

Leisure Line Power Vent  
Operations & Maintenance  
Manual  
And  
Safety Instructions

Black Rock Manufacturing  
DBA  
Leisure Line Stove Company  
Rear 620 Broad Street  
Berwick, PA 18603

<http://www.leisurelinestoves.com/ind>

blackrockmanufacturing@gmail.com

570-752-1811

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### **WARNING**

**A CARBON MONOXIDE DETECTOR MUST BE INSTALLED, REFER TO YOUR STOVE, BOILER OR FURNACE MANUAL BEFORE OPERATION OF THIS POWER VENT. READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE PROCEEDING WITH THE INSTALLATION. DO NOT USE THIS LEISURE LINE POWER VENTOR OR ANY OF ITS COMPONENTS FOR OTHER THAN IS INSTRUCTED IN THIS MANUAL. IF USED FOR ANY OTHER SOLID FUEL APPLIANCE FIRE AND/OR PERSONAL INJURY AND/OR DEATH MAY RESULT.**

### **CAUTION**

**ALL STOVES, BOILERS AND FURNACES MUST UTILIZE A BAROMETRIC DRAFT CONTROL SUCH AS THE FIELD CONTROLS TYPE RC BAROMETRIC DAMPER, THE WEIGHTS SHOULD BE ADJUSTED TO OBTAIN A  $-.03''$  TO  $-.05''$  WATER COLUMN NEGATIVE PRESSURE IN THE FLUE PIPE AT THE STOVE OUTLET. APPLIANCES SHOULD HAVE A MINIMUM OF 75% EFFICIENCY OR A MEASURED FLUE GAS TEMPERATURE OF NOT MORE THAN 550°F AT THE INLET OF THE VENTER.**

## **Installation Safety Instructions**

1. Safety inspection of a venting system should be performed before and after installing a power venting system on an existing or new appliance. Follow NFPA 211, the International Mechanical Code and/or The International Residential Code for information on inspection requirements.

**WARNING: THIS DEVICE MUST BE INSTALLED BY A QUALIFIED INSTALLER IN ACCORDANCE WITH THE INSTRUCTIONS IN THIS MANUAL. A QUALIFIED AGENCY IS DEFINED AS: “ANY INDIVIDUAL, FIRM, CORPORATION, OR COMPANY WHO EITHER IN PERSON OR THROUGH A REPRESENTATIVE IS IN ENGAGED IN, AND IS RESPONSIBLE FOR INSTALLATION AND OPERATION OF SOLID FUEL BURNING HEATING APPLIANCES. WHO IS EXPERIENCED IN SUCH WORK, FAMILIAR WITH ALL PRECAUTIONS REQUIRED, AND HAS COMPLETED THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION”.**

2. Plan the venting system layout before installation to avoid the possibility of accidental contact with concealed wiring or plumbing.
3. Single wall pipe may be used to join the stove with the power vent, check local and national codes for guidelines.
4. This equipment is designed to overcome minor negative pressure conditions in perform the steps in the “General Installation Inspection” section of this manual.
5. All Leisure Line stoves, boilers and furnaces which utilize a power vent must be fitted with a WMO-1 flue safety interlock switch per the instructions contained in this manual.
6. Piping clearances to combustables, length, fitting configuration and location of the venting system outlet should be installed in accordance with manufacturers recommendation as shown in the following excerpts from the Field Controls Manual:

**DO NOT DESTROY, RETAIN THESE INSTRUCTION AFTER INSTALLATION**

EQUIVALENT LENGTH (FEET) OF VENT PIPE FITTING									
VENT PIPE FITTINGS		VENT PIPE DIAMETER							
		3"	4"	5"	6"	7"	8"	9"	10"
TEE		19	25	31	38	44	50	56	63
90° ELBOW		5	7	9	11	12	14	16	18
45° ELBOW		3	4	4	5	6	7	8	9
SUDDEN REDUCER OR INCREASER FOR 3 *RATIOS (d/D)	d/D								
	1/4	8	11	14	17	19	22	25	28
	1/2	5	7	8	10	12	13	15	17
	3/4	2	3	3	4	4	5	6	6

\*Reducer or increaser ratio (d/D) small diameter divided reducer ratio is  $d/D = \frac{4}{8} = \frac{1}{2}$ .  
To estimate the equivalent foot length for the fitting, use the smaller pipe diameter for the equivalent length figure. Example 4" to 8" reducer; the reducer ratio is 1/2 and the smaller pipe diameter is 4". So, from the chart, the equivalent feet would be 7 feet. (See Figure 1)

**Example:** System Pipe Size = 4"

Step 1 Two 4" 90° elbows @ 7 feet each = 14 ft.

Step 2 Ten 2 foot lengths of 4" pipe = 20 ft.

Step 3 Total equivalent feet = 14 ft. + 20 ft. = 34 ft.

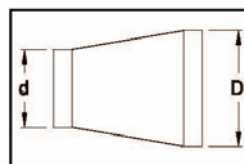


Figure 1

### INSTALLATION

**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.

1. Remove power venter from packaging and inspect unit for damage. If the packaging has been crushed or mutilated, check unit very carefully for damage. Rotate blower wheel to ensure that the motor and blower wheel rotate freely. DO NOT install if any damage is apparent. Refer to unit sizing chart to check proper venting sizing.
2. Location of the termination of the venting system should be installed in accordance with the National Fuel Gas Code ANSI Z223.1, manufacturer's recommendations and/or local codes which are applicable. See requirements below or refer to installation location, Diagram A, for typical locations.
  - a. The exit termination of mechanical draft systems shall not be less than 7' above grade when located adjacent to public walkways.
  - b. A venting system shall terminate at least 3' above any forced air inlet located within 10'.
  - c. 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. When venting oil fired equipment with a Field Control's CAS-2 series Airboot® kit, the intake air hood can be mounted within 12 inches of the power venter exhaust.
  - d. The vent termination of a direct vent appliance with an input of 50,000 BTUs per hour or less shall be located at least 9" from any opening through which vented gases could enter the building. With an input over 50,000 BTUs per hour, a 12" termination clearance shall be required.
  - e. The vent termination point shall not be installed closer than 3' from an inside corner of an L-shaped structure.
  - f. The vent termination should not be mounted directly above, or within 3' horizontally from an oil tank vent or gas meter.
  - g. The bottom of the vent terminal shall be located at least 12" above finished grade.
3. After determining the location of the venting system termination point (See Diagram A), cut a square hole through the wall at least 1" larger than the outer pipe diameter of the power venter. Mount the power venter through the wall, keeping the outer pipe centered in the hole. (See Figure 3) Fasten the power venter to the outside wall with appropriate fasteners, sealing the edges of the power venter base plate to the wall with a high temperature silicone sealant. DO NOT enclose the spaced plates on the power venter body. This will result in reduced cooling of the power venter body. Wood or vinyl siding should be cut so that the unit mounts directly on the wall board to provide a stable support. If the siding is greater than 1/2" thick use a spacer plate or board behind the power venter mounting plate. (See Figure 2)

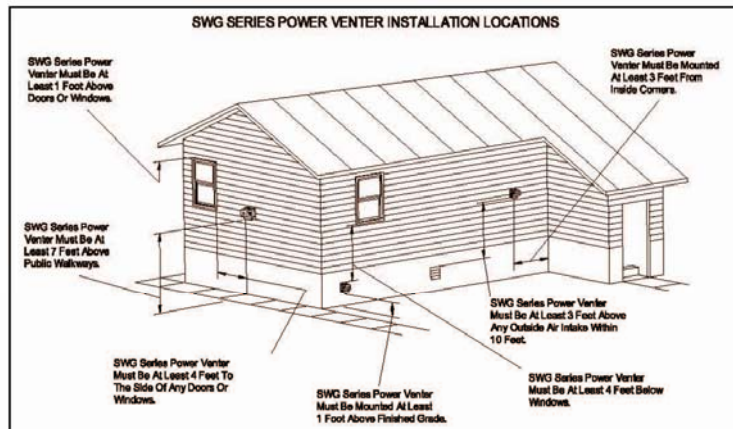


Diagram A

**NOTE:** If mounting the power venter through a combustible wall material and the flue gas temperature is above 400°F at the power venter inlet, line the square hole with a piece of corrosion resistant sheet metal or non-combustible material. The liner piece should be the same width as the wall section. (See Figure 3) The power venter has a maximum flue gas temperature of 550°F at the venter inlet. For installation in wall thicknesses over 8 inches, use SWG Series Through Wall Extension Kit, Model PEK.

#### 4. Backing Plate Installation

- a. One Piece Backing Plate Installation (3", 6", 8" Models) Remove the end pipe cover screws on the sides of the outside pipe and remove end pipe cover. Then mount the backing plate over the outer pipe and route the flexible conduit and pressure switch tube (if applicable) through the holes provided in the backing plate. Fasten the backing plate to the inside wall with appropriate fasteners. (See Figure 4) Re-install the end pipe cover and screws.
- b. Two Piece Backing Plate Installation (4" and 5" Models):
  - i. Position the Upper Backing Plate Half on the inside wall by placing the plate half on the inside wall and up to the venter body, locating the air pressure sensing tube through the small slot in the plate half and the flexible conduit through the larger slot, as shown in Figure 5. Install an appropriate fastener in the upper right corner hole in the plate half.
  - ii. Cut off or bend the two tabs of the Lower Backing Plate Half inward (See Figure 6) and position it on the inside wall as shown in Figure 7 and install appropriate fasteners through the upper left and lower right corner holes in both plate halves.
  - iii. Install an appropriate fastener in the lower left corner hole.

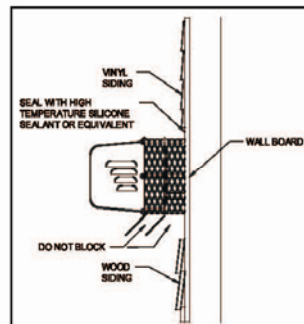


Figure 2

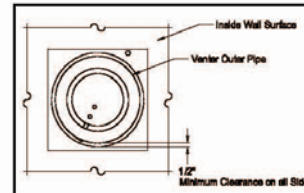


Figure 3

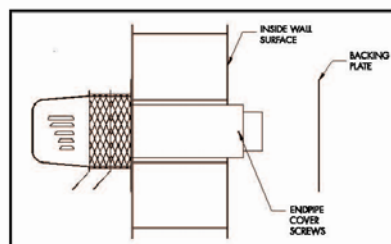


Figure 4



***DO NOT DESTROY, RETAIN THESE INSTRUCTION AFTER INSTALLATION***



Figure 5



Figure 6



Figure 7

#### CONNECTING POWER VENTER TO APPLIANCE

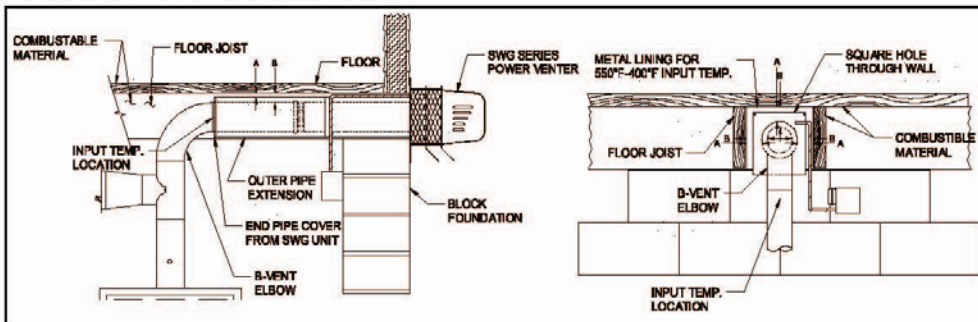


Diagram B

Venting system should be installed and supported in accordance with the National Fuel Gas Code ANSI Z223.1, or 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 power venter to the vent system. If needed, place the reducer close to the power venter. Smaller vent pipe sizes than a chimney-vented system may be used for the vent system.

If mounting venting system near combustible materials, refer to Diagram B for allowable installation clearances. Clearances are based on an installation using single wall galvanized steel vent pipe. For metal thickness of galvanized steel pipe connectors, refer to NFPA 211 or NFPA 54 Standards for guidelines. If manufactured double wall vent pipe is required or used for the installation, clearance should be based on the vent pipe's rated clearance. Always check local code requirements for code restrictions.

Route the vent pipe from the appliance to the power 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 power venter. For clearances to combustible materials, multiple appliance venting and other installation requirements, refer to the National Fuel Gas Code ANSI Z223.1, and/or any applicable local codes or appliance manufacturer's installation instructions.

# INSTALLATION USING SINGLE WALL VENT PIPE

Table 3

INSTALLATION CLEARANCE WITH SINGLE WALL VENT PIPE					
DOUBLE PIPE SYSTEM			SINGLE PIPE SYSTEM		
Allowable inlet temperature SWG Stainless Steel	Allowable inlet temperature SWG/SWGII	Clearance (A)	Allowable inlet temperature SWG Stainless Steel	Allowable inlet temperature SWG/SWGII	Clearance (B)
400°F or less	400°F or less	½" minimum	400°F or less	400°F or less	3" minimum
400°F to 650°F US/575°F CA	400°F to 550°F	1" minimum	400°F to 650°F US/575°F CA	400°F to 550°F	4" minimum
400°F to 650°F US/575°F CA	400°F to 550°F	½" minimum with sheet metal liner	400°F to 650°F US/575°F CA	400°F to 550°F	3" minimum with sheet metal liner

Use a PEK series extension kit or follow installation method below for a double pipe system. To install an outer pipe extension to the SWG power venter, the end pipe cover on the power venter must be removed. Then, cut a 1 inch square notch into the vent pipe extension before attaching the power venter. (See Figure 8) This allows clearance for the adjustment damper. Install the needed pipe extensions and terminate the outer pipe extension with the end pipe cover. (See Diagram B) The table above shows minimum allowable clearances when using single or double pipe systems. When the outer pipe is extended over the inner pipe, use the double pipe guidelines when determining clearances. Figure 6 shows how the airflow pattern through an SWG reduces the required clearances to combustibles.

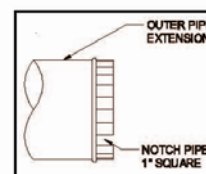


Figure 8

**NOTE:** Vent pipe joints should be secured with at least three (3) sheet metal screws.

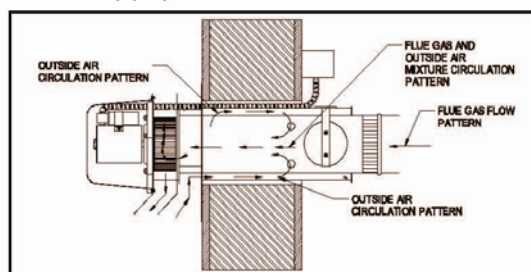


Figure 9

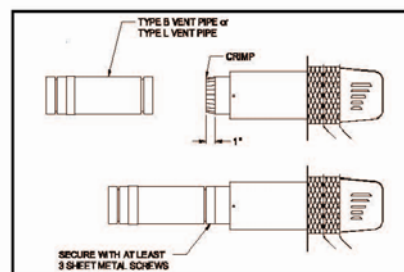


Figure 10

## CLASS B AND CLASS L DOUBLE WALL VENT PIPE INSTALLATION

(Follow vent pipe manufacturer's listed or recommended clearances from combustible material.)

1. Using a hand crimper or a like device, crimp the inner pipe of the SWG power venter approximately 1" long. (See Figure 10)
2. Attach the vent pipe over the crimped end of the SWG power venter inner pipe.
3. Secure the vent pipe to the SWG power venter inner pipe with at least three (3) #8 sheet metal screws. Pre-drilling the holes through both pipes will allow easier fastening.

## WIRING

**NOTE:** Refer to appropriate control kit for proper installation instructions.

Wire the power venter motor and controls in accordance with the National Electrical Code and applicable local codes. **UNIT MUST BE GROUNDED.** Check ground circuit to make certain that the unit has been properly grounded. The wiring should be protected by an over-current circuit device rated at 15 amperes. **CAUTION** MUST be taken to ensure that the wiring does not come in contact with any heat source. All line voltage and safety control circuits between the power venter and the appliance **MUST** be wired in accordance with the National Electrical Code for class 1 wiring or equivalent.

## **Installation Instructions**

1. This manual is designed to be used in conjunction with the Field Controls manual that comes with your power venter.

**NOTE: THE TYPE HDS POWER VENTERS HAVE BEEN TESTED WITH LEISURE LINE STOVES PER UL 1482 BY CONAM INSPECTIONS INC, AUBURN MA 01501. THE TYPE AF POWER VENTERS WERE TESTED WITH LEISURE LINE STOVES, FURNACES, AND BOILERS PER UL 1482, AND 1523 BY INTERTEK TESTING SERVICES OF MIDDLETON, WI 53562. ANY DEVIATION FROM THESE INSTRUCTIONS COULD RENDER THE POWER VENTER NON-COMPLIANT WITH UL SAFETY STANDARDS.**

2. Open/Unpack Power Vent and barometric damper, check for damage. Rotate Venter wheel to ensure that the assembly rotates freely.

**CAUTION: DO NOT INSTALL POWER VENT IF ANY DAMAGE IS EVIDENT**

3. Check for all parts for your particular Power Vent model per the table below.

<b><i>Power Vent Model</i></b>	<b><i>Application</i></b>	<b><i>WMO Safety Switch Wiring</i></b>	<b><i>Reducer Size</i></b>
<b>4HDS</b>	<b>All Stove models</b>	<b>Plug in Cords</b>	<b>4" X 6"</b>
<b>4AF</b>	<b>All Stove Models</b>	<b>Plug in Cords</b>	<b>4" X 6"</b>
<b>5AF 6"</b>	<b>110 AnthraKing Furnace and WL 110 Boiler</b>	<b>Flexible metal conduit, customer provided</b>	<b>5" X 6"</b>
<b>5AF 8"</b>	<b>220 AnthraKing Furnace and 220 Boiler</b>	<b>Flexible metal conduit, customer provided</b>	<b>5" X 8"</b>

3. Plan for the installation using the data contained in the previous section, ensure that the location of the power vent outlet is in compliance with all requirements.

**NOTE: ENSURE THAT THE POWER VENTER IS NOT INSTALLED WITH THE MOTOR SHAFT IN A VERTICAL POSITION. THIS WILL LEAD TO PREMATURE MOTOR FAILURE, ADDITIONALLY THE STOVE SHOULD BE LOCATED AS CLOSE AS POSSIBLE TO THE POWER VENTER.**

4. Select a location for the power vent and cut the hole, install the power venter per instructions and clearances found in the Installation Safety Instructions and per local and national codes. It is recommended that if an inspection is required, a walk through with the inspector be performed prior to cutting the hole.
5. Secure the power venter and trim, secure the rheostat box to the wall and reconnect the rheostat wiring. Provide power to the unit and verify proper operation.



***DO NOT DESTROY, RETAIN THESE INSTRUCTION AFTER INSTALLATION***

- 6. 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 reducer as shown in the above table should be attached directly to the power venter so that the larger pipe runs the entire length from the appliance.**
- 7. Minimize the number of elbows and tees per the inserted manufacturers data contained in the Installation Safety Instructions.**
- 8. Secure all pipe joints with three sheet metal screws and use only 24 gauge or thicker black stove pipe for the connection to the appliance.**
- 9. Mount the barometric draft control and install the weight on the appropriate scale for orientation. H scale is used for horizontal installation of the T and V is used for Vertical Installation of the T. Level the pivot shaft and verify free operation.**

**DO NOT DESTROY, RETAIN THESE INSTRUCTION AFTER INSTALLATION**

MODEL: FIELD R-C



**READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE PROCEEDING WITH THE 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 HVAC appliances, who is experienced in such work, familiar with all the precautions required, and has complied with all the requirements of the authority having jurisdiction.

Please retain these instructions after installation.

Installed By: \_\_\_\_\_ Phone: \_\_\_\_\_ Installation Date: \_\_\_\_\_



**FIELD CONTROLS**

[www.fieldcontrols.com](http://www.fieldcontrols.com)

## ***DO NOT DESTROY, RETAIN THESE INSTRUCTION AFTER INSTALLATION***

### **CHOOSING THE LOCATION**

Do not attach draft control to top or bottom of the flue pipe, nor in room separated from appliance. Best location is as close to appliances as possible.

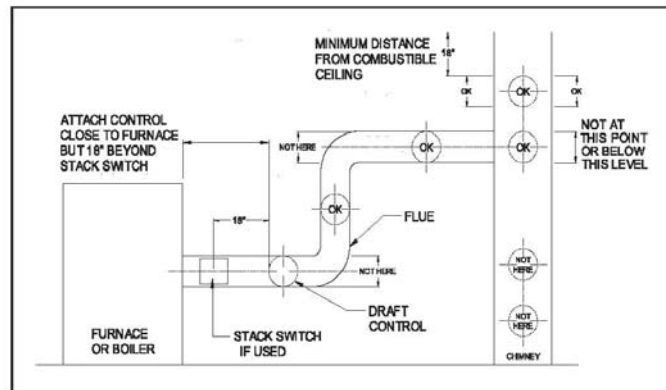


Figure 1

### **INSTALLATION**

**Important:** Make these adjustments when installing.

**Vertical Flue:** (1) Adjustment weight must be in RIGHT HAND SLOT (Marked "V") in bracket on gate. (2) The arrow on flap at bottom of gate must line up with letter "V" on lower right part of gate. If it does not, remove flap, turn over and snap on to gate again.

Flap can be removed by inserting small screw driver at the back side of the gate between the gate and the flap, then pulling downward on flap.

**Horizontal Flue:** (1) Adjustment weight must be in LEFT HAND SLOT (Marked "H") in bracket on gate. (2) The arrow on flap at bottom of gate must line up with letter "H" on lower left part of gate. If it does not, remove flap, turn over and snap on to gate again.

Bend outward the two ears at the front corners of collar and insert clamping screw. Bolt the remainder of the collar together. (See Figure 2)

Hold the collar against the flue in the EXACT position and mark the outline of the collar on the flue. Cut a hole in the flue about half an inch smaller than the marks.

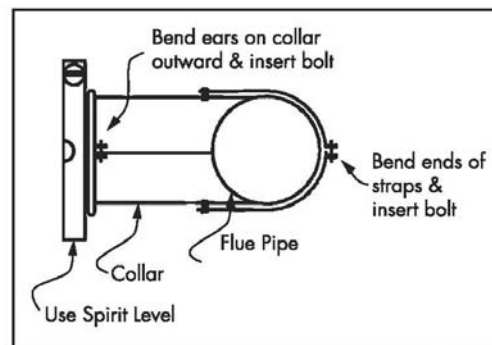


Figure 2

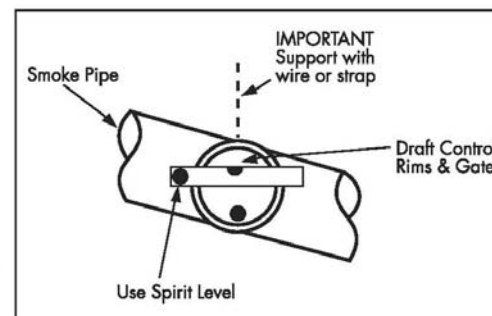


Figure 3

## ***DO NOT DESTROY, RETAIN THESE INSTRUCTION AFTER INSTALLATION***

Then cut a series of short slits (about  $\frac{3}{8}$ " or  $\frac{1}{2}$ " deep) around the edges of the opening. After the collar is strapped on the flue the cut edges can be bent outward in the collar and thus make a better joint. WHEN FINISHED, THE OPENING INTO THE FLUE MUST BE FULL SIZE OF THE COLLAR OF THE DRAFT CONTROL. If flue pipe is made of material too heavy to bend out into collar, the opening into the flue must be within  $\frac{1}{4}$ " of the same diameter as the collar.

Strap the collar to the flue pipe and place the draft control into the collar, fastening it there by tightening the clamping screw in the collar.

Use a spirit level to make sure that the control does not lean forward or backward but instead is plumb in both directions, regardless of whether the flue is horizontal, vertical, or sloping.

- 10. Install the WOMO-1 flue switch in the stove using a 3/4" hole saw. The switch should be installed slightly below the level of the grate and in the side or back of the stove four to six inches from the corner. Take care not to drill through a stiffener and to mount the switch above the level of the ash pan. Some stoves will not have enough room to mount the switch in the back. For furnace and boiler installation the flue switch should be installed in the flue outlet as close to the appliance as possible. The WOMO-1 must disconnect power to the burn appliance when it trips, momentarily pushing the red button through the small hole in the cover will test this.**
- 11. For stoves plug the flue switch into a wall outlet and plug the Coal-Trol power cord into the female plug provided on the WOMO-1. For boiler and furnace installations the unit will be hard wired to a power source and in series with the power**

**WARNING: FOR CONTINUED SAFE OPERATION, THE STOVE, BOILER, OR FURNACE VENT SYSTEM COMBINATION IS REQUIRED TO BE CLEANED, INSPECTED AND MAINTAINED ANNUALLY BY A QUALIFIED AGENCY**

### **Power Venter Concept of Operation and General Information**

- 1. A Leisure Line power venter is designed to replace a chimney by providing a draft in the flue pipe. The unit must be used in combination with a barometric draft control and operates continuously as long as the appliance is burning. Speed is controlled by means of a rheostat so that the barometric draft control shows visible sign that there is draft during all burn levels (just slightly moving as a minimum).**
- 2. A WOMO-1 blocked flue switch is a required part of the installation and is hooked in series with power to the appliance to ensure shut down in the event of a loss of draft.**
- 3. Ensure that the installation is adequate for safe operation by performing the General Installation Inspection after initial installation and after any major modification to the home.**
- 4. Proper maintenance is important for trouble free and safe operation. Fly ash can build up and block the flue pipe, ensure that periodic inspections are performed by a qualified person. Remember that moisture under the hopper lid is a sign of poor draft and should never be ignored.**
- 5. Fly ash is also corrosive, proper cleaning will ensure a long life and the safety of you and your family.**

## **General Installation Inspection**

The following procedure will help evaluate the venting system and must be performed before placing the power vent into service. It is intended as a guide to aid in determining that the venting system is properly installed and is in a safe condition for continuous use. This 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.

1. Visually inspect the venting system for proper size and determine that there is no flue gas spillage, blockage, restriction, leakage, corrosion or other deficiency which could cause unsafe operation.
2. Close all doors, windows, fire dampers and other openings in the area where the burn appliance is located. Turn on all clothes dryers, exhaust fans, range hoods and other vents at maximum speed.
3. Set the weight on the barometric draft control to align with the 3 or 4 on the proper scale (H for horizontal installation and V for vertical installation).
4. Ensure that the appliance lit and in max burn mode so that max output is held (adjust thermostat or whatever control is in play to achieve this), measure the draft to ensure that it is  $-.04$  to  $-.06$ " WC at the flue outlet of the appliance. Adjust the rheostat knob so that the desired draft is present and the barometric damper door is just moving slightly at full burn.
5. Visually determine that the flame on the burn grate is blue and consistent. This is a sign that there is sufficient combustion air for proper operation of the unit.

**WARNING: THE NEXT STEP WILL POSSIBLY RELEASE CARBON MONOXIDE TO THE ROOM, ENSURE THAT THERE IS A WORKING CARBON MONOXIDE DETECTOR IN THE AREA BEFORE PERFORMING.**

6. Momentarily shut off the power vent and ensure that the WMO-1 trips off within 10 minutes or so. Restart the power venter and reset the WMO-1.
7. After 30 minutes of operation test for spillage at the barometric draft control using a match or smoke from a candle or cigarette. If spillage occurs there is not enough combustion air, refer to National Flue Gas Code, A.N.S.I. Z223.1 or any applicable local codes for guidance.
8. After completion of the test return all doors, windows, dampers, and fans to there normal condition.

## **In Season Maintenance**

1. Check Elbows and horizontal pipe runs for fly ash build up every ton of coal used, clean as needed.
2. Clean flue pipe at exit of appliance every month or so.
3. Clean the screen opening on the exterior from any foreign objects monthly.
4. Perform the maintenance steps found in Appendix A every 4 to 6 weeks.
5. Oil fan motor every two months or so with 1 drop of Superlube or 0W5 synthetic oil.
6. Ensure that the inlet of the WMO-1 safety switch is free from fly ash by placing the vacuum hose over the inlet



## **Resolution of Common Problems**

1. If the power vent speed is still too fast at the minimum rheostat setting, there is a tuning screw on the side of the rheostat that can reduce the speed.
2. The power vent will make a rumbling noise when dirty or in need of lubrication.

## **Recommended Spare Parts**

1. Generally speaking the power venter fan will last a lifetime with proper maintenance, the heat slinger (cooling fan for the motor may need replacement due to it's aluminum construction. Inspect this item each year and keep a replacement handy in the event it has deteriorated beyond serviceable condition. With proper cleaning and oiling the fan motor should last in excess of 5 years.

## **End of Season Maintenance**

1. Remove all flue pipes from the stove and power venter. Take pipes and ash pans outside and wash down thoroughly and dry in ths sun.
2. Inspect all vent connections for looseness, evidence of corrosion or leakage. Check the barometric draft control for free movement and re-level it when re-installed for the next burn season.
3. Remove the power venter fan and motor assembly and block the opening.
4. Coat all flue pipe and fan assembly with WD-40 or other suitable metal protector and store in a dry location.
5. Disconnect power to the appliance, remove the WMO-1 cover assembly. Remove the two screws holding the control box to the heat transfer assembly. The control box slides, unlocking it from the heat transfer tube assembly. Carefully remove any buildup from the thermal switch surface.

**CAUTION: DO NOT DENT OR SCRATCH THE SURFACE OF THE THERMAL SWITCH, IF THE THERMAL SWITCH IS DAMAGED REPLACE IT.**

6. Clear and remove any buildup or obstruction inside the heat transfer tube. Remount, lock and refasten the control box with the two screws. Reattach the assembly cover, and connect power to the appliance.

***DO NOT DESTROY, RETAIN THESE INSTRUCTION AFTER INSTALLATION***

## **APPENDIX A SWG 4HDS Power Vent Maintenance Instructions**

### **Leisure Line Power Vent Maintenance Manual Insert**

*NOTE: YOUR POWER VENT IS AN EXPENSIVE ITEM THAT CAN LAST FOR MANY YEARS OF PROPERLY MAINTAINED. THIS PROCEDURE WILL TAKE LESS THAN 30 MINUTES ONCE YOU ARE FAMILIAR WITH THE TOOLS AND REQUIRED ACTIONS, PLEASE PROTECT YOUR INVESTMENT AND PERFORM THESE IMPORTANT STEPS.*

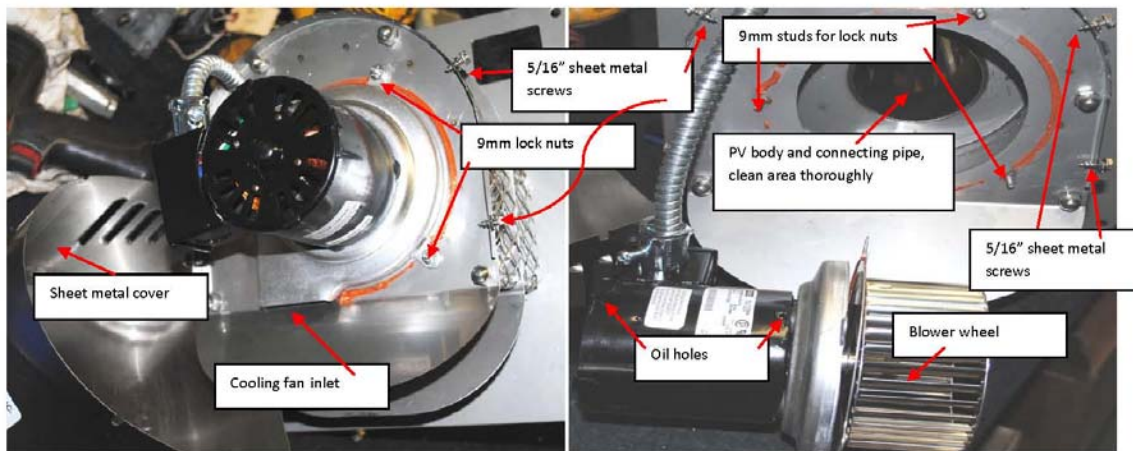
The steps described in this Insert are normally required on an annual basis, however depending on coal quality, quantity burned and atmospheric conditions the steps described here may be required as often as once per month.

TOOLS NEEDED: SMALL VACUUM CLEANER WITH CREVICE TOOL, SMALL COMPRESSOR WITH HOSE AND AIR NOZZLE, STIFF BRISTLE BRUSH, SHARP PICK OR OTHER TOOL TO SCRAPE, 5/16" NUT DRIVER OR ¼" DRIVE SOCKET, 9MM DEEP WELL ¼" DRIVE SOCKET, ¼" DRIVE SOCKET AND 6" EXTENSION, STEP LADDER IF NEEDED TO REACH PV.

1. Shut the stove off on the control panel and cover the barometric damper opening with a cloth or suitable seal (this will prevent dust from entering your home while you are cleaning the unit).

NOTE: THE FOLLOWING STEPS SHOULD BE PERFORMED AS QUICKLY AS POSSIBLE TO PREVENT THE NEED FOR RE-LIGHTING THE STOVE. IT WILL GO OUT IN AROUND 6 to 10 MINUTES.

2. Using a 5/16" socket or nut driver, loosen and retain the four sheet metal screws that hold on the outer cover.
3. Using a 9mm socket remove the three lock nuts that secure the power vent motor to the case.
4. Carefully remove the blower assembly and pull the unit out so you can properly inspect and clean the unit. Check for any broken fins on the main blower and on the cooling fan (located up inside the unit behind the blower wheel).
5. Using a sharp object carefully scrape the coal fly ash off the individual blades on the main blower. Using a vacuum and compressed air thoroughly clean the blower, cooling blade, and motor casing.
6. Inspect blower wheel for any caked on coal fly ash, and repeat step 5 as needed till all is removed.
7. Inspect PV housing and connecting pipe for any collected coal fly ash, vacuum out as needed.
8. Re-install PV motor and tighten the three 9mm lock nuts.
9. Give the motor and cooling fan one last blast of compressed air, spray WD-40 or similar water dispersant up into the cooling fan area to help the fan last longer (this fan is made of aluminum which is very susceptible to corrosion from the coal fly ash).
10. Lubricate motor with two to three drops of Field Controls Super Lube, (this is the recommended lubricant for those motors that have oil holes, some have sealed bearings and do not require lubrication). Mobil One 0W5 Full Synthetic can be used if Super Lube is not available.
11. Reinstall the cover and secure with the four 5/16" sheet metal screws.
12. REMOVE CLOTH/COVER FROM BAROMETRIC DAMPER. Return stove to operation and verify the barometric damper is properly adjusted and the rheostat is adjusted so the damper flap just slightly flutters at full stove burn.



570-752-1811, [leisurelinestoves@gmail.com](mailto:leisurelinestoves@gmail.com), Leisure Line Stove Co, R 620 Broad St, Berwick PA 18603

CAUTION: YOU SHOULD HAVE AT LEAST TWO WORKING CO DETECTORS INSTALLED IN YOUR HOME!!

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## **Appendix B SWG 4RMK Motor Replacement Kit Instructions**

### **REPAIR MOTOR KIT**

Model: SWG-4HD, SWGII-4HD, SWG-5,  
SWGII-5, SWG-6, SWGII-6



This kit includes a replacement assembly for the SWG and SWGII series sidewall power venter models listed above.

**NOTE:** Before working on power venter, shut off electrical power to control box.

**ITEMS INCLUDED:**

- 1- Replacement Motor and Blower Wheel on Mounting Bracket with Mounting Fasteners
- 1- 1/8" Hex wrench
- 1- Tube of high temperature silicone sealant
- 1- Instruction Sheet

**READ THESE INSTRUCTIONS CAREFULLY AND COMPLETELY BEFORE PROCEEDING WITH THE 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 HVAC appliances, who is experienced in such work, familiar with all the precautions required, and has complied with all the requirements of the authority having jurisdiction.

Please retain these instructions after installation.

Installed By: \_\_\_\_\_ Phone: \_\_\_\_\_ Installation Date: \_\_\_\_\_



**FIELD CONTROLS**

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**IDENTIFY WHICH MODEL POWER VENTER YOU HAVE**

**CAUTION:** Avoid applying excess pressure on the blower wheel when handling. This will cause an imbalance of the blower wheel which will result in excessive vibration and premature motor failure.

**REMOVAL**

1. Remove motor cover. (See Figure 1)
2. Remove the electrical box cover and disconnect the conduit and wires. (See Figure 2) It is not necessary to disconnect the wires from the Control Kit.
3. Remove the nuts securing the motor assembly, and pull the motor assembly straight off of the unit. (See Figure 3)
4. Clean off any build-up inside the blower wheel housing.

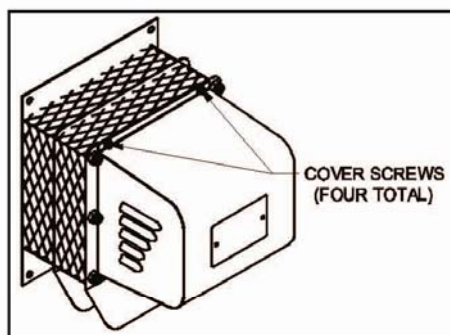


Figure 1

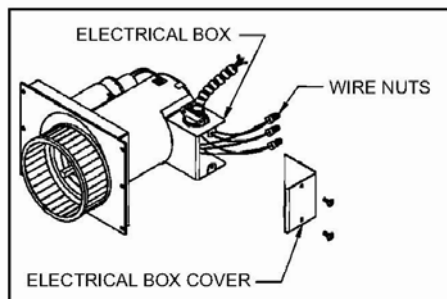


Figure 2

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**INSTALLATION**

1. Align the holes in the circular cover plate with the holes in the motor mount bracket on the motor assembly. (See Figure 3)
2. Slide the motor assembly onto the protruding threaded studs on the power vent body with the exhaust chute pointing downward, and replace the nuts securely to the threaded studs. (See Figure 3)
3. Use the top knockout on the electrical box and reattach the flexible conduit and wires to the motor using the conduit connector and wire nuts. Secure the cover on the electrical box.
4. Seal around the edge of the motor mount bracket with the provided high temperature silicone sealant. Install the motor cover with the side louvers pointing downward. (See Figure 1)

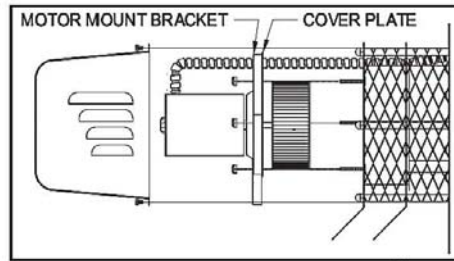


Figure 3



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## LIMITED WARRANTY

Field Controls, LLC ("Company") warrants that its products shall be free from defects in material and workmanship under normal use for the limited period indicated, **from the date of manufacture, subject to the provisions 1-8 below.**

**Eighteen (18) months**

All Field Controls Products (except for those listed below as 5 years or 90 days).

**Five (5) years**

Field Controls Direct Vent Systems (FDVS), Field Oil Vent Kits (FOVP), and ComboVents (CV).

Field Controls warrants that the products listed below shall be free from defects in material and workmanship under normal use for the limited period indicated, **from the date of purchase by the consumer, subject to the provisions 1-8 below.**

**Ninety (90) days**

UV lamps/bulbs

**Provisions:**

1. During the limited warranty period, Company, or its authorized service representative, will repair or replace, at Company's option, without charge, a defective Product. Product that is repaired may be repaired with new or refurbished replacement parts. Product that is replaced may be replaced with a new or refurbished product of the same or similar design. Company will return repaired or replacement Product to customer in working condition. Labor charges are not covered as part of the limited warranty.
2. With regard to UV lamps/bulbs, customer shall be required to include a "valid proof of purchase" (sales receipt) identifying the Product purchased (Product model or accurate date code information) and the date the Product(s) was purchased.
3. Product whose warranty/quality stickers, Product serial number plates or electronic serial numbers have been removed, altered or rendered illegible shall not be covered under the limited warranty.
4. Defective Product must be returned to Company, postage prepaid.
5. IN NO EVENT SHALL COMPANY BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR SIMILAR DAMAGES (INCLUDING, BUT NOT LIMITED TO, LOST PROFITS OR REVENUE, INABILITY TO USE PRODUCT, OR OTHER ASSOCIATED EQUIPMENT, THE COST OF SUBSTITUTE EQUIPMENT, AND CLAIMS BY THIRD PARTIES) RESULTING FROM THE USE OF PRODUCT. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
6. THIS WARRANTY AND REMEDIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL, WRITTEN, EXPRESS, STATUTORY OR IMPLIED. TO THE EXTENT PERMITTED BY LAW, COMPANY DISCLAIMS ALL IMPLIED AND STATUTORY WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
7. Company makes no warranty of any kind in regard to other manufacturer's products distributed by Company. Company will pass on all warranties made by the manufacturer and where possible, will expedite the claim on behalf of the customer, but ultimately, responsibility for disposition of the warranty claim lies with the manufacturer.
8. Product that has been subjected to misuse, accident, shipping or other physical damage, improper installation or application, abnormal operation or handling, neglect, fire, water or other liquid intrusion are not covered by the warranty.



**FIELD CONTROLS**

Phone: 252.522.3031 • Fax: 252.522.0214  
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P/N 46252300 Rev G 09/09

## Appendix C SWG Superlube Information

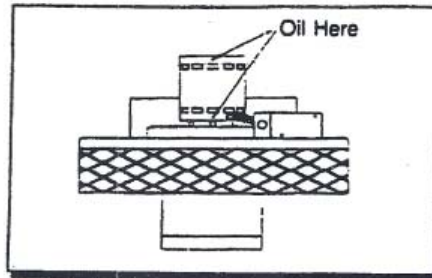
# SWG Superlube

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.

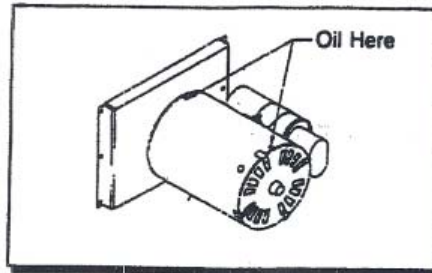


**Caution:** Not for use on plastic parts. Do not mix with petroleum based lubricant, an increase in bearing wear may result.

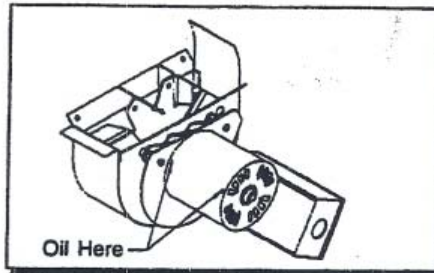
•Material Safety Data Sheet available upon request•



Type-C 6" & 8"



SWG Series 3" to 6"



Model DI-1 & DI-2



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Form 04204 RP

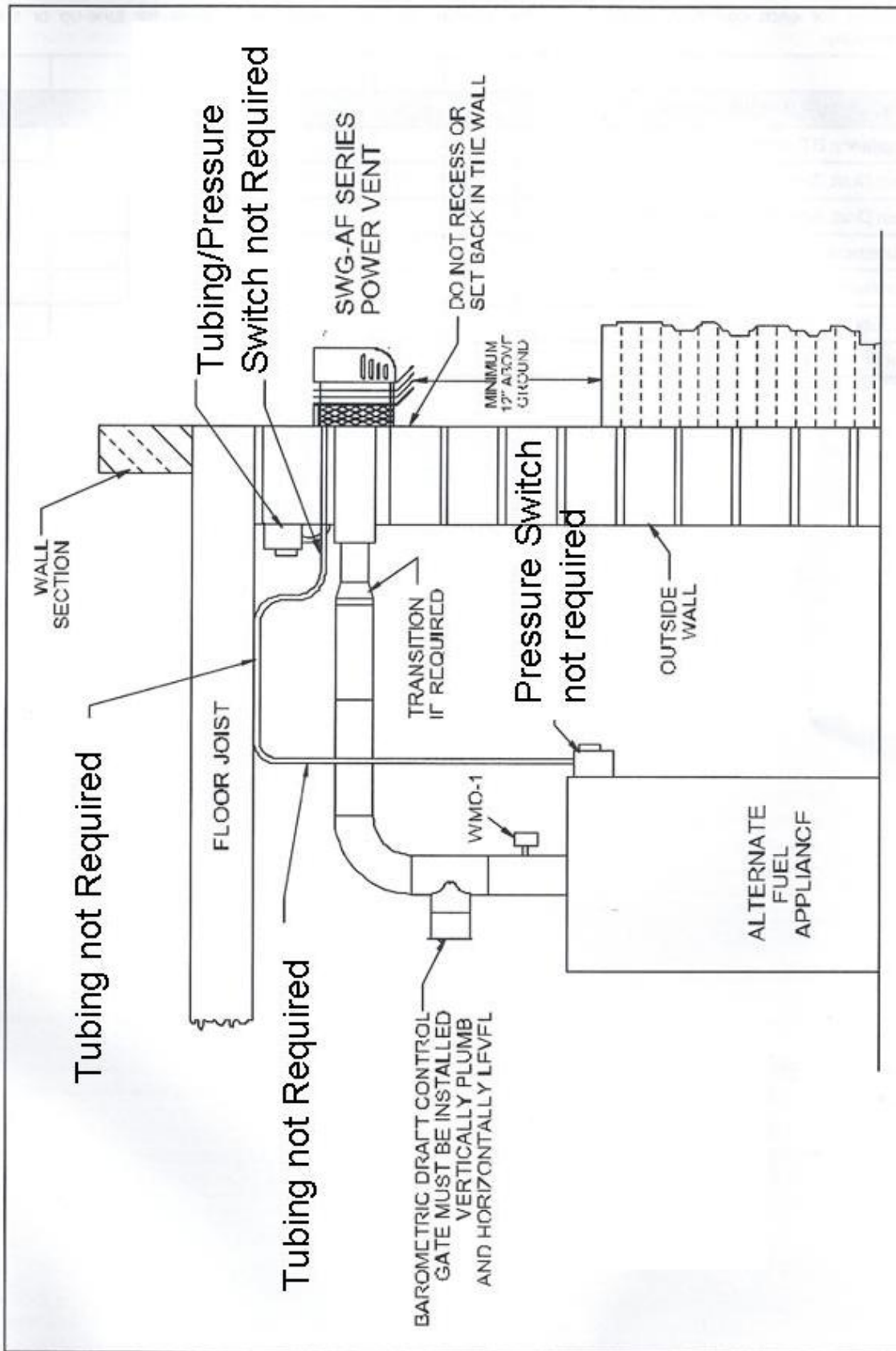
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## **Appendix D SWG Type AF Installation Information**

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**TYPICAL INSTALLATION CONFIGURATION**



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## Appendix E SWG Type AF Wiring Information

