Objective

To design a next generation HPG that incorporated:

- Safety
- Portability
- Flexibility
- Reproducibility

Design Criteria

- Safe for children
- One-person maneuverable
- Transportation
- Set up
- Adjustable for different users
- Fit in a small car
- 60-120 rpm range
- Under 50 lbs per module

Design Process

- Benchmark Design
- Establish Design Criteria
- Pick Motor
- Prototype, Test, and Build

Flexibility

- Capable of powering a variety of loads

Safety

- Hand holds
- Shielded moving and electrical parts

Portability

- Easy to maneuver in the dolly position
- Compact

Reproducibility

- Simple tube design
- Readily available parts

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