



**Climate
Master**

decentralized
air conditioning systems

**Installation
instructions for
control modules**

INSTALLATION
AND
OPERATING INSTRUCTION
FOR
CONTROL MODULES



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INSTALLATION AND OPERATING INSTRUCTIONS FOR SECURITY GUARD CONTROL MODULES

Control modules are available in two variations - Manual Change Over and Automatic Change Over.

These controls incorporate a special circuit controlled by a time clock which permits activation and shut-down of units at pre-determined times. Each control is furnished with an override timer which permits operation of each unit for up to two (2) hours during shut-down periods. A low temperature thermostat is also provided which prevents the room temperature from dropping below 55°F during periods when the unit is shut off.

CONTROL INSTALLATION

- Step 1. Remove and save two (2) mounting screws from top front of control module. Fit aluminum switch plate over push buttons and thermostat shaft. Press thermostat knob onto thermostat shaft.
- Step 2. Hook slot at the top rear of control module over the support angle in the room cabinet. Swing module upward and forward until mounting holes in module align with mounting slots in the front flange of room cabinet. (See Fig. 1).
- Step 3. Re-install two (2) mounting screws and tighten securely.
(See Fig. 1).

Step 4. Plug heat section cord and cool chassis cord into the control.

The heat section cord and cool chassis cord are labeled to match their receptacles at the control.

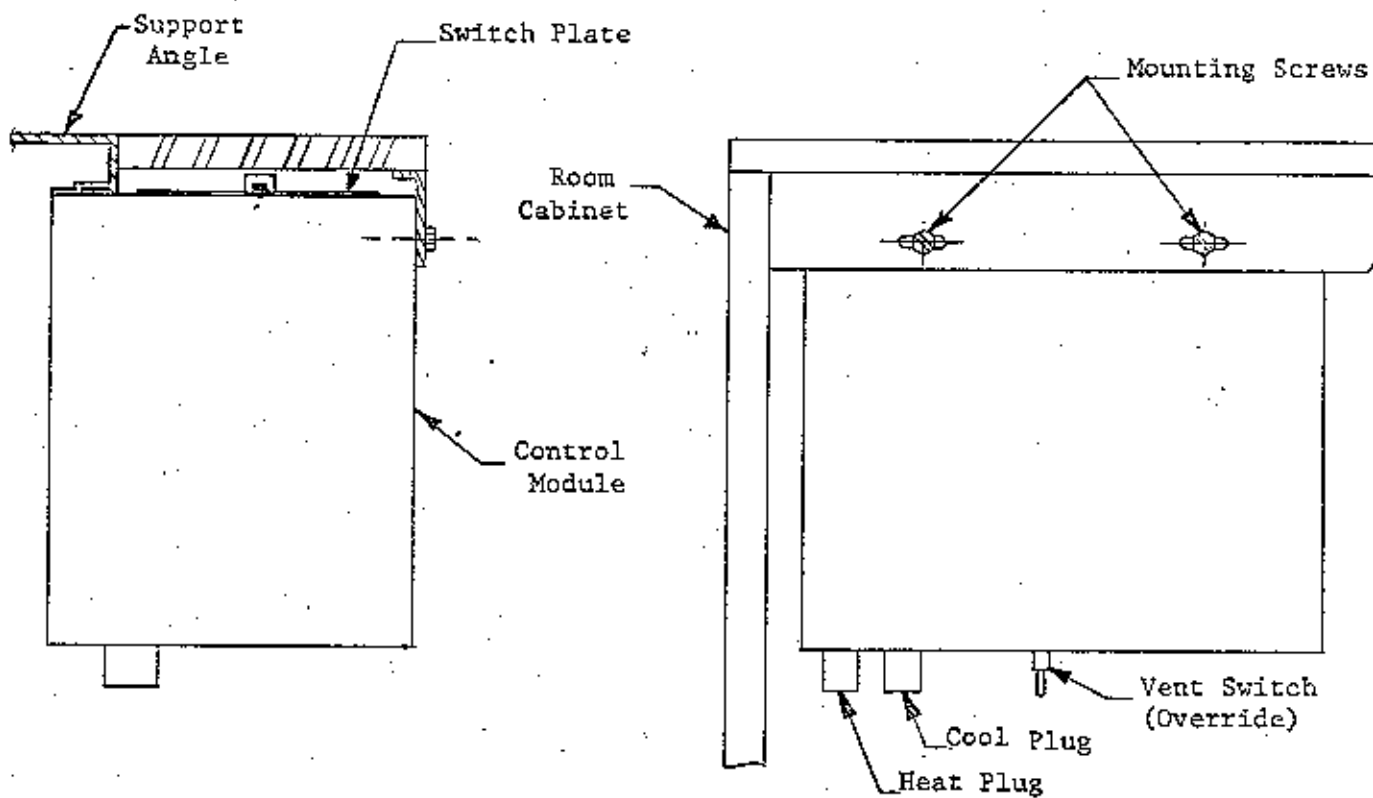
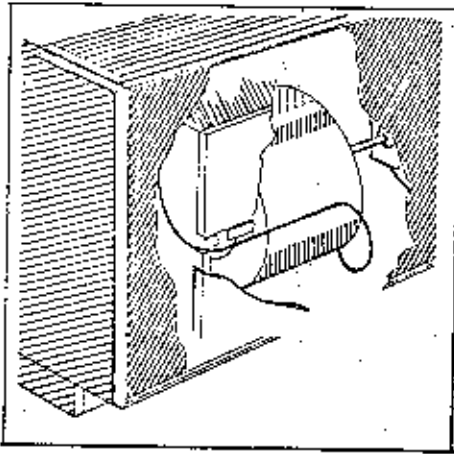


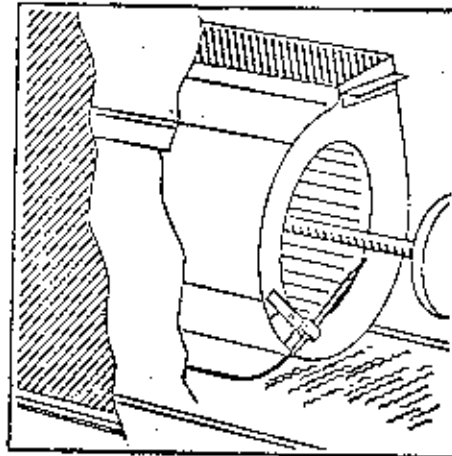
Fig. I

Step 5. Open blower compartment cover on cooling chassis by loosening two (2) sheet metal screws. Unwind thermostat capillary tube and stretch it through slot at upper left corner of blower compartment. (See Fig. II). CAUTION: Be careful not to kink or break capillary tube while unwinding it.

Insert bulb and clip at left hand blower inlet. Tip of bulb must be higher than its junction with the capillary tube and must not come in contact with the blower wheel or motor shaft. Close blower compartment cover and tighten two (2) sheet metal screws.



Routing capillary tube



Thermostat bulb detail

FIG. II

CONTROL OPERATION

Correct voltage and current must be supplied to each unit in accordance with the nameplate ratings. All electrical leads must be connected to the control module in the correct manner and the disconnect switch(s) must be closed. CAUTION: Before turning on main power, make certain that all control module OFF buttons are down.

1. Manual Change Over Control

This control includes a 5-button switch that provides for OFF, HI COOL, LO COOL, HEAT and VENT. Each function operates as follows:

- A. Set thermostat knob fully clockwise (COOLER) and press HEAT button. Roomside blowers will start immediately at low speed, and motorized damper will open to admit fresh air. Slowly turn thermostat knob counterclockwise (WARMER) until contacts click. Heating module will now operate and discharge air will become warm.
- B. Set thermostat knob fully counterclockwise (WARMER). Press LO COOL button. Roomside blowers will run at low speed and motorized damper will open to admit fresh air. Slowly turn thermostat knob clockwise (COOLER) until contacts click. Compressor and condenser blower will now operate and discharge air will become cooler. Motorized damper will close.
- C. With compressor and condenser blower running, press HI COOL button. Roomside blower speed will increase.

D. Press VENT button. Compressor and condenser blower will stop and roomside blowers will run at low speed. The motorized damper will open to admit fresh air to the blower compartment.

NOTE: Fresh air damper will operate at all times when VENT button is pushed. Fresh air damper will be closed during all other cycles unless damper override switch is set to OPEN position.

E. Press OFF button. All operations will stop.

F. If operation of unit is desired during shut-down periods, turn override timer knob clockwise for up to two (2) hours additional run time. When the override timer is on, the unit will function as outlined in items 1A through 1E.

2. Automatic Change Over Control

This control includes a 3-button switch that provides for OFF, ON and VENT. Each function operates as follows:

- A. Set thermostat knob fully counterclockwise (WARMER). Press ON button. Roomside blowers will start immediately at low speed. Motorized damper will open to admit fresh air and the heating module will operate. Within a few moments, the discharge air will become warm.
- B. Turn thermostat clockwise (COOLER). Roomside blower speed will increase. Compressor and condenser blower will start and fresh air damper will close. Discharge air will become cool within a few moments.
- C. After room has cooled appreciably, the compressor and condenser blower will stop. Roomside blowers will switch to low speed and

fresh air damper will reopen.

- D. Press VENT button. Roomside blowers will run at low speed and motorized damper will open to admit fresh air. Neither the heater or compressor and condenser blower will operate when the VENT button is down.

NOTE: Fresh air damper will operate only when the damper override switch is set to OPEN position.

- E. Press OFF button. All operations will stop.
- F. If operation of unit is desired during shut-down periods, turn override timer knob clockwise for up to two (2) hours additional run time. When the override timer is on, the unit will function as outlined in items 2A through 2E.