



## INSTALLATION INSTRUCTIONS

Trade-Wind® In-Line Blower / Ventilators

### Models:

PSX006XL

PSD008XL

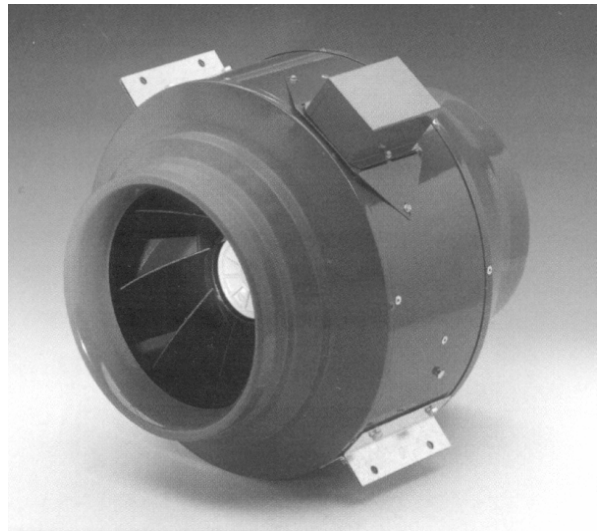
PSD010XL

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Part 1 - Planning The Installation

Part 2 - Securing The Blower / Ventilator

Part 3 - Electrical Connection



## **READ AND SAVE THESE INSTRUCTIONS**

Before beginning installation, please thoroughly read and become familiar with these instructions. Installation and service must be completed by a qualified installer. Failure to properly install this product may void the warranty.

**Installer:** Please leave these installation instructions with the range hood installation instructions.

**Owner:** Please keep these installation instructions for local electrical inspector's use and for future reference.



**WARNINGS:** Must be followed carefully to avoid personal injury.



**IMPORTANT:** Must be followed carefully to avoid damage.



**TIPS:** Contain helpful information to facilitate installation.



### **WARNING: TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS OBSERVE THE FOLLOWING:**

- ? Use this unit only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.
- ? Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag to the service panel.
- ? Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.



**CAUTION:** For General Ventilation Use Only. Do Not Use To Exhaust Hazardous or Explosive Material and Vapors.



**CAUTION:** This unit has an unguarded impeller. Do not use in locations readily accessible to people or animals. **WEAR HAND PROTECTION AND STAY CLEAR OF SHARP EDGES!** The compactness and adaptability of the model PSD blower permits easy installation. The units are shipped fully assembled and can be mounted at any angle. For mounting suggestions see Page 3 & 4. Because this unit has rotating parts, safety precautions should be exercised during all phases of installation, operation and maintenance. Remove unit from package and inspect before installation. If damaged, report damage to carrier. DO NOT operate this unit with visible damage to the blower or impeller assembly. Screen guards must be installed when blower will be within reach of personnel, within (7) feet of the working area, or when advisable for safety.



**WARNING! DO NOT CONNECT POWER SUPPLY until blower is completely installed. Make sure electrical service to the blower is locked in “OFF” position.**

- ? Check voltage at blower to see if it corresponds to the motor name plate. Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- ? Sufficient air is needed for proper combustion and exhausting of gasses through the flue (chimney) of fuel burning equipment, (e.g., gas water heater, gas furnace) to prevent back drafting.
- ? Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA) and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and the local code authorities.
- ? When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities. Ducted blowers must always be vented to the outdoors.
- ? If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) –protected branch circuit.
- ? NEVER place a switch where it can be reached from a tub or shower.
- ? All units are suitable for use with solid-state speed control.



**WARNING! TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

- ? Sufficient air is needed for proper combustion and exhausting of gasses through the flue (chimney) or fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA) and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) and the local code authorities.
- ? When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- ? Duct blowers must always be vented to the outdoors.

## PART 1 Planning the Installation

For best and quietest performance, the In-Line Blower should be installed in the attic, near or slightly beyond the mid-point of the duct system. In installations requiring the blower be in a chase or wood-type hood over the range (e.g., no attic above the kitchen), the duct silencer will not be as effective in absorbing motor noise. In addition, there will likely be motor sound transmitted through the walls of the chase, bypassing the duct silencer. **Given the high performance of Trade-Wind® In-Line Blowers, it is highly recommended that the blower NOT be attached directly to the liner or in a chase immediately above the liner unless a Trade-Wind® brand duct silencer is installed between the blower and liner and neoprene lined FC Clamps\* are used.**

Trade-Wind® brand Professional Series ventilation systems can be installed in an infinite variety of configurations. The In-Line Blower and Duct Silencer can be installed at any angle.



### Connecting the Blower / Ventilator

After properly aligning and supporting the blower, connect it to the duct. Fasten in place by using sheet metal screws and tape or preferably **FC Clamps\***. Fast Clamps (**FC Clamps**) are the recommended connectors for connecting the blower to the duct system. FC Clamps are easy to connect and work extremely well as a vibration absorber and noise suppressor. They are made of steel and are lined with a 0.3" neoprene pad. If FC Clamps are used to connect the blower to the duct, it is not as necessary to use them on the Duct Silencer for vibration suppression. FC Clamps are available from Trade-Wind® (Universal Metal Industries, Inc.) through your Trade-Wind® supplier.

**CAUTION: DO NOT hang PSD model blowers / ventilators from the FC Clamp's hanging tabs. Instead, use the integral brackets bolted to the blower housing.**

Hanger-type vibration isolators and suspension hardware (e.g., threaded rod, slotted angle iron, hurricane strap) are not supplied with blower. If the blower is suspended with these items, they will absorb much of the motor's minor vibration.

For more information about vibration absorbers, visit the following internet sites:

[www.grainger.com](http://www.grainger.com) (e.g., for WW Grainger Item 4C879)

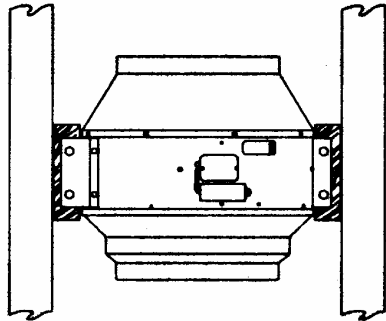
[www.vibration-absorbers.com](http://www.vibration-absorbers.com)

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

\*FC Clamps are available from Trade-Wind® (Universal Metal Industries, Inc.) through your Trade-Wind® supplier. Ask for model numbers FC6 (6"), FC8 (8") or FC10 (10"), 2 per box.

## Part 2 Securing the Blower / Ventilator

### Mounting Illustration Option 1

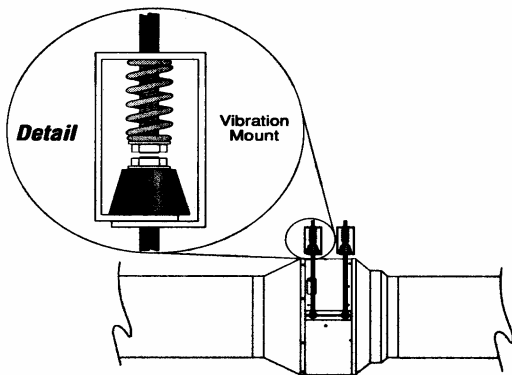


#### Follow all applicable codes when installing this unit.

1. Build and install wood supports to framing structure for blower mounting.
2. Attach blower directly to wood supports.

The In-Line Blower's mounting brackets are designed for flexible and easy installation at any angle—horizontal, vertical or diagonal. The brackets should be bolted directly to a 2" x 4" type wood framing structure (e.g., an attic truss) or suspended by threaded rod, slotted angle-iron or hurricane strap. The installation should be sufficient to support the blower's weight.

### Mounting Illustration Option 2



#### Follow all applicable codes when installing this unit.

1. Equipment should be hung in position with temporary fixtures that can be removed after vibration hangers\* are installed.
2. **Optional** vibration hanger\* may be fastened directly to the structure or somewhere between the suspended unit. Be sure not to over tighten the neoprene element. Install hangers.
3. If threaded rod is used, turn nuts on rod assembly clockwise one complete turn on each hanger. Repeat this procedure until temporary hanging fixtures are loose and blower is suspended completely on the vibration hangers.
4. Remove temporary fixtures and level ducting and blower by taking additional turns on the spring / top hanger rod nut as required.

**\*IMPORTANT NOTE:** Hanger-type vibration isolators and suspension hardware (e.g., threaded rod, slotted angle iron, hurricane strap) are not supplied with blower. If the blower is suspended with these items, they will absorb much of the motor's minor vibration.

For more information about vibration absorbers, visit the following internet sites:

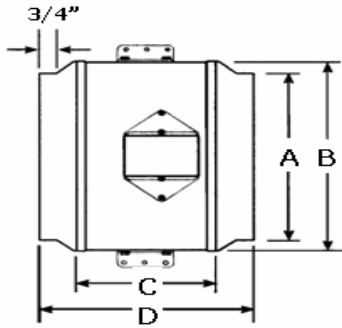
[www.grainger.com](http://www.grainger.com) (e.g., for W.W. Grainger Item 4C879)

[www.vibration-absorbers.com](http://www.vibration-absorbers.com)

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

## Part 3 Electrical Connection

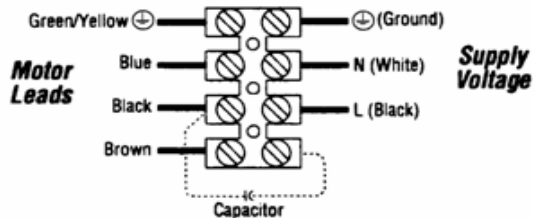
### Dimensions



### Dimensions Data & Amperage

Model	A	B	C	D	Amps
PSX006XL	6"	13 ¼"	6 ½"	8 ¼"	1.26
PSD008XL	8"	12.5"	7"	15.5"	2.99
PSD010XL	10"	14"	8"	15"	4.84

### 115 Volt Single Phase Fans



### WARNING:

- ? Ensure the power supply is disconnected before proceeding.
- ? Verify that the power supply matches the ratings found on the blower data label before proceeding.
- ? The complete blower unit must be properly grounded at all times when electrical power is applied.
- ? Do not ground the appliance with the neutral (white) house supply wire. A separate ground wire must be utilized.

**Failure to complete electrical connections properly may result in damaged or non-functional systems. Follow instructions carefully to ensure proper installation.**

### Wiring Diagram (for connecting "in-line" blowers to Trade-Wind® Pro & Standard Series liners\*)

Black	120 volt AC from electrical panel (usually black) to liner
White	Neutral from electrical panel (white) to liner
Green	Ground from electrical panel (usually green) to liner
Red	120 volt AC variable control from liner to 120 volt AC of variable speed ventilator (usually black) <b>CAUTION: Do NOT connect this wire to a 3-speed blower.</b>

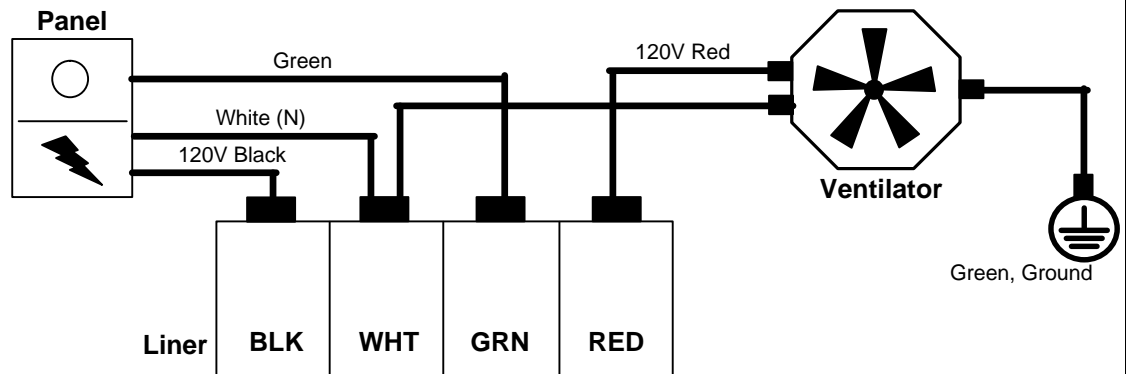
#### \*Trade-Wind® Liner Models:

VSL400 Series  
PSL700 Series

#### Excluding...

3-speed motor models, which all have a -6 or -12 at the end of the model number.

#### House Electrical Panel



It is the owner's responsibility to ensure that a qualified person performs the electrical connection of this appliance. The electrical installation, including minimum supply wire size, must comply with the National Electric Code ANSI/NFPA 70-1990 (or latest revision) and local codes and ordinances. A copy of this standard may be obtained from: National Fire Protection Assoc., 1 Batterymarch Park, Quincy, MA 02269



## WARRANTY

### Trade-Wind® Professional Series Kitchen Ventilation Products

#### What is Covered

Universal Metal Industries, Inc., warrants its Trade-Wind® Professional Series kitchen ventilation products to the original user, to be free of defects in materials and workmanship for one (1) year from the date of purchase.

Universal Metal Industries, Inc., at its option, will repair or replace the complete unit or any defective component without charge. This warranty may be voided if any unauthorized service, alterations or repairs are made to the product.

#### What is Not Covered

- ? Normal maintenance and service of any product that has been subject to misuse, negligence, accident or installation inconsistent with the recommended installation instructions.
- ? Product used other than for normal in-home use or products used outside of the United States.
- ? Damage to the product caused by accident, fire, flood or other acts of God.
- ? Service calls to educate the customer in the proper use and care of the product, correct faulty installation, change fuses or reset breakers.

Universal Metal Industries, Inc. disclaims and excludes any liability for implied warranties or for incidental or consequential damages wherever permitted by law. There are no implied warranties of merchantability or fitness for a particular use or purpose. This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

#### For Service

If you need service, contact Customer Service at the address or phone number below. Provide the model number, part identification and details of the problem. Proof of purchase must be provided.

Warranty Rev. 02/25/04

Universal Metal Industries, Inc. has a policy of continuous improvements and reserves the right to modify (at any time and without notice) any or all of its products, features, designs, components and specifications. For exact dimensions, see the Installation Instructions included with each product. Some features may be slightly different than shown on product literature.



For more information, please contact your Trade-Wind® Representative

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