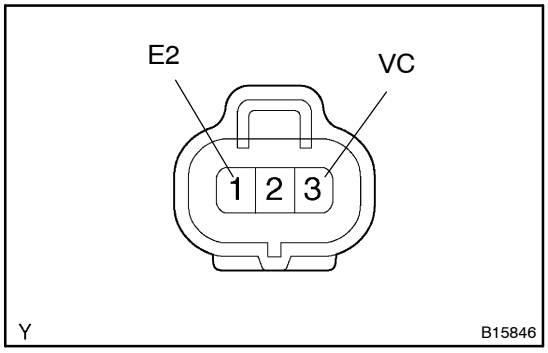


TURBO PRESSURE SENSOR

ED04B–02

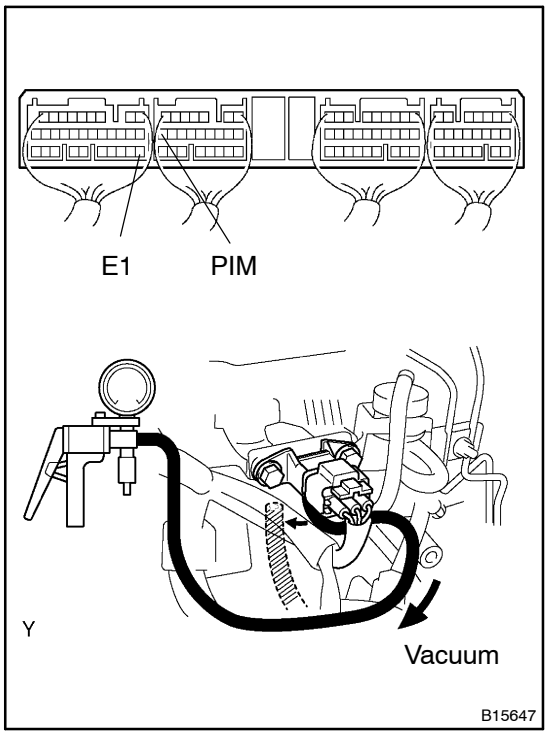
INSPECTION

INSPECT POWER SOURCE VOLTAGE OF TURBO PRESSURE SENSOR

(a) Inspect the power source voltage of the turbo pressure sensor.
  (1) Disconnect the sensor connector.
  (2) Turn the ignition switch ON.
  (3) Using a voltmeter, measure the voltage between connector terminals VC (3) and E2 (1) of the wiring harness side.

Voltage: 4.5 – 5.5 V

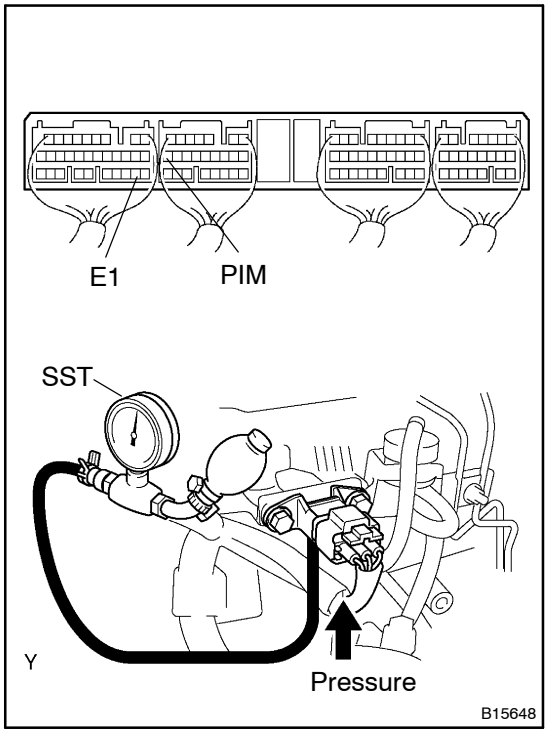
  (4) Turn the ignition switch OFF.
  (5) Reconnect the sensor connector.



(b) Inspect the power output of the turbo pressure sensor.
  (1) Turn the ignition switch ON.
  (2) Disconnect the vacuum hose form the sensor.
  (3) Connect a voltmeter to terminals PIM and E1 of the engine ECU (E8) connector, and measure the output voltage under ambient atmospheric pressure.
  (4) Apply vacuum to the sensor in 13.3 kPa (100 mmHg, 3.94 in.Hg) segments to 40.0 kPa (300 mmHg, 11.81 in.Hg).
  (5) Measure the voltage drop from step (c) above for each segment.

Voltage drop:

Applied vacuum kPa (mmHg, in.Hg)	Voltage drop V
13.3 (100, 3.94)	0.9 – 1.1
26.7 (200, 7.87)	1.3 – 1.5
40.0 (300, 11.81)	1.5 – 1.7



(c) Using SST (turbocharger pressure gauge), apply pressure to the turbo pressure sensor in 19.6 kPa (0.20 kgf/cm^2, 2.84 psi) segments to 98.0 kPa (1.00 kgf/cm^2, 14.2 psi).
SST 09992–00242

(d) Measure the voltage up from step (c) above for each segment.
Voltage up:

Applied pressure kPa (kgf/cm^2, psi)	Voltage up V
39.2 (0.40, 5.69)	1.2 – 1.5
58.8 (0.60, 8.53)	1.5 – 1.8
78.5 (0.80, 11.4)	1.8 – 2.1
98.0 (1.00, 14.2)	2.1 – 2.4

(e) Reconnect the vacuum hose to the turbo pressure sensor.