

OBD-II

MODEs and PIDs

Normally, one is only concerned with the nine diagnostic test modes described by SAE J1979 (although there is provision for more). All of these modes are not required to be supported by every vehicle, and are often not.

These are the 9 modes:

01 : show Current Data

02 : show Freeze Frame Data

03 : show DTC

04 : clear DTC and stored values

05 : test results, O2 sensors

06 : test results, non-continuously monitored

07 : test results, continuously monitored

08 : special control mode

09 : request vehicle information

MODE 01 PIDs 00 – 20 Table

PID	Description	PID	Description
00	PIDs supported	0F	Intake Air Temp
01	# of Trouble codes and tests available	10	Air Flow
03	Fuel System Status	11	Throttle Position
04	Calculated Load	12	Secondary Air Status
05	Coolant Temp.	13	Location of O2 sensors
06	Short Term Fuel Trim Bank 1	14	O2 Sensor1 Bank1 Volts
07	Long Term Fuel Trim Bank 1	15	O2 Sensor2 Bank1 Volts
08	Short Term Fuel Trim Bank 2	16	O2 Sensor3 Bank1 Volts
09	Long Term Fuel Trim Bank 2	17	O2 Sensor4 Bank1 Volts
0A	Fuel Pressure	18	O2 Sensor1 Bank2 Volts
0B	Manifold Pressure	19	O2 Sensor2 Bank2 Volts
0C	RPM	1A	O2 Sensor3 Bank2 Volts
0D	Vehicle Speed	1B	O2 Sensor4 Bank2 Volts
0E	Ignition Timing Advance	1C	OBD type
		1D	Same as 13
		1E	PTO Status
		20	SAE2190 support

MODE 01 PID 1C

A typical response would be:

\$ 1C 01

The returned value (01) shows that this vehicle conforms to OBDII (California ARB) standards. Some of the defined responses are :

01 : OBDII (California ARB)

02 : OBD (Federal EPA)

03 : OBD and OBDII

04 : OBD I

05 : not intended to meet any OBD requirements

06 : EOBD (Europe)

Some MODEs may provide multi-line responses (\$09, if supported, can display the vehicle's serial number).