



DTC 82

IGNITION CONTROL 3X SIGNAL ERROR 3.4L (VIN S) "F" CARLINE (SFI)

Circuit Description:

If the Tech 1 scan tool did not indicate a cranking RPM and there is no spark present at the plugs, the problem lies in the electronic ignition control system or the power and ground supplies to the Ignition Control Module (ICM).

The magnetic crank sensor is used to determine engine crankshaft position much the same way as the pick-up coil did in distributor type systems. The sensor is mounted in the block near a seven slot wheel on the crank shaft. The rotation of the wheel creates a magnetic field in the sensor which induces a voltage signal. The electronic ignition control module then processes this signal and creates the reference pulses needed by the PCM and the signal triggers the correct coil at the correct time.

DTC 82 Will Set When: If no 3X reference pulses are detected by the PCM during cranking, a DTC 82 will be set.

Action Taken (PCM will default to): The engine will not start, a DTC 82 will be stored and the MIL will remain illuminated.

DTC 82 Will Clear When: A current DTC 82 is cleared immediately after key "OFF," or when the engine is running. A history DTC 82 will clear after 50 consecutive ignition key cycles without a current DTC 82 being stored.

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

1. This test will determine if the 12 volt supply and a good ground is available at the electronic ignition control module.
2. Checks for continuity of the crankshaft position sensor and connections.
3. Voltage will vary in this test depending on cranking speed of engine.

Diagnostic Aids: An open or shorted 3X signal will cause a "Cranks But Won't Run" condition. An intermittent connection however may set a DTC 82 and then disappear when a connection is made. A history DTC 82 may indicate poor terminal connections, a marginally faulty sensor or a marginal ICM.