

LakeExpo

Maseratis For Disabled Kids: Camdenton Robotics Team Works Wonders At 'Go Baby Go' Event



The Camdenton LASER 3284 robotics team is using their powers for good.

The team collaborated with Lake Regional Health System to create the Central Mo FIRST Robotics Go Baby Go event, held at Camdenton High School Saturday, September 22nd.

Go Baby Go is a national, community-based research, design and outreach program that provides modified ride-on cars to children birth to age 3 who experience limited mobility. The Go Baby Go movement was founded by creator Cole Galloway, a physical therapist at University of Delaware. The cars are less-expensive alternatives to power wheelchairs (the cars only cost a couple hundred dollars), and they help impaired kids to move and restore physical independence.

Sixteen electric powered toy cars were modified to benefit mobility impaired youth in the Lake of the Ozarks area. Members of the LASER Robotics Engineering Technology class identified a Maserati toy 6-volt car to work with during class to engineer the alterations and write a modification instruction guide. Making a prototype, base car modifications were developed by relocating the foot accelerator to a button that could be used to make the car move. Due to request by a therapist to involve strengthening handgrip, a 3D throttle lever was student designed, tested and incorporated as a design modification alternative. The final design was used on a number of vehicle modifications Saturday. One recipient required LASER robotics team members to design a custom 3D printed extension for her arm, so she could steer the vehicle with a car remote control.

Eight Lake area occupational therapists participated Saturday morning, collaborating with the build teams to customize the car to their clients' personal needs. The customizations ranged from relocating button activation locations to adjusting the harness restraints. Child recipients' cars were modified to meet their physical needs.

After modifications were made to the cars, families joined the high school FIRST robotics teams that worked on their child's car for lunch. All participants gathered in the RC Worthan Theater at noon to take a group picture and test-drive the personalized and customized Maserati car. This also allowed teams to provide parents information on the operation control and maintenance of the vehicles before taking them home.

Assisting Camdenton LASER 3284 in making the car modifications were four other **FIRST** FRC robotics teams that accepted an invitation to come and help at the event. Knob Noster- Stealth Panther 6424, Sedalia - Team SCREAM 4522, St. Charles-

Lutheran Roboteers 4329, and (Kansas City) Barstow - The KUHNIGITS 1939 made the trip to Camdenton to assist with car modifications using customized instruction manuals designed by LASER 3284 team members. Mentors and students alike were emotional and grateful after meeting the families and working with the children to fit and test-drive the vehicle. Club organizers said they hope this will be an annual event will explore serving different age groups in the future.

LASER extended a special thank you to Lake Regional Hospital, Camdenton R-III school, maintenance staff, and Mrs. Nicklas from the theater department for their assistance at this event.