PINNACLE CLIMATE TECHNOLOGIES LIMITED WARRANTY POLICY

Pinnacle Climate Technologies, Inc. warrants this ventilator to the original retail purchaser only, to be free from defects in material and workmanship for a period of three (3) years from the date of initial purchase. This product must be properly installed, maintained and operated in accordance with the instructions provided.

Pinnacle Climate Technologies, Inc. requires reasonable proof of your date of purchase from an authorized retailer or distributor. Therefore, you should keep your sales slip, invoice or cancelled check from the original purchase. This Limited Warranty shall be limited to the repair or replacement of parts, prove defective under normal use and service within the warranty period, and which Pinnacle Climate Technologies, Inc. shall determine at its reasonable discretion.

This warranty does not apply to products purchased for rental use.

This Limited Warranty does not cover any failures or operating difficulties due to normal wear and tear, accident, abuse, misuse, alteration, misapplication, improper installation or improper maintenance and service by you or any third party. Failure to perform normal and routine maintenance on the ventilator, shipping damage, damage related to insects, birds or animals of any kind, and damage due to weather conditions are also not covered. In addition, the Limited Warranty does not cover damage to the finish, such as scratches, dents, discoloration, rust or other weather damage, after purchase.

All transportation costs for the return of damaged product or parts will be the responsibility of the purchaser. Upon receipt of damaged item, Pinnacle Climate Technologies, Inc. will examine the item and determine if defective. Pinnacle Climate Technologies, Inc. will repair or replace and return the item, freight pre-paid. If Pinnacle Climate Technologies, Inc. finds the item to be in normal operating condition, or not defective the item will be returned freight collect. This Limited Warranty is in lieu of all other express warranties. Pinnacle Climate Technologies, Inc. disclaims all warranties for products that are purchased from sellers other than authorized dealers or distributors.

AFTER THE PERIOD OF THREE (3) YEARS AND THE WARRANTY EXPIRES, Pinnacle Climate Technologies, Inc. DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR APPLICATION. FURTHER, Pinnacle Climate Technologies, Inc. SHALL HAVE NO LIABILITY WHATSOEVER TO PURCHASER OR ANY THIRD PARTY FOR ANY SPECIAL, INDIRECT, PUNITIVE INCIDENTAL, OR CONSEQUENTIAL DAMAGES. Pinnacle Climate Technologies, Inc. assumes no responsibility for any defects caused by third parties. This Limited Warranty gives the purchaser specific legal rights; a purchaser may have other rights depending upon where he or she lives. Some states do not allow the exclusion or limitation of special, incidental or consequential damages, or limitations on how long a warranty lasts, so the above exclusion and limitations may not apply to you.

Pinnacle Climate Technologies, Inc. does not authorize any person or company to assume for it any other obligation or liability in connection with the sale, installation, use, removal, return or replacement of its equipment, and no such representations are binding on Pinnacle Climate Technologies, Inc. Always be sure to specify the model number and serial number when making any claim with Pinnacle Climate Technologies, Inc. For your convenience, use the space provided on the next page to list this information.

Dealer: ______________________________________

Purchase Date: ________________________________

Serial No. ________________________________

WARNING! CALIFORNIA PROPOSITION 65: This product can expose you to chemicals, including lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Pinnacle Climate Technologies, Inc.
Sauk Rapids, MN 56379 USA • Toll Free (800) 779-3267
Fax: 320-251-2922 • www.schaeferventilation.com • info@pinnacleclimate.com

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9/5/18

ACZC-408
INTRODUCTION

Congratulations on your selection of a new Americ® confined space ventilator from Pinnacle Climate Technologies. Our goal is to provide you with the very best in high performance air ventilators. Reading this User’s Manual will help you achieve the maximum benefit from your confined air ventilator. If you do not understand any portion of this Manual, please contact Pinnacle, or your authorized Pinnacle dealer for proper assistance prior to operating this ventilator.

Do not allow anyone to operate the confined space ventilator without first reading the User’s Manual and becoming familiar with its operation. Pinnacle has endeavored to provide you with the finest equipment available for providing air for portable ventilation purposes. The possibility does exist, however, that the confined space ventilator can be subjected to applications not intended by Pinnacle. Misure and/or misapplication of the confined space ventilator can lead to the possibility of serious damage, injury, or even death. Anyone operating the confined space ventilator should refer to current OSHA job safety and health rules and regulations pertaining to the construction industry, with a particular emphasis on 29 CFR 1910, which contains rules governing Permit-Required Confined Spaces for General Industry.

All specifications are general in nature and are not intended for specific application purposes. Pinnacle accepts no responsibility for variations which may be evident in actual products, specifications, pictures, and descriptions contained in this publication.

TABLE OF CONTENTS

- Safety Precautions .................................................................................................................. 1
- Preparation ................................................................................................................................. 2
- Specifications ............................................................................................................................. 3
- Operation .................................................................................................................................... 4
- Maintenance ............................................................................................................................... 4
- Troubleshooting Guide ............................................................................................................. 5
- Parts List .................................................................................................................................... 6
- Limited Warranty ....................................................................................................................... 7

SAFETY PRECAUTIONS

\section*{DANGER}

THE VENTILATOR IS DESIGNED FOR PORTABLE AIR VENTILATION PURPOSES ONLY. THE VENTILATOR IS NOT DESIGNED FOR TRANSPORTING LIQUID OR SEMI-SOLID MATERIALS. THE ELECTRIC MOTOR AND FAN HOUSING ARE NOT DESIGNED FOR OPERATION IN AN EXPLOSIVE OR FLAMMABLE ATMOSPHERE. OPERATION OF THE FAN IN AN EXPLOSIVE OR FLAMMABLE ATMOSPHERE MAY RESULT IN PROPERTY DAMAGE, PERSONAL INJURY OR EVEN DEATH. INCORRECT USE OF THE VENTILATOR CAN RESULT IN AN ELECTRICAL SHOCK AND/OR ELECTROCUTION. ALWAYS OPERATE THE FAN IN COMPLIANCE WITH CURRENT OSHA AND NATIONAL ELECTRIC CODE REGULATIONS.

\section*{DANGER}

INCORRECT USE OF THE VENTILATOR CAN RESULT IN PROPERTY DAMAGE, PERSONAL INJURY OR EVEN DEATH. TO REDUCE THIS RISK, GIVE COMPLETE AND UNDIVIDED ATTENTION TO THE JOB AT HAND. AN ENVIRONMENT ATMOSPHERE CONSTANTLY CHANGES; THEREFORE, IT’S RECOMMENDED THAT AIR MONITORING/GAS DETECTION EQUIPMENT BE USED FREQUENTLY. IF TESTS SHOW THAT THE ATMOSPHERE QUALIFIES AS A HAZARDOUS LOCATION (AN AREA WHERE THE POSSIBILITY OF EXPLOSION AND FIRE IS CREATED BY THE PRESENCE OF COMBUSTIBLE LIQUIDS, FLAMMABLE GASES, VAPORS, DUST, FIBERS, FLAMES, OR FILINGS) DO NOT USE THIS VENTILATOR. READ AND UNDERSTAND THE FOLLOWING PREPARATION ITEMS AND GENERAL SAFETY INFORMATION.

TROUBLESHOOTING GUIDE

CAUTION: All service procedures should be executed with the unit unplugged.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit will not run.</td>
<td>No power to unit</td>
<td>Plug unit in. Check circuit breaker.</td>
</tr>
<tr>
<td></td>
<td>Switch is faulty</td>
<td>Replace switch.</td>
</tr>
<tr>
<td></td>
<td>Unit runs but fan makes loud scraping noise.</td>
<td>Remove motor and replace damaged motor mounts.</td>
</tr>
<tr>
<td></td>
<td>Unit has been severely jolted causing fan to rub against housing.</td>
<td>Remove motor and replace damaged motor mounts.</td>
</tr>
<tr>
<td></td>
<td>Unit has been severely jolted causing housing to deform.</td>
<td>Replace housing/unit as necessary.</td>
</tr>
<tr>
<td></td>
<td>Severe jolt has bent motor shaft causing unit to be out of balance.</td>
<td>Remove and replace motor. Replace fan blade if necessary.</td>
</tr>
<tr>
<td></td>
<td>Fan blade damaged.</td>
<td>Replace fan blade.</td>
</tr>
<tr>
<td></td>
<td>Dirt build up on one side of fan blade.</td>
<td>Clean fan blade.</td>
</tr>
<tr>
<td></td>
<td>Motor is jammed against housing.</td>
<td>Remove motor and replace damaged motor mounts.</td>
</tr>
<tr>
<td></td>
<td>Capacitor wire has broken/come loose, capacitor has failed.</td>
<td>Repair/replace wires/capacitor as necessary.</td>
</tr>
<tr>
<td></td>
<td>Housing has been damaged such that it presses on the fan blade.</td>
<td>Replace housing/unit as necessary.</td>
</tr>
<tr>
<td></td>
<td>Motor bearings are failing, or motor has developed an internal electric fault.</td>
<td>Replace motor.</td>
</tr>
<tr>
<td></td>
<td>Intake grill and/or exhaust grill is obstructed.</td>
<td>Remove obstruction.</td>
</tr>
<tr>
<td></td>
<td>Excessive duct length.</td>
<td>Reduce duct length to recommended maximum.</td>
</tr>
</tbody>
</table>

WARNING: THIS APPLIANCE MUST BE EARTHED. IMPORTANT!

The wire of this mains lead are colored in accordance with the following code:

- BLUE—NEUTRAL
- BROWN—LIVE
- YELLOW / GREEN—EARTH

As the colors of the wires in the mains lead of this appliance may not correspond with the colored markings identifying the terminals in your plug proceed as follows: The wire colored brown must be connected to the terminal marked with the letter —L— or colored red.

The wire colored blue must be connected to the terminal marked with the letter —N— or colored black.

The wire colored yellow/green must be connected to the terminal marked with the letter E or Ensure that your machine is connected correctly. If you are in any doubt consult a qualified electrician.

This appliance must be protected by a 13A fuse if a 13A (B.S. 1363) plug is used or if any other type of plug is used, by a 5A fuse either in the plug or adaptor or at the distribution board.

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PREPARATION

- Become familiar with the ventilator operations before using this ventilator. Read and understand all Cautions and Warnings in this Manual. Refer to current OSHA publications for complete job safety and health rules and regulations (CFR 1926 and 1910).
- Confirm that the ventilator is in its original factory configuration and has not been modified in any manner.
- Minors should not be allowed to operate the ventilator. Close attention is necessary when used, especially when used near children or animals.
- Guard against the possibility of back-related injuries. Always lift the ventilator with leg muscles and not with the back.
- Periodically inspect the ventilator visually for damaged or worn parts. Check for loose and/or broken parts. Be sure that the ventilator and accessories are in good working condition before operating.
- Ground the motor securely. The (U.S.) ventilator utilizes a NEMA 5-15P plug. It is designed to operate ONLY from a grounded, 115 volt nominal AC, 60Hz, single-phase power source that utilizes a NEMA 5-15R receptacle. The 230 volt, 50Hz ventilator (VAF1500B) comes with a power cord having no end connector. The customer must provide a plug suitable for use with grounded receptacles at their location. The use of a ground fault circuit interrupter (GFCI) gives additional on the job protection from electrical shock hazards caused by ground faults in commercial, industrial and residential applications.
- Know how to stop the ventilator quickly in an emergency. Turn unit off at (on/off) switch located on side of unit or unplug ventilator from power supply.

SAFETY INFORMATION

- Never place the ventilator in standing water because of extreme shock hazard.
- Never allow air intake grill to become blocked.
- Never discharge flammable solvents or kerosene based chemicals through the ventilator air intake grill.
- Do not use the ventilator in areas where flammable or combustible liquids, gases, vapors, dust, fibers, or filings may be present.
- Never put any object in the air intake grill.
- Never run the ventilator outside when it is raining. Never store the ventilator outdoors.
- Do not use the ventilator as a toy.
- Use the ventilator only with a properly grounded outlet.
- Unplug the ventilator from outlet when not in use and before servicing.
- Do not use the ventilator with a damaged cord or plug. Do not pull or carry the ventilator by its cord, do not use cord as a handle, do not close a door on the cord, and do not pull cord around sharp edges or corners. Keep cord away from heated surfaces. Do not unplug the ventilator by pulling on cord, grasp the plug and not the cord. Do not handle the plug or cord with wet hands.
- Keep hair, loose clothing, fingers, and all parts of the body away from the air intake grill.
- Do not allow water inside the motor. If the motor becomes wet for any reason, unplug the ventilator and thoroughly dry it before using again.
- Never remove the ground from the power cord or plug as this may result in electrical shock or electrocution.
- Removing the ground would void the warranty.
- If the ventilator has been dropped, left outdoors, or dropped into water, etc., please thoroughly inspect it prior to use. If the ventilator is not working or if you have a question about its safe operation, do not operate it. Contact Schaefer directly at 800-779-3267 or at www.schaeferventilation.com.

WARNING TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THIS VENTILATOR WITH ANY SOLID STATE SPEED CONTROL DEVICE.
**SPECIFICATIONS**

**NOTE:** Refer to the TROUBLESHOOTING GUIDE in this manual for service information.

**MOTOR SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Model #</th>
<th>VAF1500A</th>
<th>VAF1500B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage</td>
<td>115 AC</td>
<td>230 AC</td>
</tr>
<tr>
<td>Frequency</td>
<td>60 Hz</td>
<td>50 Hz</td>
</tr>
<tr>
<td>Phrase</td>
<td>Single</td>
<td>Single</td>
</tr>
<tr>
<td>Electric Motor</td>
<td>1/4 HP</td>
<td>1/4 HP</td>
</tr>
<tr>
<td>RPM</td>
<td>3000</td>
<td>2260</td>
</tr>
<tr>
<td>Free Air (CFM)</td>
<td>877</td>
<td>749</td>
</tr>
<tr>
<td>Max S.P.</td>
<td>1.5”</td>
<td>1.5”</td>
</tr>
</tbody>
</table>

The published flow rates are intended to serve only as a reference. Manufacturing tolerances, duct type, and specific operating parameters will affect the overall flow rates(s) for each particular fan.

**AIR FLOW RATES**

<table>
<thead>
<tr>
<th>Feet</th>
<th>Description</th>
<th>CFM</th>
<th>m³/min.</th>
<th>CFM</th>
<th>m³/min.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Free Air</td>
<td>1349</td>
<td>38.2</td>
<td>1182</td>
<td>33.5</td>
</tr>
<tr>
<td>25’</td>
<td>Straight</td>
<td>1190</td>
<td>33.7</td>
<td>1033</td>
<td>29.3</td>
</tr>
<tr>
<td>25’</td>
<td>(1) 90° bend</td>
<td>1181</td>
<td>33.4</td>
<td>1045</td>
<td>29.6</td>
</tr>
<tr>
<td>25’</td>
<td>(2) 90° bends</td>
<td>1095</td>
<td>31.0</td>
<td>971</td>
<td>27.5</td>
</tr>
<tr>
<td>50’</td>
<td>Straight</td>
<td>1160</td>
<td>32.8</td>
<td>1025</td>
<td>29.0</td>
</tr>
<tr>
<td>50’</td>
<td>(1) 90° bend</td>
<td>1147</td>
<td>32.5</td>
<td>1009</td>
<td>28.6</td>
</tr>
<tr>
<td>50’</td>
<td>(2) 90° bends</td>
<td>1035</td>
<td>29.3</td>
<td>947</td>
<td>26.8</td>
</tr>
</tbody>
</table>

When duct is used, be aware that the airflow rate decreases as the length of duct increases. Airflow rates will vary with specific duct types and manufactures.

**OPERATION**

- Your new ventilator comes to you completely assembled and ready to operate. Upon removing the ventilator from its carton, inspect it for any possible damage in transit.
- Before operating the ventilator, please read all the Safety Precautions and Safety Information about the proper and safe use of the ventilator.
- Assess your job site. Certain job site locations are classified as being hazardous because the atmosphere may contain gas vapor or dust in explosive quantities.

**CAUTION**

- The airflow rate decreases as the length of duct increases for both blowing and suction applications. Airflow rates will vary with specific duct types and manufactures.

**FEATURES**

- Safety Guard
- Carry Handle
- Duct Adapters
- Power Cord
- Power Switch

**READ AND SAVE THESE INSTRUCTIONS!**

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**MAINTENANCE**

**DANGER**

- Always shut off the fan and unplug it from its power source to prevent accidental starting and the possibility of electrical shock and/or electrocution. Be sure the fan blade has stopped rotating before placing any objects or fingers near the fan grill.

1. Visually check all fasteners and individual components for loose or broken parts. Tighten or replace items, as required, only with genuine, factory approved replacement parts.
2. Keep the fan blade clean from debris. Accumulation of dust, dirt, paint, etc. on the fan blade will throw the blade rotation out of balance resulting in damage. To clean the fan blade, be sure the plug is disconnected and the blade has stopped rotating. Remove one grill and wipe blade and interior shell housing clean of debris with a damp cloth and mild liquid soap. Dry all parts thoroughly. DO NOT PRESSURE WASH THE FAN. Replace grill prior to next operation.

**DANGER**

- Do not operate the fan without the inlet and outlet grill properly in place.

3. Contact Schaefer directly for fan maintenance or repair not described in this manual (or if you are unsure whether maintenance is required) at 800-779-3267 or www.schaeferventilation.com.