P0351-IGNITION COIL # 1 PRIMARY CIRCUIT — Continued

POSSIBLE CAUSES
PCM

TEST	ACTION	APPLICABILITY
1	Ignition on, engine not running. With the DRBIII®, read DTCs and record the related Freeze Frame data. Is the Good Trip Counter displayed and equal to zero? Yes → Go To 2 No → Refer to the INTERMITTENT CONDITION Symptom (Diagnostic Procedure). Perform POWERTRAIN VERIFICATION TEST VER - 5.	All
2	Turn the ignition off. Disconnect the Ignition Coil harness connector. Ignition on, engine not running. With the DRBIII®, actuate the ASD Relay. Using a 12-volt test light connected to ground, probe the (F42) ASD Relay Output circuit at the coil rail harness connector. Does the test light illuminate brightly? Yes → Go To 3 No → Repair the excessive resistance or short to ground in the (F42) ASD Relay Output circuit. Inspect the related fuses and repair as necessary. Perform POWERTRAIN VERIFICATION TEST VER - 5. **CAUTION: Stop All Actuations**	All
3	Turn the ignition off. Disconnect the Ignition Coil harness connector. **NOTE: The resistance of the 2.4L Primary Ignition Coil is 0.53 to 0.63 of an ohm and the resistance of a 4.0L Primary Coil Rail is 0.51 to 0.61 of an ohm at 70°F (21.1°C).** Measure the resistance of the primary ignition coil. Is the resistance value within the listed specifications? Yes → Go To 4 No → Replace the ignition coil. Perform POWERTRAIN VERIFICATION TEST VER - 5.	All
4	Turn the ignition off. Disconnect the Ignition Coil harness connector. Using a 12-volt test light connected to 12-volts, probe the Ignition Coil Control circuit. Crank the engine for 5 second while observing the test light. What is the state of the test light while cranking the engine? Brightly blinking. Replace the Ignition Coil. Perform POWERTRAIN VERIFICATION TEST VER - 5. ON constantly. Go To 5 OFF constantly. Go To 6	All

P0351-IGNITION COIL # 1 PRIMARY CIRCUIT — Continued

TEST	ACTION	APPLICABILITY
5	Turn the ignition off. Disconnect the PCM harness connectors. Measure the resistance between the Ignition Coil Control circuit and ground. Is the resistance below 100 ohms? Yes → Repair the short to ground in the Ignition Coil Control circuit. Perform POWERTRAIN VERIFICATION TEST VER - 5. No → Go To 7	All
6	Turn the ignition off. Disconnect the PCM harness connectors. Measure the resistance of the Ignition Coil Control circuit from the Ignition Coil connector to the PCM connector. Is the resistance below 5.0 ohms? Yes → Go To 7 No → Repair the open in the Ignition Coil Control circuit. Perform POWERTRAIN VERIFICATION TEST VER - 5.	All
7	**NOTE: Before continuing, check the PCM harness connector terminals for corrosion, damage, or terminal push out. Repair as necessary.** Using the schematics as a guide, inspect the wire harness and connectors. Pay particular attention to all Power and Ground circuits. If there are no possible causes remaining, view repair. Repair Replace and program the Powertrain Control Module per Service Information. Perform POWERTRAIN VERIFICATION TEST VER - 5.	All