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 *to* 65535 ms	1 ms / bit
01	**06**	**10**	Lean *to* Rich Sensor Switch Time	0 *to* 65535 ms	1 ms / bit
01	**07**	**0A**	Minimum Sensor Voltage Achieved	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**08**	**0A**	Maximum Sensor Voltage Achieved	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**0A**	**10**	Sensor Period (Calculated)	0 *to* 65535 ms	1 ms / bit
01	**10** (1)	**06**	B1S1 WRAF Slow Response	0 to 19.99 raw value	0.000305 / bit
01	**80**	**16**	Particulate Matter Sensor Temperature Not Plausible	-40 to 6513.5°C	0.1 °C / bit - 40°C
01	**80** (10)	**2B**	Rich *to* Lean Switches Test Results	0 *to* 65535 switches	1 switch / bit
01	**81** (16)	**24**	Particulate Matter Sensor Temperature Performance	0 to 65535 counts	1 count / bit
01	**81** (10)	**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	**82** (16)	**41**	Particulate Matter Sensor Shunt Circuit Current	0 to 655.35 uAmps	0.01 uAmps / bit
01	**83**	**05**	Dynamic Response Performance	0 to 1.999	0.0000305 / bit
01	**83**	**0A**	Low Sensor Voltage for Half Period Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**83** (16)	**41**	Particulate Matter Sensor Electrode Current value during regeneration	0 to 655.35 uAmps	0.01 uAmps / bit
01	**84** (16)	**04**	Particulate Matter Sensor Electrode Current difference during regeneration	0 to 65.535 unitless	0.001 / bit
01	**84**	**0A**	High Sensor Voltage for Half Period Time Calculation	0.0000 *to* 7.9900 Volts	0.122 mV / bit
01	**84**	**85**	Secondary Sensor Lambda Trim Correction of Primary Sensor	-0.999 to +0.999	0.0000305 / bit
01	**85** (16)	**0C**	Particulate Matter Sensor Protection Tube performance	0 to 655.35 Volts	0.01V / bit
01	**85**	**10**	O2 Sensor Rich *to* Lean Half Period Time	0 *to* 65535 ms	1 ms / bit
01	**86**	**10**	O2 Sensor Lean *to* Rich Half Period Time	0 *to* 65535 ms	1 ms / bit
01	**87**	**10**	Sum of O2 Sensor L/R *and* R/L Half Period Times	0 *to* 65535 ms	1 ms / bit
01	**87** (16)	**24**	Particulate Matter Sensor Sensitivity Factor Performance	0 *to* 65535 counts	1 count / bit
01	**88** (3)	**90**	Difference Between Rich-Lean Response *and* Lean-Rich Response	–32768 *to* +32767 ms	1 ms / 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 / bit
01	**8F**	**B1**	Instantaneous Positive Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s / bit
01	**90**	**B1**	Instantaneous Negative Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s / bit
01	**91** (11)	**90**	O2 Sensor Delayed Response - Rich to Lean	–32768 *to* +32767 ms	1 ms / 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 (11)	90	O2 Sensor Delayed Response - Lean to Rich	–32768 *to* +32767 ms	1 ms / bit
01	93 (16)	10	O2 Sensor Dynamic Period Check – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	94 (16)	90	O2 Sensor Dynamic Symmetry Check – Bank 1 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
01	D0	24	O2 Value Plausibility Check During Overrun	0 *to* 65535 counts	1 count / bit
01	D0	24	O2 Value Plausibility Check During Overrun– Bank 1 Sensor 1 (calculated) (16)	0 *to* 65535 counts	1 count / bit
01	D1	24	Dynamic Check for O2 Signal Test	0 *to* 65535 counts	1 count / bit
01	D1	24	Dynamic Check for O2 Signal Test – Bank 1 Sensor 1 (calculated) (16)	0 *to* 65535 counts	1 count / bit
01	D2	10	Dynamic Check of NOx sensor high to low – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	D2	11	Dynamic Check of NOx sensor	0 to 6553.5 s	100 ms / bit
01	D2	11	Dynamic Check of NOx sensor – Bank 1 Sensor 1 (16)	0 to 6553.5 s	100 ms / bit
01	D3	86	NOx Sensor Performance - Signal High	-9.994 to +9.994	0.000305 / bit
01	D3	86	NOx Sensor Performance - Signal High Bank 1 Sensor 1 (16)	-9.994 to +9.994	0.000305 / bit
01	D4	24	NOx Sensor Performance - Signal Low/Hi Bank 1 Sensor 1 X/Y debouncing	0 *to* 65535 counts	1 count / bit
01	D4	86	NOx Sensor Performance - Signal Low	-9.994 to +9.994	0.000305 / bit
01	D4	86	NOx Sensor Performance - Signal Low Bank 1 Sensor 1 (16)	-9.994 to +9.994	0.000305 / bit
01	D5	B0	NOx Sensor Performance - Signal Low/Hi Bank 1 Sensor 1 EWMA filter	–100.01 *to* +100.00%	0.003052% / bit
01	E0	10	O2 Sensor Increasing Dynamic Check Low – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	E0	90 (16)	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
01	E1	10	O2 Sensor Increasing Dynamic Check High – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	E2	10	O2 Sensor Decreasing Dynamic Check Low – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	E2 (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
01	E3	10 (14)	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	E3	20 (15)	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 1	0 *to* 255.996	0.0039062 / bit
01	E3	20 (15)	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 1	0 *to* 255.996	0.0039062 / bit
01	E4	30	Oxygen concentration implausibly high in part load	0 *to* 100%	0.001526% / bit
01	E5	30	Oxygen concentration implausibly Low in part load	0 *to* 100%	0.001526% / bit
01	E6	10 (15)	NOx Sensor Dynamic Check low to high Delay Time Test – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	E6	11 (14)	NOx Sensor Dynamic Check low to high – Bank 1 Sensor 1	0 to 6553.5 s	100 ms / bit
01	E7	20	NOx Sensor Dynamic Check low to high Response Ratio Test – Bank 1 Sensor 1	0 *to* 255.996	0.0039062 / bit
01	E8	B0	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 1	–100.01 *to* +100.00%	0.003052% / bit
01	E8 (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 1	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
01	E9	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 1	–100.01 *to* +100.00%	0.003052% / bit
01	E9[17]	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 1	0 *to* 65535 counts	1 count / bit
01	EA	24	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 1	0 *to* 65535 counts	1 count / bit
01	D6[16]	24	NOx Sensor Dynamic Check high to low Bank1 Sensor 1	0 *to* 65535 counts	1 count / bit
01	ED[17]	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 1	0 *to* 65535 counts	1 count / bit
01	ED[16]	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 1	–100.01 *to* +100.00%	0.003052% / bit
01	EE[17]	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 1	0 *to* 65535 counts	1 count / bit
01	EE[16]	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 1	–100.01 *to* +100.00%	0.003052% / bit
01	EF[16]	20	NOx Sensor Self Diagnostics – Bank 1 Sensor 1	0 *to* 255.996	0.0039062 / bit
01	F0[16]	10	O2 Sensor Increasing Dynamic Check Low – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	F0[16]	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 2	–32768 *to* +32767 ms	1 ms / bit
01	F1[16]	10	O2 Sensor Increasing Dynamic Check High – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	F2[16]	10	O2 Sensor Decreasing Dynamic Check Low – Bank 1 Sensor 1	0 *to* 65535 ms	1 ms / bit
01	F2[16]	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 2	–32768 *to* +32767 ms	1 ms / bit
01	F3[16]	20	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 1	0 *to* 255.996	0.0039062 / bit
01	F4[16]	82	NOx sensor offset learning at min limit – Bank 1 Sensor 1	-3276.8 to +3276.7 ppm	0.1 ppm / bit
01	F5[16]	82	NOx sensor offset learning at min limit – Bank 1 Sensor 2	-3276.8 to +3276.7 ppm	0.1 ppm / bit
01	F6[16]	04	NOx sensor slow response monitor – Bank 1 Sensor 2	0 *to* 65.535	0.001 / bit
01	F7[16]	82	NOx sensor offset learning at min limit – Bank 1 Sensor 3	-3276.8 to +3276.7 ppm	0.1 ppm / bit
01	F8[16]	20	NOx Sensor Self Diagnostics – Bank 1 Sensor 3	0 *to* 255.996	0.0039062 / bit
01	F9[16]	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 3	–32768 *to* +32767 ms	1 ms / bit
01	FA[16]	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 3	–32768 *to* +32767 ms	1 ms / bit
01	FB[17]	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
01	FB[16]	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
01	FC[17]	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
01	FC[16]	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / 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 Monitor Bank 1 Sensor 2					
02	**05**	**10**	Rich to Lean Sensor Transient (Gradient) Time	0 *to* 65535 ms	1 ms / bit
02	**05**	**20**	B1S2 rich-lean switch time in fuel cut-off	0 *to* 255.996	0.0039062 / bit
02	**07**	**0A**	Minimum Sensor Voltage Achieved	0.0000 *to* 7.9900 Volts	0.122 mV / bit
02	**08**	**0A**	Maximum Sensor Voltage Achieved	0.0000 *to* 7.9900 Volts	0.122 mV / bit
02	**80** (16)	**16**	Particulate Matter Sensor Temperature Not Plausible	-40 to 6513.5°C	0.1°C / bit - 40°C
02	**81** (16)	**24**	Particulate Matter Sensor Temperature Performance	0 *to* 65535 counts	1 count / bit
02	**81** (8)	**0A**	Maximum Sensor Voltage for Functional Check	0.0000 *to* 7.9900 Volts	0.122 mV / bit
02	**82** (16)	**41**	Particulate Matter Sensor Shunt Circuit Current	0 to 655.35 uAmps	0.01 uAmps / bit
02	**82** (8)	**0A**	Minimum Sensor Voltage for Functional Check	0.0000 *to* 7.9900 Volts	0.122 mV / bit
02	**83** (16)	**41**	Particulate Matter Sensor Electrode Current value during regeneration	0 to 655.35 uAmps	0.01 uAmps / bit
02	**84** (16)	**04**	Particulate Matter Sensor Electrode Current difference during regeneration	0 to 65.535 unitless	0.001 / bit
02	**85** (16)	**0C**	Particulate Matter Sensor Protection Tube performance	0 to 655.35 Volts	0.01V / bit
02	**86**	**10**	Rich to Lean Sensor Delay (Response) Time	0 *to* 65535 ms	1 ms / bit
02	**86**	**35**	Rich to Lean Sensor Delay (Response) Time	0 to 65535 ms	10 ms / bit
02	**87** (16)	**24**	Particulate Matter Sensor Sensitivity Factor Performance	0 *to* 65535 counts	1 count / bit
02	**8A**	**24**	Post Catalyst Sensor Open Test	0 *to* 65535 counts	1 count / bit
02	**8A**	**24**	Post Catalyst Sensor Open Test – Bank 1 Sensor 2 (16)	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	**8B**	**0A**	Post Catalyst Sensor Rich Tests – Bank 1 Sensor 2 (16)	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	**8C**	**0A**	Post Catalyst Sensor Lean Tests – Bank 1 Sensor 2 (16)	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	0.0000 *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 / bit
02	**93** (16)	**11**	Rich to Lean Sensor Transient (Gradient) Time	0 to 6553.5 s	100 ms / bit
02	**94**	**03**	Post Catalyst Sensor Slow L/R Response Test	0 *to* 655.35 unitless	0.01 / bit
02	**D0** (16)	**24**	O2 Value Plausibility Check During Overrun– Bank 1 Sensor 2 (calculated)	0 *to* 65535 counts	1 count / bit
02	**D0** (16)	**30**	O2 Value Plausibility Check During Overrun	0 *to* 100%	0.001526% / bit
02	**D1** (16)	**24**	Dynamic Check for O2 Signal Test – Bank 1 Sensor 2 (calculated)	0 *to* 65535 counts	1 count / bit
02	**D2** (16)	**10**	Dynamic Check of NOx sensor high to low – Bank 1 Sensor 2	0 *to* 65535 ms	1 ms / bit
02	**D4** (16)	**24**	NOx Sensor Performance - Signal Low/Hi Bank 1 Sensor 2 X/Y debouncing	0 *to* 65535 counts	1 count / bit
02	**D5**	**01**	NOx Sensor Performance - Signal Insufficient Peak Value	0 *to* 65535 unitless	1 count / bit
02	**D5**	**01**	NOx Sensor Performance - Signal Insufficient Peak Value Bank 1 Sensor 2 (16)	0 *to* 65535 unitless	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
02	D5 (16)	B0	NOx Sensor Performance - Signal Low/Hi Bank 1 Sensor 2 EWMA filter	–100.01 *to* +100.00%	0.003052% / bit
02	D6	01 (14)	NOx Sensor Performance	0 *to* 65535 unitless	1 count / bit
02	D7	30	Oxygen concentration implausibly high in part load	0 *to* 100%	0.001526% / bit
02	D8	30	Oxygen concentration implausibly low in part load	0 *to* 100%	0.001526% / bit
02	E0 (16)	10	O2 Sensor Increasing Dynamic Check Low – Bank 1 Sensor 2	0 *to* 65535 ms	1 ms / bit
02	E0	20 (15)	NOx Sensor Self Diagnostics – Bank 1 Sensor 2	0 *to* 255.996	0.0039062 / bit
02	E0	81 (14)	NOx Sensor Self Diagnostics – Bank 1 Sensor 2	-32768 to +32767	1 / bit
02	E0 (16)	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
02	E0 (16)	AF	NOx Sensor Self Diagnostics – Bank 1 Sensor 2	-32768 to +32767	1 / bit
02	E1 (16)	10	O2 Sensor Increasing Dynamic Check High – Bank 1 Sensor 2	0 *to* 65535 ms	1 ms / bit
02	E1	81	NOx Signal Stuck in Range - Bank 1 Sensor 2	-32768 to +32767	1 / bit
02	E1	AF (16)	NOx Signal Stuck in Range - Bank 1 Sensor 2	-32768 to +32767	1 / bit hex to decimal
02	E2 (16)	10	O2 Sensor Decreasing Dynamic Check Low – Bank 1 Sensor 2	0 *to* 65535 ms	1 ms / bit
02	E2	81	NOx Sensor Abort Self Diagnostics – Bank 1 Sensor 2	-32768 to +32767	1 / bit
02	E2 (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
02	E3 (16)	20	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 2	0 *to* 255.996	0.0039062 / bit
02	E6 (16)	10	NOx Sensor Dynamic Check low to high Delay Time Test – Bank 1 Sensor 2	0 *to* 65535 ms	1 ms / bit
02	E7 (16)	20	NOx Sensor Dynamic Check low to high Response Ratio Test – Bank 1 Sensor 2	0 *to* 255.996	0.0039062 / bit
02	E8 (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 2	0 *to* 65535 counts	1 count / bit
02	E8	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 2	–100.01 *to* +100.00%	0.003052% / bit
02	E9 (17)	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 2	0 *to* 65535 counts	1 count / bit
02	E9	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 2	–100.01 *to* +100.00%	0.003052% / bit
02	EA	24	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 2	0 *to* 65535 counts	1 count / bit
02	ED (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 2	0 *to* 65535 counts	1 count / bit
02	ED (16)	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 2	–100.01 *to* +100.00%	0.003052% / bit
02	EE (17)	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 2	0 *to* 65535 counts	1 count / bit
02	EE (16)	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 2	–100.01 *to* +100.00%	0.003052% / bit
02	EF (16)	20	NOx Sensor Self Diagnostics – Bank 1 Sensor 2	0 *to* 255.996	0.0039062 / 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
02	F0	10	O2 Sensor Increasing Dynamic Check Low – Bank 1 Sensor 2	0 *to* 65535 ms	1 ms / bit
02	F0 (16)	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 2	–32768 *to* +32767 ms	1 ms / bit
02	F1	10	O2 Sensor Increasing Dynamic Check High – Bank 1 Sensor 2	0 *to* 65535 ms	1 ms / bit
02	F2	10	O2 Sensor Decreasing Dynamic Check Low – Bank 1 Sensor 2	0 *to* 65535 ms	1 ms / bit
02	F2 (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 2	–32768 *to* +32767 ms	1 ms / bit
02	F3	20	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 2	0 *to* 255.996	0.0039062 / bit
02	F4 (16)	82	NOx sensor offset learning at min limit – Bank 1 Sensor 1	-3276.8 to +3276.7 ppm	0.1 ppm / bit
02	F5 (16)	82	NOx sensor offset learning at min limit – Bank 1 Sensor 2	-3276.8 to +3276.7 ppm	0.1 ppm / bit
02	F6 (16)	04	NOx sensor slow response monitor – Bank 1 Sensor 2	0 *to* 65.535	0.001 / bit
02	F7 (16)	82	NOx sensor offset learning at min limit – Bank 1 Sensor 3	-3276.8 to +3276.7 ppm	0.1 ppm / bit
02	F8 (16)	20	NOx Sensor Self Diagnostics – Bank 1 Sensor 3	0 *to* 255.996	0.0039062 / bit
02	F9 (16)	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 3	–32768 *to* +32767 ms	1 ms / bit
02	FA (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 3	–32768 *to* +32767 ms	1 ms / bit
02	FB (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
02	FB (16)	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
02	FC (17)	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
02	FC (16)	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
Oxygen Sensor Monitor Bank 1 Sensor 3					
03	80	16	Particulate Matter Sensor Temperature Not Plausible	-40 to 6513.5°C	0.1°C / bit - 40°C
03	81	24	Particulate Matter Sensor Temperature Performance	0 *to* 65535 counts	1 count / bit
03	82	41	Particulate Matter Sensor Shunt Circuit Current	0 to 655.35 uAmps	0.01 uAmps / bit
03	83	41	Particulate Matter Sensor Electrode Current value during regeneration	0 to 655.35 uAmps	0.01 uAmps / bit
03	84	04	Particulate Matter Sensor Electrode Current difference during regeneration	0 to 65.535 unitless	0.001 / bit
03	85	0C	Particulate Matter Sensor Protection Tube performance	0 to 655.35 Volts	0.01V / bit
03	87	24	Particulate Matter Sensor Sensitivity Factor Performance	0 *to* 65535 counts	1 count / bit
03	8A	24	Post Catalyst Sensor Open Test	0 *to* 65535 counts	1 count / bit
03	8A	24	Post Catalyst Sensor Open Test – Bank 1 Sensor 3 (16)	0 *to* 65535 counts	1 count / bit
03	8B	0A	Post Catalyst Sensor Rich Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
03	8B	0A	Post Catalyst Sensor Rich Tests – Bank 1 Sensor 3 (16)	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	8C	0A	Post Catalyst Sensor Lean Tests – Bank 1 Sensor 3 (16)	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

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	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 / bit
03	94	03	Post Catalyst Sensor Slow L/R Response Test	0 *to* 655.35 unitless	0.01 / bit
03	D0 (16)	24	O2 Value Plausibility Check During Overrun– Bank 1 Sensor 3 (calculated)	0 *to* 65535 counts	1 count / bit
03	D1 (16)	24	Dynamic Check for O2 Signal Test – Bank 1 Sensor 3 (calculated)	0 *to* 65535 counts	1 count / bit
03	D2 (16)	10	Dynamic Check of NOx sensor high to low – Bank 1 Sensor 3	0 *to* 65535 ms	1 ms / bit
03	D4 (16)	24	NOx Sensor Performance - Signal Low/Hi Bank 1 Sensor 3 X/Y debouncing	0 *to* 65535 counts	1 count / bit
03	D5 (16)	B0	NOx Sensor Performance - Signal Low/Hi Bank 1 Sensor 3 EWMA filter	–100.01 *to* +100.00%	0.003052% / bit
03	D6 (16)	01	NOx Sensor Performance Bank 1 Sensor 3	0 to 65535	1 count / bit
03	D6 (16)	24	NOx Sensor Dynamic Check high to low Bank1 Sensor 3	0 *to* 65535 counts	1 count / bit
03	E0 (16)	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
03	E0 (16)	10	O2 Sensor Increasing Dynamic Check Low – Bank 1 Sensor 3	0 *to* 65535 ms	1 ms / bit
03	E0 (16)	AF	NOx Sensor Self Diagnostics – Bank 1 Sensor 3	-32768 to +32767	1 / bit
03	E1 (16)	10	O2 Sensor Increasing Dynamic Check High – Bank 1 Sensor 3	0 *to* 65535 ms	1 ms / bit
03	E2 (16)	10	O2 Sensor Decreasing Dynamic Check Low – Bank 1 Sensor 3	0 *to* 65535 ms	1 ms / bit
03	E2 (16)	81	NOx Sensor Abort Self Diagnostics – Bank 1 Sensor 3	-32768 to +32767	1 / bit
03	E2 (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
03	E3 (16)	20	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 3	0 *to* 255.996	0.0039062 / bit
03	E6 (16)	10	NOx Sensor Dynamic Check low to high Delay Time Test – Bank 1 Sensor 3	0 *to* 65535 ms	1 ms / bit
03	E7 (16)	20	NOx Sensor Dynamic Check low to high Response Ratio Test – Bank 1 Sensor 3	0 *to* 255.996	0.0039062 / bit
03	E8 (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
03	E8 (16)	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
03	E9 (17)	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
03	E9 (16)	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
03	ED (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
03	ED (16)	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
03	EE (17)	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 3	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	EE (16)	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
03	EF (16)	20	NOx Sensor Self Diagnostics – Bank 1 Sensor 3	0 *to* 255.996	0.0039062 / bit
03	F0 (16)	10	O2 Sensor Increasing Dynamic Check Low – Bank 1 Sensor 3	0 *to* 65535 ms	1 ms / bit
03	F0 (16)	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 2	–32768 *to* +32767 ms	1 ms / bit
03	F1 (16)	10	O2 Sensor Increasing Dynamic Check High – Bank 1 Sensor 3	0 *to* 65535 ms	1 ms / bit
03	F2 (16)	10	O2 Sensor Decreasing Dynamic Check Low – Bank 1 Sensor 3	0 *to* 65535 ms	1 ms / bit
03	F2 (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 2	–32768 *to* +32767 ms	1 ms / bit
03	F3 (16)	20	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 3	0 *to* 255.996	0.0039062 / bit
03	F4 (16)	82	NOx sensor offset learning at min limit – Bank 1 Sensor 1	-3276.8 to +3276.7 ppm	0.1 ppm / bit
03	F5 (16)	82	NOx sensor offset learning at min limit – Bank 1 Sensor 2	-3276.8 to +3276.7 ppm	0.1 ppm / bit
03	F6 (16)	04	NOx sensor slow response monitor – Bank 1 Sensor 2	0 to +65.535 unitless	0.001 / bit
03	F7 (16)	82	NOx sensor offset learning at min limit – Bank 1 Sensor 3	-3276.8 to +3276.7 ppm	0.1 / bit
03	F8 (16)	20	NOx Sensor Self Diagnostics – Bank 1 Sensor 3	0 *to* 255.996	0.0039062 / bit
03	F9 (16)	2F	Particulate Matter Sensor Sensitivity Factor Performance	0 *to* 655.35%	0.01% / bit
03	F9 (16)	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 3	–32768 *to* +32767 ms	1 ms / bit
03	FA (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 3	–32768 *to* +32767 ms	1 ms / bit
03	FB (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
03	FB (16)	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
03	FC (17)	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
03	FC (16)	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
03	FD (16)	41	Particulate Matter Sensor Shunt Circuit Current	0 to 655.35 uAmps	0.01 uAmps / bit
03	FE (16)	2F	Particulate Matter Sensor Protection Tube monitor normalized integrated voltage	0 *to* 655.35%	0.01% / bit
Oxygen Sensor Monitor Bank 1 Sensor 4					
04	80 (16)	16	Particulate Matter Sensor Temperature Not Plausible	-40 to 6513.5°C	0.1°C / bit - 40°C
04	81 (16)	24	Particulate Matter Sensor Temperature Performance	0 *to* 65535 counts	1 count / bit
04	82 (16)	41	Particulate Matter Sensor Shunt Circuit Current	0 to 655.35 uAmps	0.01 uAmps / bit
04	83 (16)	41	Particulate Matter Sensor Electrode Current value during regeneration	0 to 655.35 uAmps	0.01 uAmps / bit
04	84 (16)	04	Particulate Matter Sensor Electrode Current difference during regeneration	0 to 65.535 unitless	0.001 / bit
04	85 (16)	0C	Particulate Matter Sensor Protection Tube performance	0 to 655.35 Volts	0.01V / bit
04	87 (16)	24	Particulate Matter Sensor Sensitivity Factor Performance	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
04	D0 (16)	24	O2 Value Plausibility Check During Overrun– Bank 1 Sensor 4 (calculated)	0 *to* 65535 counts	1 count / bit
04	D1 (16)	24	Dynamic Check for O2 Signal Test – Bank 1 Sensor 4 (calculated)	0 *to* 65535 counts	1 count / bit
04	D2 (16)	10	Dynamic Check of NOx sensor high to low – Bank 1 Sensor 4	0 *to* 65535 ms	1 ms / bit
04	D4 (16)	24	NOx Sensor Performance - Signal Low/Hi Bank 1 Sensor 4 X/Y debouncing	0 *to* 65535 counts	1 count / bit
04	D5 (16)	B0	NOx Sensor Performance - Signal Low/Hi Bank 1 Sensor 4 EWMA filter	–100.01 *to* +100.00%	0.003052% / bit
04	D6 (16)	24	NOx Sensor Dynamic Check high to low Bank1 Sensor 4	0 *to* 65535 counts	1 count / bit
04	E0 (16)	10	O2 Sensor Increasing Dynamic Check Low – Bank 1 Sensor 4	0 *to* 65535 ms	1 ms / bit
04	E0 (16)	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
04	E1 (16)	10	O2 Sensor Increasing Dynamic Check High – Bank 1 Sensor 4	0 *to* 65535 ms	1 ms / bit
04	E2 (16)	10	O2 Sensor Decreasing Dynamic Check Low – Bank 1 Sensor 4	0 *to* 65535 ms	1 ms / bit
04	E2 (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
04	E3 (16)	20	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 4	0 *to* 255.996	0.0039062 / bit
04	E6 (16)	10	NOx Sensor Dynamic Check low to high Delay Time Test – Bank 1 Sensor 4	0 *to* 65535 ms	1 ms / bit
04	E7 (16)	20	NOx Sensor Dynamic Check low to high Response Ratio Test – Bank 1 Sensor 4	0 *to* 255.996	0.0039062 / bit
04	E8 (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 4	0 *to* 65535 counts	1 count / bit
04	E8 (16)	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 4	–100.01 *to* +100.00%	0.003052% / bit
04	E9 (17)	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 4	0 *to* 65535 counts	1 count / bit
04	E9 (16)	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 4	–100.01 *to* +100.00%	0.003052% / bit
04	ED (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 4	0 *to* 65535 counts	1 count / bit
04	ED (16)	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 4	–100.01 *to* +100.00%	0.003052% / bit
04	EE (17)	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 4	0 *to* 65535 counts	1 count / bit
04	EE (16)	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 4	–100.01 *to* +100.00%	0.003052% / bit
04	EF (16)	20	NOx Sensor Self Diagnostics – Bank 1 Sensor 4	0 *to* 255.996	0.0039062 / bit
04	F0 (16)	10	O2 Sensor Increasing Dynamic Check Low – Bank 1 Sensor 4	0 *to* 65535 ms	1 ms / bit
04	F0 (16)	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 2	–32768 *to* +32767 ms	1 ms / bit
04	F1 (16)	10	O2 Sensor Increasing Dynamic Check High – Bank 1 Sensor 4	0 *to* 65535 ms	1 ms / 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
04	F2 (16)	10	O2 Sensor Decreasing Dynamic Check Low – Bank 1 Sensor 4	0 *to* 65535 ms	1 ms / bit
04	F2 (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 2	–32768 *to* +32767 ms	1 ms / bit
04	F3 (16)	20	O2 Sensor Decreasing Dynamic Check High – Bank 1 Sensor 4	0 *to* 255.996	0.0039062 / bit
04	F4 (16)	82	NOx sensor offset learning at min limit – Bank 1 Sensor 1	-3276.8 to +3276.7 ppm	0.1 ppm / bit
04	F5 (16)	82	NOx sensor offset learning at min limit – Bank 1 Sensor 2	-3276.8 to +3276.7 ppm	0.1 ppm / bit
04	F6 (16)	04	NOx sensor slow response monitor – Bank 1 Sensor 2	0 to +65.535 unitless	0.001 / bit
04	F7 (16)	82	NOx sensor offset learning at min limit – Bank 1 Sensor 3	-3276.8 to +3276.7 ppm	0.1 ppm / bit
04	F8 (16)	20	NOx Sensor Self Diagnostics – Bank 1 Sensor 3	0 *to* 255.996	0.0039062 / bit
04	F9 (16)	90	O2 Sensor Increasing Dynamic Check – Bank 1 Sensor 3	–32768 *to* +32767 ms	1 ms / bit
04	FA (16)	90	O2 Sensor Decreasing Dynamic Check – Bank 1 Sensor 3	–32768 *to* +32767 ms	1 ms / bit
04	FB (17)	24	O2 Concentration Plausibility Check During Overrun - Bank 1 Sensor 4	0 *to* 65535 counts	1 count / bit
04	FB (16)	B0	O2 Concentration Plausibility Check During Overrun – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / bit
04	FC (17)	24	O2 Concentration Plausibility Check During Load - Bank 1 Sensor 4	0 *to* 65535 counts	1 count / bit
04	FC (16)	B0	O2 Concentration Plausibility Check During Load – Bank 1 Sensor 3	–100.01 *to* +100.00%	0.003052% / 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	01	0A	Rich to lean sensor threshold voltage – Bank 2 Sensor 1 (constant) (16)	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	02	0A	Lean to rich sensor threshold voltage – Bank 2 Sensor 1 (constant) (16)	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	03	0A	Low sensor voltage for switch time calculation – Bank 2 Sensor 1 (constant) (16)	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	04	0A	High sensor voltage for switch time calculation – Bank 2 Sensor 1 (constant) (16)	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	05	10	Rich *to* Lean Sensor Switch Time	0 *to* 65535 ms	1 ms / bit
05	05	10	Rich to lean sensor switch time – Bank 2 Sensor 1 (calculated) (16)	0 *to* 65535 ms	1 ms / bit
05	06	10	Lean *to* Rich Sensor Switch Time	0 *to* 65535 ms	1 ms / bit
05	06	10	Lean to rich sensor switch time – Bank 2 Sensor 1 (calculated) (16)	0 *to* 65535 ms	1 ms / bit
05	07	0A	Minimum Sensor Voltage Achieved	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	08	0A	Maximum Sensor Voltage Achieved	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	0A	10	Sensor Period (Calculated)	0 *to* 65535 ms	1 ms / bit
05	10 (1)	06	B2S1 WRAF Slow Response	0 to 19.99 raw value	0.000305 / 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	80	2B	Rich *to* Lean Switches Test Results	0 *to* 65535 switches	1 switch / bit
05	80	2B	Rich to Lean Switches Test Results – Bank 2 Sensor 1 (calculated) (16)	0 *to* 65535 switches	1 switch / bit
05	81	2B	Lean *to* Rich Switches Test Results	0 *to* 65535 switches	1 switch / bit
05	81	2B	Lean to Rich Switches Test Results – Bank 2 Sensor 1 (calculated) (16)	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	82	20	Rich-Lean Response to Lean-Rich Response Ratio – Bank 2 Sensor 1 (calculated) (16)	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	83	0A	Low sensor voltage for half period time calculation – Bank 2 Sensor 1 (constant) (16)	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	84	0A	High sensor voltage for half period time calculation – Bank 2 Sensor 1 (constant) (16)	0.0000 *to* 7.9900 Volts	0.122 mV / bit
05	85	10	O2 Sensor Rich *to* Lean Half Period Time	0 *to* 65535 ms	1 ms / bit
05	85	10	O2 sensor rich to lean half period time – Bank 2 Sensor 1 (calculated) (16)	0 *to* 65535 ms	1 ms / bit
05	86	10	O2 Sensor Lean *to* Rich Half Period Time	0 *to* 65535 ms	1 ms / bit
05	86	10	O2 sensor lean to rich half period time – Bank 2 Sensor 1 (calculated) (16)	0 *to* 65535 ms	1 ms / bit
05	87	10	Sum of O2 Sensor L/R *and* R/L Half Period Times	0 *to* 65535 ms	1 ms / bit
05	87	10	Sum of O2 sensor L/R and R/L half period times – Bank 2 Sensor 1 (calculated) (16)	0 *to* 65535 ms	1 ms / bit
05	88	90	Difference Between Rich-Lean Response *and* Lean-Rich Response	–32768 *to* +32767 ms	1 ms / bit
05	88	90	Difference Between Rich-Lean Response and Lean-Rich Response – Bank 2 Sensor 1 (calculated) (16)	–32768 *to* +32767 ms	1 ms / bit
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 / bit
05	8E	B1	Absolute Average Slope of the O2 Sensor Signal – Bank 2 Sensor 1 (calculated) (16)	–65536 *to* +65534 mV/s	2 mV/s / bit
05	8F	B1	Instantaneous Positive Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s / bit
05	8F	B1	Instantaneous Positive Slope of the O2 Sensor Signal – Bank 2 Sensor 1 (calculated) (16)	–65536 *to* +65534 mV/s	2 mV/s / bit
05	90	B1	Instantaneous Negative Slope of the O2 Sensor Signal	–65536 *to* +65534 mV/s	2 mV/s / bit
05	90	B1	Instantaneous Negative Slope of the O2 Sensor Signal – Bank 2 Sensor 1 (calculated) (16)	–65536 *to* +65534 mV/s	2 mV/s / bit
05	91	90	O2 Sensor Delayed Response - Rich to Lean	–32768 *to* +32767 ms	1 ms / 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	91	90	O2 Sensor Delayed Response - Rich to Lean Bank 2 Sensor 1 (calculated)[16]	–32768 *to* +32767 ms	1 ms / bit
05	92	90	O2 Sensor Delayed Response - Lean to Rich	–32768 *to* +32767 ms	1 ms / bit
05	92	90	O2 Sensor Delayed Response - Lean to Rich Bank 2 Sensor 1 (calculated)[16]	–32768 *to* +32767 ms	1 ms / bit
05	93[16]	10	O2 Sensor Dynamic Period Check – Bank 2 Sensor 1	0 *to* 65535 ms	1 ms / bit
05	94[16]	90	O2 Sensor Dynamic Symmetry Check – Bank 2 Sensor 1	–32768 *to* +32767 ms	1 ms / bit
Oxygen Sensor Monitor Bank 2 Sensor 2					
06	05	10	Rich to Lean Sensor Transient (Gradient) Time	0 *to* 65535 ms	1 ms / bit
06	05	20	B2S2 rich-lean switch time in fuel cut-off	0 *to* 255.996	0.0039062 / bit
06	07	0A	Minimum Sensor Voltage Achieved	0.0000 *to* 7.9900 Volts	0.122 mV / bit
06	08	0A	Maximum Sensor Voltage Achieved	0.0000 *to* 7.9900 Volts	0.122 mV / bit
06	81[9]	0A	Sensor Voltage Achieved for below Commanded Target Voltage Functional Check	0.0000 *to* 7.9900 Volts	0.122 mV / bit
06	82	0A	Sensor Voltage Achieved for above Commanded Target Voltage Functional Check	0.0000 *to* 7.9900 Volts	0.122 mV / bit
06	86	10	Rich to Lean Sensor Delay (Response) Time	0 *to* 65535 ms	1 ms / bit
06	8A	24	Post Catalyst Sensor Open Test	0 *to* 65535 counts	1 count / bit
06	8A	24	Post Catalyst Sensor Open Test – Bank 2 Sensor 2[16]	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	8B	0A	Post Catalyst Sensor Rich Tests – Bank 2 Sensor 2[16]	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	8C	0A	Post Catalyst Sensor Lean Tests – Bank 2 Sensor 2[16]	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 / bit
06	94	03	Post Catalyst Sensor Slow L/R Response Test	0 *to* 655.35 unitless	0.01 / bit
Oxygen Sensor Monitor Bank 2 Sensor 3					
07	8A	24	Post Catalyst Sensor Open Test	0 to 65535 counts	1 count / bit
07	8A	24	Post Catalyst Sensor Open Test – Bank 2 Sensor 3[16]	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	8B	0A	Post Catalyst Sensor Rich Tests – Bank 2 Sensor 3[16]	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	8C	0A	Post Catalyst Sensor Lean Tests – Bank 2 Sensor 3[16]	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

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	92	0A	Post Catalyst Sensor Delayed Initial L/R Response Test	0.0000 *to* 7.9900 Volts	0.122 mV / bit
07	93	03	Post Catalyst Sensor Slow R/L Response Test	0 *to* 655.35 unitless	0.01 / bit
07	94	03	Post Catalyst Sensor Slow L/R Response Test	0 *to* 655.35 unitless	0.01 / bit
Catalyst Monitor Bank 1				EWMA = Exponentially Weighted Moving Average	
21	84 (8)	05	Catalyst Test Bank 1 (normalized) - EWMA	0 to 1.999	0.0000305 / bit
21	A0	01	Catalyst Test Bank 1 (using Catalyst DFCO Exit Test)	0 *to* 65535 unitless	1 count / bit
21	A0	05	Catalyst Test Bank 1 (using OSC normalized ratio units)	0 *to* 1.999 unitless	0.0000305 / bit
21	A0	86	Catalyst Test Bank 1 (using OSC normalized ratio units)	-9.994 to +9.994	0.000305 / bit
21	A0	90	Catalyst Test Bank 1 (using OSC compensation units)	–32768 *to* +32767 ms	1 ms / 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 count / bit
21	A2	06	Passive monitoring of the oxidation catalyst efficiency	0 *to* 19.988 unitless	0.000305 / bit
21	A2	06	Passive monitoring of the oxidation catalyst efficiency (Bank 1) (16)	0 *to* 19.988 unitless	0.000305 / bit
21	A2 (16)	39	Passive monitoring of the oxidation catalyst efficiency (Bank 1)	-327.68 to +327.68%	0.01% / bit
21	A3 (16)	84	Main Catalyst Efficiency Monitoring	-32.768 to +32.767 unitless	0.001 / bit
21	A4 (16)	84	Pre Catalyst Efficiency Monitoring	-32.768 to +32.767 unitless	0.001 / bit
21	A5 (16)	11	Regeneration Process Not Efficient (DOC2 Unable to Assist DPF Regeneration)	0 *to* 6553.5 s	100 ms / bit
21	A6 (18)	84	NO2 feed-gas monitor	-32.768 to +32.767 unitless	0.001 / bit
Catalyst Monitor Bank 2				EWMA = Exponentially Weighted Moving Average	
22	84 (9)	05	Catalyst Test Bank 2 (normalized) - EWMA	0 to 1.999	0.0000305 / bit
22	A0	01	Catalyst Test Bank 2 (using Catalyst DFCO Exit Test)	0 *to* 65535 unitless	1 count / bit
22	A0	05	Catalyst Test Bank 2 (using OSC normalized ratio units)	0 *to* 1.999 unitless	0.0000305 / bit
22	A0	86	Catalyst Test Bank 2 (using OSC normalized ratio units)	-9.994 to +9.994	0.000305 / bit
22	A0	90	Catalyst Test Bank 2 (using OSC compensation units)	–32768 *to* +32767 ms	1 ms / bit
22	A0	05	Catalyst Diag B2	0 to 1.999 raw value	0.0000305 / bit
22	A1 (16)	01	Catalyst Test Bank 2 (using Catalyst DFCO Exit Test)	0 to 65535	1 count / bit
EGR Monitor Bank 1					
31	A0	2F (15)	EGR Slow Response - Increasing Flow	0 to 655.35%	0.01% / bit
31	A0	82 (14)	EGR Slow Response - Increasing Flow	–3276.8 *to* +3276.7 counts	0.1 count / bit
31	A1	2F (15)	EGR Slow Response – Decreasing Flow	0 to 655.35%	0.01% / bit
31	A1	82 (14)	EGR Slow Response – Decreasing Flow	–3276.8 *to* +3276.7 counts	0.1 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
31	A2 (16)	05	EGR Cooler Efficiency	0 to 1.999	0.0000305 / bit
31	A2	06	EGR Cooler Efficiency	0 *to* 19.988 unitless	0.000305 / bit
31	A3	82	Excessive EGR	–3276.8 *to* +3276.7 counts	0.1 count / bit
31	A4	82	Insufficient EGR	–3276.8 *to* +3276.7 counts	0.1 count / bit
31	A5 (16)	2F	EGR B Slow Response - Increasing Flow	0 to 655.35%	0.01% / bit
31	A6 (16)	2F	EGR B Slow Response - Decreasing Flow	0 to 655.35%	0.01% / bit
31	A7	05	Low Pressure EGR Cooler Efficiency	0 to 1.999969	0.0000305 / bit
31	A8	FD	EGRF Decel Service Test	–32.768 *to* +32.767 kPa	0.001 kPa / bit
31	A9 (6)	FD	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	AE (16)	24	Excessive EGR flow monitor	0 *to* 65535 counts	1 count / bit
31	AF	24	Airflow Negative Control Deviation Test	0 *to* 65535 counts	1 count / bit
31	AF (16)	24	Insufficient EGR flow monitor	0 *to* 65535 counts	1 count / bit
31	B0 (17)	24	Insufficient LP EGR flow monitor	0 *to* 65535 counts	1 count / bit
31	B1 (19)	82	Insufficient HP EGR flow monitor (model based)	3276.8 to 3276.7	0.1 / bit
31	B2 (19)	82	Insufficient LP EGR flow monitor (model based)	3276.8 to 3276.7	0.1 / bit
31	B3 (19)	82	Excessive HP EGR flow monitor (model based)	3276.8 to 3276.7	0.1 / bit
31	B4 (19)	82	Excessive LP EGR flow monitor (model based)	3276.8 to 3276.7	0.1 / bit
VVT Monitor Bank 1					
35	9A (8)	9C	Exhaust Camshaft Slow Response	-327.68° to +327.67°	0.01° / bit
35	9B (8)	9C	Exhaust Camshaft Target Error	-327.68° to +327.67°	0.01° / bit
35	9D (8)	9C	Intake Camshaft Slow Response	-327.68° to +327.67°	0.01° / bit
35	9E (8)	9C	Intake Camshaft Target Error	-327.68° to +327.67°	0.01° / bit
35	B0	24	PHSR Intake CAM Phaser Rationality Test	0 *to* 65535 counts	1 count / bit
35	B0	24	PHSR Intake CAM Phaser Rationality Test Bank 1 (16)	0 *to* 65535 counts	1 count / bit
35	B1	24	PHSR Exhaust CAM Phaser Rationality Test	0 *to* 65535 counts	1 count / bit
35	B1	24	PHSR Exhaust CAM Phaser Rationality Test Bank 1 (16)	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
35	B2 (16)	AF	VVLR Oil Control Valve 1 Stuck in High Test	-327.68 to +327.67%	0.01% / bit
35	B3 (16)	AF	VVLR Oil Control Valve 1 Stuck in Low Test	-327.68 to +327.67%	0.01% / bit
35	B4 (16)	AF	VVLR Oil Control Valve 2 Stuck in High Test	-327.68 to +327.67%	0.01% / bit
35	B5 (16)	AF	VVLR Oil Control Valve 2 Stuck in Low Test	-327.68 to +327.67%	0.01% / bit
35	C0 (16)	24	Sliding Cam A Actuator A Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
35	C1 (16)	24	Sliding Cam A Actuator B Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
35	C2 (16)	24	Sliding Cam A Actuator C Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
35	C3 (16)	24	Sliding Cam A Actuator D Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
35	C4 (16)	24	Sliding Cam A Actuator E Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
35	C5 (16)	24	Sliding Cam A Actuator F Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
35	C6 (16)	24	Sliding Cam A Actuator G Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
35	C7 (16)	24	Sliding Cam A Actuator H Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
35	CA (16)	24	Sliding Cam A Camshaft Actuator A Pin Position Sensor Performance	0 *to* 65535 counts	1 count / bit
35	CB (16)	24	Sliding Cam A Camshaft Actuator B Pin Position Sensor Performance	0 *to* 65535 counts	1 count / bit
35	CC (16)	24	Sliding Cam A Camshaft Actuator C Pin Position Sensor Performance	0 *to* 65535 counts	1 count / bit
35	CD (16)	24	Sliding Cam A Camshaft Actuator D Pin Position Sensor Performance	0 *to* 65535 counts	1 count / bit
35	CE (16)	24	Sliding Cam A Camshaft Actuator E Pin Position Sensor Performance	0 *to* 65535 counts	1 count / bit
35	CF (16)	24	Sliding Cam A Camshaft Actuator F Pin Position Sensor Performance	0 *to* 65535 counts	1 count / bit
35	D0 (16)	24	Sliding Cam A Camshaft Profile Control Sleeve Position Sensor A Performance	0 *to* 65535 counts	1 count / bit
35	D1 (16)	24	Sliding Cam A Camshaft Profile Control Sleeve Position Sensor B Performance	0 *to* 65535 counts	1 count / bit
35	D2 (16)	24	Sliding Cam A Camshaft Actuator A Pin Stuck	0 *to* 65535 counts	1 count / bit
35	D3 (16)	24	Sliding Cam A Camshaft Actuator B Pin Stuck	0 *to* 65535 counts	1 count / bit
35	D4 (16)	24	Sliding Cam A Camshaft Actuator C Pin Stuck	0 *to* 65535 counts	1 count / bit
35	D5 (16)	24	Sliding Cam A Camshaft Actuator D Pin Stuck	0 *to* 65535 counts	1 count / bit
35	D6 (16)	24	Sliding Cam A Camshaft Actuator E Pin Stuck	0 *to* 65535 counts	1 count / bit
35	D7 (16)	24	Sliding Cam A Camshaft Actuator F Pin Stuck	0 *to* 65535 counts	1 count / bit
35	D8 (16)	24	Sliding Cam A Camshaft Actuator G Pin Stuck	0 *to* 65535 counts	1 count / bit
35	D9 (16)	24	Sliding Cam A Camshaft Actuator H Pin Stuck	0 *to* 65535 counts	1 count / bit
35	DA (16)	24	Sliding Cam A Camshaft Profile Control Sleeve Position Sensor A Unintended Shift	0 *to* 65535 counts	1 count / bit
35	DB (16)	24	Sliding Cam A Camshaft Profile Control Sleeve Position Sensor B Unintended Shift	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
VVT Monitor Bank 2					
36	**9A** [9]	**9C**	Exhaust Camshaft Slow Response	-327.68° to +327.67°	0.01° / bit
36	**9B** [9]	**9C**	Exhaust Camshaft Target Error	-327.68° to +327.67°	0.01° / bit
36	**9D** [9]	**9C**	Intake Camshaft Slow Response	-327.68° to +327.67°	0.01° / bit
36	**9E** [9]	**9C**	Intake Camshaft Target Error	-327.68° to +327.67°	0.01° / bit
36	**B0**	**24**	PHSR Intake CAM Phaser Rationality Test	0 *to* 65535 counts	1 count / bit
36	**B0**	**24**	PHSR Intake CAM Phaser Rationality Test Bank 2 [16]	0 *to* 65535 counts	1 count / bit
36	**B1**	**24**	PHSR Exhaust CAM Phaser Rationality Test	0 *to* 65535 counts	1 count / bit
36	**B1**	**24**	PHSR Exhaust CAM Phaser Rationality Test Bank 2 [16]	0 *to* 65535 counts	1 count / bit
36	**C0** [16]	**24**	Sliding Cam B Actuator A Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
36	**C1** [16]	**24**	Sliding Cam B Actuator B Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
36	**C2** [16]	**24**	Sliding Cam B Actuator C Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
36	**C3** [16]	**24**	Sliding Cam B Actuator D Profile Actuator Control Performance	0 *to* 65535 counts	1 count / bit
36	**C4** [16]	**24**	Sliding Cam B Camshaft Profile Control Sleeve Position Sensor A Performance	0 *to* 65535 counts	1 count / bit
36	**C5** [16]	**24**	Sliding Cam B Camshaft Profile Control Sleeve Position Sensor B Performance	0 *to* 65535 counts	1 count / bit
36	**C6** [16]	**24**	Sliding Cam B Camshaft Actuator A Pin Stuck	0 *to* 65535 counts	1 count / bit
36	**C7** [16]	**24**	Sliding Cam B Camshaft Actuator B Pin Stuck	0 *to* 65535 counts	1 count / bit
36	**C8** [16]	**24**	Sliding Cam B Camshaft Actuator C Pin Stuck	0 *to* 65535 counts	1 count / bit
36	**C9** [16]	**24**	Sliding Cam B Camshaft Actuator D Pin Stuck	0 *to* 65535 counts	1 count / bit
36	**CA** [16]	**24**	Sliding Cam B Camshaft Profile Control Sleeve Position Sensor A Unintended Shift	0 *to* 65535 counts	1 count / bit
36	**CB** [16]	**24**	Sliding Cam B Camshaft Profile Control Sleeve Position Sensor B Unintended Shift	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	**80**	**81**	EVAP Tank Gross Leak	-32768 to +32767	1 / bit
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** [12]	**31**	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

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
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 to 6553.5 s	100 ms / 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% / bit
EVAP Monitor 0.020"			**EVPD** = Evap Pressure / Vacuum Decay **EWMA** = Exponentially Weighted Moving Average **EONV** = Engine Off Natural Vacuum **EREV** = Extended Range Electric Vehicle		
3C	80	05	EONV NV 0.020 Test - EWMA	0 to 1.999	0.0000305 / bit
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% / bit
3C	C8	20	EONV NV 0.020 Test for EONV	0 *to* 255.996	0.0039062 / bit
3C	C8	20	EONV NV 020_Test (For EONV Spec Version 22.1.1 and later) (16)	0 *to* 255.996	0.0039062 / bit
3C	C8	FD	EONV NV 0.020 Test for EONV	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3C	C8	FD	EONV NV 020 Test (For EONV Spec Version 22.0.0 and prior) (16)	–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 *to* 255.996	0.0039062 / bit
3C	C9	20	EONV Vacuum Rezero Test (For EONV Spec Version 30.0.0 and later) (16)	0 *to* 255.996	0.0039062 / bit
3C	CA	24	EONV Fuel Level Rationality Test for EONV	0 *to* 65535 counts	1 count / bit
3C	CA	24	EONV Fuel Level Rationality Test (For EONV Spec Version 30.0.0 and later) (16)	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	CB	24	EONV Vacuum Rationality Test (For EONV Spec Version 30.0.0 and later) (16)	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	E0	0A	EVAP Small Leak, Fast PASS Hi (16)	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
3C	E1	0A	EVPD_NV_020_EREV_Test2 (scaled in Volts)	0.0000 *to* 7.9900 Volts	0.122 mV / bit
3C	E1	0A	EVAP Small Leak, Fast PASS Lo (16)	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
3C	E2	FD	EVAP Small Leak, PASS/FAIL (16)	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3C	E3	FD	EREV LeakBetweenDCV_LDP Test1(scaled in kPa)	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3C	E3	FD	EVAP LeakBtwDCV LDP, PASS/FAIL (16)	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3C	E4	2E	EREV VentValveStuckOpen Test1	FALSE, TRUE	N/A
3C	E4	2E	EVAP VentVlvStkOpen, Fast PASS (16)	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
3C	E9 (16)	FD	ELCP Pump To Fuel Tank Restriction, PASS/FAIL	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3C	EA (17)	2E	ELCP Pump To Fuel Tank Restriction, Fast PASS	FALSE, TRUE	N/A
Purge Flow Monitor			**EVPD** = Evap Pressure / Vacuum Decay		
3D	88	81	Purge Valve Flow Test - Stuck Open / Leak	-32768 to +32767	1 / bit
3D	8C	81	Canister Vent Valve Test - Stuck Closed / Restricted	-32768 to +32767	1 / bit
3D	C4	11	EVPD NV Purge Pass Test	0 to 6553.5 s	100 ms / 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 (5)	11	EVPD Vent Rest Test 1	0 to 6553.5 s	100 ms / 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
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
3D	ED (16)	24	EVAP_PurgePumpSpdOff	0 *to* 65535 counts	1 count / bit
3D	EE (16)	24	EVAP_PurgePumpSpdOn	0 *to* 65535 counts	1 count / bit
3D	EF (16)	FD	EVAP_PurgePumpSysPerf	–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
3D	F0 (16)	FD	EVAP_PurgePumpMisAsm	–32.768 *to* +32.767 kPa	0.001 kPa / bit
3D	F1 (16)	20	EVAP_PurgePumpPresPerf	0 *to* 255.996	0.0039062 / bit
Oxygen Sensor Heater Monitor Bank 1 Sensor 1					
41	81 (9)	14	Sensor Element Impedance	0 to 65535 Ohms	1Ω / bit
41	85	16	Heater Temperature	-40 to 6513.5°C	0.1 °C / bit - 40°C
41	86 (16)	10	Particulate Matter Sensor Heater Performance	0 *to* 65535 ms	1 ms / bit
41	D0	11	Time to Activity Monitor	0 to 6553.5 s	100 ms / bit
41	D0	11	Time to Activity Monitor – Bank 1 Sensor 1 (16)	0 to 6553.5 s	100 ms / bit
41	D0 (16)	11	Time to Activity Monitor – Bank 1 Sensor 1 (Diesel Nox)	0 to 6553.5 s	100 ms / bit
41	D1	0F	Current Feedback Amps Value Test	0.00 *to* 655.35 A	0.01 A / bit
41	D1	0F	Current Feedback Amps Value Test – Bank 1 Sensor 1 (16)	0.00 *to* 655.35 A	0.01 A / bit
41	D2	24	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
41	D2	24	Current Feedback X/Y Samples Test – Bank 1 Sensor 1 (16)	0 *to* 65535 counts	1 count / bit
41	D3	84	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
41	D3	84	Heater Resistance Error Test – Bank 1 Sensor 1 (16)	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
41	D3	11	Sensor Heater Monitor B1S1 'operative readiness time'	0 to 6553.5 s	100 ms / bit
41	D4	96	Sensor Heater Monitor B1S1 'tip temperature out of range'	-3276.8 to +3276.7°C	0.1°C / bit
41	D4	24	UEGO Heater Temperature Test	0 *to* 65535 counts	1 count / bit
41	D4	24	UEGO Heater Temperature Test – Bank 1 Sensor 1 (16)	0 *to* 65535 counts	1 count / bit
41	D9 (16)	24	UEGO Heater Temperature Test – Bank 1 Sensor 1	0 *to* 65535 counts	1 count / bit
41	EA	24	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 1	0 *to* 65535 counts	1 count / bit
41	EC (16)	24	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 1	0 *to* 65535 counts	1 count / bit
41	FA (16)	11	Particular Matter Sensor Heater Successful Regeneration -Sensor 1	0 to 6553.5 s	100 ms / bit
Oxygen Sensor Heater Monitor Bank 1 Sensor 2					
42	81 (8)	14	Sensor Element Impedance	0 to 65535 Ohms	1Ω / bit
42	86 (16)	10	Particulate Matter Sensor Heater Performance	0 *to* 65535 ms	1 ms / bit
42	D0	11	Time to Activity Monitor	0 to 6553.5 s	100 ms / bit
42	D0	11	Time to Activity Monitor – Bank 1 Sensor 2 (16)	0 to 6553.5 s	100 ms / bit
42	D1	0F	Current Feedback Amps Value Test	0.00 *to* 655.35 A	0.01 A / bit
42	D1	0F	Current Feedback Amps Value Test – Bank 1 Sensor 2 (16)	0.00 *to* 655.35 A	0.01 A / bit
42	D2	24	Current Feedback X/Y Samples 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
42	D2	24	Current Feedback X/Y Samples Test – Bank 1 Sensor 2 (16)	0 *to* 65535 counts	1 count / bit
42	D3	84	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
42	D3	84	Heater Resistance Error Test – Bank 1 Sensor 2 (16)	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
42	D4 (16)	96	UEGO Heater Temperature Test	-3276.8 to +3276.7°C	0.1°C / bit
42	D5	14	Sensor Heater Monitor B1S2 ' resistance out of range'	0 to 65535 ohms	1Ω / bit
42	D9 (16)	24	UEGO Heater Temperature Test – Bank 1 Sensor 2	0 *to* 65535 counts	1 count / bit
42	EA	24	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 2	0 *to* 65535 counts	1 count / bit
42	EC (16)	24	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 2	0 *to* 65535 counts	1 count / bit
42	FA (16)	11	Particular Matter Sensor Heater Successful Regeneration -Sensor 2	0 to 6553.5 s	100 ms / bit
Oxygen Sensor Heater Monitor Bank 1 Sensor 3					
43	86	10	Particulate Matter Sensor Heater Performance	0 *to* 65535 ms	1 ms / bit
43	D0	11	Time to Activity Monitor	0 to 6553.5 s	100 ms / bit
43	D0	11	Time to Activity Monitor – Bank 1 Sensor 2 (Diesel Nox) (16)	0 to 6553.5 s	100 ms / bit
43	D0	11	Time to Activity Monitor – Bank 1 Sensor 3 (16)	0 to 6553.5 s	100 ms / bit
43	D1	0F	Current Feedback Amps Value Test	0.00 *to* 655.35 A	0.01 A / bit
43	D1	0F	Current Feedback Amps Value Test – Bank 1 Sensor 3 (16)	0.00 *to* 655.35 A	0.01 A / bit
43	D2	24	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
43	D2	24	Current Feedback X/Y Samples Test – Bank 1 Sensor 3 (16)	0 *to* 65535 counts	1 count / bit
43	D3	84	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
43	D3	84	Heater Resistance Error Test – Bank 1 Sensor 3 (16)	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
43	D9 (16)	24	UEGO Heater Temperature Test – Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
43	E0	11	Particular Matter Sensor Heater Successful Regeneration	0 to 6553.5 s	100 ms / bit
43	E0 (16)	2F	Particulate Matter Sensor Regeneration Success	0 to 655.35%	0.01% / bit
43	EA (16)	24	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
43	EC (16)	24	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 3	0 *to* 65535 counts	1 count / bit
43	FA (16)	11	Particular Matter Sensor Heater Successful Regeneration	0 to 6553.5 s	100 ms / 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 4					
44	**86** [16]	**10**	Particulate Matter Sensor Heater Performance	0 *to* 65535 ms	1 ms / bit
44	**D3** [16]	**13**	Heater Resistance Error Test	0.0 to 65535 mΩ	1 mΩ / bit
44	**D9** [16]	**24**	UEGO Heater Temperature Test – Bank 1 Sensor 4	0 *to* 65535 counts	1 count / bit
44	**EA** [16]	**24**	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 4	0 *to* 65535 counts	1 count / bit
44	**EC** [16]	**24**	NOx Sensor Heater Sense Circuit Range/Performance Bank 1 Sensor 4	0 *to* 65535 counts	1 count / bit
44	**FA** [16]	**11**	Particular Matter Sensor Heater Successful Regeneration -Sensor 4	0 to 6553.5 s	100 ms / bit
Oxygen Sensor Heater Monitor Bank 2 Sensor 1					
45	**81** [9]	**14**	Sensor Element Impedance	0 to 65535 Ohms	1Ω / bit
45	**D0**	**11**	Time to Activity Monitor	0 to 6553.5 s	100 ms / bit
45	**D0**	**11**	Time to Activity Monitor – Bank 2 Sensor 1 [16]	0 to 6553.5 s	100 ms / bit
45	**D1**	**0F**	Current Feedback Amps Value Test	0.00 *to* 655.35 A	0.01 A / bit
45	**D1**	**0F**	Current Feedback Amps Value Test – Bank 2 Sensor 1 [16]	0.00 *to* 655.35 A	0.01 A / bit
45	**D2**	**24**	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
45	**D2**	**24**	Current Feedback X/Y Samples Test – Bank 2 Sensor 1 [16]	0 *to* 65535 counts	1 count / bit
45	**D3**	**84**	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
45	**D3**	**84**	Heater Resistance Error Test – Bank 2 Sensor 1 [16]	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
45	**D3**	**11**	Sensor Heater Monitor B2S1 'operative readiness time'	0 to 6553.5 s	100 ms / bit
45	**D4**	**96**	Sensor Heater Monitor B2S1 'tip temperature out of range'	-3276.8 to +3276.7°C	0.1°C / bit
Oxygen Sensor Heater Monitor Bank 2 Sensor 2					
46	**81** [9]	**14**	Sensor Element Impedance	0 to 65535 Ohms	1Ω / bit
46	**D0**	**11**	Time to Activity Monitor	0 to 6553.5 s	100 ms / bit
46	**D0**	**11**	Time to Activity Monitor – Bank 2 Sensor 2 [16]	0 to 6553.5 s	100 ms / bit
46	**D1**	**0F**	Current Feedback Amps Value Test	0.00 *to* 655.35 A	0.01 A / bit
46	**D1**	**0F**	Current Feedback Amps Value Test – Bank 2 Sensor 2 [16]	0.00 *to* 655.35 A	0.01 A / bit
46	**D2**	**24**	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
46	**D2**	**24**	Current Feedback X/Y Samples Test – Bank 2 Sensor 2 [16]	0 *to* 65535 counts	1 count / bit
46	**D3**	**84**	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
46	**D3**	**84**	Heater Resistance Error Test – Bank 2 Sensor 2 [16]	–32.768 *to* +32.767 differential ohms	0.001Ω / 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
46	D5	14	Sensor Heater Monitor B2S2 ' resistance out of range'	0 to 65535 ohms	1Ω / bit
Oxygen Sensor Heater Monitor Bank 2 Sensor 3					
47	D0	11	Time to Activity Monitor	0 to 6553.5 s	100 ms / bit
47	D0	11	Time to Activity Monitor – Bank 2 Sensor 3 (16)	0 to 6553.5 s	100 ms / bit
47	D1	0F	Current Feedback Amps Value Test	0.00 *to* 655.35 A	0.01 A / bit
47	D1	0F	Current Feedback Amps Value Test– Bank 2 Sensor 3 (16)	0.00 *to* 655.35 A	0.01 A / bit
47	D2	24	Current Feedback X/Y Samples Test	0 *to* 65535 counts	1 count / bit
47	D2	24	Current Feedback X/Y Samples Test– Bank 2 Sensor 3 (16)	0 *to* 65535 counts	1 count / bit
47	D3	84	Heater Resistance Error Test	–32.768 *to* +32.767 differential ohms	0.001Ω / bit
47	D3	84	Heater Resistance Error Test – Bank 2 Sensor 3 (16)	–32.768 *to* +32.767 differential ohms	0.001Ω / 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
72	E6 (16)	05	AIR Pump On Pressure Variation Ratio Between Bank 1 and Bank 2	0 *to* 1.9999695	0.0000305 / bit
Fuel System Monitor Bank 1					
81	A1	3C (14)	Cylinder 1 Injection Timing Advanced	0 to 6553.5 µs	0.1 µs / bit
81	A1	8F (15)	Cylinder 1 Injection Timing Advanced	-32768 to 32767 µs	1 µs / bit
81	A2	3C (14)	Cylinder 2 Injection Timing Advanced	0 to 6553.5 µs	0.1 µs / bit
81	A2	8F (15)	Cylinder 2 Injection Timing Advanced	-32768 to 32767 µs	1 µs / 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	A3	3C (14)	Cylinder 3 Injection Timing Advanced	0 to 6553.5 µs	0.1 µs / bit
81	A3	8F (15)	Cylinder 3 Injection Timing Advanced	-32768 to 32767 µs	1 µs / bit
81	A4	3C (14)	Cylinder 4 Injection Timing Advanced	0 to 6553.5 µs	0.1 µs / bit
81	A4	8F (15)	Cylinder 4 Injection Timing Advanced	-32768 to 32767 µs	1 µs / bit
81	A5	3C (14)	Cylinder 5 Injection Timing Advanced	0 to 6553.5 µs	0.1 µs / bit
81	A5	8F (15)	Cylinder 5 Injection Timing Advanced	-32768 to 32767 µs	1 µs / bit
81	A6	3C (14)	Cylinder 6 Injection Timing Advanced	0 to 6553.5 µs	0.1 µs / bit
81	A6	8F (15)	Cylinder 6 Injection Timing Advanced	-32768 to 32767 µs	1 µs / bit
81	A7	3C (14)	Cylinder 7 Injection Timing Advanced	0 to 6553.5 µs	0.1 µs / bit
81	A7	8F (15)	Cylinder 7 Injection Timing Advanced	-32768 to 32767 µs	1 µs / bit
81	A8	3C (14)	Cylinder 8 Injection Timing Advanced	0 *to* 6553.5 µs	0.1 µs / bit
81	A8	8F (15)	Cylinder 8 Injection Timing Advanced	-32768 to 32767 µs	1 µs / bit
81	B1 (16)	84	Air Fuel Imbalance Monitor Variance Ratio EWMA-Normal Mode Bank 1	-32.768 to +32.767 unitless	0.001 / bit
81	B2 (16)	84	Air Fuel Imbalance Monitor Variance Ratio EWMA-Optional Mode Bank 1	-32.768 to +32.767 unitless	0.001 / bit
81	C0 (20)	24	Injection Timing Performance - Cylinder 1	0 to 65535 counts	1 count / bit
81	C1 (20)	24	Injection Timing Performance - Cylinder 2	0 to 65535 counts	1 count / bit
81	C2 (20)	24	Injection Timing Performance - Cylinder 3	0 to 65535 counts	1 count / bit
81	C3 (20)	24	Injection Timing Performance - Cylinder 4	0 to 65535 counts	1 count / bit
81	C4 (20)	24	Injection Timing Performance - Cylinder 5	0 to 65535 counts	1 count / bit
81	C5 (20)	24	Injection Timing Performance - Cylinder 6	0 to 65535 counts	1 count / bit
81	C6 (20)	24	Injection Timing Performance - Cylinder 7	0 to 65535 counts	1 count / bit
81	C7 (20)	24	Injection Timing Performance - Cylinder 8	0 to 65535 counts	1 count / bit
81	D1	3C (14)	Cylinder 1 Injection Timing Retarded	0 to 6553.5 µs	0.1 µs / bit
81	D1	8F (15)	Cylinder 1 Injection Timing Retarded	-32768 to 32767 µs	1 µs / bit
81	D2	3C (14)	Cylinder 2 Injection Timing Retarded	0 to 6553.5 µs	0.1 µs / bit
81	D2	8F (15)	Cylinder 2 Injection Timing Retarded	-32768 to 32767 µs	1 µs / bit
81	D3	3C (14)	Cylinder 3 Injection Timing Retarded	0 to 6553.5 µs	0.1 µs / bit
81	D3	8F (15)	Cylinder 3 Injection Timing Retarded	-32768 to 32767 µs	1 µs / bit
81	D4	3C (14)	Cylinder 4 Injection Timing Retarded	0 to 6553.5 µs	0.1 µs / bit
91	D4	8F (15)	Cylinder 4 Injection Timing Retarded	-32768 to 32767 µs	1 µs / bit
81	D5	3C (14)	Cylinder 5 Injection Timing Retarded	0 to 6553.5 µs	0.1 µs / bit
81	D5	8F (15)	Cylinder 5 Injection Timing Retarded	-32768 to 32767 µs	1 µs / bit
81	D6	3C (14)	Cylinder 6 Injection Timing Retarded	0 to 6553.5 µs	0.1 µs / bit
91	D6	8F (15)	Cylinder 6 Injection Timing Retarded	-32768 to 32767 µs	1 µs / bit
81	D7	3C (14)	Cylinder 7 Injection Timing Retarded	0 to 6553.5 µs	0.1 µs / bit
81	D7	8F (15)	Cylinder 7 Injection Timing Retarded	-32768 to 32767 µs	1 µs / bit
81	D8	3C (14)	Cylinder 8 Injection Timing Retarded	0 to 6553.5 µs	0.1 µs / bit
81	D8	8F (15)	Cylinder 8 Injection Timing Retarded	-32768 to 32767 µs	1 µs / 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	E0	24 (15)	A/F Ratio Deviation Max	0 *to* 65535 counts	1 count / bit
81	E0	83 (14)	A/F Ratio Deviation Max	-327.68 to +327.67	0.01 / bit hex to decimal
81	E1	24 (15)	A/F Ratio Deviation Min	0 *to* 65535 counts	1 count / bit
81	E1	83 (14)	A/F Ratio Deviation Min	-327.68 to +327.67	0.01 / bit hex to decimal
81	F0 (16)	FB	Fuel Rail Pressure Positive Deviation	-327680 to +327670 kPa	10 kPa / bit
81	F1 (16)	FB	Fuel Rail Pressure Negative Deviation	-327680 to +327670 kPa	10 kPa / bit
81	F2 (16)	24	Fuel Pressure Regulator 1 Exceeded Control Limits Pressure Too Low	0 *to* 65535 counts	1 count / bit
81	F3 (16)	24	Fuel Pressure Regulator 1 Exceeded Control Limits Pressure Too High	0 *to* 65535 counts	1 count / bit
81	F4 (16)	24	Fuel Pressure Regulator 2 Exceeded Control Limits Pressure Too Low	0 *to* 65535 counts	1 count / bit
81	F5 (16)	24	Fuel Pressure Regulator 2 Exceeded Control Limits Pressure Too High	0 *to* 65535 counts	1 count / bit
82	B1 (16)	84	Air Fuel Imbalance Monitor Variance Ratio EWMA-Normal Mode Bank 2	-32.768 to +32.767 unitless	0.001 / bit
82	B2 (16)	84	Air Fuel Imbalance Monitor Variance Ratio EWMA-Optional Mode Bank 2	-32.768 to +32.767 unitless	0.001 / bit
Boost Pressure Control Monitor Bank 1					
85	B0	30	Turbocharger Vane Position Slow Response - Increasing Position	0 *to* 100%	0.001526% / bit
85	B1	30	Turbocharger Vane Position Slow Response - Decreasing Position	0 *to* 100%	0.001526% / bit
85	B2	05 (15)	Charge Air Cooler Efficiency	0 to 1.999969 unitless	0.0000305 / bit
85	B2	06 (14)	Charge Air Cooler Efficiency	0 *to* 19.988 unitless	0.000305 / bit
85	B3 (16)	24	Monitoring for Underboost	0 *to* 65535 counts	1 count / bit
85	B3	FC	Monitoring for Underboost	-327.68 to +327.67 kPa	0.01 kPa / bit
85	B4 (16)	24	Monitoring for Overboost	0 *to* 65535 counts	1 count / bit
85	B4	FC	Monitoring for Overboost	-327.68 to +327.67 kPa	0.01 kPa / bit
85	B5	AF	Turbocharger Vane Position Performance - Low Position	-327.68 to +327.67%	0.01% / bit
85	B6	AF	Turbocharger Vane Position Performance - High Position	-327.68 to +327.67%	0.01% / bit
85	B7	17	Boost Pressure Slow Reponse – Increasing	0 *to* 655.35 kPa	0.01 kPa / bit
85	B8	17	Boost Pressure Slow Reponse – Decreasing	0 *to* 655.35 kPa	0.01 kPa / bit
85	B9 (16)	24	Monitoring for Excessive Boost	0 *to* 65535 counts	1 count / bit
90	80 (16)	39	Nox Trap Efficiency Below Threshold Bank 1	-327.68 to +327.67%	0.01% / 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
NOx Catalyst Monitor Bank 1					
98	90	84	SCR NOx Efficiency	-32.768 to +32.767 unitless	0.001 / bit
98	90	84	Nox/SCR Catalyst Monitor Bank1 (16)	-32.768 to +32.767 unitless	0.001 / bit
98	91	84	Diesel Emission Fluid Quality	-32.768 to +32.767 unitless	0.001 / bit
98	92	03	Closed loop Reductant Injection Control at Limit-Flow too low	0 *to* 655.35 unitless	0.01 / bit
98	93	03	Closed Loop Reductant Injection Control at Limit-Flow too High	0 *to* 655.35 unitless	0.01 / bit
98	94	17	Reductant Delivery Performance Monitoring	0 *to* 655.35 kPa	0.01 kPa / bit
98	94 (16)	2F	Reductant Delivery Performance Monitoring	0 *to* 655.35%	0.01% / bit
98	94 (16)	FC	Reductant Delivery Performance Monitoring	-327.68 to +327.67 kPa	0.01 kPa / bit
98	95 (17)	84	Nox/SCR Catalyst Monitor Bank 1 Catalyst 2	-32.768 to +32.767 unitless	0.001 / bit
98	96	24 (18)	Reductant Delivery Performance Maximum Authority Monitor	0 *to* 65535 counts	1 count / bit
98	97	84 (19)	SCR NOx Efficiency Monitoring	-32.768 to +32.767 unitless	0.001 / bit
98	97	84 (19)	Nox/SCR Catalyst Monitor Bank 1	-32.768 to +32.767 unitless	0.001 / 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
A2	0B	24 (13)	EWMA (Exponential Weighted Moving Average) misfire counts since the last restart after hybrid/electric autostop for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A2	0C	24 (13)	Misfire counts since the last restart after hybrid/electric autostart	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	0B	24 (13)	EWMA (Exponential Weighted Moving Average) misfire counts since the last restart after hybrid/electric autostop 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
A3	**0B**	**24** [16]	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0 [16]	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
A3	**0C**	**24** [13]	Misfire counts since the last restart after hybrid/electric autostart	0 *to* 65535 counts	1 count / bit
A3	**0C**	**24** [16]	Misfire counts for last/current driving cycles (calculated) [16]	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	**0B**	**24** [13]	EWMA (Exponential Weighted Moving Average) misfire counts since the last restart after hybrid/electric autostop for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A4	**0B**	**24** [16]	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0 [16]	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
A4	**0C**	**24** [13]	Misfire counts since the last restart after hybrid/electric autostart	0 *to* 65535 counts	1 count / bit
A4	**0C**	**24** [16]	Misfire counts for last/current driving cycles (calculated) [16]	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
A5	**0B**	**24** [13]	EWMA (Exponential Weighted Moving Average) misfire counts since the last restart after hybrid/electric autostop for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A5	**0B**	**24** [16]	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0 [16]	0 *to* 65535 counts	1 count / bit
A5	**0C**	**24** [7]	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
A5	**0C**	**24** [13]	Misfire counts since the last restart after hybrid/electric autostart	0 *to* 65535 counts	1 count / bit
A5	**0C**	**24** [16]	Misfire counts for last/current driving cycles (calculated) [16]	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

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 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	**0B**	**24** [13]	EWMA (Exponential Weighted Moving Average) misfire counts since the last restart after hybrid/electric autostop for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A6	**0B**	**24** [16]	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0 [16]	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	**0C**	**24** [13]	Misfire counts since the last restart after hybrid/electric autostart	0 *to* 65535 counts	1 count / bit
A6	**0C**	**24** [16]	Misfire counts for last/current driving cycles (calculated) [16]	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	**0B**	**24** [13]	EWMA (Exponential Weighted Moving Average) misfire counts since the last restart after hybrid/electric autostop for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A7	**0B**	**24** [16]	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0 [16]	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	**0C**	**24** [13]	Misfire counts since the last restart after hybrid/electric autostart	0 *to* 65535 counts	1 count / bit
A7	**0C**	**24** [16]	Misfire counts for last/current driving cycles (calculated) [16]	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
A8	**0B**	**24** [13]	EWMA (Exponential Weighted Moving Average) misfire counts since the last restart after hybrid/electric autostop 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	**0B**	**24** [16]	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0 [16]	0 *to* 65535 counts	1 count / bit
A8	**0C**	**24**	Misfire counts for the last / current driving cycles	0 *to* 65535 counts	1 count / bit
A8	**0C**	**24** [13]	Misfire counts since the last restart after hybrid/electric autostart	0 *to* 65535 counts	1 count / bit
A8	**0C**	**24** [16]	Misfire counts for last/current driving cycles (calculated) [16]	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	**0B**	**24** [13]	EWMA (Exponential Weighted Moving Average) misfire counts since the last restart after hybrid/electric autostop for the last 10 driving cycles	0 *to* 65535 counts	1 count / bit
A9	**0B**	**24** [16]	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0 [16]	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	**0C**	**24** [13]	Misfire counts since the last restart after hybrid/electric autostart	0 *to* 65535 counts	1 count / bit
A9	**0C**	**24** [16]	Misfire counts for last/current driving cycles (calculated) [16]	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
AA	**0B** [16]	**24**	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0	0 *to* 65535 counts	1 count / bit
AA	**0C** [16]	**24**	Misfire counts for last/current driving cycles (calculated)	0 *to* 65535 counts	1 count / bit
AB	**0B** [16]	**24**	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0	0 *to* 65535 counts	1 count / bit
AB	**0C** [16]	**24**	Misfire counts for last/current driving cycles (calculated)	0 *to* 65535 counts	1 count / bit
AC	**0B** [16]	**24**	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0	0 *to* 65535 counts	1 count / bit
AC	**0C** [16]	**24**	Misfire counts for last/current driving cycles (calculated)	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
AD	0B [16]	24	EWMA (Exponential Weighted Moving Average) misfire counts for last 10 driving cycles (calculated), Calculation: 0.1 * (current counts) + 0.9 * (previous average), Initial value for (previous average) = 0	0 *to* 65535 counts	1 count / bit
AD	0C [16]	24	Misfire counts for last/current driving cycles (calculated)	0 *to* 65535 counts	1 count / bit
Particulate Matter Filter Monitor Bank 1					
B2	E0	24	Post Injection Control Under Temperature Deviation Monitoring	0 *to* 65535 counts	1 count / bit
B2	E1	24	Post Injection Control Over Temperature Deviation Monitoring	0 *to* 65535 counts	1 count / bit
B2	E2	24	HCI Injection Control Under Temperature Deviation Monitoring	0 *to* 65535 counts	1 count / bit
B2	E3	24	HCI Injection Control Over Temperature Deviation Monitoring	0 *to* 65535 counts	1 count / bit
B2	E4	24	After Injection Control Under Temperature Deviation Monitoring	0 *to* 65535 counts	1 count / bit
B2	E5	24	After Injection Control Over Temperature Deviation Monitoring	0 *to* 65535 counts	1 count / bit
B2	F0 [16]	04	Diesel Particulate Filter Efficiency Bank 1	0 to 65.535 unitless	0.001 / bit
B2	F0	17	Diesel Particulate Filter Efficiency	0 *to* 655.35 kPa	0.01 kPa / bit
B2	F0	17	Diesel Particulate Filter Efficiency Bank 1 [16]	0 *to* 655.35 kPa	0.01 kPa / bit
B2	F1	20 [15]	Diesel Particulate Filter Regeneration Frequency Bank 1	0 *to* 255.993	0.00390625 / bit
B2	F1	36 [14]	Diesel Particulate Filter Regeneration Frequency Bank 1	0 *to* 655.35 g	0.01 g / bit
B2	F2	96	Closed Loop Exhaust Fuel Injector DPF Regeneration Control At Limit - Temperature Too Low	-3276.8 to +3276.7°C	0.1°C / bit
B2	F3	96	Closed Loop Exhaust Fuel Injector DPF Regeneration Control At Limit - Temperature Too High	-3276.8 to +3276.7°C	0.1°C / bit
B2	F4	96	Closed Loop DPF Regeneration Control At Limit - Stage 1 Temperature Too Low	-3276.8 to +3276.7°C	0.1°C / bit
B2	F5	96	Closed Loop DPF Regeneration Control At Limit - Stage 1 Temperature Too High	-3276.8 to +3276.7°C	0.1°C / bit
B2	F6 [16]	06	Diesel Particulate Filter Efficiency Monitoring	0 *to* 19.988175 counts	0.000305 count / bit
B2	F6	83	Diesel Particulate Filter Efficiency Monitoring	-327.68 to +327.67	0.01 / bit hex to decimal signed
B2	F7	24	Diesel Particulate Filter Total Not Functional Failure Monitoring	0 *to* 65535 counts	1 count / bit
B2	F8 [16]	17	Diesel Particulate Filter (DPF) High Differential Pressure	0 *to* 655.35 kPa	0.01 kPa / bit

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

Some items have footnotes, defined on the last pages.

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.

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.

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

Some items have footnotes, defined on the last pages.

FOOTNOTES

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.

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).

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

Some items have footnotes, defined on the last pages.

FOOTNOTES

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 2010 model vehicles:

Pontiac Solstice and Saturn Sky with 2.0L (VIN X) engine
Chevrolet HHR SS and Cobalt SS with 2.0L (VIN X) engine
Cadillac CTS and STS 3.6L (VIN X) engine
Saturn Outlook 3.6L (VIN X) engine
Buick Enclave and LaCrosse 3.6L (VIN X) engine
GMC Acadia 3.6L (VIN X) engine
Chevrolet Traverse and Camaro 3.6L (VIN X) engine
Pontiac G8 with 3.6L (VIN X) engine

For the following OBDMID and TID the test value could equal the test limit when the test has failed.

OBDMID $35	**TID $9D**
OBDMID $35	**TID $9A**
OBDMID $35	**TID $9E**
OBDMID $35	**TID $9B**
OBDMID $42	**TID $81**
OBDMID $21	**TID $84**
OBDMID $02	**TID $81**
OBDMID $02	**TID $82**

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

Some items have footnotes, defined on the last pages.

FOOTNOTES

9 For the following 2010 model vehicles:

Cadillac CTS and STS 3.6L (VIN X) engine
Saturn Outlook 3.6L (VIN X) engine
Buick Enclave and LaCrosse 3.6L (VIN X) engine
GMC Acadia 3.6L (VIN X) engine
Chevrolet Traverse and Camaro 3.6L (VIN X) engine
Pontiac G8 with 3.6L (VIN X) engine

For the following OBDMID and TID the test value could equal the test limit when the test has failed.

OBDMID $36	**TID $9D**
OBDMID $36	**TID $9A**
OBDMID $36	**TID $9E**
OBDMID $36	**TID $9B**
OBDMID $41	**TID $81**
OBDMID $45	**TID $81**
OBDMID $46	**TID $81**
OBDMID $22	**TID $84**
OBDMID $06	**TID $81**

10 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.

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

Some items have footnotes, defined on the last pages.

FOOTNOTES

11 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.

12 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.

13 For the following vehicles:

All hybrid/electric vehicles through 2013 model year

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

Some items have footnotes, defined on the last pages.

FOOTNOTES

14 For the following vehicles:

All 2016 and prior model year vehicles except 2016 Chevrolet Cololrado and GMC Canyon with 2.5L (VIN L / RPO-LKH) or 2.8L (VIN 1 / RPO-LWN) Diesel engine

15 For the following vehicles:

All 2016 model year Chevrolet Cololrado and GMC Canyon with 2.5L (VIN L / RPO-LKH) or 2.8L (VIN 1 / RPO-LWN) Diesel engine

16 For the following vehicles:

All 2017 model year and beyond

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

Some items have footnotes, defined on the last pages.

FOOTNOTES

17 For the following vehicles:

All 2018 model year and beyond

18 For the following vehicles:

All 2019 model year and beyond

19 For the following vehicles:

All 2020 model year and beyond

20 For the following vehicles:

All 2021 model year and beyond