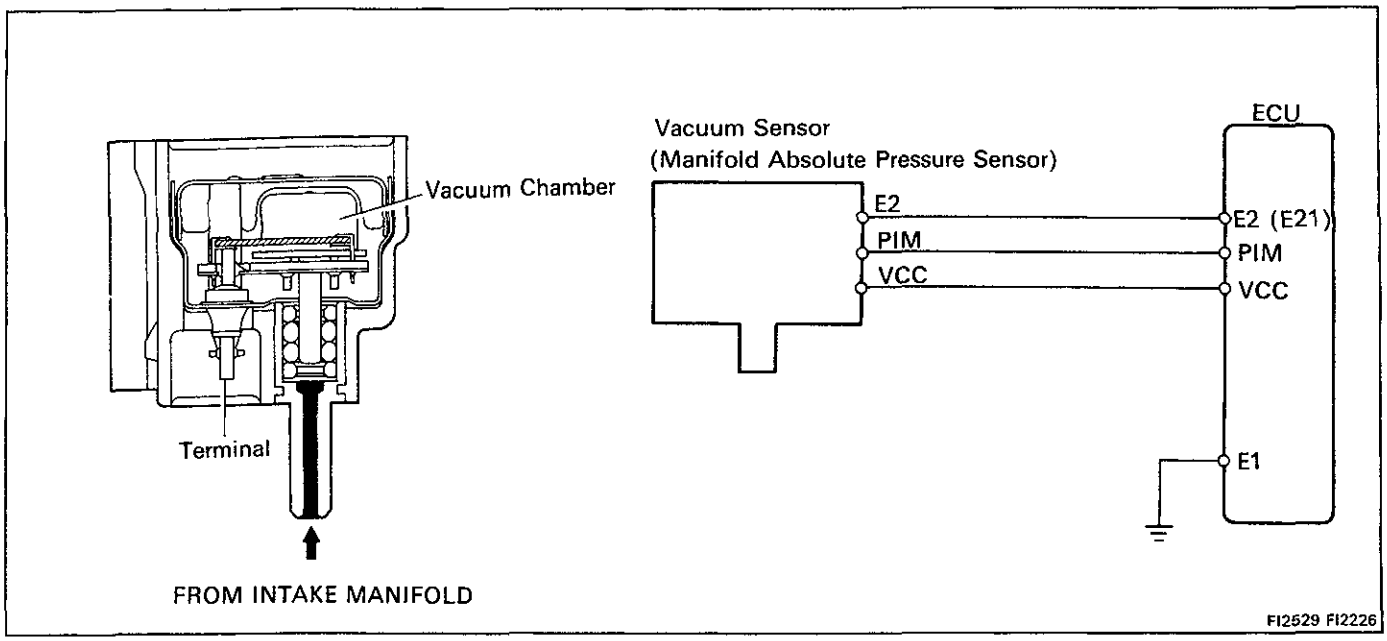
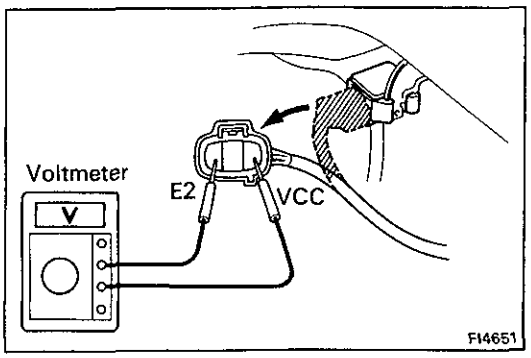
Vacuum Sensor (Manifold Absolute Pressure Sensor)





INSPECTION OF VACUUM SENSOR

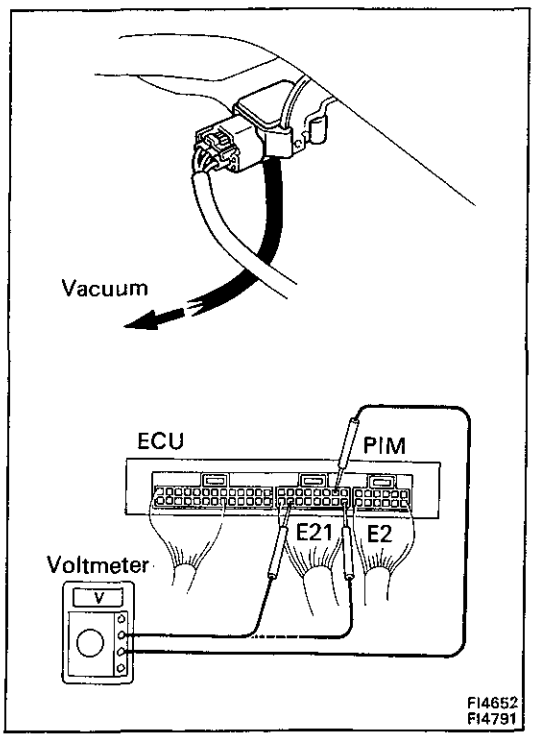
1. INSPECT POWER SOURCE VOLTAGE OF VACUUM SENSOR

(a) Disconnect the vacuum sensor connector.

(b) Turn the ignition switch to ON.

(c) Using a voltmeter, measure the voltage between terminals VCC and E2 of the vacuum sensor connector.

Voltage: 4 – 6 V



2. INSPECT POWER OUTPUT OF VACUUM SENSOR

(a) Turn the ignition switch to ON.

(b) Disconnect the vacuum hose of the intake manifold.

(c) Connect a voltmeter to terminals PIM and E2 (E21) of the ECU, and measure the record of the output voltage under ambient atmospheric pressure.

(d) Apply vacuum to the vacuum sensor in 100 mm Hg (3.94 in.Hg, 13.3 kPa) segments to 500 mmHg(19.69 in.Hg, 66.7 kPa).

(e) Measure voltage drop from step (c) above for each segment.

Voltage drop

Applied Vacuum mmHg (in.Hg, kPa)	100 3.94 13.3	200 7.87 26.7	300 11.81 40.0	400 15.75 53.3	500 19.69 66.7
Voltage drop V	0.3 – 0.5	0.7 – 0.9	1.1 – 1.3	1.5 – 1.7	1.9 – 2.1