Bulletin No.: PIC5842
Date: Apr-2013

Service Bulletin

PRELIMINARY INFORMATION

Subject: Buzz Noise In Speakers When Listening To The Radio With Various Lighting Turned On

Models: 2013 Chevrolet Camaro
Equipped with High Intensity Discharge (HID) headlamps

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

Condition/Concern

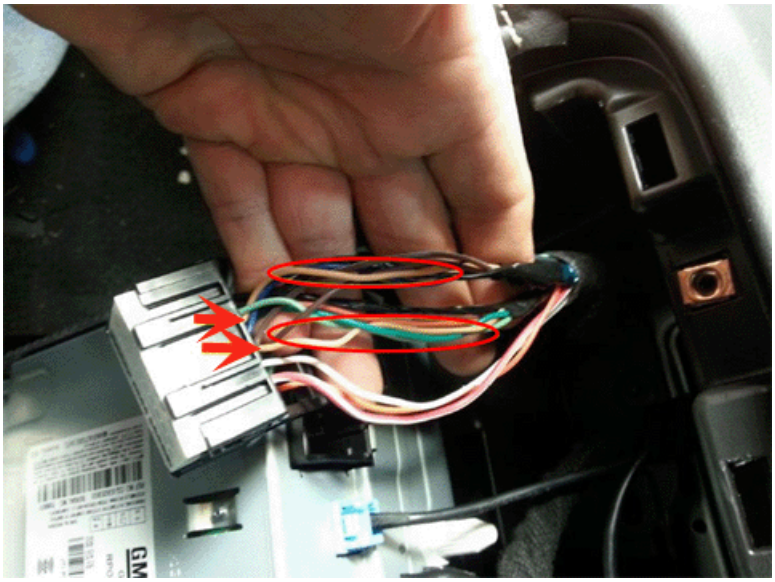
Some customers may comment on a slight buzz noise coming from one or more speakers in the vehicle. This noise is relatively quiet and will only be heard when listening to the radio while certain vehicle lights are turned on. The radio must be on volume level 1 or higher in order to hear this noise, as it is muted when the volume is turned all the way down to 0. Typically, this noise is most easily heard in vehicles with an amplified audio system as opposed to vehicles with the base audio system. It is also been found that the noise can easily be heard with the Daytime Running Lamps turned on.

Recommendation/Instructions

This concern may be caused by one or more incorrectly twisted pairs of low level audio circuits that run from the radio to the amplifier. If this concern is encountered, it is important to first make sure the noise can be easily duplicated, and then to narrow the issue down to specific audio channels in the vehicle. This noise can be induced by operation of several different lights on the vehicle, but it seems to be most easily heard with operation of the Daytime Running Lamps. To duplicate the issue, first start the engine, and make sure the high and low beam headlamps are turned off. Second, turn the radio on and adjust to volume level 1. The buzz noise should not be heard. Turn the auto headlamp switch on and shine a shop light onto the ambient light sensor. Make sure the vehicle is not in Park if the vehicle has an automatic transmission. This will turn the Daytime Running Lamps on and the buzz noise should be audible. If the regular headlamps are turned on, this noise will not likely be heard. By turning the DRLs on and off technicians should be able to make the buzz noise come an go.

If this concern has been verified, the next step is to narrow the noise down to a specific audio channel(s). Make sure the radio is still playing at volume level 1, and the Daytime Running Lamps are turned ON. Note whether or not any buzzing noise can be heard from each individual speaker in the car. Carefully listen to all speakers as this noise may be heard in more than one speaker in the vehicle. After this is done, compare the affected audio circuits on the vehicle to the schematics in Global Service Information. Carefully compare the wire colors, pinouts, and connector cavities of each of the affected channels to make sure they are all in the correct location. In addition to this, inspect each of the vehicle's twisted audio circuits to make sure they are properly paired together. Confirm that the positive and negative circuits from one channel are twisted together.

Example: If a positive audio circuit from one channel is twisted together with the negative circuit from a different channel, this is not correct, and is likely what is allowing this buzz noise to be heard. In the photo below, two tan audio circuits were incorrectly inserted into the radio connector. The low level audio circuits were then incorrectly twisted together. Electrically, they were wired correctly to the amplifier, but they were no longer paired with the correct circuit now that they are twisted together in the harness.



By twisting the incorrect pairs of wires together, this eliminates the noise cancelling effect of the twisted pairs and it allows interference from the daytime running lamp circuits to be picked up and heard through the various speaker channels in the vehicle. The lights are not the cause of the buzz noise and should not be replaced. The incorrect twisting of the audio circuits is what allows this electrical interference to be heard through the speakers.

If the above condition is found, first remove the incorrect circuits from the plastic connector at the back of the radio and reposition them in the correct cavities. Verify the correct circuits are paired and twisted together as needed. Then inspect all other connectors that the audio circuits run through.

Important: If a wiring concern is found in one location, there will always be a similar wiring issue at another connector of the same audio circuits. If this noise concern is found but all speakers will produce audio, circuits were swapped in two separate locations on the vehicle. In all instances, refer to the correct schematics in GSI to make sure the appropriate circuits are paired together before they are twisted together.

Once all audio circuits are confirmed to be in the correct location, and they are also paired and twisted correctly, confirm the noise is no longer present by turning the Daytime Running Lamps on and off.

Warranty Information

For wiring repairs covered under warranty, please refer to latest version of bulletin 10-00-89-005 for warranty information on wire/connector repairs.

Please follow this diagnostic or repair process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

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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