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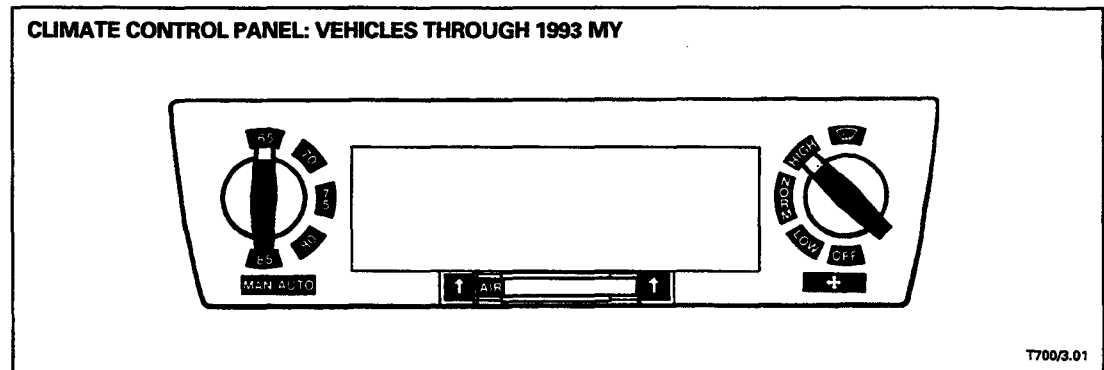
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Mark III Climate Control

System Description

The Mark III climate control system used in the XJS Range is very similar to the Mark IV system. The main difference is the function controls. Systems through 1993 model year use an electromechanical control panel that is integral with the climate control unit. 1994 and later model year systems use a separate electronic control panel with a remote electronic panel module. The 1994 MY ON system has expanded function controls. The Mark III system does not incorporate solar compensation.

Function controls (through 1993 MY)



Fan Control (AUTO mode)

OFF The system is not operational. Power is off, but a signal is sent to the ECM to ensure that the fresh / recirculation flaps remain closed preventing outside air from entering the car.

LOW The ECM maintains blower speed within a range of low speeds, depending on the temperature requirement.

NORM The ECM controls the full range of blower speeds, depending on the temperature requirement.

HIGH The blowers run at high speed only.

DEF The blowers run at high speed. Full air flow and full heat is directed to the windshield.

Temperature

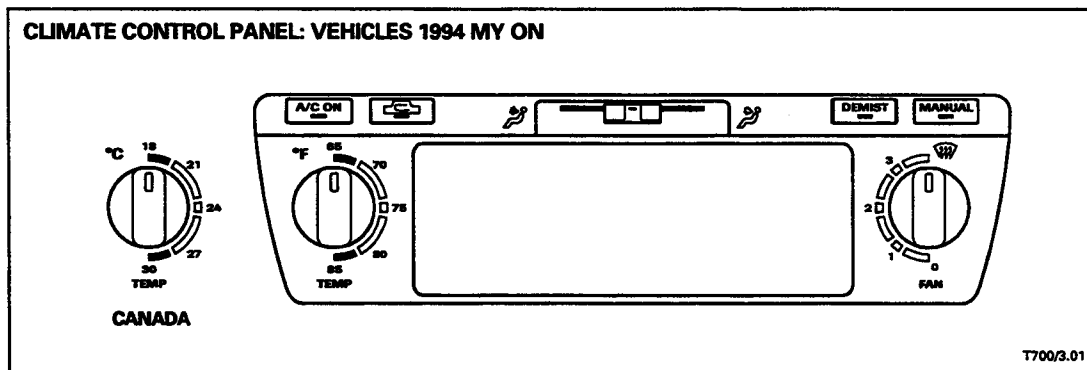
AUTO (temp. switch pushed in) In-car temperature requirements within a range of 65 to 85°F are provided, as selected by the driver.

MAN (temp. switch pulled out) Vent outlet temperature is maintained as selected by the driver.

Face

Outlet air temperature of the two side facia vents is controlled by the sliding bar. Full left decreases side vent air temperature; full right provides side vent air temperature. The side vent outlet air temperature is equal to the footwell outlet air temperature.

Function controls (1994 MY ON)



Fan Control

The operation is the same as the previous system.

Temperature

The temperature control provides only a temperature select function.

Demist

When selected, windshield demisting is provided with no change in outlet air temperature.

Recirculation

When selected, outside air intake is closed. This control should be used to temporarily exclude undesirable air from entering the vehicle or to provide recirculation of air already cooled and dehumidified by the evaporator.

Manual

When selected, the automatic temperature control function of the system is overridden.

A/C on

When selected, the air conditioning compressor is switched off. The system will supply only ambient air or heated outlet air.

Face

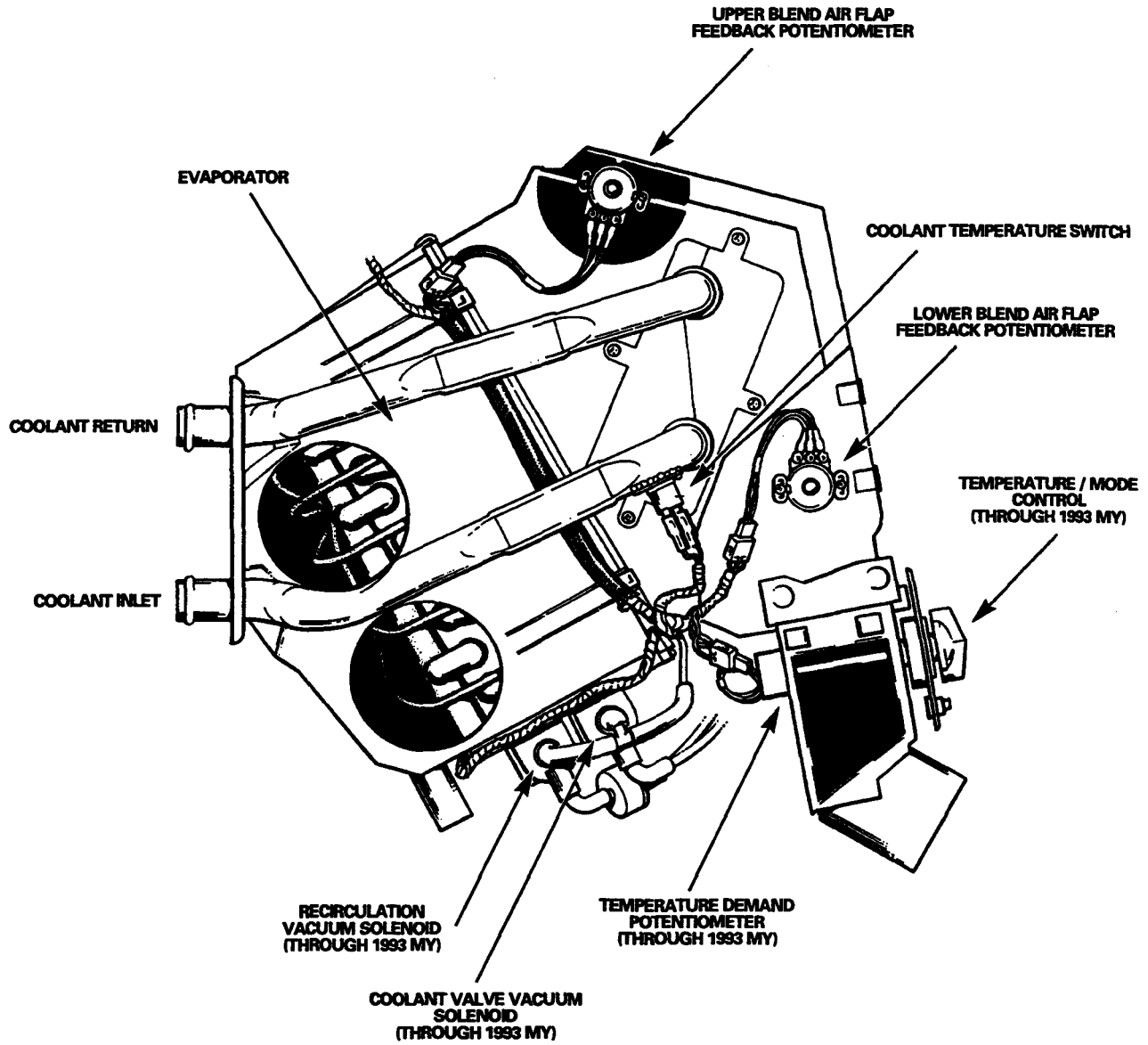
The operation is the same as the previous system.

Mark III Climate Control

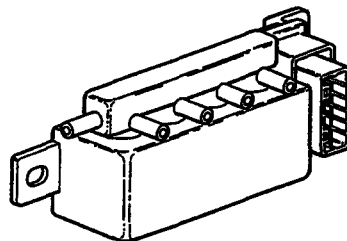
Components

Component Location

CLIMATE CONTROL UNIT: LEFT SIDE



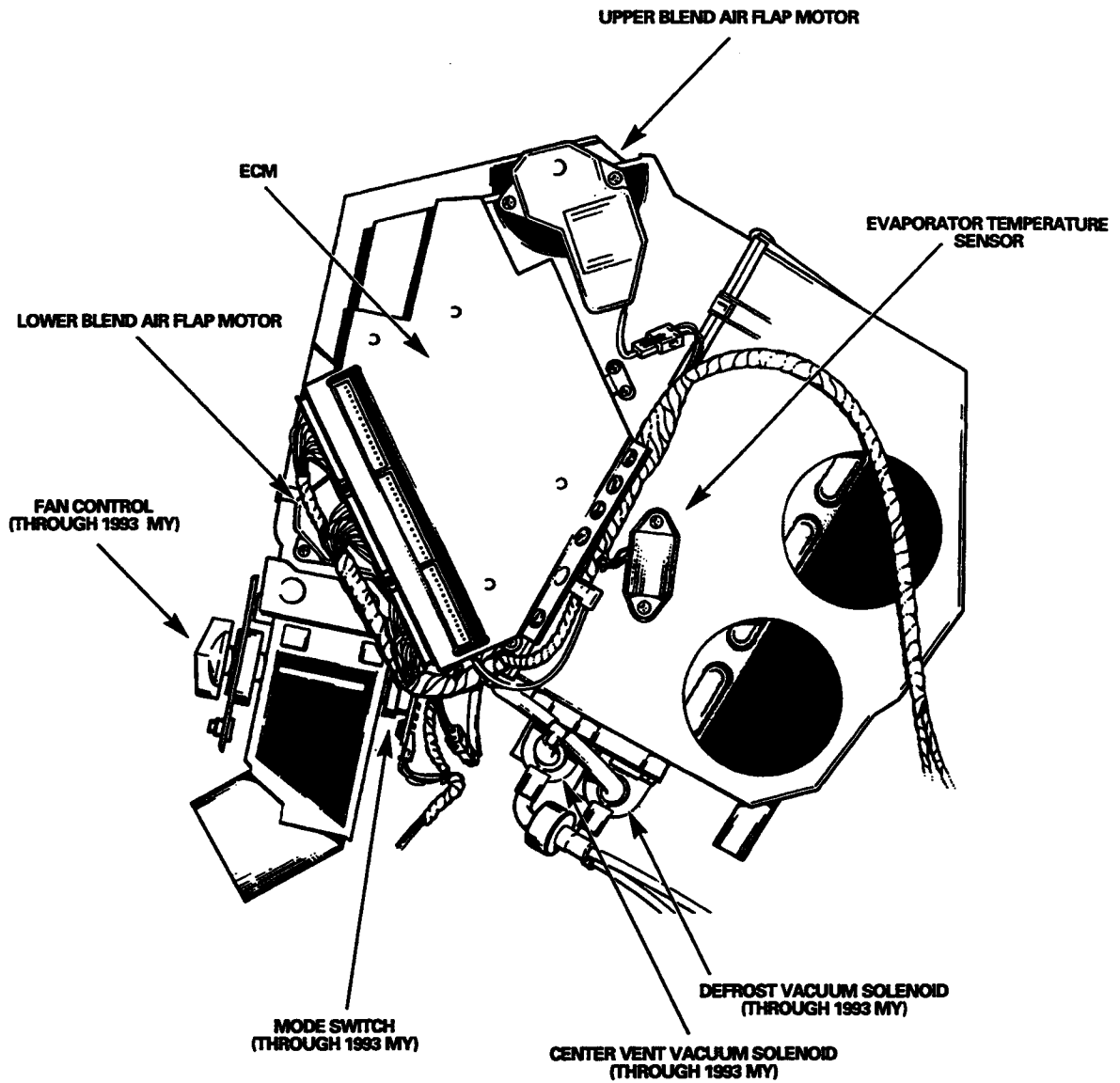
NOTE: IN 1994 MY, INDIVIDUAL SOLENOID VACUUM VALVES ARE REPLACED BY A SOLENOID VACUUM VALVE PACK .



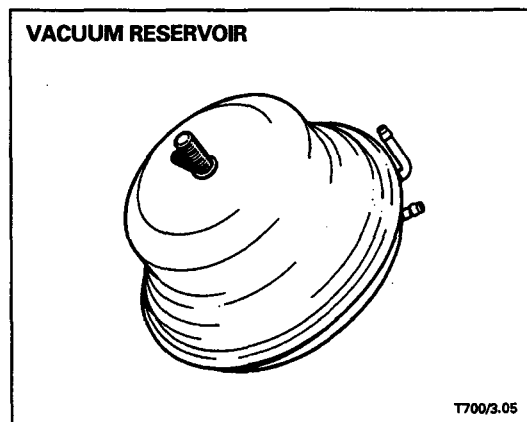
SOLENOID VACUUM VALVE PACK

T700/3.03A & B

CLIMATE CONTROL UNIT: RIGHT SIDE

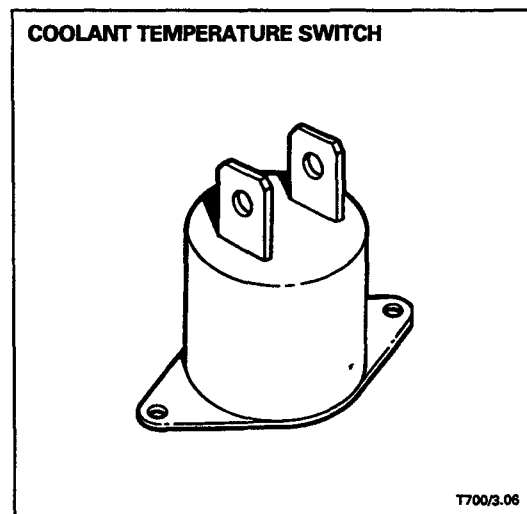


Components (continued)



Vacuum Reservoir

The vacuum reservoir is located behind the front bulkhead right closing panel.



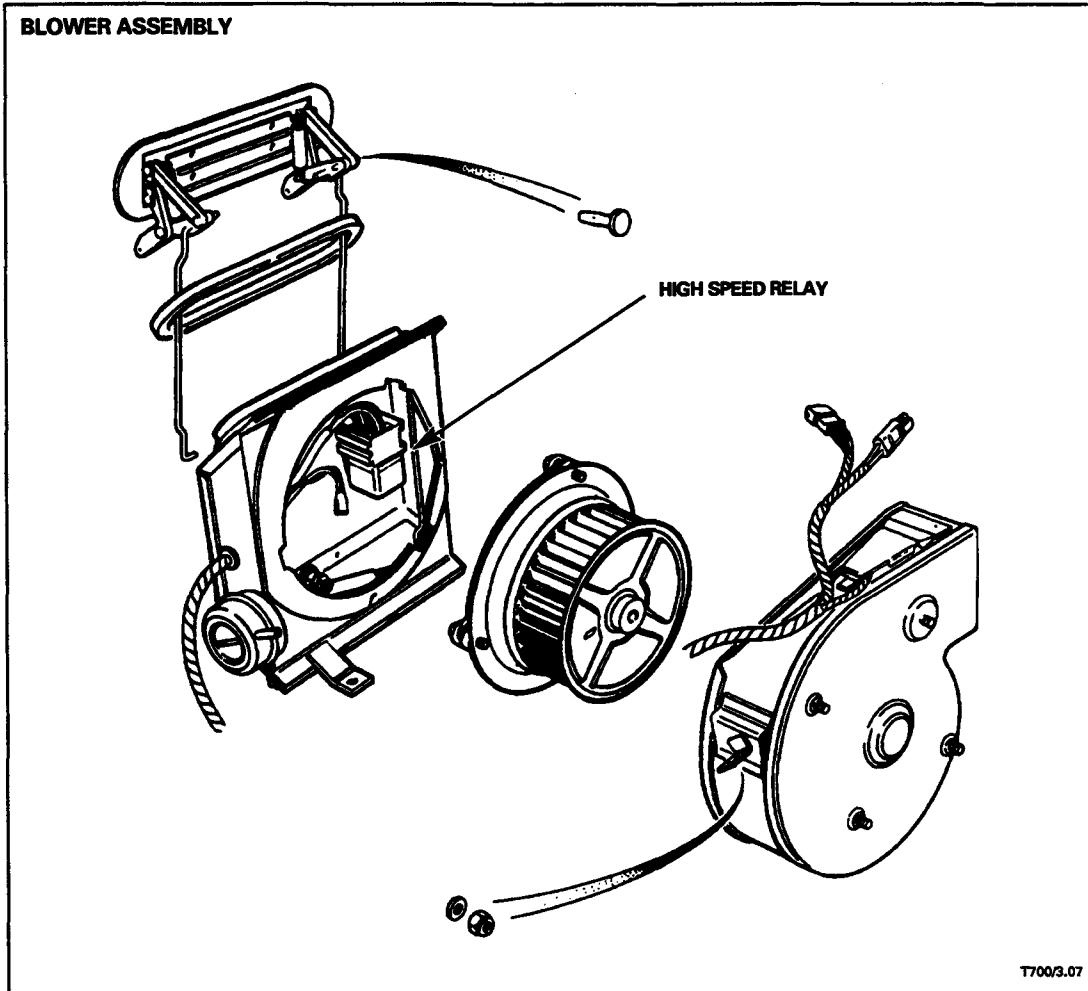
Coolant Temperature Switch

The physical appearance of the coolant temperature switch is identical to the Mark IV switch; however, the temperature rating is different. Additionally, the switch must be matched to the ECM. Do not interchange coolant temperature switches.

⚠ CAUTION! Consult the latest Technical Bulletin and Parts microfiche to ensure that the correct switch is selected for replacement.

Blower Assembly

The blower assemblies contain a high speed relay and a transistor circuit to control blower speed.

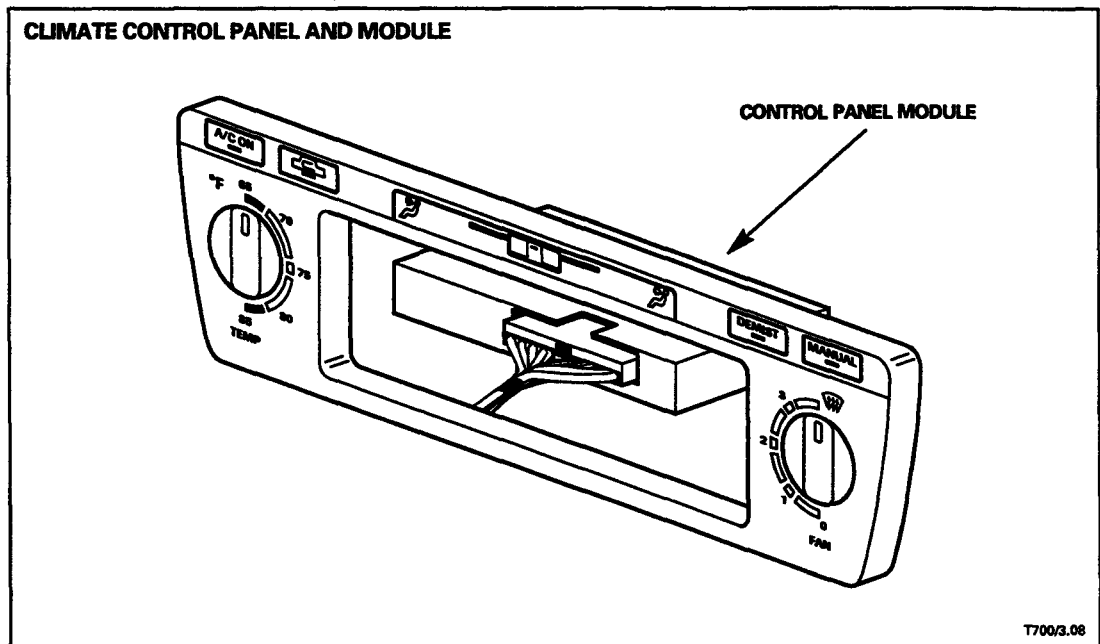


Mark III Climate Control

System Improvements (1994 MY ON)

Climate control panel

The new electronic climate control panel has revised functions with additional features. Individual buttons have been added to control manual recirculation, demist (air bleed to windshield), air conditioning on/off, and automatic or manual function. A new temperature differential control is located at the top of the panel. New potentiometers are used for temperature differential and fan speed. The panel interfaces with the climate control system through a separate control panel module.

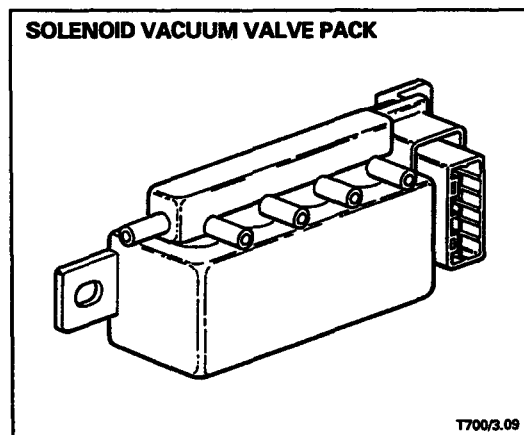


Climate control module (ECM)

The ECM has been revised to accommodate new functions and improve temperature stability and consistency of settings. A 118°F (45°C) engine coolant temperature switch replaces the previous 86°F (30°C) switch.

Servo motors

Quieter servo motors with reduced backlash react smoother and faster to further aid in stabilizing interior temperature and system reliability.



Vacuum harness and solenoid vacuum valve pack

The vacuum harness and vacuum valves have been revised to simplify assembly and improve reliability. The newly designed harness simplifies assembly and improves reliability. The solenoid vacuum valve pack contains the four vacuum valves for operation of recirculation, defrost, coolant valve and center vent. Recirculation operates only via the ECM. No separate main recirculation solenoid vacuum valve is used.

Ambient temperature sensor

In order to improve response, the climate control ambient temperature sensor has been relocated to the air plenum chamber in front of the windshield.

Blower assemblies

Blower assembly mounting has been revised to accommodate the passenger side air bag and fascia refinements.

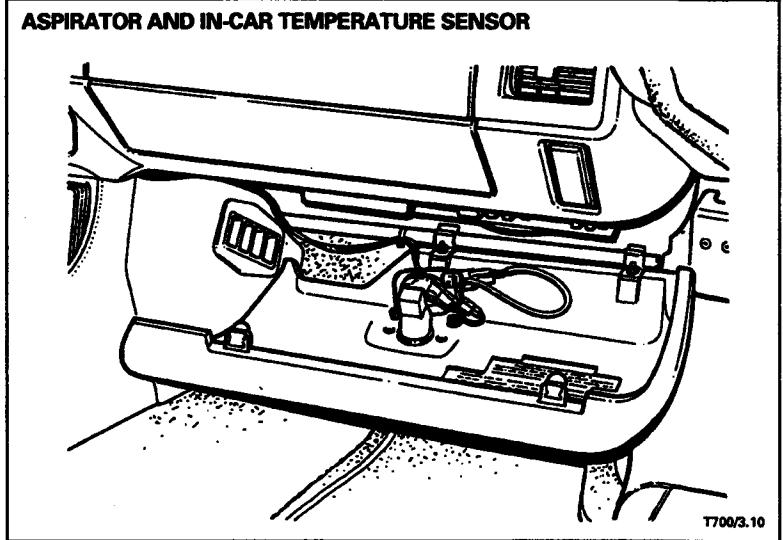
Aspirator and in-car temperature sensor

The motorized aspirator is mounted in the lower portion of the passenger knee bolster.

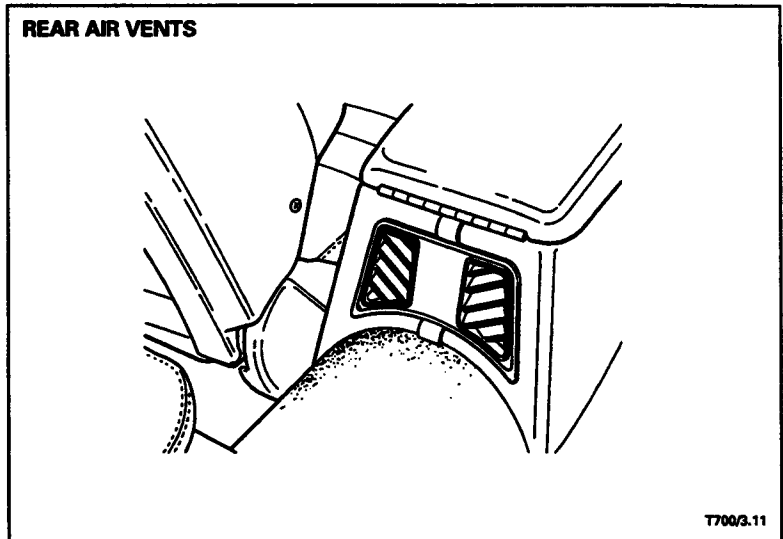
Console ducting and vents

Revisions to the console ducting and air vents improve air flow to the rear footwell areas and simplify construction.

ASPIRATOR AND IN-CAR TEMPERATURE SENSOR



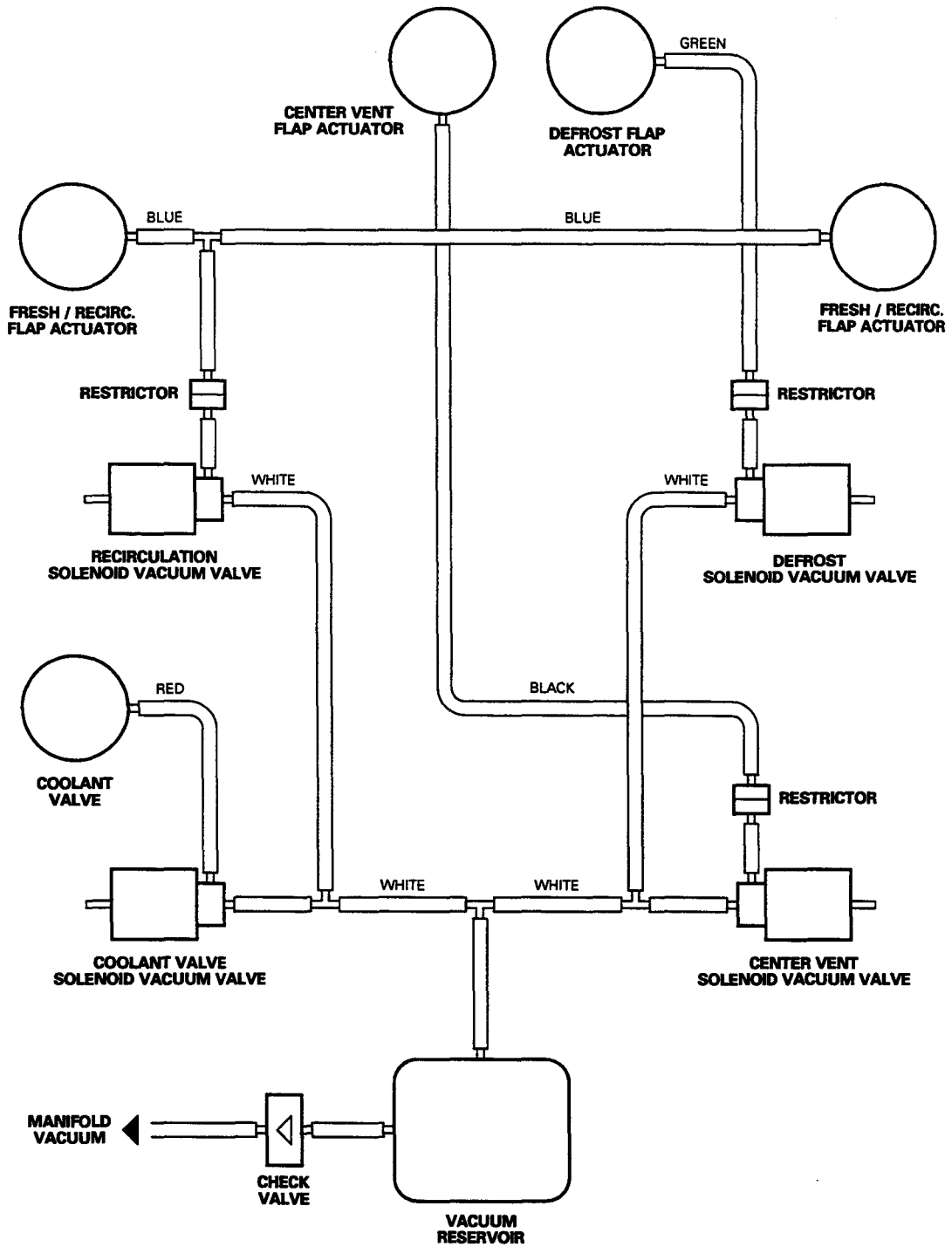
REAR AIR VENTS



Mark III Climate Control

Vacuum System

CLIMATE CONTROL VACUUM CIRCUIT: VEHICLES THROUGH 1993 MY



T700/3.12

CLIMATE CONTROL VACUUM CIRCUIT: VEHICLES 1994 MY ON

