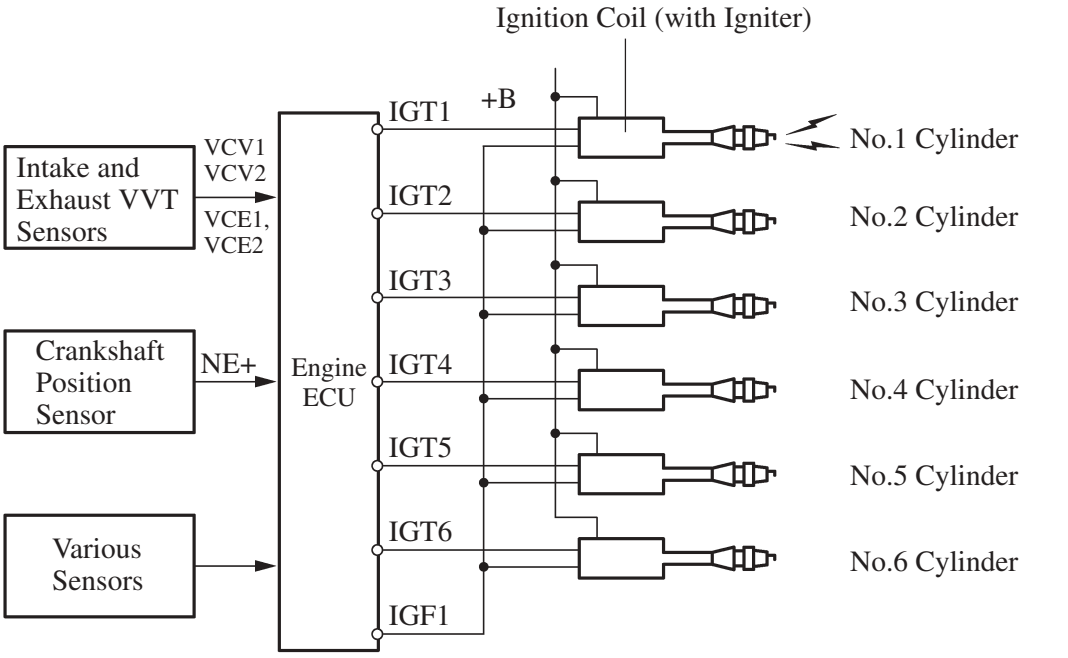
■IGNITION SYSTEM

1. General

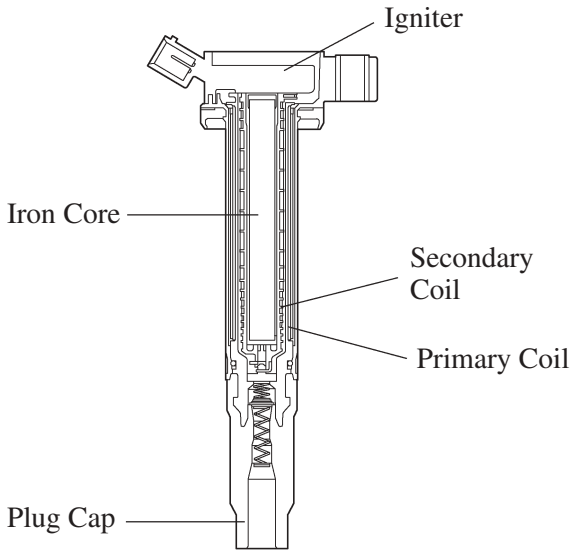
A DIS (Direct Ignition System) is used. The DIS improves the ignition timing accuracy, reduces high-voltage loss, and enhances the overall reliability of the ignition system by eliminating the distributor.The DIS is an independent ignition system which has one ignition coil (with igniter) for each cylinder.



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.

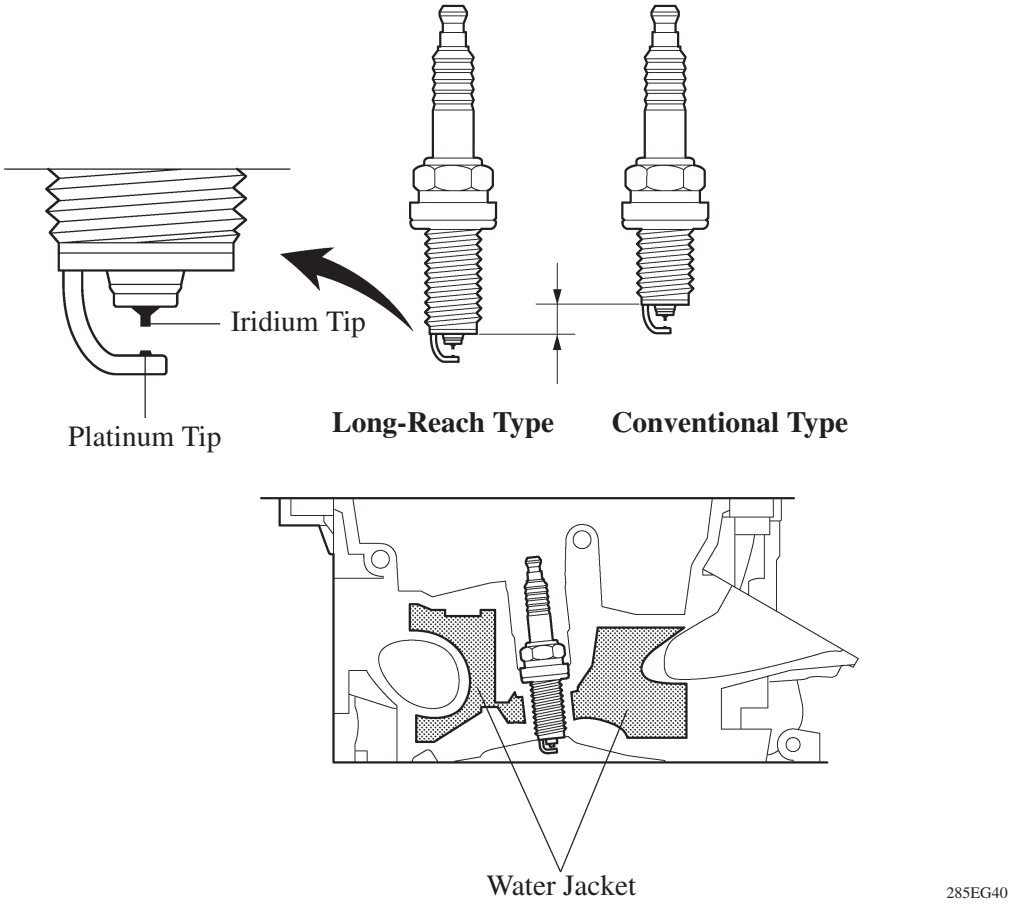


Ignition Coil Cross Section

285EG39

3. Spark Plug

- Long-reach type spark plugs are used. 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.
- Iridium-tipped spark plugs are used to achieve a 193,000 km (120,000 miles) maintenance interval. By making the center electrode of iridium, the superior ignition performance as platinum-tipped spark plugs is achieved and durability has been increased.



▶ Specifications ◀

Maker	DENSO
Type	FK20HR11
Plug Gap	1.0 – 1.1 mm (0.0394 – 0.043 in.)

■CHARGING SYSTEM

- As on the 2GR-FE engine model, a compact and lightweight segment conductor type alternator (SE0 type) that generates a high amperage output in a highly efficient manner is used as standard equipment.
- An alternator pulley with a clutch is used.
- For details of this alternator, refer to 2AZ-FE Engine Charging System on page EG-27.

■STARTING SYSTEM

- As on the 2GR-FE engine model, a compact and lightweight PS (Planetary reduction - Segment conductor motor) type starter (PS1.7 type) is used as standard equipment.
- For details of this stator, refer to 2AZ-FE Engine Starting System on page EG-29.