LEISURE LINE STOVE COMPANY, INC.
BERWICK, PA 18603

LEISURE LINE STOKER STOVE
DIRECT VENT POWER VENTER
TESTED TO UL 378 & UL 1482
CONAM Inspection, Inc., Auburn, MA 01501

THE LEISURE LINE DIRECT VENT POWER VENTER IS DESIGNED FOR USE ONLY WITH THE LEISURE LINE STOKER STOVE TO EXHAUST BY-PRODUCTS OF COMBUSTION THROUGH A COMBUSTIBLE WALL TO THE OUTSIDE.

Caution:
DO NOT USE THIS POWER VENTER OR ANY OF ITS COMPONENTS FOR ANY OTHER PURPOSE. IF USED WITH ANY OTHER SOLID FUEL APPLIANCE A HOUSE FIRE MAY RESULT. OTHER USAGE VOIDS ALL WARRANTIES AND LIABILITY. IT MUST BE INSTALLED ABOVE GROUND LEVEL. DO NOT VENT INTO A CELLAR WALL, DUGOUT HOLE, ETC. USE ONLY ORIGINAL PARTS.

INSTALLATION, OPERATION AND MAINTENANCE INSTRUCTION MANUAL

DIRECT VENT POWER VENTER

READ THIS MANUAL COMPLETELY BEFORE ATTEMPTING TO INSTALL OR USE YOUR *LEISURE LINE* DIRECT VENT/ POWER VENTER.

ALWAYS USE A GAS ALARM!

INSTALLATION SAFETY INSTRUCTIONS

CAUTION: This device must be installed by a qualified installer in accordance with the manufacturer's installation instructions. Appliances should have a minimum of 75% combustion efficiency or have a maximum measured flue gas temperature of 550°F at the inlet of the venter.

A. The power venting system must be installed by a qualified installer. "Qualified Installer" shall mean an individual who has been properly trained or a licensed installer.

B. Safety inspection of a venting system should be performed before and after installing a power venting system on an existing or new appliance.

C. Plan the vent system layout before installation to avoid the possibility of accidental contact with concealed wiring or plumbing inside the wall(s).

D. Single wall vent pipe may be used to join the stove to the venting system. Refer to national or local codes for guidelines.

E. This equipment is designed to overcome minor negative pressure conditions. To ensure extreme negative pressure does not exist, follow the "General Installation Inspection" section of this manual.

F. On stoves, it is recommended that the secondary safety switch WMO-1 be installed into the system.

G. Air flow adjustment MUST be made to ensure appliance efficiency. This should be done at the appliance exhaust outlet with a velocity meter, draft gauge or by the "match test procedure".

H. A barometric draft control MUST be installed to regulate proper air flow and fluctuations in the system's air flow during operation. Fluctuations can come from wind loads on the outlet of the venter, house depressurization during windy days and the different house ventilation requirements in winter operation.

INSTALLATION OF POWER VENTER

CAUTION: Failure to install, maintain and/or operate the power venting system in accordance with manufacturer's instructions will result in conditions which may produce bodily injury and/or property damage.

A. Remove power venter from box and inspect unit for damage. If the carton has been crushed or mutilated, check unit very carefully for damage. Rotate venter wheel to insure that the motor and venter wheel rotate freely. DO NOT install if any damage is apparent.

B. Location of the termination of the venting system should be installed in accordance with the manufacturer's recommendations, and/or local codes which are applicable. See the following requirements or refer to installation location Diagram A for typical locations.

1. The exit termination of mechanical draft systems shall not be less that 7' above grade when located adjacent to public walkways.

2. A venting system shall terminate at least 3' above any forced air inlet located within 10'.

3. The venting system of other than a direct vent appliance shall terminate at least 4' below, 4' horizontally from or 1' above any door, window or gravity air inlet into the building.

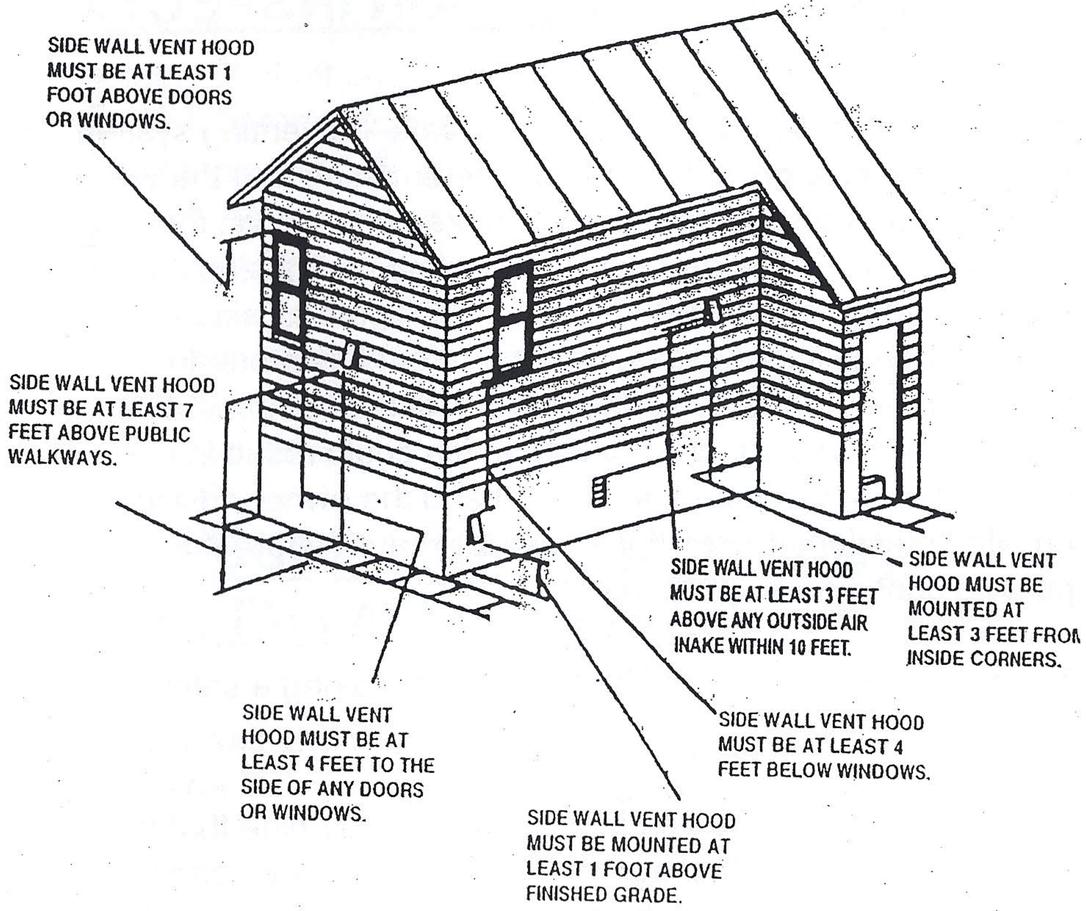
4. The vent termination point shall not be installed closer than 3' from an inside corner of an L-shaped structure.

5. The vent termination should not be mounted directly above or within 3' horizontally from oil tank vent or gas meter.

6. The bottom of the vent terminal shall be located at least 12" above finished grade.

C. The power venter should never be installed with the venter motor in the vertical position. This could lead to premature motor failure. The stove should be installed as close to the outside wall as possible.

Diagram A.
PVE SIDEWALL VENT TERMINATION LOCATIONS



CONNECTING VENTER TO APPLIANCE

The venting system should be installed and supported in accordance with any local codes. A vent pipe connector shall be supported for the design and weight of the material employed, to maintain clearances, prevent physical damage and separation of joints. A vent pipe increaser or reducer may be required for connecting the venter to the vent system. Smaller vent pipe sized than a chimney-vented system may be used for the vent

system.

Route the vent pipe from the stove to the venter using a minimum number of elbows as possible, not more than 2 elbows.

GENERAL INSTALLATION INSPECTION

The following procedure will help evaluate the venting system. It is intended as a guide to aid in the determining that the venting system is properly installed and is in a safe condition for continuous use. The procedure should be recognized as a generalized procedure which cannot anticipate all situations. Accordingly, in some cases, deviation from this procedure may be necessary to determine safe operation of the equipment. If it is determined that a condition exists which could result in unsafe operation, the stove should be shut off and the owner advised of the unsafe condition. Corrections must be made before the stove is put into continuous operation.

The following steps should be followed in making a safety inspection.

1. Visually inspect the venting system to determine that there is no flue spillage, blockage or restriction, leakage, corrosion or other deficiencies which could cause an unsafe operation.

2. Insofar as practical, close all building doors, fireplace dampers, windows, and all doors in area in which the stove is located. Turn on clothes dryers, any exhaust fans, such as range hoods and bathroom exhausters so they operate at maximum speed. Do not operate a summer exhaust fan.

3. Place in operation the stove being inspected. Follow the lighting instructions and operate continuously.

4. Visually determine that the burner is burning properly.

5. Test for spillage at the barometric draft control opening and burner inlet air location after 5 minutes of burner operation. Use a draft gauge, flame of a match or candle, smoke from a cigarette, cigar or pipe. If spillage occurs, adequate air is not available. Shut off stove and check for spillage around the draft hood, barometric draft control or burner inlet air location after power venter has stopped operation. **If a flow reversal is noticed, house depressurization is occurring and make up air is required.**

6. Return doors, windows, exhaust fans, fireplace dampers and any other fuel-burning appliances to their previous condition of use.

LEISURE LINE POWER VENT INSTALLATION INSTRUCTIONS

1. Use inside wall end plate as a template to mark hole location. Cut hole one inch larger than marked hole to facilitate easy installation.

2. Install vent hood through opening from outside. Fasten the vent hood to the outside wall with appropriate type mounting screws.

3. Fasten wall end plate to the inside wall with appropriate type mounting screws.

1. Install a properly sized vent pipe section into inner pipe of the vent hood. Seal the connection and all other vent pipe joints on the pressure side of the Power Venter with a high temperature silicone adhesive sealant or equivalent. Fasten vent pipe connection with three sheet metal screws or with other

appropriate type mounting screws.

MAINTENANCE

The vent system should be inspected regularly at 4-6 week intervals. Stove must be turned off during cleaning of this unit.

1. Screened opening of vent hood should be free from foreign material and cleaned if necessary.

2. Cleaning of the power venter and wheel must be done every 4-6 weeks. Clean wheel thoroughly with brush. Vacuum entire unit.

3. Visually inspect safety switch for debris blocking tube opening. Clean away any interference.

4. Test CO detector.

5. Oil motor twice a year.

6. Remove from wall and clean thoroughly after shutting down for the season. Use baking soda and warm water in a bucket with a sponge.

INSTALLING WMO-1

Installation on the WMO-1 safety switch is necessary when Power Venting a Leisure Line Coal Stove. With the installation, a 3/4 hole saw will be needed to drill a hole in the side or back of the stove to locate the switch. With a Pocono or Hyfire, the best location facing the stove is on the left hand side, measuring 12 inches up from the floor and 4-6 inches in from the back of the side. Be careful not to drill into a side stiffener. With a Econo or Pioneer, locate the switch in the back of the stove, 2 inches in from either side and 12 inches up from the floor. If needed move your measurement 1-2 inches to miss the stiffener.

With the switch installed the next step is to plug the thermostat or rheostat that is mounted on the hopper into the safety switch. Plug the safety switch into the wall outlet. Now all power must travel through the safety switch first. If the power venter fails, or the pipes block, etc. the stove will shut down. The switch has a reset button inside the hole, push with a small screwdriver after correcting the problem.

This switch must be kept clean. The tube must be free of dirt and ash to work properly.

When operating a Leisure Line Stoker Stove, a –.02 to –.05 draft must be maintained. This can be checked with a draft gauge. All stoves create different drafts; have this work done by a **professional!!!!!!**

SETTING THE DRAFT

Setting up the draft must be done after the stove is burning. Set the weight on the barometric damper at 3 or 4. Now turn the rheostat knob on the power vent to the point where the barometric damper to have the gauge read a negative .02 to .05. This unit must be installed by a qualified technician. Never use more than 2 elbows to connect this power venter to the stove. A poor draft will occur. KEEP YOUR PIPES CLEAN OF ASH AND/OR DEBRIS.

CARBON MONOXIDE

Actuation of your CO alarm indicates the presence of Carbon Monoxide. Turn off your coal stove immediately and try to find & solve the problem. Open windows and doors to help move the fresh air throughout the house.

What is Carbon Monoxide?

- Carbon Monoxide (CO) is an odorless, colorless, poisonous gas created when any fuel is burned - gasoline, propane, natural gas, oil, wood, coal and even tobacco. When combustion air is limited, more CO is produced. Serious problems can develop when combustion by-products are not properly vented outside the house.

What are the Effects of CO exposure?

- When you breathe CO, it enters your bloodstream through your lungs and attaches to red blood cells. The early symptoms of carbon monoxide poisoning are often mistaken for the flu - headache, dizziness, weakness, nausea, vomiting, sleepiness, and confusion.

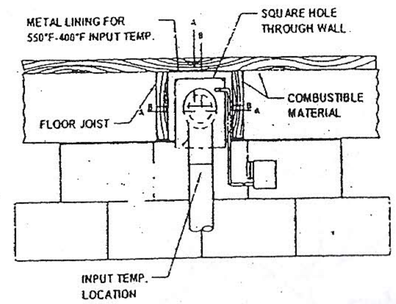
Treatments for CO poisoning.

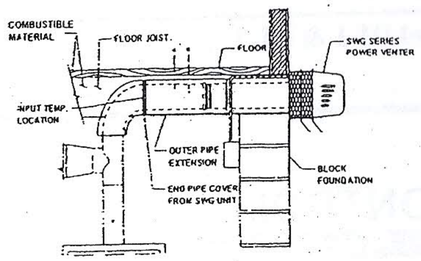
- Any person who is suspected to have CO poisoning should leave the potentially dangerous environment, get fresh air immediately and seek the care of a physician. Acute CO poisoning is usually treated by breathing in oxygen. When CO poisoning is severe, high pressure oxygen therapy in a special "hyperbaric chamber" may be used.

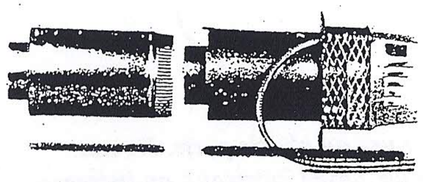
CLEARANCE TO COMBUSTABLE MATERIAL

If mounting the venting system near combustible materials, refer to Diagram A for allowable installation clearances. Clearances are based on an installation using single wall black stove vent pipe. If manufactured double wall insulated vent pipe is required or used for the installation, clearance should be based on the vent pipe's rated clearances. Always check local code requirements for code restrictions.
Routing of the vent system and clearances for the vent pipe may be planned once the termination location is determined. Route the vent pipe from the appliance to the venter using as few elbows as possible. The horizontal section of the vent pipe should have a slight upward slope from the appliance to the venter. The vent pipe size (diameter) can be smaller than a typical chimney vented system and still overcome the higher pressure losses because the power venter mechanically creates the required draft or air flow to vent the system.

Single Pipe System		Double Wall Insulated Pipe System	
Allowable Inlet Temperature	Clearance (B)	Allowable Inlet Temperature	Clearance (A)
400°F or less	12"	400°F or less	2.5"
550°F or less	12"	550°F or less	2.5"





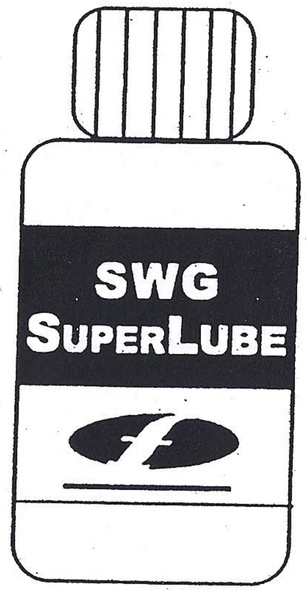


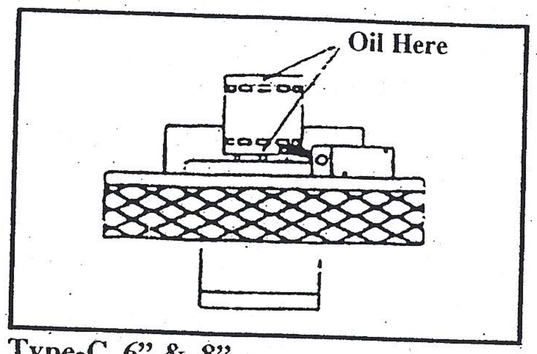
PEK EXTENSTION KIT

The standard SWG Power Venter is Designed for walls up to 8" thick. PEK Extension kits allow the SWG to be installed in walls up to 16" thick. The PEK kit includes the inner/outer pipe extension, air flow damper and 1' of ¼" Aluminum tubing. Available for Model SWG-4HD and SWG-4HDs.

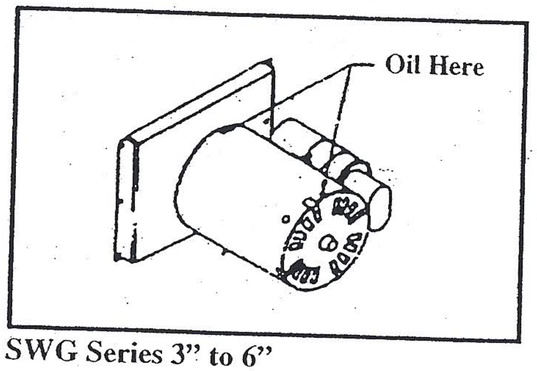
SWG Superlube

This specially designed synthetic lubricant provides quality protection for all SWG Power Venters and other sleeve bearing motors. Lubricating with SWG Superlube protects your motor at operating temperatures from –40° F. to 300° F. And, just 4 to 6 drops a year could increase the life of your motor by up to 5 times.

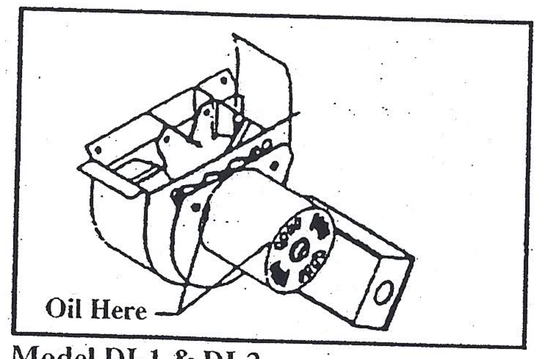




Type-C 6" & 8"



SWG Series 3" to 6"



Model DI-1 & DI-2

Caution: Not for use on plastic parts. Do not mix with petroleum based lubricant, an increase in bearing wear may result.

Material Safety Data Sheet available upon request*

FIELDCONTROLS
THE VENTING SOLUTIONS COMPANY
2630 Airport Road • Kinston, NC 28504
(919) 522-3031 • FAX (919) 522-0214