

Subject: CHECK ENGINE LIGHT ON WITH DTCs P0011:00 AND/OR P0012:00	Bulletin No: 01-007/15
	Last Issued: 05/12/2015

APPLICABLE MODEL(S)/VINS

2015 CX-5 with VINs from JM3KE*****439966 to 461449 (produced from Jan. 31, 2014 to Mar. 21, 2014)

2014 Mazda3 with VINs from JM1BM*****177872 to 196206 (produced from Jan. 31, 2014 to Mar. 21, 2014)

2015 Mazda6 with VINs from JM1GJ*****170533 to 177277 (produced from Jan. 31, 2014 to Mar. 21, 2014)

DESCRIPTION

Some vehicles may experience a check engine light on with DTCs P0011:00 and/or DTC P0012:00 stored in memory.

- P0011:00: Electric variable valve timing control system - (Over-advanced)
- P0012:00: Electric variable valve timing control system - (Over-retarded)

This concern may be caused by variable valve timing (VVT) actuator spring shaft fatigue. During vehicle usage, the spring shaft may fail and cause incorrect VVT operation and check engine light illumination.

The inspection procedure has been improved to eliminate this concern in the future.

When you encounter a customer complaint on this concern, repair according to the steps below.

REPAIR PROCEDURE

1. Verify that DTCs P0011:00 and/or P0012:00 are stored in the PCM memory.
2. Warm up the engine to normal operating temperature.
3. Inspect various valve timing performance (conformity) using M-MDS.
 - a. Access the following PIDs:
 - VT IN_ACT
 - VT IN_DES
 - b. Run the engine from idle up to 3,000 rpm. Repeat this five (5) times.
 - c. Does the monitor value of the PID item VT IN_ACT conform to the VT IN_DES PID value?
 - If YES, this bulletin is not applicable. Refer to the instructions on MS3 online or the Workshop Manual.
 - If NO, go to next step.
4. Replace the electric variable valve timing motor/driver and actuator according to MS3 online or the Workshop Manual:
 - (section 01-10 ELECTRIC VARIABLE VALVE TIMING MOTOR/DRIVER REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5]).
 - (section 01-10 ELECTRIC VARIABLE VALVE TIMING ACTUATOR INSPECTION [SKYACTIV-G 2.0, SKYACTIV-G 2.5]).
 - (section 01-10 ELECTRIC VARIABLE VALVE TIMING ACTUATOR, HYDRAULIC VARIABLE VALVE TIMING ACTUATOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5]).
5. Verify the repair.

PART(S) INFORMATION

Part Number	Description	Qty.	Notes
PE01-12-4X0B	EVVT Actuator	1	---
PE01-10-235	Cylinder Head Cover Gasket	1	2.0L
PY01-10-235		1	2.5L
PE01-12-257	EVVT Motor / Driver Gasket	1	---
9YA0-20-678	Upper Blind Plug	1	---
9YA0-20-863	Lower Blind Plug	1	2.0L
9YA0-20-865		1	2.5L

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.
- This repair will be covered under California Emissions (Short or Long) or PZEV Emissions Warranty where applicable.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	6X
Damage Code	9M
Part Number Main Cause	PE01-12-4X0B
Quantity	1
Operation Number / Labor Hours:	XXL2SXRX / 2.0 Hrs.