

Steering and Braking Systems Analysis of Go Cart



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Abstract With increasing popularity for F1 in India, go carting has started attracting a lot of attention especially among the young engineers and neophyte drivers. This has set many motorsport enthusiasts and other automotive societies to organize go cart competitions and events to fulfill the crave to learn more about automobiles of graduating engineers. Spurred by passion, many engineers have started teaming up to tussle against teams participating from various engineering colleges in India. Steering system is one of crucial areas in designing of go cart as even the slightest of improvement in response of this system could reduce the lap time and help to reach the driver beyond the finish line to win a position. Thus, steering has to be reliable enough such that the driver could have the complete control over the cart even in the toughest tracks.

Keywords Go cart · Steering system · Braking system

1 Introduction

Go cart is a mini racing car. It was first made by Art Ingles in late 1950's in USA. It does not have suspension system and does not have differential in it [1]. Differential is not used because of less clearance between go cart base and track surface [2, 3]. The power source of go cart is battery [4]. As the surrounding is getting polluted by petrol and diesel vehicle, the best alternative is electric vehicle. Go cart looks like a formula 1 car but not fast like them as well as it is cheaper than formula 1 cars. Nowadays, go carts are used in racing events where the participants should know what the purpose of the event and their role in event is.

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