

Yes	INSTALL a new speaker for the one in question.
No	LOCATE the source of the noise and REPAIR as needed.

DIAGNOSIS AND TESTING > INFORMATION AND ENTERTAINMENT SYSTEM > PINPOINT TESTS > PINPOINT TEST F : NO SOUND FROM ALL SPEAKERS

Refer to Audio System/Navigation - Without SYNC for schematic and connector information.

Refer to Power Distribution/BCM for schematic and connector information.

Normal Operation and Fault Conditions

REFER to: Information and Entertainment System - System Operation and Component Description . See ACM.

A short to ground or short to voltage in the circuitry to one of the speakers may cause multiple speakers to lose sound due to the built-in overload protection feature of the ACM. In this case, a speaker fault DTC sets.

To prevent voltage spikes from producing popping noises through the speakers when the ignition is in the START position, the PCM applies voltage on the ACM start signal circuit. When the voltage is received by the ACM, the audio signal output is muted. A short to voltage on this circuit causes the ACM output to be muted continuously, and will cause the warning chimes to only sound from the IPC.

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
B1142:27	Ignition Status 1: Signal Rate of Change Above Threshold	Set by the ACM when a short to voltage is detected on the start signal circuit.

Possible Sources

- Wiring, terminals, or connectors
- ACM

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F1 VERIFY THAT THE ACM (AUDIO FRONT CONTROL MODULE) PASSES THE NETWORK TEST

Using a diagnostic scan tool, perform the network test.

Did the ACM pass the network test?

Yes	GO to F2
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No	REFER to: Communications Network . See The ACM Does Not Respond To The Diagnostic Scan Tool.
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F2 CHECK THE PCM (POWERTRAIN CONTROL MODULE) FOR DTC (DIAGNOSTIC TROUBLE CODE) P0616 OR P0617

Using a diagnostic scan tool, perform the PCM self-test.

Is DTC P0616 or P0617 set in the PCM?

Yes	* For vehicles with the 2.7L EcoBoost (238kW/324PS), REFER to: STARTING SYSTEM . See PCM DTC Chart.* For vehicles with the 3.5L Duratec (209kW/284PS), REFER to: STARTING SYSTEM . See PCM DTC Chart.* For vehicles with the 3.5L Ecoboost (272kW/370PS), REFER to: STARTING SYSTEM . See PCM DTC Chart.* For vehicles with the 5.0L 32V Ti-VCT, REFER to: STARTING SYSTEM . See PCM DTC Chart.
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No	GO to F3
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F3 CHECK THE START SENSE CIRCUIT FOR A SHORT TO VOLTAGE

Ignition OFF.

Disconnect: ACM C240A .

Disconnect: BJB Starter Relay.

Disconnect:

PCM C1232B for vehicles with the 2.7L EcoBoost (238kW/324PS).

PCM C1551B for vehicles with the 3.5L Duratec (209kW/284PS).

PCM C175B for vehicles with the 3.5L Ecoboost (272kW/370PS).

PCM C1381B for vehicles with the 5.0L 32V Ti-VCT.

Ignition ON.

Measure:

Vehicles with the 2.7L EcoBoost (238kW/324PS)

Positive Lead	Measurement / Action	Negative Lead
C240A-3	Ω	Ground

Vehicles with the 3.5L Duratec (209kW/284PS)

Positive Lead	Measurement / Action	Negative Lead
C240A-3	Ω	Ground

Vehicles with the 3.5L Ecoboost (272kW/370PS)

Positive Lead	Measurement / Action	Negative Lead
C240A-3	Ω	Ground

Vehicles with the 5.0L 32V Ti-VCT

Positive Lead	Measurement / Action	Negative Lead
C240A-3	Ω	Ground

Is any voltage present?

Yes	REPAIR the circuit.
No	GO to F4

F4 CHECK FOR CORRECT ACM (AUDIO FRONT CONTROL MODULE) OPERATION

Ignition OFF.

Disconnect and inspect all the ACM connectors.

Repair:

Corrosion (clean module pins or install new connectors or terminals)

Damaged or bent pins (install new terminals or pins)

Pushed-out pins (install new pins as necessary)

Reconnect the ACM connectors. Make sure they seat and latch correctly.

Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW the TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new ACM. REFER to: Audio Front Control Module (ACM) .
No	The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues.