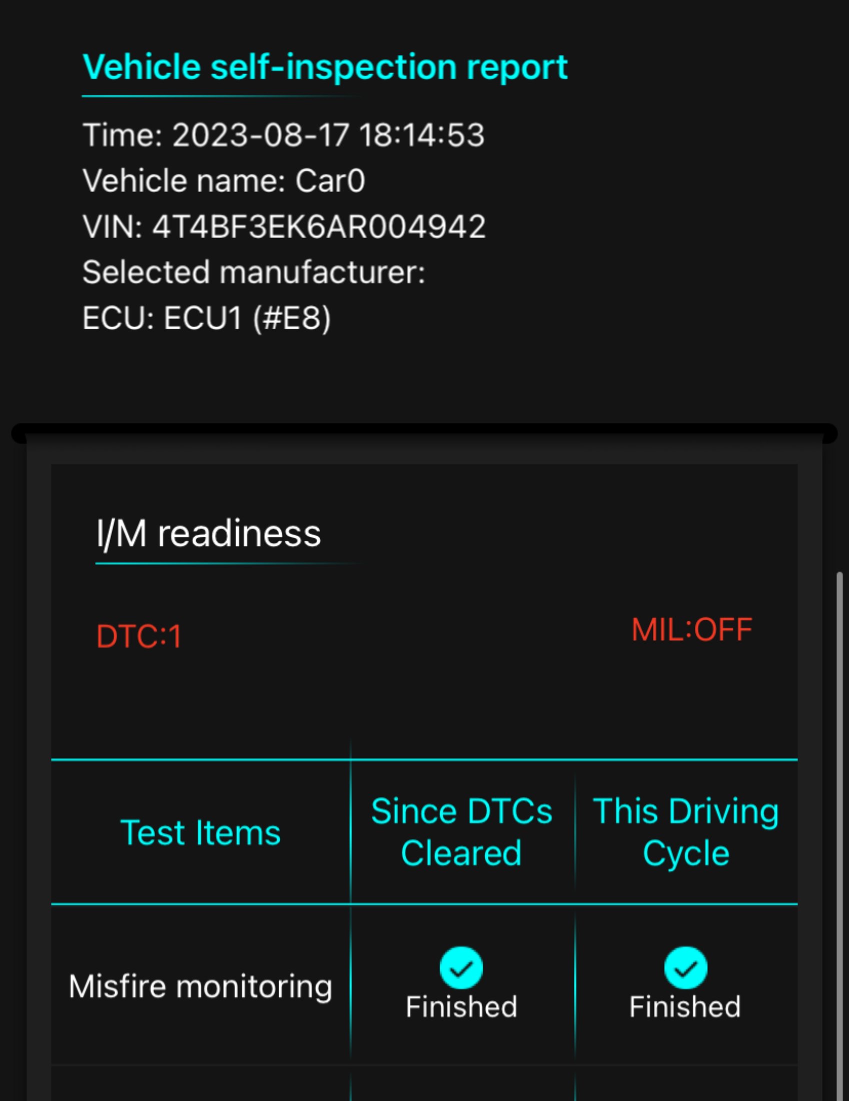


Vehicle self-inspection report

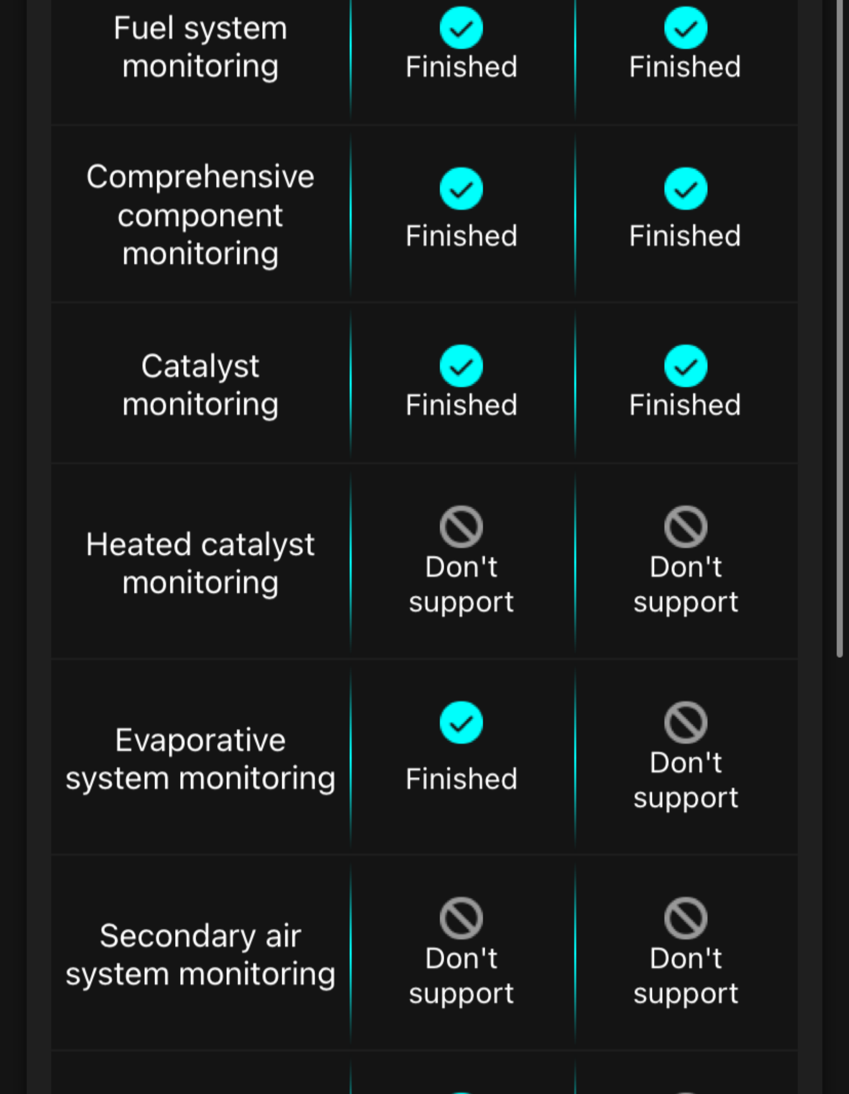
Time: 2023-08-17 18:14:53
Vehicle name: Car0
VIN: 4T4BF3EK6AR004942
Selected manufacturer:
ECU: ECU1 (#E8)

I/M readiness

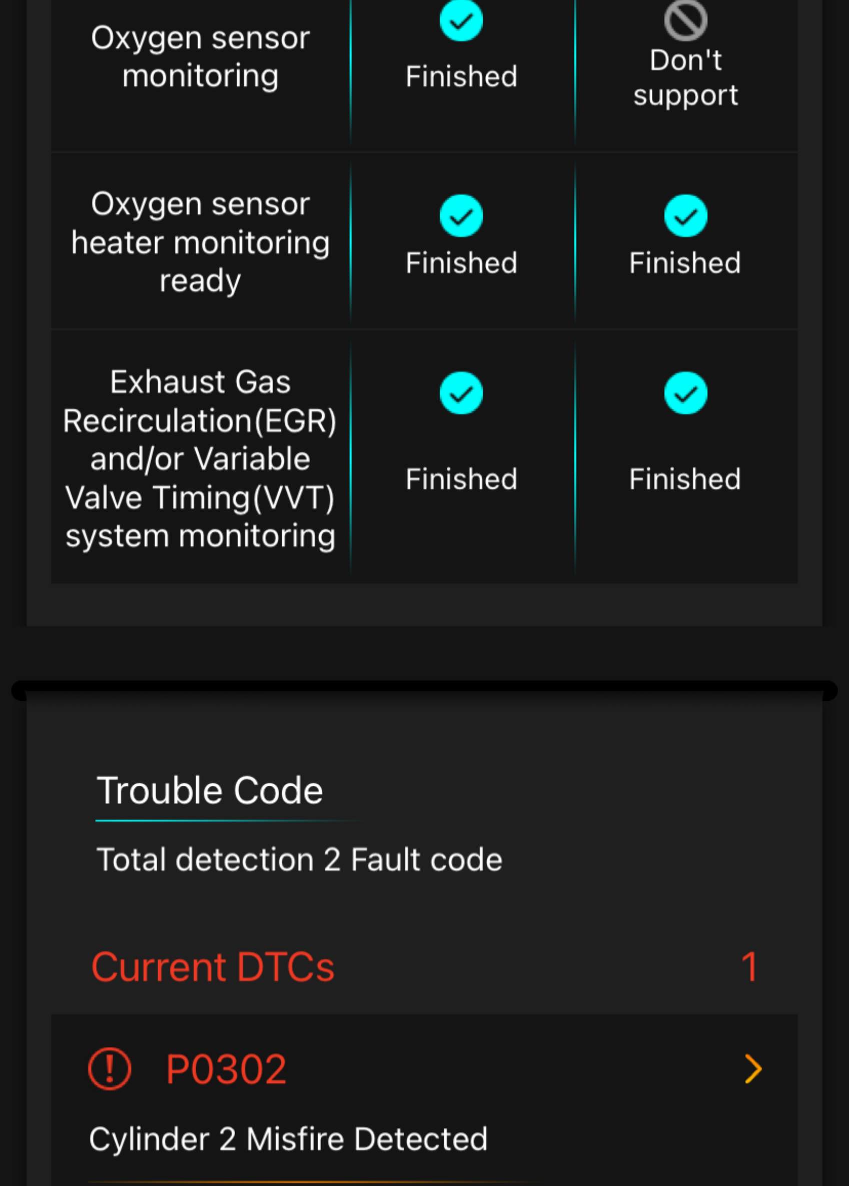
DTC:1

MIL:OFF

Test Items	Since DTCs Cleared	This Driving Cycle
Misfire monitoring	✓ Finished	✓ Finished



Fuel system monitoring	✓ Finished	✓ Finished
Comprehensive component monitoring	✓ Finished	✓ Finished
Catalyst monitoring	✓ Finished	✓ Finished
Heated catalyst monitoring	⊘ Don't support	⊘ Don't support
Evaporative system monitoring	✓ Finished	⊘ Don't support
Secondary air system monitoring	⊘ Don't support	⊘ Don't support



Oxygen sensor monitoring	✓ Finished	⊘ Don't support
Oxygen sensor heater monitoring ready	✓ Finished	✓ Finished
Exhaust Gas Recirculation(EGR) and/or Variable Valve Timing(VVT) system monitoring	✓ Finished	✓ Finished

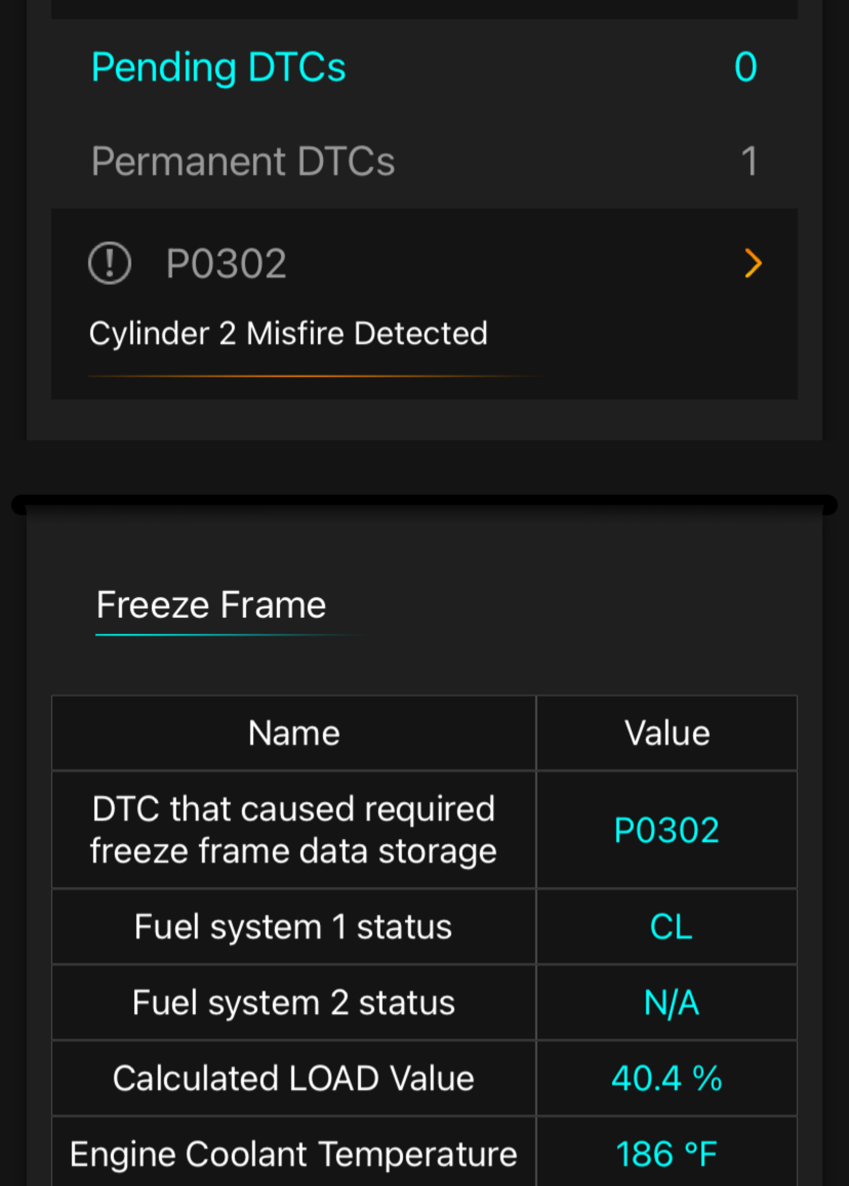
Trouble Code

Total detection 2 Fault code

Current DTCs 1

ⓘ P0302 ›

Cylinder 2 Misfire Detected



Pending DTCs 0

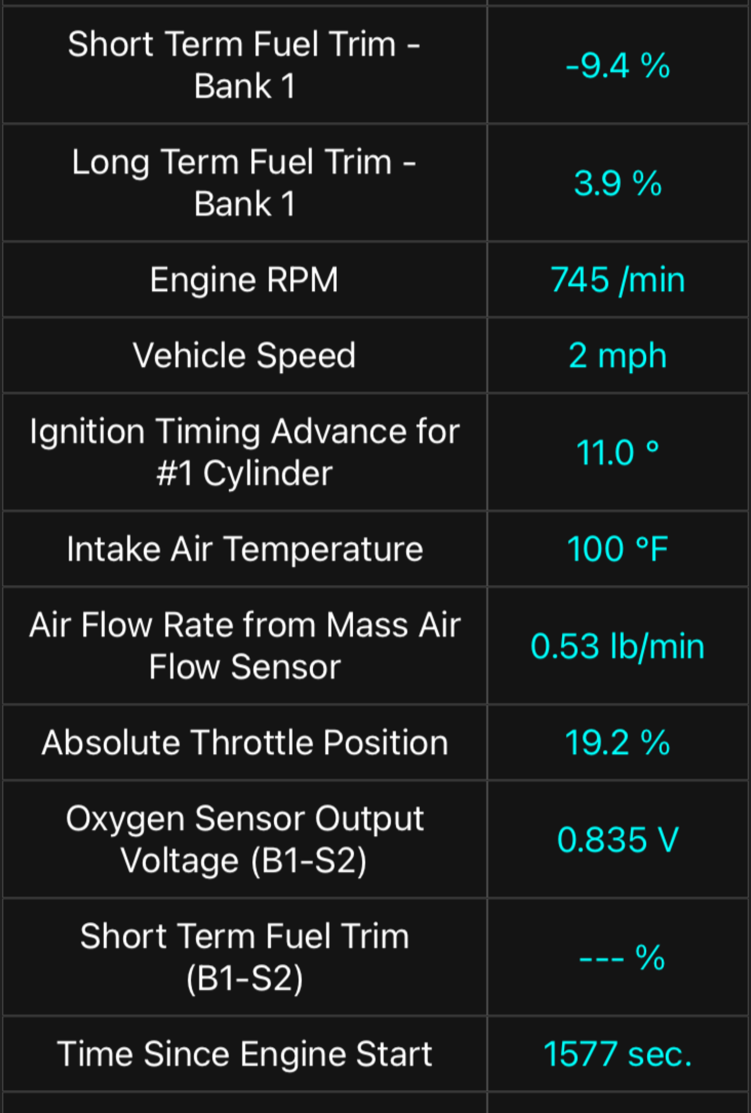
Permanent DTCs 1

ⓘ P0302 >

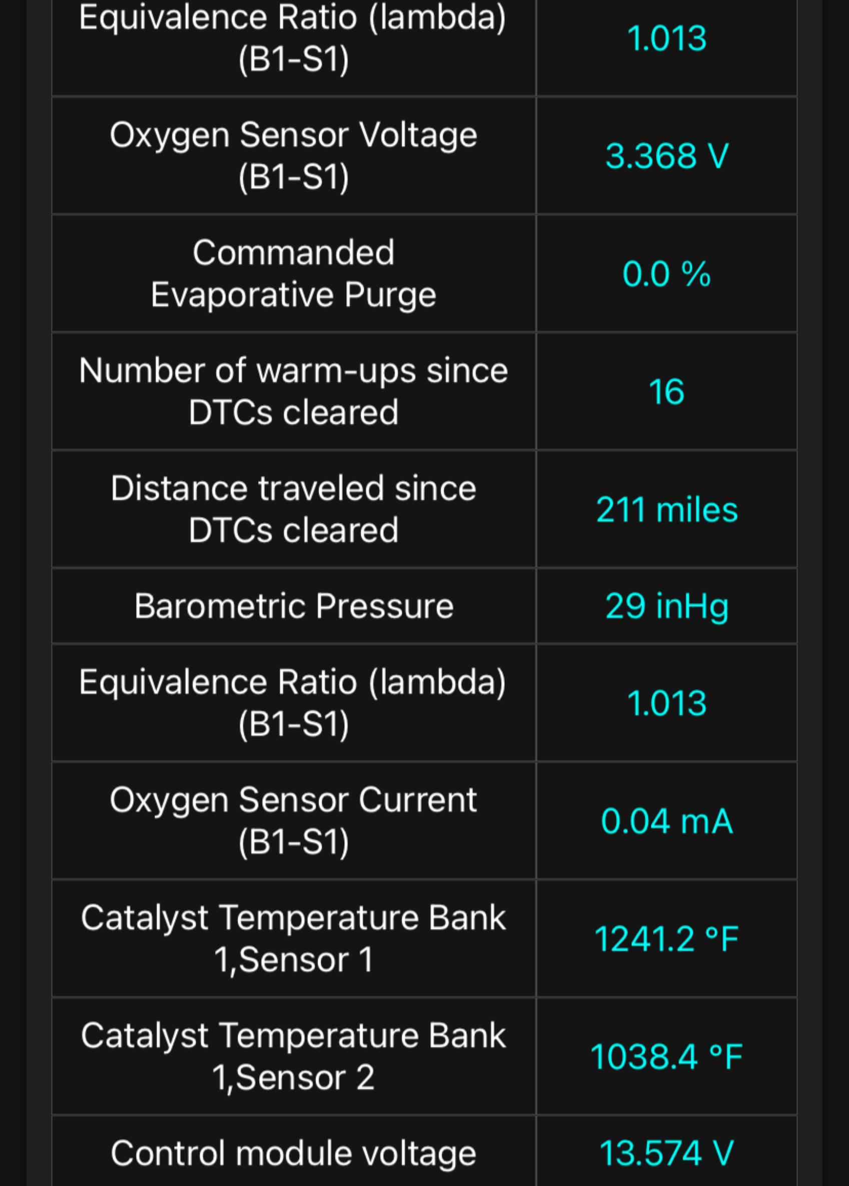
Cylinder 2 Misfire Detected

Freeze Frame

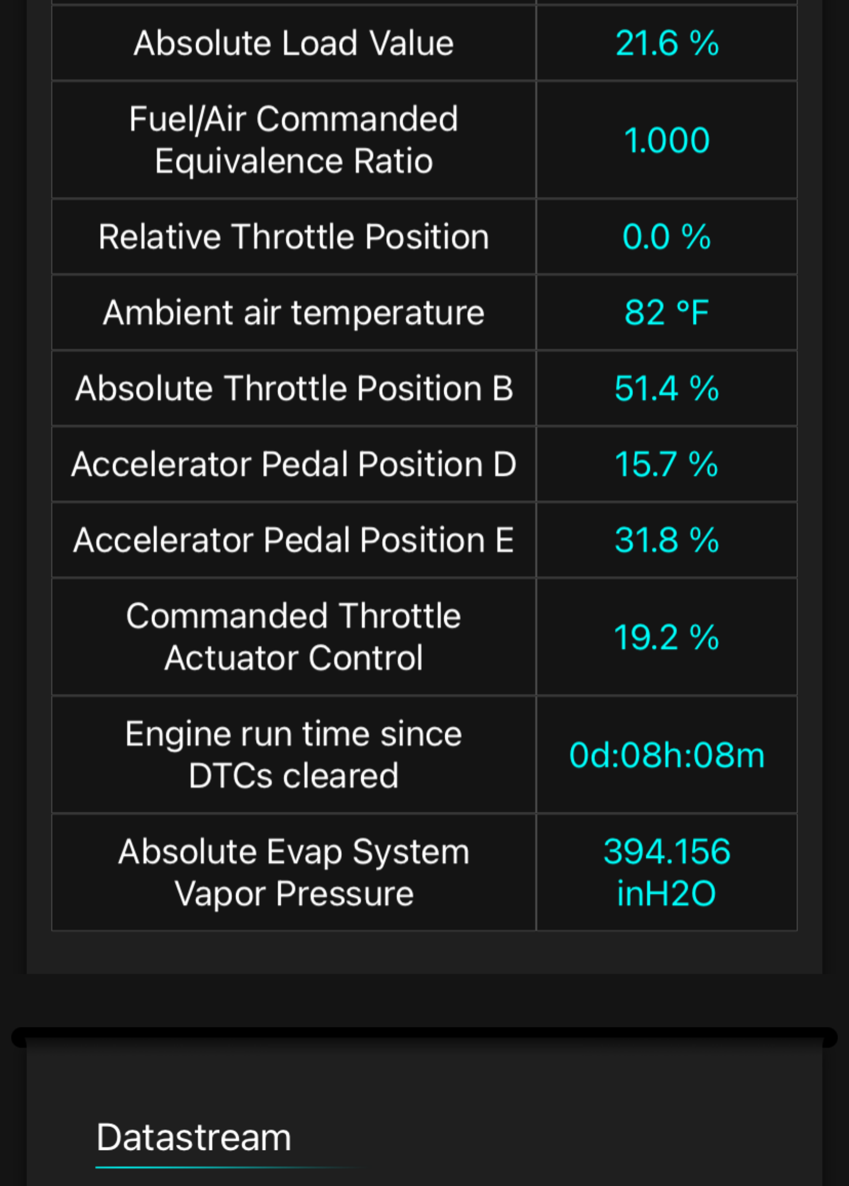
Name	Value
DTC that caused required freeze frame data storage	P0302
Fuel system 1 status	CL
Fuel system 2 status	N/A
Calculated LOAD Value	40.4 %
Engine Coolant Temperature	186 °F



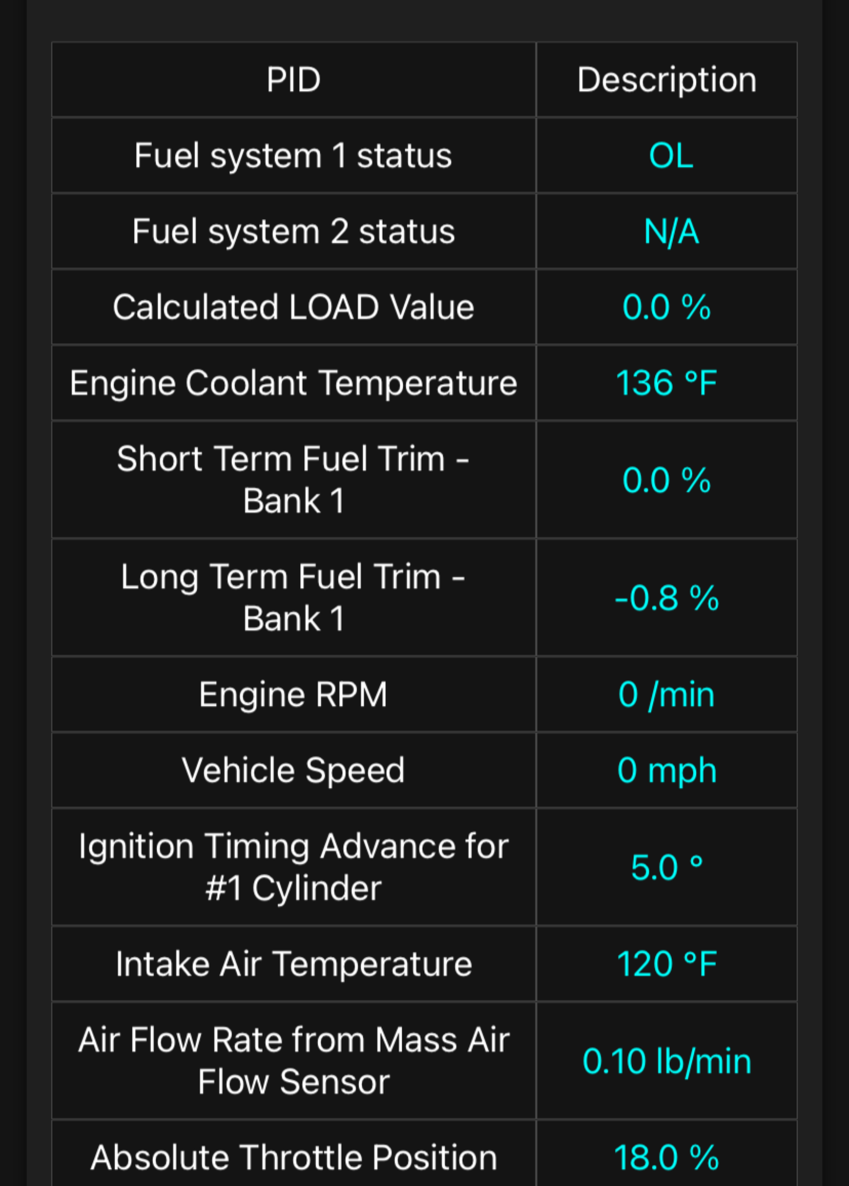
Short Term Fuel Trim - Bank 1	-9.4 %
Long Term Fuel Trim - Bank 1	3.9 %
Engine RPM	745 /min
Vehicle Speed	2 mph
Ignition Timing Advance for #1 Cylinder	11.0 °
Intake Air Temperature	100 °F
Air Flow Rate from Mass Air Flow Sensor	0.53 lb/min
Absolute Throttle Position	19.2 %
Oxygen Sensor Output Voltage (B1-S2)	0.835 V
Short Term Fuel Trim (B1-S2)	--- %
Time Since Engine Start	1577 sec.



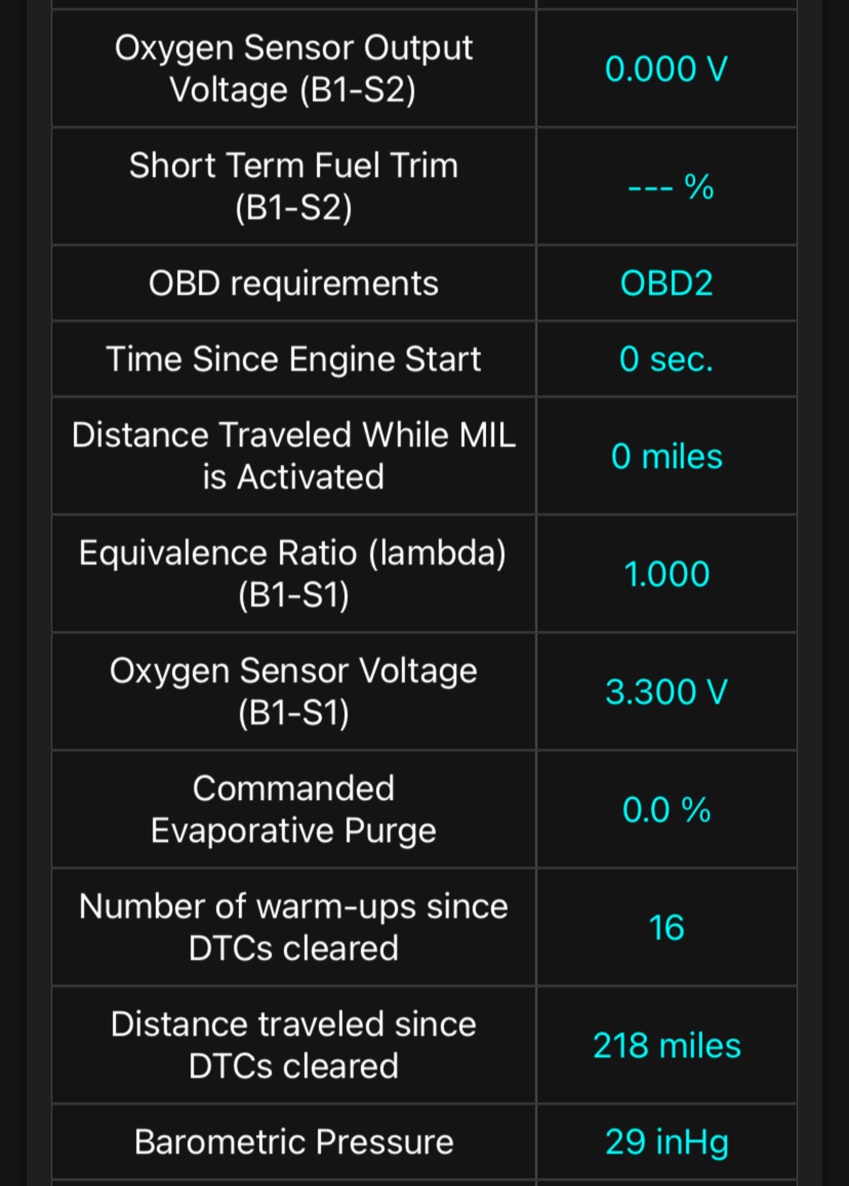
Equivalence Ratio (lambda) (B1-S1)	1.013
Oxygen Sensor Voltage (B1-S1)	3.368 V
Commanded Evaporative Purge	0.0 %
Number of warm-ups since DTCs cleared	16
Distance traveled since DTCs cleared	211 miles
Barometric Pressure	29 inHg
Equivalence Ratio (lambda) (B1-S1)	1.013
Oxygen Sensor Current (B1-S1)	0.04 mA
Catalyst Temperature Bank 1,Sensor 1	1241.2 °F
Catalyst Temperature Bank 1,Sensor 2	1038.4 °F
Control module voltage	13.574 V



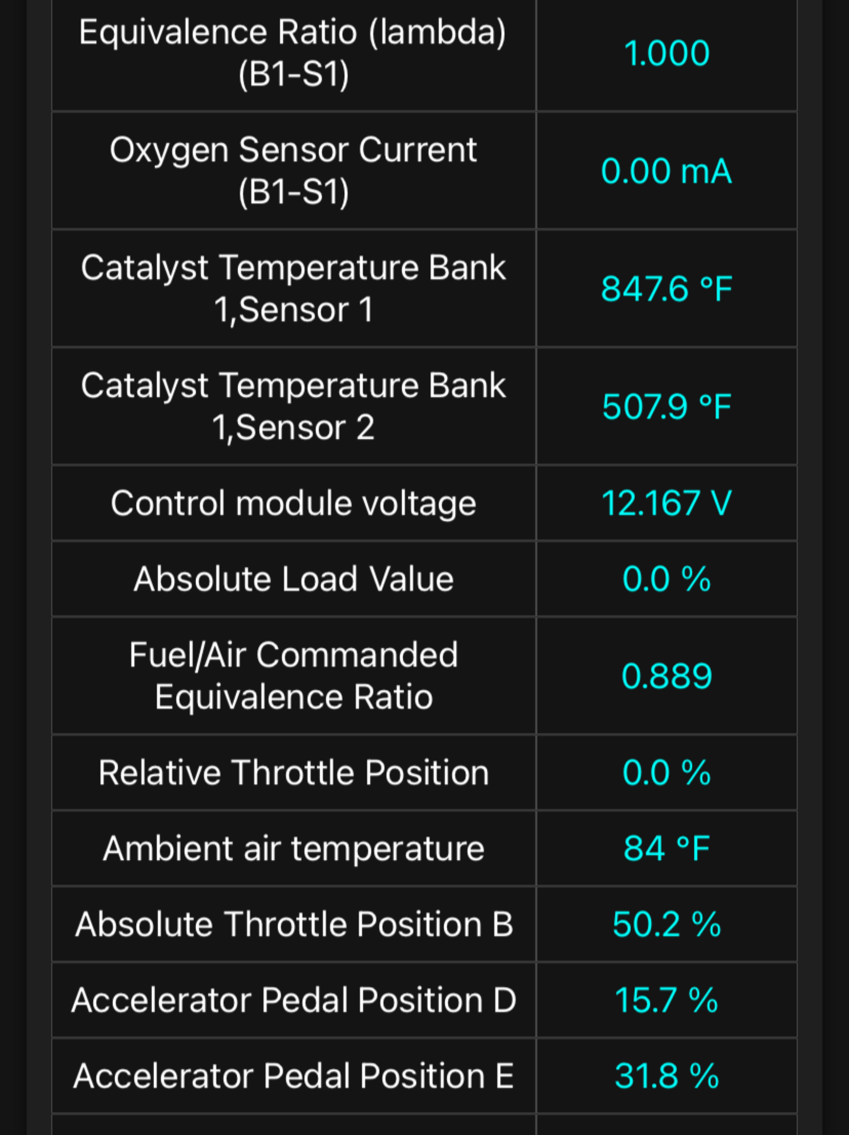
Absolute Load Value	21.6 %
Fuel/Air Commanded Equivalence Ratio	1.000
Relative Throttle Position	0.0 %
Ambient air temperature	82 °F
Absolute Throttle Position B	51.4 %
Accelerator Pedal Position D	15.7 %
Accelerator Pedal Position E	31.8 %
Commanded Throttle Actuator Control	19.2 %
Engine run time since DTCs cleared	0d:08h:08m
Absolute Evap System Vapor Pressure	394.156 inH2O



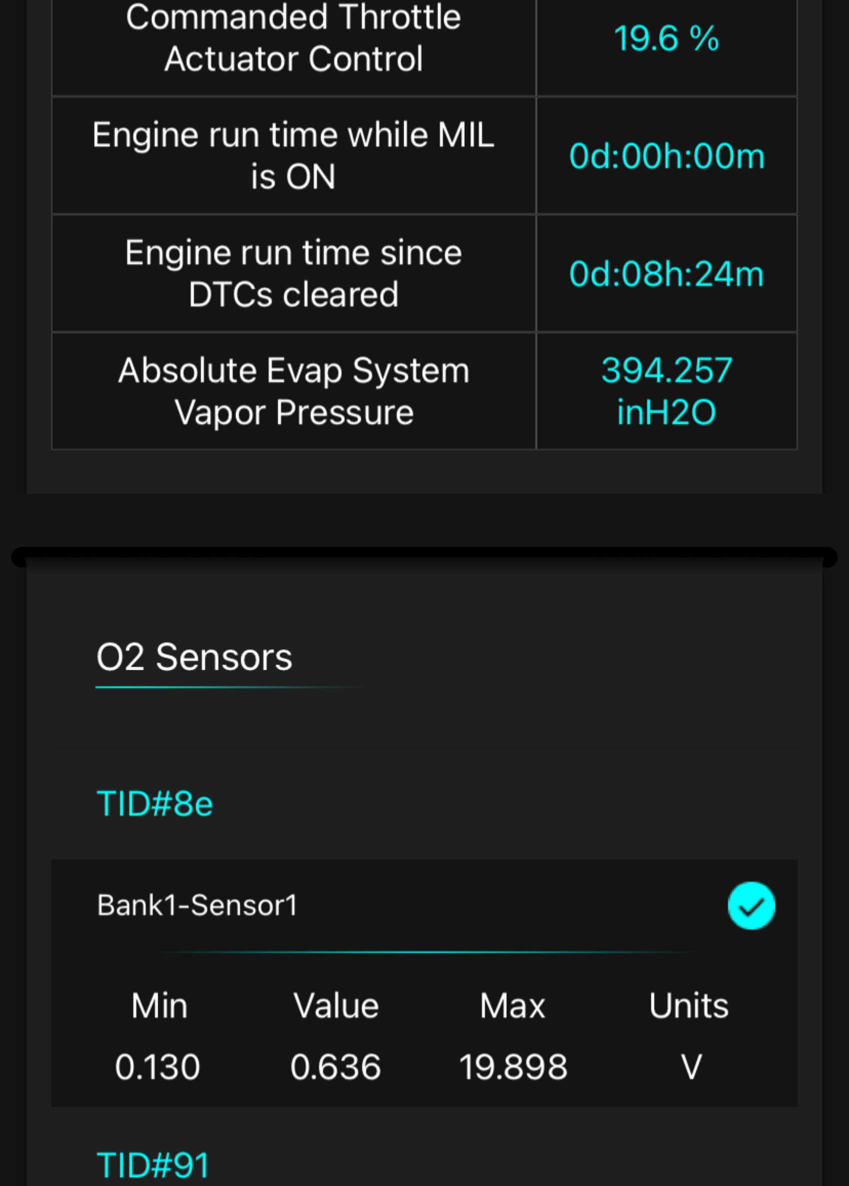
PID	Description
Fuel system 1 status	OL
Fuel system 2 status	N/A
Calculated LOAD Value	0.0 %
Engine Coolant Temperature	136 °F
Short Term Fuel Trim - Bank 1	0.0 %
Long Term Fuel Trim - Bank 1	-0.8 %
Engine RPM	0 /min
Vehicle Speed	0 mph
Ignition Timing Advance for #1 Cylinder	5.0 °
Intake Air Temperature	120 °F
Air Flow Rate from Mass Air Flow Sensor	0.10 lb/min
Absolute Throttle Position	18.0 %



Oxygen Sensor Output Voltage (B1-S2)	0.000 V
Short Term Fuel Trim (B1-S2)	--- %
OBD requirements	OBD2
Time Since Engine Start	0 sec.
Distance Traveled While MIL is Activated	0 miles
Equivalence Ratio (lambda) (B1-S1)	1.000
Oxygen Sensor Voltage (B1-S1)	3.300 V
Commanded Evaporative Purge	0.0 %
Number of warm-ups since DTCs cleared	16
Distance traveled since DTCs cleared	218 miles
Barometric Pressure	29 inHg



Equivalence Ratio (lambda) (B1-S1)	1.000
Oxygen Sensor Current (B1-S1)	0.00 mA
Catalyst Temperature Bank 1,Sensor 1	847.6 °F
Catalyst Temperature Bank 1,Sensor 2	507.9 °F
Control module voltage	12.167 V
Absolute Load Value	0.0 %
Fuel/Air Commanded Equivalence Ratio	0.889
Relative Throttle Position	0.0 %
Ambient air temperature	84 °F
Absolute Throttle Position B	50.2 %
Accelerator Pedal Position D	15.7 %
Accelerator Pedal Position E	31.8 %



Commanded Throttle Actuator Control	19.6 %
Engine run time while MIL is ON	0d:00h:00m
Engine run time since DTCs cleared	0d:08h:24m
Absolute Evap System Vapor Pressure	394.257 inH2O

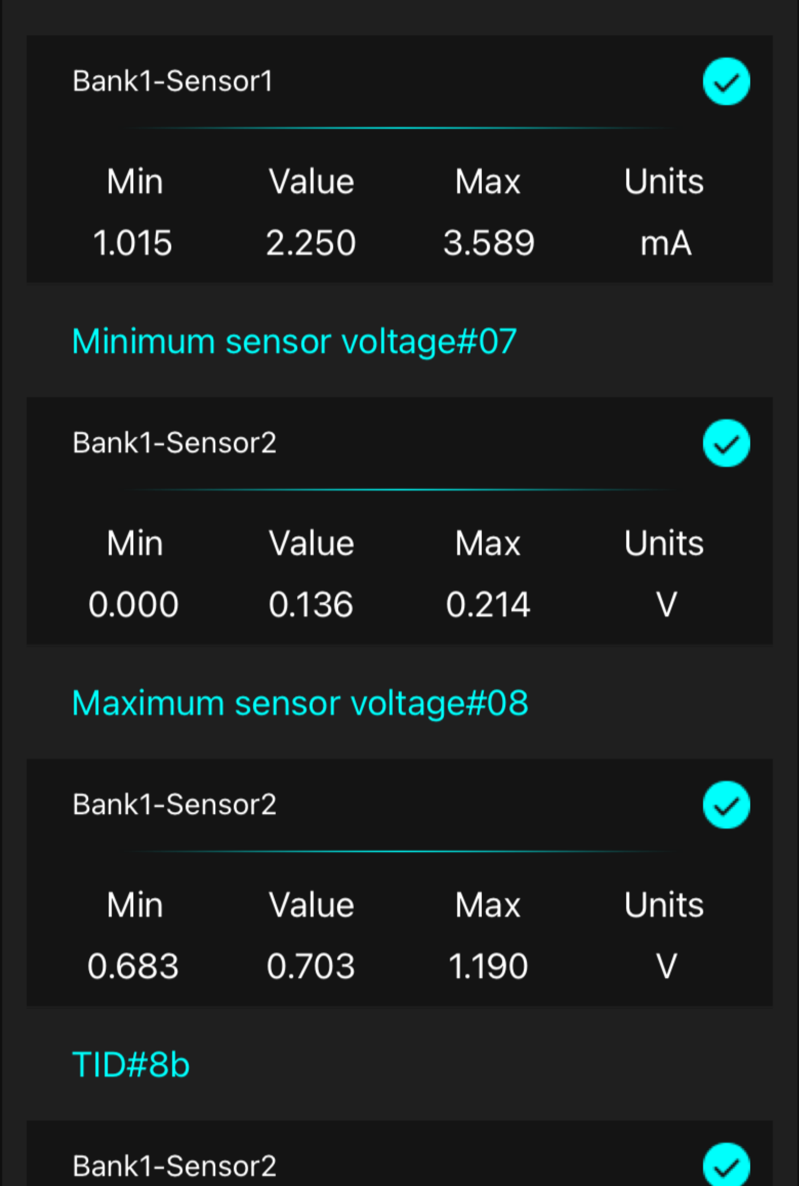
O2 Sensors

TID#8e

Bank1-Sensor1 ✓

Min	Value	Max	Units
0.130	0.636	19.898	V

TID#91



Bank1-Sensor1 ✓

Min	Value	Max	Units
1.015	2.250	3.589	mA

Minimum sensor voltage#07

Bank1-Sensor2 ✓

Min	Value	Max	Units
0.000	0.136	0.214	V

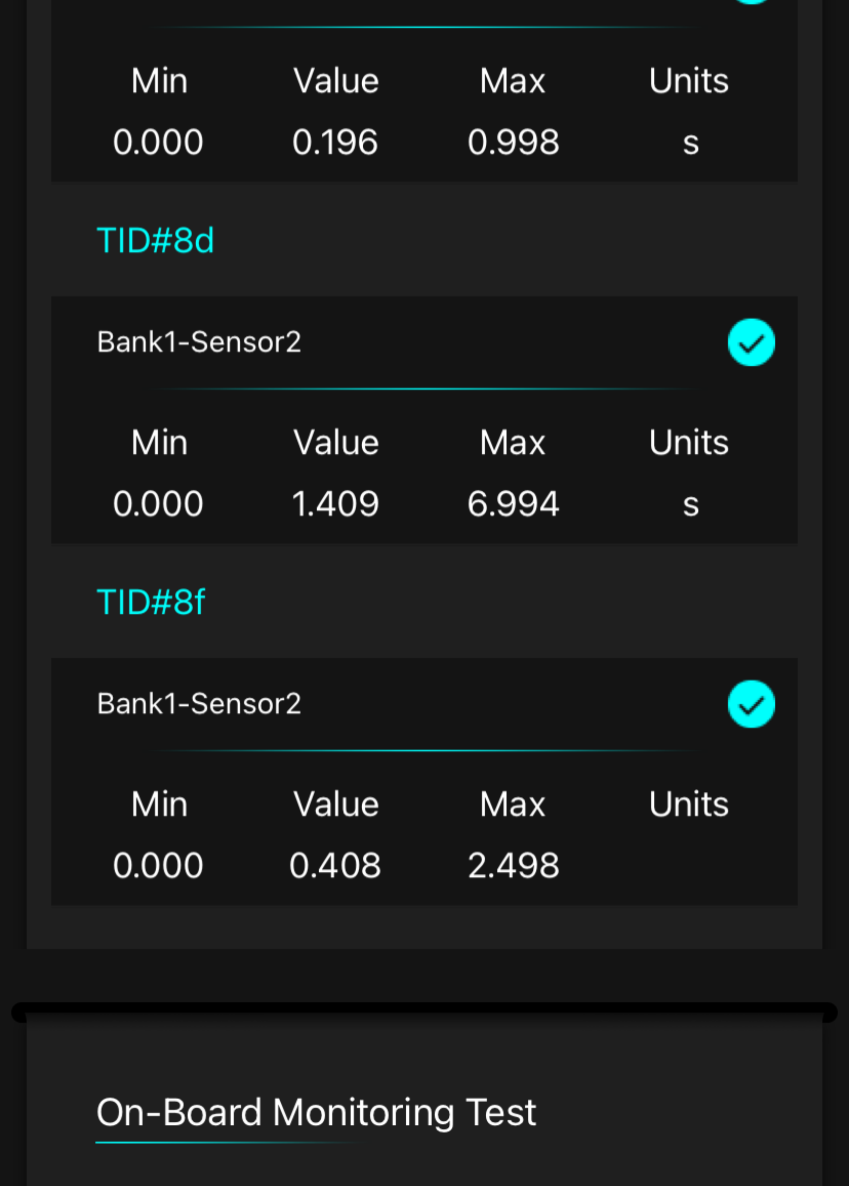
Maximum sensor voltage#08

Bank1-Sensor2 ✓

Min	Value	Max	Units
0.683	0.703	1.190	V

TID#8b

Bank1-Sensor2 ✓



Min	Value	Max	Units
0.000	0.196	0.998	s

TID#8d

Bank1-Sensor2 ✓

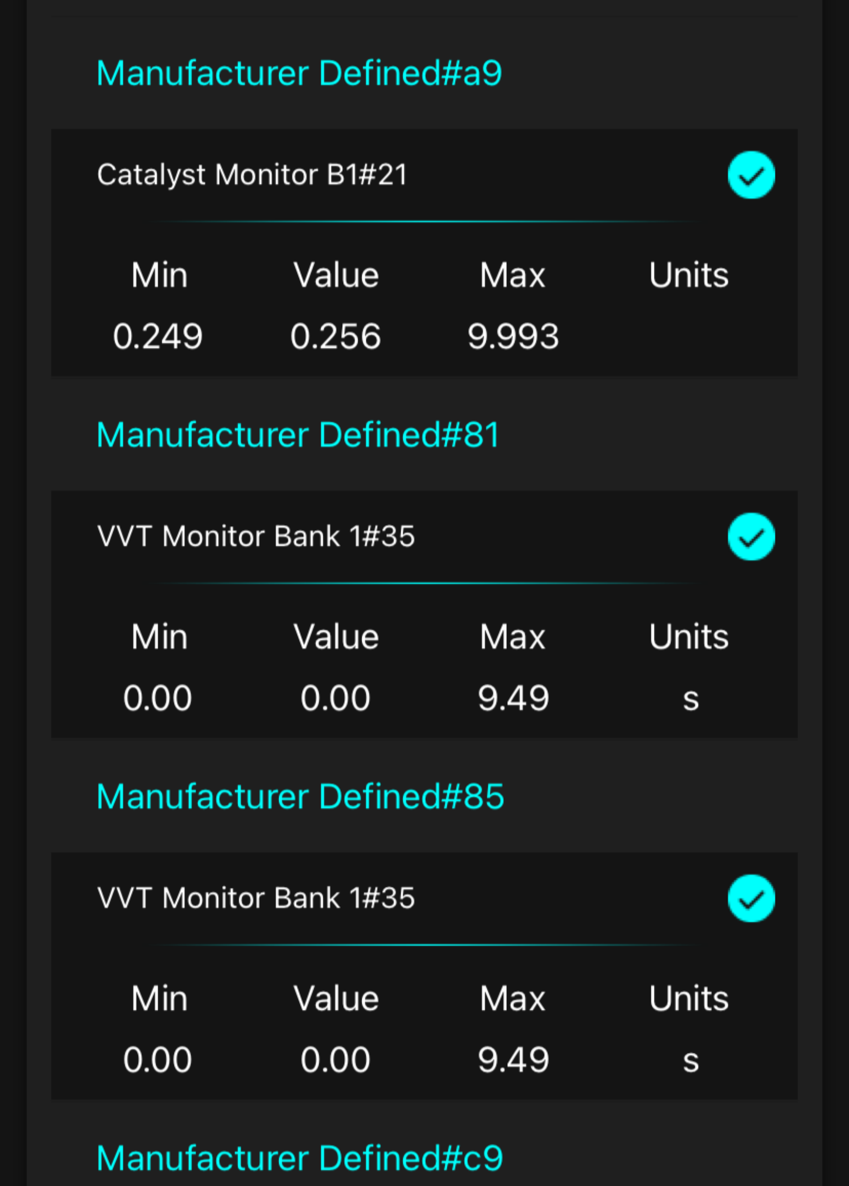
Min	Value	Max	Units
0.000	1.409	6.994	s

TID#8f

Bank1-Sensor2 ✓

Min	Value	Max	Units
0.000	0.408	2.498	

On-Board Monitoring Test



Manufacturer Defined#a9

Catalyst Monitor B1#21 ✓

Min	Value	Max	Units
0.249	0.256	9.993	

Manufacturer Defined#81

VVT Monitor Bank 1#35 ✓

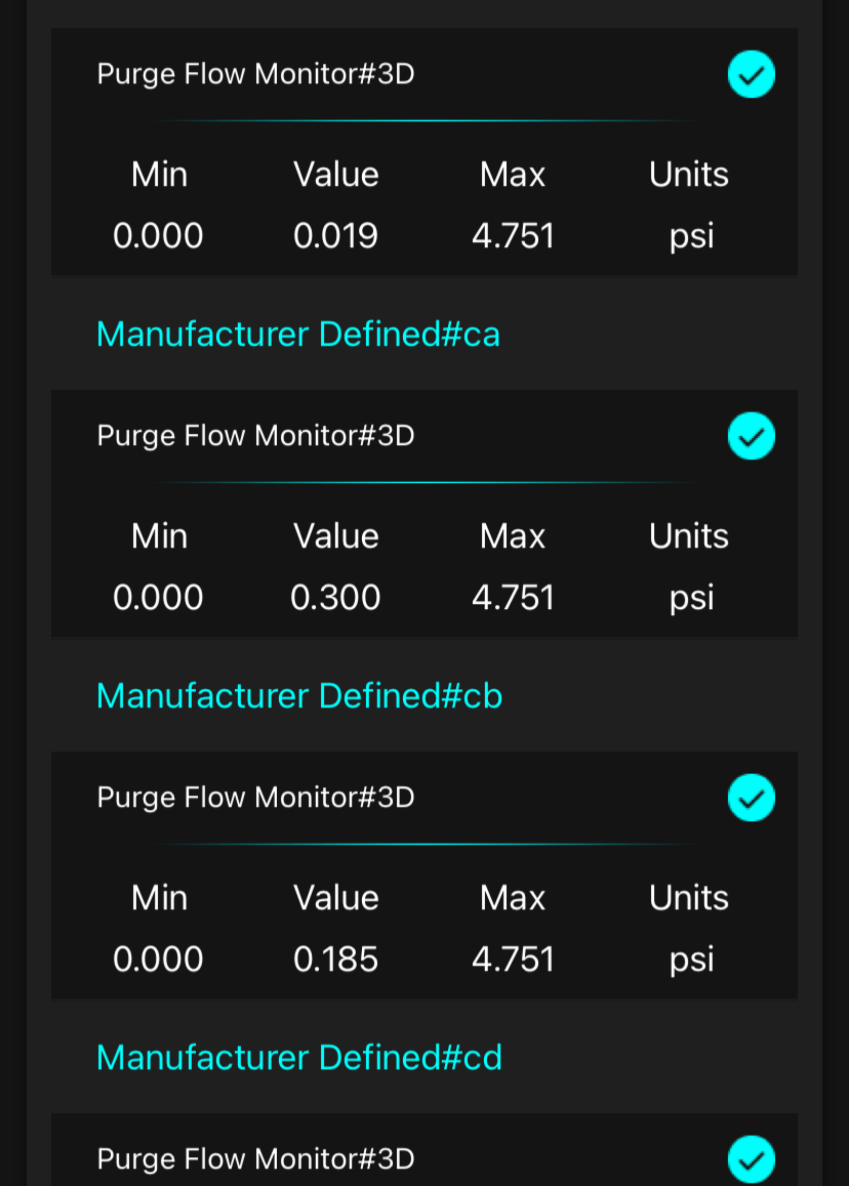
Min	Value	Max	Units
0.00	0.00	9.49	s

Manufacturer Defined#85

VVT Monitor Bank 1#35 ✓

Min	Value	Max	Units
0.00	0.00	9.49	s

Manufacturer Defined#c9



Purge Flow Monitor#3D ✓

Min	Value	Max	Units
0.000	0.019	4.751	psi

Manufacturer Defined#ca

Purge Flow Monitor#3D ✓

Min	Value	Max	Units
0.000	0.300	4.751	psi

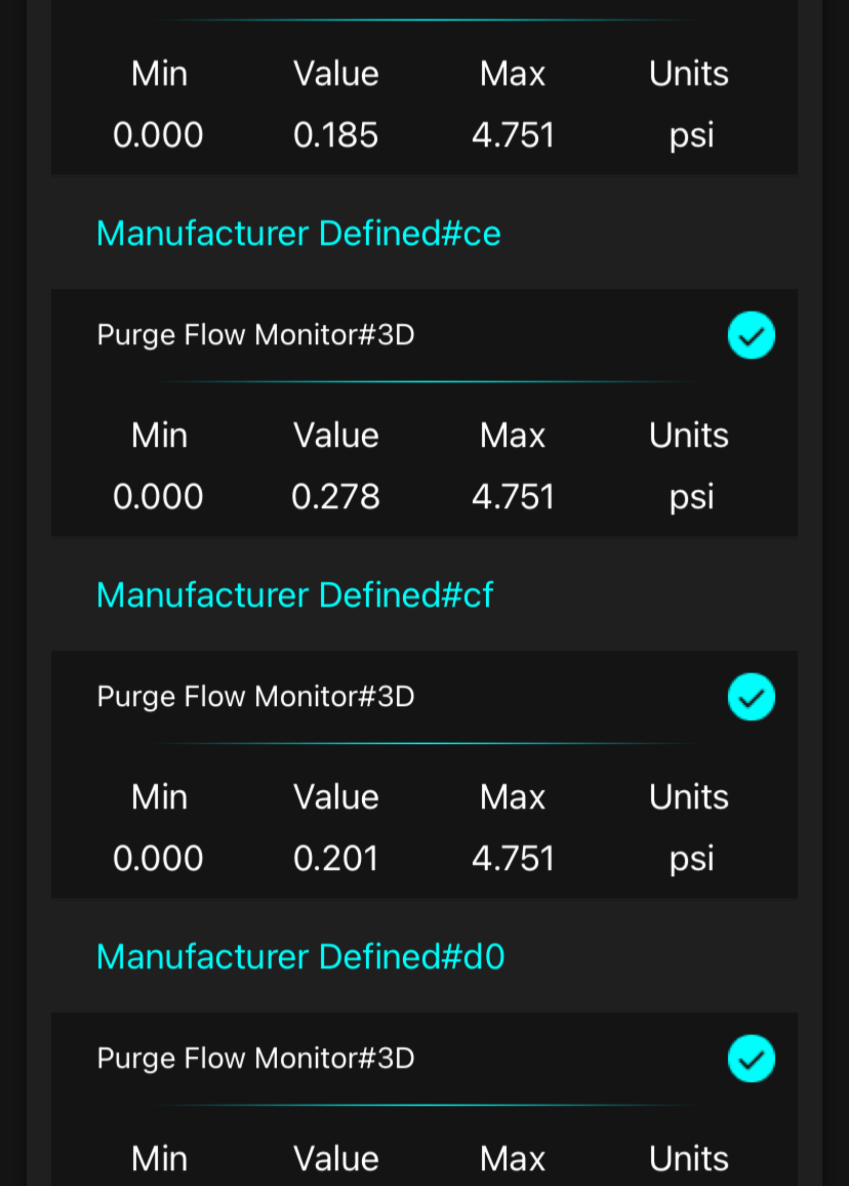
Manufacturer Defined#cb

Purge Flow Monitor#3D ✓

Min	Value	Max	Units
0.000	0.185	4.751	psi

Manufacturer Defined#cd

Purge Flow Monitor#3D ✓



Min	Value	Max	Units
0.000	0.185	4.751	psi

Manufacturer Defined#ce

Purge Flow Monitor#3D ✓

Min	Value	Max	Units
0.000	0.278	4.751	psi

Manufacturer Defined#cf

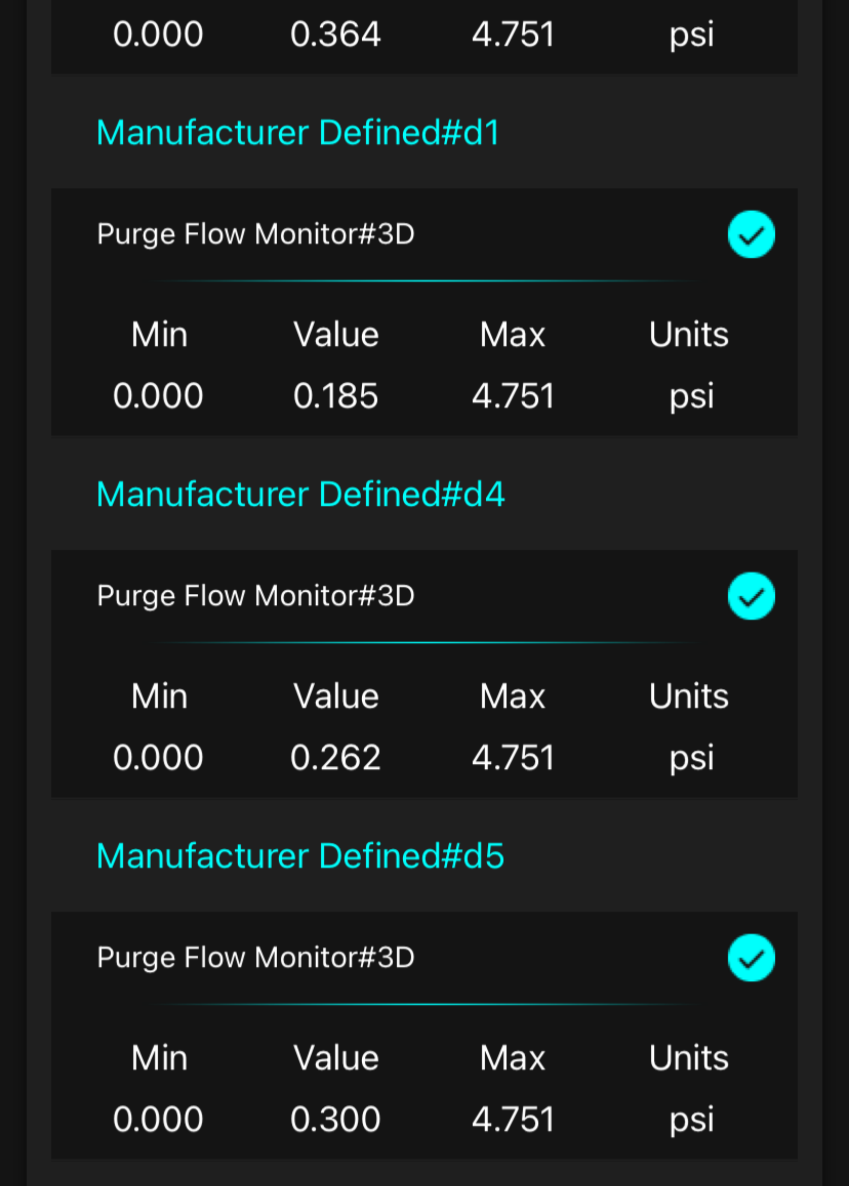
Purge Flow Monitor#3D ✓

Min	Value	Max	Units
0.000	0.201	4.751	psi

Manufacturer Defined#d0

Purge Flow Monitor#3D ✓

Min	Value	Max	Units



0.000	0.364	4.751	psi

Manufacturer Defined#d1

Purge Flow Monitor#3D ✓

Min	Value	Max	Units
0.000	0.185	4.751	psi

Manufacturer Defined#d4

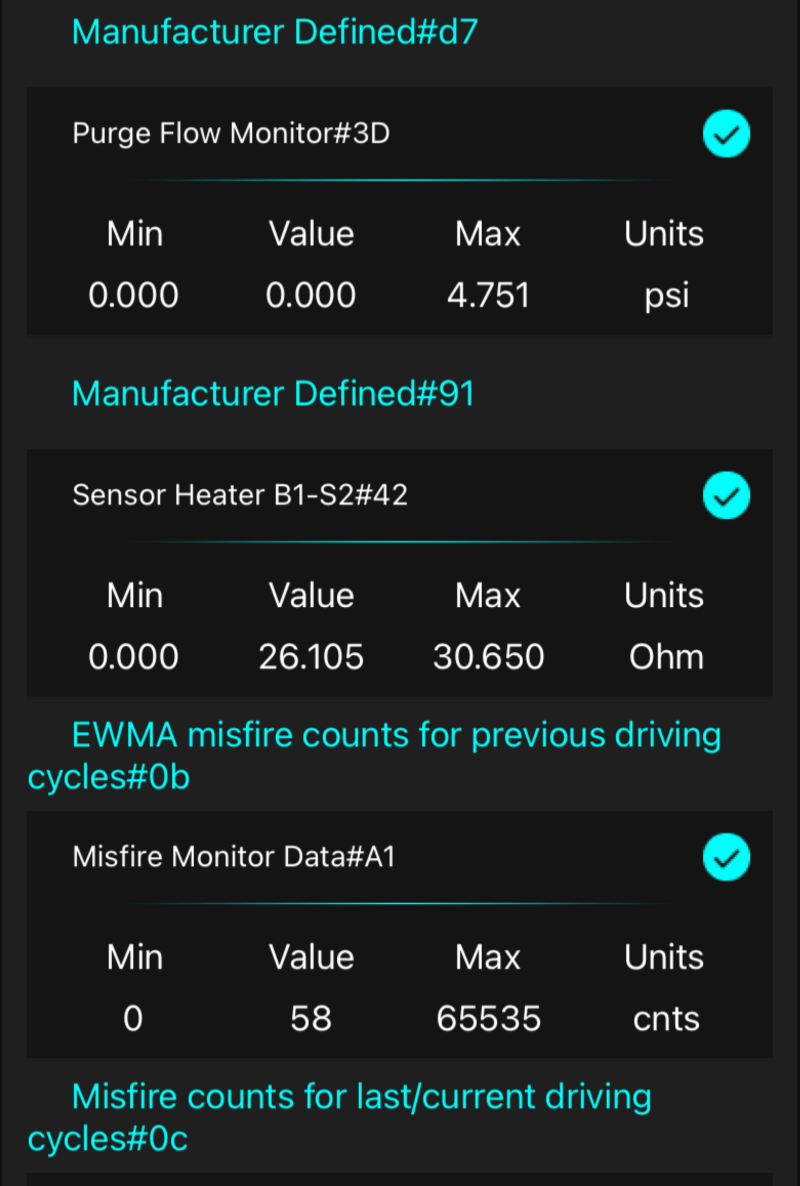
Purge Flow Monitor#3D ✓

Min	Value	Max	Units
0.000	0.262	4.751	psi

Manufacturer Defined#d5

Purge Flow Monitor#3D ✓

Min	Value	Max	Units
0.000	0.300	4.751	psi



Manufacturer Defined#d7

Purpose Flow Monitor#3D ✓

Min	Value	Max	Units
0.000	0.000	4.751	psi

Manufacturer Defined#91

Sensor Heater B1-S2#42 ✓

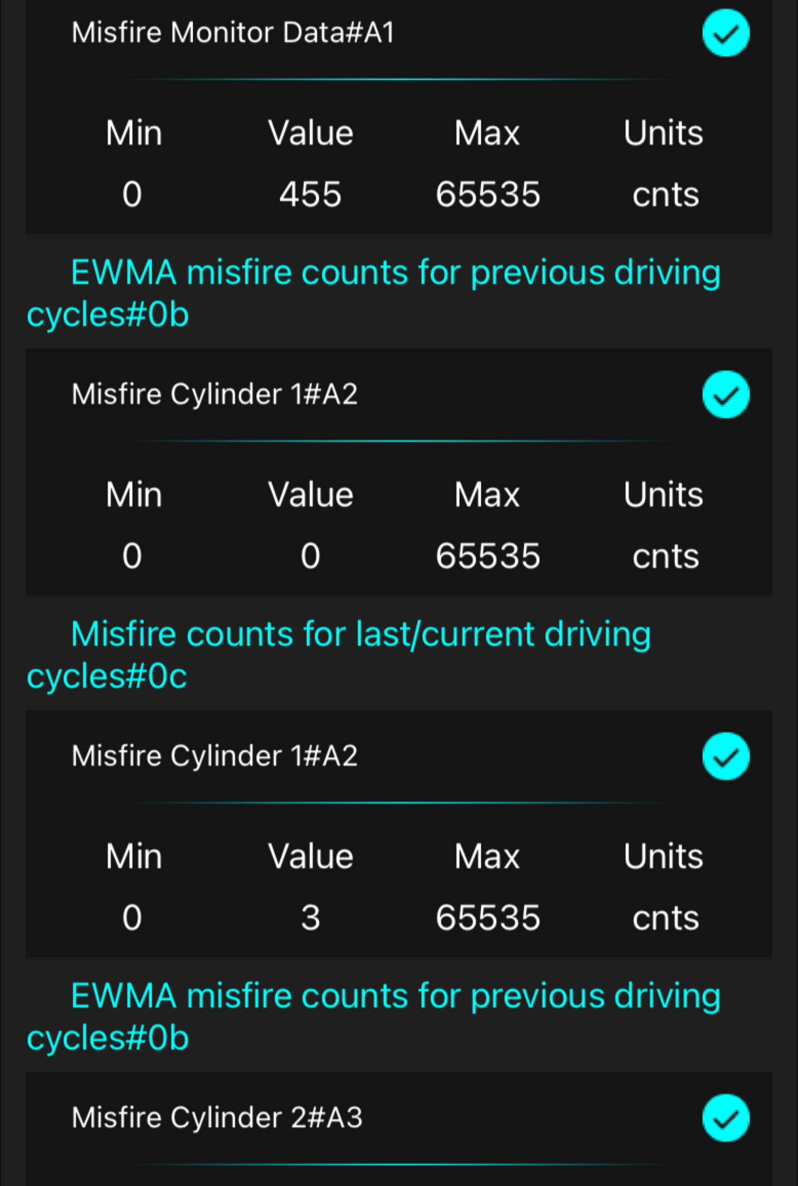
Min	Value	Max	Units
0.000	26.105	30.650	Ohm

EWMA misfire counts for previous driving cycles#0b

Misfire Monitor Data#A1 ✓

Min	Value	Max	Units
0	58	65535	cnts

Misfire counts for last/current driving cycles#0c



Misfire Monitor Data#A1 ✓

Min	Value	Max	Units
0	455	65535	cnts

EWMA misfire counts for previous driving cycles#0b

Misfire Cylinder 1#A2 ✓

Min	Value	Max	Units
0	0	65535	cnts

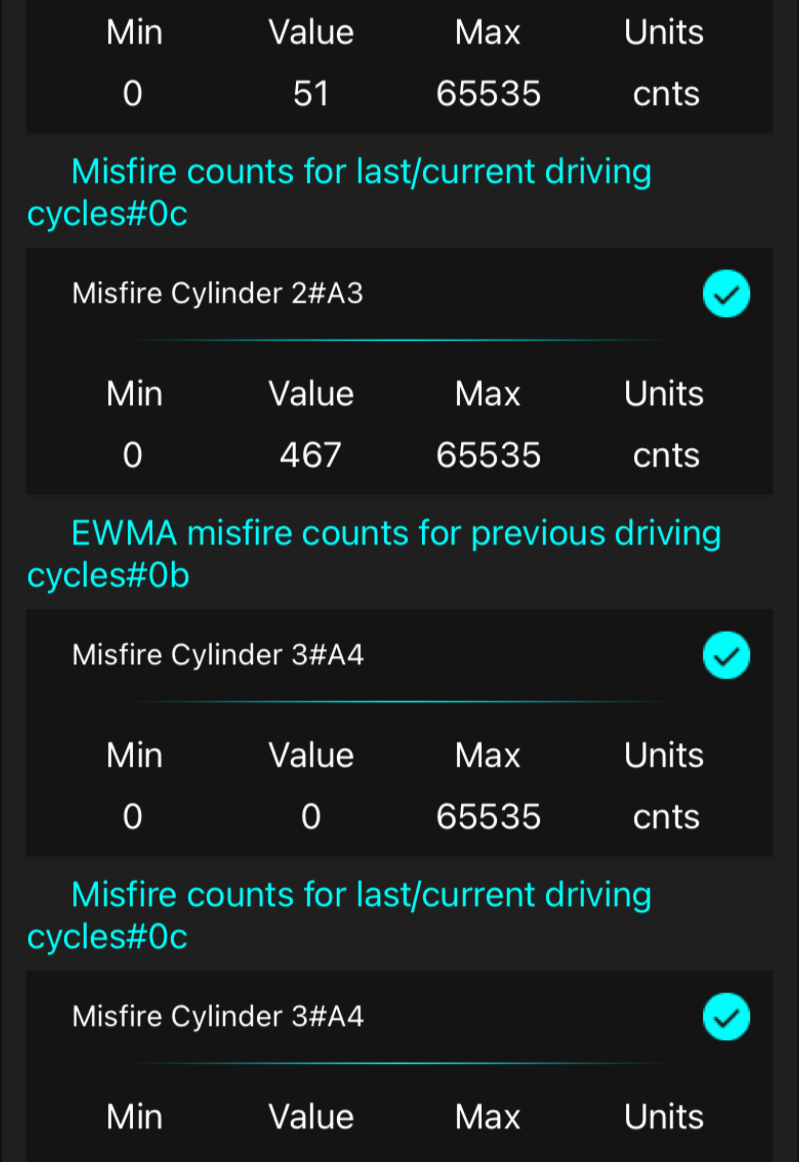
Misfire counts for last/current driving cycles#0c

Misfire Cylinder 1#A2 ✓

Min	Value	Max	Units
0	3	65535	cnts

EWMA misfire counts for previous driving cycles#0b

Misfire Cylinder 2#A3 ✓



Min	Value	Max	Units
0	51	65535	cnts

Misfire counts for last/current driving cycles#0c

Misfire Cylinder 2#A3 ✓

Min	Value	Max	Units
0	467	65535	cnts

EWMA misfire counts for previous driving cycles#0b

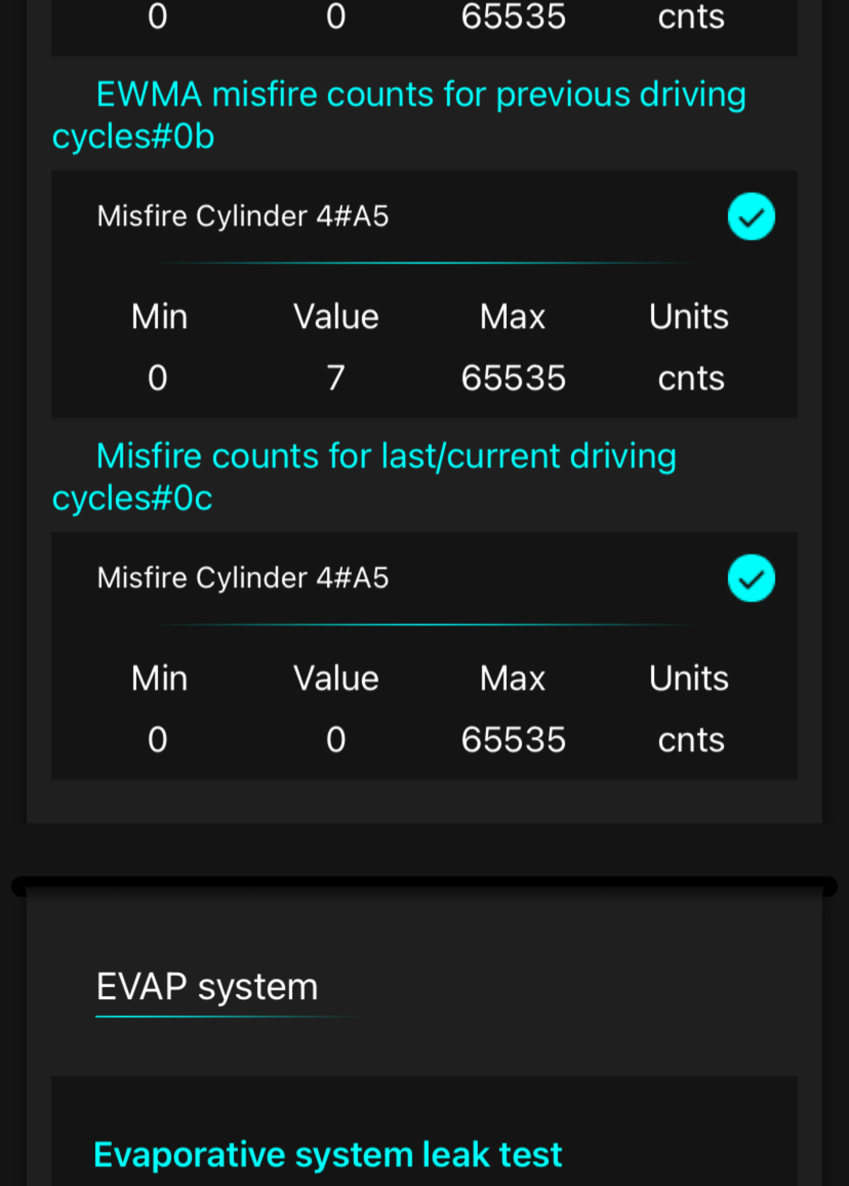
Misfire Cylinder 3#A4 ✓

Min	Value	Max	Units
0	0	65535	cnts

Misfire counts for last/current driving cycles#0c

Misfire Cylinder 3#A4 ✓

Min	Value	Max	Units



0	0	65535	cnts

EWMA misfire counts for previous driving cycles#0b

Misfire Cylinder 4#A5 ✓

Min	Value	Max	Units
0	7	65535	cnts

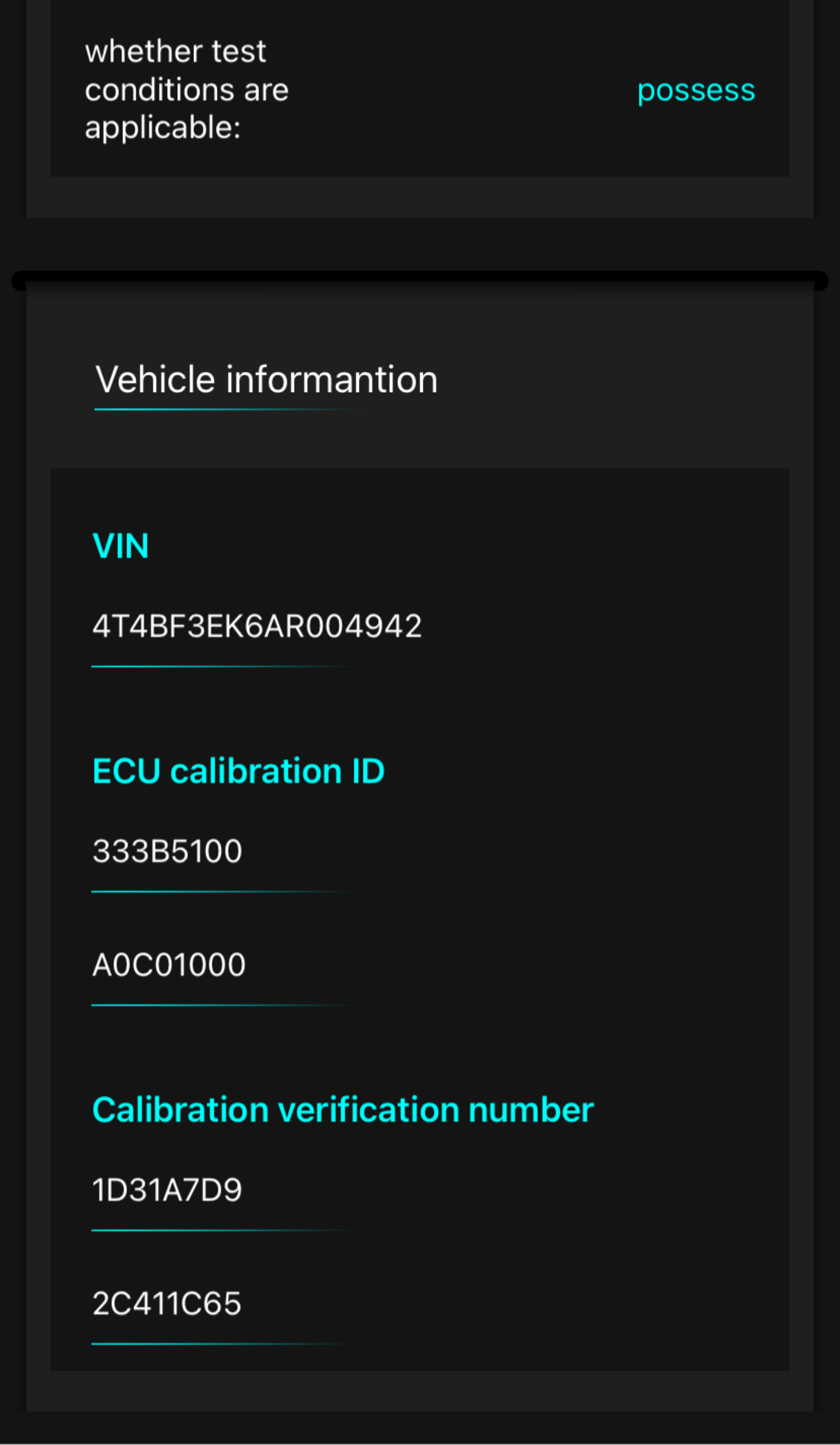
Misfire counts for last/current driving cycles#0c

Misfire Cylinder 4#A5 ✓

Min	Value	Max	Units
0	0	65535	cnts

EVAP system

Evaporative system leak test



whether test conditions are applicable: possess

Vehicle informantion

VIN

4T4BF3EK6AR004942

ECU calibration ID

333B5100

A0C01000

Calibration verification number

1D31A7D9

2C411C65