# **USER'S INFORMATION MANUAL**

# SERIES Cast 92 GAS BOILERS

**TO THE INSTALLER:** This manual is the property of the owner and must be affixed near the boiler for *future reference.* 

TO THE OWNER: This boiler should be inspected annually by a Qualified Service Agency.

**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.

# TO BE COMPLETED BY THE INSTALLER

Service Agency		_ Phone No
Address		
Boiler Model No	Serial No	_ Date of Installation:
<b>o</b> °		
$\sqrt{3}$	PeerlessBoilers.com	
FSC Mixed Sources Product group from well-managed forests and recycled wood or fibre	<b>PB HEAT, LLC</b> 131 S. CHURCH STREET • BALLY, PA 19503	3
Cart no. SCS-COC-001363		C028001 P0 (5/10 1M)

www.fsc.org © 1996 Forest Stewardship Council

#### **Basic Operation**

# 

Service on this boiler should be undertaken only by trained and skilled personnel from a qualified service agency.

# 

Should overheating occur or the gas supply fail to shut off, DO NOT turn off power to the boiler or circulating pump. Instead, shut off the gas supply at the external shut-off valve or other gas shut-off.

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.

# M WARNING

Read and follow all instructions on this page and throughout the User's information manual. Failure to comply could result in severe personal injury, death or substantial property damage.

Installation and service must be performed by a qualified installer, service agency or the gas supplier, following guidelines given in the Installation, Operation and Maintenance Manual and other documents provided with the boiler.

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury (exposure to hazardous materials)\* or loss of life.

\*(This boiler contains crystalline silica materials that have been identified as carcinogenic or possibly carcinogenic to humans when inhaled, refer to the Installation, Operation and Maintenance Manual for details.).

### 

YOU MUST MAINTAIN THE BOILER ACCORDING TO THIS MANUAL

Read and follow the care and maintenance procedures in this manual. As with any piece of equipment, the life and reliability of the boiler and system depend on regular and thorough maintenance.

Failure to properly inspect and maintain the boiler and it's vent, air, and condensate systems can result in excessive levels of carbon monoxide, which can cause severe personal injury or death.



Figure 1: Cast 92-4 Components

# 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 boiler 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 boiler area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor. See below.
- C. Use only your hand to turn the gas valve handle. Never use tools. If the handle 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 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 that has been under water.

#### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- Do not touch any electric switch; do not use any phone in your building.
- If you cannot reach your gas supplier, call the fire department.

### **OPERATING INSTRUCTIONS**

WARNING

Do not attempt to operate this boiler unless it has been started, adjusted and maintained at least annually by a qualified heating service technician.

- 1. **STOP!** Read the safety information above on this label.
- 2. Set the thermostat to lowest setting. Turn off all electrical power to the boiler. Press the boiler ON/OFF switch to **OFF**.
- 3. DO NOT TRY TO LIGHT THE BURNER BY HAND.
- Turn manual gas valve handle clockwise 
  to CLOSE the gas valve. (Gas valve may have lever handle. Valve location will vary by installations.)
- 5. 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. If you don't smell gas, go to the next step.
- 6. Turn manual gas valve handle counterclockwise 🖍 to **OPEN** the gas valve.
- 7. Turn ON all electrical power to the boiler.
- 8. Set the thermostat to its highest setting. Press the ON/OFF switch to **ON**.
- 9. The DISPLAY will cycle through the ignition sequence, and show "RUN" when the boiler is operating.
- 10. If the boiler does not operate, follow the instructions below to "TURN OFF GAS TO BOILER." Call your service technician or gas supplier.



# TO TURN OFF GAS TO BOILER

- 1. Set the thermostat to its lowest setting.

42-5230

2. Turn off all electric power to the boiler if service is to be performed.

**Figure 2: Lighting and Operating Instructions** 

#### Caring for the Cast 92 Boiler and System

#### A. General Housekeeping (Frequently):

- 1. NO gasoline or flammable liquids or vapors in the boiler area.
- 2. NO laundry products, paints, pool chemicals, acids, cements or glues in the boiler area if the boiler uses inside air or near the air intake fitting if air is piped to the boiler.
- **B.** Inspect and Protect the Intake Air (Frequently): DON'T block the boiler air intake or air piping intake fitting.
- C. Inspect and Protect the Vent Piping (Frequently): Check the vent piping to make sure it is intact and that the vent termination is not obstructed.

#### D. Inspect and Protect the Condensate Drain System (Frequently):

- 1. Make sure the condensate line is intact and not obstructed.
- 2. Make sure the condensate pump and neutralization filter are operating correctly and that you are maintaining per the manufacturer's instructions.

# 

Do not operate the boiler with the condensate drain line disconnected. If there is evidence of exhaust leakage from the condensate drain line, turn off the unit and contact a qualified service contractor. These conditions may result in boiler exhaust entering the structure and causing severe personal injury or death from carbon monoxide poisoning and oxygen depletion.

- 3. Check the vent opening at the top of the condensate drain trap assembly. Make sure there are no exhaust emissions escaping from this opening.
- E. Remove and Inspect the Air Filter (Monthly): The boiler includes an air filter to remove particulate from entering air. Remove and clean the filter following the instructions in this manual.
- F. Inspect/Check/Test Water System Components (Every 6 Months): Check the boiler and system piping, the relief valve, and low water cut-off (if one is installed) as directed in this manual.

#### G. Inspect/Check/Test Water System Components (Every Year):

- 1. Have the boiler and heating system serviced and started up at the beginning of every heating season.
- 2. A qualified technician can ensure the boiler and system are operating correctly. Without an annual service call, your boiler and system can develop problems.
- 3. Have the boiler/system water checked by your water treatment specialist.

#### User Maintenance

# 

Service on this boiler should be undertaken only by trained and skilled personnel from a qualified service agency. Inspections should be performed at intervals specified in the Installation, Operation and Maintenance Manual and this User's Information Manual. Maintain manuals in a legible condition.

Keep boiler area clear and free of combustible materials, gasoline and other flammable vapors and liquids.

Do not place any obstructions in boiler room that will hinder flow of combustion and ventilation air.

#### A. Air Inlet Inspection Procedure:

- 1. Air From the Boiler Room. If the boiler air inlet takes air from the boiler room (no air piping connected to the air inlet) the room must have air openings into the room as described in the Installation, Operation and Maintenance Manual. Make sure the air openings are not obstructed.
- 2. Air Piped to Boiler. If boiler air is provided with air piping from outside, make sure the air piping is fully supported with no sags. All joints must be intact. And the air intake fitting outside must be unobstructed and in good condition.
- 3. Make sure that snow, leaves or other debris are not blocking the air inlet.
- 4. Make sure there are no contaminants or flammable materials around the boiler or the air intake.
- 5. If you find any problems with the air inlet system, immediately turn the boiler off and contact your qualified service technician.

#### B. Vent System Inspection Procedure:

- 1. Check the entire run of the vent system where possible.
- 2. The vent pipe should be fully supported with no sags.
- 3. All joints should be intact and secure.
- 4. Make sure the vent outlet is unobstructed and in good condition.
- 5. There should be no signs of corrosion of the vent pipe or indications of dripping water.
- 6. Make sure that snow, leaves or other debris are not blocking the vent outlet.
- 7. If you find any problems with the vent system, immediately turn the boiler off and contact your qualified service technician.

#### C. Checking Water System Components:

- 1. **Pressure/temperature Gauge (on top rear of boiler).** The pressure gauge should never read above about 24 PSIG. Higher pressure probably indicates a problem with the system expansion tank.
- 2. **Relief Valve (on top rear of boiler).** Observe the relief valve and discharge piping. Make sure there are no signs of dripping water. The piping discharge must be unobstructed an located where hot water from the discharge would not pose a hazard to anyone.
- 3. Also inspect any other components if recommended by your qualified service technician.
- 4. Contact your qualified service technician immediately if you see any problems.
- **D. Report Problems Immediately:** If you observe any problems with the boiler or system, immediately consult your qualified service technician.

#### E. Cleaning the Air Filter:

- 1. Turn the boiler on/off switch OFF.
- 2. Remove the three thumb screws that secure the filter access plate (see the illustration below).
- 3. Remove the filter access plate and gasket.
- 4. Pull the filter clamp back and remove the air filter.
- 5. Inspect the filter and the filter enclosure area for dust or debris.
- 6. Clean the filter, if necessary, by washing under running water. Shake off excess water and towel dry.

#### 

If the filter enclosure and blower inlet show signs of drywall dust, construction debris or other deposits, contact your qualified service technician to inspect the boiler. Operating the boiler under these conditions could result in potential serious personal injury, death or substantial property damage.

- 7. If the filter is damaged or cannot be cleaned effectively, obtain a replacement filter from your qualified service technician.
- 8. To replace the air filter, pull the filter clamp back, insert the filter, and allow the clamp to secure the filter in place.
- 9. Replace the filter access cover gasket and access cover.
- 10. Replace the three thumbscrews and finger tighten securely.
- 11. Turn the boiler on/off switch ON.



Figure 3: Cleaning the Air Filter