

Date: June 14, 2019

## SERVICE BULLETIN

Bulletin No.: 2019-0036

**Product Models Affected:**

Aerotech (Ford E-series Chassis) – 2012MY – 2019MY

FORM Rev 2019-0417

**Purpose:**

To add support to the driver side A-pillar to B-pillar Header Frame and Windshield Header Frame to prevent stress cracking of the exterior cosmetic skin.

**Warranty Status:**

Standard warranty coverage for all product models.

**Tool(s) / Equipment Required:**

7/16-inch socket with extension  
Ratchet  
7/16-inch open end wrench  
#2 Phillips Screwdriver  
Drill  
5/16-inch drill bit  
Gloves (PPE)  
Safety Glasses (PPE)

**Part(s) / Material Required:**

<u>Description</u>	<u>Part Number</u>	<u>Quantity</u>
Reference Engineering Dwg, CAP RNFRCMNT ASM, ATF	0039807	1
Technical Data Sheet, 3M NVH Dampening Material,	04274	1
Expandable Foam, Urethane	E50328	A/R
Isopropyl Alcohol	N/A	A/R
Loctite 242, Blue	E53554	A/R

## General

1. Park the vehicle on a flat level surface.
2. Chock wheels of the vehicle.
3. Ensure that the product use date is not greater than one (1) year from the manufacturing date for all adhesives and sealants. Ensure product handling and storage processes meet manufacturer requirements.
4. Protect adjacent areas, e.g.; dash, steering wheel, floor, seat, etc. from material discharge and drip during application.
5. Read the 3M 4274 Technical Data Sheet and ensure understanding of dwell times related to dispensing of material.
6. Read the 3M 4274 Technical Data Sheet and ensure understanding of material Directions for Use as outlined in the Technical Data Sheet.
7. Disconnect battery(ies), PCM/ECM/Modules, and other electrical device connections as described in the Ford Service Manual for welding on the chassis.
8. Reconnect battery(ies), PCM/ECM/Modules, and other electrical device connections as described in the Ford Service Manual for welding on the chassis only after completing all weld process operations.
9. Wear appropriate PPE during rework process operations.
10. Ensure a fire extinguisher or other fire control apparatus are available during hot work operations.
11. Repair any damaged sheetmetal per chassis manufacturer recommended practices or contact your local autobody shop for necessary repairs.

**Procedure:**

1. Remove carefully the interior pads, stanchions, handrails, mirrors and/or sun visor in order to gain access to roof cut/top of windshield area. Reference Photo #1 and Photo #2.



Photo #1  
(representative example of interior assembly)



Photo #2

2. Put aside the components removed. These components will be reinstalled after completion of the rework/repair.
3. Inject Expandable Foam into the A-pillar to B-pillar Chassis Cab Header Frame between two (2) lines, building a stop-gap wall. Reference Photo #3.
4. Inject Expandable Foam into the Chassis Cab Windshield Header Frame between the two (2) lines, building a stop-gap wall. Reference Photo #4.
5. Allow Expandable Foam to fully cure.
6. Insert a plug into the driver side sun visor hole to allow for the re-installation of the spring mechanism on the sun visor after injection of the 3M 4274 NVH Dampener material. Reference Photo #4.
7. Sleeve any wires that may be running through the Windshield Header Frame to allow for the wires to freely move through the Header Frame after injection of the 3M 4274 material.
8. Tape off the rear and middle holes of the Header Frame between the A-pillar and B-pillar. Reference Photo #3.
9. Inject 3M 4274 NVH Dampener material into the Header Frame in the two (2) non-taped Header Frame holes beginning at the Expandable Foam in the A-pillar to B-pillar Header Frame and proceeding toward the driver side A-pillar, filling completely the Header Frame. Reference Photo #3.

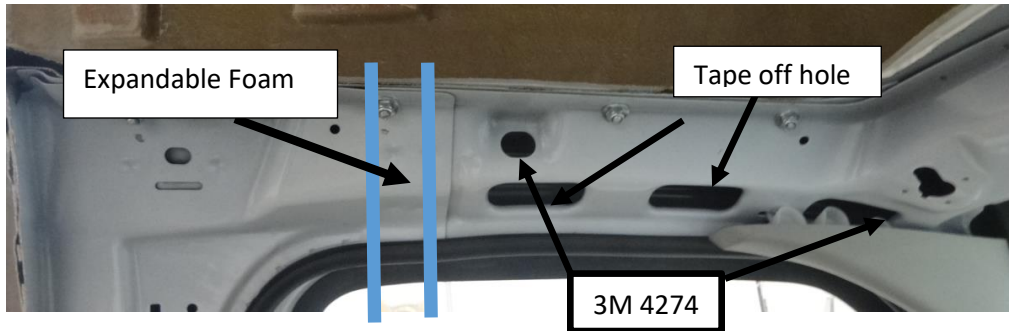


Photo #3  
A-pillar to B-pillar Header Frame

**NOTE:**

Apply Dampener material in layers, ensuring that various layers are applied prior to set-up of the previous layer, and avoiding cold joints of the Dampener material being applied.

10. Tape off the two (holes) used to inject the 3M 4274 material into the A-pillar to B-pillar Header Frame to ensure the 3M 4274 NVH Dampener material does not ooze out of the Header Frame.

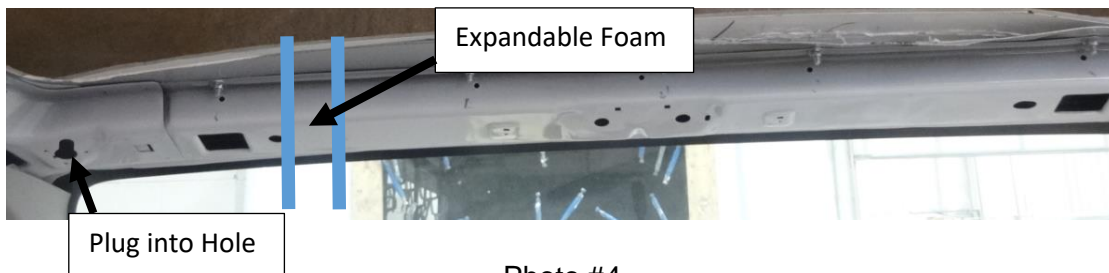


Photo #4  
Windshield Header Frame

11. Inject 3M 4274 NVH Dampener material into the Windshield Header Frame holes beginning at the Expandable Foam in the Header Frame and proceeding toward the driver side A-pillar, filling completely the Header Frame. Reference Photo #5.



3M 4274

Photo #5  
Windshield Header Frame

**NOTE:**

Apply Dampener material in layers, ensuring that various layers are applied prior to set-up of the previous layer, and avoiding cold joints of the Dampener material being applied.

12. Tape off holes in the Windshield Header Frame used to fill the Header Frame with the 3M 4274 material to ensure the 3M 4274 NVH Dampener material does not ooze out of the Header Frame.
13. Allow the 3M 4274 NVH Dampener material to cure for 24 hours minimum.
14. Insert CAP RNFRCMNT metal component into the front cap. Reference Illustration #6.

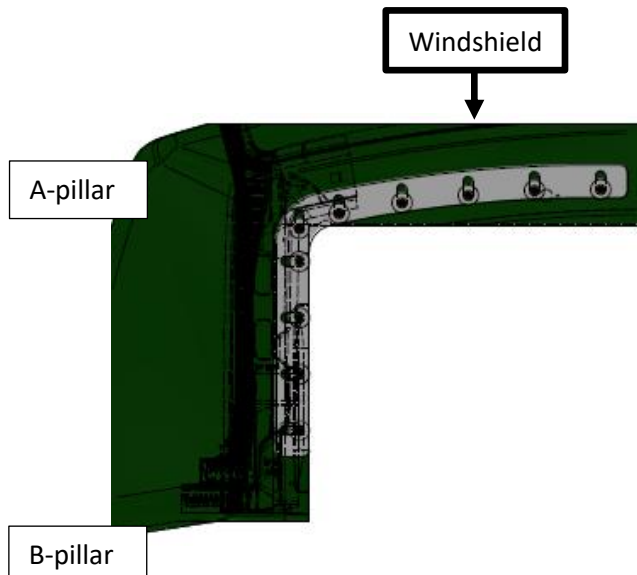


Illustration #6  
Top View

15. Align the CAP RNFRMNT metal component so that the portion over the window allows for the new bolt location to be drilled and inserted thru the pinch weld flange of the frame over the top of the Windshield Header Frame. Reference Illustration #7.
16. Align the CAP RNFRMNT metal component between the A-pillar and B-pillar so that the holes of the CAP RNFRMNT allows for the new bolt location to be drilled and inserted through the pinch weld flange of the frame. Reference Illustration #7 and Photos #8 & #9.
17. Mark each hole centerline location of the CAP RNFRMNT metal component on the interior side of the front cap fiberglass. Reference Illustration #7.

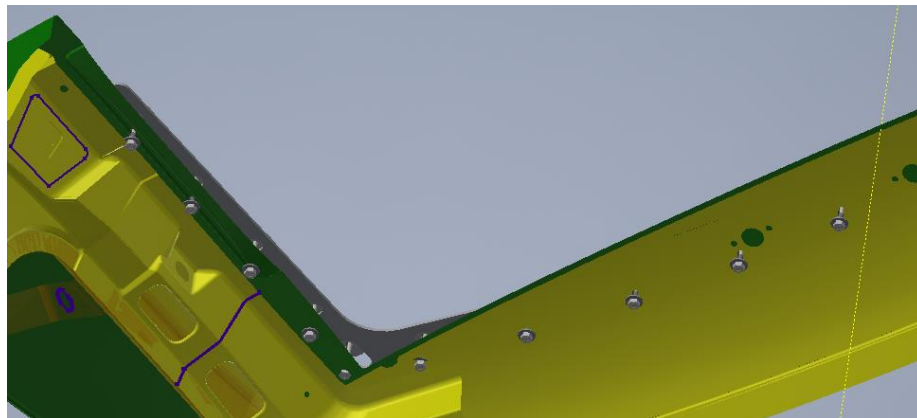


Illustration #7



Photo #8  
Windshield Header Frame



Photo #9  
A-pillar to B-pillar Header Frame

18. Remove the CAP RNFRMNT metal component.
19. Drill a 5/16-inch hole thru the materials from interior surface of the front cap thru the front windshield frame pinch weld. Reference Illustrations #6 & #7, and Photos #8 & #9.
20. Insert the CAP RNFRMNT metal component into the front cap, aligning the holes of the CAP RNFRMNT with the drilled/existing holes in the front cap.
21. Insert the bolts and hardware into each hole. Reference Illustration #7, Photos #8 & #9 and Dwg 0039807.
22. Tighten each bolt assembly until snug.
23. Torque each bolt assembly to 10 – 16 lb.ft.
24. Reassemble interior components in reverse order as disassembly. Reference Photo #10.

**NOTE:**

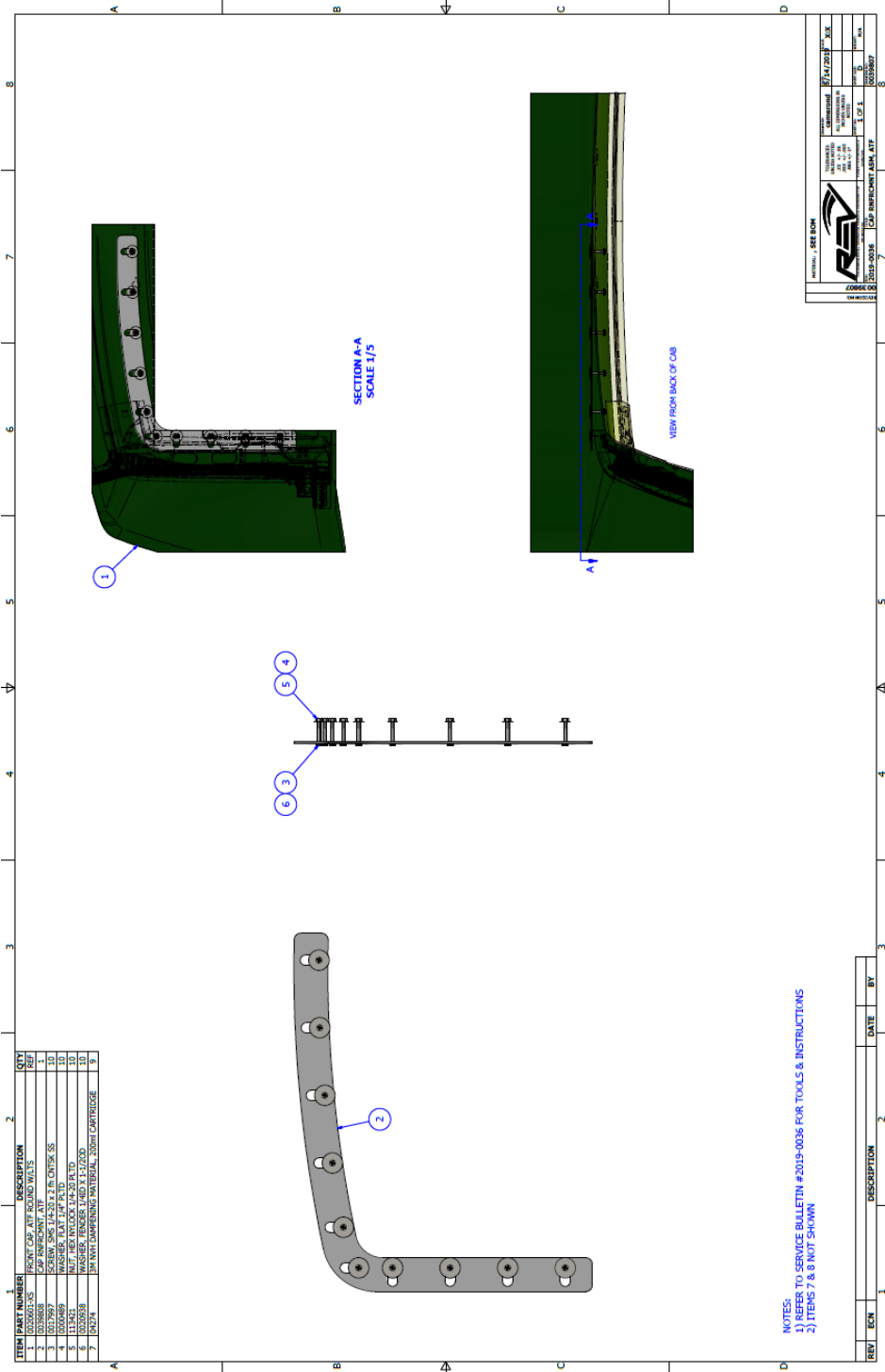
Apply one (1) drop of Loctite 242 onto the threads of each screw prior to assembly.



Photo #10

**Contact Information:**

Contact Eldorado Customer Service, 1655 Wall Street, Salina, KS 67401; or by calling (785) 827-1033 / (800) 955-9086; or by Email: [bussupport@eldorado-bus.com](mailto:bussupport@eldorado-bus.com); or by Fax: (785) 827-3017.



## 3M NVH Dampening Material 04274

Technical Data Sheet

May, 2011

3M Part No.(s)	3M Part Descriptor(s)
04274	3M™ NVH Dampening Material

**Product Description** A heavy bodied, flexible 2-part urethane adhesive to be used for NVH (noise, vibration and harshness) damping applications. Ideally suited for applications requiring long open time and/or non-expanding material.

**Features**

- 200 ml Dual-Syringe Cartridge System
- Non-expanding
- Long work time
- Remains flexible

**Typical Physical Properties** Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

	Part A	Part B
Container	200 ml Dual-Syringe Cartridge	
Base/Accelerator	Urethane	
Color	Black	Amber / Clear
Solids Content (Appx.)	100%	
Consistency	Thick paste when mixed	
Service Temperature - °F	-20 to 180°F	

**Product Uses** NVH applications throughout the vehicle, including, but not limited to:

- Between roof bows and roof skin
- Between door skin and intrusion beam
- Between quarter panel and inner structure
- Between hood and deck lid skins and underlying spider frames

Use with the following applicators: PN 08571 (manual), PN 08117 (manual), and PN 09930 (pneumatic).

3M™ Static Mixing Nozzle: PN 08193 (6/bag), PN 08194 (50/box).

## 3M™ NVH Dampening Material 04274

### Typical Performance Properties

The following times have been determined with ambient air temperature and substrate temperature @ 70°F and are considered typical values.

**WORK TIME:**  
60 minutes

**MIX NOZZLE DWELL TIME:**  
20 minutes

**CURE TIME:**  
24 hours at 77°F  
1 hour at 160°F  
30 minutes at 210°F

**HARDNESS:**  
45 shore A

### Directions for Use

1. Where applicable, clean areas with an appropriate 3M VOC compliant product for removal of surface contaminants. Reference the 3M Automotive Aftermarket Catalog for a suitable VOC compliant product.
2. Dry fit replacement panel to ensure proper fit up prior to applying 3M™ NVH Dampening Material.

#### PRODUCT PREPARATION:

1. Insert cartridge into applicator gun.
2. Remove retaining collar and plug from end of cartridge. Discard plug, save retaining collar.
3. Extrude a small amount of product until both parts A and B dispense equally.  
**NOTE:** Parts A and B of this product are very runny prior to mixing. It is recommended that you extrude the material with the dispensing end of the cartridge facing upward, into a paper towel. Continue to hold the cartridge in this position until you have completed the next step (4).
4. Attach 3M™ Static Mixing Nozzle (PN 08193, 08194) to cartridge and lock in place with retaining collar.
5. Dispense a small amount of material through the nozzle and discard.

#### PRECAUTIONARY INFORMATION:

Before using this product, please reference Product Label and/or Material Safety Data Sheet for Health and Safety Information.

#### GENERAL REPAIR PROCESS:

1. Apply adhesive to the desired area.
2. Allow to cure 24 hours.

#### CLEAN-UP:

Remove excess PN04274 prior to complete cure by using an appropriate VOC compliant adhesive remover suitable for most surfaces, such as 3M™ Specialty Adhesive Remover (PN38984 / PN38987).

## 3M™ NVH Dampening Material 04274

**Applications** May be used as a noise dampening material in the form of a bead, or tooled with a spreader over an area to form a sound dampening pad.

**Storage and Handling** When stored at the recommended conditions in original, unopened containers, this product has a shelf life of 12 months. Store at room temperature. Rotate stock on a "first-in-first-out" basis.  
**After use, leave mix nozzle in place to seal the cartridge.**

**Precautionary Information** Refer to Product Label and Material Safety Data Sheet for Health and Safety Information before using this product.

**Technical Information** The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

**Product Use** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application.

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### For Additional Health and Safety Information

## 3M

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Printed in U.S.A.  
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