

DESCRIPTION AND OPERATION

Engine Ignition

The ignition system consists of the following:

- Crankshaft position (CKP) sensor
- Ignition coil
- Spark plug wire
- Spark plug

The ignition system is:

- an electronic distributorless ignition system (EDIS) is controlled by an electronic engine control integrated into the powertrain control module (PCM).
- set at 10 degrees before top dead center (BTDC) for base timing, and is not adjustable.

The crankshaft position (CKP) sensor:

- is a variable reluctance sensor.
- senses a missing tooth on the crankshaft damper pulse ring.
- generates a crankshaft position signal which is sent to the PCM. The PCM counts this signal for engine rpm.

The ignition coil:

- changes low voltage pulses from the PCM to high voltage pulses.
- has 3 transformers.
- fires 2 spark plugs simultaneously.

Spark plug wires carry high voltage pulses from the ignition coil to the spark plugs.

The spark plugs:

- change high voltage pulses to spark at the gap, which ignites the fuel and air mixture.

The firing order is: 1-4-2-5-3-6.

Coil Terminal-To-Cylinder Relationship

