

TURBO PRESSURE SENSOR INSPECTION

TC03X-01

1. INSPECT POWER SOURCE VOLTAGE OF TURBO PRESSURE SENSOR

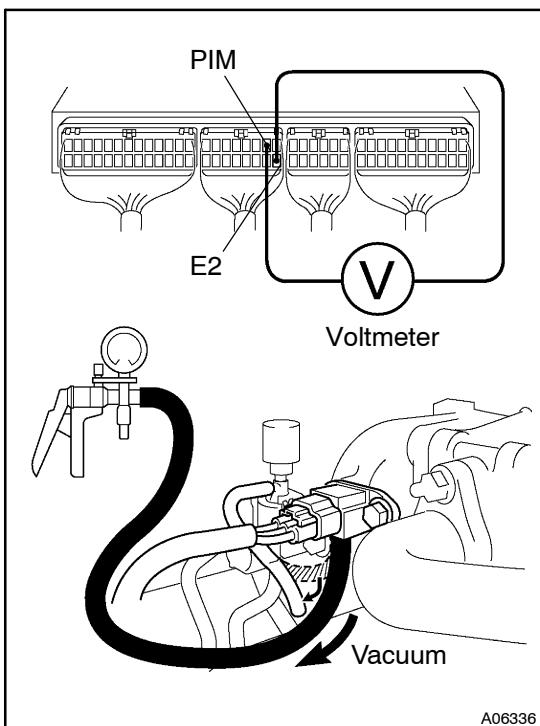
- Disconnect the turbo pressure sensor connector.
 - Turn the ignition switch ON.
 - Using a voltmeter, measure the voltage between connector terminals VC and E2 of the wiring harness side.
- Voltage:**
4.75 – 5.25V
- Turn the ignition switch OFF.
 - Reconnect the turbo pressure sensor connector.

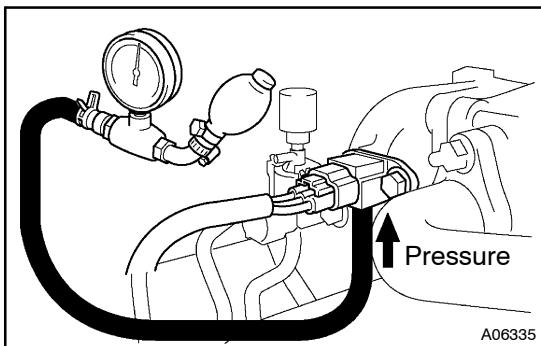
2. INSPECT SUPPLY POWER OF TURBO PRESSURE SENSOR

- Turn the ignition switch ON.
- Disconnect the vacuum hose from the turbo pressure sensor.
- Connect a voltmeter to terminals PIM and E2 of the ECU, and measure the output voltage under ambient atmospheric pressure.
- 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).
- 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/cm², 1.4 psi) segments to 49.0 kPa (0.50 kgf/cm², 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.