

# USER'S INFORMATION MANUAL

## CAST IRON GAS-FIRED HOT WATER AND STEAM BOILERS

### WARNING

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

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
  - Do not try to light any appliance.
  - Do not touch any electrical switch; do not use any phone in your building.
  - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
  - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

### WARNING

Assurez-vous de bien suivre les instructions données dans cette notice pour réduire au minimum le risque d'incendie ou d'explosion ou pour éviter tout dommage matériel, toute blessure ou la mort.

- Ne pas entreposer ni utiliser d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.
- **QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:**
  - Ne pas tenter d'allumer d'appareils.
  - Ne touchez à aucun interrupteur. Ne pas vous servir des téléphones dans le bâtiment où vous vous trouvez.
  - Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
  - Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incendies.
- L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.

### WARNING

- There are no user serviceable parts on this boiler. Attempts to service this boiler by someone other than a qualified gas service technician could void the warranty, cause property damage, personal injury or loss of life.
- This boiler has parts containing refractory ceramic fibers (RCF). After the boiler has been fired, RCF may change into crystalline silica, a known carcinogen. See the safety information in the Installation, Operating, and Service Instructions before attempting service or repair.

The following terms are used throughout this manual to bring attention to the presence of hazards of various risk levels.

 **WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in death, serious injury or substantial property damage.

 **CAUTION**

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury or property damage.

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## Basic Operation

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1. Instructions to safely light and shut down this boiler are shown on pages 5 - 7, as well as on a label affixed to the boiler. When the boiler is working properly, this boiler will light and shut down automatically in response to the building thermostats(s). If it does not, the boiler must be inspected by a qualified gas service technician.
2. All boilers are equipped with a means of preventing the boiler from firing if there is an excessive blockage in the vent system. Depending on the type of boiler, one of two means are used:
  - Boilers designed for chimney venting are equipped with a blocked vent switch located as shown in Figure 1 or 2, depending on the specific boiler design. If this switch opens, the boiler will not fire. Call a qualified heating service agency to diagnose and the problem and reset this switch if necessary.
  - Boilers equipped with a fan for sidewall venting are equipped with an air pressure switch that will automatically reset if the blockage is removed. If the boiler fails to fire and the vent terminal on the outside of the building can be safely assessed, inspect the terminal for a blockage such as ice buildup or a nest. If such a blockage is not present, or cannot be safely removed, call a qualified heating service agency to diagnose and correct the problem.
3. All boilers are equipped with a flame rollout switch (Figure 3). This switch will shut the burners down in the event that flames exit the burner compartment through the front opening. If this happens, the flame rollout switch must be replaced. If the boiler fails to fire, call a qualified heating service agency to diagnose and correct the problem.

 **WARNING**

- **A shutdown of the burners due to the blocked vent switch is an indication that there is a problem with the vent system, such as a blockage, or the combustion air supply. The blocked vent switch should only be reset after a qualified gas service technician has diagnosed and corrected the venting/combustion air problem that caused the blocked vent switch to open.**
- **In the event that the flame rollout switch opens, the cause of the flame rollout must be diagnosed and corrected by a qualified gas service technician before the boiler is restarted.**
- **A “tripped” flame rollout switch must be replaced by an identical switch having the same temperature setting.**
- **Should overheating occur or the gas supply fail to shut off, do not turn off or disconnect the electrical supply to the pump. Instead, shut off the gas supply at a location external to the appliance / En cas de surchauffe ou si l'admission de gaz ne peut être coupée, ne pas couper ni débrancher l'alimentation électrique de la pompe. Fermer plutôt le robinet d'admission de gaz à l'extérieur de l'appareil.**
- **Do not use this boiler if any part has been under water. Immediately call a qualified service technician to inspect the boiler and to replace any part of the control system and any gas control which has been under water.**
- **This boiler is equipped with safety devices, which could cause it to shutdown, requiring service to restore normal operation. Where such a shutdown could result in damage from low temperatures (such as frozen pipes), do not leave the heating system unattended during cold weather unless alarms or other safeguards are in place to prevent damage.**

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## Maintenance

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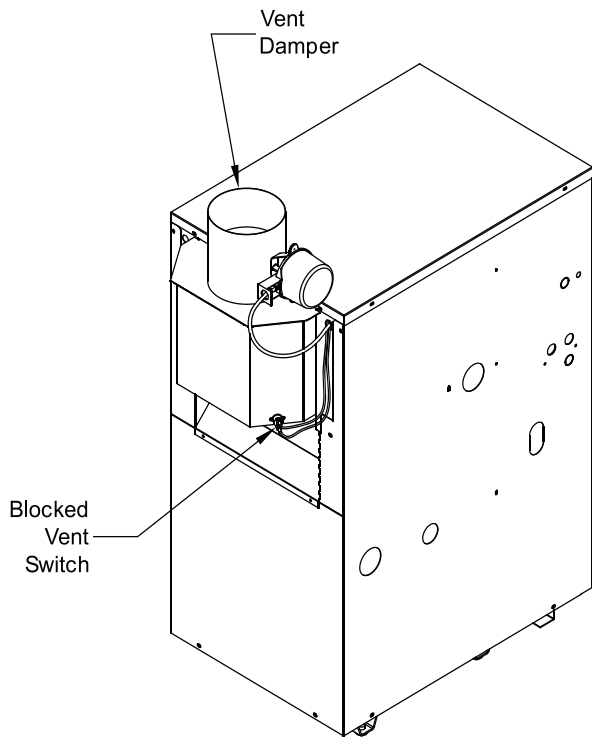
1. Safe reliable operation of this boiler depends upon proper periodic maintenance.
2. The following should be done on a **continuous basis**:
  - Keep the area around the boiler free of objects, which are flammable or which could obstruct the flow of air into and around the boiler.
  - Do not store or use sources of hydrocarbons such as bleaches, fabric softeners, paints, cleaners, refrigerants, and cat boxes near the boiler. Traces of these chemicals can be drawn into the boiler, causing severe corrosion damage to the boiler and/or objectionable odors.
  - Do not expose the boiler to large amounts of dust such as that generated by dry wall construction or woodworking.
3. A qualified gas service technician must perform the maintenance procedure shown in the Installation, Operating, and Service manual on an **annual basis**.
4. The owner should visually inspect the venting system on a **monthly basis**. If any of the following conditions are found, the boiler should be shut down and a qualified gas service technician called to correct the problem before the boiler is placed back in service:
  - Loose joints, corrosion or other deterioration
  - Condensate leakage
  - Sags in horizontal runs of vent pipe
  - (Chimney vent boilers only) Blocked vent switch not surely attached as shown in Figure 1 or 2, as applicable
5. The owner should also perform a **monthly** visual inspection of the boiler and the surrounding system piping. To do this, remove the boiler jacket door. If any of the following are found, a qualified gas service technician should be consulted immediately:
  - Deterioration of the visible controls, wiring, and sheet metal components
  - Heating system water leaks
  - Black carbon (“soot”) in or near the burner compartment area (Figure 3)
6. Steam Boilers – Steam boilers require **occasional** additions of makeup water to replace the small amount of water lost through radiator and system vents. If an automatic water feeder is installed, this device should add enough water on its own for the boiler to operate. If there is no feeder and the boiler needs more water, the yellow “Low Water” light will be illuminated on the low water cut-off located on the side of the boiler. Wait at least 15 minutes for all water in the system to return to the boiler and then open the manual feed valve to add water until the water level is about 6” (about 3/4 of the way) from the bottom of the glass. Consult a qualified gas service technician if you are not sure of the location of the manual feed valve or cannot see the water level in the glass.
7. Auxiliary Controls – Many boilers are installed with equipment not supplied with the boiler, but which is critical for safe, reliable operation of the boiler. Some examples of this type of equipment include zone controls and boiler feed pumps. Make sure that this equipment is maintained in accordance with its manufacturer’s instructions.

### WARNING

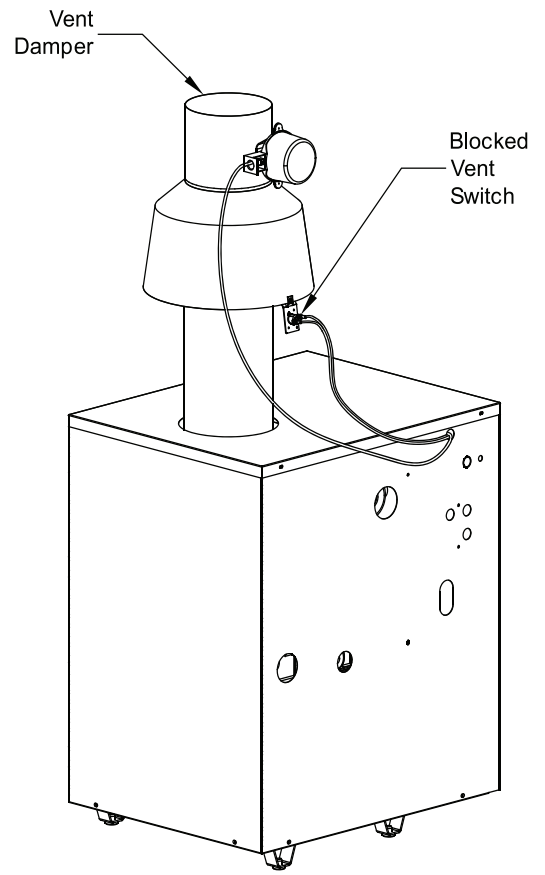
**Black carbon (“soot”) in or near the burner compartment area is an indication of a potential carbon monoxide hazard. If carbon is found, the boiler should be shut down immediately and inspected by a qualified gas service technician. The cause of the sooting should be found and corrected before the boiler is restarted.**

### CAUTION

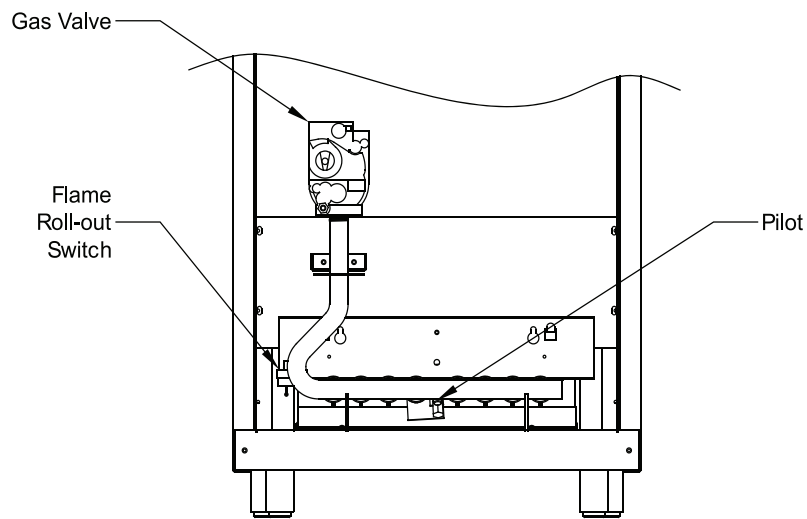
**If it is necessary to either manually or automatically add water to a boiler more than once a month, a qualified gas service technician should inspect the system for leaks or defective vents. Frequent additions of fresh water can result in severe damage to boiler.**



**Figure 1: Boilers with Rear Relief Opening**



**Figure 2: Boilers with Vertical Relief Opening**



**Figure 3: Burner Compartment Area**

# LIGHTING AND SHUTDOWN INSTRUCTIONS (Boilers Equipped with Honeywell VR8204 and VR8304 Gas Valves)

## FOR YOUR SAFETY READ BEFORE OPERATING/POUR VOTRE SECURITE LISEZ AVANT DE METTRE EN MARCHE

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

**AVERTISSEMENT:** Quiconque ne respecte pas à la lettre les instructions dans la présente notice risque de déclencher un incendie ou une explosion entraînant des dommages, des blessures ou la mort.

- A. This appliance 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 knob. Never use tools. If the knob will not turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

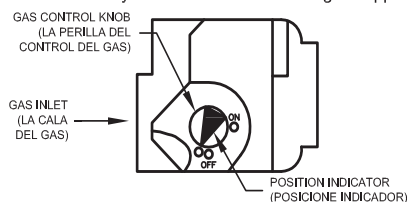
- A. Cet appareil est muni d'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.
- B. AVANT DE FAIRE FONCTIONNER, reniflez tout autour de l'appareil pour déceler une odeur de gaz. Reniflez près du plancher, car certains gaz sont plus lourds que l'air et peuvent s'accumuler au niveau du sol.

### QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:

- Ne pas tenter d'allumer d'appareil.
  - Ne touchez à aucun interrupteur ; ne pas vous servir des téléphones se trouvant dans le bâtiment.
  - Appelez immédiatement votre fournisseur de gaz depuis voisin. Suivez les instructions du fournisseur.
  - Si vous ne pouvez rejoindre le fournisseur, appelez le service des incendies.
- C. Ne poussez ou tournez la manette d'admission du gaz qu'à la main; ne jamais utiliser d'outil. Si la manette reste coincée, ne pas tenter de la réparer; appelez un technicien qualifié. Le fait de forcer la manette ou de la réparer peut déclencher une explosion ou un incendie.
- D. N'utilisez pas cet appareil s'il a été plongé dans l'eau, même partiellement. Faites inspecter l'appareil par un technicien qualifié et remplacez toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

## OPERATING INSTRUCTIONS/INSTRUCTIONS DE FONCTIONNEMENT

1. STOP! Read safety information above (to the left) 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. Remove front door.
6. Locate the gas control valve at the end of the gas supply pipe going into the boiler. The gas control is the brown or blue plastic knob located on top of the gas control valve.
7. Rotate gas control knob clockwise ↻ from "ON" position to "OFF". Make sure knob rests against stop.
8. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above (to the left) on this label. If you don't smell gas, go to the next step.
9. Rotate gas control knob counterclockwise ↻ from "OFF" to "ON". Make sure knob rest against stop. Do not force.
10. Replace front door.
11. Turn on all electric power to the appliance.
12. Set the thermostat to the desired setting.
13. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



1. ARRÊTEZ ! Lisez les instructions de sécurité sur la portion supérieure (à gauche) cette étiquette.
2. Réglez le thermostat à la température la plus basse.
3. Coupez l'alimentation électrique de l'appareil.
4. Cet appareil est équipé de l' dispositif d'allumage qui automobile allume maticallyle brûleur. Ne pas essayer d'allumer le brûleur près main.
5. Enlevez la porte de devant.
6. Localisez la valve du controle du Gaz à la fin du depart de la pipe de la proovision du gaz dans l'appareil. Le bouton plastique brun ou bleu localise sur la valve du controle du gaz. Voyez le diagramme.
7. Faites pivoter le bouton de contrôle du gaz dans le sens inverse ↻ des aiguilles d'une montre de "OFF" pour "ON".
8. Attendre cinq (5) minutes pour laisser échapper tout le gaz. Reniflez tout autour de l'appareil, y compris près du plancher, pour déceler une odeur de gaz, ARRÊTEZ ! Passez à l'étape B des instructions de sécurité sur la portion supérieure (à gauche) cette étiquette. S'il n'y a pas d'odeur de gaz, passez à l'étape suivante.
9. Faites pivoter gas contrôle bouton clockwise ↻ from la position "ON" à "OFF". Assurez-vous que pommeau repose contre stop. Ne forcez pas.
10. Remplacer la porte de devant.
11. Allumer toute l'énergie électrique au appareil.
12. Réglez le thermostat à la température désirée.
13. Si l'appareil ne se met pas en marche, suivez les instructions intitulées "Comment couper l'admission de gaz de l'appareil" et appelez un technicien qualifié ou le fournisseur de gaz.

## TO TURN OFF GAS TO APPLIANCE/COMMENT COUPER L'ADMISSION DE GAZ DE L'APPAREIL

1. Set the thermostat to lowest setting.
  2. Turn off all electric power to the appliance if service is to be performed.
  3. Remove front door.
  4. Rotate gas control knob clockwise ↻ from "ON" position to "OFF". Make sure knob rests against stop.
  5. Replace front door.
1. Regler le thermostat au plus bas regle.
  2. Coupez l'alimentation électrique de l'appareil si le service devrait être exécuté.
  3. Enlever la porte de devant.
  4. Tourner le gaz regle le bouton dans le sens des aiguilles d'une montre à partir ↻ de position a de. Assurer que le se repose contre arete.
  5. Remplacer la porte de devant

# LIGHTING AND SHUTDOWN INSTRUCTIONS

## (Boilers Equipped with Dual Honeywell VR8304 Gas Valves)

### FOR YOUR SAFETY READ BEFORE OPERATING/POUR VOTRE SÉCURITÉ LISEZ AVANT DE METTRE EN MARCHÉ

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

**AVERTISSEMENT:** Quiconque ne respecte pas à la lettre les instructions dans la présente notice risque de déclencher un incendie ou une explosion entraînant des dommages, des blessures ou la mort.

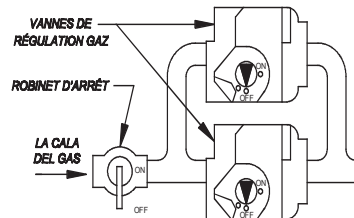
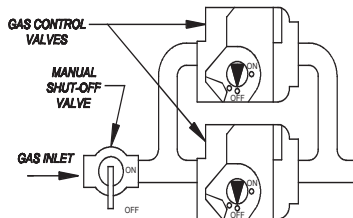
- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- B. **BEFORE OPERATING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- 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 knob. Never use tools. If the knob 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 under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

- A. Cet appareil est muni d'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.
- B. **AVANT DE FAIRE FONCTIONNER** reniflerez tout autour de l'appareil pour déceler une odeur de gaz. Reniflerez près du plancher, car certains gaz sont plus lourds que l'air et peuvent s'accumuler au niveau du sol.
- QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:**
- Ne pas tenter d'allumer d'appareil.
  - Ne touchez à aucun interrupteur ; ne pas vous servir des téléphones se trouvant dans le bâtiment.
  - Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
  - Si vous ne pouvez rejoindre le fournisseur, appelez le service des incendies.
- C. Ne poussez ou tournez la manette d'admission du gaz qu'à la main ; ne jamais utiliser d'outil. Si la manette reste coincée, ne tentez pas de la réparer ; appelez un technicien qualifié. Le fait de forcer la manette ou de la réparer peut déclencher une explosion ou un incendie.
- D. N'utilisez pas cet appareil s'il a été plongé dans l'eau, même partiellement. Faites inspecter l'appareil par un technicien qualifié et remplacez toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

### OPERATING INSTRUCTIONS/INSTRUCTIONS DE MISE EN MARCHÉ

1. STOP! Read 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. Remove front door.
6. Locate manual shut-off valve and both gas control valves at end of gas supply pipe going into boiler.
7. Rotate handle on manual shut-off valve clockwise ↻ from "ON" position to "OFF" position.
8. Rotate gas control knob on BOTH gas valves clockwise ↻ from "ON" position to "OFF" position.
9. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
10. Rotate gas control knob on BOTH gas valves counterclockwise ↺ from "OFF" position to "ON" position. Do Not Force.
11. Rotate handle on manual shut-off valve counterclockwise ↺ from "OFF" position to "ON" position. Do Not Force.
12. Replace front door.
13. Turn on all electric power to the appliance.
14. Set thermostat to desired setting.
15. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

1. ARRÊTEZ ! Lisez les instructions de sécurité sur la portion supérieure de cette étiquette.
2. Réglez le thermostat à la température la plus basse.
3. Coupez l'alimentation électrique de l'appareil.
4. Cet appareil est muni d'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.
5. Enlevez la porte de devant.
6. Placer le robinet d'arrêt et les deux valves de contrôle de gaz à la fin de la tuyau d'alimentation de gaz entrant dans la chaudière.
7. Tourner la poignée manuelle robinet sens horaire ↻ de ON position à OFF position.
8. Tourner le bouton de commande de gaz sur le deux robinets de gaz sens horaire ↻ de ON position à OFF position.
9. Attendre cinq (5) minutes pour laisser échapper tout le gaz. Reniflerez tout autour de l'appareil, y compris près du plancher, pour déceler une odeur de gaz. Si vous sentez une odeur de gaz, ARRÊTEZ ! Passez 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, passez à l'étape suivante.
10. Tourner le bouton de commande de gaz sur les deux robinets de gaz sens antihoraire ↺ de OFF position à ON position. Ne Forcez pas.
11. Tourner la manivelle sur manuel robinet sens antihoraire ↺ de OFF position à ON position. Ne Forcez pas.
12. Remplacez la porte de devant.
13. Mettez l'appareil sous tension.
14. Réglez le thermostat à la température désirée.
15. Si l'appareil ne se met pas en marche, suivez les instructions intitulées « Comment couper l'admission de gaz de l'appareil » et appelez un technicien qualifié ou le fournisseur de gaz.



### TO TURN OFF GAS TO APPLIANCE/COMMENT COUPER L'ADMISSION DE GAZ DE L'APPAREIL

1. Set the thermostat to lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Remove front door.
4. Rotate handle on manual shut-off valve clockwise ↻ from "ON" position to "OFF" position. Rotate gas control knob on BOTH gas valves clockwise ↻ from "ON" position to "OFF" position.
5. Replace front door.

1. Réglez le thermostat à la température la plus basse.
2. Coupez l'alimentation électrique de l'appareil s'il faut procéder à l'entretien.
3. Enlever la porte de devant.
4. Tourner la poignée manuelle robinet sens horaire ↻ de ON position à OFF position. Tourner le bouton de commande de gaz sur le deux robinets de gaz sens horaire ↻ de ON position à OFF position.
5. Remplacez la porte de devant.

# LIGHTING AND SHUTDOWN INSTRUCTIONS (Boilers Equipped with Robertshaw 7000DERHC Series Gas Valves)

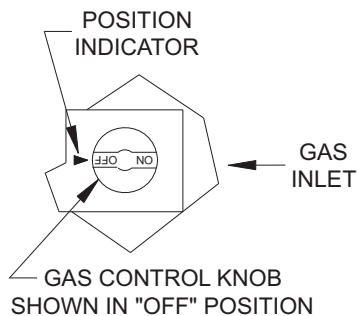
## FOR YOUR SAFETY READ BEFORE LIGHTING

**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 is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- B. BEFORE LIGHTING 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 knob. Never use tools. If the knob 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 under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

## 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 pilot. Do not try to light the pilot by hand.



5. Remove front access panel.
6. Rotate the gas control knob clockwise ↻ to OFF.
7. 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 the next step.
8. Rotate the gas control knob counter clockwise ↶ to "ON".
9. Replace front access panel.
10. Turn on all electric power to the appliance.
11. Set thermostat to desired setting.
12. If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

## 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 in gas control knob slightly and turn clockwise ↻ to "OFF". Do not Force.

