

These will also work on the 07 & 08 bikes.

The IM (instrument module) is capable of displaying DTC's (diagnostic trouble codes).

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.

DTC FAULT CONDITION MODULE

"BUS Er" Serial data bus shorted/low/open/high
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
B1122 Right turn output fault
B1131 Alarm Output Low TSM/TSSM
B1132 Alarm Output High TSM/TSSM
B1134 Starter Output High TSM/TSSM
B1135 Accelerometer Fault TSM/TSSM
B1141 Ignition switch open/low
B1151 Sidecar BAS Low TSM/TSSM
B1152 Sidecar BAS High TSM/TSSM
B1153 Sidecar BAS Out of Range TSM/TSSM
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 EFI
P0112 IAT Sensor Voltage Low EFI
P0113 IAT Sensor Voltage Open/High EFI
P0117 ET Sensor Voltage Low EFI
P0118 ET Sensor Voltage Open/High EFI
P0122 TP Sensor Open/Low EFI
P0123 TP Sensor High EFI
P0131 Front O2 sensor low (lean)
P0132 Engine running rich
P0134 Front O2 sensor open/not responding
P0151 Rear O2 sensor low (lean)
P0152 Rear O2 sensor high (rich)
P0154 Rear O2 sensor open/not responding
P0261 Front Injector Open/Low EFI
P0262 Front Injector High EFI
P0263 Rear Injector Open/Low EFI
P0264 Rear Injector High EFI
P0373 CKP Sensor Intermittent Carb
P0373 CKP Sensor Intermittent EFI
P0374 CKP Sensor Not Detected Carb
P0374 CKP Sensor Synch Error EFI
P0501 VSS Low Carb
P0501 VSS Low EFI
P0502 VSS High/Open Carb
P0502 VSS High/Open EFI
P0505 Loss of Idle Sped Control EFI
P0562 Battery Voltage Low Carb
P0562 Battery Voltage Low EFI
P0563 Battery Voltage High Carb

P0563 Battery Voltage High EFI
P0602 Calibration Memory Error Carb
P0603 EEPROM Failure Carb
P0603 ECM EEPROM Error EFI
P0604 RAM Failure Carb
P0605 Program Memory Error Carb
P0605 ECM Flash Error EFI
P0607 Converter Error Carb
P0661 Intake solenoid low/open
P0662 Intake solenoid high/shorted
P1001 System Relay Coil Open/Low EFI
P1002 System relay Coil High/Shorted EFI
P1003 System relay Contacts Open EFI
P1004 System Relay Contacts Closed EFI
P1009 Incorrect Password Carb
P1009 Incorrect Password EFI
P1010 Missing Password Carb
P1010 Missing Password EFI
P1351 Front Ignition Open/Low Carb
P1351 Front Ignition Open/Low EFI
P1352 Front Ignition Coil High/Shorted Carb
P1352 Front Ignition Coil High/Shorted EFI
P1353 Front Cylinder No Combustion EFI
P1354 Rear Ignition Coil Open/Low Carb
P1354 Rear Ignition Coil Open/Low EFI
P1355 Rear Ignition Coil High/Shorted Carb
P1355 Rear Ignition Coil High/Shorted EFI
P1356 Rear Cylinder No Combustion EFI
P1357 Intermittent Secondary Front EFI
P1358 Intermittent Secondary Rear EFI
U1016 Loss of ICM/ECM Serial Data Instruments
U1016 Loss of ECM Serial Data, Vehicle Speed, Vehicle Inhibit Motion or Powertrain
Security Status TSM/TSSM
U1064 Loss of TSM/TSSM Serial Data Carb
U1064 Loss of TSM/TSSM Serial Data EFI
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 TSM/TSSM
U1255 Missing Message at Speedometer EFI
U1255 Serial Data Error/Missing Message EFI
U1255 Serial Data Error/Missing Message Instruments
U1255 Serial Data Error/Missing Message TSM/TSSM
U1300 Serial Data Low Carb
U1300 Serial Data Low EFI
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

2006 models with O2 sensors (Dynas)

P0131 Front O2 sensor lean for any length of time

P0151 Rear O2 sensor lean for any length of time

Above codes can also be set if O2 sensor fails.

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. Home position established by taking readings off the 22 teeth on the alternator rotor.

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.

TP – 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