

# Service Alert

Mazda North American Operations  
Irvine, CA 92618-2922



<b>Subject:</b>  <b>WHEEL BEARING NOISE MISDIAGNOSED AS TRANSMISSION, TRANSFER UNIT OR DIFFERENTIAL</b>	<b>Service Alert No.: SA-006/22</b>
	<b>Last Issued : 02/28/2022</b>

## BULLETIN NOTES

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

Previous Service Alerts:	Date(s) Issued:
SA-032/21	05/11/21
SA-016/19	04/08/19

## APPLICABLE MODEL(S)/VINS

2012-2022 Mazda3	2016-2021 CX-3	2016-2022 Mazda2
2013-2022 CX-5	2016-2022 CX-9	2020-2022 CX-30
2014-2022 Mazda6	2016-2022 MX-5	2023 CX-50

## DESCRIPTION

There have been warranty claims submitted for growling or bearing whine noise in differentials, transfer units and transmissions where the source of the noise was a wheel bearing. This misdiagnosis can lead to multiple repair attempts, warranty debits, and additional inconvenience and/or cost to the customer. To reduce the chance of this occurring, please follow the steps outlined in the repair procedure.

## REPAIR PROCEDURE

1. Before test driving the vehicle, visually inspect the tires for excess or unusual wear and verify they are all the same size, brand, and overall wear.
2. Compare the vehicle to another like vehicle (same trim, model year, **and tires**) to confirm the concern is not a characteristic of the vehicle.

**NOTE: Record the noise heard in the customer vehicle and make a recording in the known good vehicle when driven under the same conditions.**

3. Check for another published document for the vehicle you are working on that describes the noise. **Is there another published document?**

- **YES:** Follow that repair procedure first and retest.
- **NO:** Continue to the next step.

Page 1 of 2

**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.

4. Lift both vehicles in the air and run them at the speed the noise is heard on the road.
- a. Are both vehicles equal in operational noise when run on the rack?  
**YES:** Go to step 5.  
**NO:** Continue to the next sub-step.
  - b. Use a stethoscope and listen to each wheel bearing and compare it to the known good vehicle. **Are any bearings significantly noisier on the customer's vehicle vs. the known good vehicle?**  
**YES:** Replace the suspect bearing(s).  
**NOTE: If you can hear the noise without a stethoscope, make a recording of it and then make a recording of the known good vehicle under the same conditions.**  
**NO:** Go to step 5.
  - c. If the source of the noise was not confirmed in the previous steps, swap the wheels and tires with those from a known good vehicle.  
**NOTE: If tires are required, contact the tire manufacturer for warranty replacement. Contact phone numbers for the various brands are found in the *Mazda Quick Reference to Warranty* booklet. In the 2021 edition, it is found on page 26.**
  - d. Contact the **Technical Assistance Hotline** with all of your test results.

**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.