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| <b>Subject:</b><br><br><b>CHECK ENGINE LIGHT ON WITH DTC P0300-P0304</b> | <b>Bulletin No:</b> 01-014/16  |
|  | <b>Last Issued:</b> 06/10/2016 |

## APPLICABLE MODEL(S)/VINS

2013-2016 CX-5 vehicles with VINs lower than JM3KE\*\*\*\*\*802960 (produced before April 7, 2016)

2014-2016 Mazda3 vehicles with VINs lower than JM1BM\*\*\*\*\*346088 (produced before April 7, 2016)

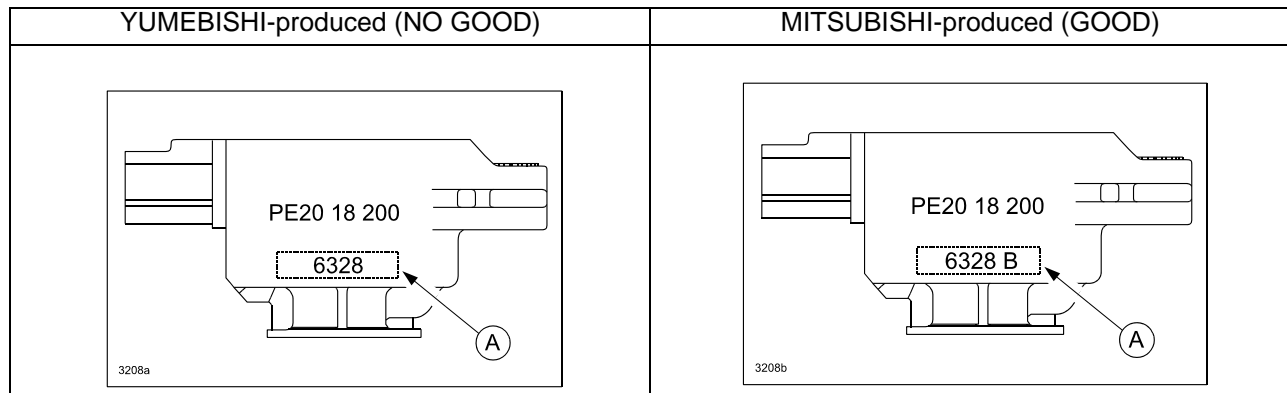
2014-2016 Mazda6 vehicles with VINs lower than JM1GJ\*\*\*\*\*111093 (produced before April 7, 2016)

## DESCRIPTION

Some vehicles may experience a lack of engine power/rough idling and the check engine light on with one or more of the misfire related DTCs of P0300:00, P0301:00, P0302:00, P0303:00 and P0304:00. This concern may be caused by an internal failure of the ignition coil(s) due to a high difference between cold and warm ambient temperatures. The production method of the ignition coil has been changed to eliminate this concern.

**NOTE:** The ignition coils are supplied from two different vendors, YUMEBISHI and MITSUBISHI. This concern only occurs on YUMEBISHI- produced ignition coil.

To distinguish between YUMEBISHI and MITSUBISHI ignition coils, look at their lot numbers (A). YUMEBISHI have 4 digit lot numbers and MITSUBISHI have 5 digit lot numbers as shown.



|   |   |
|---|---|
| 6 | Year (4=2014, 5=2015, 6=2016)                     |
| 3 | Month (1=Jan, 2=Feb, 3=Mar...X=Oct, Y=Nov)        |
| 2 | Day   |
| 8 |   |
| B | MITSUBISHI-produced only (A=Daytime, B=Nighttime) |

Customers having this concern should have their vehicle repaired using the following repair procedure.

**CONSUMER NOTICE:** The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools/equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership. Mazda North American Operations reserves the right to alter the specifications and contents of this bulletin without obligation or advance notice. All rights reserved. No part of this bulletin may be reproduced in any form or by any means, electronic or mechanical---including photocopying and recording and the use of any kind of information storage and retrieval system ---without permission in writing.

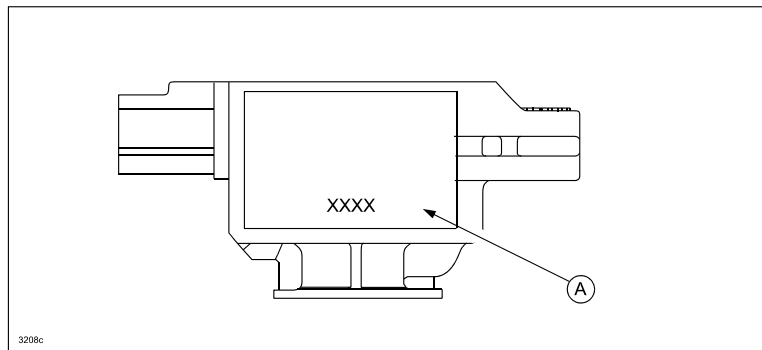
## REPAIR PROCEDURE

1. Verify the customer concern and the misfire related DTC(s) exists using the M-MDS.
2. Switch the two ignition coils of the cylinder with a misfire (identified by the misfire DTC) and a cylinder without misfire.
  - If the misfire transfers to the other cylinder, the ignition coil is defective. Go to next step.
  - If the misfire does not transfer, a different cause such as malfunction of the wiring harness, spark plug etc. is possible. In this case, this TSB is not applicable. Perform further diagnosis according to the workshop manual.
3. Replace the defective ignition coil(s) with modified one(s) according to the workshop manual (section 01-18).  
CX-5: IGNITION COIL/ION SENSOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].  
Mazda3: IGNITION COIL/ION SENSOR REMOVAL/INSTALLATION [SKYACTIV-G 2.0, SKYACTIV-G 2.5].  
Mazda6: IGNITION COIL/ION SENSOR REMOVAL/INSTALLATION [SKYACTIV-G 2.5].
4. Check if any of the other non-defective coils are YUMEBISHI-produced and made before lot number 6328 (March 28, 2016 production). If any were made before this date, replace them with modified one(s) as well.
5. Verify the repair

## PART(S) INFORMATION

| Part Number  | Description   | Qty.          |
|--------------|---------------|---------------|
| PE20-18-100A | Ignition Coil | 1, 2, 3, or 4 |

**NOTE:** There is no part number change. Differentiate the new modified ignition coil (YUMEBISHI-produced) from the old one by the lot number on the ignition coil. Ignition coils with the lot number of 6328 (March 28, 2016 production) or higher are modified.



## 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 New Vehicle Limited Warranty and California Emission Warranty (short term) or PZEV, where applicable.
- Additional diagnostic time cannot be claimed for this repair.

|                                 |                              |
|---------------------------------|------------------------------|
| Warranty Type                   | A                            |
| Symptom Code                    | 03 (Rough Idle)              |
| Damage Code                     | 9W (Internal Failure)        |
| Part Number Main Cause          | PE20-18-100A (Ignition Coil) |
| Quantity                        | 1, 2, 3, or 4                |
| Operation Number / Labor Hours: | XXM3WBRX / 0.4 Hrs.          |