Diagnostic Report

Created by OBDLink - OBD Solutions

www.obdsoftware.net

Date: 5/17/2024 4:10:18 PM

VIN:

Manufacturer: Chevrolet

Model: Corvette Year: 2008

Monitor Status Report

ECU 7E0

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 completed this test
Heated Catalyst	No	ECU does not support this test
Evap System	No	ECU has not yet 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 completed this test
Oxygen Sensor Heater	No	ECU has completed this test
EGR and/or VVT System	No	ECU does not support this test

MIL On

Number of Confirmed Codes: 3

Readiness Standard: CT - 2001 and newer

This vehicle is not ready for emissions testing.

Reason

- ECU 7E0
 - The MIL is On
 - Confirmed trouble codes have been detected

Trouble Code Report

ECU	Code	Туре	Status	UDS Status	Description
ECU 7E0	P0304	PowerTrain	Confirmed	N/A	Cylinder 4 Misfire Detected
ECU 7E0	P0420	PowerTrain	Confirmed	N/A	Catalyst System Efficiency Below Threshold
ECU 7E0	P0430	PowerTrain	Confirmed	N/A	Catalyst System Efficiency Below Threshold
ECU 7E0	P0420	PowerTrain	Pending	N/A	Catalyst System Efficiency Below Threshold
ECU 7E0	P0430	PowerTrain	Pending	N/A	Catalyst System Efficiency Below Threshold
Electronic Brake Control	C0561- 71	Chassis	Historical	N/A	Manufacturer Defined
Engine Control	P0300	PowerTrain	Pending	N/A	Random/Multiple Cylinder Misfire Detected
Engine Control	P0420	PowerTrain	Confirmed	N/A	Catalyst System Efficiency Below Threshold
Engine Control	P0430	PowerTrain	Confirmed	N/A	Catalyst System Efficiency Below Threshold
Exhaust Flow Control	P166A	PowerTrain	Historical	N/A	Manufacturer Defined
Digital Radio Receiver	U1000	Network	Confirmed	N/A	Manufacturer Defined
Digital Radio Receiver	U1301	Network	Historical	N/A	Manufacturer Defined
Vehicle Communication Interface	B2470	Body	Historical	N/A	Cellular Phone Antenna Circuit (2000+)
Vehicle Communication Interface	B2476	Body	Historical	N/A	Cellular Phone Select Service Switch Malfunction (keypad signal circuit)
Driver Door Module	B1420	Body	Historical	N/A	Seat Switch Input Status
Driver Door Module	U1301	Network	Historical	N/A	Manufacturer Defined
Passenger Door/Tire Pressure	B1420	Body	Historical	N/A	Seat Switch Input Status
Passenger Door/Tire Pressure	U1301	Network	Historical	N/A	Manufacturer Defined

Additional Information

Description	Value	Units
Malfunction indicator lamp (MIL) status	On	
Freeze frame DTC	P0304	
Distance traveled while MIL is activated	191.38	miles
Number of warm-ups since DTCs cleared	11	
Distance traveled since DTCs cleared	192.63	miles

Mode \$01 - Powertrain Diagnostic Data

PID	Description	Value	Units
SAE 0x03	Fuel system 1 status	0	
SAE 0x03	Fuel system 2 status	0	
SAE 0x04	Calculated load value	0	%
SAE 0x05	Engine coolant temperature	152.6	°F
SAE 0x06	Short term fuel % trim - Bank 1	0	%
SAE 0x07	Long term fuel % trim - Bank 1	0.78	%
SAE 0x08	Short term fuel % trim - Bank 2	0	%
SAE 0x09	Long term fuel % trim - Bank 2	-5.47	%
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		deg
SAE 0x0F	Intake air temperature	158	°F
SAE 0x10	Mass air flow rate	0	lb/min
SAE 0x11	Absolute throttle position	26.27	%
SAE 0x13	Location of oxygen sensors	51	
SAE 0x14	O2 voltage (Bank 1, Sensor 1)	0.45	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 (Bank 1, Sensor 2)	99.219	%
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)		%
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	191.38	miles

SAE 0x2E	Commanded evaporative purge	0	%
SAE 0x2F	Fuel level input	92.94	%
SAE 0x30	Number of warm-ups since DTCs cleared	11	
SAE 0x31	Distance traveled since DTCs cleared	192.63	miles
SAE 0x32	Evap system vapor pressure	-0.28	inH2O
SAE 0x33	Barometric pressure	29.83	inHg
SAE 0x3C	Catalyst temperature (Bank 1 Sensor 1)	32	°F
SAE 0x3D	Catalyst temperature (Bank 2 Sensor 1)		°F
SAE 0x42	Control module voltage		V
SAE 0x43	Absolute load value		%
SAE 0x44	Fuel/Air commanded equivalence ratio		
SAE 0x45	Relative throttle position	14.51	%
SAE 0x46	Ambient air temperature	71.6	°F
SAE 0x47	Absolute throttle position B	25.88	%
SAE 0x49	Accelerator pedal position D		%
SAE 0x4A	Accelerator pedal position E		%
SAE 0x4C	Commanded throttle actuator control		%
Aux 0x00	Input voltage read by the scan tool	11.6	V

Mode \$02 - Freeze Frame

First Occurrence

Description	Value	Units
Freeze frame DTC	P0304	
Fuel system 1 status	2	
Fuel system 2 status	2	
Calculated load value	31.37	%
Engine coolant temperature	141.8	°F
Short term fuel % trim - Bank 1	-3.12	%
Long term fuel % trim - Bank 1	8.59	%
Short term fuel % trim - Bank 2	-0.78	%
Long term fuel % trim - Bank 2	2.34	%
Intake manifold absolute pressure	12.99	inHg
Engine RPM	657.75	RPM
Vehicle speed	5.59	MPH
Ignition timing advance for #1 cylinder	13.5	deg

Intake air temperature	84.2	°F
Mass air flow rate	1.26	lb/min
Absolute throttle position	17.25	%
Time since engine start	118	sec
Commanded evaporative purge	11.76	%
Fuel level input	65.1	%
Number of warm-ups since DTCs cleared	0	
Distance traveled since DTCs cleared	0	miles
Evap system vapor pressure	0.6	inH2O
Barometric pressure	29.23	inHg
Catalyst temperature (Bank 1 Sensor 1)	1085	°F
Catalyst temperature (Bank 2 Sensor 1)	1085	°F
Control module voltage	13.92	V
Absolute load value	21.18	%
Fuel/Air commanded equivalence ratio	1	
Relative throttle position	5.88	%
Ambient air temperature	32	°F
Absolute throttle position B	17.25	%
Accelerator pedal position D	20.78	%
Accelerator pedal position E	10.2	%
Commanded throttle actuator control	7.84	%
<u> </u>	•	

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

Component	Description	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	Pass
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$02 - Lean to rich sensor threshold voltage (constant)	0	0	0	V	Pass
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$03 - Low sensor voltage for switch time calculation(constant)	0.2502	0.2502	0.2502	V	Pass
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$04 - High sensor voltage for switch time calculation(constant)	0.6007	0.6007	0.6007	V	Pass
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$05 - Rich to lean sensor switch time (calculated)	0.016	0	0.222	sec	Pass
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$06 - Lean to rich sensor switch time (calculated)	0.014	0	0.263	sec	Pass
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$80 - Manufacturer Defined	341	45	65535	switches	Pass
\$01 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 1	TID \$81 - Manufacturer Defined	343	45	65535	switches	Pass
\$02 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 2	TID \$8A - Manufacturer Defined	74	0	1450	counts	Pass
\$02 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 2	TID \$8B - Manufacturer Defined	0.7161	0.7137	1.0756	V	Pass
\$02 - Exhaust Gas Sensor Monitor Bank 1 - Sensor 2	TID \$8C - Manufacturer Defined	0.0958	0	0.1956	V	Pass
\$05 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 1	TID \$01 - Rich to lean sensor threshold voltage (constant)	0	0	0	V	Pass

\$05 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 1	TID \$02 - Lean to rich sensor threshold voltage (constant)	0	0	0	V	Pass
\$05 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 1	TID \$03 - Low sensor voltage for switch time calculation(constant)	0.2502	0.2502	0.2502	V	Pass
\$05 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 1	TID \$04 - High sensor voltage for switch time calculation(constant)	0.6007	0.6007	0.6007	V	Pass
\$05 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 1	TID \$05 - Rich to lean sensor switch time (calculated)	0.019	0	0.222	sec	Pass
\$05 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 1	TID \$06 - Lean to rich sensor switch time (calculated)	0.014	0	0.263	sec	Pass
\$05 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 1	TID \$80 - Manufacturer Defined	341	45	65535	switches	Pass
\$05 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 1	TID \$81 - Manufacturer Defined	345	45	65535	switches	Pass
\$06 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 2	TID \$8A - Manufacturer Defined	93	0	1450	counts	Pass
\$06 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 2	TID \$8B - Manufacturer Defined	0.7236	0.7137	1.0756	V	Pass
\$06 - Exhaust Gas Sensor Monitor Bank 2 - Sensor 2	TID \$8C - Manufacturer Defined	0.0461	0	0.1956	V	Pass
\$21 - Catalyst Monitor Bank 1	TID \$A0 - Manufacturer Defined	0.1512	0.4997	0.9994		Fail
\$22 - Catalyst Monitor Bank 2	TID \$A0 - Manufacturer Defined	0.1494	0.4997	0.9994		Fail
\$3A - EVAP Monitor (0.090")	TID \$C0 - Manufacturer Defined	2.723	0	11	1	Incomplete

\$3A - EVAP Monitor (0.090")	TID \$C1 - Manufacturer Defined	0	0	0	sec	Incomplete
\$3C - EVAP Monitor (0.020")	TID \$C8 - Manufacturer Defined	0	0	0		Incomplete
\$3C - EVAP Monitor (0.020")	TID \$C9 - Manufacturer Defined	0	0	0		Incomplete
\$3C - EVAP Monitor (0.020")	TID \$CA - Manufacturer Defined	0	0	1	counts	Incomplete
\$3C - EVAP Monitor (0.020")	TID \$CB - Manufacturer Defined	0	0	1	counts	Incomplete
\$3D - Purge Flow Monitor	TID \$C4 - Manufacturer Defined	60	60	6553.5	sec	Pass
\$3D - Purge Flow Monitor	TID \$C5 - Manufacturer Defined	-21.25	-8000	2500	Pa	Pass
\$3D - Purge Flow Monitor	TID \$C6 - Manufacturer Defined	1.4	0	60	sec	Pass
\$3D - Purge Flow Monitor	TID \$C7 - Manufacturer Defined	6.004	6	40	1	Pass
\$41 - Exhaust Gas Sensor Heater Monitor Bank 1 - Sensor 1	TID \$D2 - Manufacturer Defined	0	0	8	counts	Pass
\$41 - Exhaust Gas Sensor Heater Monitor Bank 1 - Sensor 1	TID \$D3 - Manufacturer Defined	-0.775	-4.211	2.481		Pass
\$42 - Exhaust Gas Sensor Heater Monitor Bank 1 - Sensor 2	TID \$D2 - Manufacturer Defined	0	0	8	counts	Pass
\$42 - Exhaust Gas Sensor Heater Monitor Bank 1 - Sensor 2	TID \$D3 - Manufacturer Defined	-0.285	-4.199	2.481		Pass
\$45 - Exhaust Gas Sensor Heater Monitor Bank 2 - Sensor 1	TID \$D2 - Manufacturer Defined	0	0	8	counts	Pass

\$45 - Exhaust Gas Sensor Heater Monitor Bank 2 - Sensor 1	TID \$D3 - Manufacturer Defined	-0.46	-4.211	2.481		Pass
\$46 - Exhaust Gas Sensor Heater Monitor Bank 2 - Sensor 2	TID \$D2 - Manufacturer Defined	0	0	8	counts	Pass
\$46 - Exhaust Gas Sensor Heater Monitor Bank 2 - Sensor 2	TID \$D3 - Manufacturer Defined	-0.199	-4.199	2.481		Pass
\$A2 - Misfire Cylinder 1 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	5	0	0	counts	Fail
\$A2 - Misfire Cylinder 1 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	0	0	0	counts	Pass
\$A3 - Misfire Cylinder 2 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	0	0	0	counts	Pass
\$A3 - Misfire Cylinder 2 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	0	0	0	counts	Pass
\$A4 - Misfire Cylinder 3 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	2	0	0	counts	Fail
\$A4 - Misfire Cylinder 3 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	0	0	0	counts	Pass
\$A5 - Misfire Cylinder 4 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	119	0	0	counts	Fail

\$A5 - Misfire Cylinder 4 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	0	0	0	counts	Pass	
\$A6 - Misfire Cylinder 5 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	1	0	0	counts	counts Fail	
\$A6 - Misfire Cylinder 5 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	0	0	0	counts	Pass	
\$A7 - Misfire Cylinder 6 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	2	0	0	counts	Fail	
\$A7 - Misfire Cylinder 6 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	0	0	0	counts	Pass	
\$A8 - Misfire Cylinder 7 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	0	0	0	counts	Pass	
\$A8 - Misfire Cylinder 7 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	0	0	0	counts	Pass	
\$A9 - Misfire Cylinder 8 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	5	0	0	counts	Fail	
\$A9 - Misfire Cylinder 8 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	0	0	0	counts	Pass	

General Information

Description	Value
Vehicle Identification Number	
Calibration ID - ECU 7E0	12612281
Calibration ID - ECU 7E0	12614360
Calibration ID - ECU 7E0	12624796
Calibration ID - ECU 7E0	12614362
Calibration ID - ECU 7E0	12634083
Calibration ID - ECU 7E0	12620561
Calibration ID - ECU 7E0	12612282
Calibration ID - ECU 7E0	12614378
Calibration Verification Number - ECU 7E0	0000F11E
Calibration Verification Number - ECU 7E0	000011C6
Calibration Verification Number - ECU 7E0	000021C5
Calibration Verification Number - ECU 7E0	0000D91E
Calibration Verification Number - ECU 7E0	00005E70
Calibration Verification Number - ECU 7E0	00009998
Calibration Verification Number - ECU 7E0	0000F6CF
Calibration Verification Number - ECU 7E0	00005FD0

In-Performance Tracking

ECU	Counter	Description	Value
ECU 7E0	0x00	OBD Monitoring Conditions Encountered Counts	15
ECU 7E0	0x01	Ignition Cycle Counter	24
ECU 7E0	0x02	Catalyst Monitor Completion Counts Bank 1	10
ECU 7E0	0x03	Catalyst Monitor Conditions Encountered Counts Bank 1	15
ECU 7E0	0x04	Catalyst Monitor Completion Counts Bank 2	10
ECU 7E0	0x05	Catalyst Monitor Conditions Encountered Counts Bank 2	15
ECU 7E0	0x06	O2 Sensor Monitor Completion Counts Bank 1	13
ECU 7E0	0x07	O2 Sensor Monitor Conditions Encountered Counts Bank 1	15
ECU 7E0	0x08	O2 Sensor Monitor Completion Counts Bank 2	13
ECU 7E0	0x09	O2 Sensor Monitor Conditions Encountered Counts Bank 2	15
ECU 7E0	0x0F	EVAP Monitor Conditions Encountered Counts	9