

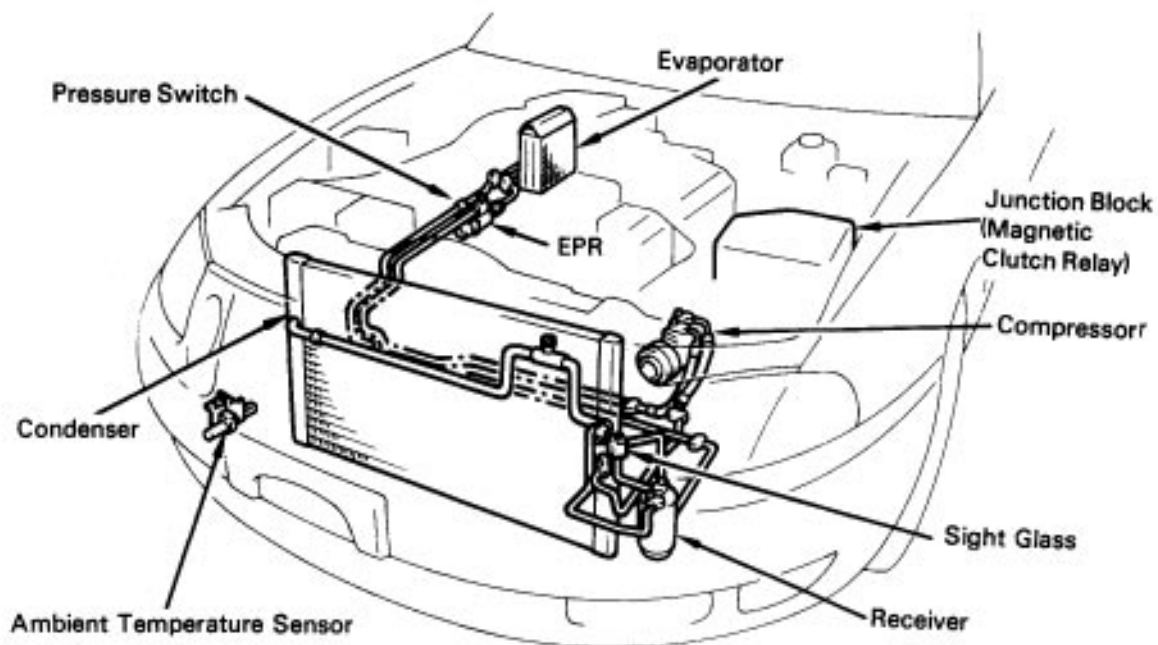
DESCRIPTION

FEATURES

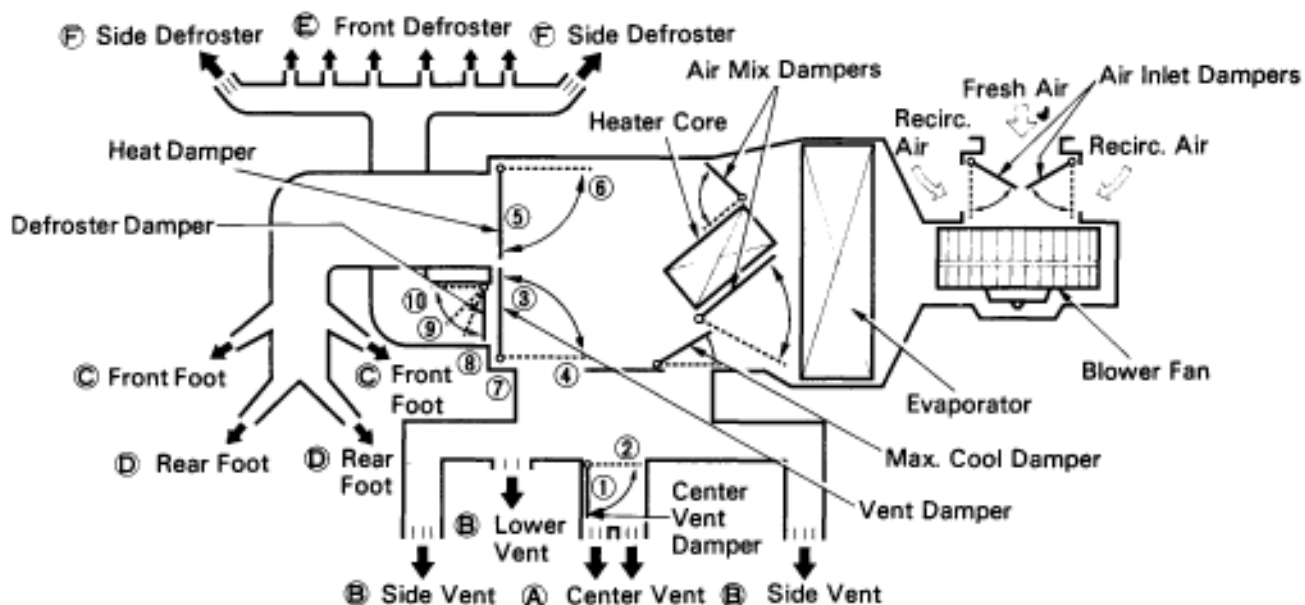
The microprocessor controlled automatic air conditioner is a system which controls the the cabin air conditioning automatically using a microcomputer.

The microcomputer senses the air temperature outside and inside the cabin, the amount of sunlight, the compressor operating condition and temperature setting, etc. and maintains the optimum blower air temperature and air flow at the intakes and outlets automatically.

PARTS LOCATION



OPERATION OF DAMPERS



NO1189

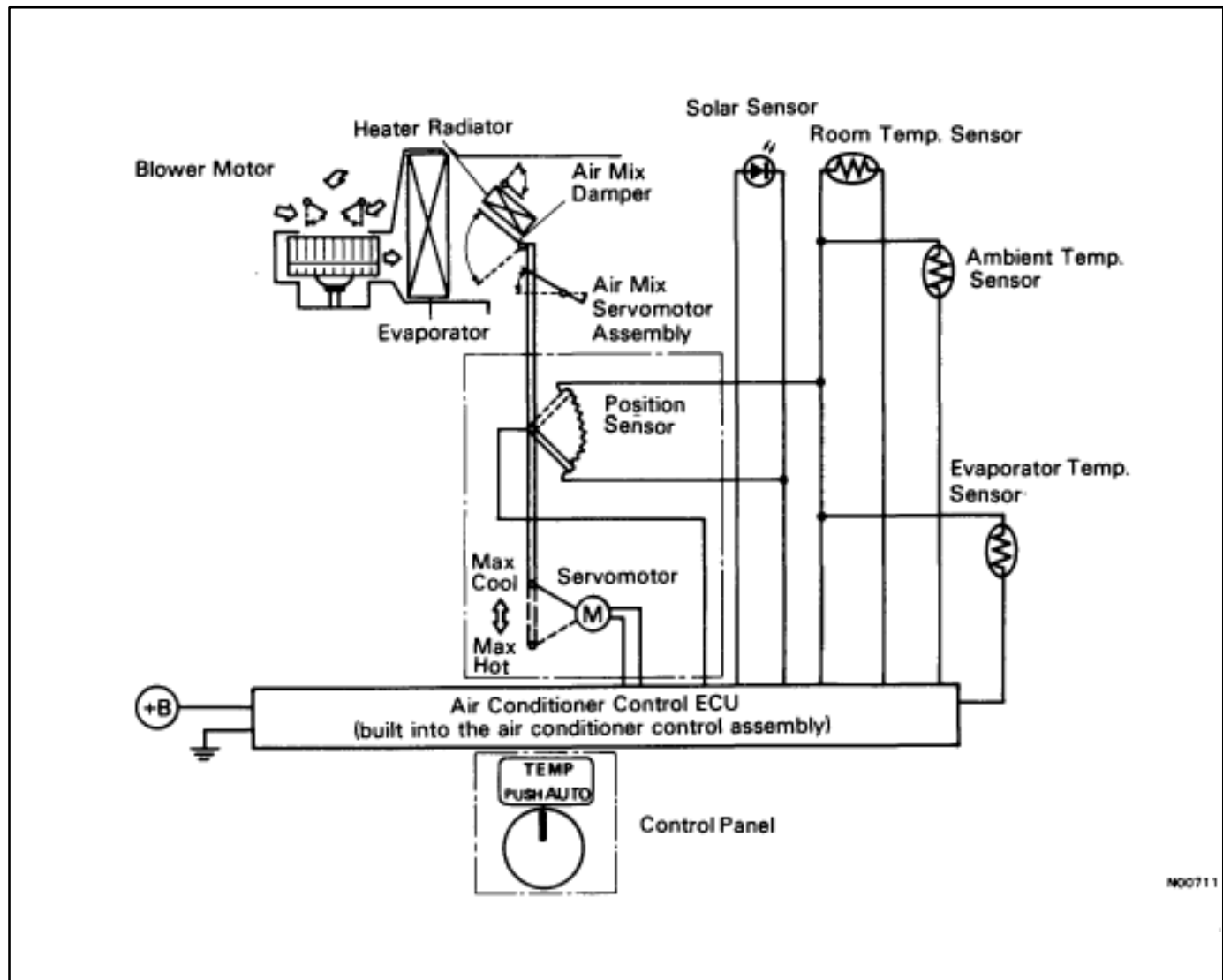
Air Outlet Mode		Mode Control Damper Position	Vent		Foot		Defroster	
			A Center	B Side	C Front	D Rear	E Front	F Side
Face		① ③ ⑤ ⑦	○	○				
Bi-level		① ③ ⑥ ⑦	○	○	○	○		
Foot*	I	② ④ ⑥ ⑧		○	○	○	○	○
	II	② ④ ⑥ ⑦		○	○	○		
Foot Defroster		② ④ ⑥ ⑨		○	○	○	○	○
Defroster		② ④ ⑤ ⑩		○			○	○

The size of the circle ○ indicates the proportion of air flow volume.

* Foot I indicates the status during automatic control and Foot II indicates the status during manual control.

CONTROL FUNCTIONS

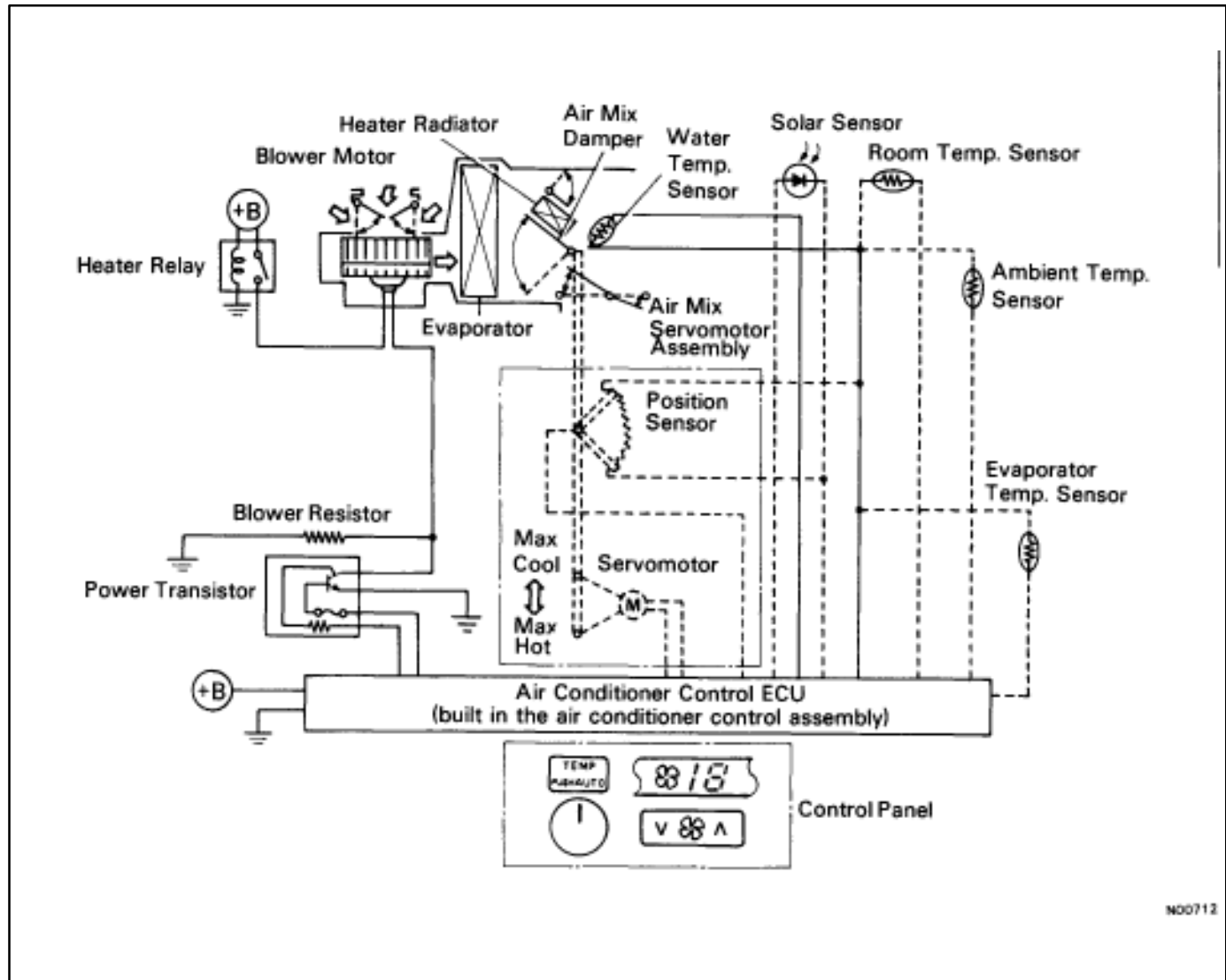
Interior Room Temperature Control System



- The desired temperature is set using the TEMP switch.
- From the input signals (room temperature sensor, ambient temperature sensor, evaporator temperature sensor and solar sensor) and the temperature setting, the air conditioner control ECU determines the air flow volume and outputs signals to the air mix servomotor.
- When it receives signals from the ECU, the air mix servomotor opens or closes the air mix damper to change the air flow temperature. When the temperature reaches the specified temperature, it is detected by the air mix damper position sensor and the ECU stops the servomotor.

HINT: If the desired temperature setting is 65°F, the ECU forcibly sets the air mix damper to the Max Cool position. If it is set at 85°F, the ECU forcibly sets the air mix damper to the Max Hot position.

Blower Fan Speed Control System



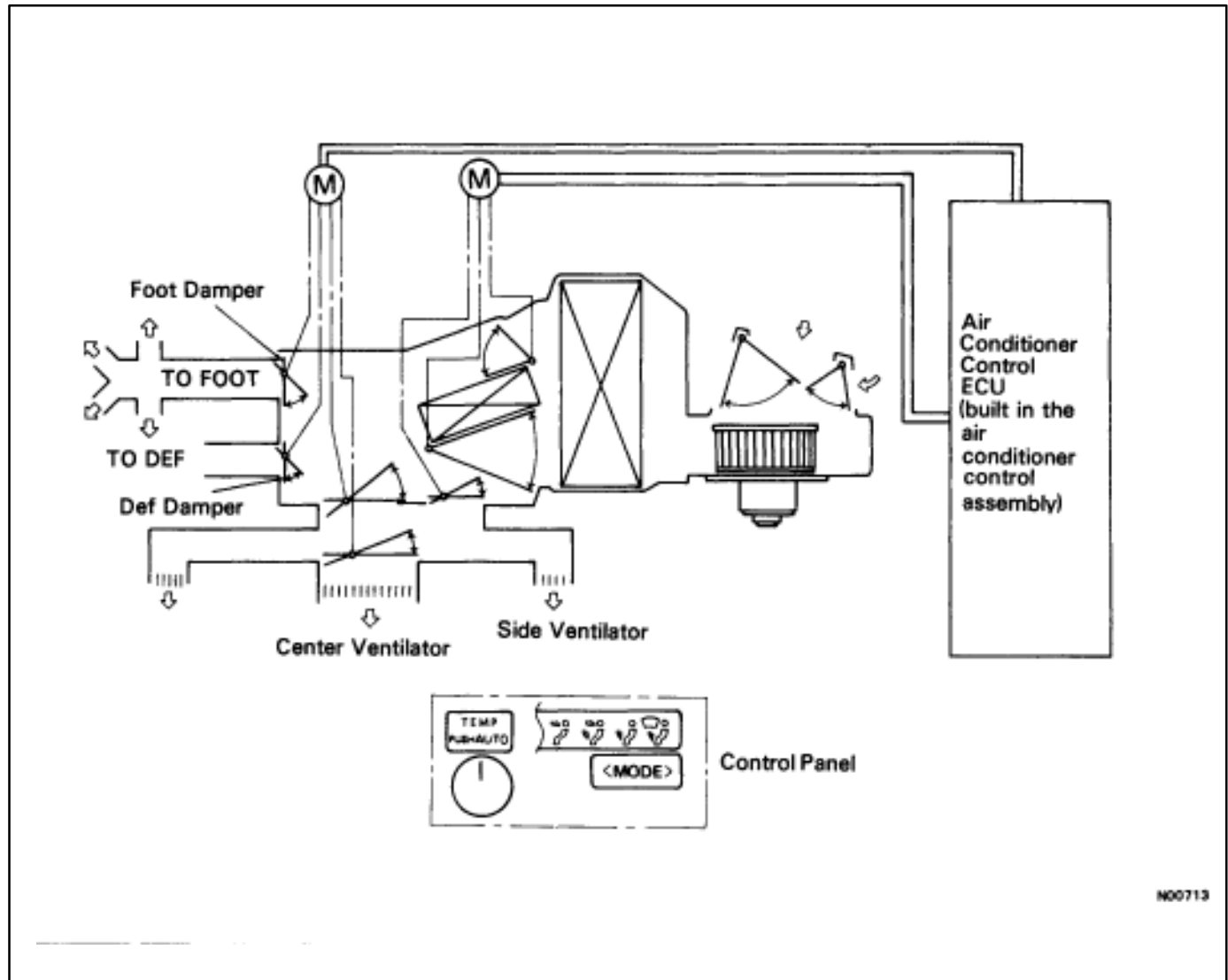
(When AUTO Switch is ON)

- The desired temperature is set using the TEMP switch.
- From the input signals (room temperature sensor, ambient temperature sensor and solar sensor) and the temperature setting, the air conditioner control ECU determines the air flow volume and outputs signals to the power transistor.
- When it receives signals from the ECU, the power transistor increases or reduces the blower motor speed to control the air flow volume.

(When AUTO Switch is OFF)

The ECU turns the power transistor increasing or reducing the blower motor speed fixing the air flow volume in accordance with the position of the Manual switch.

Air Flow Mode Control System



(When the AUTO Switch is ON)

- The desired temperature is set using the TEMP switch.
- From the input signals (room temperature sensor, ambient temperature sensor and solar sensor) and the temperature setting, the air conditioner control ECU determines the air flow mode and outputs signals to the mode servomotor and max cool servomotor.
- When it receives signals from the ECU, the servomotors open or close each of the dampers to change the air flow mode.

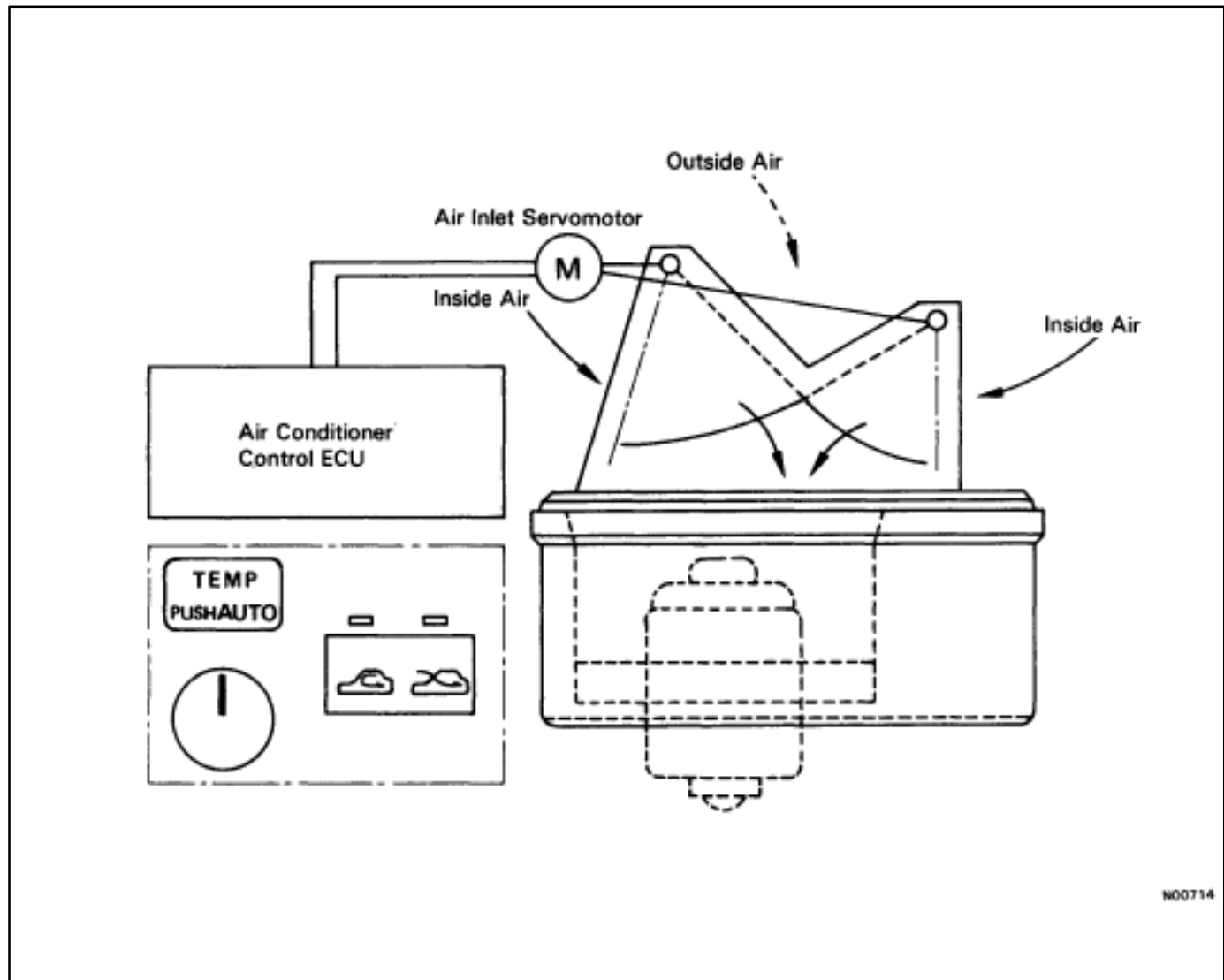
(When the AUTO Switch is OFF)

The ECU fixes the air flow mode in accordance with the Manual switch position.

(When the Engine is Cold)

If the Mode is set on B/L or FOOT, the ECU forcibly changes the air vent to DEF if cold signals are input from the water temperature sensor.

Air Inlet Control System



N00714

(When the AUTO Switch is ON)

- The desired temperature is set using the TEMP switch.
- From the input signals (room temperature sensor, ambient temperature sensor and solar sensor) and the temperature setting, the air conditioner control ECU determines the air inlet and outputs signals to the air inlet servomotor assembly.
- When it receives signals from the ECU, the air inlet servomotor opens or closes the damper to change the air inlet. When the air inlet is changed to the desired setting, it is detected by the air inlet damper position sensor and the ECU stops the servomotor.

HINT: If the Mode switch is set on DEF, the ECU forcedly changes the air inlet to FRS.

(When the AUTO Switch is OFF)

The ECU fixes the air inlet according to the position of the manual switch.