

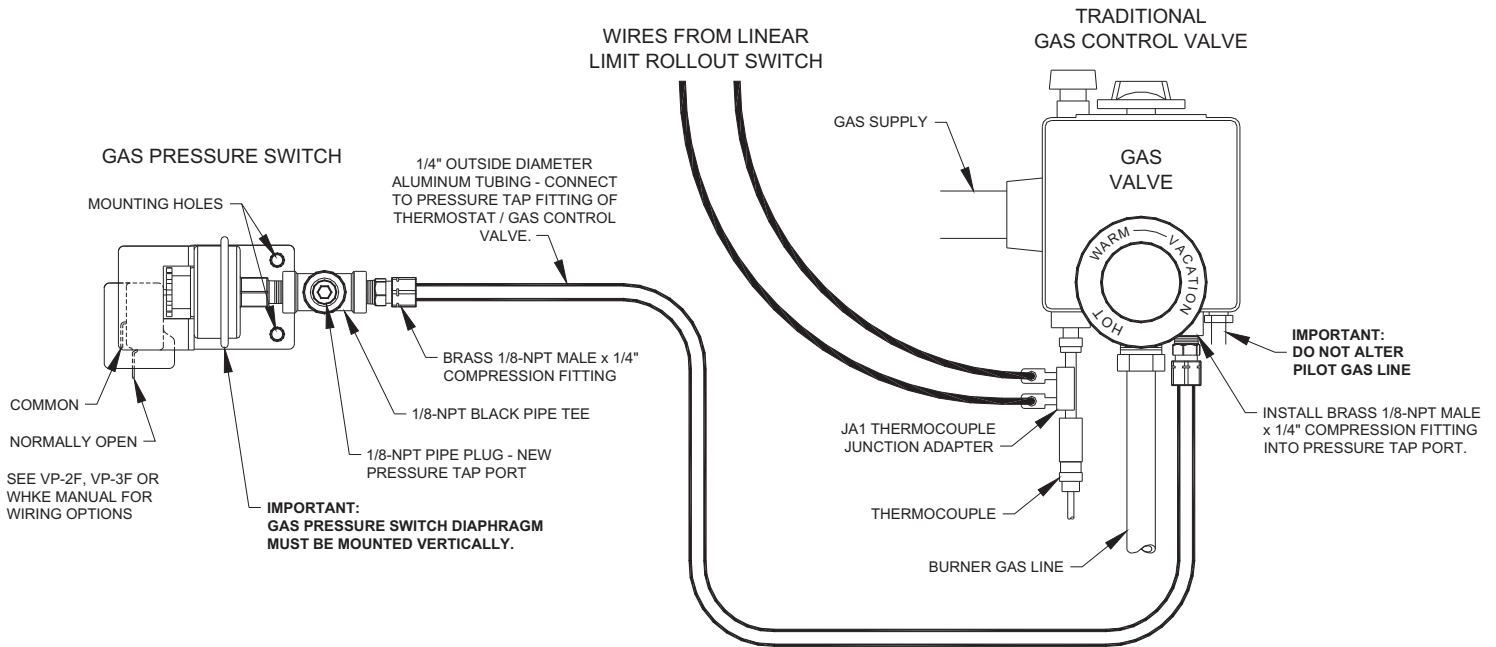


# TJERNLUND PRODUCTS, INC.

1601 Ninth Street • White Bear Lake, MN 55110-6794  
PHONE (800) 255-4208 • (651) 426-2993 • FAX (651) 426-9547  
Visit our web site • www.tjernlund.com

## GAS PRESSURE SWITCH AND LINEAR LIMIT INSTALLATION WITH TRADITIONAL GAS VALVE

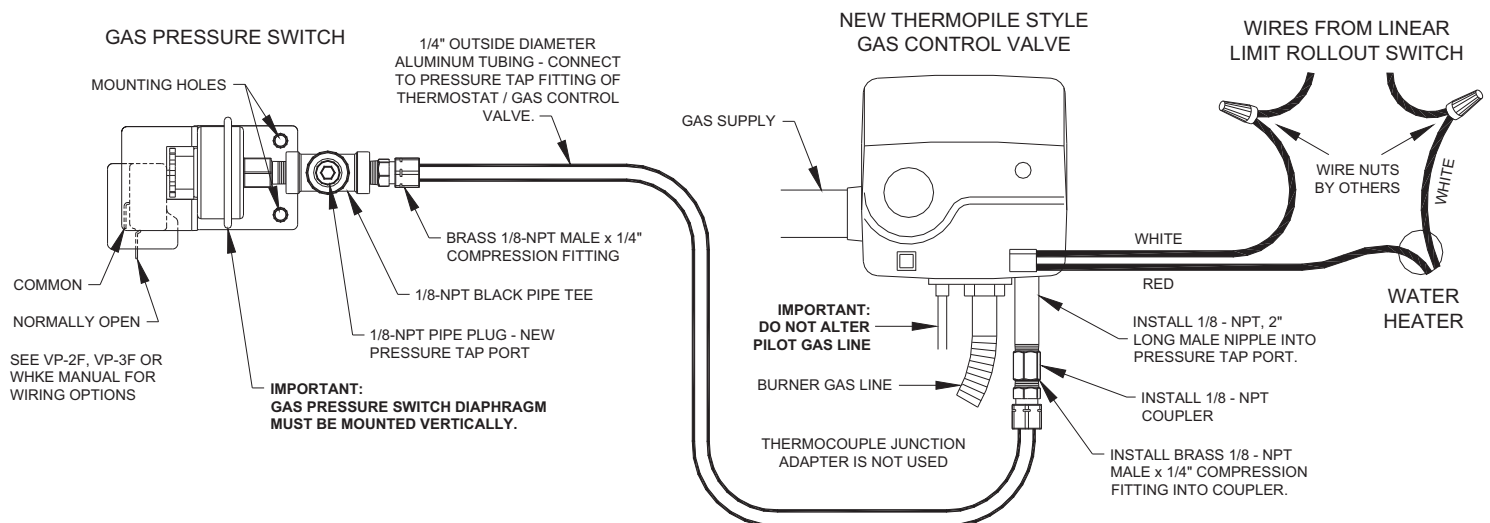
The Diagram Below shows how to connect the JA1 Thermocouple Junction Adapter, Linear Limit Spill Switch and Gas Pressure Switch with a traditional gas valve. Typical Tjernlund models this applies to are VP2-F, VP3-F & WHKE.



## GAS PRESSURE SWITCH AND LINEAR LIMIT INSTALLATION WITH NEW THERMOPILE GAS VALVE

The Diagram Below shows how to connect the Linear Limit Spill Switch and Gas Pressure Switch with a Thermopile Style Gas Valve. **NOTE:** The JA1 Thermocouple Junction Adapter is not used with this style of gas valve.

The 1/8 - NPT, 2" long male nipple and 1/8 - NPT coupler must be installed into the gas valve pressure tap port as shown below. The Linear Limit Switch must be wired in series with the water heater ECO safety circuit WHITE wire from thermopile gas valve.





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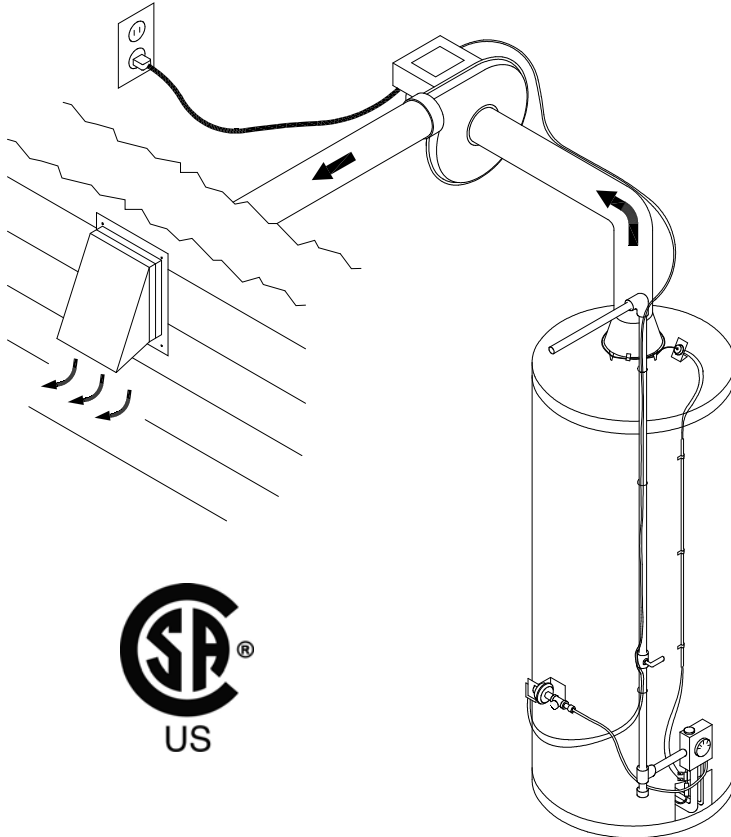
Patented

side wall  
vent  
**systems**

## MODELS

VP-2F For Millivolt Water Heaters up to 60,000 BTU/hr

VP-3F For Millivolt Water Heaters from 60,000 to 120,000 BTU/hr



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**OWNER'S INSTRUCTIONS  
THESE INSTRUCTIONS MUST REMAIN  
WITH EQUIPMENT  
DO NOT DESTROY**

---

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**ALWAYS FOLLOW WATER  
HEATER MANUFACTURER'S  
INSTRUCTIONS FOR PROPER  
OPERATION OF HEATER AND  
RE-LIGHTING OF PILOT**

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## WATER HEATER VENT PACKAGE

For Natural Gas or LP

**NOTE:**

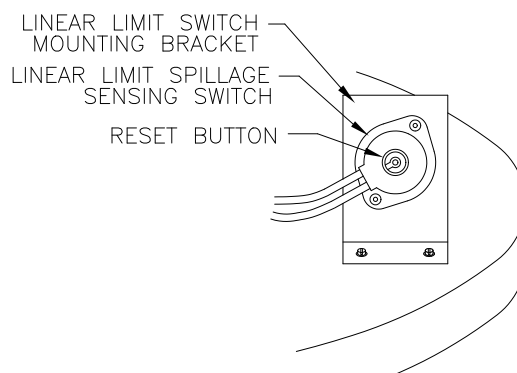
The VP-2F and VP-3F Water Heater Vent Packages use a Linear Limit for the safety interlock circuit. If the pilot light is extinguished, follow the steps under "IN THE EVENT OF A PILOT OUTAGE" on page 1 of these instructions to relight water heater.

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## IN THE EVENT OF PILOT OUTAGE

1. Push the reset button in the center of the Linear Limit spillage sensing located on the draft hood on the top of the water heater.
2. Turn the gas pilot knob at the top of water heater gas valve to "OFF" position.  
**WARNING: Gas pilot knob MUST REMAIN IN "OFF" POSITION FOR FIVE MINUTES BEFORE PILOT IS RE-LIT.** Perform steps 3 & 4 while waiting.
3. Visually verify that there is 115 volt power established to the Power Venter. Check fuse or circuit breaker, wall plug and electrical connections.
4. Visually verify that all electrical connections of control cord circuit are intact.
5. Follow water heater manufacturer's re-lighting instructions attached to water heater or located in water heater owner's manual.



### USER NOTE:

Since the Power Venter cannot operate during a power outage, the safety interlock controls are designed to prohibit gas flow to the water heater. Follow the above procedures and water heater manufacturer's instructions for relighting the pilot when power has been restored.

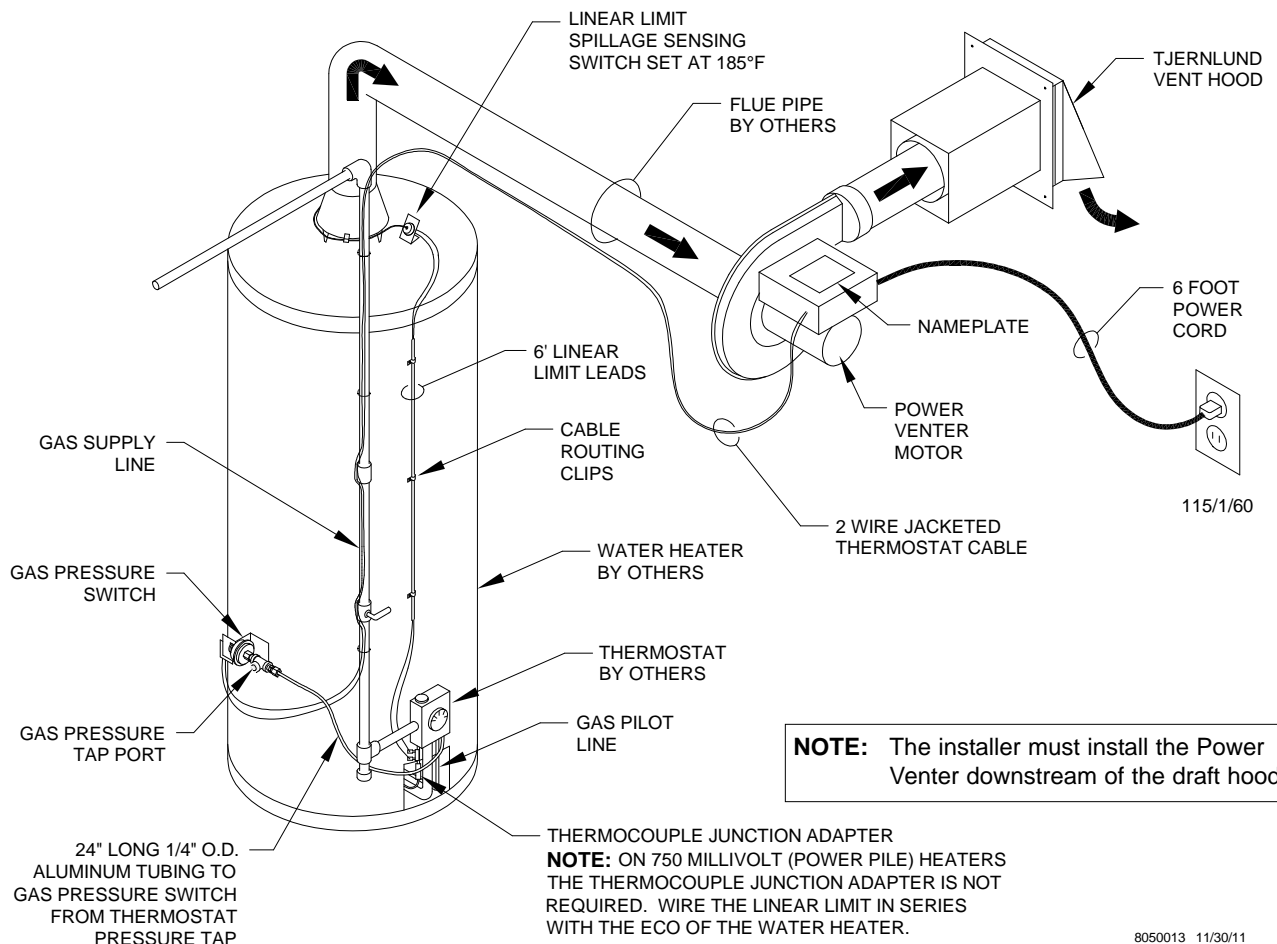
## INSTALLER NOTES

1. The installer must read and follow these instructions carefully to assure proper installation and operation of the water heater vent package.
2. The installer must fill in the required information on the nameplate located on the Power Venter electrical box.
3. The installer must affix the wiring diagram label included with these instructions to the water heater casing adjacent to its rating plate.
4. The water heater may only be installed on the suction side of Power Venter.
5. The installer must notify the owner of the maintenance (Page 13) required with the use of this product.
6. The installer must verify that the pilot safety controls on water heater are in good operating condition before installation of the water heater vent package.
7. The Power Venter must not be installed into any portion of a vent system which serves appliances other than the one(s) vented by the VP-2F or VP-3F.

## SEQUENCE OF OPERATION

1. Water heater thermostat calls for heat.
2. Simultaneously, the Power Venter is actuated by the gas pressure switch and the burner fires.
3. When the thermostat is satisfied the burner shuts down.
4. The Power Venter continues to operate for a non-adjustable time period of approximately 45 seconds to purge the vent system of residual flue gases.
5. If, at any time, sustained flue gas spillage is detected by the Linear Limit spillage sensing switch the pilot / ECO circuit is de-energized, disrupting the flow of gas to the burner and pilot. The reset button on the Linear Limit will need to be pushed in and the pilot will need to be relit to establish water heater operation.

## TYPICAL INSTALLATION



## INSTALLATION RESTRICTIONS

The Power Venter shall not be installed on incinerators, condensing type appliances or solid-fuel burning appliances. The Power Venter may only be installed on appliances equipped with a draft hood, draft diverter or barometric draft control.

The Power Venter shall not be installed on an appliance with an automatic valve having a manual opener unless the manual opener has been rendered inoperative or the automatic valve has been replaced with a valve not equipped with a manual opener.

### CAUTION:

1. **Failure to install, maintain and/or operate the Power Venter in accordance with manufacturer's instructions may result in conditions which can produce bodily injury and property damage.**
2. **The Power Venter must be installed by a qualified installer in accordance with these instructions and all local codes or in their absence in accordance with the latest edition of the National Fuel Gas Code (NFPA #54), The latest edition of the National Electric Code (NFPA #70) and The Occupational Safety and Health Act (OSHA) when applicable. If improperly installed a hazardous condition such as an explosion or carbon monoxide poison accumulation could result.**
3. "Qualified Installer" shall mean an individual properly trained and licensed.
4. The installer must write or imprint name, phone number, date of installation and sign in the appropriate space on the Power Venter nameplate.
5. Plan the vent system so that Code required distances are maintained from plumbing and wiring.
6. The Power Venter motor shaft must be mounted horizontally to prevent motor bearing wear.
7. Flue gas temperature must not be exceed 575° F at Power Venter inlet. Ambient temperature must not exceed 104° F.
8. Disconnect power supply when making wiring connections or when working around the fan blade and motor. Failure to do so may result in severe personal injury and equipment damage.
9. Make certain the power source is adequate for the fan motor requirements. Do not add the Power Venter to a circuit where the total load is unknown.
10. The installer must verify that the BTU/hr input of the water heater does not exceed the recommended input of the VP-2F (60,000) or VP-3F (120,000).
11. A safety inspection of the water heater must be performed before installation of the VP-2F or VP-3F as outlined in ANSI Z223.1/NFPA #54, Appendix H.

## ACTUATION AND SAFETY CONTROLS INSTALLATION

After opening carton, inspect thoroughly for hidden damage. Fan blade should rotate freely. If any damage is found notify freight carrier and your distributor immediately and file a concealed damage claim. Remove the carton labeled "Actuation and Safety Controls."

### GAS PRESSURE SWITCH INSTALLATION

The gas pressure switch is mounted on the casing of the water heater adjacent to the heater's thermostat/gas control valve. It should be mounted close enough so that the supplied 1/4" tubing will reach from the gas pressure switch fitting to the thermostat/gas valve pressure tap port. The two provided screws are self-tapping and drilling. The screws do not require the use of a drill and their 1/2" length assures that the inner tank will not be penetrated.

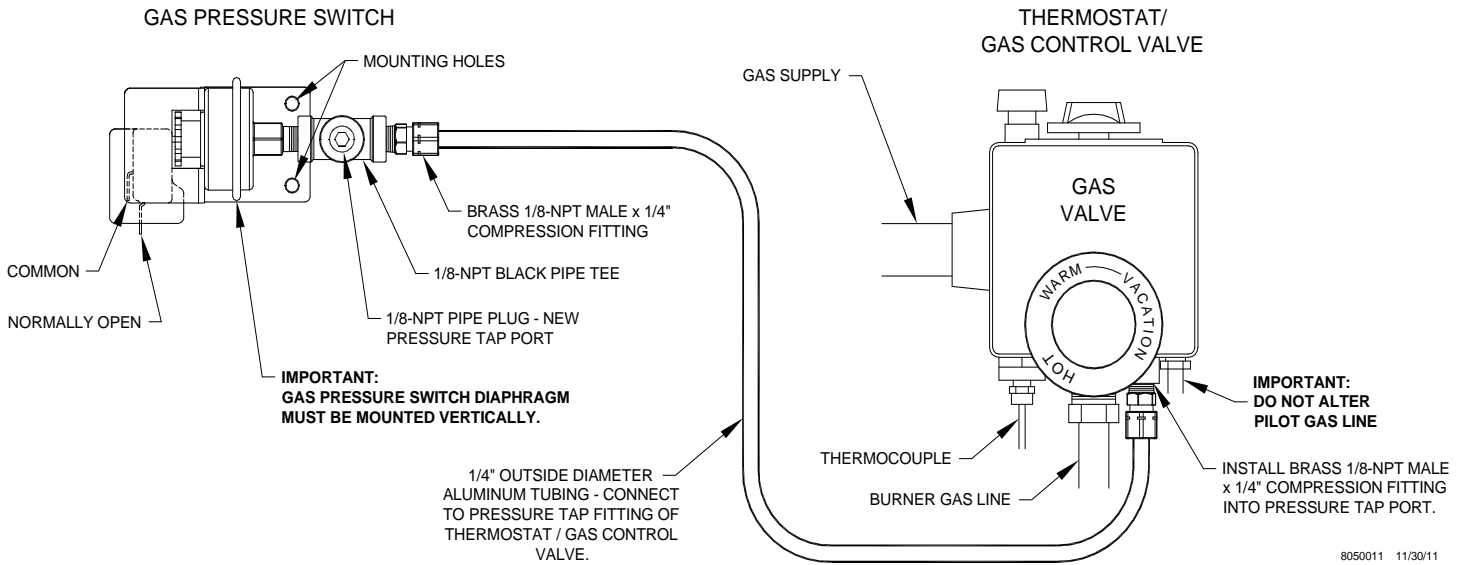
1. Mount the gas pressure switch by securing it to the heater casing with a screw in each of the two mounting holes. **IMPORTANT: Mount gas pressure switch so that diaphragm is in a VERTICAL position, (See Diagram A).**
2. Install the supplied 1/8"-NPT pipe plug to the 90° port of the supplied 1/8"-NPT black pipe tee, (See Diagram A). Use thread sealant, do not over tighten.
3. Install the 1/8"-NPT black pipe tee to the gas pressure switch, (See Diagram A). Use thread sealant, do not over tighten. **CAUTION:** Utilize the hex nut on the gas pressure switch when attaching the black pipe tee.
4. Install the supplied Brass 1/8"-NPT male x 1/4" compression fitting to the 1/8"-NPT black pipe tee, (See Diagram A). Use thread sealant, do not over tighten.
5. Remove the PRESSURE TAP plug from the underside of the thermostat/gas control valve and install the supplied Brass 1/8"-NPT male x 1/4" compression fitting, (See Diagram A). Use thread sealant, do not over tighten. **IMPORTANT: DO NOT alter the heater's PILOT GAS LINE, (See Diagram A).**
6. Using a tube cutter, cut the appropriate length of the supplied 1/4" tubing to reach from the gas pressure switch fitting to the PRESSURE TAP PORT fitting of the thermostat/gas control valve. Make sure each end of the tubing is not pinched closed.

7. Use the 1/4" tubing to connect gas pressure switch fitting to the PRESSURE TAP PORT fitting on the thermostat/gas control valve.

8. Conduct a gas leakage test of all connections as outlined in the latest edition of NFPA 54, ANSI Z223.1, part 4. or local codes.

**NOTE:** A "gauge pressure tap port" can be accessed by removing the 1/8-NPT pipe plug that is on the 1/8-NPT black pipe tee (attached to the gas pressure switch).

DIAGRAM A



**LINEAR LIMIT SPILLAGE SENSING SWITCH INSTALLATION**

**PURPOSE:**

To provide a means for appliance shut-down in the event of flue blockage or Power Venter failure.

**OPERATION:**

When concentrated spillage of the products of combustion occurs from the draft hood, the Linear Limit sensing switch circuit will open preventing burner operation.

1. Attach the Linear Limit sensing switch mounting bracket to the top of the water heater using the sheet metal screws provided. The Linear Limit bracket should be approximately 1/2" from the draft hood.
2. Attach the three Linear Limit capillary mounting brackets around the draft hood, equally spaced.
3. Insert the Linear Limit spillage sensing switch capillary into the "U" of the Linear Limit brackets outlining the perimeter of the draft hood. The Linear Limit capillary may be overlapped if necessary, (See Diagram B). **IMPORTANT: DO NOT CUT THE CAPILLARY**, it will be destroyed and water heater will be disabled.
4. Route the Linear Limit spillage sensing switch cable down the water heater casing locating the end near the Thermocouple or ECO of water heater. Secure it with the cable clamps and self drilling screws provided, (See Diagram B1).

DIAGRAM B

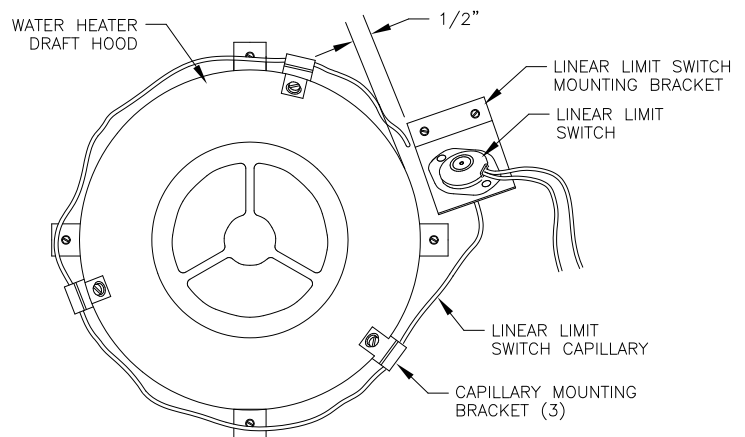
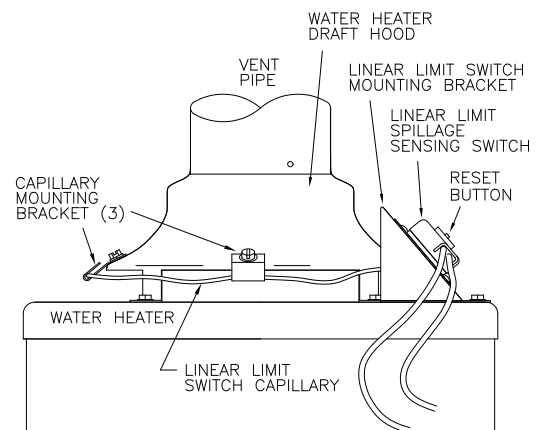
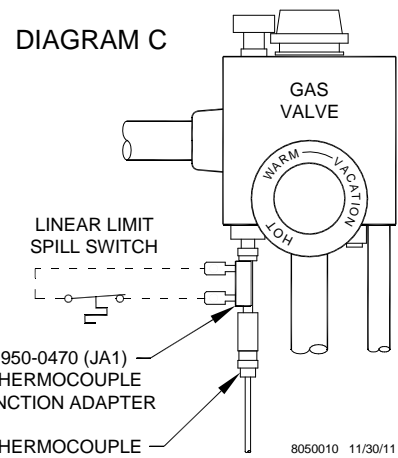


DIAGRAM B1



## THERMOCOUPLE JUNCTION ADAPTER INSTALLATION

Unscrew thermocouple from gas valve and screw in Thermocouple Junction Adapter. Screw thermocouple into Thermocouple Junction Adapter. Connect Linear Limit cables to spade connections on Thermocouple Junction Adapter, (See Diagram C). **NOTE:** On 750 Millivolt (power pile) heaters, wire Linear Limit spill switch in series with high limit (ECO) of heater.



## VENT HOOD TERMINATION CLEARANCES

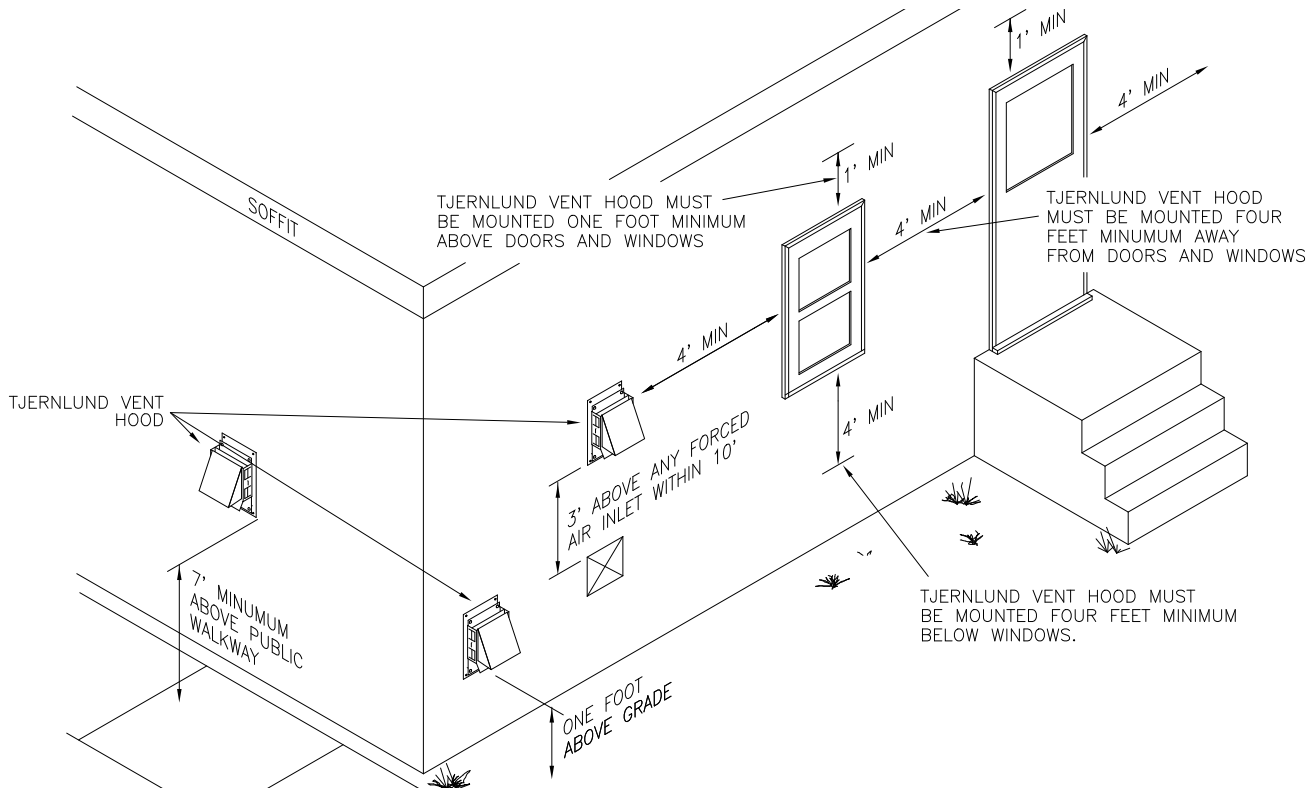
### CODE REQUIREMENTS

Failure to follow these installation instructions may violate applicable national and/or local codes. Terminate the vent system so that proper minimum clearances are maintained as cited in the latest edition of the National Fuel Gas Code (NFPA # 54) and the latest edition of Chimneys, Fireplaces, Vents, and Solid Fuel Burning Appliances (NFPA #211), or as follows:

- Not be less than 7 feet above grade when located adjacent to public walk ways.
- At least 3 feet above any forced air inlet located within 10 feet.
- At least 4 feet below, 4 feet horizontally from or 1 foot above any door, window or gravity air inlet into any building.
- At least 12 inches above grade.
- So that the flue gases are not directed so as to jeopardize people, overheat combustible structures or enter buildings, and
- Not less than 2 feet from an adjacent building.

The vent terminal shall also not be installed closer than 3 feet from the inside corner of an L shaped structure.

1. Check vent pipe system for leakage. All vent system leaks must be sealed prior to installation of a power venter.
2. A vent system incorporating a Tjernlund VH1 Series vent hood should not exceed 575° F.
3. Termination of a sidewall vent system with a device other than the Tjernlund VH1 Series vent hood could affect system performance and result in a possible safety hazard.
4. Plan the vent system layout to avoid the possibility of accidental contact with wiring or plumbing inside of walls.
5. Installation must be done by one experienced and familiar with venting of combustion appliances.



## VENT HOOD INSTALLATION

1. Verify that proposed Vent Hood location will conform to "Vent Hood Termination Clearances" on page 5.
2. Use scissors to detach Vent Hood Mounting Template on page 14. Follow instructions on Vent Hood template.

## POWER VENTER INSTALLATION

### CODE REQUIREMENTS

Power Venter installation must be in accordance with the following requirements of the National Fuel Gas Code: (ANSI Z223.1)

- All portions of the vent system under positive pressure during operation (on the outlet side of the Power Venter) shall be designed and installed so as to prevent leakage of flue or vent gases into a building.
- All appliances must enter the vent system on the inlet side of the Power Venter.
- Provision shall be made to interlock the appliance(s) to prevent the flow of gas to the main burners when the draft system is not performing so as to satisfy the operating requirements of the equipment for safe performance.

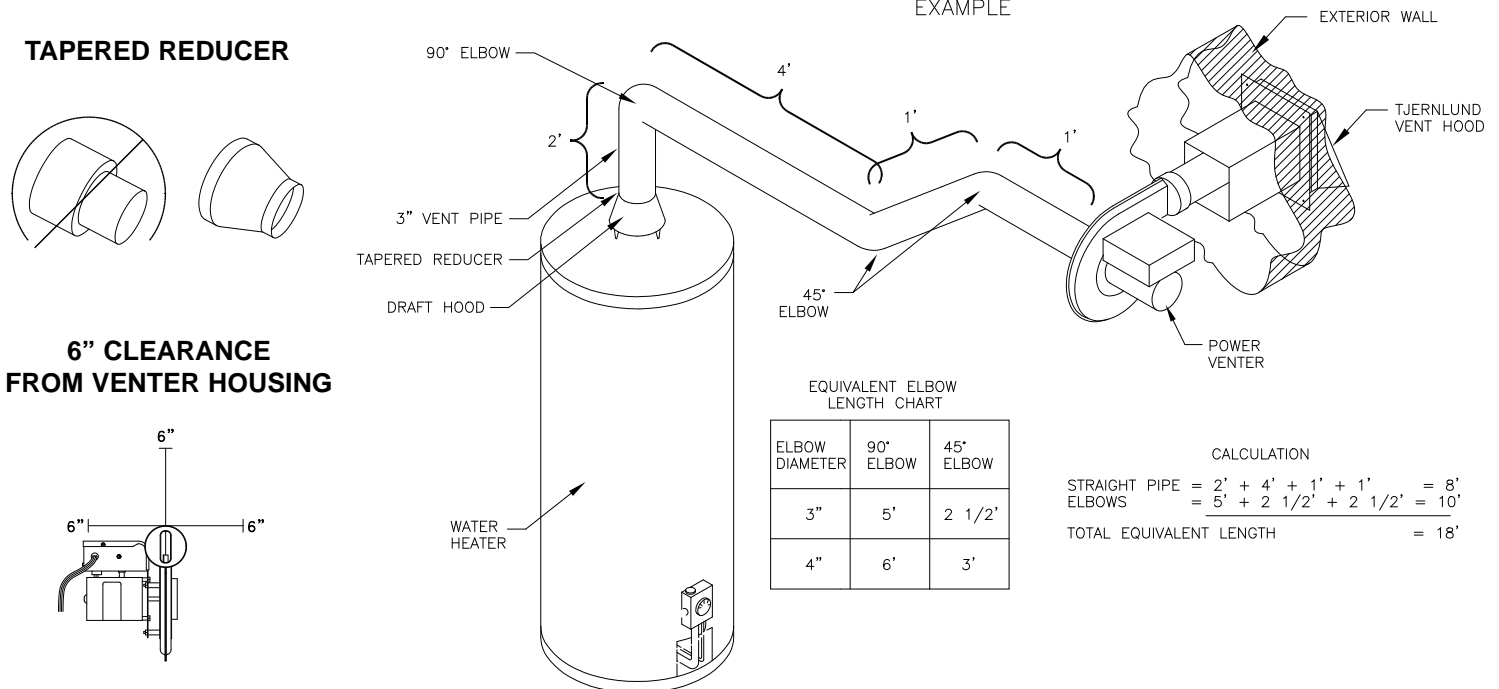
### INSTALLATION RESTRICTIONS

1. Power Venter should be installed as close to the termination of the vent system as possible to prevent flue gas leakage.
2. Power Venter must be installed with the motor shaft horizontal to prevent motor bearing wear.
3. Power Venter housing is single wall. Six inch clearance must be maintained to combustible materials.
4. **If installing the VP-2F**, 3" vent pipe may be used from the water heater to the Power Venter. If the flue outlet is larger than 3", install a **tapered** reducer directly after the draft hood of the water heater.

**If installing the VP-3F**, 4" vent pipe may be used from the water heater to the Power Venter. If the flue outlet is larger than 4", install a **tapered** reducer directly after the draft hood of the water heater.

**NOTE:** All reducers and vent pipe are to be supplied by the installer and are available from your local heating wholesaler.

5. The equivalent vent pipe length of elbows and straight pipe must be calculated. The total equivalent length must not exceed 75 feet with no more than 25 equivalent feet in elbows.



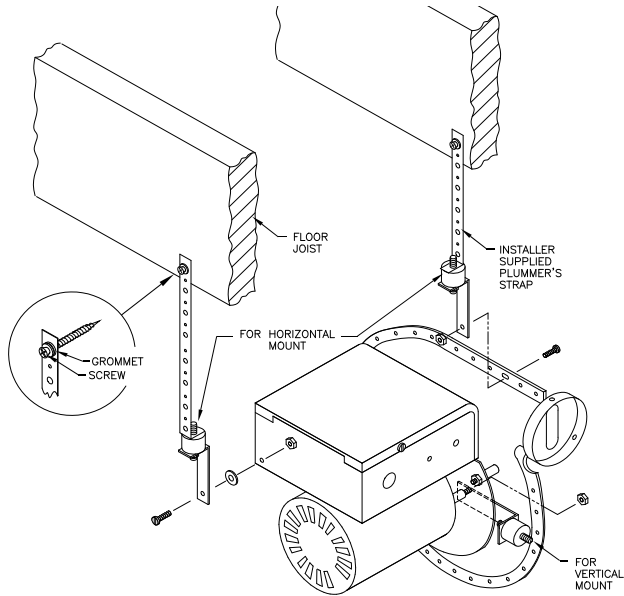


## MOUNTING POWER VENTER

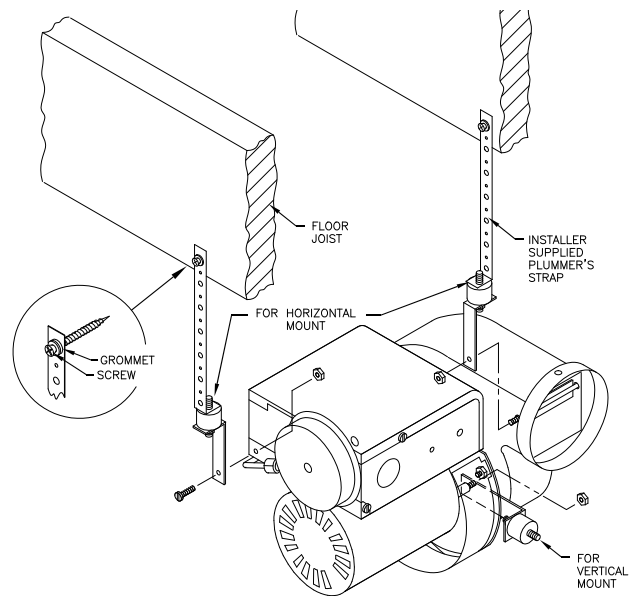
- To facilitate installation and reduce vibration, we have included 2 mounting brackets, 2 rubber isolators and 2 rubber grommets. One of the brackets may be used temporarily as a "third hand" to support the Power Venter while positioning it for permanent installation. Install the brackets as shown below.

**NOTE:** The Power Venter may be mounted in any position as long as the shaft of the motor remains horizontal.

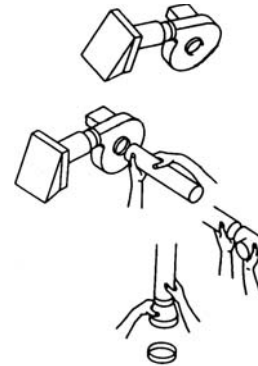
### VP-2F MOUNTING



### VP-3F MOUNTING



- Connect outlet of Power Venter to inner sleeve of vent hood. Sections of vent pipe are permitted between Power Venter and Vent Hood but all connections after the Power Venter will be under a positive pressure during operation. These connections must be sealed with high temperature silicone sealant or aluminum vent pipe tape supplied by installer.
- Using the holes as a guide, attach vent pipe to inlet collar using sheet metal screws. Install properly sized vent pipe sections from Power Venter inlet to appliance outlet avoiding elbows wherever possible and using only tapered transitions.
- Support vent pipe in accordance with vent manufacturer's instructions.



## ELECTRICAL

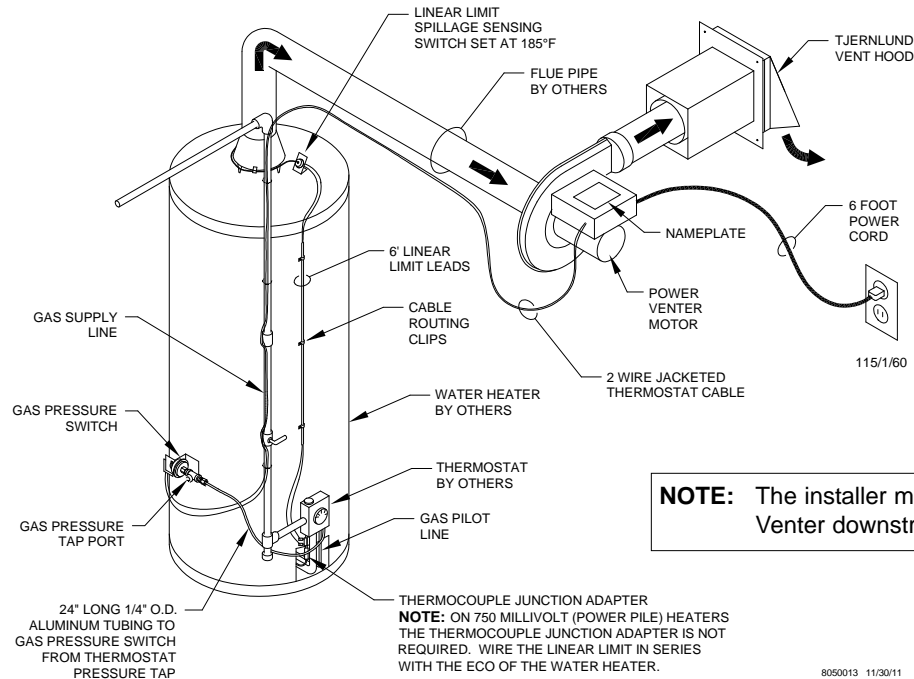
Route the 25' control cable supplied with the Power Venter back to the water heater controls along the ceiling joists, taking care not to come closer than 6" to the vent pipe or any other potentially hot surface. In most cases, the gas supply line may be used as a routing path from the ceiling to the water heater controls, the supplied nylon straps may be used to secure the cable.

**NOTE:** If the distance between the Power Venter and the heater controls is greater than the length of the cable, splice a section of 2 conductor PVC sheathed, 105 degree C thermostat cable to the supplied cable. Make sure the color coded leads remain consistent. An NEC approved accessible junction box must be used to contain the splice. Splices shall be made mechanically secure and insulated with tape or fixture type splicing connectors may be employed. Strain relief hardware contained within the NEC approved junction box shall be utilized.

The Power Venter operates on 110/115 VAC, therefore a grounded outlet must be within reach of the six foot power cord supplied with Power Venter. The flexible power cord supplied with the unit may only be used where local codes permit. If local codes do not permit the use of flexible power cord, follow steps below.

- Remove the electrical box cover, flexible cord and strain relief from the enclosure.
- Install suitable conduit fitting in enclosure and splice field wiring into existing wiring using code authorized method (wire nuts, etc.).
- Replace electrical box cover.

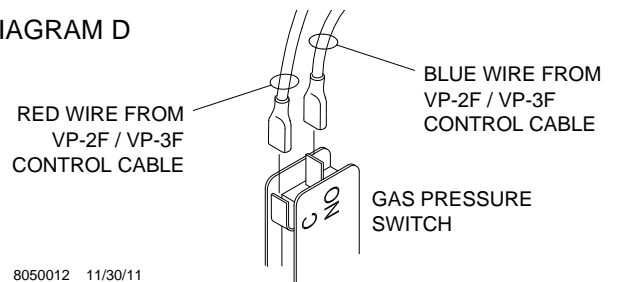
## TYPICAL INSTALLATION



## ACTUATING AND SAFETY CONTROL CIRCUIT CONNECTIONS

1. If not previously completed, push both leads from the Linear Limit spill switch onto Thermocouple Junction Adapter terminal, (See Diagram C, Page 5). **NOTE:** On 750 Millivolt (power pile) heaters, wire Linear Limit spill switch in series with high limit (ECO) of heater.
2. Push the Red lead from Power Venter 25' control cable onto the common on the Gas Pressure Switch, (See Diagram D)
3. Push the Blue lead from the Power Venter 25' control cable onto the normally open terminal on the Gas Pressure Switch, (See Diag. D).
4. Plug the power cord from the Power Venter into a grounded 115 VAC outlet. Verify that the outlet is powered through a 15 amp circuit breaker.

### DIAGRAM D



**NOTE:** The Power Venter may operate for approximately 45 seconds when power is first established. Wait until the Power Venter shuts off before continuing.

## OPERATION CIRCUIT CHECK

1. Place water heater in operation.
  - A. The Power Venter should operate.
2. Turn gas pilot knob to "pilot".
  - B. The Power Venter should continue to operate for approximately 45 seconds to purge the vent system of any residual flue gases.
3. Repeat steps 1 and 2 twice to assure operation.

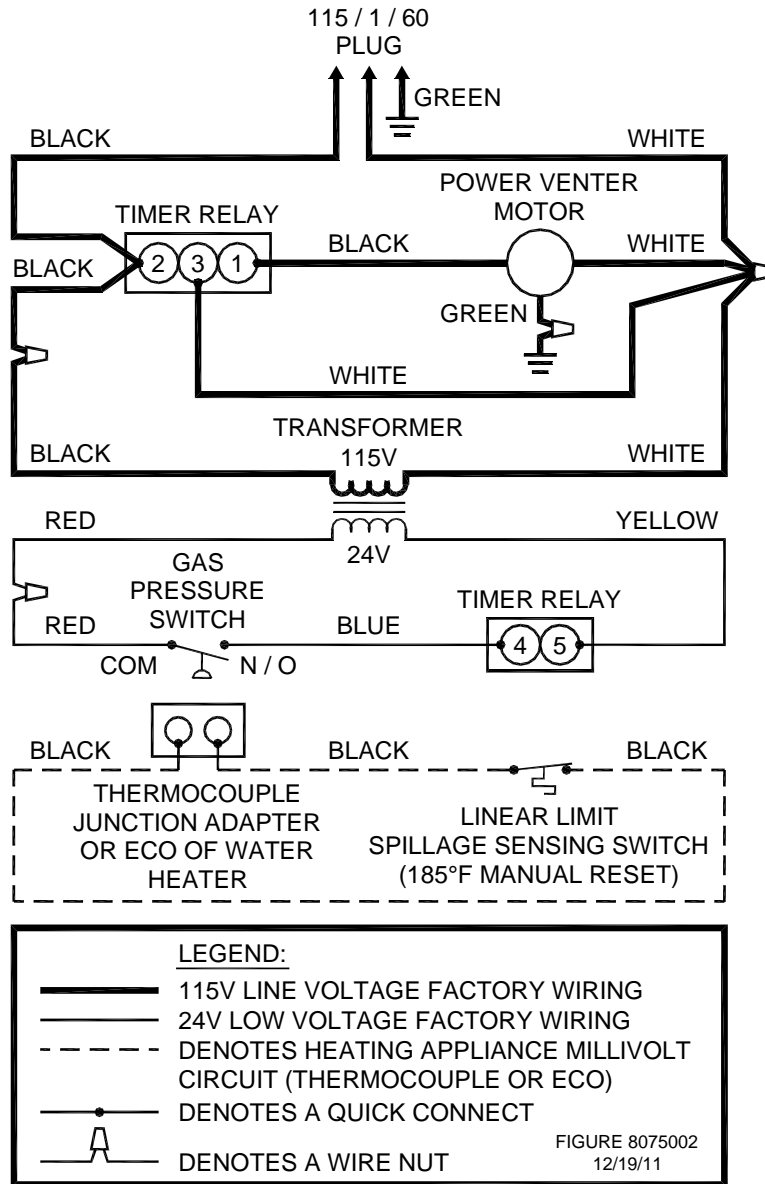
## SAFETY INTERLOCK TEST

### IMPORTANT:

The Linear Limit spillage sensing switch must disable the heater in the event of a venting malfunction. The following procedure is necessary to confirm that the heater is disabled in the event of a venting malfunction.

1. Unplug Power Venter from 115 VAC outlet to disable the Power Venter.
2. Adjust the heater's thermostat or run hot water until full burner operation occurs. Venter should **not** run, but burner should fire.
3. Flue gas spillage will emit from the draft hood. Linear Limit spillage sensor should open in less than 3 minutes, extinguishing pilot light and disabling water heater. If water heater is not disabled, remove call for heat, reposition Limit and repeat steps 1-3.
4. Wait 2-3 minutes for Linear Limit sensing element to cool and push the reset button on Linear Limit spillage sensing switch.
5. Plug Power Venter power cord back into 115 VAC outlet.
6. Re-light pilot following the heater manufacturer's instructions. Adjust the heater's thermostat or run hot water until full burner operation occurs. Power Venter should now be running while burner is firing. Turn thermostat down or hot water off so burner is no longer firing. Power Venter should continue to run for approximately 45 seconds during the Relay/Timer post-purge cycle.

**VP-2F / VP-3F WATER HEATER VENT PACKAGE LADDER WIRING DIAGRAM**



**COMBUSTION AIR TEST**

**WARNING:**

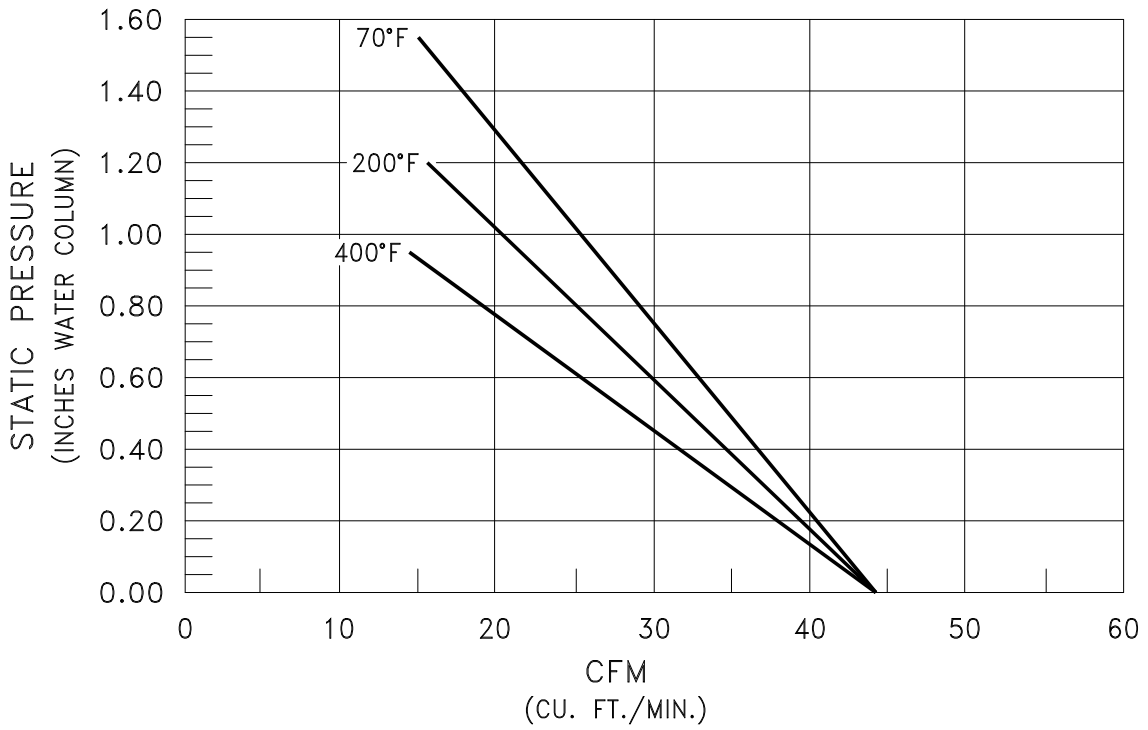
The Linear Limit spillage sensing switch is designed to alert the user to a potentially hazardous condition. It is not designed to, and cannot replace, regular vent system inspection, appliance servicing and combustion testing. **DO NOT USE IT AS A SUBSTITUTE FOR PROFESSIONAL APPLIANCE MAINTENANCE.**

1. Close all doors and windows of the building. If the appliance is installed in a utility room or closet, close the entrance door. Close fire place dampers.
2. Turn on clothes dryer. Turn on all exhaust fans, such as range hoods, bathroom exhaust and whole house fans to maximum speeds. Do not operate a fan used strictly for summer exhausting.
3. Following the water heater manufacturer's instructions, place the appliance in operation, set thermostat for continuous operation.
4. Allow fans and appliance to operate for 5 minutes.
5. Tripping of the Linear Limit spillage sensing switch during the 5 minutes indicates an unsafe operating condition. Turn off fuel supply to appliance and **DO NOT OPERATE UNTIL UNSAFE VENTING CONDITION IS INVESTIGATED BY PROFESSIONAL CONTRACTOR OR UTILITY SERVICE PERSONNEL.**
6. Return all windows, doors and fans to their previous conditions of use.
7. Sign and date these instructions to verify that the combustion air and safety interlock test have been completed. These instructions must remain on premises.

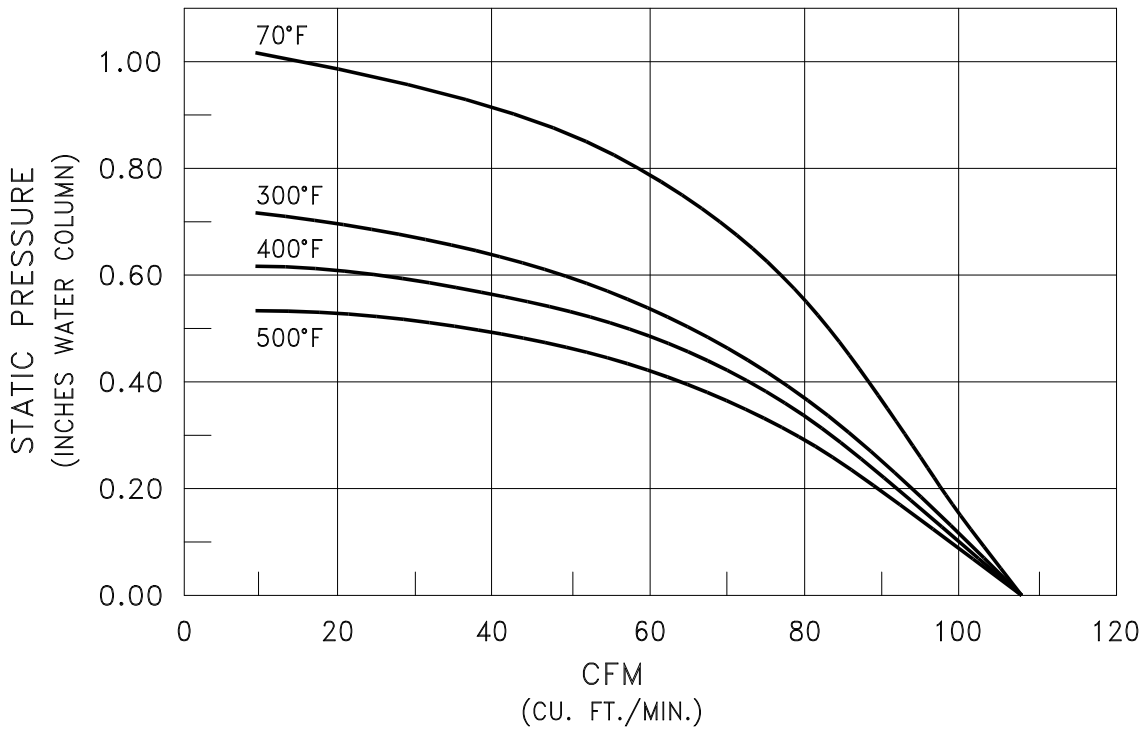
Sign: \_\_\_\_\_

Date: \_\_\_\_\_

**VP-2F PERFORMANCE CURVE**



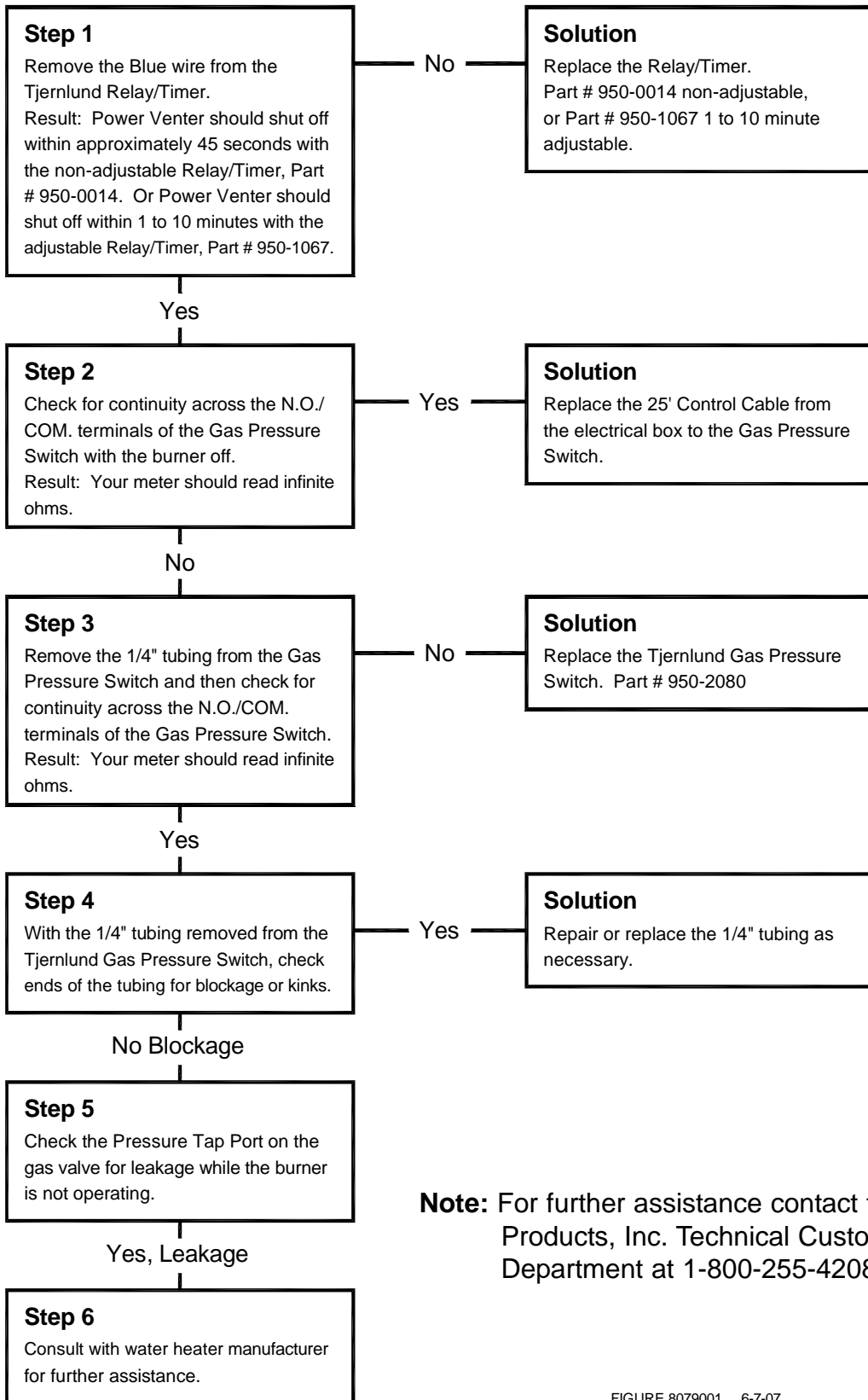
**VP-3F PERFORMANCE CURVE**



**Symptom 1**

Venter runs constantly.

**NOTE:** If the pilot light is extinguished, follow the steps under "IN THE EVENT OF A PILOT OUTAGE" on page 1 of these instructions before continuing.



**Note:** For further assistance contact the Tjernlund Products, Inc. Technical Customer Service Department at 1-800-255-4208, 7:30 - 4:30 CST.

FIGURE 8079001 6-7-07

**Symptom 2**  
Venter will not run.

**NOTE:** If the pilot light is extinguished, follow the steps under "IN THE EVENT OF A PILOT OUTAGE" on page 1 of these instructions before continuing.

**Step 1**  
Establish that all 115 volt circuits are complete to the Power Venter. Check the electrical plug to the wall receptacle, circuit breakers, and fuses.

**Solution**  
Re-establish 115 volts to the Power Venter.

Yes

**Step 2**  
CAUTION: Disconnect the 115 volt power supply to the Power Venter before attempting the following procedure.  
a) Remove the two Black leads from the Relay/Timer and connect them together.  
b) Re-establish the 115 volt power supply to the Power Venter.  
Result: The Power Venter should run constantly.

**Solution**  
Replace the Power Venter motor.  
Motor Part Number  
VP-2F 950-2020  
VP-3F 950-1020

Yes

**Step 3**  
CAUTION: Disconnect the 115 volt power supply to the Power Venter before attempting the following procedure.  
a) Reinstall the two Black leads from Step 2 to their original terminals.  
b) Jump the Red and Blue leads from the Gas Pressure Switch.  
c) Re-establish the 115 volt power supply to the Power Venter.  
Result: The Power Venter should run constantly.

**Step 3.1**  
Measure the voltage on terminals 4 and 5 on the Relay/Timer.  
Result: At this time you should measure approximately 24 volts.

**Solution**  
Replace the Relay/Timer.  
Part # 950-0014 non-adjustable, or Part # 950-1067 one to ten minute adjustable.

No

**Step 3.2**  
Measure the voltage on the secondary side of the 115/24 volt transformer.  
Result: At this time you should measure approximately 24 volts.

**Solution**  
Replace the 25' Control Cable from the electrical box to the Gas Pressure Switch.

No

**Solution**  
Replace the Transformer.  
Part # 950-2030

Yes

**Step 4**  
Remove the 1/4" tubing from the Tjernlund Gas Pressure Switch and check ends of the tubing for blockage or kinks.

**Solution**  
Repair or replace the 1/4" tubing as necessary.

No Blockage

**Step 5**  
Check for gas pressure at the Pressure Tap Port on the gas valve while the burner is operating.  
Result: Pressure is present.

**Solution**  
Replace the Tjernlund Gas Pressure Switch. Part # 950-2080

No

**Step 6**  
Consult with water heater manufacturer for further assistance.

**Note:** For further assistance contact the Tjernlund Products, Inc. Technical Customer Service Department at 1-800-255-4208, 7:30 - 4:30 CST.

## MAINTENANCE

1. The VP-2F & VP-3F motors are permanently lubricated and do not need to be oiled.
2. The owner must semiannually inspect the vent hood and vent pipe for blockage, corrosion and leaks.
3. A vent system inspection must be performed annually by a qualified service agency. The inspection should include the operation circuit check, safety interlock test, combustion air test and a visual inspection of the complete vent system for corrosion, blockage and leaks. Any corrosion, blockage or leaks detected, must be replaced or repaired immediately.

## HOW TO OBTAIN SERVICE ASSISTANCE

1. If you have any questions about your Power Venter or if it requires adjustment, repair or routine maintenance, we suggest that you contact your installer, plumbing contractor or service agency.
2. If you require technical information contact Tjernlund Products, Inc. at 1-800-255-4208.

When contacting Tjernlund Products, Inc., please have the following information available:

1. Model number of the Power Venter
2. Name and address of installer and service agency
3. Date of original installation and dates any service work was performed
4. Details of the problem

## LIMITED PARTS WARRANTY AND CLAIM PROCEDURE

Tjernlund Products, Inc. warrants the components of its products for one year from date of installation. This warranty covers defects in material and workmanship. This warranty does not cover normal maintenance, transportation or installation charges for replacement parts or any other service calls or repairs. Products that are tampered with, damaged, installed improperly, wired incorrectly or defective due to malfunctioning appliances are not covered under this warranty. This warranty DOES NOT cover the complete Power Venter if it is operable, except for the defective part.

- 1.) Follow troubleshooting guide to determine defective component. If unable to determine faulty component, contact your Tjernlund distributor or Tjernlund Products Technical Customer Service Department at 1-800-255-4208 for troubleshooting assistance.
- 2.) After the faulty component is determined, return it to your Tjernlund distributor for replacement. Please include Venter date code component was taken from. The date code is located on the Electrical Box coverplate. If the date code is older than 1 year, you will need to provide a copy of the original installation receipt to your distributor. Credit or replacement will only be issued to a Tjernlund distributor after the defective part has been returned prepaid to Tjernlund and verified defective.

## REPLACEMENT PARTS LIST

ITEM	PART NUMBER
VP-2F Vent Hood	VH1-3
VP-3F Vent Hood	VH1-4
VP-2F Venter Motor	950-2020
VP-3F Venter Motor	950-1020
Gas Pressure Switch	950-2080
24V Transformer	950-2030
Post Purge Relay/Timer (approx. 45 second non-adjustable delay)	950-0014
Post Purge Relay/Timer (1 to 10 minute adjustable delay)	950-1067
Linear Limit Spill Switch	950-2064

### TJERNLUND LIMITED ONE YEAR WARRANTY

Tjernlund Products, Inc. warrants to the original purchaser of this product that the product will be free from defects due to faulty material or workmanship for a period of (1) year from the date of original purchase or delivery to the original purchaser, whichever is earlier. Remedies under this warranty are limited to repairing or replacing, at our option, any product which shall, within the above stated warranty period, be returned to Tjernlund Products, Inc. at the address listed below, postage prepaid. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF, AND TJERNLUND PRODUCTS, INC. EXPRESSLY DISCLAIMS LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF THIS PRODUCT. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES AND NO AGENT IS AUTHORIZED TO ASSUME FOR US ANY LIABILITY ADDITIONAL TO THOSE SET FORTH IN THIS LIMITED WARRANTY. IMPLIED WARRANTIES ARE LIMITED TO THE STATED DURATION OF THIS LIMITED WARRANTY. Some states do not allow limitation on how long an implied warranty lasts, so that limitation may not apply to you. In addition, some states do not allow the exclusion or limitation of incidental or consequential damages, so that above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which may vary from State to State. Send all inquiries regarding warranty work to Tjernlund Products, Inc. 1601 9th Street, White Bear Lake, MN 55110-6794. Phone (651) 426-2993 • (800) 255-4208 • Fax (651) 426-9547 • Email: fanmail@tjfans.com

1. Use scissors to detach template. Verify "Vent Hood Installation Clearances" on page 5 are adhered to. Attach the Vent Hood Mounting Template to the interior of the wall the vent hood will be penetrating.
2. Verify that wall penetration will not come in contact with concealed wiring or plumbing. Use VH1-3 template for the model VP-2F and VH1-4 template for the model VP-3F. Using a 1/2" drill bit, drill two pilot holes where noted on the template. The drill bit must be long enough to penetrate to the building exterior.
3. Attach the template to the building exterior aligning the pilot holes on the template with the pilot holes drilled in step 2.
4. Using a reciprocating saw, cut an opening through the building siding, wall board, etc., following the appropriate lines of the template.
5. Slide the Vent Hood through the opening and fasten to exterior wall using provided screws.
6. Once Power Venter is completely installed and secured, apply a bead of exterior rated caulk between Vent Hood flange and exterior of building.

**CUT OUT THIS SQUARE IF INSTALLING THE VP-3F (VH1-4" VENT HOOD)**

**CUT OUT THIS SQUARE IF INSTALLING THE VP-2F (VH1-3" VENT HOOD)**

<b>VH1-3 ROUGH-IN</b>	<b>6 3/4" Sq.</b>
<b>VH1-4 ROUGH-IN</b>	<b>8" Sq.</b>

