

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922



Subject: LIGHT RESISTANCE AND/OR UNUSUAL NOISE WHEN TURNING STEERING WHEEL LEFT OR RIGHT	Bulletin No.: 06-002/23
	Last Issued : 05/03/2023

BULLETIN NOTES

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

Previous TSBs:	Date(s) Issued:
06-001/21	01/20/21 and 09/16/21
06-001/20	02/05/20
06-005/19	7/22/19
06-002/18	09/14/18

APPLICABLE MODEL(S)/VINS

US Spec.:

2016-2022 CX-3 vehicles with VINs lower than JM1 DK**** ** 606638 (Produced before Jul. 11, 2021)

Mexico Spec.:

2023 CX-3

2016-2021 CX-3 vehicles with VINs lower than JM1 DK**** ** 606638 (Produced before Jul. 11, 2021)

2016-2023 Mazda2 without Lane-keep assist

Mazda2 equipped with Lane-keep assist system is not applicable to this service bulletin due to a difference of part supplier.

DESCRIPTION

Some vehicles may exhibit a light resistance and/or an unusual noise when turning the steering wheel in either direction. This concern may be caused by **insufficient lubrication between the worm wheel gear and worm shaft.**

To eliminate this concern, the production process for the steering shaft has been modified.

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

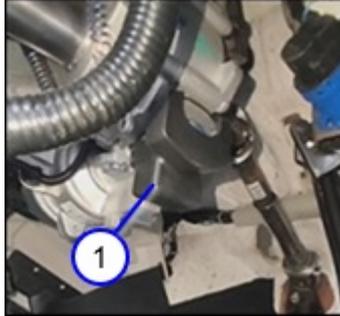
REPAIR PROCEDURE

1. Verify the customer concern.

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.

Add grease to the steering column according to following steps:

1. Place paper on floor mat of driver seat to prevent it from getting dirty.
2. Adjust the driver seat to the rear most position and adjust the steering wheel to the highest position.
3. Remove the housing cover (1) if equipped.

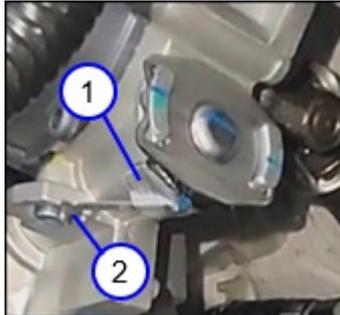


4. Remove the aluminum tape (1).

NOTE:

- When the aluminum tape is removed, a hole will appear.
- The old sealant (butyl rubber) can be left as is.

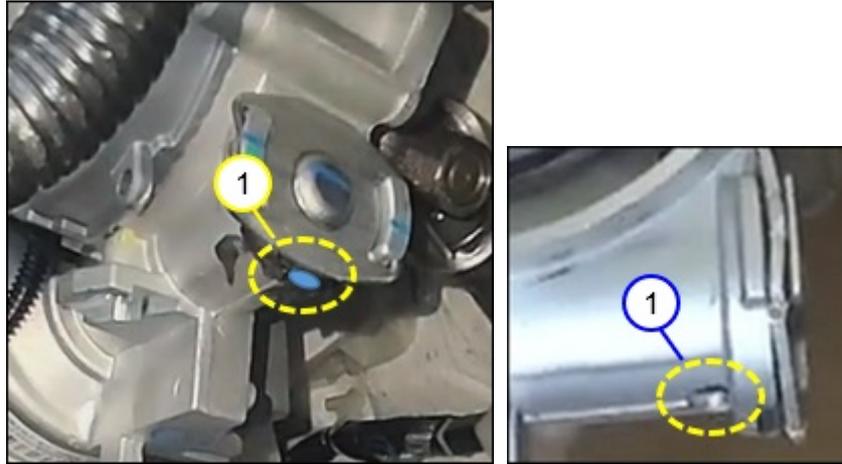
5. Remove the anti-rattle spring (2) using a T25 wrench.



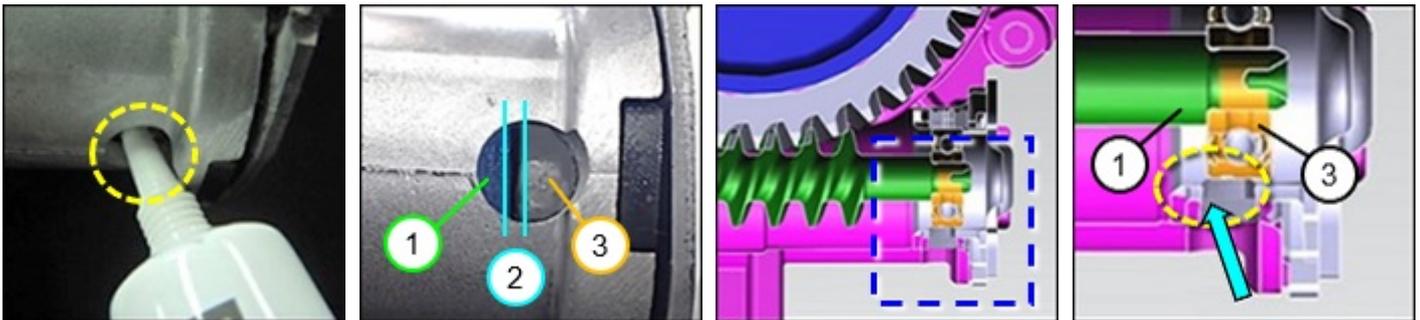
6. Prepare the grease tube.
7. Start the engine.
8. Turn the steering wheel to the left lock position.
9. Insert the tip of the grease tube into the hole (1).

NOTE: If butyl adheres to your fingers, clean your fingers to avoid parts contamination.

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.

**IMPORTANT NOTE:**

- Keep the proper angle of the grease tube to the hole.
- Inject the grease by inserting the tip of the grease tube into the gap (2) between the worm shaft (1) and the bearing (3).
- If the grease overflows from the hole, the grease is not entering the gap.
- To avoid the grease staying at the hole, keep the tip of the grease tube off the bearing (3) and keep the steering wheel turning.
- If the grease does not reach to entire worm gear, the concern may recur.



10. While injecting the grease, slowly turn the steering wheel to the right lock position.

NOTE: Inject the grease so that one tube is used up while turning steering wheel from the left lock position to the right lock position.

11. To use the entire contents of the tube, gather grease in the tube by using a scraper as shown below.

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.



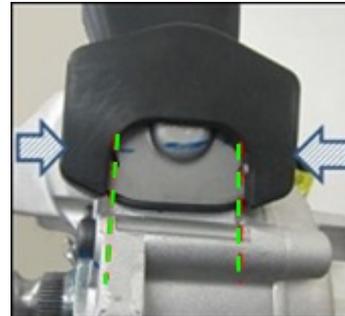
12. Repeat the procedure from steps 6 to 9 by using the remaining grease in the tube.
13. Prepare another grease tube.
14. Repeat the procedure from step 6 to 11 again.
15. Turning the steering wheel from lock to lock 5 times, check if the concern is resolved as the grease spreads on the entire worm gear.
16. Install the anti-rattle spring and the aluminum tape.

NOTE: Tightening torque of anti-rattle spring bolt using T25 wrench: {5.5-6.5 N-m, 56-66 kgf-cm, 48-57 in-lbf}

NOTE:

- Wipe off excess grease around the hole.
- **DO NOT** spray parts cleaner directly around the hole. Apply cleaner to a shop towel to wipe off the grease.

17. Install the housing cover.
 - a. Attach the band part of the cover.
 - b. Press it from both sides to fit.
 - c. Shake the cover lightly to confirm proper fit.



18. Return the driver seat and the steering wheel to the original position.
19. Verify the repair.

PARTS INFORMATION

NOTE: Mazda2 equipped with Lane-keep assist system is not applicable since the part supplier is different.

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.

Parts Number	Description	Qty.	Notes
D0Y0-32-GR1	Steering Grease	1	Includes parts listed below
DBY0-32-151A	End Housing Cover	1	Order if not installed

Description	Qty.
Grease tube (10ml)	2
Aluminum tape	1
Anti-rattle spring	1
Anti-rattle spring bolt	1



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 term.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	31
Damage Code	99
Part Number Main Cause	D0Y0-32-GR1
Quantity	1
Operation Number / Labor Hours:	XXP66XAX / 0.5 Hr.

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.