

Bulletin No.: 17-NA-122

Date: Apr-2017

Service Bulletin

TECHNICAL

Subject: Diagnostic Tip for Booming Noise of Active Noise Cancellation (ANC) Module Between 1,500 RPM to 2,400 RPM

Brand:	Model:	Model Year:		VI	N:	Engine:	Transmission:
		from	to	from	to		
Chevrolet	Impala (VIN 1)	2014	2016				
	Impala	2017	2017				

Involved Region or Country	North America and N.A. Export Regions
Additional Options (RPOs)	UQG, UQS
Condition	Some customers may comment on a booming noise heard around 1,500 to 2,400 RPM's.
Cause	This condition may be caused by incorrect speaker polarity from the amplifier, electrical connector at the doors, and/or the rear shelf speakers, which can create an opposite pressure effect in the passenger compartment.
Correction	If the noise can be validated by allowing the engine to safely rev to the specified RPM's and disconnect any of the microphones or opening a door, will turn the ANC off. If the unwanted noise goes away, that would indicate that the trouble is to be related to the ANC output function in the amplifier. • Check the polarity to all the bass producing speakers: - Front and rear doors - Amplifier - If equipped, rear shelf speaker

Parts Information

No parts are required for this repair.

Warranty Information

Labor Operation	Description	Labor Time
-----------------	-------------	------------

5430840	Terminal Replacement	Use Published Labor Operation
		Time

Service Procedure

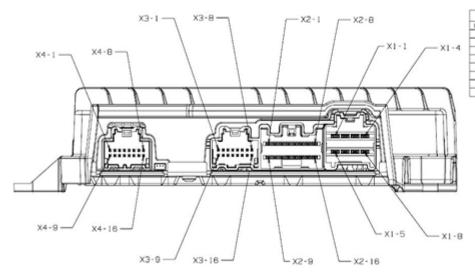
Refer to Terminal Removal in SI for proper terminal removal and installation.

Note: The pinouts noted in the schematic should aid in determining if any wires to the speakers are reversed.

PIN #	FUNCTION	DESCRIPTION	
1	N/C	N/C	
2	N/C	N/C	
3	CONTROL	MOST TX-	
4	CONTROL	MOST TX+	
5	CONTROL	MOST RX-	
6	CONTROL	MOST RX+	
7	N/C	N/C	
8	N/C	N/C	
9	N/C	N/C	
10	N/C	N/C	
11	N/C	N/C	
12	N/C	N/C	
13	N/C	N/C	
14	CONTROL	MOST ECL	
15	N/C	N/C	
10 100		N1.00	

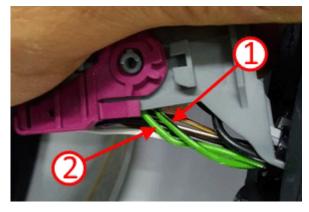
	X3 CONNECTOR	
PIN #	FUNCTION	DESCRIPTION
1	CONTROL.	LSBMLAN
- 2	CONTROL.	CRANKSHAFT POSITION SENSOR REPLICATED
3	N/C	N/C
4	ANALOS INPUT I:	DRIVER SIDE MICROPHONE +
- 5	ANALOG INPUT 2+	PASSENGER SIDE MICROPHONE +
6	ANALOS INPUT 3+	REAR MICROPHONE +
7	N/C	N/C
8	N/C	N/C
9	CONTROL	LSOMLAN (REDUNDANT)
10	N/C	N/C
11	N/C	N/C
12	ANALOG INPUT 1-	DRIVER SIDE MICROPHONE -
13	ANALOS INPUT 2-	PASSENSER SIDE MICROPHONE -
14	ANALOG INPUT 3-	REAR MICROPHONE -
15	N/C	N/C
16	N/C	N/C

X2 CONNECTOR				
PIN #	FUNCTION	DESCRIPTION		
1	N/C	N/C		
2	N/C	N/C		
3	N/C	N/C		
4	AUDIO OUTOUT CHG+	RIGHT FRONT L/P SPKR +		
5	AUDIO OUTPUT CH7+	LEFT FRONT L/P SPKR +		
6	AUDIO OUTPUT CH6+	RIGHT REAR S/D SPKR +		
7	AUDIO OUTPUT CHS+	LEFT REAR S/D SPKR .		
8	N/C	N/C		
9	N/C	N/C		
10	N/C	N/C		
- 11	N/C	N/C		
12	AUDIO OUTOUT CHB-	RIGHT FRONT I/P SPKR -		
13	AUDIO OUTPUT CH7-	LEFT FRONT 1/P SPKR -		
14	AUDIO OUTPUT CHB-	RIGHT REAR S/D SPKR -		
15	AUDIO OUTPUT CHS-	LEFT REAR S/D SPKR -		
16	N/C	N/C		



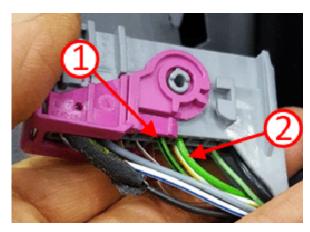
XI CONNECTOR			
PIN #	FUNCTION	DESCRIPTION	
1	N/C	N/C	
2	AUDIO OUTPUT CH2+	RIGHT FRONT S/D SPKR +	
3	AUDIO OUTPUT CHI-	LEFT FRONT S/D SPKR +	
4	POWER	BATTERY +	
5	N/C	N/C	
6	AUDIO OUTPUT CH2-	RIGHT FRONT SZD SPKR -	
7	AUDIO OUTPUT CHI-	LEFT FRONT S/D SPKR -	
8	POWER	GROUND	

Refer to the ANC module diagram in SI to validate the wiring output to speakers.



Example of incorrect speaker polarity found at the electrical connector located at the left side rear door.

- Speaker Positive (1)
- Speaker Negative (2)



Example of correct speaker polarity.

- Speaker Positive (1)
- Speaker Negative (2)

Version	1
Modified	

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.



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION