Installation Instructions

NOTE: Read the entire instruction manual before starting the installation.

SAFETY CONSIDERATIONS

Recognize safety information. This is the safety-alert symbol \triangle . When you see this symbol on the furnace and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

Wiring MUST be in accordance with CSA C22.1 and any other applicable federal, provincial and local code requirements.

For installations in the USA, all wiring shall be in accordance with the ANSI/NFPA70and applicable local codes.

A WARNING

FIRE, CARBON MONOXIDE POISONING HAZARD

Failure to follow this warning could result in property damage, personal injury or death.

The Blocked Vent Shut-Off **MUST** be inspected and maintained annually by a qualified agency.

INTRODUCTION

In Canada, the Blocked Vent Shut-Off System (BVSO) is required for installation with an oil-fired appliance that normally operates with its vent system under negative pressure. For increased safety, it is also strongly recommended for U.S. installations. This device is intended to detect a blocked vent system, respond to hot flue gases backing up through its heat transfer tube, and to shut off the oil burner. The Blocked Vent Shut-Off requires manual resetting.

DESCRIPTION AND USAGE

The KLABV0301DET blocked vent shut-off kit contains the following items:

Item	Qty.
Blocked vent shut-off system	1
Wiring harness	1
J straps	2
Self tapping screws	6
Installation instructions	1

The electrical rating for this kit is 120 VAC - 5 FL AMPS.

INSTALLATION

This device MUST be installed by a qualified agency in accordance with the manufacturer's installation instructions.

The definition of a qualified agency is: any individual, firm, corporation or company which either in person or through a representative is engaged in, and is responsible for, the installation and operation of oil appliances, who is experienced in such work, familiar with all the precautions required, and has complied with all the requirements of the authorities having jurisdiction.

▲ WARNING

FIRE, EXPLOSION, ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury, death, and/or property damage.

These instructions are intended to be used by qualified personnel who have been trained in installing this type of furnace. Read installation instructions completely before proceeding with the installation.

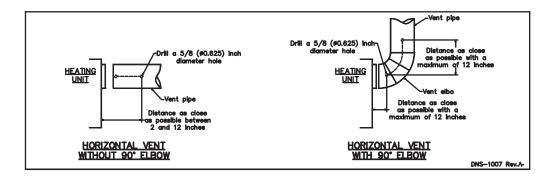


Fig. 1 - Drill Hole in Vent Pipe

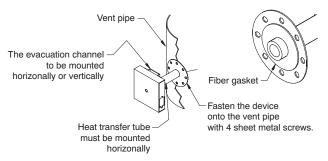


Fig. 2 - Mounting Transfer Tube and Evacuation Channel

A WARNING

FIRE, CARBON MONOXIDE POISONING HAZARD

Failure to follow this warning could result in property damage, personal injury, or death.

DO NOT reset the device or restart the furnace unless the cause of the interruption has been identified and corrected by a qualified agency. Ensure that the Blocked Vent Shut-Off has been cleaned by a qualified agency before placing into service. Annual inspection and cleaning of the Blocked Vent Shut-Off by a qualified agency is required.

A CAUTION

CUT HAZARD

Failure to follow this caution may result in personal injury.

Sheet metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing, safety glasses and gloves when handling parts, and servicing furnaces.

Step 1 — Installation Into the Vent Pipe

- 1. The heat transfer tube must be mounted horizontally. However, the evacuation channel can be mounted either horizontally or vertically. (See Fig. 2 and 3.)
- 2. Drill or pierce a clean hole (about 5/8-in. diameter) in the vent pipe at least 2 in. (50.8 mm) but not more than 12 in. (304.8 mm) from the appliance outlet. The hole must always be before the draft regulator. (See Fig. 1 and 3.) Insert the BVSO heat transfer tube into the 5/8" hole in the flue pipe, making sure that the fiber gasket is properly in place. Fasten the device to the flue pipe with 4 self-tapping screws.

WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death.

Disconnect electrical power supply to the furnace before wiring the Blocked Vent Shut-Off.

Step 2 — Wiring Instructions

- To allow for easy installation of the Blocked Vent Shut-Off System, electrical wires and connectors are supplied with the BVSO. Follow the wiring diagrams supplied with the furnace.
- 2. Wire the BVSO in series with the limit control circuit to the primary control (See Fig. 4, 5, and 6). Route all wiring with an acceptable wiring enclosure in accordance with the current CSA C22.1 Canadian Electrical Code Part 1 and any other applicable federal, provincial and local code requirements. Installations in the USA shall be in accordance with ANSI/NFPA70 and applicable local codes.

MAINTENANCE

A WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death.

Disconnect electrical power supply to the furnace before wiring the Blocked Vent Shut-Off.

▲ WARNING

FIRE, CARBON MONOXIDE POISONING HAZARD

Failure to follow this warning could result in personal injury or death.

Do not dent or scratch the surface of the thermal switch. The thermal switch MUST be replaced if it is damaged.

For continuous safe operation, the Blocked Vent Shut-off (BVSO) device must be inspected and maintained annually by a qualified service technician.

- 1. Disconnect power to the appliance.
- Remove the two screws holding on the BVSO assembly cover.
- 3. Remove the cover.
- 4. Remove the two screws holding the control box to the heat transfer tube assembly. Sliding the control box in the appropriate direction will unlock it from the heat transfer tube assembly.
- Carefully remove any build-up from the thermal switch surface.
- Clear and remove any build-up or obstruction inside the heat transfer tube.
- 7. Re-mount, lock and fasten the control box with the two screws removed in Step 4.
- 8. Re-attach the assembly cover with the screws removed in Step 2.
- 9. Re-establish power to the furnace.

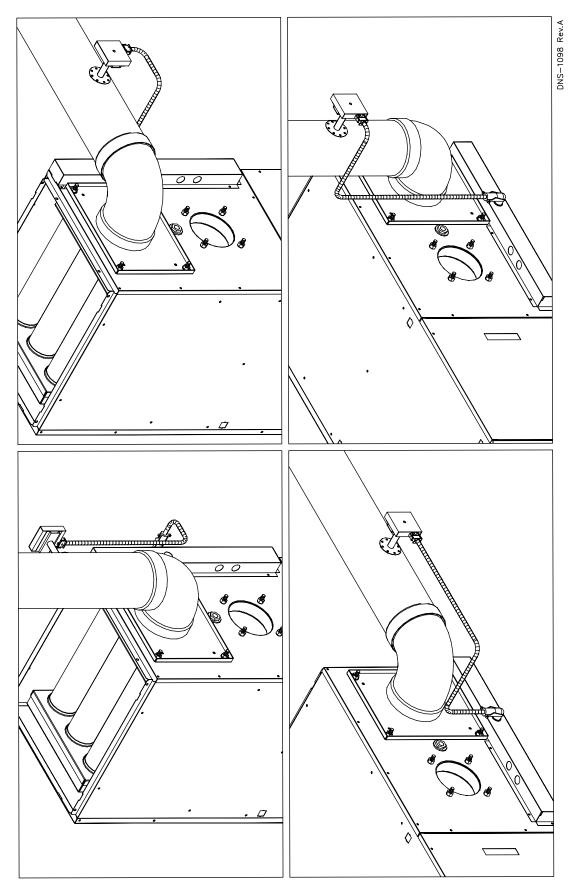


Fig. 3 - BVSO Placement

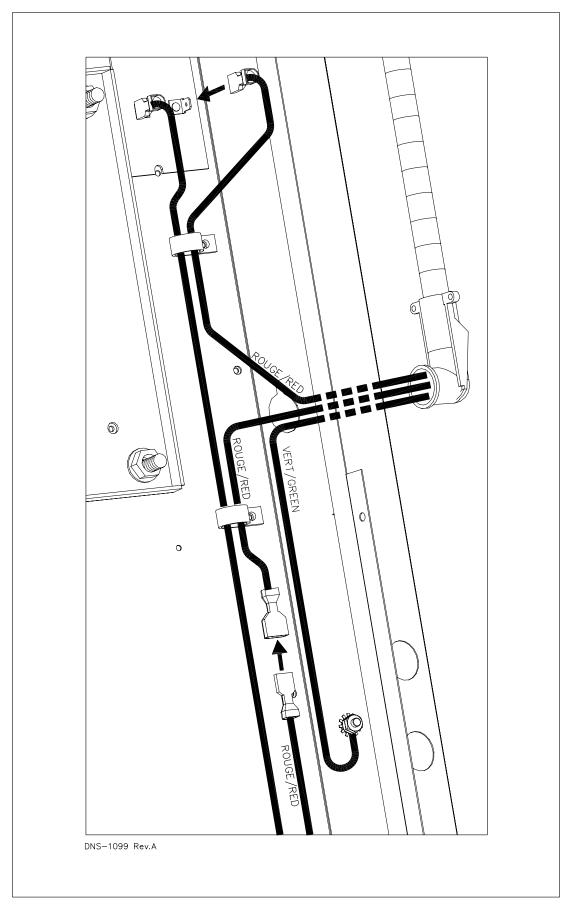


Fig. 4 - BVSO Wiring

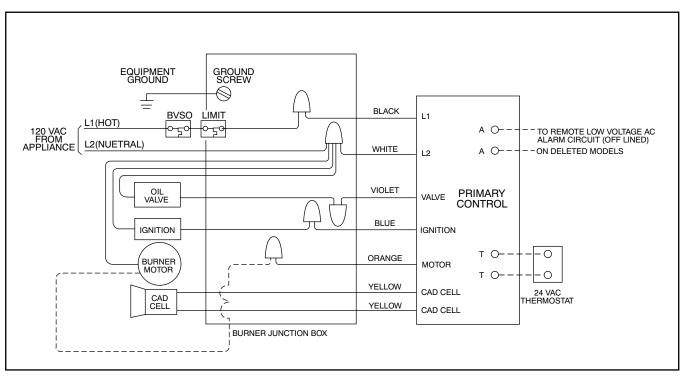


Fig. 5 - Honeywell R7184P - Beckett Burner

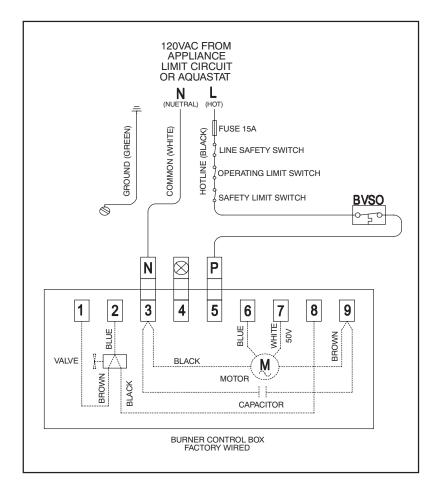


Fig. 6 - Riello Burner