Specifications

Team 5- Go-Kart

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Go-Kart for Joey Toce

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Operational Specifications:

This go-kart is to be battery operated with two sets of controls. One set of controls will be installed in the dashboard for Joey to use. It will be a set of three buttons directing forward, right and left motion. There will be no reverse setting and the buttons will have to be continuously depressed to function. Joey seems to prefer his left hand and therefore the controls will be mounted towards the left side of the dashboard. The second set of controls will be a remote control to be handled by either of his parents. This remote will have more sophisticated controls based on thumb sticks for forward and directional movement. The remote can override dashboard controls and will be equipped with a kill switch. The seating in the kart will provide an adjustable amount of leg room to account for Joey’s growth. It will keep his legs bent at the knees and have straps to prevent movement similar to his wheelchair. The back of the seat will have trunk support as well as a head backing to prevent whiplash. It will be equipped with a safety harness which will secure his shoulders and buckle between his legs. It will be predominantly driven in the Toce’s backyard and the tires and suspension must be fitted accordingly.

Technical Specification: (all preliminary approximations)

**Physical:**
Type of Material – Steel Frame

**Mechanical:**
Size: 5 x 3 x 3 feet (L x W x H)
Weight: 100-200 lbs
Speed: 5-15 mph
Power: 2 HP

**Electrical:**
Voltage range: 12-24 Volts DC
Current range: 10-20 Amps
Wireless Range: 100-200 ft.

**Environmental:**
Storage Temperature: -20 – 150 degree F
Operating Temperature: 0-100 degree F
Operating Environment: outdoors

**Safety:**
- Bucket seat with safety harness
- Leg restraints
- Roll cage
- Remote kill switch

**Maintenance:**
- Battery recharge
- Tire pressure
- Cleaning