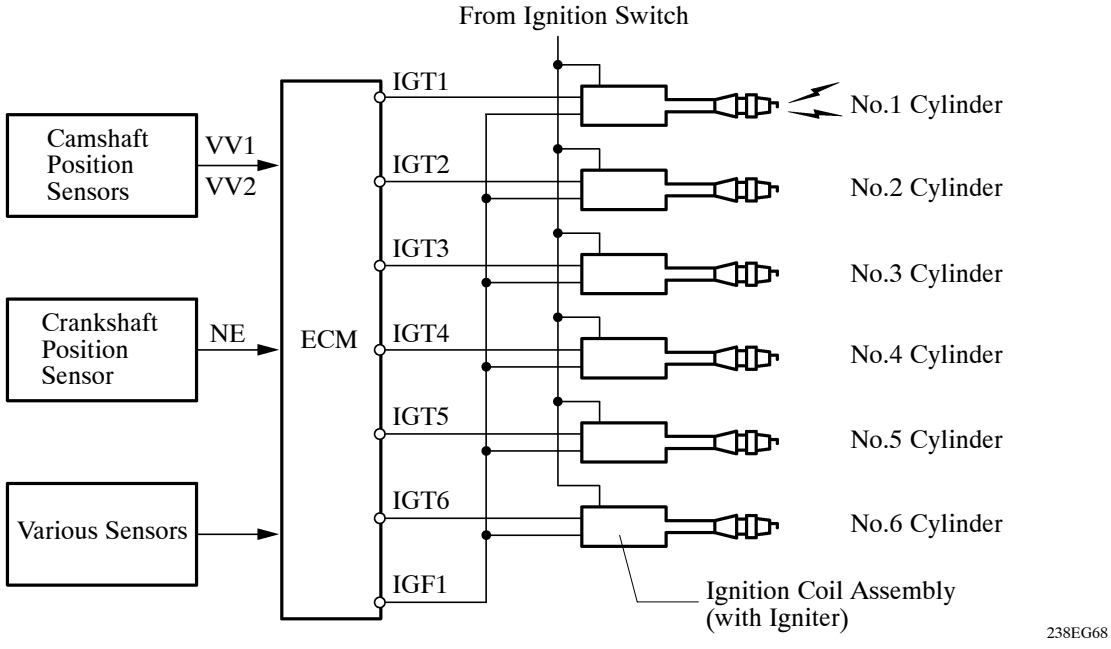
■IGNITION SYSTEM

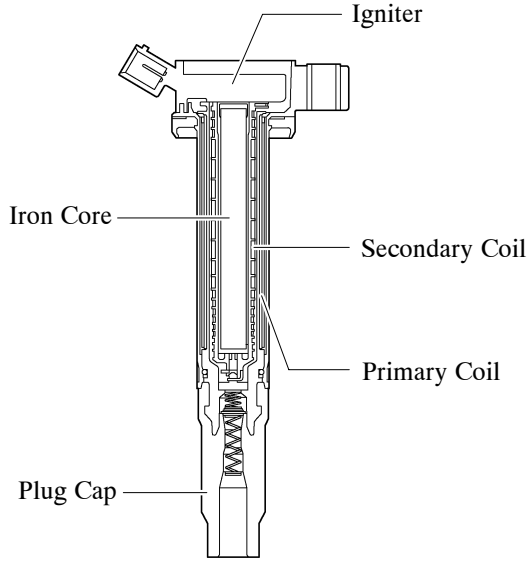
1. General

A DIS (Direct Ignition System) is used. The DIS improves ignition timing accuracy, reduces high-voltage loss, and enhances the overall reliability of the ignition system by eliminating the need for a distributor. The DIS is an independent ignition system which has one ignition coil assembly (with igniter) for each cylinder.



2. Ignition Coil Assembly

The DIS provides 6 ignition coil assemblies, one for each cylinder. The spark plug caps, which provide contact to spark plugs, are integrated with the ignition coil assembly. Also, an igniter is enclosed to simplify the system.



Ignition Coil Assembly Cross Section

3. Spark Plug

- Long-reach type spark plugs are used. This type of spark plugs allows the area of the cylinder head sub-assembly that receive the spark plugs to be made thick. Thus, the water jacket can be extended near the combustion chamber, which contributes to cooling performance.
- Iridium-tipped spark plugs are used to achieve a 120000 miles (192000 km) maintenance interval. By making the center electrode of iridium, it is possible to achieve superior ignition performance and durability when compared to platinum-tipped spark plugs.

