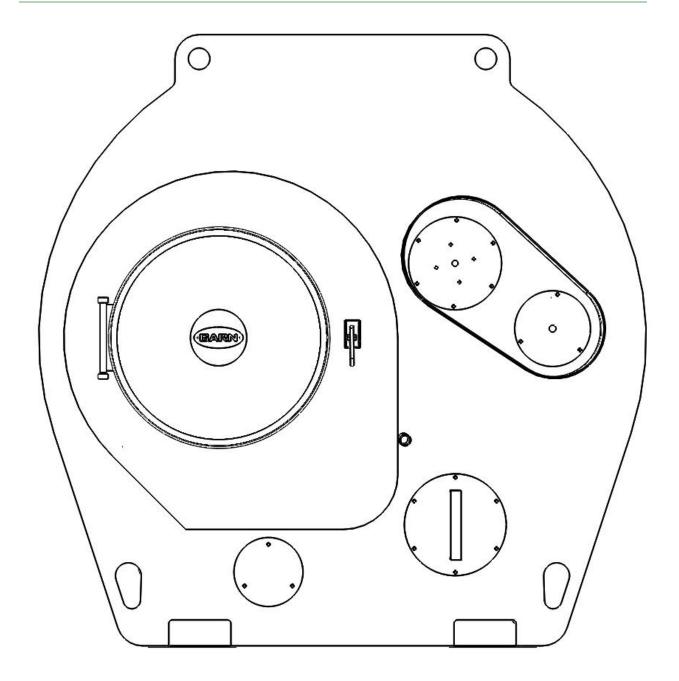
# GARN® WHS 3200 Addendum to the Owner's Manual



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# A. CODES, INSURANCE, AND SAFETY SYMBOLS

The GARN® WHS Wood Heating System is a direct-vented wood-burning appliance that stores heat in a non-pressurized vessel. It is listed by ITS/Warnock Hersey Testing Laboratory, Madison, Wisconsin according to ANSI/UL-391, UL-726, and CAN/USA B366.1-11. It is to be installed according to this manual, on-line technical bulletins, Federal, State and local codes, and your insurance underwriter's guidelines.



The GARN® unit, all related heating equipment (including pumps, piping, fan coils, hot water baseboard, radiant floor heating systems, etc), and all electrical equipment (including power wiring, controls, control wiring, back up electric heating, etc) must be installed by a qualified installer or licensed personnel in strict compliance with all Federal, State and local codes. All electrical equipment, devices and wiring installed with the GARN® unit must be UL/CSA listed. The installer is to supply and install all code required electrical over current and disconnect devices.

Local building and fire inspectors are given discretion to determine if construction and heating installations are safe. They use recommended guidelines developed by various national organizations, such as NFPA (National Fire Protection Association). Your insurance company may also have specific guidelines concerning the installation of wood heating equipment. Follow all local and national codes. The installation must comply with applicable sections of Canadian CSA Standard B365 or U.S. NFPA Standard 211.

The design of the GARN® Wood Heating System is unique and was developed under the following patents: United States Patents #4,401,101 and #4,549,526; Canadian Patents #1,163,880 and #1,220,686.



A **notice** provides a piece of information to make a procedure easier or clearer.



A **caution** emphasizes where equipment damage might occur. Personal injury is not likely.



A **warning** emphasizes areas where personal injury or death may occur but is not likely. Property or equipment damage is likely.



A **danger** emphasizes areas or procedures where death, serious injury, or property damage is likely if not strictly followed

## **HOW TO USE THIS MANUAL**

A standard Owner's Manual is supplied with the smaller GARN® WHS models. All the WHS-3200 components are larger than those shown in the standard GARN® Owner's Manual, but the information is all transferable to the larger model. The GARN® WHS-3200 has a different combustion chamber, door, blower housing, and fittings, but it operates using the same principles of combustion and heat storage.

This *Addendum* to the standard Owner's Manual discusses the differences between the smaller GARN® units and the WHS-3200. This is a short Addendum and should be reviewed before using the standard Owner's Manual. That way you will be familiar with the important differences.

## MAJOR DIFFERENCES BETWEEN WHS-3200 AND SMALLER UNITS:

The combustion chamber design is functionally the same as the smaller WHS models, only larger. The major difference between the WHS-3200 and other WHS models is in the design of the heat exchanger. The hot gases leave the secondary reaction chamber and flow through a short length of single pipe until they reach a multiple tube heat exchanger in the rear of the unit. The gases flow through the multiple-tube heat exchanger to the induced draft motor and then out through the flue.

## **B. UNPACKING THE WHS-3200**

## COMPONENTS PACKED IN THE COMBUSTION CHAMBER

All the items in the combustion chamber are the same as shown in the standard Owner's Manual.

### **COMBUSTION CHAMBER DIFFERENCES**

The combustion chamber is the same basic design as the smaller WHS models, but the WHS-3200 uses a larger 2" firebrick and a 12-inch diameter ceramic secondary reaction chamber in 3 sections.

#### HINGE

The WHS-3200 door hinge has a grease fitting. The hinge should be greased periodically to prevent wear.

## C. INSTALLING THE WHS-3200

All the installation guidelines in the Owner's Manual apply to the WHS-3200. When placing and enclosing the unit use the larger dimensions and weight of the WHS-3200.

All WHS 3200 models utilize a 10" Class A vertical flue. Any brand of Class A flue may be utilized, but the flue must be a packed, insulated stainless steel flue.



#### AIR INSULATED FLUE IS NOT ALLOWED. USE ONLY 10 INCH CLASS A FLUE.

In addition, all flue joints must be sealed with hi-temp silicone during assembly, and the perimeter of each joint sealed with aluminum tape. Flue installation must be in full compliance with the flue

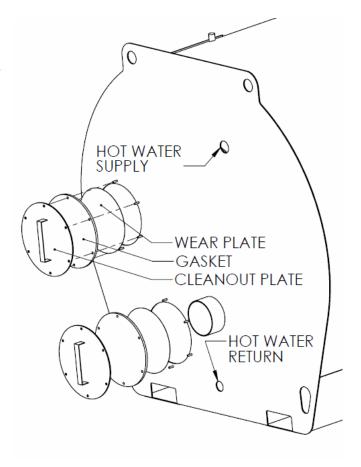
manufacturer's instructions and all federal, state and local codes.

# D. OPERATING & MAINTAINING THE WHS-3200

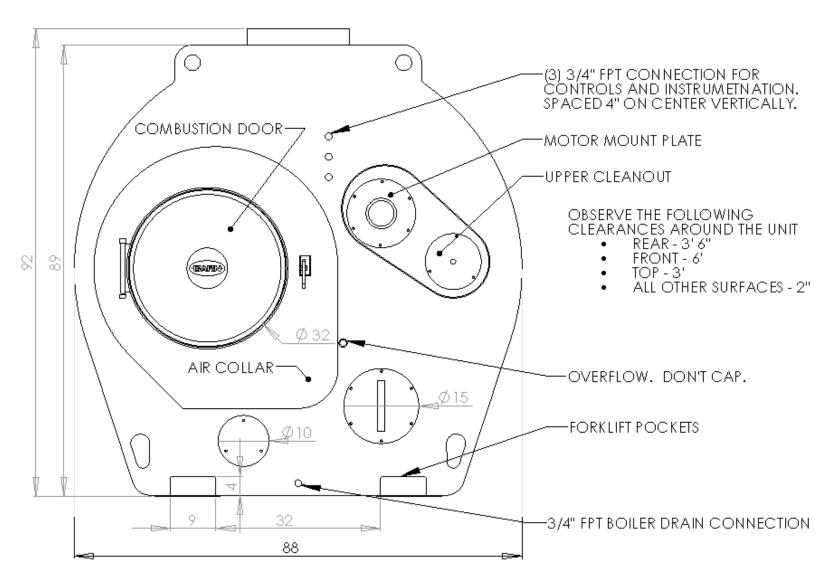
All the information in the Owner's Manual applies to the WHS-3200. The only difference is the access and cleaning of the heat exchanger piping. The diagram at the end of this addendum shows the cleanout locations. Once per heating season, clean the heat exchanger piping using appropriately sized stiff round wire brushes, coupled to standard flexible rod extenders or pull-chains.

Correctly sized wire brushes are available from your GARN® dealer or at <a href="https://www.garn.com">www.garn.com</a>

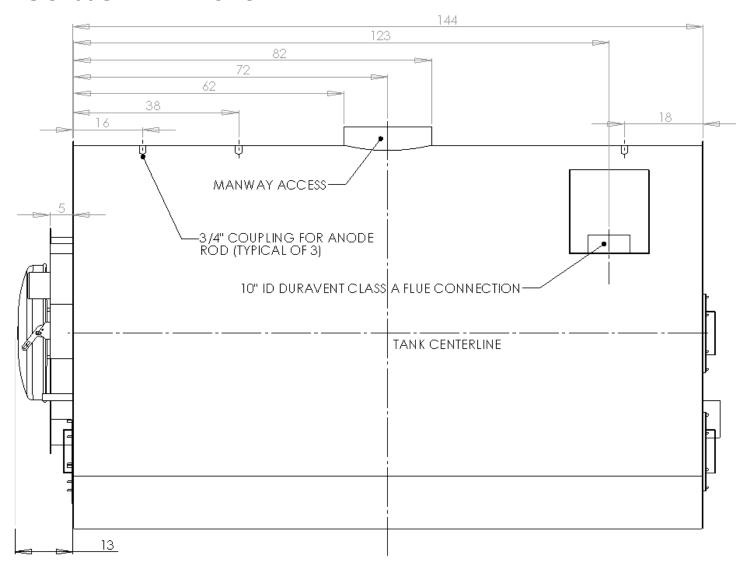
The motor mount plate and inner plate will fit in any position. All of the cleanout plates must be installed with the gasket in good condition. Both rear cleanouts should have the round sheet metal wear plate installed between the gasket and the tank.



# E. WHS-3200 FRONT VIEW OF UNIT



# F. WHS-3200 SIDE VIEW OF UNIT



# **G. WHS-3200 REAR VIEW OF UNIT**

