# 2. Compression

## A: INSPECTION

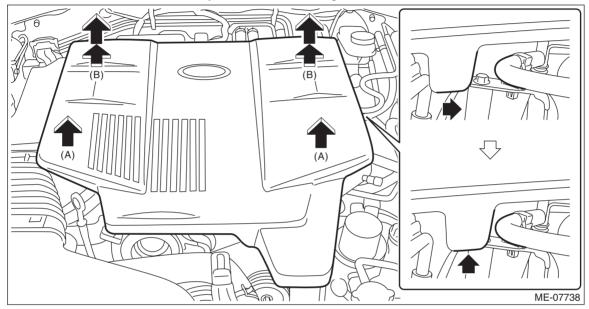
## **CAUTION:**

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

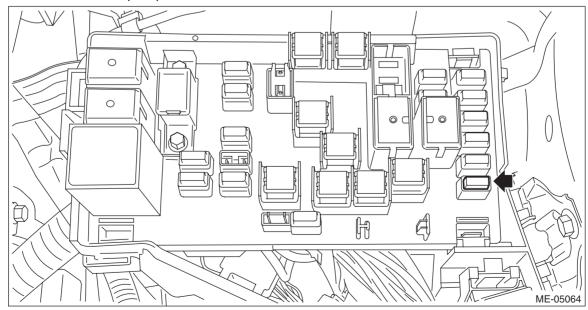
- 1) Turn the ignition switch to OFF.
- 2) Remove the collector cover. (HEV model)
  - (1) Carefully pull up the front of collector cover at two positions (A).
  - (2) Carefully pull up the rear of collector cover at two positions (B) while moving it backward.

#### NOTE:

Be careful not to contact the fuel delivery tube when moving the collector cover rearward.



- 3) After warming-up the engine, turn the ignition switch to OFF.
- 4) Make sure that the battery (12 volt auxiliary battery) is fully charged.
- 5) Check the starter motor for satisfactory performance and operation.
- 6) Remove the fuse of fuel pump from main fuse box.

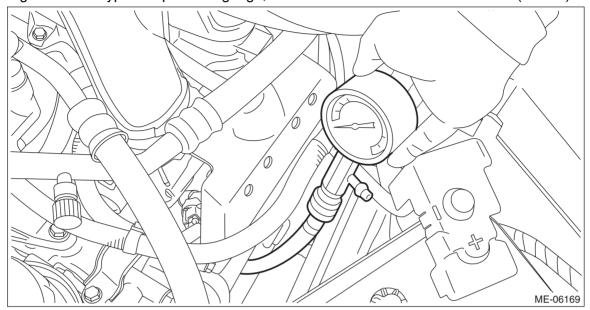


- 7) Start the engine and run it until it stalls.
- 8) After the engine stalls, crank it for five more seconds.

- 9) Turn the ignition switch to OFF.
- 10) Remove all spark plugs. <Ref. to IG(H4DO(w/o HEV))-4, REMOVAL, Spark Plug.>
- 11) Install the compression gauge to the spark plug hole.

#### NOTE:

When using a screw-in type compression gauge, the screw should be less than 25 mm (0.98 in) long.



- 12) Install the 12 volt engine restart battery. (HEV model) <Ref. to SC(H4DO(HEV))-42, 12 VOLT ENGINE RESTART BATTERY, INSTALLATION, Battery.>
- 13) Connect the battery ground terminal. <Ref. to NT-5, BATTERY, NOTE, Note.>
- 14) Turn the ignition switch to ON.
- 15) Depress the accelerator pedal to full throttle.
- 16) 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

 $1,050 - 1,400 \text{ kPa} (11 - 14 \text{ kg/cm}^2, 152 - 203 \text{ psi})$ 

Difference between cylinders

100 kPa (1 kg/cm<sup>2</sup>, 14 psi), or less

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