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 OK Conversion Calculator**2007 Hummer H2 V8-6.0L**

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**Engine Cranks But Does Not Run****Engine Cranks but Does Not Run****Description**

The Engine Cranks but Does Not Run diagnostic table is an organized approach to identifying a condition that causes an engine to not start. The diagnostic table directs the service technician to the appropriate system diagnosis. The diagnostic table assumes the following conditions are met:

- The battery is completely charged. Refer to Battery Inspection/Test (Non-HP2). [See: Starting and Charging\Testing and Inspection\Component Tests and General Diagnostics](#)
- The engine cranking speed is acceptable. Refer to Engine Cranks Slowly. [See: Starting and Charging\Testing and Inspection\Symptom Related Diagnostic Procedures\Engine Cranks Slowly](#)
- There is adequate fuel in the [fuel tank](#).

**Test**

Step 1 - Step 8

Step	Action	Values	Yes	No
1	Did you perform the Diagnostic System Check - Vehicle?	-	Go to Step 2	<a href="#">Go to Diagnostic System Check - Vehicle</a>
2	Crank the engine for the specified amount of time. Does the scan tool display any DTCs that failed this ignition?	15 seconds	<a href="#">Go to Diagnostic Trouble Code (DTC) List - Vehicle</a>	Go to Step 3
3	Does the scan tool display any body control module (BCM) vehicle theft deterrent (VTD) DTCs?	-	<a href="#">Go to Diagnostic System Check - Vehicle</a>	Go to Step 4
4	Turn ON the ignition, with the engine OFF. Probe both sides of the powertrain control module (PCM) 1 fuse located in the underhood electrical center with a test lamp connected to a good ground. Does the test lamp illuminate on at least on side of the fuse?	-	Go to Step 5	<a href="#">Go to Ignition Relay Diagnosis</a>
5	Monitor the ignition 1 signal parameter with a scan tool. Is the ignition 1 signal parameter at the specified value?	B+	Go to Step 6	Go to Step 10
6	Command the fuel pump ON with a scan tool. Does the fuel pump operate?	-	Go to Step 7	<a href="#">Go to Fuel Pump Electrical Circuit Diagnosis</a>
7	Turn OFF the ignition. Disconnect a spark plug wire. Install the J 26792 Spark Tester. Attempt to start the engine. Repeat test for remaining cylinders. Does the spark tester spark for all cylinders?	-	Go to Step 8	<a href="#">Go to Electronic Ignition (EI) System Diagnosis</a>
8	Turn OFF the ignition. Install a fuel pressure gage.  <b>Important: The fuel pump operates for about 2 seconds when the ignition is turned ON. The fuel pressure must be observed when the fuel pump is operating.</b>  Turn ON the ignition, with the engine OFF. Observe the fuel pressure while the fuel pump is operating.  Is the fuel pressure within the specified range?	VIN V, T, U Gasoline: 385-425 kPa (55-62 psi)  VIN Z Ethanol: 335-375 kPa (48-54 psi)	Go to Step 9	<a href="#">Go to Fuel System Diagnosis</a>

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Step 9 - Step 14

Step	Action	Values	Yes	No
9	<p>Inspect for the following conditions:</p> <p>The engine coolant temperature (ECT) sensor is not close to the actual engine temperature. The duct work between the mass air flow (MAF) sensor and the throttle body for air leaks A restricted exhaust system.</p> <p>A malfunctioning MAF sensor may cause a no start or a stall after a start. If you suspect this, disconnect the MAF sensor. The PCM will default to the speed density in order to calculate the engine load and the intake air flow. If disconnecting the MAF sensor corrects the condition and the connections are OK. The spark plugs for being gas fouled.</p> <p>An engine mechanical failure that causes an engine not to start such as timing chain, low compression</p> <p>Compare the MAP/BARO parameters to another vehicle. The parameter values should be close to each other.</p> <p>Did you complete the action?</p>	-	Go to Step 13	-
10	<p>Test the ignition 1 voltage circuits that are supplied by the PCM 1 fuse for an open or for a short to ground. Replace the fuse if necessary.</p> <p>Did you find and correct the condition?</p>	-	Go to Step 13	Go to Step 11
11	<p>Inspect for poor connections at the harness connector of the PCM.</p> <p>Did you find and correct the condition?</p>	-	Go to Step 13	Go to Step 12
12	<p>Replace the PCM.</p> <p>Did you complete the replacement?</p>	-	Go to Step 13	-
13	<p>Clear the DTCs with a scan tool. Turn OFF the ignition for 30 seconds. Attempt to start the engine.</p> <p>Does the engine start the continue to run?</p>	-	Go to Step 14	Go to Step 2
14	<p>Allow the engine to reach operating temperature. Observe the DTC information with a scan tool.</p> <p>Are there any DTCs that have not been diagnosed?</p>	-	Go to Diagnostic Trouble Code (DTC) List - Vehicle	System OK

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