

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922



Subject: CHECK ENGINE LIGHT ON WITH DTC P0126:00	Bulletin No.: 01-011/21
	Last Issued : 09/27/2021

BULLETIN NOTES

This bulletin supersedes the previously issued bulletin(s) listed below. The changes are noted below in Red.

Previously Issued TSBs:	Date(s) Issued
01-011/21	04/22/21

APPLICABLE MODEL(S)/VINS

2019-2021 Mazda3

2018-2021 (US spec) / 2019-2021 (Mexico spec) Mazda6

2019-2021 CX-3

2018-2021 CX-5

2020-2021 CX-30

NOTE: Vehicles with SKYACTIV-G 2.5T (turbo) are not applicable.

DESCRIPTION

Some customers may experience the CHECK ENGINE light ON with DTC P0126:00 (Thermostat stuck open) and one or more of the following symptoms:

- The engine takes longer to warm up
- The engine temperature gauge fluctuates
- The low coolant temperature indicator (blue) light stays on longer or comes on while driving
- Poor heater performance, especially at idle

NOTE: Vehicles with SKYACTIV-G 2.5T are not applicable.

Due to production variety of the failsafe thermostat integrated in the coolant control valve, engine coolant may enter into a dry hollow in the failsafe thermostat, resulting in unintended opening of the failsafe thermostat at lower temperatures (104-176 °F (40-80 °C)). To eliminate this concern, the production process of the coolant control valve has been modified.

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REPAIR PROCEDURE

- Verify customer concerns and check the coolant temperature in the freeze frame data.
 - If it is at around 104-176 °F (40-80 °C), proceed to step 2.
 - If it is not at around 104-176 °F (40-80 °C), this TSB is not applicable. Diagnose according to the instruction on MGSS.
- Replace the coolant control valve with a new one according to the instruction on MGSS (COOLANT CONTROL VALVE REMOVAL/INSTALLATION).
 - Mazda3 (COOLANT CONTROL VALVE REMOVAL/INSTALLATION)
 - Mazda6 (COOLANT CONTROL VALVE REMOVAL/INSTALLATION)
 - CX-3 (COOLANT CONTROL VALVE REMOVAL/INSTALLATION)
 - CX-5 (COOLANT CONTROL VALVE REMOVAL/INSTALLATION)
 - CX-30 (COOLANT CONTROL VALVE REMOVAL/INSTALLATION)
- Warm up the engine and confirm that the primary malfunction is resolved according to the instruction on MGSS (Repeatability verification procedure in the DTC P0126:00 [PCM]).
 - Mazda3 (DTC P0126:00 [PCM (SKYACTIV-G)])
 - Mazda6 (DTC P0126:00 [PCM (SKYACTIV-G)])
 - CX-3 (DTC P0126:00 [PCM (SKYACTIV-G)])
 - CX-5 (DTC P0126:00 [PCM (SKYACTIV-G)])
 - CX-30 (DTC P0126:00 [PCM (SKYACTIV-G)])
- Verify repair.

PARTS INFORMATION

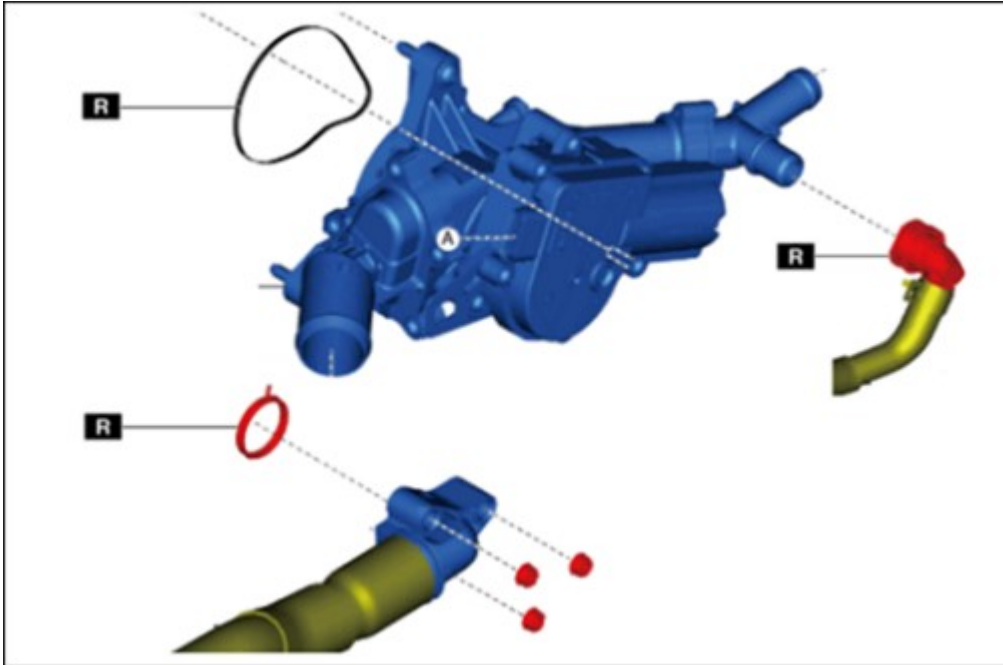
Parts Number	Description	Qty.	Notes
PYFD-15-16Z	Valve, Water Control	1	O-ring included
PYFB-15-169	Gasket, Water Outlet	1	[R] for Lower radiator hose component
PE13-15-296	Connector	1	[R] for water hose for A/T oil cooler
PYFA-15-592A	O-Ring (Water Outlet)	1	[R] for ECT sensor No.2
PYFB-15-113	Washer	1	[R] for ECT sensor No.2
0000-77-508E-20	Coolant	as needed	7.8 US qt (7.4L, 6.5 Imp qt) maximum

[R]: Replacement parts

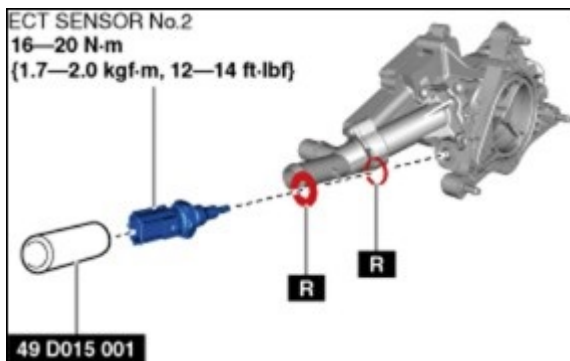
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Replacement parts locations

- O-ring
- Gasket
- Connector



- O-ring and washer for ECT sensor No.2



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NOTE: Since the modification has been implemented during the production of the part number without a suffix, it is necessary to check the suffix and the production date code of the obtained part.

- If available part is PYFD-15-16ZA or with later suffix, the following procedure is not necessary.

1. With a smart phone, scan the two dimensional code on the water control valve.
2. The code consists of three blocks of codes where the sample picture is read as PYFD1516Z 171115 0000063 and the second block of the code is the production date in YYMMDD format.

- If the second block of the code is 201116 or greater (meaning November 16, 2020 or later), the coolant control valve is modified.



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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 Mazda's Powertrain Warranty term, Calif. Emission Warranty (long term) [except 2018 Mazda6, 2019 CX-3 and 2018 CX-5], or Calif. Emission Warranty (short term) [2018 Mazda6, 2019 CX-3 and 2018 CX-5]
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	6X
Damage Code	9K
Part Number Main Cause	PYFD-15-16Z
Quantity	1
Operation Number / Labor Hours:	See chart below.

Model	Spec	Operation No.	Labor Hours
Mazda3	2.0L	XXT2BARX	1.3 Hrs.
	2.5L-A/T	XXT2BBRX	
	2.5L-M/T	XXT2BCRX	1.2 Hrs.
CX-3	2.0L	XXT2BARX	1.2 Hrs.
CX-30	2.0L	XXT2BARX	1.2 Hrs.
	2.5L without cylinder deactivation	XXT2BDRX	
	2.5L with cylinder deactivation	XXT2BERX	1.3 Hrs.
Mazda6	2.5L	XXT2BFRX	1.3 Hrs.
CX-5	2.0L-M/T	XXT2BGRX	1.2 Hrs.
	2.0L-A/T	XXT2BHRX	1.3 Hrs.
	2.5L	XXT2BFRX	

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