



TECHNICAL SERVICE BULLETIN

Classification: BT09-052K	Reference: NTB09-081K	Date: April 29, 2024
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WINDSHIELD CRACKING

This bulletin has been amended. See **AMENDMENT HISTORY** on the last page.
Please discard previous versions of this bulletin.

APPLIED VEHICLES: All Nissan vehicles

SERVICE INFORMATION

The purpose of this bulletin is to give Nissan dealers guidelines to help determine if windshield breakage or damage is covered under warranty or is the customer's responsibility.

Nissan North America (NNA) is not responsible for damage to glass that is a result of objects striking or scratching the glass, including damage caused by the installation of aftermarket window tinting. However, NNA is responsible for manufacturing issues such as distorted glass and cracks that are due to improper installation or damage to the glass during vehicle assembly. NNA typically does not find any type of cracks in the windshield due to stress after the dealership pre-delivery inspection (PDI).

Glass damage can be categorized in three general areas:

1. Cracks due to objects striking the glass (page 2).
2. Cracks due to scratch in glass surface (page 5).
3. Distortion or cracks due to manufacturing issues (page 7).

Part Return Process Reminder:

Prior to removal, dealers must take at least two (2) digital photographs of the damaged area. Dealers are required to mark glass and other components returned that have "visible issues" using masking tape or appropriate means (grease pen, etc.) to identify and highlight the area damaged.



HINT:

- The claim may be debited if the part is not marked properly and/or missing the required digital photographs.
- Refer to the Glass Part Return section of the Nissan Assurance Products Reference Manual (APRM) for complete glass return details.

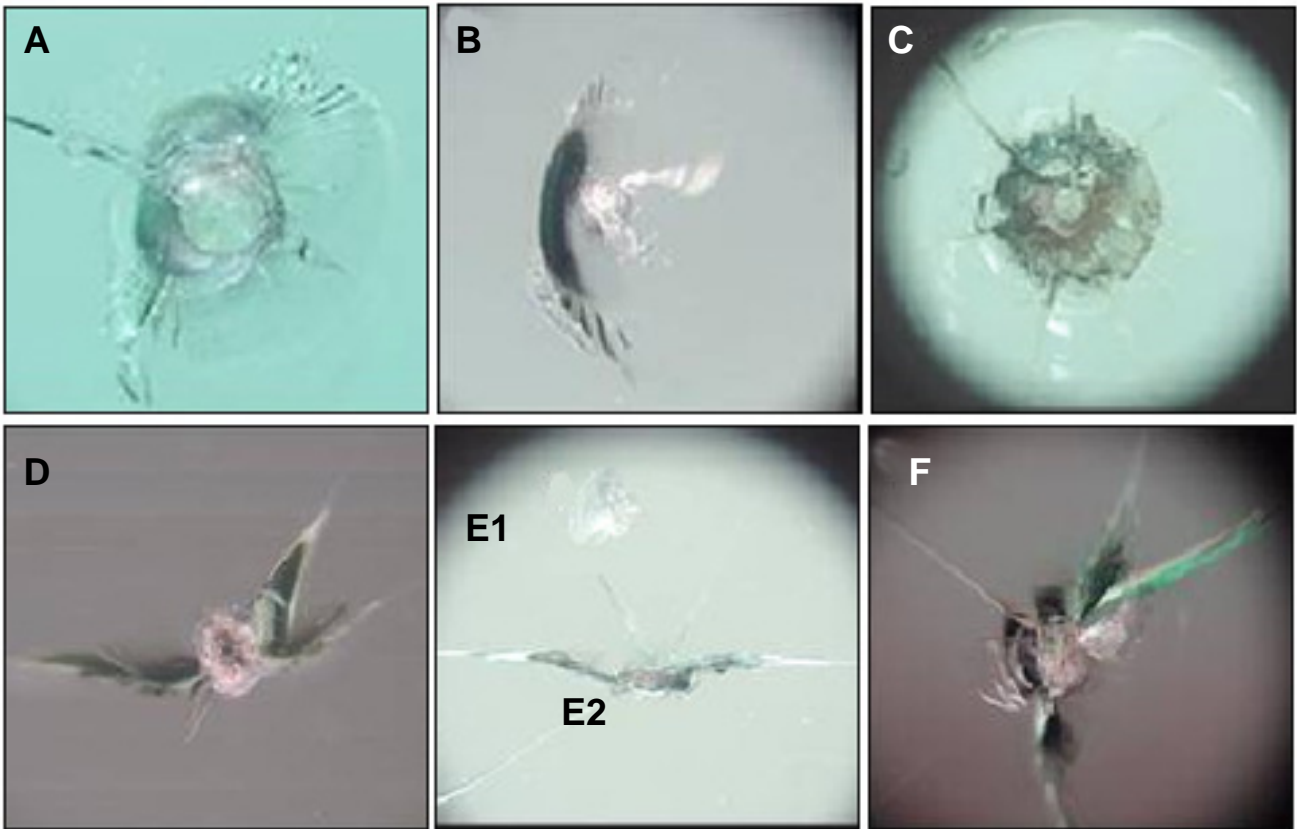
Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

1) HOW TO DETERMINE IF GLASS DAMAGE IS DUE TO OBJECTS STRIKING THE GLASS

Cracks from Objects Striking the Glass

Most windshield damage that occurs due to impact is easily identified as shown below:

- Cone shaped break (A, B, C)
- Crush mark (D, E1, F)
- Star shape crack (C, D, E2, F).



Cracks can spread and become larger from the original strike point or crush mark due to:

- Thermal stresses caused by temperature fluctuation.
- External physical stresses, such as hand touch, wind force, or vehicle vibration during driving (pot holes).

A lead, or crack from one of the star cracked impact points can run to the edge of the glass and **appear** to be a low stress crack starting from the glass outside edge.

Single Crack Beginning or Ending at the Edge of the Glass

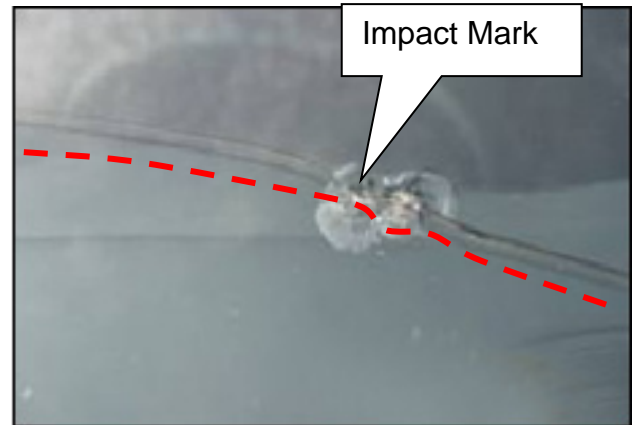
Single cracks must be inspected along the entire crack for impact marks.

- If any impact mark is found anywhere along the crack, it indicates the damage occurred from an object striking the windshield. This is not covered under warranty.
- A magnifying glass (10X magnification) may be necessary to identify impact marks that may be less than 1 mm in diameter.
- The tip of a ball point pen can be run along the crack in the windshield to find the impact point.

HINT: A lead, or crack from an impact point can run to the edge of the glass and appear to be a low stress crack starting from the glass outside edge.



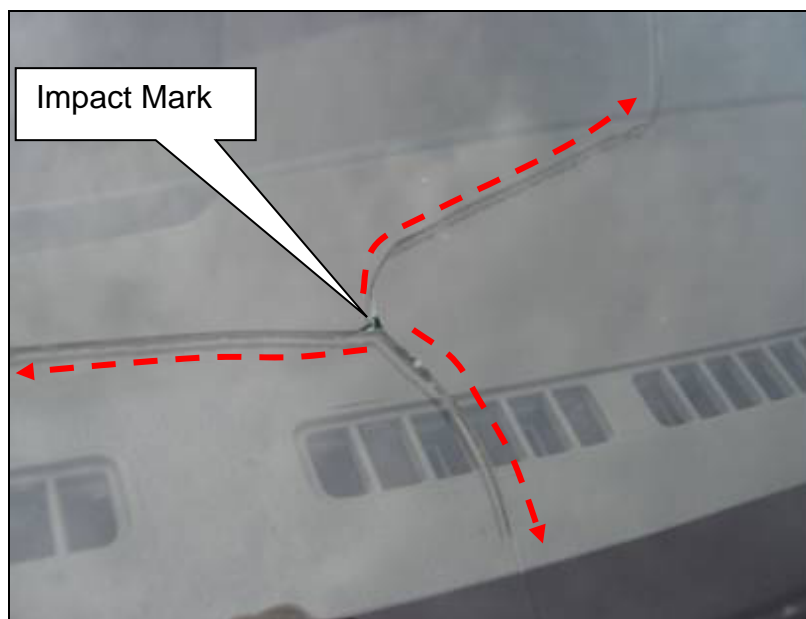
Single crack with **no** impact mark:
Warranty



Single crack with impact mark:
Not Warranty

Compound Crack Beginning or Ending at the Edge of the Glass

This type of crack is always caused by impact to the glass. The point of impact is located where the crack “branches out”.

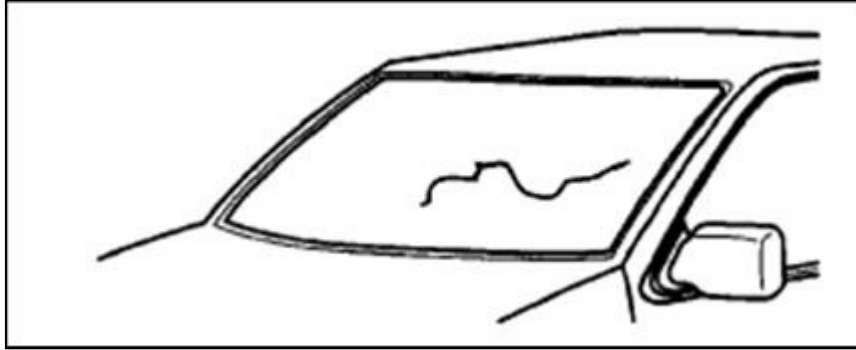


Compound crack: **Not Warranty**

Cracks That Are Only in the Middle of the Glass

This type of crack does not begin or end at the edge of the glass.

- These cracks are always caused by an impact to the glass and are not covered under warranty.



Cracks not reaching the edge: **Not Warranty**

2) HOW TO DETERMINE IF GLASS DAMAGE IS DUE TO A SCRATCH IN THE GLASS SURFACE

Cracks from a Scratch in the Glass Surface

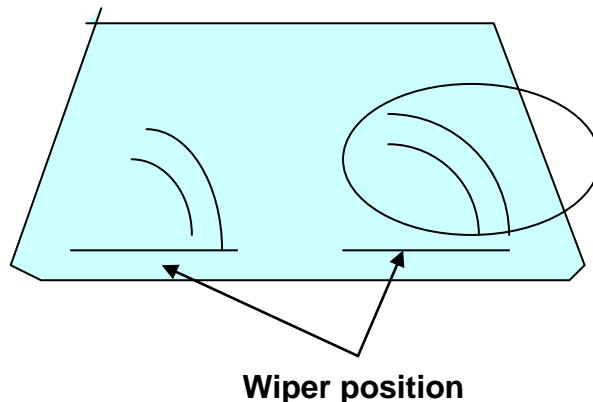
Glass is produced by fusing together various raw materials such as silica, soda ash, and limestone, and has a hardness of 5 to 6 on the Mohs scale (for reference, a diamond has a hardness of 10 on the same scale).

Since earth and sand can contain substances harder than that of glass, glass can be easily scratched by:

- Fine sand particles.
- Hard metal.
- Rubbing action of contaminated wiper rubbers, or sand particles caught between the wiper and the glass, especially when operating the wipers in a dry condition.

A magnifying glass (10X magnification) may be necessary to identify wiper scratches as a start point of cracks in the glass.

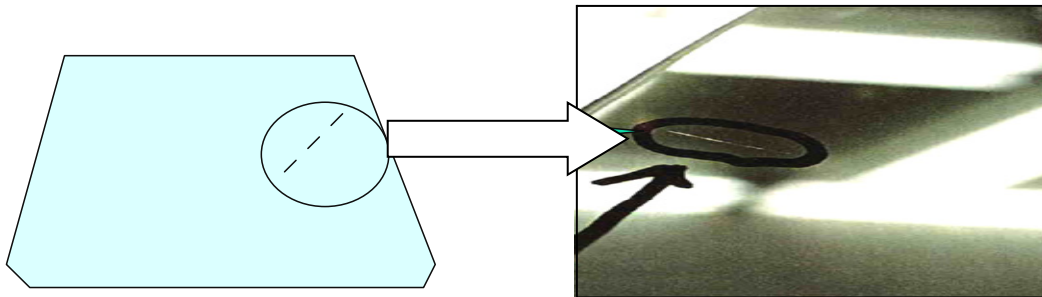
- Inspect the wiper paths (may be a single scratch of a group of scratches).
- Small scratches can cause a small rupture in the outer glass surface, which can lead to a crack from thermal conditions, vehicle vibration during driving, or wind pressure.



Scratch from sand/stone: **Not Warranty**

A magnifying glass (10X magnification) may be necessary to identify metal object scratches as a start point of cracks in the glass.

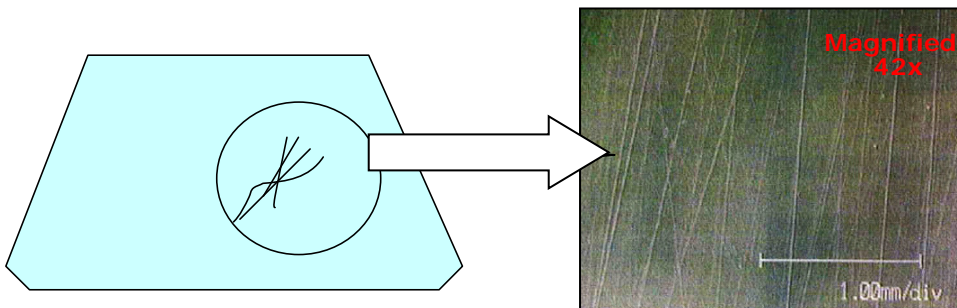
- Scratches can occur from metal objects such as keys and metal buttons. These scratches are typically sharp and can be found anywhere on the glass surface.
- Thoroughly examine the entire length of the crack to identify any scratch as a start point.
- Small scratches can cause a small rupture in the outer glass surface, which can lead to a crack from thermal conditions, vehicle vibration during driving, or wind pressure.



Scratch from metal objects: **Not Warranty**

A magnifying glass (10X magnification) may be necessary to identify scratches caused by a contaminated towel as a start point of cracks in the glass.

- Scratches can occur from wiping the glass with a towel that has sand particles or dirt on it.
- These scratches are typically long and have several scratches concentrated together.
- These scratches can be found anywhere on the glass surface.
- Thoroughly examine the entire length of the crack to identify any scratch as a start point.



Scratch from dirty towel/cloth: **Not Warranty**

3) HOW TO DETERMINE IF GLASS HAS DISTORTION OR CRACKS DUE TO MANUFACTURING ISSUE

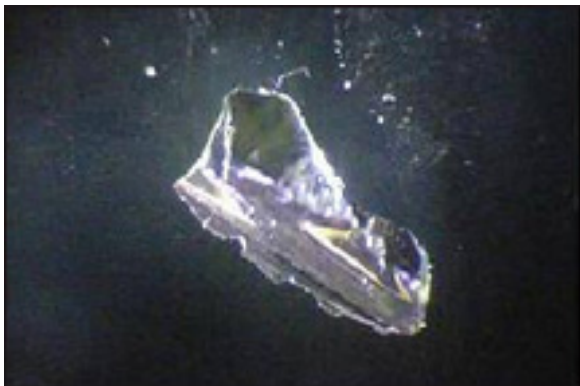
Distortion or Cracks Due to Manufacturing Issue



Open bubble – **Warranty**



Surface blister - **Warranty**



Adhesion chip – **Warranty**
(Can occur from a manufacturing issue such as adhesion of molding to the glass surface along the glass edge.)



Surface blister – **Warranty**

CLAIMS INFORMATION

For manufacturing issue claims only:

Submit a Primary Failed Part (PP) line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
RPL Windshield	(1)	UG10AA	FD	03	(2)

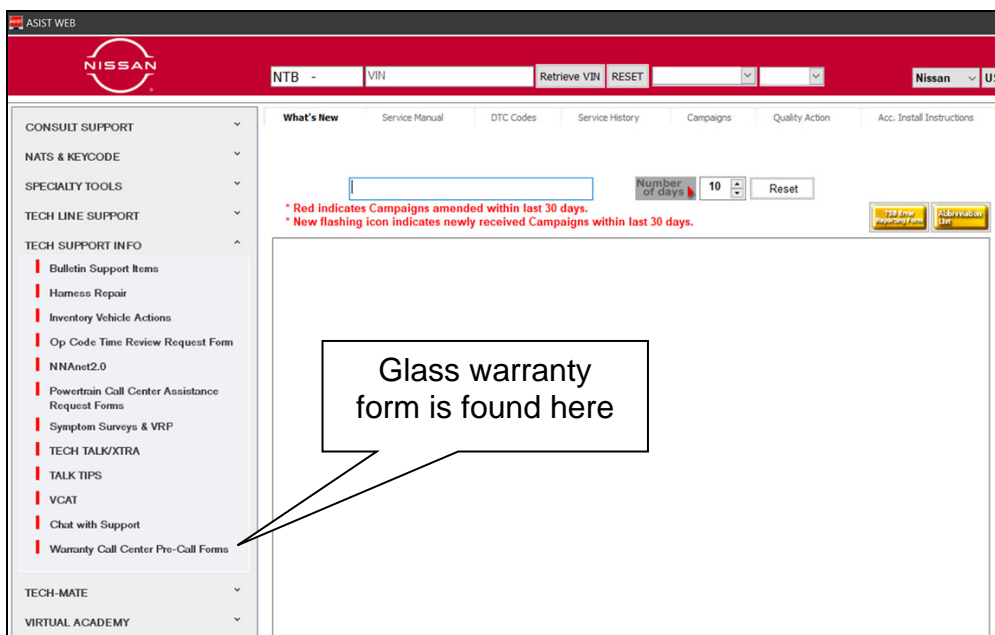
(1) Reference the Electronic Parts Catalog (EPC) and use the applicable Windshield P/N as the PFP.

(2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated FRT.

HINT: Refer to the Glass Part Return section of the Nissan Assurance Products Reference Manual (APRM) for complete glass return details.

Part Return Process Reminder:

- Dealers are required to take at least two (2) digital photographs that clearly identify the alleged glass defect prior to removing the glass from the vehicle.
- Digital photographs must be kept in dealer records.
- Dealers are required to mark glass and other components returned that have “visible issues” using masking tape or appropriate means (grease pen, etc.) to identify and highlight the area damaged.
- The new glass warranty form must be completed and digital photograph files attached through ASIST for:
 1. Over DCAL Warranty Call Center pre-authorization
 2. Glass Part Return requests
- **The claim will be subject to a claim debit if the part is not marked properly and/or missing the required digital photographs (via ASIST) to support identification of a warrantable defect.**



AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
August 25, 2009	NTB09-081	Original bulletin published
March 8, 2013	NTB09-081A	Latest models and model years applied
April 28, 2015	NTB09-081B	Latest models and model years applied, and pages 1 and 3 revised
January 28, 2016	NTB09-081C	Latest models and model years applied, and the "Part Return Process Reminder" section revised
February 21, 2017	NTB09-081D	Latest models and model years applied, aftermarket window tinting statement added, and APRM reference on pages 1 and 8 revised
November 29, 2017	NTB09-081E	Latest models and model years applied, and warranty information on pages 1 and 8 revised
April 9, 2018	NTB09-081F	Latest models and model years applied
May 15, 2019	NTB09-081G	Latest models and model years applied, and APRM reference on pages 1 and 8 revised
May 10, 2021	NTB09-081H	Latest models and model years applied, and APRM reference on pages 1 and 8 revised
February 17, 2022	NTB09-081I	Publication date revised to include the latest models and model years
February 27, 2023	NTB09-081J	Publication date revised to include the latest models and model years, and APRM reference on pages 1 and 8 revised
April 29, 2024	NTB09-081K	Figure on page 8 updated and publication date revised to include the latest models and model years