GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
	Oxygen Sensor Monitor Bank 1 Sensor 1				
01	**01**	**0A**	Rich *to* Lean Sensor Threshold Voltage	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**02**	**0A**	Lean *to* Rich Sensor Threshold Voltage	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**03**	**0A**	Low Sensor Voltage for Switch Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**04**	**0A**	High Sensor Voltage for Switch Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**05**	**10**	Rich *to* Lean Sensor Switch Time	0.0000 *to* 65.535 seconds	1 ms / bit
01	**06**	**10**	Lean *to* Rich Sensor Switch Time	0.0000 *to* 65.535 seconds	1 ms / bit
01	**10** (1)	**06**	B1S1 WRAF Slow Response	0 to 19.99 raw value	0.000305 / bit
01	**80** (8)	**2B**	Rich *to* Lean Switches Test Results	0 *to* 65535 switches	1 switch / bit
01	**81** (8)	**2B**	Lean *to* Rich Switches Test Results	0 *to* 65535 switches	1 switch / bit
01	**82**	**20**	Rich-Lean Response *to* Lean-Rich Response Ratio	0 *to* 255.996	0.0039062 / bit
01	**83**	**0A**	Low Sensor Voltage for Half Period Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**84**	**0A**	High Sensor Voltage for Half Period Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**85**	**10**	O2 Sensor Rich *to* Lean Half Period Time	0.0000 *to* 65.535 seconds	1 ms / bit
01	**86**	**10**	O2 Sensor Lean *to* Rich Half Period Time	0.0000 *to* 65.535 seconds	1 ms / bit
01	**87**	**10**	Sum of O2 Sensor L/R *and* R/L Half Period Times	0.0000 *to* 65.535 seconds	1 ms / bit
01	**88**	**90** (3)	Difference Between Rich-Lean Response *and* Lean-Rich Response	–32.768 *to* +32.767 seconds	0.001 sec / bit
01	**89**	**06**	B1S1 WRAF Slow Response	0 to 19.99 raw value	0.000305 / bit
01	**8E**	**B1**	Absolute Average Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s per bit
01	**8F**	**B1**	Instantaneous Positive Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s per bit
01	**90**	**B1**	Instantaneous Negative Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s per bit
01	**91** (9)	**90**	O2 Sensor Delayed Response - Rich to Lean	–32.768 *to* +32.767 seconds	0.001 sec per bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
01	**92** [9]	**90**	O2 Sensor Delayed Response - Lean to Rich	–32.768 *to* +32.767 seconds	0.001 sec per bit
01	**D0**	**24**	O2 Value Plausibility Check During Overrun	0 *to* 65535 counts	1 count / bit
01	**D1**	**24**	Dynamic Check for O2 Signal Test	0 *to* 65535 counts	1 count / bit
01	**D2**	**11**	Dynamic Check of NOx sensor	0.0 *to* 6553.5 seconds	0.1 seconds / bit
01	**D3**	**86**	NOx Sensor Performance - Signal High	-9.994 to +9.994	0.000305 per bit
01	**D4**	**86**	NOx Sensor Performance - Signal Low	-9.994 to +9.994	0.000305 per bit
	Oxygen Sensor Monitor Bank 1 Sensor 2				
02	**05**	**20**	B1S2 rich-lean switch time in fuel cut-off	0.000:1 *to* 255.99:1 ratio	**0.0039062 / bit**
02	**8A**	**24**	Post Catalyst Sensor Open Test	0 *to* 65535 counts	1 count / bit
02	**8B**	**0A**	Post Catalyst Sensor Rich Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
02	**8C**	**0A**	Post Catalyst Sensor Lean Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
02	**91**	**0A**	Post Catalyst Sensor Delayed Initial R/L Response Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
02	**92**	**0A**	Post Catalyst Sensor Delayed Initial L/R Response Test	=E430.0000 *to* 7.9900 Volts	0.122 mV / bit
02	**93**	**03**	Post Catalyst Sensor Slow R/L Response Test	0 *to* +655.35 unitless	0.01 per bit
02	**94**	**03**	Post Catalyst Sensor Slow L/R Response Test	0 *to* +655.35 unitless	0.01 per bit
02	**D5**	**01**	NOx Sensor Performance - Signal Insufficient Peak Value	0 *to* +65535 unitless	1 per bit
02	**D6**	**01**	NOx Sensor Performance	0 *to* +65535 unitless	1 per bit
02	**D7**	**30**	Oxygen concentration implausibly high in part load	0 to 100 percent	0.001526 % per bit
02	**D8**	**30**	Oxygen concentration implausibly low in part load	0 to 100 percent	0.001526 % per bit
	Oxygen Sensor Monitor Bank 1 Sensor 3				
03	**8A**	**24**	Post Catalyst Sensor Open Test	0 *to* 65535 counts	1 count / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
03	**8B**	**0A**	Post Catalyst Sensor Rich Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
03	**8C**	**0A**	Post Catalyst Sensor Lean Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
03	**91**	**0A**	Post Catalyst Sensor Delayed Initial R/L Response Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
03	**92**	**0A**	Post Catalyst Sensor Delayed Initial L/R Response Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
03	**93**	**03**	Post Catalyst Sensor Slow R/L Response Test	0 *to* +655.35 unitless	0.01 per bit
03	**94**	**03**	Post Catalyst Sensor Slow L/R Response Test	0 *to* +655.35 unitless	0.01 per bit
	Oxygen Sensor Monitor Bank 2 Sensor 1				
05	**01**	**0A**	Rich *to* Lean Sensor Threshold Voltage	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	**02**	**0A**	Lean *to* Rich Sensor Threshold Voltage	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	**03**	**0A**	Low Sensor Voltage for Switch Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	**04**	**0A**	High Sensor Voltage for Switch Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	**05**	**10**	Rich *to* Lean Sensor Switch Time	0.0000 *to* 65.535 seconds	1 ms / bit
05	**06**	**10**	Lean *to* Rich Sensor Switch Time	0.0000 *to* 65.535 seconds	1 ms / bit
05	**10** (1)	**06**	B2S1 WRAF Slow Response	0 to 19.99 raw value	0.000305 / bit
05	**80**	**2B**	Rich *to* Lean Switches Test Results	0 *to* 65535 switches	1 switch / bit
05	**81**	**2B**	Lean *to* Rich Switches Test Results	0 *to* 65535 switches	1 switch / bit
05	**82**	**20**	Rich-Lean Response *to* Lean-Rich Response Ratio	0 *to* 255.996	0.0039062 / bit
05	**83**	**0A**	Low Sensor Voltage for Half Period Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	**84**	**0A**	High Sensor Voltage for Half Period Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	**85**	**10**	O2 Sensor Rich *to* Lean Half Period Time	0.0000 *to* 65.535 seconds	1 ms / bit
05	**86**	**10**	O2 Sensor Lean *to* Rich Half Period Time	0.0000 *to* 65.535 seconds	1 ms / bit
05	**87**	**10**	Sum of O2 Sensor L/R *and* R/L Half Period Times	0.0000 *to* 65.535 seconds	1 ms / bit
05	**88**	**90**	Difference Between Rich-Lean Response *and* Lean-Rich Response	–32.768 *to* +32.767 seconds	0.001 sec per bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
05	**89**	**06**	B2S1 WRAF Slow Response	0 to 19.99 raw value	0.000305 / bit
05	**8E**	**B1**	Absolute Average Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s per bit
05	**8F**	**B1**	Instantaneous Positive Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s per bit
05	**90**	**B1**	Instantaneous Negative Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s per bit
05	**91**	**90**	O2 Sensor Delayed Response - Rich to Lean	–32.768 *to* +32.767 seconds	0.001 sec per bit
05	**92**	**90**	O2 Sensor Delayed Response - Lean to Rich	–32.768 *to* +32.767 seconds	0.001 sec per bit
	Oxygen Sensor Monitor Bank 2 Sensor 2				
06	**05**	**20**	B2S2 rich-lean switch time in fuel cut-off	0.000:1 *to* 255.99:1 ratio	**0.0039062 / bit**
06	**8A**	**24**	Post Catalyst Sensor Open Test	0 *to* 65535 counts	1 count / bit
06	**8B**	**0A**	Post Catalyst Sensor Rich Tests	0.0000 *to* 7.9900 Volts	0.122 mV / bit
06	**8C**	**0A**	Post Catalyst Sensor Lean Tests	0.0000 *to* 7.9900 Volts	0.122 mV / bit
06	**91**	**0A**	Post Catalyst Sensor Delayed Initial R/L Response Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
06	**92**	**0A**	Post Catalyst Sensor Delayed Initial L/R Response Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
06	**93**	**03**	Post Catalyst Sensor Slow R/L Response Test	0 *to* +655.35 unitless	0.01 per bit
06	**94**	**03**	Post Catalyst Sensor Slow L/R Response Test	0 *to* +655.35 unitless	0.01 per bit
	Oxygen Sensor Monitor Bank 2 Sensor 3				
07	**8A**	**24**	Post Catalyst Sensor Open Test	0 to 65535 counts	1 count / bit
07	**8B**	**0A**	Post Catalyst Sensor Rich Tests	0.0000 *to* 7.9900 Volts	0.122 mV / bit
07	**8C**	**0A**	Post Catalyst Sensor Lean Tests	0.0000 *to* 7.9900 Volts	0.122 mV / bit
07	**91**	**0A**	Post Catalyst Sensor Delayed Initial R/L Response Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
07	**92**	**0A**	Post Catalyst Sensor Delayed Initial L/R Response Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
07	93	03	Post Catalyst Sensor Slow R/L Response Test	0 *to* +655.35 unitless	0.01 per bit
07	94	03	Post Catalyst Sensor Slow L/R Response Test	0 *to* +655.35 unitless	0.01 per bit
	Catalyst Monitor Bank 1				
21	A0	01	Catalyst Test Bank 1 (using Catalyst DFCO Exit Test)	0 *to* +65535 unitless	1 per bit
21	A0	05	Catalyst Test Bank 1 (using OSC normalized ratio units)	0 *to* +1.999 unitless	0.0000305 per bit
21	A0	86	Catalyst Test Bank 1 (using OSC normalized ratio units)	–9.994 *to* +9.994	0.000305 per bit
21	A0	90	Catalyst Test Bank 1 (using OSC compensation units)	–32.768 *to* +32.767 seconds	0.001 sec per bit
21	A0	05	Catalyst Diag B1	0 to 1.999 raw value	0.0000305 / bit
21	A1	01	Catalyst Test Bank 1 (using Catalyst DFCO Exit Test)	0 *to* +65535 unitless	1 per bit
21	A2	06	Passive monitoring of the oxidation catalyst efficiency	0 *to* +19.988 unitless	0.000305 per bit
	Catalyst Monitor Bank 2				
22	A0	01	Catalyst Test Bank 2 (using Catalyst DFCO Exit Test)	0 *to* +65535 unitless	1 per bit
22	A0	05	Catalyst Test Bank 2 (using OSC normalized ratio units)	0 *to* +1.999 unitless	0.0000305 per bit
22	A0	86	Catalyst Test Bank 2 (using OSC normalized ratio units)	–9.994 *to* +9.994	0.000305 per bit
22	A0	90	Catalyst Test Bank 2 (using OSC compensation units)	–32.768 *to* +32.767 seconds	0.001 sec per bit
22	A0	05	Catalyst Diag B2	0 to 1.999 raw value	0.0000305 / bit
	EGR Monitor Bank 1				
31	A0	82	EGR Slow Response - Increasing Flow	–3276.8 *to* +3276.7 counts	0.1 sec per bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
31	**A1**	**82**	EGR Slow Response – Decreasing Flow	–3276.8 *to* +3276.7 counts	0.1 sec per bit
31	**A2**	**06**	EGR Cooler Efficiency	0 *to* +19.988 unitless	0.000305 per bit
31	**A3**	**82**	Excessive EGR	–3276.8 *to* +3276.7 counts	0.1 sec per bit
31	**A4**	**82**	Insufficient EGR	–3276.8 *to* +3276.7 counts	0.1 sec per bit
31	**A8**	**FD**	EGRF Decel Service Test	–32.768 *to* +32.767 kPa	0.001 kPa / bit
31	**A9**	**FD** (6)	EGRF Quick Test	–32.768 *to* +32.767 kPa	0.001 kPa / bit
31	**AA**	**24**	O2 Positive Concentration Rationality Test	0 *to* 65535 counts	1 count / bit
31	**AB**	**24**	O2 Negative Concentration Rationality Test	0 *to* 65535 counts	1 count / bit
31	**AC**	**24**	Throttle Airflow Positive Control Deviation Test	0 *to* 65535 counts	1 count / bit
31	**AD**	**24**	Throttle Airflow Negative Control Deviation Test	0 *to* 65535 counts	1 count / bit
31	**AE**	**24**	Airflow Positive Control Deviation Test	0 *to* 65535 counts	1 count / bit
31	**AF**	**24**	Airflow Negative Control Deviation Test	0 *to* 65535 counts	1 count / bit
	VVT Monitor Bank 1				
35	**B0**	**24**	PHSR Intake CAM Phaser Rationality Test	0 *to* 65535 counts	1 count / bit
35	**B1**	**24**	PHSR Exhaust CAM Phaser Rationality Test	0 *to* 65535 counts	1 count / bit
	VVT Monitor Bank 2				
36	**B0**	**24**	PHSR Intake CAM Phaser Rationality Test	0 *to* 65535 counts	1 count / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
36	**B1**	**24**	PHSR Exhaust CAM Phaser Rationality Test	0 *to* 65535 counts	1 count / bit
	EVAP Monitor (Cap off)				
39	**39** (1)	**FE**	Cap Off/gross Leak	-8192 to +8191.75 Pa	0.25 Pa / bit
39	**3A** (1)	**32**	Large leak	0 to 1.999 inch	0.0000305 / bit
39	**3B** (2)				
39	**B0**	**FE**	Cap Off/gross Leak	-8192 to +8191.75 Pa	0.25 Pa / bit
39	**B1**	**32**	Large leak	0 to 1.999 inch	0.0000305 / bit
	EVAP Monitor (Large)		**EVPD** = Evap Pressure / Vacuum Decay		
3A	**C0**	**31** (10)	EVPD Weak Vacuum Test scaled in liters	0.0 *to* 65.535 liters	0.001 liters / bit
3A	**C0**	**3F**	EVPD_Weak_Vacuum_Test (scaled in liters)	0.0 *to* 655.35 liters	0.01 liters / bit
3A	**C0**	**FD**	EVPD Weak Vacuum Test scaled in kPa	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3A	**C1**	**11**	EVPD Weak Vac Flwup Test	0.0 *to* 6553.5 seconds	0.1 seconds / bit
3A	**EC**	**0A**	EVPD_NV_LargeLeak_EREV_Test1 (scaled in Volts)	0.0000 *to* 7.9900 Volts	0.122 mV / bit
3A	**ED**	**0A**	EVPD_NV_LargeLeak_EREV_Test2 (scaled in Volts)	0.0000 *to* 7.9900 Volts	0.122 mV / bit
3A	**EE**	**FD**	EVPD_NV_ LargeLeak _EREV_Test3 (scaled in kPa)	–32.768 *to* +32.767 kPa	0.001 kPa / bit
	EVAP Monitor 0.040"		**EVPD** = Evap Pressure / Vacuum Decay		
3B	**C2**	**32**	EVPD NV 0.040 Test scaled in inches	0.000 *to* 1.999 inches	0.0000305 inches / bit
3B	**C2**	**B0**	EVPD NV 0.040 Test scaled in percentage slope	–100.01 *to* +100.00%	+0.003052 percent / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
	EVAP Monitor 0.020"		**EVPD** = Evap Pressure / Vacuum Decay **EONV** = Engine Off Natural Vacuum **EREV** = Extended Range Electric Vehicle		
3C	**C3**	**32**	EVPD NV 0.020 Test scaled in inches	0.000 *to* 1.999 inches	0.0000305 inches / bit
3C	**C3**	**B0**	EVPD NV 0.020 Test scaled in percentage slope	–100.01 *to* +100.00%	+0.003052 percent / bit
3C	**C8**	**20**	EONV NV 0.020 Test for EONV	0.000:1 *to* 255.996:1 ratio	0.0039 / bit unitless
3C	**C8**	**FD**	EONV NV 0.020 Test for EONV	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3C	**C8**	**05**	EONV 0.020" leak	0 to 1.999 raw value	0.0000305 / bit
3C	**C9**	**FE**	Canister Vent Valve 'stuck closed'	-8192 to +8191.75 Pa	0.25 Pa / bit
3C	**C9**	**20**	EONV Vacuum Rezero Test for EONV	0.000:1 *to* 255.996:1 ratio	0.0039 / bit unitless
3C	**CA**	**24**	EONV Fuel Level Rationality Test for EONV	0 *to* 65535 counts	1 count / bit
3C	**CB**	**FE**	Canister Purge Valve 'stuck open'	-8192 to +8191.75 Pa	0.25 Pa / bit
3C	**CB**	**24**	EONV Vacuum Rationality Test for EONV	0 *to* 65535 counts	1 count / bit
3C	**E0**	**0A**	EVPD_NV_020_EREV_Test1 (scaled in Volts)	0.0000 *to* 7.9900 Volts	0.122 mV / bit
3C	**E1**	**0A**	EVPD_NV_020_EREV_Test2 (scaled in Volts)	0.0000 *to* 7.9900 Volts	0.122 mV / bit
3C	**E2**	**FD**	EVPD_NV_020_EREV_Test3 (scaled in kPa)	–32.768 *to* +32.767 kPa	0.001 kPa / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
3C	**E3**	**FD**	EREV LeakBetweenDCV_LDP Test1(scaled in kPa)	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3C	**E4**	**2E**	EREV VentValveStuckOpen Test1	FALSE, TRUE	N/A
3C	**E5**	**FE**	EREV VentValveStuckOpen Test2 (scaled in inH2O)	–8192 to +8191.75 Pa or approx –32.768 *to* +32.767 inches H2O	0.25 Pa per bit or approx 0.001 inches H2O per bit
3C	**E6**	**2E**	EREV VentValveStuckClsd Test1	FALSE, TRUE	N/A
3C	**E7**	**FE**	EREV VentValveStuckClsd Test2 (scaled in inH2O)	–8192 to +8191.75 Pa or approx –32.768 *to* +32.767 inches H2O	0.25 Pa per bit or approx 0.001 inches H2O per bit
3C	**E8**	**FD**	EREV VentValveStuckClsd Test3 (scaled in kPa)	–32.768 *to* +32.767 kPa	0.001 kPa / bit
	Purge Flow Monitor		**EVPD** = Evap Pressure / Vacuum Decay		
3D	**C4**	**11**	EVPD NV Purge Pass Test	0.0 *to* 6553.5 seconds	0.1 seconds / bit
3D	**C5**	**FE**	EVPD Purge Vac Fail Test	–8192 to +8191.75 Pa or approx –32.768 *to* +32.767 inches H2O	0.25 Pa per bit or approx 0.001 inches H2O per bit
3D	**C6**	**11** (5)	EVPD Vent Rest Test 1	0.0 *to* 6553.5 seconds	0.1 seconds / bit
3D	**C7**	**FD**	EVPD Vent Rest Test 2 - scaled in kPa	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3D	**C7**	**31**	EVPD Vent Rest Test 2 - scaled in liters	0.0 *to* 65.535 liters	0.001 liters / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
3D	**EA**	**FE**	EREV_VentSystemPerf_Test (scaled in inH2O)	–8192 to +8191.75 Pa or approx –32.768 *to* +32.767 inches H2O	0.25 Pa per bit or approx 0.001 inches H2O per bit
3D	**EB**	**FD**	EREV_PurgeValveFlow_Test (scaled in kPa)	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3D	**EC**	**24**	EREV_VentSysPerf_Test (scaled in counts)	0 *to* 65535 counts	1 count / bit
	Oxygen Sensor Heater Monitor Bank 1 Sensor 1				
41	**D0**	**11**	Time to Activity Monitor	0.0 *to* 6553.5 seconds	0.1 seconds / bit
41	**D1**	**0F**	Current Feedback Amps Value Test	0.00 *to* 655.35 Amperes	0.01 Amperes / bit
41	**D2**	**24**	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
41	**D3**	**84**	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001 Ohm/bit
41	**D3**	**11**	Sensor Heater Monitor B1S1 'operative readiness time'	0 to 6553.5 seconds	100ms / bit
41	**D4**	**96**	Sensor Heater Monitor B1S1 'tip temperature out of range'	-3276.8 to + 3276.7 degC	0.1 degC / bit
41	**D4**	**24**	UEGO Heater Temperature Test	0 *to* 65535 counts	1 count / bit
	Oxygen Sensor Heater Monitor Bank 1 Sensor 2				
42	**D0**	**11**	Time to Activity Monitor	0.0 *to* 6553.5 seconds	0.1 seconds / bit
42	**D1**	**0F**	Current Feedback Amps Value Test	0.00 *to* 655.35 Amperes	0.01 Amperes / bit
42	**D2**	**24**	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
42	**D3**	**84**	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001 Ohm / bit
42	**D5**	**14**	Sensor Heater Monitor B1S2 ' resistance out of range'	0 to 65535 ohms	1 ohm / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
	Oxygen Sensor Heater Monitor Bank 1 Sensor 3				
43	**D0**	**11**	Time to Activity Monitor	0.0 *to* 6553.5 seconds	0.1 seconds / bit
43	**D1**	**0F**	Current Feedback Amps Value Test	0.00 *to* 655.35 Amperes	0.01 Amperes / bit
43	**D2**	**24**	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
43	**D3**	**84**	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001 Ohm / bit
	Oxygen Sensor Heater Monitor Bank 2 Sensor 1				
45	**D0**	**11**	Time to Activity Monitor	0.0 *to* 6553.5 seconds	0.1 seconds / bit
45	**D1**	**0F**	Current Feedback Amps Value Test	0.00 *to* 655.35 Amperes	0.01 Amperes / bit
45	**D2**	**24**	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
45	**D3**	**84**	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001 Ohm / bit
45	**D3**	**11**	Sensor Heater Monitor B2S1 'operative readiness time'	0 to 6553.5 seconds	100ms / bit
45	**D4**	**96**	Sensor Heater Monitor B2S1 'tip temperature out of range'	-3276.8 to + 3276.7 degC	0.1 degC / bit
	Oxygen Sensor Heater Monitor Bank 2 Sensor 2				
46	**D0**	**11**	Time to Activity Monitor	0.0 *to* 6553.5 seconds	0.1 seconds / bit
46	**D1**	**0F**	Current Feedback Amps Value Test	0.00 *to* 655.35 Amperes	0.01 Amperes / bit
46	**D2**	**24**	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
46	**D3**	**84**	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001 Ohm / bit
46	**D5**	**14**	Sensor Heater Monitor B2S2 ' resistance out of range'	0 to 65535 ohms	1 ohm / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
	Oxygen Sensor Heater Monitor Bank 2 Sensor 3				
47	**D0**	**11**	Time to Activity Monitor	0.0 *to* 6553.5 seconds	0.1 seconds / bit
47	**D1**	**0F**	Current Feedback Amps Value Test	0.00 *to* 655.35 Amperes	0.01 Amperes / bit
47	**D2**	**24**	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
47	**D3**	**84**	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001 Ohm / bit
	Secondary AIR Monitor 1				
71	**E0**	**24**	AIR Bank 1 Test	0 *to* 65535 counts	1 count / bit
71	**E1**	**FD**	AIR On Pressure Error Test Bank 1	–32.768 *to* +32.767 kPa	0.001 kPa / bit
71	**E2**	**FD**	AIR Valve Shut Pressure Error Test Bank 1	–32.768 *to* +32.767 kPa	0.001 kPa / bit
71	**E3**	**FD**	AIR Pump Off Pressure Error Test Bank 1	–32.768 *to* +32.767 kPa	0.001 kPa / bit
71	**E5**	**02**	AIR Pump On Pressure Variation Test Bank 1	0 *to* 6553.5 unitless	0.1 / bit
	Secondary AIR Monitor 2				
72	**E0**	**24**	AIR Bank 2 Test	0 *to* 65535 counts	1 count / bit
72	**E1**	**FD**	AIR On Pressure Error Test Bank 2	–32.768 *to* +32.767 kPa	0.001 kPa / bit
72	**E2**	**FD**	AIR Valve Shut Pressure Error Test Bank 2	–32.768 *to* +32.767 kPa	0.001 kPa / bit
72	**E3**	**FD**	AIR Pump Off Pressure Error Test Bank 2	–32.768 *to* +32.767 kPa	0.001 kPa / bit
72	**E4**	**FD**	AIR On Pressure Differential, *between* Bank 1 and Bank 2	–32.768 *to* +32.767 kPa	0.001 kPa / bit
72	**E5**	**02**	AIR Pump On Pressure Variation Test Bank 2	0 *to* 6553.5 unitless	0.1 / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
	Fuel System Monitor Bank 1				
81	**D1**	**3C**	Cylinder 1 Injection Timing Retarded	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**D2**	**3C**	Cylinder 2 Injection Timing Retarded	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**D3**	**3C**	Cylinder 3 Injection Timing Retarded	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**D4**	**3C**	Cylinder 4 Injection Timing Retarded	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**D5**	**3C**	Cylinder 5 Injection Timing Retarded	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**D6**	**3C**	Cylinder 6 Injection Timing Retarded	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**D7**	**3C**	Cylinder 7 Injection Timing Retarded	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**D8**	**3C**	Cylinder 8 Injection Timing Retarded	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**A1**	**3C**	Cylinder 1 Injection Timing Advanced	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**A2**	**3C**	Cylinder 2 Injection Timing Advanced	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**A3**	**3C**	Cylinder 3 Injection Timing Advanced	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**A4**	**3C**	Cylinder 4 Injection Timing Advanced	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**A5**	**3C**	Cylinder 5 Injection Timing Advanced	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**A6**	**3C**	Cylinder 6 Injection Timing Advanced	**[0 to 6553.5] usec**	**0.1 usec per bit**
81	**A7**	**3C**	Cylinder 7 Injection Timing Advanced	**[0 to 6553.5] usec**	**0.1 usec per bit**

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
81	**A8**	**3C**	Cylinder 8 Injection Timing Advanced	**[0 to 6553.5] usec**	**0.1 usec per bit**
	Boost Pressure Control Monitor Bank 1				
85	**B0**	**30**	Turbocharger Vane Position Slow Response - Increasing Position	[0 to 100] Percent	0.001526 % per bit
85	**B1**	**30**	Turbocharger Vane Position Slow Response - Decreasing Position	[0 to 100] Percent	0.001526 % per bit
85	**B2**	**6**	Charge Air Cooler Efficiency	**[0 to 19.988] unitless**	**0.000305 per bit**
85	**B3**	**FC**	Monitoring for Underboost	**[-327.68 to +327.67] kPa**	**0.01 kPa per bit**
85	**B4**	**FC**	Monitoring for Overboost	**[-327.68 to +327.67] kPa**	**0.01 kPa per bit**
85	**B5**	**AF**	Turbocharger Vane Position Performance - Low Position	**[-327.68 to +327.67] kPa**	**0.01 kPa per bit**
85	**B6**	**AF**	Turbocharger Vane Position Performance - High Position	**[-327.68 to +327.67] kPa**	**0.01 % per bit**
	NOx Catalyst Monitor Bank 1				
98	**90**	**84**	SCR NOx Efficiency	**[-32.768 to 32.767] unitless**	**0.001 per bit**
98	**91**	**84**	Diesel Emission Fluid Quality	**[-32.768 to 32.767] unitless**	**0.001 per bit**

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
98	**92**	**3**	Closed loop Reductant Injection Control at Limit-Flow too low	**[0 to 655.35] unitless**	**0.01 per bit**
98	**93**	**3**	Closed Loop Reductant Injection Control at Limit-Flow too High	**[0 to 655.35] unitless**	**0.01 per bit**
	Misfire Cylinder 1 Data				
A2	**0B**	**24** (4)	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A2	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 2 Data				
A3	**0B**	**24** (4) (7)	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A3	**0C**	**24** (7)	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 3 Data				
A4	**0B**	**24** (4) (7)	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A4	**0C**	**24** (7)	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 4 Data				
A5	**0B**	**24** (4) (7)	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
A5	**0C**	**24** (7)	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
A5	**A5**	**24**	EWMA (Exponentially Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 5 Data				
A6	**0B**	**24** (4)	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A6	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
A6	**A5**	**24**	EWMA (Exponentially Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 6 Data				
A7	**0B**	**24** (4)	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A7	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
A7	**A5**	**24**	EWMA (Exponentially Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 7 Data				
A8	**0B**	**24**	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
A8	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
A8	**A5**	**24**	EWMA (Exponentially Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 8 Data				
A9	**0B**	**24**	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A9	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
A9	**A5**	**24**	EWMA (Exponentially Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 9 Data				
AA	**0B**	**24**	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
AA	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 10 Data				
AB	**0B**	**24**	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
AB	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit

GM mode $06 data definitions for GM vehicles using GMLAN diagnostic data link

Some items have footnotes, defined on the last pages.

OBD Monitor ID (OBDMID)	Test ID (TID)	Units and Scaling ID (UASID)	Description	Range For Information ONLY. Source information is J1979	Resolution For Information ONLY. Source information is J1979
	Misfire Cylinder 11 Data				
AC	**0B**	**24**	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
AC	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
	Misfire Cylinder 12 Data				
AD	**0B**	**24**	EWMA (Exponential Weighted Moving Average) misfire counts for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
AD	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
	Particulate Matter Filter Monitor Bank 1				
B2	**F0**	**17**	Diesel Particulate Filter Efficiency	0 *to* +655.35 kPa	0.01 kPa / bit
B2	**F1**	**36**	Diesel Particulate Filter Regeneration Frequency	0 *to* +655.35 kPa	0.01 kPa / bit
B2	**F2**	**96**	Closed Loop Exhaust Fuel Injector DPF Regeneration Control At Limit - Temperature Too Low	–3276.8 *to* +3276.7 degrees C	0.1 degrees C per bit
B2	**F3**	**96**	Closed Loop Exhaust Fuel Injector DPF Regeneration Control At Limit - Temperature Too High	–3276.8 *to* +3276.7 degrees C	0.1 degrees C per bit
B2	**F4**	**96**	Closed Loop DPF Regeneration Control At Limit - Stage 1 Temperature Too Low	–3276.8 *to* +3276.7 degrees C	0.1 degrees C per bit
B2	**F5**	**96**	Closed Loop DPF Regeneration Control At Limit - Stage 1 Temperature Too High	–3276.8 *to* +3276.7 degrees C	0.1 degrees C per bit

FOOTNOTES

1 For the following 2004 model year vehicles:

Cadillac XLR, SRX with 4.6 liter (VIN A) engine

The following OBDMIDs and TIDs may be defined as shown:

OBDMID $01
- TID $10 may be replaced with TID $89

OBDMID $05
- TID $10 may be replaced with TID $89

OBDMID $39
- TID $39 may be replaced with TID $B0
- TID $3A may be replaced with TID $B1

2 For the following 2004 model year vehicles:

Cadillac XLR, SRX with 4.6 liter (VIN A) engine

OBDMID $39 TID $3B: Test is not supported by the vehicle. Test limits and value are invalid.

FOOTNOTES

3 For the following 2005 model year vehicles:

Chevrolet Equinox with 3.4 liter (VIN F)
Chevrolet Malibu with 3.5 liter (VIN 8)
Pontiac Grand Am with 3.5 liter (VIN 8)

OBDMID $01 TID $88 test limits and value should be divided by 1000.

4 For the following 2005 model year vehicles:

Chevrolet Equinox with 3.4 liter (VIN F)
Chevrolet Malibu with 3.5 liter (VIN 8)
Pontiac Grand Am with 3.5 liter (VIN 8)

OBDMID $A2 through $A7 TID $0B test value should be multiplied by 10.

5 For the following 2007 model year vehicle:

Buick Lucerne with 3.8L (VIN 2) engine

If the test limit for OBDMID $3D TID $6C reads 8.8 seconds (raw Hex value 58), the test value may be invalid.

If the test value is more than the test limit *-and-* P0446 is <u>not</u> set, the data is invalid.

If the test value is less than the test limit *-and-* P0446 is set, the data may be invalid.

FOOTNOTES

6 For the following 2006 model year vehicles:

Buick Lucerne with 4.6L (VIN Y) engine
Cadillac DTS with 4.6L (VIN Y *-or-* 9) engine

OBDMID $31 TID $A9 test limits and test value should be multiplied by 4 (limit result to –32.768 -to- +32.767 kPa).

7 For the following 2007 model year vehicle:

Pontiac Solstice, Saturn Sky, with 2.0L (VIN X) engine.

The OBDMID $A3, $A4, and $A5 are misaligned with the cylinders.
OBDMID $A3 Test IDs contain misfire data for cylinder #3, (not #2).
OBDMID $A4 Test IDs contain misfire data for cylinder #4, (not #3).
OBDMID $A5 Test IDs contain misfire data for cylinder #2, (not #4).

8 For the following 2011 model year vehicle:

Chevrolet Cruze with 1.8L (VIN H) engine

OBDMID $01 TID $80 and TID $81 test values and limits may not be available on all vehicles.

FOOTNOTES

9 For the following 2011 model year vehicle:

Chevrolet Cruze with 1.8L (VIN H) engine

OBDMID $01 TID $91 and TID $92: Tests are not supported by the vehicle. Test limits and values are invalid.

10 For the following vehicles:

All vehicles that respond with OBDMID $3A TID $C0 UASID $31

Test value could equal the test limit when the test has failed.