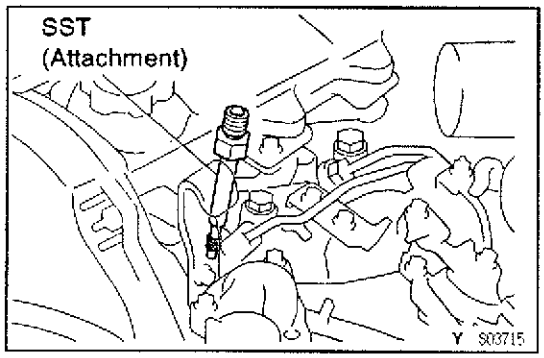
COMPRESSION CHECK

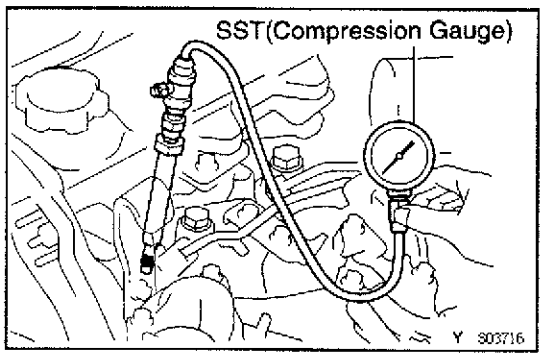
E05XW-03

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 GLOW PLUGS**
   (See steps 2 to 5 in cylinder head removal)
3. **DISCONNECT INJECTION PUMP (FUEL CUT SOLENOID) CONNECTOR**
4. **CHECK CYLINDER COMPRESSION PRESSURE**
   HINT: Turn the starter before measuring the compression and discharge the foreign objects.



(a) Install SST (attachment) to the glow plug hole.
SST 09992−00024 (09992−00121)
Torque: 13 N·m (130 kgf·cm, 9 ft·lbf)



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

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

(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:
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:
490 kPa (5.0 kgf/cm², 71 psi) 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.

(g) Remove the SST.
SST 09992−00024 (09992−00121, 09992−00211)