

DIAGNOSTIC TROUBLE CODE DESCRIPTIONS

Diagnostic Trouble Code	DRB Scan Tool	Description of Diagnostic Trouble Code
11*	No Crank Reference Signal at PCM	No crank reference signal detected during engine cranking.
12*	Battery Disconnect	Direct battery input to PCM was disconnected within the last 50 Key-on cycles.
13**	No Change in MAP From Start to Run	No difference recognized between the engine MAP reading and the barometric (atmospheric) pressure reading at start-up.
14**	MAP Sensor Voltage Too Low	MAP sensor input below minimum acceptable voltage.
	or	
	MAP Sensor Voltage Too High	MAP sensor input above maximum acceptable voltage.
15**	No Vehicle Speed Sensor Signal	No vehicle distance (speed) sensor signal detected during road load conditions.
17*	Engine is Cold Too Long	Engine coolant temperature remains below normal operating temperatures during vehicle travel (thermostat).
21**	O2S Stays at Center	Neither rich or lean condition detected from the oxygen sensor input.
	or	
	O2S Shorted to Voltage	Oxygen sensor input voltage maintained above the normal operating range.
22**	ECT Sensor Voltage Too High	Engine coolant temperature sensor input above maximum acceptable voltage.
	or	
	ECT Sensor Voltage Too Low	Engine coolant temperature sensor input below minimum acceptable voltage.
23**	Intake Air Temp Sensor Voltage Low	Intake manifold air temperature sensor input below the minimum acceptable voltage.
	or	
	Intake Air Temp Sensor Voltage High	Intake manifold air temperature sensor input above the maximum acceptable voltage.
24**	Throttle Position Sensor Voltage High	Throttle position sensor input above the maximum acceptable voltage.
	or	
	Throttle Position Sensor Voltage Low	Throttle position sensor input below the minimum acceptable voltage.

* Check Engine Lamp will not illuminate at all times if this Diagnostic Trouble Code was recorded. Cycle Ignition key as described in manual and observe code flashed by Check Engine lamp.

** Check Engine Lamp will illuminate during engine operation if this Diagnostic Trouble Code was recorded.

DIAGNOSTIC TROUBLE CODE DESCRIPTIONS—CONTINUED

Diagnostic Trouble Code	DRB Scan Tool	Description of Diagnostic Trouble Code
25**	Idle Air Control Motor Circuits	A shorted condition detected in one or more of the idle air control motor circuits.
27*	Injector #1 Control Circuit	Injector #1 output driver does not respond properly to the control signal.
	or	
	Injector #2 Control Circuit	Injector #2 output driver does not respond properly to the control signal.
	or	
	Injector #3 Control Circuit	Injector #3 output driver does not respond properly to the control signal.
	or	
	Injector #4 Control Circuit	Injector #4 output driver does not respond properly to the control signal.
	or	
	Injector #5 Control Circuit	Injector #5 output driver does not respond properly to the control signal.
	or	
	Injector #6 Control Circuit	Injector #6 output driver does not respond properly to the control signal.
33*	A/C Clutch Relay Circuit	An open or shorted condition detected in the A/C clutch relay circuit.
34*	Speed Control Solenoid Circuits	An open or shorted condition detected in the Speed Control vacuum or vent solenoid circuits.
	or	
	Speed Control Switch Always Low	Speed Control switch input below the minimum acceptable voltage.
	or	
	Speed Control Switch Always High	Speed Control switch input above the maximum acceptable voltage.
35* (XJ Only)	Rad Fan Control Relay Circuits	An open or shorted condition detected in the radiator fan relay circuit.
41**	Generator Field Not Switching Properly	An open or shorted condition detected in the generator field control circuit.
42*	Auto Shutdown Relay Control Circuit	An open or shorted condition detected in the auto shutdown relay circuit.

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DIAGNOSTIC TROUBLE CODE DESCRIPTIONS—CONTINUED

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44*	Battery Temp Sensor Volts out of Limit	An open or shorted condition exists in the engine coolant temperature sensor circuit or a problem exists in the PCM's battery temperature voltage circuit.
46**	Charging System Voltage Too High	Battery voltage sense input above target charging voltage during engine operation.
47**	Charging System Voltage Too Low	Battery voltage sense input below target charging during engine operation. Also, no significant change detected in battery voltage during active test of generator output.
51**	O2S Signal Stays Below Center (Lean)	Oxygen sensor signal input indicates lean air/fuel ratio condition during engine operation.
52**	O2S Signal Stays Above Center (Rich)	Oxygen sensor signal input indicates rich air/fuel ratio condition during engine operation.
53*	Internal PCM Failure or	PCM Internal fault condition detected.
	PCM Failure SRI Communications	PCM Internal fault condition detected.
54*	No Cam Sync Signal at PCM	No fuel sync (camshaft signal) detected during engine cranking.
55*	Display not shown on DRB scan tool	Completion of diagnostic trouble code display on the Malfunction Indicator Lamp (Check Engine Lamp).
62*	PCM Failure SRI miles not stored	Unsuccessful attempt to update SRI (service reminder indicator) miles in the PCM EEPROM.
63*	PCM Failure EEPROM Write Denied	Unsuccessful attempt to write to an EEPROM location by the PCM.

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