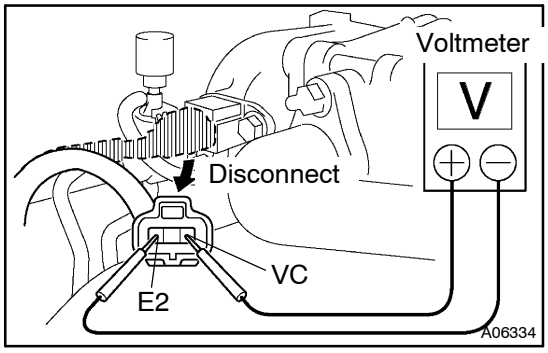


TURBO PRESSURE SENSOR (1HD–FTE)

TC02D–01

INSPECTION

1. INSPECT POWER SOURCE VOLTAGE OF TURBO PRESSURE SENSOR

(a) Disconnect the turbo pressure sensor connector.

(b) Turn the ignition switch ON.

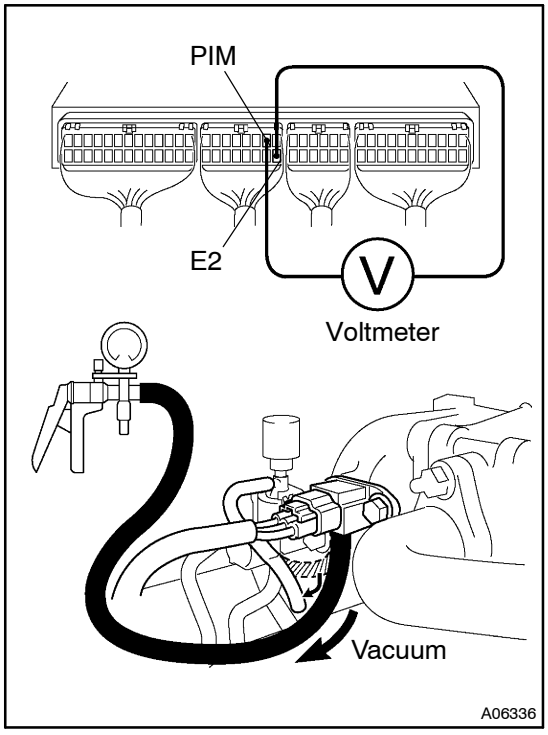
(c) Using a voltmeter, measure the voltage between connector terminals VC and E2 of the wiring harness side.

Voltage:

4.75 – 5.25 V

(d) Turn the ignition switch OFF.

(e) Reconnect the turbo pressure sensor connector.



2. INSPECT SUPPLY POWER OF TURBO PRESSURE SENSOR

(a) Turn the ignition switch ON.

(b) Disconnect the vacuum hose from the turbo pressure sensor.

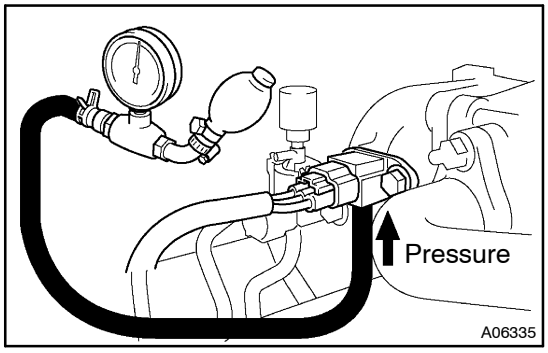
(c) Connect a voltmeter to terminals PIM and E2 of the ECU, and measure the output voltage under ambient atmospheric pressure.

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

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

Voltage drop:

Applied vacuum kPa (mmHg, in.Hg)	**13.3 (100, 3.94)**	**26.7 (200, 7.87)**	**40.0 (300, 11.81)**
Voltage drop V	**0.1 – 0.3**	**0.3 – 0.5**	**0.5 – 0.7**



(f) Using SST (turbocharger pressure gauge), apply pressure to the turbo pressure sensor in 9.8 kPa (0.10 kgf/cm^2, 1.4 psi) segments to 49.0 kPa (0.50 kgf/cm^2, 7.1 psi).
SST 09992–00241

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

Applied pressure kPa (kgf/cm^2, psi)	**19.6 (0.20, 2.84)**	**39.2 (0.40, 5.69)**	**58.8 (0.60, 8.53)**	**78.5 (0.80, 11.4)**	**98.0 (1.00, 14.2)**
Voltage up V	**0.15 – 0.45**	**0.4 – 0.7**	**0.7 – 1.0**	**1.0 – 1.3**	**1.3 – 1.6**

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