Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

Some items have footnotes, defined on the last pages.

Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description (see footnotes on last page)	Decimal Range	Hex Range
Enhanced Evaporative Emission System Monitor #1 (.040" Leak)
02	04	1-Low	EVAP canister loading test	Test Not Run - Test Value Passed Test Not Run - Test Limit Passed	0000 - 0100 0000 - 0001
02	06	1-Low	EVAP excess vacuum pass test 2	−3276.8 -to- +3276.7 integral index-seconds	0000 - FFFF
02	10	1-Low	EVAP weak vacuum pass test 1 [1]	−3276.8 -to- +3276.7 in of H2O Vacuum	8000 - 7FFF
02	11	1-Low	EVAP purge leak pass test	0 -to- 6553.5 seconds	0000 - FFFF
02	12	0-High	EVAP small leak vacuum decay rate test [1]	−32.768 -to- +32.767 inches of H2O per sec	8000 - 7FFF
02	20	0-High	EVAP weak vacuum fail test 1 [1]	−3276.8 -to- +3276.7 integral index-seconds	8000 - 7FFF
02	21	0-High	EVAP purge leak vapor fail test	0 -to- 6553.5 seconds	0000 - FFFF
02	26	0-High	EVAP excess vacuum test 1 [1]	−3276.8 -to- +3276.7 in of H2O Vacuum	8000 - 7FFF
02	30	1-Low	EVAP weak vacuum test 2 vacuum	0 -to- 6553.5 seconds	0000 - FFFF
02	31	0-High	EVAP purge leak vacuum fail test	−3276.8 -to- +3276.7 in of H2O Vacuum	0000 - FFFF
02	36	0-High	EVAP excess vacuum fail test 2	0 -to- 6553.5 seconds	0000 - FFFF
02	40	1-Low	EVAP weak vacuum test 2 vapor	0 -to- 6553.5 seconds	0000 - FFFF
02	46	1-Low	EVAP excess vacuum pass test 2 [1]	−3276.8 -to- +3276.7 integral index-seconds	8000 - 7FFF
02	50	1-Low	EVAP weak vacuum pass test 1	−3276.8 -to- +3276.7 in of H2O Vacuum	0000 - FFFF
02	52	0-High	EVAP small leak vacuum decay rate test	−32.768 -to- +32.767 inches of H2O per sec	0000 - FFFF
02	60	0-High	EVAP weak vacuum fail test 1	−3276.8 -to- +3276.7 integral index-seconds	0000 - FFFF
02	62	0-High	EVAP NV .020" Error test	−12800 -to- +12799.6% slope error	0000 - FFFF
02	66	0-High	EVAP excess vacuum test 1	−3276.8 -to- +3276.7 in of H2O Vacuum	0000 - FFFF
02	71	0-High	EVAP purge leak vacuum fail test	−3276.8 -to- +3276.7 in of H2O Vacuum	0000 - FFFF
02	72	0-High	EVAP NV .040" Error Test	−12800 -to- +12799.6% slope error	0000 - FFFF
Secondary Air Injection Reaction System Monitor
03	01	0-High	AIR bank 1 test	0 -to- 65535 counts	0000 - FFFF
03	02	0-High	AIR bank 2 test	0 -to- 65535 counts	0000 - FFFF
03	03	0-High	AIR on pressure error test bank 1 Out of range high	−32.768 -to- +32.767 kPa	0000 - FFFF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

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Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range
Secondary Air Injection Reaction System Monitor					
03	03	1-Low	AIR on pressure error test bank 1 Out of range low	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	04	1-Low	AIR valve shut pressure error test bank 1	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	05	0-High	AIR pump off pressure error test bank 1 Out of range high	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	13	0-High	AIR on pressure error high test bank 2 Out of range high	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	13	1-Low	AIR on pressure error test bank 2 Out of range low	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	14	1-Low	AIR valve shut pressure error test bank 2	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	15	0-High	AIR pump off pressure error test bank 2 Out of range high	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	16	0-High	AIR on pressure differential high between bank 1 and bank 2 Out of range high	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	16	1-Low	AIR on pressure differential high between bank 1 and bank 2 Out of range low	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	83	1-Low	AIR on pressure error test bank 1 Out of range low	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	84	1-Low	AIR valve shut pressure error test bank 1 Out of range low	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	93	1-Low	AIR on pressure error test bank 2 Out of range low	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	94	1-Low	AIR valve shut pressure error test bank 2 Out of range low	−32.768 *-to-* +32.767 kPa	0000 - FFFF
03	96	1-Low	AIR on pressure differential low between bank 1 and bank 2 Out of range low	−32.768 *-to-* +32.767 kPa	0000 - FFFF
Catalyst Efficiency Steady State Monitor					
04	20	0-High	Steady state catalyst test bank 1 [1]	−555 *-to-* +554.9831 mV	8000 - 7FFF
04	30	0-High	Steady state catalyst test bank 2 [1]	−555 *-to-* +554.9831 mV	8000 - 7FFF
04	60	0-High	Steady state catalyst test bank 1	−555 *-to-* +554.9831 mV	0000 - FFFF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

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Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range
Catalyst Efficiency Steady State Monitor					
04	61	0-Low	Catalyst test bank 1 using catalyst DFCO Exit Test [5]	0 -to- 65535 counts	0000 - FFFF
04	70	0-High	Steady state catalyst test bank 2	−555 -to- +554.9831 mV	0000 - FFFF
04	71	0-Low	Catalyst test bank 2 using catalyst DFCO Exit Test [5]	0 -to- 65535 counts	0000 - FFFF
Oxygen Sensor Monitors and Constants					
05	01	0-High	Rich to lean sensor threshold voltage - B1S1	0 -to- 2048 mV	0000 - FFFF
05	02	0-High	Lean to rich sensor threshold voltage - B1S1	0 -to- 2048 mV	0000 - FFFF
05	03	0-High	Low sensor voltage for switch time calculation - B1S1	0 -to- 2048 mV	0000 - FFFF
05	04	0-High	High sensor voltage for switch time calculation - B1S1	0 -to- 2048 mV	0000 - FFFF
05	05	0-High	Rich to lean sensor switch time - B1S1 Out of range high	0 -to- 1024 ms	0000 - FFFF
05	05	1-Low	Rich to lean sensor switch time - B1S1 Out of range low	0 -to- 1024 ms	0000 - FFFF
05	06	0-High	Lean to rich sensor switch time - B1S1 Out of range high	0 -to- 1024 ms	0000 - FFFF
05	06	1-Low	Lean to rich sensor switch time - B1S1 Out of range low	0 -to- 1024 ms	0000 - FFFF
05	07	1-Low	Rich to lean switches - B1S1	0 -to- 65535 switches	0000 - FFFF
05	08	1-Low	Lean to rich switches - B1S1	0 -to- 65535 switches	0000 - FFFF
05	09	0-High	R/L response to L/R response ratio - B1S1 Out of range high	0:1 -to- 8:1 ratio	0000 - FFFF
05	09	1-Low	R/L response to L/R response ratio - B1S1 Out of range low	0:1 -to- 8:1 ratio	0000 - FFFF
05	0A	0-High	Post catalyst sensor open test - B1S2 [4]	0 -to- 65535 samples	0000 - FFFF
05	0B	1-Low	Post catalyst sensor rich tests - B1S2	0 -to- 2048 mV	0000 - FFFF
05	0C	0-High	Post catalyst sensor lean tests - B1S2	0 -to- 2048 mV	0000 - FFFF
05	0D	0-High	Difference between R/L response and L/R response - B1S1 Out of range high [2]	−32768 -to- +32767 ms	0000 - FFFF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

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Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range
Oxygen Sensor Monitors and Constants				
05	0D	1-Low	Difference between R/L response and L/R response - B1S1 (2) Out of range low	−32768 -to- +32767 ms	0000 - FFFF
05	13	0-High	Low sensor voltage for half period time calculation - B1S1	0 -to- 2048 mV	0000 - FFFF
05	14	0-High	High sensor voltage for half period time calculation - B1S1	0 -to- 2048 mV	0000 - FFFF
05	15	0-High	O2 sensor rich to lean half period time - B1S1	0 -to- 2048 ms	0000 - FFFF
05	16	0-High	O2 sensor lean to rich half period time - B1S1	0 -to- 2048 ms	0000 - FFFF
05	17	0-High	Sum of O2 sensor L/R and R/L half period times - B1S1	0 -to- 2048 ms	0000 - FFFF
05	1A	0-High	Post catalyst sensor open test - B1S3	0 -to- 65535 samples	0000 - FFFF
05	1B	1-Low	Post catalyst sensor rich tests - B1S3	0 -to- 2048 mV	0000 - FFFF
05	1C	0-High	Post catalyst sensor lean tests - B1S3	0 -to- 2048 mV	0000 - FFFF
05	41	0-High	Rich to lean sensor threshold voltage - B2S1	0 -to- 2048 mV	0000 - FFFF
05	42	0-High	Lean to rich sensor threshold voltage - B2S1	0 -to- 2048 mV	0000 - FFFF
05	43	0-High	Low sensor voltage for switch time calculation - B2S1 (3)	0 -to- 2048 mV	0000 - FFFF
05	44	0-High	High sensor voltage for switch time calculation - B2S1 (3)	0 -to- 2048 mV	0000 - FFFF
05	45	0-High	Rich to lean sensor switch time - B2S1 Out of range high	0 -to- 1024 ms	0000 - FFFF
05	45	1-Low	Rich to lean sensor switch time - B2S1 Out of range low	0 -to- 1024 ms	0000 - FFFF
05	46	0-High	Lean to rich sensor switch time - B2S1 Out of range high	0 -to- 1024 ms	0000 - FFFF
05	46	1-Low	Lean to rich sensor switch time - B2S1 Out of range low	0 -to- 1024 ms	0000 - FFFF
05	47	1-Low	Rich to lean switches - B2S1	0 -to- 65535 switches	0000 - FFFF
05	48	1-Low	Lean to rich switches - B2S1	0 -to- 65535 switches	0000 - FFFF
05	49	0-High	R/L response to L/R response ratio - B2S1 Out of range high	0:1 -to- 8:1 ratio	0000 - FFFF
05	49	1-Low	R/L response to L/R response ratio - B2S1 Out of range low	0:1 -to- 8:1 ratio	0000 - FFFF
05	4A	0-High	Post catalyst sensor open test - B2S2	0 -to- 65535 samples	0000 - FFFF
05	4B	1-Low	Post catalyst sensor rich tests - B2S2	0 -to- 2048 mV	0000 - FFFF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

Some items have footnotes, defined on the last pages.

Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range
Oxygen Sensor Monitors and Constants				
05	4C	0-High	Post catalyst sensor lean tests - B2S2	0 *-to-* 2048 mV	0000 - FFFF
05	4D	0-High	Difference between R/L response and L/R response - B2S1 Out of range high	−32768 *-to-* +32767 ms	0000 - FFFF
05	4D	1-Low	Difference between R/L response and L/R response - B2S1 Out of range low	−32768 *-to-* +32767 ms	0000 - FFFF
05	53	0-High	Low sensor voltage for half period time calculation - B2S1	0 *-to-* 2048 mV	0000 - FFFF
05	54	0-High	High sensor voltage for half period time calculation - B2S1	0 *-to-* 2048 mV	0000 - FFFF
05	55	0-High	O2 sensor rich to lean half period time - B2S1	0 *-to-* 2048 ms	0000 - FFFF
05	56	0-High	O2 sensor lean to rich half period time - B2S1	0 *-to-* 2048 ms	0000 - FFFF
05	57	0-High	Sum of O2 sensor L/R and R/L half period times - B2S1	0 *-to-* 2048 ms	0000 - FFFF
05	5A	0-High	Post Catalyst Sensor Open Test - B2S3	0 *-to-* 65535 samples	0000 - FFFF
05	85	1-Low	Rich to lean sensor switch time - B1S1	0 *-to-* 1024 ms	0000 - FFFF
05	86	1-Low	Lean to rich sensor switch time - B1S1	0 *-to-* 1024 ms	0000 - FFFF
05	87	1-Low	Rich to lean switches test results - B1S1	0 *-to-* 65535 switches	0000 - FFFF
05	88	1-Low	Lean to rich switches test results - B1S1	0 *-to-* 65535 switches	0000 - FFFF
05	89	1-Low	R/L response to L/R response ratio - B1S1	0:1 *-to-* 8:1 ratio	0000 - FFFF
05	8B	1-Low	Post catalyst sensor rich tests - B1S2	0 *-to-* 2048 mV	0000 - FFFF
05	8D	1-Low	Difference between R/L response and L/R response - B1S1 [2]	−32768 *-to-* +32767 ms	0000 - FFFF
05	9B	1-Low	Post catalyst sensor rich tests - B1S3	0 *-to-* 2048 mV	0000 - FFFF
05	C5	1-Low	Rich to lean sensor switch time - B2S1	0 *-to-* 1024 ms	0000 - FFFF
05	C6	1-Low	Lean to rich sensor switch time - B2S1	0 *-to-* 1024 ms	0000 - FFFF
05	C7	1-Low	Rich to lean switches test results - B2S1	0 *-to-* 65535 switches	0000 - FFFF
05	C8	1-Low	Lean to rich switches test results - B2S1	0 *-to-* 65535 switches	0000 - FFFF
05	C9	1-Low	R/L response to L/R response ratio - B2S1	0:1 *-to-* 8:1 ratio	0000 - FFFF
05	CB	1-Low	Post catalyst sensor rich tests - B2S2	0 *-to-* 2048 mV	0000 - FFFF
05	CD	1-Low	Difference between R/L response and L/R response - B2S1	−32768 *-to-* +32767 ms	0000 - FFFF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

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Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range
O2 Sensor Heater System Time to Activity Monitor					
06	35	0-High	Oxygen sensor heater time to activity monitor - B1S1	0 *-to-* 65535 seconds	0000 - FFFF
06	41	0-High	Oxygen sensor heater time to activity monitor - B1S2	0 *-to-* 65535 seconds	0000 - FFFF
06	47	0-High	Oxygen sensor heater time to activity monitor - B1S3	0 *-to-* 65535 seconds	0000 - FFFF
06	55	0-High	Oxygen sensor heater time to activity monitor - B2S1	0 *-to-* 65535 seconds	0000 - FFFF
06	61	0-High	Oxygen sensor heater time to activity monitor - B2S2	0 *-to-* 65535 seconds	0000 - FFFF
06	67	0-High	Oxygen sensor heater time to activity monitor - B2S3	0 *-to-* 65535 seconds	0000 - FFFF
Exhaust Gas Recirculation System Monitor					
07	01	1-Low	MAF measured EGR dynamic range	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	02	0-High	Lowest measured exhaust pressure during EGR intrusive test	0 *-to-* 32767.5 kPa	0000 - FFFF
07	03	0-High	MAF below expected value during no EGR intrusive idle test	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	04	0-High	MAF below expected value during no EGR off-idle test	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	05	0-High	MAF below expected value during full EGR intrusive idle test	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	06	0-High	No EGR intrusive idle test MAF Out of range high	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	07	0-High	No EGR off-idle test MAF Out of range high	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	08	0-High	Largest positive MAF error during EGR intrusive test	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	09	0-High	EVRV open stuck during no EGR intrusive idle test	0 *-to-* 32767.5 kPa	0000 - FFFF
07	0A	0-High	VSV closed stuck during no EGR intrusive idle test	0 *-to-* 32767.5 kPa	0000 - FFFF
07	0B	0-High	No EGR intrusive idle test MAF Out of range high	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	0B	1-Low	No EGR intrusive idle test MAF Out of range low	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	0C	0-High	No EGR off-idle test MAF Out of range high	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	0C	1-Low	No EGR off-idle test MAF Out of range low	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	0D	0-High	EGR decel test [1]	–45.000 *-to-* +44.99863 kPa	8000 - 7FFF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

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Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range
Exhaust Gas Recirculation System Monitor					
07	0D	1-Low	Full EGR intrusive idle test MAF Out of range low	0 *-to-* 255.996 gm/cyl	0000 - FFFF
07	4C	0-High	EGR cruise test	−45.000 *-to-* +44.99863 kPa	0000 - FFFF
07	4D	0-High	EGRF decel service test	−45.000 *-to-* +44.99863 kPa	0000 - FFFF
07	4F	0-High	EGRF quick test	−45.000 *-to-* +44.99863 kPa	0000 - FFFF
Enhanced Evaporative System Monitor #2 (.020" Leak) **EVPD** = *Evap Vacuum Pressure Decay tests* **EONV** = *Engine Off Natural Vacuum tests*					
0A	01	0-High	EVAP/EVPD canister vent restriction test 1 [6]	0 *-to-* 6553.5 seconds	0000 - FFFF
0A	03	0-High	EVPD weak vacuum test	0 *-to-* 6553.5 seconds	0000 - FFFF
0A	04	1-Low	EVPD weak vacuum follow-up test	0 *-to-* 6553.5 seconds	0000 - FFFF
0A	05	0-High	EVAP/EVPD .040" leak test	0 *-to-* 6.5535 inches	0000 - FFFF
0A	06	0-High	EVAP/EVPD .020" leak test	0 *-to-* 6.5535 inches	0000 - FFFF
0A	07	1-Low	EVPD purge pass test	0 *-to-* 6553.5 seconds	0000 - FFFF
0A	09	0-High	EONV NV .020" test for EONV spec version 22.0.0 and prior	0:1 *-to-* 4.0000:1 ratio	0000 - FFFF
0A	0A	0-High	EONV NV .020" test for EONV spec version 22.1.1 and later [9]	0:1 *-to-* 255.99609375:1 ratio	0000 - FFFF
0A	0B	0-High	EONV vacuum rezero test [8]	0:1 *-to-* 255.99609375:1 ratio	0000 - FFFF
0A	0C	0-High	EONV fuel level rationality test [7]	0 *-to-* 65535 counts	0000 - FFFF
0A	0D	0-High	EONV vacuum rationality test [7]	0 *-to-* 65535 counts	0000 - FFFF
0A	13	0-High	EVAP weak vacuum test	0 *-to-* 65.535 liters	0000 - FFFF
0A	42	0-High	EVPD canister vent restriction test 2 Out of range high	−3276.8 *-to-* +3276.7 in of H2O Vacuum	0000 - FFFF
0A	42	1-Low	EVPD canister vent restriction test 2 Out of range low	0 *-to-* 65.535 liters	0000 - FFFF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

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Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description (see footnotes on last page)	Decimal Range	Hex Range
Enhanced Evaporative System Monitor #2 (.020" Leak)					
0A	48	0-High	EVAP/EVPD purge vacuum fail test	−3276.8 -to- +3276.7 in of H2O Vacuum	0000 - FFFF
0A	84	1-Low	EVAP weak vacuum follow-up test	0 -to- 6553.5 seconds	0000 - FFFF
0A	87	1-Low	EVAP purge pass test	0 -to- 6553.5 seconds	0000 - FFFF
0A	C2	1-Low	EVAP vent rest test 2	0 -to- 65.535 liters	0000 - FFFF
Catalyst Efficiency Monitor					
0C	20	0-High	Idle catalyst efficiency test - bank 1 [1]	−32.768 -to- +32.767 seconds	8000 - 7FFF
0C	30	0-High	Idle catalyst efficiency test - bank 2 [1]	−32.768 -to- +32.767 seconds	8000 - 7FFF
0C	60	0-High	Catalyst Test Bank 1 (using OSC compensation units)	−32.768 -to- +32.767 seconds	0000 - FFFF
0C	61	1-Low	Catalyst Test Bank 1 (using OSC normalized ratio units)	0.000 -to- 1.999	0000 - FFFF
0C	70	0-High	Catalyst Test Bank 2 (using OSC compensation units)	−32.768 -to- +32.767 seconds	0000 - FFFF
0C	71	1-Low	Catalyst Test Bank 2 (using OSC normalized ratio units)	0.000 -to- 1.999	0000 - FFFF
0C	E1	1-Low	Catalyst Test Bank 1 (using OSC normalized ratio units)	0.000 -to- 1.999	0000 - FFFF
0C	F1	1-Low	Catalyst Test Bank 2 (using OSC normalized ratio units)	0.000 -to- 1.999	0000 - FFFF
O2 Sensor Heater System Current Feedback Monitor					
0E	11	0-High	Oxygen sensor heater current feedback x/y samples test - B1S1	0 -to- 65535 samples	0000 - FFFF
0E	12	0-High	Oxygen sensor heater current feedback x/y samples test - B1S2 [4]	0 -to- 65535 samples	0000 - FFFF
0E	13	0-High	Oxygen sensor heater current feedback x/y samples test - B1S3	0 -to- 65535 samples	0000 - FFFF
0E	21	0-High	Oxygen sensor heater current feedback x/y samples test - B2S1	0 -to- 65535 samples	0000 - FFFF
0E	22	0-High	Oxygen sensor heater current feedback x/y samples test - B2S2	0 -to- 65535 samples	0000 - FFFF
0E	23	0-High	Oxygen sensor heater current feedback x/y samples test - B2S3	0 -to- 65535 samples	0000 - FFFF
0E	35	0-High	Oxygen sensor heater current feedback high amperage value test - B1S1 Out of range high	0 -to- 5.000 Amperes	0000 - 00FF
0E	35	1-Low	Oxygen sensor heater amperage test - B1S1 Out of range low	0 -to- 5.000 Amperes	0000 - 00FF

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Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range
			O2 Sensor Heater System Current Feedback Monitor		
0E	41	0-High	Oxygen sensor heater current feedback high amperage value test - B1S2 Out of range high	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	41	1-Low	Oxygen sensor heater amperage test - B1S2 Out of range low	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	47	0-High	Oxygen sensor heater current feedback high amperage value test - B1S3 Out of range high	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	47	1-Low	Oxygen sensor heater amperage test - B1S3 Out of range low	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	55	0-High	Oxygen sensor heater current feedback high amperage value test - B2S1 Out of range high	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	55	1-Low	Oxygen sensor heater amperage test - B2S1 Out of range low	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	61	0-High	Oxygen sensor heater current feedback high amperage value test - B2S2 Out of range high	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	61	1-Low	Oxygen sensor heater amperage test - B2S2 Out of range low	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	67	0-High	Oxygen sensor heater current feedback high amperage value test - B2S3 Out of range high	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	67	1-Low	Oxygen sensor heater amperage test - B2S3 Out of range low	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	B5	1-Low	Current feedback low amps value test - B1S1	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	C1	1-Low	Current feedback low amps value test - B1S2	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	C7	1-Low	Current feedback low amps value test - B1S3	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	D5	1-Low	Current feedback low amps value test - B2S1	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	E1	1-Low	Current feedback low amps value test - B2S2	0 *-to-* 5.000 Amperes	0000 - 00FF
0E	E7	1-Low	Current feedback low amps value test - B2S3	0 *-to-* 5.000 Amperes	0000 - 00FF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

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Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description (see footnotes on last page)	Decimal Range	Hex Range
O2 Sensor Heater Monitor Resistance Error Test				
16	11	0-High	Heater Resistance Error Test - B1S1 Out of range high	−32.768 -to- +32.767 ohms	0000 - FFFF
16	11	1-Low	Heater Resistance Error Test - B1S1 Out of range low	−32.768 -to- +32.767 ohms	0000 - FFFF
16	12	0-High	Heater Resistance Error Test - B1S2 Out of range high	−32.768 -to- +32.767 ohms	0000 - FFFF
16	12	1-Low	Heater Resistance Error Test - B1S2 Out of range low	−32.768 -to- +32.767 ohms	0000 - FFFF
16	13	0-High	Heater Resistance Error Test - B1S3 Out of range high	−32.768 -to- +32.767 ohms	0000 - FFFF
16	13	1-Low	Heater Resistance Error Test - B1S3 Out of range low	−32.768 -to- +32.767 ohms	0000 - FFFF
16	21	0-High	Heater Resistance Error Test - B2S1 Out of range high	−32.768 -to- +32.767 ohms	0000 - FFFF
16	21	1-Low	Heater Resistance Error Test - B2S1 Out of range low	−32.768 -to- +32.767 ohms	0000 - FFFF
16	22	0-High	Heater Resistance Error Test - B2S2 Out of range high	−32.768 -to- +32.767 ohms	0000 - FFFF
16	22	1-Low	Heater Resistance Error Test - B2S2 Out of range low	−32.768 -to- +32.767 ohms	0000 - FFFF
16	23	0-High	Heater Resistance Error Test - B2S3 Out of range high	−32.768 -to- +32.767 ohms	0000 - FFFF
16	23	1-Low	Heater Resistance Error Test - B2S3 Out of range low	−32.768 -to- +32.767 ohms	0000 - FFFF
16	91	1-Low	Heater Resistance Error Test - B1S1	−32.768 -to- +32.767 ohms	0000 - FFFF
16	92	1-Low	Heater Resistance Error Test - B1S2	−32.768 -to- +32.767 ohms	0000 - FFFF
16	93	1-Low	Heater Resistance Error Test - B1S3	−32.768 -to- +32.767 ohms	0000 - FFFF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

Some items have footnotes, defined on the last pages.

Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description (see footnotes on last page)	Decimal Range	Hex Range
O2 Sensor Heater Monitor Resistance Error Test					
16	A1	1-Low	Heater Resistance Error Test - B2S1	−32.768 -to- +32.767 ohms	0000 - FFFF
16	A2	1-Low	Heater Resistance Error Test - B2S2	−32.768 -to- +32.767 ohms	0000 - FFFF
16	A3	1-Low	Heater Resistance Error Test - B2S3	−32.768 -to- +32.767 ohms	0000 - FFFF

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

Some items have footnotes, defined on the last pages.

Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range

FOOT NOTES

Footnote 1

The data corresponding to these CompIDs are scaled using signed 2's complement mathematics and will be phased out according to CARB mail-out 98-01.

Footnote 2

For the following 2004 model year vehicles:

Saturn LS with 2.2 liter (VIN F) engine
Pontiac Grand Am, Sunfire with 2.2 liter (VIN F) engine
Oldsmobile Alero with 2.2 liter (VIN F) engine
Chevrolet Cavalier, Classic with 2.2 liter (VIN F) engine

The data definition for TID $05 CID $0D -and- CID $8D test limits and value may be defined as:

Decimal Range: –32768 -to- +32767

Hex range: 8000 -to- 7FFF

Footnote 3

For the following 2004 and 2005 model year vehicles:

Vehicles equipped with: 4.6 liter (VIN Y) -or- 4.6 liter (VIN 9) engines

The TID $05 CID $43 and CID $44 test limits may be transposed

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

Some items have footnotes, defined on the last pages.

Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range

FOOT NOTES

Footnote 4

For the following 2004 and 2005 model year vehicles:

Trucks equipped with:
2.8 liter (VIN 8) -or- 3.5 liter (VIN 6) engines

The TID $0E CID $12 and TID $05 CID $0A test values are invalid

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Footnote 5

For the following 2004 through 2007 model year vehicles:

Parallel Hybrid Trucks equipped with 5.3 liter (VIN T) engine

The test tool will identify TID $04 CID $61 *-and-* CID $71 as High limit tests
The TID $04 CID $61 and CID $71 test limits are actually LOW limits
For TID $04 CID $61 and CID $71, test values above the test limit indicate a passing test
For TID $04 CID $61 and CID $71, test values below the test limit indicate a failing test

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Footnote 6

For the following 2007 model year vehicles:

Buick Rendezvous with 3.5L (VIN 8) engine
Buick LaCross with 3.8L (VIN 2) engine
Pontiac Grand Prix with 3.8L (VIN 2 -or- 4) engine

If the test limit for TID $0A CID $01 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 not set, the data is invalid.
If the test value is less than the test limit -and- P0446 is set, the data may be invalid.

Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range

FOOT NOTES

Footnote 7

For the following 2005 and 2006 model year vehicles:

Chevrolet Colorado, GMC Canyon, Hummer H3, with 2.8L (VIN 8) -or- 3.5L (VIN 6) engine
Chevrolet Trailblazer (all), GMC Envoy (all), Buick Rainier, with 4.2L (VIN S) engine
Saab 9.7, Isuzu Ascender, with 4.2L (VIN S) engine
Chevrolet Malibu with 2.2L (VIN F) engine
Chevrolet Cobalt SS, Saturn ION Redline with 2.0L (VIN P) engine

The test limit will read zero (0) counts for these vehicles equipped with the engines listed above.

When comparing to test values, the test limits for TID $0A CID $0C -and- $0D should be 1 count.

For TID $0A CID $0C -and- $0D, a test value of 0 or 1 count indicates a passing test.

For TID $0A CID $0C -and- $0D, a test value of more than 1 count indicates a failing test.

Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range

FOOT NOTES

Footnote 8	For the following 2005 and 2006 model year vehicles:

Chevrolet Colorado, GMC Canyon, Hummer H3, with 2.8L (VIN 8) -or- 3.5L (VIN 6) engine
Chevrolet Trailblazer (all), GMC Envoy (all), Buick Rainier,   with 4.2L (VIN S) engine
Saab 9.7,   Isuzu Ascender,   with 4.2L (VIN S) engine
Chevrolet Malibu with 2.2L (VIN F) engine
Chevrolet Cobalt SS, Saturn ION Redline with 2.0L (VIN P) engine

The test limit will read zero (0) counts for these vehicles equipped with the engines listed above.

When comparing to test values, the test limits for TID $0A CID $0B should be as follows:

If P0450 is <u>not</u> currently active:

The test value should be compared to 0.7299 (Hex value BA) when evaluating test results.

    For TID $0A CID $0B, a test value less than or equal to 0.7299 (Hex value BA) indicates a passing test.

    For TID $0A CID $0B, a test value more than 0.7299 (Hex value BA) indicates a failing test.

If P0450 <u>is</u> currently active:

The test value should be compared to 0.4000 (Hex value 66) when evaluating test results.

    For TID $0A CID $0B, a test value less than or equal to 0.4000 (Hex value 66) indicates a passing test.

    For TID $0A CID $0B, a test value more than 0.4000 (Hex value 66) indicates a failing test.

Mode $06 data definitions for GM vehicles using J1850/Class2 diagnostic data link

Some items have footnotes, defined on the last pages.

Test ID (Hex)	Comp ID (Hex)	Test Limit Type	Description *(see footnotes on last page)*	Decimal Range	Hex Range

FOOT NOTES

Footnote 9

For the following 2005 and 2006 model year vehicles:

Group **A**	Chevrolet Colorado, GMC Canyon, with 2.8L (VIN 8) -or- 3.5L (VIN 6) engine
Group **B**	Hummer H3 with 3.5L (VIN 6) engine
Group **C**	Chevrolet Trailblazer (all), GMC Envoy (all), Buick Rainier, with 4.2L (VIN S) engine
Group **C**	Saab 9.7, Isuzu Ascender, with 4.2L (VIN S) engine
Group **D**	Chevrolet Malibu with 2.2L (VIN F) engine
Group **E**	Chevrolet Cobalt SS, Saturn ION Redline with 2.0L (VIN P) engine

The test limit will read zero (0) counts for these vehicles equipped with the engines listed above.

When comparing to test values, the test limits for TID $0A CID $0A should be as follows:

If P0450 is <u>not</u> currently active:

The test value should be compared to *(see table below)* when evaluating test results.

	Group A	Group B	Group C	Group D	Group E
Actual test limit	0.6300	0.5499	0.6500	0.4000	0.5000
Hex value	A1	8C	A6	66	80

For each group, for TID $0A CID $0A, a test value less than or equal to *(table value above)* indicates a passing test.

For each group, for TID $0A CID $0A, a test value more than *(table value above)* indicates a failing test.

If P0450 is currently active:

The test value should be compared to *(see table below)* when evaluating test results.

	Group A	Group B	Group C	Group D	Group E
Actual test limit	0.4500	0.3499	0.3499	0.3499	0.3302
Hex value	73	59	59	59	54

For each group, for TID $0A CID $0A, a test value less than or equal to *(table value above)* indicates a passing test.

For each group, for TID $0A CID $0A, a test value more than *(table value above)* indicates a failing test.