

# List of Diagnostic Trouble Code (DTC)

## GENERAL DESCRIPTION

## 1. List of Diagnostic Trouble Code (DTC)

### A: LIST

| DTC   | Item  | Index   |
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| P0026 | Intake Valve Control Solenoid Circuit Range/Performance (Bank 1)  | <Ref. to GD(H4SO)-8, DTC P0026 INTAKE VALVE CONTROL SOLENOID CIRCUIT RANGE/PERFORMANCE (BANK 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| P0028 | Intake Valve Control Solenoid Circuit Range/Performance (Bank 2)  | <Ref. to GD(H4SO)-10, DTC P0028 INTAKE VALVE CONTROL SOLENOID CIRCUIT RANGE/PERFORMANCE (BANK 2), Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P0030 | HO2S Heater Control Circuit (Bank 1 Sensor 1)                     | <Ref. to GD(H4SO)-11, DTC P0030 HO2S HEATER CONTROL CIRCUIT (BANK 1 SENSOR 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>                     |
| P0031 | HO2S Heater Control Circuit Low (Bank 1 Sensor 1)                 | <Ref. to GD(H4SO)-13, DTC P0031 HO2S HEATER CONTROL CIRCUIT LOW (BANK 1 SENSOR 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>                 |
| P0032 | HO2S Heater Control Circuit High (Bank 1 Sensor 1)                | <Ref. to GD(H4SO)-15, DTC P0032 HO2S HEATER CONTROL CIRCUIT HIGH (BANK 1 SENSOR 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>                |
| P0037 | HO2S Heater Control Circuit Low (Bank 1 Sensor 2)                 | <Ref. to GD(H4SO)-17, DTC P0037 HO2S HEATER CONTROL CIRCUIT LOW (BANK 1 SENSOR 2), Diagnostic Trouble Code (DTC) Detecting Criteria.>                 |
| P0038 | HO2S Heater Control Circuit High (Bank 1 Sensor 2)                | <Ref. to GD(H4SO)-19, DTC P0038 HO2S HEATER CONTROL CIRCUIT HIGH (BANK 1 SENSOR 2), Diagnostic Trouble Code (DTC) Detecting Criteria.>                |
| P0068 | MAP/MAF - Throttle Position Correlation                           | <Ref. to GD(H4SO)-21, DTC P0068 MAP/MAF - THROTTLE POSITION CORRELATION, Diagnostic Trouble Code (DTC) Detecting Criteria.>                           |
| P0076 | Intake Valve Control Solenoid Circuit Low (Bank 1)                | <Ref. to GD(H4SO)-23, DTC P0076 INTAKE VALVE CONTROL SOLENOID CIRCUIT LOW (BANK 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>                |
| P0077 | Intake Valve Control Solenoid Circuit High (Bank 1)               | <Ref. to GD(H4SO)-24, DTC P0077 INTAKE VALVE CONTROL SOLENOID CIRCUIT HIGH (BANK 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>               |
| P0082 | Intake Valve Control Solenoid Circuit Low (Bank 2)                | <Ref. to GD(H4SO)-24, DTC P0082 INTAKE VALVE CONTROL SOLENOID CIRCUIT LOW (BANK 2), Diagnostic Trouble Code (DTC) Detecting Criteria.>                |
| P0083 | Intake Valve Control Solenoid Circuit High (Bank 2)               | <Ref. to GD(H4SO)-24, DTC P0083 INTAKE VALVE CONTROL SOLENOID CIRCUIT HIGH (BANK 2), Diagnostic Trouble Code (DTC) Detecting Criteria.>               |
| P0101 | Mass or Volume Air Flow Circuit Range/Performance                 | <Ref. to GD(H4SO)-25, DTC P0101 MASS OR VOLUME AIR FLOW CIRCUIT RANGE/PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting Criteria.>                 |
| P0102 | Mass or Volume Air Flow Circuit Low Input                         | <Ref. to GD(H4SO)-27, DTC P0102 MASS OR VOLUME AIR FLOW CIRCUIT LOW INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.>                         |
| P0103 | Mass or Volume Air Flow Circuit High Input                        | <Ref. to GD(H4SO)-28, DTC P0103 MASS OR VOLUME AIR FLOW CIRCUIT HIGH INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.>                        |
| P0107 | Manifold Absolute Pressure/Barometric Pressure Circuit Low Input  | <Ref. to GD(H4SO)-29, DTC P0107 MANIFOLD ABSOLUTE PRESSURE/BAROMETRIC PRESSURE CIRCUIT LOW INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P0108 | Manifold Absolute Pressure/Barometric Pressure Circuit High Input | <Ref. to GD(H4SO)-30, DTC P0108 MANIFOLD ABSOLUTE PRESSURE/BAROMETRIC PRESSURE CIRCUIT HIGH INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.> |
| P0111 | Intake Air Temperature Sensor 1 Circuit Range/Performance         | <Ref. to GD(H4SO)-31, DTC P0111 INTAKE AIR TEMPERATURE SENSOR 1 CIRCUIT RANGE/PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting Criteria.>         |
| P0112 | Intake Air Temperature Sensor 1 Circuit Low                       | <Ref. to GD(H4SO)-34, DTC P0112 INTAKE AIR TEMPERATURE SENSOR 1 CIRCUIT LOW, Diagnostic Trouble Code (DTC) Detecting Criteria.>                       |
| P0113 | Intake Air Temperature Sensor 1 Circuit High                      | <Ref. to GD(H4SO)-35, DTC P0113 INTAKE AIR TEMPERATURE SENSOR 1 CIRCUIT HIGH, Diagnostic Trouble Code (DTC) Detecting Criteria.>                      |
| P0117 | Engine Coolant Temperature Circuit Low                            | <Ref. to GD(H4SO)-36, DTC P0117 ENGINE COOLANT TEMPERATURE CIRCUIT LOW, Diagnostic Trouble Code (DTC) Detecting Criteria.>                            |
| P0118 | Engine Coolant Temperature Circuit High                           | <Ref. to GD(H4SO)-37, DTC P0118 ENGINE COOLANT TEMPERATURE CIRCUIT HIGH, Diagnostic Trouble Code (DTC) Detecting Criteria.>                           |

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| P0122 | Throttle/Pedal Position Sensor/<br>Switch "A" Circuit Low                                       | <Ref. to GD(H4SO)-38, DTC P0122 THROTTLE/PEDAL POSITION SENSOR/<br>SWITCH "A" CIRCUIT LOW, Diagnostic Trouble Code (DTC) Detecting Crite-<br>ria.>                                  |
| P0123 | Throttle/Pedal Position Sensor/<br>Switch "A" Circuit High                                      | <Ref. to GD(H4SO)-39, DTC P0123 THROTTLE/PEDAL POSITION SENSOR/<br>SWITCH "A" CIRCUIT HIGH, Diagnostic Trouble Code (DTC) Detecting Crite-<br>ria.>                                 |
| P0125 | Insufficient Coolant Temperature for<br>Closed Loop Fuel Control                                | <Ref. to GD(H4SO)-40, DTC P0125 INSUFFICIENT COOLANT TEMPERA-<br>TURE FOR CLOSED LOOP FUEL CONTROL, Diagnostic Trouble Code (DTC)<br>Detecting Criteria.>                           |
| P0126 | Insufficient Engine Coolant Tempera-<br>ture for Stable Operation                               | <Ref. to GD(H4SO)-42, DTC P0126 INSUFFICIENT ENGINE COOLANT TEM-<br>PERATURE FOR STABLE OPERATION, Diagnostic Trouble Code (DTC)<br>Detecting Criteria.>                            |
| P0128 | Coolant Thermostat (Engine Coolant<br>Temperature Below Thermostat Reg-<br>ulating Temperature) | <Ref. to GD(H4SO)-44, DTC P0128 COOLANT THERMOSTAT (ENGINE<br>COOLANT TEMPERATURE BELOW THERMOSTAT REGULATING TEMPER-<br>ATURE), Diagnostic Trouble Code (DTC) Detecting Criteria.> |
| P0131 | O2 Sensor Circuit Low Voltage (Bank<br>1 Sensor 1)  | <Ref. to GD(H4SO)-46, DTC P0131 O2 SENSOR CIRCUIT LOW VOLTAGE<br>(BANK 1 SENSOR 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P0132 | O2 Sensor Circuit High Voltage<br>(Bank 1 Sensor 1)   | <Ref. to GD(H4SO)-48, DTC P0132 O2 SENSOR CIRCUIT HIGH VOLTAGE<br>(BANK 1 SENSOR 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| P0133 | O2 Sensor Circuit Slow Response<br>(Bank 1 Sensor 1)  | <Ref. to GD(H4SO)-50, DTC P0133 O2 SENSOR CIRCUIT SLOW<br>RESPONSE (BANK 1 SENSOR 1), Diagnostic Trouble Code (DTC) Detecting<br>Criteria.>   |
| P0134 | O2 Sensor Circuit No Activity<br>Detected (Bank 1 Sensor 1)                                     | <Ref. to GD(H4SO)-53, DTC P0134 O2 SENSOR CIRCUIT NO ACTIVITY<br>DETECTED (BANK 1 SENSOR 1), Diagnostic Trouble Code (DTC) Detecting<br>Criteria.>                                  |
| P0137 | O2 Sensor Circuit Low Voltage (Bank<br>1 Sensor 2)  | <Ref. to GD(H4SO)-55, DTC P0137 O2 SENSOR CIRCUIT LOW VOLTAGE<br>(BANK 1 SENSOR 2), Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P0138 | O2 Sensor Circuit High Voltage<br>(Bank 1 Sensor 2)   | <Ref. to GD(H4SO)-57, DTC P0138 O2 SENSOR CIRCUIT HIGH VOLTAGE<br>(BANK 1 SENSOR 2), Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| P0139 | O2 Sensor Circuit Slow Response<br>(Bank 1 Sensor 2)  | <Ref. to GD(H4SO)-58, DTC P0139 O2 SENSOR CIRCUIT SLOW<br>RESPONSE (BANK 1 SENSOR 2), Diagnostic Trouble Code (DTC) Detecting<br>Criteria.>   |
| P0140 | O2 Sensor Circuit Low Voltage (Bank<br>1 Sensor 2)  | <Ref. to GD(H4SO)-66, DTC P0140 O2 SENSOR CIRCUIT NO ACTIVITY<br>DETECTED (BANK1 SENSOR2), Diagnostic Trouble Code (DTC) Detecting<br>Criteria.>                                    |
| P0171 | System Too Lean (Bank 1)  | <Ref. to GD(H4SO)-68, DTC P0171 SYSTEM TOO LEAN (BANK 1), Diagnostic<br>Trouble Code (DTC) Detecting Criteria.>   |
| P0172 | System Too Rich (Bank 1)  | <Ref. to GD(H4SO)-69, DTC P0172 SYSTEM TOO RICH (BANK 1), Diagnostic<br>Trouble Code (DTC) Detecting Criteria.>   |
| P0181 | Fuel Temperature Sensor "A" Circuit<br>Range/Performance  | <Ref. to GD(H4SO)-70, DTC P0181 FUEL TEMPERATURE SENSOR "A" CIR-<br>CUIT RANGE/PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting Crite-<br>ria.>                                 |
| P0182 | Fuel Temperature Sensor "A" Circuit<br>Low Input  | <Ref. to GD(H4SO)-73, DTC P0182 FUEL TEMPERATURE SENSOR "A" CIR-<br>CUIT LOW INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P0183 | Fuel Temperature Sensor "A" Circuit<br>High Input   | <Ref. to GD(H4SO)-74, DTC P0183 FUEL TEMPERATURE SENSOR "A" CIR-<br>CUIT HIGH INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| P0196 | Engine Oil Temperature Sensor Cir-<br>cuit Range/Performance                                    | <Ref. to GD(H4SO)-75, DTC P0196 ENGINE OIL TEMPERATURE SENSOR<br>CIRCUIT RANGE/PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting<br>Criteria.>                                   |
| P0197 | Engine Oil Temperature Sensor Low   | <Ref. to GD(H4SO)-77, DTC P0197 ENGINE OIL TEMPERATURE SENSOR<br>LOW, Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P0198 | Engine Oil Temperature Sensor High  | <Ref. to GD(H4SO)-78, DTC P0198 ENGINE OIL TEMPERATURE SENSOR<br>HIGH, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| P0222 | Throttle/Pedal Position Sensor/<br>Switch "B" Circuit Low                                       | <Ref. to GD(H4SO)-79, DTC P0222 THROTTLE/PEDAL POSITION SENSOR/<br>SWITCH "B" CIRCUIT LOW, Diagnostic Trouble Code (DTC) Detecting Crite-<br>ria.>                                  |

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| P0223 | Throttle/Pedal Position Sensor/<br>Switch "B" Circuit High                               | <Ref. to GD(H4SO)-80, DTC P0223 THROTTLE/PEDAL POSITION SENSOR/<br>SWITCH "B" CIRCUIT HIGH, Diagnostic Trouble Code (DTC) Detecting Crite-<br>ria.>                          |
| P0301 | Cylinder 1 Misfire Detected  | <Ref. to GD(H4SO)-81, DTC P0301 CYLINDER 1 MISFIRE DETECTED, Diag-<br>nostic Trouble Code (DTC) Detecting Criteria.>   |
| P0302 | Cylinder 2 Misfire Detected  | <Ref. to GD(H4SO)-86, DTC P0302 CYLINDER 2 MISFIRE DETECTED, Diag-<br>nostic Trouble Code (DTC) Detecting Criteria.>   |
| P0303 | Cylinder 3 Misfire Detected  | <Ref. to GD(H4SO)-86, DTC P0303 CYLINDER 3 MISFIRE DETECTED, Diag-<br>nostic Trouble Code (DTC) Detecting Criteria.>   |
| P0304 | Cylinder 4 Misfire Detected  | <Ref. to GD(H4SO)-86, DTC P0304 CYLINDER 4 MISFIRE DETECTED, Diag-<br>nostic Trouble Code (DTC) Detecting Criteria.>   |
| P0327 | Knock Sensor 1 Circuit Low (Bank 1<br>or Single Sensor)                                  | <Ref. to GD(H4SO)-87, DTC P0327 KNOCK SENSOR 1 CIRCUIT LOW (BANK<br>1 OR SINGLE SENSOR), Diagnostic Trouble Code (DTC) Detecting Criteria.>                                  |
| P0328 | Knock Sensor 1 Circuit High (Bank 1<br>or Single Sensor)                                 | <Ref. to GD(H4SO)-89, DTC P0328 KNOCK SENSOR 1 CIRCUIT HIGH<br>(BANK 1 OR SINGLE SENSOR), Diagnostic Trouble Code (DTC) Detecting Cri-<br>teria.>                            |
| P0335 | Crankshaft Position Sensor "A" Cir-<br>cuit  | <Ref. to GD(H4SO)-91, DTC P0335 CRANKSHAFT POSITION SENSOR "A"<br>CIRCUIT, Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P0336 | Crankshaft Position Sensor "A" Cir-<br>cuit Range/Performance                            | <Ref. to GD(H4SO)-93, DTC P0336 CRANKSHAFT POSITION SENSOR "A"<br>CIRCUIT RANGE/PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting<br>Criteria.>                           |
| P0340 | Camshaft Position Sensor "A" Circuit<br>(Bank 1)   | <Ref. to GD(H4SO)-95, DTC P0340 CAMSHAFT POSITION SENSOR "A" CIR-<br>CUIT (BANK 1 OR SINGLE SENSOR), Diagnostic Trouble Code (DTC) Detect-<br>ing Criteria.>                 |
| P0341 | Camshaft Position Sensor "A" Circuit<br>Range/Performance (Bank 1 or Sin-<br>gle Sensor) | <Ref. to GD(H4SO)-96, DTC P0341 CAMSHAFT POSITION SENSOR "A" CIR-<br>CUIT RANGE/PERFORMANCE (BANK 1 OR SINGLE SENSOR), Diagnostic<br>Trouble Code (DTC) Detecting Criteria.> |
| P0400 | Exhaust Gas Recirculation Flow   | <Ref. to GD(H4SO)-98, DTC P0400 EXHAUST GAS RECIRCULATION FLOW,<br>Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P0420 | Catalyst System Efficiency Below<br>Threshold (Bank 1)                                   | <Ref. to GD(H4SO)-101, DTC P0420 CATALYST SYSTEM EFFICIENCY<br>BELOW THRESHOLD (BANK 1), Diagnostic Trouble Code (DTC) Detecting<br>Criteria.>                               |
| P0442 | Evaporative Emission Control Sys-<br>tem Leak Detected (Small Leak)                      | <Ref. to GD(H4SO)-103, DTC P0442 EVAPORATIVE EMISSION CONTROL<br>SYSTEM LEAK DETECTED (SMALL LEAK), Diagnostic Trouble Code (DTC)<br>Detecting Criteria.>                    |
| P0447 | Evaporative Emission Control Sys-<br>tem Vent Control Circuit Open                       | <Ref. to GD(H4SO)-119, DTC P0447 EVAPORATIVE EMISSION CONTROL<br>SYSTEM VENT CONTROL CIRCUIT OPEN, Diagnostic Trouble Code (DTC)<br>Detecting Criteria.>                     |
| P0448 | Evaporative Emission Control Sys-<br>tem Vent Control Circuit Shorted                    | <Ref. to GD(H4SO)-121, DTC P0448 EVAPORATIVE EMISSION CONTROL<br>SYSTEM VENT CONTROL CIRCUIT SHORTED, Diagnostic Trouble Code<br>(DTC) Detecting Criteria.>                  |
| P0451 | Evaporative Emission Control Sys-<br>tem Pressure Sensor                                 | <Ref. to GD(H4SO)-123, DTC P0451 EVAPORATIVE EMISSION CONTROL<br>SYSTEM PRESSURE SENSOR, Diagnostic Trouble Code (DTC) Detecting Cri-<br>teria.>                             |
| P0452 | Evaporative Emission Control Sys-<br>tem Pressure Sensor Low Input                       | <Ref. to GD(H4SO)-125, DTC P0452 EVAPORATIVE EMISSION CONTROL<br>SYSTEM PRESSURE SENSOR LOW INPUT, Diagnostic Trouble Code (DTC)<br>Detecting Criteria.>                     |
| P0453 | Evaporative Emission Control Sys-<br>tem Pressure Sensor High Input                      | <Ref. to GD(H4SO)-127, DTC P0453 EVAPORATIVE EMISSION CONTROL<br>SYSTEM PRESSURE SENSOR HIGH INPUT, Diagnostic Trouble Code (DTC)<br>Detecting Criteria.>                    |
| P0456 | Evaporative Emission Control Sys-<br>tem Leak Detected (Very Small Leak)                 | <Ref. to GD(H4SO)-128, DTC P0456 EVAPORATIVE EMISSION CONTROL<br>SYSTEM LEAK DETECTED (VERY SMALL LEAK), Diagnostic Trouble Code<br>(DTC) Detecting Criteria.>               |
| P0457 | Evaporative Emission Control Sys-<br>tem Leak Detected (Fuel Cap Loose/<br>Off)          | <Ref. to GD(H4SO)-128, DTC P0457 EVAPORATIVE EMISSION CONTROL<br>SYSTEM LEAK DETECTED (FUEL CAP LOOSE/OFF), Diagnostic Trouble<br>Code (DTC) Detecting Criteria.>            |

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| P0458 | Evaporative Emission System Purge Control Valve Circuit Low  | <Ref. to GD(H4SO)-129, DTC P0458 EVAPORATIVE EMISSION SYSTEM PURGE CONTROL VALVE CIRCUIT LOW, Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P0459 | Evaporative Emission System Purge Control Valve Circuit High | <Ref. to GD(H4SO)-131, DTC P0459 EVAPORATIVE EMISSION SYSTEM PURGE CONTROL VALVE CIRCUIT HIGH, Diagnostic Trouble Code (DTC) Detecting Criteria.> |
| P0461 | Fuel Level Sensor "A" Circuit Range/Performance              | <Ref. to GD(H4SO)-133, DTC P0461 FUEL LEVEL SENSOR "A" CIRCUIT RANGE/PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting Criteria.>              |
| P0462 | Fuel Level Sensor "A" Circuit Low                            | <Ref. to GD(H4SO)-135, DTC P0462 FUEL LEVEL SENSOR "A" CIRCUIT LOW, Diagnostic Trouble Code (DTC) Detecting Criteria.>                            |
| P0463 | Fuel Level Sensor "A" Circuit High                           | <Ref. to GD(H4SO)-137, DTC P0463 FUEL LEVEL SENSOR "A" CIRCUIT HIGH, Diagnostic Trouble Code (DTC) Detecting Criteria.>                           |
| P0464 | Fuel Level Sensor Circuit Intermittent                       | <Ref. to GD(H4SO)-139, DTC P0464 FUEL LEVEL SENSOR CIRCUIT INTERMITTENT, Diagnostic Trouble Code (DTC) Detecting Criteria.>                       |
| P0500 | Vehicle Speed Sensor "A"                                     | <Ref. to GD(H4SO)-142, DTC P0500 VEHICLE SPEED SENSOR "A", Diagnostic Trouble Code (DTC) Detecting Criteria.>                                     |
| P0506 | Idle Air Control System RPM Lower Than Expected              | <Ref. to GD(H4SO)-143, DTC P0506 IDLE AIR CONTROL SYSTEM RPM LOWER THAN EXPECTED, Diagnostic Trouble Code (DTC) Detecting Criteria.>              |
| P0507 | Idle Air Control System RPM Higher Than Expected             | <Ref. to GD(H4SO)-144, DTC P0507 IDLE AIR CONTROL SYSTEM RPM HIGHER THAN EXPECTED, Diagnostic Trouble Code (DTC) Detecting Criteria.>             |
| P0512 | Starter Request Circuit                                      | <Ref. to GD(H4SO)-145, DTC P0512 STARTER REQUEST CIRCUIT, Diagnostic Trouble Code (DTC) Detecting Criteria.>                                      |
| P0513 | Incorrect Immobilizer Key                                    | <Ref. to GD(H4SO)-146, DTC P0513 INCORRECT IMMOBILIZER KEY, Diagnostic Trouble Code (DTC) Detecting Criteria.>                                    |
| P0604 | Internal Control Module Random Access Memory (RAM) Error     | <Ref. to GD(H4SO)-147, DTC P0604 INTERNAL CONTROL MODULE RANDOM ACCESS MEMORY (RAM) ERROR, Diagnostic Trouble Code (DTC) Detecting Criteria.>     |
| P0605 | Internal Control Module Read Only Memory (ROM) Error         | <Ref. to GD(H4SO)-148, DTC P0605 INTERNAL CONTROL MODULE READ ONLY MEMORY (ROM) ERROR, Diagnostic Trouble Code (DTC) Detecting Criteria.>         |
| P0607 | Throttle Control System Circuit Range/Performance            | <Ref. to GD(H4SO)-149, DTC P0607 THROTTLE CONTROL SYSTEM CIRCUIT RANGE/PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting Criteria.>            |
| P0638 | Throttle Actuator Control Range/Performance (Bank 1)         | <Ref. to GD(H4SO)-151, DTC P0638 THROTTLE ACTUATOR CONTROL RANGE/PERFORMANCE (BANK 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>         |
| P0700 | Transmission Control System (MIL Request)                    | <Ref. to GD(H4SO)-153, DTC P0700 TRANSMISSION CONTROL SYSTEM (MIL REQUEST), Diagnostic Trouble Code (DTC) Detecting Criteria.>                    |
| P0851 | Park/Neutral Switch Input Circuit Low (AT Model)             | <Ref. to GD(H4SO)-154, DTC P0851 PARK/NEUTRAL SWITCH INPUT CIRCUIT LOW (AT MODEL), Diagnostic Trouble Code (DTC) Detecting Criteria.>             |
| P0851 | Neutral Switch Input Circuit Low (MT Model)                  | <Ref. to GD(H4SO)-155, DTC P0851 NEUTRAL SWITCH INPUT CIRCUIT LOW (MT MODEL), Diagnostic Trouble Code (DTC) Detecting Criteria.>                  |
| P0852 | Park/Neutral Switch Input Circuit High (AT Model)            | <Ref. to GD(H4SO)-156, DTC P0852 PARK/NEUTRAL SWITCH INPUT CIRCUIT HIGH (AT MODEL), Diagnostic Trouble Code (DTC) Detecting Criteria.>            |
| P0852 | Neutral Switch Input Circuit High (MT Model)                 | <Ref. to GD(H4SO)-157, DTC P0852 NEUTRAL SWITCH INPUT CIRCUIT HIGH (MT MODEL), Diagnostic Trouble Code (DTC) Detecting Criteria.>                 |
| P1152 | O2 Sensor Circuit Range/Performance (Low) (Bank 1 Sensor 1)  | <Ref. to GD(H4SO)-158, DTC P1152 O2 SENSOR CIRCUIT RANGE/PERFORMANCE (LOW) (BANK1 SENSOR1), Diagnostic Trouble Code (DTC) Detecting Criteria.>    |
| P1153 | O2 Sensor Circuit Range/Performance (High) (Bank 1 Sensor 1) | <Ref. to GD(H4SO)-160, DTC P1153 O2 SENSOR CIRCUIT RANGE/PERFORMANCE (HIGH) (BANK1 SENSOR1), Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| P1160 | Return Spring Failure  | <Ref. to GD(H4SO)-162, DTC P1160 RETURN SPRING FAILURE, Diagnostic Trouble Code (DTC) Detecting Criteria.>  |

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| P1400 | Fuel Tank Pressure Control Solenoid Valve Circuit Low         | <Ref. to GD(H4SO)-164, DTC P1400 FUEL TANK PRESSURE CONTROL SOLENOID VALVE CIRCUIT LOW, Diagnostic Trouble Code (DTC) Detecting Criteria.>         |
| P1420 | Fuel Tank Pressure Control Sol. Valve Circuit High            | <Ref. to GD(H4SO)-166, DTC P1420 FUEL TANK PRESSURE CONTROL SOL. VALVE CIRCUIT HIGH, Diagnostic Trouble Code (DTC) Detecting Criteria.>            |
| P1443 | Vent Control Solenoid Valve Function Problem                  | <Ref. to GD(H4SO)-168, DTC P1443 VENT CONTROL SOLENOID VALVE FUNCTION PROBLEM, Diagnostic Trouble Code (DTC) Detecting Criteria.>                  |
| P1491 | Positive Crankcase Ventilation (Blow-by) Function Problem     | <Ref. to GD(H4SO)-170, DTC P1491 POSITIVE CRANKCASE VENTILATION (BLOW-BY) FUNCTION PROBLEM, Diagnostic Trouble Code (DTC) Detecting Criteria.>     |
| P1492 | EGR Solenoid Valve Signal #1 Circuit Malfunction (Low Input)  | <Ref. to GD(H4SO)-172, DTC P1492 EGR SOLENOID VALVE SIGNAL #1 CIRCUIT MALFUNCTION (LOW INPUT), Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P1493 | EGR Solenoid Valve Signal #1 Circuit Malfunction (High Input) | <Ref. to GD(H4SO)-174, DTC P1493 EGR SOLENOID VALVE SIGNAL #1 CIRCUIT MALFUNCTION (HIGH INPUT), Diagnostic Trouble Code (DTC) Detecting Criteria.> |
| P1494 | EGR Solenoid Valve Signal #2 Circuit Malfunction (Low Input)  | <Ref. to GD(H4SO)-176, DTC P1494 EGR SOLENOID VALVE SIGNAL #2 CIRCUIT MALFUNCTION (LOW INPUT), Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P1495 | EGR Solenoid Valve Signal #2 Circuit Malfunction (High Input) | <Ref. to GD(H4SO)-176, DTC P1495 EGR SOLENOID VALVE SIGNAL #2 CIRCUIT MALFUNCTION (HIGH INPUT), Diagnostic Trouble Code (DTC) Detecting Criteria.> |
| P1496 | EGR Solenoid Valve Signal #3 Circuit Malfunction (Low Input)  | <Ref. to GD(H4SO)-176, DTC P1496 EGR SOLENOID VALVE SIGNAL #3 CIRCUIT MALFUNCTION (LOW INPUT), Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P1497 | EGR Solenoid Valve Signal #3 Circuit Malfunction (High Input) | <Ref. to GD(H4SO)-176, DTC P1497 EGR SOLENOID VALVE SIGNAL #3 CIRCUIT MALFUNCTION (HIGH INPUT), Diagnostic Trouble Code (DTC) Detecting Criteria.> |
| P1498 | EGR Solenoid Valve Signal #4 Circuit Malfunction (Low Input)  | <Ref. to GD(H4SO)-176, DTC P1498 EGR SOLENOID VALVE SIGNAL #4 CIRCUIT MALFUNCTION (LOW INPUT), Diagnostic Trouble Code (DTC) Detecting Criteria.>  |
| P1499 | EGR Solenoid Valve Signal #4 Circuit Malfunction (High Input) | <Ref. to GD(H4SO)-176, DTC P1499 EGR SOLENOID VALVE SIGNAL #4 CIRCUIT MALFUNCTION (HIGH INPUT), Diagnostic Trouble Code (DTC) Detecting Criteria.> |
| P1560 | Back-Up Voltage Circuit Malfunction                           | <Ref. to GD(H4SO)-177, DTC P1560 BACK-UP VOLTAGE CIRCUIT MALFUNCTION, Diagnostic Trouble Code (DTC) Detecting Criteria.>                           |
| P1570 | Antenna   | <Ref. to GD(H4SO)-178, DTC P1570 ANTENNA, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| P1571 | Reference Code Incompatibility                                | <Ref. to GD(H4SO)-178, DTC P1571 REFERENCE CODE INCOMPATIBILITY, Diagnostic Trouble Code (DTC) Detecting Criteria.>                                |
| P1572 | IMM Circuit Failure   | <Ref. to GD(H4SO)-178, DTC P1572 IMM CIRCUIT FAILURE (EXCEPT ANTENNA CIRCUIT), Diagnostic Trouble Code (DTC) Detecting Criteria.>                  |
| P1574 | Key Communication Failure                                     | <Ref. to GD(H4SO)-178, DTC P1574 KEY COMMUNICATION FAILURE, Diagnostic Trouble Code (DTC) Detecting Criteria.>                                     |
| P1576 | EGI Control Module EEPROM                                     | <Ref. to GD(H4SO)-178, DTC P1576 EGI CONTROL MODULE EEPROM, Diagnostic Trouble Code (DTC) Detecting Criteria.>                                     |
| P1577 | IMM Control Module EEPROM                                     | <Ref. to GD(H4SO)-178, DTC P1577 IMM CONTROL MODULE EEPROM, Diagnostic Trouble Code (DTC) Detecting Criteria.>                                     |
| P1578 | Meter Failure   | <Ref. to GD(H4SO)-178, DTC P1578 METER FAILURE, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| P1602 | Control Module Programming Error                              | <Ref. to GD(H4SO)-179, DTC P1602 CONTROL MODULE PROGRAMMING ERROR, Diagnostic Trouble Code (DTC) Detecting Criteria.>                              |
| P2096 | Post Catalyst Fuel Trim System Too Lean (Bank 1)              | <Ref. to GD(H4SO)-181, DTC P2096 POST CATALYST FUEL TRIM SYSTEM TOO LEAN (BANK 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>              |

# List of Diagnostic Trouble Code (DTC)

## GENERAL DESCRIPTION

| DTC   | Item  | Index  |
|-------|---|--|
| P2097 | Post Catalyst Fuel Trim System Too Rich (Bank 1)                  | <Ref. to GD(H4SO)-183, DTC P2097 POST CATALYST FUEL TRIM SYSTEM TOO RICH (BANK 1), Diagnostic Trouble Code (DTC) Detecting Criteria.>                  |
| P2101 | Throttle Actuator Control Motor Circuit Range/Performance         | <Ref. to GD(H4SO)-185, DTC P2101 THROTTLE ACTUATOR CONTROL MOTOR CIRCUIT RANGE/PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting Criteria.>         |
| P2102 | Throttle Actuator Control Motor Circuit Low                       | <Ref. to GD(H4SO)-186, DTC P2102 THROTTLE ACTUATOR CONTROL MOTOR CIRCUIT LOW, Diagnostic Trouble Code (DTC) Detecting Criteria.>                       |
| P2103 | Throttle Actuator Control Motor Circuit High                      | <Ref. to GD(H4SO)-187, DTC P2103 THROTTLE ACTUATOR CONTROL MOTOR CIRCUIT HIGH, Diagnostic Trouble Code (DTC) Detecting Criteria.>                      |
| P2109 | Throttle/Pedal Position Sensor "A" Minimum Stop Performance       | <Ref. to GD(H4SO)-188, DTC P2109 THROTTLE/PEDAL POSITION SENSOR "A" MINIMUM STOP PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting Criteria.>       |
| P2122 | Throttle/Pedal Position Sensor/Switch "D" Circuit Low Input       | <Ref. to GD(H4SO)-189, DTC P2122 THROTTLE/PEDAL POSITION SENSOR/SWITCH "D" CIRCUIT LOW INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.>       |
| P2123 | Throttle/Pedal Position Sensor/Switch "D" Circuit High Input      | <Ref. to GD(H4SO)-191, DTC P2123 THROTTLE/PEDAL POSITION SENSOR/SWITCH "D" CIRCUIT HIGH INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.>      |
| P2127 | Throttle/Pedal Position Sensor/Switch "E" Circuit Low Input       | <Ref. to GD(H4SO)-193, DTC P2127 THROTTLE/PEDAL POSITION SENSOR/SWITCH "E" CIRCUIT LOW INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.>       |
| P2128 | Throttle/Pedal Position Sensor/Switch "E" Circuit High Input      | <Ref. to GD(H4SO)-195, DTC P2128 THROTTLE/PEDAL POSITION SENSOR/SWITCH "E" CIRCUIT HIGH INPUT, Diagnostic Trouble Code (DTC) Detecting Criteria.>      |
| P2135 | Throttle/Pedal Position Sensor/Switch "A"/"B" Voltage Correlation | <Ref. to GD(H4SO)-197, DTC P2135 THROTTLE/PEDAL POSITION SENSOR/SWITCH "A"/"B" VOLTAGE CORRELATION, Diagnostic Trouble Code (DTC) Detecting Criteria.> |
| P2138 | Throttle/Pedal Position Sensor/Switch "D"/"E" Voltage Correlation | <Ref. to GD(H4SO)-199, DTC P2138 THROTTLE/PEDAL POSITION SENSOR/SWITCH "D"/"E" VOLTAGE CORRELATION, Diagnostic Trouble Code (DTC) Detecting Criteria.> |
| P2227 | Atmospheric Pressure Sensor Range/Performance                     | <Ref. to GD(H4SO)-201, DTC P2227 BAROMETRIC PRESSURE CIRCUIT RANGE/PERFORMANCE, Diagnostic Trouble Code (DTC) Detecting Criteria.>                     |
| P2228 | Barometric Pressure Circuit Low                                   | <Ref. to GD(H4SO)-202, DTC P2228 BAROMETRIC PRESSURE CIRCUIT LOW, Diagnostic Trouble Code (DTC) Detecting Criteria.>                                   |
| P2229 | Barometric Pressure Circuit High                                  | <Ref. to GD(H4SO)-203, DTC P2229 BAROMETRIC PRESSURE CIRCUIT HIGH, Diagnostic Trouble Code (DTC) Detecting Criteria.>                                  |
| U0073 | CAN Failure, Bus 'OFF' Detection                                  | <Ref. to GD(H4SO)-204, DTC U0073 CAN FAILURE, BUS 'OFF' DETECTION, Diagnostic Trouble Code (DTC) Detecting Criteria.>                                  |
| U0101 | CAN (TCU) DATA NOT LOADED   | <Ref. to GD(H4SO)-205, DTC U0101 CAN (TCU) DATA NOT LOADED, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| U0122 | CAN (VDC) DATA NOT LOADED   | <Ref. to GD(H4SO)-205, DTC U0122 CAN (VDC) DATA NOT LOADED, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| U0140 | CAN (BCU) DATA NOT LOADED   | <Ref. to GD(H4SO)-205, DTC U0140 CAN (BCU) DATA NOT LOADED, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| U0402 | CAN (TCU) Data Abnormal   | <Ref. to GD(H4SO)-205, DTC U0402 CAN (TCU) DATA ABNORMAL, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| U0416 | CAN (VDC) Data Abnormal   | <Ref. to GD(H4SO)-205, DTC U0416 CAN (VDC) DATA ABNORMAL, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |
| U0422 | CAN (BCU) Data Abnormal   | <Ref. to GD(H4SO)-205, DTC U0422 CAN (BCU) DATA ABNORMAL, Diagnostic Trouble Code (DTC) Detecting Criteria.>   |