

Dual Electronic Automatic Temperature Control (DATC) Module Diagnostic Trouble Codes — DTCs

If using the scan tool or front panel diagnostics to check for DATC DTCs:

1. Check continuous DTCs.
2. Run DATC self-test. Refer to Front Panel DATC Self-Test (On-demand Diagnostic Trouble Codes — DTCs).

General Information:

- If the DTC is continuous only and does not appear in the self-test, this indicates an intermittent fault condition, such as a poor wiring connection or a loose terminal. If the DATC does not appear after running the self-test it may also indicate that the DTC may no longer exist.
- If the DTC is continuous and appears in the self-test, this indicates a hard fault. A hard fault suggests a permanent wiring failure, disconnected connector or component failure.

Front Panel DATC Module Self-Test (On-Demand Diagnostic Trouble Codes — DTCs)

On-demand DTCs are those that are reported by an ECU when a failure is detected while executing a diagnostic test. For the DATC module this means that all faults (hard) that occur while the module is conducting a self-test shall be reported as an on-demand DTC.

- The DATC module self-test will not detect concerns associated with data link messages such as engine coolant temperature or vehicle speed signals. The scan tool must be used to retrieve these concerns.
- The vehicle interior temperature should be between 0-32°C (32-90°F) when carrying out the self-test. If the temperatures are not within the specified ranges, false temperature sensor DTCs may be displayed.

The DATC module self-test through the front panel display:

- can be initiated at any time. Normal operation of the system stops when the self-test is activated.
- is entered by pressing the OFF and DEFROST buttons simultaneously and then pressing the AUTO button within two seconds. Record all DTCs displayed.
- concludes by reporting all on-demand DTCs. Follow the diagnostics procedure given under ACTION in the DTC index for each DTC given.
- reports individual on-demand DTCs as four-digit DTCs (less the alpha character).
- will calibrate all the mode doors and check all analog inputs. The DATC module will only report on-demand (hard) faults that occurred while the DATC module was conducting its self-test.
- will light all control panel display segments if no faults are detected.
- will report individual on-demand DTCs without the °C symbol lit.

To exit the self-test, press the defrost button. This will clear all on-demand codes from the DATC module memory. If no button is pushed, DTCs will continue to be displayed.

Upon exit from the self-test the DATC module returns to operational status. The DATC module executes a hard (cold boot) reset which places the DATC system in the OFF mode.

If a condition exists but no DTCs appear during the self-test, GO to [Symptom Chart](#) Condition: The DATC System Is Inoperative, Intermittent or Incorrect Operation.

Always exit the self-test before powering the system down (system turned OFF).

Front Panel DATC Module Display — Retrieve Continuous Diagnostic Trouble Codes (DTCs)

Continuous DTCs are fault codes recorded by the DATC module which have occurred during normal operation. For the DATC module this means that all faults (intermittent or hard) that occur while the module is in an operational state shall be reported as a continuous DTC.

- To retrieve continuous DTCs, press the OFF and DEFROST buttons simultaneously, followed by pressing the RECIRC button within two seconds.
- The DATC module will report all continuous DTCs to the vacuum fluorescent (VF) display.
- The DATC module will not carry out a self-test; it will only display continuous faults codes which are stored in memory.
- All VF display segments will light if no faults are detected.
- Individual continuous DTCs will be reported with the °C symbol lit.
- DTCs shall be reported as a four-digit DTC (less the alpha character).
- Pressing the front defrost button will exit the retrieve continuous DTCs mode and clear all continuous DTCs from DATC module memory.
- Pressing any other button (other than DEFROST) will exit the retrieve continuous DTCs mode and maintain all continuous DTCs in DATC module memory.
- Upon exit from the retrieve continuous DTCs mode the DATC module returns to operational status. The DATC module executes a hard (cold boot) reset which places the DATC system in the OFF mode.

Diagnostic Trouble Code Index

Powertrain Control Module (PCM) Diagnostic Trouble Code (DTC) Index

DTC	Description	Action
P1460	WOT A/C cutout internal driver malfunction	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
P1461	A/C pressure sensor circuit high input	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
P1462	A/C pressure sensor circuit low input	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
P1463	A/C pressure sensor insufficient pressure variation	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
P1469	Low A/C cycling period	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
P1474	Low speed fan internal driver failure	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
P1479	High speed fan internal driver failure	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
P1464	A/C demand out of self-test range	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.

Dual Electronic Automatic Temperature Control (DATC) Module Diagnostic Trouble Code (DTC) Index

DTC	Run-Time (Intermittent) Faults or Self-Test (Hard) Faults	Description	Action to Take
B1242	1242	Air inlet door actuator circuit failure	GO to Pinpoint Test C.
B1251	1251	In-vehicle temperature sensor circuit open	GO to Pinpoint Test D.
B1253	1253	In-vehicle temperature sensor circuit short to ground	GO to Pinpoint Test D.
B1255	1255	Ambient air temperature sensor open	GO to Pinpoint Test F.
B1257	1257	Ambient air temperature sensor	GO to Pinpoint Test F.

		short to ground	
B1259	1259	A/C solar radiation sensor open circuit	GO to Pinpoint Test G.
B1261	1261	A/C solar radiation sensor circuit short to ground	GO to Pinpoint Test G.
B1262	1262	Defrost door actuator circuit failure	GO to Pinpoint Test C.
B1263	1263	Panel door actuator circuit failure	GO to Pinpoint Test C.
B1264	1264	Floor door actuator circuit failure	GO to Pinpoint Test C.
B1265	1265	Cold air bypass door actuator circuit failure	INSPECT the vehicle for the presence of a cold air bypass door actuator. If a cold air bypass door actuator is present, GO to Pinpoint Test C. If a cold air bypass door actuator is not present, ignore DTC B1265.
B1342	1342	ECU defective	INSTALL a new DATC module.
B1676	1676	Battery voltage out of range	—
B1946	1946	Evaporator discharge temperature sensor open circuit	GO to Pinpoint Test E.
B1947	1947	Evaporator discharge temperature sensor circuit short to ground	GO to Pinpoint Test E.
B1966	1966	Driver heater core discharge temperature sensor open circuit	GO to Pinpoint Test E.
B1967	1967	Driver heater core discharge temperature sensor short circuit	GO to Pinpoint Test E.
B2428	2428	Passenger heater core discharge temperature sensor open circuit	GO to Pinpoint Test E.
B2429	2429	Passenger heater core discharge temperature sensor short circuit	GO to Pinpoint Test E.
B2477	2477	Module configuration failure	RECONFIGURE the DATC module.
B2797	2797	Driver coolant control valve open circuit	GO to Pinpoint Test J.
B2798	2798	Driver coolant control valve circuit short to ground	GO to Pinpoint Test H.
B2799	2799	Passenger coolant control valve open circuit	GO to Pinpoint Test J.
B2800	2800	Passenger coolant control valve circuit short to ground	GO to Pinpoint Test H.
U1041	5041	SCP invalid or missing data for function read vehicle speed	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
U1073	5073	SCP invalid or missing data for engine coolant	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
U1027	5027	SCP invalid or missing data for engine rpm	REFER to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.
U1178	5178	SCP invalid or missing data for voice command	This code will only appear if the vehicle is equipped with voice command.
U1222	5222	SCP invalid or missing data for interior lamps	—