

End results of last project

Project Conclusions

- New motors produced an 11.54% reduction in RPM's
- New motors marginally increased resistance
- New motors did not allow users to maintain smooth rhythm; could not produce water
- Addition of capacitor circuit could potentially smooth power flow enough to produce water
- Testing leads us to other areas of potential improvement (ie. Crank Arms, Pedals)
- Generator and Pump circuit redesigned and simplified
- Generator circuit PCB layout completed

Opportunities for Future Work

- Thermodynamic analysis
- Fabricate PCB with new design
- Do more life testing on motors
- Redesign crank arms to be more receptive foot power
- Research on brushless motors
- Increase resistance of the motors
- Investigate Solar energy
- Investigate alternatives to energy-storage concept

Alternative for Energy Storage

Added Input Stage

