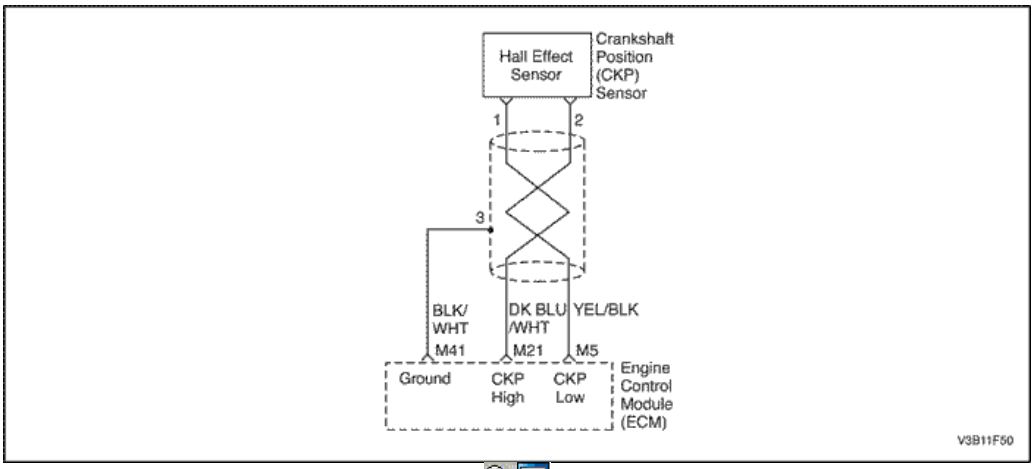
Step	Action	Value(s)	Yes	No
5	1. Turn the ignition OFF. 2. Disconnect the Engine Control Module (ECM) connector. 3. With a ohmmeter connected ground, measure the resistance of the Knock Sensor (KS) through the KS signal circuit, terminal M18. Is the resistance between the specified value?	90-110 kΩ	Go to *Step 6*	Go to *Step 8*
6	Check for a poor connection at the ECM connector KS signal circuit and repair as needed. Is the repair complete?	-	Go to *Step 11*	Go to *Step 7*
7	1. Turn the ignition OFF. 2. Replace the ECM. Is the repair complete?	-	Go to *Step 11*	-
8	Check the KS connector for a poor connection and repair as needed. Is the repair complete?	-	Go to *Step 11*	Go to *Step 9*
9	Check the KS signal circuit for an open or a short to ground or voltage and repair as needed. Is the repair complete?	-	Go to *Step 11*	-
10	1. Turn the ignition OFF. 2. Replace the KS. Is the repair complete?	-	Go to *Step 11*	-
11	1. Using the scan tool, clear the DTCs. 2. Start the engine and idle at normal operating temperature. 3. Operate the vehicle within the conditions for setting this DTC as supported in the text. Does the scan tool indicate that this diagnostic ran and passed?	-	Go to *Step 12*	Go to *Step 2*
12	Check if any additional DTCs are set. Are any DTCs displayed that have not been diagnosed?	-	Go to applicable DTC table	System OK



Diagnostic Trouble Code (DTC) P0336

58X Crank Position Sensor Extra/Missing Pulses

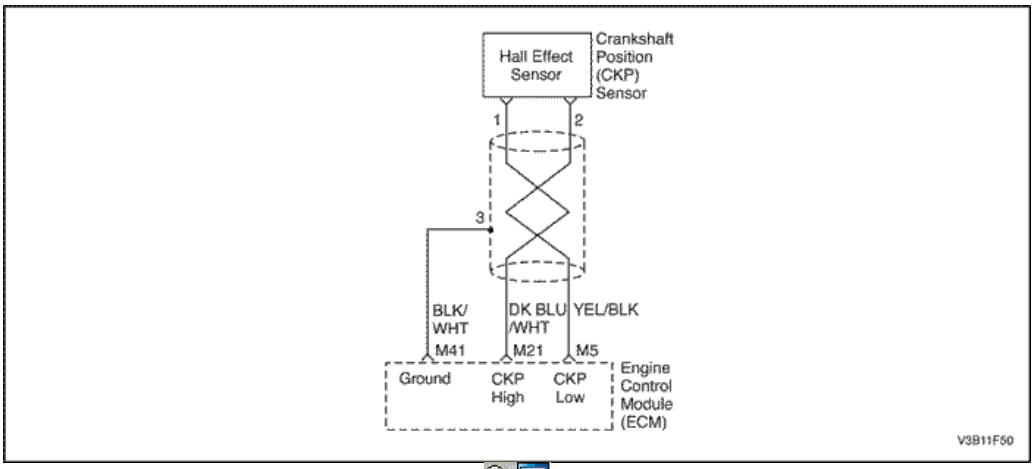
Circuit Description

The 58X reference signal is produced by the Crankshaft Position (CKP) sensor. During one crankshaft revolution, 58 crankshaft pulses will be produced. The Engine Control Module (ECM) uses the 58X reference signal to calculate engine rpm and CKP. The ECM constantly monitors the number of pulses on the 58X reference circuit and compares them to the number of Camshaft Position (CMP) signal pulses being received. If the ECM receives and incorrect number of pulses on the 58X reference circuit, Diagnostic Trouble Code (DTC) P0336 will set.

Conditions for Setting the DTC

- Engine is running.
- Extra or missing pulses detected between consecutive 58X reference pulses.
- Number of extra or missing teeth is greater than or equal to 2 per revolution.
- Above condition is detected in 10 of 100 crankshaft rotations.

Step	Action	Value(s)	Yes	No
11	1. Using the scan tool, clear the DTCs. 2. Start the engine and idle at normal operating temperature. 3. Operate the vehicle within the conditions for setting this DTC as supported in the text. Does the scan tool indicate that this diagnostic ran and passed?	-	Go to *Step 12*	Go to *Step 2*
12	Check if any additional DTCs are set. Are any DTCs displayed that have not been diagnosed?	-	Go to applicable DTC table	System OK



Diagnostic Trouble Code (DTC) P0337

58X Crank Position Sensor No Signal

Circuit Description

The 58X reference signal is produced by the Crankshaft Position (CKP) sensor. During one crankshaft revolution, 58 crankshaft pulses will be produced. The Engine Control Module (ECM) uses the 58X reference signal to calculate engine rpm and CKP. The ECM constantly monitors the number of pulses on the 58X reference circuit and compares them to the number of Camshaft Position (CMP) signal pulses being received. If the ECM does not receive any 58X reference pulses on the 58X reference circuit while cranking, Diagnostic Trouble Code (DTC) P0337 will set.

Conditions for Setting the DTC

- 58X reference pulse not seen during cranking.
- DTCs P0341 and P0342 are not set.
- Change in voltage drop is greater than 0.6 volts and change in Manifold Absolute Pressure (MAP) is greater than 1.2 kPa (0.17 psi) for manual transaxle.
- Change in voltage drop is greater than 1.2 volts and change in MAP is greater than 0.8 kpa (0.12 psi) for automatic transaxle.
- 58X reference pulse not seen for 8 seconds.

Action Taken When the DTC Sets

- The Malfunction Indicator Lamp (MIL) will illuminate.
- The ECM will record operating conditions at the time the diagnostic fails. This information will be stored in the Freeze Frame and Failure Records buffer.
- A history DTC is stored.

Conditions for Clearing the MIL/DTC

- The MIL will turn OFF after four consecutive ignition cycles in which the diagnostic runs without a fault.
- A history DTC will clear after 40 consecutive warm-up cycles have occurred without a fault.
- The DTC(s) can be cleared using the scan tool.
- Disconnecting the ECM battery feed for more than 10 seconds.

Diagnostic Aids

An intermittent may be caused by a poor connection, rubbed-through wire insulation or a wire broken inside the insulation. Check for:

- Poor connection - Inspect the ECM harness and connectors for improper mating, broken locks, improperly formed or damaged terminals, and poor terminal-to-wire connections.
- Damaged harness - Inspect the wiring harness for damage. If the harness appears to be OK, disconnect the ECM, turn the ignition ON and observe a voltmeter connected to the 58X reference circuit at the ECM harness connector while moving the connectors and the wiring harnesses related to the ECM. A change in voltage will indicate the location of the fault.