# Technical Service Bulletin

# Mazda North American Operations Irvine, CA 92618-2922



Subject:		
FRONT AND REAR BRAKE NOISE	Bulletin No.: 04-001/23	
	Last Issued : 09/13/2023	

#### **BULLETIN NOTES**

This bulletin supersedes the previously issued bulletin(s) listed below.

Previous TSBs:	Date(s) Issued:	Previous TSBs:	Date(s) Issued:
04-001/23	02/13/23, 01/04/23	04-001/22	03/24/22
04-004/22	11/29/22	04-003/20	02/20/20
04-002/22	06/09/22 and 04/19/22		

## APPLICABLE MODEL(S)/VINS:

2013-2024 CX-5

#### **DESCRIPTION**

**Front Brake Noise Symptom 1:** Some vehicles may exhibit a click noise when first moving forward or reverse from a stop OR when first applying the brakes while moving forward at slow speeds. This is caused by deteriorated grease between the brake pads and the shim, the front brake pads move upward/downward along with the brake rotors during brake application. When the vehicle moves or the brakes are applied the next time, the front brake pads move to the other side, which causes a click noise.

**Front Brake Noise Symptom 2:** Some vehicles may exhibit the brakes having an unusual noise or vibration when applying the brake. This is caused by rust on the brake disk plate's surface.

**Rear Brake Noise Symptom 1:** Some vehicles may exhibit a squeak noise from the rear brakes while braking lightly and occurs more frequently when driving at slow speeds. The noise is caused by poor contact between the guide plate and the mounting support. To eliminate this concern, the material of the pads has been changed to copper-free and the specification of the shims has been changed to a coated spring with tape.

**Rear Brake Noise Symptom 2:** Some vehicles equipped with an electric parking brake (EPB) may exhibit a grinding noise from the rear brakes when braking. This may be caused by the rear brake pads not having the capability to remove the rust from the rear brake discs. The red rust accumulated on the discs is exposed to high temperatures during braking, and consequently the rust turns black. As the black rust is too hard to be removed by the brake pads, the rust progress is accelerated, resulting in the grinding noise.

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

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# NOTE:

• The material of the brake pads has been changed to copper-free and the specification of the shims has been changed to a coated spring with tape.

• Refer to SA-019/20 - (BRAKE NOISE, JUDDER AND DRAGGING DIAGNOSIS AND SERVICING) if brake noise continues after repair is completed (front and rear).

#### REPAIR PROCEDURE

## Front Brake Repair Procedure:

- 1. Verify the customer concern.
- 2. Check the disc surface to see if the cause of noise and vibration is the disc's rust (Some areas of the surface have fallen off due to rust and are thinned, which may look like black stains on the surface). If rust is the cause of the noise or vibration when applying the brake, lathe disks on-vehicle, or replace them with new ones and replace the brake pads.

#### NOTE:

- Check the disc thickness using a micrometer before lathing, if the thickness is less than 27.6mm, replace the disc
  (DO NOT lathe). Measure the thickness in the relatively less rusted area where the pads are hitting but not in the
  severely rusted area.
- Disc replacement is acceptable if the repair shop does not have an on-car lathe machine.
- 3. After lathing the disc, re-measure the disc thickness. Replace the discs if the thickness is below the machining limit of 26.8 mm as well as the brake pads. Refer to the instructions in MGSS:
  - FRONT BRAKE DISC PAD REMOVAL/INSTALLATION [WITH SINGLE PISTON FLOATING CALIPER]
  - FRONT BRAKE DISC PAD REMOVAL/INSTALLATION WITH 2-PISTON FLOATING CALIPER
  - FRONT BRAKE DISC REMOVAL/INSTALLATION [WITH SINGLE PISTON FLOATING CALIPER]
  - FRONT BRAKE DISC REMOVAL/INSTALLATION [WITH 2-PISTON FLOATING CALIPER]
- 4. Verify the repair.

**NOTE:** Refer to SA-019/20 - (BRAKE NOISE, JUDDER AND DRAGGING DIAGNOSIS AND SERVICING) if brake noise continues after repair is completed.

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#### **Rear Brake Repair Procedure:**

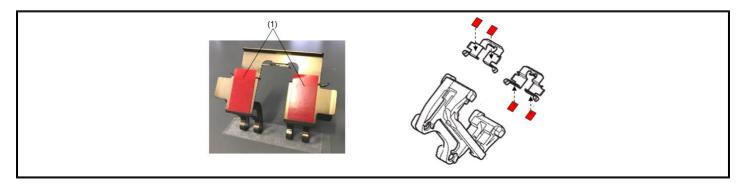
- 1. Verify the customer concern.
- 2. Check the disc surface to see if the cause of noise and vibration is the disc's rust (Some areas of the surface have fallen off due to rust and are thinned, which may look like black stains on the surface).

#### NOTE:

- If rust is the cause of the noise or vibration when applying the brake, lathe disks on-vehicle, or <u>replace them with</u> new ones and replace the brake pads.
- If brake discs DO NOT have rust, check the disc thickness using a micrometer before lathing, refer to the instructions in MGSS:
  - REAR BRAKE INSPECTION
  - REAR BRAKE DISC PAD REMOVAL/INSTALLATION
  - REAR BRAKE DISC REMOVAL/INSTALLATION

## NOTE:

- Verify if the tape is installed to both guide plates (some kits do not have the tape installed and is packaged separately).
- If the tape is not applied to the guide plates, peel off the red release film (1) and the dual adhesive tape (2) from
  the release paper (3) and apply the dual adhesive tape to the contact surfaces of the guide plates as shown
  below.



4. Verify the repair.

**NOTE:** Refer to SA-019/20 - (BRAKE NOISE, JUDDER AND DRAGGING DIAGNOSIS AND SERVICING) if brake noise continues after repair is completed.

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## **PARTS INFORMATION**

Model Year	Part Number	Description	Qty.	Notes
	KGY0-33-28Z	PAD SUB SET, FRONT CALIPER (W/O TURBO)	1	
	K0Y1-33-29Z	ATTACHMENT (SHIMS), PAD-FRONT (W/O TURBO)	1	
TAY0-33-28Z		PAD SUB SET, FRONT CALIPER (W/ TURBO)	1	
2013-2022 CX-5	L2Y6-33-29Z	ATTACHMENT (SHIMS), PAD-FRONT (W/ TURBO)	1	
	KD45-33-251	FRONT PLATE DISC (W/O TURBO )	0 or 2	
	TK78-33- 251B	FRONT PLATE DISC (W/ TURBO)	0 or 2	
2018 CX-5	TKY8-33- 28ZB	PAD SUB SET, FRONT CALIPER (DIESEL)	1	
(Diesel)	L2Y6-33-29Z	ATTACHMENT (SHIMS), PAD-FRONT (DIESEL)	1	
2013-2022 CX-5	KBY6-26-43Z	PAD SET, REAR CALIPER	1	With Attachments (Shims)
	K011-26- 251C	REAR PLATE DISC	0 or 2	

**NOTE:** If KBY6-26-43Z is unavailable to order, then the combination of KBY6-26-48Z and KBY6-26-49Z can be used in it's place.

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## WARRANTY INFORMATION

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#### 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 (if vehicle contains OE or Genuine Mazda brake pads/rotors).
- · Additional diagnostic time cannot be claimed for this repair.

Front Brakes		
Warranty Type	A	
Symptom Code	83	
Damage Code	9Y	
Part Number Main Cause	7777-SP-W18	
Quantity	0	
Operation Number / Labor Hours:	Discs and pads/attachments replacement - XXW53XRX / 0.5 Hrs. (For both sides)  Discs lathe, and pads/attachments replacement - XXW54XRT / Enter actual time (Max. 1.2 Hrs. for both sides)  Discs lathe, and discs and pads/attachments replacement - XXW55XRT / Enter actual time (Max. 1.2 Hrs. for both sides).	

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Rear Brakes		
Warranty Type	A	
Symptom Code	53	
Damage Code	9Y	
Part Number Main Cause	7777-SP-S18	
Quantity	0	
Operation Number / Labor Hours:	Pad Set Replacement (Both Sides) AND Brake Disc Replacement (Both Sides) YY833XRX / 0.6 Hrs. (*1)  Discs lathe, and pads/attachments replacement AND Discs lathe, and discs and pads/attachments replacement YY834XRT / Enter actual time (Max. 1.2 Hrs. for both sides).	

<sup>\*1:</sup> Submit an applicable labor time by referring to the SRT manual.

**NOTE:** All replaced parts are to be claimed as related parts.

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