TC027-01

# ON-VEHICLE INSPECTION

## 1. INSPECT INTAKE AIR SYSTEM

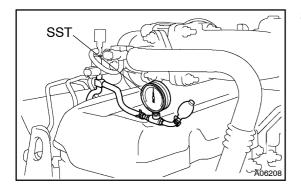
Check for leakage or clogging between the air cleaner housing and turbocharger inlet and between the turbocharger outlet and cylinder head.

- Clogged air cleaner .... Clean or replace element
- Hoses collapsed or deformed .... Repair or replace
- Leakage from connections .... Check each connection and repair
- Cracks in components .... Check and replace

#### 2. INSPECT EXHAUST SYSTEM

Check for leakage or clogging between the cylinder head and turbocharger inlet and between the turbocharger outlet and exhaust pipe.

- Deformed components .... Repair or replace
- Foreign material in passengers .... Remove
- Leakage from components .... Repair or replace
- Cracks in components .... Check and replace



#### 3. CHECK TURBOCHARGING PRESSURE

- (a) Warm up engine.
- (b) Using a 3 way connector, connect SST (turbocharger pressure gauge) to the hose leading to the VSV for turbo pressure sensor..

SST 09992-00241

(c) Press in the clutch pedal, then press the accelerator pedal down as far as it will go. Measure the turbocharging pressure at maximum speed 1HD-T: 4400 rpm 1HD-FTE: 4300 rpm.

### Standard pressure:

1HD-T:

38.6 – 50.0 kPa (0.38 – 0.49 kgf/cm<sup>2</sup>, 5.4 – 7.0 psi) 1HD-FTE:

50.0 - 70.0 kPa (0.49 - 0.69 kgf/cm<sup>2</sup>, 7.0 - 9.8 psi)

If the pressure is less than that specification, check the intake air and exhaust systems for leakage.

If there is no leakage, replace the turbocharger assembly. If the pressure is above specification, check if the actuator hose is disconnected or cracked. If not, replace the turbocharger assembly.

- 4. INSPECT IMPELLER WHEEL ROTATION (See page TC-10)
- 5. INSPECT ACTUATOR OPERATION (See page TC-10)
- 6. INSPECT TURBO PRESSURE SENSOR (See page TC-17)
- 7. INSPECT VSV FOR TURBOCHARGING PRESSURE CONTROL

(See page TC-19)