



LES CODES ERREUR des HARLEY-DAVIDSON

Comment identifier les Codes Pannes de nos Harley à Injection, en Anglais
DTC = Diagnostic Trouble Code

Sur nos machines à injection, nous avons une multitude d'informations qui sont collectées par le système. Dès qu'une anomalie est détectée, un code d'erreur est stocké dans le module D.T.C

Pour pouvoir lire les erreurs stockées, il faut entrer dans le mode "Diagnostic"

Pour ce faire, il faut enfoncer le bouton de remise à zéro du compteur puis tourner le bouton de contact sur ON. Le cadran s'allume, l'aiguille tourne jusqu'au maximum pour revenir en position initiale. Il s'affiche alors DIAG, on peut arrêter la pression sur le bouton de remise à zéro.

Puis il faut presser à nouveau le bouton de remise à zéro pour pouvoir entrer dans les divers modules :

- P** ==> l'ECM / ICM (module de contrôle de l'allumage)
- S** ==> TSM / TSSM (module de contrôle des clignotants et de l'alarme)
- SP** => compteur de vitesse
- T** ==> compte-tours (si votre Bécane en a un)

On change de module en appuyant tout simplement sur le bouton de remise à zéro.

La lettre qui clignote vous indique le module dans lequel vous êtes, puis en appuyant 5 secondes sur le bouton, vous entrez dans la partie diagnostic du module.

On peut faire défiler la liste des codes par une pression rapide sur le bouton de remise à zéro.

Pour sortir du mode DIAGNOSTIC, il faut remettre le bouton central de contact sur OFF.

Ce n'est pas compliqué, et cela permet d'avoir une première approche.

Ci-dessous voici le tableau des erreurs principales relevées.



DTC FAULT CONDITION 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
B1131	Alarm Output Low TSM/TSSM
B1132	Alarm Output High TSM/TSSM
B1134	Starter Output High TSM/TSSM
B1135	Accelerometer Fault TSM/TSSM
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
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
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

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

LEXIQUE

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.

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.

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

LES CODES ERREURS

Des Modèles Multiplexés

Le groupe U concerne la liaison de données d'erreur de série de l'EFI

Le groupe C sont tout autour de la faute ABS

Le groupe P sont tous les autres

Avec l'avènement du bus CAN (depuis 2011) le groupe B a augmenté massivement depuis la BCM (Body Control Module)

et concerne des messages d'erreur très détaillées sur tous les interrupteurs, lampes et clignotants. En outre, il existe un certain chevauchement (rares) dans les groupes P et C avec les codes utilisés précédemment.

Messages d'erreur spécifiques

TIP : Capteur d'inclinaison : la moto a basculé et ne démarre plus

BUS Er : le bus série a perdu le contact

no rSP : pas de compteur de vitesse (apparaît également si vous voulez lire les codes d'erreur avec kill switch).

Side StAnd : Béquille latérale La machine a été éteinte parce que la béquille est sortie

Signification des Abréviations

shorted low -> mise à la masse shorted high -> plus ou moins ouvert

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. 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

HFSM – Hands Free Security Module = TSSM

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...detonation detection

JSS – Jiffy Stand Sensor

LHCM – Left Hand Control Module

MAP – Manifold Absolute Pressure sensor

RHCM – Right Hand Control Module

RCM – Reverse Control Module

TCA – Throttle Control Actuator

TGS – Twist Grip Sensor

TMAP – Intake Air Temperature/ Manifold Absolute Pressure TP (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 Senso

Groupe B : Batterie, allumage, éclairage, accessoires

B0563	Battery Voltage High TSM/TSSM
B1004	Fuel Level Sending Unit Low Instruments B1005 Fuel Level Sending Unit High/Open B1006 Accessory Line Overvoltage
B1007	Ignition Line Overvoltage Instruments B1008 Reset Switch Closed Instruments
B1121	Left Turn Output Fault TSM/TSSM
B1122	Right Turn Output fault TSM/TSSM
B1123	Left Turn Output Short to Ground TSM/TSSM B1124 Right Turn Output Short to Ground TSM/TSSM
B1125	Left Turn Output Short to Battery TSM/TSSM Right
B1126	Turn Output Short to Battery TSM/TSSM
B1131	Alarm Output Low TSSM
B1132	Alarm Output High TSSM
B1134	Starter Output High TSM/TSSM
B1135	Accelerometer Fault TSM/TSSM
B1136	Accelerometer Tip Test Error TSSM
B1141	Ignition switch open/low TSSM
B1142	Smart Security System Internal Fault TSSM B1143 Security Antenna Short to Ground TSSM
B1144	Security Antenna Short to Battery TSSM B1145 Security Antenna Open TSSM
B1151 (Sidecar)	BAS Low TSM/TSSM (capteur d'inclinaison)
B1152 (Sidecar)	BAS High TSM/TSSM
B1153 (Sidecar)	BAS Out of Range TSM/TSSM
B1154	Clutch Switch Input Short to Ground
B1155	Neutral Switch Input Short to Battery

BCM Codes : Il ya dorénavant une nouvelle série de codes B qui sont générés par le module de contrôle (BCM) relié à la CAN et concernant principalement l'alimentation des accessoires (lampes, interrupteur, pompes, klaxon, sirène d'alarme, etc...)

B1101	LHCM turn signal bulb out
B1103	LHCM internal fault
B1151	RHCM turn signal bulb out
B1153	RHCM internal fault
B1200	Instrument internal fault Instrumente B1210 Fuel sender shorted low/fuel Gauge Circuit
B1211	Fuel sender shorted high/open
B2102	System power output shorted high B2103 System power output shorted low
B2104	System power output overloaded
B2107	Front position/running power output shorted high
B2108	Front position/running power output shorted low
B2109	Front position/running power output overloaded
B2112	Accessory output shorted high
B2113	Accessory output shorted low
B2114	Accessory output overloaded
B2116	Fuelpump output Open
B2117	Fuelpump output shorted high
B2118	Fuelpump output shorted low
B2119	Fuelpump output overloaded
B2121	Starter Output Open/BCM Malfunction
B2122	Starter output shorted high
B2123	Starter output shorted low
B2124	Starter output overloaded
B2126	Horn output open
B2127	Horn output shorted high
B2128	Horn output shorted low
B2129	Horn 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
B2166	Running lights output open
B2168	Running lights signal output shorted low
B2169	Running lights signal output overloaded
B2172	Security siren output shorted high
B2173	Security siren output shorted low
B2176	Security antenna output open
B2177	Security antenna output shorted high
B2178	Security antenna output shorted low
B2203	Ignition switch input shorted low
B2206	Engine stop switch input open/shorted high
B2208	Engine stop switch input shorted low
B2218	Neutral switch shorted low
B2223	Rear Brake switch shorted low
B2250	Clutch switch stuck
B2251	Horn switch stuck
B2252	High beam switch stuck
B2253	Low beam switch stuck
B2254	Left turn switch stuck
B2255	Trip switch stuck
B2260	Start switch stuck
B2261	Right turn switch stuck
B2262	Front Brake switch stuck
B2263	Hazard switch stuck
B2270	BCM internal fault
B2271	BCM low voltage
B2272	BCM or Speedometer voltage high
B2274	Constant battery line fault

Groupe P : Capteurs et moteur

P0051	Heater Control Circuit O2 Sensor Low
P0106	Map Sensor Rate of Range Error
P0107	Map Sensor Failed Open/Low
P0108	Map Sensor Failed High (ou prise d'air à l'admission)
P0112	IAT Sensor Voltage Low
P0113	IAT Sensor Voltage Open/High P0117 ET Sensor Voltage Low
P0118	ET Sensor Voltage Open/High
P0120	TPS1 Range Error TPS (Throttle Position Sensor)
P0122	TPS1 Low TPS
P0123	TPS1 High/Open TPS
P0131	Front O2 sensor low (lean)
P0132	Front O2 sensor high (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
P0220	TPS2 Range Error (TPS2 pour les TBW seulement)
P0222	TPS2 Low TPS
P0223	TPS2 High/Open
P0261	Front Injector Open/Low
P0262	Front Injector High
P0263	Rear Injector Open/Low
P0264	Rear Injector High (pour CAN-Bus)
P0264	Rear Injector Open/Low
P0265	Rear Injector High
P0371	Crank Position Sensor (CKP) too many pulses
P0372	Crank Position Sensor (CKP) too few pulses
P0373	CKP Sensor Intermittent
P0374	CKP Sensor Not Detected
P0444	Purge Solenoid (evaporative Canister) Open/Low
P0445	Purge Solenoid (evaporative Canister) High
P0501	VSS Low
P0502	VSS High/Open (for CAN-Bus)
P0502	VSS speed failed low
P0503	VSS speed failed high
P0505	Loss of Idle Speed Control
P0506	Idle speed control- rpm too low
P0507	Idle Air Control System RPM Higher Than Expected
P0562	Battery Voltage Low
P0563	Battery Voltage High
P0572	Brake Switch Low
P0577	Cruise Control Input High
P0602	Calibration Memory Error
P0603	ECM EEPROM Failure
P0604	RAM Failure
P0605	ECM flash memory error
P0605	ECM Flash Error
P0607	Converter Error
P0641	5V+Vref 1 Out Of Range
P0651	5V+Vref 2 Out Of Range
P0661	Intake solenoid low/open
P0662	Intake solenoid high/shorted
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 (Twist Grip Sensor)
P1351	Front Ignition Open/Low
P1352	Front Ignition Coil High/Shorted
P1353	Front Cylinder No Combustion
P1354	Rear Ignition Coil Open/Low
P1355	Rear Ignition Coil High/Shorted
P1356	Rear Cylinder No Combustion
P1357	Front Intermittent Secondary Combustion
P1358	Rear Intermittent Secondary Combustion
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 (TBW Bikes)
P1511	EFI Power Management Mode
P1512	EFI Forced Idle Mode
P1514	Air Flow Fault (TBW Bikes) souvent avec P1511
P1600	EFI Module Processor Internal Error
P1632	Odometer learned up

P2100	EFI TCA Motor Circuit Open (TBW Bikes)
P2101	EFI TCA Motor Circuit Range/Performance (Actuation Error)
P2102	EFI TCA Motor Circuit Low
P2103	EFI TCA Motor Circuit High
P2105	EFI Forced engine shutdown
P2107	EFI Module Control Processor Internal Fault
P2119	EFI Motor Throttle Body Range Performance (TBW Bikes)
P2122	TGS1 Low/Open (Twist Grip Sensor)
P2123	TGS1 High TGS1
P2127	TGS2 Low/Open
P2128	TGS2 High TGS2
P2135	TPS Voltage Correlation Error (Throttle Position Sensor) entre TPS1 et TPS2
P2138	TGS Voltage Correlation Error (Twist grip sensor) entre TGS1 et TGS2
P2176	EFI Closed Position Not Learned
P2300	Front ignition coil driver low/open
P2301	Front ignition coil driver high/shortened
P2303	Rear ignition coil driver low/open
P2304	Rear ignition coil driver high/shortened

Connexions de données du bus CAN

U0001	CAN BUS fault
U0011	CAN BUS low shorted to CAN BUS high
U0100	Lost communication with ECM
U0121	Lost communication with ABS
U0140	Lost communication with BCM
U0141	Lost communication with LHCM
U0142	Lost communication with RHCM
U0156	Lost communication with speedometer
U1016	Loss of ICM/ECM Serial Data
U1040	Loss of communication with ABS
U1064	Loss of TSM/TSSM Serial Data
U1097	Loss of Speedometer Serial data
U1255	Missing Message at Speedometer EFI
U1300	Serial Data Low
U1301	Serial Data Open/High
U1302	Infotainment Bus off
U1306	Infotainment Bus lost communication with Handsfree Phone
U1307	Infotainment Bus lost communication with CB
U1308	Infotainment Bus lost communication with future
U1312	Infotainment Bus lost communication with future
U1313	Infotainment Bus lost communication with Radio Satellite
U1314	Infotainment Bus lost communication with navigation
U1317	Infotainment Bus lost communication with high-out amplifier

Groupe: ABS

C0562	Device Voltage Low
C0563	Device Voltage High
C1014	ECU Internal Fault ABS
C1017	Pump Motor Power Circuit Fault
C1018	Pump Motor Ground High Resistance Fault
C1021	Front Wheel Speed Sensor equals Zero
C1023	Rear Wheel Speed Sensor equals Zero
C1025	Front Wheel Speed Signal Intermittent
C1027	Front Wheel Speed Signal Frequency out of Range
C1032	Front wheel speed sensor circuit open or shorted
C1034	Rear wheel speed sensor circuit open or shorted
C1041	Rear actuator circuit low/open
C1042	Front actuator circuit open C1042 Pump Motor Open
C1043	Pump Motor Stalled

C1044	Rear actuator circuit open
C1052	Rear actuator circuit high
C1055	ABS ECU internal fault
C1066	ECU Internal Fault
C1094	Front Brake Switch Always On
C1095	Front Brake Switch Open
C1102	Rear actuator motor stalled
C1118	ECU Internal Fault
C1121	ECU Internal Fault
C1151	Front Wheel Release Too Long
C1153	Rear Wheel Release Too Long
C1158	Calibration Programming Required
C1178	No VIN received from ECM
C1184	VIN does not match ABS ECU calibration
C1192	Front actuator circuit high
C1193	Front actuator motor stalled
C1206	Front wheel speed sensor frequency out of range
C1207	Rear Wheel Speed Signal Intermittent
C1208	Rear wheel speed sensor frequency out of range
C1212	Front or Rear Brake not Applied with Decel
C1214	Rear Brake Switch Always On
C1216	Rear Brake Switch Open
C1222	ABS voltage low-terminal 11
C1223	ABS voltage low - terminal 20
C1224	Front actuator power shorted high
C1225	Rear actuator power shorted high
C1561	Front apply solenoid circuit open or high
C1562	Front apply solenoid circuit shorted low
C1563	Front solenoid circuit shorted high
C1564	Front release solenoid circuit open or high
C1565	Front release solenoid circuit shorted low
C1567	Rear apply solenoid circuit open or high
C1568	Rear apply solenoid circuit shorted low
C1571	Rear solenoid circuit shorted high
C1572	Rear release solenoid circuit open or high resistance
C1573	Rear release solenoid circuit shorted low

Radio Diagnostic

Les codes d'erreur suivants (B2006-B2027) pour le diagnostic sont affichés sur la radio elle-même. Pousser d'abord sur le bouton Eject sur le lecteur CD. Maintenir appuyés deux touches du bas (touches 1 à 6) et mettre le contact. Le code de diagnostic est alors affiché sur l'écran de votre radio.

B2006	Radio switch stuck or open
B2007	Handlebar switch shorted high
B2008	Handlebar switch shortened low
B2009	Handlebar switch stuck or open
B2010	Passenger switch shortened high
B2011	Passenger switch shortened low
B2012	Passenger switch stuck or open
B2013	Sidecar switch shortened high
B2014	Sidecar switch shortened low
B2015	Sidecar switch stuck or open
B2016	Front speaker shortened R<1.5 Ohms tested once per ignition cycle R>1.0 Ohm when setup
B2017	Front speaker opened R>100 Ohms tested once per ignition cycle ignition ON after Ignition OFF for at least 10 sec.
B2018	Front speaker shortened to ground Ignition ON after Ignition OFF for at least 10 sec.
B2019	Front speaker shortened to battery Ignition ON after Ignition OFF for at least 10 sec.
B2020	Rear speaker shortened R<1.5 Ohms tested once per ignition cycle R>1.0 Ohm when setup
B2021	Rear speaker opened R>100 Ohms tested once per ignition cycle ignition ON after Ignition
B2022	Rear speaker shortened to ground Ignition ON after Ignition OFF for at least 10 sec.

B2023	Rear speaker shortened to battery Ignition ON after Ignition OFF for at least 10 sec.
B2024	Sidecar speaker shortened R<1.5 Ohms tested once per ignition cycle R>1.0 Ohm
B2025	Sidecar speaker opened R>100 Ohms tested once per ignition cycle ignition ON after Ignition OFF for at least 10 sec.
B2026	Sidecar speaker shortened to ground Ignition ON after Ignition OFF for at least 10 sec.
B2027	Sidecar speaker shortened to battery Ignition ON after Ignition OFF for at least 10 sec

