Amana

USE AND CARE INSTRUCTIONS

AIR CONDITIONING
CONDENSING UNIT
1 THRU 5 TON and
GAS FIRED FURNACE

Photo shown is a typical unit and will vary by model and size.

Chas Roberts
AIR CONDITIONING & HEATING

(602) 943-3426
9828 North 19th Avenue
Phoenix, AZ 85021-1992

(520) 292-6858
4065 East Illinois Street
Tucson, AZ 85714-2106

www.ChasRoberts.com

Important Facts You Should Know About Your Gas Furnace and Air Conditioner

Chas Roberts
AIR CONDITIONING & HEATING
(602) 943-3426 or (520) 292-6858
www.ChasRoberts.com

Gas Furnace

• **If You Smell Gas** – Call your gas company, at once, from a neighbor's phone. DO NOT touch any electrical switches or light any flames.

• **If Smoke Appears – Don't be alarmed, THIS IS NORMAL**, the first time the furnace is started. Your smoke alarms may sound, but they will reset when the smoke clears. The reason this happens is because the factory applies a layer of oil inside the furnace to protect it during shipment. The burners will burn away this oil the first time the furnace is started. The furnace will smoke this one time only.

• **Before you call for service, check these simple items first:**

- ❑ Is the furnace plugged in and are the breakers and disconnects turned on?
- ❑ Is the thermostat set above the room temperature?
- ❑ Is the thermostat switch set in the heat position:
- ❑ Is the gas line connected to the furnace? If not, call you builder or plumbing contractor.
- ❑ Is the gas manual shut off valve open? The gas valve handle is located just outside the furnace and the handle should be turned parallel with the gas pipe to be on. If it is turned at a right angle, it is off.
- ❑ Is the air filter dirty or full of lint? A dirty filter will block needed air flow to the furnace and shut it down prematurely.

• If you have checked all these things, and the furnace still does not operate, CALL your builder or Chas Roberts Air Conditioning.

• Important, more detailed information on your furnace should be reviewed in your homeowner's operation and maintenance manual.

Air Conditioner

• During the cooling season, your gas furnace provides air flow for your air conditioning.

• Do Not turn the air conditioning system off. Part-time cooling is poor economy. If the system is left off during the morning, the home will soak up heat and be more difficult to cool in the afternoon. You can actually save money by letting the thermostat determine when cooling is needed.

• During the hot, dry seasons, we recommend keeping the air conditioner blower on continuously. The air conditioning unit cools more evenly when the blower switch is in the ON position. The blower provides refreshing air movement and even temperatures throughout the home. The blower also circulates air through the filter, which helps remove dust, lint and other pollutants more efficiently.

• During the more humid monsoon season, we recommend switching the blower to the AUTO position to help dehumidify the air more efficiently. Check you condensate drain to make sure the moisture being removed from the house is draining properly. The bottom drain outside your house should be dripping and the emergency overflow drain above should be dry.

• Shades, drapes, shutters, or screens should be installed on windows that are exposed to direct sunlight. Also, plant a tress or put up a canopy to protect your windows from the direct sun.

• For cooling and heating . . . Leave your thermostat alone. When you have found a temperature that you prefer, it is best to leave the thermostat at that setting.

• Clean or replace the filters frequently. Dirty filters will lower performance and efficiency of your cooling. The filters are usually located at the return grille or at the indoor section of your unit.

IMPORTANT NOTICE

IT IS RECOMMENDED THAT ALL SERVICE BE PERFORMED BY AN AUTHORIZED DEALER. EVEN ROUTINE MAINTENANCE SHOULD ONLY BE PERFORMED AFTER REVIEW OF PROPER PROCEDURES WITH THE INSTALLING DEALER.

HOW TO ENJOY LIFE WITH CENTRAL AIR CONDITIONING

The purpose of this USER'S GUIDE is to acquaint you with your central air conditioning, with air conditioning in general, and to suggest some procedures which, if followed, will allow your system to function more effectively.

Your air conditioning unit is made of quality materials and component parts and is designed and assembled by some of the leading craftsmen in the industry. The size of your unit has been determined by Chas Roberts Air Conditioning on the basis of information which has been given to them concerning the construction of your building and possibly your own living habits.

Your complete air conditioning system is designed to give you many years of comfort. Even so you must learn to live with it. Any conditioning system has its limitations and any equipment will function more effectively and be better able to give you the comfort you expect if the family knows and follows the proper procedures.

Many people condemn a home air conditioning system because it doesn't keep the rooms as cool and comfortable in hot, muggy weather as they think it should. This may be unfair. Any residential cooling system has definite limitations. It is the reverse of the heating system. Family living habits that help the heating system are arch enemies of a cooling system. The furnace delivers heat into the room and the extraneous heat that is created within the house form electric lights, cooking, the TV set, etc., helps to heat the rooms. Just that much less is required from the furnace.

Cooling is just the reverse. The cooling equipment removes heat from the house and any extra heat released in the rooms from these same sources will make the room air warmer and place an additional burden upon the equipment. Further, with heating, we are primarily concerned with the thermometer temperature and relative humidity (the amount of moisture in the air). Relative humidity is an important factor in the comfort cooling and the removal of moisture from the air is essential.

"BALMY" VS. "MUGGY"

The effect of humidity upon comfort can be illustrated by a familiar outdoor condition. There are days when the temperature is relatively high, yet it is comfortable because the air feels "balmy". This is because the relative humidity is low. There are other days when the temperature is about the same but there is discomfort from a "muggy" feeling and perspiration does not dry on the skin. This is because the humidity is high.

The same condition can exist indoors. The air must be both cool and relatively dry for comfort.

NO MYSTERIES ABOUT COOLING

There is nothing very mysterious about the operation of a cooling unit. The theory in home air conditioning is the same as that used in the electric refrigerator in your kitchen.

Room air is drawn into the cooling unit by a fan, first passing through a filter that removes most of the dirt, dust and pollen. It next passes over the surface of a coil that is cooled by a refrigerant circulating through the inside of the coil. Here the temperature of the air is reduced about 15-20 degrees and then discharged through ducts and registers into the rooms.

When this air passes through the coil, it also loses some of its moisture which collects upon the coil surfaces in the form of water and is wasted to the sewer by a condensate drain.

Your unit is designed to remove the maximum amount of heat and moisture: however, you should never lose sight of the fact that there are definite limits on its capacity to do either.

ADEQUATE ATTIC VENTILATION IS A MUST

Since the purpose of the cooling is to remove heat from the inside of the house, the first step should be to keep as much heat as possible from entering the house. Heat enters the house through walls heated by outdoor air and the sun. It comes in through the ceiling from the roof or attic above.

When the temperature outside is 90 degrees, it is very possible for your attic temperature to reach 130 degrees if it is not properly ventilated. You should have cross ventilation to remove the excessive heat. This is generally provided in most modern homes.

Attic Fan. An attic fan may be added at one end of the attic to give the ultimate in attic ventilation. The fan may be thermostatically controlled, or it may be manually controlled by you.

SHADE AIDS COOLING

Glass areas exposed to the sun are responsible for a very substantial amount of the heat that enters a house. The sun not only heats the glass but also all the surfaces indoors that it shines upon. The most effective way to eliminate this heat is to keep the sun off the glass area and windows. A roof overhang of two or three feet on the south side of the house will effectively shade the windows on that side. Exterior awnings and sun shades will offer partial protection on the east and west sides, and the fewer the window on these two sides of the house the better. Tall shrubs and plantings, a vine covered trellis or a garden wall are particularly effective. Screen shades, Venetian blinds and heavy draperies will also help. A few trees that shade the house are of inestimable value.

Some of these protective methods will be difficult to provide on an existing house, be every one that is practical should be used for comfort and for operating economy. As a matter of information, even the orientation of the house on the lot can mean much to the cooling system.

THERMOSTAT SETTING

A temperature of seventy-six to seventy-eight degrees is preferred by most people. You may select a lower temperature setting if you wish and you will probably have that temperature a good portion of the time. However, do not be disappointed if the temperature gets a few degrees warmer during A very hot afternoon. Most residential systems are designed for a maximum cooling that will maintain the indoor temperature 30 degrees below the normal outdoor temperature and they cannot do much better than that.

Due to a time lag caused by the insulation in your home, the full radiating effect of the sun will not be felt until the mid-afternoon. In very hot weather, you may want to set your thermostat several degrees below the normal setting so as to store up some cooling capacity for the hot afternoon. Walls, furniture, and the like will retain some of the additional cooling created by lower temperature setting, and you will be better prepared for the afternoon heat.

WHAT CAN YOU DO ON HOT, "MUGGY" DAYS TO OBTAIN MAXIMUM COMFORT

We have already learned that the function of the air conditioning system is to remove both heat and moisture from the home. When it is extremely hot and "muggy" any residential air conditioning system has to work hard to obtain the differential between indoor and outdoor temperature mentioned in the paragraph above.

It naturally follows that on hot, "muggy" days, any additional heat and moisture that is released within the house will place an additional burden on the cooling system and may even be the accused of inadequate cooling. This is where you must learn to live with the cooling system and realize its limitations.

We have outlined in the following paragraphs several recommendations on how to reduce heat and moisture released within the house.

COOKING

Families living in air conditioned houses have better appetites than those in homes which are not air conditioned. Also, cooking releases a large amount of heat and moisture. A kitchen range with all burners operating can release more heat into the home than a two or three ton cooling unit can remove if it did nothing else. A kitchen ventilating fan should always be running while cooking is in process. A kitchen window should be slightly open to replace the air the fan moves out.

MOPPING AND CLEANING

Mopping floors, washing furniture and other cleaning operations, requiring water, will release moisture into the air as the wet surfaces dry. These operations should be done on a cool day or at during the coolest part of a warm day, when the full cooling capacity of the equipment is not required.

DRYING CLOTHES

Laundry, including baby clothes and lingerie, should never be dried indoors when cooling. The water released from the clothes enters the air and then must be removed by the cooling equipment.

Never permit an automatic clothes drier to discharge its heat and moisture inside an air conditioned house. It will place a load upon the cooling unit that may cause discomfort for hours. Many complaints of unsatisfactory cooling have been traced to this one cause. Driers must be vented to the outdoors. When venting to the outdoors, never vent close to the outdoor portion of the Heat Pump as you will quickly fill its coils with lint.

IRONING CLOTHES

A hand iron releases heat into the air. Ironing should be done on a cool day or late in the evening when the cooling system has reserve capacity and can remove this extra heat without noticeable difficulty.

BATHS AND SHOWERS

Tub and shower baths release heat and moisture (steam) into the air. The shower bath releases more than the tub bath, and of course, the longer the shower the more released heat and moisture. A bathroom ventilating fan in operation while the baths are being taken, will remove the heat and moisture. Do not use a shower curtain that absorbs water – use one of plastic materials or other non-absorbent materials.

OTHER THINGS YOU SHOULD KNOW ABOUT YOUR CENTRAL AIR CONDITIONING

Your Heat Pump will remove odors from the house that are dust-borne because the dust will be eliminated by the filters and the wet surfaces of the cooling coil. Incidentally, the water that drips off the cooling coil is not equivalent to distilled water, since it is filled with dust, germs and dust-borne odors.

DUST, DIRT AND POLLENS

Your unit will remove most of the dirt, dust, and pollens. Many hay fever patients report considerable relief in an air conditioned house during the pollen season.

ENTERTAINING

Your Heat Pump was sized and designed to keep you and your family comfortable. Unless you Dealer was told to provide cooling for an additional 15 or 20 people, your system will probably not keep this many people comfortable on a hot day. Lowering the thermostat setting will not help, unless it is done 3 to 4 hours before the additional people arrive.

CLEAN THE FILTERS

Filters should be cleaned monthly during air conditioning season and at least twice during the heating season. Dirty ones affect the operation of the equipment by reducing the amount of air that can be moved through it.

MOLD OR MILDEW

Mold or mildew should not appear on clothing or household furnishing in air conditioned houses. If it does appear, the indoor relative humidity is probably too high and should be investigated. Most conditions of this kind can be traced back to an undiscovered source of moisture within the house and to where more moisture is entering the room air than the air conditioner can remove. This source must be located and promptly eliminated. There are many possible sources. The most common is moisture coming from the following: 1) Through a concrete floor that is improperly protected from soil moisture; 2) Through the floor over a crawl space which does not have a moisture barrier over the ground; 3) Through the floor over a damp basement.

STALE AIR

It is recommended that the blower for air circulation be run continuously during the operation. During mild weather when the unit does not operate for long periods, this circulation in the air conditioned area will eliminate any "muggy" feeling.

WINDOW COVERINGS

Windows on the east, south and west sides of the house that are not protected from the sun on the outside, should be protected on the inside with Venetian blinds or heavy draperies. Keep them closed or drawn when the sun is on their side of the house. Inside protection against sun will not be as effective as outside protection but it will help tremendously.

DOORS AND WINDOWS

Windows should remain closed throughout the cooling season. To open them lets in warm air and often highly humid air, particularly at night. Do not open the doors more often than necessary and then for as short a period as possible. It usually costs more to cool a house with children that are running in and out at frequent intervals because each time the door is opened warm air come in.

DON'T TURN EQUIPMENT OFF AND ON

Your unit is thermostatically controlled and should be allowed to operate as required throughout the cooling season. The thermostat will operate the unit only as necessary to keep you comfortable and requires no help. There are technical reasons why uninterrupted operation is the most satisfactory.

THERMAL SHOCK

The physical thermal shock to the body of a person going out of or into an air conditioned space, so often associated with cooling during hot weather, has been no major problem with residential air conditioning.

There appears to be no dangerous physical shock to a normally healthy person entering or leaving an air conditioned apace, although the change may be temporarily unpleasant. This however, may not be the case with persons in ill health. With such persons the greater the difference in temperature between the air conditioned space and the outdoors, the greater the reaction or discomfort will be. Mothers with small children who go in and out of doors frequently have avoided the possibility of this by maintaining a slightly higher temperature indoors.

SUMMARY

You will learn that there are many more things that you Heat Pump will do for you which we have not mentioned. Many of these you will recognize when they present themselves. If you will remember to minimize the release of heat and moisture indoors, especially on hot "muggy" days, you will realize maximum comfort for your air conditioning system.

People who live in air conditioned homes generally eat better, stay at home more, and are more amiable, along with countless other blessings that only domestic air conditioning can bring.

LUBRICATION OF FURNACE BLOWER AND MOTOR

Air circulating blowers on forced air furnaces consist mainly of two pieces of equipment: the blower assembly and the motor by which it is operated. This equipment will give years of uninterrupted service providing they are kept properly lubricated.

SEE LUBRICATION INSTRUCTIONS LOCATED IN BLOWER COMPARTMENT

Caution must also be taken as not to over oil the blower motor. Too much oil will gum the motor contacts and will cause the belt and rubber mountings to deteriorate

OPERATIONAL CHECK LIST

NOTE: DISCONNECT ALL POWER TO UNIT BEFORE SERVICING

Service hints and points to check if your unit becomes inoperative

1. CHECK FUSES AND CIRCUIT BREAKERS

On plug type fuses, visual examination will normally disclose the defective fuse. Use only Fusetron or Fusetat type fuses. On cartridge types, some type of fuse tester should be used. To reset circuit breakers move lever to OFF position and back to the ON position.

2. DIRTY FILTERS

When operating on the cooling cycle and the filters are dirty, your unit may short cycle (go off and on) and frost may form on the indoor coil as well as the large line between the outdoor unit and the coil installed in the indoor Air Handler.

When operating on the heating cycle, and the filters are dirty, the compressor will be running at an abnormally high temperature. This can cause the compressor to shut-off.

Clean or replace the filters if they are the disposable type. The filter can be found contained in the Air Handler filter rack or box adjacent to or under the Air Handler or in a return air filter grille.

3. EVAPORATOR COIL COVERED WITH ICE

Check for broken blower belt or defective blower motor.

4. CLOGGED CONDENSER COILS

Grass cutting, leaves, dirt and dust, lint from clothes dryer, fall-off from trees, can be drawn into the coil by movement of the air. A clogged condenser coil will lower the efficiency of your unit and could cause damage to the condenser. Damage of this type is not covered by the Warranty. Use a brush to remove debris from the coil.

Chas Roberts
AIR CONDITIONING & HEATING

(602) 943-3426
9828 North 19th Avenue
Phoenix, AZ 85021-1992

(520) 292-6858
4065 East Illinois Street
Tucson, AZ 85714-2106

www.ChasRoberts.com

LIMITED WARRANTY

Models: GSC10, GSH10, GSC13, GSH13, GSC14, GSH14, GPH, GPC, PCC

This heating or air conditioning unit is warranted by Goodman Manufacturing Company, L.P. ("Goodman") to be free from defects in materials and workmanship under normal use and maintenance as described below:

- **To the original registered owner** and his or her spouse ("owner"), **all parts** are warranted for a period of **10 YEARS** or for so long as the owner owns the home in which the unit was originally installed (whichever ends first), except as provided below. However, this warranty applies only if:
  1) The unit is installed in an owner-occupied, single family residence, and
  2) The unit is properly registered with Goodman online within 60 days after the original installation. To register, follow the instructions found at www.goodmanmfg.com.
- If the above warranty does not apply, then **all parts** are warranted for a period of **5 YEARS.**

Neither warranty continues after the unit is removed from the location where it was originally installed.

Neither warranty applies to, and no warranty is offered by Goodman on, any unit ordered over the Internet.

The warranty period begins on the date of the original installation. If that date cannot be verified, the warranty period begins three months from the month of manufacture (indicated by the first four digits of the serial number (yymm)).

As its only responsibility, and your only remedy, Goodman will furnish a replacement part, without charge for the part only, to replace any part that is found to be defective due to workmanship or materials under normal use and maintenance. For warranty credit, the defective part must be returned to a Goodman heating and air conditioning products distributor by a state certified or licensed contractor. Any part replaced pursuant to this warranty is warranted only for the unexpired portion of the warranty term applying to the original part.

This warranty does not apply to labor, freight, or any other cost associated with the service, repair or operation of the unit.

This warranty is in lieu of all other express warranties. **ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS WARRANTY.** Some states and provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

GOODMAN SHALL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO EXTRA UTILITY EXPENSES OR DAMAGES TO PROPERTY. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

Goodman is not responsible for:

1. Damage or repairs required as a consequence of faulty installation or application.
2. Damage as a result of floods, fires, winds, lightning, accidents, corrosive atmosphere or other conditions beyond the control of Goodman.
3. Use of components or accessories not compatible with this unit.
4. Products installed outside the United States or Canada.
5. Normal maintenance as described in the installation and operating manual, such as cleaning of the coils, filter cleaning and/or replacement and lubrication.
6. Parts not supplied or designated by Goodman.
7. Damage or repairs required as a result of any improper use, maintenance, operation or servicing.
8. Failure to start due to interruption and/or inadequate electrical service.
9. Any damage caused by frozen or broken water pipes in the event of equipment failure.
10. Changes in the appearance of the unit that do not affect its performance.

This warranty gives you specific legal rights, and you may also have other rights that may vary from state to state or province to province.

Owner Name _____

Address of Installation _____

City/State-Province/Zip-Postal Code

_____

Installer Name _____

City/State-Province/Zip-Postal Code

_____

Phone # / Fax # _____

Distributor Name _____

City/State-Province/Zip-Postal Code

_____

Phone # / Fax # _____

Model # & Serial # _____

Installation Date _____

Part No. PWCACHPPA
Printed in USA
01/07

For further information about this warranty, contact Goodman Consumer Affairs at **(877) 254-4729** or by mail to 7401 Security Way, Houston, Texas 77040.

Chas Roberts

AIR CONDITIONING & HEATING

The Most Comfortable Call You Can Make!

Chas Roberts Air Conditioning is proud to be a family owned and operated business, serving Arizona since 1942.

As your HVAC system Installer, we can provide you with services to meet all of your Heating and Air Conditioning needs after you have taken possession of your new home:

- Sales
- Service & Repair
- Extended Warranties
- Preventative Maintenance

We are available to speak with you Monday-Friday 7am to 8pm, Saturday 7am to 5pm, and Sunday 9am to 4pm with extended hours during the summer.

Please call, or visit our website, with all of your HVAC questions or concerns.

(602) 943-3426 or (520) 292-6858
www.ChasRoberts.com

ROC19133 ROC069769 ROC073706

Amana

ENERGY STAR

GAS-FIRED WARM AIR FURNACE
USER'S INFORMATION MANUAL

⚠ WARNING

IF THE INFORMATION IN THESE INSTRUCTIONS 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 YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT.

– INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR THE GAS SUPPLIER.

Installer - *Affix this manual, Installation Guide, and Warranty adjacent to the appliance.*

Owner - *Read and keep all product literature in a safe place for future reference.*

⚠ WARNING

SHOULD OVERHEATING OCCUR, OR THE GAS SUPPLY FAIL TO SHUT OFF, SHUT OFF THE MANUAL GAS VALVE TO THE FURNACE BEFORE SHUTTING OFF THE ELECTRICAL SUPPLY.

⚠ WARNING

TO AVOID PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, DO NOT USE THIS FURNACE IF ANY PART OF THE FURNACE HAS BEEN UNDER WATER. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE FURNACE AND TO REPLACE ANY PART OF THE CONTROL SYSTEM AND ANY GAS CONTROL HAVING BEEN UNDER WATER.

⚠ WARNING

PRODUCT CONTAINS FIBERGLASS WOOL. DISTURBING THE INSULATION IN THIS PRODUCT DURING INSTALLATION, MAINTENANCE, OR REPAIR WILL EXPOSE YOU TO FIBERGLASS WOOL. BREATHING THIS MAY CAUSE LUNG CANCER. (FIBERGLASS WOOL IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.) FIBERGLASS WOOL MAY ALSO CAUSE RESPIRATORY, SKIN, AND EYE IRRITATION. TO REDUCE EXPOSURE OR FOR FURTHER INFORMATION, CONSULT MATERIAL SAFETY DATA SHEETS AVAILABLE FROM ADDRESS SHOWN BELOW.

⚠ RECOGNIZE THIS SYMBOL AS A SAFETY PRECAUTION.

Due to policy of continual product improvement, the right is reserved to change specifications and design without notice.

Part No. HI-115A
Printed in USA

Effective: May 2006

Important Facts You Should Know About Your Gas Furnace and Air Conditioner

Chas Roberts
AIR CONDITIONING & HEATING
(602) 943-3426 or (520) 292-6858
www.ChasRoberts.com

Gas Furnace

• **If You Smell Gas** – Call your gas company, at once, from a neighbor's phone. DO NOT touch any electrical switches or light any flames.

• **If Smoke Appears – Don't be alarmed, THIS IS NORMAL**, the first time the furnace is started. Your smoke alarms may sound, but they will reset when the smoke clears. The reason this happens is because the factory applies a layer of oil inside the furnace to protect it during shipment. The burners will burn away this oil the first time the furnace is started. The furnace will smoke this one time only.

• **Before you call for service, check these simple items first:**

- ❑ Is the furnace plugged in and are the breakers and disconnects turned on?
- ❑ Is the thermostat set above the room temperature?
- ❑ Is the thermostat switch set in the heat position:
- ❑ Is the gas line connected to the furnace? If not, call you builder or plumbing contractor.
- ❑ Is the gas manual shut off valve open? The gas valve handle is located just outside the furnace and the handle should be turned parallel with the gas pipe to be on. If it is turned at a right angle, it is off.
- ❑ Is the air filter dirty or full of lint? A dirty filter will block needed air flow to the furnace and shut it down prematurely.

• If you have checked all these things, and the furnace still does not operate, CALL your builder or Chas Roberts Air Conditioning.

• Important, more detailed information on your furnace should be reviewed in your homeowner's operation and maintenance manual.

Air Conditioner

• During the cooling season, your gas furnace provides air flow for your air conditioning.

• Do Not turn the air conditioning system off. Part-time cooling is poor economy. If the system is left off during the morning, the home will soak up heat and be more difficult to cool in the afternoon. You can actually save money by letting the thermostat determine when cooling is needed.

• During the hot, dry seasons, we recommend keeping the air conditioner blower on continuously. The air conditioning unit cools more evenly when the blower switch is in the ON position. The blower provides refreshing air movement and even temperatures throughout the home. The blower also circulates air through the filter, which helps remove dust, lint and other pollutants more efficiently.

• During the more humid monsoon season, we recommend switching the blower to the AUTO position to help dehumidify the air more efficiently. Check you condensate drain to make sure the moisture being removed from the house is draining properly. The bottom drain outside your house should be dripping and the emergency overflow drain above should be dry.

• Shades, drapes, shutters, or screens should be installed on windows that are exposed to direct sunlight. Also, plant a tress or put up a canopy to protect your windows from the direct sun.

• For cooling and heating . . . Leave your thermostat alone. When you have found a temperature that you prefer, it is best to leave the thermostat at that setting.

• Clean or replace the filters frequently. Dirty filters will lower performance and efficiency of your cooling. The filters are usually located at the return grille or at the indoor section of your unit.

Safety

Signal Words

Dear Homeowner, please recognize the following safety information. This information will alert you to the potential for personal injury.

WARNING - Indicate hazards or unsafe practices which **COULD** result in severe personal injury or death.

WARNING

THIS PRODUCT CONTAINS OR PRODUCES A CHEMICAL OR CHEMICALS WHICH MAY CAUSE SERIOUS ILLNESS OR DEATH AND WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

WARNING

TO AVOID POSSIBLE EQUIPMENT DAMAGE, PERSONAL INJURY, FIRE OR DEATH, THE FOLLOWING INSTRUCTIONS MUST BE OBSERVED REGARDING UNIT LOCATION, AIR REQUIREMENTS AND OPERATING PROCEDURES.

WARNING

HEATING UNIT SHOULD NOT BE UTILIZED WITHOUT REASONABLE, ROUTINE, INSPECTION, MAINTENANCE AND SUPERVISION. IF THE BUILIDNG IN WHICH ANY SUCH DEVICE IS LOCATED WILL BE VACANT, CARE SHOULD BE TAKEN THAT SUCH DEVICE IS ROUTINELY INSPECTED, MAINTAINED AND MONITORED. IN THE EVENT THAT THE BUILDING MAYBE EXPOSED TO FREEZING TEMPERATURES AND WILL BE VACANT, ALL WATER-BEARING PIPES SHOULD BE DRAINED, THE BUILDING SHOULD BE PROPERLY WINTERIZED, AND THE WATER SOURCE CLOSED. IN THE EVENT THAT THE BUILDING MAY BE EXPOSED TO FREEZING TEMPERATURES AND WILL BE VACANT, ANY HYDRONIC COIL UNITS SHOULD BE DRAINED AS WELL AND, IN SUCH CASE, ALTERNATIVE HEAT SOURCES SHOULD BE UTILIZED.

Important Note To The Owner

It is important that you fill out the owner's registration card and mail it today. This will assist us in contacting you should any service or warranty information change in the future. When filling in the registration card, be sure to include the Model, Manufacturing and Serial Numbers, plus the installation date. If the registration card cannot be located, please call 1-877-254-4729 to register the furnace.

Your warranty certificate is also supplied with the unit. Read the warranty carefully and note what is covered. Keep the warranty certificate in a safe place, so you can find it, if necessary.

Before using this manual, check the serial plate for proper model identification.

The installation and servicing of this equipment must be performed by qualified, experienced technicians only.

Unit Location

1. The furnace area and the vicinity of any other gas appliances must be kept clear and free of combustible materials, gasoline, and other flammable vapors and liquids. Also, do not store or use flammable items such as paint, varnish, or lacquer in the area.
2. Do not store or use chlorine or fluorine products (bleaches, cements, strippers, aerosols) near the unit. They can corrode the heat exchanger.
3. Do not use the furnace closet as storage for brooms, mops, brushes and oily rags or cloths. The area must be kept clear, clean and free of lint. Furnace must be kept free and clear of exposed or loose insulation materials in the area of installation. Examine the furnace area when the furnace or additional insulation is added since some insulation materials may be combustible.
4. Make sure the furnace is always connected to an approved vent, in good condition, to carry combustion products outdoors.
5. Familiarize yourself with the controls that shut off the gas and electrical power to the furnace. If the furnace is to be shut down at the end of the heating season, turn off both the gas and electrical power. For safety, always turn the gas and electrical power off before performing service or maintenance on the furnace.
6. Establish a regular maintenance schedule to insure efficient and safe operation of the furnace. The furnace should be checked at the beginning of each heating and cooling season by a qualified service technician.

WARNING

TO AVOID PERSONAL INJURY OR FIRE, MINIMUM CLEARANCES TO COMBUSTIBLE SURFACES MUST BE FOLLOWED.

7. Make certain the required clearances for the furnace are always maintained. These clearances are listed on the furnace clearance label. If any question develops, contact the installer of the furnace, or another qualified servicer.

Unit Installation

Examine the furnace installation to determine the following:

1. All flue product carrying passages external to the furnace (i.e. chimney, vent connector) are clear and free of obstructions.
2. The vent connector is in place, slopes upward and is physically sound without holes or excessive corrosion.
3. The return air duct connection is physically sound, sealed to the furnace casing, and terminates outside the space containing the furnace.
4. The physical support of the furnace is sound without sagging, cracks, or gaps around the base so as to provide a seal between the support and the base.
5. There are no obvious signs of deterioration of the furnace.
6. Check for proper burner flame performance. Flame should extend directly outward from burners without, curling, floating, or lifting off.

Air Requirements

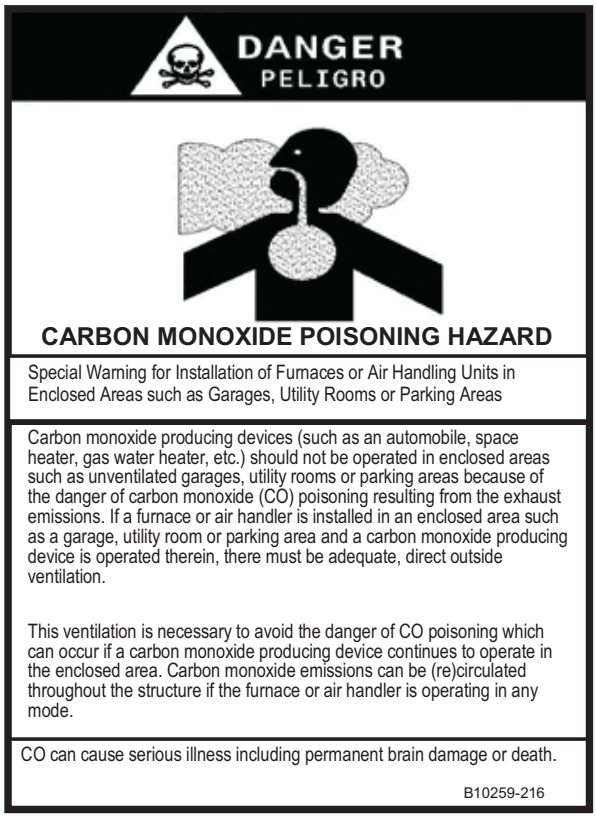
WARNING

TO AVOID PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, SUFFICIENT FRESH AIR MUST BE SUPPLIED FOR PROPER COMBUSTION AND VENTILATION OF FLUE GASES. MOST HOMES REQUIRE OUTSIDE AIR TO BE SUPPLIED INTO THE FURNACE AREA.

Improved construction and additional insulation in homes have reduced the heat loss and made these homes much tighter around doors and windows so that air infiltration is minimal. This creates a problem to supply ventilation and/or combustion air for gas fired or other fuel burning appliances. Any use of appliances that pull air out of the house (clothes dryers, exhaust fans, fireplaces, water heaters, non-direct vent furnaces, etc.) increases this problem and appliances could be starving for air.

If fuel-burning appliances are starved for air, the flue gases which these appliances produce as they operate may not vent outdoors properly, but remain in the home instead. These flue gases may

include carbon monoxide.



Carbon monoxide or "CO" is a colorless and odorless gas produced when fuel is not burned completely or when the flame does not receive sufficient oxygen.

Be aware of these air starvation signals which indicate conditions that my result in carbon monoxide or that carbon monoxide may be present:

1. Headaches-Nausea-Dizziness, Flu-like symptoms.
2. Excessive humidity-heavily frosted windows or a moist "clammy" feeling in the home.
3. Smoke from a fireplace will not draw up the chimney.
4. Flue gases that will not draw up the appliance vent pipe.

Combustion Air

The air for combustion and ventilation can typically be obtained from the surrounding unconfined space or louvered closet door. Observe the following precautions concerning air availability:

- When a furnace is installed in a closet and the closet door is louvered, DO NOT OBSTRUCT LOUVERS. Louvers must be open and clear to provide combustion air to the furnace.
- When a furnace is installed in a confined space within a home and the air for combustion and ventilation enters the space through ducts from the outside, be sure to routinely check the entering and outlet, grilled openings to verify that they are always clear and clean.
- Do not partition off a small area around the furnace utilizing a non-louvered door. This could obstruct the combustion air from reaching the furnace.

Indoor Humidity

Relative humidity is the amount of water vapor in the air relative to the amount the air can hold at the same temperature. The colder the air; the less moisture it can hold. As air is warmed, its ability to hold moisture is increased. Relative humidity is important to your health and home as proper humidification helps reduce respiratory difficulties and helps improve the indoor air quality.

A good relative humidity is one just high enough to barely start condensation along the lower edges or lower corners of the windows. More than that can be damaging.

Frequent fogging or excessive condensation on inside windows indicates the indoor humidity level is too high for outdoor weather conditions. Damage to the building may result if the condition persists. Condensation on inside of storm windows indicates loose inside windows. Adding weather-stripping to tighten inside windows usually corrects this problem.

The following table shows the recommended maximum indoor humidity in relationship to the outdoor temperatures.

Outdoor Temperature	Humidity	
	Single -Paned Glass	Double-Paned Glass
+30°F	30%	50%
+20°F	20%	40%
+10°F	15%	35%
0°F	10%	30%
-10°F	5%	25%
-20°F	5%	20%
-30°F	3%	18%

Table 1

For Propane (LP) Gas Installations Only

For furnaces operating on propane gas, please review the following warnings before use.

⚠ WARNING

To avoid property damage, personal injury or death, due to explosion or fire, install a gas detecting warning device. Since the odorant in propane gas can be reduced by iron oxide (rust), a gas detecting warning device is the only reliable method to detect propane gas leaks.

⚠ WARNING

If the gas furnace is installed in a basement, an excavated area or a confined space, it is strongly recommended to contact a propane supplier to install a gas detecting warning device in case of a gas leak.

- **Since propane gas is heavier than air, any leaking gas can settle in any low areas or confined spaces.**
- **Propane gas odorant may fade, making the gas undetectable except with a warning device.**

⚠ WARNING

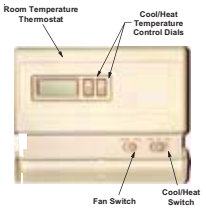
An undetected gas leak will create a danger of explosion or fire. If the presence of gas is suspected, follow the instructions on the cover of this manual. Failure to do so could result in SERIOUS PERSONAL INJURY OR DEATH.

Thermostat Functions

There are many types and styles of thermostats but the operation is usually similar. BE SURE TO BECOME FAMILIAR WITH YOUR

THERMOSTAT. The simplest type of thermostat only starts and stops the furnace to maintain the desired room temperature. The most widely used types will control both heating and cooling functions and will have a Fan Switch with Auto and ON settings. On Auto, the circulating air blower will cycle on/off with the furnace but if switched to ON it will run continuously regardless of whether or not heating or cooling is being provided.

In addition, there are thermostats which automatically switch from heating to cooling mode and those with night set back capability. The night set back, or multiple set back, type allows for a different temperature at night or during the day when no one is at home. Programmable thermostats will allow for more control and tailoring of the heating and cooling functions. The level of this control will depend on the type of thermostat applied.



System Switch	Fan Switch	Action
OFF	AUTO	None
COOL	AUTO	System only cools, fan cycles off and on.
COOL	ON	System only cools, fan runs all the time.
HEAT	AUTO	System only heats, fan cycles off and on.
HEAT	ON	System only heats, fan runs all the time.
OFF	ON	No heating or cooling, fan runs all the time.

Furnace Operation

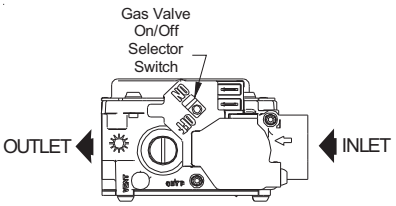
WARNING

Electrical components are contained in both compartments. To avoid personal injury, electrical shock or death, do not remove any internal compartment covers. Contact a qualified servicer at once if an abnormal condition is noticed.

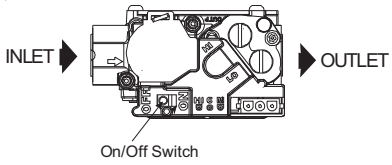
Keep both doors in place except for inspection and maintenance. An interlock switch prevents furnace operation if the blower door is not in place.

Furnace Start-Up

1. Close the external manual gas shut-off valve.
2. Turn off the electrical power to the furnace.
3. Set the room thermostat to the lowest possible setting.
4. Remove the burner compartment door.
5. This furnace is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
6. Move the furnace's gas valve ON/OFF switch to the OFF position.
7. Wait five minutes to clear out any gas. Then smell for gas, including near the floor as some types of gas are heavier than air.
8. If you smell gas following the five minute waiting period in step 7, immediately follow the instructions on the cover of this manual. If you do not smell gas after five minutes, move the furnace's gas valve ON/OFF switch to the ON position.
9. Replace the burner compartment door.
10. Open the external manual gas shut-off valve.
11. Turn on the electrical power to the furnace.
12. Adjust the thermostat to a setting above room temperature.
13. After the burners are lit, set the thermostat to desired temperature.



White-Rodgers Model 36G22 (Single-Stage)



White-Rodgers Model 36G54 (Two-Stage)

Furnace Shut Down

To shut down your furnace, follow the steps listed below.

1. Set the thermostat to the lowest setting.
2. Integrated control closes gas valve extinguishing flame.
3. Induced draft blower is de-energized following a 15 second delay. The circulator blower is de-energized following a 60, 90, 120, or 180 second delay period.
4. Remove the burner compartment door.
5. Move the furnace's gas valve ON/OFF switch to the OFF position.
6. Close the external manual gas shut-off valve.
7. Replace the burner compartment door.

Lockout Reset

Furnace lockout is characterized by a non-functioning furnace (circulator blower may be running continuously) providing a one flash diagnostic LED code. Lockout results when a furnace control detects abnormal conditions. If the furnace is in "lockout", it may be reset by any of the following methods:

1. One hour automatic reset. Control will automatically reset itself and attempt to resume normal operations following a one hour lockout period.
2. Power interruption. Interrupt 115 volt power to the furnace for between 0 and 20 seconds.
3. Thermostat cycle. Interrupt thermostat signal to the furnace for between 0 and 20 seconds.

If the condition which originally caused the lockout still exists, the control will return to lockout. If your furnace frequently locks out, a problem exists which must be corrected. Contact a qualified servicer.

Routine Maintenance

Maintenance is to be performed by a qualified service technician only. User maintenance is to be restricted to frequent air filter changes and to ensure the warnings and notices found elsewhere in this manual be followed. We recommend that at a minimum system maintenance be performed by a qualified service technician prior to the beginning of each heating season, and if equipped with air conditioning prior to that season.

WARNING

PERSONAL INJURY OR DEATH MAY RESULT FROM IMPROPER MAINTENANCE PERFORMED BY UNTRAINED PERSONNEL. CALL YOUR INSTALLING DEALER OR OTHER QUALIFIED SERVICE COMPANIES TO PERFORM THE MAINTENANCE INSPECTION.

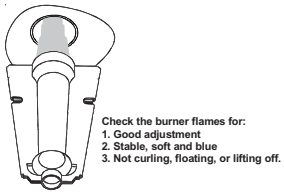
WARNING

TO AVOID PERSONAL INJURY OR DEATH DUE TO ELECTRICAL SHOCK, DISCONNECT THE ELECTRICAL POWER BEFORE PERFORMING ANY MAINTENANCE.

ANNUAL INSPECTION

The furnace should be inspected by a qualified installer, or service agency at least once per year. This check should be performed at the beginning of the heating season. This will insure that all furnace components are in proper working order and that the heating system functions appropriately. Particular attention should be paid to the following items. Repair as necessary.

- Flue pipe system. Check for blockage and/or leakage. Check the outside termination and the connections at and internal to the furnace.
- Combustion air intake pipe system (where applicable). Check for blockage and/or leakage. Check the outside termination and the connection at the furnace.
- Heat exchanger. Check for corrosion and/or buildup within the heat exchanger passageways.
- Burners. Check for proper ignition, burner flame, and flame sense. Flames should extend directly outward from burners without curling, floating or lifting off.
- Wiring. Check electrical connections for tightness and/or corrosion. Check wires for damage.
- Filters. Check that filters are clean and in the proper placement in the furnace or duct system.



Burner Flame

FILTERS

WARNING

TO AVOID PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, DISCONNECT ELECTRICAL POWER BEFORE REMOVING FILTERS. NEVER OPERATE FURNACE WITHOUT A FILTER INSTALLED BECAUSE DUST AND LINT WILL BUILD UP ON INTERNAL PARTS RESULTING IN LOSS OF EFFICIENCY, EQUIPMENT DAMAGE AND POSSIBLE FIRE.

A return air filter is not supplied with this furnace; however, a means of filtering all of the return air must be provided. Your installer will supply filters at the time of installation. Become familiar with filter location and procedures for removing, cleaning and replacing them.

If you need assistance, contact the installer of your furnace or another qualified servicer.

Filters must be inspected, cleaned or changed every two months or as required. As a homeowner, it is your personal responsibility to keep air filters clean. Remember that dirty filters are the most common cause of inadequate heating or cooling performance.

FILTER REMOVAL

Filters can be located in a central return grille, a side panel external filter rack (upflow only), or internally. To remove filters from an external filter rack in an upright upflow installation, follow the directions provided with external filter rack kit. To remove all other filter configurations, follow the directions listed in the Installation Manual.

If using Media or Electronic Air Cleaner, follow the directions provided with the air cleaner for proper filter removal, cleaning, and replacement.

FILTER CLEANING AND/OR REPLACEMENT

Disposable filters must be replaced with a filter or filters of the same size as that which is removed. Filters must comply with UL900 or CAN/ULC-S111 Standards.

Permanent filters must be cleaned, washed, and dried as specified by the filter manufacturer. If it becomes necessary to replace a permanent filter, it must be replaced with a filter or filters of the same size as that which is removed. Filters must comply with UL900 or CAN/ULC-S111 Standards.

When reinstalling filters, be careful to maintain correct airflow direction.

SAFETY LABELS

NOTE: If safety labels are missing or illegible, contact the installing dealer or our Customer Service Department for ordering information.

FOR YOUR SAFETY READ BEFORE OPERATING

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

A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.

B. BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Do not touch any electric 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 your gas supplier, call the fire department.

C. Use only your hand to push in or turn the gas control lever. Never use tools. If the lever will not push in or 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.

D. Do not use this appliance if any part has been underwater. 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 underwater.

LIRE AVANT DE METTRE EN MARCHELIRE

AVERTISSEMENT: Quiconque ne respecte pas á la lettre les instructions dans le présent manuel risque de déclecher un incendie ou une explosion entraînant des dammages matériels, des lésions corporelles ou la perte de vies humaines.

A. Cet appareil ne comporte pas de veilleuse. Il est muni d'un dispositif d'allumage qui allume automatiquement le brûleur. Ne pas tenter d'allumer le brûleur manuellement.

B. AVANT DE LE FAIRE FONCTIONNER, renifler tout autour de l'appariel pour déceler une odeur de gaz. Renifler près du plancher, car certains gaz sont plus lourds que l'air et peuvent s'accumuler au niveau du so.l

QUE FAIRE S'IL Y A UNE ODEUR DE GAZ

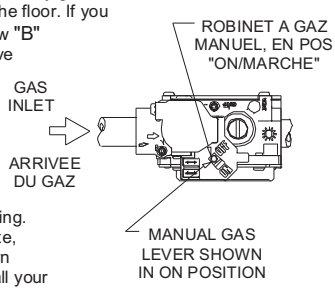
- Ne pas tenter d'allumer l'appariel
- Ne toucher aucun interrupteur électrique; n'utiliser aucun téléphone dans le bâtiment.
- Appeler immédiatement le fournisseur de gaz en employant le téléphone dún voisin. Respecter à la lettre les instructions du fournisseur de gaz.
- Si personne ne répond, appeler le service des incendies.

C. Ne pousser ou tourner le levier d'admission du gaz qu'à la main; ne jamais emploer d'outil à cet effet. Si la manette reste coincée, ne pas tenter de la réparer; appeler un technicien qualifié. Quiconque tente de forcer la manette ou de la reparer peut déclencher une explosion ou un incendie.

D. Ne pas se servir de cet appareil s'il a été plongé dans l'eau, complètement ou en partie. Appeler un technicien qualifié pour inspecter l'appareil et remplacer tout partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

OPERATING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. Set the thermostat to lowest setting.
3. Turn off all power to the appliance.
4. This appliance is equipped with an ignition. device which automatically lights the burner. Do not try to light the burner by hand.
5. Push the gas control lever to "OFF" Position. Do not force.
6. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you then smell gas, STOP! Follow "B" in the safety. information above on this label if you don't smell gas, go to next step.
7. Push gas control lever to "ON".
8. Replace access panel.
9. Turn on all electric power to the appliance.
10. Set thermostat to desired setting.
11. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas company.



MISE EN MARCHE

1. ARRETÊR! Lisez les instructions de sécurité sur la portion supérieure de cette étiquette.
2. Régler le thermostat à la température la plus basse
3. Couper l'alimentation électrique de l'appareil.
4. Cet appareil ménager étant doté d'un système d'allumage automatique, ne pas essayer à allumer le brûleur manuellement.
5. Pousse le levier du contrôle du gaz à "OFF/ ARRET" position.
6. Attendre cinq (5) minutes pour laisser echapper tout le gaz. Renifler tout autour de l'appareil, y compris près du plancher, pour déceler une odeur de gaz. Si c'est le cas, ARRETER! Passer à l'étape B des instructions de sécuritié sur la portion supérieure de cette étiquette. S'il n'y a pas d'odeur de gaz, passer à l'étape suivanté.
7. Pousse le levier du contrôle du gaz à "ON/MARCHE" position.
8. Remettre en place le panneau d'accés.
9. Mettre l'appareil sous tension.
10. Régler le thermostat à la température desirée.
11. Si l'appareil ne se met pas en marche, suiyre les instructions intitulées. Comment coupler l'admission de gaz de l'appereil et appeler un technicien qualifié ou le fourrnisseur de gaz.

TO TURN OFF GAS TO APPLIANCE

1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Push the gas control lever to "OFF" Position. Do not force.
4. Replace control access panel.

POUR COUPER L'ADMISSION DE GAZ DE L'APPAREIL

1. Régler le thermostat à la température la plus basse.
2. Couper l'alimentation électrique de l'appareil s'il faut procéder à des opérations d'entretien.
3. Pousse le levier du contrôle du gaz à "OFF / ARRET" position. Ne pas forcer.
4. Remettre en place le panneau d'accès.

11072712

SAFETY LABELS

DANGER
PELIGRO

CARBON MONOXIDE POISONING HAZARD

Special Warning for Installation of Furnaces or Air Handling Units in Enclosed Areas such as Garages, Utility Rooms or Parking Areas

Carbon monoxide producing devices (such as an automobile, space heater, gas water heater, etc.) should not be operated in enclosed areas such as unventilated garages, utility rooms or parking areas because of the danger of carbon monoxide (CO) poisoning resulting from the exhaust emissions. If a furnace or air handler is installed in an enclosed area such as a garage, utility room or parking area and a carbon monoxide producing device is operated therein, there must be adequate, direct outside ventilation.

This ventilation is necessary to avoid the danger of CO poisoning which can occur if a carbon monoxide producing device continues to operate in the enclosed area. Carbon monoxide emissions can be (re)circulated throughout the structure if the furnace or air handler is operating in any mode.

CO can cause serious illness including permanent brain damage or death.

B10259-216

⚠ WARNING: FIRE, EXPLOSION AND ASPHYXIATION HAZARD	⚠ WARNING: FIRE AND EXPLOSION HAZARD
IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION SERVICE OR MAINTENANCE CAN CAUSE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH, OR EXPOSURE TO SUBSTANCES IN FUEL OR FROM FUEL COMBUSTION WHICH CAN CAUSE DEATH OR SERIOUS ILLNESS, AND WHICH ARE KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER, BIRTH DEFECTS, OR OTHER REPRODUCTIVE HARM. READ AND FOLLOW INSTRUCTIONS AND PRECAUTIONS IN USER'S INFORMATION MANUAL PROVIDED WITH THIS FURNACE. INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED INSTALLER, SERVICE AGENCY OR GAS SUPPLIER.	CAN RESULT IN SERIOUS INJURY OR DEATH. DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE. STORAGE OF OR USE OF GASOLINE OR OTHER FLAMMABLE VAPORS OR LIQUIDS IN THE VICINITY OF THIS OR ANY APPLIANCE CAN RESULT IN SERIOUS INJURY OR DEATH.
⚠ AVERTISSEMENT: RISQUE D'INCENDIE, D'EXPLOSION ET ASPHYXIE	⚠ AVERTISSEMENT:RISQUE D'INCENDIE ET D'EXPLOSION
UN REGLAGE, UNE MODIFICATION, UN RÉPARATION, UN ENRETIEN OU UNE INSTALLATION INCORRECT PUET ENTRAÎNER DES BLESSURES GRAVES OU LA MORT. SUIVRE LES INSTRUCTION ET LES CONSIGNES QUI FIGURENT DANS LA NOTICE D'UTILISATION QUI ACCOMPAGNE CE GÉNÉRATEUR D'AIR CHAUD. L'INSTALLATION ET L'ENTRETIEN DOIVENT ÉTRE EFFECTURÉS PAR UN RÉPARATEUR QUALIFIÉ OU PAR LE FOURNISSEUR DE GAZ.	RISQUE DE BLESSURES GRAVES OU DE MORT. NE PAS ENTREPOSER NI UTILISER DE L'ESSENCE NI D'AUTRES VAPEURS OU LIQUIDES INFLAMMABLES DANS LE VOISINAGE DE CET APPAREIL, NI DE TOUT AUTRE APPAREIL. LE FAIT D'ENTREPOSER OU D'UTILISER DE L'ESSENCE OU D'AUTRES LIQUIDES OU VAPEURS INFLAMMABLES À PROXIMITÉ DE CET APPAREIL OU DE TOUT AUTRE APPAREIL PEUT CAUSER DES BLESSURES GRAVES OU LA MORT.
SEE INSIDE SURFACE OF BURNER COMPARTMENT DOOR FOR LIGHTING/OPERATING INSTRUCTIONS.	FILTER(S) SHOULD BE INSPECTED FREQUENTLY AND CLEANED WHEN NECESSARY. WHEN REPLACEMENT IS REQUIRED BE SURE TO USE THE SAME TYPE (CLASS 1 OR 2) AND SIZE ORIGINALLY INSTALLED AND THAT IT IS U.L.C.* CERTIFIED. *CANADIAN REQUIREMENT
LES INDICATIONS POUR L 'ECLAIRAGE ET LE SERVICE SE TROUVENT A LA SURFACE INTERIEURE LA PORTE DU COMPARTIMENT DU BRULEUR.	LES FILTRES DOIVENT ETRE FREQUEMMENT INSPECTES ET NETTOYES SI NECESSAIRE. REMPLACES-LES DE FILTRES DU MEME TYPE (CLASSE 1 OU 2) ET FORMAT QUE DANS L'EQUIPEMENT ORIGINAL. CERTIFIES PAR LE U.L.C. 22317001

⚠ WARNING

Risk of electric shock or death.

Disconnect remote electric power supply or supplies before servicing.

This compartment must be closed except when servicing.

⚠ AVERTISSEMENT

Danger de choc électrique ou de mort.
Débrancher toute boite á fusibles avant l'entretien.
Ce compartment doit rester ferme, sauf pour l'entretien.

⚠ WARNING

HEATING UNITS SHOULD NOT BE UTILIZED WITHOUT REASONABLE, ROUTINE, INSPECTION, MAINTENANCE AND SUPERVISION. IF THE BUILDING IN WHICH ANY SUCH DEVICE IS LOCATED WILL BE VACANT, CARE SHOULD BE TAKEN THAT SUCH DEVICE IS ROUTINELY INSPECTED, MAINTAINED AND MONITORED. IN THE EVENT THAT THE BUILDING MAY BE EXPOSED TO FREEZING TEMPERATURES AND WILL BE VACANT, ALL WATER-BEARING PIPES SHOULD BE DRAINED, THE BUILDING SHOULD BE PROPERLY WINTERIZED, AND THE WATER SOURCE CLOSED. IN THE EVENT THAT THE BUILDING MAY BE EXPOSED TO FREEZING TEMPERATURES AND WILL BE VACANT, ANY HYDRONIC COIL UNITS SHOULD BE DRAINED AS WELL AND, IN SUCH CASE, ALTERNATIVE HEAT SOURCES SHOULD BE UTILIZED.

B14933-206

If your furnace is not operating or is performing improperly, take time to perform the following checks before requesting service. A couple of simple checks may allow you to avoid a service call. If the following steps do not resolve the problem, contact a qualified servicer for further troubleshooting and/or repairs. Do not attempt troubleshooting beyond that which is outlined below. Do not attempt repairs yourself.

- Check the blower compartment sight glass. If LED is flashing, record the number of flashes seen in sequence, shutdown your unit as outlined in the "Furnace Start-up" section and contact a qualified servicer for further troubleshooting and/or repairs. Refer to Installation Instructions for code identification. If not flashing, continue with checks.
- Check thermostat for proper operation. Verify that it is set on HEAT and that temperature (above room temperature) setting is appropriate.
- Check fuse or circuit breaker in furnace electrical circuit. Replace as necessary.
- Check to see that the manual gas shut-off valve external to the furnace is in the ON position. If the valve is in the OFF position, turn the gas ON following the start up procedures outlined in the "Furnace Start-up" section.
- Check for dirty filter(s). This in the most common cause of improper furnace operation. Replace or clean filters as necessary.
- Check for blocked return air or supply air grilles throughout you home. Grilles may be blocked by furniture, drapery, clothes, carpeting, etc. Clear any blockage.

Most questions can be answered by your local dealer. For additional information, please call:

Chas Roberts
AIR CONDITIONING & HEATING

(602) 943-3426

9828 North 19th Avenue
Phoenix, AZ 85021-1992

(520) 292-6858

4065 East Illinois Street
Tucson, AZ 85714-2106

www.ChasRoberts.com

To obtain the proper labels, the Model Number and Serial Number of the unit must be supplied. These numbers are recorded on the nameplate of the furnace. For convenience, record this information here:

MODEL NUMBER: _ _ _ _ _ _ _ _ _ _ _ _ _ _

CONSUMER INFORMATION LINE
TOLL FREE
1-877-254-4729 (U.S. only)
email us at: customerservice@goodmanmfg.com
fax us at: (731) 856-1821
(Not a technical assistance line for dealers.)

Outside the U.S., call 1-713-861-2500.
(Not a technical assistance line for dealers.)
Your telephone company will bill you for the call.

Effective: May 2006

LIMITED WARRANTY

Models: GMS8, GDS8, GHS8, GKS9

This heating or air conditioning unit is warranted by Goodman Manufacturing Company, L.P. ("Goodman") to be free from defects in materials and workmanship under normal use and maintenance as described below:

- **To the original registered owner** and his or her spouse ("owner"), the **HEAT EXCHANGER** is warranted for the owner's **LIFETIME** or for so long as the owner owns the home in which the unit was originally installed (whichever ends first), and **all remaining parts** are warranted for a period of **10 YEARS**, except as provided below. These warranties apply only if:
  1) The unit is installed in an owner-occupied, single family residence, and
  2) The unit is properly registered with Goodman online within 60 days after the original installation. To register, follow the instructions found at www.goodmanmfg.com
- If the above warranties do not apply, then the **HEAT EXCHANGER** is warranted for a period of **20 YEARS**, and **all remaining parts** are warranted for a period of **5 YEARS**.

Neither warranty continues after the unit is removed from the location where it was originally installed.

Neither warranty applies to, and no warranty is offered by Goodman on, any unit ordered over the Internet.

The warranty period begins on the date of the original installation. If that date cannot be verified, the warranty period begins three months from the month of manufacture (indicated by the first four digits of the serial number (yymm)).

As its only responsibility, and your only remedy, Goodman will furnish a replacement part, without charge for the part only, to replace any part that is found to be defective due to workmanship or materials under normal use and maintenance. For warranty credit, the defective part must be returned to a Goodman Heating and Air Conditioning products distributor by a state certified or licensed contractor. Any part replaced pursuant to this warranty is warranted only for the unexpired portion of the warranty term applying to the original part.

This warranty does not apply to labor, freight, or any other cost associated with the service, repair or operation of the unit.

This warranty is in lieu of all other express warranties. **ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS WARRANTY.** Some states and provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

GOODMAN SHALL IN NO EVENT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO EXTRA UTILITY EXPENSES OR DAMAGES TO PROPERTY. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you.

Goodman is not responsible for:

1. Damage or repairs required as a consequence of faulty installation or application.
2. Damage as a result of floods, fires, winds, lightning, accidents, corrosive atmosphere or other conditions beyond the control of Goodman.
3. Use of components or accessories not compatible with this unit.
4. Products installed outside the United States or Canada.
5. Normal maintenance as described in the installation and operating manual, such as cleaning of the coils, filter cleaning and/or replacement and lubrication.
6. Parts not supplied or designated by Goodman.
7. Damage or repairs required as a result of any improper use, maintenance, operation or servicing.
8. Failure to start due to interruption and/or inadequate electrical service.
9. Any damage caused by frozen or broken water pipes in the event of equipment failure.
10. Changes in the appearance of the unit that do not affect its performance.

This warranty gives you specific legal rights, and you may also have other rights that may vary from state to state or province to province.

Owner Name _____

Address of Installation _____

City/State-Provinces/Zip-Postal Code

_____

Installer Name _____

City/State-Provinces/Zip-Postal Code

_____

Phone # / Fax # _____

Distributor Name _____

City/State-Provinces/Zip-Postal Code

_____

Phone # / Fax # _____

Model # & Serial # _____

Installation Date _____

Part No. PWCFURNPA
Printed in USA
01/07

For further information about this warranty, contact Goodman Consumer Affairs at **(877) 254-4729** or by mail to 7401 Security Way, Houston, Texas 77040.

Chas Roberts

AIR CONDITIONING & HEATING

The Most Comfortable Call You Can Make!

Chas Roberts Air Conditioning is proud to be a family owned and operated business, serving Arizona since 1942.

As your HVAC system Installer, we can provide you with services to meet all of your Heating and Air Conditioning needs after you have taken possession of your new home:

- Sales
- Service & Repair
- Extended Warranties
- Preventative Maintenance

We are available to speak with you Monday-Friday 7am to 8pm, Saturday 7am to 5pm, and Sunday 9am to 4pm with extended hours during the summer.

Please call, or visit our website, with all of your HVAC questions or concerns.

(602) 943-3426 or (520) 292-6858
www.ChasRoberts.com

ROC19133 ROC069769 ROC073706