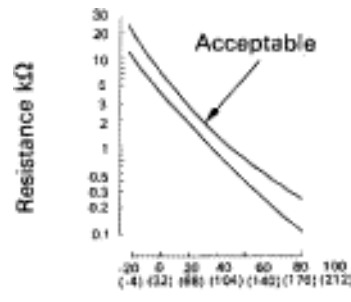
2 Check intake air temp. sensor.



P Disconnect the air flow meter connector.

C Measure resistance between terminals 1 and 2 of air flow meter connector.

OK Resistance is within Acceptable Zone on chart.



Intake air temp. °C (°F)	Resistance
20 (68)	2 – 3 kΩ
60 (140)	0.4 – 0.7 kΩ

OK

NG

Replace intake air temp. sensor (Replace air flow meter).

3 Check for open and short in harness and connector between engine & ECT ECU and intake air temp. sensor (See page IN-27).

OK

NG

Repair or replace harness or connector.

Check and replace engine & ECT ECU.