Service Bulletin

Bulletin No.: 17-NA-201
Date: October, 2020

TECHNICAL

Subject: Excessive Windshield Condensation, HVAC Defrost Door Flutter Type Noise Heard

Brand:	Model:	Model Year:		Breakpoint:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Camaro	2016	2021	SOP	April 01, 2017* *Vehicles built after this date DO NOT have pads on the HVAC defrost doors.	—	—

Involved Region or Country	North America, Europe, Russia, Middle East, Israel, South America, Japan, GM Korea Company, China, Thailand
Condition	Some customers may comment on one of the following conditions: **Condition 1** Some customers may comment on a flutter type noise heard from the HVAC when in manual mode and set to either floor or tri-level mode. **Condition 2** Some customers may comment on excessive condensation on the windshield above the center defrost vents. **Note:** For vehicles built **AFTER** the Breakpoint listed in the table above and have customers commenting on a condensation issue, they need to refer to the Additional Information section of this bulletin.
Cause	**Condition 1** This condition may be caused by the HVAC door making contact to the case during high fan speed.

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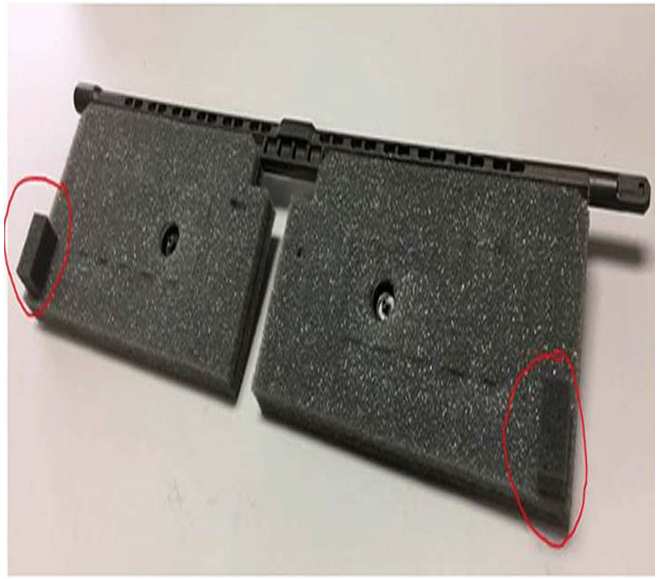
Condition 2



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This condition may be caused by the foam pads on the defrost door allowing too much air to pass through, causing excessive condensation on the outside of the windshield.

Note: During extremely humid conditions, some condensation can be considered normal.

Additional Information:
In certain settings, the system is designed to bleed air to the windshield to prevent it from fogging/freezing in cold weather conditions where the ambient temperature is extremely cold and the inside cabin temperature is hot.
The best recommendation for customer comfort, and to prevent condensation during hot/humid ambient conditions and cold cabin air, is to place the AC in “auto” or manually set it to the “bi-level” (floor and vent/face/dash) position. The recommended temperature setting is between 20-22°C (68-72°F).

Table 6: Air Flow Distribution

Mode	Inlet Air	Temperature Lever Set Position		Outlet Air															
				W/S		Inner Vents		Outer Vents Note 3		Rear Vent		Front Floor		Rear Floor		Front SWD	
				Dr	Pa	Dr	Pa	Dr	Pa	Dr	Pa	Dr	Pa	Dr	Pa	Dr	Pa
Vent with Rear Vent	Rec	F/C	%	0		40-Ø+3		40-Ø+3		20-Ø+3		0		0		0	
			L/s														
Vent without Rear Vent	Rec	F/C	%	0		50-Ø+3		50-Ø+3		0		0		0		0	
			L/s														
Vent with Rear Vents	OSA	F/C	%	0		40-Ø+3		40-Ø+3		20-Ø+3		0		0		0	
			L/s														
Vent without Rear Vent	OSA	F/C	%	0		50-Ø+3		50-Ø+3		0		0		0		0	
			L/s														
Bi-level with Rear Vent	OSA	30% from F/C	%	0		23-Ø+3		23-Ø+3		12-Ø+3		27-Ø+3		15-Ø+3		0	
			L/s														
Bi-level without Rear Vent	OSA	F/C	%	0		26-Ø+3		26-Ø+3		0		33-Ø+3		15-Ø+3		0	
			L/s														
Floor with Rear Floor	OSA	F/H	%	15-Ø+3 Note 1		0		6-Ø+2		0		44-Ø+3		25-Ø+3		10-Ø+2 Note 1	
			L/s														
Floor without Rear Floor	OSA	F/H	%	15-Ø+3 Note 1		0		6-Ø+2		0		69 ± 5		0		10-Ø+2 Note 1	

AC Auto goes to dash on its own, 0% to W/S

If manually override mode to floor and dash, called bi-level, W/S is still 0%

If manually override mode to only floor, W/S get 15% of airflow

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The table shown above helps to understand the function of the HVAC as it relates to the customer settings.

- OSA = Outside Air
- Rec = Recirculated Air
- F/C = Full Cold
- F/H = Full Hot

Correction	**Condition 1** An updated software calibration has been released to address the flutter type noise condition. **Condition 2** For vehicles built prior to the Breakpoint listed in the table above, remove both foam pads located on the defrost door to address the excessive windshield condensation, then update the software to address the flutter issue that results when the foam is removed.

Service Procedure

Condition 1

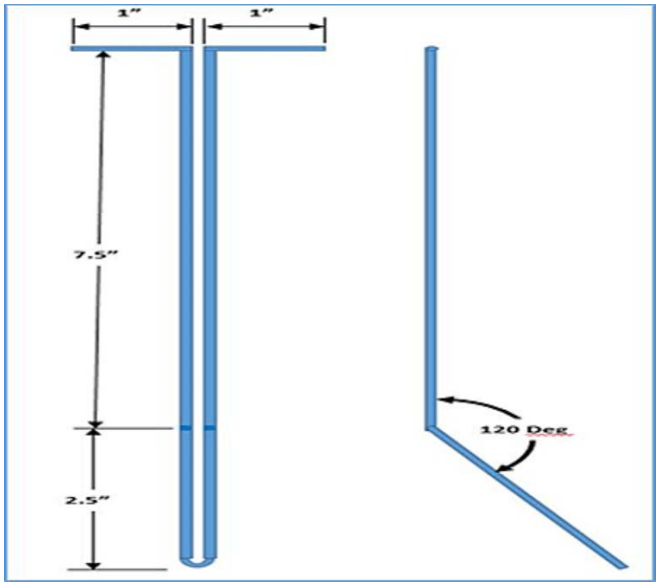
Note: Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to www.gmdesolutions.com for further information. If not available, connect a fully charged 12V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.

Reprogram the HVAC system control module with the latest calibrations available on TIS2WEB. Refer to *HVAC System Control Module Reprogramming with SPS* in SI.

Condition 2

Preparation/Tool

- Boroscope
- Grippers / Fingers tool
- Metal coat hanger / Mechanics wire
- Zip ties
- 12” clear tube 5/16” OD x 3/16” ID



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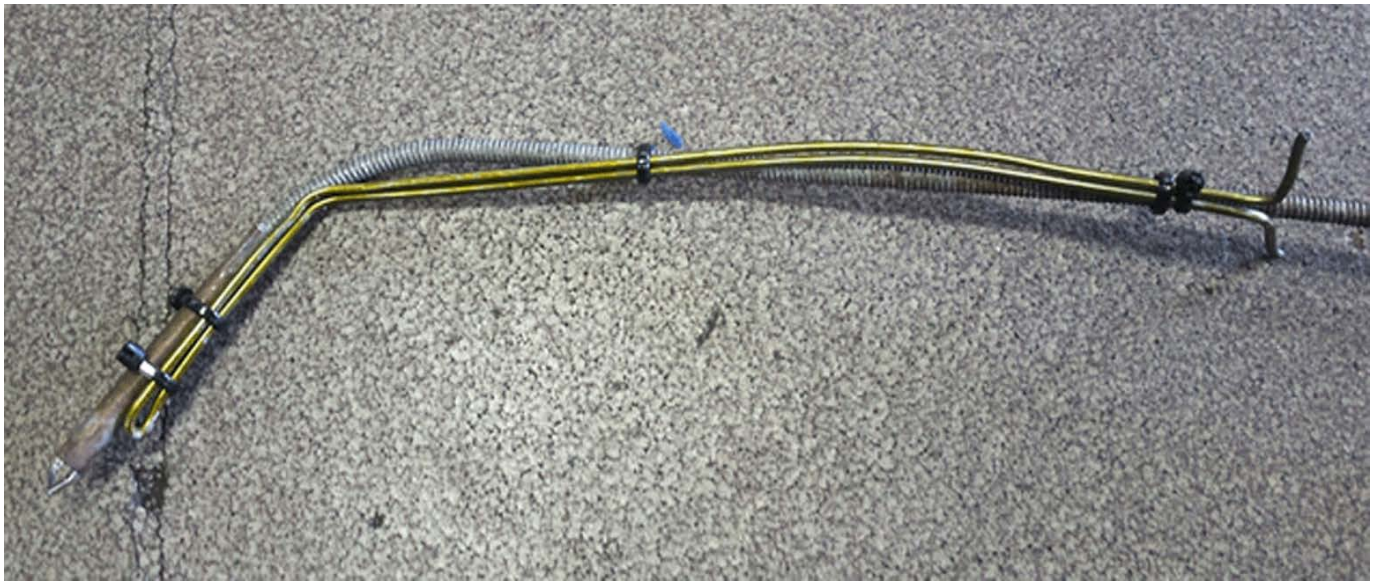

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Bend the wire 120°, as shown above, and zip tie the grippers/fingers tool to hold the shape/angle needed to reach the foam pads on the defrost door.

Note: It is important to have the ends of the wire bent outwards to provide a handle to help maneuver the fingers into place.

1. Remove both windshield garnish moldings. Refer to *Windshield Garnish Molding Replacement* in SI.
2. Remove the windshield. Refer to *Windshield Replacement* in SI.
3. Place the HVAC mode in “Floor” or “Tri-Level” mode.

Note: This mode will hold the door in the best position to reach the foam pads.

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4. Going through the center defrost vents, position the boroscope so the 10 mm x 10 mm foam pads can be seen.

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5. Using the boroscope to view the pad, insert the 30 cm (12 in) clear tube (recommend 5/16” OD x 3/16” ID) on top of the foam pad.
6. With the boroscope and clear tube in place, have an assistant pour approximately 30-60 ml (1-2 oz) of Kent Acrysol P20005 or equivalent in the clear tube.

Important: DO NOT use more than 30-60 ml (1-2 oz) of fluid to prevent excess fluid seeping into the HVAC case. Remove the clear tube as soon as the fluid is absorbed by the foam pads.

Important: DO NOT remove the boroscope.

7. Wait 60 seconds for the foam pads to absorb the Acrysol.
8. With the boroscope in place, use the grippers/fingers to grab and remove the foam pad.
9. Remove the grippers/fingers and boroscope.
10. Repeat steps 3–9 to remove the 2nd foam pad.
11. To eliminate any odor from the Acrysol, run the vehicle in the following mode:
    - 11.1. Windows Open
    - 11.2. Tri-Level HVAC mode (all 3 buttons lit – defrost, vent and floor)
    - 11.3. A/C Off
    - 11.4. Blower = max.
    - 11.5. Temp 24°C (75°F)

Note: Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to www.gmdesolutions.com for further information. If not available, connect a fully charged 12V jumper or booster pack disconnected from the AC voltage supply. DO NOT connect a battery charger.

12. Reprogram the HVAC system control module with the latest calibrations available on TIS2WEB. Refer to *HVAC System Control Module Reprogramming with SPS* in SI.

Warranty Information

For vehicles repaired under the Bumper-to-Bumper coverage (Canada Base Warranty coverage), use the following labor operation. Reference the Applicable Warranties section of Investigate Vehicle History (IVH) for coverage information.

Labor Operation	Description	Labor Time
2881238*	HVAC System Control Module Reprogramming for Flutter Noise	0.3 hr
4480628*	Removing Both Foam Pads From the Defrost Door	1.5 hrs
*This is a unique Labor Operation for bulletin use only.		

To avoid warranty transaction rejections, carefully read and follow the instructions below.

- The VIN and the job card number on the transaction must match the VIN and job card number associated with the reprogramming event in the SPS system.
- The SPS Warranty Claim Code must be accurately entered in the “SPS Warranty Claim Code” field of the transaction.
- When more than one Warranty Claim Code is generated for a programming event, it is required to document all Warranty Claim Codes in the “Correction” field on the job card. Dealers must also enter one of the codes in the “SPS Warranty Claim Code” field of the transaction, otherwise the transaction will reject. It is best practice to enter the FINAL code provided by SPS.

Warranty Claim Code Information Retrieval

If the SPS Warranty Claim Code was not recorded on the Job Card, the code can be retrieved in the SPS system as follows:

1. Open TIS on the computer used to program the vehicle.
2. Select and start SPS.
3. Select Settings.
4. Select the Warranty Claim Code tab.

The VIN, Warranty Claim Code and Date/Time will be listed on a roster of recent programming events. If the code is retrievable, dealers should resubmit the transaction making sure to include the code in the SPS Warranty Claim Code field.

Version	4
Modified	February 13, 2019 – Updated the Condition, Cause and Service Procedure. July 19, 2019 – Added the 2018-2019 Model Years, Breakpoint information and updated the Involved Region or County, Condition, Cause, Correction and Warranty Information. September 30, 2020 – Added the 2020 and 2021 Model Years.

GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.

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