

### 3. Spark Plug

#### A: REMOVAL AND INSTALLATION

**CAUTION:**

All spark plugs installed on an engine, must be of the same heat range.

**Spark plug:**

**CHAMPION: RC10YC4**

**(Alternate)**

**NGK: BKR6E-11**

**NIPPONDENSO: K20PR-U11**

- 1) Remove spark plug cords by pulling boot, not cord itself.
- 2) Remove spark plugs.
- 3) When installing spark plugs on cylinder head, use spark plug wrench.

**Tightening torque (Spark plug):**

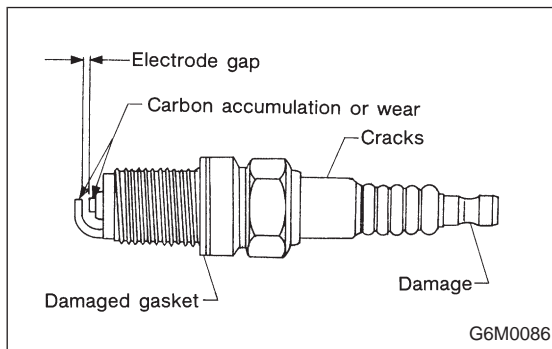
**$20.6 \pm 2.9$  N·m ( $2.10 \pm 0.30$  kg·m,  $15.19 \pm 2.14$  ft·lb)**

**CAUTION:**

The above torque should be only applied to new spark plugs without oil on their threads.

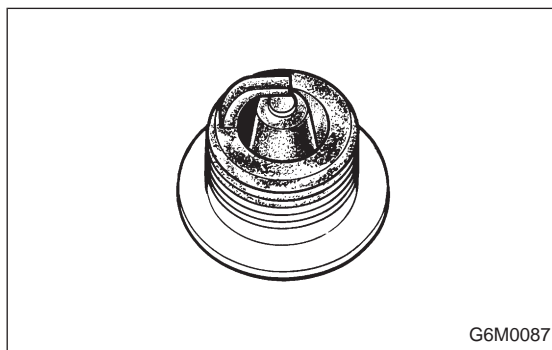
In case their threads are lubricated, the torque should be reduced by approximately 1/3 of the specified torque in order to avoid their over-stressing.

- 4) Connect spark plug cords.

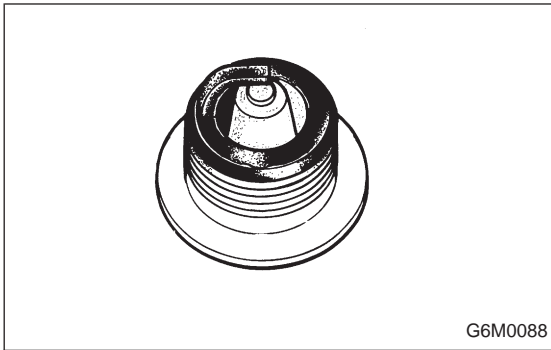


#### B: INSPECTION

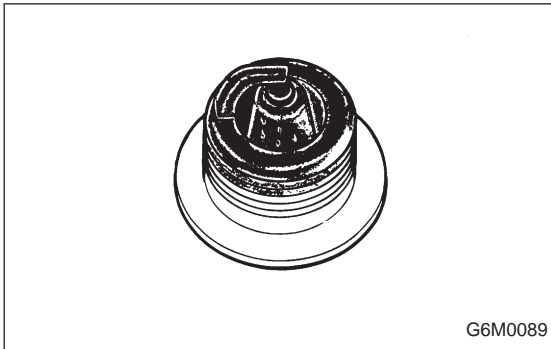
Check electrodes and inner and outer porcelain of plugs, noting the type of deposits and the degree of electrode erosion.



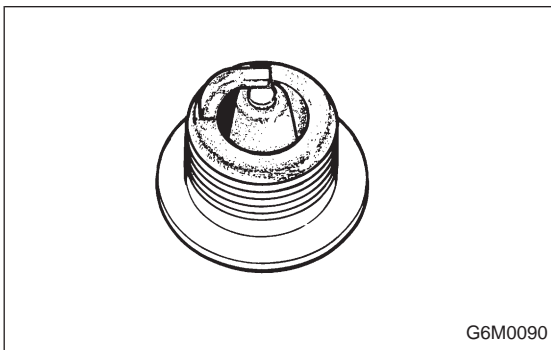
- 1) Normal  
Brown to grayish-tan deposits and slight electrode wear indicate correct spark plug heat range.



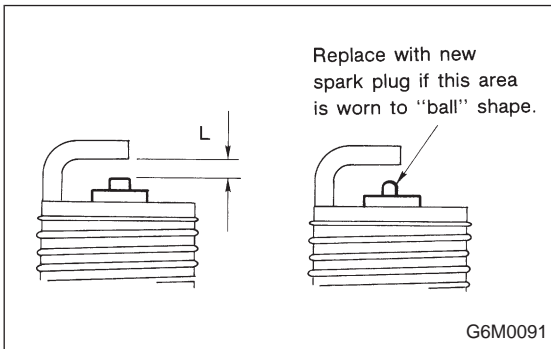
2) Carbon fouled  
 Dry fluffy carbon deposits on insulator and electrode are mostly caused by slow speed driving in city, weak ignition, too rich fuel mixture, dirty air cleaner, etc. It is advisable to replace with plugs having hotter heat range.



3) Oil fouled  
 Wet black deposits show excessive oil entrance into combustion chamber through worn rings and pistons or excessive clearance between valve guides and stems. If same condition remains after repair, use a hotter plug.



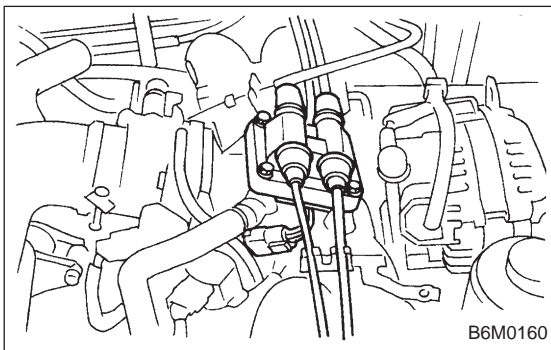
4) Overheating  
 White or light gray insulator with black or gray brown spots and bluish burnt electrodes indicate engine overheating. Moreover, the appearance results from incorrect ignition timing, loose spark plugs, wrong selection of fuel, hotter range plug, etc. It is advisable to replace with plugs having colder heat range.



**C: CLEANING AND REGAPPING**

Clean spark plugs in a sand blast type cleaner. Avoid excessive blasting. Clean and remove carbon or oxide deposits, but do not wear away porcelain. If deposits are too stubborn, discard plugs. After cleaning spark plugs, recondition firing surface of electrodes with file. Then correct the spark plug gap using a gap gauge.

**Spark plug gap: L**  
 1.0 — 1.1 mm (0.039 — 0.043 in)



**4. Ignition Coil**

**A: REMOVAL AND INSTALLATION**

- 1) Disconnect battery ground cable.
- 2) Disconnect connector from ignition coil.
- 3) Remove ignition coil.
- 4) Installation is in the reverse order of removal.

**CAUTION:**  
 Be sure to connect wires to their proper positions. Failure to do so will damage unit.