

1D



## Compression Pressure Check

The compression pressure reading of a cylinder is a good indicator of its internal condition. The decision to overhaul the cylinder is often based on the results of a compression test. Periodic maintenance records kept at your dealership should include compression readings for each maintenance service.

### NOTE:

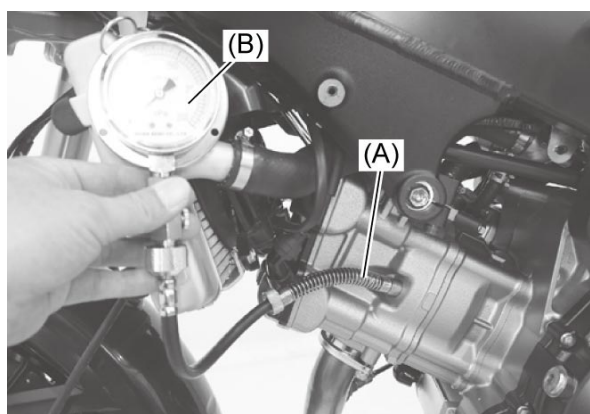
- **Before checking the engine for compression pressure, make sure that the cylinder head bolts are tightened to the specified torque values and the valves are properly adjusted.**
- **Make sure that the battery is in fully-charged condition.**

- 1) Warm up the engine.
- 2) Disconnect the all spark plug caps and remove each spark plug (Side).
- 3) Install the compression gauge and adaptor in the spark plug hole. Make sure that the connection is tight.

### Special Tool

(A): [09915-64512](#)

(B): [09915-63311](#)



- 4) Keep the throttle grip in the fully-opened position.



- 5) Press the starter button and crank the engine for a few seconds. Record the maximum gauge

reading as the cylinder compression.

- 6)** Repeat this procedure with the other cylinder.

**Compression pressure**

**Standard: 1000 – 1400 kPa (10 – 14 kgf/cm<sup>2</sup>, 142 – 199 psi)**

**Service limit: 800 kPa (8 kgf/cm<sup>2</sup>, 114 psi)**

**Compression pressure difference**

**Service limit: 200 kPa (2 kgf/cm<sup>2</sup>, 28 psi)**

**If compression pressure is less than the service limit, it is considered any of the following reasons:**

- Excessively worn cylinder walls
- Worn piston or piston rings
- Piston rings stuck in grooves
- Poor valve seating
- Ruptured or otherwise defective cylinder head gasket

**Overhaul the engine in the following cases:**

- Compression pressure in one of the cylinder is 800 kPa (8 kgf/cm<sup>2</sup>, 114 psi) or less.
- Compression pressures of all cylinders are 1000 kPa (10 kgf/cm<sup>2</sup>, 142 psi) or less.
- Compression pressure difference between 2 cylinders is more than 200 kPa (2 kgf/cm<sup>2</sup>, 28 psi).

- 7)** After checking the compression pressure, install the removed parts.