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

#### A: LIST

DTC	Item	Index
P0011	A Camshaft Position-Timing Over- Advanced or System Performance (Bank 1)	<ref. "a"="" (bank="" (dtc).="" 1)="" camshaft="" code="" diagnostic="" dtc="" en(h4dotc)-89,="" or="" over-advanced="" p0011="" performance="" position-tim-ing="" procedure="" system="" to="" trouble="" with="" —="" —,=""></ref.>
P0021	A Camshaft Position-Timing Over- Advanced or System Performance (Bank 2)	<ref. "a"="" (bank="" (dtc).="" 2)="" camshaft="" code="" diagnostic="" dtc="" en(h4dotc)-90,="" or="" over-advanced="" p0021="" performance="" position-tim-ing="" procedure="" system="" to="" trouble="" with="" —="" —,=""></ref.>
P0030	HO2S Heater Control Circuit (Bank 1 Sensor 1)	<ref. cir-<br="" control="" dtc="" en(h4dotc)-91,="" heater="" ho2s="" p0030="" to="" —="">CUIT (BANK 1 SENSOR 1) —, Diagnostic Procedure with Diagnostic Trou- ble Code (DTC).&gt;</ref.>
P0031	HO2S Heater Control Circuit Low (Bank 1 Sensor 1)	<ref. cir-<br="" control="" dtc="" en(h4dotc)-93,="" heater="" ho2s="" p0031="" to="" —="">CUIT LOW (BANK 1 SENSOR 1) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0032	HO2S Heater Control Circuit High (Bank 1 Sensor 1)	<ref. (bank="" (dtc).="" 1="" 1)="" circuit="" code="" control="" diagnostic="" dtc="" en(h4dotc)-97,="" heater="" high="" ho2s="" p0032="" procedure="" sensor="" to="" trouble="" with="" —="" —,=""></ref.>
P0037	HO2S Heater Control Circuit Low (Bank 1 Sensor 2)	<ref. cir-<br="" control="" dtc="" en(h4dotc)-99,="" heater="" ho2s="" p0037="" to="" —="">CUIT LOW (BANK 1 SENSOR 2) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0038	HO2S Heater Control Circuit High (Bank 1 Sensor 2)	<ref. cir-<br="" control="" dtc="" en(h4dotc)-103,="" heater="" ho2s="" p0038="" to="" —="">CUIT HIGH (BANK 1 SENSOR 2) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0068	Manifold Absolute Pressure/Baro- metric Pressure Circuit Range/Per- formance	<ref. absolute="" dtc="" en(h4dotc)-105,="" manifold="" p0068="" pres-<br="" to="" —="">SURE/BAROMETRIC PRESSURE CIRCUIT RANGE/PERFORMANCE —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0101	Mass or Volume Air Flow Circuit Range/Performance	<ref. (dtc).="" air="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-107,="" flow="" mass="" or="" p0101="" performance="" procedure="" range="" to="" trouble="" volume="" with="" —="" —,=""></ref.>
P0102	Mass or Volume Air Flow Circuit Low Input	<ref. (dtc).="" air="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-109,="" flow="" input="" low="" mass="" or="" p0102="" procedure="" to="" trouble="" volume="" with="" —="" —,=""></ref.>
P0103	Mass or Volume Air Flow Circuit High Input	<ref. (dtc).="" air="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-113,="" flow="" high="" input="" mass="" or="" p0103="" procedure="" to="" trouble="" volume="" with="" —="" —,=""></ref.>
P0107	Manifold Absolute Pressure/Barometric Pressure Circuit Low Input	<ref. absolute="" dtc="" en(h4dotc)-115,="" manifold="" p0107="" pres-<br="" to="" —="">SURE/BAROMETRIC PRESSURE CIRCUIT LOW INPUT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0108	Manifold Absolute Pressure/Barometric Pressure Circuit High Input	<ref. absolute="" dtc="" en(h4dotc)-117,="" manifold="" p0108="" pres-<br="" to="" —="">SURE/BAROMETRIC PRESSURE CIRCUIT HIGH INPUT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0111	Intake Air Temperature Circuit Range/Performance	<ref. (dtc).="" air="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-119,="" intake="" p0111="" performance="" procedure="" range="" temperature="" to="" trouble="" with="" —="" —,=""></ref.>
P0112	Intake Air Temperature Circuit Low Input	<ref. (dtc).="" air="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-121,="" input="" intake="" low="" p0112="" procedure="" temperature="" to="" trouble="" with="" —="" —,=""></ref.>
P0113	Intake Air Temperature Circuit High Input	<ref. (dtc).="" air="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-123,="" high="" input="" intake="" p0113="" procedure="" temperature="" to="" trouble="" with="" —="" —,=""></ref.>
P0117	Engine Coolant Temperature Circuit Low Input	<ref. (dtc).="" circuit="" code="" coolant="" diagnostic="" dtc="" en(h4dotc)-127,="" engine="" input="" low="" p0117="" procedure="" temperature="" to="" trouble="" with="" —="" —,=""></ref.>
P0118	Engine Coolant Temperature Circuit High Input	<ref. coolant="" dtc="" en(h4dotc)-129,="" engine="" p0118="" tempera-<br="" to="" —="">TURE CIRCUIT HIGH INPUT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>

DTC	Item	Index
P0122	Throttle/Pedal Position Sensor/ Switch "A" Circuit Low Input	<ref. "a"="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-133,="" input="" low="" p0122="" pedal="" position="" procedure="" sensor="" switch="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P0123	Throttle/Pedal Position Sensor/ Switch "A" Circuit High Input	<ref. dtc="" en(h4dotc)-137,="" p0123="" pedal="" position<br="" throttle="" to="" —="">SENSOR/SWITCH "A" CIRCUIT HIGH INPUT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0125	Insufficient Coolant Temperature for Closed Loop Fuel Control	<ref. coolant="" dtc="" en(h4dotc)-141,="" insufficient="" p0125="" tem-<br="" to="" —="">PERATURE FOR CLOSED LOOP FUEL CONTROL —, Diagnostic Proce- dure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0126	Insufficient Coolant Temperature for Stable Operation	<ref. coolant="" dtc="" en(h4dotc)-143,="" insufficient="" p0126="" tem-<br="" to="" —="">PERATURE FOR STABLE OPERATION —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0128	Coolant Thermostat (Coolant Temperature Below Thermostat Regulating Temperature)	<ref. coolant="" dtc="" en(h4dotc)-146,="" p0128="" thermostat<br="" to="" —="">(COOLANT TEMPERATURE BELOW THERMOSTAT REGULATING TEM- PERATURE) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0131	O <sub>2</sub> Sensor Circuit Low Voltage (Bank 1 Sensor 1)	<ref. (bank="" (dtc).="" 1="" 1)="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-147,="" low="" o2="" p0131="" procedure="" sensor="" to="" trouble="" voltage="" with="" —="" —,=""></ref.>
P0132	O <sub>2</sub> Sensor Circuit High Voltage (Bank 1 Sensor 1)	<ref. (bank="" (dtc).="" 1="" 1)="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-149,="" high="" o2="" p0132="" procedure="" sensor="" to="" trouble="" voltage="" with="" —="" —,=""></ref.>
P0133	O <sub>2</sub> Sensor Circuit Slow Response (Bank 1 Sensor 1)	<ref. (bank="" (dtc).="" 1="" 1)="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-151,="" o2="" p0133="" procedure="" response="" sensor="" slow="" to="" trouble="" with="" —="" —,=""></ref.>
P0134	O <sub>2</sub> Sensor Circuit No Activity Detected (Bank 1 Sensor 1)	<ref. (bank="" (dtc).="" 1="" 1)="" activity="" circuit="" code="" detected="" diagnostic="" dtc="" en(h4dotc)-153,="" no="" o2="" p0134="" procedure="" sensor="" to="" trouble="" with="" —="" —,=""></ref.>
P0137	O <sub>2</sub> Sensor Circuit Low Voltage (Bank 1 Sensor 2)	<ref. (bank="" (dtc).="" 1="" 2)="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-155,="" low="" o2="" p0137="" procedure="" sensor="" to="" trouble="" voltage="" with="" —="" —,=""></ref.>
P0138	O <sub>2</sub> Sensor Circuit High Voltage (Bank 1 Sensor 2)	<ref. (bank="" (dtc).="" 1="" 2)="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-159,="" high="" o2="" p0138="" procedure="" sensor="" to="" trouble="" voltage="" with="" —="" —,=""></ref.>
P0139	O <sub>2</sub> Sensor Circuit Slow Response (Bank 1 Sensor 2)	<ref. (bank="" (dtc).="" 1="" 2)="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-163,="" o2="" p0139="" procedure="" response="" sensor="" slow="" to="" trouble="" with="" —="" —,=""></ref.>
P0171	System too Lean (Bank 1)	<ref. (bank="" (dtc).="" 1)="" code="" diagnostic="" dtc="" en(h4dotc)-165,="" lean="" p0171="" procedure="" system="" to="" too="" trouble="" with="" —="" —,=""></ref.>
P0172	System too Rich (Bank 1)	<ref. (bank="" (dtc).="" 1)="" code="" diagnostic="" dtc="" en(h4dotc)-166,="" p0172="" procedure="" rich="" system="" to="" too="" trouble="" with="" —="" —,=""></ref.>
P0181	Fuel Temperature Sensor "A" Circuit Range/Performance	<ref. dtc="" en(h4dotc)-169,="" fuel="" p0181="" sen-<br="" temperature="" to="" —="">SOR "A" CIRCUIT RANGE/PERFORMANCE —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0182	Fuel Temperature Sensor "A" Circuit Low Input	<ref. dtc="" en(h4dotc)-171,="" fuel="" p0182="" sen-<br="" temperature="" to="" —="">SOR "A" CIRCUIT LOW INPUT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0183	Fuel Temperature Sensor "A" Circuit High Input	<ref. "a"="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-173,="" fuel="" high="" input="" p0183="" procedure="" sensor="" temperature="" to="" trouble="" with="" —="" —,=""></ref.>
P0222	Throttle/Pedal Position Sensor/ Switch "B" Circuit Low Input	<ref. "b"="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-177,="" input="" low="" p0222="" pedal="" position="" procedure="" sensor="" switch="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P0223	Throttle/Pedal Position Sensor/ Switch "B" Circuit High Input	<ref. "b"="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-181,="" high="" input="" p0223="" pedal="" position="" procedure="" sensor="" switch="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>

DTC	Item	Index
P0230	Fuel Pump Primary Circuit	<ref. cir-<br="" dtc="" en(h4dotc)-185,="" fuel="" p0230="" primary="" pump="" to="" —="">CUIT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0244	Turbo/Super Charger Wastegate Solenoid "A" Range/Performance	<ref. "a"="" (dtc).="" charger="" code="" diagnostic="" dtc="" en(h4dotc)-189,="" p0244="" performance="" procedure="" range="" solenoid="" super="" to="" trouble="" turbo="" wastegate="" with="" —="" —,=""></ref.>
P0245	Turbo/Super Charger Wastegate Solenoid "A" Low	<ref. "a"="" (dtc).="" charger="" code="" diagnostic="" dtc="" en(h4dotc)-191,="" low="" p0245="" procedure="" solenoid="" super="" to="" trouble="" turbo="" wastegate="" with="" —="" —,=""></ref.>
P0246	Turbo/Super Charger Wastegate Solenoid "A" High	<ref. charger<br="" dtc="" en(h4dotc)-193,="" p0246="" super="" to="" turbo="" —="">WASTEGATE SOLENOID "A" HIGH —, Diagnostic Procedure with Diagnos- tic Trouble Code (DTC).&gt;</ref.>
P0301	Cylinder 1 misfire detected	<ref. (dtc).="" 1="" code="" cylinder="" detected="" diagnostic="" dtc="" en(h4dotc)-196,="" misfire="" p0301="" procedure="" to="" trouble="" with="" —="" —,=""></ref.>
P0302	Cylinder 2 misfire detected	<ref. (dtc).="" 2="" code="" cylinder="" detected="" diagnostic="" dtc="" en(h4dotc)-196,="" misfire="" p0302="" procedure="" to="" trouble="" with="" —="" —,=""></ref.>
P0303	Cylinder 3 misfire detected	<ref. (dtc).="" 3="" code="" cylinder="" detected="" diagnostic="" dtc="" en(h4dotc)-196,="" misfire="" p0303="" procedure="" to="" trouble="" with="" —="" —,=""></ref.>
P0304	Cylinder 4 misfire detected	<ref. (dtc).="" 4="" code="" cylinder="" detected="" diagnostic="" dtc="" en(h4dotc)-197,="" misfire="" p0304="" procedure="" to="" trouble="" with="" —="" —,=""></ref.>
P0327	Knock Sensor 1 Circuit Low Input (Bank 1 or Single Sensor)	<ref. (bank="" (dtc).="" 1="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-203,="" input="" knock="" low="" or="" p0327="" procedure="" sensor="" sensor)="" single="" to="" trouble="" with="" —="" —,=""></ref.>
P0328	Knock Sensor 1 Circuit High Input (Bank 1 or Single Sensor)	<ref. (bank="" (dtc).="" 1="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-205,="" high="" input="" knock="" or="" p0328="" procedure="" sensor="" sensor)="" single="" to="" trouble="" with="" —="" —,=""></ref.>
P0335	Crankshaft Position Sensor "A" Circuit	<ref. crankshaft="" dtc="" en(h4dotc)-207,="" p0335="" position="" sen-<br="" to="" —="">SOR "A" CIRCUIT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0336	Crankshaft Position Sensor "A" Circuit Range/Performance	<ref. crankshaft="" dtc="" en(h4dotc)-209,="" p0336="" position="" sen-<br="" to="" —="">SOR "A" CIRCUIT RANGE/PERFORMANCE —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0340	Camshaft Position Sensor "A" Circuit (Bank 1 or Single Sensor)	<ref. camshaft="" dtc="" en(h4dotc)-211,="" p0340="" position="" sen-<br="" to="" —="">SOR "A" CIRCUIT (BANK 1 OR SINGLE SENSOR) —, Diagnostic Proce- dure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0345	Camshaft Position Sensor "A" Circuit (Bank 2)	<ref. "a"="" (bank="" (dtc).="" 2)="" camshaft="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-213,="" p0345="" position="" procedure="" sensor="" to="" trouble="" with="" —="" —,=""></ref.>
P0420	Catalyst System Efficiency Below Threshold (Bank 1)	<ref. catalyst="" dtc="" effi-<br="" en(h4dotc)-215,="" p0420="" system="" to="" —="">CIENCY BELOW THRESHOLD (BANK 1) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0442	Evaporative Emission Control System Leak Detected (small leak)	<ref. (dtc).="" (small="" code="" control="" detected="" diagnostic="" dtc="" emission="" en(h4dotc)-219,="" evaporative="" leak="" leak)="" p0442="" procedure="" system="" to="" trouble="" with="" —="" —,=""></ref.>
P0447	Evaporative Emission Control System Vent Control Circuit Open	<ref. dtc="" emission<br="" en(h4dotc)-223,="" evaporative="" p0447="" to="" —="">CONTROL SYSTEM VENT CONTROL CIRCUIT OPEN —, Diagnostic Pro- cedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0448	Evaporative Emission Control System Vent Control Circuit Shorted	<ref. (dtc).="" circuit="" code="" control="" diagnostic="" dtc="" emission="" en(h4dotc)-227,="" evaporative="" p0448="" procedure="" shorted="" system="" to="" trouble="" vent="" with="" —="" —,=""></ref.>
P0451	Evaporative Emission Control System Pressure Sensor Range/Performance	<ref. (dtc).="" code="" control="" diagnostic="" dtc="" emission="" en(h4dotc)-229,="" evaporative="" p0451="" performance="" pressure="" procedure="" range="" sensor="" system="" to="" trouble="" with="" —="" —,=""></ref.>
P0452	Evaporative Emission Control System Pressure Sensor Low Input	<ref. (dtc).="" code="" control="" diagnostic="" dtc="" emission="" en(h4dotc)-231,="" evaporative="" input="" low="" p0452="" pressure="" procedure="" sensor="" system="" to="" trouble="" with="" —="" —,=""></ref.>

DTC	Item	Index
P0453	Evaporative Emission Control System Pressure Sensor High Input	<ref. (dtc).="" code="" control="" diagnostic="" dtc="" emission="" en(h4dotc)-235,="" evaporative="" high="" input="" p0453="" pressure="" procedure="" sensor="" system="" to="" trouble="" with="" —="" —,=""></ref.>
P0456	Evaporative Emission Control System Leak Detected (very small leak)	<ref. dtc="" emission<br="" en(h4dotc)-239,="" evaporative="" p0456="" to="" —="">CONTROL SYSTEM LEAK DETECTED (VERY SMALL LEAK) —, Diagnos- tic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0457	Evaporative Emission Control System Leak Detected (fuel cap loose/ off)	<ref. dtc="" emission<br="" en(h4dotc)-243,="" evaporative="" p0457="" to="" —="">CONTROL SYSTEM LEAK DETECTED (FUEL CAP LOOSE/OFF) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0458	Evaporative Emission Control System Purge Control Valve Circuit Low	<ref. dtc="" emission<br="" en(h4dotc)-247,="" evaporative="" p0458="" to="" —="">CONTROL SYSTEM PURGE CONTROL VALVE CIRCUIT LOW —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0459	Evaporative Emission Control System Purge Control Valve Circuit High	<ref. dtc="" emission<br="" en(h4dotc)-249,="" evaporative="" p0459="" to="" —="">CONTROL SYSTEM PURGE CONTROL VALVE CIRCUIT HIGH —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0461	Fuel Level Sensor Circuit Range/ Performance	<ref. cir-<br="" dtc="" en(h4dotc)-251,="" fuel="" level="" p0461="" sensor="" to="" —="">CUIT RANGE/PERFORMANCE —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0462	Fuel Level Sensor Circuit Low Input	<ref. cir-<br="" dtc="" en(h4dotc)-253,="" fuel="" level="" p0462="" sensor="" to="" —="">CUIT LOW INPUT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0463	Fuel Level Sensor Circuit High Input	<ref. cir-<br="" dtc="" en(h4dotc)-257,="" fuel="" level="" p0463="" sensor="" to="" —="">CUIT HIGH INPUT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0464	Fuel Level Sensor Circuit Intermittent	<ref. cir-<br="" dtc="" en(h4dotc)-261,="" fuel="" level="" p0464="" sensor="" to="" —="">CUIT INTERMITTENT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0483	Cooling Fan Rationality Check	<ref. (dtc).="" check="" code="" cooling="" diagnostic="" dtc="" en(h4dotc)-263,="" fan="" p0483="" procedure="" rationality="" to="" trouble="" with="" —="" —,=""></ref.>
P0502	Vehicle Speed Sensor Circuit Low Input	<ref. (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-267,="" input="" low="" p0502="" procedure="" sensor="" speed="" to="" trouble="" vehicle="" with="" —="" —,=""></ref.>
P0503	Vehicle Speed Sensor Intermittent/ Erratic/High	<ref. (dtc).="" code="" diagnostic="" dtc="" en(h4dotc)-269,="" erratic="" high="" intermittent="" p0503="" procedure="" sensor="" speed="" to="" trouble="" vehicle="" with="" —="" —,=""></ref.>
P0506	Idle Control System RPM Lower Than Expected	<ref. (dtc).="" code="" control="" diagnostic="" dtc="" en(h4dotc)-271,="" expected="" idle="" lower="" p0506="" procedure="" rpm="" system="" than="" to="" trouble="" with="" —="" —,=""></ref.>
P0507	Idle Control System RPM Higher Than Expected	<ref. (dtc).="" code="" control="" diagnostic="" dtc="" en(h4dotc)-275,="" expected="" higher="" idle="" p0507="" procedure="" rpm="" system="" than="" to="" trouble="" with="" —="" —,=""></ref.>
P0512	Starter Request Circuit	<ref. (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-279,="" p0512="" procedure="" request="" starter="" to="" trouble="" with="" —="" —,=""></ref.>
P0519	Idle Control System Malfunction (Fail-Safe)	<ref. (dtc).="" (fail-safe)="" code="" control="" diagnostic="" dtc="" en(h4dotc)-283,="" idle="" mal-function="" p0519="" procedure="" system="" to="" trouble="" with="" —="" —,=""></ref.>
P0545	Exhaust Gas Temperature Sensor Circuit Low-BANK 1	<ref. (dtc).="" 1="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-287,="" exhaust="" gas="" low-bank="" p0545="" procedure="" sensor="" temperature="" to="" trouble="" with="" —="" —,=""></ref.>
P0546	Exhaust Gas Temperature Sensor Circuit High-BANK 1	<ref. (dtc).="" 1="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-289,="" exhaust="" gas="" high-bank="" p0546="" procedure="" sensor="" temperature="" to="" trouble="" with="" —="" —,=""></ref.>
P0600	Improper CAN Communication	<ref. can="" cir-<br="" communication="" dtc="" en(h4dotc)-293,="" p0600="" to="" —="">CUIT —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P0604	Internal Control Module Random Access Memory (RAM) Error	<ref. (dtc).="" (ram)="" access="" code="" control="" diagnostic="" dtc="" en(h4dotc)-295,="" error="" internal="" memory="" module="" p0604="" procedure="" random="" to="" trouble="" with="" —="" —,=""></ref.>

DTC	Item	Index
P0605	Internal Control Module Read Only Memory (ROM) Error	<ref. (dtc).="" (rom)="" code="" control="" diagnostic="" dtc="" en(h4dotc)-298,="" error="" internal="" memory="" module="" only="" p0605="" procedure="" read="" to="" trouble="" with="" —="" —,=""></ref.>
P0607	Control Module Performance	<ref. (dtc).="" code="" control="" diagnostic="" dtc="" en(h4dotc)-299,="" module="" p0607="" perfor-mance="" procedure="" to="" trouble="" with="" —="" —,=""></ref.>
P0638	Throttle Actuator Control Range/Performance (Bank 1)	<ref. (bank="" (dtc).="" 1)="" actuator="" code="" control="" diagnostic="" dtc="" en(h4dotc)-302,="" p0638="" performance="" procedure="" range="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P0691	Cooling Fan 1 Control Circuit Low	<ref. (dtc).="" 1="" circuit="" code="" control="" cooling="" diagnostic="" dtc="" en(h4dotc)-303,="" fan="" low="" p0691="" procedure="" to="" trouble="" with="" —="" —,=""></ref.>
P0692	Cooling Fan 1 Control Circuit High	<ref. (dtc).="" 1="" circuit="" code="" control="" cooling="" diagnostic="" dtc="" en(h4dotc)-307,="" fan="" high="" p0692="" procedure="" to="" trouble="" with="" —="" —,=""></ref.>
P0700	Request AT MIL ON	<ref. (dtc).="" ,="" at="" code="" diagnostic="" dtc="" en(h4dotc)-310,="" light="" mil="" p0700="" procedure="" request="" to="" trouble="" up="" with="" —=""></ref.>
P0851	Neutral Switch Input Circuit Low	<ref. (at="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-311,="" input="" low="" model)="" neutral="" p0851="" procedure="" switch="" to="" trouble="" with="" —="" —,=""> or <ref. (dtc).="" (mt="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-313,="" input="" low="" model)="" neutral="" p0851="" procedure="" switch="" to="" trouble="" with="" —="" —,=""></ref.></ref.>
P0852	Neutral Switch Input Circuit High	<ref. (at="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-315,="" high="" input="" model)="" neutral="" p0852="" procedure="" switch="" to="" trouble="" with="" —="" —,=""> or <ref. (dtc).="" (mt="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-319,="" high="" input="" model)="" neutral="" p0852="" procedure="" switch="" to="" trouble="" with="" —="" —,=""></ref.></ref.>
P1152	O <sub>2</sub> Sensor Circuit Range/Performance (Low) (Bank1 Sensor1)	<ref. <br="" circuit="" dtc="" en(h4dotc)-321,="" o2="" p1152="" range="" sensor="" to="" —="">PERFORMANCE (LOW) (BANK1 SENSOR1) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P1153	O <sub>2</sub> Sensor Circuit Range/Performance (High) (Bank1 Sensor1)	<ref. <br="" circuit="" dtc="" en(h4dotc)-323,="" o2="" p1153="" range="" sensor="" to="" —="">PERFORMANCE (HIGH) (BANK1 SENSOR1) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P1160	Return Spring Failure	<ref. (dtc).="" code="" diagnostic="" dtc="" en(h4dotc)-326,="" failure="" p1160="" procedure="" return="" spring="" to="" trouble="" with="" —="" —,=""></ref.>
P1301	Misfire Detected (High Temperature Exhaust Gas)	<ref. (dtc).="" (high="" code="" detected="" diagnostic="" dtc="" en(h4dotc)-327,="" exhaust="" gas)="" misfire="" p1301="" procedure="" temperature="" to="" trouble="" with="" —="" —,=""></ref.>
P1312	Exhaust Gas Temperature Sensor Function	<ref. dtc="" en(h4dotc)-329,="" exhaust="" gas="" p1312="" tempera-<br="" to="" —="">TURE SENSOR MALFUNCTION —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P1400	Fuel Tank Pressure Control Solenoid Valve Circuit Low	<ref. (dtc).="" circuit="" code="" control="" diagnostic="" dtc="" en(h4dotc)-331,="" fuel="" low="" p1400="" pressure="" procedure="" solenoid="" tank="" to="" trouble="" valve="" with="" —="" —,=""></ref.>
P1420	Fuel Tank Pressure Control Sol. Valve Circuit High	<ref. (dtc).="" circuit="" code="" control="" diagnostic="" dtc="" en(h4dotc)-335,="" fuel="" high="" p1420="" pressure="" procedure="" solenoid="" tank="" to="" trouble="" valve="" with="" —="" —,=""></ref.>
P1443	Vent Control Solenoid Valve Function Problem	<ref. (dtc).="" code="" control="" diagnostic="" dtc="" en(h4dotc)-337,="" function="" p1443="" problem="" procedure="" solenoid="" to="" trouble="" valve="" vent="" with="" —="" —,=""></ref.>
P1446	Fuel Tank Sensor Control Valve Circuit Low	<ref. (dtc).="" circuit="" code="" control="" diagnostic="" dtc="" en(h4dotc)-339,="" fuel="" low="" p1446="" procedure="" sensor="" tank="" to="" trouble="" valve="" with="" —="" —,=""></ref.>
P1447	Fuel Tank Sensor Control Valve Circuit High	<ref. (dtc).="" circuit="" code="" control="" diagnostic="" dtc="" en(h4dotc)-343,="" fuel="" high="" p1447="" procedure="" sensor="" tank="" to="" trouble="" valve="" with="" —="" —,=""></ref.>
P1448	Fuel Tank Sensor Control Valve Range/Performance	<ref. (dtc).="" code="" control="" diagnostic="" dtc="" en(h4dotc)-345,="" fuel="" p1448="" performance="" procedure="" range="" sensor="" tank="" to="" trouble="" valve="" with="" —="" —,=""></ref.>

DTC	Item	Index
P1491	Positive Crankcase Ventilation (Blow-by) Function Problem	<ref. (blow-by)="" (dtc).="" code="" crankcase="" diagnostic="" dtc="" en(h4dotc)-347,="" function="" p1491="" positive="" problem="" procedure="" to="" trouble="" venti-lation="" with="" —="" —,=""></ref.>
P1518	Starter Switch Circuit Low Input	<ref. (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-349,="" input="" low="" p1518="" procedure="" starter="" switch="" to="" trouble="" with="" —="" —,=""></ref.>
P1544	Exhaust Gas Temperature Too High	<ref. (dtc).="" code="" diagnostic="" dtc="" en(h4dotc)-353,="" exhaust="" gas="" high="" p1544="" procedure="" temperature="" to="" too="" trouble="" with="" —="" —,=""></ref.>
P1560	Back-Up Voltage Circuit Malfunction	<ref. (dtc).="" back-up="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-355,="" malfunction="" p1560="" procedure="" to="" trouble="" voltage="" with="" —="" —,=""></ref.>
P2004	Tumble Generated Valve System 1 (Valve Open)	<ref. (dtc).="" (valve="" 1="" code="" diagnostic="" dtc="" en(h4dotc)-359,="" generated="" open)="" p2004="" procedure="" system="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2005	Tumble Generated Valve System 2 (Valve Open)	<ref. (dtc).="" (valve="" 2="" code="" diagnostic="" dtc="" en(h4dotc)-360,="" generated="" open)="" p2005="" procedure="" system="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2006	Tumble Generated Valve System 1 (Valve Close)	<ref. (dtc).="" (valve="" 1="" close)="" code="" diagnostic="" dtc="" en(h4dotc)-361,="" generated="" p2006="" procedure="" system="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2007	Tumble Generated Valve System 2 (Valve Close)	<ref. (dtc).="" (valve="" 2="" close)="" code="" diagnostic="" dtc="" en(h4dotc)-362,="" generated="" p2007="" procedure="" system="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2008	Tumble Generated Valve Signal 1 Circuit Malfunction (Open)	<ref. (dtc).="" (open)="" 1="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-363,="" generated="" malfunction="" p2008="" procedure="" signal="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2009	Tumble Generated Valve Signal 1 Circuit Malfunction (Short)	<ref. (dtc).="" (short)="" 1="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-365,="" generated="" malfunction="" p2009="" procedure="" signal="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2011	Tumble Generated Valve Signal 2 Circuit Malfunction (Open)	<ref. (dtc).="" (open)="" 2="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-367,="" generated="" malfunction="" p2011="" procedure="" signal="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2012	Tumble Generated Valve Signal 2 Circuit Malfunction (Short)	<ref. (dtc).="" (short)="" 2="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-369,="" generated="" malfunction="" p2012="" procedure="" signal="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2016	Tumble Generated Valve Position Sensor 1 Circuit Low	<ref. (dtc).="" 1="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-371,="" generated="" low="" p2016="" position="" procedure="" sensor="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2017	Tumble Generated Valve Position Sensor 1 Circuit High	<ref. (dtc).="" 1="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-375,="" generated="" high="" p2017="" position="" procedure="" sensor="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2021	Tumble Generated Valve Position Sensor 2 Circuit Low	<ref. (dtc).="" 2="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-377,="" generated="" low="" p2021="" position="" procedure="" sensor="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2022	Tumble Generated Valve Position Sensor 2 Circuit High	<ref. (dtc).="" 2="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-381,="" generated="" high="" p2022="" position="" procedure="" sensor="" to="" trouble="" tumble="" valve="" with="" —="" —,=""></ref.>
P2088	OCV Solenoid Valve Signal A Circuit Open (Bank 1)	<ref. (bank="" (dtc).="" 1)="" a="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-383,="" ocv="" open="" p2088="" procedure="" signal="" solenoid="" to="" trouble="" valve="" with="" —="" —,=""></ref.>
P2089	OCV Solenoid Valve Signal A Circuit Short (Bank 1)	<ref. (bank="" (dtc).="" 1)="" a="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-385,="" ocv="" p2089="" procedure="" short="" signal="" solenoid="" to="" trouble="" valve="" with="" —="" —,=""></ref.>
P2092	OCV Solenoid Valve Signal A Circuit Open (Bank 2)	<ref. (bank="" (dtc).="" 2)="" a="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-387,="" ocv="" open="" p2092="" procedure="" signal="" solenoid="" to="" trouble="" valve="" with="" —="" —,=""></ref.>

DTC	Item	Index
P2093	OCV Solenoid Valve Signal A Circuit Short (Bank 2)	<ref. (bank="" (dtc).="" 2)="" a="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-389,="" ocv="" p2093="" procedure="" short="" signal="" solenoid="" to="" trouble="" valve="" with="" —="" —,=""></ref.>
P2096	Post Catalyst Fuel Trim System Too Lean Bank 1	<ref. catalyst="" dtc="" en(h4dotc)-391,="" fuel="" p2096="" post="" to="" trim<br="" —="">SYSTEM TOO LEAN BANK 1 —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P2097	Post Catalyst Fuel Trim System Too Rich Bank 1	<ref. catalyst="" dtc="" en(h4dotc)-397,="" fuel="" p2097="" post="" to="" trim<br="" —="">SYSTEM TOO RICH BANK 1 —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P2101	Throttle Actuator Control Motor Circuit Range/Performance	<ref. (dtc).="" actuator="" circuit="" code="" control="" diagnostic="" dtc="" en(h4dotc)-403,="" motor="" p2101="" performance="" procedure="" range="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P2102	Throttle Actuator Control Motor Circuit Low	<ref. (dtc).="" actuator="" circuit="" code="" control="" diagnostic="" dtc="" en(h4dotc)-411,="" low="" motor="" p2102="" procedure="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P2103	Throttle Actuator Control Motor Circuit High	<ref. (dtc).="" actuator="" circuit="" code="" control="" diagnostic="" dtc="" en(h4dotc)-415,="" high="" motor="" p2103="" procedure="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P2109	Throttle/Pedal Position Sensor A Minimum Stop Performance	<ref. (dtc).="" a="" code="" diagnostic="" dtc="" en(h4dotc)-418,="" minimum="" p2109="" pedal="" performance="" position="" procedure="" sensor="" stop="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P2122	Throttle/Pedal Position Sensor/ Switch "D" Circuit Low Input	<ref. "d"="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-419,="" input="" low="" p2122="" pedal="" position="" procedure="" sensor="" switch="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P2123	Throttle/Pedal Position Sensor/ Switch "D" Circuit High Input	<ref. "d"="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-423,="" high="" input="" p2123="" pedal="" position="" procedure="" sensor="" switch="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P2127	Throttle/Pedal Position Sensor/ Switch "E" Circuit Low Input	<ref. "e"="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-427,="" input="" low="" p2127="" pedal="" position="" procedure="" sensor="" switch="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P2128	Throttle/Pedal Position Sensor/ Switch "E" Circuit High Input	<ref. "e"="" (dtc).="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-431,="" hight="" input="" p2128="" pedal="" position="" procedure="" sensor="" switch="" throttle="" to="" trouble="" with="" —="" —,=""></ref.>
P2135	Throttle/Pedal Position Sensor/ Switch "A"/"B" Voltage Rationality	<ref. "a"="" "b"="" (dtc).="" code="" diagnostic="" dtc="" en(h4dotc)-435,="" p2135="" pedal="" position="" procedure="" rationality="" sensor="" switch="" throttle="" to="" trouble="" voltage="" with="" —="" —,=""></ref.>
P2138	Throttle/Pedal Position Sensor/ Switch "D"/"E" Voltage Rationality	<ref. "d"="" "e"="" (dtc).="" code="" diagnostic="" dtc="" en(h4dotc)-441,="" p2138="" pedal="" position="" procedure="" rationality="" sensor="" switch="" throttle="" to="" trouble="" voltage="" with="" —="" —,=""></ref.>
P2227	Atmospheric Pressure Sensor Circuit Range/Performance	<ref. (dtc).="" atmospheric="" circuit="" code="" diagnostic="" dtc="" en(h4dotc)-446,="" p2227="" performance="" pressure="" procedure="" range="" sensor="" to="" trouble="" with="" —="" —,=""></ref.>
P2228	Atmospheric Pressure Sensor Circuit Malfunction (Low Input)	<ref. atmospheric="" dtc="" en(h4dotc)-447,="" p2228="" pressure<br="" to="" —="">SENSOR CIRCUIT MALFUNCTION (LOW INPUT) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>
P2229	Atmospheric Pressure Sensor Circuit Malfunction (High Input)	<ref. atmospheric="" dtc="" en(h4dotc)-448,="" p2229="" pressure<br="" to="" —="">SENSOR CIRCUIT MALFUNCTION (HIGH INPUT) —, Diagnostic Procedure with Diagnostic Trouble Code (DTC).&gt;</ref.>

MEMO: