



# International Journal on Recent Researches In Science, Engineering & Technology

(Division of Mechanical Engineering)

A Journal Established in early 2000 as National journal and upgraded to International journal in 2013 and is in existence for the last 10 years. It is run by Retired Professors from NIT, Trichy. It is an absolutely free (No processing charges, No publishing charges etc) Journal Indexed in JIR, DIIF and SJIF.

Research Paper

Available online at: [www.jrrset.com](http://www.jrrset.com)

ISSN (Print) : 2347-6729

ISSN (Online) : 2348-3105

Volume 4, Issue 2,  
Feb. 2016.

JIR IF : 2.54

DIIF IF : 1.46

SJIF IF : 1.329

---

## Design and Fabrication of Hydraulic Steering System by Using Pascal's Law with GoKart Mechanism

**Pranesh Ganesan**

Department Of Mechanical Engineering

Anna University, Chennai

Sriram Engineering College, Thiruvallur – 602024

E.mail:praneshice13@gmail.com and website:<http://pranesh.freeblog.biz>

### *Abstract:*

In this present work turn the steering wheel, the front wheels turn accordingly, and the car changes direction. How that happens though is not quite so simple. Well - it used to be back in the days when cars were called horseless carriages, but nowadays, not so much. The steering knuckles system is where the axles themselves, which are mounted on a knuckles, out and away from the go kart, and they actually rotate around these pivots, and cause the wheels to turn by using of hydraulic single acting cylinder. And also using Pascal's law by moving of the hydraulic single acting cylinder. In general, because the ratio of the typical tie rod's length to its cross section is usually very large, it would buckle under the action of compressive forces. The working strength of a tie rod is the product of the allowable working stress and the rod's minimum cross-sectional area. Track rods are fitted to each end of the steering rack, and are adjusted to set the tracking. Tie rods connect the suspension to the body work to keep the wheels in line. The tie rods are part of your steering linkage that goes out to your wheels. Track rods are part of the rear wheel system.