Audio Control Module (ACM) Self-Diagnostic Mode

Audio Systems Without Navigation

NOTE: *If the Audio Front Control Module (ACM) is inoperable the ACM part number may be obtained from a label affixed to the chassis.*

1. Turn the ACM on.

2. Operate the audio system in radio tuner (AM/FM) mode.

3. Press and hold preset buttons 3 and 6 for 3 seconds until the speaker walk test begins.
   - The display indicates each speaker as it is tested.

4. **NOTE:** *If the speaker walk test is the only test required, this procedure can be stopped after Step 3 by turning the ACM off.*

   Before the speaker walk test is complete, carry out any of the following actions:

Preset Button Press	Diagnostic Function	Display	Diagnostic Function Description
1	ACM Self-Test	SELF TEST	The ACM carries out a self-test. At the end of the self-test, the display either indicates SELF PASS or scrolls through any DTCs present. Note that the self-test may not indicate all DTCs that are present. If additional DTCs are suspected, retrieve continuous and on-demand DTCs using the scan tool.
2	View DTCs	NO DTCS, or scrolls through DTCs	The ACM or FDIM displays any DTCs that are present. To scroll through the DTCs, press the TUNE UP button. If no DTCs are present, the display reads NO DTCS.
3	AM/FM Antenna Signal Strength	SIGNAL ###	The ACM or FDIM displays the AM/FM antenna signal strength. To run this test, the audio system should be in AM radio tuner mode before entering the ACM self-diagnostic mode.
4	Software Levels	SOFT LEVELS	The ACM or FDIM displays software levels for various components of the audio system. Knowing the software levels may not aid diagnostics. Press the TUNE UP button to scroll through the software levels.
5	Display Test	DISPLAY TEST, then all segments illuminate	All of the ACM or FDIM display segments illuminate.
6	Retrieve ACM Part Number	RADIO CONFIG	The ACM or FDIM displays the ACM part number and various configuration levels. Press the TUNE UP button to scroll to the desired function.

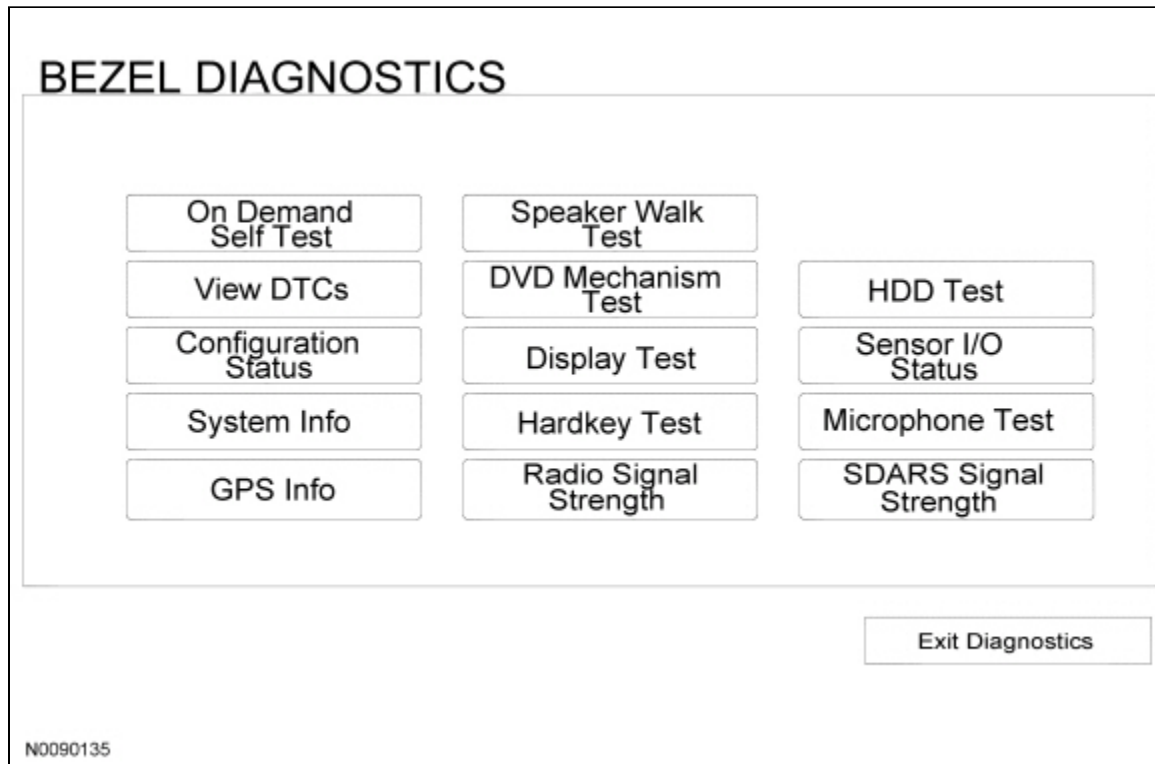5. To exit the self-diagnostic mode, turn the ACM off.

Satellite Radio Electronic Serial Number (ESN) Retrieval — Vehicles Without Navigation

NOTE: *If the SDARS is inoperable the Electronic Serial Number (ESN) may be obtained from a label affixed to the chassis.*

1. Operate the audio system in satellite radio mode.

2. Depending on vehicle configuration, press and hold the AUX button and preset button 1 or the SIRIUS button and preset button 1, simultaneously.
   - The Satellite Digital Audio Receiver System (SDARS) module Electronic Serial Number (ESN) displays on the screen.

3. Record the SDARS module ESN .

4. Turn the audio system off.

Audio Systems With Navigation

1. Turn the Audio Front Control Module (ACM) on.

2. Operate the audio system in radio tuner (AM/FM) mode.

3. Press and hold preset buttons 3 and 6 for 3 seconds until the speaker walk test begins.
   - The display indicates each speaker as it is tested.

4. **NOTE:** *If the speaker walk test is the only test required, this procedure can be stopped after this step, or by allowing the speaker walk test to complete on its own.*

   Before the speaker walk test is complete, press the "End Test" selection.

BEZEL DIAGNOSTICS

On Demand Self Test	Speaker Walk Test	
View DTCs	DVD Mechanism Test	HDD Test
Configuration Status	Display Test	Sensor I/O Status
System Info	Hardkey Test	Microphone Test
GPS Info	Radio Signal Strength	SDARS Signal Strength

Exit Diagnostics

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5. The following tests are available through the "BEZEL DIAGNOSTICS" menu:

Display Selection	Diagnostic Function Description
On Demand Self Test	The ACM carries out a self-test. At the end of the self-test, the display either indicates "Test Passed" or lists any DTCs present. Note that the self-test may not indicate all DTCs that are present. If DTCs are suspected, retrieve continuous and on-demand DTCs using the scan tool.
View DTCs	The ACM or FDIM displays any DTCs that are present. If there is more than a full screen of DTCs present, to scroll through the DTCs, press the down arrow on the display. If no DTCs are present, the display reads NO DTCS. Press the "Clear DTCs" selection to clear any DTCs present.
Configuration Status	The display shows the ACM configuration. A "0" indicates the item is configured off, while a "1" indicates the item is configured on. If the ACM appears to be misconfigured, refer to Section 418-01.
System Info	The ACM or FDIM displays system information for various components of the audio system. The following items are most important for servicing the audio system: • Nav Radio Part Number — provides the ACM part number • ESN1 — provides the satellite radio Electronic Serial Number (ESN)
GPS Info	The current Global Positioning System (GPS) satellite information is shown, along with the current vehicle position. Pressing the "SV Status" selection provides additional information, if present.
Speaker Walk Test	The ACM carries out the speaker walk test.
DVD Mechanism Test	The ACM tests the internal CD/DVD drive mechanism.
Display Test	This test provides for testing of the touchscreen colors and the touchscreen sectors. Pressing any of the colors on the display causes the whole display to change to that color; pressing the display again returns to the Display Test menu. Pressing the "Touchscreen Activation Test" selection enters the touchscreen sector test. Press any area of the screen to test the touchscreen sector; press the "X" at the RH lower corner of the display to return to the Display Test menu.
Hardkey Test	This test provides for testing of the ACM buttons (not the touchscreen). When each button is pressed, the screen displays the button that is active. This test can also be used to isolate a stuck button.
Radio Signal Strength	The ACM or FDIM displays the AM/FM antenna signal strength. To run this test, the audio system should be in AM radio tuner mode before entering the ACM self-diagnostic mode.
HDD Test	The ACM tests its internal hard drive.
Sensor I/O Status	The ACM displays inputs it is receiving from external sources. These inputs include: • Ignition — indicates ON (ignition in ACC or RUN) or OFF • Brake — indicates ON (vehicle in PARK) or OFF (vehicle not in PARK) • Illumination — indicates ON or OFF • ReverseGear — indicates ON (vehicle in REVERSE) or OFF (vehicle not in REVERSE)
Microphone Test	The ACM tests the microphone by supplying a test tone and monitoring the input from the microphone. If there is a concern with the microphone input, the ACM sets DTC B1D79:01. For diagnostics, refer to Diagnosis and Testing in this section.
SDARS Signal Strength	The ACM or FDIM displays the satellite radio antenna signal strength.

6. To exit the self-diagnostic mode, press the "Exit Diagnostics" selection from the "BEZEL DIAGNOSTICS" menu.