COMPRESSION CHECK

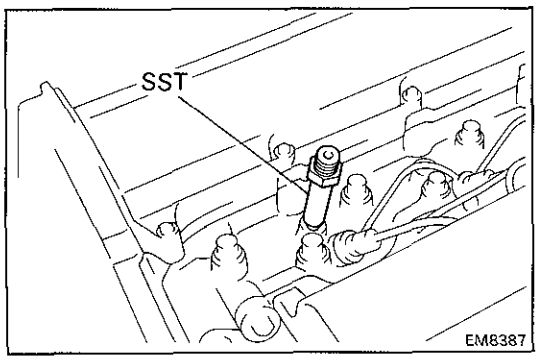
HINT: If there is lack of power, excessive oil consumption or poor fuel economy, measure the compression pressure.

1. **WARM UP AND STOP ENGINE**

   Allow the engine to reach normal operating temperature.

2. **DISCONNECT INJECTION PUMP (FUEL CUT SOLENOID) CONNECTOR**

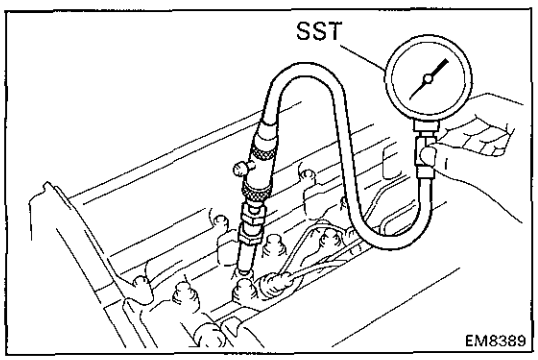
3. **REMOVE GLOW PLUGS**
   (See step 9 on page EM-57)



4. **CHECK CYLINDER COMPRESSION PRESSURE**

   (a) Install SST (attachment) to the glow plug hole.

   SST 09992-00024 (09992-00160)



   (b) Connect SST (compression gauge) to SST (attachment).

   SST 09992-00024 (09992-00160, 09992-00211)

(c) Fully open the throttle valve.

(d) While cranking the engine, measure the compression pressure.

HINT: Always use a fully charged battery to obtain engine revolution of 250 rpm or more.

(e) Repeat steps (a) through (d) for each cylinder.

NOTICE: This measurement must be done in as short a time as possible.

Compression pressure:
1PZ and 1HZ
37.0 kg/cm^2 (526 psi, 3,628 kPa) or more
1HD-T
35.0 kg/cm^2 (498 psi, 3,432 kPa) or more

Minimum pressure:
1PZ and 1HZ
27.0 kg/cm^2 (384 psi, 2,648 kPa) or more
1HD-T
25.0 kg/cm^2 (356 psi, 2,452 kpa) or more

Difference between each cylinder:
5.0 kg/cm^2 (71 psi, 490 kPa) or less

(f) If the cylinder compression in one or more cylinders is low, pour a small amount of engine oil into the cylinder through the glow plug hole and repeat steps (a) through (d) for the cylinder with low compression.

- If adding oil helps the compression chances are that the piston rings and/or cylinder bore are worn or damaged.
- If pressure stays low, a valve may be sticking or seating improperly, or there may be leakage past the gasket.

5. **REINSTALL GLOW PLUGS**
(See step 11 on page EM-81)

6. ***RECONNECT INJECTION PUMP (FUEL CUT SOLENOID) CONNECTOR***