

# Diagnostic Report

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**Date:** 3/13/2022 8:23:39 PM**VIN:** JM1FE173840119678**Manufacturer:** Mazda**Model:** RX-8**Option:** 654x2cc 13B-MSP High-Power**Year:** 2004

## Monitor Status Report

Name	Continuous	Available	Complete
Misfire	Yes	Yes	Yes
Fuel System	Yes	Yes	Yes
Components	Yes	Yes	Yes
Catalyst	No	Yes	No
Heated Catalyst	No	No	No
Evap System	No	Yes	No
Secondary Air System	No	Yes	Yes
AC Refrigerant	No	No	No
Oxygen Sensor	No	Yes	Yes
Oxygen Sensor Heater	No	Yes	Yes
EGR System	No	No	No

### MIL On

Number of Confirmed Codes: 1

Readiness Standard: None

**This vehicle is not ready for emissions testing.**

### Reason

- MIL On
- Confirmed trouble codes have been detected
- Number of incomplete tests exceeds the maximum number allowed

# Trouble Code Report

ECU	Code	Type	Status	Description
7E0	P0410	PowerTrain	Confirmed	(AIR) System
7E0	P0420	PowerTrain	Pending	Catalyst System Efficiency Below Threshold (Bank 1)
7E0	P0410	PowerTrain	Pending	(AIR) System
7E0	P0125	PowerTrain	Pending	Insufficient Coolant Temp For Closed Loop Fuel Control
7E0	P0172	PowerTrain	Pending	System Too Rich (Bank 1)

## Additional Information

PID	Description	Value	Units
SAE 0x21	Distance traveled while MIL is activated	0	miles
SAE 0x30	Number of warm-ups since DTCs cleared	1	
SAE 0x31	Distance traveled since DTCs cleared	8.08	miles

## Mode \$01 - Powertrain Diagnostic Data

PID	Description	Value	Units
SAE 0x03	Fuel system 1 status	2	
SAE 0x03	Fuel system 2 status	0	
SAE 0x04	Calculated load value	35.69	%
SAE 0x05	Engine coolant temperature	188.6	°F
SAE 0x06	Short term fuel % trim - Bank 1	-1.56	%
SAE 0x07	Long term fuel % trim - Bank 1	-7.03	%
SAE 0x0C	Engine RPM	833.25	RPM
SAE 0x0D	Vehicle speed	0	MPH
SAE 0x0E	Ignition timing advance for #1 cylinder	-5	deg
SAE 0x0F	Intake air temperature	59	°F
SAE 0x10	Mass air flow rate	0.65	lb/min
SAE 0x11	Absolute throttle position	12.16	%
SAE 0x12	Commanded secondary air status	4	
SAE 0x13	Location of oxygen sensors	3	
SAE 0x15	O2 voltage (Bank 1, Sensor 2)	0.07	V
SAE 0x15	Short term fuel trim (Bank 1, Sensor 2)	0.781	%
SAE 0x1C	OBd requirements to which vehicle or engine is certified	1	
SAE 0x1F	Time since engine start	618	sec

SAE 0x21	Distance traveled while MIL is activated	0	miles
SAE 0x2E	Commanded evaporative purge	19.22	%
SAE 0x2F	Fuel level input	28.63	%
SAE 0x30	Number of warm-ups since DTCs cleared	1	
SAE 0x31	Distance traveled since DTCs cleared	8.08	miles
SAE 0x33	Barometric pressure	29.23	inHg
SAE 0x34	O2 sensor lambda wide range (current probe) (Bank 1, Sensor 1)	1.022	
SAE 0x34	O2 sensor current wide range (Bank 1, Sensor 1)	0.066	mA
SAE 0x3C	Catalyst temperature (Bank 1 Sensor 1)	1119.38	°F
SAE 0x42	Control module voltage	14.36	V
SAE 0x43	Absolute load value	23.14	%
SAE 0x44	Fuel/Air commanded equivalence ratio	1.02	
SAE 0x45	Relative throttle position	1.18	%
SAE 0x46	Ambient air temperature	55.4	°F
SAE 0x47	Absolute throttle position B	29.8	%
SAE 0x49	Accelerator pedal position D	31.37	%
SAE 0x4A	Accelerator pedal position E	20.78	%
SAE 0x4C	Commanded throttle actuator control	1.96	%
Aux 0x00	Input voltage read by the scan tool	14.3	V

## Mode \$02 - Freeze Frame

PID	Description	Value	Units
0x02	Freeze frame DTC	P0410	
0x03	Fuel system 1 status	4	
0x03	Fuel system 2 status	0	
0x04	Calculated load value	46.27	%
0x05	Engine coolant temperature	55.4	°F
0x06	Short term fuel % trim - Bank 1	0	%
0x07	Long term fuel % trim - Bank 1	-1.56	%
0x0C	Engine RPM	1726.25	RPM
0x0D	Vehicle speed	0	MPH
0x0E	Ignition timing advance for #1 cylinder	7.5	deg
0x0F	Intake air temperature	55.4	°F
0x10	Mass air flow rate	2.07	lb/min
0x11	Absolute throttle position	14.9	%
0x12	Commanded secondary air status	1	

0x1F	Time since engine start	23	sec
0x2E	Commanded evaporative purge	0	%
0x2F	Fuel level input	29.02	%
0x30	Number of warm-ups since DTCs cleared	1	
0x31	Distance traveled since DTCs cleared	8.08	miles
0x33	Barometric pressure	29.23	inHg
0x3C	Catalyst temperature (Bank 1 Sensor 1)	747.32	°F
0x42	Control module voltage	14.22	V
0x43	Absolute load value	34.9	%
0x44	Fuel/Air commanded equivalence ratio	0.98	
0x45	Relative throttle position	3.92	%
0x46	Ambient air temperature	55.4	°F
0x47	Absolute throttle position B	32.16	%
0x49	Accelerator pedal position D	31.37	%
0x4A	Accelerator pedal position E	20.78	%
0x4C	Commanded throttle actuator control	5.88	%

## 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	No
Bank 2 - Sensor 2	No
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 \$80 - Manufacturer Defined	0.7969	0.3086	255.9928		Pass
\$01 - Exhaust	TID \$81 - Manufacturer	0.7851	0.2656	255.9928		Pass

Gas Sensor Monitor Bank 1 – Sensor 1	Defined					
\$02 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 2	TID \$03 - Low sensor voltage for switch time calculation(constant)	0.3002	0.3002	0.3002	V	Pass
\$02 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 2	TID \$04 - High sensor voltage for switch time calculation(constant)	0.4003	0.4003	0.4003	V	Pass
\$02 - Exhaust Gas Sensor Monitor Bank 1 – Sensor 2	TID \$05 - Rich to lean sensor switch time (calculated)	0.032	0	0.08	sec	Pass
\$21 - Catalyst Monitor Bank 1	TID \$80 - Manufacturer Defined	10.0975	0	7.9999		Fail
\$3A - EVAP Monitor (0.090")	TID \$80 - Manufacturer Defined	0	0	0	mA	Pass
\$3B - EVAP Monitor (0.040")	TID \$80 - Manufacturer Defined	0	0	0	mA	Pass
\$3C - EVAP Monitor (0.020")	TID \$80 - Manufacturer Defined	0	0	0		Pass
\$3D - Purge Flow Monitor	TID \$80 - Manufacturer Defined	0	0	0	mA	Pass
\$71 - Secondary Air Monitor 1	TID \$80 - Manufacturer Defined	5.12	0	4.992	sec	Fail
\$A2 - Misfire Cylinder 1 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	1	0	65535	counts	Pass
\$A2 - Misfire Cylinder 1 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	13	0	65535	counts	Pass
\$A3 - Misfire Cylinder 2 Data	TID \$0B - EWMA (Exponential Weighted Moving Average) misfire counts for last ten (10) driving cycles	2	0	65535	counts	Pass
\$A3 - Misfire Cylinder 2 Data	TID \$0C - Misfire counts for last/current driving cycles (calculated, rounded to an integer value)	1	0	65535	counts	Pass

## Mode \$09 - Vehicle Information

### General Information

Description	Value
Vehicle Identification Number	JM1FE173840119678
Calibration ID - \$7E0	N3Z2EU00013H6020
Calibration Verification Number - \$7E0	02EF5ADC

### In-Performance Tracking

Counter	Description	Value
0x00	OBD Monitoring Conditions Encountered Counts	1
0x01	Ignition Cycle Counter	5
0x02	Catalyst Monitor Completion Counts Bank 1	1
0x03	Catalyst Monitor Conditions Encountered Counts Bank 1	1
0x06	O2 Sensor Monitor Completion Counts Bank 1	1
0x07	O2 Sensor Monitor Conditions Encountered Counts Bank 1	1
0x0C	AIR Monitor Completion Condition Counts (Secondary Air)	2