

Electronic Automatic Temperature Control Module Self-Test

- The EATC module self-test will not detect concerns associated with data link messages like engine coolant temperature or vehicle speed signals. A NGS tester must be used to retrieve these concerns.
- The EATC module self-test will detect concerns in the system control functions and will display hard diagnostic trouble codes (DTCs) in addition to intermittent diagnostic trouble codes for concerns that occur during system operation. The vehicle interior temperature should be between 4°-32°C (40-90°F) when carrying out the self-test. If the temperatures are not within the specified ranges, false in-car temperature sensor DTCs will be displayed.
- The self-test can be initiated at any time. Normal operation of the system stops when the self-test is activated.
- To enter the self-test, press the OFF and FLOOR buttons simultaneously and then press the AUTOMATIC button within two seconds. The display will show a pulse tracer going around the center of the display window. The test may run as long as 30 seconds. Record all DTCs displayed.
- If any DTCs appear during the self-test, follow the diagnostics procedure given under ACTION for each DTC given.
- If a condition exists but no DTCs appear during the self-test, refer to the Symptom Chart Condition: The EATC System Is Inoperative, Intermittent or Improper Operation.
- To exit self-test and retain all intermittent DTCs, push the blue (cooler) button. The control will exit self-test, retain all intermittent diagnostic trouble codes and then turn OFF (display blank).
- To exit the self-test and clear all DTCs, press the DEFROST button. The vacuum fluorescent display window will show 888 and all function symbols for one second. Then, the EATC control assembly will turn OFF (display blank) and all DTCs will be cleared.
- Always exit the self-test before powering the system down (system turned OFF).
- Intermittent DTCs will be deleted after 80 ignition switch ON cycles after the intermittent condition occurs.

EATC Hard Self-Test Faults	EATC Intermittent Run-Time Faults	NGS DTC	Description
024	022	B1249	Blend door short
	025	B1249	Blend door failure
031	N/A	B1251	A/C in-car temperature sensor open circuit
030	N/A	B1253	A/C in-car temperature sensor short to ground
041	043	B1255	A/C ambient temperature sensor open circuit
040	042	B1257	A/C ambient temperature sensor short to ground
050	052	B1261	A/C solar radiation sensor circuit short to ground
		U1041	SCP invalid or missing data for function read vehicle speed
		U1073	SCP invalid or missing data for engine coolant
		U1222	SCP invalid or missing data for interior lamps

Note: While the above test is useful for diagnosis of suspected eatc related problems, many of the system outputs do not provide any feedback to the control head. Which means there could be numerous problems with your eatc system and you still get a "clean bill of health" from the self diagnostics. For instance, I did not receive any error codes during the self test when I had the vacuum control block tubes & electrical connector unplugged, the air conditioner compressor request line not connected to anything, and the blend door actuator laying loose on a table without being attached to the plenum. If the eatc system were actually installed inside a vehicle like that, air would always flow from the defroster vents regardless of how the vehicle operator set the controls and temperature regulation would be nonexistent since the blend door could randomly flop around inside the plenum without any restrictions and the a/c compressor would never engage. Additionally, keep in mind that when set to the override settings of either 60 or 90 degrees, the eatc head ignores temperature and solar radiation data and commands the blend door to either full warm or full cold position. So if you can't get heat in the 90 degree setting and cooled air in the 60 degree setting, your problem is NOT caused by the interior temperature, exterior temperature or sunload sensors.