

INSTALLATION INSTRUCTIONS

Heat Pump Thermostat Manual Changeover Two-Stage Heat, One-Stage Cool

74-130297 Rev 2

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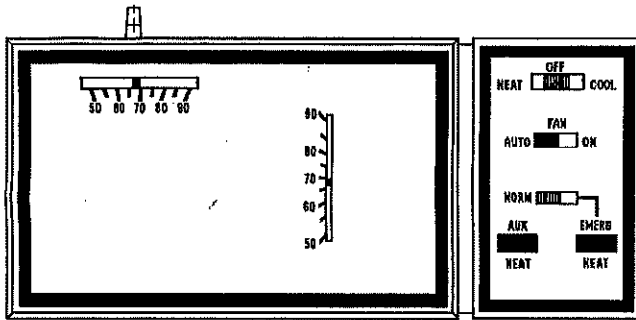


Figure 1, Thermostat

SPECIFICATIONS

Range 50° to 90° on heating cycle. 50° to 90° on cooling cycle.

Adjustment Means: A single setting lever is used for heating or cooling control. Heating or cooling selection is made by positioning system switch.

Differential: Heating or cooling 2°F.

Switch Rating: Mercury switches 1.5 amps at 24 volts.
Slide switches 2 amps at 24 volts.

Scale Markings: 5° per division, numbered every 10°.

Dimensions: 6.3" x 2.75" x 1.72"

IMPORTANT

The thermostat is specially packed for shipment. However, it must be handled carefully.

UNPACKING

After removing thermostat from carton, disassemble as follows:

1. Remove the thermostat cover by pulling the bottom edge of cover upward until it snaps free.
2. Carefully remove and discard the packing, which protects the mercury switches and thermometer during shipment.
3. Place cover in a safe place while mounting the thermostat.

THERMOSTAT MOUNTING

1. At the location selected, prepare an opening for the thermostat wiring.
2. Run low voltage thermostat wires to the location and pull about 4" through the wall opening and lead through large opening in thermostat indicated in Figure 2.
3. Fasten thermostat on wall or a horizontal outlet box using two elongated holes as indicated in Figure 2.
4. Level the thermostat using a carpenter's level. Minor out-of-level adjustments can be made by using elongated mounting slots.

IMPORTANT

Inaccurate leveling will cause thermostat control deviation. Care must be taken to mount thermostat in a true, level position.

INSTALLATION

Location: Locate the thermostat on an inside wall since the temperature of outside walls varies with outdoor conditions.

1. The position on the inside wall must be at least 18 inches from the junction with an outside wall.
2. The vertical location should be about five feet above the floor and should permit a free flow of room air over the thermostat.
3. Having made a tentative selection of the best mounting location, check against the following possible objections:
 - a. Steam pipes, water pipes, or warm air stacks in adjacent partition space.
 - b. Cold, unused room on opposite side of partition.
 - c. Kitchen range on opposite side of partition.
 - d. Subject to radiation from fireplace or direct sun effect from windows.
 - e. Subject to drafts from stairwells or outside doors.
 - f. In direct path of air currents from air delivery registers.
 - g. Heat from nearby lamps, radios or television sets.

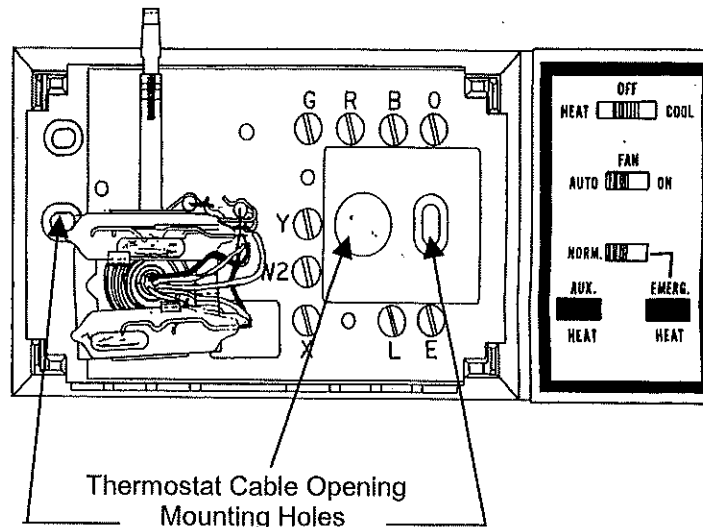


Fig. 2 Thermostat with Cover Removed

WIRING

1. All wiring must comply with applicable codes and ordinances.
2. Connect leads to terminals per unit diagram or hook-up diagram. Refer to Installation Instructions of the heat pump and Figure 3 for wiring instructions.
3. A letter code is near each terminal for easy identification.
4. Push excess wire back into wall and plug wall opening with putty or caulking material to prevent drafts from affecting thermostat.
5. Snap cover into place by slipping it over the four plastic pressure springs at the corners of the thermostat.

SETTING AND ADJUSTING

No adjustments are necessary as the heating and cooling anticipators are the voltage type and no change is required when installed with various control systems. Move the setting lever to the desired position. It takes at least one hour after the room temperature has reached the thermostat setting for all sensors to stabilize.



DISPOSAL NOTICE

If this control is replacing a control that contains mercury, do not place your old control in the trash. Contact your local waste management authority for instructions regarding disposal of an old control containing mercury.

CONTROL PANEL OPERATION

To the right there is a control panel which has three switches and two lamps. The "SYSTEM" switch, "FAN" switch and "NORMAl" switch; red "EMERGENCY HEAT" lamp and blue "AUX HEAT" lamp.

"SYSTEM" switching positions control thermostat operations as follows:

- HEAT - Heating system is controlled by the thermostat. Cooling system is off.
- OFF - Both the heating and cooling systems are off. If the "FAN" switch is at "AUTO" position, the fan is also off.
- COOL - Thermostat controls cooling system. Heating system is off.

"FAN" switching positions control fan operation as follows:

- AUTO - Fan operates with heat pump.
- ON - Fan operates continuously.

"NORMAl" switching positions control heating operation as follows:

- NORMAl - Heat pump and auxiliary heaters operate normally. Emergency heat lamp is off.
- EM HT- Energizes auxiliary heaters through thermostat operation and de-energizes the heat pump. The red emergency heat lamp is on all of the time.

EMERG.HEAT LAMP - Red lamp is on when "NORMAl" switch is in the "EMERGENCY HEAT" position.

AUX. HEAT LAMP - Blue lamp is on whenever the auxiliary heaters are energized.

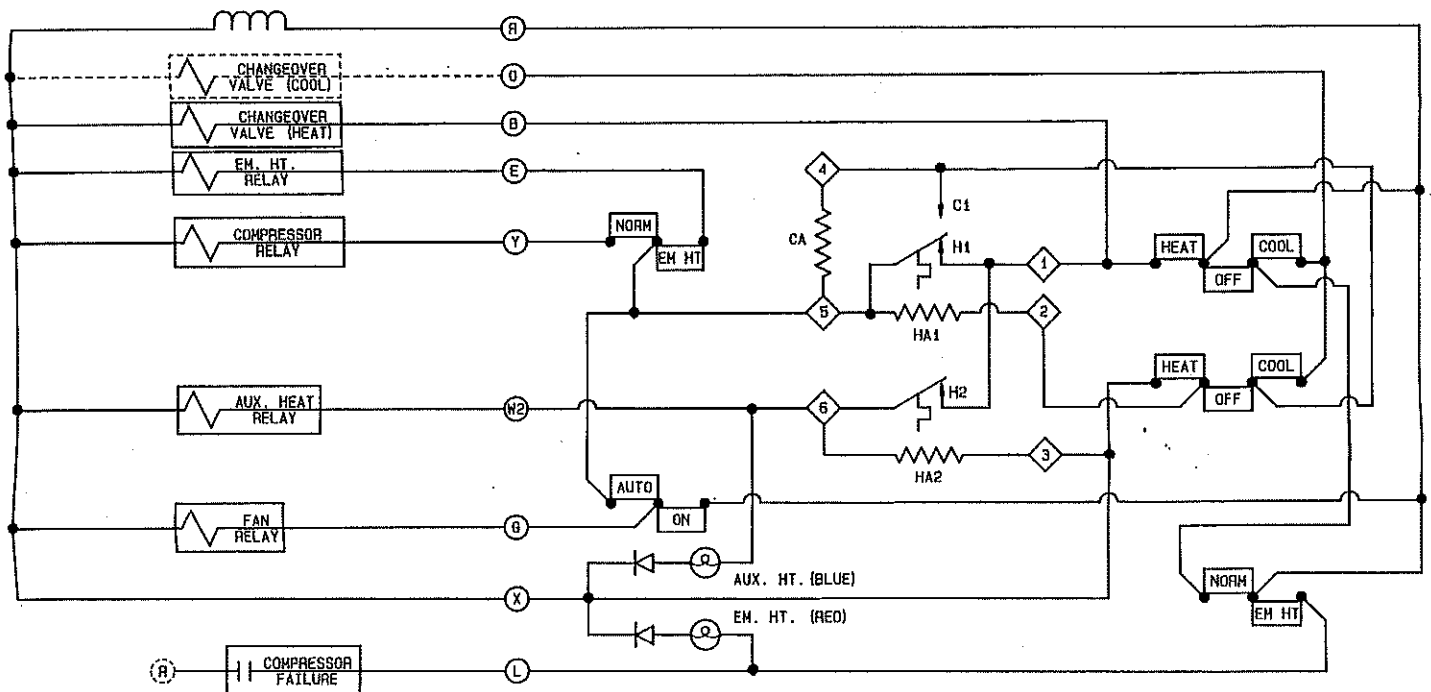


Figure 3 Internal Wiring Schematic