



## ***Finned Copper Tube Gas Boilers (DB) & Water Heaters (DW)***

# **Boiler User's Information Manual**



**WARNING** This manual is intended only for use by a qualified heating installer/technician. Read and follow this manual, all supplements and related instructional information provided with the boiler. Install, start and service the boiler only in the sequence and methods given in these instructions. Failure to do so can result in severe personal injury, death or substantial property damage.

**WARNING** **Do not use the boiler during construction.** Construction dust and particulate, particularly drywall dust, will cause contamination of the burner, resulting in possible severe personal injury, death or substantial property damage. The boiler can only be operated with a dust-free air supply. Follow the instruction manual procedures to duct air to the boiler air intake. If the boiler has been contaminated by operation with contaminated air, follow the instruction manual guidelines to clean, repair or replace the boiler if necessary.

**CAUTION** Affix these instructions near to the boiler. Instruct the building owner to retain the instructions for future use by a qualified service technician, and to follow all guidelines in the User's Information Manual.

**WARNING** If the information in this manual is not followed exactly, a fire or explosion may result causing property, 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 phone outside the building. 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 ou ni d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.**

#### 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.**

**L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.**

**WARNING** Failure to properly vent this unit can cause excessive amounts of carbon monoxide resulting in severe personal injury or death!

**DESIGNED AND TESTED ACCORDING TO A.S.M.E. BOILER AND PRESSURE VESSEL CODE, SECTION IV FOR A MAXIMUM ALLOWABLE WORKING PRESSURE OF 160 PSI, 1103 kPa WATER.**

**CAUTION** Servicing, inspection and adjustment must be done by a trained technician in accordance with all applicable local and national codes. Improper servicing or adjustment can damage the boiler/water heater!

The boiler/water heater should be cleaned and inspected once a year, before each heating season. Make sure that the burner, ignition components and vent system are free from dust, soot, dirt, corrosion or other deposits that would impair the boiler/water heater's performance and safe operation.

**WARNING** Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury (exposure to hazardous materials)\* or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier (who must read and follow the supplied instructions before installing, servicing or removing this boiler. This boiler contains crystalline silica materials that have been identified as carcinogenic to humans when inhaled)\*.

**WARNING** AVERTISSEMENT: Une installation, un réglage, une modification, une réparation ou un entretien non conforme aux normes peut entraîner des dommages matériels, des blessures (exposition à des matières dangereuses) ou la mort. L'installation et l'entretien doivent être effectués par un installateur ou un service d'entretien qualifié ou le fournisseur de gaz (qui doivent avoir lu les instructions fournies avant de faire l'installation, l'entretien ou l'enlèvement de la chaudière et les respecter. Cette chaudière contient des matériaux qui ont été identifiés comme étant cancérogènes ou pouvant l'être).

In Canada, the installation must be in accordance with the requirements of CSA B149.1 or .2, Installation Code for Gas Burning Appliances and Equipment.

The owner should maintain a record of all service work performed with the date and a description of the work done. Include the name of the service organization for future reference.

Direct all questions to your RBI distributor or contact the RBI Customer Service Department, 260 North Elm Street, Westfield, MA 01085 for U.S. or 7555 Tranmere Drive, Mississauga ONT L5S 1L4 for Canada. Always include the model and serial numbers from the rating plate of the boiler/water heater in question.

**WARNING** Never store combustible materials, gasoline or any product containing flammable vapors or liquids in the vicinity of the boiler/water heater. Failure to comply with this warning can result in an explosion or fire causing extensive property damage, severe personal injury or death!

All aspects of the boiler/water heater installation must conform to the requirements of the authority having jurisdiction, or, in the absence of such requirements, to the National Fuel Gas Code, ANSI Z223.1/NFPA 54-latest revision. Where required by the authority having jurisdiction, the installation must conform to the Standard for Controls and Safety Devices for Automatically Fired Boilers, ANSI/ASME CSD-1.

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'alimentation 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.

### OPERATING INSTRUCTIONS

#### FOR YOUR SAFETY READ BEFORE OPERATING

#### POUR VOTRE SÉCURITÉ LISEZ AVANT DE METTRE EN MARCHÉ

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.

Cet appareil est muni d'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.

- 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.

**WARNING** Propane gas may not always be detected by smell. Propane gas is heavier than air and can collect in low areas.

Propane gas can ignite or explode if an ignition source is present and result in death, serious injury and property damage!

#### FOR YOUR SAFETY

- Have only qualified licensed professionals install, service and maintain this appliance and your gas system in accordance with all applicable codes.
- Install a nationally listed combustible gas detector(s) in your home.
- If you suspect a leak:
  1. Have everyone leave the building immediately.
  2. Do not attempt to light any appliance.
  3. Do not touch any electrical or electronic switches in the building.
  4. Do not use any phone in the building.
  5. Call your gas supplier from a phone outside of the building.
  6. If you cannot reach your gas supplier call the fire department.

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 un voisin. Suives les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur, appelez le service de incendies.

- C. 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 that has been under water.

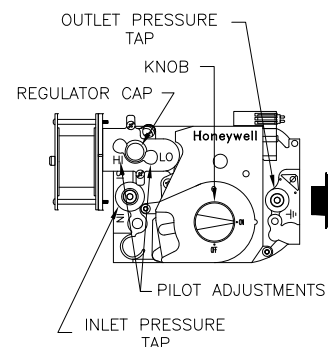
N'utilisez pas cet appareil s'il a été plongé dans l'eau, même partiellement. Faites inspecter l'appareil par un technicien qualifié et remplacez toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

**CAUTION** To prevent being burned, stand clear of the boiler during ignition and don't touch any hot metal parts!

### Operating Instructions

1. **STOP!** Read the safety information above. If, at any time, the appliance will not operate properly, follow the instructions "TO TURN OFF GAS TO APPLIANCE".
2. Set the operating control or thermostat to off or its lowest setting.
3. Turn off all electric power to the appliance.
4. Close the main manual gas shut-off valve, Figure 2.
5. Make sure that the gas supply piping has been purged of air and that all gas joints up to the gas valve have been thoroughly checked for leaks. 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.
6. Remove the upper front jacket panel.
7. Turn the knob on the pilot valve to off.
8. Turn the knob on the main gas valve to off, 300 & 400 models, Figure 1. On 600 through 2100 models close the manual shutoff valve located in the control compartment, Figure 2.
9. Locate pilot and manifold pressure taps in the upper compartment. Remove the 1/8 in screw plugs.
10. Connect a **20 in, 508 mm WC** manometer to each tapping, see Figure 2.

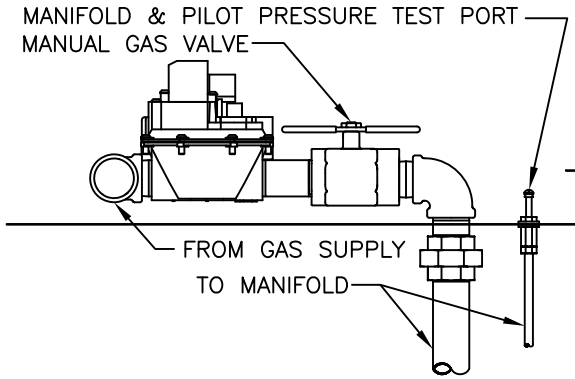
**Figure 1** Pilot Valve (All Models)  
Main Valve (300 & 400 Models)



11. Turn the knob on the pilot valve to on, Figure 1.

12. Turn the knob on the main gas valve to on, 300 and 400 models, Figure 1. On 600 through 2100 models open the manual shutoff valve located in the control compartment, Figure 2.
13. Turn on all electric power to the boiler.

**Figure 2** Manual Valve & Manifold Pressure Tap



14. Set the staging control or thermostat to the desired setting.
15. The pilot should automatically light. Do not try to light the pilot by hand!
16. The burners should light with proper boiler operation.
17. The pilot and manifold pressures should match those listed in Table 1. To adjust the manifold gas pressure see the “Gas Pressure Adjustment” instructions in the “CHECKING AND ADJUSTMENTS” section.

**Table 1** Pilot & Manifold Settings

	Natural Gas	
	inches W.C.	mm W.C.
Low Fire	1.5 ± .02	33 ± 5
High Fire	2.5 ± 0.2	63 ± 5
	LP Gas	
	inches W.C.	mm W.C.
Low Fire	3.9 +/- 0.2	99 ± 5
High Fire	9.3 +/- 0.2	236 ± 5

**Instructions De Mise En Marche**

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. Fermer la vanne manuelle d'arrêt d'alimentation de gaz.
6. 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. 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.
7. Ouvrir la vanne manuelle d'arrêt d'alimentation de gaz.
8. Mettez l'appareil sous tension.
9. Réglez le thermostat à la température désirée.
10. Si l'appareil ne se met pas en marche, suivez les instructions intitulées couper l'admission de gaz de l'appareil et appelez un technicien qualifié ou le fournisseur de gaz.

**To Turn Off Gas To Appliance**

1. Set the operating control or thermostat to its lowest setting.
2. Turn off all electric power to the appliance if service is to be performed.
3. Close the manual main valves.

**COUPER L'ADMISSION DE GAZ DE L'APAREIL**

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. Fermer la vanne manuelle d'arrêt d'alimentation de gaz.



260 North Elm Street  
Westfield, MA 01085  
Phone: (413) 568-9571  
Fax: (413) 568-9613

7555 Tranmere Drive  
Mississauga, Ontario L5S 1L4 Canada  
Phone: (905) 670-5888  
Fax: (905) 670-5782

www.rbiwaterheaters.com

