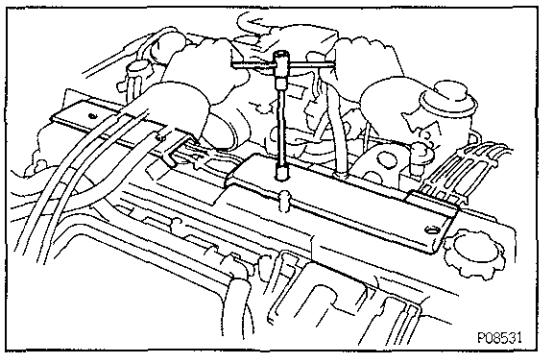
# COMPRESSION CHECK

EG27H-01

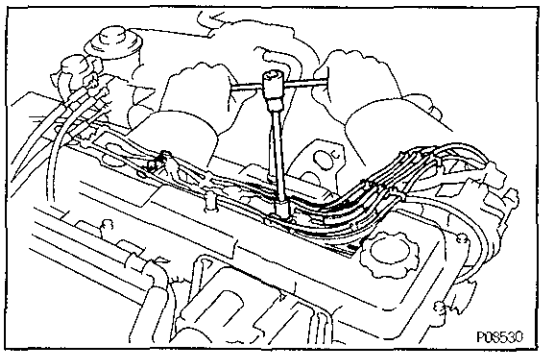
HINT: If there is lack of power, excessive oil consumption or poor fuel economy, measure the compression pressure.

1. **WARM UP AND STOP ENGINE**
Allow the engine to warm up to normal operating temperature.

2. **DISCONNECT DISTRIBUTOR CONNECTOR**

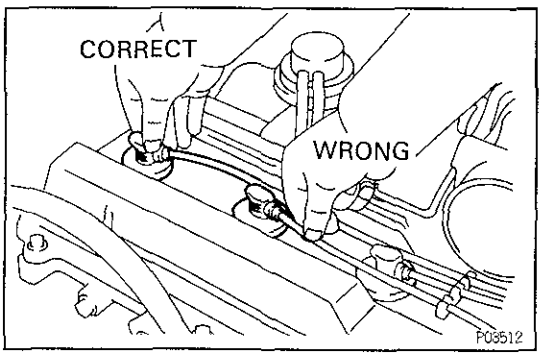



3. **REMOVE NO.2 AND NO.3 CYLINDER HEAD COVERS**
Remove the four bolts and head covers.

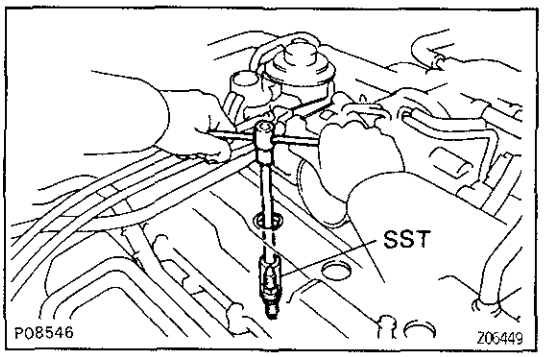



4. **DISCONNECT HIGH–TENSION CORDS FROM SPARK PLUGS**

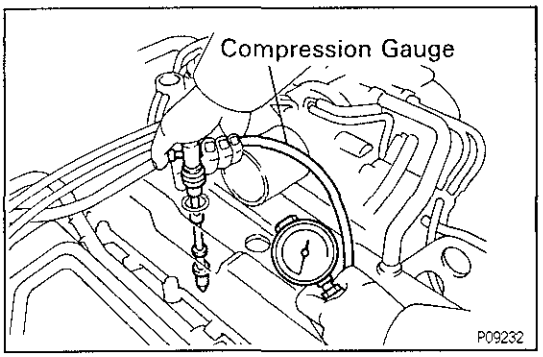
(a) Remove the two mounting bolts of the No.1 and No.2 cord clamps.




(b) Disconnect the high – tension cords at the rubber boot.
DO NOT pull on the cords.
**NOTICE: Pulling on or bending the cords may damage the conductor inside.**




5. **REMOVE SPARK PLUGS**
Using SST, remove the spark plug.
SST 09155–16100




EG

## 6. CHECK 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:**

**1,176 kPa (12.0 kgf/cm², 171 psi) or more 1FZ−FE**

**900 kPa (9.2 kgf/cm², 131 psi) or more 1FZ−F (Low octane)**

**1,030 kPa (10.5 kgf/cm², 149 psi) or more 1FZ−F (Others)**

**Minimum pressure:**

**883 kPa (9.0 kgf/cm², 128 psi) 1FZ−FE**

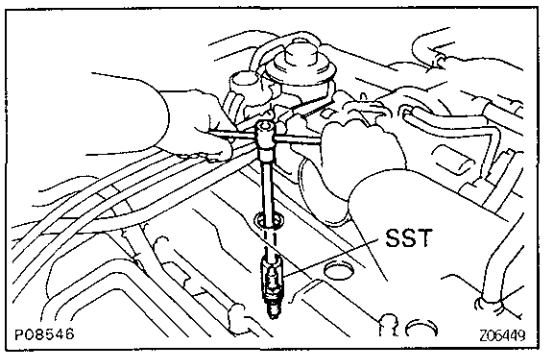
**785 kPa (8.0 kgf/cm², 114 psi) 1FZ−F**

**Difference between each cylinder:**

***98 kPa (1.0 kgf/cm², 14 psi) or less***

(e) If the cylinder compression in one or 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, chances are that the piston rings and/or cylinder bore are worn or damage.
- If pressure stays low, a valve may be sticking or seating is improper, or there may be leakage past the gasket.

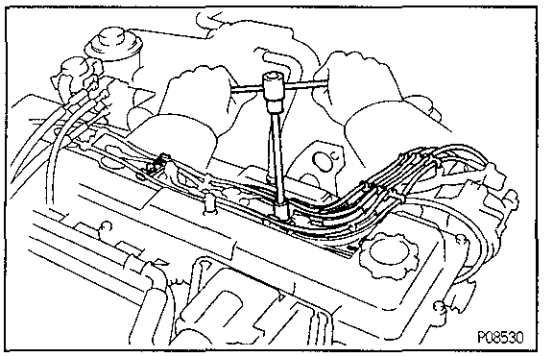



## 7. INSTALL SPARK PLUGS

Using SST, install the spark plug.

SST 09155−16100

**Torque: 20 N·m (200 kgf·cm, 14 ft·lbf)**

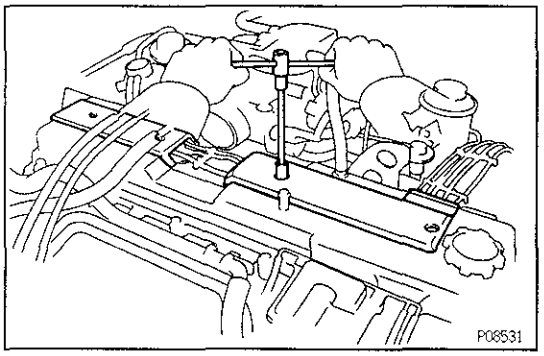



**8. RECONNECT HIGH–TENSION CORDS TO SPARK PLUGS**

(a) Reconnect the high–tension cords to the spark plugs.

(b) Install the No.1 and No.2 cord clamps with the two bolts.






**9. INSTALL NO.2 AND NO.3 CYLINDER HEAD COVERS**

Install the head covers with the four bolts.

**10. CONNECT DISTRIBUTOR CONNECTOR**