DIORM-19

DIAGNOSTIC TROUBLE CODE CHART

HINT:

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

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

DTC No. (See page)	Detection Item	Trouble Area	MIL*1	Memory
P0031 *5 (DI-243)	Oxygen (A/F) Sensor Heater Circuit Low (Bank 1 Sensor 1)	Open in heater circuit of A/F sensor A/F sensor heater EFI main relay ECM	0	0
P0032 *5 (DI-243)	Oxygen (A/F) Sensor Heater Circuit High (Bank 1 Sensor 1)	Short in heater circuit of A/F sensor A/F sensor heater EFI main relay ECM	0	0
P0037 (DI-246)	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 2)	Open in heater circuit of heated oxygen sensor Heated oxygen sensor heater EFI main relay ECM	0	0
P0038 (DI-246)	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 2)	Short in heater circuit of heated oxygen sensor Heated oxygen sensor heater EFI main relay ECM	0	0
P0100 (DI-249)	Mass or Volume Air Flow Circuit	Open or short in mass air flow meter circuit Mass air flow meter ECM	0	0
P0101 (DI-253)	Mass or Volume Air Flow Circuit Range/Performance Problem	Mass air flow meter	0	0
P0102 (DI-249)	Mass or Volume Air Flow Circuit Low Input	Open or short in mass air flow meter circuit Mass air flow meter ECM	0	0
P0103 (DI-249)	Mass or Volume Air Flow Circuit High Input	Short in mass air How meter circuit (+B circuit) Mass air flow meter ECM	0	0
P0110 (DI-254)	Intake Air Temperature Circuit	Open or short in intake air temp. sensor circuit Intake air temp. sensor (built in mass air flow meter) ECM	0	0
P0112 (DI-254)	Intake Air Temperature Circuit Low Input	Short in intake air temp. sensor circuit Intake air temp. sensor (built in mass air flow meter) ECM	0	0
P0113 (DI–254)	Intake Air Temperature Circuit High Input	Open in intake air temp. sensor circuit Intake air temp. sensor (built in mass air flow meter) ECM	0	0
P0115 (DI–258)	Engine Coolant Temperature Circuit	Open or short in engine coolant temp. sensor circuit Engine coolant temp. sensor ECM	0	0
P0116 (DI-263)	Engine Coolant Temperature Circuit Range/Performance Problem	Cooling system Engine coolant temp. sensor	0	0

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P0117	Engine Coolant Temperature Cir-	Short in engine coolant temp. sensor circuit		
(DI-258)	cuit Low Input	Engine coolant temp. sensor ECM	0	0
P0118 (DI–258)	Engine Coolant Temperature Circuit High Input	Open in engine coolant temp. sensor circuit Engine coolant temp. sensor ECM	0	0
P0120 *2 (DI-265)	Throttle Pedal Position Sensor/ Switch "A" Circuit	Open or short in throttle position sensor circuit Throttle position sensor Wire harness ECM	0	0
P0121 *2 (DI-276)	Throttle Pedal Position Sensor/ Switch "A" Circuit Range/Perfor- mance Problem	Throttle position sensor	0	0
P0122 *2 (DI-265)	Throttle/Pedal Position Sensor/ Switch "A" Circuit Low Input	Same as DTC No. P0120	0	0
P0123 *2 (DI–265)	Throttle/Pedal Position Sensor/ Switch "A" Circuit High Input	Open in throttle position sensor circuit (E2 circuit) Short in throttle position sensor circuit (+B circuit) Throttle position sensor ECM	0	0
P0120 *3 (DI-272)	Throttle Pedal Position Sensor/ Switch "A" Circuit	Open or short in throttle position sensor circuit Throttle position sensor Wire harness ECM	0	0
P0121 *3 (DI-276)	Throttle Pedal Position Sensor/ Switch "A" Circuit Range/Perfor- mance Problem	Throttle position sensor	0	0
P0122 *3 (DI-272)	Throttle/Pedal Position Sensor/ Switch "A" Circuit Low Input	Open in throttle position sensor circuit Throttle position sensor ECM	0	0
P0123 *3 (DI-272)	Throttle/Pedal Position Sensor/ Switch "A" Circuit High Input	Open in throttle position sensor circuit (E2 circuit) Short in throttle position sensor circuit (+B circuit) Throttle position sensor ECM	0	0
P0125 (DI-263)	Insufficient Coolant Temperature for Closed Loop Fuel Control	Same as DTC No. P0116	0	0
P0128 (DI-277)	Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature)	Thermostat Cooling system Engine coolant temp. sensor ECM	Z	۵
P0134 *5 (DI-278)	Oxygen (A/F) Sensor Circuit No Activity Detected (Bank 1 Sensor 1)	Open or short in A/F sensor (bank 1 sensor 1) circuit A/F sensor (bank 1 sensor 1) A/F sensor heater EFI main relay A/F sensor heater and relay circuit Air induction system Fuel pressure Injector Gas leak in exhaust system PCV hose connection PCV valve and hose ECM	0	0
P0136 (DI-288)	Oxygen Sensor Malfunction (Bank 1 Sensor 2)	Open or short in heated oxygen sensor circuit Heated oxygen sensor Heated oxygen sensor heater	0	0

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P0171 (DI–292)	System too Lean (Bank 1)	 Air induction system Injector blockage Mass air flow meter Engine coolant temp. sensor Fuel pressure Gas leakage in exhaust system Open or short in A/F sensor (bank 1 sensor 1) circuit A/F sensor (bank 1 sensor 1) PCV valve and hose PCV hose connection EFI main relay A/F sensor heater and relay circuit 	0	0
P0172 (DI-292)	System too Rich (Bank 1)	Injector leak or blockage Mass air flow meter Engine coolant temp. sensor Ignition system Fuel pressure Gas leakage in exhaust system Open or short in A/F sensor (bank 1 sensor 1) circuit A/F sensor (bank 1 sensor 1) EFI main relay A/F sensor heater and relay circuit	0	0
P0220 *2 (DI–265)	Throttle/Pedal Position Sensor/ Switch "B" Circuit	Open or short in throttle position sensor circuit Throttle position sensor Wire harness ECM	0	0
P0222 *2 (DI–265)	Throttle/Pedal Position Sensor/ Switch "B" Circuit Low Input	Open in throttle position sensor circuit Short in ground circuit Throttle position sensor ECM	0	0
P0223 *2 (DI-265)	Throttle/Pedal Position Sensor/ Switch "B" Circuit High Input	Short in throttle position sensor circuit (+B circuit) Throttle position sensor ECM	0	0
P0300 (DI-301)	Random/Multiple Cylinder Misfire Detected	Open or short in engine wire	0	0
P0301 (DI-301) P0302 (DI-301) P0303 (DI-301) P0304 (DI-301)	Cylinder 1 Misfire Detected Cylinder 2 Misfire Detected Cylinder 3 Misfire Detected Cylinder 4 Misfire Detected	Connector connection Vacuum hose connection Ignition system Injector Fuel pressure Mass air flow meter Engine coolant temp. sensor Compression pressure Valve clearance	0	0
P0305 (DI–301)	Cylinder 5 Misfire Detected	Valve timing PCV hose connection	0	0
P0306 (DI–301)	Cylinder 6 Misfire Detected	PCV hose ECM	0	0
P0325 (DI–312)	Knock Sensor 1 Circuit (Bank 1 or Single Sensor)	Open or short in knock sensor 1 circuit Knock sensor 1 (looseness) ECM	0	0
P0330 (DI-312)	Knock Sensor 2 Circuit (Bank 2)	Open or short in knock sensor 2 circuit Knock sensor 2 (looseness) ECM	0	0

P0335 (DI-315)	Crankshaft Position Sensor "A" Circuit	Open or short in crankshaft position sensor circuit Crankshaft position sensor	0	0
P0339 (DI-315)	Crankshaft Position Sensor "A" Circuit Intermittent	Crankshaft timing pulley ECM	0	0
P0340 (DI-318)	Camshaft Position Sensor "A" Circuit (Bank 1 or Single Sensor)	Open or short in camshaft position sensor circuit Camshaft position sensor	0	0
P0341 (DI-318)	Camshaft Position Sensor "A" Circuit Range/Performance (Bank 1 or Single Sensor)	RH camshaft timing pulley Jumping teeth of timing belt ECM	0	0
P0351 (DI-320)	Ignition Coil "A" Primary/Secondary Circuit	Ignition system Open or short in IGF and IGT circuit from igniter to ECM Igniter Ignition coil ECM	0	0
P0420 (DI-325)	Catalyst System Efficiency Below Threshold (Bank 1)	 Gas leakage in exhaust system A/F sensor (bank 1 sensor 1) Heated oxygen sensor (bank 1 sensor 2) Three—way catalytic converter 	0	0
P0441 (DI-328)	Evaporative Emission Control System Incorrect Purge Flow	Fuel tank cap incorrectly installed Fuel tank cap cracked or damaged Vacuum hose cracks, holed blocked, damaged or disconnected Open or short in vapor pressure sensor circuit Vapor pressure sensor Open or short in VSV circuit for EVAP VSV for EVAP Open or short in VSV circuit for CCV VSV for CCV Open or short in VSV circuit for pressure switching valve VSV for pressure switching valve Fuel tank cracked, holed or damaged Charcoal canister cracked, holed or damaged Fuel tank over fill check valve cracked or damaged ECM	0	0
P0442 (DI-361)	Evaporative Emission Control System Leak detected (small leak)	Fuel tank cap incorrectly installed Fuel tank cap cracked or damaged Hose or tube cracked, hole, damaged or loose seal ((3) or (9) in Fig. 1) Vacuum hose cracked, holed, blocked, damaged or disconnected Fuel tank cracked, holed or damaged Charcoal canister cracked, holed or damaged Open or short in vapor pressure sensor circuit VSV for CCV VSV for EVAP VSV for pressure switching valve Vapor pressure sensor Fuel tank over fill check valve cracked or damaged ECM	0	0
P0446 (DI-328)	Evaporative Emission Control System Vent Control Circuit	Same as DTC No. P0441	0	0
P0451 (DI-375)	Evaporative Emission Control System Pressure Sensor/Switch Range/Performance	Open or short in vapor pressure sensor circuit Vapor pressure sensor ECM	0	0

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P0452 (DI-375)	Evaporative Emission Control System Pressure Sensor/Switch Low Input	Open in vapor pressure sensor circuit Vapor pressure sensor ECM	0	0
P0453 (DI-375)	Evaporative Emission Control System Pressure Sensor/Switch High Input	Short in vapor pressure sensor circuit Vapor pressure sensor ECM	0	0
P0456 (DI-361)	Evaporative Emission Control System Leak detected (very small leak)	• Same as DTC No. P0442	0	0
P0500 (DI-378)	Vehicle Speed Sensor "A"	Combination meter Open or short in vehicle speed sensor circuit	0	0
P0503 (DI-378)	Vehicle Speed Sensor "A" Intermittent/Erratic/High	Vehicle speed sensor ECM	0	0
P0505 *2 (DI–381)	Idle Air Control System	Air induction system Electric throttle control system PCV valve and hose	0	0
P0505 *3 (DI-383)	Idle Air Control System	PCV hose connection PCV hose Open or short in IAC valve circuit	0	0
P0511 *3 (DI–383)	Idle Air Control Circuit	IAC valve is stuck or closed Open or short in A/C signal circuit Air induction system ECM	0	0
P0560 (DI-387)	System Voltage	Open in back up power source circuit ECM	0	0
P0604 *2 (DI-389)	Internal Control Module Random Access Memory (RAM) Error		0	0
P0606 *2 (DI-389)	ECM/PCM Processor	• ECM	0	0
P0607 *2 (DI-389)	Control Module Performance		0	0
P0617 (DI-390)	Starter Relay Circuit High	Short in Park/neutral position (PNP) switch (A/T) or Clutch start switch (M/T) circuit Park/neutral position (PNP) switch (A/T) Clutch start switch (M/T) Ignition switch ECM	0	0
P0657 *2 (DI-389)	Actuator Supply Voltage Circuit / Open	• ECM	0	0
P0705 *4 (DI-396)	Transmission Range Sensor Circuit Malfunction (PRNDL Input)	Open in park/neutral position switch circuit Park/neutral position switch ECM	0	0
P0724 *4 (DI-397)	Brake Switch "B" Circuit High	Short in stop light switch signal circuit Stop light switch ECM	0	0
P0850 *4 (DI-396)	Park/Neutral Switch Input Circuit Low	Same as DTC No. P0705	0	0
P1126 *2 (DI-400)	Magnetic Clutch Circuit	Open or short in magnetic clutch circuit Magnetic clutch ECM	0	0
P2102 *2 (DI-403)	Throttle Actuator Control Motor Circuit Low	Open in throttle control motor circuit Throttle control motor ECM	0	0

P2103 *2 (DI-403)	Throttle Actuator Control Motor Circuit High	Short in throttle control motor circuit Throttle control motor ECM	0	0
P2111 *2 (DI-405)	Throttle Actuator Control System – Stuck Open	Throttle control motor circuit Throttle control motor	0	0
P2112 *2 (DI-405)	Throttle Actuator Control System – Stuck Closed	Throttle body Throttle valve	0	0
P2118 *2 (DI-407)	Actuator Control Motor Current Range/Performance	Open in ETCS power source circuit ECM	0	0
P2119 *2 (DI-410)	Throttle Actuator Control Throttle Body Range/Performance	Electric throttle control system ECM	0	0
P2120 *2 (DI-412)	Throttle/Pedal Position Sensor/ Switch "D" Circuit	Open or short in accelerator pedal position sensor circuit Accelerator pedal position sensor ECM	0	0
P2121 *2 (DI-419)	Throttle/Pedal Position Sensor/ Switch "D" Circuit Range/Perfor- mance	Accelerator pedal position sensor	0	0
P2122 *2 (DI-412)	Throttle/Pedal Position Sensor/ Switch "D" Circuit Low Input	Open in accelerator pedal position sensor circuit Short in ground circuit Accelerator pedal position sensor ECM	0	0
P2123 *2 (DI-412)	Throttle/Pedal Position Sensor/ Switch "D" Circuit High Input	Short in accelerator pedal position sensor circuit (+B circuit) Accelerator pedal position sensor ECM	0	0
P2125 *2 (DI-412)	Throttle/Pedal Position Sensor/ Switch "E" Circuit	Open or short in accelerator pedal position sensor circuit Accelerator pedal position sensor ECM	0	0
P2127 *2 (DI-412)	Throttle/Pedal Position Sensor/ Switch "E" Circuit Low Input	Open in accelerator pedal position sensor circuit Short in ground circuit Accelerator pedal position sensor ECM	0	0
P2128 *2 (DI-412)	Throttle/Pedal Position Sensor/ Switch "E" Circuit High Input	Short in accelerator pedal position sensor circuit (+B circuit) Accelerator pedal position sensor ECM	0	0
P2135 *2 (DI-265)	Throttle Pedal Position Sensor/ Switch "A" / "B" Voltage Correla- tion	Open or short in throttle position sensor circuit Throttle position sensor Wire harness ECM	0	0
P2138 *2 (DI-412)	Throttle Pedal Position Sensor/ Switch "D" / "E" Voltage Correla- tion	Open or short in throttle position sensor circuit Throttle position sensor ECM	0	0
P2195 *5 (DI-421)	Oxygen (A/F) Sensor Signal Stuck Lean (Bank 1 Sensor 1)	Open or short in A/F sensor circuit A/F sensor A/F sensor heater EFI main relay	0	0
P2196 *5 (DI-421)	Oxygen (A/F) Sensor Signal Stuck Rich (Bank 1 Sensor 1)	Air induction system Fuel pressure Injector ECM	0	0
P2237 *5 (DI-430)	Oxygen Sensor Pumping Current Circuit / Open (for A/F sensor) (Bank 1 Sensor 1)	Open or short in A/F sensor circuit A/F sensor A/F sensor heater EFI main relay	0	0

P2238 *5 (DI-430)	Oxygen Sensor Pumping Current Circuit / Low (for A/F sensor) (Bank 1 Sensor 1)	Open in A/F sensor circuit A/F sensor A/F sensor heater EFI main relay	0	0
P2239 *5 (DI-430)	Oxygen Sensor Pumping Current Circuit / High (for A/F sensor) (Bank 1 Sensor 1)	Short in A/F sensor circuit A/F sensor A/F sensor heater EFI main relay	0	0
P2A00 (DI-435)	A/F Sensor Circuit Slow Response (Bank 1 Sensor 1)	 Open or short in A/F sensor circuit A/F sensor A/F sensor heater EFI main relay Air induction system Fuel pressure Injector ECM 	0	0

^{*1:} $\bigcirc\dots$ MIL lights up. $-\dots$ MIL does not lights up.

^{*2:} w/ Electronic Throttle Control System

^{*3:} w/o Electronic Throttle Control System

^{*4:} A/T only

^{*5:} This DTC is related to A/F sensor, although the detection item is oxygen sensor.