

How to Build, A 300/400 watt Pedal Powered exercise bike

By Dr. T. M. Lamb

Simple, Step-by-Step plans on how you can build a Pedal Power Exercise bike, and make real, usable power while you exercise.

Now you can pedal exercise and produce power at the same time. And if your solar system ever runs low on power and the sun don't shine and the wind wont blow you can pedal power your batteries to full charge in a couple of hours. And hey who don't need a little exercise and now you can actually produce something useful while you exercise.

We have heard reports of 400 watts but we were conservative when we estimated 300 watts but how much power you produce is up to you and how good a shape your in and how fast and how long you can pedal at speed. All that, determines how much power you can make. The average person in reasonable shape can produce 300 watts for 30 to 45 minutes.

It's actually a lot of fun to exercise knowing you are helping the environment and producing something useful and needed.

This is the simplest and easiest generator exercise bike plans on the market bar none and the cheapest too, the bike cost me about \$100, the generator cost me \$50, the blocking diode cost me \$5.00 and the volt meter cost me \$7.00 all this for only \$162.00 Not to bad...

Pedal exercise for an hour to charge a 12 volt battery and run 3 or 4 or more (12 volt) LED lights all night long, or you can power a radio etc.

How's that for POWER you can use.



First you need to find an exercise bike, one with a front wheel is best. An Aerodyne exercise bike, (WILL NOT work as it has NO wheel). I found mine on Ebay for under \$100 including shipping. (It had to be shipped via bus as it was to big and bulky to ship UPS or USPS.)



When you get the seat and handlebars adjusted just right you are ready to start. Also you need to attach a volt meter to the leads coming off the generator and give your generator a spin by hand IF it reads any voltage then you know which direction it needs to spin to create a charge. Just hold the flywheel against the exercise bike and turn the wheel in the direction it would go IF you were pedaling it when you notice your flywheel spinning in the right direction to make power then you will know which fork leg to attach your generator, so it spins in the right direction to make power for you to charge your batteries. IF you attach it to the wrong fork leg making it spin backwards it will NOT make any voltage and you will have to take it off and re-attach it to the other fork leg so your generator spins in the right direction. Spending a few minutes to get this right is well worth the investment, as the direction the flywheel spins is important. Check and double check to be sure.



Note look for a generator that already has a bracket installed and just drilled holes in the fork tube to match the holes already drilled in the mounting bracket. Also I used washers to adjust how far over the wheel ran on the generator flywheel. Where you drill the holes is critical as there is no adjustment to make the flywheel run tighter against the bikes wheel so be sure before you drill the holes. I found my generator on Ebay it was advertised as a AMETEK tread mill Generator/DC Motor with attached flywheel. It looks a little rusty but it works good. (A DC motor when it's spun at speed is then a generator that makes DC current). I bought mine on Ebay for about \$50.00

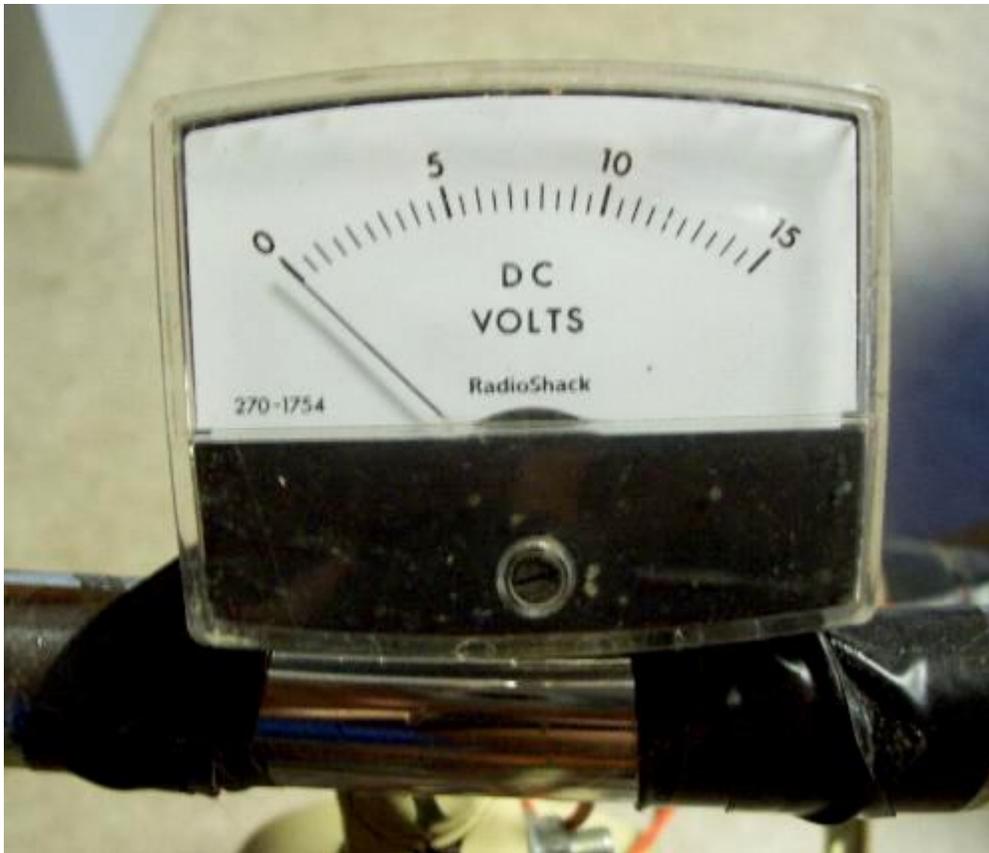


In this photo you can see below the generator the bolt going through the fork tube also note all the washers used to adjust the flywheel as to where it runs on the bike wheel and added washers were used to pull the bolt away from the bike wheel so it wouldn't rub against the wheel.



Run the Red (Positive) wire off your Generator and into your voltmeter and from there to your blocking diode and from there to your clips to attach to your batteries. Do the same with your Black (Negative) wire going to your negative or black wire on your voltmeter and then you bypass the blocking diode and go straight to your battery clips to attach to your batteries. And yes your red or Positive cable goes to your Positive battery post and your Negative wire goes to your Negative battery post that way your batteries will charge when you start peddling.

On the positive (red) wire you will need to wire in a blocking diode so your battery power will not drain back through your generator while you are not pedaling and run your battery dead. Radio Shack has these Blocking Diodes and they are simple to wire in. The blocking diode ONLY wires into your + Positive wire (NOT your Negative wire) Be sure to run your wires to your voltmeter before you attach the blocking diode. You also can find these blocking diodes on ebay under solar power blocking diodes, they only cost from \$5.00 to \$7.00. Be sure to wire in your volt meter before you wire in the blocking diode this way you will only read the voltage YOU produce and NOT the voltage in your batteries. A volt meter is handy so you can see just how much power you are producing and putting into your batteries.



If you like you can attach the voltmeter to the handle bars to see how much voltage you are making as you pedal. As you can see this volt meter came from Radio Shack and was just taped to the handle bars.

There are all kinds of kits, plans and finished exercise generator bikes you can build or buy but this one is the simplest and cleanest we have seen, bar none!

Pedal power generator, more FREE info here:

<http://pedalpowergenerator.com/#FREE>

<http://www.los-gatos.ca.us/davidbu/pedgen.html>

<http://www.windstreampower.com/index.php>

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