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Subject: RATTLE / CHATTER NOISE FROM REAR DIFFERENTIAL	Bulletin No: 03-001/16
	Last Issued: 01/08/2016

BULLETIN NOTE

- This bulletin supersedes the previous bulletin 03-002/14, issued on 05/13/14. The APPLICABLE MODEL(S)/VINS, DESCRIPTION, REPAIR PROCEDURE, and PART(S) and WARRANTY INFORMATION have been revised.
- Changes are noted below in Red beside the change bar.

APPLICABLE MODEL(S)/VINS

2013-2016 CX-5 AWD vehicles with VINs lower than JM3KE*****725078 (produced before October 1, 2015)

DESCRIPTION

While driving at low speeds, some vehicles may exhibit a chattering / rattling type noise from the rear of the vehicle. The noise may be caused by a rear differential bearing failure.

The following mass-production changes have been implemented to eliminate the noise.

Description	Starting VIN and Production Date
1. The assembly process was improved.	JM3KE*****391989 (September 16, 2013)
2. The shape of the coupling unit housing was changed.	JM3KE*****725078 (October 1, 2015)

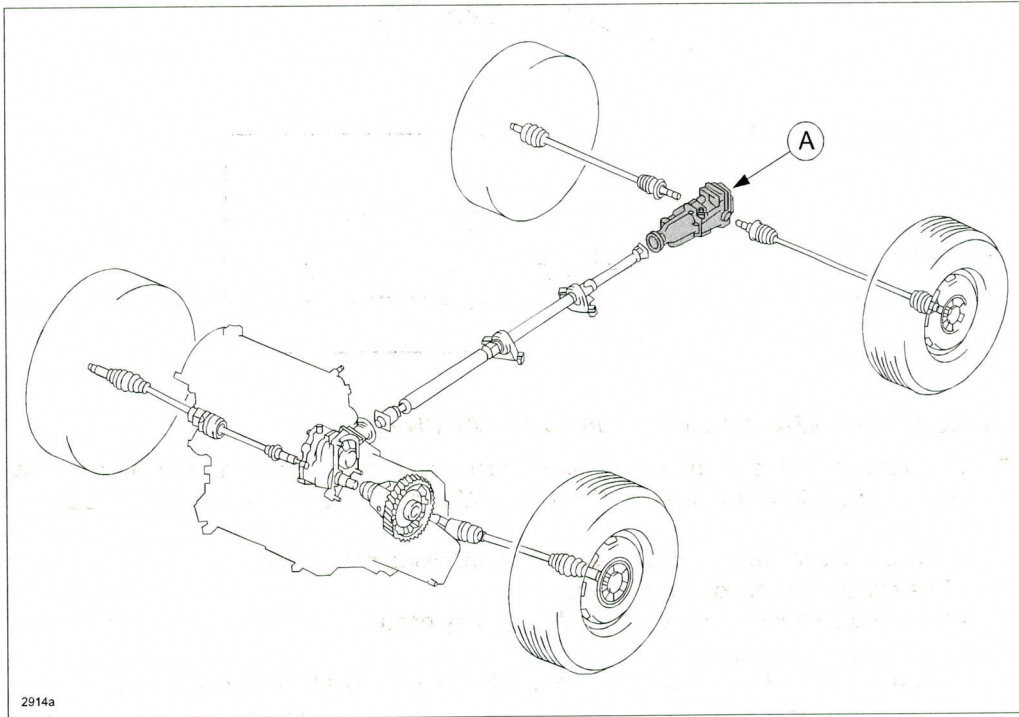
Customers having this concern should have their vehicle repaired using the following repair procedure.

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

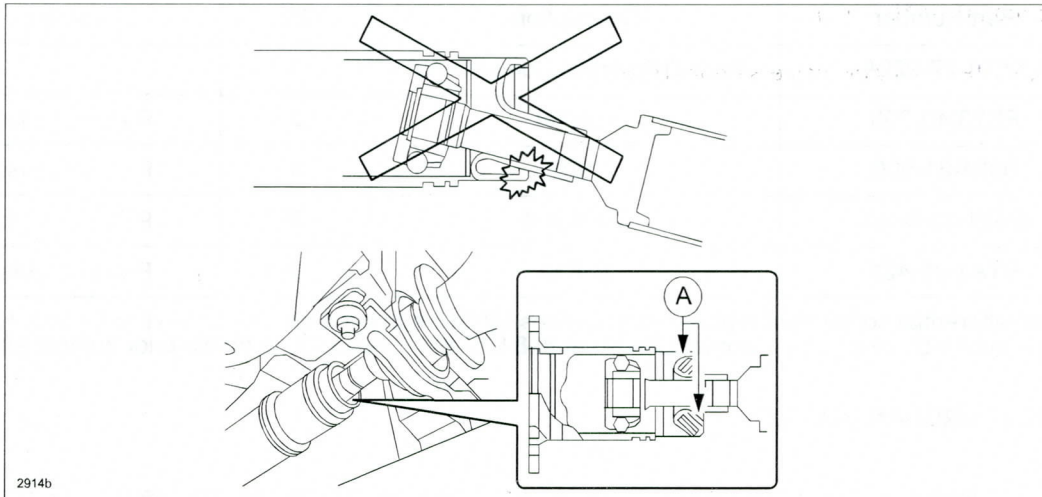
1. Lift the vehicle **according to the instructions on MS3 online or the Workshop Manual** (section 00-00 JACKING POSITIONS, VEHICLE LIFT (2 SUPPORTS) AND SAFETY STAND (RIGID RACK) POSITIONS).
2. Verify the noise is heard from the rear differential component (A) when the wheel speed is approximately 3 to 6 mph (5 to 10 km/h).

[CLICK HERE](#) to view noise sample video.



3. Has the noise been verified?
 - a. Yes - Proceed to step 4.
 - b. No - This bulletin does not apply. Refer to MS3 online or Workshop Manual (section 03-03 NO.3 ABNORMAL NOISE AND/OR VIBRATION FROM COUPLING COMPONENT).
4. **Obtain Hotline Control Number (HCN) from MS3 online.**
5. Contact MASH at 888 832-8477, option 2, to obtain authorization to replace the rear differential component (including the coupling unit). Refer to MS3 online or Workshop Manual (section 03-14 REAR DIFFERENTIAL REMOVAL/INSTALLATION).

CAUTION: If the constant velocity joint angle is excessive during propeller shaft removal/installation, the constant velocity joint boot may be damaged when contacting the metallic cover. Protect the constant velocity joint boot by inserting a shop rag (A) between the boot and the metallic cover.



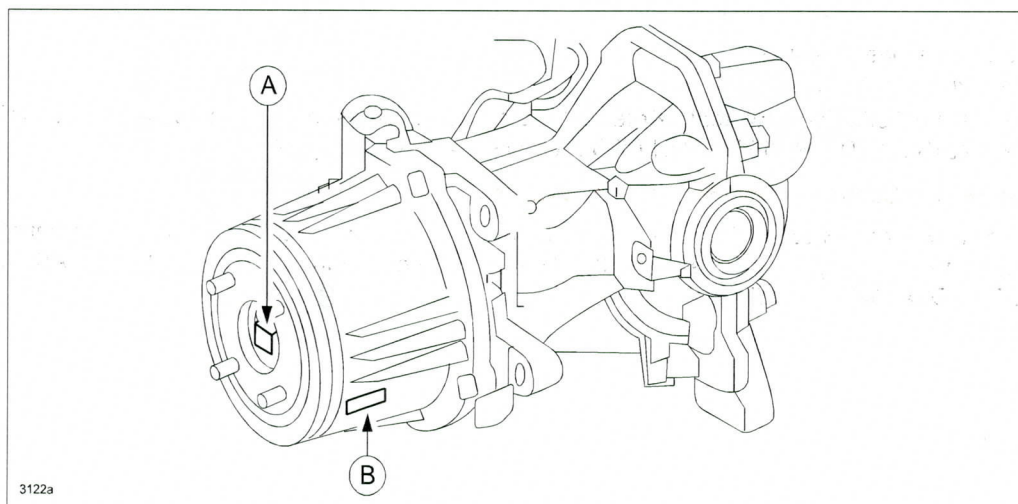
COUPLING COMPONENT CALIBRATION DATA WRITING:

CAUTION: After part replacement, write characteristic value of new coupling component to 4WD control module (from M-MDS toolbox, "Chassis", "4WD/AWD", "Coupling Calibration Data Writing").

If this is not completed, it may result in the following conditions:

- The system will not operate normally.
- Coupling component durability problems may occur.

Obtain characteristic value from label (A) or mark (B) locations shown below.



6. Verify repair.

PART(S) INFORMATION

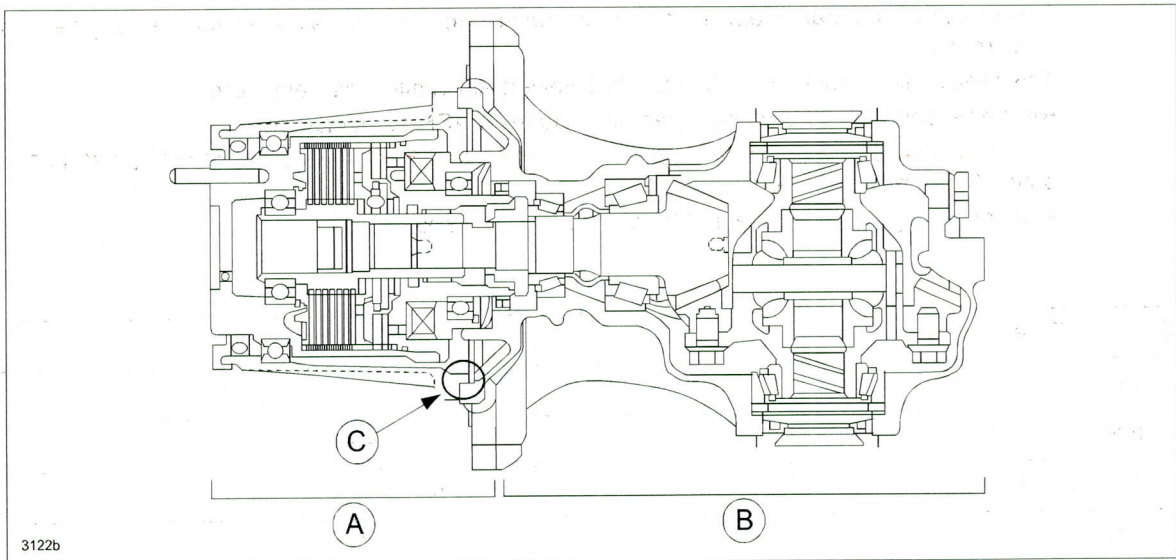
Part Number	Description	Qty.	Notes
KAT1-27-020A	Rear Differential Component *	1	---
PE23-40-305	Gasket	2	Part not reusable
9994-61-000	Nut	4	Part not reusable
D651-33-042A	Lock Nut	2	Part not reusable
RTA1-25-421	C-Clip	2	Part not reusable

* Rear differential component replacement requires MASH authorization. Obtain Hotline Control Number (HCN) from MS3 online, then contact MASH at 888 832-8477, option 2, to obtain prior authorization.

PARTS INTERCHANGEABILITY:

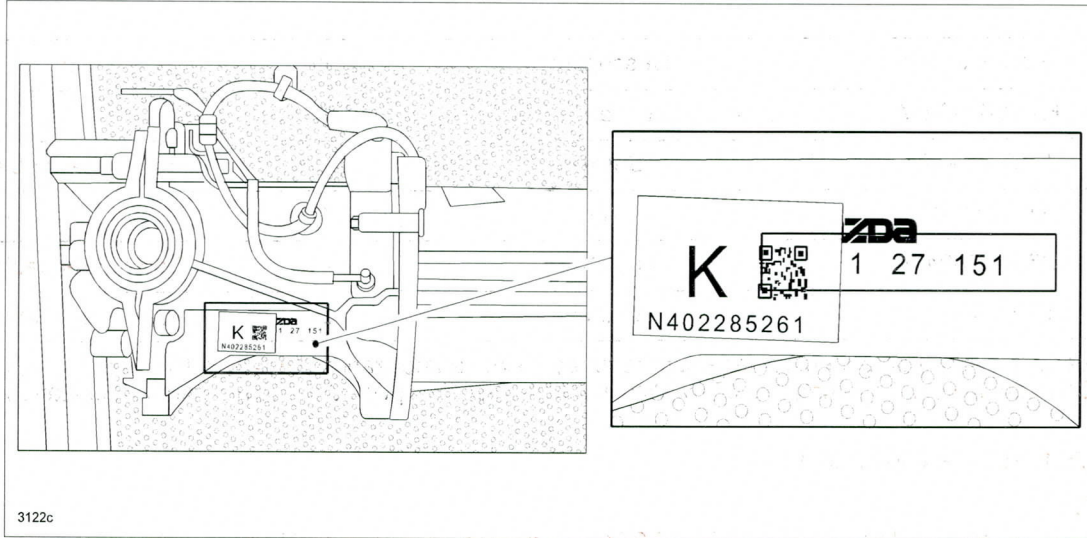
NOTE:

- New coupling unit (A) (KE01-27-97XA) and differential housing (B) are used during mass-production.
- New coupling unit IS NOT INTERCHANGEABLE WITH THE OLD DIFFERENTIAL HOUSING due to an increase in guide (C) length.



IDENTIFY DIFFERENTIAL HOUSING:

- The **OLD** differential housing has no suffix (KA01-27-151) in the molded part number (as shown below).
- The **NEW** differential housing has an "A" suffix (KA01-27-151A) in the molded part number.



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 Limited Warranty term.
- Rear differential component replacement requires MASH authorization.
- Obtain Hotline Control Number (HCN) from MS3 online, then contact MASH at 888 832-8477, option 2, to obtain prior authorization.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A	
Symptom Code	82	
Damage Code	9G	
Part Number Main Cause	KAT1-27-020A	
Quantity	1	
Operation Number / Labor Hours:	XXK66CRX / 3.0 Hrs. Rear Differential Component R&R	SKYACTIV-G 2.0L and 2.5L w/o Electric Parking Brake
	XXK66CRX / 3.1 Hrs. Rear Differential Component R&R	SKYACTIV-G 2.0L and 2.5L with Electric Parking Brake