### Diagnostic Report

Created by OBD Fusion - OCTech, LLC

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**Date:** 5/3/2024 9:28:06 AM

**VIN:** 1GKS2EEF0BR386032

**Year:** 2003

Make: GMC

Model: Envoy

Option: Denali

# **Monitor Status Report**

## FPCM-FuelPumpCtrl

Name	Continuous	Status
Misfire	Yes	ECU does not support this test
Fuel System	Yes	ECU does not support this test
Comprehensive Component	Yes	ECU has completed this test
Catalyst	No	ECU does not support this test

Name	Continuous	Status
Heated Catalyst	No	ECU does not support this test
Evap System	No	ECU does not support this test
Secondary Air System	No	ECU does not support this test
Gasoline Particulate Filter	No	ECU does not support this test
Oxygen Sensor	No	ECU does not support this test
Oxygen Sensor Heater	No	ECU does not support this test
EGR and/or VVT System	No	ECU does not support this test

# **ECM-EngineControl**

Name	Continuous	Status
Misfire	Yes	ECU has completed this test
Fuel System	Yes	ECU has completed this test
Comprehensive Component	Yes	ECU has completed this test
Catalyst	No	ECU has not yet completed this test
Heated Catalyst	No	ECU does not support this test
Evap System	No	ECU has completed this test
Secondary Air System	No	ECU does not support this test
Gasoline Particulate Filter	No	ECU does not support this test
Oxygen Sensor	No	ECU has not yet

Name	Continuous	Status
		completed this test
Oxygen Sensor Heater	No	ECU has completed this test
EGR and/or VVT System	No	ECU has completed this test

## **TCM-TransmisCtrl**

Name	Continuous	Status
Misfire	Yes	ECU does not support this test
Fuel System	Yes	ECU does not support this test
Comprehensive Component	Yes	ECU has completed this test
Catalyst	No	ECU does not support this test
Heated Catalyst	No	ECU does not support this test
Evap System	No	ECU does not support this test
Secondary Air System	No	ECU does not support this test
Gasoline Particulate Filter	No	ECU does not support this test
Oxygen Sensor	No	ECU does not support this test
Oxygen Sensor Heater	No	ECU does not support this test
EGR and/or VVT System	No	ECU does not support this test

#### MIL On

Number of Confirmed Codes: 5

Readiness Standard: CA - 2000 and newer (Gas)

This vehicle is not ready for emissions testing.

#### Reason

- ECM-EngineControl
  - o The MIL is On
  - o Confirmed trouble codes have been detected
  - o Number of incomplete tests exceeds the maximum number allowed

## **Trouble Code Report**

ECU	Code	Туре	Status	UDS Status	Description
ECM-Engin eControl	P0106	PowerTrain	Confirmed	N/A	Manifold Absolute Pressure/Ba rometric Pressure Circuit Range/Perf ormance
ECM-Engin eControl	P0171	PowerTrain	Confirmed	N/A	System Too Lean
ECM-Engin eControl	P0174	PowerTrain	Confirmed	N/A	System Too Lean
ECM-Engin eControl	P0301	PowerTrain	Confirmed	N/A	Cylinder 1 Misfire Detected
ECM-Engin eControl	P219A	PowerTrain	Confirmed	N/A	Manufactur er Defined
ECM-Engin eControl	P0171	PowerTrain	Pending	N/A	System Too Lean

ECU	Code	Туре	Status	UDS Status	Description
ECM-Engin eControl	P0174	PowerTrain	Pending	N/A	System Too Lean
ECM-Engin eControl	P0171	PowerTrain	Permanent	N/A	System Too Lean
ECM-Engin eControl	P0174	PowerTrain	Permanent	N/A	System Too Lean
ECM-Engin eControl	P219A	PowerTrain	Permanent	N/A	Manufactur er Defined
ECM-Engin eControl	P0420	PowerTrain	Permanent	N/A	Catalyst System Efficiency Below Threshold

## **Additional Information**

Description	Value	Units
Malfunction indicator lamp (MIL) status	On	
Freeze frame DTC	P0174	
Distance traveled while MIL is activated	579.12	miles
Number of warm-ups since DTCs cleared	22	
Distance traveled since DTCs cleared	579.12	miles

# **Mode \$01 - Powertrain Diagnostic Data**

PID	Description	Value	Units
SAE 0x03	Fuel system 1	0	

PID	Description	Value	Units
	status		
SAE 0x03	Fuel system 2 status	0	
SAE 0x04	Calculated load value	0	%
SAE 0x05	Engine coolant temperature	78.8	°F
SAE 0x06	Short term fuel % trim - Bank 1	0	%
SAE 0x07	Long term fuel % trim - Bank 1	24.22	%
SAE 0x08	Short term fuel % trim - Bank 2	0	%
SAE 0x09	Long term fuel % trim - Bank 2	24.22	%
SAE 0x0A	Fuel rail pressure (gauge)	48.3	psi
SAE 0x0B	Intake manifold absolute pressure	29.53	inHg
SAE 0x0C	Engine RPM	0	RPM
SAE 0x0D	Vehicle speed	0	MPH
SAE 0x0E	Ignition timing advance for #1 cylinder	10	deg
SAE 0x0F	Intake air temperature	93.2	°F
SAE 0x10	Mass air flow rate	0	lb/min
SAE 0x11	Absolute throttle position	30.98	%
SAE 0x13	Location of oxygen sensors	51	
SAE 0x14	O2 voltage (Bank 1, Sensor 1)	0.445	V
SAE 0x14	Short term fuel trim (Bank 1, Sensor 1)	0	%
SAE 0x15	O2 voltage (Bank 1, Sensor 2)	0.445	V
SAE 0x15	Short term fuel trim	99.219	%

PID	Description	Value	Units
	(Bank 1, Sensor 2)		
SAE 0x18	O2 voltage (Bank 2, Sensor 1)	0.445	V
SAE 0x18	Short term fuel trim (Bank 2, Sensor 1)	0	%
SAE 0x19	O2 voltage (Bank 2, Sensor 2)	0.45	V
SAE 0x19	Short term fuel trim (Bank 2, Sensor 2)	99.219	%
SAE 0x1C	OBD requirements to which vehicle or engine is certified	11	
SAE 0x1F	Time since engine start	0	sec
SAE 0x21	Distance traveled while MIL is activated	579.12	miles
SAE 0x2E	Commanded evaporative purge	0	%
SAE 0x2F	Fuel level input	17.65	%
SAE 0x30	Number of warm-ups since DTCs cleared	22	
SAE 0x31	Distance traveled since DTCs cleared	579.12	miles
SAE 0x32	Evap system vapor pressure	0.03	inH2O
SAE 0x33	Barometric pressure	29.53	inHg
SAE 0x3C	Catalyst temperature (Bank 1 Sensor 1)	32	°F
SAE 0x3D	Catalyst temperature (Bank 2 Sensor 1)	32	°F
SAE 0x42	Control module voltage	11.98	V
SAE 0x43	Absolute load	0	%

PID	Description	Value	Units
	value		
SAE 0x44	Fuel/Air commanded equivalence ratio	0.27	
SAE 0x45	Relative throttle position	17.25	%
SAE 0x46	Ambient air temperature	78.8	°F
SAE 0x47	Absolute throttle position B	30.98	%
SAE 0x49	Accelerator pedal position D	19.22	%
SAE 0x4A	Accelerator pedal position E	9.41	%
SAE 0x4C	Commanded throttle actuator control	18.82	%
SAE 0x52	Alcohol fuel percentage	16.08	%

# **Mode \$02 - Freeze Frame**

## **First Occurrence**

Description	Value	Units
Freeze frame DTC	P0174	
Fuel system 1 status	2	
Fuel system 2 status	2	
Calculated load value	23.53	%
Engine coolant temperature	185	°F

Description	Value	Lloito
Description		Units
Short term fuel % trim - Bank 1	29.69	%
Long term fuel % trim - Bank 1	29.69	%
Short term fuel % trim - Bank 2	17.19	%
Long term fuel % trim - Bank 2	29.69	%
Fuel rail pressure (gauge)	42.64	psi
Intake manifold absolute pressure	11.81	inHg
Engine RPM	597.25	RPM
Vehicle speed	0	MPH
Ignition timing advance for #1 cylinder	17	deg
Intake air temperature	95	°F
Mass air flow rate	0.87	lb/min
Absolute throttle position	22.35	%
Time since engine start	50	sec
Commanded evaporative purge	26.27	%
Fuel level input	13.33	%
Number of warm-ups since DTCs cleared	0	
Distance traveled since DTCs cleared	0	miles
Evap system vapor pressure	-0.58	inH2O
Barometric pressure	29.83	inHg
Catalyst temperature (Bank 1 Sensor 1)	696.2	°F
Catalyst temperature (Bank 2 Sensor 1)	696.2	°F
Control module voltage	13.82	V
Absolute load value	17.65	%
Fuel/Air commanded equivalence ratio	1	

Description	Value	Units
Relative throttle position	8.63	%
Ambient air temperature	89.6	°F
Absolute throttle position B	21.96	%
Accelerator pedal position D	19.22	%
Accelerator pedal position E	9.41	%
Commanded throttle actuator control	12.16	%
Alcohol fuel percentage	3.14	%

# **Mode \$05 - Oxygen Sensors**

Sensor	Available
Bank 1 - Sensor 1	Yes
Bank 1 - Sensor 2	Yes
Bank 1 - Sensor 3	No
Bank 1 - Sensor 4	No
Bank 2 - Sensor 1	Yes
Bank 2 - Sensor 2	Yes
Bank 2 - Sensor 3	No
Bank 2 - Sensor 4	No

# Mode \$06 - On-Board Monitoring

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$01 - Rich to lean sensor threshold voltage (constant)	0	0	0	V	Incomple te
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$02 - Lean to rich sensor threshold voltage (constant)	0	0	0	V	Incomple te
\$01 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 1	TID \$03 - Low sensor voltage for switch time calculatio n(constant )	0.3003	0.3003	0.3003	V	Incomple te
\$01 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 1	TID \$04 - High sensor voltage for switch time calculatio n(constant )	0.6007	0.6007	0.6007	V	Incomple te
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$05 - Rich to lean sensor switch time (calculate d)	0.009	0	0.12	sec	Incomple te
\$01 - Exhaust	TID \$06 - Lean to	0.009	0	0.12	sec	Incomple te

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
Gas Sensor Monitor Bank 1 – Sensor 1	rich sensor switch time (calculate d)					
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$80 - Manufactu rer Defined	1101	43	65535	switches	Incomple te
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$81 - Manufactu rer Defined	1100	43	65535	switches	Incomple te
\$02 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 2	TID \$8A - Manufactu rer Defined	1	0	590	counts	Incomple te
\$02 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 2	TID \$8B - Manufactu rer Defined	0	0	0	V	Incomple te
\$02 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 2	TID \$8C - Manufactu rer Defined	0	0	0	V	Incomple te
\$02 -	TID \$91 -	0	0	0	V	Incomple

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
Exhaust Gas Sensor Monitor Bank 1 – Sensor 2	Manufactu rer Defined					te
\$02 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 2	TID \$92 - Manufactu rer Defined	0	0	0	V	Incomple te
\$02 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 2	TID \$93 - Manufactu rer Defined	0	0	0		Incomple te
\$02 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 2	TID \$94 - Manufactu rer Defined	0	0	0		Incomple te
\$05 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 1	TID \$01 - Rich to lean sensor threshold voltage (constant)	0	0	0	V	Incomple te
\$05 - Exhaust Gas Sensor Monitor Bank 2 – Sensor 1	TID \$02 - Lean to rich sensor threshold voltage (constant)	0	0	0	V	Incomple te
\$05 -	TID \$03 -	0.3003	0.3003	0.3003	V	Incomple

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
Exhaust Gas Sensor Monitor Bank 2 – Sensor 1	Low sensor voltage for switch time calculatio n(constant)					te
\$05 - Exhaust Gas Sensor Monitor Bank 2 – Sensor 1	TID \$04 - High sensor voltage for switch time calculatio n(constant )	0.6007	0.6007	0.6007	V	Incomple te
\$05 - Exhaust Gas Sensor Monitor Bank 2 – Sensor 1	TID \$05 - Rich to lean sensor switch time (calculate d)	0.015	0	0.12	sec	Incomple te
\$05 - Exhaust Gas Sensor Monitor Bank 2 – Sensor 1	TID \$06 - Lean to rich sensor switch time (calculate d)	0.012	0	0.12	sec	Incomple te
\$05 - Exhaust Gas Sensor Monitor Bank 2 – Sensor 1	TID \$80 - Manufactu rer Defined	424	43	65535	switches	Incomple te
\$05 - Exhaust Gas	TID \$81 - Manufactu rer	425	43	65535	switches	Incomple te

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
Sensor Monitor Bank 2 – Sensor 1	Defined					
\$06 - Exhaust Gas Sensor Monitor Bank 2 – Sensor 2	TID \$8A - Manufactu rer Defined	2	0	590	counts	Incomple te
\$06 - Exhaust Gas Sensor Monitor Bank 2 – Sensor 2	TID \$8B - Manufactu rer Defined	0	0	0	V	Incomple te
\$06 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 2	TID \$8C - Manufactu rer Defined	0	0	0	V	Incomple te
\$06 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 2	TID \$91 - Manufactu rer Defined	0	0	0	V	Incomple te
\$06 - Exhaust Gas Sensor Monitor Bank 2 – Sensor 2	TID \$92 - Manufactu rer Defined	0	0	0	V	Incomple te
\$06 - Exhaust Gas	TID \$93 - Manufactu rer	0	0	0		Incomple te

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
Sensor Monitor Bank 2 – Sensor 2	Defined					
\$06 - Exhaust Gas Sensor Monitor Bank 2 – Sensor 2	TID \$94 - Manufactu rer Defined	0	0	0		Incomple te
\$21 - Catalyst Monitor Bank 1	TID \$A0 - Manufactu rer Defined	0	0	0		Incomple te
\$22 - Catalyst Monitor Bank 2	TID \$A0 - Manufactu rer Defined	0	0	0		Incomple te
\$35 - VVT Monitor Bank 1	TID \$B0 - Manufactu rer Defined	0	0	200	counts	Pass
\$3A - EVAP Monitor (0.090")	TID \$C0 - Manufactu rer Defined	3.256	0	14	I	Pass
\$3A - EVAP Monitor (0.090")	TID \$C1 - Manufactu rer Defined	0	0	0	sec	Pass
\$3C - EVAP Monitor (0.020")	TID \$C8 - Manufactu rer Defined	0.0781	0	0.6484		Pass
\$3C - EVAP Monitor (0.020")	TID \$C9 - Manufactu rer Defined	0.1445	0	0.7266		Pass
\$3C - EVAP	TID \$CA - Manufactu	0	0	1	counts	Pass

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
Monitor (0.020")	rer Defined					
\$3C - EVAP Monitor (0.020")	TID \$CB - Manufactu rer Defined	0	0	1	counts	Pass
\$3D - Purge Flow Monitor	TID \$C4 - Manufactu rer Defined	47.6	47.5	6553.5	sec	Pass
\$3D - Purge Flow Monitor	TID \$C5 - Manufactu rer Defined	56	-8000	2500	Pa	Pass
\$3D - Purge Flow Monitor	TID \$C6 - Manufactu rer Defined	2.6	0	60	sec	Pass
\$3D - Purge Flow Monitor	TID \$C7 - Manufactu rer Defined	10.003	10	40	1	Pass
\$41 - Exhaust Gas Sensor Heater Monitor Bank 1 - Sensor 1	TID \$D2 - Manufactu rer Defined	0	0	8	counts	Pass
\$41 - Exhaust Gas Sensor Heater Monitor Bank 1 - Sensor 1	TID \$D3 - Manufactu rer Defined	-1.441	-4.211	2.481		Pass
\$42 - Exhaust Gas Sensor	TID \$D2 - Manufactu rer Defined	0	0	8	counts	Pass

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
Heater Monitor Bank 1 – Sensor 2						
\$42 - Exhaust Gas Sensor Heater Monitor Bank 1 – Sensor 2	TID \$D3 - Manufactu rer Defined	-0.337	-4.199	2.481		Pass
\$45 - Exhaust Gas Sensor Heater Monitor Bank 2 - Sensor 1	TID \$D2 - Manufactu rer Defined	0	0	8	counts	Pass
\$45 - Exhaust Gas Sensor Heater Monitor Bank 2 – Sensor 1	TID \$D3 - Manufactu rer Defined	-1.386	-4.211	2.481		Pass
\$46 - Exhaust Gas Sensor Heater Monitor Bank 2 - Sensor 2	TID \$D2 - Manufactu rer Defined	0	0	8	counts	Pass
\$46 - Exhaust Gas Sensor Heater Monitor Bank 2 -	TID \$D3 - Manufactu rer Defined	-0.246	-4.199	2.481		Pass

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
Sensor 2						
\$A2 - Misfire Cylinder 1 Data	TID \$0B - EWMA (Exponent ial Weighted Moving Average) misfire counts for last ten (10) driving cycles	179	0	65535	counts	Pass
\$A2 - Misfire Cylinder 1 Data	TID \$0C - Misfire counts for last/curren t driving cycles (calculate d, rounded to an integer value)	142	0	65535	counts	Pass
\$A3 - Misfire Cylinder 2 Data	TID \$0B - EWMA (Exponent ial Weighted Moving Average) misfire counts for last ten (10) driving cycles	0	0	65535	counts	Pass
\$A3 - Misfire Cylinder 2 Data	TID \$0C - Misfire	3	0	65535	counts	Pass

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
	t driving cycles (calculate d, rounded to an integer value)					
\$A4 - Misfire Cylinder 3 Data	TID \$0B - EWMA (Exponent ial Weighted Moving Average) misfire counts for last ten (10) driving cycles	1	0	65535	counts	Pass
\$A4 - Misfire Cylinder 3 Data	TID \$0C - Misfire counts for last/curren t driving cycles (calculate d, rounded to an integer value)	0	0	65535	counts	Pass
\$A5 - Misfire Cylinder 4 Data	TID \$0B - EWMA (Exponent ial Weighted Moving Average) misfire counts for last ten (10)	0	0	65535	counts	Pass

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
	driving cycles					
\$A5 - Misfire Cylinder 4 Data	TID \$0C - Misfire counts for last/curren t driving cycles (calculate d, rounded to an integer value)	0	0	65535	counts	Pass
\$A6 - Misfire Cylinder 5 Data	TID \$0B - EWMA (Exponent ial Weighted Moving Average) misfire counts for last ten (10) driving cycles	0	0	65535	counts	Pass
\$A6 - Misfire Cylinder 5 Data	TID \$0C - Misfire counts for last/curren t driving cycles (calculate d, rounded to an integer value)	0	0	65535	counts	Pass
\$A7 - Misfire Cylinder 6 Data	TID \$0B - EWMA (Exponent ial	7	0	65535	counts	Pass

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
	Weighted Moving Average) misfire counts for last ten (10) driving cycles					
\$A7 - Misfire Cylinder 6 Data	TID \$0C - Misfire counts for last/curren t driving cycles (calculate d, rounded to an integer value)	3	0	65535	counts	Pass
\$A8 - Misfire Cylinder 7 Data	TID \$0B - EWMA (Exponent ial Weighted Moving Average) misfire counts for last ten (10) driving cycles	0	0	65535	counts	Pass
\$A8 - Misfire Cylinder 7 Data	TID \$0C - Misfire counts for last/curren t driving cycles (calculate d, rounded to an	0	0	65535	counts	Pass

Compone nt	Descriptio n	Value	Minimum	Maximum	Units	Result
	integer value)					
\$A9 - Misfire Cylinder 8 Data	TID \$0B - EWMA (Exponent ial Weighted Moving Average) misfire counts for last ten (10) driving cycles	0	0	65535	counts	Pass
\$A9 - Misfire Cylinder 8 Data	TID \$0C - Misfire counts for last/curren t driving cycles (calculate d, rounded to an integer value)	0	0	65535	counts	Pass

# **Mode \$09 - Vehicle Information**

## **General Information**

Description	Value	
Vehicle Identification Number	1GKS2EEF0BR386032	

Description	Value
Calibration ID	Not Available
Calibration Verification Number - TCM-TransmisCtrl	0000C99B
Calibration Verification Number - TCM-TransmisCtrl	0000DA96
Calibration Verification Number - TCM-TransmisCtrl	00002754
Calibration Verification Number - TCM-TransmisCtrl	0000CB99
Calibration Verification Number - FPCM-FuelPumpCtrl	0000B0E2
Calibration Verification Number - FPCM-FuelPumpCtrl	00003A4D
Calibration Verification Number - FPCM-FuelPumpCtrl	00006417
Calibration Verification Number - ECM-EngineControl	0000700E
Calibration Verification Number - ECM-EngineControl	00004D73
Calibration Verification Number - ECM-EngineControl	0000269F
Calibration Verification Number - ECM-EngineControl	000036F2
Calibration Verification Number - ECM-EngineControl	000008FA
Calibration Verification Number - ECM-EngineControl	000002AE
Calibration Verification Number - ECM-EngineControl	00007EC0
Calibration Verification Number - ECM-EngineControl	0000A2F2

## **In-Performance Tracking**

ECU	Counter	Description	Value
ECM-EngineContr	0x00	OBD Monitoring	36

ECU	Counter	Description	Value
ol		Conditions Encountered Counts	
ECM-EngineContr ol	0x01	Ignition Cycle Counter	119
ECM-EngineContr ol	0x03	Catalyst Monitor Conditions Encountered Counts Bank 1	1
ECM-EngineContr ol	0x05	Catalyst Monitor Conditions Encountered Counts Bank 2	1
ECM-EngineContr ol	0x06	O2 Sensor Monitor Completion Counts Bank 1	26
ECM-EngineContr ol	0x07	O2 Sensor Monitor Conditions Encountered Counts Bank 1	36
ECM-EngineContr ol	0x08	O2 Sensor Monitor Completion Counts Bank 2	26
ECM-EngineContr ol	0x09	O2 Sensor Monitor Conditions Encountered Counts Bank 2	36
ECM-EngineContr ol	0x0A	EGR and/or VVT Monitor Completion Condition Counts	20
ECM-EngineContr ol	0x0B	EGR and/or VVT Monitor Conditions Encountered Counts	36
ECM-EngineContr ol	0x0E	EVAP Monitor Completion Condition Counts	1
ECM-EngineContr ol	0x0F	EVAP Monitor Conditions Encountered	4

ECU	Counter	Description	Value
		Counts	
ECM-EngineContr ol	0x11	Secondary O2 Sensor Monitor Conditions Encountered Counts Bank 1	1
ECM-EngineContr ol	0x13	Secondary O2 Sensor Monitor Conditions Encountered Counts Bank 2	1