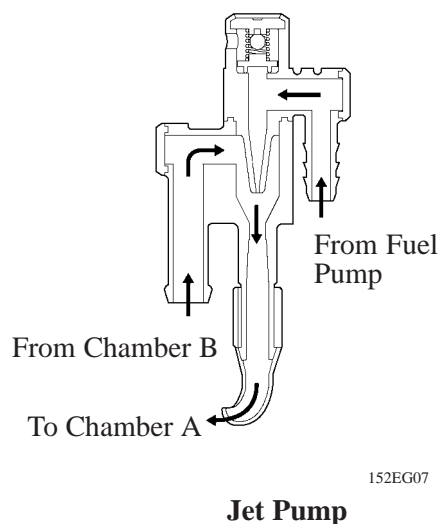
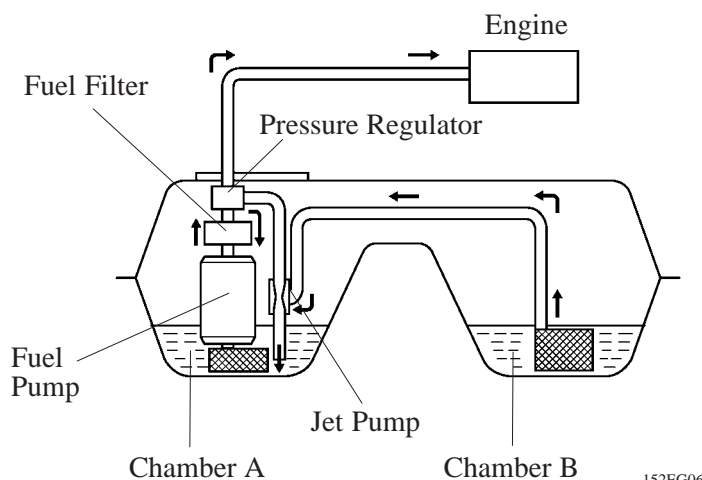


4. Jet Pump

A jet pump is adopted in the fuel tank. Since the propeller shaft is located below its center bottom, the fuel tank of the GS300 is shaped as indicated below.

A fuel tank with such a shape tends to cause the fuel to be dispersed into both chamber A and chamber B when the fuel level is low, stopping the fuel in chamber B from being pumped out. To prevent this from occurring, a jet pump has been provided to transfer the fuel from chamber B to chamber A.

This is accomplished by utilizing the flow of the fuel, so that the vacuum created by the fuel, as it passes through the venturi is used to suck the fuel out of chamber B and send it to chamber A.

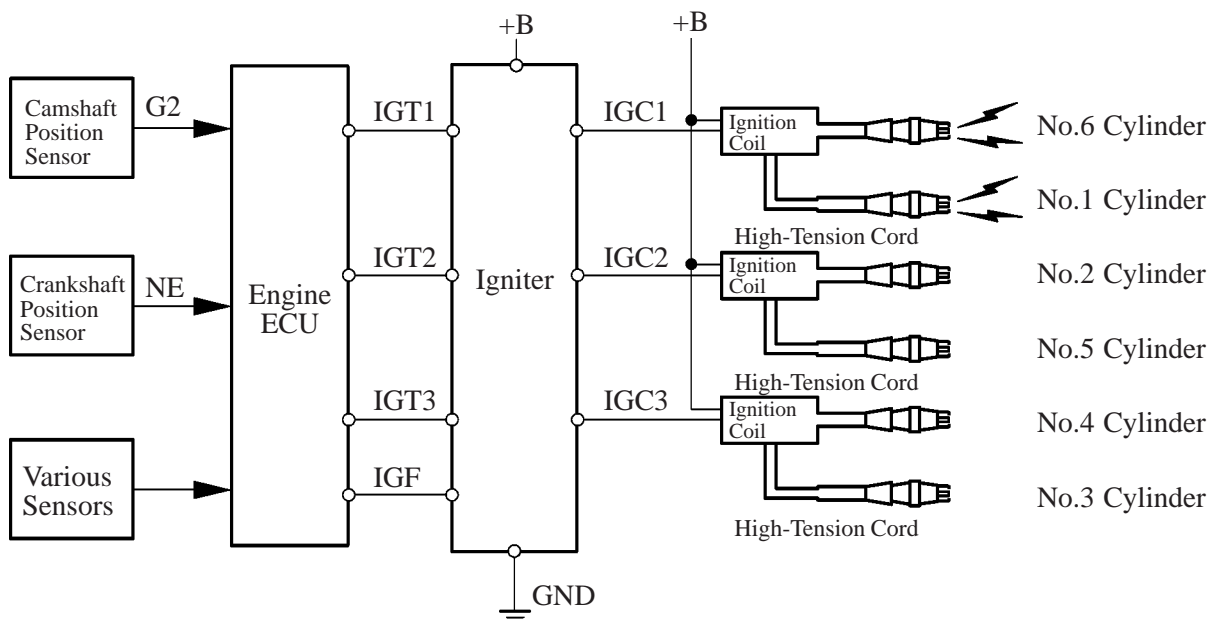


IGNITION SYSTEM

1. General

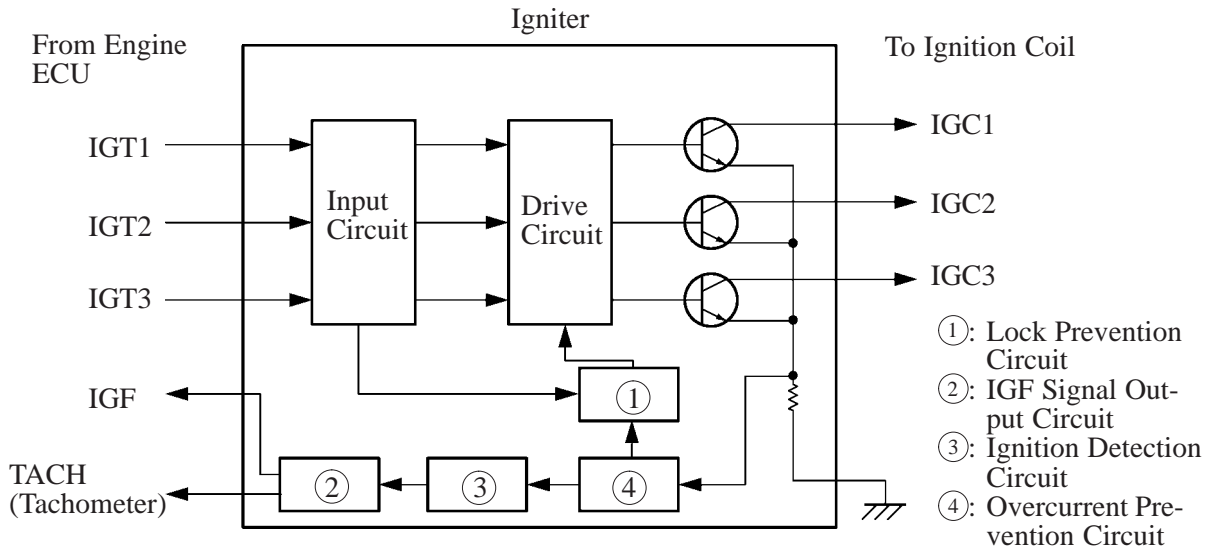
A DIS (Direct Ignition System) has been adopted in the new 2JZ-GE engine. The DIS improves the ignition timing accuracy, reduces high-voltage loss and enhances the overall reliability of the ignition system by eliminating the distributor.

The DIS in new 2JZ-GE engine is a 2-cylinder simultaneous ignition system which ignites 2-cylinders simultaneously with one ignition coil.



2. Igniter

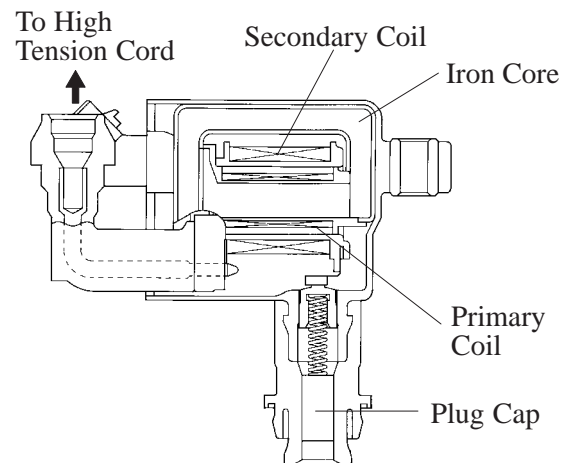
The internal system diagram of the igniter is shown below. A characteristic of this igniter is that it contains the 3 power transistors as illustrated. Based on the IGT signals input for each cylinder the drive circuit activates the respective power transistors to control the primary ignition current (IGC) for all the ignition coils. At the same time, the igniter also sends an ignition confirmation signal (IGF) as a fail-safe function to the engine ECU.



150EG12

3. Ignition Coil

The DIS system of the 2JZ-GE engine consists of 3 sets of ignition coils integrated with plug caps and with the high-tension cords attached directly onto the ignition coil.

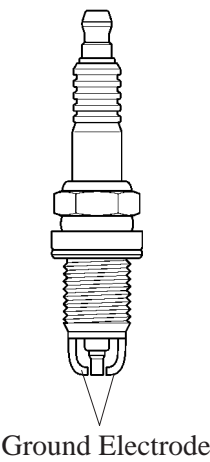


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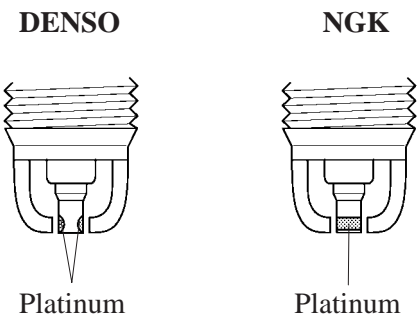
Ignition Coil Cross Section

4. Spark Plug

Along with the adoption of the DIS, twin-ground electrode spark plugs have been adopted. The models for Europe and Australia have adopted the platinum-tipped spark plugs.



► Platinum Tipped Spark Plugs ◀



143EG09

► Recommended Spark Plugs ◀

	Europe and Australia	G.C.C. Countries
DENSO	PK20TR11	K20TR11
NGK	BKR6EKP11	BKR6EKB11
Plug Gap	1.0 – 1.1 mm (0.039 – 0.043 in.)	