



Evolution of the design through prototype development, ranging from rear-wheel steered devices to current 'scooter style' front-mounted unit

Electric wheelchairs are expensive & awkward to transport, but many wheelchair users (both self-propelled and those dependent on an attendant or carer) could benefit from power assistance. This is a detachable add-on unit, providing power, steering and braking at a lower cost, to fit 70% of manual wheelchairs. With both user control and attendant control modes, the unit can be swapped between chairs with very different capabilities—for example in a hospital or nursing home. Prototypes so far test configurations and motor/drive systems, including brushless motors, hub motors and regenerative braking. Under development—more information at [www.lockton-motor.co.uk](http://www.lockton-motor.co.uk)

# Wheelchair Drive

2004 Motion Drives & Controls Award for Engineering in Product Design  
 2005 Cambridge University Entrepreneurs' £1k Business Plan Winner