(f) If the cylinder compression in one or more cylinders is low, pour a small amount of engine oil into the cylinder through the injection nozzle 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.

(g) Remove the SST.
SST 09992–00024 (09992–00211, 09992–00250)

5. RECONNECT INJECTION PUMP (FUEL CUT SOLENOID) CONNECTOR

6. REINSTALL INJECTION NOZZLES
(See injection nozzles installation in Fuel System)

7. START ENGINE AND CHECK FOR LEAKS

COMPRESSION CHECK (15B–F, 15B–FT)

EG81Z–01

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

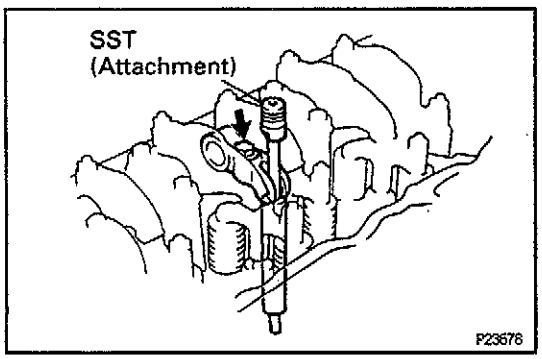
1. WARM UP AND STOP ENGINE
Allow the engine to warm up to normal operating temperature.

2. REMOVE CYLINDER HEAD COVER
(See step 10 in cylinder head removal)

3. REMOVE NOZZLE LEAKAGE PIPE
(See step 2 in injection nozzles removal in Fuel System)

4. REMOVE INJECTION PIPES
(See step 3 in injection nozzles removal in Fuel System)

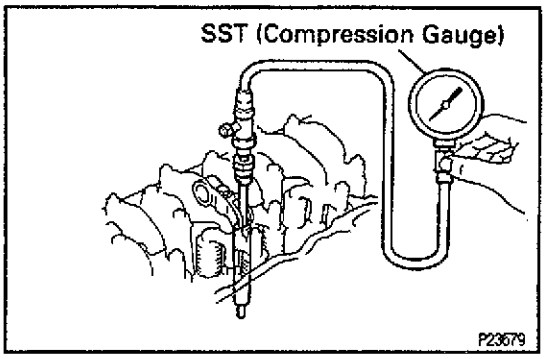
5. DISCONNECT INJECTION PUMP (FUEL CUT SOLENOID) CONNECTOR



6. CHECK CYLINDER COMPRESSION PRESSURE
NOTICE: When measuring the compression pressure of each, the other 3 injection nozzles must be installed in the cylinder head.

(a) Remove the injection nozzle.
(See steps 4 and 5 in injection nozzles removal in Fuel System)

(b) Install the gasket and SST (attachment) to the injection nozzle hole with the nozzle holder clamp and bolt.



EG

SST 09992−00400
Torque: 21 N·m (210 kgf·cm, 15 ft·lbf)

(c) Connect SST (compression gauge) to the SST (attachment).
SST 09992−00024 (09992−00211)

(d) Fully open the throttle valve, and start the engine.

(e) While cranking the engine, measure the compression pressure.
HINT: Always use a fully charged battery to obtain engine revolution of 250 rpm or more.

(f) Repeat steps (a) through (d) for each cylinder.
NOTICE: This measurement must be done in as short a time as possible.
Compression pressure:
15B−F
3,334 kPa (34.0 kgf/cm², 484 psi) or more
15B−FT
3,138 kPa (32.0 kgf/cm², 455 psi) or more
Minimum pressure:
1,961 kPa (20.0 kgf/cm², 284 psi)
Difference between each cylinder:
196 kPa (2.0 kgf/cm², 28 psi) or less

(g) If the cylinder compression in one or more cylinders is low, pour a small amount of engine oil into the cylinder through the injection nozzle hole and repeat steps (a) through (e) 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.

(h) Remove the SST.
SST 09992−00400, 09992−00024 (09992−00211)

(i) Reinstall the injection nozzle.
(See steps 1 and 2 in injection nozzles installation in Fuel System)

7. RECONNECT INJECTION PUMP (FUEL CUT SOLENOID) CONNECTOR

8. REINSTALL INJECTION PIPES
(See step 3 in injection nozzles installation in Fuel System)

9. REINSTALL NOZZLE LEAKAGE PIPE
(See step 4 in injection nozzles installation in Fuel System)

10. REINSTALL CYLINDER HEAD COVER
(See step 7 in cylinder head installation)

11. START ENGINE AND CHECK FOR LEAKS