

Abnormal Fluttering and/or Vibration Across Rear-Center Section of Hood

Service Category Vehicle Exterior

Market USA and Mexico

Section Exterior Panels/Trim

Toyota Supports
 ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2024	Grand Highlander, Grand Highlander HV	

Introduction

Some 2024 model year Grand Highlander and Grand Highlander Hybrid vehicles may exhibit an abnormal fluttering and/or vibration across the rear-center section of the hood. This phenomenon is most notable on darker color vehicles. However, this condition may be noticed on the subject vehicles regardless of the paint color. Follow the Repair Procedure in this bulletin to address this condition.

Warranty Information

For USA Market

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
BD2422	Fill Hood Cavity with Expanding Foam	1.5	53301-0E270	9B	99

APPLICABLE WARRANTY

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

For Mexico Market

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
BD2422	Fill Hood Cavity with Expanding Foam	1.5	53301-0E270	9B	99

APPLICABLE WARRANTY

- This repair is covered under the Toyota Basic Warranty. This warranty is in effect for 36 months or 60,000 kilometers, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

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Parts Information

PART NUMBER	PART NAME	QTY
90467-A0003	Clip (for Hood Insulator)	9

NOTE

The original hood insulator clips may become damaged during the removal process. Replace any of the damaged hood insulator clips with NEW clips.

Required Tools & Equipment

REQUIRED TOOLS & MATERIAL	QTY
3M™ Manual Cartridge Applicator, 08571 (or Equivalent)	1
3M™ Flexible Foam 08463, Urethane, 200 mL Cartridge (or Equivalent)	4
3M™ 8193 Mixing Nozzle (or Equivalent)	8
Disposable Plastic Cover	As Needed
Nitrile Gloves	As Needed
Painter's Tape	1 Roll
Disposable Shop Towels	1 Roll
Borescope*	1

* A borescope may be helpful in performing the procedure but is not necessary.

NOTE

Disposable plastic cover **MUST** cover the entire engine bay, fenders, and the lower quarter of the windshield. Since plastic covers come in various sizes and shapes, the quantity of plastic covers needed for this repair will vary.

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Repair Procedure

1. Confirm the condition exists.

Does the vehicle exhibit a condition with an abnormal fluttering and/or vibration across the rear-center section of the hood?

- **YES** — Continue to step 2.
- **NO** — This bulletin does NOT apply. Continue diagnosis using the applicable Repair Manual.

2. Open the hood and prop normally.

Figure 1. Hood Securely Opened

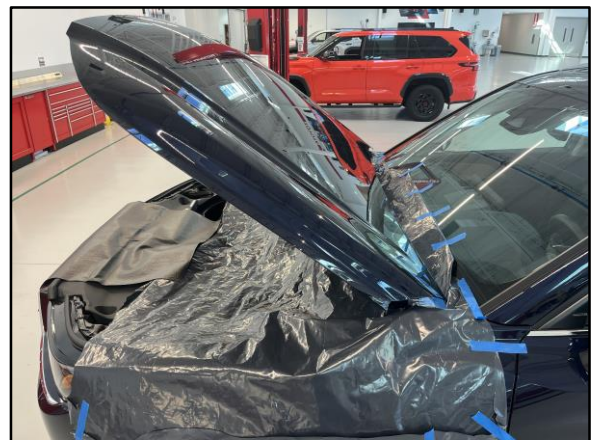


3. Protect the engine bay, cowl, and lower portion of windshield from any potential drips from the foam application by covering with disposable plastic covers.

Figure 2. Protected Engine Bay



Figure 3. Protected Fender and Windshield



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Repair Procedure (continued)

4. Remove the hood insulator by carefully removing the nine hood insulator clips. Refer to TIS, applicable model and model year Repair Manual.
 - [2024](#) Grand Highlander and Grand Highlander HV:
Vehicle Exterior – Door / Hatch – Hood – Disassembly

NOTE

Perform step 1 ONLY.

5. Gather all the materials and stage near the vehicle.

Figure 4. Stage Materials Near the Vehicle



6. Install the mixing nozzle and foam cartridge in the applicator gun.

Figure 5. Assembled Applicator



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Repair Procedure (continued)

7. Insert the mixing nozzle tip at an angle into each of the accessible openings in the hood as shown in figures 6 – 7.

Fill cavities with expanding foam until the foam is touching both the inner and outer hood panels. The use of a borescope may be helpful to ensure foam expansion but is not required.

In larger openings, use a sweeping motion to maximize coverage, as shown in this [Example Video](#).

Black stickers covering some holes will need to be removed and replaced once the expanding foam has cured.

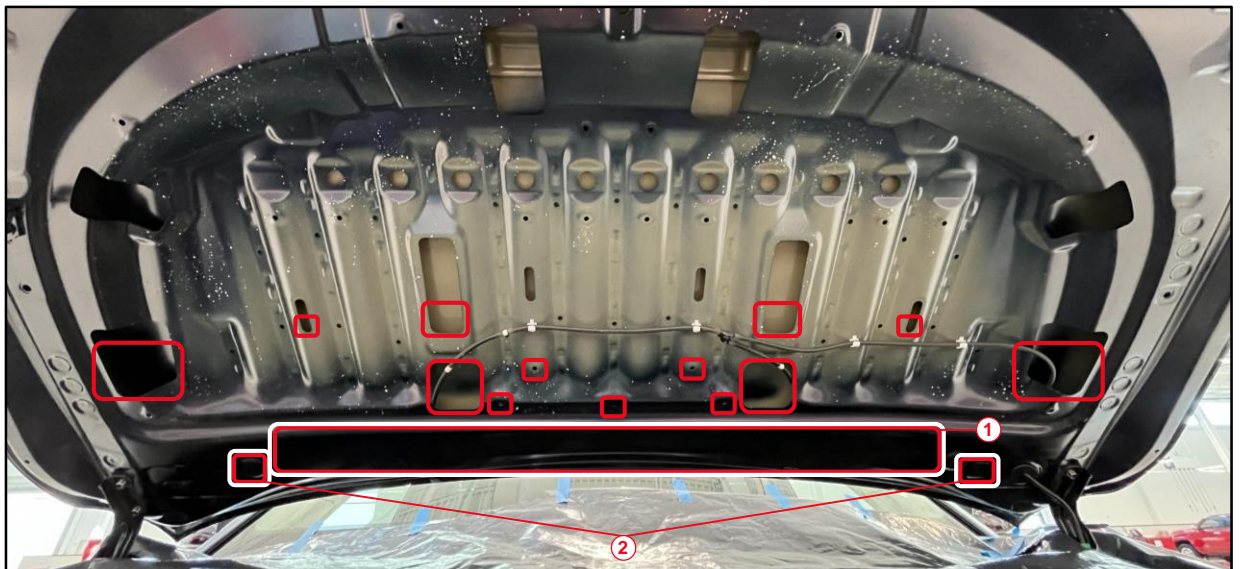
Figure 6. Nozzle Inserted at an Angle




NOTE

- In some cases, it may be necessary to pause and replace the nozzle before proceeding to the next cavity.
- The expanding foam will cure extremely fast.
- Dwell time for this material is ONLY 10 seconds.

Figure 7. Example of Under the Hood



	Cavities Used to Fill Foam
1	Fill Area Evenly As Possible

2	Holes Covered by Black Stickers
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Repair Procedure (continued)

8. Ensure that all the insulator foam is cured.

Figure 8. Example of Cured Insulator Foam



9. Clean all the excess foam from around the cavity openings and remove all protective coverings from the engine bay, cowl, and windshield.
10. Re-install the hood insulator with NEW clips.
Refer to TIS, applicable model and model year Repair Manual.
 - [2024](#) Grand Highlander and Grand Highlander HV:
Vehicle Exterior – Door/Hatch – Hood – Reassembly

NOTE

- Perform step 6 ONLY.
- The insulator foam may interfere slightly with the insulator tabs.
- Use a utility knife or flat head screwdriver to open a small slit for the insulator tabs.

11. Test-drive the vehicle to confirm the condition has been addressed.