

## DIAGNOSTIC TROUBLE CODE CHART

### 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.

DTC No. (See Page)	Detection Item	Trouble Area	MIL*	Memory
P0100 (DI-170)	Mass Air Flow Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in mass air flow meter circuit</li> <li>• Mass air flow meter</li> <li>• ECM</li> </ul>	○	○
P0101 (DI-174)	Mass Air Flow Circuit Range / Performance Problem	<ul style="list-style-type: none"> <li>• Mass air flow meter</li> </ul>	○	○
P0110 (DI-175)	Intake Air Temp. Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in intake air temp. sensor circuit</li> <li>• Intake air temp. sensor</li> <li>• ECM</li> </ul>	○	○
P0115 (DI-179)	Engine Coolant Temp. Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in engine coolant temp. sensor circuit</li> <li>• Engine coolant temp. sensor</li> <li>• ECM</li> </ul>	○	○
P0116 (DI-183)	Engine Coolant Temp. Circuit Range / Performance Problem	<ul style="list-style-type: none"> <li>• Engine coolant temp. sensor</li> <li>• Cooling system</li> </ul>	○	○
P0120 (DI-184)	Throttle / Pedal Position Sensor / Switch "A" Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in throttle position sensor circuit</li> <li>• Throttle position sensor</li> <li>• ECM</li> </ul>	○	○
P0121 (DI-189)	Throttle / Pedal Position Sensor / Switch "A" Circuit Range / Performance Problem	<ul style="list-style-type: none"> <li>• Throttle position sensor</li> </ul>	○	○
P0125 (DI-190)	Insufficient Coolant Temp. for Closed Loop Fuel Control	<ul style="list-style-type: none"> <li>• Open or short in heated oxygen sensor circuit</li> <li>• Heated oxygen sensor</li> </ul>	○	○
P130 (DI-193)	Heated Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 1)	<ul style="list-style-type: none"> <li>• Heated oxygen sensor</li> <li>• Fuel trim malfunction</li> </ul>	○	○
P0133 (DI-196)	Heated Oxygen Sensor Circuit Slow Response (Bank 1 Sensor 1)	<ul style="list-style-type: none"> <li>• Heated oxygen sensor</li> </ul>	○	○

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## DIAGNOSTICS – ENGINE (2JZ-GTE)

DTC No. (See Page)	Detection Item	Trouble Area	MIL*	Memory
P0135 (DI-197)	Heated Oxygen Sensor Heater Circuit Malfunction (Bank 1 Sensor 1)	<ul style="list-style-type: none"> <li>• Open or short in heater circuit of heated oxygen sensor</li> <li>• Heated oxygen sensor heater</li> <li>• ECM</li> </ul>	○	○
P0136 (DI-199)	Heated Oxygen Sensor Circuit Malfunction (Bank 1 Sensor 2)	<ul style="list-style-type: none"> <li>• Heated oxygen sensor</li> </ul>	○	○
P0141 (DI-197)	Heated Oxygen Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)	<ul style="list-style-type: none"> <li>• Same as DTC No. P0135</li> </ul>	○	○
P0171 (DI-201)	System too Lean (Fuel Trim)	<ul style="list-style-type: none"> <li>• Air Intake (hose loose)</li> <li>• Fuel line pressure</li> <li>• Injector blockage</li> <li>• Heated oxygen sensor malfunction</li> <li>• Mass air flow meter</li> <li>• Engine coolant temp. sensor</li> </ul>	○	○
P0172 (DI-201)	System too Rich (Fuel Trim)	<ul style="list-style-type: none"> <li>• Fuel line pressure</li> <li>• Injector blockage, leak</li> <li>• Heated oxygen sensor malfunction</li> <li>• Mass air flow meter</li> <li>• Engine coolant temp. sensor</li> </ul>	○	○
P0300 (DI-204)	Random / Multiple Cylinder Misfire Detected	<ul style="list-style-type: none"> <li>• Ignition system</li> <li>• Injector</li> </ul>	○	○
P0301	Misfire Detected	<ul style="list-style-type: none"> <li>• Fuel line pressure</li> </ul>		
P0302	– Cylinder 1	<ul style="list-style-type: none"> <li>• EGR</li> </ul>		
P0303	– Cylinder 2	<ul style="list-style-type: none"> <li>• Compression pressure</li> </ul>		
P0304	– Cylinder 3	<ul style="list-style-type: none"> <li>• Valve clearance not to specification</li> </ul>		
P0305	– Cylinder 4	<ul style="list-style-type: none"> <li>• Valve timing</li> </ul>		
P0306 (DI-204)	– Cylinder 5 – Cylinder 6	<ul style="list-style-type: none"> <li>• Mass air flow meter</li> <li>• Engine coolant temp. sensor</li> </ul>		
P0325 (DI-209)	Knock Sensor 1 Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in knock sensor 1 circuit</li> <li>• Knock sensor 1 (looseness)</li> <li>• ECM</li> </ul>	○	○
P0330 (DI-209)	Knock Sensor 2 Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in knock sensor 2 circuit</li> <li>• Knock sensor 2 (looseness)</li> <li>• ECM</li> </ul>	○	○
P0335 (DI-212)	Crankshaft Position Sensor "A" Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in crankshaft position sensor circuit for NE signal</li> <li>• Crankshaft position sensor for NE signal</li> <li>• Starter</li> <li>• ECM</li> </ul>	○	○

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DTC No. (See Page)	Detection Item	Trouble Area	MIL*	Memory
P0340 (DI-215)	Camshaft Position Sensor Circuit Malfunction	<ul style="list-style-type: none"> <li>• Open or short in camshaft position sensor circuit</li> <li>• Camshaft position sensor</li> <li>• Open or short in crankshaft position sensor circuit for NE2 signal</li> <li>• Crankshaft position sensor for NE2 signal</li> <li>• Starter</li> <li>• ECM</li> </ul>	○	○
P0401 (DI-217)	Exhaust Gas Recirculation Flow Insufficient Detected	<ul style="list-style-type: none"> <li>• EGR valve stuck closed</li> <li>• Short in VSV circuit for EGR</li> <li>• Open in EGR gas temp. sensor circuit</li> <li>• EGR hose disconnected</li> <li>• ECM</li> </ul>	○	○
P0402 (DI-227)	Exhaust Gas Recirculation Flow Excessive Detected	<ul style="list-style-type: none"> <li>• EGR valve stuck open</li> <li>• EGR VSV open malfunction</li> <li>• Open in VSV circuit for EGR</li> <li>• Short in EGR gas temp. sensor circuit</li> <li>• ECM</li> </ul>	○	○
P0420 (DI-231)	Catalyst System Efficiency Below Threshold	<ul style="list-style-type: none"> <li>• Three-way catalytic converter</li> <li>• Open or short in heated oxygen sensor circuit</li> <li>• Heated oxygen sensor</li> </ul>	○	○
P0441 (DI-234)	Evaporative Emission Control System Incorrect Purge Flow	<ul style="list-style-type: none"> <li>• Open or short in VSV circuit for EVAP</li> <li>• VSV for EVAP</li> <li>• ECM</li> <li>• Vacuum hose blocked or disconnected</li> <li>• Charcoal canister</li> </ul>	○	○
P0500 (DI-238)	Vehicle Speed Sensor Malfunction	<ul style="list-style-type: none"> <li>• Open or short in vehicle speed sensor circuit</li> <li>• Vehicle speed sensor</li> <li>• Combination meter</li> <li>• ECM</li> </ul>	○	○
P0505 (DI-240)	Idle Control System Malfunction	<ul style="list-style-type: none"> <li>• IAC valve is stuck or closed</li> <li>• Open or short in IAC valve circuit</li> <li>• Open or short in A/C signal circuit</li> <li>• Air intake (hose loose)</li> </ul>	○	○
P0510 (DI-243)	Closed Throttle Position Switch Malfunction	<ul style="list-style-type: none"> <li>• Open in closed throttle position switch circuit</li> <li>• Closed throttle position switch</li> <li>• ECM</li> </ul>	○	○

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**DTC CHART (Manufacture Controlled)**

DTC No. (See Page)	Detection Item	Trouble Area	MIL*	Memory
P1100 (DI-247)	Barometric Pressure Sensor Circuit MAfunction	•ECM	○	○
P1200 (DI-248)	Fuel Pump Relay / ECU Circuit Malfunction	•Open or short in fuel pump ECU circuit •Fuel pump ECU •ECM power source circuit •Fuel pump •ECM	—	○
P1300 (DI-252)	Igniter Circuit Malfunction	•Open or short in IGF or IGT circuit from igniter to ECM •Igniter •ECM	○	○
P1335 (DI-257)	Crankshaft Position Sensor Circuit Malfunction (during engine running)	•Open or short in crankshaft position sensor circuit for NE signal •Crankshaft position sensor for NE signal •Starter •ECM	—	○
P1400 (DI-258)	Sub Throttle Position Sensor Malfunction	•Open or short in sub throttle position sensor circuit •Sub throttle position sensor •ECM	○	○
P1401 (DI-261)	Sub Throttle Position Sensor Range / Performance Problem	•Sub throttle position sensor	○	○
P1405 (DI-262)	Turbo Pressure Sensor Circuit Malfunction	•Open or short in turbo pressure sensor circuit •Turbo pressure sensor •ECM	○	○
P1406 (DI-265)	Turbo Pressure Sensor Circuit Range / Performance Problem	•Turbo pressure sensor	○	○
P1511 (DI-266)	Boost Pressure Low Malfunction	•Air intake (leakage or clogging) •Actuator (for waste gate valve, IACV control valve, exhaust bypass valve and exhaust gas control valve) •Short in VSV for waste gate valve, IACV control valve, exhaust bypass valve and exhaust gas control valve circuit •ECM	○	○
P1512 (DI-274)	Boost Pressure High Malfunction	•Actuator (for waste gate valve and exhaust bypass valve) •Short in VSV for waste gate valve and exhaust bypass valve circuit •ECM	○	○
P1520 (DI-279)	Stop Light Switch Signal Malfunction	•Short in stop light switch signal circuit •Stop light switch •ECM	○	○
P1600 (DI-282)	ECM BATT Malfunction	•Open in back up power source circuit •ECM	○	○

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DTC No. (See Page)	Detection Item	Trouble Area	MIL*	Memory
P1605 (DI-284)	Knock Control CPU Malfunction	•ECM	○	○
P1630 (DI-285)	Traction Control System Malfunction	•Open or short in ETC+ or ETC- circuit •Open or short in EFI+ or EFI- circuit •Throttle control ECU •ECM	—	○
P1652 (DI-287)	IACV Control Circuit Malfunction	•Open or short in VSV circuit for IACV •VSV for IACV •ECM	○	○
P1658 (DI-291)	Waste Gate Valve Control Circuit Malfunction	•Open or short in VSV circuit for waste gate valve •VSV for waste gate valve •ECM	○	○
P1661 (DI-294)	Exhaust Gate Valve Control Cir- cuit Malfunction	•Open or short in VSV circuit for exhaust gate control valve •VSV for exhaust gate control valve •ECM	○	○
P1662 (DI-297)	Exhaust Bypass Valve Control Circuit Malfunction	•Open or short in VSV circuit for exhaust bypass valve •VSV for exhaust bypass valve •ECM	○	○
P1780 (DI-300)	Park / Neutral Position Switch Malfunction	•Short in park / neutral position switch circuit •Park / neutral position switch •ECM	○	○

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