

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 | <u>ACM</u> Self-Test | SELF TEST | The <u>ACM</u> 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 <u>ACM</u> or <u>FDIM</u> 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 <u>ACM</u> or <u>FDIM</u> displays the AM/FM antenna signal strength. To run this test, the audio system should be in AM radio tuner mode before entering the <u>ACM</u> self-diagnostic mode. |
| 4 | Software Levels | SOFT LEVELS | The <u>ACM</u> or <u>FDIM</u> 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 <u>ACM</u> or <u>FDIM</u> display segments illuminate. |
| 6 | Retrieve <u>ACM</u> Part Number | RADIO CONFIG | The <u>ACM</u> or <u>FDIM</u> displays the <u>ACM</u> 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



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 <u>ACM</u> 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 <u>ACM</u> or <u>FDIM</u> 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 | <p>The display shows the <u>ACM</u> configuration. A "0" indicates the item is configured off, while a "1" indicates the item is configured on. If the <u>ACM</u> appears to be misconfigured, refer to Section 418-01</p> <div style="border: 1px solid black; padding: 5px;"> <div style="text-align: right;">  </div> <div style="display: flex; justify-content: space-between;"> 418-01 Module Configuration 2013 Mustang </div> <div style="text-align: right; font-size: small;"> DIAGNOSIS AND TESTING Procedure revision date: 05/01/2012 </div> <hr/> <p style="text-align: center;">Module Configuration</p> <p>Special Tool(s)</p> <div style="border: 1px solid black; padding: 2px; display: flex; align-items: center;">  <div style="padding-left: 5px;"> Vehicle Communication Module (VCM) and Integrated Diagnostic System (IDS) software with appropriate hardware, or equivalent scan tool </div> </div> <p>Principles of Operation</p> <p>Configurable modules accommodate a variety of vehicle options, eliminating the need for many unique modules for one vehicle line. These modules must be configured when replaced as part of a repair procedure. Configurable modules should not be exchanged between vehicles since the settings are unique to each vehicle. Failure to configure a new module may result in incorrect operation and/or DTCs setting.</p> <p>The following are the 3 different methods of configuration:</p> <ul style="list-style-type: none"> • Programmable Module Installation (PMI) • Module reprogramming (flashing) • Programmable parameters <p style="font-size: small;">Some modules do not support all 3 methods</p> </div> |
| System Info | <p>The <u>ACM</u> or <u>FDIM</u> displays system information for various components of the audio system. The following items are most important for servicing the audio system:</p> <ul style="list-style-type: none"> • Nav Radio Part Number — provides the <u>ACM</u> 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 <u>ACM</u> carries out the speaker walk test. |

| Display Selection | Diagnostic Function Description |
|-----------------------|--|
| DVD Mechanism Test | The <u>ACM</u> 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 <u>ACM</u> 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 <u>ACM</u> or <u>FDIM</u> displays the AM/FM antenna signal strength. To run this test, the audio system should be in AM radio tuner mode before entering the <u>ACM</u> self-diagnostic mode. |
| HDD Test | The <u>ACM</u> tests its internal hard drive. |
| Sensor I/O Status | <p>The <u>ACM</u> displays inputs it is receiving from external sources. These inputs include:</p> <ul style="list-style-type: none"> • 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 <u>ACM</u> 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 <u>ACM</u> sets DTC B1D79:01. For diagnostics, refer to Diagnosis and Testing in this section. |
| SDARS Signal Strength | The <u>ACM</u> or <u>FDIM</u> displays the satellite radio antenna signal strength. |

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