

Parameter Identification (PID)

Description

The PID mode allows access to PCM information. This includes analog and digital signal inputs and outputs along with calculated values and the system status. There are two types of PID lists available and both are used throughout this manual. The first is the generic (J1979) OBD PID list. This is a standard set of PIDs that all scan tools must be able to access. The second is a Ford specific (J2190) list which can be accessed by an appropriate scan tool. When accessing any of these PIDs, the values are continuously updated. The generic or Ford PID list provides definitions and values in appropriate units.

Generic OBD PID List

An X in the Freeze Frame column denotes both a mode 1 and mode 2 PID (real time and freeze frame).

Freeze Frame	Acronym	Description	Measurement Units
X	APP_D	Accelerator Pedal Position D	%
X	APP_E	Accelerator Pedal Position E	%
X	BARO	Barometric Pressure	kPa
X	CATEMP11	Catalyst Temperature Bank 1, Sensor 1	Degrees
X	CATEMP12	Catalyst Temperature Bank 1, Sensor 2	Degrees
X	CATEMP21	Catalyst Temperature Bank 2, Sensor 1	Degrees
X	CATEMP22	Catalyst Temperature Bank 2, Sensor 2	Degrees
X	CLRDIST	Distance Since Codes Cleared	Km/mi
X	CLRWRMUP	Number Of Warm Ups Since DTCs Cleared	Units
X	ECT	Engine Coolant Temperature	Degrees
X	EGRPCT	Commanded EGR	%
X	EGR_ERR	EGR Error	%
X	EVAP_VP	Evaporative System Vapor Pressure	kPa
X	EQ_RAT	Commanded Equivalence Ratio	Unit
X	FLI	Fuel Level Input	%
X	FRP	Fuel Rail Pressure	kPa
X	FUEL SYS1	Fuel System Feedback Control Status Bank 1	Open Loop / Closed Loop
X	FUEL SYS2	Fuel System Feedback Control Status Bank 2	Open Loop / Closed Loop
X	IAT	Intake Air Temperature	Degrees
X	LOAD	Calculated Engine Load	%
X	LOAD_ABS	Absolute Load Value	%
X	LONGFT1	Current Bank 1 Fuel Trim Adjustment (kamref1) From Stoichiometry Which Is Considered Long Term	%
X	LONGFT2	Current Bank 2 Fuel Trim Adjustment (kamref2) From Stoichiometry Which Is Considered Long Term	%

X	MAF	Mass Airflow Rate	g/s-lb/min
X	MAP	Manifold Absolute Pressure	Volts/kPa/ PSI/in-Hg
X	MIL_DIST	Distance Traveled with MIL ON	Kilometer
X	O2S11	Bank 1 Upstream Oxygen Sensor (11)	Volts
X	O2S12	Bank 1 Downstream Oxygen Sensor (12)	Volts
X	O2S13	Bank 1 Downstream Oxygen Sensor (13)	Volts
X	O2S21	Bank 2 Upstream Oxygen Sensor (21)	Volts
X	O2S22	Bank 2 Downstream Oxygen Sensor (22)	Volts
X	O2S23	Bank 2 Downstream Oxygen Sensor (23)	Volts
	OBDSUP	On Board Diagnostic System	OBD II OBD I OBD Combination of or None
X	PTO	Power Take Off Status	On/Off
X	RPM	Revolutions Per Minute	RPM
X	RUNTM	Run Time	Seconds
X	SHRTFT1	Current Bank Fuel Trim Adjustment (lambse1) From Stoichiometry Which Is Considered Short Term	%
X	SHRTFT2	Current Bank 2 Fuel Trim Adjustment (lambse1) From Stoichiometry Which Is Considered Short Term	%
X	SPARKADV	Spark Advance Requested	Degrees
X	TAC_PCT	Commanded Throttle Actuator	%
X	TP	Throttle Position	%
X	TP REL	Relative Throttle Position	%
	VSS	Vehicle Speed Sensor	km/h-mph

Ford PID List

Note: This is not a complete list of Ford PIDs available. This is a list of Ford PIDs in this manual.

PID	Description	Ford Units
AAT	Ambient Air Temperature	Degrees
AAT_V	Ambient Air Temperature Voltage	Volts
AEIS_ACTION	Number Of Drive Cycles Where Automatic Engine Idle Shutdown Occurred	Count
AEIS_POSS	Number Of Drive Cycles Where Automatic Engine Idle Shutdown Possible	Count
APP	Accelerator Pedal Position	Percent
APP1	Accelerator Pedal Position 1	Volts
APP2	Accelerator Pedal Position 2	Volts

APP_MAXDIFF	Maximum Difference Between APP1 And APP2	Degrees
APP_MODE	Accelerator Pedal Position Mode	Pedal Position
AXLE	Axle Ratio	Ratio
B+	Battery Voltage	Volts
BARO	Barometric Pressure Sensor	Frequency/Pressure
BOO	Brake Pedal Position (BPP) Switch	On/Off
BOO1	Brake Pedal Position (BPP) Switch	On/Off
BOO2	Brake Pressure Applied	On/Off
BPP/BOO	Brake Pedal Position (BPP) Switch	On/Off
BRKOVDR_POSS	Number Of Drive Cycles In Which Brake Override Accelerator Action Possible	Numeric Value
BRKOVDR_ACTION	Number Of Drive Cycles Where Brake Override Accelerator Action Occurred	Numeric Value
CAC_T	Charge Air Cooler Temperature	Degrees F
CAC_V	Charge Air Cooler Voltage	Volts
CACCT	Charge Air Cooler (CAC) Coolant Temperature Sensor	Degrees F
CACCT_V	Charge Air Cooler (CAC) Coolant Temperature Sensor Voltage	Volts
CAT_EVAL	Catalyst Evaluated	Yes/No
CHT	Cylinder Head Temperature Input	Volt/Degrees F
CLRDIST	Distance Since DTCs Cleared	Miles
CLRWRMUP	Number Of Warm-Ups Since DTCs Cleared	Count
CPP_BOT	Clutch Pedal At Or Near Bottom Of Travel	Yes/No
CPP	Clutch Pedal Position Switch Input	On/Off
CPP/PNP	Clutch Pedal Position/Park Neutral Position Switch Input	Neutral/Drive
DECHOKE	Crank Fueling Disabled	Yes/No
DIST_AEIS	Distance Since Automatic Engine Idle Shutdown Occurred	Miles
DIST_BRKOVDR	Distance Since Brake Override Accelerator Action Occurred	Miles
DPFEGR	Differential Pressure Feedback EGR Input	Volts
ECT	Engine Coolant Temperature Input	Volts/Degrees F
EGRMC1F	EGR Motor Control Fault	Fault/No Fault
EGRMC2F	EGR Motor Control Fault	Fault/No Fault
EGRMC3F	EGR Motor Control Fault	Fault/No Fault
EGRMC4F	EGR Motor Control Fault	Fault/No Fault
EGRMDSD	Electric EGR Motor Commanded In Steps	On/Off
EGRPCT	Commanded EGR	Percent
EGRVR	EGR Valve Vacuum Control	Percent
EGR_EVAL	EGR Evaluated	Yes/No
EGR_STEP	EGR Valve Motor Position	Position
EONV_RDY	EVAP Monitor Test Ready At Next Key Off	Ready/Not Ready
EQ_RAT11	Equivalence Ratio Lambda Bank 1, Sensor 1	Ratio
EQ_RAT21	Equivalence Ratio Lambda Bank 2, Sensor 1	Ratio
ETC_ACT	Electronic Throttle Control Actual	Degrees
ETC_DSD	Electronic Throttle Control Desired	Degrees

ETC_TRIM	Electronic Throttle Control Trim	Degrees
EVAP020C	Evaporative Emissions Monitor	Yes/No
EVAP020D	Evaporative Emissions Monitor	Allow/Disallow
EVAP020R	Evaporative Emissions Monitor	Ready/Not Ready
EVAPCP	Evaporative Emissions Canister Purge Valve	Percent/On/Off
EVAPCV	Evaporative Emissions Canister Purge Vent Control	Percent/On/Off
EVAPCV_F	Evaporative Emissions Canister Purge Vent Fault	Fault/No Fault
EVAPSOAK	Evaporative Emissions Monitor Soak Conditions Are Met	Yes/No
EVAPSTA	Evaporative Emissions Monitor Completed Cycle	Status
EVAP_ACTIVE	Evaporative Emissions Activation Switch Position At Start Detection	Yes/No
EVAP_EVAL	Evaporative Emissions Monitor Evaluated	Yes/No
EVAP_SWITCH	Evaporative Emissions Actual Switch	Open/Closed
EVMV	Electronic Vapor Management Valve Commanded Current	Current
FAN	Engine Cooling Fan Operation	On/Off
FANDC	Variable Speed Fan Duty Cycle	Percent
FAN_DSD	Fan Speed Desired	Percent
FANSS	Fan Speed Sensor Signal	RPM
FANVAR	Variable Speed Fan Output	Percent
FANVAR_F	Variable Speed Fan Output Fault	Fault/No Fault
FCIL	Fuel Cap Indicator Light	On/Off
FF_INF	Inferred Flex Fuel	Percent
FLI	Fuel Level Indicator Input	Percent
FLP	Low Side Fuel Pressure	Pressure
FP	Fuel Pump	Percent/On/Off
FPM	Fuel Pump Secondary Monitor	Percent/On/Off
FPM2	Fuel Pump Secondary 2 Monitor	Percent/On/Off
FPM_STAT	Fuel Pump Monitor Status	Fault/No Fault
FRP	Fuel Rail Pressure Input	Volts/Pressure
FRP_DSD	Fuel Rail Pressure Desired	Pressure
FRT	Fuel Rail Temperature	Degrees F/Volts
FTP	Fuel Tank Pressure Input	Volts/Pressure
FTP_H2O	Fuel Tank Pressure Input	Pressure
FTP_INF	Inferred Fuel Tank Pressure	Pressure
FUELPW1	Injector Pulse Width Bank 1	Time
FUELPW2	Injector Pulse Width Bank 2	Time
FUELSYS	Fuel System Status	Open Loop/ Closed Loop
F_VCV	Fuel Volume Control Valve	Percent
GEAR	Transmission Gear Status	Gear
HFC	High Speed Fan Control	On/Off
HTR11	Bank 1 Sensor 1 HO2S Heater Control	On/Off
HTR11F	Bank 1 Sensor 1 HO2S Heater Circuit Fault	Fault/No Fault

HTR12	Bank 1 Sensor 2 HO2S Heater Control	On/Off
HTR12F	Bank 1 Sensor 2 HO2S Heater Circuit Fault	Fault/No Fault
HTR21	Bank 2 Sensor 1 HO2S Heater Control	On/Off
HTR21F	Bank 2 Sensor 1 HO2S Heater Circuit Fault	Fault/No Fault
HTR22	Bank 2 Sensor 2 HO2S Heater Control	On/Off
HTR22F	Bank 2 Sensor 2 HO2S Heater Circuit Fault	Fault/No Fault
HTRCM11	Bank 1 Sensor 1 O2S Heater Circuit Current	Current
HTRCM12	Bank 1 Sensor 2 O2S Heater Circuit Current	Current
HTRCM21	Bank 2 Sensor 1 O2S Heater Circuit Current	Current
HTRCM22	Bank 2 Sensor 2 O2S Heater Circuit Current	Current
HTRX1	HO2S Sensor 1 (Upstream) Heater Control	On/Off
HTRX2	HO2S Sensor 2 (Downstream) Heater Control	On/Off
HO2S11	Bank 1 Sensor 1 HO2S Input	Volts
HO2S12	Bank 1 Sensor 2 HO2S Input	Volts
HO2S21	Bank 2 Sensor 1 HO2S Input	Volts
HO2S22	Bank 2 Sensor 2 HO2S Input	Volts
IAC	Idle Air Control	Percent
IACTRIM	Short Term Airflow Trim	Numeric Value
IAT	Intake Air Temperature Input	Degrees F/Volts
IAT2	Intake Air Temperature Sensor 2 Input	Degrees F/Volts
IGN_R/S	Ignition Switch Run/Start	On/Off
IMTV	Intake Manifold Tuning Valve Control	Percent
INJ1F-8F	Fuel Injector Primary Fault (Cylinders 1-8)	Fault/No Fault
INJ9F-10F	Fuel Injector Primary Fault (Cylinders 9 and 10)	Fault/No Fault
INJPWR_M	Injectors Circuit Voltage Monitor	Volts
KNOCK1	Knock Sensor 1 Signal	Count
KNOCK2	Knock Sensor 2 Signal	Count
LFC	Low Speed Fan Control	On/Off
LOAD	Calculated Engine Load	Percent
LONGFT1	Long Term Fuel Trim Bank 1	Percent
LONGFT2	Long Term Fuel Trim Bank 2	Percent
MAF	Mass Airflow Rate Input	Frequency/Volts/Mass Flow
MAP	Intake Manifold Absolute Pressure	Frequency/Volts/ Pressure
MAP_DMD	Manifold Absolute Pressure Demanded	Pressure
MIL	Malfunction Indicator Lamp Control	On/Off
MIL_DIS	Distance Since MIL Was Activated	Miles
MISFIRE	Misfire Status	Yes/No
MP_LRN	Learned Misfire Correction Profile	Yes/No
NM	Number Of Misfires	Count
NUM	Misfire Events During Latest Misfire Cycle	Count
O2BANK1	Bank 1 O2S Status	Rich/Lean

O2BANK2	Bank 2 O2S Status	Rich/Lean
O2S11	Bank 1 Sensor 1 O2S Input	Volts
O2_DS_DISBL	Downstream Oxygen Sensor Fuel Control Disabled	Yes/No
O2_DS1_ERR	Downstream Closed Loop Input Error Bank 1	Volts
O2_DS2_ERR	Downstream Closed Loop Input Error Bank 2	Volts
O2S11_CUR	Bank 1 Sensor 1 Current	Current
O2S11_HTR	Commanded Duty Cycle For The O2S11 Heater Output	Percentage
O2S11_IMPED	O2S11 Sensor Impedance	Volts
O2S11_READY	O2S11 Is Warm And Ready To Operate	Yes/No
O2S11_STAT	O2S11 Status	Fault/No Fault
O2S11_TR	O2 Sensor Trim Circuit Resistance 11	Resistance
O2S12	Bank 1 Sensor 2 O2S Input	Volts
O2S21	Bank 2 Sensor 1 O2S Input	Volts
O2S21_CUR	Bank 2 Sensor 1 Current	Current
O2S21_HTR	Commanded Duty Cycle For The O2S21 Heater Output	Percentage
O2S21_IMPED	O2S21 Sensor Impedance	Volts
O2S21_READY	O2S21 Is Warm And Ready To Operate	Yes/No
O2S21_STAT	O2S21 Status	Fault/No Fault
O2S21_TR	O2 Sensor Trim Circuit Resistance 21	Resistance
O2S22	Bank 2 Sensor 2 O2S Input	Volts
O2S_EVAL	Oxygen Sensor Circuits Evaluated	Yes/No
O2SHTR_EVAL	Oxygen Sensor Heater Circuits Evaluated	Yes/No
OSS	Output Shaft Speed	RPM
PTO	Power Take Off Status Input	On/Off
PTOLOAD	Power Take Off Engage Input	Yes/No
PTOIR_V	Power Take Off RPM Select Input	Volts
PTOIL	Power Take Off Indicator Lamp Output	On/Off
RO2FT1	Rear O2 Fuel Trim - Bank 1	Percentage
RO2FT2	Rear O2 Fuel Trim - Bank 2	Percentage
RPM	Engine Speed Based Upon CKP Input	RPM
RPMDSD	RPM Desired	RPM
SCBC	Supercharger Bypass Control	On/Off
SCIP_V	Supercharger Inlet Pressure	Volts
SHRTFT	Short Term Fuel Trim	Percent
SHRTFT1	Short Term Fuel Trim Bank 1	Percent
SHRTFT2	Short Term Fuel Trim Bank 2	Percent
SPARK_ACTUAL	Spark Advance Actual	Degrees
SPARKADV	Spark Advance	Degrees
SPKDUR_1-8	Spark Duration (Cylinders 1-8)	Time
SS_OUTOP	Stop Start Coordination Out Of Operation	Status
SS_START_ERR	Stop Start Coordination Start Error	Status
SS_STOP_ERR	Stop Start Coordination Stop Error	Status

STARTER_CNTS	Starter Motor Activation Counter	Count
STRT_RLY	Starter Relay	Enabled/Disabled
SYNC	CMP And CKP Synchronized	Yes/No
TCBP	Measured Boost At Throttle Inlet Pressure Sensor	kPa/psi
TCBP_V	Throttle Inlet Pressure Sensor Voltage	Volts
THROTTLE_CMD	Commanded Throttle Actuator Control	Percent
TORQUE	Net Torque Into Torque Converter	Torque
TP	Throttle Position Input	Volts/Percent
TPCT	Lowest Closed Throttle Voltage	Volts
TP_MAXDIFF	Maximum Angle Difference Between TP1 And TP2	Degrees
TPMODE	Throttle Position	Closed/Part/ Wide Open Throttle
TP1	Throttle Position 1 Voltage	Volts
TP2	Throttle Position 2 Voltage	Volts
TP_B	Absolute Throttle Position B	Percent
TP1_ADP_CLSD	Throttle Position 1 Adaption Voltage Closed Stop	Volts
TP1_ADP_LIMP	Throttle Position 1 Adaption Voltage At Limp Home	Volts
TP1_ADP_MINAIR	Throttle Position 1 Adaption Volt Minimum Airflow	Volts
TP2_ADP_CLSD	Throttle Position 2 Adaption Voltage Closed Stop	Volts
TP2_ADP_LIMP	Throttle Position 2 Adaption Voltage At Limp Home	Volts
TQ_CNTRL	Torque Fuel/Spark Limiting Status	Status
TRIP CNT	OBD II Trips Completed	Count
TURBO_BP1_STAT	Turbocharger Bypass 1 Status	Fault/No Fault
TURBO_BP2_STAT	Turbocharger Bypass 2 Status	Fault/No Fault
TURBO_BPASS	Turbocharger Bypass Valve	Percent
TURBO_BPASS_2	Turbocharger Bypass Valve 2	Percent
TURBO_OVER	Turbocharger Overboost Condition	Fault/No Fault
TURBO_UNDER	Turbocharger Underboost Condition	Fault/No Fault
TURBO_WGATE	Turbocharger Wastegate	Percent
TWGATE_STAT	Turbocharger Wastegate Status	Fault/No Fault
VCTADV	Variable Cam Timing Advance	Degrees
VCTADV2	Variable Cam Timing Advance 2	Degrees
VCTADVERR	Variable Cam Timing Advance Error	Degrees
VCTADVERR2	Variable Cam Timing Advance 2 Error	Degrees
VCTDC	Variable Cam Timing Advance Duty Cycle	Percent
VCTDC2	Variable Cam Timing Advance Duty Cycle	Percent
VCT_EXH_ACT1	Actual Exhaust B Camshaft Position Bank 1	Degrees
VCT_EXH_ACT2	Actual Exhaust B Camshaft Position Bank 2	Degrees
VCT_EXH_DC1	Exhaust B Camshaft Position Duty Cycle Bank 1	Percent
VCT_EXH_DC2	Exhaust B Camshaft Position Duty Cycle Bank 2	Percent
VCT_EXH_DIF1	Exhaust B Camshaft Desired Minus Actual Bank 1	Degrees
VCT_EXH_DIF2	Exhaust B Camshaft Desired Minus Actual Bank 2	Degrees

VCT_EXH_DSD	VCT Exhaust Angle Desired	Degrees
VCT_EXH_DSD1	VCT Exhaust Angle Desired Bank 1	Degrees
VCT_INT_ACT1	Actual Intake A Camshaft Position Bank 1	Degrees
VCT_INT_ACT2	Actual Intake A Camshaft Position Bank 2	Degrees
VCT_INT_DC1	Intake A Camshaft Position Duty Cycle Bank 1	Percent
VCT_INT_DC2	Intake A Camshaft Position Duty Cycle Bank 2	Percent
VCT_INT_DIF1	Intake A Camshaft Desired Minus Actual Bank 1	Degrees
VCT_INT_DIF2	Intake A Camshaft Desired Minus Actual Bank 2	Degrees
VCT_INTK_DSD	VCT Intake Angle Desired	Degrees
VCT_INTK_DSD1	VCT Intake Angle Desired Bank 1	Degrees
VCTSUS	Variable Cam Timing System Status	Open/Closed
VCT1_F	Variable Cam Timing Fault	Fault/No Fault
VCT2_F	Variable Cam Timing 2 Fault	Fault/No Fault
VPWR	Vehicle Power Voltage	Volts
VREF	Vehicle Reference Voltage	Volts
VSS	Vehicle Speed	Speed
WGATE_PRES	Wastegate Control Absolute Pressure Sensor	Pressure
WGATE_PRES_F	Wastegate Control Pressure Sensor Status	Fault/No Fault
WGATE_V	Wastegate Control Pressure Sensor Voltage	Volts
WGATE_VAC_DSD	Desired Wastegate Control Vacuum	Pressure
WGATE_VAC_INF	Wastegate Control Vacuum Inferred	Pressure