

# SIDEWALL VENTING BLOWER



SVB-80  
SVB-80-5

## INSTALLATION AND OPERATING INSTRUCTIONS

DO NOT DESTROY OR DISCARD

THESE INSTRUCTIONS MUST REMAIN WITH THE  
EQUIPMENT

Goodman Mfg. Co., L.P.  
1501 Seamist Houston, TX 77008

## GENERAL INSTRUCTIONS & PRECAUTIONS:

**This Sidewall Venting Blower has been designed and approved for use ONLY with mid efficiency (80% GMP Series) gas fired forced air central furnaces manufactured by GOODMAN MFG. CO., L.P. and MUST NOT be installed on ANY OTHER sidewall vented furnace.**

Application to any other appliance, except as listed above, CAN RESULT IN CARBON MONOXIDE POISONING. SERIOUS INJURY OR DEATH CAN RESULT FROM CARBON MONOXIDE POISONING. THERE IS ALSO THE RISK OF EXPLOSION AND / OR FIRE.

This device is **not** to be connected to a water heater, multiple appliances, an existing vent or chimney.

It may be applied to installations utilizing either Natural or Liquified Petroleum (LP) gases.

This device must be installed and serviced only by a qualified contractor familiar with this type of equipment and gas fired furnaces.

The installation must comply with local codes, or in the absence of local code with the National Fuel Gas Code, ANSI Z223.1 (latest edition), it's addendums and, if applicable, the National Electrical Code, ANSI/NFPA 70 (latest edition), or current CAN/CGA-B149.1 & .2 Gas Installation Codes.

All wiring must conform to the accompanying wiring diagram. Line voltage uses a line cord connection when local codes permit this type of installation. The 115 volt receptacle must be located within eight (8) feet of the device. The installation of the power supply must be completed by a qualified installer.

A safety inspection of the existing system must be performed prior to attachment of this device. Refer to the Installation and Operating Instructions accompanying the furnace ANSI Z223.1, or CAN/CGA-B149.1 & 2.

Plan the vent system to avoid obstructions such as beams, walls, plumbing pipes, electrical wiring, etc.

**Disconnect or shut off all electrical power before attempting installation and/or service of this device or the furnace to which it is connected.**

Low voltage wiring must follow the accompanying wiring diagram. The low voltage wiring is to be permanently supported.

This device can be connected to GOODMAN furnaces with inputs of 40,000 btu/hr. to 150,000 btu/hr.

The maximum permissible length of the vent must not exceed forty-five feet (45'). The installation can contain up to two (2) 90 degrees elbows without affecting the length.

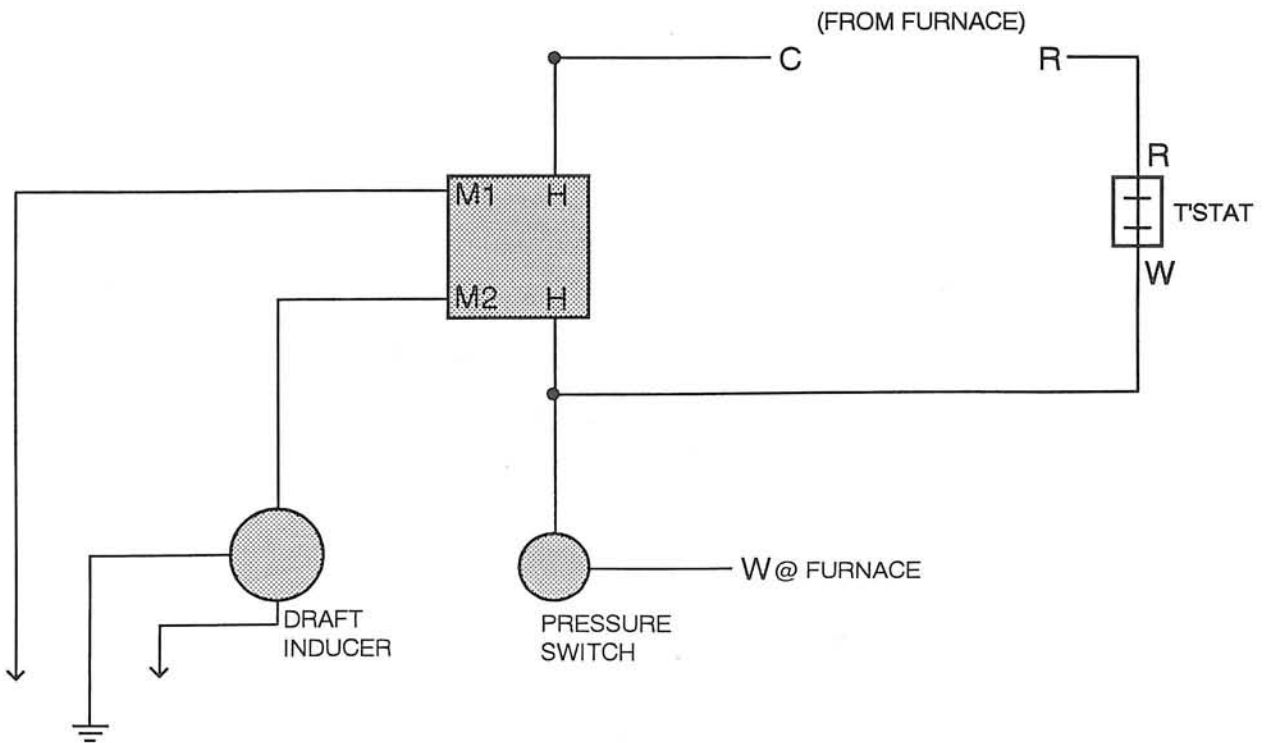
This optional device is intended to be installed in new construction as well as retrofitted.

All retrofit installations must conform to these Installation and Operating Instructions.

When installing as a retrofit the existing vent system must be disconnected or removed. DO NOT connect to an existing vent system.

All installations must conform to local, National, or Provincial codes or jurisdictions having authority.

This device may be connected only to the GMP series of gas furnaces manufactured by Goodman Mfg. Co., L.P.



ALL FIELD INSTALLED WIRE MUST BE RATED FOR A MINIMUM OF 75°C. (for ease of installation type SJT 18/3 wire may be used).

### GENERAL INSTALLATION INSTRUCTIONS:

The barometric damper must be installed in a "tee" as depicted in the illustration. The "tee" must be in the vertical run of the vent directly above the furnace vent outlet. The arrow on the barometric damper must be in the upward position as close to true vertical as possible. No screws must interfere with the operation of the damper flapper.

This device should be located as close as possible to the wall penetration and must be permanently supported. The vent must not be considered as part of the permanent support.

The draft inducer is design tested for connection to Class B-1 venting material. At no time should it be connected to any type of non-metallic vent material. It must **NEVER** be connected to any type of high temperature plastic venting material.

The vent material must never be of a lesser diameter than the vent connector, four inches (4"), of the furnace.

The only electrical connections necessary are three (3) low voltage wires and a 115 volt 15 amp receptacle for high voltage. ( 50 hz. has brown L1, blue L2 and green GND. leads instead of line cord)

The clearances to combustible materials is one inch (1") and zero (0) for non-combustible materials.

**Failure to adhere to the following clearances could result in the products of combustion, specifically Carbon Monoxide and Carbon Dioxide, entering the dwelling with the risk of illness or death.**

The following information can also be found in The National Fuel Gas Code ANSI Z223.1 NFPA 54

The vent terminal must be installed a minimum of twelve inches (12") above grade or expected snow levels. Unusual past snow falls should be considered.

The vent must not terminate less than seven feet (7') above a public walkway

The vent must not terminate under a porch, deck or similar structure.

The vent connector should extend six inches (6") beyond the outside wall.

When possible, avoid installing the vent terminal facing prevailing winds.

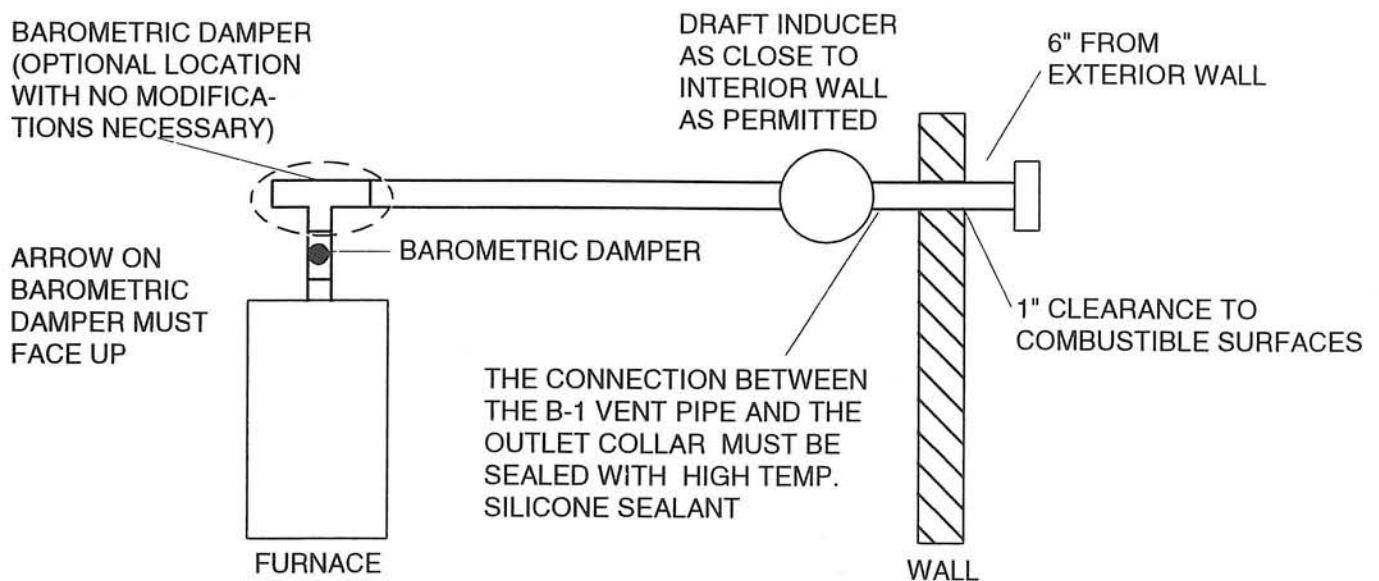
The vent terminal must not be installed less than four feet (4') from nor one foot (1') above an operable window or door.

The vent terminal must be at least three feet (3') above any outside air intake within a ten (10') radius.

The vent terminal must not be installed within three feet (3') from any inside corner.

The exiting flue gases may, under some conditions, tend to condense. Care should be taken so this condensate does not encroach on the exterior wall where it may cause some discoloration or etching.

Keep the area around the terminal free of snow, dirt, shrubs, or any other obstacles which could interfere with the normal venting operation



NOTE: All venting material must be type B.

## VENT PIPE INSTALLATION:

The Draft Inducer must be installed as close to the interior wall penetration as possible. This will avoid any possibility of a positive pressure in any portion of the system, aside from the vent terminal connector which could cause condensation to form and possibly cause degradation of the vent pipe.

Use the wall plate as a template to mark the hole for the vent pipe penetration.

Cut the hole one inch (1") larger than the marked hole. This will insure that the minimum one inch (1") clearance is maintained to a combustible material and will facilitate the installation in non-combustible walls.

Attach the outside wall plate. Install the vent terminal following the manufacturer's instructions. Secure with a clockwise twist.

Insure that the six inch (6") clearance from the outside wall to the vent terminal is maintained.

Attach the Venting Blower to the vent pipe and secure in place. Keep the motor shaft in a horizontal position. Three (3) sheet metal screws must be used to secure the Draft Inducer to the vent pipe.

Apply generous amounts of high temperature silicone to wall plate where it meets the exterior wall and the vent pipe.

Connect the remainder of the vent system.

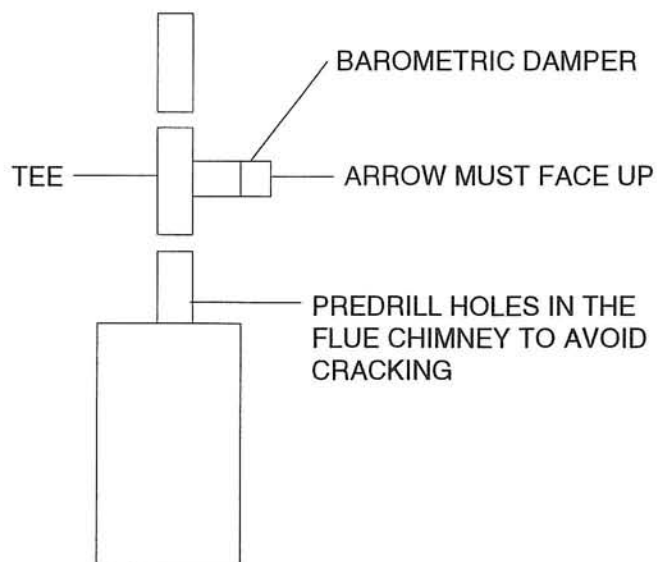
Use sheet metal screws to secure the vent pipe to the Draft Inducer collar.

When securing the vent pipe to the furnace use a flue connector and the screws supplied with the furnace or redrill the acceptance holes to avoid the chimney from cracking.

Insert the barometric damper into the tee on the vertical length of the vent. Assure that the arrow on the damper plate faces as near to true upright position as possible.

Support the vent pipe in a saddle method every four feet (4') with approved hangers such as plumber's strap. Do not secure the strap to the pipe.

TYPICAL UPFLOW  
INSTALLATION



## **START-UP AND CHECK-OUT PROCEDURE:**

Before proceeding perform a safety check of the existing furnace installation.

Shut off all gas and electricity to the appliance. To shut off gas use the shutoff valve in the supply line to the furnace.

Make sure that the furnace is set-up for the proper type of gas.

Check the high and low voltage wire and connections for tightness and they are positioned and secure so they will not be able to contact high temperature locations.

The vent should be as close to horizontal as possible, without sags.

The vent pipes must be interlocked. Follow the vent manufacturers instructions for proper method of installation. Use type "B" vent material only.

Before starting the furnace, check for gas leaks using soap bubbles or other approved methods. Repair any leaks or replace defective fittings if necessary.

In so far as practical, close all building doors and windows and all doors between the space in which the appliance is located and other spaces of the building. Turn on clothes dryer. Turn on any exhaust fans, such as range hoods and bathroom exhausts, so they will operate at maximum speed. Do not operate a summer exhaust fan. Close fireplace dampers.

To place the furnace in operation follow the lighting instructions found on the blower access panel.

Place the furnace through a normal cycle to determine that it operates in the proper sequence.

Cycle the furnace three times to determine that it lights satisfactorily, without floating, lifting or flashback, then adjust the thermostat so the appliance will operate continuously.

Check the main limit control, and auxiliary if applicable, for proper operation. This can be checked by blocking the circulating air inlet or temporarily disconnecting the electrical supply to the blower motor and determining that the limit control acts to shut off the main burner gas. Remove the blockage or reconnect the electrical supply to the blower before proceeding.

Check the thermostat heat anticipator for proper adjustment. Instructions accompany the thermostat or can also be found in the Installation and Operations Instructions contained in the furnace package.

## **SEQUENCE OF OPERATION:**

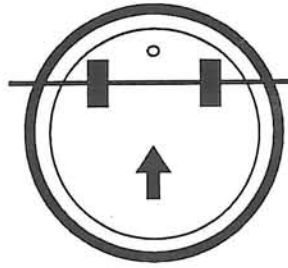
Upon a demand for heat the Venting Blower motor is energized.

The Venting Blower pressure switch closes allowing the "W" signal to the furnace to continue it's normal sequence of operation.

The furnace goes through it's normal check-out and operating procedures as outlined in the Installation & Operating Instructions accompanying the furnace.

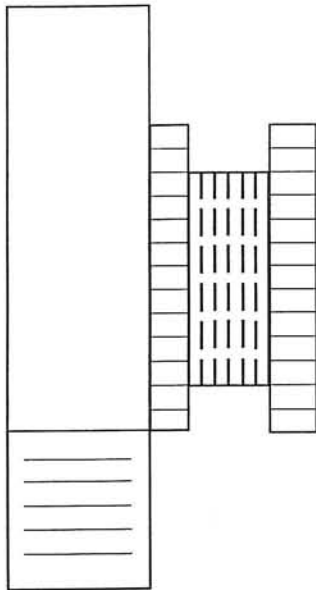
When the call for heat is satisfied the furnace main gas shuts down. The indoor blower will continue to operate for 150 seconds. During this period of time the Venting Blower motor will also continue to operate for approximately one and one half (1 1/2) minutes to assure that all flue gases are purged from the furnace and it's venting system.

# REPAIR PARTS LIST

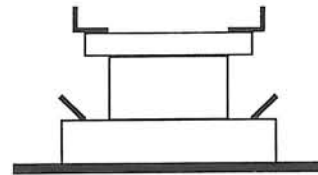


BAROMETRIC  
DAMPER  
B25728-00

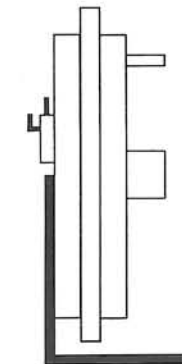
VENTER BLOWER ASS'Y.  
B18590-05 (60 Hz)  
B18590-505 (50 Hz)



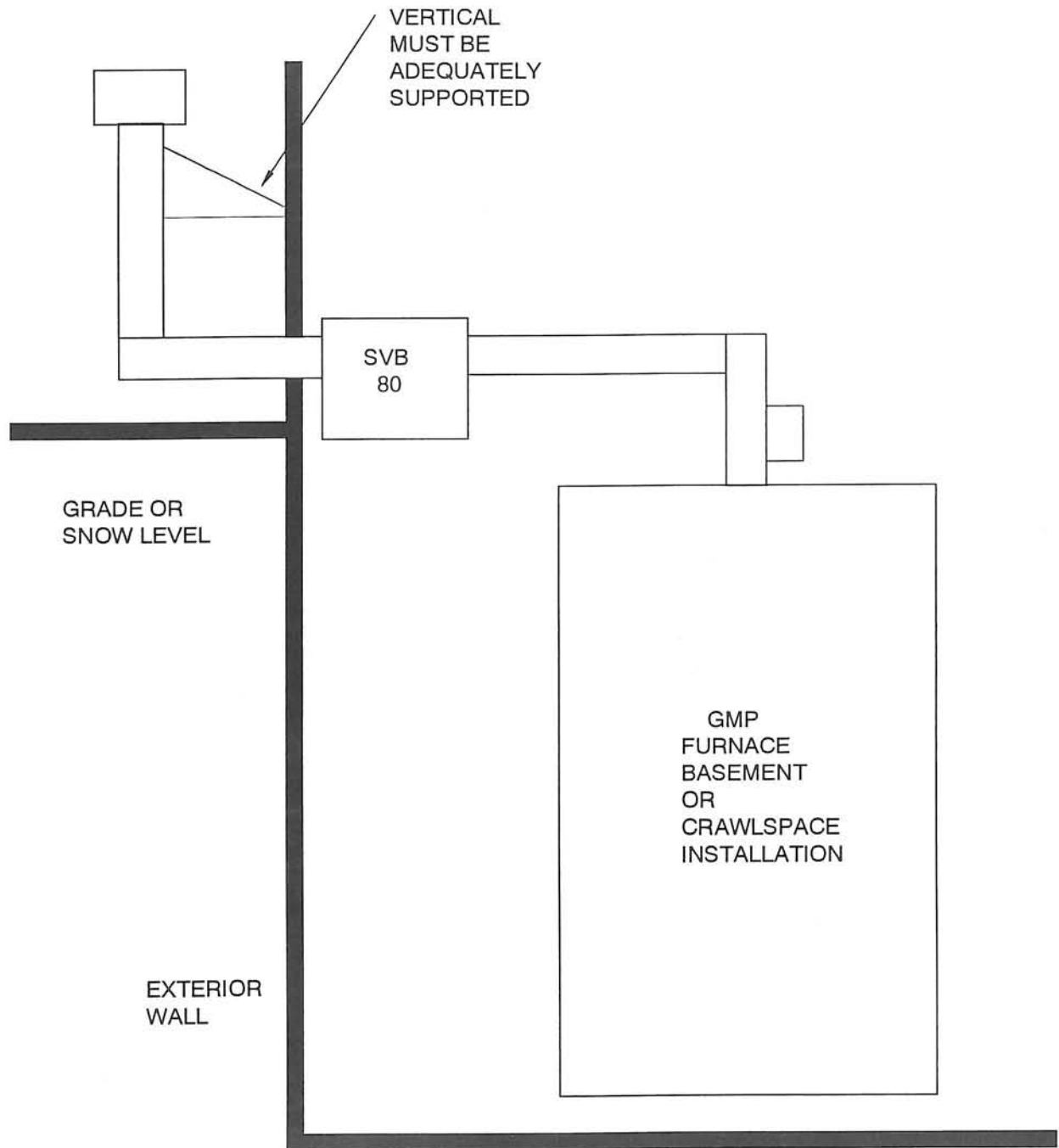
SEQUENCER  
B12565-51



LINE CORD  
B25017-00  
(60 Hz ONLY)



AIR PRESSURE  
SWITCH  
B13701-33



AN ELBOW AND A SECTION OF VENT PIPE MAY BE INSTALLED ON THE VENT AFTER EXITING THE EXTERIOR WALL TO BRING THE TERMINAL ABOVE GRADE OR ESTIMATED SNOW LEVELS. THIS ELBOW MUST BE OF THE SAME TYPE OF "B" VENT AS THE REST OF THE VENT SYSTEM. THIS UPWARD SECTION MUST BE ADEQUATELY SUPPORTED. THE CLEARANCE OF THE VENT TERMINAL MUST BE AT LEAST ONE INCH (1") FROM THE WALL.

ALL LOCAL CODES MUST BE FOLLOWED.