

# USER'S INFORMATION MANUAL

## HW/HWC Series

### Magic-Pak Thru-the-Wall Unit

#### ⚠ WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life. For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

#### ⚠ WARNING

Do not block any portion of the exterior of the unit. The flow of combustion and ventilation air must not be obstructed from entering the furnace and condenser coil. Do not permit overhanging structures or shrubs to obstruct condenser air discharge, combustion air inlet or vent outlet. Such obstructions may cause actions which could result in property damage, personal injury or death.

#### ⚠ CAUTION

The unit area must be kept clean and free of combustible materials, gasoline and other flammable vapors and liquids.

#### ⚠ WARNING

Should overheating occur or the gas supply fail to shut off, turn off the manual gas valve to the appliance before shutting off the electrical supply.

### Congratulations...

...you have one of the most modern gas heating appliances made. Your unit has been carefully selected to keep you warm and comfortable during the winter months. It will deliver superb performance with only minimal help from you. It will also keep you comfortably cool during hot summer days and nights (HWC models only).

To keep your operating cost low and to eliminate unnecessary service calls, we have provided a few guidelines. These guidelines will help you understand how your appliance operates and how to maintain it so you can get years of safe and dependable service.



Certified for Canada

The E.T.L. Testing Laboratories, Inc. symbol on your appliance is your assurance that your furnace design meets nationally recognized standards for safety and performance.

**WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.**

– Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

– What to do if you smell gas:

- Do not try to light any appliance.
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach the gas supplier, call the fire department.

– Installation and service must be performed by a qualified installer, service agency or the gas supplier.



#### Certified Efficiency Ratings

The Gas Appliance Manufacturers Association (GAMA) symbol verifies that Annual Fuel Utilization Efficiency (AFUE) ratings for our gas furnaces have been derived from U.S. Government standard tests.

Manufactured By  
A.A.C.  
A Lennox International Inc. Company  
421 Monroe Street  
Bellevue, OH 44811



## General Information

Your model HW/HWC unit is unique in that it is entirely self-contained in one compact cabinet. It uses outside air for gas combustion and the products of combustion are exhausted by a power vent directly to the outside through the upper left corner of the exterior grille. If your unit is located at ground level or so the exterior is on a balcony, you will be able to observe the flue products discharge area. On cold mornings during the heating cycle you may notice a vapor emitting from the discharge area. This is **normal**.

Depending on your local or state building codes, you will have a power disconnect either adjacent to your unit or located at your main electrical panel. Overcurrent protection will be provided at this point. Have your builder, dealer or maintenance people show you how to turn the power on and off for your Magic-Pak unit.

A field-supplied gas cock (valve) is located in the gas line entering the top of your unit. Manually turn the handle so it is in a parallel position to the gas line. This is the "OPEN" position.

Your unit is equipped with an energy saving, automatic, intermittent ignition control. The burners are automatically ignited at the beginning of each heating cycle and shut off when each cycle is completed. **Your unit does not have a pilot requiring manual lighting.**

### For your safety - Read before operating

#### **WARNING**

If you do not follow these instructions exactly, a fire or explosion may result, causing property damage, personal injury or loss of life.

**Before operating**, smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle to the lowest point. Refer to "**What to do if you smell gas**" on page 1 if the odor of gas is present.

Use only your hand to turn the gas control knob; **never use tools**. If the knob will not turn by hand, don't try to repair it. Call a qualified service technician. Force or attempted repair may result in a fire or explosion.

Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

#### **CAUTION**

These units are not approved for mobile home applications.

## Operating Your Furnace

#### **CAUTION**

This furnace is equipped with a direct ignition control. Do not attempt to manually light the burners.

### Lighting Instructions

1. **STOP!** Read the previous safety information.
2. Turn off electrical power to the appliance.
3. Turn the thermostat to lowest setting.
4. Turn the gas valve knob to "ON" position. See Figure 1.
5. Turn on electrical power to the appliance.
6. Set the room thermostat to the desired temperature. (If the thermostat "set" temperature is above room temperature after the pre-purge time expires, main burner will light.)

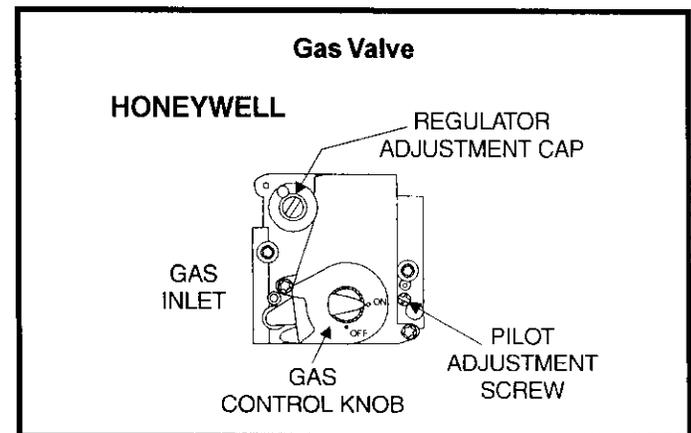


Figure 1

### To Shut Down

1. Turn off electrical power to the appliance.
2. Turn the gas valve knob to "OFF" position.

### Temperature Control

There are many types and styles of thermostats. Yours may look different from the one pictured in Figure 1. However, almost all thermostats perform the same basic functions described in the following section.

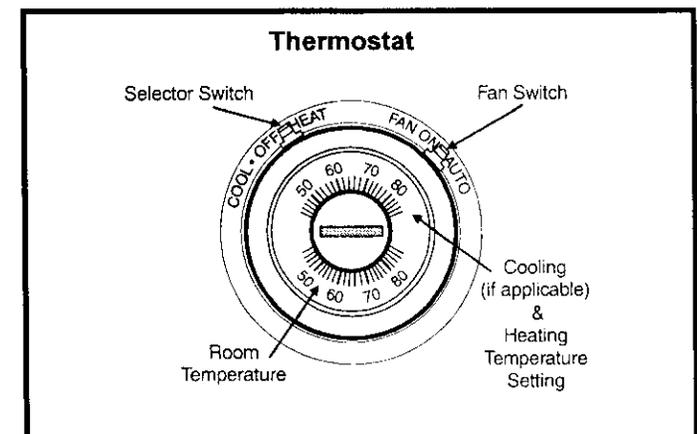


Figure 2

## Thermostat Operation

There are two switches located on the thermostat. One switch controls the heating and cooling functions. The other switch is for "FAN" operation, either continuous or automatic. On the thermostat is the temperature range for the heating temperature and the cooling temperature desired.

To put the system into operation, push the switch to either "HEAT" or "COOL" position. After you have chosen the type of operation you desire, move the thermostat dial or lever to select the temperature you would like the system to maintain.

## Fan Operation

You may wish to increase your comfort by setting your system for continuous air circulation of the indoor air. The fan switch on the thermostat permits you to do this.

With the switch in the "ON" position, the fan will operate continuously. "AUTO" position gives fan operation only when the unit is in either heating or cooling.

## Maintenance Of Your Unit

### **▲ WARNING**

Always shut off all power to the unit before attempting any of the following maintenance procedures. Failure to do so may result in personal injury.

There are routine maintenance steps you should take to keep your unit operating efficiently. This will assure longer life, lower operating costs and fewer service calls. Certain service and maintenance procedures require the skill of a trained service person who utilizes special tools and training. Personal injury can result if unqualified personnel attempt those procedures.

**Your unit should be inspected and serviced at least once per year by a qualified service technician.**

## Periodic Inspections

Your Magic-Pak is designed to give many years of efficient, satisfactory service. However, the varied air pollutants commonly found in most areas can affect longevity and safety. Chemicals contained in everyday household items such as laundry detergents, cleaning sprays, hair sprays, deodorizers and other products which produce airborne residuals may have an adverse affect upon the metals used to construct your appliance.

It is important that you periodically inspect your unit. Visually inspect all flue product carrying areas of the furnace, the vent-air intake system, main gas burners and heat exchanger. You will be able to make this observation by removing the access panel located on the upper portion of the cabinet. A screw-driver is needed to remove this panel. A flashlight will be useful. Make one inspection prior to the beginning of the heating season and another half way through the heating season.

**Should you observe unusual amounts of rust, flakes or other deposits, coatings or corrosion, it is important that you call your authorized dealer at once to obtain a qualified service inspection.**

## Owner/User Maintenance

Should your living area be part of an apartment or condominium complex, you may likely have maintenance personnel who will provide all normal maintenance functions to keep your unit operating at maximum efficiency. If you are responsible for this maintenance, there are several key steps you will need to perform. Your Magic-Pak unit will, in most cases, be located behind a moveable opening or closet.

1. **Filter** Lift up and pull out on the bottom cabinet panel. The filter is immediately behind this panel and can easily be slid out of the side channels which keep it in place in front of the indoor cooling coil. The filter may be vacuumed or preferably washed, then dried and replaced. This is a permanent, washable filter and will last many years when properly cared for. When inserting the filter in the side channels, make sure it does not touch the fins of the coil. Your filter should be checked every four to six weeks.
2. **Indoor Coil** This coil must be clean at all times, especially for efficient cooling performance. Should any lint or dirt collect on the coil fins, you can usually remove this accumulation using an ordinary vacuum cleaner hose with a crevice tool or brush attachment. Be careful, the coil fins are very fragile and are easily damaged.
3. **Condensate Drain** During cooling, the moisture removed from indoors collects on the indoor coil, drops to the drain pan at the bottom of the coil and then drains away through a plastic hose connected to the stub at the center of the drain pan. **Make sure this drain connection is kept open** to keep condensate from overflowing the pan.
4. **Outdoor Condensing Coil** If your unit is located at ground level where outdoor debris can collect on the outdoor coil, you will need to periodically inspect and clean this coil during the cooling season. Use of a vacuum or hose is recommended. A dirty coil will cause inefficient operation on cooling and it may also contribute to cooling service problems. Be careful, the coil fins are very fragile and are easily damaged.
5. **Blower and Fan Motors** These are direct drive, sealed bearing motors and do not require lubrication or owner maintenance. Access to these motors can be made only when the entire cooling chassis is removed by your authorized service person or dealer.

Since the entire cooling section of your unit is a factory sealed system assembled on a slide-out chassis, only your authorized service dealer should be called to make any necessary repairs or adjustments.



## A.R.I. Capacity Certified

The Air-conditioning & Refrigeration Institute label assures you of cooling capacity as shown on the rating plate.

## Limited Warranty

August 1, 1997

*This warranty gives you specific legal rights and you may have other rights which vary from state/province to state/province.*

**Warrantor: Armstrong Air Conditioning Inc., 421 Monroe St., Bellevue, OH 44811**

Armstrong Air Conditioning Inc. products are available under the following names: Air Ease, Armstrong Air, American Aire, Concord, Magic-Pak

Subject to the limitations stated in this warranty, we warrant to the first buyer for use the residential heating, cooling or heat pump unit, when installed, operated and maintained as required by this warranty, to be free of defects in workmanship or material for a period of 5 years in residential installations (1 year in non-residential installations) from the time of installation. We will replace any defective component without cost or expense to you except for the costs of delivery and labor for removal and replacement of the defective component.

**These HW/HWC Magic-Pak Thru-the-Wall units carry a limited 10-year warranty on the heat exchanger. Stainless steel heat exchangers carry a limited 20-year pro-rated warranty: Full credit in years 1 through 10, then declining by 10% each year after. Limited 10- and 20-year warranties apply to the original owner in private owner-occupied residences. Units produced prior to 1991 had a limited 5-year warranty on the heat exchanger. Replacement cooling chassis for the HWC models carry the same warranty as new units.**

### Warranty Begins

The warranty period begins when the installation is complete and the product is ready to operate. You must be able to verify this date whenever a warranty claim is made. Original bill of sale, installer's invoice or other similar document will suffice. If the beginning date cannot be verified, we will consider warranty coverage to begin 6 months after the date the product was shipped from our factory.

### Limitations on Implied Warranties

Implied warranties of merchantability or, to the extent applicable, fitness for a particular purpose are limited to 5 years, the same duration as the basic limited written warranty provided herein. Some states/provinces do not allow limitations on how long an implied warranty of merchantability or fitness lasts, so the above limitations or exclusions may not apply to you.

### Only Warranty

This written Limited Warranty is the only warranty made by the warrantor; this warranty is in lieu of and excludes all other warranties, express or implied. The warrantor does not authorize any person to provide any other warranty or to assume for it any further obligation in connection with the warranted product.

### What is NOT Covered

1. Cabinets or cabinet pieces.
2. Normal maintenance items such as filters, fan belts, fuses or other consumable items.
3. Damage caused by misuse, failure to maintain properly, accidents or acts of God.
4. External wiring, piping, venting or attachment of accessory products not integral to our product, including without limitation, humidifier, air cleaner, vent damper, thermostat or other mechanical devices not manufactured by the warrantor.
5. Products that have been operated in a corrosive atmosphere where a concentration of acids, halogenated hydrocarbons or other corrosive elements causes deterioration to metal surfaces or integral components. NOTE: Operation in a corrosive atmosphere is considered abuse and voids this warranty.
6. Products that have NOT been installed in accordance with our published installation instructions, applicable local, state/provincial or national codes, ACCA published standards.
7. Products that have NOT been installed by competent, qualified installers.
8. Products that have been moved from their original place of installation.

### Warranty on Replacement Components

Any replacement component furnished by us will assume the remaining (unused) portion of the Limited Warranty.

### Consequential Damages

The warrantor shall not be responsible for any consequential damages caused by any defect in the product. Some state/provinces do not allow the exclusion or limitations of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

NOTE: After the first year, in the event that a gas or oil heat exchanger is no longer being manufactured by the warrantor, the warrantor will allow a credit equal to the then current wholesale price of an equivalent heat exchanger towards the purchase of a new Armstrong gas or oil furnace.

This product must be installed, used and cared for in accordance with the instruction manual. You are responsible for required periodic maintenance or service, such as changing or cleaning of air filters and lubrication or cleaning of components. Failure to properly install, operate or maintain your unit voids this warranty.

### Owner Record

Model # \_\_\_\_\_ Serial # \_\_\_\_\_ Installation Date \_\_\_\_\_

#### INSTALLED BY:

Dealer \_\_\_\_\_

Address \_\_\_\_\_

Telephone # \_\_\_\_\_ License # \_\_\_\_\_