



Subject: WHEEL BEARING NOISE MISDIAGNOSED AS TRANSMISSION, TRANSFER UNIT OR DIFFERENTIAL NOISE	Service Alert No.: SA-020/25
	Last Issued : 04/15/2025

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-006/22	03/09/22 and 02/28/22
SA-032/21	05/11/21
SA-016/19	04/08/19

APPLICABLE MODEL(S)/VINS

2012-2025 Mazda3	2016-2025 CX-3	2016-2025 Mazda2	2024-2025 CX-90
2013-2025 CX-5	2016-2023 CX-9	2020-2025 CX-30	2025 CX-70
2014-2021 Mazda6	2016-2025 MX-5	2023-2025 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

- Before test-driving the vehicle, visually inspect the tires for excess or unusual wear and verify that they are all the same size, brand, and overall wear.
NOTE: Tires of different brands, size and/or circumference may cause noise and/or damage to the vehicles transmission, transfer case and/or differential.
- 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.

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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

4. Lift both vehicles in the air.

- a. Run both vehicles at the speed the noise is heard on the road.

Are both vehicles equal in operational noise when run on the rack?

- YES:** Go to step 5.
NO: Go to step b.

- b. Use ChassisEAR or a stethoscope and listen to each wheel bearing and compare it to the known good vehicle.

NOTE: Refer to the following video on the use of ChassisEAR for NVH diagnosis: Using ChassisEAR
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 ChassisEAR or 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.

5. 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. A list of tire manufacturers can be found under Tire Warranty in the MAZDA WARRANTY POLICIES & PROCEDURES MANUAL on One Mazda.

6. Contact the Technical Assistance Hotline with all of your test results.

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