

## Engine Ignition

The Electronic Ignition (EI) system is a coil-on-plug ignition system. The coil-on-plug ignition system consists of the:

- Crankshaft Position (CKP) sensor.
- Camshaft Position (CMP) sensor.
- ignition coils.
- spark plugs.

The **CKP** sensor:

- is a variable reluctance sensor.
- is mounted to the lower RH side of the front cover.
- is triggered by a 36-minus-1 tooth trigger wheel mounted on the crankshaft.
- provides base timing and crankshaft speed (rpm) to the PCM.

The **CMP** sensor:

- is mounted on the LH side of the front cover.
- sends the PCM a signal indicating camshaft position used for fuel and spark synchronization.

The 8 separate ignition coils:

- convert low voltage signals from the PCM to high voltage pulses.
- produce the high voltage pulses for the spark plugs.
- are connected directly to each spark plug.

The spark plugs:

- convert a high voltage pulse into a spark which ignites the fuel and air mixture.
  - originally installed on the vehicle have a platinum-enhanced active electrode for long life.
-

