

DIAGNOSTIC TROUBLE CODE CHART

ENGINE TROUBLE CODES

HINT:

Parameters listed in the chart may not be exactly the same as your reading due to the type of instrument or other factors.

If a malfunction code is displayed during the DTC check in check mode, check the circuit for that code listed in the table below. For details of each code, turn to the page referred to under the "See Page" for the respective DTC No. in the DTC chart.

*1: ○ ● ● ● CHECK ENG is indicated.

– □ ● ● ● CHECK ENG is not indicated.

*2: Only LH bank ECU is detected.

*3: Only RH bank ECU is detected.

*4: Both LH and RH bank ECU are detected.

DTC No. (See Page)	Detection Item	Trouble Area	CHECK ENG*1	Memory
P0100/31*4 (DI-30)	Air Flow Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in air flow meter circuit • Air flow meter • Engine ECU 	○	○
P0110/24*4 (DI-37)	Intake Air Temp. Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in intake air temp. sensor circuit • Intake air temp. sensor (inside air flow meter) • Engine ECU 	–	○
P0115/22*4 (DI-43)	Water Temp. Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in water temp. sensor circuit • Water temp. sensor • Engine ECU 	○	○
P0120/41*4 (DI-49)	Throttle Position Sensor Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in throttle position sensor circuit • Throttle position sensor • Engine ECU 	○	○
P0130/21*4 (DI-56)	Oxygen Sensor Circuit Malfunction (Bank 1 (2) Sensor 1)	<ul style="list-style-type: none"> • Oxygen sensor • Fuel trim malfunction 	–	○
P0135/21*4 (DI-62)	Oxygen Sensor Heater Circuit Malfunction (Bank 1 (2) Sensor 1)	<ul style="list-style-type: none"> • Open or short in heater circuit of oxygen sensor • Oxygen sensor heater • Engine ECU 	–	○
P0136/27*4 (DI-64)	Oxygen Sensor Circuit Malfunction (Bank 1 (2) Sensor 2)	<ul style="list-style-type: none"> • Oxygen sensor 	–	○
P0141/21*4 (DI-62)	Oxygen Sensor Heater Circuit Malfunction (Bank 1 (2) Sensor 2)	<ul style="list-style-type: none"> • Same as DTC No. P0135/21 	–	○
P0171/25*4 (DI-66)	Fuel Trim System too Lean	<ul style="list-style-type: none"> • Air intake (hose loose) • Fuel line pressure • Injector blockage • Oxygen sensor (bank1 (2), sensor1) malfunction • Air flow meter • Water temp. sensor 	–	○
P0325/52*4 (DI-70)	Knock Sensor 1 (2) Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in knock sensor 1 (2) circuit • Knock sensor 1 (2) looseness • Engine ECU 	○	○
P0330/55*4 (DI-70)	Knock Sensor 3 (4) Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in knock sensor 2 circuit • Knock sensor 3 (4) looseness • Engine ECU 	○	○

DIAGNOSTICS – ENGINE

P0335/12, 13*4 (DI-74)	Crankshaft Position Sensor Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in crankshaft position sensor circuit • Crankshaft position sensor • Starter • Engine ECU 	○	○
P0340/12*4 (DI-77)	Camshaft Position Sensor Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in camshaft position sensor circuit • Camshaft position sensor • Starter • Engine ECU 	○	○
P0500/42*2 (DI-79)	Vehicle Speed Sensor Malfunction	<ul style="list-style-type: none"> • Open or short in vehicle speed sensor circuit • Vehicle speed sensor • Engine ECU 	-	○
P1200/78*3 (DI-101)	Fuel Pump Relay/Engine ECU Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in fuel pump relay circuit. • Fuel pump relay • Engine ECU 	-	○
P1202/79*4 (DI-104)	Fuel Pump Circuit Malfunction	<ul style="list-style-type: none"> • Fuel pump change relay • Fuel pump • Engine ECU 	○	○
P1300/14*4 (DI-106)	Igniter Circuit Malfunction	<ul style="list-style-type: none"> • Open or short in IGF or IGT circuit from igniter to Engine ECU • Igniter • Engine ECU 	○	○
P1335/12, 13*4 (DI-113)	Crankshaft Position Sensor Circuit Malfunction (during engine running)	<ul style="list-style-type: none"> • Open or short in crankshaft position sensor circuit • Crankshaft position sensor • Starter • Engine ECU 	-	○
P1346/18*4 (DI-114)	VVT Sensor Circuit Range/Per- formance Problem	<ul style="list-style-type: none"> • Mechanical system malfunction (Skipping teeth to timing belt, belt stretched) • Engine ECU 	○	○
P1349/59*4 (DI-114)	VVT System Malfunction	<ul style="list-style-type: none"> • Valve timing • Oil control valve • VVT controller assembly • Engine ECU 	-	○
P1640/89*4 (DI-122)	Communication Malfunction No.1	<ul style="list-style-type: none"> • Wire harness • Engine ECU 	○	○
P1641/89*4 (DI-123)	Communication Malfunction No.2	<ul style="list-style-type: none"> • Wire harness • Engine ECU 	○	○
P1645/82*2 (DI-124)	Body ECU Malfunction	<ul style="list-style-type: none"> • Body ECU • A/C ECU • Communication bus 	-	○
P1656/39*4 (DI-124)	OCV Circuit Malfunction (Bank1)	<ul style="list-style-type: none"> • Open or short in oil control valve circuit (bank 1) • Oil control valve (bank 1) • Engine ECU 	○	○
B1300/56*2 (DI-26)	Water Temp. Sensor (For Hydraulic Cooling Fan) Cir- cuit Malfunction	<ul style="list-style-type: none"> • Water Temp. Sensor (for hydraulic cooling fan) • Engine ECU 	○	○
B1305/57*2 (DI-28)	Hydraulic Motor Control Solenoid Circuit Malfunction	<ul style="list-style-type: none"> • Hydraulic Motor Gear Pump • Engine ECU 	○	○

ECTS TROUBLE CODES (When not use hand-held tester)

DTC No. (See Page)	Detection Item	Trouble Area	Multi Warning Light	Memory
P1127/11 (DI-97)	ETCS Actuator Power Source Circuit Malfunction	<ul style="list-style-type: none"> • Throttle relay • Engine ECU • Wire harness and connector 	○	○
P1127/12 (DI-97)	ETCS Actuator Power Source Circuit Malfunction	<ul style="list-style-type: none"> • Throttle relay • Engine ECU • Wire harness and connector 	○	○
P1125/21 (DI-88)	Throttle Control Motor Circuit Malfunction	<ul style="list-style-type: none"> • Throttle motor • Engine ECU • Wire harness and connector 	○	○
P1125/22 (DI-88)	Throttle Control Motor Circuit Malfunction	<ul style="list-style-type: none"> • Throttle motor • Wire harness and connector 	○	○
P1125/23 (DI-92)	Throttle Control Motor Circuit Malfunction	<ul style="list-style-type: none"> • Throttle motor • Engine ECU • Wire harness and connector 	○	○
P1125/24 (DI-94)	Throttle Control Motor Circuit Malfunction	<ul style="list-style-type: none"> • Throttle body • Throttle motor • Throttle position sensor • Wire harness and connector 	○	○
P0120/31 (DI-49)	Throttle Position Sensor Circuit Malfunction	<ul style="list-style-type: none"> • Throttle position sensor • Engine ECU • Wire harness and connector 	○	○
51	ETCS Actuator Power Source Circuit Malfunction	<ul style="list-style-type: none"> • Throttle relay • Engine ECU • Wire harness and connector 	-	○
P1127/52 (DI-97)			○	○
P1121/91 (DI-82)	Accelerator Position Sensor Range/Performance Problem	<ul style="list-style-type: none"> • Main accelerator sensor • Sub accelerator sensor • Accelerator switch • Engine ECU • Wire harness and connector 	○	○