

# Fan Turbine



## Owner's Manual: FAN TURBINE 5KW

This manual is intended solely for use by a Licensed Contractor of Fan Turbine.

Thank you for your purchase of the Fan Turbine. It is the most advanced wind turbine system in the world. We are proud to offer a cost effective renewable energy technology that will provide you with many years of electric generation from an available and abundant resource; the wind.

Please take a moment to complete and return to us the Warranty Registration Card which comes with the product.

Please note that the warranty depends on the proper installation of the Fan Turbine. Please read this Owner's Manual carefully and always use Fan Turbine Authorized Installers or other licensed contractors for proper installation.

The Fan Turbine is manufactured by NAS Industries Inc.,  
info@nasindustries.net [www.nasindustries.net](http://www.nasindustries.net). 1212-574-7933.

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# Safety Instructions

PLEASE READ THESE INSTRUCTIONS AND THE ENTIRE MANUAL PRIOR TO INSTALLATION. INSTALLATION OF THIS WIND TURBINE CAN ONLY BE PERFORMED BY A FAN TURBINE AUTHORIZED INSTALLER OR OTHER LICENSED CONTRACTOR.

## Safety Icons

The following symbols identify dangers associated with the installation, use or ownership of the Fan Turbine. When you see the symbols be aware of the protocol for personal injury or property damage.



**WARNING** indicates a hazard that could result in personal injury or property damage.

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### CAUTION

**CAUTION** indicates a hazard that could result in property damage.

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**IMPORTANT:** PLEASE TAKE NOTE

**PROFESSIONAL INSTALLATION:** REQUIRED

**TIP:** HELPFUL INFORMATION TO EASE THE INSTALLATION

## Important Safety Instructions

1. This Owner's Manual contains important instructions for the Fan Turbine installation and maintenance
2. Read the entire Owner's Manual prior to installation and follow all warnings and cautions included in the Owner's Manual and/or attached to the Fan Turbine.
3. Improper installation, adjustment, alteration, service maintenance, or use can cause fire, electrical shock, or other conditions which may cause personal injury or property damage.
4. The use of a Fan Turbine Authorized Installer or other licensed contractor is required for the installation and maintenance of the Fan Turbine.
5. Choose a very calm, nearly no wind, day for the installation.
6. Follow the installation procedures contained within this Owner's Manual and all safety codes. Follow your National Electric Code (NEC) and your local building and zoning codes.

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**WARNING****PERSONAL INJURY AND PROPERTY DAMAGE HAZARD**

The Fan Turbine can only be connected to Energy Management System approved by Fan Turbine. Failure to follow this warning may void the Fan Turbine warranty and may result in, personal injury or property damage (including damage to the Fan Turbine).

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7. The Fan Turbine can only be moved and lifted by Fan Turbine Authorized Installers or other licensed contractors using standard hoists and hydraulic lifts such as a crane or bucket truck.
8. Appropriate protective personal equipment such as hard hat, work gloves, safety glasses, and closed toe work shoes should be worn when installing the Fan Turbine.
9. Only Fan Turbine Authorized Installers or other licensed contractors can perform the installation and maintenance functions on this Fan Turbine:
10. The installation directions include recommendations of a variety of options. Installation must be approved and certified by your local Professional Engineer (PE) and the installer must acquire all the necessary permits from the local authorities prior to installation.
11. Your installer must use only proper grounding methods as stipulated by your NEC.
12. The Fan Turbine is an electric generator. Therefore, high voltage is generated within the system. Be sure to use only Fan Turbine Authorized Installers or other licensed contractors to perform work on this turbine.
13. Failure to complete and mail in the registration card may affect the warranty.
14. Failure to use a Fan Turbine Authorized Installer or other licensed contractor or to follow local codes may void your warranty.

NOTE TO INSTALLER: This Owner's Manual should be left with the owner of the Fan Turbine.

# Introduction

For Information On:	See:
Product Description	2
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## Product Description

The Fan Turbine is a novel electric generator (worldwide patents pending). It consists of super lightweight and strong blades made up of carbon, axial flux generator, and an aluminum hub. Bearings are used to attach to the mount and to the turbine. A slip ring is mounted under the Mount. Permanent magnets are built into the generator.

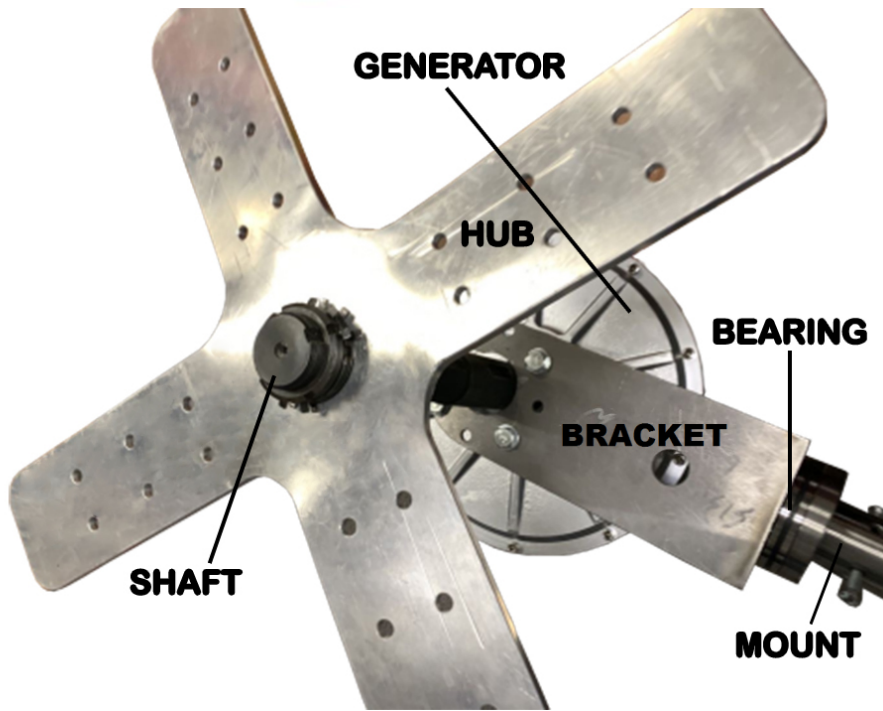
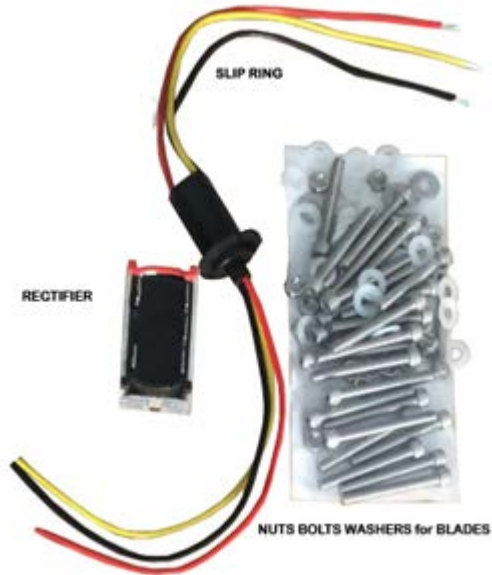
The wind flows through this blades with ease and it interacts with the lightweight and aerodynamic design to induce a rotational motion at the center of the 10 degree hub. This rotational motion is **the** indication that wind energy is being extracted from the flowing wind stream. The magnets travel at a high speed for any given rotation because they are located in the axial flux generator. The placement of the permanent magnets in the generator produces the needed high speed motion without the need of any gearing mechanism. The elimination of gears in this wind turbine technology enhances wind energy extraction efficiency and prolongs its operating life.

The low torque axial flux coreless generator at high speed converts the motion of the magnets into electricity. An aerodynamically shaped aluminum shell covers the stator system.

## Shipping Contents

1. One (1) Fan Turbine generator with bracket, bearing, mount, and hub preassembled.
2. (4) Carbon Blades
3. (1) Slip Ring
4. (24) M6 Bolts and (24) locknuts, (24) steel washers and (24) plastic washers
5. (1) 3 Phase bridge rectifier AC to DC
6. One (1) Warranty Registration Card
7. TO COMPLETE THE MOUNTING INSTALLATION YOU WILL NEED: electrical wire, electrical tape, tools, and one of several possible mounts, and safety gloves, glasses, hat.







## Before Installing the Fan Turbine:

### IMPORTANT

Please take note that the Fan Turbine is a proprietary wind driven electric generator. It is designed to reduce annual electric consumption by connecting it to the electric grid at the breaker panel. It may also be used as a stand-alone installation where connecting to a local electric grid is not possible. Its unique and highly efficient design enables it to begin generating electricity starting at 2 mph (0.9 m/s) and continue operating until 40 mph (17.9 m/s). A minimum average wind speed of 12 mph (5.4 m/s) is recommended for optimal wind turbine output performance. Please follow the Site Selection guidelines for optimal installation.

Please contact Fan Turbine' Customer Service if there is any doubt or concern regarding this electric generator or its installation.

## Transportation and Storage

Careshouldbetakenwhenhandlingthegeneratorassemblyasitisquiteheavy. It is recommended that the packaged wind turbine be transported and stored in its horizontal position in its box and crate. In this orientation, the maximum storage height is 3 ft high.

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**WARNING**

The wind turbine must be opened and unpacked in its vertical orientation. Failure to do so may result in serious injury and/or property damage.

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Open the turbine in the vertical orientation (refer to figure 1.1). After cutting the outside straps, refer to the unpacking instructions that can be found inside the packaging.

The wind turbine may be transported or stored within the following temperature range: -40 C to 60 C (-40 F to 140 F). The cardboard packaging must be protected from rain, snow and other moisture.

## Preassembly

Only Fan Turbine Authorized Installers or other licensed contractors can move and lift the Fan Turbine assembly.

The components of the assembly are described in figure 1.2:

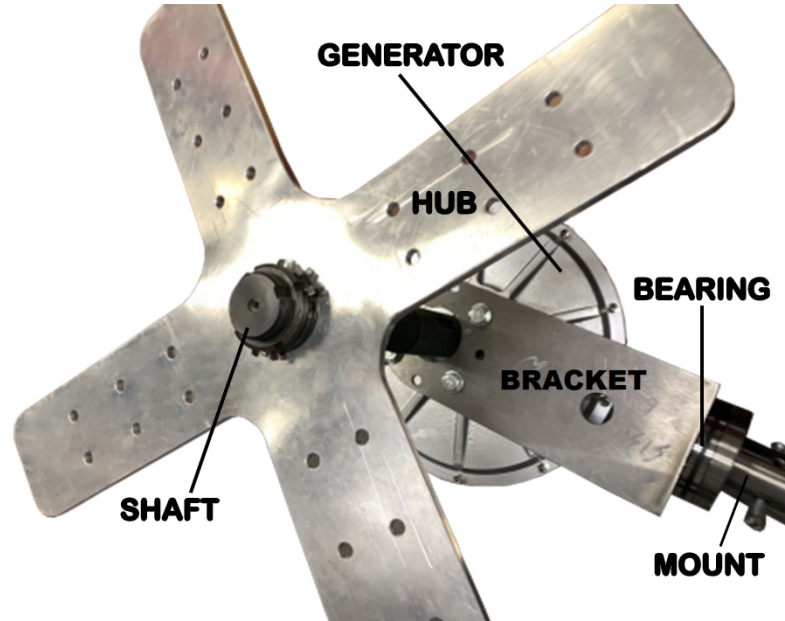


Figure 1.2: Turbine Components

## Turbine Brake

Only Fan Turbine Authorized Installers or other licensed contractors can perform installation and maintenance functions.

This rotation off occurs when any two of the 3 wires from the generator is engaged and should be implemented during shipping and installation and assembly or during maintenance which should only be performed below wind speeds of 10 mph (4.5 m/s). After putting the System in its Turbine STOP mode the system can be moved or assembled.

This method of connecting two wires acts as a backup emergency shut-off. If the turbine is free spinning and cannot be stopped, this brake can be used to stop the turbine.

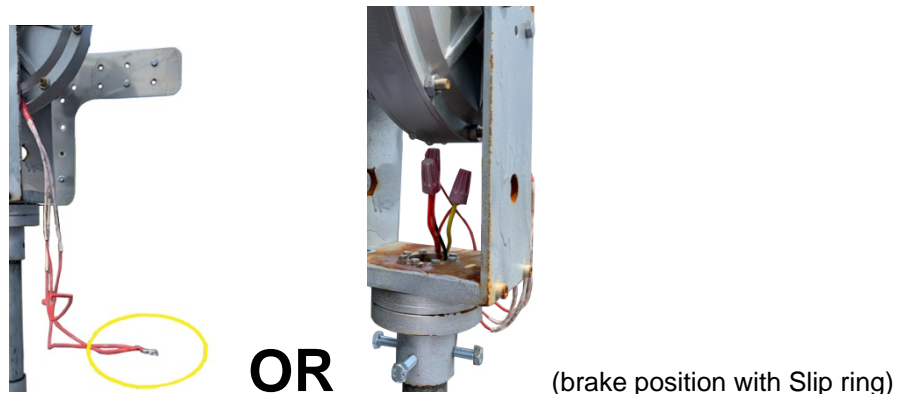


Figure 13: Turbine brake position

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**WARNING**

Generator shall be in brake position before and during the installation of the blades or generator and shall only be disconnected once all maintenance or installation is completed. Failure to do so may result in injury and/or property damage.

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**WARNING**

If any maintenance is to be done on the turbine, the turbine must be put in BRAKE mode, and the blades must be held to prevent turning during installation of the blades. Failure to do so may result in serious injury and/or property damage.

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# 2

## Specifications

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## Technical Specifications

<b>Model WT6500</b>	<b>Specification</b>
Rated Power Output	5000 KW at 31 mph (13.9 m/s)
Weight	Turbine: 105 lb. (51 kg),
Rotor Diameter	6 ft. (1.82 m)
Type	Blade Tip Power System™
Blades	4 Carbon – Xenecore Blades
Generator	Axial Flux Coreless
Grid Feeding	Depends on Inverter chosen
Protection	Brakes may be activated by connecting 2 wires
Duty Type	S1, Continuous Duty
Cut-In Wind Speed	1 mph (0.4 m/s)
Rated Wind Speed	31 mph (13.9 m/s)
Survival Wind Speed	140 mph (62.6 m/s)
Recommended Minimum Average Wind Speed	12 mph (5.4 m/s)
Sound Power Level	At 10 ft. (3 m) away, less than 35 dB at 30 mph (13.4 m/s)
Temperature - Operating, Storage and Transportation	-40 C to 60 C (-40 F to 140 F)

DATA SUBJECT TO CHANGE WITHOUT NOTICE

# 3

## Turbine Installation

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# Turbine Mounting

## Introduction

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### **WARNING**

Hazardous voltages, currents, or other conditions that could cause serious bodily injury or death exist in this equipment or may be associated with its use.

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### **WARNING**

**PERSONAL INJURY AND PROPERTY DAMAGE HAZARD**  
The Fan Turbine can only be connected to an Inverter approved by Fan Turbine. Failure to follow this warning may void the Fan Turbine warranty and may result in personal injury or property damage (including damage to the Fan Turbine).

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### PROFESSIONAL INSTALLATION: REQUIRED

After following the unpacking procedures included in the wind turbine package, it is required that only Fan Turbine Authorized Installers or other licensed contractors perform the installation and maintenance of the wind turbine.

In general, the installation consists of mounting the turbine on suitable and approved mounting hardware. The installation procedure includes recommendations for the mounting options. They must be approved and certified by your local PE (professional engineer) and the Fan Turbine Authorized Installer or other licensed contractor must acquire all the necessary permits from the local authorities

BEFORE installation.

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### **WARNING**

**PERSONAL INJURY AND PROPERTY DAMAGE HAZARD**  
Do not touch revolving turbine blades or insert objects, including sticks and screwdrivers, into revolving turbine blades. Failure to follow this warning may result in personal injury or property damage.

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### **CAUTION**

WHEN MOUNTING ON OR OVER A COMBUSTIBLE SURFACE, A FOOT PLATE OF AT LEAST 1.43 mm GALVANIZED OR 1.6 mm UNCOATED STEEL EXTENDED AT LEAST 150 mm BEYOND THE EQUIPMENT ON ALL SIDES MUST BE INSTALLED.

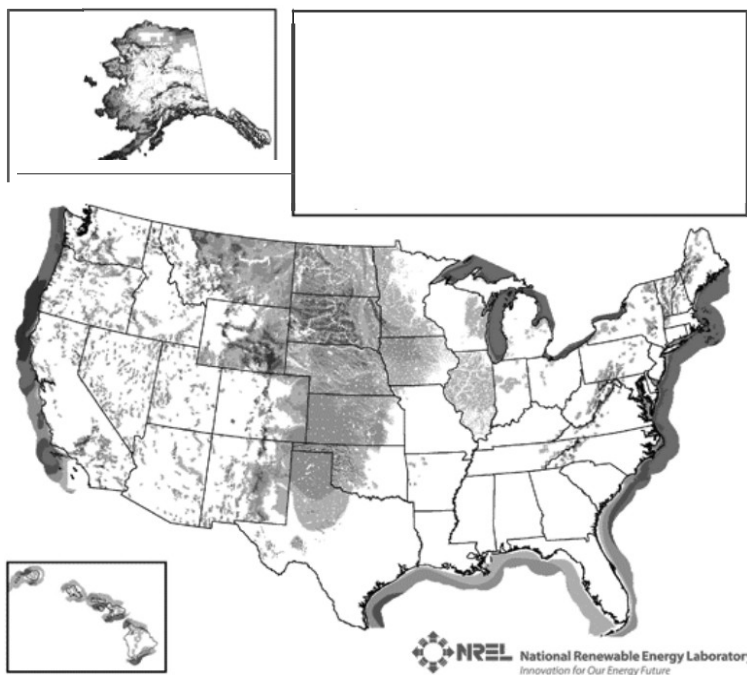
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Building codes and installation requirements vary considerably between various townships, cities, states and countries. Make sure that all required local permits are obtained BEFORE beginning installation. In all cases installation must be conducted by a Fan Turbine Authorized Installer or other licensed contractor. In some locations the local electric utility may have strict regulations about renewable energy technologies such as this wind turbine and other interconnect agreements and therefore it is highly recommended that they are also contacted BEFORE installation.

## Site Selection

The key objective of a site evaluation or study is to place the Fan Turbine so energy generated from the wind is maximized while meeting the local zoning requirements. Key elements to focus on during the site evaluation include:

1. High average wind speeds. The turbine delivers its best energy performance in areas of high wind speeds. This can best be determined by using simple anemometers at the installation site. It is recommended that such wind speed data is recorded for as long a period as possible and even better if several seasons are considered. When this is not possible, published wind data can give an estimate for the average local wind speeds. Published wind atlases may contain very useful comparative data for a region or a specific location. However, be very careful when relying only on this information as such data quite often tends to be measured at very high altitudes and may not be useful at lower and more practical heights.
2. As a general rule it is best to install the turbine at the highest permissible position and far removed in proximity to trees and other adjacent buildings or structures.
3. Always take into consideration all possible safety consequences of the turbine installation at the local site.



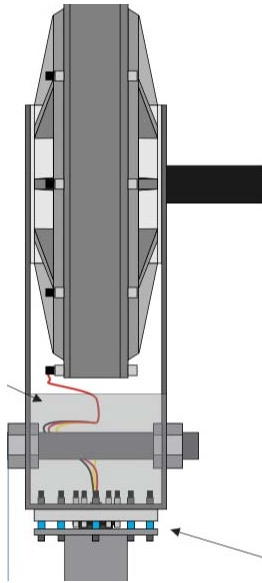
Wind Power Classification				
Wind Power Class	Resource Potential	Wind Power Density at 50 m $W/m^2$	Wind Speed <sup>a</sup> at 50 m m/s	Wind Speed <sup>a</sup> at 50 m mph
3	Fair	300 - 400	6.4 - 7.0	14.3 - 15.7
4	Good	400 - 500	7.0 - 7.5	15.7 - 16.8
5	Excellent	500 - 600	7.5 - 8.0	16.8 - 17.9
6	Outstanding	600 - 800	8.0 - 8.8	17.9 - 19.7
7	Superb	800 - 1600	8.8 - 11.1	19.7 - 24.8

<sup>a</sup>Wind speeds are based on a Weibull k value of 2.0

Figure 2.1: Wind Map for USA



**ASSEMBLY: SLIP RING:** The 3 wire slip ring allows the generator to turn 360 degrees maintaining the 3 wire AC output. The 20A slip ring is positioned between the Mount and the 1.5" pole. The lower wires of the slip ring should be connected to the down lead wire connected to the rectifier/inverter assembly and grid. **It is important that the upper slip ring rotates freely and it is well positioned between the mounting pole and the mount of the generator assembly.**



MOUNT

**1.5"** Outer Diameter Pole

SLIP RING



ROTATING BEARING

## BLADE INSTALLATION

1. Be sure that the generator brake is on by attaching any 2 of the wires to each other. This prevents the hub and shaft from turning freely.
2. THE ASSEMBLY COMES WITH 4 EQUALLY WEIGHTED AND BALANCED CARBON BLADES. THESE SHOULD BE ATTACHED ONE BY ONE WITH 2 PERSONS AFTER THE GENERATOR IS MOUNTED TO THE **1 ½ inch** outer diameter POLE with three wires attached to the slip ring coming out from the bottom of the pole. This assembly requires 2 persons with less than 8 MPH winds. Otherwise assembly can be more difficult to control.



THE ASSEMBLY COMES WITH M6 CAP BOLTS and NUTS. 1/4"-20 HEX BOLTS AND LOCK NUTS CAN ALSO BE USED. WHILE ONE PERSON IS HOLDING THE BACK OF THE NUT WITH A WRENCH OR M6 CAPS NUT WRENCH (M6 ALLEN WRENCH), THE OTHER PERSON IS SECURING 6 HOLES WITH A PLASTIC WASHER, METAL WASHER AND LOCKNUT.





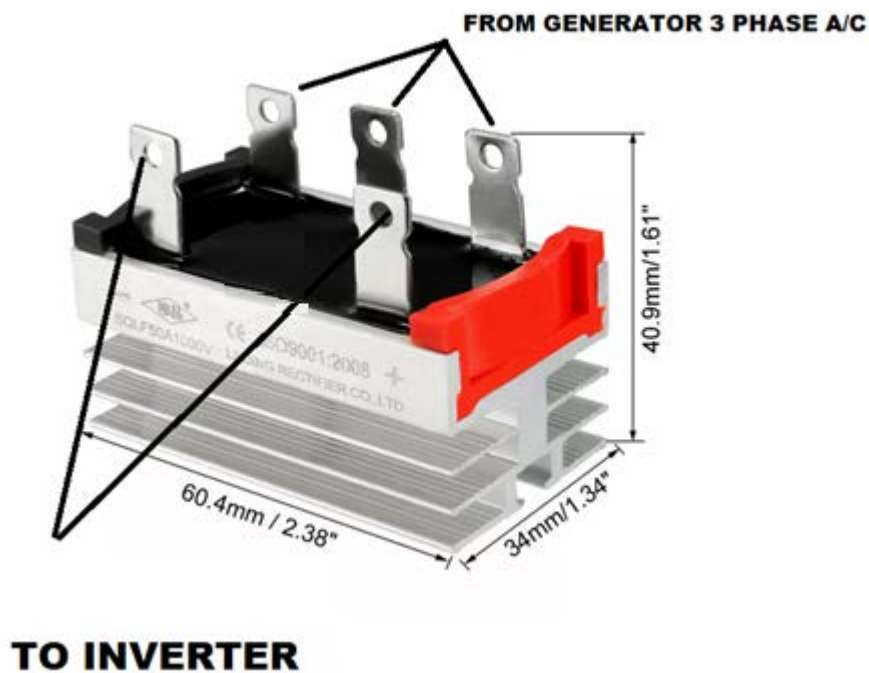
EACH POSITION IS SECURED BY A PLASTIC WASHER AGAINST THE CARBON, THEN THE METAL WASHER, THEN THE LOCK NUT ON THE OUTSIDE. **DO NOT OVERTIGHTEN THE LOCK NUTS WHICH COULD CRUSH THE CARBON BLADES.**

SAFETY HOLD. THIS INDICATES THE PROPER WAY TO GET CONTROL OF THE GENERATOR WHICH IS SPINNING. APPROACH THE GENERATOR FROM THE BACK SIDE AND HOLD THE SHAFT TO SLOW DOWN THE GENERATOR





**Rectifier:** 3 phase Bridge Rectifier will convert the three phase AC output from the generator to DC.



50A 1000V  
5-Pin



## BLADE Assembly

**PROFESSIONAL INSTALLATION: REQUIRED**



**Figure 2.7:**  
Remove deflector from packaging.  
Ensure six (6) nuts are fully tightened  
with plastic washer, metal washer, and  
lock nut



**Figure 2.9:**  
Ensure the nuts are tight with plastic washers  
against the carbon.



**Figure 2.8:**



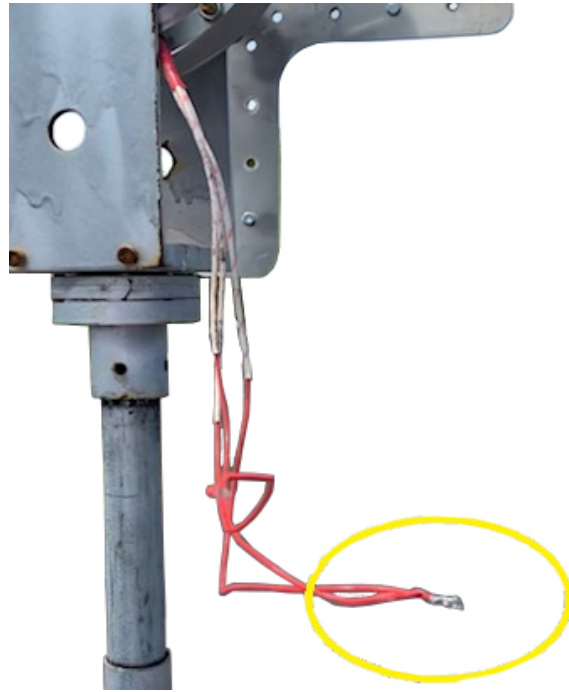
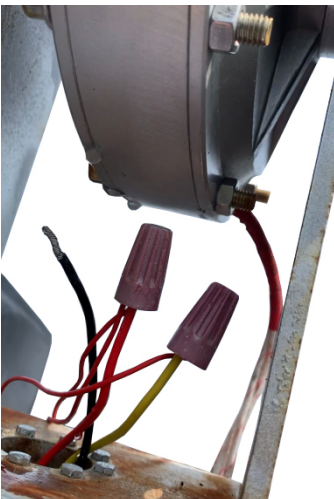
**Figure 2.11:**  
Mount the blades with brake on by touching two the  
generator wires together.



Mount the blades one at a time 2 persons.

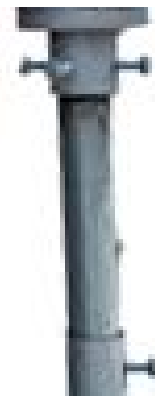


**Figure 2.10:**  
Mount blades 2 persons one at a time with brake on



**Figure 2.12:**  
Brake on.

Repeat steps for remaining blades



Lock the assembly with 4 x M8 Bolts against the pole and lock in the poles to the mounting stand.

# Turbine Wiring

## Wiring

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### WARNING

#### ELECTRIC SHOCK HAZARD

Disconnect turbine and any battery circuits before wiring. Turn off all power before wiring. Failure to follow safety warning could result in serious injury and/or death.

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### WARNING

#### PERSONAL INJURY AND PROPERTY DAMAGE HAZARD

Connecting the Fan Turbine to any Inverter other than a Fan Turbine approved Inverter may void the Fan Turbine warranty and may result in personal injury or property damage (including damage to the Fan Turbine).

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Installations must meet all local electrical codes. Installations of the equipment must only be performed by Fan Turbine Authorized Installers or other licensed contractors.

A licensed electrician must perform all electrical connections. All electrical systems must be grounded in accordance to your National Electric Code (NEC) and local standards. Please refer to the Inverter Manual for full details on wiring, connecting and commissioning of the Fan Turbine.

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### WARNING

#### REVERSE POLARITY DAMAGE

Before making the final DC connection or closing the DC breaker or disconnect, check cable polarity at all connections. Positive (+) must be connected to positive (+). Negative (-) must be connected to negative (-).

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## Grounding

**PROFESSIONAL INSTALLATION:** A LICENSED ELECTRICIAN MUST INSTALL AND COMMISSION THIS TURBINE USING YOUR NATIONAL ELECTRIC CODE AND IN COMPLIANCE TO THE LOCAL PERMITTING AND ZONING CODES.

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### WARNING

#### SHOCK HAZARD

Disconnect wind turbine and any battery circuits before removing the grounding connections or before removing or installing any fuses. Wait at least five minutes for the internal circuitry to discharge before servicing the unit. Failure to follow this warning may result in personal injury or property damage.

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The turbine must also be grounded at the base of the mounting pole, or custom mount. Grounding at these mounts may prevent electric shock and voltage surges. Proper mount grounding may also minimize damage due to lightning strikes.

Grounding information is available from the National Electric Code (NEC) USA 2005 as well as



the International Electro technical Commission (IEC) standard 60364-5-54 section Erection of Electrical Equipment: Earthing Arrangements, Protective Conductors and Protective Bonding Conductors. Please reference the NEC and IEC standards regarding full details of grounding this wind turbine. Please also refer to 205 NEC article 250.53 (G) regarding the grounding electrode installation. Also refer to 2005 NEC article 250.66 (A) regarding conductor size where it stipulates that where a grounding electrode conductor is connected to a rod, pipe or plate electrode, that portion of the conductor that is the sole connection to the grounding electrode shall be a minimum of 6 AWG copper wire or 4 AWG aluminum wire.

## Operation

### **WARNING**

#### **PERSONAL INJURY AND PROPERTY DAMAGE HAZARD**

Do not touch revolving turbine blades or insert objects, including sticks and screwdrivers, into revolving turbine blades. Failure to follow this may result in personal injury or property damage.

**PROFESSIONAL INSTALLATION:** A LICENSED ELECTRICIAN MUST INSTALL AND COMMISSION THIS TURBINE USING YOUR NATIONAL ELECTRIC CODE AND IN COMPLIANCE TO THE LOCAL PERMITTING AND ZONING CODES.

Follow the electrical connections and commissioning procedures in the Inverter manual for the wind turbine start up, operations, and maintenance. The label below is provided for turbines used with inverters to indicate the location of the AC POWER disconnect switch. Please cut out and place near the Inverter where a licensed electrician and service personnel can easily see it.

## ATTENTION

To Disable Wind Turbine  
Disconnect AC Power

Note: AC Power Disconnect Box is located at:

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Disconnect & Lock - Out AC Power per NFPA and OSHA Requirements  
before servicing and/or maintenance.

Fan Turbine, Inc

There are no parts in the Fan Turbine that require lubrication or scheduled maintenance. Please follow the manufacturer guidelines of any batteries used for their installation, operation and maintenance. Please contact Fan Turbine Customer Service with any questions.

If noise or vibration is detected or if the turbine's blades rotate very slowly under extremely windy conditions turn turbine off and please contact Fan Turbine Customer Service.

# 4

## Warranty Information

# 25 Year Warranty

## Limited Warranty:

Subject to the terms below, Fan Turbine, Inc. ("Fan Turbine") warrants its products against defects in parts or components under normal use consistent with product instructions for 25 (twenty five) years. This warranty extends only to the Purchaser and cannot be assigned to any other party. If warranted products contain defects covered under this warranty, Fan Turbine' obligation shall be limited to, in Fan Turbine' sole and absolute discretion, repairing or replacing the defective parts within the Turbine assembly (generator, mount, bracket, bearing, and shaft) and Blades as pictured here:



## Warranty Claims:

No rights may be exercised under this warranty unless the Purchaser registers the product for warranty coverage within sixty (60) days after purchase or provides proof of purchase. Purchaser can register the product for warranty coverage online at [www.nasindustries.net](http://www.nasindustries.net) or by completing and returning the warranty registration card included with the product, in which case the product will be considered registered as of the postmark date on the warranty registration card. Notice of any defect covered under this warranty must be given within thirty (30) Days of the date the defect is discovered. Notice shall be in writing or by telephone. Notices by telephone shall be made by calling Customer Service at 800-489-0908 and written notices shall be sent to:

Fan Turbine Inc.  
fanturbine1@gmail.com\_  
Attn.: Customer Service - Warranties

The Purchaser must provide Fan Turbine the following: (1) the date the defect was discovered; (2) evidence of the defect, including, without limitation, photographs and a verbal/written description of the defect; (3) the serial number of the product; (4) the original purchase date of the product; (5) the location of the product; and (6) the name, address, and phone number of the party making the warranty claim.

We reserve the right to an on-site inspection by an authorized service representative. If it becomes necessary for the product to be shipped to the Factory Authorized Dealer/Service Center, the Purchaser shall be responsible for transporting the product to and from the Factory Authorized Dealer/Service Center. Additionally, reasonable travel charges of the inspector may be assessed in cases where the product is in a remote location.

If we, in our sole discretion, determine that repairs are not feasible, we reserve the right to provide a replacement part or product in lieu of repair. We will replace with a part of value equal to the original purchase. In such event, reasonable costs for removal of the defective product

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and delivery and installation of the replacement product will be the responsibility of the Purchaser. All replaced parts and products shall become the property of Fan Turbine on the date the part or product is replaced.

## Limitations and Exclusions on Limited Warranty:

This limited warranty will not apply under any of the following circumstances:

1. If any part of the product has been altered or modified by anyone other than an authorized representative of Fan Turbine;
2. If any part of the product has not been installed, operated, repaired, or maintained in accordance with the product's instructions;
3. If any part of the product has been the subject of misuse, misapplication, improper maintenance or repair, damage caused by the fault or negligence of anyone other than an authorized representative of Fan Turbine, damage caused by severe weather or acts of God, or any other act or event beyond the control of Fan Turbine, i.e. lightning; and
4. If the product has been exposed to winds exceeding 140 mph (62.6 m/s) or has been subjected to abnormal physical, thermal or electrical stress.

## Warranty Registration:

The Purchaser must maintain proof of purchase or register the product for warranty coverage within sixty (60) days after purchase. Purchaser can register the product for warranty coverage online at [www.nasindustries.net](http://www.nasindustries.net) or by completing and returning the warranty registration card included with the product. All warranty claims made on a product that has not been registered will be denied unless proof of purchase can be provided.

## Disclaimers Applicable to all Warranties:

EXCEPT FOR THE EXPRESS LIMITED WARRANTY SET FORTH ABOVE, FANTURBINE ICS EXPRESSLY DISCLAIMS AND EXCLUDES ALL OTHER EXPRESS WARRANTIES. ADDITIONALLY, TO THE EXTENT PERMITTED BY APPLICABLE LAW, EACH AND EVERY IMPLIED WARRANTY THAT MAY APPLY TO THE PRODUCT (INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND FREEDOM FROM ENCUMBRANCES) ARE LIMITED IN DURATION TO THE FIVE-YEAR LIMITED WARRANTY PERIOD. FANTURBINE EXPRESSLY DISCLAIMS ALL LIABILITY FOR BODILY INJURY OR DEATH THAT MAY OCCUR, DIRECTLY OR INDIRECTLY, BY USE OF THE PRODUCT.

## Limitation of Liability:

IN NO EVENT SHALL FANTURBINE BE LIABLE FOR ANY DAMAGES RESULTING FROM LOSS OF CONFIDENTIAL OR OTHER INFORMATION OR BUSINESS INTERRUPTION OR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES WHATSOEVER (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFITS), REGARDLESS OF THE FORM OF ACTION, WHETHER IN TORT, STRICT LIABILITY, CONTRACT OR OTHERWISE, ARISING OUT OF OR IN ANY WAY RELATED TO THE DEFECT, REPAIR, REPLACEMENT OR SHIPMENT OF THE PRODUCT, EVEN IF FANTURBINE KNOWS OF, OR SHOULD HAVE KNOWN OF, THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING LIMITATIONS, EXCLUSIONS AND DISCLAIMERS SHALL APPLY TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW. IN NO EVENT SHALL FANTURBINE' AGGREGATE LIABILITY EXCEED THE AMOUNT ACTUALLY RECEIVED BY FANTURBINE FROM THE PURCHASER FOR THE PURCHASE OF THE PRODUCT.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. No agent, dealer, Service Company, or other party is authorized to change, modify, or extend the terms of this

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warranty in any manner whatsoever.

## **Legal Remedies:**

This warranty gives you specific legal rights, and you may have other rights which vary from state to state or province to province.

## **Changes to this Limited Warranty:**

Fan Turbine may change this warranty from time to time. When Fan Turbine makes changes to the warranty, it will post them at [www.nasindustries.net](http://www.nasindustries.net). The warranty that shall apply to a product shall be the warranty posted at the website at the time the product is purchased. It is the Purchaser's responsibility to check the website to see if the warranty posted there is different than the warranty stated herein.

## **Governing Law:**

If the Purchaser purchases the product in the United States of America, this warranty is governed by the laws of the State of New York and the applicable federal laws of the United States. If the Purchaser purchases the product in Canada, this warranty is governed by the laws of the Province of Ontario and the federal laws of Canada applicable therein. In either case, the application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded.

## EC Declaration of Conformity

In accordance with EN ISO 17050-1:2004

We NAS Industries, Inc.  
of 225 Post Ave, Westbury NY 11590

*In accordance with the following Directive(s):*

IEC 61439-1	Low-Voltage Directive
CENELEC EN 61000-6-2	EMC Directive
CENELEC EN 61000-6-4	EMC Directive
IEC 60034-1	Rotating Electrical Machines Directive
IEC 60204-1	Safety of Machinery Electrical Equipment Directive

*Hereby declare that:*

Equipment Fan Turbine and Fan Turbine Wind Turbine 5KW  
Model numbers

*Is in conformity with the applicable requirements of the following documents:*

Ref. No.	Title	Edition/Date
IEC 61439-1	Low-Voltage Switchgear and Controlgear Assemblies – Part 1: General Rules	1.0/2009-01-22
CENELEC EN 61000-6-2	Electromagnetic Compatibility (EMC) - Part 6-2: Generic Standards - Immunity for Industrial Environments	1999-01-01
CENELEC EN 61000-6-4	Electromagnetic Compatibility (EMC) - Part 6-4: Generic Standards - Emission Standard for Industrial Environments	2007-01-01
IEC 60034-1	Rotating Electrical Machines Part 1: Rating and Performance	11/2004-04-01
IEC 60204-1	Safety of Machinery Electrical Equipment of Machines – Part 1: General Requirements	5/2005-10-01

I hereby declare that the equipment named above has been designed to comply with the relevant sections of the above referenced specifications. The unit complies with all applicable Essential Requirements of the Directives.

Signed: Derek Chen  
Position: Chief Tech Officer  
On: May 20th, 2020

# CE

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**CE**

**Fan Turbine**

5KW

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