# 2. Compression

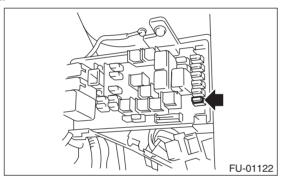
## A: INSPECTION

### **CAUTION:**

After warming-up, engine becomes very hot. Be careful not to burn yourself during measurement.

#### NOTE:

- Before checking the compression pressure, the compression condition of each cylinder can be confirmed as a guide by using the compression measurement mode in Subaru Select Monitor. <Ref. to EN(STI)(diag)-60, OPERATION, System Operation Check Mode.>
- In the compression measurement mode, the compression condition is judged by each cylinder speed. The high speed cylinder has low compression pressure and low speed cylinder has high compression pressure.
- 1) After warming-up the engine, turn the ignition switch to OFF.
- 2) Make sure that the battery is fully charged.
- 3) Remove the fuse of fuel pump from main fuse box.

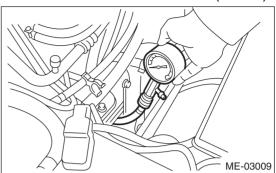


- 4) Start the engine and run it until it stalls.
- 5) After the engine stalls, crank it for five more seconds.
- 6) Turn the ignition switch to OFF.
- 7) Remove all spark plugs. <Ref. to IG(STI)-4, RE-MOVAL, Spark Plug.>
- 8) Depress the accelerator pedal to full throttle.
- 9) Check the starter motor for satisfactory performance and operation.

10) Install the compression gauge to the spark plug hole.

#### NOTE:

When using a screw-in type compression gauge, the screw should be less than 18 mm (0.71 in) long.



11) Crank the engine by starter motor and read the value when the needle of the compression gauge becomes stable.

#### NOTE:

- Perform at least two measurements per cylinder, and make sure that the values are correct.
- If the compression pressure is out of standard, check or adjust the pistons, valves and cylinders.

## Compression (fully open throttle):

Standard

981 — 1,177 kPa (10 — 12 kg/cm², 142 — 171 psi)

Difference between cylinders 49 kPa (0.5 kg/cm<sup>2</sup>, 7 psi), or less

12) After inspection, install the related parts in the reverse order of removal.