

USER'S INFORMATION MANUAL SERIES 41K GAS FIRED STEAM AND HOT WATER HEATING BOILER

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.

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.

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.

Information and specifications outlined in this manual in effect at the time of printing of this manual. ECR International reserves the right to discontinue, change specifications or system design at any time without notice and without incurring any obligation, whatsoever.



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**INSTRUCTIONS FOR OPERATION AND MAINTENANCE
OF GAS FIRED HOT WATER HEATING BOILER**

RETAIN FOR FUTURE REFERENCE

SAFETY SYMBOLS & WARNINGS

Maintenance and Service must be completed by qualified agency.

⚠ WARNING

Fire, explosion, asphyxiation and electrical shock hazard. Improper maintenance and service could result in death or serious injury. Read this manual and understand all requirements, including use of qualified agency where directed.

⚠ WARNING

Fire, explosion, and asphyxiation hazard. Before lighting verify boiler contains water visible in gauge glass . Failure to follow these instructions could result in death or serious injury.

Become familiar with symbols identifying potential hazards.



This is the safety alert symbol. Symbol alerts you to potential personal injury hazards. Obey all safety messages following this symbol to avoid possible injury or death.

⚠ DANGER

Indicates a hazardous situation which, if not avoided, WILL result in death or serious injury

⚠ WARNING

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

⚠ CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

Used to address practices not related to personal injury.

⚠ WARNING

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

- This appliance is equipped with an ignition device which automatically lights burner. **Do NOT try to light this burner by hand.**
- Before operating smell all around appliance area for gas. Be sure to smell next to floor because some gas is heavier than air and will settle to the floor.
- **Use only your hand to turn the gas shutoff valve.** Never use tools. If valve will not turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in fire or explosion.
- **Do not use this appliance if any part has been under water.** Immediately call a qualified service technician to inspect appliance and to replace any part of control system and any gas control which has been under water.

⚠ CAUTION

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.

2.2 To Turn Off Gas To Appliance

- Set thermostat to lowest setting.
- Turn **"OFF"** all electric power to appliance if service is to be performed.
- Remove front jacket panel.
- Turn gas shutoff valve handle clockwise to closed position. Handle should be perpendicular to gas pipe. See Figures 2-1 and 2-2.
- Replace front jacket panel.

Operating Instructions

Stop! Read Safety information above.

- Set thermostat to lowest setting.
- Turn **"OFF"** all electrical power to appliance.
- This appliance is equipped with an ignition device which automatically lights the burner. **Do not try to light burner by hand!**
- Remove front jacket panel.
- Turn gas shutoff valve clockwise to closed position. Handle should be perpendicular to gas pipe. See Figures 2-1 and 2-2.
- Wait 5 minutes for any gas to clear. Smell for gas, including near floor. If you smell gas, **STOP!** Follow instructions on this page: **"What To Do If You Smell Gas."** If you do **not** smell gas, go to next step.
- Turn gas shutoff valve counter clockwise ↺ to the open position. Handle should be parallel to gas pipe.
- Replace front jacket panel.
- Turn **"ON"** electrical power to appliance.
- Set thermostat to desired setting.
- If the appliance will not operate, follow instructions TO TURN OFF GAS TO APPLIANCE and call your service technician or gas supplier.

Figure 1 - Honeywell VR8300 Series Gas Valve (300/400 Bases)

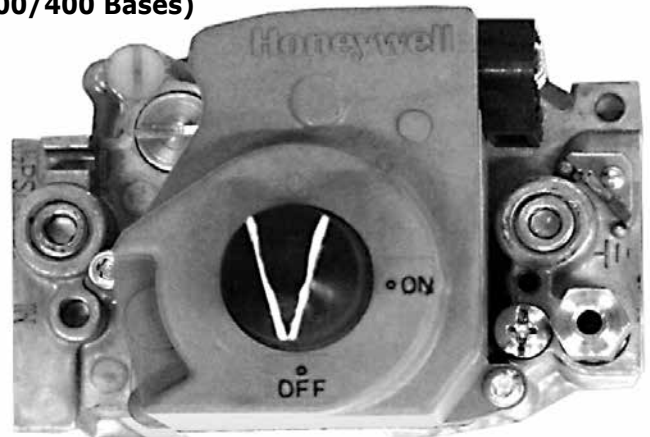
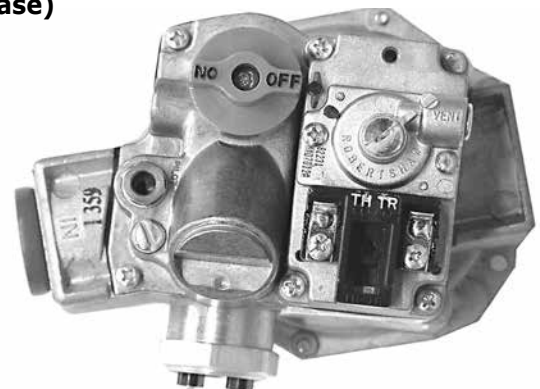


Figure 2 - Robertshaw 7000 DERHC Series Gas Valve (500 Base)



GENERAL INSTRUCTIONS

WARNING

Burn and scald hazard. Discharge of water, vapor and steam may scald. Failure to follow these instructions could result in death or serious injury.

Before the beginning of each heating season have a qualified agency check and clean the boiler.

Check for the following:

1. Flue ways for dirt and scale.
2. Venting flue connectors for plugging, sagging, rust through and solid joints.
3. Burners and pilot for proper flame and operation.
4. Gas piping for leaks.
5. Operation of electronics and wiring condition.
6. Functionality of low water cutoff (*steam*).
7. Functionality of Pressure Control.
8. Water pump oiling (*See manufacturer's manual*).
9. Safety relief valve or safety valve.
10. Blow down.
11. Air vents on steam heaters.
12. Operation of other custom system components.
13. Purge air from water systems.
14. Clean and Flush steam systems, if required, and fill to proper level. (*See Figure #3*)

WARNING

Burn and scald hazard. Discharge of water, vapor and steam may scald. Water and steam are under pressure, open all valves slowly. Failure to follow these instructions could result in death or serious injury.

Perform general housekeeping and maintenance as specified below.

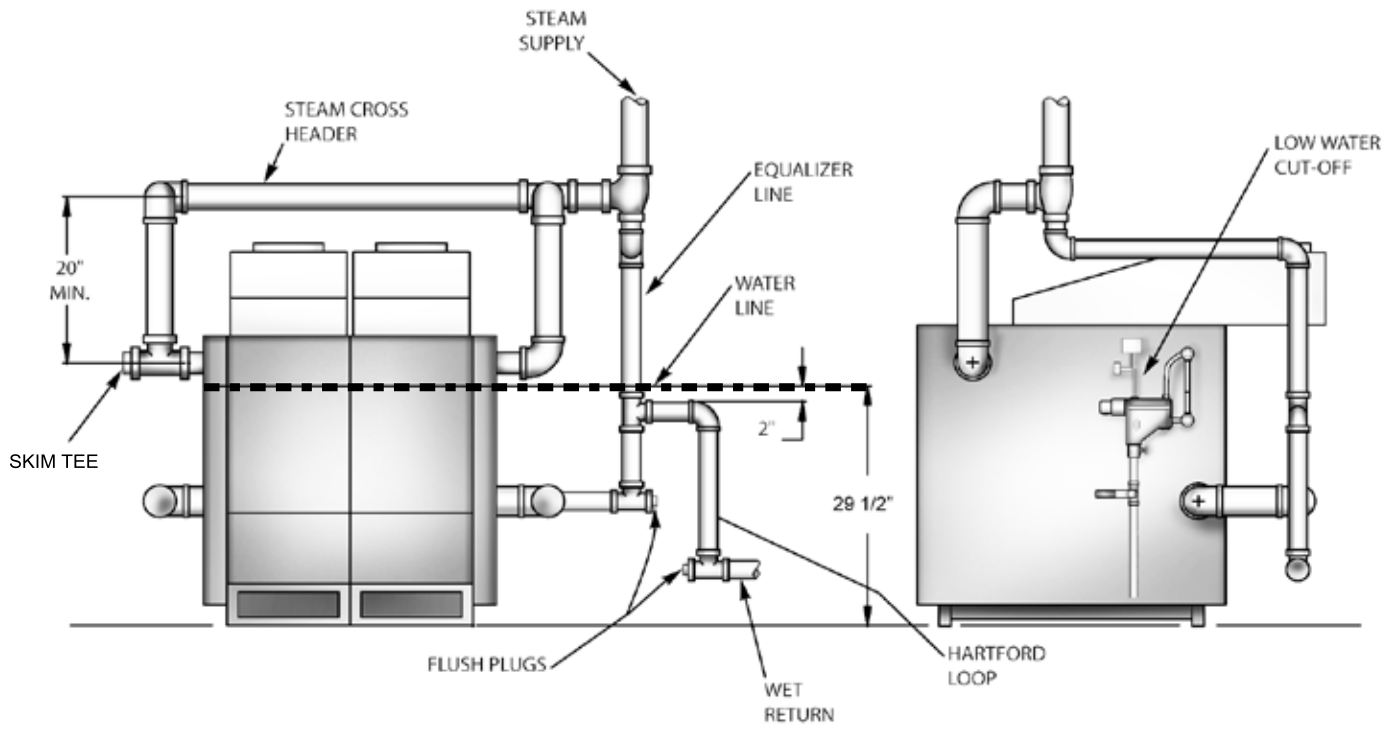
Weekly Maintenance

- Boilers are equipped with safety valve (steam). Refer to manufacture's instructions for operation and maintenance.
- If valve leaks steam when boiler is operating at normal pressure it must be replaced. Contact qualified service agent to replace or repair.
- On steam boilers with manual low water cut-off valves, open purge valve until water flows clear. *See Figure# 3.*

Annually or Beginning of Each Heating Season

- Contact qualified agency to perform maintenance and cleaning per Installation, Operation and Maintenance manual.
- Inspection will include examining all flue product carrying areas, vent system, burner and heat exchanger.
- Filling the boiler if drained as part of End of Heating Season procedure and blowing down the boiler.

Figure 3 - Steam Boiler – Optimum Water Level



Maintain proper water level – Flush manual Low Water Cutoff once a week.

Installer Information

Name:	
Address:	
Phone:	Email: