

Diagnostic Trouble Codes (DTC's) through 2008

Speedometer Self Diagnostics: The speedometer is capable of displaying and clearing speedometer, tachometer, TSM/TSSM and ICM/ECM Diagnostic Trouble Codes (DTC).

1- Turn Ignition switch to OFF & Run/Stop switch is to Run.

2- Push odometer reset button in & hold.

3- Turn ignition switch to Ignition and release odometer reset button. Background lighting should illuminate, speedometer needle should sweep its full range and indicator lamps (battery, security, low fuel, check engine and cruise) should illuminate. The word "diag" should then appear.

4 - Push the odometer reset button once and you will see the selection menu "PSSPt" with the first P flashing.

5 - Each letter represents an area of the diagnostics module. The module that is flashing is the one you are going to check. To move from one letter (module) to the next, you push the odometer reset button one time. (from P to S to SP to t and back to P, etc.)

P = ECM/ICM (Electronic Control Module [EFI] / Ignition Control Module [Carbureted])

S = TSM/TSSM (Turn Signal/ Turn Signal Security Module)

SP = speedometer

T = tachometer

6 - To get the DTC within an area of diagnostics, push and hold the odometer reset button in for 5 seconds and release. If there are any DTC's the code will be displayed or the word "none" will appear if there are no DTC's. Push the odometer reset button again to view additional codes if they exist.

7 - Record the codes.

8 - If DTC's are not to be cleared, Press and release the odometer reset button. Part number of module will be displayed.

NOTE: To determine if a code is current or historic, clear the displayed code by pushing in and holding the odometer reset button (longer than 5 seconds) until 'clear' comes up. Release the odometer reset button. Turn OFF the ignition switch. Run your bike and shut it down then recheck the DTC's again by repeating steps 1 to 9. If the code is current it will reappear.

9 – Press and release the odometer reset button to continue to the next module.

10 – Turn Ignition switch to OFF.

On models not equipped with a tachometer "No Rsp" will appear when the tachometer identifier is selected.

"No Rsp" will also appear if the run/off switch is in the off position when doing this procedure.

HFSM = Hands Free Security Module
TSSM = Turn Signal Security Module
TSM = Turn signal module

B0563 Battery Voltage High TSM/TSSM
B1004 Fuel Level Sending Unit Low Instruments
B1005 Fuel Level Sending Unit High/Open Instruments
B1006 Accessory Line Overvoltage Instruments
B1007 Ignition Line Overvoltage Instruments
B1008 Reset Switch Closed Instruments
B1121 (TSM) Left Turn Output Fault - (HFSM) Left Turn Output Open
B1122 (TSM) Right Turn Output Fault - (HFSM) Right Turn Output Open
B1123 (HFSM) Left Turn Output Short to Ground
B1124 (HFSM) Right Turn Output Short to Ground
B1125 (HFSM) Left Turn Output Short to Battery
B1126 (HFSM) Right Turn Output Short to Battery
B1131 (HFSM) Alarm Output Low
B1131 Alarm Output Low TSM/TSSM
B1132 (HFSM) Alarm Output High
B1132 Alarm Output High TSM/TSSM
B1134 Starter Output High TSM/TSSM
B1135 Accelerometer Fault TSM/TSSM
B1136 (HFSM) Accelerometer Tip Test Error
B1141 (TSM) Ignition Switch Low/Open - (HFSM) Ignition Switch Low/Open
B1142 Smart Security System Internal Fault
B1143 (HFSM) Security Antenna Short to Ground
B1144 (HFSM) Security Antenna Short to Battery
B1145 (HFSM) Security Antenna Open
B1151 Bank Angle Sensor(BAS) Short to Ground
B1151 Sidecar BAS Low TSM/TSSM
B1152 Bank Angle Sensor(BAS) Short to Battery
B1152 Sidecar BAS High TSM/TSSM
B1153 Bank Angle Sensor(BAS) High
B1153 Sidecar BAS Out of Range TSM/TSSM
B1154 Clutch Switch Input Short to Ground
B1155 Neutral Switch Input Short to Battery
P0106 MAP Sensor Rate of Range Error Carb
P0107 Map Sensor Failed Open/Low Carb
P0107 Map Sensor Open/Low EFI
P0108 Map Sensor Failed High Carb
P0108 Map Sensor High
P0112I AT Voltage Low
P0113I AT Sensor Voltage Open/High EFI
P0113I AT Voltage Open/High
P0117 ET Sensor Low
P0118 ET Sensor High
P0118 ET Sensor Voltage Open/High EFI
P0120 TPS1 Range Error
P0122 TP Sensor Open/Low EFI
P0122 TPS1 Low

P0123 TP Sensor High EFI
P0123 TPS2 High/Open
P0131 Front Oxygen Sensor Low
P0132 Front Oxygen Sensor High
P0134 Front Oxygen Sensor Inactive
P0151 Rear Oxygen Sensor Low
P0152 Rear Oxygen Sensor High
P0154 Rear Oxygen Sensor Inactive
P0220 TPS2 Range Error
P0222 TPS2 Low
P0223 TPS2 High/Open
P0261 Front Injector Open/Low
P0262 Front Injector High EFI
P0263 Rear Injector Open/Low EFI
P0264 Rear Injector High EFI
P0371 Crank Position Sensor (CKP)
P0372 Crank Position Sensor (CKP)
P0373 CKP Sensor Intermittent
P0374 CKP Sensor Not Detected Carb
P0374 CKP Sensor Synch Error EFI
P0444 Purge Solenoid Open/Low
P0445 Purge Solenoid High
P0501 VSS Sensor Low
P0502 VSS High/Open
P0505 Loss of Idle Sped Control EFI
P0562 Battery Voltage Low
P0563 Battery Voltage High
P0572 Brake Switch Low
P0577 Cruise Control Input High
P0602 Calibration Memory Error Carb
P0603 ECM EEPROM Memory Error
P0603 EEPROM Failure Carb
P0604 RAM Failure Carb
P0605 ECM Flash Error EFI
P0605 ECM FLASH Memory Error
P0605 Program Memory Error Carb
P0607 Converter Error Carb
P06415 V+Vref 1 Out Of Range
P06515 V+Vref 2 Out Of Range
P1001 System Relay Coil Open/Low
P1002 System Relay Coil High/Shorted
P1003 System relay contacts open
P1004 System Relay Contacts Closed
P1009 Incorrect Password
P1010 Missing Password
P1270 TGS Validation Error
P1351 Front Ignition Coil Driver Open/Low
P1352 Front Ignition Coil Driver High/Shorted
P1353 Front Cylinder No Combustion
P1354 Rear Ignition Coil Driver Open/Low
P1355 Rear Ignition Coil Driver High/Shorted

P1356 Rear Cylinder No Combustion
P1357 Front Cylinder Combustion Intermittent
P1358 Rear Cylinder Combustion Intermittent
P1475 Exhaust Actuation Position Error
P1477 Exhaust Actuator Open/Low
P1478 Exhaust Actuator Shorted/High
P1501 Jiffy Stand Sensor Low
P1502 Jiffy Stand Sensor High
P1510 EFI Limited Performance Mode
P1511 EFI Power Management Mode
P1512 EFI Forced Idle Mode
P1514 Air Flow Fault
P1600 EFI Module Processor Internal Error
P2100 EFI Motor Circuit Open
P2101 EFI Motor Circuit Range Performance (Actuation Error)
P2102 EFI Motor Circuit Low
P2103 EFI Motor Circuit High
P2105 EFI Forced engine shutdown
P2107 EFI Module Processor Internal Fault
P2119 EFI Motor Throttle Body Range Performance
P2122 TGS1 Low/Open
P2123 TGS1 High
P2127 TGS2 Low/Open
P2128 TGS2 High
P2135 TPS Correlation Error
P2138 TGS Correlation Error (Twist grip sensor)
P2176 EFI Closed Position Not Learned
U1016 Loss of ECM Vehicle Speed, Vehicle Inhibit Motion or Powertrain Security Status
TSM/TSSM
U1016 Loss of ICM/ECM Serial Data Instruments
U1064 Loss of TSM/FSFM Serial Data to ICM / ECM
U1064 Loss of TSM/TSSM Serial Data Instruments
U1097 Loss of Speedometer Serial data Carb
U1097 Loss of Speedometer Serial data EFI
U1097 Loss of Speedometer Serial Data to ECM
U1097 Loss of Speedometer Serial data TSM/TSSM
U1255 Missing Message at Speedometer EFI
U1255 Serial Data Error
U1255 Serial Data Error/Missing Message EFI
U1255 Serial Data Error/Missing Message Instruments
U1255 Serial Data Error/Missing Message TSM/TSSM
U1300 ECM Serial Data Low
U1300 Serial Data Low
U1300 Serial Data Low Instruments
U1300 Serial Data Low TSM/TSSM
U1301 Serial Data Open/High Carb
U1301 Serial Data Open/High EFI
U1301 Serial Data Open/High Instruments
U1301 Serial Data Open/High TSM/TSSM

AFR – Air Fuel Ratio

ATS – Air Temperature Sensor

BAS – Bank Angle Sensor

CCM – Cruise Control Module

CKP – Crank Position Sensor. The CKP generates an “AC signal” which is sent to the ECM where it is used to reference engine position (TDC) and speed.

DTC – Diagnostic Trouble Codes

ECM – Electronic Control Module. (The Computer) Computes the spark advance for proper ignition timing and fuel control based on sensor inputs (from CKP, MAP & TP sensors) and controls the low-voltage circuits for the ignition coils and injectors.

The dwell time for the ignition coil is also calculated in the microprocessor and is dependent upon battery voltage. The programmed dwell feature gives adequate spark at all speeds.

ECT – Engine Coolant Temperature. Sensor also controls the cooling fan relay that provides 12 Vdc to the fans.

EFI – Electronic Fuel Injection

EFP – Electronic Fuel Pump

ET – Engine Temperature sensor

FI – Fuel Injectors

FPR – Fuel Pressure regulator

IAC – Idle Air Control actuator

IAT – Intake Air Temperature sensor

ISS – Ion Sensing System...detonation detection

MAP – manifold Absolute Pressure sensor. The MAP sensor monitors the intake manifold pressure (vacuum) and sends the information to the ECM.

The EMC then adjusts the spark and fuel-timing advance curves for optimum performance.

TGS - Twist grip sensor

TPS – Throttle Position Sensor

TSM/TSSM (Turn Signal/ Turn Signal Security Module)

VE – Volume Efficiency

VSS – Vehicle Speed Sensor. Used as an input for idle speed control