K1 ETM

DISCOVERY

Heated Air

With the Ignition Switch (X134) in position II, battery voltage is applied to the Ignition Load Relay (K127). The relay is energized, applying battery voltage to the Left Maximun Cool Switch (X267). When the Left and Right Temperature Controls are turned to the maximum cool position, the Left Maximum Cool Switch (X267) and Right Maximum Cool Switch (X268) close. Battery voltage is now applied to the Water Valve (K206). The Water Valve (K206) closes and prevents heated engine coolant from entering the heater matrix. When one or both of the Temperature Controls are not in the maximum cool position, battery voltage is not applied to the Water Valve (K206). The valve then opens and allows heated engine coolant to enter the heater matrix.

Rear Blower

With the Ignition Switch (X134) in position II, battery voltage is applied to the Ignition Load Relay (K127). The relay is energized, applying battery voltage to the Rear Blower Motor Relay (K193), the Rear A/C Fan Speed Relay (K205) and the Rear A/C Control Relay (K194).

When the Rear A/C System is turned on, the Rear A/C Switch Amplifier provides ground to the Rear A/C Control Relay (K194). The relay is energized, applying ground to the Rear A/C Fan Speed Relay (K205). The Rear A/C Fan Speed Relay (K205) then energizes. When the Passenger's Rear Fan Speed Switch (X246) is turned to position I, ground is applied to terminal 85 of the Rear Blower Motor Relay (K193) through the closed switch contacts of the Rear A/C Fan Speed Relay (K205). The Rear Blower Motor Relay (K193) energizes, applying battery voltage to terminal 1 of the Rear Blower Motor (M145).

Ground is applied to the Rear Blower Motor (M145) through all three resistors of the Rear Blower Resistor Unit (Z215). The Rear Blower Motor (M145) then runs at low speed. When the Passenger's Rear Fan Speed Switch (X246) is turned to position II, the Rear Blower Motor Relay (K193) remains energized. Battery voltage is still applied to terminal 1 of the Rear Blower Motor (M145). Ground is now applied to the Rear Blower Motor (M145) through two resistors of the Rear Blower Motor Resistor Unit (Z215) and the Passenger's Rear Fan Speed Switch (X246). The

motor then runs at the low–medium speed. When the Passenger's Rear Fan Speed Switch (X246) is turned to position III, the Rear Blower Motor Relay (K193) remains energized. Ground is now applied to the Rear Blower Motor (M145) through one resistor of the Rear Blower Motor Resistor Unit (Z215) and the Passenger's Rear Fan Speed Switch (Z246).

The motor then runs at medium—high speed. When the Passenger's Rear Fan Speed Switch (X246) is turned to position IV, the Rear Blower Motor Relay (K193) remains energized. Ground is now applied directly to the Rear Blower Motor (M145) through the Passenger's Rear Fan Speed Switch (X246). The motor then runs at high speed.

ELECTRICAL TROUBLESHOOTING MANUAL