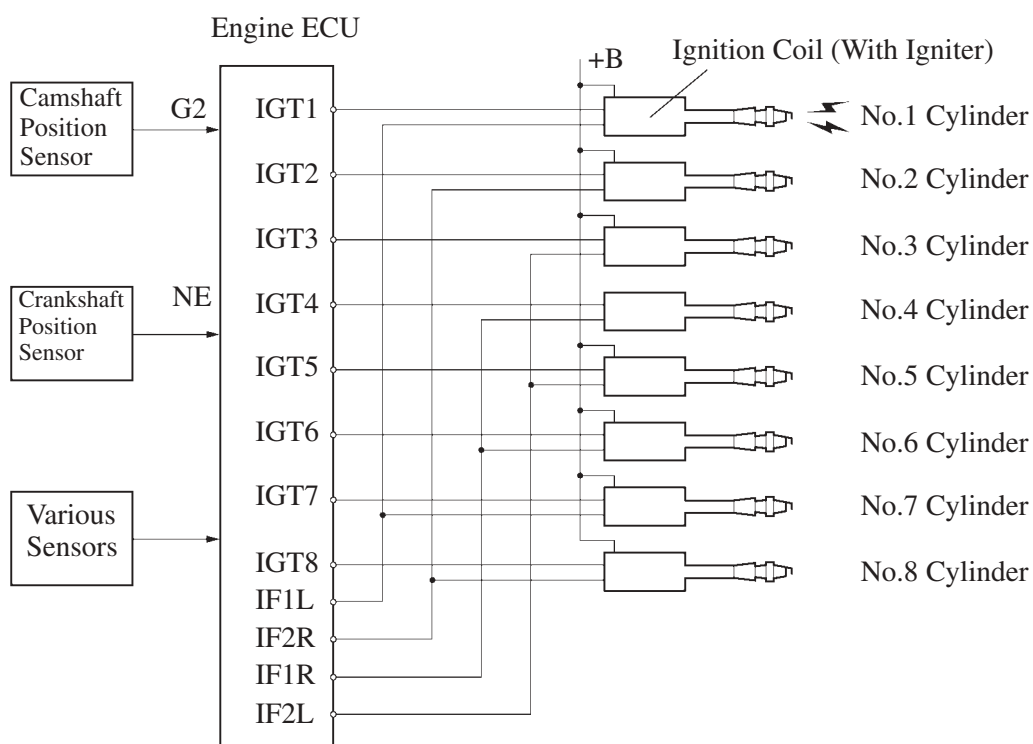


■ IGNITION SYSTEM

1. General

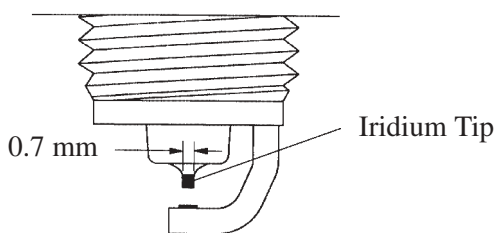
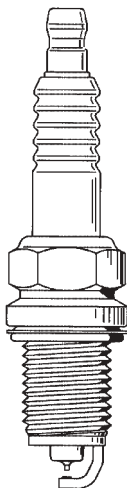
- A DIS (Direct Ignition System) has been adopted. The DIS improves the ignition timing accuracy, reduces high-voltage loss, and enhances the overall reliability of the ignition system by eliminating the distributor. The DIS in this engine is an independent ignition system which has one ignition coil (with igniter) for each cylinder.
- Iridium-tipped spark plugs have been adopted.
- In contrast to the previous 1UZ-FE engine on the LS400, compact and lightweight ignition coils with an optimized construction have been adopted in the new 3UZ-FE engine on the GS430.



188EG62

2. Spark Plug

Iridium-tipped spark plugs have been adopted to improve ignition performance while maintaining the same level of durability of the platinum-tipped spark plugs.



151EG39

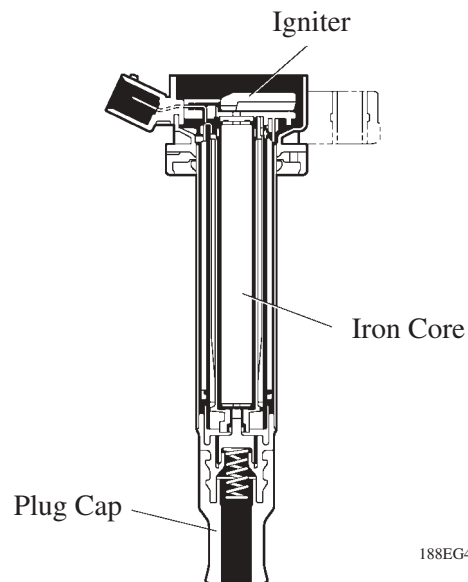
► Recommended Spark Plugs ◀

DENSO	SK20R11
NGK	IFR6A11
Plug Gap	1.0 – 1.1 mm (0.0394 – 0.043 in.)

3. Ignition Coil (with Igniter)

The DIS provides 8 ignition coils, one for each cylinder. The spark plug caps, which provide contact to the spark plugs, are integrated with an ignition coil. Also, an igniter is enclosed to simplify the system.

However, in contrast to the previous 1UZ-FE engine on the LS400, compact and lightweight ignition coils with an optimized construction have been adopted in the new 3UZ-FE engine on the GS430.



188EG41

Ignition Coil Cross Section