IGNITION COIL REMOVAL/INSTALLATION

1. Disconnect the negative battery cable.
2. Remove in the order indicated in the table.
3. Install in the reverse order of removal.

### IGNITION COIL REMOVAL/INSTALLATION

**Caution**
- Disconnecting the ignition coil and plug cap can tear the plug cap off and cause damage to the connecting part. Disconnect the ignition coil and plug cap only when each component needs to be replaced, and be careful not to tear and damage them.

<table>
<thead>
<tr>
<th>1</th>
<th>Connector</th>
</tr>
</thead>
</table>
| 2 | High-tension lead  
(See 01–18–3 HIGH-TENSION LEAD REMOVAL/INSTALLATION) |
| 3 | Ignition coil |
| 4 | Plug cap |
| 5 | Spring |
IGNITION SYSTEM

IGNITION COIL INSPECTION

Igniter
- Carry out spark test. (See 01–03A–60 Spark Test.) (See 01–03B–59 Spark Test.)

Ignition Coil Operation Inspection
1. Remove ignition coils, high-tension leads, and spark plugs.
2. Connect the ignition coil, high-tension lead, spark plug, and the battery as shown in the figure.

Caution
- When connecting the ignition coil, be sure to attach as a female terminal to each terminal. Otherwise, coil terminals may come into contact and the ignition coil could be damaged.

Note
- Use the high-tension lead and spark plug that function properly.

3. Verify that the spark plug produces a strong, pale spark when change the switch off to on.

Warning
- Do not hold the spark plug, high-tension lead, or ignition coil while inspecting the ignition coil. You may be subjected to a strong shock.

Note
- No.1 and No.4 cylinders and No.2 and No.3 cylinder are ignited simultaneously.

Secondary Coil Winding
1. Remove the ignition coil.
2. Measure the resistance from lead hole 1 to 4, and lead hole 2 to 3 using an ohmmeter.

• If not as specified, replace the ignition coil.

Specification
ZM 8.0—12.0 kilohms
FS 7.2—10.8 kilohms

Insulation Resistance of Case
1. Disconnect the high-tension lead. (See 01–18–3 HIGH-TENSION LEAD REMOVAL/INSTALLATION.)
2. Disconnect the ignition coil connector.
3. Measure the insulation resistance from terminal 1A to ignition coil case, and terminal 2A to ignition coil case using an ohmmeter.

• If not as specified, replace the ignition coil.
IGNITION SYSTEM

Specification
Above 10 megohms

Caution
- The high-tension leads must be reinstalled to their original positions. Incorrect installation can damage the leads and cause power loss, and negatively affect the electronic components.

HIGH-TENSION LEAD REMOVAL/INSTALLATION

1. Measure the resistance of the high-tension leads using an ohmmeter.
- If not as specified, replace the high-tension leads.

<table>
<thead>
<tr>
<th>High-tension lead</th>
<th>Engine type</th>
<th>(kilohm)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ZM</td>
<td>FS</td>
</tr>
<tr>
<td>No.1 lead</td>
<td>3.3—7.8</td>
<td>5.6—12.1</td>
</tr>
<tr>
<td>No.3 lead</td>
<td>2.9—6.9</td>
<td>1.9—4.0</td>
</tr>
</tbody>
</table>

HIGH-TENSION LEAD INSPECTION