



Service Bulletin

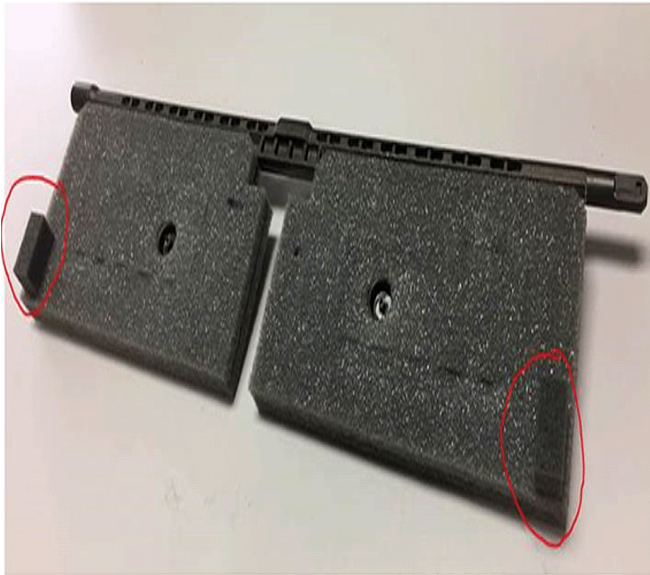
Bulletin No.: 17-NA-201

Date: February, 2019

TECHNICAL

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

Brand:	Model:	Model Year:		VIN:		Engine:	Transmission:
		from	to	from	to		
Chevrolet	Camaro	2016	2017				

Involved Region or Country	North America and N.A. Export Regions
Condition	<p>Some customers may comment on one of the following conditions:</p> <ul style="list-style-type: none"> Vehicles built between October 15, 2015 – March 12, 2016, a flutter type noise may be heard from the HVAC when in manual mode and set to either floor or tri-level mode. Vehicles built on/after March 13, 2016 may have excessive condensation on the windshield above the center defrost vents.
Cause	<p>These may be caused by one of the following conditions:</p> <ul style="list-style-type: none"> Flutter noise may be due to the HVAC door making contact to the case during high fan speed. <div style="text-align: center;">  </div> <p style="text-align: right;">4779509</p> <ul style="list-style-type: none"> Windshield condensation may be due to the foam pads on the defrost door allowing too much air to pass through, causing excessive condensation on the outside of the windshield. <p>Note: During extreme humid conditions, some condensation can be considered normal.</p> <p>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. Recommended temperature setting is between 68-72 degrees (20-22°C).</p>

Mode	Inlet Air	Temperature Level Set Position	Table 6: Air Flow Distribution									
			Outlet Air									
			W/S		Inner Vents		Outer Vents		Rear Vent	Front Floor	Rear Floor	Front SWD
Cr	Pa	Cr	Pa	Cr	Pa	Cr	Pa	Cr	Pa	Cr	Pa	
Vent with Rear Vent	Rec	F/C	%	0	40-2+3	40-2+3	20-2+3	0	0	0	0	0
			Ln									
Vent without Rear Vent	Rec	F/C	%	0	50-2+3	50-2+3	0	0	0	0	0	0
			Ln									
Vent with Rear Vents	OSA	F/C	%	0	40-2+3	40-2+3	20-2+3	0	0	0	0	0
			Ln									
Vent without Rear Vent	OSA	F/C	%	0	50-2+3	50-2+3	0	0	0	0	0	0
			Ln									
Bi-level with Rear Vent	OSA	30% from F/C	%	0	23-2+3	23-2+3	12-2+3	27-2+3	15-2+3	0	0	0
			Ln									
Bi-level without Rear Vent	OSA	F/C	%	0	26-2+3	26-2+3	0	33-2+3	15-2+3	0	0	0
			Ln									
Floor with Rear Floor	OSA	F/H	%	15-2+3	0	4-2+2	0	44-2+3	25-2+3	15-2+3	0	0
			Ln									
Floor without Rear Floor	OSA	F/H	%	15-2+3	0	4-2+2	0	69±5	0	15-2+3	0	0
			Ln									

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 explain the air flow distribution.

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

Correction

- An updated software calibration has been released to address the flutter type noise condition.
- 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

Flutter Noise:

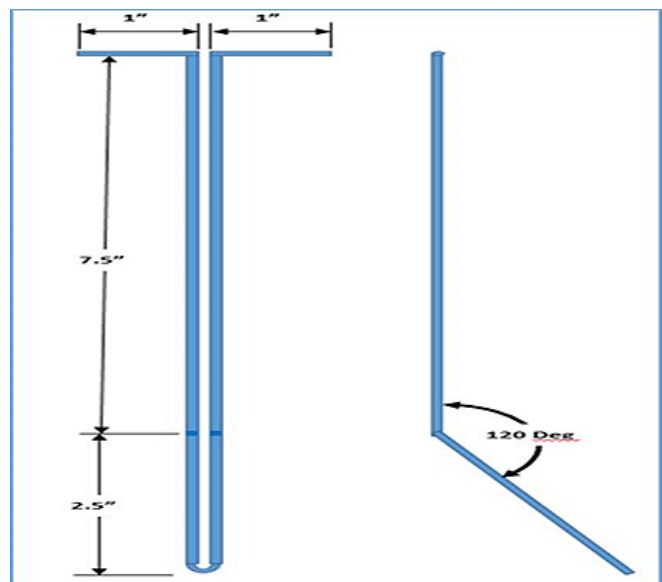
Reprogram the HVAC system control module with the latest calibrations available on TIS2WEB. Refer to *HVAC System Control Module Reprogramming with SPS* in SI.

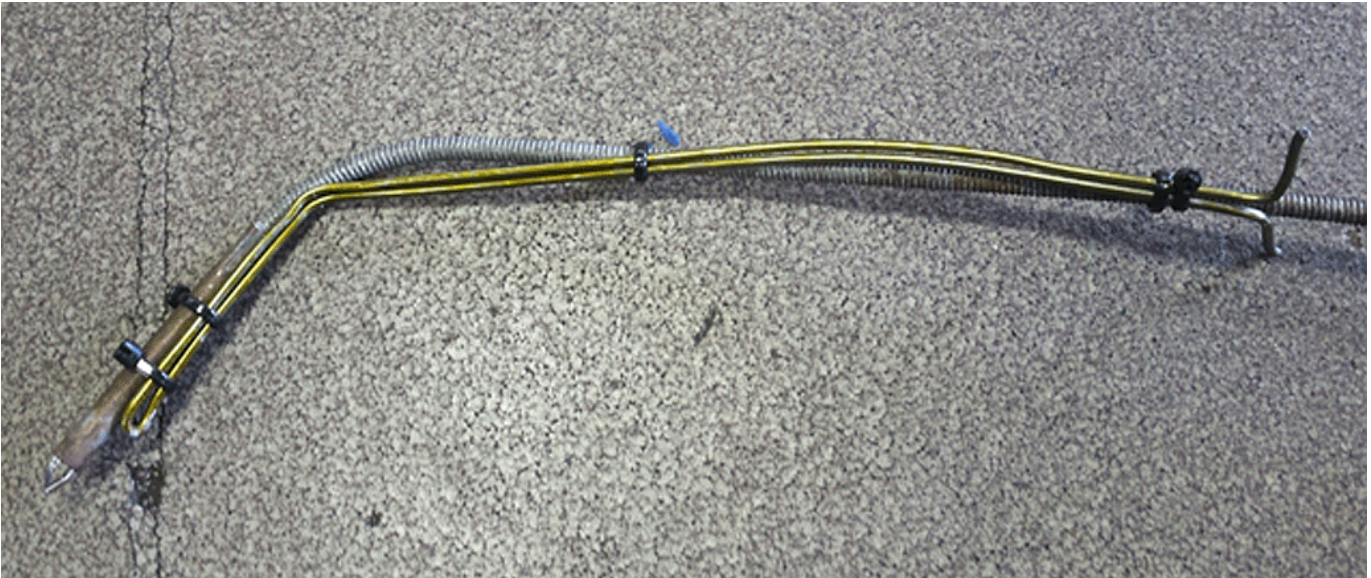
Note: Stable battery voltage is critical during programming. Any fluctuation, spiking, over voltage or loss of voltage will interrupt programming. Install a GM Authorized Programming Support Tool to maintain system voltage. Refer to www.gmdesolutions.com for further information. If not available, connect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

Windshield Condensation:

Preparation/Tool

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





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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 12" (30 cm) 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 1–2 oz. (30–60 ml) of Kent Acrysol P20005 or equivalent in the clear tube.

Important: DO NOT use more than 1–2 oz. (30–60 ml) 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 75 degrees F (24 C)
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.

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 12 V jumper or booster pack disconnected from the AC voltage supply. **DO NOT** connect a battery charger.

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.		

Version	2
Modified	February 13, 2019 – Updated the Condition, Cause and Service Procedure.

