

Form # P 04

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK CITY OF PORTLAND

BUILDING INSPECTION PERMIT

Permit Number: 040188

Please Read
Application And
Notes, If Any,
Attached

This is to certify that Smith Stephen L. & /Owner

has permission to Install Burnham/ Beckett Oil fired Boiler at

AT 208 Hope Ave City of Portland, Oregon, License No. 392 A013001

provided that the person or persons who apply for or accept this permit shall comply with all of the provisions of the Statutes of this State and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and when permission proceeds before this building or part thereof is started or otherwise exposed-in-4 HOUR NOT REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

Fire Dept. _____

Health Dept. _____

Appeal Board _____

Other _____

Department Name

Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit Application
 389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 04-0188	Issue Date: MAR 05 2004	COL: 892 A013001
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Location of Construction: 208 Hope Ave	Owner Name: Smith Stephen L &	Owner Address: 142 Lane Ave	Phone: CITY OF PORTLAND
Business Name:	Contractor Name: Owner	Contractor Address: Portland	Phone:
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	Zone:

Past Use: Single Family Home	Proposed Use: Single Family Home/ Install Burnham/ Beckett Oil Fired Boiler in Basement.	Permit Fee: \$66.00	Cost of Work: \$5,000.00	CEO District: 5
Proposed Project Description: Install Burnham/ Beckett Oil Fired Boiler in Basement.		FIRE DEPT: <input type="checkbox"/> Approved <input checked="" type="checkbox"/> Denied	INSPECTION: Use Group: P/10 Type: Heating BOLA Mechanical 199B	
		Signature:	Signature:	
PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)				
Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied				
Signature: _____ Date: _____				

Permit Taken By: Idobson	Date Applied For: 03/03/2004	Zoning Approval		
1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules. 2. Building permits do not include plumbing, septic or electrical work. 3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input type="checkbox"/> Date:	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date:	Historic Preservation <input type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date:	

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 04-0188	Date Applied For: 03/03/2004	CBL: 392 A013001
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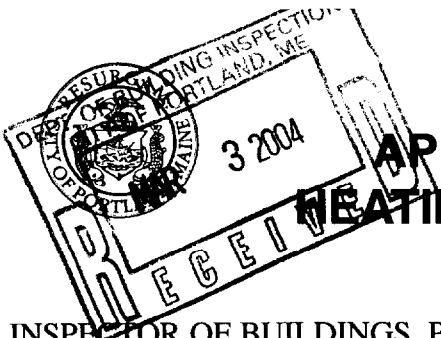
Location of Construction: 208 Hope Ave	Owner Name: Smith Stephen L &	Owner Address: 142 Lane Ave	Phone:
Business Name:	Contractor Name: Owner	Contractor Address: Portland	Phone
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Proposed Use: Single Family Home/ Install Burnham/ Beckett Oil Fired Boiler in Basement.	Proposed Project Description: Install Burnham/ Beckett Oil Fired Boiler in Basement.
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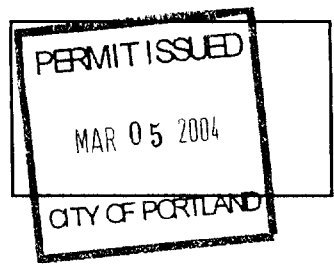
Dept: Zoning **Status:** Approved **Reviewer:** Tammy Munson **Approval Date:** 03/04/2004
Note: **Ok to Issue:**

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 03/04/2004
Note: **Ok to Issue:**

1) Installation shall comply with 1993 BOCA Mechanical Code and State of Maine Oil and Solid Fuel Board Laws and Rules



FILL IN AND SIGN WITH INK



APPLICATION FOR PERMIT HEATING OR POWER EQUIPMENT

To the INSPECTOR OF BUILDINGS, PORTLAND, ME.

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

392 A 13

Location / CBL 208 Hope Ave. Use of Building single family home Date 4-3-04

Name and address of owner of appliance Stephen L. Smith

Installer's name and address Stephen L. Smith, 142 Lane Ave, Portland ME 04103
Telephone 650-9299

Location of appliance:

Basement Floor
 Attic Roof

Type of Fuel:

Gas Oil Solid

Appliance Name: Burner / Becket

U.L. Approved Yes No

Will appliance be installed in accordance with the manufacture's installation instructions? Yes No

IF NO Explain: _____

The Type of License of Installer:

Master Plumber # _____
 Solid Fuel # _____
 Oil # _____
 Gas # _____
 Other Home owner

Type of Chimney:

Masonry Lined
Factory built _____

Metal
Factory Built U.L. Listing # _____

Direct Vent
Type _____ UL# _____

Type of Fuel Tank

Oil
 Gas

Size of Tank 330 gal

Number of Tanks 1

Distance from Tank to Center of Flame 6' 10" feet.

Cost of Work: \$ 5,000

Permit Fee: \$ 66.00

Approved

Fire: _____
Ele.: _____
Bldg.: _____

Signature of Installer [Signature]

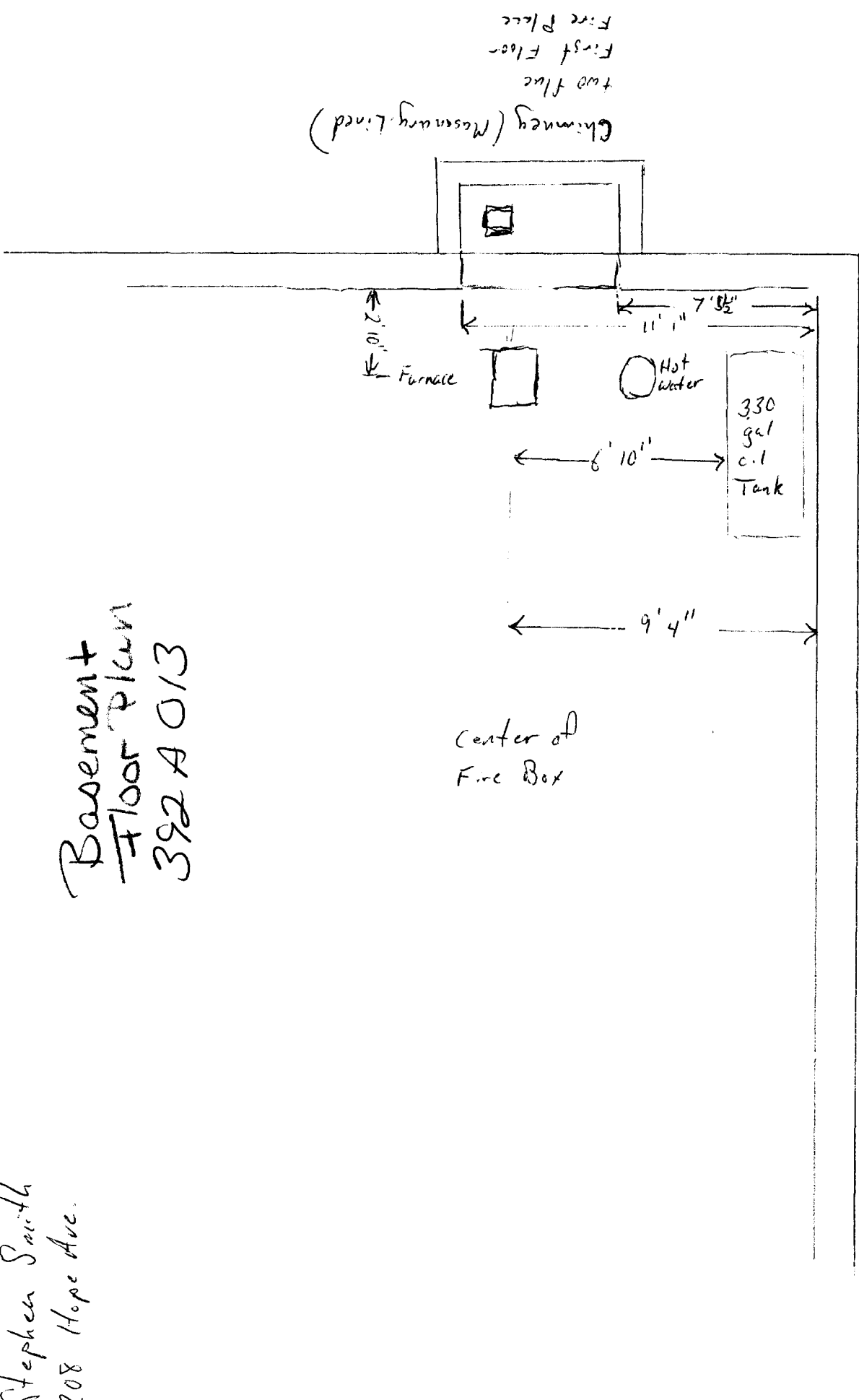
Approved with Conditions

See attached letter or requirement

Inspector's Signature _____ Date Approved _____

Stephen Smith
208 Hope Ave.

Basement Floor Plan 392 A 013



Center of
Fire Box

8' Foundation
Wall

Front (Street Side) of House



Supplemental Instructions Beckett AFG Burner Specifications and Repair Part Revisions V8 Series Oil Boiler

These instructions supplement information contained in *Installation, Operating and Service Instructions for V8 Series Oil-Fired Boiler*, Part No. 8142824. Follow supplemental instructions and details outlined below unless directed otherwise.

WARNING

Prior to attempting any service on this boiler, read, understand and follow all instructions as outlined in this supplement and also the Installation, Operating and Service Instructions which was provided with the boiler.

GENERAL INFORMATION

A. These instructions contain revised information for the Beckett AFG burner specifications and repair parts used on Models V83 and V84 as listed in the following Tables:

TABLE 6: BECKETT AFG BURNER SPECIFICATIONS

Boiler Model	Firing Rate GPH	Beckett AFG				
		Settings			◆ Nozzle	● Pump Pressure
		Head (Setting)	Air Shutter	Air Band	GPH x Angle Type	
V82W	0.60	L1	7	0	0.50 x 60A	140
■ V83S ■ V83WM	0.75	L1	10	.5	0.60 x 60A	140
V83W	1.05	L1	10	1.5	0.85 x 60A	140
V84S V84WM	1.05	V1 (0)	10	.5	0.85 x 60A	140
V84W	1.35	V1 (0)	10	2	1.10 x 60B HAGO	140
V85S V85WM	1.35	V1 (0)	10	1	1.10 x 60B	140
V85W	1.65	V1 (2)	10	5	1.35 x 60B	140
V86S V86WM	1.65	V1 (2)	10	3	1.35 x 60B	140
V86W	1.90	V1 (3)	10	3.5	1.50 x 45B	160
V87S V87W	2.10	V1 (4)	10	3	1.65 x 45B HAGO	170
V88S V88W	2.35	V1 (4)	10	5	1.75 x 45B HAGO	170
V89S V89W	2.60	V1 (6)	10	7	2.00 x 45P HAGO	170

- Beckett builds that utilize a low firing rate baffle:
V83S Packaged Boiler (installed in burner)
V83WM Packaged Boiler [shipped loose; install for low firing rate (0.75 GPH) application]
V83W/S Knockdown Boiler - burner carton [shipped loose; install for low firing rate (0.75 GPH) application]
- ◆ All burners utilize Delavan nozzles unless otherwise noted.
- Single stage fuel pump is standard, two stage fuel pump is optional. Single stage pump pressure was preset by burner manufacturer to settings shown in table above. Two stage pump pressure was factory set at 100 psi and must be readjusted to settings shown above during burner start-up.

BECKETT OIL BURNER PART NOS. FOR V8 SERIES BOILERS

NOTE: When ordering parts always give the serial and model numbers shown on the boiler and burner. Also provide the name of the part(s) and part number as listed below.

Boiler Model	V82	V83	V84	V85
Air Tube Combination	AFG70MB	AFG70MMAQN	AFG70MDAQN	AFG70MD
Beckett's Spec No.	BCB7319	BCB7322V	BCB7325V	BCB7328
Air Band	3626	3492	3492	3492
Air Band Nut	4150	4150	4150	4150
Air Band Screw	4198	4198	4198	4198
Air Shutter	32211	3709	3709	3709
Air Shutter Screw	4198	4198	4198	4198
Blower Wheel	2999	2999	2999	2999
Coupling	2454	2454	2454	2454
Low Firing Rate Baffle	---	5880 [1]	---	---
Bulkhead Knurled Locknut	3-666	3-666	3-666	3-666
Connector Tube Assembly	5636	5636	5636	5636
Electrode Clamp	1-49	1-49	1-49	1-49
Electrode Clamp Screw	4219	4219	4219	4219
Electrode Insulator Assembly	5780	5780	5780	5780
Spider Spacer Assembly	5-503	5-503	5-503	5-503
Escutcheon Plate	3493	3493	5941	5941
Adjusting Plate Assembly	---	---		
Head	5912	5912	5913	5913
Head Screws	4221	4221	4221	4221
Flange Gasket	31498	31498	31498	31498
AFG Housing	5877	5877	5877	5877
Motor	21805	21805	21805	21805
Nozzle Adapter	2-13	2-13	2-13	2-13
Nozzle Line Electrode Assembly	NL70MB	NL70MM	NL70MD	NL70MD
Oil Pump, Clean Cut	2184404U	2184404U	2184404U	2184404U
Static Plate	3384	3384	3383P	3383P
Ignitor	51771U	51771U	51771U	51771U
Ignitor Hinge Screw	4217	4217	4217	4217
Ignitor Holding Screw	4292	4292	4292	4292
Ignitor Gasket Kit	51304	51304	51304	51304
Wire Guard	10251	10251	10251	10251
Junction Box	5770	5770	5770	5770
Flame Detector	7006	7006	7006	7006
Oil Solenoid Valve Coil	21755	21755	21755	21755
Oil Solenoid Valve Cord	21807	21807	21807	21807

[1] 5880 used on V83S and V83WM firing rates only

(continued on Next Page)

BECKETT OIL BURNER PART NOS. FOR V8 SERIES BOILERS (continued)

NOTE: When ordering parts always give the serial and model numbers shown on the boiler and burner. Also provide the name of the part(s) and part number as listed below.

Boiler Model	V86	V87	V88	V89
Air Tube Combination	AFG70MD	AFG70MD	AFG70MD	AFG70MD
Beckett's Spec No.	BCB7331	BCB7332	BCB7333	BCB7334
Air Band	3492	3492	3492	3492
Air Band Nut	4150	4150	4150	4150
Air Band Screw	4198	4198	4198	4198
Air Shutter	3709	3709	3709	3709
Air Shutter Screw	4198	4198	4198	4198
Blower Wheel	2999	2999	2999	2999
Coupling	2454	2454	2454	2454
Low Firing Rate Baffle	---	---	---	---
Bulkhead Knurled Locknut	3-666	3-666	3-666	3-666
Connector Tube Assembly	5636	5636	5636	5636
Electrode Clamp	1-49	1-49	1-49	1-49
Electrode Clamp Screw	4219	4219	4219	4219
Electrode Insulator Assembly	5780	5780	5780	5780
Spider Spacer Assembly	5-503	5-503	5-503	5-503
Escutcheon Plate	5941	5941	5941	5941
Adjusting Plate Assembly				
Head	5913	5913	5913	5913
Head Screws	4221	4221	4221	4221
Flange Gasket	31498	31498	31498	31498
AFG Housing	5877	5877	5877	5877
Motor	21805	21805	21805	21805
Nozzle Adapter	2-13	2-13	2-13	2-13
Nozzle Line Electrode Assembly	NL70MD	NL70MD	NL70MD	NL70MD
Oil Pump, Clean Cut	2184404U	2184404U	2184404U	2184404U
Static Plate	3383P	3383P	3383P	3383P
Ignitor	51771U	51771U	51771U	51771U
Ignitor Hinge Screw	4217	4217	4217	4217
Ignitor Holding Screw	4292	4292	4292	4292
Ignitor Gasket Kit	51304	51304	51304	51304
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Flame Detector	7006	7006	7006	7006
Oil Solenoid Valve Coil	21755	21755	21755	21755
Oil Solenoid Valve Cord	21807	21807	21807	21807

INSTALLATION INFORMATION

BECKETT CLEAN CUT FUEL UNIT

Part No. 21844

Part No. 21844

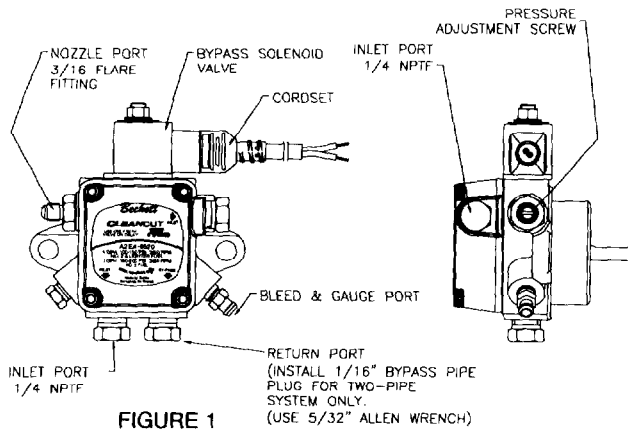


FIGURE 1

Notice Special Requirements

CAUTION: This Equipment must be installed, adjusted and started only by a qualified service technician. – an individual or agency, licensed and experienced with all codes and ordinances, who is responsible for the installation and adjustment of the equipment. The installation must comply with all local codes and ordinances and with the National Fire Protection Standard for Liquid Fuel Equipment, NFPA 31 (or CSA B139-M91).

CAUTION: This pump must be used with a control system that provides a valve on delay (pre-purge).

Generation Information • ALL SYSTEMS

IMPORTANT INFORMATION Long or oversized inlet lines may require the pump to operate dry during initial bleeding period. In such cases, the priming may be assisted by injecting fuel oil in the pump gearset. Under lift conditions, lines and fittings must be air tight. To assure this, "Pipe Dope" may be applied to both the used and unused inlet and both return fittings. **DO NOT USE TEFLON TAPE!! DO NOT USE COMPRESSION FITTINGS!!**

MOUNTING POSITION Beckett CleanCut fuel unit may be mounted in any position (except upside-down during single pipe installation).

VACUUM CHECK A Vacuum Gage may be installed in either of the 1/4" NPT inlet ports. The Beckett CleanCut pump should be used where the vacuum does not exceed 6" hg. single pipe and 12" hg. two pipe. Remember, running vacuum is the total of all pressure drops (ΔP) in the system from tank to inlet of pump.

PRESSURE CHECK When a pressure check is made use either the BLEED PORT OR NOZZLE PORT.

CUTOFF CHECK To check cutoff pressure, dead head a pressure gage in nozzle port. Run burner for short period of time. Shut burner off. The pressure will drop and hold above zero.

•CAUTION•

Pressurized or gravity feed installations must not exceed 3 P.S.I. on inlet line or return line at the pump per NFPA 31. A pressure greater than 10 P.S.I. may cause damage to the shaft seal.

Mounting Pump

To install a CleanCut fuel unit on chassis with existing shutter tab see Figure 2 and follow these steps:

Remove existing fuel unit and solenoid valves, if applicable, and appropriately dispose of them.

Note the air setting of the shutter, then remove the air shutter, set the shutter aside to be reinstalled.

Remove the shutter tab by using a pair of side cutter pliers and file sharp edges flush with burner surface. This will permit the shutter to be locked securely.

Install the air shutter using one screw located above the shutter tab that was removed. Adjust the shutter to the original air setting and tighten screw securely.

Notice. Do not install the top shutter screw, it will interfere with the solenoid on the fuel unit.

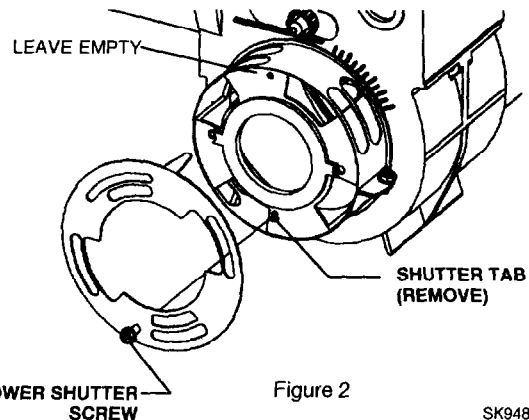


Figure 2

SK9484

To install a CleanCut fuel unit on a housing with two upper mounting screw holes, make sure the upper screw is installed in the hole closest to the front of the burner (air tube side). See Figure 3.

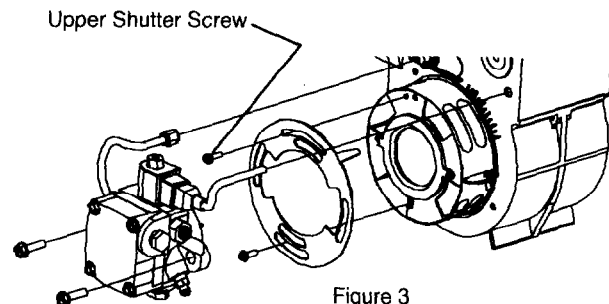


Figure 3

SK9485

392 A 013

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 04-0188	Date Applied For: 03/03/2004	CBL: 392 A013001
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Location of Construction: 208 Hope Ave	Owner Name: Smith Stephen L &	Owner Address: 142 Lane Ave	Phone:
Business Name:	Contractor Name: Owner	Contractor Address: Portland	Phone:
Lessee/Buyer's Name	Phone:	Permit Type: HVAC	

Proposed Use: Single Family Home/ Install Burnham/ Beckett Oil Fired Boiler in Basement.	Proposed Project Description: Install Burnham/ Beckett Oil Fired Boiler in Basement.
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Dept: Zoning **Status:** Approved **Reviewer:** Tammy Munson **Approval Date:** 03/04/2004
Note: **Ok to Issue:**

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 03/04/2004
Note: **Ok to Issue:**

1) Installation shall comply with 1993 BOCA Mechanical Code and State of Maine Oil and Solid Fuel Board Laws and Rules