

Subject: POOR WINDSHIELD WIPING, WIPER CHATTERING NOISE AND WIPER BLADE CONTACTING A-PILLAR	Service Alert No.: SA-025/25
	Last Issued : 05/15/2025

BULLETIN NOTES

APPLICABLE MODEL(S)/VINS

2020-2025 CX-30
2023-2025 CX-50
2025 CX-70
2024-2025 CX-90
2019-2025 Mazda3
2022-2023 MX-30

DESCRIPTION

Some vehicles may exhibit wiper blade contact with the A-pillar trim, with or without a chattering noise. This condition may be caused by worn or contaminated wiper blades. It can also be caused by bent wiper arms, or loose wiper arm retaining nuts due to improper handling. Improper handling occurs when pulling on or forcing the wiper arms. Technicians should be aware that while replacement of the wiper blade may resolve some cases, correction of bent components or repositioning of the wiper arms, particularly when the retaining nut is loose, requires additional steps to ensure proper alignment and function.

Customers with these concerns should have their vehicle repaired using the following repair procedure.

REPAIR PROCEDURE

Clean the front windshield and replace the front windshield wiper blades with new ones.

1. Operate the wipers and use the wiper washer function when doing so, or continuously spray water onto the windshield and turn them on.
2. Check the wiper arm and blade for damage.

Is the wiper chattering on the glass?

YES	Follow the steps below: a. Verify that the wiper arm is not bent or otherwise damaged. If damaged, replace it and the wiper blade (as customer pay) according to the instructions on MGSS "WINDSHIELD WIPER ARM AND BLADE REMOVAL/INSTALLATION" for the appropriate model. b. If the wiper arm is ok, clean the wiper blade and retest; if it still chatters, replace it. c. Continue to Step 3.
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NO	Continue to Step 3.
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3. Operate the wipers and use the wiper washer function when doing so, or continuously spray water onto the windshield and turn them on.

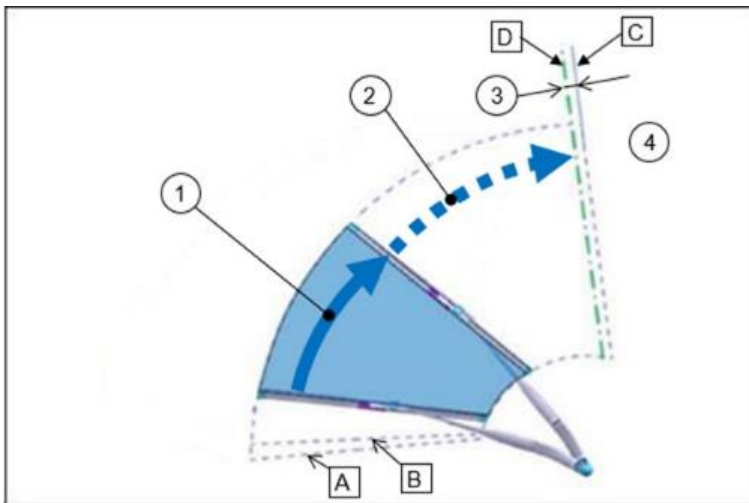
4. Check the wiper arm and blade for damage.

Is the wiper hitting the A-pillar?

YES	<ul style="list-style-type: none"> Verify that the wiper arm is not bent or otherwise damaged. If damaged, replace it and the wiper blade (as customer pay) according to the instructions on MGSS "WINDSHIELD WIPER ARM AND BLADE REMOVAL/INSTALLATION" for the appropriate model. Front Wiper Service Caution: <ul style="list-style-type: none"> The wiper arm park position is located under the hood. When servicing front wipers, front wiper service mode is required or damage to wiper arms may occur (see Front Wiper Service Position below). If wiper arms are replaced, M-MDS is needed for wiper arm adjustment (see Service Information) <p>NOTE: DO NOT use wiper arms as markers when in dealer inventory</p>
NO	Return the vehicle to the customer.

SUMMARY OF WIPER CONTROL AND CAUSES OF WIPER CHATTER RESULTING IN A-PILLAR CONTACT:

The control unit installed in the wiper motor monitors variation of the resistance fluctuations when the wipers are operating, predicts the wiper's overrun, and controls the position at which the motor output is reversed. This control keeps the blade's operating range in the correct position.



View from Front of Vehicle

A	Wiper storage position
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B	Lower reverse position
C	Original upper reverse position
D	Corrected upper reverse position
1	Load accumulation range
2	Shifting to speed map for correction
3	Retreated 15 mm from the original position
4	A-pillar

Stick-Slip Control:

When the water film formed on the windshield during rain is uneven, causing fluctuations in the friction coefficient " μ " on the windshield surface, the unit predicts overrun due to the stick-slip phenomenon (*) from the resistance variation during the wiper operation. That reduces the wiping angle to prevent the wiper blade from contacting the A-pillar.

***Stick-Slip Phenomenon:**

Wiper chattering and/or squeaking noises are caused by friction between the windshield and the wiper blade. Sliding and sticking occur intermittently when an object slides on another object instead of a smooth, continuous movement.

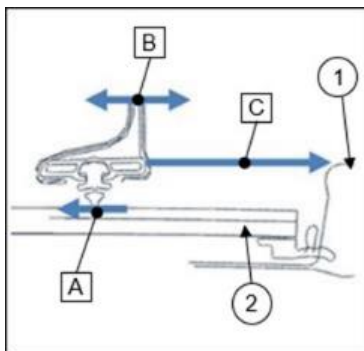
Mechanism of Wiper Contact with the A-Pillar:

Under the following conditions, an unstable frictional resistance (A) on the windshield surface occurs, causing the wiper blade to experience more "chattering" (B) than expected.

- Oil film adheres to the windshield surface.
- Water-repellent treatment is uneven.
- The edge of the wiper blade rubber is worn or the coating peels off.

This condition may induce mis-detection of the friction resistance variations during wiper operation, causing the stick-slip control to fail. This leads to overrun (C) of the wiper, and the plastic part at the tip of the wiper blade lightly contacts the A-pillar.

NOTE: There is no impact on the vehicle body painted surface.



A	Unstable frictional resistance
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B	Chattering wiper blades
C	Wiper over-run
1	A-pillar
2	Windshield

WARRANTY INFORMATION

NOTE: There is no warranty coverage for outside influence, such as bent wiper arm(s).

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