FACTORY AIR™ by 4 SEASONS

TECH TIP

Inadequate Condenser Air Flow

Condition:
Customer complains that the A/C stops cooling and blows warm air when the vehicle is idling for an extended period of time, such as sitting in traffic.

Cause:
Inadequate airflow across the condenser is a common cause for this condition.

Testing:
Normal testing procedures may not show a problem if the airflow is borderline. Both pressure and temperature readings may remain within specifications. Follow the maximum heat load test described in the Tips and Techniques manual (FS # 99900). Look for hi-side pressure to slowly rise, while the difference between condenser inlet and outlet temperatures diminishes. If cooling the condenser with a high volume fan or a misting of water helps the A/C to blow cold air again, condenser airflow may be inadequate.

Correction:
Re-affirm that the condenser is free of debris and that the electric fan or fan clutch is operating correctly. Check that there are no restrictions in front of the condenser and the fins are not damaged. Check factory air dams and fan shrouds for misalignment and breaks. Check Factory bulletins for overheating and condenser airflow corrections.

Retrofitting may enhance this problem. Pontiac put a bulletin out to add an air dam around the condenser/radiator because air was bypassing over the condenser/radiator. Other shroud changes, air dam and seal additions, and condenser changes have been advised in several factory bulletins.

Another correction is the addition of an auxiliary electric fan. Besides aftermarket fan add-ons, there are some factory bulletins that advise the installation of an auxiliary electric fan. One example is GM's bulletin 01-01-39-004A for 2002-2003 Escalade, 2000-2003 Suburban/Tahoe, and 2000-2003 Yukon equipped with a 6.0 engine.