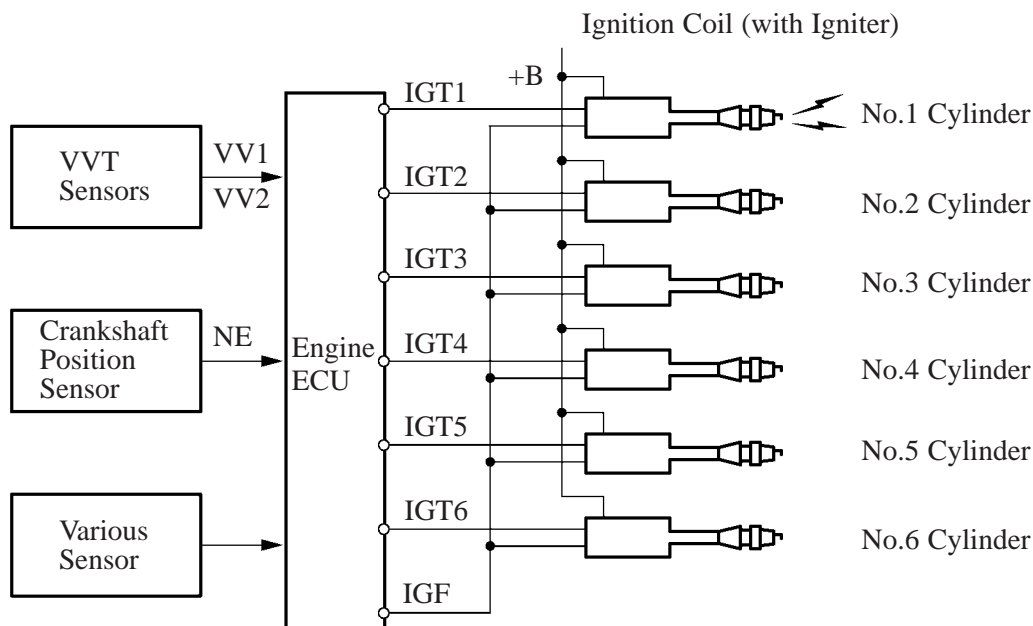


## ■ IGNITION SYSTEM

### 1. General

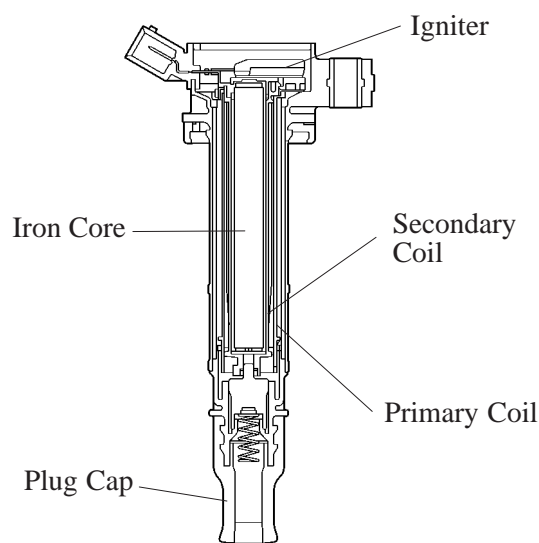
A DIS (Direct Ignition System) is used in the 1GR-FE engine. The DIS improves the ignition timing accuracy, reduces high-voltage loss, and enhances the overall reliability of the ignition system by eliminating the distributor. The DIS in this engine is an independent ignition system, which has one ignition coil for each cylinder.



238EG68

### 2. Ignition Coil

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

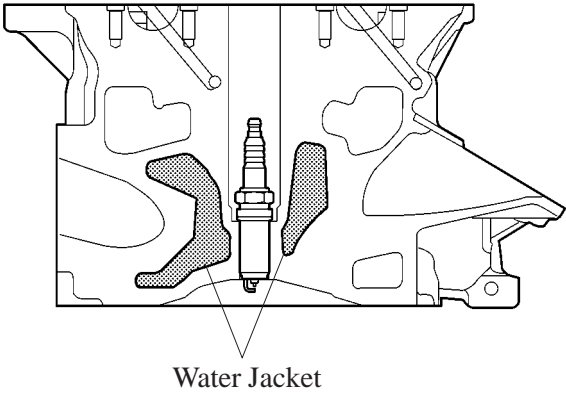
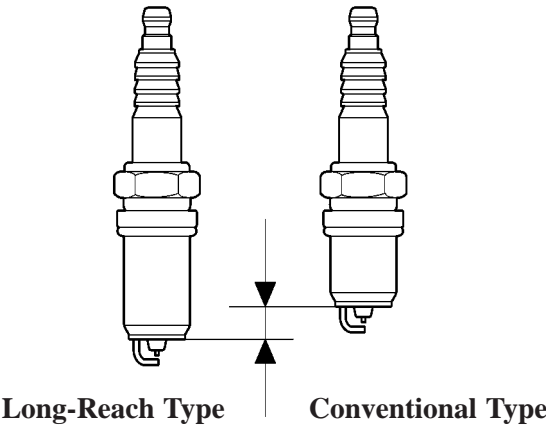


**Ignition Coil Cross Section**

238EG69

3. Spark Plug

Long-reach type spark plugs have been adopted. This type of spark plugs allows the area of the cylinder head to receive the spark plugs to be made thick. Thus, the water jacket can be extended near the combustion chamber, which contributes to cooling performance.



238EG46

► Specifications ◀

DENSO	K20HR-U11
NGK	LFR6C-11
Plug Gap	1.0 – 1.1 mm (0.0394 – 0.0433 in.)