

PPG-B300 Owner's Manual



TABLE OF CONTENTS

Introduction.....	3
IMPORTANT SAFETY INSTRUCTIONS	3
Remove Rear Tire off Your Bike (VIDEO)	4
Secure Generator Bracket	5
Rear Axle Setup	6
Mount & Align Your Bicycle	8
Installing V-beltt	9
Verify Your Generator is Working	10
Connecting to a Battery Power Pack	11
Charge Controller.....	12
Sales & Support	12

Introduction

The instructions for setting up this bike generator are included in this manual and also are available in a YouTube video at this link:

<https://youtu.be/uqQapiw142w>

We recommend that you watch the video instruction since it provides more detail.

IMPORTANT SAFETY INSTRUCTIONS

The Following definition applies to the word "Warning" found throughout this manual:

! WARNING	This indicates a potentially harmful situation where that if not avoided could result in death or serious injury.
------------------	---

PRIOR TO USING THIS EQUIPMENT, OBSERVE THE FOLLOWING WARNINGS:

1. Read and understand the complete Owner's Manual
2. Operate during its operation. This machine is not suitable as a children's toy. There is a natural tendency for children to want to play on this equipment, this in the supervising children should be aware of their responsibilities to be vigilant. Moving parts that may appear to present obvious hazards to adults may not appear to do so to children.
3. Any person having an existing medical condition that prevents bicycling exercise related activity must not use this equipment.
4. Inspect this equipment for loose parts or signs of wear. Pay special attention to the seat, pedals, and crank arms. Do not use if found in poor condition.
5. This equipment contains moving parts. Use Caution. Do not wear loose clothing or jewelry or have long hair hanging down where it could get caught in the rear wheel.
6. Care should be taken when mounting and dismounting the bicycle. Bike stand handles should be tightened so the bike is very secure.
7. This machine is designed for a user weight limit of 250 lbs. People over this weight are not to use this equipment.
8. Set up the generator system so that there is a free area of 24 inches or more on all sides of the machine. Keep others out of this area when the machine is in use.
9. Make sure the seat height is adjusted correctly for the height of the rider.

Remove Rear Tire off Your Bike (VIDEO)

This video shows how to remove the tire off your rear wheel.

<http://www.youtube.com/watch?v=FN2Qa33Vz2o>

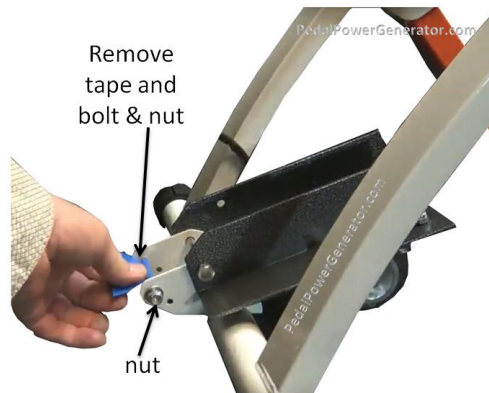


Secure Generator Bracket

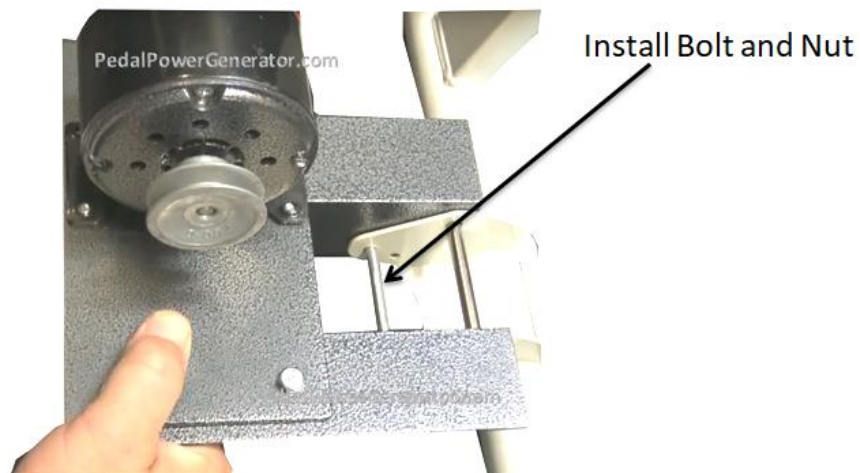
Clear off a workspace at waist height to allow you a comfortable working height. Place the stand as shown below and open up the clamps.



Remove blue tape and the bolt as shown.



Lay generator plate down in horizontal position as shown below. Install the bolt and nut as shown. Use 11mm wrench to tighten down the 4 bolts holding the generator and the two on the top plate.



! WARNING

Using the correct axle ends in your bike generator stand will minimize risk of the bike falling out of the stand and cause possible injury.

Rear Axle Setup

The bicycle generator stand is designed to hold your bike securely by the rear axle of your wheel. The receiving cups of the stand hold the axle ends in place.



There are two basic types of bike axles. One is called the “quick release” skewer style. The other is just the standard axle with nuts on each end.

Quick Release Style	Standard Bike Axle
<p style="text-align: center;">QUICK RELEASE LEVER</p> <p>A close-up photograph of a bicycle's rear axle assembly. A black arrow points to the quick release lever, which is a small metal component attached to the axle. The background shows the spokes of the wheel and the hub.</p>	<p>A close-up photograph of a standard bicycle axle. The axle is inserted into a red metal component, likely a generator stand. A silver nut and washer are visible on the end of the axle.</p>

If your axle does not have a quick release lever then it is safe to assume that you have a standard bike axle with the nuts on each end. In rare cases the nut on the axle may need to be sanded down a little bit to put a small taper at the end as shown below. A belt sander or grinder can be used to do this after removing the nut off the axle. Careful! It gets hot when you sand it down!



In the case that a road bike or mountain bike is being used that has a “Quick release” skewer you must check the axle end to see if it is plastic. If it is, then it must be replaced with a metal skewer. Metal skewers are available on Amazon or EBay or Google Shop or may be included with your bike generator stand.

METAL SKEWER



PLASTIC SKEWER

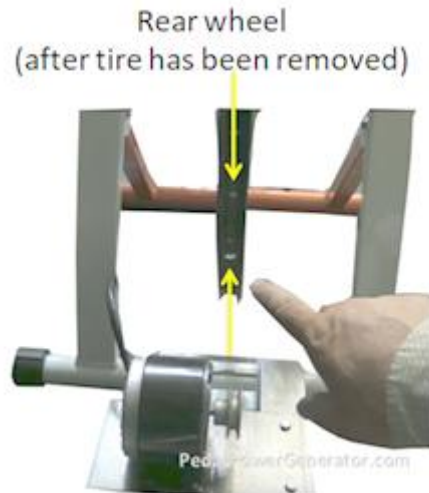


Mount & Align Your Bicycle

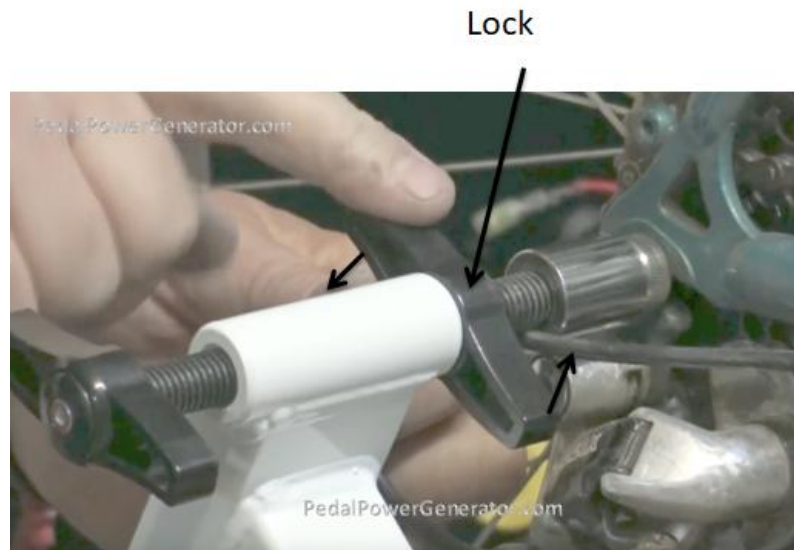
You will need to mount your bicycle to the bike trainer stand by first opening up the stand clamp shafts, then lowering the bike into the stand.

Align the rear wheel with the pulley on the generator the best you can. Good wheel alignment will minimize noise, loss of energy due to friction, and extend the life of your belt.

Below the wheel alignment with the generator pulley is highlighted with the two yellow arrows.



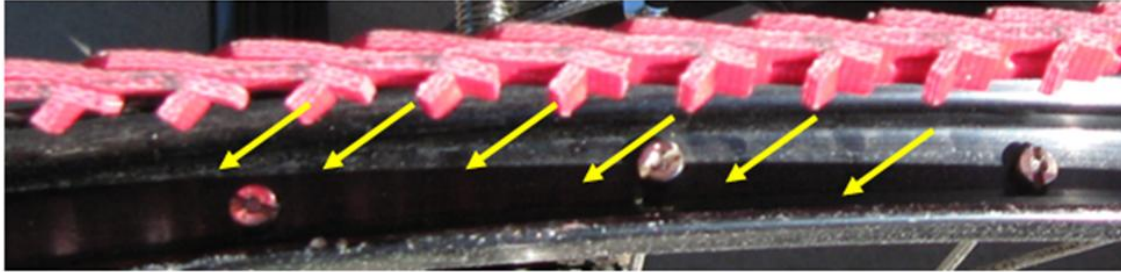
After the alignment is done, tighten down the left and right clamps with equal turns so the alignment stays true. Put as much force into it as you can. There are two locks on the bike's stand, one on each clamp. Engage the locks as shown below. These should be very tight. A light hammer would be ok to use to set these clamps securely.



Installing V-belt

Your pedal power generator will come with approximately 80 inches of adjustable length V-belt.

Belt tabs point this way, catching on the spoke ends



Wheel spins this way

A pair of needle nosed pliers will make this step easier. You will first need to install the belt around the generator pulley as shown. Then wrap the belt around your rim to take a measurement and see where you should break the belt at.

NOTE: This takes 1 or two iterations to get the belt tension just right.

Fit belt around rear wheel and remove links in belt

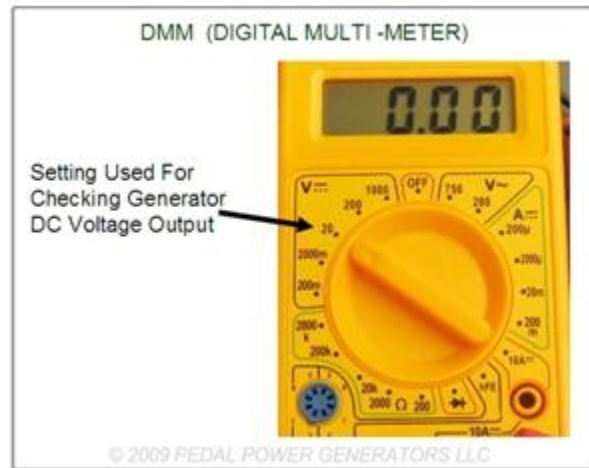


After you have broken the belt where you want to, reconnect the belt by inserting the tab through the double length as shown. Using the small needle nose pliers or finger nails, reach through the V-belt opening over the single link, pull the end tab through and give a quick twist of the wrist.

This YouTube video will show you how to put the V-belt onto your rear bike wheel. It is best to use small needle nose pliers to install this belt. <https://youtu.be/uqQapiw142w>

Verify Your Generator is Working

Use a volt meter set to DC volts 20 range to test out your generator.

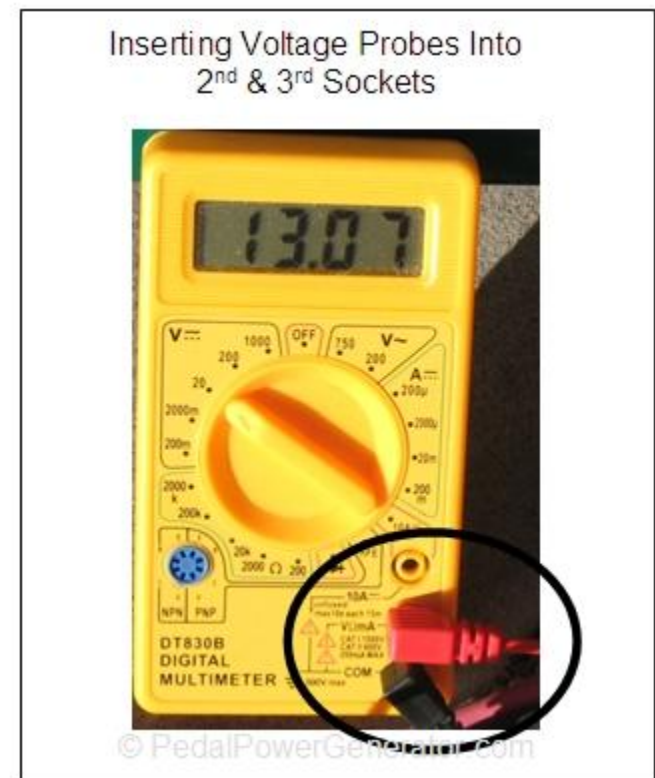


DT830B VOLT METER

Insert the black voltage probe connection into the bottom hole on your volt meter labeled "COM"

Insert the read voltage probe cable end into the hole labeled "VΩmA"

When you are done, your cables should look like the meter in the picture.



Now probe the voltage from your bike generator wires. It will take two people to do this. One person will need to pedal on the bike, the other person to probe the black and red wires coming from the generator.

Connecting to a Battery Power Pack

The video shows instructions on how to attach a cigarette lighter plug to the wires of the generator. Watch video here: <https://youtu.be/uqQapiw142w>

Saving the energy you produce in a power pack is an excellent way to be able to use your energy for many different purposes such as charging cell phones, powering lights, or laptop computers.

SAFETY:

Batteries hold tremendous power. You must connect to a power pack or battery following electrical standards such as proper wire size, fuse, and wire size.

This table will allow you to determine approximately the state of charge of your battery. Measured volts is the reading that you are getting from the DMM.

STATE OF CHARGE LOOK UP TABLE FOR SEALED ABSORBED GLASS MAT BATTERY (A.K.A. AGM)

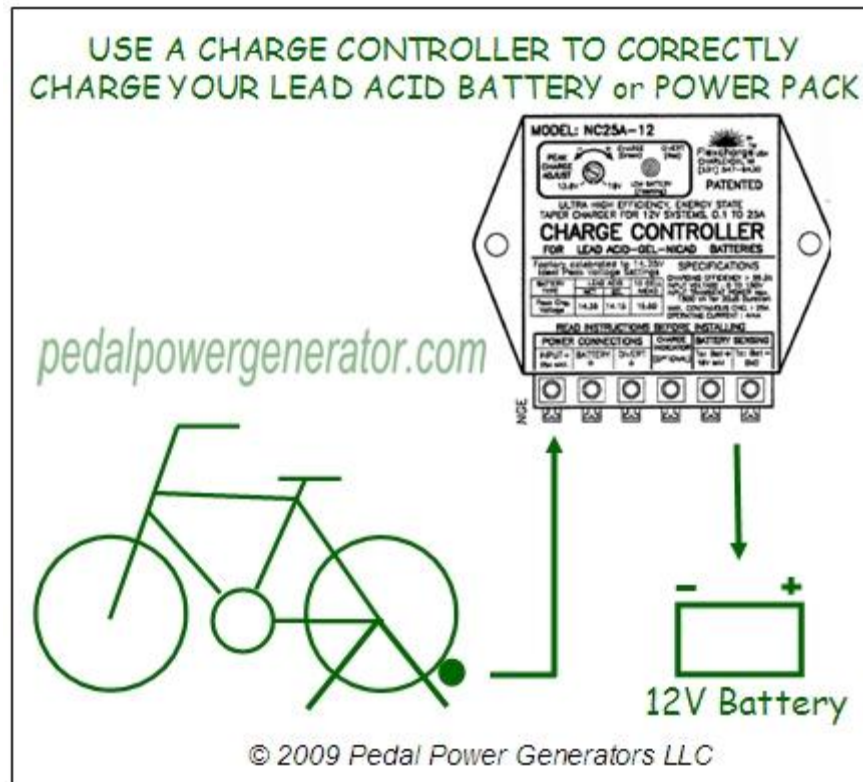
MEASURE VOLTS	% CHARGED
11.8	0%
11.9	10%
12.0	20%
12.1	30%
12.2	40%
12.3	50%
12.4	60%
12.5	70%
12.6	80%
12.7	90%
12.8	100%

Charge Controller

Each battery has a “max charge Voltage” level that should not be exceeded. If you wish to protect the battery from overheating or getting damaged, then use a charge controller. You will notice that when your battery is fully charged, the bike generator will suddenly get very easy to pedal. This is the charge controller functioning as it should in protecting your battery from getting damaged by excessive voltage / current.

The NC25A charge controller is very well designed for the bike generator application.

This video will show you how to install the charge controller: <https://youtu.be/OSXldBRtVxM>



Sales & Support

Email: support@pedalpowergenerator.com

Website: Pedalpowergenerator.com

1293 E. Parkview Dr.

Gilbert, AZ 85295

Phone: 480-489-4111