

**DTC 36** 

## DISTRIBUTOR IGNITION SYSTEM (FAULTY HIGH RESOLUTION PULSE OR EXTRA LOW RESOLUTION PULSE DETECTED) 5.7L (VIN P) "F" CARLINE (MFI)

## **Circuit Description:**

The distributor ignition system supplies two timing inputs to the ECM, a high resolution signal (360 pulses per one crankshaft revolution) and a low resolution signal (4 pulses per one crankshaft revolution). The ECM can determine if one of the timing inputs is not being received by comparing the two inputs. If the ECM detects one timing pulse without detecting the other timing pulse, this DTC will set.

The reference signals toggle between 0 and 5 volts as the camshaft turns. Therefore, an open, a short to voltage, a short to ground, or a defective sensor inside the distributor can prevent the voltage from pulsing at the ECM.

**Test Description:** Number(s) below refer to circled number(s) on the diagnostic chart.

- DTC 36 will set if:
  - If less than 60 high resolution pulses are detected between each low resolution pulse.
  - Failure occurs 5 consecutive times.
- 2. This test will determine if the ECM is sending out a signal to the distributor for processing. If this signal is not available, or is shorted to ground or voltage, the distributor cannot ground it to produce reference pulses.

## **Diagnostic Aids:**

The engine does not need the high resolution pulse to operate. If a DTC 36 is present and the vehicle will not start, check for DTC 16 and use that chart first. If the engine will still not run, refer to CHART A-3 "Engine Cranks But Will Not Run."