

Bulletin No.: PIC5812A

Date: Mar-2013

PRELIMINARY INFORMATION

Subject: Diagnostic Tip - Proper Installation Of HVAC Module Connectors After Removal

Models: 2013 Cadillac ATS

This PI was superseded to update condition field. Please discard PIC5812.

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

Condition/Concern

After removing the connectors on the Electronic Climate Control Module (HVAC Module) with the vehicle battery still connected, it is possible to reconnect the connectors in the wrong order when reinstalling the HVAC module. Improper connection will result in improper motor (actuator) control.

After improper connection a vehicle may exhibit any or all of the following conditions:

- Airflow will only come out of defrost or panel in all manual mode selections.
- 2. Driver or Passenger temperature motors appear stuck in full hot or full cold, even when selecting Hi or Lo on the temperature control screen. Full hot may be difficult to diagnose with a cold engine.
- 3. Air Inlet motor appears stuck in fresh mode or recirculation mode when mode is manually set to bi-level or panel.
- 4. Any of the motor commanded positions (Air Inlet, Mode 1, Temperature 1, Temperature 2) can be out of range (greater than 1023).
- 5. Any of the motor actual positions can be out of range (greater than 1023).
- 6. Any of the motor actual position will not change even when the motor driver shows increase or decrease.

Please follow the procedure below to eliminate any confusion or concerns when reconnecting the HVAC Module.

Recommendation/Instructions

- 1. Please connect the connectors in the proper sequence (J1, J3, and J4 can be installed in any order, but J2 (Brown Power Connector) must be last) to avoid motor (actuator) relearn process. If not connected in proper order, you must proceed to the next step.
- 2. If the proper connection procedure was not followed previous to reinstallation of the HVAC module connectors and it appears you have a stuck motor (actuator), perform the Actuator Calibration Procedure below.

Preferred Method (with Scan Tool)

Note: Do not adjust any controls on the HVAC control module while the HVAC control module is self-calibrating. If interrupted, improper HVAC performance will result.

- 1. Clear all DTCs.
- 2. Place the ignition switch in the OFF position.
- 3. Connect all previously disconnected components.
- 4. Start the vehicle.
- 5. With the scan tool, initiate the HVAC Actuators re-calibration feature of the HVAC Control Module Special Functions menu.
- 6. Operate system and verify that no DTCs have set as current DTCs.

Alternate Method (without Scan Tool)

Note: Do not adjust any controls on the HVAC control module while the HVAC control module is self-calibrating. If interrupted, improper HVAC performance will result.

Clear all DTCs.

- 2. Place the ignition switch to the OFF position.
- 3. Connect all previously disconnected components.
- 4. Remove the HVAC control module fuse for a minimum of 10 seconds.
- 5. Install the HVAC control module fuse.
- 6. Start the vehicle.
- 7. Wait 40 seconds for the HVAC control module to self-calibrate.
- 8. Operate system and verify that no DTCs have set as current DTCs.

ADDITIONAL SI KEYWORDS:

bind cold door driver duct hi high inop inoperative IP left lo low passenger program programming right temp

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.

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