

# USER'S INFORMATION MANUAL

## SINGLE PACKAGE HEAT PUMP UNITS



ISO 9001  
Certified Quality  
Management System

### TABLE OF CONTENTS

<b>SAFETY</b> .....	1	<b>SYSTEM OPERATION</b> .....	2
<b>THERMOSTATS</b> .....	1	MANUAL CHANGE-OVER THERMOSTAT .....	2
YOUR KEY TO COMFORT .....	1	ELECTRONIC THERMOSTAT .....	2
COOLING AND HEATING (HEAT PUMP) .....	1	<b>CARE OF SYSTEM</b> .....	2
MANUAL CHANGE-OVER .....	1	COIL CARE .....	2
<b>PROGRAMMABLE ELECTRONIC THERMOSTATS</b> .....	1	SERVICE CALLS .....	2
FAN OPERATION SELECTION .....	2	FILTER CARE .....	3
<b>START-UP</b> .....	2	PARTS INFORMATION .....	3
POWER FAILURE .....	2	<b>SOME EFFICIENCY DO'S &amp; DON'TS</b> .....	3
		<b>REPLACEMENT PARTS</b> .....	3

## Congratulations . . .

*On your purchase of one of the most versatile comfort conditioning systems available in the industry today. This high efficiency system has been precision designed, manufactured of high quality materials and has passed many vigorous inspections and tests to ensure years of satisfactory service.*

*This booklet is meant to increase your understanding of your system, tell you how to operate it efficiently and how to obtain the greatest measure of comfort at the lowest operating expense. Please read this booklet thoroughly.*

*We appreciate your interest in our product and your decision to purchase our system. Enjoy your comfort.*

**The manufacturer recommends that the user read all sections of this manual and keep the manual for future reference.**

### SECTION I: SAFETY

#### **⚠ WARNING**

*This product must be installed and serviced by a qualified installer or service agency. Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage.*

### SECTION II: THERMOSTATS

#### YOUR KEY TO COMFORT

Though thermostats may vary widely in appearance they are all designed to perform the same basic function, to control the operation of your air conditioning or heat pump system. Regardless of size or shape, each thermostat will feature a temperature indicator; a dial, arm, or push button for selection of the desired temperature; a fan switch to choose the indoor fan operation; and a comfort switch for you to select the system mode of operation.

#### COOLING AND HEATING (HEAT PUMP)

If your system has been designed to allow both cooling and heating operation, you may have either a manual change-over type, or a programmable electronic type thermostat with single stage of cooling and single stage of heat.

#### MANUAL CHANGE-OVER

Manual change-over simply means that the comfort switch must be manually positioned every time you wish to switch from the cooling to heating or heating to cooling modes of operation.

### SECTION III: PROGRAMMABLE ELECTRONIC THERMOSTATS

The computerized electronic thermostat is actually a sophisticated electronic version of a manual change-over type. This thermostat includes features which allow "set-back" temperature variations for periods of sleep, or while you are away during the day, and means energy savings for you. The thermostat also features a digital clock.

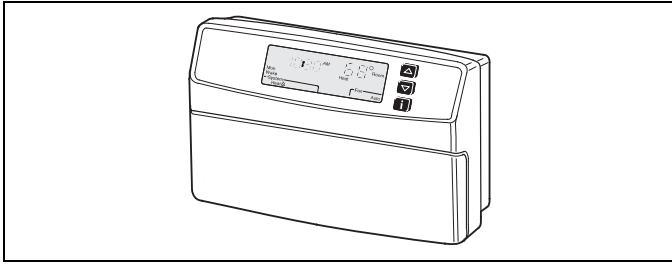


FIGURE 1: PROGRAMMABLE ELECTRONIC THERMOSTAT

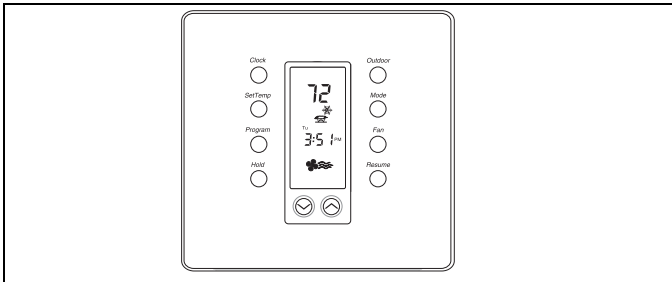


FIGURE 2: PROGRAMMABLE ELECTRONIC THERMOSTAT

## FAN OPERATION SELECTION

A multi-position fan switch allows you to choose the type of fan operation of the indoor fan.

### AUTO

With the thermostat fan switch set to "AUTO", the fan will run intermittently as required for either heating or cooling. This position will provide the lowest operating cost. If you purchased one of our thermostats, they have an Intelligent fan mode which continually circulates the air during occupied modes or when you are at home, and can cycle the fan during unoccupied mode or during the night while you sleep to further conserve energy.

### ON

**CONTINUOUS FAN OPERATION:** With the thermostat fan switch set to "ON", the indoor fan will not shut off. However, the cooling (AC) or heating (heat pump) systems will still operate as required by room temperatures. This provides continuous air filtering and more even temperature distribution to all conditioned spaces.

**FAN ONLY OPERATION:** On moderate days, usually during spring and fall, when neither heating nor cooling is required, you may want to run only the fan to ventilate, circulate and filter the air in your home or building. Set the comfort control switch to "OFF" and the fan switch to "ON". Be sure to return the switches to their original positions for normal operation.

## SECTION IV: START-UP

The comfort control switch is assumed to be in the "OFF" position. If the main power supply to the unit is off, turn the appropriate disconnects to the "ON" position. Place the system into operation as follows:

1. Set temperature adjustment to the desired temperature on your thermostat.

**COOLING** - The higher the setting, the lower the amount of energy consumed. Federal Guidelines recommend a setting of 78 °F.

**HEATING** - The lower the setting, the lower the amount of energy consumed. Federal guidelines recommend a setting of 65 °F or lower.

**NOTE:** If your cooling and heating temperature adjustments are separate, be sure to set both.

2. After considering "Fan Operation Selection" above, select and set the fan operation mode you desire.
3. Move the comfort control switch to the desired mode of operation (Cooling or Heating) found on your particular thermostat.

## POWER FAILURE

When accidents, wind storms, etc. disrupt electrical power supply to your house, switch thermostat to "OFF" position.

## SECTION V: SYSTEM OPERATION

### MANUAL CHANGE-OVER THERMOSTAT

**COOLING YOUR HOME:** With the comfort control switch in the "COOL" position, the system will operate as follows: When the indoor temperature rises above the level indicated by the temperature adjustment setting, the system will start. The unit will operate and the fan will circulate the cooled, filtered air. When the room temperature is lowered to the setting selected, the system will shut off.

**HEATING YOUR HOME:** If your system includes a heating unit and the comfort control switch is in the "HEAT" position, the system will operate as follows: When the indoor temperature drops below the level indicated by the temperature adjustment setting, the system will start. The heating system will operate and the fan will circulate the filtered air. When the room temperature rises to the setting selected, the system will shut off. Whether heating or cooling, the fan will continue to operate if the fan switch was set in the "ON or Intelligent" position. The "AUTO" setting on the fan switch will allow the fan to shut off when your system does.

### ELECTRONIC THERMOSTAT

The computerized electronic thermostat, when programmed, will function automatically to operate the system as follows: When the indoor temperature rises above the higher (COOL) setting, the unit will operate and the fan will circulate the cooled, filtered air. When the room temperature is lowered to the selected level, the system will shut off. The fan will either shut off or run continuously, depending upon your choice of fan switch setting. When the indoor temperature drops below the lower (HEAT) setting, the heating system will operate, and the indoor fan will circulate the heated, filtered air. When the indoor temperature rises to the selected setting, the system will shut off. The indoor fan will either shut off or run continuously, depending upon your choice of fan switch setting.

## SECTION VI: CARE OF SYSTEM

It is strongly recommended that regular periodic preventative maintenance be performed on this equipment. The person most familiar with the equipment in your H.V.A.C. system is a dealer. The dealer can ensure your maintenance program meets the conditions of the Warranty, maximize the efficiency of the equipment, and service your unit within the federally mandated guidelines with regard to unlawful discharge of refrigerants into the atmosphere.

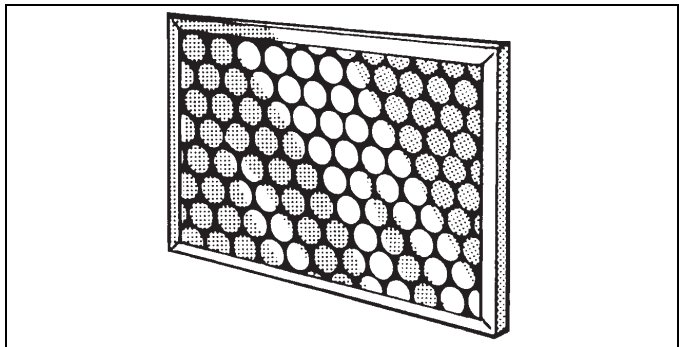
### COIL CARE

Keep the outdoor unit free of foliage, grass clippings, leaves, paper, and any other material which could restrict the proper air flow in and out of the unit. The coil may be vacuumed to remove any debris from between the fins. If the coil becomes excessively dirty, turn the main disconnect switch to "Off" and wash the coil with your garden hose. Avoid getting water into the fan motor and control box. Flush dirt from base pan after cleaning the coil.

### SERVICE CALLS

There are a few instances where the user can avoid unnecessary service calls. If unit stops functioning properly check the following items before calling your servicing dealer:

1. Indoor section for dirty filter.



2. Outdoor section for leaf or debris blockage. Eliminate problem, turn off the thermostat for 10 seconds and attempt start. Wait 5 minutes. If system does not start, call your servicing dealer.

### FILTER CARE

These units are shipped without a filter and is the responsibility of the installer to place a high velocity filter into the return air duct system.

Inspect the air filter(s) at least once a month. If they are dirty, wash reusable filters with a mild detergent per manufacturer's recommendations. Replace disposable filters with new filters. Install the clean filters with "air flow" arrow in the same direction as the air flow in your duct. Filters should be clean to assure maximum efficiency and adequate air circulation.

### PARTS INFORMATION

Replacement parts are available from local contractor/dealer or the nearest distribution center.

### SECTION VII: SOME EFFICIENCY DO'S & DON'TS

DON'T heat or cool unused household area. Reduce supply and return air flow to a minimum in areas which are not living spaces (storage rooms, garages, basements, etc).

DON'T be a "thermostat juggler". Moving your thermostat setting will not make your system heat or cool any faster. Adjust your thermostat to a comfortable setting and leave it there.

DON'T restrict air circulation. Placing furniture, rugs, etc. in such a way that they interfere with air vents will make your system work harder to achieve a comfortable temperature level. This requires more energy, which means greater cost to you.

DON'T heat or cool when you are away. If you are going to be away for a day or more, re-adjust your thermostat accordingly. Your furniture is far less demanding than you are when it comes to comfort levels. However, don't expect the system to restore comfort conditions immediately upon returning home. It will take a little time.

DON'T locate lamps or other heat-producing appliances (radios, TV's, heaters, etc.) near your thermostat. The heat from these items will give your thermostat "false information" about the temperature in the room.

DO select a comfortable thermostat setting, but keep in mind that moderation in temperature selection will save energy.

DO turn on your kitchen exhaust fan when cooking and your bathroom exhaust fan when showering. Also, make sure your clothes dryer is properly vented. If these items are neglected, an excess heat and humidity condition may be created, causing your air conditioning system to run longer.

DO set your thermostat a few degrees lower than normal several hours before entertaining a large group of people in a relatively small area. People give off a considerable amount of heat and moisture in a closed area.

DO keep drapes and venetian blinds closed when practical. These items provide insulation against heat loss/gain.

DO contact a qualified service person to make repairs or adjustments to your system. He has been trained to perform this service.

### SECTION VIII: REPLACEMENT PARTS

<u>RENEWAL PARTS FORM No.</u>	<u>RESPECTIVE MODEL No.</u>
<b>SINGLE PACKAGE HEAT PUMP (2 TON)</b>	
035-20291-000	PHP024H13*1A
<b>SINGLE PACKAGE HEAT PUMP (2.5 TON)</b>	
035-20291-000	PHP030H13*1A
<b>SINGLE PACKAGE HEAT PUMP (3 TON)</b>	
035-20291-000	PHP036H13*1A
<b>SINGLE PACKAGE HEAT PUMP (3.5 TON)</b>	
035-20291-000	PHP042H13*1A
<b>SINGLE PACKAGE HEAT PUMP (4 TON)</b>	
035-20291-000	PHP048H13*1A
<b>SINGLE PACKAGE HEAT PUMP (5 TON)</b>	
035-20291-000	PHP060H13*1A

OWNER please have your installer fill in the following information immediately after unit has been installed and is properly operating.

Installed by \_\_\_\_\_

Installer's Address \_\_\_\_\_

Installation Date \_\_\_\_\_

Owner's Name \_\_\_\_\_

Owner's Address \_\_\_\_\_

Equipment installed at (address) \_\_\_\_\_

Model Number \_\_\_\_\_ Serial Number \_\_\_\_\_

Distributor from whom the equipment was purchased \_\_\_\_\_

*The owner should keep this information in a place where it can be found if needed for warranty purposes.*

