

# GAS-FIRED WARM AIR FURNACE

## USER'S INFORMATION MANUAL



### WARNING

#### FIRE OR EXPLOSION HAZARD

FAILURE TO FOLLOW SAFETY WARNINGS EXACTLY COULD RESULT IN SERIOUS INJURY, DEATH OR PROPERTY DAMAGE

- 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



### AVERTISSEMENT

#### RISQUE D'INCENDIE OU D'EXPLOSION

Si les consignes de sécurité ne sont pas suivies à la lettre, cela peut entraîner la mort, de graves blessures ou des dommages matériels.

- Ne pas entreposer ni utiliser d'essence ni autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.
- QUE FAIRE SI UNE ODEUR DE GAZ ES DÉTECTÉE
  - Ne mettre en marche aucun appareil.
  - Ne toucher aucun interrupteur électrique; ne pas utiliser de téléphone dans le bâtiment.
  - Quitter le bâtiment immédiate.
  - Appeler immédiatement le fournisseur de gaz en utilisant le service d'incendie.
- L'installation et l'entretien doivent être effectués par un installateur ou une entreprise d'entretien qualifié, ou le fournisseur de gaz.

**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 THE GAS SUPPLY FAIL TO SHUT OFF OR IF OVERHEATING OCCURS, SHUT OFF THE GAS VALVE TO THE FURNACE BEFORE SHUTTING OFF ELECTRICAL SUPPLY.

Encas de température excessive, ou s'il est impossible de couper l'alimentation en gaz, fermer le robinet manuel d'alimentation en gaz du générateur d'air chaud avant de couper l'alimentation électrique.

#### PROP 65 WARNING FOR CALIFORNIA CONSUMERS



### WARNING

Cancer and Reproductive Harm -  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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### WARNING

TO PREVENT POSSIBLE PROPERTY DAMAGE, PERSONAL INJURY OR DEATH DUE TO ELECTRICAL SHOCK, THE FURNACE MUST BE LOCATED TO PROTECT THE ELECTRICAL COMPONENTS FROM 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. TO REDUCE EXPOSURE OR FOR FURTHER INFORMATION, CONSULT MATERIAL SAFETY DATA SHEETS AVAILABLE FROM THE 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.*

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

## SAFETY SECTION

- THE FURNACE AREA MUST BE KEPT CLEAR AND FREE OF COMBUSTIBLE MATERIALS, GASOLINE, AND OTHER FLAMMABLE VAPORS AND LIQUIDS.
- THE FURNACE MUST BE KEPT FREE AND CLEAR OF INSULATING MATERIAL. EXAMINE THE FURNACE AREA AFTER INSTALLATION AND PERIODICALLY THEREAFTER. EXAMINE THE FURNACE AREA ANY-TIME WORK IS PERFORMED OR INSULATION HAS BEEN ADDED SINCE INSULATING MATERIALS HAVE THE POTENTIAL TO BE COMBUSTIBLE.
- FOR PROPER AND SAFE OPERATION THE FURNACE NEEDS AIR FOR COMBUSTION AND VENTILATION, DO NOT BLOCK OR OBSTRUCT AIR OPENINGS ON THE FURNACE, AIR OPENINGS TO THE AREA IN WHICH THE FURNACE IS INSTALLED, AND THE SPACING'S AROUND THE FURNACE.
- REFER TO THE LIGHTING INSTRUCTION LABEL ON THE FURNACE DOOR AND INFORMATION & ILLUSTRATIONS IN THIS DOCUMENT ON PAGES 5 & 6 FOR LIGHTING AND SHUTTING DOWN THE FURNACE.
- CONTACT A QUALIFIED SERVICE AGENCY SHOULD YOUR FURNACE EVER FAIL TO OPERATE.

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

### 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 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 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 REGARDING PRODUCT LIMITED WARRANTY

Your limited warranty certificate is supplied as a separate document with the unit installed by your contractor. Read the limited warranty certificate carefully to determine what is and is not covered and keep the warranty certificate in a safe place. If you are unable to locate the warranty certificate please contact your installing contractor or contact customer service (877-254-4729) to obtain a copy.

*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 FOR PROPER COMBUSTION AND VENTILATION OF FLUE GASES MUST BE SUPPLIED. MOST HOMES REQUIRE OUTSIDE AIR 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.) could reduce combustion air to the furnace.

If fuel-burning appliances are starved for air, the flue gases produced may not vent outdoors properly. These flue gases may include carbon monoxide.

### ⚠ DANGER



#### 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 automobiles, space heaters, gas water heaters, etc.) should not be operated in enclosed areas such as unventilated garages or utility rooms 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 and a carbon monoxide producing device is operated therein, there must be adequate direct outside ventilation. 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.

### ⚠ DANGER

#### RISQUE D'EMPOISONNEMENT AU MONOXYDE DE CARBONE

Avertissement spécial au sujet de l'installation d'appareils de chauffage ou de traitement d'air dans des endroits clos, tels les garages, les locaux d'entretien et les Stationnements. Évitez de mettre en marche les appareils produisant du monoxyde de carbone (tels que les automobiles, les appareils de chauffage autonome, etc.) dans des endroits non ventilés tels que les d'empoisonnement au monoxyde de carbone. Si vous devez faire fonctionner ces appareils dans un endroit clos, assurez-vous qu'il y ait une ventilation directe provenant de l'extérieur. Les émissions de monoxyde de carbone peuvent être recirculées dans les endroits clos, si l'appareil de chauffage ou de traitement d'air sont en marche. Le monoxyde de carbone peut causer des maladies graves telles que des dommages permanents au cerveau et même la mort.

### ⚠ PELIGRO

#### RIESGO DE INTOXICACIÓN POR MONÓXIDO DE CARBONO

Advertencia especial para la instalación de calentadores o manejadoras de aire en áreas cerradas como estacionamientos o cuartos de servicio. Los equipos o aparatos que producen monóxido de carbono (tal como automóvil, calentador de gas, calentador de agua por medio de gas, etc) no deben ser operados en áreas cerradas debido al riesgo de envenenamiento por monóxido de carbono (CO) que resulta de las emisiones de gases de combustión. Si el equipo o aparato se opera en dichas áreas, debe existir una adecuada ventilación directa al exterior. Las emisiones de monóxido de carbono pueden circular a través del aparato cuando se opera en cualquier modo. El monóxido de carbono puede causar enfermedades severas como daño cerebral permanente o muerte.

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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 may 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 also (where local codes permit) 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 by using 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 a poor seal 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%

## 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 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



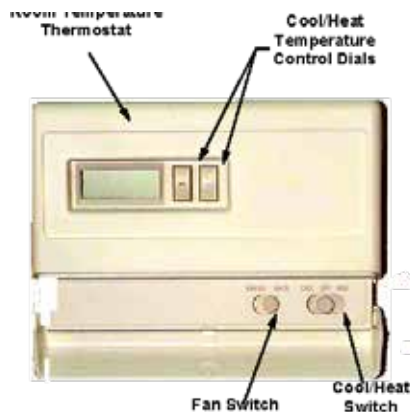
### WARNING

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

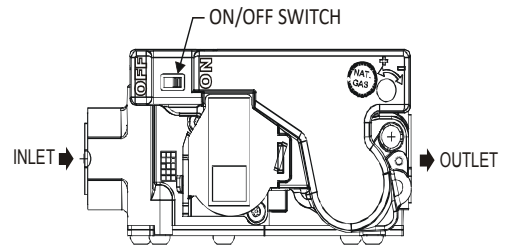
There are many types and styles of thermostats but operation is usually similar. BE SURE TO BECOME FAMILIAR WITH YOUR THERMOSTAT. The simplest type of thermostat only starts and stops the furnace to maintain the desired room temperature. The most widely used types will control both heating and cooling 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 depends 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.



**White-Rodgers Part NO 36J27-519 Modulating Gas Valve**

## 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.

## 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 90, 120, 150, 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 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 greater than 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 air conditioning season.

**! WARNING**

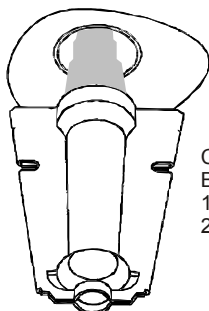
**PERSONAL INJURY OR DEATH MAY RESULT FROM IMPROPER MAINTENANCE PERFORMED BY UNTRAINED PERSONNEL. CALL YOUR INSTALLING DEALER OR OTHER QUALIFIED SERVICE COMPANIES TO PERFORM THE MAINTENANCE INSPECTION.**

**! WARNING**

**TO PREVENT PERSONAL INJURY OR DEATH DUE TO ELECTRIC SHOCK, DISCONNECT ELECTRICAL POWER BEFORE SERVICING THIS UNIT.**

## 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 by a qualified technician. 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 or service as necessary.



Check the Burner Flames for:  
1. Stable, soft and blue.  
2. Not curling, floating or lifting off.

- 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.
- Drainage system. Check for blockage and/or leakage. Check hose connections at and internal to furnace.
- Filters. Check that filters are clean and in the proper placement in the furnace or duct system.

## MOTORS

The combustion air motor and indoor blower motor are permanently lubricated and require no further lubrication.

## FILTERS

**! WARNING**

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

A return air filter is not supplied with this furnace and cannot be installed inside the cabinet; however, a means of filtering all of the return air (intake) 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

Depending on the installation, differing filter arrangements can be applied. Filters can be located in a central return grille or a side panel external filter rack (upflow only). To remove filters from an external filter rack, follow the directions provided with external filter rack kit

### Horizontal Unit Filter Removal

Filters in horizontal installations are located in the central return register or the ductwork near the furnace.

To remove:

1. Turn OFF electrical power to furnace.
2. Remove filter(s) from the central return register or ductwork.
3. Replace filter(s) by reversing the procedure for removal.
4. Turn ON electrical power to furnace.

To remove all other filter configurations, consult with the installing contractor.

## MEDIA AIR FILTER OR ELECTRONIC AIR CLEANER REMOVAL

High efficiency filters are available in both electronic and non-electronic types. These filters can do a better job of catching small airborne particles. Contact your dealer for further information.

If using a 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.

## ***TROUBLESHOOTING/BEFORE YOU REQUEST A SERVICE CALL***

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 in the following bullet points. Do not attempt repairs yourself.

- Check thermostat for proper operation. Verify that it is set on HEAT and that temperature (above room temperature) setting is appropriate.
- Check the electrical panel for tripped circuit breakers or failed fuses. Reset the circuit breakers or replace fuses as necessary.
- Check for dirty filter(s). This is the most common cause of improper furnace operation. Check your filter(s) at least once a month and replace or clean filters as necessary.
- Check for blocked return air or supply air grilles throughout your home. Grilles may be blocked by furniture, drapery, clothes, carpeting, etc. Clear any blockage.
- Check intake and vent terminations on high efficiency furnaces to make sure they are not blocked.



## 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 exactly, a fire or 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.

**OPERATING INSTRUCTIONS**

1. **STOP!** Read the safety information above on this label.
2. Set the thermostat to lowest setting.
3. Turn off all electric 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.

**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.

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**LIRE AVANT DE METTRE  
EN MARCHELIRE**

**AVERTISSEMENT :** Quiconque ne respecte pas à la lettre les instructions dans le présent manuel risque de déclencher un incendie ou une explosion entraînant des dommages 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'appareil 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 sol.

**QUE FAIRE S'IL Y A UNE ODEUR DE GAZ**

- Ne pas tenter d'allumer d'appareils.
- Ne toucher à aucun interrupteur; ne pas vous servir des téléphones dans le bâtiment.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur de gaz.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.

C. Ne pousser ou tourner la manette d'admission du gaz qu'à la main. Ne jamais employer d'outil à cette fin. Si la manette reste coincée, ne tenter pas de la réparer; appelez un technicien qualifié. Quiconque tente de forcer la manette ou de la réparer peut provoquer une explosion ou un incendie.

D. Ne pas se servir de cet appareil s'il a été plongé dans l'eau, même partiellement. Faire inspecter l'appareil par un technicien qualifié et remplacer toute partie du système de contrôle et toute commande qui ont été plongées dans l'eau.

**MISE EN MARCHÉ**


1. **ARRÊTEZ** Lisez les instructions de sécurité dans la section 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 d'allumer le brûleur manuellement.
5. Pousse le levier du contrôle du gaz à "OFF/ ARRET" position.
6. Attendre cinq (5) minutes pour laisser échapper 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, **ARRÊTEZ**. Passer à l'étape B des instructions de sécurité sur la portion supérieure de cette étiquette. S'il n'y a pas d'odeur de gaz, passer à l'étape suivante.
7. Pousse le levier du contrôle du gaz à "ON/MARCHE" position.
8. Remettre en place le panneau d'accès.
9. Mettre l'appareil sous tension.
10. Régler le thermostat à la température désirée.
11. Si l'appareil ne se met pas en marche, suivre les instructions intitulées Comment couper l'admission de gaz de l'appareil et appeler un technicien qualifié ou le fournisseur de gaz.

**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.

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# SAFETY LABELS

	<b>⚠ WARNING</b>
	RISK OF ELECTRIC SHOCK. CAN CAUSE INJURY OR DEATH: DISCONNECT ALL REMOTE ELECTRIC POWER SUPPLIES BEFORE SERVICING. THIS COMPARTMENT MUST BE CLOSED EXCEPT WHEN SERVICING.
	<b>⚠ AVERTISSEMENT</b>
	DANGER DE CHOC ÉLECTRIQUE OU DE MORT. COUPEZ TOUT LE COURANT AVANT TOUT ENTRETIEN OU RÉPARATION. LE COMPARTIMENT DOIT RESTER FERMÉ SAUF PENDANT L'ENTRETIEN.
	<b>⚠ ADVERTENCIA</b>
	PELIGRO DE CHOQUE ELÉCTRICO O MUERTE. DESCONECTE TODAS LAS FUENTES DE ENERGÍA ELÉCTRICA ANTES DE MANTENIMIENTO O SERVICIO TÉCNICO. EL COMPARTIMIENTO DEBE PERMANECER CERRADO EXCEPTO DURANTE EL SERVICIO DE MANTENIMIENTO.
	<b>⚠ WARNING</b>
	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 IS EXPOSED TO FREEZING TEMPERATURES, ALL WATER-BEARING PIPES SHOULD BE DRAINED, THE BUILDING SHOULD BE PROPERLY WINTERIZED, AND THE WATER SOURCE CLOSED. SHOULD THE BUILDING BE EXPOSED TO FREEZING TEMPERATURES, ANY HYDRONIC COIL UNITS SHOULD BE DRAINED AS WELL, AND, IN SUCH CASE, ALTERNATIVE HEAT SOURCES SHOULD BE UTILIZED.
	<b>⚠ AVERTISSEMENT</b>
	UNITÉS DE CHAUFFAGE NE DEVRAIT ÊTRE UTILISÉ SANS RAISONNABLE INSPECTION DE ROUTINE, LA MAINTENANCE ET LA SUPERVISION. SI L'IMMEUBLE DANS LEQUEL UN TEL DISPOSITIF SE TROUVE SERA VACANTE, IL CONVIENT DE VEILLER À CE QUE CE TYPE D'APPAREIL EST RÉGULIÈREMENT INSPECTÉ ET ENTRETENU, ET SURVEILLÉ. DANS LE CAS OÙ L'IMMEUBLE EST EXPOSÉ À DES TEMPÉRATURES DE GEL, TOUTE L'EAU DES TUYAUX DE ROULEMENT DOIT ÊTRE VIDANGÉE. LE BÂTIMENT DEVRAIT ÊTRE CORRECTEMENT URBANISÉ, ET LA SOURCE D'EAU FERMÉE. SI LE BÂTIMENT EST EXPOSÉ À DES TEMPÉRATURES DE GEL, AUCUNE BOBINE HYDRONIQUE UNITÉS DOIT ÊTRE VIDANGÉE AINSI, ET, DANS DE TELS CAS, D'AUTRES SOURCES DE CHALEUR DEVRONT ÊTRE UTILISÉES.
	<b>⚠ WARNING</b>
	FIRE, EXPLOSION, AND ASPHYXIATION HAZARD IMPROPER ADJUSTMENT, ALTERATION, SERVICE, MAINTENANCE OR INSTALLATION CAN CAUSE SERIOUS INJURY OR DEATH. READ AND FOLLOW INSTRUCTIONS AND PRECAUTIONS IN USER'S INFORMATION MANUAL PROVIDED WITH THIS FURNACE. INSTALLATION AND SERVICE MUST BE PERFORMED BY A QUALIFIED SERVICE AGENCY OR GAS SUPPLIER.
	<b>⚠ AVERTISSEMENT</b>
	RISQUE D'INCENDIE ET D'ASPHYXIE UN RÉGLAGE, UNE MODIFICATION, UNE RÉPARATION, UN ENTRETIEN OU UNE INSTALLATION INCORRECTE PEUT ENTRAÎNER DES BLESSURES GRAVES OU LA MORT. SUIVEZ LES INSTRUCTIONS ET LES CONSIGNES DANS LA NOTICE D'UTILISATION QUI ACCOMPAGNE CE GÉNÉRATEUR D'AIR CHAUD. L'INSTALLATION ET L'ENTRETIEN DOIVENT ÊTRE EFFECTUÉS PAR UN RÉPARATEUR QUALIFIÉ OU PAR LE FOURNISSEUR DE GAZ.

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<b>⚠ WARNING: FIRE, EXPLOSION AND ASPHYXIATION HAZARD</b>	<b>⚠ WARNING: FIRE AND EXPLOSION HAZARD</b>
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.
<b>⚠ AVERTISSEMENT: RISQUE D'INCENDIE, D'EXPLOSION ET D'ASPHYXIE</b>	<b>⚠ AVERTISSEMENT: RISQUE D'INCENDIE ET D'EXPLOSION</b>
UN RÉGLAGE, UNE MODIFICATION, UNE RÉPARATION, UN ENTRETIEN OU UNE INSTALLATION INCORRECTE PEUT ENTRAÎNER DES BLESSURES GRAVES OU LA MORT. SUIVEZ LES INSTRUCTIONS ET LES CONSIGNES QUI FIGURENT DANS LA NOTICE D'UTILISATION QUI ACCOMPAGNE CE GÉNÉRATEUR D'AIR CHAUD. L'INSTALLATION ET L'ENTRETIEN DOIVENT ÊTRE EFFECTUÉS 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'ÉCLAIRAGE ET LE SERVICE SE TROUVENT À LA SURFACE INTÉRIEURE LA PORTE DU COMPARTIMENT DU BRÛLEUR.	LES FILTRES DOIVENT ÊTRE FRÉQUEMMENT INSPECTÉS ET NETTOYÉS SI NÉCESSAIRE. REMPLACEZ-LES DE FILTRES DU MEME TYPE (CLASSE 1 OU 2) ET FORMAT QUE DANS L'ÉQUIPEMENT ORIGINAL. CERTIFIÉS PAR LE U.L.C.

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<b>⚠ DANGER</b>

<b>CARBON MONOXIDE POISONING HAZARD</b>
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 automobiles, space heaters, gas water heaters, etc.) should not be operated in enclosed areas such as unventilated garages or utility rooms 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 and a carbon monoxide producing device is operated therein, there must be adequate direct outside ventilation. 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.
<b>⚠ DANGER</b>
<b>RISQUE D'EMPOISONNEMENT AU MONOXYDE DE CARBONE</b>
Avertissement spécial au sujet de l'installation d'appareils de chauffage ou de traitement d'air dans des endroits clos, tels les garages, les locaux d'entretien et les Stationnements. Évitez de mettre en marche les appareils produisant du monoxyde de carbone (tels que les automobiles, les appareils de chauffage autonome, etc.) dans des endroits non ventilés tels que les d'empoisonnement au monoxyde de carbone. Si vous devez faire fonctionner ces appareils dans un endroit clos, assurez-vous qu'il y ait une ventilation directe provenant de l'extérieur. Les émissions de monoxyde de carbone peuvent être recirculées dans les endroits clos, si l'appareil de chauffage ou de traitement d'air sont en marche. Le monoxyde de carbone peut causer des maladies graves telles que des dommages permanents au cerveau et même la mort.
<b>⚠ PELIGRO</b>
<b>RIESGO DE INTOXICACIÓN POR MONÓXIDO DE CARBONO</b>
Advertencia especial para la instalación de calentadores o manejadoras de aire en áreas cerradas como estacionamientos o cuartos de servicio. Los equipos o aparatos que producen monóxido de carbono (tal como automóvil, calentador de gas, calentador de agua por medio de gas, etc) no deben ser operados en áreas cerradas debido al riesgo de envenenamiento por monóxido de carbono (CO) que resulta de las emisiones de gases de combustión. Si el equipo o aparato se opera en dichas áreas, debe existir una adecuada ventilación directa al exterior. Las emisiones de monóxido de carbono pueden circular a través del aparato cuando se opera en cualquier modo. El monóxido de carbono puede causar enfermedades severas como daño cerebral permanente o muerte.

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GOODMAN® BRAND



AMANA® BRAND

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Thank you for your recent purchase. Though not required to get the protection of the standard warranty, registering your product is a relatively short process, and entitles you to additional warranty protection, except that failure by California and Quebec residents to register their product does not diminish their warranty rights.

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

## CONSUMER INFORMATION LINE

TOLL FREE

1-877-254-4729 (U.S. only)

email us at: [customerservice@goodmanmfg.com](mailto:customerservice@goodmanmfg.com)

fax us at: (731) 856-1821

(Not a technical assistance line for dealers.)

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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.

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: \_ \_ \_ \_ \_

Goodman Manufacturing Company, L.P.  
5151 San Felipe, Suite 500, Houston, TX 77056  
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