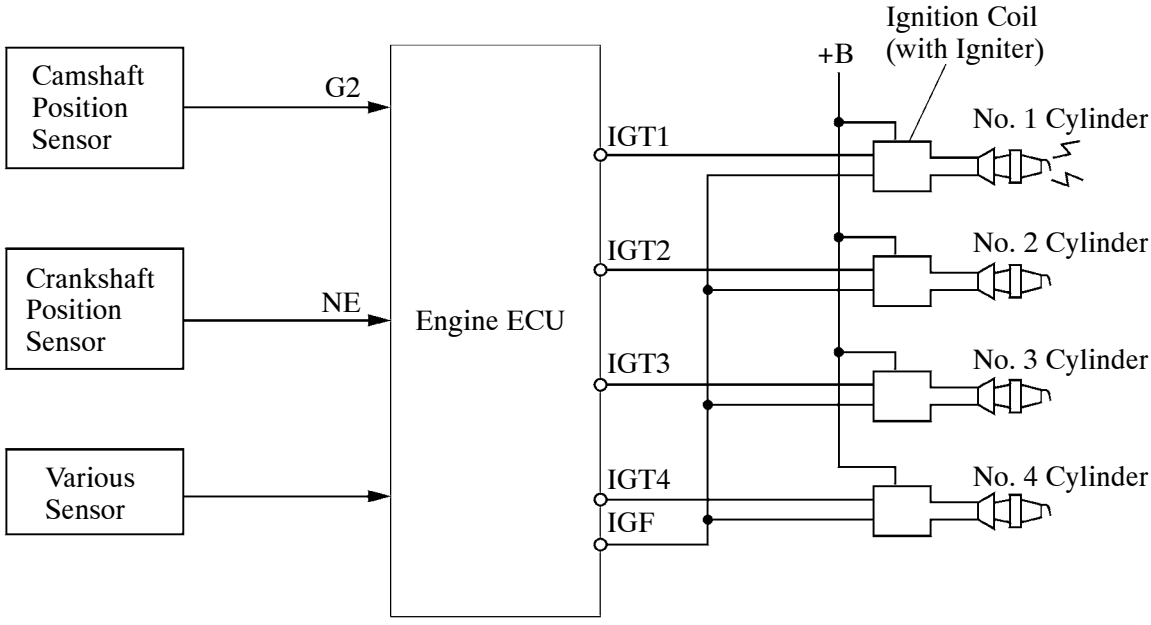
10. Ignition System

General

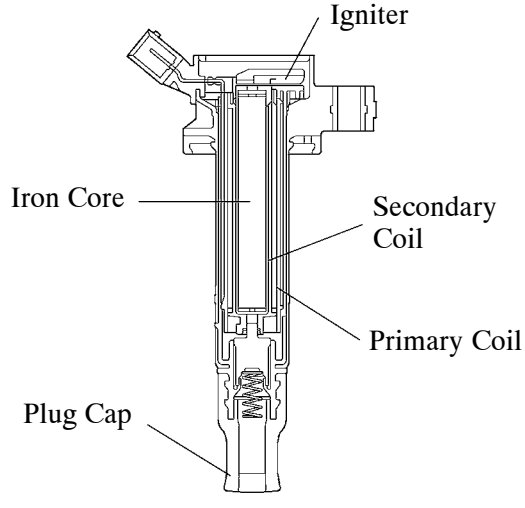
A DIS (Direct Ignition System) is used. The DIS improves the ignition timing accuracy, reduces high-voltage loss, and enhances the overall reliability of the ignition system by eliminating the distributor. The DIS in this engine is an independent ignition system, which has one ignition coil for each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



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Ignition Coil

The DIS is provided with 4 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.

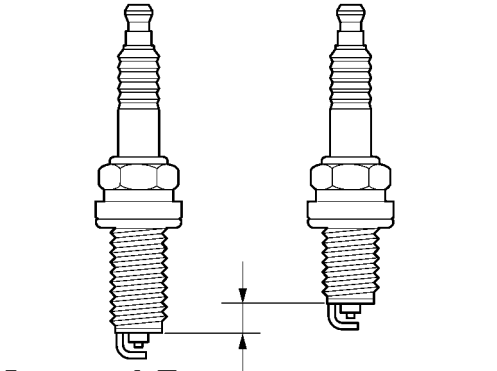


Ignition Coil Cross Section

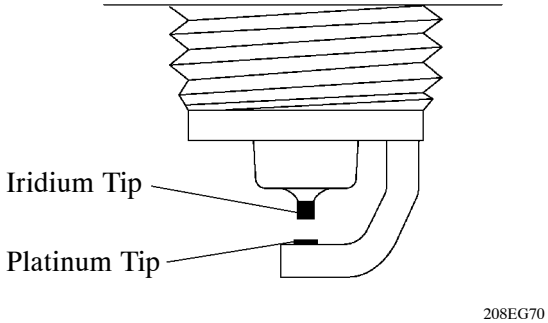
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Spark Plug

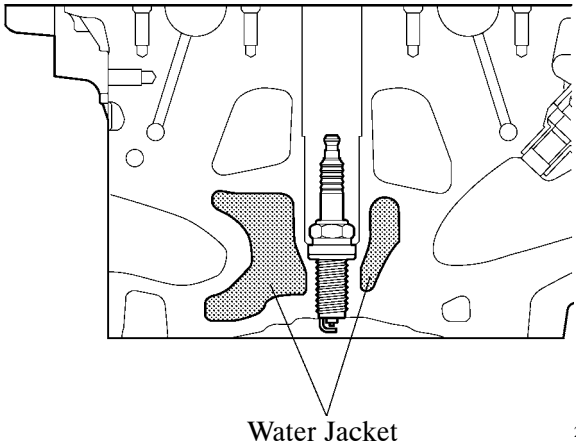
- Long-reach type spark plugs are used. This type of spark plugs allow the area of the cylinder head to receive the spark plugs to be made thick. Thus, the water jacket near the combustion chamber can be extended, which contributes to cooling performance.
- On the unleaded gasoline models, iridium-tipped spark plugs are used to realize 100,000 km (62,140 mile) maintenance-free operation. By making the center electrode of iridium, the same ignition performance as for a platinum-tipped spark plug has been achieved and further improvement in durability has been realized.



Long-reach Type **Conventional Type**



Iridium-tipped Spark Plug



▶ Specifications ◀

Engine Type	Unleaded Gasoline Engine	Leaded Gasoline Engine
DENSO	SK20HR11	K20HR-U11
NGK	ILFR6C11	LFR6C11
Plug Gap	1.1 mm (0.04 in.)	