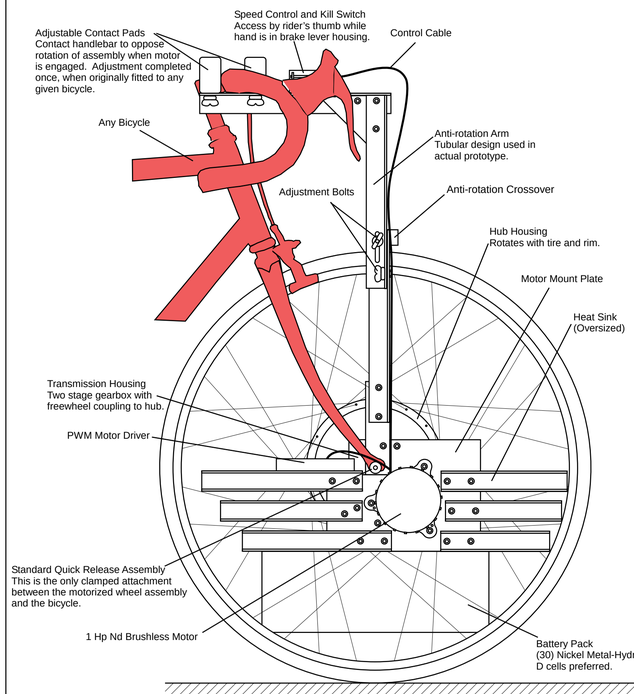
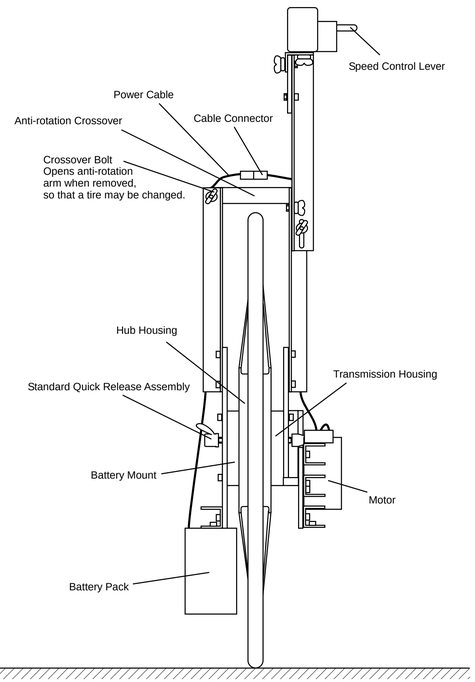
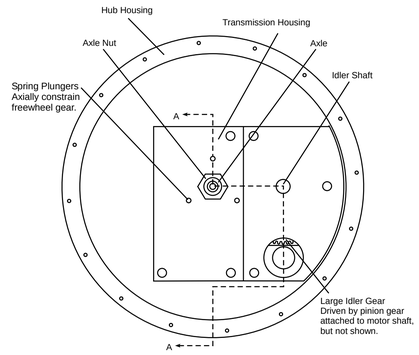


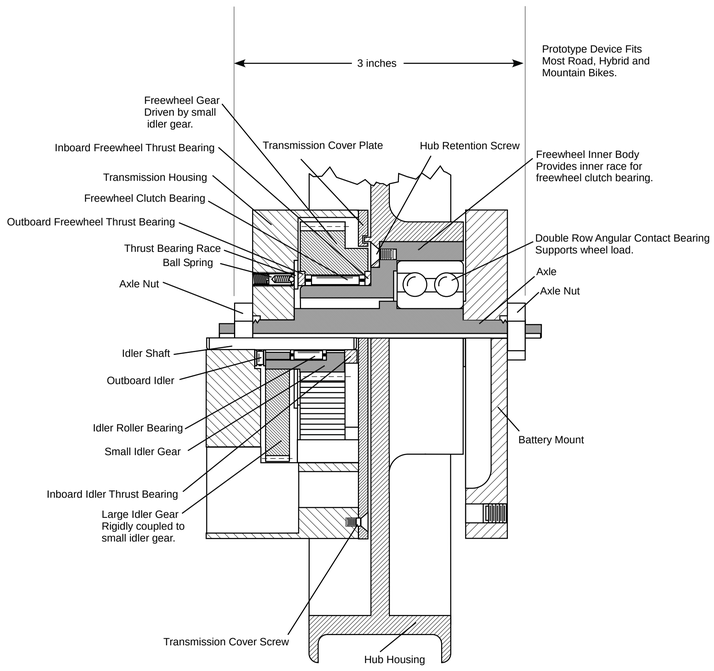
Attachment of Self-Propelled Wheel Assembly to Bicycle



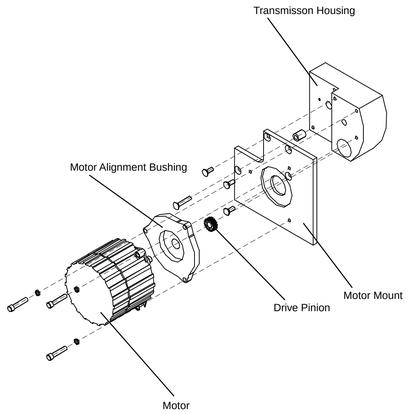
End View of Self-Propelled Wheel Assembly



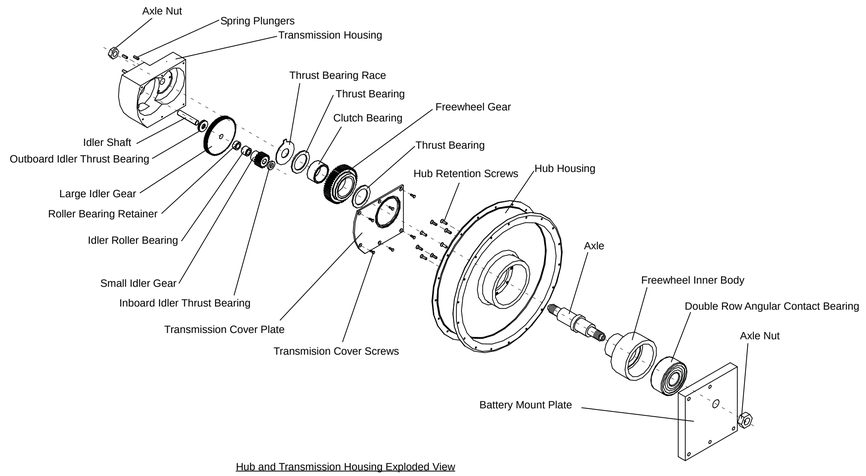
Hub and Transmission Housing Side View



Hub and Transmission Housing Section A-A



Motor Mount Exploded View



Hub and Transmission Housing Exploded View

Specifications:

Installation or Removal Time, Once Fit: 10 Seconds
Time to Fit Most Bicycles: 15 Minutes
Gross Wheel Weight: 44 Lb., prototype; about 30 Lb production
Range with Minimal Pedaling: about 30 Miles
Powered Speed: 10 - 27 Miles per Hour
Estimated Battery Life: Up to 15,000 Miles

Design Benefits:

Installation or removal from bicycle is accomplished in seconds, for routine conversion, charging, or protection of drive assembly.

Low center of mass, for excellent maneuverability; attachment does not change esthetics of original bicycle.

Motor does not add drag to bicycle when not in use, for efficient pedaling, either alone or with power assist.

Mass of drive system is supported by wheel, not bicycle frame, for safe upgrade to powered cycling.

Self-contained propulsion accessory.

Universal mount configuration fits most of the billion existing bicycles.

Design transferrable to various powerplant or energy storage configurations. Motor may be internal combustion engine, or hybrid electric.

Patent pending on features integral to design benefits.

Built and tested prototype.

Extensive product family to address differing market segments.

Neodymics™
www.neodymics.com

Neodymics™ BMU-2, Prototype Bicycle Wheel

Drawn by J. L. Radtke