DIAGNOSIS AND TESTING (Continued)

HEATER AND DEFROSTER DIAGNOSIS

CONDITION	POSSIBLE SOURCE	ACTION
● Insufficient, Erratic, or No Heat or Defrost	● Low radiator coolant due to: ● Coolant leaks. ● Engine overheating. ● Thermostat. ● Plugged or partially plugged heater core. ● Loose or improperly adjusted control cables. ● Vacuum hoses crossed, collapsed, or linked (if applicable). ● Airflow control doors sticking in binding. ● Vacuum motor or hose leaks (if applicable).	● Check radiator cap pressure. Replace if below minimum pressure. ● Fill to level. Pressure test for engine cooling system and heater system leaks. Service as required. ● Remove bugs, leaves, etc. from radiator or condenser fins. ● Check for: Inoperative electro-drive fan Sticking thermostat Incorrect ignition timing Water pump impeller damage Restricted cooling system ● Leaks in cooling system. ● Service as required. ● Feel heater hoses. If too hot to handle, thermostat is OK. ● Clean and backflush engine cooling system and heater core. ● Adjust to specifications. ● Check to see if door vacuum motors respond properly to movements of the function selector lever. Visually check vacuum hoses, and service as required. ● Check to see if door vacuum motors respond properly to movements of the function selector knob. If hesitation in movement is noticed, disconnect vacuum motor arm from door crank arm, and move crank arm by hand. Service sticking or binding door as required. ● Disconnect multiple vacuum connector from back of control assembly, and check each connector opening with hand operated vacuum pump. If one line leaks vacuum, test motor by itself before replacing (Be careful of vacuum hoses that operate two motors at same time). Service vacuum hose(s), or replace vacuum motor as required.
● Air Comes Out of Defroster Outlet In Any Function Selector Lever Position	● Vacuum system (indicates a very bad leak).	● Listen for vacuum system leak. Look for disconnected vacuum hose connector. Use hand-operated vacuum pump, and check vacuum motors for diaphragm leak. Also check for leaking function selector switch on control assembly, check valve, and leaking vacuum reservoir tank. Service hoses, or replace components as required.