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Harley-Davidson Diagnostic Trouble Codes (DTC)

The following procedure will instruct in retrieving and clearing ECM Diagnostic Trouble Codes and TSM/TSSM codes through the Harley gauge cluster as well as a list of codes.

- 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 the 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/ 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

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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" (no response) will also appear if the run/off switch is in the off position when doing this procedure.

HFMS = Hands Free Security Module

TSM = Turn signal module

DTC's are designated by a P,C,B or U

P codes indicate issues monitored by ECM

C codes indicate an issue with ABS

B codes are set by Radio, Instruments and BCM

U codes indicate a communication problems with the modules

Fault Code Abbreviation List

ABS – Anti-Lock Braking System

ACR – Automatic Compression Release

AFR – Air Fuel Ratio

AIS – Active Intake Solenoid

ATS – Air Temperature Sensor

BAS – Bank Angle Sensor

BCM – Body Control Module

CAN – Controller Area Network

CCM – Cruise Control Module
CKP – Crank Position Sensor
DLC – Datalink Connector
DTC – Diagnostic Trouble Codes
ECM – Electronic Control Module
ECT – Engine Coolant Temperature
ECU – Electronic Control Unit
EFI – Electronic Fuel Injection
EFP – Electronic Fuel Pump
ET – Engine Temperature sensor
FI – Fuel Injectors
FPR – Fuel Pressure regulator
H-DSSS – Harley-Davidson Smart Security System
HCU – Hydraulic Control Unit, ABS
[/HO2S – Heated Oxygen Sensor
IAC – Idle Air Control actuator
IAT – Intake Air Temperature sensor
ICM – Ignition Control Module
IMAP – MAP + IAT in one unit
ISS – Ion Sensing System
JSS – Jiffy Stand Sensor
LHCM – Left Hand Control Module
MAP – Manifold Absolute Pressure Sensor
MHR – Right Hand Control Module
RCM – Reverse Control Module
TCA – Throttle Control Actuator
TGS – Twist Grip Sensor
TMAP – Intake Air Temperature / Manifold Absolute Pressure equipment
TPS – Throttle Position Sensor
TSM / TSSM – (Turn Signal / Turn Signal Security Module)
VE – Volume Efficiency
VIN – Vehicle identification number
VSS – Vehicle Speed Sensor
WSS – Wheel Speed Sensor

P0031 Front HO2S low/open
P0032 Front HO2S shorted/high
P0051 Rear HO2S low/open
P0052 Rear HO2S shorted/high
P0072 AAT sensor low
P0073 AAT sensor high/open

P0107 MAP sensor failed low/open
P0107 Map Sensor Open/Low
P0108 MAP sensor failed high/open port
P0112 IAT Voltage Low
P0113 IAT Voltage Open/High
P0117 ET Sensor Low
P0118 ET Sensor High
P0120 TPS1 Range Error
P0122 TPS1 Low
P0123 TPS2 High/Open
P0131 Front Oxygen Sensor Low / Engine Lean
P0132 Front Oxygen Sensor High / Engine Rich
P0134 Front Oxygen Sensor Inactive
P0151 Rear Oxygen Sensor Low / Engine Lean
P0152 Rear Oxygen Sensor High / Engine Rich
P0154 Rear Oxygen Sensor Inactive
P0220 TPS2 Range Error
P0222 TPS2 Low/Open
P0223 TPS2 High/Open
P0261 Front Injector Open/Low
P0262 Front Injector High
P0263 Rear Injector Open/Low
P0264 Rear Injector High
P0265 Rear injector shorted high
P0371 CKP sensor wrong number of pulses
P0373 CKP Sensor Intermittent
P0374 CKP Sensor Synch Error
P0444 Purge Solenoid Open/Low
P0445 Purge Solenoid High
P0501 VSS Sensor Low
P0502 VSS Sensor High/Open
P0503 VSS failed high
P0505 Idle speed control unstable
P0562 Battery/ECM Voltage Low
P0563 Battery/ECM Voltage High
P0572 Brake Switch Low
P0577 Cruise Control Input High
P0603 ECM EEPROM Memory Error
P0605 ECM FLASH Memory Error
P0641 5 Volt Reference 1 Out of Range
P0651 5 Volt Reference 2 Out of Range
P0691 Fan/cooling relay output low/open
P0692 Fan/cooling relay output high

P1001 System Relay Coil Open/Low
P1002 System Relay Coil High/Shorted
P1003 System relay contacts open
P1004 System Relay Contacts Closed
P1009 VTD Disabled Fuel Due to Incorrect Password
P1010 Missing Password
P1017 ET indicates overheating
P1019 ECT Difference (high temp)
P1270 TGS 2 A/D 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 ETC Air Flow Fault/Error
P1600 EFI Module Processor Internal Error / Watchdog Error
P1608 Loss of continuous battery
P1655 ACR solenoid low/open
P1656 ACR solenoid shorted high
P1691 Cooling fan left low/open
P1692 Cooling fan left shorted high
P1693 Cooling fan right low/open
P1694 Cooling fan right shorted high
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 RangePerformance
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
P2184 ECT sensor low
P2185 ECT sensor high
P2300 Ignition coil driver low/open (front)
P2301 Ignition coil driver shorted high (front)
P2303 Ignition coil driver low/open (rear)
P2304 Ignition coil driver shorted high (rear)

C0562 ABS voltage low
C0563 ABS voltage high
C1014 ABS ECU relay error
C1021 ABS front WSS always zero
C1023 ABS rear WSS always zero
C1025 ABS Front wheel speed intermittent
C1027 ABS rear wheel speed intermittent
C1029 ABS wheel speed difference too high
C1032 ABS Front wheel speed circuit open/shorted
C1034 ABS rear wheel speed circuit open/shorted
C1040 ABS pump/motor error
C1055 ABS ECU internal error
C1061 ABS front apply solenoid circuit open/high resistance
C1062 ABS front release solenoid circuit open/high resistance
C1065 ABS rear apply solenoid circuit open/high resistance
C1066 ABS rear release solenoid circuit open/high resistance
C1071 Rear prime valve error
C1072 Rear isolation valve error
C1073 Front isolation valve error
C1074 Front prime valve error
C1075 Front linked inlet valve error
C1076 Front linked outlet valve error
C1077 Front circuit pressure sensor error
C1078 Rear circuit pressure sensor error
C1081 Front master pressure sensor error
C1082 Front master pressure sensor offset error
C1083 Front wheel pressure sensor error
C1084 Front wheel pressure sensor offset error
C1085 Rear master pressure sensor error
C1086 Rear master pressure offset sensor error
C1087 Rear wheel pressure sensor error

C1088 Rear wheel pressure sensor offset error
C1089 Pressure sensor external supply error
C1159 ABS invalid stored VIN
C1178 ABS no VIN received from ECM
C1184 ABS invalid VIN from ECM
C1195 Wake up error

B0563 Battery Voltage High
B1103 LHCM Internal error
B1121(HFSM) Left Turn Output Open
B1121(TSM) Left Turn Output Fault
B1122(HFSM) Right Turn Output Open
B1122(TSM) Right Turn Output Fault
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
B1132(HFSM) Alarm Output High
B1134 Starter Output High
B1135 Accelerometer Failed
B1136(HFSM) Accelerometer Tip Test Error
B1141(HFSM) Ignition SwitchLow/Open
B1141(TSM) Ignition SwitchLow/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
B1152 Bank Angle Sensor(BAS) Short to Battery
B1153 Bank Angle Sensor(BAS) High
B1153 RHCM internal error
B1154 Clutch Switch Input Short to Ground
B1155 Neutral Switch Input Short to Battery
B1200 IM internal fault
B1210 Fuel level sender shorted low/open
B1211 Fuel level sender shorted high
B1212 Fuel signal low
B1213 Fuel signal high
B1300 Radio voltage high
B1301 Radio voltage low
B1302 Face plate home button stuck
B1303 Face plate favorite button stuck

B1304 Face plate navigation button stuck
B1305 Face plate power/mute button stuck
B1306 Rear hand controls shorted high
B1307 Rear hand controls shorted low
B1308 Rear volume up button stuck
B1309 Rear volume down button stuck
B1310 Rear mode button stuck
B1311 Rear PTT button stuck
B1312 Rear tune up button stuck
B1313 Rear tune down button stuck
B1314 LHCM VR button stuck
B1315 LHCM up button stuck
B1316 LHCM left button stuck
B1317 LHCM center button stuck
B1318 LHCM right button stuck
B1319 LHCM down button stuck
B1320 RHCM Info button stuck
B1321 RHCM up button stuck
B1322 RHCM left button stuck
B1323 RHCM center button stuck
B1324 RHCM right button stuck
B1325 RHCM down button stuck
B1326 RHCM CB squelch up button stuck
B1327 RHCM CB PTT button stuck
B1328 RHCM CB squelch down button stuck
B1329 Faceplate preset button 1 stuck
B1330 Faceplate preset button 2 stuck
B1331 Faceplate preset button 3 stuck
B1332 Faceplate preset button 4 stuck
B1333 Faceplate preset button 5 stuck
B1334 Faceplate preset button 6 stuck
B1335 Faceplate preset button 7 stuck
B1336 Faceplate preset button 8 stuck
B1337 Front left speaker shorted together
B1338 Front left speaker open
B1339 Front left speaker shorted low
B1340 Front left speaker shorted high
B1341 Rear left speaker shorted together
B1342 Rear left speaker open
B1343 Rear left speaker shorted low
B1344 Rear left speaker shorted high
B1345 Front right speaker shorted together
B1346 Front right speaker open

B1347 Front right speaker shorted low
B1348 Front right speaker shorted high
B1349 Rear right speaker shorted together
B1350 Rear right speaker open
B1351 Rear right speaker shorted low
B1352 Rear right speaker shorted high
B1353 Speaker offset DC output
B1354 GPS antenna open
B1355 GPS antenna shorted low
B1356 SDARS antenna open
B1357 SDARS antenna shorted
B1358 Front left headset shorted high
B1359 Front right headset shorted high
B1360 Front left headset shorted low
B1361 Front right headset shorted low
B1362 Rear left headset shorted high
B1363 Rear right headset shorted high
B1364 Rear left headset shorted low
B1365 Rear right headset shorted low
B1366 Internal thermal shutdown error
B1401 Amp voltage low
B1402 Amp voltage high
* Amp 1 Amp 2
B1403 Speaker offset DC output *
B1404 Internal thermal shutdown error *
B1405 EQ correlation error
B1406 Invalid or missing EQ
B1410 Channel 1 speaker open *
B1411 Channel 1 speaker shorted low *
B1412 Channel 1 speaker shorted high *
B1413 Channel 1 Speaker shorted together *
B1420 Channel 2 speaker open *
B1421 Channel 2 speaker shorted low *
B1422 Channel 2 speaker shorted high *
B1423 Channel 2 speaker shorted together *
B1430 Channel 3 speaker open *
B1431 Channel 3 speaker shorted low *
B1432 Channel 3 speaker shorted high *
B1433 Channel 3 speaker shorted together *
B1440 Channel 4 speaker open *
B1441 Channel 4 speaker shorted low *
B1442 Channel 4 speaker shorted high *
B1443 Channel 4 speaker shorted together *

B2102 System power output shorted high
B2103 System power output shorted low
B2104 System power output overloaded
B2106 L4 output open
B2107 L4 output shorted high
B2108 L4 output shorted low
B2109 L4 output overloaded
B2112 ACC output shorted high
B2113 ACC output shorted low
B2114 ACC output overloaded
B2116 Fuel pump output open
B2117 Fuel pump output shorted high
B2118 Fuel pump output shorted low
B2119 Fuel pump output overloaded
B2121 Starter output open
B2122 Starter output shorted high
B2123 Starter output shorted low
B2124 Starter output overloaded
B2127 E4 output shorted high
B2128 E4 output shorted low
B2129 E4 output overloaded
B2131 High beam output open
B2132 High beam output shorted high
B2133 High beam output shorted low
B2134 High beam output overloaded
B2136 Low beam output open
B2137 Low beam output shorted high
B2138 Low beam output shorted low
B2139 Low beam output overloaded
B2141 Left front turn signal output open
B2143 Left front turn signal output shorted low
B2144 Left front turn signal output overloaded
B2146 Right front turn signal output open
B2148 Right front turn signal output shorted low
B2149 Right front turn signal output overloaded
B2151 Left rear turn signal output open
B2153 Left rear turn signal output shorted low
B2154 Left rear turn signal output overloaded
B2156 Right rear turn signal output open
B2158 Right rear turn signal output shorted low
B2159 Right rear turn signal output overloaded
B2161 Brake lamp output open
B2163 Brake lamp output shorted low

B2164 Brake lamp output overloaded
B2168 Running lights output shorted low
B2169 Running lights output overloaded
B2172 H2 output shorted high
B2173 H2 output shorted low
B2176 Security antenna output open
B2177 Security antenna output shorted high
B2178 Security antenna output shorted low
B2183 G2 output shorted low
B2188 G3 output shorted low
B2193 H4 output shorted low
B2198 H3 output shorted low
B2201 IGN switch off w/VSS
B2203 Ignition switch input shorted low
B2206 Run/stop switch input open/shorted high
B2208 Run/stop switch input shorted low
B2210 Run/stop switch inputs both open
B2212 Run/stop switch inputs both closed
B2218 Neutral switch shorted low
B2223 Rear brake switch shorted low (light on)
B2226 BAS input open
B2228 BAS input shorted low
B2231 Fork locked/VSS
B2232 Fork lock shorted high
B2233 Fork lock shorted low
B2234 Fork lock detected with option disabled
B2235 Fork lock configuration invalid
B2250 Clutch switch stuck
B2251 Horn switch stuck
B2253 FTP switch stuck
B2254 Left turn switch stuck
B2255 Trip switch stuck
B2256 LHCM Police siren power stuck
B2257 LHCM Police siren wail power stuck
B2258 LHCM police siren yelp stuck
B2260 Start switch stuck
B2261 Right turn switch stuck
B2262 Front brake switch stuck
B2263 Hazard switch stuck
B2264 RHCM police lights power switch stuck
B2265 RHCM police lights front switch stuck
B2266 RHCM police lights rear switch stuck
B2267 RHCM police ICR switch stuck

B2270 BCM internal error
B2271 BCM voltage low
B2272 BCM/IM voltage high
B2274 Constant battery line error

U0001 CAN BUS error
U0002 CAN comm bus perf error
U0003 Network management monitoring
U0100 Lost comm w/ECM
U0121 Lost comm W/ABS
U0140 Lost comm W/BCM
U0141 Lost comm w/LHCM
U0142 Lost comm w/RHCM
U0156 Lost comm w/SPEEDO
U0158 Lost comm w/fuel gauge
U0159 Lost comm w/volt gauge
U0160 Lost comm w/ fuel and volt gauge
U0184 Lost comm w/radio
U0185 Lost comm w/Amp 1
U0186 Lost comm w/ AMP 2
U1016 Loss of ECM Serial Data
U1064 Loss of TSM/FSFM Serial Data to ECM
U1097 Loss of SpeedometerSerial Data to ECM
U1255 Serial Data Error
U1300 ECM Serial Data Low
U1300 Serial Data Low
U1301 ECM Serial Data High
U1301 Serial Data High
U1302 ACC bus perf error
U1401 Lost com w/CB

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