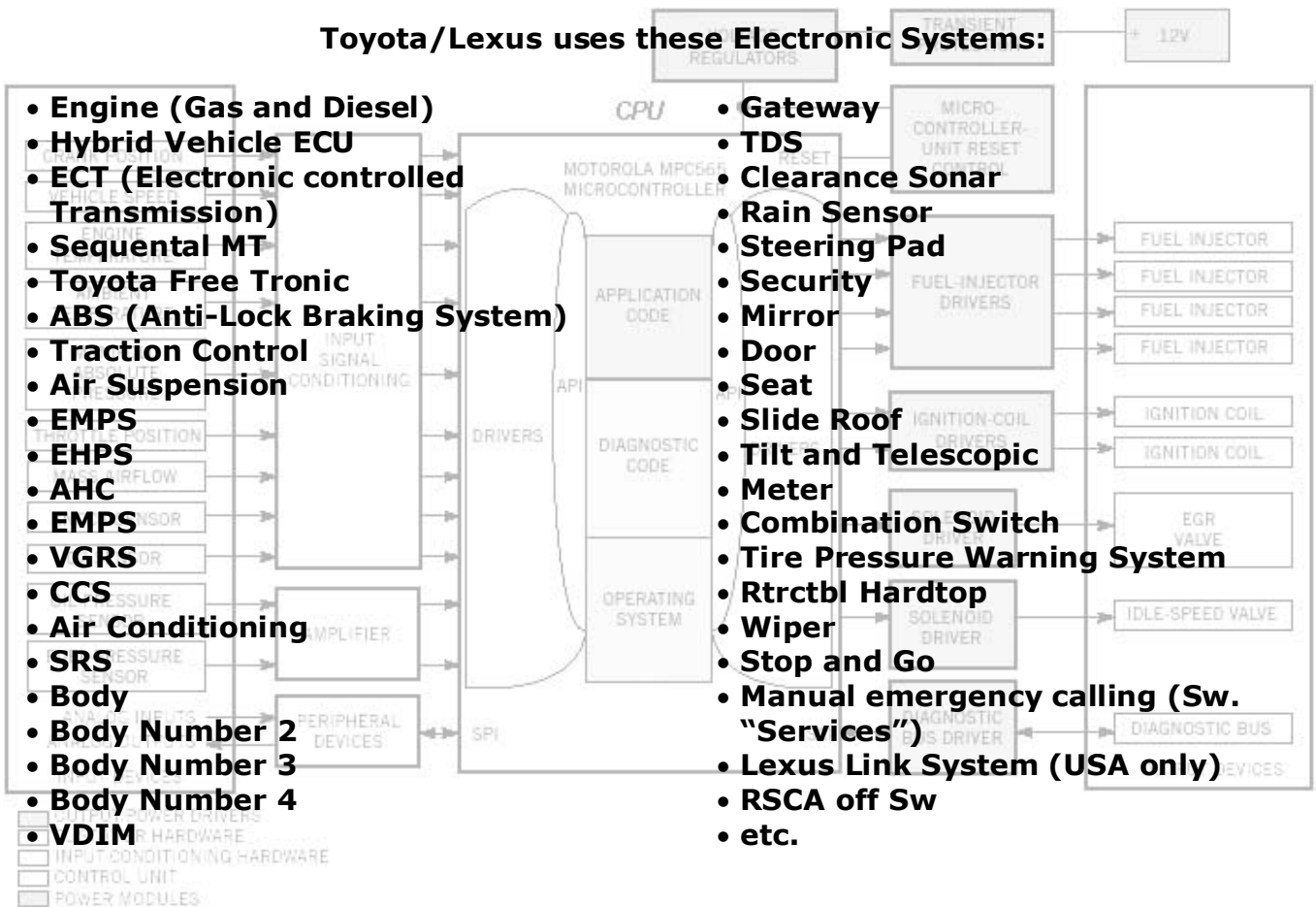


Toyota/Lexus uses these Electronic Systems:



All cars and light trucks built for sale in the United States after 1996 are required to be OBD-II compliant. The European Union adopted (directive 98/69/EC) a similar law in 2001 for gasoline-powered vehicles, and in 2003 for cars with diesel engines.

SAE J2012 (Diagnostic Trouble Codes) defines a set of diagnostic trouble codes (DTCs) where industry uniformity has been achieved. DTCs consist of an alpha character followed by four characters.

Pxxxx is reserved for powertrain DTCs

Bxxxx is reserved for body DTCs

Cxxxx is reserved for chassis DTCs

Uxxxx is reserved for network DTCs (UART the body electronics like door and roof control, air conditioning, and lightning, as well as for the entertainment control).

The second character designates whether the DTCs and a generic SAE DTC or a manufacturer-specific DTC.

Powertrain codes	Body codes
P0xxx - Generic	B0xxx - Generic
P1xxx - Manufacturer-specific	B1xxx - Manufacturer-specific
P2xxx - Generic	B2xxx - Manufacturer-specific
P30xx-P33xx - Manufacturer-specific	B3xxx - Generic
P34xx-P39xx - Generic	
Chassis codes	Network Communication codes
C0xxx - Generic	U0xxx - Generic
C1xxx - Manufacturer-specific	U1xxx - Manufacturer-specific
C2xxx - Manufacturer-specific	U2xxx - Manufacturer-specific
C3xxx - Generic	U3xxx - Generic

The remaining characters designate the system associated with the fault. The characters are hex and can range from 0 - F.

The third digit defines the specific system or sub-system within the car where the problem is located:

Third digit / System or sub-system

1 Fuel and Air Metering

2 Fuel and Air Metering (injector circuit malfunction only)

3 Ignition System or Misfire

4 Auxiliary Emission Control System

5 Vehicle Speed Control and Idle Control System

6 Computer Output Circuits

7 Transmissions

8 Transmissions

9 Control Modules, input and output signals

Note. Standardized Electronic Format of Service Information (J2008). Beginning January 1, 2002, manufacturers shall make available at a fair and reasonable price, all 2002 and newer model year vehicle emission-related diagnosis and repair information provided to the manufacturer's franchised dealers (e.g., service manuals, technical service bulletins, etc.) in the electronic format specified in SAE Recommended Practice J2008 Draft Technical Report, "Recommended Organization of Service Information" (J2008), October, 1998, November, 1995. The information shall be made available within 30 days of its availability to franchised dealers.

Note. Courtesy regulations on June 8, 2001 (66 FR 30830) "...OEMs must make full text emissions-related service information available via the World Wide Web¹. Second, that OEMs must provide equipment and tool companies with information that allows them to develop pass-through reprogramming tools. Third, OEMs must make available enhanced diagnostic information to equipment and tool manufacturers and to make available OEM-specific diagnostic tools for sale..."

Testifying on behalf of the Alliance of Automobile Manufacturers, Greg Dana, Vice President for Environmental Affairs stated, "Historically, about 75* percent of vehicle service and repairs are performed in non-dealer shops. The auto industry views these non-dealer shops as their partners in providing service to their mutual customers, the driving public. Automakers are required by law to provide all information to diagnose and repair engine, transmission, fuel, and emission control systems."

Note. CAN ISO 11898 (Controller Area Network) is the newest computer protocol in the automotive industry and is mandatory on all cars by 2008.

The CAN protocol has been integrated into the OBD-II spec by the International Standards Organization (ISO) committee and has been accepted as the standard diagnostic protocol by manufacturers. In addition, the California Air Resources Board (CARB) has embraced CAN and made it mandatory for all vehicles. Manufacturers can begin implementing CAN in 2003 and must be CAN compliant by 2008 model year. The CAN standard is also a mandatory part of each new state emissions inspection and maintenance program and will be retrofitted into the established programs.

Note. In most newer computer systems, fault codes are stored in a "nonvolatile" memory that is not lost if the battery is disconnected. The codes remain intact until they are cleared using a scan tool (which few motorists own). What's more, disconnecting the battery or computer's power supply **can have undesirable consequences** because it causes the loss of the engine computer's "learned" memory - the adjustments that are made over time to compensate for engine wear and driving habits. On some vehicles where the computer also regulates the electronic transmission, the computer may have to be put through a special learning procedure to relearn the proper operation of the transmission if power has been lost!

Another issue that is related to OBD II is that of reprogramming vehicle computers. Most late-model computers have some type of flash PROM memories that can be reprogrammed if MAINT REQD, VGRS.

¹ Industry estimates indicate that independent technicians perform up to 80% of all vehicle service and repairs (These conclusions are confirmed by statistics issued from the Motor and Equipment Manufacturers Association (Automotive Industry Status Report, 1999. EPA Air Docket A-2000-49, item II-F-05)

CodeNo.	Description
B0100	Short In D Squib Circuit / 13
B0101	Open in Driver-Side Air Bag Module Squib Circuit /14
B0102	Short in D Squib Circuit (to Ground) / 11
B0103	Short in D Squib Circuit (to B+) / 12
B0105	Short in P Side Air Bag Squib Circuit / 53
B0106	Open In P Side Air Bag Squib Circuit / 54
B0107	Short In P Side Air Bag Squib Circuit (to Ground) / 51
B0108	Short In P Side Air Bag Squib Circuit (to B+) / 52
B0110	Short In Side Squib (RH) Circuit / 43
B0111	Open In Side Squib (RH) Circuit / 44
B0111	Cab Side Airbag Circuit (Range/Performance) Malfunction (² AV.'99)
B0112	Short In Side Air Bag Module Squib (RH) Circuit (to Ground) / 41
B0113	Short In Side Squib (RH) Circuit (to B+) / 42
B0115	Short in Side Air Bag Module Squib (LH) Circuit / 47
B0116	Open In Side Air Bag Module Squib (LH) Circuit / 48
B0117	Short In Side Squib (LH) Circuit (to Ground) / 45
B0118	Short In Side Air Bag Module Squib (LH) Circuit (to B+) / 46
B0121	Seat Belt Buckle Swith, RH malfunction / 26
B0122	Seat Belt Buckle Swith, RH malfunction / 26
B0126	Seat Belt Buckle Swith, LH malfunction / 27
B0127	Seat Belt Buckle Swith, LH malfunction / 27
B0130	Short in P-Side Seat Belt Pretensioner Squib (RH) Circuit / 63
B0131	Open in P-Side Seat Belt Pretensioner Squib (RH) Circuit / 64
B0132	Short in P-Side Seat Belt Pretensioner Squib (RH) Circuit (to Ground) / 61
B0133	Short in P-Side Seat Belt Pretensioner Squib (RH) Circuit (to B+) / 62
B0135	Short in D-Side Seat Belt Pretensioner Squib (LH) Circuit / 73
B0136	Open in D-Side Seat Belt Pretensioner Squib (LH) Circuit / 74
B0137	Short in D-Side Seat Belt Pretensioner Squib (LH) Circuit (to Ground) / 71
B0138	Short in D-Side Seat Belt Pretensioner Squib (LH) Circuit (to B+) / 72
B1100	Airbag Sensor Assembly Malfunction (Progr. Avens) / 31 соотвт
B1135	SRS Control Module – poor multi-plug connection / 24
B1140	Side Airbag Sensor Assembly (RH) Malfunction / 32
B1141	Side Airbag Sensor Assembly (LH) Malfunction / 33
B1142	Door Side Airbag Sensor (RH) Malfunction
B1143	Door Side Airbag Sensor (RH) Malfunction
B1144	Door Side Airbag Sensor (LH) Malfunction
B1145	Door Side Airbag Sensor (LH) Malfunction
B1146	Side Crach Sensor, RH B post Malfunction / 32
B1147	Side Crach Sensor, LH B post Malfunction / 33
B1148	Front Crach Sensor, RH Malfunction / 36
B1149	Front Crach Sensor, LH Malfunction / 37
B1150	Occupant classification system Malfunction / 23 (4Runner and Sienna)
B1150	Passenger airbag ON/OFF indicator light circuit malfunction / 28 (4Runner and Sienna)
B1153	Seat Position Sensor malfunction / 25
B1154	Side Crach Sensor, Rear RH in C posts / 38
B1155	Side Crach Sensor, Rear LH in C posts / 39
B1156	Front Airbag (Front crach) Sensor (RH) Malfunction / 15
B1157	Front Airbag (Front crach) Sensor (RH) Malfunction / 15
B1158	Front Airbag (Front crach) Sensor (LH) Malfunction / 16
B1159	Front Airbag Sensor (LH) Malfunction / 16
B1160	Inflatable curtain RH short circuit / 83
B1161	Inflatable curtain RH open circuit / 84
B1162	Inflatable curtain RH short circuit to Earth / 81
B1163	Inflatable curtain RH short circuit to Positive / 82
B1165	Inflatable curtain LH short circuit / 87
B1166	Inflatable curtain LH open circuit / 88
B1167	Inflatable curtain LH short circuit to Earth / 85

² Read on It's Vehicles

B1168	Inflatable curtain LH short circuit to Positive / 86
B1180	Driver's Air Bag, Stage 2 – short circuit / 17
B1181	Driver's Air Bag, Stage 2 – open circuit / 18
B1182	Driver's Air Bag, Stage 2 – – short circuit to Earth / 19
B1183	Driver's Air Bag, Stage 2 – short circuit tp Positive / 22
B1185	Passenger Air Bag Stage 2 short circuit / 57
B1186	Passenger Air Bag Stage 2 open circuit / 58
B1187	Passenger Air Bag Stage 2 short circuit to Earth / 55
B1188	Passenger Air Bag Stage 2 short circuit to Positive / 56
B1211	No Communication Between Driver's Door ECU & Body ECU/11 <u>RX300 a '01</u>
B1212	No Communication Between Passenger's Front Door ECU & Body ECU / 12
B1214	Door System Bus Communication Circuit is Shorted To Battery Voltage / 14
B1215	Door System Bus Communication Circuit is Shorted To Ground / 15
B1216	No Communication Between Right Rear Door ECU & Body ECU / 16 (Rear right door ECU communication stop <u>RX300 a '01</u>)
B1217	No Communication Between Left Rear Door ECU & Body ECU / 17
B1221	Power Window Master Switch Circuit / 21 (Power window switch circuit on driver door <u>RX300 a '01</u>)
B1222	Driver's Door Lock Control Switch Circuit / 22
B1223	Passenger's Front Window Switch Circuit / 23
B1224	Passenger's Door Lock Control Switch Circuit / 24
B1225	Right Rear Window Switch Circuit / 25
B1226	Left Rear Window Switch Circuit / 26
B1231	Driver's Jam Protection Limit Switch Circuit / 31
B1232	Driver's Jam Protection Pulse Switch Circuit / 32
B1233	Passenger's Front Jam Protection Limit Switch Circuit / 33
B1234	Passenger's Front Jam Protection Pulse Switch Circuit / 34
B1235	Right Rear Jam Protection Limit Switch Circuit / 35
B1236	Right Rear Jam Protection Pulse Switch Circuit / 36
B1237	Left Rear Jam Protection Limit Switch Circuit / 37
B1238	Left Rear Jam Protection Pulse Switch Circuit / 38
B1241	Body ECU Switch Circuit Diagnosis ONE OF MONITORED SWITCHES HAS ABNORMAL OUTPUT/ 41
B1242	Wireless Door Lock Tuner Circuit Malfunction (WIRELESS DOOR LOCK RECEIVER) / 42
B1243	GSW TERMINAL CIRCUIT MALFUNCTION / 43
B1244	Light Sensor Circuit Malfunction / 44
B1251	MIRROR CONTROL SWITCH / 51
B1256	Instrument Control Panel Circuit Diagnosis / 56 (Center cluster integration panel switch circuit diagnosis <u>RX300 a '01</u>)
B1261	No Communication Between ECM & Body ECU / 61
B1269	THEFT DETERRENT ECU COMMUNICATION STOPPED / 69
B1272	No Communication between Power Seat ECU (W/Memory) & Body ECU (POWER SEAT ECU COMMUNICATION STOPPED) / 72
B1273	No Communication Between Sun Roof Control ECU & Body ECU / 73
B1275	No Communication Between Accessory Bus Buffer & Body ECU / 75
B1276	No Communication Between Combination Meter ECU & Body ECU (A/C and combination meter integrated ECU communication stop <u>RX300 a '01</u>)
B1277	No Communication Between Instrument Control Panel & Body ECU (Center cluster integration panel communication stop <u>RX300 a '01</u>)
B1300	Engine Coolant Temperature Sensor for Hydraulic Cooling Fan Circuit Malfunction
B1305	Solenoid for Hydraulic Cooling Fan Circuit Malfunction
B1421 ³	Solar Sensor Circuit (Passenger Side) (Progr., RX3))
B1423	Open in pressure Sensor Circuit / Abnormal refrigerant Pressure (Progr, RX3)
B1424	Solar Sensor Circuit (Driver Side) (Progr.)
B1650	Occupant classification system Malfunction / 23 (Tundra and Sequoia)
B1660	Passenger airbag ON/OFF indicator light circuit malfunction / 43 (Tundra and Sequoia)
B1771	Passenger side buckle switch circuit malfunction
B1780	Occupant classification sensor front LH circuit malfunction
B1781	Occupant classification sensor front RH circuit malfunction
B1782	Occupant classification sensor rear LH circuit malfunction
B1783	Occupant classification sensor rear RH circuit malfunction

³ A/C SYSTEM

DTC on Toyota / Lexus from al tech page

B1785	Occupant classification sensor front LH collision detection
B1786	Occupant classification sensor front RH collision detection
B1787	Occupant classification sensor rear LH collision detection
B1788	Occupant classification sensor rear RH collision detection
B1790	Airbag sensor assembly center communication circuit malfunction
B1793	Occupant classification sensor power supply circuit malfunction
B1794	Open in occupant classification ECU circuit (to +B)
B1795	Occupant classification ECU malfunction
B1796	Sleep operation failure of occupant classification ECU
B2416	Height Control Sensor (RX330 '05)
B2602	Power Tilt And Power Telescopic Steering Column: B2602 Key Unlock Warning Switch Circuit Malfunction
B2603	Power Tilt And Power Telescopic Steering Column: B2603 Tilt And Telescopic Manual Switch Circuit Mal
B2621	Power Tilt And Power Telescopic Steering Column: B2621 Communication Interruption
B2785	Ignition Switch ON Malfunction / 99
B2786	Ignition Switch OFF Malfunction / 99
B2790	Key Unlock Warning Switch ON Malfunction
B2791	Key Unlock Warning Switch Off Malfunction / 99
B2793	B2793
B2794	B2794
B2795	Unmatched Key Code / 99
B2796	No Communication in Immobiliser System / 99
B2797	Communication Malfunction No.1 / 99
B2798	Communication Malfunction No.2 / 99
B2799	Engine Immobiliser System Malfunction
C0200	FR Whell Speed Sensor Malfunction (Cald, Cam, RX3, Cel.) / 31 and
C0205	FL Whell Speed Sensor Malfunction / 32 (Cald, Cel.)
C0210	RR Whell Speed Sensor Malfunction (Cald, Cam, Cel., HL) / 33
C0215	RL Speed Sensor Circuit (Cel., Cald., HL) / 34
C0226	ABS Actuator Solenoid Circuit (Cel.) or ABS Solenoid Valve Circuit (MR) / 21 and
C0236	ABS Actuator Solenoid Circuit (MR, Cel.) / 22 (Cam. '03)
C0237	Speed Sensor Circuit (Cel.)
C0238	Speed Sensor Circuit (Cel.)
C0239	Speed Sensor Circuit (Cel.)
C0246	ABS Actuator Solenoid Circuit (MR, Cel) or RR Wheel ABS Coil / Motor #1 Circuit Malf. (HL) / 23 or Open or short circuit in brake actuator solenoid circuit (SRR circuit) (Cam. '03)
C0256	ABS Actuator Solenoid Circuit (MR, Cel.) / 24 or Open or short circuit in brake actuator solenoid circuit (SRL circuit) (Cam. '03)
C0273	ABS Motor Relay Circuit (MR, Cel.) / 13 or Open circuit in ABS MTR relay circuit (Cam. '03)
C0274	ABS Motor Relay Circuit (MR, Cel.) / 14 Short circuit in ABS MTR relay circuit (Cam. '03)
C0278	OPEN CIRCUIT IN ABS SOLENOID RELAY CIRCUIT / 11 (Cam. '04, Cam. '03)
C0278	ABS Motor Relay Circuit (MR, Cel.)
C0279	SHORT CIRCUIT IN ABS SOLENOID RELAY CIRCUIT/ 12 - (Cam. '04, Cam. '03)
C0279	ABS Motor Relay Circuit (MR, Cel.)
C0274	Water Pump Motor Relay Circuit Voltage to High (?) (Cam.)
C0278	Solenoid Relay Circuit Voltage to Low (Cam.)
C0279	Solenoid Relay Circuit Voltage to High (Cam.)
C0371	VSC Sensor Signal or Circuit malfunction C0371/71 Yaw Rate Sensor (Test Mode DTC) Cam. '05
C1200	Brake Boost Sensor Circuit Malfunction / 98 ⁴
C1201	Brake Boost Sensor Circuit Range/Performance (!?) ECM system malfunction (51 by VSC-light) Cam. '03
C1201	Engine Control System Malfunction (VCS lamp ON-RX3) or ECM/TCM malfunction / 51
C1202	Brake fluid level low open circuit in brake fluid level warning switch circuit (52 by VSC-light) Cam. '03
C1203	ECM/TRC communication Circuit malfunction / 53 (RX, LC) 53 by VSC-light Cam. '03
C1207	Starter Signal block malfunction / 37 (?)
C1208 ⁵	Steering Position Sensor Signal or Circuit malfunction / 72 (?)

⁴ Old DTC, Ref. To P0557 and P0558

⁵ may be need

C1210	No learned (adaptation) VSC Sensor / 36 or ZERO POINT CALIBRATION OF YAW RATE SENSOR UNDONE (Cam. '03, '04) (36 by VSC-light) Cam. '03
C1223	Malfunction in ABS Control System (RX3, Sol, HL) / 43
C1224	NEO Signal Circuit Open or Short / 44 Open or short circuit in NE signal circuit (44 by VSC-light) Cam. '03
C1225	Open or short circuit in brake actuator solenoid circuit (SM circuit) / 25 Cam. '03
C1226	Open or short circuit in brake actuator solenoid circuit ((SRM circuit) / 26 Cam. '03
C1227	Open or short circuit in brake actuator solenoid circuit ((SRC circuit) / 27 Cam. '03
C1231	Steering Angle Sensor Signal or Circuit malfunction (Progr. Pr.) / (VSC TRC-31)
C1232	Accel. Sensor Signal or Circuit malfunction / 32 or MALFUNCTION IN DECELERATION SENSOR (Cam. '04)
C1233	VSC Sensor Circuit Open or Short/33 or Yaw Sensor Circuit Open or Short (Progr., RX3) or OPEN OR SHORT CIRCUIT IN YAW RATE SENSOR CIRCUIT (Cam. '03, '04)
C1234	VSC Sensor Signal Out of Range (malfunction) / 34 or MALFUNCTION IN YAW RATE SENSOR (Cam. '03, '04)
C1235	Speed Sensor Rotor / Right Front (Cel.) or Foreign matter is attached on the tip of the right front sensor Cam. '03 / 35
C1236	Speed Sensor Rotor / Left Front (Cel.) or Foreign matter is attached on the tip of the left front sensor Cam. '03 / 36 by ABS light
C1336	No learned (adaptacion) VSC Sensor/39?
C1238	Speed Sensor Circuit (MR), Speed Sensor Rotor / Right Rear (Cel., Cald.) ABS-lamp=38 or Foreign matter is attached on the tip of the right rear sensor Cam. '03
C1239	Speed Sensor Circuit (MR), Speed Sensor Rotor / Left Rear (Cel.) or Foreign matter is attached on the tip of the left rear sensor Cam. '03 / 39
C1340	Block Diff. Circuit malfunction/47?
C1241	IG Power Source Circuit (MR,Cel.) C1241/94 Low Power Supply Voltage 4W(RAV4 06, Cam.'03)
C1243	MALFUNCTION IN DECELERATION SENSOR / 43 (Cam. '04, Cam. '03)
C1244	Deceleration Sensor Circuit Open or Short (Progr.) ot OPEN OR SHORT IN DECELERATION SENSOR CIRCUIT (Cam. '04, Cam. '03)
C1245	MALFUNCTION IN DECELERATION SENSOR / 45 (Cam. '04)
C1246	Malfunction in master cylinder pressure sensor Cam. '03 / 46
C1249	Brake Light Switch Circuit Malfunction (Cam., MR) or Open circuit in stop lamp switch circuit Cam. '03 / 49
C1251	ABS Pump Motor Lock (MR, Cel.) or ABS pump motor is locked Open circuit in pump motor circuit / 51 Cam. '03
C1271	Low Output Voltage of Right Front Speed Sensor (MR) / 71 (Test Mode DTC)
C1272	Low Output Voltage of Left Front Speed Sensor (MR) / 72 (Test Mode DTC)
C1273	Low Output Voltage of Right Rear Speed Sensor (MR) / 73 (Test Mode DTC)
C1274	Low Output Voltage of Left Rear Speed Sensor (MR) / 74 (Test Mode DTC)
C1275	Abnormal Change in Input Voltage of Right Front Speed Sensor (MR) / 75
C1276	Abnormal Change in Input Voltage of Left Front Speed Sensor (MR) / 76 (Test Mode DTC)
C1277	Abnormal Change in Input Voltage of Right Rear (?) Speed Sensor (MR) / 77 (Test Mode DTC)
C1278	Abnormal Change in Input Voltage of Left Rear Speed Sensor (MR) / 78
C1278/78	Abnormal Change in Output Signal of Rear Speed Sensor LH (Test Mode DTC)
C1280/82	Engine Circuit Malfunction (RAV4 a '06)
C1281	Master Cylinder Pressure Sensor Output Signal is faulty (RX330 '05, Cam. '03) / 81
C1288/88	ECU Version Miss Match
C1296/96	ABS Malfunction(RAV4 a '06)
C1297/97	Steering Angle Sensor C1296/96 (RAV4 a '06)
C1298/98	Linear Solenoid Circuit(RAV4 a '06)
C1299/99	Cancellation of 4WD Control (RAV4 a '06)
C1335	Open circuit in steering angle sensor Cam. '03 / 35
C1336	Zero point calibration of deceleration sensor undone Cam. '03 / 39
C1360	Malfunction in comparative master cylinder pressure sensor Cam. '03 / 61 VSC-code
C1361	Short circuit in ABS motor fail safe relay circuit / 91 Cam. '05
C1379/74*	Downhill Assist Control Operation Switch (Test Mode DTC)
C1381	MALFUNCTION IN POWER SUPPLY VOLTAGE YAW/DECELERATION SENSOR / 97 (Cam. '04)
C1511 - C1514	Torque Sensors Circuit Malfunction (11 / 14)
C1515	Calibration of torque sensor zero point Not Performed / 15 ⁶

⁶ DTC from the PS warning light.

DTC on Toyota / Lexus from al tech page

C1516	Calibration of torque sensor zero point Not completed / 16
C1521 ⁷	Power Steering Motor Malfunction / 21 ⁸ (MR2, Pri)
C1522	Power Steering Motor Malfunction / 22 (MR2, Pri)
C1523	Power Steering Motor Malfunction / 23 (MR2, Pri)
C1531 - C1533	Power Steering ECU Malfunction / (31-33) (MR2, Pri)
C1539	Power Steering ECU Malfunction / 39 (MR2)
C1541 - C1543	Speed sensor Malfunction / (41- 43) (Pri)
C1571	IG power source circuit malfunction / 51 (Pri)
C1552	PIG Power Source Drop Voltage Malfunction / 52 (MR2, Pri)
C1553	When Resetting Voltage, Vehicle Is Being Driven / 53 (MR2, Pri)
C1554	EMPS relay circuit malfunction / 54 (Pri)
C1555	EMPS ECU malfunction / 55 (Pri)
C1556	P/S warning light circuit / 56 (Pri)
C1557	Memory of overheat prevention control / 57 (Pri)
C1558	Memory of voltage drop at motor power supply / 58 (Pri)
C1559	Memory of continuous control under high load / 59 (Pri)
C1571 / C1572	Speed sensor malfunction (Test mode) /(71 / 72)
C1572	Speed Sensor Signal Malfunction / 72 (MR2)
C1581	Assist Map Number Un-Writing (GS300 a '06) / 81
C1713	(LS 430 Eur.) High Control
C1714	RL (LS 430 Eur.)
C1717	FL (LS 430 Eur.)
C1743	
C1782	Stop Switch Circuit Malfunction (LX47)
C1783	Door Courtesy Switch Circuit Malfunction (LX47)
C1786	Hight Control Switch Circuit Malfunction (LX47)
C1787	EMS Switch Circuit Malfunction (LX47)
C1788	Height Control OFF Switch Circuit Malfunction (LX47)
C1794	RH Front Weel Speed Sensor Circuit malfunction (LX47)
C1795	LH Front Weel Speed Sensor Circuit malfunction (LX47)
C1813	Pressure sensor malfunction/Downside / 13 (GX47)
C1852	Low pressure malfunction in downside of KDSS / 52 (GX47)
C1854	High pressure malfunction in downside of KDSS / 54 (GX47)
C2111	Tire pressure sensor ID1 operation stop / 11
C2112	Tire pressure sensor ID2 operation stop / 12
C2113	Tire pressure sensor ID3 operation stop / 13
C2114	Tire pressure sensor ID4 operation stop / 14
C2115	Tire pressure sensor ID5 operation stop
C2116	Stop light switch signal malfunction (HIGHLANDER a '04 2-digit DTC 11 ⁹)
C2121	Tire pressure sensor ID1 not received
C2122	Tire pressure sensor ID2 not received
C2123	Tire pressure sensor ID3 not received
C2124	Tire pressure sensor ID4 not received
C2125	Tire pressure sensor ID5 not received
C2141	A malfunction in the tire pressure sensor registered to ID1
C2142	A malfunction in the tire pressure sensor registered to ID2
C2143	A malfunction in the tire pressure sensor registered to ID3
C2144	A malfunction in the tire pressure sensor registered to ID4
C2145	A malfunction in the tire pressure sensor registered to ID5
C2165	Abnormal temperature inside ID1 tire
C2166	Abnormal temperature inside ID2 tire
C2167	Abnormal temperature inside ID3 tire

⁷ Available Reading and Clearing Diagnostic Trouble Codes Without Scan Tool by using DLC No.3

⁸ Read the DTC and Input Signal Check (Test Mode) from the P/S warning light on the combination meter. For example (courtesy Mr. Serally from Mauritius Island), for Toyota Corolla NZE121 (VIN: JTDDBT23E90) Code 15 - Calibration of torque sensor zero point not performed. Code 32 - EMPS ECU malfunction. Code 33 - EMPS ECU malfunction. Code 54 - EMPS relay circuit malfunction

⁹ By observing the blinking of the low tire pressure warning light after connecting the SST between the Tc and CG terminals in DLC3 (2-digit DTC 13 Detection Item: Malfunction in ABS relation)

C2168	Abnormal temperature inside ID4 tire
C2169	Abnormal temperature inside ID5 tire
C2171	Tire pressure sensor ID not registered
C2176	Tire pressure monitor receiver is error
C2181	Tire pressure sensor ID1 not received (test diagnosis/SIGNAL CHECK DTC) / 81
C2182	Tire pressure sensor ID2 not received (test diagnosis/SIGNAL CHECK DTC) / 82
C2183	Tire pressure sensor ID3 not received (test diagnosis/SIGNAL CHECK DTC) / 83
C2184	Tire pressure sensor ID4 not received (test diagnosis/SIGNAL CHECK DTC) / 84
C2185	Tire pressure sensor ID5 not received (test diagnosis/SIGNAL CHECK DTC) / 85
C2191	Vehicle speed signal error (test diagnosis/SIGNAL CHECK DTC) / 91
C2192	Tire Pressure Warning Select Switch / 92
C2195	Tire Pressure Antenna / 95

Powertrain codes

P0001	Open in Volume Control Valve Circuit
P0004	Shot to B+ in Volume Control Valve Circuit (KGB10)
P0002	Volume Control Valve Plausibility to Consume Current High Intensity (KGB10)
P0003	Short to GND in Volume Control Valve Circuit (KGB10)
P0010	Camshaft Position "A" Actuator Circuit (Bank 1) – Cor, Sol ¹⁰ '04 RX300 (Eur, 05) Old DTC P1656
P0011	Camshaft Position "A" – Timing Over-Advanced (<u>Retarded</u>) or System Performance (Bank 1) – Cor, Sol '04, 3UZ-FE Old DTC P1349
P0012	Camshaft Position "A" – Timing Over-Retarded (Bank 1) – Cor, Sol '04 Old DTC P1349 Old DTC P1349
P0016	Crankshaft Position-Camshaft Position Correlacion (Bank 1 Sensor A) – Cor, Sol '04 <u>and</u> Old DTC P1346, P0336
P0018	Crankshaft Position-Camshaft Position Correlacion (Bank 2 Sensor A) – Sol '04 Old DTC P1351
P0020	Camshaft Position "A" Actuator Circuit (Bank 2) – Sol '04 Old DTC 1663
P0021	Camshaft Position "A" Timing Over-Advanced or System Performance (Bank 2) – Sol '04 Old DTC P13454
P0022	Camshaft Position "A" Timing Over- Retarded (Bank 2) – Sol '04 Old DTC PP1354
P0031	Oxygen (A/F) Sensor Heater Control Circuit Low (Bank 1 Sensor 1) – Cor, Sol '04 Old DTC P0135
P0032	Oxygen (A/F) Sensor Heater Control Circuit High (Bank 1 Sensor 1) – Cor '04 Old DTC P0135
P0036	Oxygen Sensor Heater Control Circuit (Bank 1 Sensor 2) (Tac)
P0037	Oxygen Sensor Heater Control Circuit Low (Bank 1 Sensor 2) Cam. '05 Old DTC P0141
P0038	Oxygen Sensor Heater Control Circuit High (Bank 1 Sensor 2) Old DTC P0141
P0051	Oxygen (A/F) Sensor Heater Control Circuit Low (Bank 2 Sensor 1) Old DTC P0155
P0052	Oxygen (A/F) Sensor Heater Control Circuit High (Bank 2 Sensor 1) Old DTC P0155
P0057	Oxygen Sensor Heater Control Circuit Low (Bank 2 Sensor 2) Old DTC P0161
P0058	Oxygen Sensor Heater Control Circuit High (Bank 2 Sensor 2)
P0063	Oxygen sensor heater control circuit low (Bank 2 Sensor 3) Old DTC P0167
P0064	Oxygen sensor heater control circuit high (Bank 2 Sensor 3) Old DTC P0167
P0069	MAP Sensor Too High or Too Low (KGB10)
P0088	High Fuel Pressure /78 (KD-FTV)
P0089	Pressure Control Valve Plausibility to Consume Current High Intensity (KGB10)
P0091	Short to GND in Pressure Control Valve Circuit (KGB10)
P0092	Short to B+ in Pressure Control Valve Circuit (KGB10)
P0093	/ 78 (KD-FTV)
P0095	Intake air temperature sensor 2 circuit Old DTC P1115
P0096	Turbocharged Air Temperature Sensor Gradient Test (KGB10)
P0097	Intake air temperature sensor 2 circuit low
P0098	Intake air temperature sensor 2 circuit high
P0098	Open or Short to B+ in Turbocharged Air Temperature Sensor Circuit (KGB10)
P0100	Mass or Volume Air Flow Circuit Malfunction / 31
P0101	Mass Air Flow Circuit Range/Performance Problem
P0102	Mass Air Flow Circuit Malfunction (Low Input – Cor, Sol "04)
P0103	Mass Air Flow Circuit Malfunction (High Input – Cor, Sol "04)
P0104	MAF Sensor Period Out of Range (KGB10)
P0105	Manifold Absolute Pressure/Barometric Pressure Circuit Malfunction / 31
P0106	Manifold Absolute Pressure Circuit Problem / 31
P0107	Manifold absolute pressure /Barometric pressure circuit low input
P0108	Manifold absolute pressure /Barometric pressure circuit high input

¹⁰ RM1097U, 3MZ-FE

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P0110	Intake Air Temperature (IAT) Circuit Malfunction / 24
P0112	Intake Air Temperature (IAT) Circuit Low Input – Cor, Sol '04
P0113	Intake Air Temperature (IAT) Circuit High Input – Cor, Sol '04
P0115	Engine Coolant Temperature Circuit Malfunction / 22
P0116	Engine Coolant Temperature Circuit Range/Performance Problem (after Engine Operates at Least 20 Minutes, Engine Coolant Temp. Sensor Value is 86°F aka 30°C or less)
P0116	Coolant Temperature Sensor Gradient Test
P0117	Engine Coolant Temperature Circuit Low Input
P0118	Engine Coolant Temperature Circuit High Input
P0120	Throttle/Pedal Position Sensor/Switch "A" Circuit Malfunction / 41
P0121	Throttle/Pedal Position Sensor/Switch "A" Circuit Range/Performance Problem / 41
P0122	Throttle/Pedal Position Sensor/Switch "A" Circuit Low Input – Cor '04
P0123	Throttle/Pedal Position Sensor/Switch "A" Circuit High Input – Cor '04
P0125	Insufficient Coolant Temperature for Closed Loop Fuel Control
P0128	Thermostat Malfunction (Coolant Temperature below Thermostat Regulating Temperature)
P0130	O2 Sensor Circuit Malfunction (Bank 1 Sensor 1) / 21
P0133	O2 Sensor Circuit Slow Response (Bank 1 Sensor 1)
P0134	Oxygen Sensor Circuit no activity Detected (Bank 1 Sensor 1) – Cor '04 Old DTC P0125
P0135	O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 1) / 21
P0136	O2 Sensor Circuit Malfunction (Bank 1 Sensor 2) / 27
P0137	Oxygen sensor circuit low voltage (Bank 1 Sensor 2)
P0138	Oxygen sensor circuit high voltage (Bank 1 Sensor 2)
P0139	O2 Sensor Circuit Slow Response (Bank 1 Sensor 2)
P0140	Oxygen sensor circuit no activity detected (Bank 1 Sensor 2)
P0141	O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)
P0142	O2 Sensor Circuit Malfunction (Bank 1 Sensor 3)
P0143	Oxygen sensor circuit low voltage (Bank 1 Sensor 3)
P0144	Oxygen sensor circuit high voltage (Bank 1 Sensor 3)
P0145	Oxygen sensor circuit slow response (Bank 1 Sensor 3)
P0147	O2 Sensor Heater Circuit Malfunction (Bank 1 Sensor 3)
P0148	Fuel delivery error
P0149	Fuel timing error
P0150	O2 Sensor Circuit Malfunction (Bank 2 Sensor 1) / 28
P0153	O2 Sensor Circuit Slow Response (Bank 2 Sensor 1)
P0155	O2 Sensor Heater Circuit Malfunction (Bank 2 Sensor 1) or Oxygen Sensor Heater Current is Less than 0.25 amp, or Exceeds 2 amps or Voltage Drop for the Heater Exceeds 5 Volts (Cam.)
P0156	O2 Sensor Circuit Malfunction (Bank 2 Sensor 2)
P0157	Oxygen Sensor Circuit Low Voltage (Bank 2 Sensor 2) LC '06
P0158	Oxygen sensor circuit High voltage (Bank 2 Sensor 2)
P0159	O2 Sensor Circuit Slow Response (Bank 2 Sensor 2)
P0160	Oxygen sensor circuit no activity detected (Bank 2 Sensor 2)
P0161	O2 Sensor Heater Circuit Malfunction (Bank 2 Sensor 2) / 28
P0162	O2 Sensor Circuit Malfunction (Bank 2 Sensor 3)
P0163	Oxygen sensor circuit low voltage (Bank 2 Sensor 3)
P0165	Oxygen sensor circuit slow response (Bank 2 Sensor 3)
P0166	Oxygen sensor circuit no activity detected (Bank 2 Sensor 3)
P0167	O2 Sensor Heater Circuit Malfunction (Bank 2 Sensor 3)
P0169	Incorrect fuel composition
P0170	Fuel Trim Malfunction
P0171	System too Lean (Fuel Trim) (tens cars) / 25 (B1)
P0172	System too Rich (Fuel Trim) / 26 (B1)
P0173	Fuel trim bank 2
P0174	System too Lean (Bank2) / 25
P0175	System too Rich (Bank2) / 26
P0176	Fuel Composition Sensor Circuit Malfunction
P0177	Fuel composition sensor circuit range /performance
P0178	Fuel composition sensor circuit low input
P0179	Fuel composition sensor circuit high input
P0180	Fuel Temperature Sensor "A" Circuit Malfunction / 39
P0181	Fuel Temperature Sensor Gradient Test (KGB10)
P0182	Short to GND in Fuel Temperature Sensor Circuit (KGB10)
P0183	Open or Short to B+ in Fuel Temperature Sensor Circuit (KGB10)

Note: Not all trouble codes are used on all models

DTC on Toyota / Lexus from al tech page

P0190	Fuel Rail Pressure Sensor Circuit Malfunction / 49
P0191	Fuel Rail Pressure Sensor ¹¹ Circuit Range / Performance (Vist.) / 49
P0191	Common Rail Pressure Sensor Gradient of Common Rail Pressure Too High
P0192	Short to GND in Common Rail Pressure Sensor Circuit
P0193	Open or Short to B+ in Common Rail Pressure Sensor Circuit (KGB10)
P0195	Engine oil temperature sensor
P0196	Engine oil temperature sensor range/performance
P0197	Engine oil temperature sensor low
P0198	Engine oil temperature sensor high
P0199	Engine oil temperature sensor intermittent
P0200	Throttle / Pedal Position Sensor / Switch "B" Circuit (LC '06)
P0201	Cylinder No. 1 Misfires Continuously
P0201	Piezoelectric Injection Timing Cylinder 1 (KGB10)
P0202	Cylinder No. 2 Misfires Continuously
P0202	Piezoelectric Injection Timing Cylinder 2 (KGB10)
P0203	Cylinder No. 3 Misfires Continuously
P0204	Cylinder No. 4 Misfires Continuously
P0205	Cylinder No. 5 Misfires Continuously
P0206	Cylinder No. 6 Misfires Continuously
P0220	Throttle/Pedal Position Sensor/Switch "B" Circuit Old DTC P0120
P0222	Throttle/Pedal Position Sensor/Switch "B" Circuit Low Input
P00222	Throttle/ Pedal position sensor/switch "B" circuit low input (LC '06)
P0222	Short to GND in Accelerator Pedal Sensor Track 1 Circuit (KGB10)
P0223	Throttle/Pedal Position Sensor/Switch "B" Circuit High Input (LC '06)
P0224	Throttle/ Pedal position sensor/switch "B" circuit intermittent
	Throttle/ Pedal position sensor/switch "C" circuit
P0226	Throttle/ Pedal position sensor/switch "C" circuit range/performance
P0227	Throttle/ Pedal position sensor/switch "C" circuit low input
P0227	Short to GND in Accelerator Pedal Sensor Track 2 Circuit (KGB10)
P0228	Throttle/ Pedal position sensor/switch "C" circuit high input
P0229	Throttle/ Pedal position sensor/switch "C" circuit intermittent
P0230	Fuel pump primary circuit (LC '06) Old DTC P1200
P0231	Fuel pump secondary circuit low Old DTC P1202
P0232	Fuel pump secondary circuit high
P0233	Fuel pump secondary circuit intermittent
P0235	Turbo/Super charger boost sensor "A" circuit Old DTC P1405
P0236	Turbo/Super charger boost sensor "A" circuit range /performance Old DTC P1406
P0236	MAP Sensor Gradient Test (KGB10)
P0237	Turbo/Super charger boost sensor "A" circuit low
P0238	Turbo/Super charger boost sensor "A" circuit high
P0263	Cylinder Balancing Controller Output of Cylinder 1 not within Normal Value Range (KGB10)
P0266	Cylinder Balancing Controller Output of Cylinder 2 not within Normal Value Range (KGB10)
P0269	Cylinder Balancing Controller Output of Cylinder 3 not within Normal Value Range (KGB10)
P0272	Cylinder Balancing Controller Output of Cylinder 4 not within Normal Value Range (KGB10)
P0274	Automatic Transmission (3UZ-FE): P0274 Brake Switch "B" Circuit High
P0300 ¹²	Random/Multiple Cylinder Misfire Detected or Misfiring Of Multiple Cylinders During Same 200-1000 Engine Revolutions
P0301	Cylinder 1 Misfire Detected
P0302	Cylinder 2 Misfire Detected
P0303	Cylinder 3 Misfire Detected
P0304	Cylinder 4 Misfire Detected
P0305	Cylinder 5 Misfire Detected
P0306	Cylinder 6 Misfire Detected
P0307	Cylinder 7 Misfire Detected
P0308	Cylinder 8 Misfire Detected
P0309	Cylinder 9 Misfire Detected
P0310	Cylinder 10 Misfire Detected
P0311	Cylinder 11 Misfire Detected
P0312	Cylinder 12 Misfire Detected

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¹² For Prius TSB EG007-01

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P0325	Knock Sensor 1 Circuit Malfunction / 52 (Bank 1 or Single Sensor on Cor, Sol '04)
P0326	Knock sensor 1 circuit range/performance
P0327	Knock Sensor 1 Circuit Low Input (Bank 1 or Single Sensor) - Cor, Sol '04, LC '06 Old DTC P0325
P0328	Knock Sensor 1 Circuit High Input (Bank 1 or Single Sensor) - Cor, Sol '04) Old DTC P0325
P0329	Knock sensor 1 circuit input intermittent (Bank 1 or Signal sensor)
P0330	Knock Sensor 2 Circuit Malfunction (Bank 2) / 55
P0331	Knock sensor 2 circuit range/performance (Bank 2)
P0332	Knock Sensor 2 Circuit Low Input (Bank 2), Sol '04, LC '06 Old DTC P0325
P0333	Knock Sensor 2 Circuit High Input (Bank 2), Sol '04, LC '06 Old DTC P0325
P0335	Crankshaft Position Sensor "A" Circuit Malfunction / 13 LC '06
P0336	Crankshaft Position Sensor "A" Circuit Range/Performance or Deviation in Crankshaft & Camshaft Position Sensor Signals (Cam.) Old DTC P1355, P1356
P0337	Crankshaft position sensor "A" circuit low input
P0338	Crankshaft position sensor "A" circuit high input
P0339	Crankshaft Position Sensor "A" Circuit Intermittent - Cor, Sol '04, LC '06 Old DTC P1335
P0340	Camshaft Position Sensor Circuit Malfunction (B1 or Single Sensor)(Mar.,Cam. Cor, Sol '04) / 12
P0340	Cylinder distinction sensor circuit range /performance / 12
P0341	Camshaft Position Sensor ("A") Circuit Range/Performance (Bank 1 or Single Sensor) - Cor '04
P0342	Camshaft position sensor "A" circuit low input (Bank 1 or Signal sensor) Old DTC P1345
P0343	Camshaft position sensor "A" circuit low input (Bank 1 or Signal sensor) Old DTC P1345
P0344	Camshaft position sensor "A" circuit intermittent (Bank 1 or signal sensor)
P0345	Camshaft Position Sensor ("A") Circuit (Bank 2) - Sol '04, LC '06 Old DTC P1350
P0346	Camshaft Position Sensor ("A") Circuit Range/Performance (Bank 2) - Sol '04, Rx300 '05 (Eur) Old DTC P1350
P0347	Camshaft position sensor "A" circuit low input (Bank 2) Old DTC P1350
P0348	Camshaft position sensor "A" circuit high input (Bank 2) Old DTC P1350
P0349	Camshaft position sensor "A" circuit intermittent (Bank 2)
P0350	Ignition coil primary / secondary circuit
P0351	Ignition Coil "A" Primary/Secondary Circuit - Cor, Sol '04 Old DTC P1300
P0352	Ignition Coil "B" Primary/Secondary Circuit - Cor, Sol '04 Old DTC P1305
P0353	Ignition Coil "C" Primary/Secondary Circuit - Cor, Sol '04 Old DTC P1310
P0354	Ignition Coil "D" Primary/Secondary Circuit - Cor, Sol '04 Old DTC P1315
P0355	Ignition Coil "E" Primary/Secondary Circuit - Sol '04 Old DTC P1320
P0356	Ignition Coil "F" Primary/Secondary Circuit - Sol '04 Old DTC P1325
P0357	Ignition coil "G" primary/Secondary circuit Old DTC P1330
P0358	Ignition coil "H" primary/Secondary circuit Old DTC P1340
P0365	Camshaft position sensor "B" circuit (Bank 1) Old DTC P1360
P0366	Camshaft position sensor "B" circuit range /performance (Bank 1) Old DTC P1357
P0367	Camshaft position sensor "B" circuit low input (Bank 1)
P0368	Camshaft position sensor "B" circuit high input (Bank 1)
P0369	Camshaft position sensor "B" circuit intermittent (Bank 1)
P0385	Crankshaft Position Sensor "B" Circuit Malfunction
P0390	Camshaft position sensor "B" circuit (Bank 2) Old DTC P1365
P0391	Camshaft position sensor "B" circuit range /performance (Bank 2) Old DTC P1358
P0392	Camshaft position sensor "B" circuit intermittent (Bank 2)
P0393	Exhaust gas recirculation control circuit range /performance
P0394	Exhaust gas recirculation sensor "A" circuit low
P0400	Exhaust Gas Recirculation Flow Malfunction
P0401	Exhaust Gas Recirculation Flow Insufficient Detected With Engine Warm & Driven at 50 MPH for 3-5 Minutes, EGR Gas Sensor Value does Not Exceed Ambient Air Temperature by 72°F (40°C) (Cam.) / 71
P0401	EGR Controller, MAF Too Low Compared to the Target (KGB10)
P0402	Exhaust Gas Recirculation Flow Excessive Detected
P0402	EGR Controller, MAF Too High Compared to the Target (KGB10)
P0403	Exhaust Gas Recirculation Circuit Malfunction / 71
P0403	MAF not within Normal Value Range (KGB10)
P0404	Exhaust gas recirculation control circuit range /performance
P0405	Exhaust gas recirculation sensor "A" circuit low Old DTC P1410
P0405	Short to GND in EGR Valve Position Sensor Circuit (KGB10)
P0406	Open or Short to B+ in EGR Valve Position Sensor Circuit (KGB10)
P0409	EGR Valve Opened and Closed Stuck Valve (KGB10)

Note: Not all trouble codes are used on all models

DTC on Toyota / Lexus from al tech page

P0410	Secondary Air Injection System Malfunction
P0411	Secondary Air Injection System Incorrect Flow Detected Old DTC P1410
P0412	Secondary Air Injection System Switching Valve "A" Circuit Malfunction LC '06
P0418	Secondary Air Injection System Control "A" Circuit LC '06
P0420	Catalyst System Efficiency Below Threshold (Bank 1) - With Engine Warm & Driven at 20-50 MPH for 5 Minutes, Heated Oxygen Sensors Have Same Wave Patterns (Cam.)
P0428	Catalyst temperature sensor high input (Bank 1) Old DTC P1111
P0430	Catalyst System Efficiency Below Threshold (Bank 2)
P043E	Evaporative Emission System Leak Detection Reference Orifice Low Flow LC '06
P043F	Evaporative Emission System Reference Orifice High Flow LC '06
P0440	Evaporative Emission Control System Malfunction
P0441	Evaporative Emission Control System, Incorrect Purge Flow
P0442	Evaporative Emission Control System Leak Detected (Small Leak)
P0443	Evaporative Emission Control System Purge Control Valve Circuit Malfunction
P0446	Evaporative Emission Control System Vent Control Malfunction
P0450	Evaporative Emission Control System Pressure Sensor Malfunction
P0451	Evaporative Emission Control System Pressure Sensor/Switch Range/Performance
P0452	Evaporative Emission Control System Pressure Sensor/Switch Low Input - Cor, Sol '04
P0453	Evaporative Emission Control System Pressure Sensor/Switch High Input - Cor, Sol '04
P0455	Evaporative Emission Control System Leak Detected (gross Leak), Sol '04
P0456	Evaporative Emission Control System Leak Detected (Very Small Leak)
P0487	EGR System Check above Upper Limit, below Lower Limit (KGB10)
P0490	Control and Position of EGR Valve not Plausible (KGB10)
P0495	FAN Consistency Test (KGB10)
P0500	Vehicle Speed Sensor Malfunction / 42 (Sensor "A" on Co, Sol r '04)
P0500	Vehicle speed sensor circuit open
P0501	Vehicle Speed Plausibility Test (KGB10)
P0503	Vehicle Speed Sensor "A" Intermittent/ Erratic/High, Sol '04 Old DTC P0500 Vehicle speed signal abnormal (LS430 a 04)
P0504	Brake Switch "A"/"B" Correlation, Sol '04
P0505	Idle Control System Malfunction or Idle Speed Varies Greatly from ECM Target Speed
P0510	Closed Throttle Position Switch Malfunction
P0511	Idle Air Control Circuit - Cor '04 Old DTC P0505
P0512	Starter request circuit Old DTC P1545
P0513	Incorrect immobilizer key Old DTC B2795
P0516	Battery Temperature Sensor Circuit Low (RAV4 '06)
P0517	Battery Temperature Sensor Circuit Low High (RAV4 '06)
P0532	Short to B+ in Air Conditioning Pressure Sensor Circuit (KGB10)
P0533	Short to B+ in Air Conditioning Pressure Sensor Circuit (KGB10)
P0545	Exhaust gas temperature sensor circuit low (Bank 1 Sensor 1)
P0546	Exhaust gas temperature sensor circuit high (Bank 1 Sensor 1)
P0550	Power Steering Pressure Sensor Circuit Malfunction or Closed Throttle Position Switch Does Not Turn On when Vehicle is Driven
P0552	Power Steering Pressure Sensor/Switch Circuit Low Input
P0553	Power Steering Pressure Sensor/Switch Circuit High Input
P0555	Brake booster pressure sensor circuit Old DTC P1540
P0556	Brake booster pressure sensor circuit range /Performance Old DTC C1210, P1541
P0557	Brake booster pressure sensor circuit low input Old DTC C1200
P0558	Brake booster pressure sensor circuit high input
P0559	Brake booster pressure sensor circuit intermittent Old DTC P1600
P0560	System Voltage - Cor, Sol '04
<u>Engine (2JZ-GE): P0604, P0606, P0607, P0657 Actuator Supply Voltage Circuit/Open</u>	
P0563	Battery Voltage Value Too High (KGB10)
P0571	Brake Switch "A" Circuit / (CC 52) (LS430 a 04) Old DTC P1520
P0571	Stop Light Switch Main Sensor not Plausible (KGB10)
P0601	ECU Test 1 Checksum Application Software, Checksum Calibration Value (KGB10)
P0603	Checksum Memory EEPROM (KGB10)
P0604	Internal Control Module Random Access Memory (RAM) Error , Sol '04, LC '06
P0605	Internal Control Module Read Only Memory (ROM) Error (ECU Test 1 Checksum Boot Software-KGB10)
P0606	ECM/PCM Processor Old DTC P0605, P1633 (+KGB10, LC '06)
P0607	Control Module Performance / (CC 54) LC '06. Old DTC P1565, P1566, P1633 Cancel circuit

Note: Not all trouble codes are used on all models

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	faulty (LS430 a '04)
P0613	TCM processor Old DTC P0740 ?
P0615	Old DTC P1522 Starter relay circuit
P0617	Starter Relay Circuit High – Cor, Sol '04 <u>and</u>
P0627	/ 78 (KD-FTV)
P0630	<u>P0630 VIN Not Programmed Or Mismatch ECM/PCM</u>
P0657	Actuator Supply Voltage Circuit / Open, Sol '04, LC '06. Old DTC P1633
P0658	5 V Supply No.1 Voltage Supply too Low (KGB10)
P0659	5 V Supply No.1 Voltage Supply too High (KGB10)
P0660	Intake manifold turning valve control circuit /Open (Bank 1) Old DTC P1651
P0663	Intake manifold turning valve control circuit /Open (Bank 1) Old DTC P1666
P0691	Short to B+ in FAN1 Circuit (KGB10)
P0692	Open or Short to GND in FAN1 Circuit (KGB10)
P0693	Short to B+ in FAN2 Circuit (KGB10)
P0705	Transmission Range Sensor Circuit Malfunction (PRNDL Input) - Cor, <u>Sol '04</u> Old DTC P1780
P0710	Transmission Fluid Temperature Sensor ("A") Circuit malfunction
P0711	Transmission Fluid Temperature Sensor ("A") Circuit Range / Performance <u>and</u>
P0712	Transmission Fluid Temperature Sensor "A" Circuit Low Input - Sol '04
P0713	Transmission Fluid Temperature Sensor "A" Circuit High Input - Sol '04
P0715	Input/Turbine Speed Sensor Circuit Malfunction (Mar.)
P0717	Input/Turbine Speed Sensor "A" Circuit No Signal - Sol '04 <u>and</u> Old DTC P0715 P1707 P1727
P0720	Output speed sensor circuit Old DTC P1700
P0722	Output Speed Sensor (Tac) signal Old DTC P1702 P1827
P0724	Brake Switch "B" Circuit High – Cor, Sol '04 '04 Old DTC P1520
P0725	Engine Speed Input Circuit Malfunction
P0740	ECT ECU Malfunction
P0741	Torque Converter Clutch Solenoid Performance (Shift Solenoid Valve DSL) – Cor, Sol '04 Old DTC P0770
P0743	Torque Converter Clutch Circuit Electrical (Tac) Old DTC P0773 Torque converter clutch circuit electrical
P0746	Pressure Control Solenoid "A" Performance (Shift Solenoid Valve SL1) - Sol '04 Old DTC P0750
P0748	Pressure Control Solenoid "A" Electrical (Shift Solenoid Valve SL1) - Sol '04 Old DTC P0753
P0750	Shift Solenoid "A" (SL1) Malfunction or Shift Solenoid A/B Malfunction
P0751	Shift Solenoid "A" performance (Shift Solenoid Valve SL1) - Cor, Sol '04 Old DTC P0750
P0753	Shift Solenoid "A" (SL1) Electrical Malfunction
P0755	Shift Solenoid "B" (SL2) Malfunction or During Normal Driving, Gear Required By ECM Does Not Match Actual Gear (Cam.)
P0756	Shift Solenoid "B" Performance (Shift Solenoid Valve S2) - Cor '04 Old DTC P0755
P0758	Shift Solenoid "B" (SL2) Electrical Malfunction
P0760	Shift Solenoid "C" Malfunction
P0761	Shift solenoid "C" performance or Stuck off Old DTC P0760
P0763	Shift Solenoid "C" Electrical
P0765	Shift Solenoid "D" Malfunction (S4 or Shift Solenoid Valve No. 4)
P0766	Shift Solenoid "D" Performance (S4 or Shift Solenoid Valve No. 4) – Sol '04 Old DTC P0765
P0768	Shift Solenoid "D" (S4 or Shift Solenoid Valve No. 4) Electrical
P0770	Shift Solenoid "E" Malfunction (Lock-Up Solenoid, also called SL solenoid)
P0771	Shift Solenoid "E" Performance (Shift Solenoid Valve SR) – Sol '04 Old DTC P1816
P0773	Shift Solenoid "E" (Lock-Up Solenoid) Electrical Circuit Malfunction
P0776	Pressure Control Solenoid "B" Performance (Shift Solenoid Valve SL2) – Sol '04
P0778	Pressure Control Solenoid "B" Electrical (Shift Solenoid Valve SL2) – Sol '04 Old DTC P0758
P0781	1-2 Shift (1-2 Shift Valve)
P0793	Intermediate Shaft Speed Sensor "A" Circuit No Signal – Sol '04 Old DTC P1732
P0796	Pressure Control Solenoid "C" Performance (Shift Solenoid Valve SL3) – Sol '04 Old DTC P0760
P0798	Pressure Control Solenoid "C" Electrical (Shift Solenoid Valve SL3) – Sol '04 Old DTC P0763
P0818	Driveline Disconnect Switch Input Circuit (Tac) Old DTC P1783
P0841	Transmission fluid pressure sensor/Switch "A" circuit range/Performance Old DTC P1846
P0842	Transmission fluid pressure sensor/Switch "A" circuit low
P0843	Transmission fluid pressure sensor/Switch "A" circuit high
P0850	Park/Neutral Switch Input Circuit – Cor '04 Old DTC P1780
P0962	Pressure control solenoid "A" control circuit low
P0963	Pressure control solenoid "A" control circuit high
P0966	Pressure control solenoid "B" control circuit low

Note: Not all trouble codes are used on all models

DTC on Toyota / Lexus from al tech page

P0967	Pressure control solenoid "B" control circuit high
P0973	Shift Solenoid "A" control Circuit Low (Shift Solenoid Valve S1) - Cor '04 and
P0974	Shift Solenoid "A" control Circuit High (Shift Solenoid Valve S1) - Cor '04, Tac
P0975	
P0976	Shift Solenoid "B" control Circuit Low (Shift Solenoid Valve S2) - Cor '04, Tac
P0977	Shift Solenoid "B" control Circuit High (Shift Solenoid Valve S2) - Cor '04
P0979	Shift solenoid "C" control circuit low
P0980	Shift solenoid "C" control circuit high
P0982	Shift Solenoid "D" Control Low - Sol '04 and
P0983	Shift Solenoid "D" Control High - Sol '04
P0985	Pressure Control Solenoid "E" Performance (Shift Solenoid Valve SR) - Sol '04
P0986	Pressure Control Solenoid "E" Electrical (Shift Solenoid Valve SR) - Sol '04
P0998	Shift solenoid "F" control circuit low
P0999	Shift solenoid "F" control circuit high
P1010	OCV for VVTL circuit (Bank 1) Old DTC P1690
P1011	OCV for VVTL open malfunction (Bank 1) Old DTC P1692
P1012	OCV for VVTL close malfunction (Bank 1) Old DTC P1693
P1020	OCV for VVTL circuit (Bank 2) Old DTC P1695
P1021	OCV for VVTL open malfunction (Bank 2) Old DTC P1697
P1022	OCV for VVTL close malfunction (Bank 2) Old DTC P1698
P1031	A/ F sensor heater circuit low (Bank 1 Sensor 1) Old DTC P1135
P1032	A/ F sensor heater circuit high (Bank 1 Sensor 1) Old DTC P1135
P1051	A/ F sensor heater circuit low (Bank 2 Sensor 1) Old DTC P1155
P1052	/ F sensor heater circuit high (Bank 2 Sensor 1) Old DTC P1155
P1100	Atmospheric Press Sensor Malfunction
P1101	Atmospheric Press Sensor Circuit Range / Performance
P1102	Barometer Atmospheric Pressure Sensor Low Input
P1103	Barometer Atmospheric Pressure Sensor High Input
P1105	Combustion Press Sensor Malfunction/High Input
P1113	Common Rail Pressure Controller PI Controller Drift, Common Rail Pressure Too Low
P1114	Electric Injection Fuel Cut-off (KGB10)
P1115	Large air temperature sensor broken wire short circuit / 24
P1120 ¹³	Accelerator Pedal Position Sensor Circuit Malfunction / 19
P1121	Accelerator Pedal Position Sensor Range/Performance Problem / 19
P1125	Throttle Control Motor Circuit Malfunction / 89
P1126	Magnetic Clutch Circuit Malfunction / 89
P1127	ETCS Actuator Power Source Circuit Malfunction / 89
P1128	Throttle Control Motor Lock Malfunction / 89
P1129	Electric Throttle Control System Malfunction / 89
P1130	A/F Sensor Circuit Range/Performance Malfunction (Bank 1 Sensor 1)
P1131	A/ F sensor circuit low (Bank 1 Sensor 1) Old DTC P1130
P1132	A/ F sensor circuit high (Bank 1 Sensor 1) Old DTC P1130
P1133	A/F Sensor Circuit Response Malfunction (Bank 1 Sensor 1)
P1134	A/ F sensor circuit no activity detected (Bank 1 Sensor 1) Old DTC P0125
P1135	A/F Sensor Heater Circuit Malfunction (Bank 1 Sensor 1)
P1136	A/F Sensor Circuit Malfunction (Bank 1 Sensor 2)
P1139	A/F Sensor Circuit Slow Response (Bank 1 Sensor 2)
P1141	A/F Sensor Heater Circuit Malfunction (Bank 1 Sensor 2)
P1150	A/F Sensor Circuit Range/Performance Malfunction (Bank 2 Sensor 1)
P1151	A/ F sensor circuit low (Bank 2 Sensor 1) (Coolant Heat Storage Tank) Old DTC P1150
P1152	A/ F sensor circuit high (Bank 2 Sensor 1) Old DTC P1150
P1153	A/F Sensor Circuit Response Malfunction (Bank 2 Sensor 1)
P1154	A/ F sensor circuit no activity detected (Bank 2 Sensor 1) Old DTC P0125
P1155	A/F Sensor Heater Circuit Malfunction (Bank 2 Sensor 1)
P1156	A/F Sensor Circuit Malfunction (Bank 2 Sensor 2)
P1159	A/F Sensor Circuit Slow Response (Bank 2 Sensor 2)
P1161	A/F Sensor Heater Circuit Malfunction (Bank 2 Sensor 2)
P1164	Common Rail Pressure Sensor Offset, PCV Controller in Open Loop (KGB10)
P1165	Common Rail Pressure Sensor Inconsistency between Rail Pressure and PCV Current
P1166	Common Rail Pressure Controller PI Controller Drift, Common Rail Pressure Too High

¹³ For Prius TSB EG018-02

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P1167	Common Rail Pressure Controller Pressure Oscillation, Dynamic Test (KGB10)
P1169	Converter DC / DC Piezo Voltage Too Low, Piezo Voltage Too High (KGB10)
P1180	CNG Pressure Sensor Circuit Malfunction
P1185	CNG Temperature Sensor Circuit Malfunction
P1190	Fuel Pressure Regulator Malfunction
P1192	Hydraulic Fuel Cut-off by PCV and VCV (KGB10)
P1197	Piezo Power Stage Voltage Control / Global Incapacity (KGB10)
P1198	Common Rail Pressure Controller VCV Adaptation, Insufficient Fuel Flow (KGB10)
P1200	Fuel Pump Relay/ECU Circuit Malfunction
P1205	Electric Air Pump Circuit Malfunction.
P1210	Injector Control Pressure Above Expected Level / 92
P1210	Open in Pressure Control Valve Circuit
P1215	EDU Circuit Malfunction (Ath.) / 97
P1220	Timer Control Circuit Malfunction
P1221	Venturi Control Circuit Malfunction
P1222	Inhalation contraction mechanism stepping motor type abnormality / 15
P1225	Spill Control Circuit Malfunction
P1226	Fuel Pump Circuit Malfunction or Control Sleeve Sensor Malfunction (Fuel Leakage) / 78
P1228	Supply pump abnormal broken wire short circuit / 78
P1229	Fuel System / 78 (KD-FTV)
P1229	Supply pump abnormal overpressure sending / 78
P1230	Venturi Position Sensor Malfunction
P1235	High Pressure Fuel Pump Circuit Malfunction or "Fuel Pump Control Out Of Range" / 78
P1240	Fuel Shutoff Valve Circuit for Delivery Pipe Malfunction
P1245	Fuel Shutoff Valve Circuit for Pressure Regulator Malfunction
P1250	Variable nozzle turbocharger instant abnormality / 34
P1252	Variable nozzle turbocharger stepping motor broken wire / 34
P1255	Variable nozzle turbocharger stick closing side abnormality / 34
P12FF	Electric Driver Unit (EDU)
P1300	Igniter Circuit Malfunction / 14
P1305	Igniter No. 2 Circuit Malfunction / 15
P1310	Igniter No. 3 Circuit Malfunction / 15
P1315	Igniter No. 4 Circuit Malfunction / 14 ()
P1320	Igniter No. 5 Circuit Malfunction
P1325	Igniter No. 6 Circuit Malfunction
P1330	Igniter No. 7 Circuit Malfunction
P1335	Crankshaft Position Sensor (CKP) Circuit Malfunction (During engine running) (Vist., Cam.) / 13
P1340	Igniter No. 8 Circuit Malfunction (1998-2000 Land Cruiser & 2000 Tundra)
P1340	Camshaft Position Sensor "A" (Bank 1 Sensor 2) LC`06
P1341	Camshaft Position Sensor "A" (Bank 1 Sensor 2) LC`06
P1345	VVT (Variable Valve Timing) Sensor/Camshaft Position Sensor Circ. Malfunction (Bank1)
P1346	VVT (Variable Valve Timing) Sensor/Camshaft Position Sensor Circuit Range/Performance Problem (Bank 1) / 18 ¹⁴
P1349	VVT (Variable Valve Timing) System Malfunction (Bank 1) 59
P1350	VVT (Variable Valve Timing) Sensor/Camshaft Position Sensor Circ. Malfunction (Bank2) ¹⁵
P1351	VVT (Variable Valve Timing) Sensor/Camshaft Position Sensor Circuit Range/Performance Problem (Bank 2)
P1349	Short to B+ in Glow Relay Circuit (KGB10)
P1350	Open or Short to GND in Glow Relay Circuit (KGB10)
P1351	Glow Relay Coherency Test (Open Relay) (KGB10)
P1352	Glow Relay Coherency Test (Latched Relay) (KGB10)
P1354	VVT (Variable Valve Timing) System Malfunction (Bank 2) ¹⁶
P1357	Exhaust VVT Sensor/Camshaft Position Sensor Circuit Malfunction (Bank 1)
P1358	Exhaust VVT Sensor/Camshaft Position Sensor Circuit Malfunction (Bank 2)
P1360	Exhaust VVT Sensor/Camshaft Position Sensor Circuit Malfunction (Bank 1)
P1365	Exhaust VVT Sensor/Camshaft Position Sensor Circuit Malfunction (Bank 2)
P1366	Injector Piezoelectric Voltage / Current / Charge Cylinder 1 (KGB10)
P1367	Injector Piezoelectric Voltage / Current / Charge Cylinder 2 (KGB10)

¹⁴ Old DTC Ref. To P0016

¹⁵ Old DTC, Ref. To P0346, P0347 and P0348

¹⁶ Old DTC Ref. To P0021 and P0022

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P1368	Injector Piezoelectric Voltage / Current / Charge Cylinder 3 (KGB10)
P1369	Injector Piezoelectric Voltage / Current / Charge Cylinder 4 (KGB10)
P1400	Sub Throttle Position Sensor Circuit Malfunction
P1401	Sub Throttle Position Sensor Circuit Range/Performance Problem (+Prizm)
P1403	Open / Short to B+ or Short to GND in PTC Heater 1 Circuit (KGB10)
P1404	Open / Short to B+ or Short to GND in PTC Heater 2 Circuit (KGB10)
P1405	Turbo Pressure Sensor Circuit Malfunction (+Prizm)
P1405	Intake pressure sensor broken wire short turbocharger abnormality / 35
P1406	Turbo Pressure Sensor Circuit Range/Performance Problem
P1410	EGR Valve Position Sensor Circuit Malfunction (aka Lift Sensor)
P1411	EGR Valve Position Sensor Circuit Range/Performance Problem
P1415	Air Pump Circuit Malfunction/ (AIR) System Bank 1 / 58 (SCV Valve)
P1416	Port Air Circuit Malfunction/ (AIR) System Bank 2 / 58 (SCV Valve)
P1420	Intake Constrictor CTRL Circuit Open or Short
P1430	Vacuum Sensor for HC Adsorber and Catalyst (HCAC) System Circuit Malfunction (HV)
P1431	Vacuum (pressure) Sensor for HC Adsorber and Catalyst (HCAC) System Circuit Range/Performance Problem
P1436	Toyota-HCAC-System By-Pass Valve Improvement-Open Malfunction (Pri)
P1437	Toyota-HCAC-System By-Pass Valve Close Malfunction
P1437	Vacuum Line Malfunction (HV)
P1440	Secondary Air Injection Vacuum Switching Valve Circuit Malfunction Bank 1 LC`06
P1441	Stuck Open in Secondary Air Injection Vacuum Switching Valve Bank 1 LC`06
P1442	Stuck Close in Secondary Air Injection Vacuum Switching Valve Bank 1 LC`06
P1443	Secondary Air Injection Vacuum Switching Valve Circuit Malfunction Bank 2 LC`06
P1444	Stuck Open in Secondary Air Injection Vacuum Switching Valve Bank 2 LC`06
P1445	Stuck Close in Secondary Air Injection Vacuum Switching Valve Bank 2 LC`06
P1455	Vapor Reducing Fuel Tank System Malfunction
P1455	Vapor Reducing Fuel Tank System Leak Detected (Small Leak) (HV)
P1461	Position of EGR Valve Out of Range
P1500	Starter Signal Circuit Malfunction
P1505	Switch Signal Malfunction
P1510	Boost Pressure Control Malfunction (Range/Performance problem)
P1511	Boost Pressure Low Malfunction or Turbo VSV
P1512	Boost Pressure High Malfunction or Turbo VSV
P1515	Inter Cooler System Malfunction
P1520	Stop Light Switch Circuit Malfunction (Open or Short) (A/T) ('03 LS430) / 51
P1525	Resolver Circuit Malfunction
P1550	Battery Current Sensor Circuit (RAV4 `06) Old DTC P1542
P1551	Battery Current Sensor Circuit Low (RAV4 `06)
P1552	Battery Current Sensor Circuit High (RAV4 `06)
P1565	Cruise Control Main Switch Circuit Malfunction
P1566	Input Signal Circuit Abnormal or Cruise Control Main Switch Circuit Fault For '03 LS430: Stop light switch input signal faulty and/or Cancel circuit faulty
P1600	ECM BATT Malfunction
P1602	Detection of Battery (RAV4 a `06)
P1602	Open, Short to B+ or Short to GND in Glow Lamp Circuit (KGB10)
P1605	Knock Control CPU (module) Malfunction
P1606	Open, Short to B+ or Short to GND in MIL Circuit (KGB10)
P1608	Open, Short to B+ or Short to GND in Coolant Temperature Lamp Circuit
P1610	Combustion Control CPU Malfunction
P1611	Inside IC abnormality /17
P1613	Secondary Air Injection Driver Malfunction LC`06
P1620	ECT1 Signal Circuit Malfunction
P1621	Microcontroller Communication not Plausible (KGB10)
P1625	ESA1 Signal Circuit Malfunction
P1626	ESA2 Signal Circuit Malfunction
P1627	ESA3 Signal Circuit Malfunction
P1630	Vehicle Speed not Plausible (KGB10)
P1630	Traction Control System Malfunction
P1630	Vehicle Speed not Plausible (KGB10)
P1633	ECM Malfunction (ETCS Circuit) or Electronic Throttle Control System (ETCS) Circuit ECM Malfunction / 89

Note: Not all trouble codes are used on all models

P1636	HV ECU Malfunction
P1637	E(G?)STP signal Malfunction (ESTP Signal Malfunction – Pri)
P1641	Piezo Power Stage Initializing of Driver Failed (KGB10)
P1645	Body ECU Malfunction
P1647	High speed CAN communication bus (U0001)
P1650	Fuel Pressure Up VSV Circuit Malfunction
P1651	VSV For ACIS Circuit Malfunction
P1652	IACV Control Circuit Malfunction
P1653	SCV Circuit Malfunction / 58
P1654	Idle Up VSV Circuit Malfunction
P1655	Idle Purge VSV Circuit Malfunction
P1656	OCV (Oil Control Valve) Circuit Malfunction (Bank 1) / 39 (RHD Platz)
P1657	Purge Cut VSV Circuit Malfunction
P1658	Waste Gate Valve Control Circuit Malfunction
P1659	Super Charger Control Circuit Malfunction
P1660	Air Bleed Control Circuit Malfunction (VSV for AICVS circuit) Old DTC P1668
P1661	Exhaust Gas Control Valve Control Circuit Malfunction
P1662	Exhaust Bypass Valve Control Circuit Malfunction
P1663	OCV (Oil Control Valve) Circuit Malfunction (Bank 2)
P1666	Intake Air Control VSV No.2 Circuit Malfunction
P1667	TCV Circuit Malfunction
P1667	Conversion A/D not Plausible Test on Pedal Value Track 2 (KGB10)
P1668	Fuel Cut-off not Plausible (KGB10)
P1669	Engine Speed not Plausible (KGB10)
P1670	Revision resistant broken wire short circuit / 32
P1672	Supervision of Maximum Engine Speed
P1673	Time Unit Control not Plausible (KGB10)
P1668	VSV for AICV Circuit Malfunction
P1690	OCV For VVTL Circuit Malfunction (Bank 1)
P1692	OCV For VVTL Open Malfunction (Bank 1)
P1693	OCV For VVTL Close Malfunction (Bank 1)
P1695	OCV For VVTL Circuit Malfunction (Bank 2)
P1697	OCV For VVTL Open Malfunction (Bank 2)
P1698	OCV For VVTL Close Malfunction (Bank 2)
P1700	Speed Sensor No.2 Malfunction
P1705	NC2 (Direct Clutch Speed Sensor) Revolution Sensor Circuit malfunction or Direct Clutch Speed Sensor Output is 300 RPM or less with Vehicle at 20 MPH or more & with Park/Neutral Position Switch Off (Av. A '00 LHD)
P1710	Steering Sensor Circuit Malfunction
P1715	Rear Wheel Sensor Circuit Malfunction
P1720	DC Clutch Forced Release Circuit Malfunction
P1725	NT Revolution Sensor or Input Turbine Speed Sensor Circuit Malfunction
P1730	NC Revolution Sensor Circuit Malfunction or Counter Gear Speed Sensor Circuit Fault
P1735	Right Front Speed Sensor Circuit Malfunction
P1740	Left Front Speed Sensor Circuit Malfunction
P1745	Transmission Fluid Temperature Sensor No.2 Circuit Malfunction
P1753	Shift Solenoid No.4 Circuit Malfunction
P1755	Linear Solenoid for Lock Up Ctrl Circ. Malfunction
P1760	Linear Solenoid for Line Pressure Control Circuit Malfunction or Shift Solenoid Valve SLT Fault or Linear Solenoid for Lock-Up Control Circuit Malfunction
P1765	Linear Solenoid ¹⁷ for Accumulator Pressure Control Circuit Malfunction (Shift Solenoid Valve "SLN" malfunction) or with Engine Warm, Current Flow to Shift Solenoid Valve "SLN" is 0.2 Amp or less for One Second with Engine at 500 RPM or more, or with Park/Neutral Position Switch Off
P1770	Differential Lock Solenoid No.1 Circuit Malfunction
P1775	Differential Lock Solenoid No.2 Circuit Malfunction
P1780	Park/Neutral Position (PNP) Switch malfunction (A/T only)
P1782	Transfer L4 SW Circuit Malfunction (Tac)
P1783	Transfer N SW Circuit Malfunction
P1785	Auto Clutch System Malfunction

¹⁷ In A-541E 4th solenoid (SLN solenoid) is used to control hydraulic pressure acting on accumulator control valve to assist in smooth shifting.

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P1790	ST Solenoid (Shift solenoid valve ST) Circuit Malfunction
P1793	Shift Solenoid ST Circuit Malfunction
P1800	Automatic Transmission Operation Circuit Malfunction
P1805	Communication (between EFI ECU and Transmission ECU) Circuit Malfunction
P1810	Communication for Torque Control Circuit Malfunction
P1815	SR Solenoid Valve Malfunction (ES300)
P1818	SR Solenoid Valve Malfunction (ES300)
P1820	NIN Sensor Circuit Malfunction (Sensor of rotational speed of primary Pooley - <u>61</u>)
P1825	NOOUT Sensor Circuit Malfunction (Sensor of rotational speed of secondary Pooley - <u>67</u>)
P1845	PTO Sensor Circuit Malfunction (Sensor disconnection for belt narrowness pressure - <u>97</u>)
P1885	SLS Circuit Malfunction (Solenoid SLS function check for belt narrowness pressure control - <u>77</u>)
P1888	SLS Circuit Malfunction (Solenoid SLS disconnection for belt narrowness pressure control - <u>77</u>)
P1890	SLC Circuit Malfunction (Solenoid for advancement and junior clutch oil pressure control - <u>46</u>)
P1891	SLC Circuit Malfunction
P1895	DSU Circuit Malfunction (<u>Solenoid</u> for Lock-Up connection, DSU - 64)
P2004	Intake manifold runner control stuck open (Bank 1)
P2006	Intake manifold runner control close open (Bank 1)
P2008	Intake manifold runner control circuit open (Bank 1) Old DTC P1416, 1653, 1667
P2009	Intake manifold runner control circuit low (Bank 1)
P2010	Intake manifold runner control circuit high (Bank 2)
P2014	Intake manifold runner position sensor/Switch circuit (Bank 1) Old DTC P1415
P2016	Intake manifold runner position sensor/Switch circuit low (Bank 1)
P2017	Intake manifold runner position sensor/ Switch circuit high (Bank 1)
P2031	Exhaust gas temperature sensor circuit (Bank 1 Sensor 2) Old DTC P1281
P2032	Exhaust gas temperature sensor circuit low (Bank 1 Sensor 2)
P2033	Exhaust gas temperature sensor circuit high (Bank 1 Sensor 2)
P2047	Reductant injector circuit /Open (Bank 1 Unit 1) Old DTC P1385
<u>P2102</u>	Throttle Actuator Control Motor Circuit Low - Sol '04 and <u>2JZ-GE, LC '06</u>
P2102	Throttle actuator control motor circuit low Old DTC P1125
P2103	Throttle Actuator Control Motor Circuit High - Sol '04, LC '06
P2103	Throttle actuator control motor circuit high Old DTC P1125
P2111	Throttle Actuator Control System - Stuck Open - Sol '04, LC '06
P2111	Throttle actuator control system - Stuck open Old DTC P1128
P2112	Throttle Actuator Control System - Stuck Closed - Sol '04
P2112	Throttle actuator control system - Stuck closed Old DTC P1128
P2118	Throttle Actuator Control System Current Range/Performance- Sol '04, ES330, LC '06
P2118	Throttle actuator control motor current range/Performance Old DTC P1127
P2119	Throttle Actuator Control System Body Range/Performance - Sol '04, LC '06
P2119	Throttle actuator control throttle body range/Performance Old DTC P1129
<u>P2120</u>	Throttle/Pedal Position Sensor/Switch "D" Circuit - Sol '04 and
P2120	Throttle/ Pedal position sensor/ Switch "D" circuit Old DTC P1120
P2121	Throttle/Pedal Position Sensor/Switch "D" Range/Performance - Sol '04
P2121	Throttle/ Pedal position sensor/ Switch "D" circuit range/Performance Old DTC P1121
P2122	Throttle/Pedal Position Sensor/Switch "D" Circuit Low Input - Sol '04, LC '06
P2123	Throttle/Pedal Position Sensor/Switch "D" Circuit High Input - Sol '04, LC '06
P2125	Throttle/Pedal Position Sensor/Switch "E" Circuit - Sol '04, LC '06
P2125	Throttle/ Pedal position sensor/ Switch "E" circuit Old DTC P1120
P2127	Throttle/Pedal Position Sensor/Switch "E" Circuit Low Input - Sol '04
P2128	Throttle/Pedal Position Sensor/Switch "E" Circuit High Input - Sol '04
P2135	Throttle / Pedal Position Sensor / Switch "A" / "B" Voltage Correlation LC '06
P2135	Throttle/Pedal Position Sensor/Switch "A"/"B" Voltage Correlation - Sol '04 Old DTC P0120
P2137	Accelerator Pedal Sensor Value Plausibility between the Two Tracks
P2138	Throttle / Pedal Position Sensor / Switch "D" / "E" Voltage Correlation LC '06
P2138	Throttle/Pedal Position Sensor/Switch "D"/"E" Voltage Correlation - Sol '04, LC100 '02 DTC P0120
P2141	Open or Short to GND in EGR Throttle Circuit
P2142	Short to B+ in EGR Throttle Circuit (KGB10)
P2143	Electric EGR Valve H Bridge, Electrical Check, Over Current Check (KGB10)
<u>P2195</u>	Oxygen Sensor Signal Stuck Lean (Bank 1 Sensor 1) - Cor, Sol '04, Tac Old DTC P0130
P2195	Oxygen (A/F) Sensor Signal Stuck Lean (Bank 1 Sensor 1) LC '06
P2196	Oxygen Sensor Signal Stuck Rich (Bank 1 Sensor 1) - Cor, Sol '04, LC '06 Old DTC P0130
P2197	Oxygen Sensor Signal Stuck Lean (Bank 2 Sensor 1) - Sol '04 (Oxygen (A/F) Sensor Signal Stuck Lean (Bank 2 Sensor 1) on LC '06

Note: Not all trouble codes are used on all models

P2198	Oxygen Sensor Signal Stuck Rich (Bank 2 Sensor 1) – Sol '04 (Oxygen (A/F) Sensor Signal Stuck Rich (Bank 2 Sensor 1) on LC '06)
P2226	Barometric pressure circuit Old DTC P1100
P2228	Barometric pressure circuit low input
P2229	Barometric pressure circuit high input
P2237	Oxygen Sensor Pumping Current Circuit / Open (for A/F sensor) (Bank 1 Sensor 1)
P2238	Oxygen Sensor Pumping current Circuit Low (for A/F Ratio Sensor B1S1) – Sol '04, LC '06
P2239	Oxygen Sensor Pumping current Circuit High (for A/F Ratio Sensor B1S1) – Sol '04, LC '06
P2241	Oxygen Sensor Pumping current Circuit Low (for A/F Ratio Sensor B2S1) – Sol '04, LC '06
P2242	Oxygen Sensor Pumping current Circuit High (for A/F Ratio Sensor B2S1) – Sol '04, LC '06
P2251	Oxygen Sensor Reference Ground Circuit / Open (for A/F sensor) (Bank 1 Sensor 1)
P2252	Oxygen Sensor Reference Ground Circuit Low (for A/F Ratio Sensor B1S1) – Sol '04, LC '06
P2253	Oxygen Sensor Reference Ground Circuit High (for A/F Ratio Sensor B1S1) – Sol '04, LC '06
P2255	Oxygen Sensor Reference Ground Circuit Low (for A/F Ratio Sensor B2S1) – Sol '04, LC '06
P2256	Oxygen Sensor Reference Ground Circuit High (for A/F Ratio Sensor B2S1) – Sol '04, LC '06
P2299	Accelerator Pedal Sensor Stick Pedal Detect
P2401	Evaporative Emission Leak Detection Pump Stuck OFF LC '06
P2402	Evaporative Emission Leak Detection Pump Stuck ON LC '06
P2419	Evaporative Emission Pressure Switching Valve Stuck ON LC '06
P2420	Evaporative Emission Pressure Switching Valve Stuck OFF LC '06
P2423	Toyota-HCAC-System (Bank 1)
P2430	Secondary Air Injection System Air Flow / Pressure Sensor Circuit Bank1 LC '06
P2431	Secondary Air Injection System Air Flow / Pressure Sensor Circuit Range/Performance Bank1 LC '06
P2432	Secondary Air Injection System Air Flow / Pressure Sensor Circuit Low Bank1 LC '06
P2433	Secondary Air Injection System Air Flow / Pressure Sensor Circuit High Bank1 LC '06
P2440	Secondary Air Injection System Switching Valve Stuck Open Bank1 LC '06
P2441	Secondary Air Injection System Switching Valve Stuck Close Bank1 LC '06
P2444	Secondary Air Injection System Pump Stuck On Bank1 LC '06
P2445	Secondary Air Injection System Pump Stuck Off Bank1 LC '06
P2610	ECM / PCM Internal Engine Off Timer Performance LC '06
P2611	A/ C refrigerant distribution valve control circuit /Open
P2670	5 V Supply No.2 Voltage Supply Too Low (KGB10)
P2671	5 V Supply No.2 Voltage Supply Too High (KGB10)
P2714	Pressure control solenoid "D" performance or stuck off Old DTC P1761, P1885 / 77 (?)
P2716	Pressure Control Solenoid "D" Electrical (Shift Solenoid Valve SLT) – Cor, Sol '04 and Old DTC P1763, P1883, P1888 / 77 (?)
P2725	Automatic Transmission (3UZ-FE): P2725 Pressure Control Solenoid 'e' Electrical Old DTC P1768
P2734	Pressure control solenoid "F" electrical Old DTC P1890
P2740	Transmission fluid temperature sensor "B" circuit Old DTC P1745
P2741	Transmission fluid temperature sensor "B" circuit range performance Old DTC P1746
P2742	Transmission fluid temperature sensor "B" circuit low
P2743	Transmission fluid temperature sensor "B" circuit high
P2757	Automatic Transmission (3UZ-FE): P2757 Torque Converter Clutch Pressure Control Solenoid Performance Old DTC P0770, P1895, P1896
P2759	Automatic Transmission (3UZ-FE): P2759 Torque Converter Clutch Pressure Control Solenoid Control Cir Old DTC P1755, P1898
P2763	Torque converter clutch pressure control solenoid control circuit high
P2764	Torque converter clutch pressure control solenoid control circuit low
P2767	Input/Turbine speed sensor "B" no signal Old DTC P1822
P2769	Torque Converter Clutch Solenoid Circuit Low (Shift Solenoid Valve SL or DSL Sol.) – Cor, Sol '04
P2770	DSL Solenoid Circuit High– Sol '04
P2770	Torque Converter Clutch Solenoid Circuit High (Shift Solenoid Valve SL) – Cor '04
P2772	Transfer "L4" Switch Circuit
P2A00	A/F Sensor Circuit Slow Response (Bank 1 Sensor 1) LC '06
P2A03	A/F Sensor Circuit Slow Response (Bank 2 Sensor 1) LC '06
P3000	HV Battery Malfunction
P3001 ¹⁸	Battery ECU malfunction
P3002	HV ECU communication malfunction
P3004	Power Cable Malfunction

¹⁸ Hybrids Vehicles

P3005	High voltage fuse snapped [sic] ¹⁹
P3006	Battery SOC are uneven ²⁰
P3007	Plausibility with Engine Filling Too Low Measured MAF (KGB10)
P3008	Plausibility with Engine Filling Too High Measured MAF (KGB10)
P3009	Leak detected ²¹ (Electric leak from high-voltage system)
P3010	Battery total resistance malfunction
P3011 to P3029	Battery block malfunction ²²
P3030	Battery voltage detective line snapped [sic] ²³
P3060	Battery temperature sensor circuit malfunction
P3076	Abnormal air flow by battery cooling fan
P3077	Battery cooling fan motor circuit malfunction
P3100	HV ECU Malfunction
P3101	Engine System Malfunction
P3105	Battery ECU Communication Circuit Malfunction
P3106	ECM Communication Circuit Malfunction
P3107	Airbag ECU Communication Circuit Malfunction
P3108	A/C Amplifier Communication Circuit Malfunction
P3109	Brake ECU Communication Circuit Malfunction
P3110	IGCT relay is always closed
P3115	HV battery current sensor malfunction
P3115	System Main Relay Malfunction
P3120	HV Transaxle Malfunction
P3125	Converter & Inverter Assembly Malfunction
P3130	Inverter Cooling System Malfunction
P3135	Circuit Breaker Sensor Malfunction
P3140	Interlock Malfunction
P3145	Vehicle Speed Sensor Circuit Malfunction
P3190	Poor Engine Power (Pri)
P3191	Engine does not start (Pri)
P3195	A/ F sensor circuit range / Performance lean side (Bank 1 Sensor 1) Old DTC P1130
P3196	A/ F sensor circuit range / Performance rich side (Bank 1 Sensor 1) Old DTC P1130
P3197	A/ F sensor circuit range / Performance lean side (Bank 2 Sensor 1) Old DTC P1150
P3198	A/ F sensor circuit range / Performance rich side (Bank 2 Sensor 1) Old DTC P1150
P3231	A/ F sensor plus minus circuit correlation (Bank 1 Sensor 1) Old DTC P1130
P3232	A/ F sensor plus minus circuit correlation low (Bank 1 Sensor 1) Old DTC P1130
P3233	A/ F sensor plus minus circuit correlation high (Bank 1 Sensor 1) Old DTC P1130
P3234	A/ F sensor plus minus circuit correlation (Bank 2 Sensor 1) Old DTC P1150
P3235	A/ F sensor plus minus circuit correlation low (Bank 2 Sensor 1) Old DTC P1150
P3236	A/ F sensor plus minus circuit correlation high (Bank 2 Sensor 1) Old DTC P1150
P3243	A/ F sensor plus circuit (Bank 1 Sensor 1) Old DTC P1130
P3245	A/ F sensor plus circuit low voltage (Bank 1 Sensor 1) Old DTC P1130
P3246	A/ F sensor plus circuit high voltage (Bank 1 Sensor 1) Old DTC P1130
P3247	A/ F sensor plus circuit (Bank 2 Sensor 1) Old DTC P1150
P3249	A/ F sensor plus circuit low voltage (Bank 2 Sensor 1) Old DTC P1150
P3250	A/ F sensor plus circuit high voltage (Bank 2 Sensor 1) Old DTC P1150
P3251	A/ F sensor minus circuit (Bank 1 Sensor 1) Old DTC P1130
P3252	A/ F sensor minus circuit low voltage (Bank 1 Sensor 1) Old DTC P1130
P3253	A/ F sensor minus circuit high voltage (Bank 1 Sensor 1) Old DTC P1130
P3254	A/ F sensor minus circuit (Bank 2 Sensor 1) Old DTC P1150
P3255	A/ F sensor minus circuit low voltage (Bank 2 Sensor 1) Old DTC P1150

¹⁹ Presumably P3005 would also be recorded if an attempt was made to start up with the service plug removed, as the high voltage fuse is physically located inside the plug.

²⁰ P3006 - not too sure about this, but criterion appears to be maximum permitted difference between highest block voltage and lowest block voltage at any instant (not including transients) is 1.2 volts.

²¹ P3009 - "Leak detected", meaning a current leakage path the high voltage circuitry to the chassis has been detected. Trigger level not known, but the criterion for manual testing is insulation resistance not less than 10M ohms when tested at 500V DC.

²² The traction battery consists of 38 physical modules, each containing 6 cells. For the purposes of monitoring by the battery ECU, modules are paired into 19 "blocks". DTCs P3011 to P3029 appear to indicate the "malfunction" of a particular block, although what "malfunction" means is not clear.

²³ P3030 - presumably means open circuit of one of the twenty voltage sense lines which are connected to the cell string at the ends and between each block.

P3256	A/ F sensor minus circuit high voltage (Bank 2 Sensor 1) Old DTC P1150
U0001	High speed CAN communication bus P1647
U0100	Lost communication with ECM/PCM Old DTC P1631
U0121	Malfunction in CAN communication (94 blinking ABS warning light on Cam. '04, Cam. '05)
U0122	Lost communication with vehicle dynamics control module Old DTC P1630
U0123	Malfunction in CAN communication with deceleration sensor (95 by ABS warning light Cam. '04)
U0123	Malfunction in CAN communication with yaw rate sensor (62 by VSC Light) Cam. '05
U0124	Malfunction in CAN communication with yaw rate sensor (62 by VSC warning light Cam. '04)
U0124	Malfunction in CAN communication with deceleration sensor (95 by ABS light Cam. '05)
U0126	Malfunction in CAN communication with steering angle sensor (63 by VSC warning light Cam. '04)
U0126	Malfunction in CAN communication with angle position sensor (63 by VSC Light) Cam. '05

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NOTE.

Статьи о практике диагностики и ремонта в этой страничке:
"Story of the Month" (by al tech page in <http://alflash.com.ua/story.htm>)

