

Manufacturer: General Motors

Complete Car Care Group: 09-09-1005

Subject: Poor Air Conditioning Cooling Complaint

Model: 1995 Oldsmobile Aurora

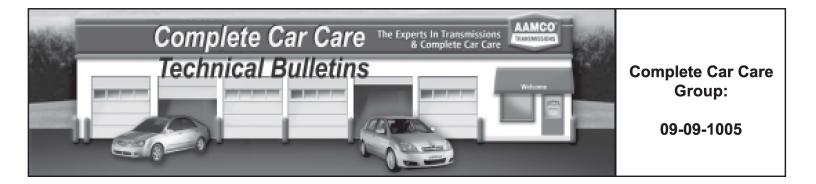
Paul Yaklin from **AAMCO Daytona Beach, Florida** sent in this Service Plus Bulletin. He had a 1995 Oldsmobile Aurora equipped with Electronic Climate Control (ECC) and a complaint of poor A/C cooling. The pressures looked normal on the gauges when the compressor was running, but the compressor cycled frequently (every 5 to 8 seconds) and there was no DTC's set.

While looking at the data list on the scan tool, Paul noticed the high side temperature sensor only showed 9°F, and looked like a good place to start. Using a sensor simulator in place of the high side temperature sensor, an input of 150°F was fed to the ECM in the hope of curing the clutch cycle. Even thought the sensor was bad, the substitute signal did nothing to stop the cycling. A look at the A/C electrical control system wiring diagram showed both a high and low pressure switch, however, neither of which was visible on the scan tool data list. These were located on the vehicle and by-passed as a test. The clutch cycling problem continued.

The low side temperature sensor showed about 21-24°F on the scan tool data list when the clutch was on, but the low side pressure gauge actually read about 41-45psi which shoud be approximately 45-50°F. At this point, the skewed sensor reading appeared to be the most likely cause of the problem. The location of the sensor (behind engine) made it nearly impossible to accurately measure the actual temperature of the line, and the range of Paul's sensor simulator would not go low enough to input a substitute signal of the value he believed it needed. A call to the dealer got a new sensor on the way for less than \$20.

Installing the new sensor required opening the refrigerant system and Paul wasn't really sure it would fix it. To find out if he was finally heading in the right direction, Paul connected the new sensor to the harness and placed the sensor in a cup of ice. The scan tool data list now showed 32°F fo the low side temperature sensor and the engine was started with the A/C full on. The clutch cycling problem was finally stopped and the A/C was performing normally.





Paul installed both high and low temperature sensors while the system was opened up and reinstalled the recovered refrigerant and verified both the high and low temperature sensors read correct values on the scan tool with the A/C operating. The ECM has a strategy for turning off the A/C clutch to prevent evaporator freeze-up when lower than expected temperature is sensed on the low side line.

Thanks Paul!

For your tip on Poor Air Conditioning Cooling!

Send Tech Tips to: AAMCO Transmissions Inc. Technical Department One Presidential Blvd. Bala Cynwyd, PA 19004

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