

Camshaft Position Sensor

- This engine uses an electromagnetic pickup sensor that provides a high level of detection accuracy. When the camshaft rotates, the air gap between the protrusion on the timing rotor and the camshaft position sensor changes. This causes the magnetic flux that passes through the coil of the camshaft position sensor to increase and decrease, causing the coil to generate an electromotive force. This electromotive force generates voltage in opposing directions, depending on whether the protrusion of the timing rotor approaches the camshaft position sensor or withdraws from the sensor. Thus, the voltage appears in the form of alternating current voltage.
- The camshaft position sensor is mounted on the left bank cylinder head. To detect the camshaft position, a protrusion that is provided on the timing pulley is used to generate 1 pulse for every 2 revolution of the crankshaft.
- A VVT sensor is mounted on the intake side of each cylinder head. To detect the camshaft position, a timing rotor that is provided on the intake camshaft is used to generate 3 pulses for every 2 revolutions of the crankshaft.

