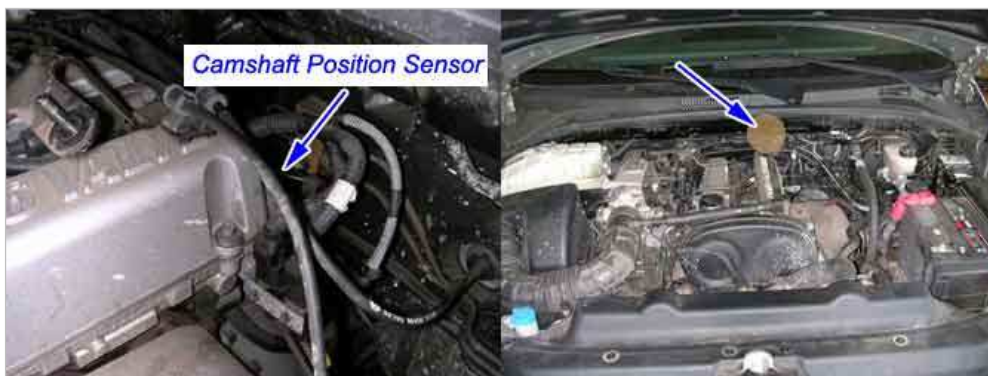


### Component Location



### Troubleshooting Hints

#### Fault Sources

1. Open or short in signal, ground or power supply circuit
2. Loose contact or resistance in the connections
3. Misadjust crankshaft and camshaft pulley position
4. Defective camshaft position sensor

#### Fault Symptoms

1. Bad fuel consumption
2. Insufficient power when driving

### DTC Detecting Condition

DTC Strategy	Enable Conditions	Threshold Value	Diagnosis time
change in output voltage ( $\Delta V_{cam}$ ) is monitored	Engine running condition	$\Delta V_{cam} = 0$	Continuous

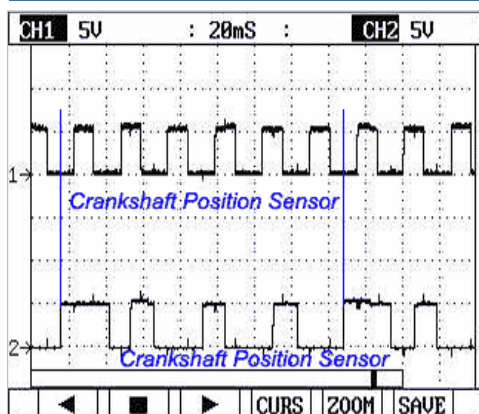
### Description

The Camshaft Position (CMP) sensor senses the Top Dead Center (TDC) point of the #1 cylinder in the compression stroke. The CMP sensor signal allows the Engine Control Module (ECM) to determine the fuel injector sequence starting point. The CMP sensor consists of the following components: 1) Trigger rotor, 2) Hall detector. The trigger rotor spins at the same speed as the camshaft. The ECM supplies 5V voltage to the hall detector. When the opening in the trigger rotor is opposite the hall detector this voltage will be grounded, and the output signal will be 0V. When the hall detector is shielded from the magnet, the voltage is not affected and the output signal will be 5V

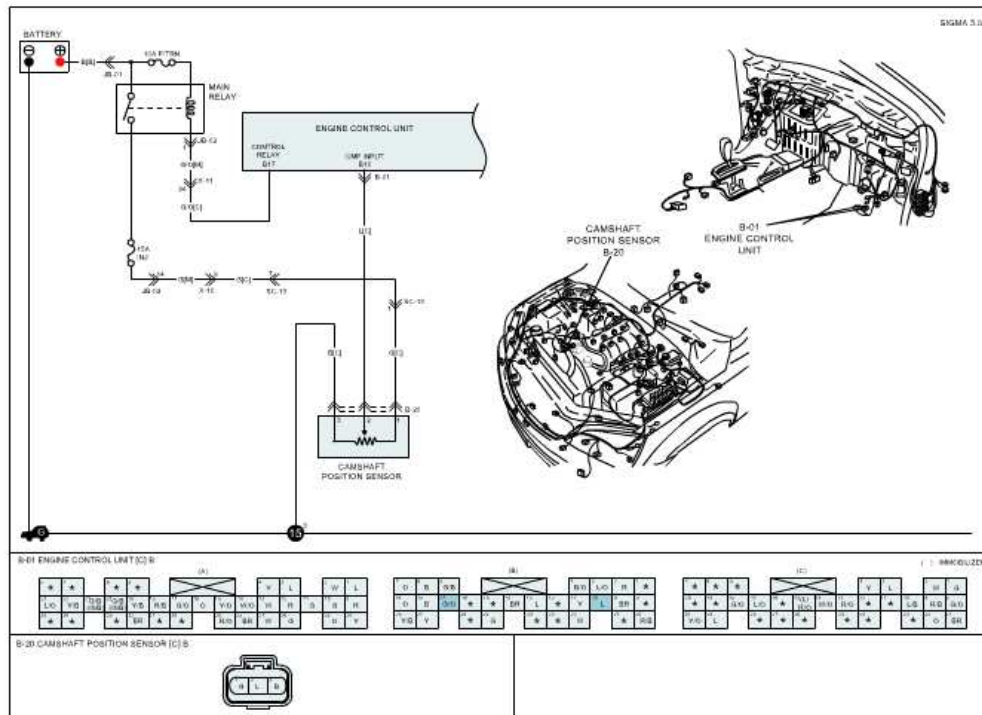
Check the following conditions when the DTC is set:

Open or short in signal, ground or power supply circuit, Loose contact or resistance in the connections, Misadjust crankshaft and camshaft pulley position or Defective camshaft position sensor

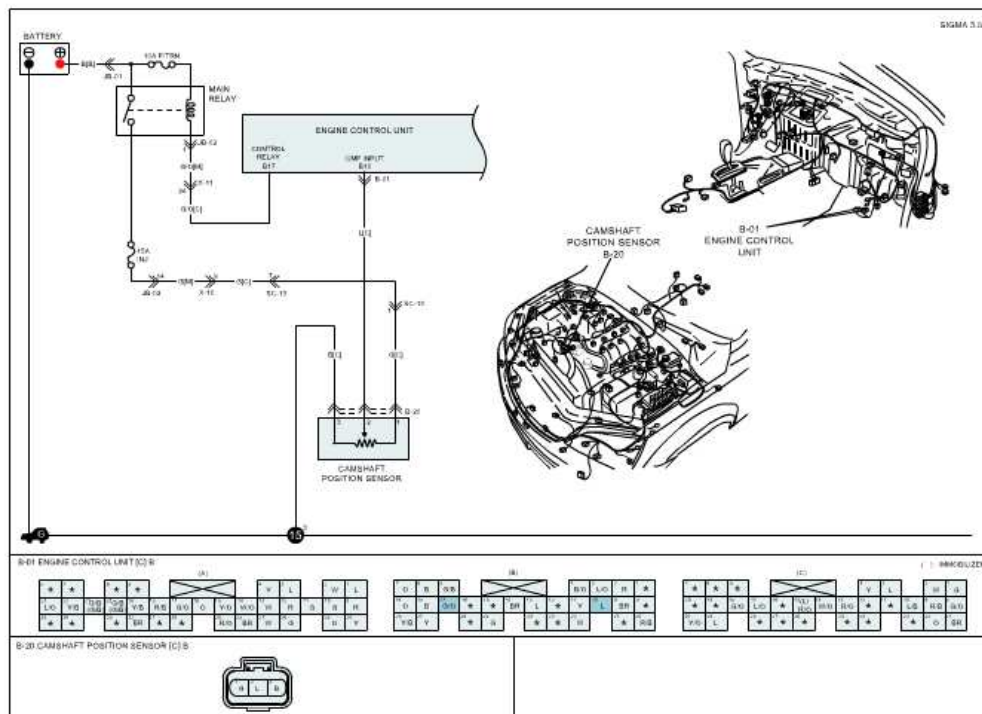
### Signal Waveform



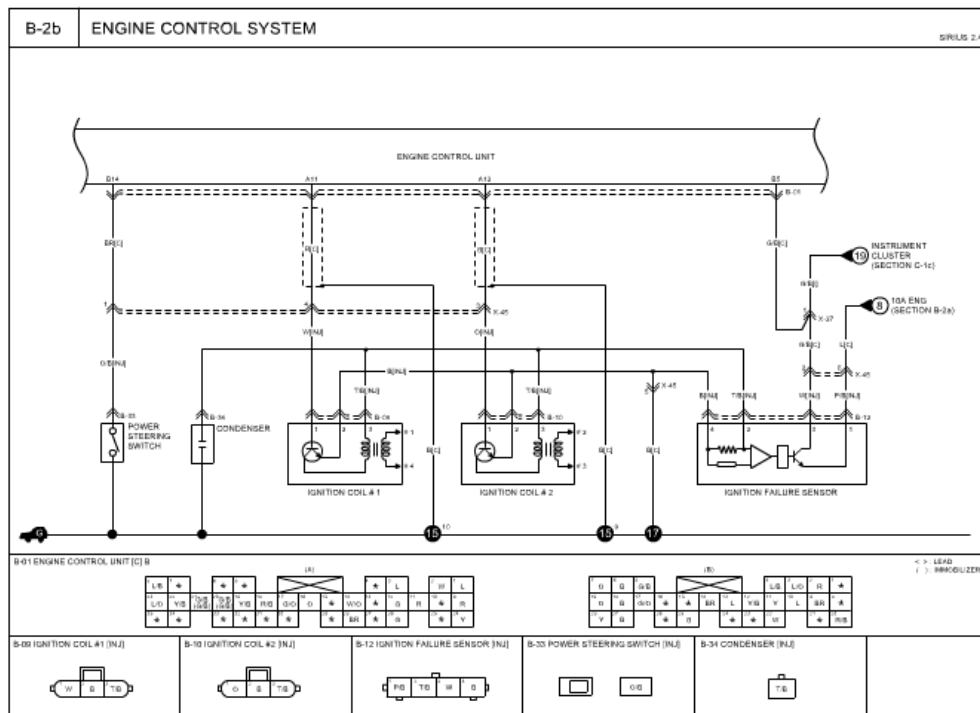
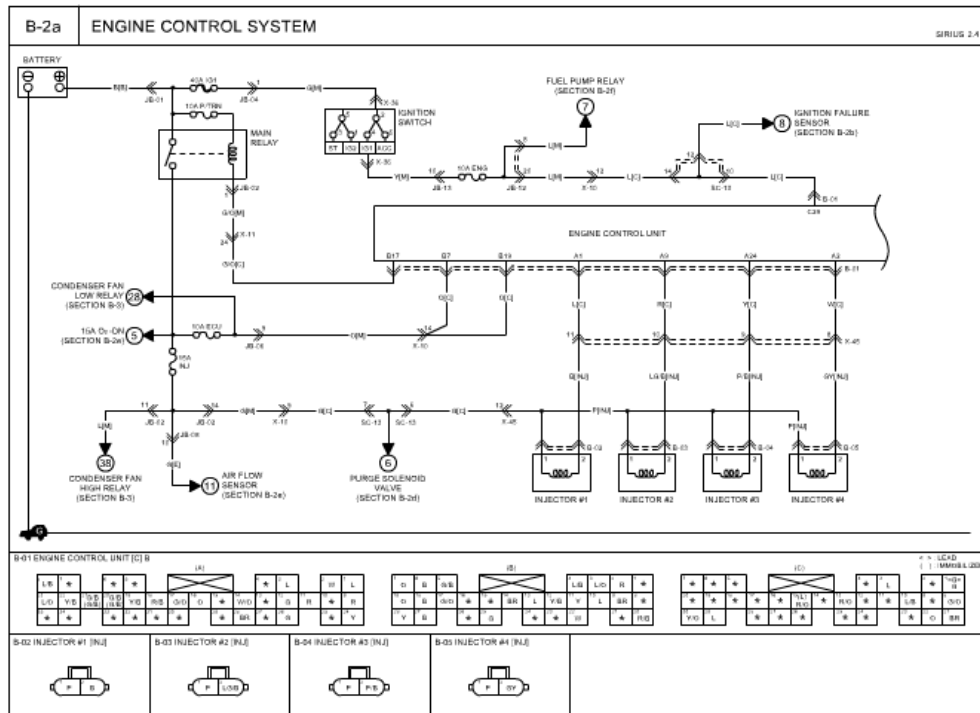
### Schematic Diagram

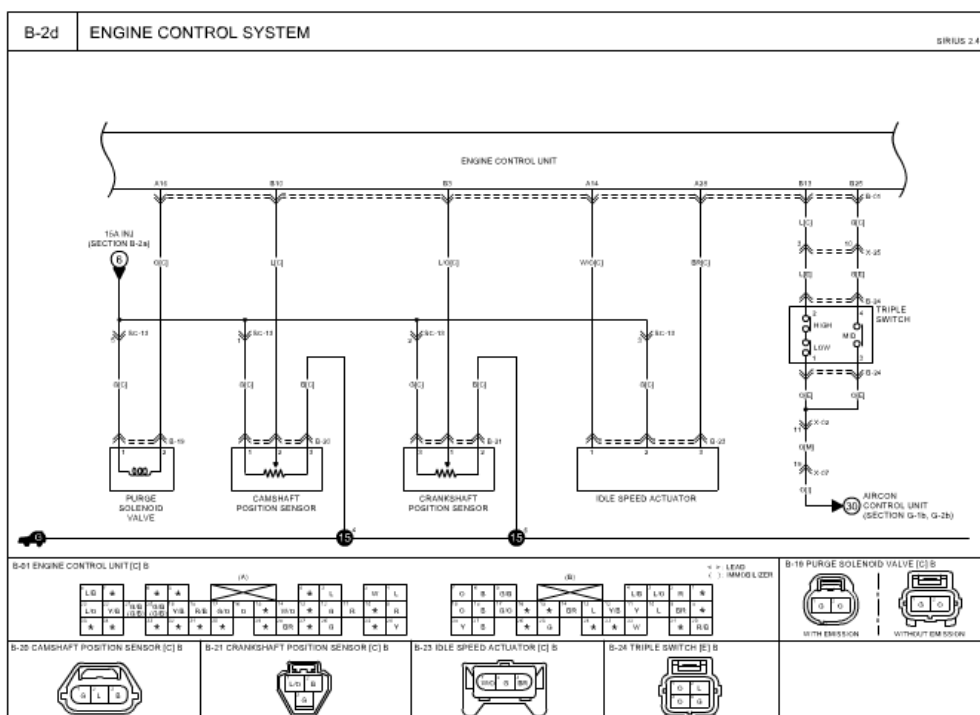
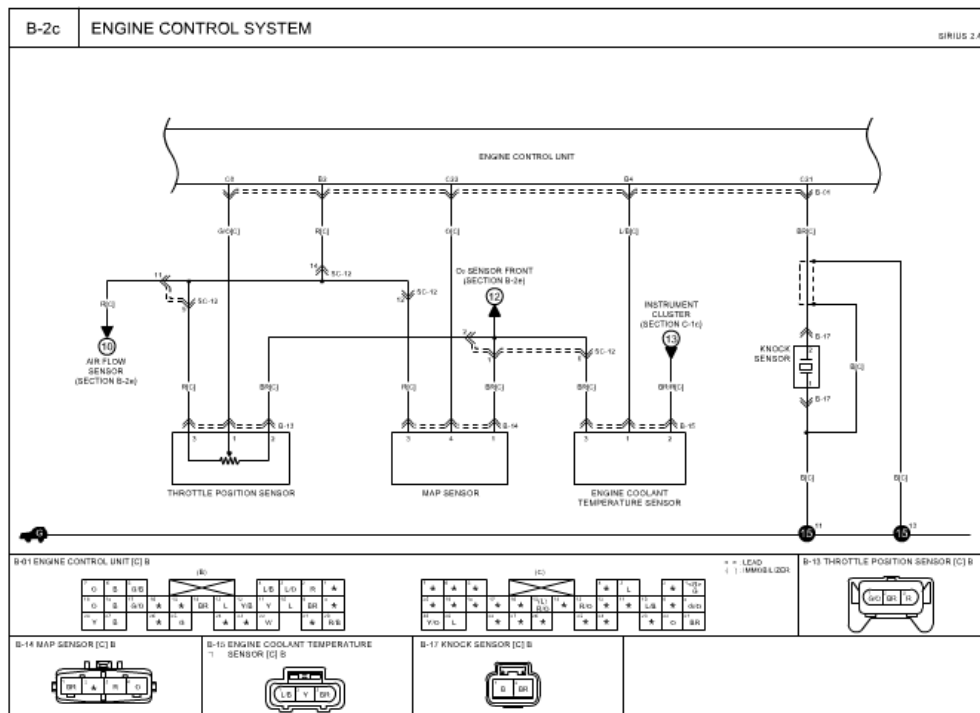


Schematic Diagram



Full Circuit





## G 2.4 DOHC > Engine Ledged All > P0340 Camshaft Position Sensor A Circuit Malfunction (Bank 1) > General Description

