



Preliminary Information

PIC6298 Decreased Air Flow from Vents after Extended Drive with Air Conditioning on

Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Cadillac	CT6	2016 - 2018	ALL	ALL	ALL	ALL
Involved Region or Country	North America					
Additional Options (RPO)	N/A					
Condition	Loss of or reduced airflow after an extended drive with A/C engaged.					
Cause	Engineering is investigating					

Correction:

Perform the following Evaporator Core Freeze Check;

Rule out other possible faults:

- Verify that the compressor clutch is able to disengage
 - 1.1 Start the vehicle and set the HVAC to full cold, panel outlets, and high blower with AC enabled.
 - 1.2. After it is blowing cold toggle the AC enable button to off.
 - 1.3. Ensure that the discharge air blowing from the vents warms up to ambient (in < 1minute)
Note: If this fails there is a problem with the compressor clutch or control circuit (short to power via wiring or relay, or clutch physically stuck on)
- Verify that the EAT sensor is wired correctly and seated fully into the module.
 - 2.1 Remove the EAT sensor connector while monitoring EAT sensor temperature
 - 2.2 The EAT value should freeze when unplugged and set a code
 - 2.3 If it does not freeze or the code is set for a different sensor the module harness will need to be inspected, verify connectors run to the correct sensors
 - 2.4 The wrong connector is connected to the EAT sensor and the correct one cannot reach, then repair or replace the harness
- Further check temperature distribution across the outlets, set driver and passenger to LO in vent mode
 - 3.1 The duct temperatures should be within 5 °C of one another
 - 3.2 If there is a large delta between different ducts we would suspect evaporator internal leak (bypass) or temperature door issues.
 - 3.3 If outlet to outlet temp delta is larger than 5 ° C, evacuate the system and note the amount recovered. If the recovered amount is less than 80% of the production charge, perform a system leak test, and fix leak accordingly. If no leak is found, recharge and re-evaluate for evaporator core freeze.

If all the above checks out OK then verify that the freeze happens in the vehicle. Make sure to run the vehicle during the ambient conditions of the complaint, or if that is not available, then on the highest humidity day in the weeks forecast. High heat and high humidity which is typically found in the SE United States is worst case.

1. Set the HVAC settings to: temperature = LO, Sync, AUTO, then lower the blower to the minimum setting.
2. Allow car to sit for 50 minutes or drive the vehicle with low speed city driving. Make sure to get in the vehicle and cycle to neutral and then back to park if idling or it will time out and shut the engine off after 1 hour.
3. Both of these conditions mean that the core is freezing:
 - 3.1 Poor airflow from the vents (compared to the beginning of the test)
 - 3.2 Larger diameter pipe from the TXV will have ice forming on it. You will need to look under the driver side cowl cover (same area as the brake master cylinder). Liquid condensate/water is normal on that pipe.

If Evaporator Freeze is duplicated, please contact General Motors Technical Assistance.

Version History

Version	1
Modified	