How Neodymics’ Cylclemotor will Address Customer Needs

In evaluating the purchase of an electrically powered bicycle, one has a choice between upgrading an existing bicycle or purchasing a dedicated powered bicycle. The upgrade will be less expensive, but upgrade “kits” currently on the market consist of separate motor, control and battery. With several clamps and cables, these take time to install and are not easily removed. Our self-contained Cylclemotor instantly snaps on or off the bicycle, thus retaining the cost benefits of not purchasing, storing, and maintaining an additional vehicle. It can be installed on the bicycle already owned, or even shared within a family owning several bikes. Conversion between the assisted propulsion and original bicycle formats can be routinely accomplished, for riding style or utility variation. Neodymics’ Cylclemotor leverages the truly vast pool of about two billion existing bicycles.
Neodymics patent pending design answers the needs of consumers in ways superior to other products. These include the following:

1. Installation is instant, and can be completed in less time than required to mount a bicycle on a car rack.
2. Removal for charging, security, or protection from the elements is just as easy.
3. The bicycle center of gravity is moved closer to the pavement for better handling than other motorized drives.
4. Original aesthetics of the bicycle are unchanged. The original drive train is not altered, so that pedal propulsion is always possible. The commuter can bike to work with assistance from the motor, and work up a sweat by choosing to return home under their own power. The “weekend warrior” can conveniently replace the drive system with original bicycle wheel.
5. Stand alone unit is inherently reliable, replaceable, and serviceable. It can be shipped via UPS or FedEx. The number of electrical connectors is reduced.
6. Above features available in a device providing power and range equal to the best dedicated electric bicycles, and at a lower price. This means moped-like performance, with reserve power for climbing the steepest hills without raising the rider's heart rate.
7. Suspension isolates the rider and bicycle from shock due to roadway imperfections.
8. Design is transferable to other powerplants and energy storage means, and can take advantage of technological developments completed by others.

**US Market Analysis**

**US Bicycle, Scooter and Electric Bicycle Sales (Estimates, in Thousands)**

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>Total Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycles</td>
<td>18,500</td>
<td>175,000 (2004)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Scooters</td>
<td>350</td>
<td>1,500</td>
<td>2,000</td>
<td>1,800</td>
<td>2,000</td>
<td>8,000 (2006)</td>
</tr>
<tr>
<td>Electric Bicycles</td>
<td>10</td>
<td>15</td>
<td>25</td>
<td>100</td>
<td>120</td>
<td>300 (2006)</td>
</tr>
</tbody>
</table>


US electric bicycle sales have grown rapidly in recent years. Neodymics website statistics suggest that some of these persons will purchase our Cyclemotor device if priced between $500 and $1500. It is not possible to manufacture our Cyclemotor in the US without exceeding this price. However, overseas manufacturers have been contacted and preliminary indications are that production quantity costs will be several hundred dollars per unit.

Recent rapid growth in the electric scooter market probably will not be sustained, due to safety and legality issues. However, electric bicycles are becoming more widely accepted, as the Consumer Product Safety Commission has classified electric bicycles as bicycles, provided that top assisted speeds do not exceed 20 MPH, total propulsive power does not exceed 1 HP, and the vehicle includes fully functional pedals. Electric bicycles appeal to the urban commuter, the environmentally conscious, the frugal, and the aging bicyclist wanting a little help up the hills. Electric scooters have been popular among children. As this population ages and comes to terms with limitations of electric scooters, electric bicycles will appear attractive to many of them. We believe that existing electric bicycle sales are much less than what may be achieved with a well designed and marketed bicycle upgrade package. Neodymics Cyclemotor can help to positively alter the way people routinely travel intermediate distances, especially with a strategic marketing alliance with a major retailer.