Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922

Subject:	**Bulletin No.:** 01-011/17
CHECK ENGINE LIGHT ON WITH DTC P2183:00	**Last Issued:** 08/04/2017

APPLICABLE MODELS/VINS
2014-2017 Mazda3 with VINS starting with 3MZ
2014-2017 Mazda3 with VINS lower than JM1B*******153241 (produced before May 16, 2017)

DESCRIPTION

If a customer brings their vehicles in with DTC P2183:00 stored, repair the vehicle using the following Repair Procedure and Caution.

- P2183:00: ECT sensor No.2 circuit range/performance problem

This is caused by the ECT sensor No.2 located near the bottom of the radiator getting wet and water entering the part due to insufficient water resistance. To correct this issue, the water resistance of the ECT sensor No.2 has been improved.

REPAIR PROCEDURE

1. Verify customer concern.
2. Check ECT sensor PIDs on Data Logger with Mazda Modular Diagnostic System (M-MDS).

- ECT: Engine Coolant Temperature
- ECT2_V: ECT sensor No.2 voltage

If the ECT sensor No.2 internal circuit is corroded, the sensor output is far below the ECT sensor No.1 output due to higher resistance caused by corrosion.
Determine if the ECT sensor No.2 is malfunctioning by comparing the two sensors outputs.

Output (V)	4.84	4.79	4.72	4.64	4.55	4.43	4.30	4.14	3.96	3.77	3.56
Temp (°C)	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
Temp (°F)	-40	-31	-22	-13	-4	5	14	23	32	41	50

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Output (V)	3.33	3.10	2.86	2.63	2.39	2.17	1.95	4.14	1.57	1.40	1.25
Temp (°C)	15	20	25	30	35	40	45	50	55	60	65
Temp (°F)	59	68	77	86	95	104	113	122	131	140	149

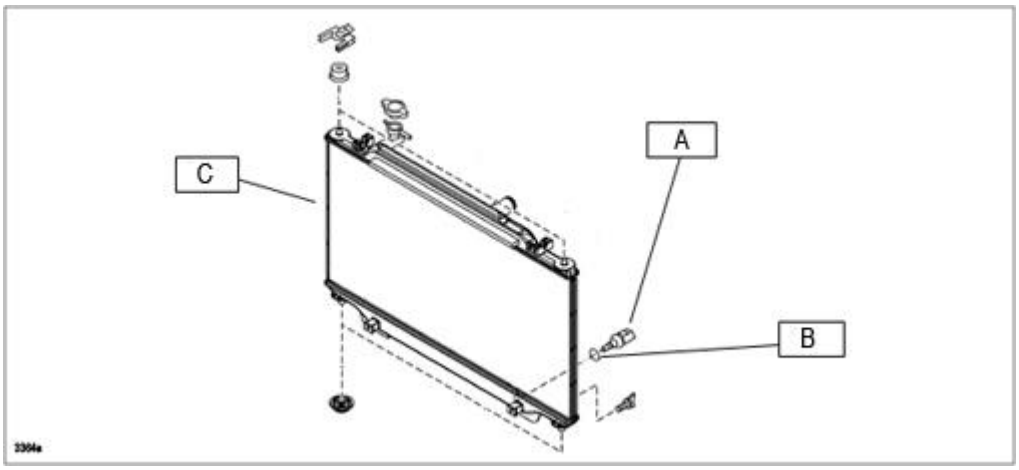
Output (V)	1.11	0.99	0.87	0.78	0.69	0.61	0.55	0.48	0.43	0.38	0.34
Temp (°C)	70	75	80	85	90	95	100	105	110	115	120
emp (°F)	158	167	176	185	194	203	212	221	230	239	248

3.If the ECT sensor No.2 is determined to be "NO GOOD", replace it with a modified one according to the Workshop Manual "ENGINE COOLANT TEMPERATURE (ECT) SENSOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].)"

NOTE: Corroded contact pins can be seen if badly corroded, but no corrosion may be seen if the pins are only corroded in back.

PARTS INFORMATION

Parts Number	Description	Qty.
PE18-18-840	Sensor, Temp Eng Coolant (A)	1
9956-21-200	Gasket (B) at Radiator (C)	1



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WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under FederalEmission Warranty or CAPZEV Emission Warranty.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	6X
Damage Code	9W
DTC Code	P2183
Part Number Main Cause	PE18-18-840
Quantity	1
Operation Number / Labor Hours:	XXN67XRX / 0.7 Hrs.

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