

"No batteries. No motors!
With these geared wheels,
I'm independent again."



Wendy Walker, user since 2007
C-6 complete, 4 years post injury

NEW!
Medicare approved
HCPCS Code
E2227

2006
WINNER
Medtrade
Innovation Award

BusinessWeek
2007
WINNER
Silver IDEA
Award

2006
WINNER
CSMC
New Product
Design

0213C

Increase mobility. Increase independence.

Barry Long, T6 complete, user since 2004, with wife Emily and children Gavin and Grace.



Half the effort to climb

Similar to bicycle technology, low gear gives added capability to ascend inclines, negotiate uneven terrain and go places that were previously challenging.

Over 55% less shoulder pain means greater mobility

An independent government-funded clinical study showed a dramatic reduction in pain in the first week, which continued to decline throughout the 20-week study.¹



Hill holding

Automatic hill holding prevents the wheelchair from rolling backwards. Ascend hills and ramps at your own speed or stop and rest if needed, eliminating the need for assistance.

Downhill control

In low gear, stopping is easier because only half the force is needed. You experience a more controlled descent.



¹ Finley, M.A., Rodgers, M.M. "Effect of 2-Speed Geared Manual Wheelchair Propulsion on Shoulder Pain and Function." Archives of Physical Medicine and Rehabilitation. Vol. 88, December 2007, pgs 1622-1627.

“Any sufficiently advanced technology is indistinguishable from magic.” – Arthur C. Clarke

The magic behind *MAGICWHEELS*® 2-gear wheels is its patented *hypocycloidal reduction drive* — a unique gear mechanism which acts much like low gear on a bicycle. By engaging the 2:1 gear the user exerts half as much effort to negotiate the same grade. The gear also gives more downhill braking control and automatic hill-holding.

**Easily shifted with palm of hand:
1:1 gear for flat surfaces; 2:1 gear
for inclines and hill-holding.**



SPECIFICATIONS:

Available in 24" and 25" wheels

Tire sizes: Tread sizes 1", 1³/₈", 2" knobby, 1³/₈" solid foam insert, or 1" SHOX tires. All tires available in 540 and 559.

Gear ratios: 1:1 high gear and 2:1 low gear

Added Weight: Approximately 10 lbs.

Wheel: Carbon fiber composite dish shaped about 3/8" thick

Handrims: Thin wall high strength aluminum hard anodized, vinyl coated, or foam; 21" or 16" O.D.; tubing 3/4" or 1" O.D.; 4-speed dual handrims optional; Natural-Fit™ handrims available; handrim spoke kits available.

Maximum user weight: 250 lb. (112 kg.)

Maximum camber: 6°

Maintenance: None. Sealed gear box factory serviced only

Axles: Quick release standard. Bolt on available

Chassis adaptor: Fits most manual wheelchairs. Call with your make and model.

Warranty: 5 year limited

FEATURES:

- **No batteries or motors**
- **Significantly easier to climb hills**
- **Automatic hill-holding with seamless override**
- **More downhill braking control**
- Easy shifting
- No added width with standard handrim
- Compatible with many aftermarket handrims
- Compatible with most manual wheelchairs
- High performance 4-speed dual handrims available

Independence is priceless

As you would imagine, technology this advanced costs considerably more than conventional wheels. However, when the expense is weighed against restrictions to lifestyle, the costs of therapy or surgery as a result of shoulder pain, or a move to a power wheelchair, *MAGICWHEELS*® becomes the most affordable, long-term solution.

Improve health. **Improve lifestyle.**

The only wheel that provides a proven health benefit and easier mobility.

A recent report sponsored by the Paralyzed Veterans of America showed that shoulder pain related to wheelchair use has a detrimental effect on quality of life: mobility is hampered and users give up their usual activities. However, a 2006 study sponsored by the National Institutes of Health brings good news. **MAGICWHEELS®** were shown to reduce shoulder pain by an average of fifty-five percent in all participants¹.

In addition, **MAGICWHEELS®** reduces by half the effort needed to climb or descend, so users enjoy a fundamental improvement in their quality of life. Many are able to resume activities they thought they had left behind forever and are able to go places that were once inaccessible without assistance. Some **MAGICWHEELS®** users even avoid transition to power chairs. With no batteries or motors, all the driving power comes from *you*. Maintain fitness and muscle tone as you move about with newfound freedom.



Living the magic



Wendy Walker, user since 2007

C-6 complete, 4 years post injury

Medicare paid for my wheels and I'm getting stronger every day.



Carlos Nuñez, user since 2006

C6-7 complete, 22 years post injury

I've been waiting 22 years for these wheels.



Jasmin Milak, user since 2005

L1-2 paraparesis, 13 years post injury

I feel free again!

Michaela, age 11

Cerebral palsy

With the magic gears the Genie comes out of the lamp and it is much easier to get where Sierra and I need to go.

