

TESTING

The following tests may be made on the heater: Burned out fuses, loose wire connections, defective wires. Collapsed hoses and air leaks in the heater body may be determined by visual inspection.

LOOSE MOTOR FAN TEST

Turn on the fan switch, and listen for the sound of the motor. If only a hum is heard, the fan is loose on the motor shaft.

FAN SWITCH TEST

Substitute a known good blower switch for the suspected switch.

PLUGGED HEATER CORE TEST

Start the engine and temporarily remove the outlet hose from the heater core (the hose may be detached from heater in engine compartment). Very little or no flow of water from the core outlet indicates that the core is plugged. Make certain the water is being supplied to the core inlet: i.e. the control knob is set at 'HOT'.

HEATER WATER VALVE TESTS

Before testing, check for proper coolant level, coolant temperature, and drive belt tension. Also look for coolant leaks or plugged hoses or heater core. Correct any defects before proceeding with the water valve tests.

VACUUM MOTOR TESTS

1. Disconnect the vacuum line and attach a vacuum pump to the vacuum motor vacuum connection.
2. When vacuum is applied and released, the arm of the vacuum motor should move freely in both directions without sticking.
3. Make sure there is full travel of the arm. This can be checked by manually pushing the arm to make sure the valve is fully seated.
4. Check for any possible leak of the vacuum diaphragm.
5. If the motor does not operate as described, it should be replaced.

HEATER WATER VALVE VACUUM SWITCH

A water valve vacuum switch is used to send vacuum to the water valve vacuum motor to close the water valve. A plunger in the switch is actuated by the movement of the crank arm with the temperature control knob.

VACUUM SYSTEM TESTS

To test the A/C-heater control system, start the engine and move the control knobs slowly from one position to another. A momentary hiss should be heard as a control knob is moved from one position to another indicating that vacuum is available at the switch assembly. A continuous hiss indicates a major leak somewhere in the system. It does not necessarily indicate that the leak is at the switch assembly.

If a momentary hiss cannot be heard when a control knob is moved from one position to another, check for a kinked, pinched or disconnected vacuum supply hose. Also inspect the check valve between the intake manifold and the vacuum reservoir to be sure it is working properly.

If a momentary hiss can be heard when a control knob is moved from one position to another, vacuum is available at the switch assembly. Then, cycle the switch through each position with the blower on HI and check the location(s) of

the discharge air. The air flow schematic and vacuum control chart gives the vacuum motors applied for each position of a control switch along with an air flow diagram of the system. The air flow diagram shows the position of each door when vacuum is applied and, their no vacuum position. With this chart, air flow for each position of a control switch can be determined. If a vacuum motor fails to operate, the motor can readily be found because the air flow will be incorrect.

If a vacuum motor is inoperative, check the operation of the motor with a vacuum pump. If the vacuum motor operates properly, the vacuum hose is probably pinched, kinked, disconnected or has a hole in it.

FAN MOTOR ELECTRICAL CIRCUIT

For the fan motor circuit wiring diagram, refer Figure 4.

ADJUSTMENTS

BLEEDING AIR FROM HEATER CORE

Remove the hose at the outlet connection of the heater core (hose that leads to the water pump). Allow any trapped air to flow out. When a continuous flow of coolant is obtained from both the hose and the core, connect the hose to the core.

Refer to Draining and Filling the Cooling System in Part 11-1.

TEMPERATURE CONTROL BELL CRANK ADJUSTMENT

1. Remove the glove box.
2. Prise the end of the inner cable from the clip on the cam plate.
3. Slide the knob to the full cool position (at lower end of blue segment).
4. Rotate the bell crank fully anticlockwise and reconnect the inner cable to the clip.
5. Install the glove box.

REMOVAL AND INSTALLATION

NOTE: The following procedures should be read in conjunction with the appropriate illustration.

FOOTWELL DUCT — LHS or RHS

1. Lower the steering column. Refer to Steering Column Removal in Group 3.
2. Remove instrument panel retaining screws and move panel rearward into vehicle. Refer Group 17.
3. Remove vacuum hose from duct.
4. Remove duct.

Installation

1. Install duct and connect vacuum hose.
2. Install instrument panel. Refer Group 17.
3. Install steering column. Refer Group 3.

HEATER HOSE ROUTING

Care must be taken when servicing the hoses to ensure a smooth kink free installation for maximum heating.

STEERING COLUMN

CAUTION: To avoid damage to the lower steering column bearing remove the steering column from the vehicle.