

The Evolution of the AmTryke® Therapeutic Tricycle



In early 1990, Sue Haywood, a physical therapist, spoke to the Longview, TX, AMBUCS™ chapter about an expensive, hand-driven tricycle she used that enabled her patients — children with disabilities — to experience the fun of riding. Haywood, Gene Allen, an engineer, and the AMBUCS™ members got together and the AmTryke® therapeutic tricycle was born!

“The AmTryke® evolved out of a basic need,” Haywood said. “I needed something that would work and that I could readily obtain.”

During the time the Longview chapter provided trykes, chapter members built a mini-factory where they cut, bent, welded, painted and assembled all the parts except for the pedals and seats. The AmTryke® could readily fit a 3-year-old or a 14-year-old. Each AmTryke® was specially designed and constructed for each individual child.

“The AmTryke® is different in that it was built for kids with a variety of problems: Down syndrome, cerebral palsy, spina bifida, autism and a variety of conditions that cause delays in motor development in children,” Haywood said. “The benefits to the weak or low-tone child are that it builds up stamina, endurance and overall strength

while having fun, versus stuffy old exercises that are very difficult to get kids to do.”

To make this wonderful tryke available to more children with special needs, the Longview chapter introduced the AmTryke® therapeutic tricycle at the 1990 AMBUCS™ National Conference in New Orleans, LA.

The Longview chapter also created AmTryke® Inc., a nonprofit organization, and provided these trykes to other chapters. In turn, these chapters used the revenue they made to give away more trykes in their community. In 1994, National AMBUCS™, Inc. took over the responsibility of AmTryke® Inc.

In late 1995, the next generation of AmTryke® therapeutic tricycles hit the market. Changes included switching to red frames and a new design to differentiate the product. The first foot cup design was also added.

“The foot cups allow a child with poor lower-extremity control to ride without constantly attempting to keep their foot on the pedal,” Haywood said. “For those with little or no function in the lower extremities, it allows them to get some range of motion and exercise while using the upper extremities to propel the tryke.”

In late 1997, the Large AmTryke® therapeutic tricycle was introduced. Essentially, it was an expanded-size version of the Regular model. The product was received well, as there were lots of calls for trykes for larger kids.

“The Large AmTryke® allowed older kids to benefit, plus allowed our previous riders to grow up into a larger model and continue the fun and therapy,” Haywood said. “Kids with disabilities come in all sizes and, prior to the new model, some of the kids were just too large for it.”

Eventually, the All-Terrain model was introduced. Based on a manufacturer’s sample, it allows higher-functioning kids to participate in aggressive outdoor play.

“The All-Terrain is my personal favorite. It is so functional at the school playground and for families who do not have nice, flat driveways for the kids to ride on,” Haywood said. “It is also a good progression up once a child has mastered the Regular AmTryke®. The full steering and larger wheels allow more freedom and increase the amount of work the child has to do to propel it forward.”

The year 2001 saw the beginning of the AmTryke® Accessory Line to help adapt a tryke to an individual child’s needs.

From a start of three accessories, the line has grown 10 times this to





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help further adapt the AmTryke® therapeutic tricycle.

“The accessories allow more kids with different problems to ride the AmTryke® independently,” Haywood said. “A good example is the stationary foot adapters. For a child with lower-leg paralysis or hip dislocations, the stress of the pedals going round and round might cause more physical damage. With the stationary adapters, the child can ride with the legs remaining stationary and get the benefit to the arms and trunk.”

In 2001, the inverted step-in frame was introduced in the Large model. This was a big winner. Design improvements included

four-way seating options, a lower center of gravity and expanded size.

The Toddler AmTryke® therapeutic tricycle was perfected in 2003 and the first large-scale production run initiated. Delivery is expected in early 2004. This fills a much-needed niche in sizing, allowing early intervention in children ages 0 to 3 years old. Hundreds of children are waiting on this new design.

“The Toddler is needed for our very small kids up to 3-and-a-half years of age. This is the population that I personally work with, and the need is tremendous,” Haywood said. “Children are considered delayed if they are not walking

independently by the age of 15 months. Many of the children I work with may not walk until they are 3 years old. If the Toddler Tryke raises that to 24 months or 30 months, hey, it is worth all the gold in ... wherever they keep it.”

Planned for 2004, the Regular AmTryke® therapeutic tricycle will switch to the inverted step-in frame. Sizing is now integrated for all models, and children will be able to easily move from one size AmTryke® therapeutic tricycle to the next as they grow.

“The inverted frame allows easy accessibility on and off the AmTryke®. With the old versions, especially the Large model, it was very difficult to get kids on the AmTryke® without two adults,” Haywood said. “And in some home settings, that is not possible on a regular basis, and the child might not be able to ride as often.”

The AmTryke® therapeutic tricycle has been provided for children in all 50 states and in 11 countries. Since National AMBUCS™ began running the project, more than 5,000 trykes have been provided for children with disabilities. AMBUCS™ looks to the future with great anticipation and looks forward to the next step in providing freedom to children with disabilities.

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