PRAGATI ENGINEERING COLLEGE

(Approved by AICTE, Permanently Affiliated to JNTUK Kakinada)
1-378, ADB Road, Surampalem – 533 437, Near Peddapuram, E.G.Dist., A.P.
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DEPARTMENT OF MECHANICAL ENGINEERING

Surampalem
Dt: 24-03-2025

CIRCULAR

It is here by informed to all the students of B.Tech. II Year students that Go-Kart club in association with IE (I), Local Chapter of Mechanical Engineering Department is going to organize a Seminar on "**KEY FUNTIONS OF A GO-KART STEERING ARM**" on 26-03-2025 in association with Mechanical Engineering. Interested students can enroll their names with your class teacher on or before 25-03-2025.

HOD-ME

PRAGATI ENGINEERING COLLEGE (A) MECH-HOD SURAMPALEM

PRAGATI ENGINEERING COLLEGE

(Autonomous)

Institution of Engineers (India)

Local Chapter, Department of Mechanical Engineering

(PEC/MC/533437)

in Association with

Go-Kart club of Mechanical Engineering Department

conducts

Seminar

on

KEY FUNTIONS OF A GO-KART STEERING ARM

26th March 2025 from 2.30 PM onwards

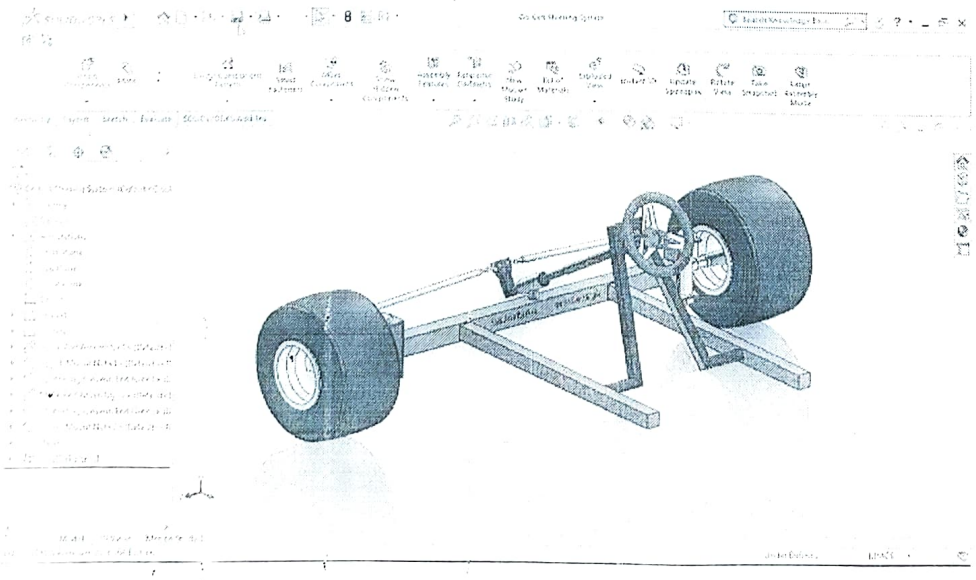
PRAGATI ENGINEERING COLLEGE: SURMAPALEM
(AUTONOMOUS)

Report on "KEY FUNTIONS OF A GO-KART STEERING ARM"

Date: 26-03-2025

A One-day programme on 26th March 2025 about Introduction to all the technical aspects and various technical terms used in the real world problems was organized by Go-Kart Club in association with IE (I) Local chapter of Mechanical Engineering Department, Pragati Engineering College.

In this seminar student coordinators of Go-Kart club of our college, Mr.P.Sarath, has taken the initiative to explain about the A **"Go-kart steering arm"** is a critical component in the kart's steering mechanism. It connects the steering rack or steering column to the steering knuckle or spindles of the front wheels. Essentially, the steering arm translates the rotational movement of the steering wheel into the turning motion of the wheels. For this session total of 20 students of mechanical department has attended.



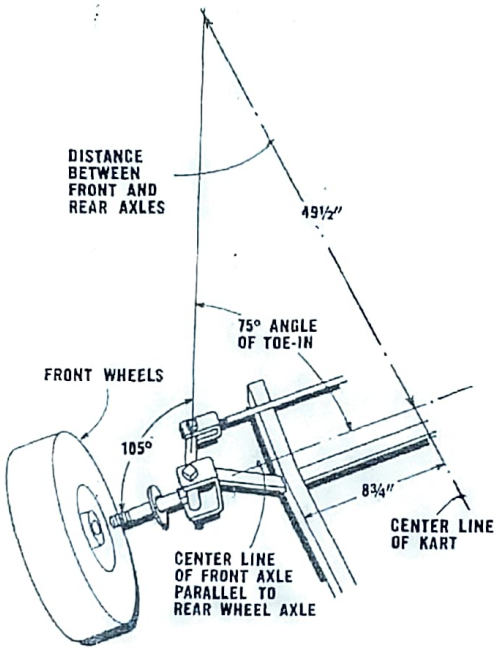
Key Components of a Go-Kart Steering System:

1. **Steering Arm:**
   - **Function:** This is the key link that connects the steering rack (or column) to the steering knuckle. The steering arm is responsible for converting the rotational input from the steering wheel into the turning motion of the front wheels.
   - **Material:** Typically made from strong materials like steel or aluminum to handle the forces involved in steering.
2. **Steering Knuckle:**
   - **Function:** The steering knuckle holds the wheel hub and allows the wheel to pivot when turned. It's connected to the steering arm and works with it to turn the wheels.
   - **Importance:** It directly impacts the steering geometry and handling characteristics of the kart.
3. **Tie Rods:**
   - **Function:** These rods connect the steering arm to the steering rack (or the steering column) and transmit the driver's steering input to the wheels.
   - **Importance:** Tie rods need to be adjustable in many go-karts to fine-tune the steering response and geometry. They also help maintain the alignment of the wheels during the kart's movement.
4. **Steering Rack or Column:**
   - **Function:** The steering rack (in some systems) or column (in others) is the central mechanism that the steering wheel is attached to. The driver turns the steering wheel, which then rotates the steering rack or column, initiating the motion of the steering arm.
   - **Importance:** It's crucial that this component is smooth and precise, as it's where the steering input originates.

Importance of a Go-Kart Steering Arm:

1. **Precise Steering Control:**
   - The steering arm helps convert the rotational movement of the steering wheel into the lateral movement of the wheels. This precise transfer of motion ensures that the driver has accurate control over the kart, allowing for sharp and responsive turns.

2. **Stability and Handling:**
   - The steering arm is a key element in maintaining the proper alignment of the front wheels. This alignment ensures that the kart stays stable and predictable during high-speed maneuvers, preventing excessive under steering or over steering.
3. **Feed back and Driver Comfort:**
   - A well-designed steering arm helps transmit road or track feedback through the steering wheel, letting the driver feel the kart's behavior, such as grip levels and road surface variations. This feedback is crucial for adjusting driving techniques.



Mr.D.J.Johnson, faculty Co-ordinator of Go-Kart club, Mechanical Engineering Department, appreciated the students for their efforts.

P. Sarath

Student Coordinator

Faculty Coordinator

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DEPARTMENT OF MECHANICAL ENGINEERING

Name of the event : **KEY FUNTIONS OF A GO-KART STEERING ARM**
Date : 26-03-2025

S.No	Roll No	Name	Signature
1	24A35A0301	A. Deepak	
2	24A35A0302	D. Lakshmi Narayana	
3	24A35A0303	D. Divakar	
4	23A31A0352	V. Trinath	
5	23A31A0351	V. Cowshik	
6	23A31A0313	B. Saiteja	
7	23A31A0341	P. Prasanth	
8	23A31A0315	B. Siva Sai	
9	23A31A0321	Y. Satya Sai Suresh	
10	24A35A0307	Mh. Bala Bhavani Sankar	
11	24A35A0304	D. Mouli	
12	24A35A0310	P. Rishikesh	
13	23A31A0316	Ch. Santhosh Kumar	
14	23A31A0322	G. Karun Kumar	
15	23A31A0340	S. Uday	
16	23A31A0332	N. Yeshwanth	
17	23A31A0330	M. Hemanth	
18	23A31A0310	A. Rajesh	
19	23A31A0334	Ch. P. Chaithanya	
20	23A31A0319	Ch. V V Satyanarayana	

INCHARGE

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