GENERAL FEATURES

DESCRIPTION

The new TOYOTA models have the following systems:

System	Outline	Model Name
DTC (Diagnostic Trouble Code)	To comply with the OBD-II regulations, all the DTC (Diagnostic Trouble Code) have been made to correspond to the SAE controlled codes. Some of the DTC have been further divided into smaller detection areas than in the past, and new DTC have been assigned to them.	Land Cruiser (Only for 2UZ-FE Engine)

The following table shows part of DTC subdivided from the old DTC. See Repair Manual of each new TOYOTA model for the details.

Old DTC	New DTC	Detection Item	Old DTC	New DTC	Detection Item
P0110	P0110	Intake air temperature circuit	P0150	P0150	Oxygen sensor circuit (Bank 2 Sensor 1)
	P0112	Intake air temperature circuit low input		P2197	Oxygen sensor signal stuck lean (Bank 2 Sensor 1)
	P0113	Intake air temperature circuit high input		P2198	Oxygen sensor signal stuck rich (Bank 2 Sensor 1)
P0115	P0115	Engine coolant temperature circuit	P0155	P0051	Oxygen sensor heater control circuit low (Bank 2 Sensor 1)
	P0117	Engine coolant temperature circuit low input		P0052	Oxygen sensor heater control circuit high (Bank 2 Sensor 1)
	P0118	Engine coolant temperature circuit high input	P0161	P0057	Oxygen sensor heater control circuit low (Bank 2 Sensor 2)
P0116	P0116	Engine coolant temperature circuit range/Performance problem		P0058	Oxygen sensor heater control circuit high (Bank 2 Sensor 2)
	P0125	Insufficient coolant temperature for closed loop fuel control	P0167	P0063	Oxygen sensor heater control circuit low (Bank 2 Sensor 3)
P0125	P0134	Oxygen sensor circuit no activity detected (Bank 1 Sensor 1)		P0064	Oxygen sensor heater control circuit high (Bank 2 Sensor 3)
	P0154	Oxygen sensor circuit no activity detected (Bank 2 Sensor 1)	P0325	P0325	Knock sensor 1 circuit (Bank 1 or Signal sensor)
	P1134	A/F sensor circuit no activity detected (Bank 1 Sensor 1)		P0327	Knock sensor 1 circuit low input (Bank 1 or Signal sensor)
	P1154	A/F sensor circuit no activity detected (Bank 2 Sensor 1)		P0328	Knock sensor 1 circuit high input (Bank 1 or Signal sensor)
P0130	P2195	Oxygen sensor signal stuck lean (Bank 1 Sensor 1)		P0332	Knock sensor 2 circuit low input (Bank 2)
	P2196	Oxygen sensor signal stuck rich (Bank 1 Sensor 1)		P0333	Knock sensor 2 circuit high input (Bank 2)
P0135	P0031	Oxygen sensor heater control circuit low (Bank 1 Sensor 1)	P0340	P0340	Camshaft position sensor “A” circuit (Bank 1 or Signal sensor)
	P0032	Oxygen sensor heater control circuit high (Bank 1 Sensor 1)		P0341	Camshaft position sensor “A” circuit range/Performance (Bank 1 or Signal sensor)
P0141	P0037	Oxygen sensor heater control circuit low (Bank 1 Sensor 2)		P1340	Camshaft position sensor “A” (Bank 1 Sensor 2)
	P0038	Oxygen sensor heater control circuit high (Bank 1 Sensor 2)		P1341	
P0147	P0043	Oxygen sensor heater control circuit low (Bank 1 Sensor 3)	P1130	P1130	A/F sensor circuit (Bank 1 Sensor 1)
	P0044	Oxygen sensor heater control circuit high (Bank 1 Sensor 3)		P1131	A/F sensor circuit low (Bank 1 Sensor 1)

New DTC	Old DTC	Detection Item	New DTC	Old DTC	Detection Item
P0120	P1230	Throttle/Pedal position sensor/ Switch “A” circuit	P0166	—	Oxygen sensor circuit no activity detected (Bank 2 Sensor 3)
P0122	—	Throttle/Pedal position sensor/ Switch “A” circuit low input	P0169	—	Incorrect fuel composition
P0123	—	Throttle/Pedal position sensor/ Switch “A” circuit high input	P0170	—	Fuel trim bank 1
P0125	P0116	Insufficient coolant temperature for close loop fuel control	P0173	—	Fuel trim bank 2
P0134	P0125	Oxygen sensor circuit no activity detected (Bank 1 Sensor 1)	P0176	—	Fuel composition sensor circuit
P0135	—	Oxygen sensor heater circuit (Bank 1 Sensor 1)	P0177	—	Fuel composition sensor circuit range/performance
P0137	—	Oxygen sensor circuit low voltage (Bank 1 Sensor 2)	P0178	—	Fuel composition sensor circuit low input
P0138	—	Oxygen sensor circuit high voltage (Bank 1 Sensor 2)	P0179	—	Fuel composition sensor circuit high input
P0140	—	Oxygen sensor circuit no activity detected (Bank 1 Sensor 2)	P0182	—	Fuel temperature sensor “A” circuit low input
P0143	—	Oxygen sensor circuit low voltage (Bank 1 Sensor 3)	P0183	—	Fuel temperature sensor “A” circuit high input
P0144	—	Oxygen sensor circuit high voltage (Bank 1 Sensor 3)	P0187	—	Fuel temperature sensor “B” circuit low input
P0145	—	Oxygen sensor circuit slow response (Bank 1 Sensor 3)	P0188	—	Fuel temperature sensor “B” circuit high input
P0146	—	Oxygen sensor circuit no activity detected (Bank 1 Sensor 3)	P0195	—	Engine oil temperature sensor
P0148	—	Fuel delivery error	P0196	—	Engine oil temperature sensor range/performance
P0149	—	Fuel timing error	P0197	—	Engine oil temperature sensor low
P0152	—	Oxygen sensor circuit high voltage (Bank 2 Sensor 1)	P0198	—	Engine oil temperature sensor high
P0154	P0125	Oxygen sensor circuit no activity detected (Bank 2 Sensor 1)	P0199	—	Engine oil temperature sensor intermittent
P0157	—	Oxygen sensor circuit low voltage (Bank 2 Sensor 2)	P0200	P1215	Injector circuit open
P0158	—	Oxygen sensor circuit high voltage (Bank 2 Sensor 2)		P1264	
P0160	—	Oxygen sensor circuit no activity detected (Bank 2 Sensor 2)		P1265	
P0163	—	Oxygen sensor circuit low voltage (Bank 2 Sensor 3)	P0219	P1678	Engine overspeed condition
P0164	—	Oxygen sensor circuit high voltage (Bank 2 Sensor 3)	P0220	P0120	Throttle/Pedal position switch/ switch “B” circuit
P0165	—	Oxygen sensor circuit slow response (Bank 2 Sensor 3)	P0222	—	Throttle/Pedal position sensor/ switch “B” circuit low input

New DTC	Old DTC	Detection Item	New DTC	Old DTC	Detection Item
P0223	—	Throttle/Pedal position sensor/ switch “B” circuit high input	P0299	P1255	Turbo/super charger under boost
P0224	—	Throttle/Pedal position sensor/ switch “B” circuit intermittent	P0326	—	Knock sensor 1 circuit range/performance
P0225	—	Throttle/Pedal position sensor/ switch “C” circuit	P0327	P0325	Knock sensor 1 circuit low input (Bank 1 or Signal sensor)
P0226	—	Throttle/Pedal position sensor/ switch “C” circuit range/performance	P0328		Knock sensor 1 circuit high input (Bank 1 or Signal sensor)
P0227	—	Throttle/Pedal position sensor/ switch “C” circuit low input	P0329	—	Knock sensor 1 circuit input intermittent (Bank 1 or Signal sensor)
P0228	—	Throttle/Pedal position sensor/ switch “C” circuit high input	P0331	—	Knock sensor 2 circuit range/performance (Bank 2)
P0229	—	Throttle/Pedal position sensor/ switch “C” circuit intermittent	P0332	P0325	Knock sensor 2 circuit low input (Bank 2)
P0230	P1200	Fuel pump primary circuit	P0333		Knock sensor 2 circuit high input (Bank 2)
P0231	P1202	Fuel pump secondary circuit low	P0334	—	Knock sensor 2 circuit input intermittent (Bank 2)
P0232	—	Fuel pump secondary circuit high	P0336	P1355	Crankshaft position sensor “A” circuit range/performance
P0233	—	Fuel pump secondary circuit intermittent		P1356	
P0234	P1256	Turbo/super charger overboost condition	P0337	—	Crankshaft position sensor “A” circuit low input
	P1512		P0338	—	Crankshaft position sensor “A” circuit high input
P0235	P1405	Turbo/Super charger boost sensor “A” circuit	P0339	P1335	Crankshaft position sensor “A” circuit intermittent
P0236	P1406	Turbo/Super charger boost sensor “A” circuit range/performance	P0340	P1345	Camshaft position sensor “A” circuit (Bank 1 or Signal sensor)
P0237	—	Turbo/Super charger boost sensor “A” circuit low	P0341	P0340	Camshaft position sensor “A” circuit range/Performance (Bank 1 or Signal sensor)
P0238	—	Turbo/super charger boost sensor “A” circuit high		P1345	Camshaft position sensor “A” circuit range/Performance (Bank 1 or Signal sensor)
P0263	P1267	Cylinder 1 contribution/balance	P0342		Camshaft position sensor “A” circuit low input (Bank 1 or Signal sensor)
P0266	P1268	Cylinder 2 contribution/balance	P0343		Camshaft position sensor “A” circuit high input (Bank 1 or Signal sensor)
P0269	P1269	Cylinder 3 contribution/balance	P0344	—	Camshaft position sensor “A” circuit intermittent (Bank 1 or signal sensor)
P0272	P1270	Cylinder 4 contribution/balance	P0345	P1350	Camshaft position sensor “A” circuit (Bank 2)

New DTC	Old DTC	Detection Item	New DTC	Old DTC	Detection Item
P0346	P1350	Camshaft position sensor "A" circuit range/Performance (Bank 2)	P0392	—	Camshaft position sensor "B" circuit low input (Bank 2)
P0347		Camshaft position sensor "A" circuit low input (Bank 2)	P0393	—	Camshaft position sensor "B" circuit high input (Bank 2)
P0348		Camshaft position sensor "A" circuit high input (Bank 2)	P0394	—	Camshaft position sensor "B" circuit intermittent (Bank 2)
P0349	—	Camshaft position sensor "A" circuit intermittent (Bank 2)	P0403	P1673	Exhaust gas recirculation control circuit
P0350	—	Ignition coil primary/secondary circuit	P0404	—	Exhaust gas recirculation control circuit range/performance
P0351	P1300	Ignition coil "A" primary/ Secondary circuit	P0405	P1410	Exhaust gas recirculation sensor "A" circuit low
P0352	P1305	Ignition coil "B" primary/ Secondary circuit	P0406	—	Exhaust gas recirculation sensor "A" circuit high
P0353	P1310	Ignition coil "C" primary/ Secondary circuit	P0409	P1411	Exhaust gas recirculation sensor "A" circuit
P0354	P1315	Ignition coil "D" primary/ Secondary circuit	P0411	P1205	Secondary air injection system incorrect flow detected
P0355	P1320	Ignition coil "E" primary/ Secondary circuit	P0425	—	Catalyst temperature sensor (Bank 1)
P0356	P1325	Ignition coil "F" primary/ Secondary circuit	P0426	—	Catalyst temperature sensor range/performance (Bank 1)
P0357	P1330	Ignition coil "G" primary/ Secondary circuit	P0427	P1110	Catalyst temperature sensor low input (Bank 1)
P0358	P1340	Ignition coil "H" primary/ Secondary circuit	P0428	P1111	Catalyst temperature sensor high input (Bank 1)
P0365	P1360	Camshaft position sensor "B" circuit (Bank 1)	P0440	—	Evaporative emission control system
P0366	P1357	Camshaft position sensor "B" circuit range/performance (Bank 1)	P0442	P0440	Evaporative emission control system leak detected (small leak)
P0367	—	Camshaft position sensor "B" circuit low input (Bank 1)	P0448	P1239	Evaporative emission system vent control circuit shorted
P0368	—	Camshaft position sensor "B" circuit high input (Bank 1)	P0452	—	Evaporative emission control system pressure sensor/switch low input
P0369	—	Camshaft position sensor "B" circuit intermittent (Bank 1)	P0453	—	Evaporative emission control system pressure sensor/switch high input
P0390	P1365	Camshaft position sensor "B" circuit (Bank 2)	P0456	P0442	Evaporative emission control system leak detected (very small leak)
P0391	P1358	Camshaft position sensor "B" circuit range/performance (Bank 2)	P0475	P1273	Exhaust pressure control valve

New DTC	Old DTC	Detection Item	New DTC	Old DTC	Detection Item
P0475	P1274	Exhaust pressure control valve	P0559	—	Brake booster pressure sensor circuit intermittent
P0475	P1420	Exhaust pressure control valve	P0560	P1600	System voltage
P0480	B1305	Fan 1 control circuit	P0571	P1520	Brake system “A” circuit
P0488	P1222	Exhaust gas recirculation throttle position control range/performance	P0604	P1633	Internal control module random access memory (RAM) error
P0503	P0500	Vehicle speed sensor “A” intermittent/Erratic/High	P0606	P0605	ECM/PCM processor
P0504	P1520	Brake switch “A”/“B” correlation		P1633	
P0511	P0505	Idle air control circuit	P0607	P1565	Control module performance
P0512	P1545	Starter request circuit		P1566	
P0513	B2795	Incorrect immobilizer key		P1633	
P0516	—	Battery temperature sensor circuit low	P0613	P0740	TCM processor
P0517	—	Battery temperature sensor circuit high	P0615	P1522	Starter relay circuit
P0544	P1280	Exhaust gas temperature sensor circuit (Bank 1 Sensor 1)	P0627	P1228	Fuel pump control circuit/Open
P0545	—	Exhaust gas temperature sensor circuit low (Bank 1 Sensor 1)	P0657	P1633	Actuator supply voltage circuit/Open
P0546	—	Exhaust gas temperature sensor circuit high (Bank 1 Sensor 1)	P0660	P1651	Intake manifold turning valve control circuit/Open (Bank 1)
P0552	—	Power steering pressure sensor/Switch circuit low input	P0663	P1666	Intake manifold turning valve control circuit/Open (Bank 2)
P0553	—	Power steering pressure sensor/Switch circuit high input	P0705	P1780	Transmission range sensor circuit malfunction (PRNDL input)
P0555	P1540	Brake booster pressure sensor circuit	P0712	—	Transmission fluid temperature sensor “A” circuit low input
P0556	C1201	Brake booster pressure sensor circuit range/Performance	P0713	—	Transmission fluid temperature sensor “A” circuit high input
	P1541		P0717	P0715	Input/Turbine speed sensor “A” circuit No signal
P0557	C1200	Brake booster pressure sensor circuit low input		P1707	
P0558		Brake booster pressure sensor circuit high input		P1727	

New DTC	Old DTC	Detection Item	New DTC	Old DTC	Detection Item
P0720	P1700	Output speed sensor circuit	P0842	—	Transmission fluid pressure sensor/Switch “A” circuit low
P0722	P1702	Output speed sensor circuit no signal	P0843	—	Transmission fluid pressure sensor/Switch “A” circuit high
	P1827		P0850	P1780	Park/Neutral switch input circuit
P0724	P1520	Brake switch “B” circuit high	P0962	—	Pressure control solenoid “A” control circuit low
P0741	P0770	Torque converter clutch circuit performance or Stuck off	P0963	—	Pressure control solenoid “A” control circuit high
P0743	P0773	Torque converter clutch circuit electrical	P0966	—	Pressure control solenoid “B” control circuit low
P0746	P0750	Pressure control solenoid “A” performance or Stuck off	P0967	—	Pressure control solenoid “B” control circuit high
P0748	P0753	Pressure control solenoid “A” electrical	P0973	—	Shift solenoid “A” control circuit low
P0751	P0750	Shift solenoid “A” performance or Stuck off	P0974	—	Shift solenoid “A” control circuit high
P0756	P0755	Shift solenoid “B” performance or Stuck off	P0976	—	Shift solenoid “B” control circuit low
P0761	P0760	Shift solenoid “C” performance or Stuck off	P0977	—	Shift solenoid “B” control circuit high
P0766	P0765	Shift solenoid “D” performance or Stuck off	P0979	—	Shift solenoid “C” control circuit low
P0771	P1816	Shift solenoid “E” performance or Stuck off	P0980	—	Shift solenoid “C” control circuit high
P0776	P0755	Pressure control solenoid “B” performance or Stuck off	P0982	—	Shift solenoid “D” control circuit low
P0778	P0758	Pressure control solenoid “B” electrical	P0983	—	Shift solenoid “D” control circuit high
P0787	—	Shift/Timing solenoid low	P0985	—	Shift solenoid “E” control circuit low
P0788	—	Shift/Timing solenoid high	P0986	—	Shift solenoid “E” control circuit high
P0793	P1732	Intermediate shaft speed sensor “A” circuit no signal	P0998	—	Shift solenoid “F” control circuit low
P0796	P0760	Pressure control solenoid “C” performance or stuck off	P0999	—	Shift solenoid “F” control circuit high
P0798	P0763	Pressure control solenoid “C” electrical	P1010	P1690	OCV for VVTL circuit (Bank 1)
P0818	P1783	Driveline disconnect switch input circuit	P1011	P1692	OCV for VVTL open malfunction (Bank 1)
P0840	P1845	Transmission fluid pressure sensor/Switch “A” circuit	P1012	P1693	OCV for VVTL close malfunction (Bank 1)
P0841	P1846	Transmission fluid pressure sensor/Switch “A” circuit range/Performance	P1020	P1695	OCV for VVTL circuit (Bank 2)

New DTC	Old DTC	Detection Item	New DTC	Old DTC	Detection Item
P1021	P1697	OCV for VVTL open malfunction (Bank 2)	P2010	—	Intake manifold runner control circuit high (Bank 2)
P1022	P1698	OCV for VVTL close malfunction (Bank 2)	P2014	P1415	Intake manifold runner position sensor/Switch circuit (Bank 1)
P1031	P1135	A/F sensor heater circuit low (Bank 1 Sensor 1)	P2016	—	Intake manifold runner position sensor/Switch circuit low (Bank 1)
P1032		A/F sensor heater circuit high (Bank 1 Sensor 1)	P2017	—	Intake manifold runner position sensor/Switch circuit high (Bank 1)
P1051	P1155	A/F sensor heater circuit low (Bank 2 Sensor 1)	P2031	P1281	Exhaust gas temperature sensor circuit (Bank 1 Sensor 2)
P1052		A/F sensor heater circuit high (Bank 2 Sensor 1)	P2032	—	Exhaust gas temperature sensor circuit low (Bank 1 Sensor 2)
P1131	P1130	A/F sensor circuit low (Bank 1 Sensor 1)	P2033	—	Exhaust gas temperature sensor circuit high (Bank 1 Sensor 2)
P1132		A/F sensor circuit high (Bank 1 Sensor 1)	P2047	P1385	Reductant injector circuit/Open (Bank 1 Unit 1)
P1134	P0125	A/F sensor circuit no activity detected (Bank 1 Sensor 1)	P2102	P1125	Throttle actuator control motor circuit low
P1151	P1150	A/F sensor circuit low (Bank 2 Sensor 1)	P2103		Throttle actuator control motor circuit high
P1152		A/F sensor circuit high (Bank 2 Sensor 1)	P2111	P1128	Throttle actuator control system – Stuck open
P1154	P0125	A/F sensor circuit no activity detected (Bank 2 Sensor 1)	P2112		Throttle actuator control system – Stuck closed
P1550	P1542	Battery current sensor circuit	P2118	P1127	Throttle actuator control motor current range/Performance
P1551	—	Battery current sensor circuit low	P2119	P1129	Throttle actuator control throttle body range/Performance
P1552	—	Battery current sensor circuit high	P2120	P1120	Throttle/Pedal position sensor/ Switch “D” circuit
P1660	P1668	VSV for AICVS circuit	P2121	P1121	Throttle/Pedal position sensor/ Switch “D” circuit range/Performance
P2004	—	Intake manifold runner control stuck open (Bank 1)	P2122	—	Throttle/Pedal position sensor/ Switch “D” circuit low input
P2006	—	Intake manifold runner control stuck close (Bank 1)	P2123	—	Throttle/Pedal position sensor/ Switch “D” circuit high input
P2008	P1416	Intake manifold runner control circuit open (Bank 1)	P2125	P1120	Throttle/Pedal position sensor/ Switch “E” circuit
	P1653		P2127	—	Throttle/Pedal position sensor/ Switch “E” circuit low input
	P1667		P2128	—	Throttle/Pedal position sensor/ Switch “E” circuit high input
P2009	—	Intake manifold runner control circuit low (Bank 1)	P2135	P0120	Throttle/Pedal position sensor/ Switch “A”/“B” voltage correlation

New DTC	Old DTC	Detection Item
P2138	P1120	Throttle/Pedal position sensor/ Switch "D"/"E" voltage correlation
P2195	P0130	Oxygen sensor signal stuck lean (Bank 1 Sensor 1)
P2196		Oxygen sensor signal stuck rich (Bank 1 Sensor 1)
P2197	P0150	Oxygen sensor signal stuck lean (Bank 2 Sensor 1)
P2198		Oxygen sensor signal stuck rich (Bank 2 Sensor 1)
P2226	P1100	Barometric pressure circuit
P2228	—	Barometric pressure circuit low input
P2229	—	Barometric pressure circuit high input
P2611	—	A/C refrigerant distribution valve control circuit/Open
P2714	P1761	Pressure control solenoid "D" performance or stuck off
	P1885	
P2716	P1763	Pressure control solenoid "D" electrical
	P1853	
	P1888	
P2734	P1890	Pressure control solenoid "F" electrical
P2740	P1745	Transmission fluid temperature sensor "B" circuit
P2741	P1746	Transmission fluid temperature sensor "B" circuit range
P2742	—	Transmission fluid temperature sensor "B" circuit low
P2743	—	Transmission fluid temperature sensor "B" circuit high
P2757	P0770	Torque converter clutch pressure control solenoid control circuit performance or stuck off
	P1895	
	P1896	
P2759	P1755	Torque converter clutch pressure control solenoid control circuit electrical
	P1898	
P2763	—	Torque converter clutch pressure control solenoid control circuit high
P2764	—	Torque converter clutch pressure control solenoid control circuit low
P2767	P1822	Input/Turbine speed sensor "B" no signal
P3195	P1130	A/F sensor circuit range/ Performance lean side (Bank 1 Sensor 1)
P3196		A/F sensor circuit range/ Performance rich side (Bank 1 Sensor 1)
P3197	P1150	A/F sensor circuit range/ Performance lean side (Bank 2 Sensor 1)
P3198		A/F sensor circuit range/ Performance rich side (Bank 2 Sensor 1)
P3231	P1130	A/F sensor plus minus circuit correlation (Bank 1 Sensor 1)
P3232		A/F sensor plus minus circuit correlation low (Bank 1 Sensor 1)
P3233	P1130	A/F sensor plus minus circuit correlation high (Bank 1 Sensor 1)
P3234	P1150	A/F sensor plus minus circuit correlation (Bank 2 Sensor 1)
P3235		A/F sensor plus minus circuit correlation low (Bank 2 Sensor 1)
P3236		A/F sensor plus minus circuit correlation high (Bank 2 Sensor 1)
P3243	P1130	A/F sensor plus circuit (Bank 1 Sensor 1)
P3245		A/F sensor plus circuit low voltage (Bank 1 Sensor 1)
P3246		A/F sensor plus circuit high voltage (Bank 1 Sensor 1)
P3247	P1150	A/F sensor plus circuit (Bank 2 Sensor 1)
P3249		A/F sensor plus circuit low voltage (Bank 2 Sensor 1)
P3250		A/F sensor plus circuit high voltage (Bank 2 Sensor 1)
P3251	P1130	A/F sensor minus circuit (Bank 1 Sensor 1)

New DTC	Old DTC	Detection Item
P3252	P1130	A/F sensor minus circuit low voltage (Bank 1 Sensor 1)
P3253		A/F sensor minus circuit high voltage (Bank 1 Sensor 1)
P3254	P1150	A/F sensor minus circuit (Bank 2 Sensor 1)
P3255		A/F sensor minus circuit low voltage (Bank 2 Sensor 1)
P3256		A/F sensor minus circuit high voltage (Bank 2 Sensor 1)
U0001	P1647	High speed CAN communication bus
U0100	P1631	Lost communication with ECM/PCM
U0122	P1630	Lost communication with vehicle dynamics control module

The following table shows part of DTC which were modified from the old DTC and which were newly established. See Repair Manual of each new TOYOTA model for the details.

Old DTC	New DTC	Detection Item	New DTC	Old DTC	Detection Item
P0005	P1165	Fuel shutoff valve control circuit open	P0048	P1254	Turbo/super charger boost control solenoid circuit high
P0006	—	Fuel shutoff valve control circuit low	P0051	P0155	Oxygen sensor heater control circuit low (Bank 2 Sensor 1)
P0007	—	Fuel shutoff valve control circuit high	P0052		Oxygen sensor heater control circuit high (Bank 2 Sensor 1)
P0010	P1656	Camshaft position “A” actuator circuit (Bank 1)	P0057	P0161	Oxygen sensor heater control circuit low (Bank 2 Sensor 2)
P0011	P1349	Camshaft position “A” – timing over-advanced or system performance (Bank 1)	P0058		Oxygen sensor heater control circuit high (Bank 2 Sensor 2)
P0012		Camshaft position “A” – timing over-retarded (Bank 1)	P0063	P0167	Oxygen sensor heater control circuit low (Bank 2 Sensor 3)
P0016	P0336	Crankshaft position – camshaft position correlation (Bank 1 Sensor A)	P0064		Oxygen sensor heater control circuit high (Bank 2 Sensor 3)
	P1346		P0087	P1233	Fuel rail/system pressure too low
P0018	P1351	Crankshaft position – Camshaft position correlation (Bank 2 Sensor A)	P0088	P1237	Fuel rail/system pressure too high
P0020	P1663	Camshaft position “A” actuator circuit (Bank 2)	P0093	P1226	Fuel system leak detected large leak
P0021	P1354	Camshaft position “A” – Timing over-advanced or system performance (Bank 2)	P0095	P1115	Intake air temperature sensor 2 circuit
P0022		Camshaft position “A” – Timing over-retarded (Bank 2)	P0097	—	Intake air temperature sensor 2 circuit low
P0031	P0135	Oxygen sensor heater control circuit low (Bank 1 Sensor 1)	P0098	—	Intake air temperature sensor 2 circuit high
P0032		Oxygen sensor heater control circuit High (Bank 1 Sensor 1)	P0102	—	Mass or volume air flow circuit low input
P0037	P0141	Oxygen sensor heater control circuit low (Bank 1 Sensor 2)	P0103	—	Mass or volume air flow circuit high input
P0038		Oxygen sensor heater control circuit High (Bank 1 Sensor 2)	P0107	—	Manifold absolute pressure/Barometric pressure circuit low input
P0043	P0147	Oxygen sensor heater control circuit low (Bank 1 Sensor 3)	P0108	—	Manifold absolute pressure/Barometric pressure circuit high input
P0044		Oxygen sensor heater control circuit High (Bank 1 Sensor 3)	P0112	P0110	Intake air temperature circuit low input
P0045	P1250	Turbo/super charger boost control solenoid circuit open	P0113		Intake air temperature circuit high input
	P1252		P0117	P0115	Engine coolant temperature circuit low input
P0047	P1253	Turbo/super charger boost control solenoid circuit low	P0118		Engine coolant temperature circuit high input

Old DTC	New DTC	Detection Item	Old DTC	New DTC	Detection Item
P1130	P1132	A/F sensor circuit high (Bank 1 Sensor 1)	P1150	P3236	A/F sensor plus minus circuit correlation high (Bank 2 Sensor 1)
	P3195	A/F sensor circuit range/ Performance lean side (Bank 1 Sensor 1)		P3249	A/F sensor plug circuit low voltage (Bank 2 Sensor 1)
	P3196	A/F sensor circuit range/ Performance rich side (Bank 1 Sensor 1)		P3250	A/F sensor plus circuit high voltage (Bank 2 Sensor 1)
	P3231	A/F sensor plus minus circuit correlation (Bank 1 Sensor 1)		P3254	A/F sensor minus circuit (Bank 2 Sensor 1)
	P3232	A/F sensor plus minus circuit correlation low (Bank 1 Sensor 1)		P3255	A/F sensor minus circuit low voltage (Bank 2 Sensor 1)
	P3233	A/F sensor plus minus circuit correlation high (Bank 1 Sensor 1)		P3256	A/F sensor minus circuit high voltage (Bank 2 Sensor 1)
	P3243	A/F sensor plus circuit (Bank 1 Sensor 1)	P1155	P1155	A/F sensor heater circuit (Bank 2 Sensor 1)
	P3245	A/F sensor plus circuit low voltage (Bank 1 Sensor 1)		P1051	A/F sensor heater circuit low (Bank 2 Sensor 1)
	P3246	A/F sensor plus circuit high voltage (Bank 1 Sensor 1)		P1052	A/F sensor heater circuit high (Bank 2 Sensor 1)
	P3251	A/F sensor minus circuit (Bank 1 Sensor 1)	P1215	P0201	Injector circuit/Open – (Cylinder 1)
	P3252	A/F sensor minus circuit low voltage (Bank 1 Sensor 1)		P0202	Injector circuit/Open – (Cylinder 2)
	P3253	A/F sensor minus circuit high voltage (Bank 1 Sensor 1)		P0203	Injector circuit/Open – (Cylinder 3)
P1135	P1135	A/F sensor heater circuit (Bank 1 Sensor 1)		P0204	Injector circuit/Open – (Cylinder 4)
	P1031	A/F sensor heater circuit low (Bank 1 Sensor 1)		P0205	Injector circuit/Open – (Cylinder 5)
	P1032	A/F sensor heater circuit high (Bank 1 Sensor 1)		P0206	Injector circuit/Open – (Cylinder 6)
P1150	P1150	A/F sensor circuit (Bank 2 Sensor 1)		P0207	Injector circuit/Open – (Cylinder 7)
	P1151	A/F sensor heater circuit low (Bank 2 Sensor 1)		P0208	Injector circuit/Open – (Cylinder 8)
	P1152	A/F sensor heater circuit high (Bank 2 Sensor 1)	P1345	P0341	Camshaft position sensor "A" circuit range/Performance (Bank 1 or Signal sensor)
	P3197	A/F sensor circuit range/ Performance lean side (Bank 2 Sensor 1)		P0342	Camshaft position sensor "A" circuit low input (Bank 1 or Signal sensor)
	P3198	A/F sensor circuit range/ Performance rich side (Bank 2 Sensor 1)		P0343	Camshaft position sensor "A" circuit high input (Bank 1 or Signal sensor)
	P3235	A/F sensor plus minus circuit correlation low (Bank 2 Sensor 1)	P1349	P0011	Camshaft position "A" – timing over-advance or system performance (Bank 1)

Old DTC	New DTC	Detection Item	Old DTC	New DTC	Detection Item
P1349	P0012	Camshaft position “A” – timing over-retarded (Bank 1)	P1354	P0021	Camshaft position “A” – Timing over-advanced or system performance (Bank 2)
P1350	P0345	Camshaft position “A” circuit (Bank 2)		P0022	Camshaft position “A” – Timing over-retarded (Bank 2)
	P0346	Camshaft position sensor “A” circuit range/Performance (Bank 2)	C1200	P0557	Brake booster pressure sensor circuit low input
	P0347	Camshaft position sensor “A” circuit low input (Bank 2)		P0558	Brake booster pressure sensor circuit high input
	P0348	Camshaft position sensor “A” circuit high input (Bank 2)	—	—	—