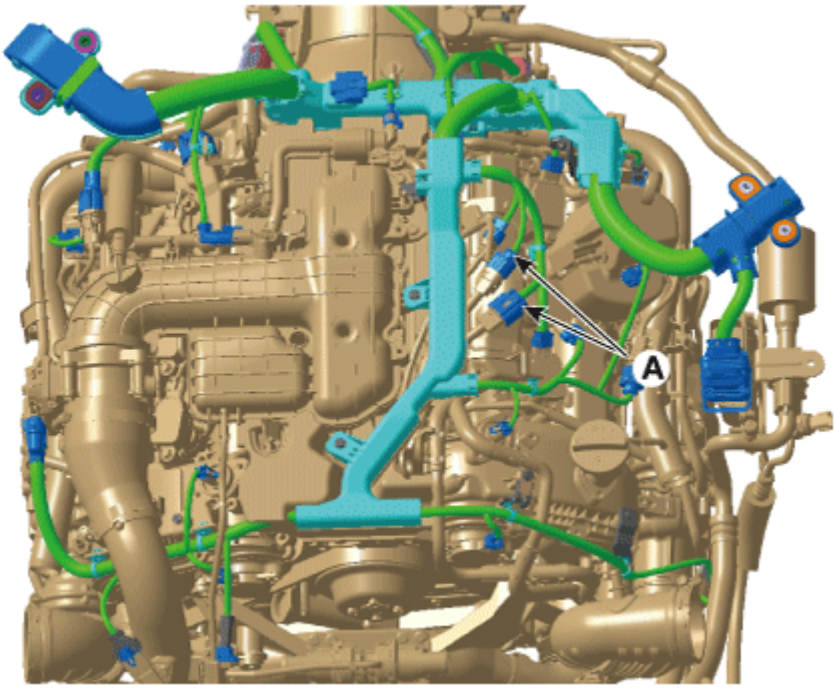
COMPRESSION PRESSURE INSPECTION

NOTICE

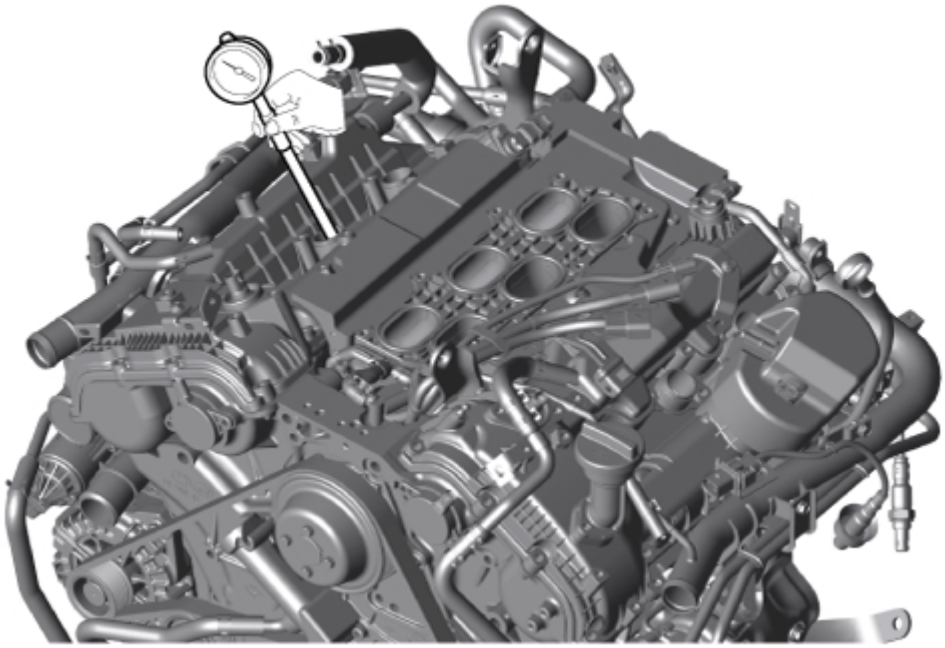
If there is lack of power, excessive oil consumption or poor fuel economy, measure the compression pressure.

1. Warm up the engine to the normal operating temperature [80 to -95°C (176 to -203°F)].
2. Disconnect the injector extension connector (A).



3. Remove the surge tank.
   (Refer to Intake and Exhaust System - "Surge Tank")
4. Remove the ignition coils.
   (Refer to Engine Electrical System - "Ignition Coil")
5. Remove the spark plugs.
   (Refer to Engine Electrical System - "Spark Plug")
6. Check cylinder compression pressure.
   (1) Insert a compression gauge into the spark plug hole.

English



(2) Crank the engine over 10 times to measure compression pressure.

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

(3) Repeat steps 1) to 3) for each cylinder.

> **NOTICE**
>
> This measurement should be taken as promptly as possible.

Compression pressure :
1,373 kPa (14.0 kgf/cm², 199 psi) (250 - 400 rpm)
Minimum pressure :
1226 kPa (12.5 kgf/cm², 178 psi)
Difference between each cylinder :
98 kPa (1.0 kg/cm², 14 psi) or less

(4) If the cylinder compression in 1 or more cylinders is low, pour a small amount of engine oil into the cylinder through the spark plug hole and repeat steps 1) to 3) for cylinders with low compression.

a. If adding oil helps the compression, it is likely that the piston rings and/or cylinder bore are worn or damaged.

b. If pressure stays low, there may be a sticking valve, an improper seating or leakage past the gasket.

7. Reinstall the spark plugs.
(Refer to Engine Electrical System - "Spark Plug")

8. Install the ignition coils.
(Refer to Engine Electrical System - "Ignition Coil")

9. Install the surge tank.
(Refer to Intake and Exhaust System - "Surge Tank")