

COMPRESSION INSPECTION

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 IGNITION COIL (See page IG-6)

3. REMOVE SPARK PLUGS

4. INSPECT CYLINDER COMPRESSION PRESSURE

- (a) Insert a compression gauge into the spark plug hole.
- (b) Fully open the throttle.
- (c) While cranking the engine, measure the compression pressure.

HINT:

Always use a fully charged battery to obtain engine speed of 250 rpm or more.

- (d) Repeat steps (a) through (c) for each cylinder.

NOTICE:

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

Compression pressure:

1ZZ-FE 1,500 kPa (15.3 kgf/cm², 218 psi)

2ZZ-GE 1,400 kPa (14.3 kgf/cm², 203 psi) or more

Minimum pressure:

1ZZ-FE 1,000 kPa (10.2 kgf/cm², 145 psi)

2ZZ-GE 1,000 kPa (10.2 kgf/cm², 145 psi)

Difference between each cylinder:

1ZZ-FE 100 kPa (1.0 kgf/cm², 15 psi) or less

2ZZ-GE 110 kPa (1.1 kgf/cm², 16 psi) or less

- (e) If the cylinder compression in one more cylinders is low, pour a small amount of engine oil into the cylinder through the spark plug hole and repeat steps (a) through (c) for cylinders with low compression.

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

5. REINSTALL SPARK PLUGS

6. INSTALL IGNITION COIL (See page IG-7)

