



TECH TIP

Update of Tip AB309 Dated March 1999

Tech Tip AB309 originally recommended not to retrofit 1985 to 1993 Cadillac vehicles because the electronic controls repeatedly set a low refrigerant code. Further research and tests have improved the likelihood of a successful retrofit.

One of the main reasons for a low refrigerant code to set was the system may have actually been undercharged. Be sure that the proper amount of 134a is installed. Start with 90% of the stated R12 charge, then add refrigerant as needed until the temperature of the evaporator outlet is within five degrees of the evaporator inlet. Do not exceed 100% of original R12 charge. GM bulletins #92-1-109 and 92-8-112 provide updated information on system refrigerant capacities.

If, after installing the correct charge and low refrigerant codes still persist, check to see if there is a PROM or EPROM update for the vehicle. GM bulletins # 90-1-133, 90-8-221, and 90-8-241 provide information about new updated PROMS and EPROMS. In some models, reprogramming the EPROM may be required.

If these steps have been performed in accordance to the manufacturer bulletins, and repeated codes are still being set, Cadillac has offered one other suggestion: add a resistor to the circuit. Some GM technicians have successfully installed a 2.2k ohm resistor in series between the BCM and the low side thermistor. The resistor alters the voltage signal for the BCM to prevent unwanted low refrigerant codes but still provide a shutdown response if the system gets very low on refrigerant.