INSTALLATION OF BECKETT COMBUSTION AIR VENT KIT # AOPS7482

This kit is to be used for connection of outside combustion air to the oil furnace.

NOTICE: Installation <u>must</u> be performed by a qualified service technician.

NOTICE: Installer is required to supply the 4" inlet air pipe (dryer vent, metal vent, etc.) Maximum 18' between the vent terminal and the oil burner air boot.

- 1: Unpack contents and confirm all items have been packed. Remove burner from mounting plate.
- 2: Determine which side of furnace the combustion air supply will enter. Remove the knock out at lower left or lower right of the vestibule, depending on the selected side.
- **3:** Affix the 4x3 reducer to the side casing using the prepunched holes in the reducer with screws provided.
- **4:** Connect the 4" side of the reducer to the 4" inlet air vent pipe (supplied by the installer) running to the Combustion Air Hood. (Refer to Combustion Air Hood installation instructions on reverse side)
- **5:** Insert the Beckett Inlet Air Boot on the pump side of the burner. The pump will need to be removed to apply the boot. See instruction sheet from Beckett for installing the boot. NOTE: The Inlet Air Boot is to be installed at a 30⁰ angle towards the front of the furnace to provide clearance of the air boot to the bottom of the furnace.
- **6:** Return the burner to the mounting plate and tighten. Re-attach wiring and oil lines.
- 7: Attach Air Boot Adaptor fitting to inlet of air boot. Clamp 3" flexible hose to this fitting with hose clamps provided. For right hand installation, trim 3" flex hose to run between air boot and casing reducer. For left hand installation, route 3" flex hose across the <u>top</u> of the burner to the casing reducer on the left side of the furnace. NOTE: Route 3" flex hose so as <u>not</u> to contact oil burner mounting plate, overheating of hose may occur.
- **8:** Secure 3" flex hose in position with wire tie and tie mount to keep flex hose from contacting mounting plate.
- **9:** Check combustions after installing vent kit.

Recommended CO2:

	MAXIMUM VENT 15	MINIMUM VENTS
LOW FIRE	11 ½ % CO2	11 ½ % CO2
MID FIRE	11 % CO2	11 ½ % CO2
HIGH FIRE	11 % CO2	11 % CO2

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SMOKE- (0-TRACE)

<u>INSTALLATION OF COMBUSTION AIR HOOD</u>

This combustion air hood is designed as an outside air termination for use with an Oil furnaces to utilize outside air for combustion.

Uncarton the combustion air hood and inspect for damage from shipping. If extensive shipping damage is evident, contact Supplier to determine how best to proceed.

1: Locate the position of the hood so it will comply with the clearances below. If used in conjunction with a power vent system it must also comply with the clearances identified in the power vent installation instructions. Clearance to an exhaust terminal or fan assisted exhaust terminal on the home is 48 inches min. Clearance vertically should be 18" minimum and at least 12" above maximum expected snow accumulation level. Horizontal clearance to shrubs, bushes or foliage is 10 inches min.

2: Determine the length of 4-inch diameter pipe needed and refer to chart below.

MAXIMUM 4-INCH SMOOTH ROUND INTAKE DUCT LENGTH			
BTU INPUT Max. Vent Lgth* (ft.) w/ Vent Hood	70,000-100,000	100,000-175,000	
18 FEET	X		
15 FEET		X	

^{*} Reduce the max vent length by 20% if corrugated tubing is used.

NOTICE: DO NOT use this chart for flexible, spiral or corrugated duct.

NOTICE: Each 90° elbow will reduce the total length by six feet. Each 45° elbow will reduce the total length by three feet.

3: Install hood on outside wall by drilling a 4-inch hole (inside wall cover plate may be used as template) and inserting hood through from the outside. Silicone caulking may be used to seal around the 4-inch tube and exterior hole. Fasten four corners of hood to siding using corrosion resistant screws of appropriate length and size (not provided). Install inside wall cover plate using screws of appropriate length and size (not provided).

NOTICE: If the combustion air piping is installed in a warm humid place such as a laundry room or above a suspended ceiling, it must be insulated with a 1.0 inch foil faced (foil face up) insulation or it's equivalent to prevent condensation.

4: Install 4-inch diameter pipe from air hood to burner intake boot supporting pipe at least every four feet of horizontal length. Make sure all safety components on furnace and burner are operating correctly.