

## A SMALL CHANGE IN AIRFLOW CAN HAVE A BIG IMPACT ON A/C PERFORMANCE!

Reduced airflow through the condenser and/or radiator can result in poor A/C performance, premature compressor failure and engine/transmission overheating.

Poor A/C performance after compressor replacement may or may not be associated with an airflow issue, especially when no obvious signs of engine overheating are evident. Therefore, a thorough evaluation of the system should be performed.



Poor airflow is a commonly undiagnosed cause of original compressor failure and **COMEBACKS** following an A/C repair job.

### Common Conditions Resulting in Poor Airflow

#### 1. Electric Fan and/or Electro-Viscous Fan Clutch Operation

The PCM looks at a wide range of inputs to determine when and at what speeds the radiator and condenser fans should operate, including engine/transmission temperature, A/C head pressure, road speed, etc. Temperature, pressure sensors, and switches essential for fan operation may require PCM calibration. Not performing calibration when necessary can cause delayed or complete lack of fan operation. See GM TSB 04-06-02-005 / GM TSB 04-01-38-019A

#### 2. Fan Shroud & Bodywork Integrity

Missing or damaged air dams and fan shrouds can seriously disrupt airflow through the condenser/radiator fins.

#### 3. Debris on Radiator/Condenser

Debris in the radiator fins and/or in the space between it and the condenser may not be obvious and will affect airflow. The result can be poor HVAC performance even though there is no evidence of engine overheating.

#### 4. Modifications: Grilles, Lift or Lowering Kits, Improperly Added Fans, etc.

These modifications can disturb airflow through the condenser/radiator assembly. They can also disturb airflow over the fan clutch thermostatic spring, which can adversely impact its operation.



Scan here to see more information on the impact of airflow on cooling and A/C system performance!

