December 19, 2013



Wiper Blade Maintenance and Cleaning

Service

Category Vehicle Exterior

Section Wiper/Washer Market USA



Applicability

| YEAR(S) | MODEL(S) | ADDITIONAL INFORMATION |
|-------------|---------------------------------|------------------------|
| 2004 – 2013 | FR-S, iQ, iQ EV, tC, xA, xB, xD | |

Introduction

The following procedures are recommended during routine maintenance or in the event of a customer concern for wiper performance.

NOTE

These procedures apply to the windshield and back glass (if the vehicle is equipped with a back glass wiper assembly).

Warranty Information

| OP CODE | DESCRIPTION | TIME | OFP | T1 | T2 |
|---------|----------------------------|------|-----|----|----|
| N/A | Not Applicable to Warranty | _ | _ | - | - |

Inspection Procedure and Maintenance

Inspection Procedure

1. During routine maintenance or in the event of a customer concern for wiper performance, please inspect wipers for any performance concerns.

HINT

- Bugs, sap, road grime, car wax treatments, and other contaminants on the rubber inserts or windshield, can cause wiper performance concerns.
- Make sure to complete the Inspection Procedure and the Cleaning Procedure before deciding to replace the rubber wiper inserts or other wiper related parts.

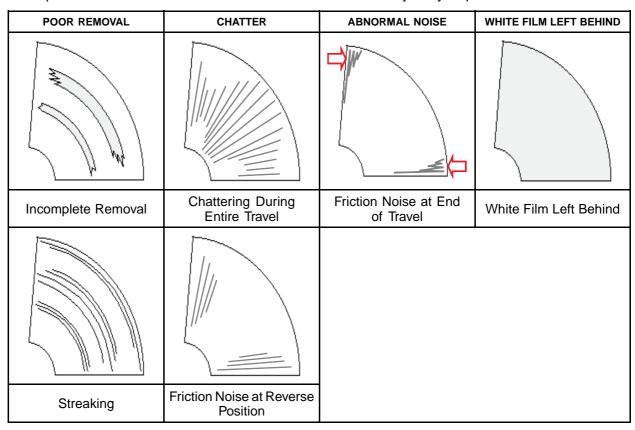


Wiper Blade Maintenance and Cleaning

Inspection Procedure and Maintenance

Inspection Procedure (Continued)

Examples of Performance Concerns that Could Be Caused by Dirty Wiper Inserts/Winshield



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S-SB-0042-13

Inspection Procedure and Maintenance

Inspection Procedure (Continued)

- 2. Contributors to poor performance/decreased rubber wiper insert life (requiring rubber wiper insert replacement).
 - Dust or dirt on the glass surface causes the rubber edge to wear quickly.
 - Sand and salt used for road conditioning during Winter months causes the edge to wear quickly, so geographical locations with significant snowfall require more frequent rubber wiper insert replacement.
 - Heat and length of time in service can cause the rubber to become hard and brittle causing the rubber to not turn over, resulting in streaking and/or unwiped areas on the glass.
 - The use of an ice scraper near the blades can easily damage the rubber insert.
 - Pulling blades off a frozen windshield can cause the rubber insert to tear.
 - Using wipers instead of an ice scraper to remove frost and ice from the glass can dull, nick, or tear the rubber.
 - Slamming the wiper on the glass to remove ice & snow can cause the blade to bend and the rubber to come out of the blade increasing the potential to scratch the glass.
 - When ice forms in wiper blade pin joints, it may cause streaking and unwiped areas. To remove ice from pin joints, compress the blade and rubber with your hand to loosen the frozen joints.

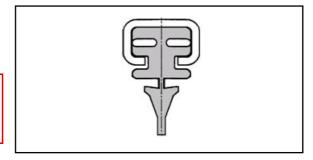
Cleaning Procedure

- 1. If any performance concerns are found, clean the rubber wiper inserts and the glass surface using the following cleaning procedure.
 - A. Rubber wiper inserts: Clean road and environmental debris from the rubber inserts by using a cloth or paper towel soaked with windshield washer fluid or a mixture of mild detergent and water.

NOTICE

Do NOT use fuel, kerosene, or petroleum based products to clean rubber inserts.

Figure 2. Rubber Wiper Insert



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Inspection Procedure and Maintenance

Cleaning Procedure (Continued)

B. **Windshield:** Rinse the glass with water and apply non–abrasive cleaner, such as Bon ami[®] (www.bonami.com) or equivalent, with a sponge.

NOTICE

Make sure to use plenty of water with all powder based cleaners to avoid scratching the glass surface.

- C. Inspect wipers for improved performance. If no improvement was found, continue to step 2.
- 2. If there is still a performance concern, inspect the wiper inserts, other related components, and replace as needed.

Examples of Wiper Conditions

| DEFORMED INSERT | WIPER INSERT HOLDER DEFORMATION | WIPER ARM DEFORMATION | ABNORMAL BACKLASH AT JOINTING BLADE | |
|-----------------------|------------------------------------|-------------------------------|--|--|
| | | | | |
| Replace Rubber Insert | Replace Wiper Blade | Replace Wiper Arm Assembly | Replace Wiper Blade | |