

# Power Assisted Handcycle

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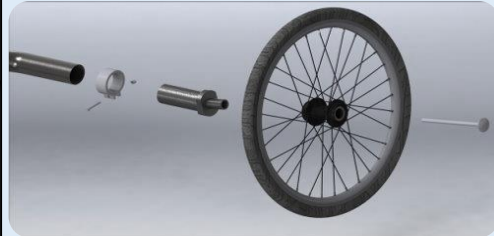
## PROBLEM STATEMENT

The goal of the Power-Assisted Hand Cycle is to serve a wide range of people in need. The new design of the product is looking to revamp portions of the current build and design by focusing on three major portions of the design;

- New design of the steering system in adjunction with a new propulsion system
- An Ergonomic seating style which allows for ease of access and exit
- Interchangeability/customization of the hand cycle to be unique for each person

## QUICK RELEASE WHEELS

- Easy disassembly for storage and transportation
- Allows for easy maintenance
- Changeability and customization to give each rider a unique design



## MANUAL CRANK SYSTEM

- Locking brake holds the handcycle still while mounting and dismounting
- Accessible braking on drive system for smooth and quick braking
- Chain tensioner incorporated to give rider a smoother ride and minimize chain movement



## COPENHAGEN WHEEL

- Top assisted Speed: 25 mph
- Range: 30 miles
- Bluetooth Connectivity
- Real time speed reading
- GPS tracker



## FOOTREST DESIGN

- Slotted Grooves for grip
- Allows for more load bearing capabilities
- Light weight design reduces weight
- Bracket system allows for easy install and customization



## SEAT FRAME/ SEAT POST

- Spring system of seat allows for rider adjustability and comfort.
- Aluminum frame allows for a lightweight and rigid design
- Bolt system allows for easy disassembly for storage and transport



## ACKNOWLEDGEMENTS

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