## HOW TO POWER UP THE WIND ON YOUR RV

Monteg

# **Introduction**





### Rob Finch, Engineer and truck driver



## RULES OF RV FULL TIME LIVING By David and Susanna McCarron

- **1. Maximum miles per day = 350 Miles**
- 2. Do not start the engine until the Navi-goddess
  - knows where you are going and how to get there
- 3. NO in and out. You must stay at least 2 nights.
- 4. You must arrive so as to completely set up **BEFORE** it is dark.
- 5. Drinks for 6. Dinner for 4. Sleeps 2. +dog/cat
- 6. If you find yourself covered in snow you screwed up



 The objectives of this session are to give you conceptual understanding of how to design and install a wind-turbine system on your RV and what it will really do ...and techniques on how to do it!



## Works well in WINDY areas such as desert or coastal areas.

RV lots



- About equal to adding another solar panel
- with a difference

 Works well at night and on those windy days when you stay inside



•Every RV is unique: •Roof Mount •Ladder Mount •Ground Mount

•HDT

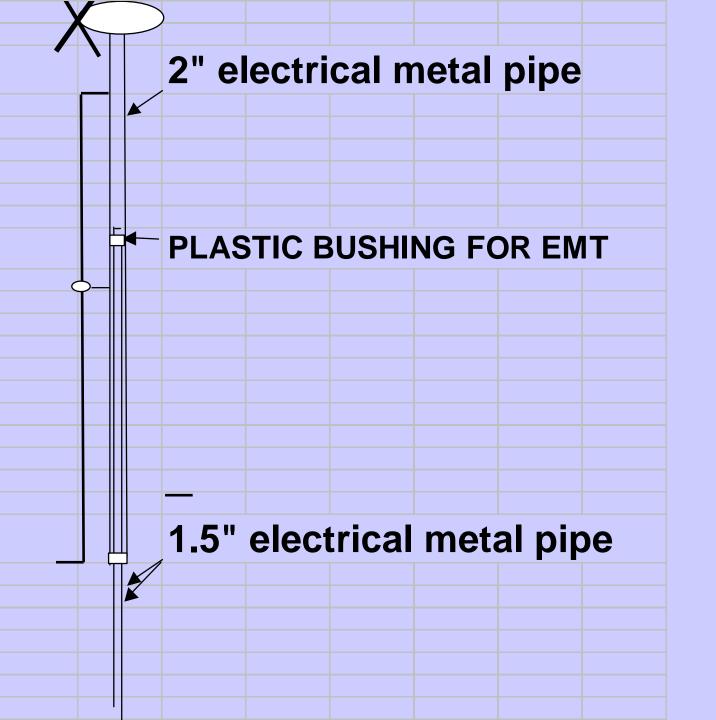
## **HOW DID I MOUNT MINE?**

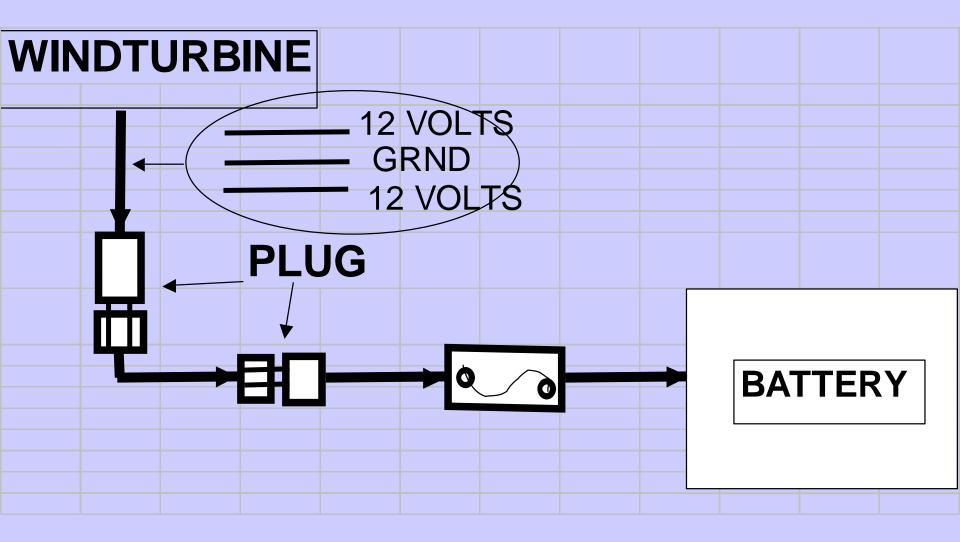






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## **ANDERSON POWER PLUG**

## Http://store.solar-electric.com/anhicupoco.html



## **VIBRATION MOUNT**





## **American Wind Energy Association**

www.awea.org/smallwind/smsyslst.html

Home of Small Windturbines http://:www.allsmallwindturbines.com/ Southwest Wind Power www.windenergy.com



SMALL WIND. BIG ENERGY.



aliR.



Technical SpecificationsRated Capacity 200 watts at 28 mph (12.5 m/s)Rotor Diameter 46 in (1.17 m)Weight 13 lb (5.9 kg)Shipping Dimensions 27 x 12.5 x 9 in (686 x 318 x 229<br/>mm) 17 lb (7.7 kg)Mount 1.5 in schedule 40 1.9 in (48 mm) OD pipe<br/>Start-Up Wind Speed 6 mph (2.68 m/s)²<br/>Voltage 12, 24 and 48 VDC

Turbine Controller Microprocessor-based smart internal regulator with peak power tracking

Body Cast aluminum (Marine is powder coated for corrosion protection)

Blades (3) Injection-molded composite

Overspeed Protection Electronic torque control

Kilowatt Hours per Month 38 kWh/mo at 12 mph (5.4 m/s)

Survival Wind Speed 110 mph (49.2 m/s)

# Air X

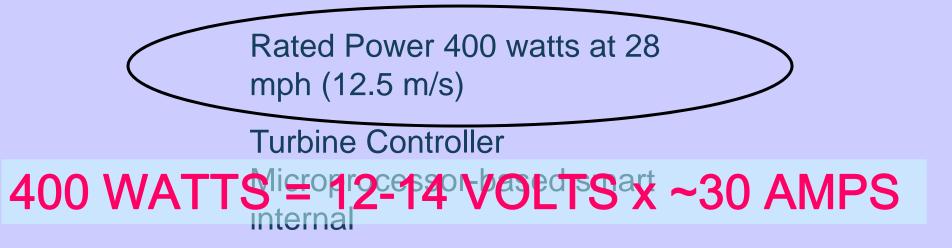
#### **Remote Power Solutions**

The Air X brings versatility, efficiency and durability to remote wind power. With more than 90,000 units sold, Air X is the best-selling small wind generator in the world. Ideal for battery-charging applications, Air X is often used for remote homes, telecommunication towers, monitoring stations, and in areas of the developing world without electrical service.





**Technical Specifications** Rotor Diameter 46 in (1.15 m) Weight 13 lb (5.85 kg) Shipping Dimensions 27 x 15 x 9 in (686 x 38 x 228 mm) 17 lb (7.7 kg) Mount 1.5 in schedule 40 pipe 1.9 in (48.26 mm) OD Start-Up Wind Speed 8 mph (3.58 m/s)Voltage 12, 24, and 48 VDC



regulator with peak power tracking

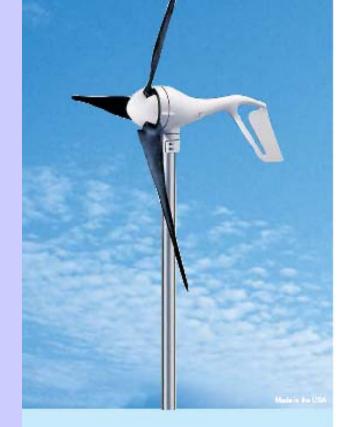
Body Cast aluminum (Marine is powder

coated for corrosion protection)

Blades 3-Carbon fiber

composite

Overspeed Protection Electronic torque control

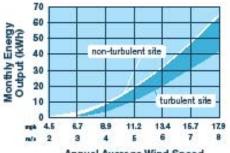


#### **Technical Specifications**

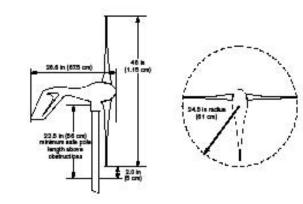
Rotor Diameter	46 in (1.15 m)
Weight	13 lb (5.85 kg)
Shipping Dimensions	27 x 15 x 9 in (696 x 38 x 228 mm) 17 lb (7.7 kg)
Mount	1.5 in schedule 40 pipe 1.9 in (48.26 mm) OD
Start-Up Wind Speed	8 mph (3.58 m/s)
Voltage	12, 24, and 48 VDC
Rated Power	400 watts at 28 mph (12.5 m/s)
Turbine Controller	Microprocessor-based smart internal regulator with peak power tracking
Body	Cast aluminum (Marine is powder coated for corrosion protection)
Blades	3-Carbon fiber composite
Courses and Destantion	Provide and a second second



#### MONTHLY ENERGY







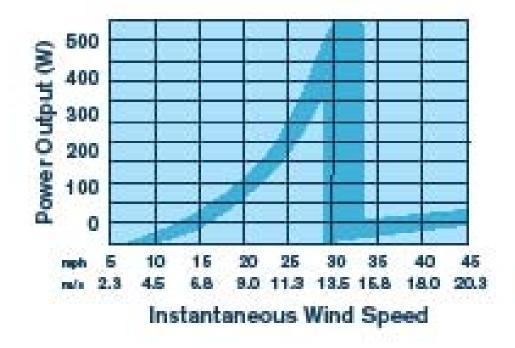
#### Southwest Windpower 1801 W. Route 66

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## http//:www.allsmallwindturbines.com/



The New 400 watt turbine!

**Owner's Manual** 

Wind Turbine Serial Number

## **EZ** Tower

### 29 ft (8.8 m) guyed tower for AIR small wind generators

#### Towers have never been so easy

Installing small wind systems just doesn't get any easier than this. The EZ Tower comes with all the parts needed with the exception of the power wire.

Installs in less than two hours\*

- No Concrete.
- No Gin Pole.
- No Winching.
- · Fully engineered to 110 mph (49 m/s) winds.
- · Galvanized tubing, cable and hardware.
- Ships via UPS anywhere. Ships in one 74 inch (1.9 m) box. Weight: 80 lb (36 kg).
- · All materials included even pipe!





Arrowhead anchors ease installation.

Designed for use with

Air Breeze, Air X and Air 403

#### Southwest Windpower

1801 W. Route 66 Ragstaff, AZ 86001 USA 928.779.9463 www.airbreeze.com

Makers of Skystream 3.7\* / AIR / Whisper

\* installation times may vary depending on experience and soil conditions.

🙇 Please recycle

# Review



• Do <u>YOU</u> still want a windturbine?

• Do you have a conceptual understanding of design and use?

**Questions?**