INSTALLATION, OPERATING AND SERVICE INSTRUCTIONS FOR V7 SERIES OIL FIRED BOILER KNOCKDOWN & PACKAGED HEATING UNITS





As an ENERGY STAR[®] Partner, Burnham Corporation has determined that the V73WR (0.60 GPH), V74WR (0.80 GPH), V75WR (0.90 GPH), and V76WR (1.15 GPH) meet the ENERGY STAR[®] guidelines for Energy efficiency established by the United States Environmental Protection Agency (EPA).





These instructions have been reviewed by ULC and found suitable for use in the installation of ULC labeled V-7 Series Boilers.



The ULC label or listed marking on a product is the only evidence provided by Underwriters' Laboratories of Canada to identify products which have been produced under the listing and follow-up service.

For service or repairs to boiler, call your heating contractor. When seeking information on boiler, provide Boiler Model Number and Serial Number as shown on Rating Label.

Boiler Model Number	Boiler Serial Number	Installation Date				
_V7	6					
Heating Contractor	Phone Number					
Address						



SECTION II: KNOCKDOWN BOILER ASSEMBLY Note: If Boiler is Packaged Go To Section III

A. REMOVAL OF BARE BOILER FROM SKID

- 1. Boiler is secured to base with 4 bolts, 2 on front and 2 on rear, see Figure 2. Remove all bolts.
- 2. Tilt boiler to right and to rear. Using right rear leg as pivot, rotate boiler 90° in a clockwise direction, and lower left side of boiler to floor. Tilt boiler and remove crate skid.



Figure 2

- **B.** MOVE BOILER TO PERMANENT POSITION by sliding or walking.
- **C.** TEST BOILER FOR LEAKS before installing controls, trim, and jacket, and before connecting to heating system.
 - 1. Loosen nuts on tie rods until only finger tight.
 - 2. Install pressure gauge (at least 30 P.S.I. capacity), a hose to the city water and a valve in the supply tapping. Plug remainder of tappings.
 - 3. Fill boiler with water and apply a pressure of at least 10 pounds but no more than 30 pounds gauge pressure.
 - 4. Examine Boiler carefully inside and outside for leaks or damage due to shipment or handling.
- **D.** DRAIN WATER FROM BOILER. Remove gauge, valve and plugs from those tappings to be used. Leave other tappings plugged or bushed according to Figure 4.
- **E.** INSPECT JOINTS BETWEEN SECTIONS. All joints are factory sealed. If there are any spaces due to shipment or handling, seal them with boiler putty.
- **F.** INSPECT FLUE COVER PLATES for tightness. If loose, retighten mounting hardware. If flue plate or sealing insulation is damaged repair or replace as needed.
- G. INSTALL AND SECURE CANOPY with cerafelt gasket and hardware provided to ensure gas tight seal — see Figure 3.
 - 1. Cut two (2) strips 13 ³/₄" lg. from the roll of cerafelt gasket insulation. Place one (1) strip across the top of the front section and the other across the rear

section as shown in Fig. 3. Place gaskets so as not to allow any flueway blockage.

2. Cut the remainder of the roll into two (2) equal pieces. Place each piece along the sides, allowing the ends to overlap the front and rear pieces.

Do not allow any flueway blockage.

3. Position canopy body within the retaining bar which borders the flueway openings on top of the bare boiler block assembly.



BOILER CANOPY INSTALLATION Figure 3

IMPORTANT: Jacket support bracket must be facing left side of boiler — see Figure 3.

- Secure canopy to boiler with two (2) 1/4" 20 x 3" lg. carriage bolts, 1/4" flat washers and 1/4" - 20 wing nuts provided.
- **H.** INSTALL the following steam or water trim that would be concealed or inaccessible after flush jacket is installed, see Figure 4 for boiler tapping locations and usage.
 - 1. STEAM BOILER Top tappings:
 - a. Tapping "L" Install 2" plug in rear section top supply tapping on boiler sizes V73 thru V75.
 - b. Tapping "M" Install ¾" coupling and ¾" x 8" long nipple into ¾" tapping located next to front section top supply tapping — all boiler sizes.
 - 2. WATER BOILER Top tappings:
 - a. Tapping "L" Install 2" plug in rear section top supply tapping on boiler sizes V73 thru V79.



PURPOSE OF TAPPINGS								
Tapping Location S	Size	Steam Boiler		Water Boiler				
		Non-Heater	w/Heater	Non-Heater	Front Heater	Rear Heater		
А	3⁄4 "	PA404A Pressuretrol (Probe LWCO) Plugged (Float LWCO)		L8148A Operating Control	L8124C Operating Control	Flush Plug		
В	1⁄4 "	Pressure/Vacuum Gauge		Temperature/Pressure Gauge				
С	3⁄4 "	Probe LWCO Std. Plugged (Float LWCO)		Flush Plug				
C-C	3⁄4 "	Flush Plug	Flush Plug	Flush Plug				
D	1⁄2 "	Water Gauge Glass (Probe LWCO) Water Gauge Glass, Pressuretrol, and LWCO (Float)		Flush Plug				
F	3⁄4 "		L4006A Operating Control		Disregard	L8124C Operating Control		
G	1½"	Bushed to ¾" for Draincock (Optional Return)		Return				
Н	1½"	Return		Bushed to ¾" for Draincock (Optional Return)				
J	1½"	Surface Blowoff - Plugged		Flush Plug				
К	2"	Front Supply (3 thru 9 Section)		Front Supply (3 thru 9 Section)				
L	2"	Plugged, Optional Second Supply (3 thru 5 Section) Required Second Supply (6 thru 9 Section)		Plugged (3 thru 9 Section)				
М	3⁄4 "	Safety Valve		Relief Valve				
Р	3⁄4 "	Auxiliary Tapping - Plugged		Aux.Tapping - Plugged	Disregard	Aux.Tapping - Plugged		
R	3⁄4 "	Auxiliary Tapping - Plugged		Auxiliary Tapping - Plugged				