

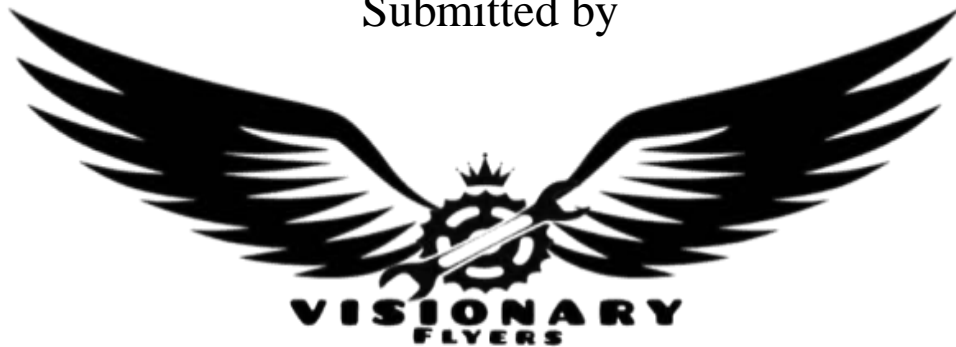


M.KUMARASAMY
COLLEGE OF ENGINEERING
NAAC Accredited Autonomous Institution
Approved by AICTE & Affiliated to Anna University
ISO 9001:2015 & ISO 14001:2015 Certified Institution
Thalavapalayam, Karur – 639 113.

SAEINDIA
Society of Automotive Engineers INDIA

Design report-4

Submitted by



TEAM: VISIONARY FLYERS

TEAM ID: BDC242026

M. Kumarasamy College of Engineering

Thalavapalayam, Karur -639113

Presented for

Bicycle Design

Competition (BCDC)-2024

GOKURAM B
Team Captain

Dr SATHEESHKUMAR S
Faculty Advisor

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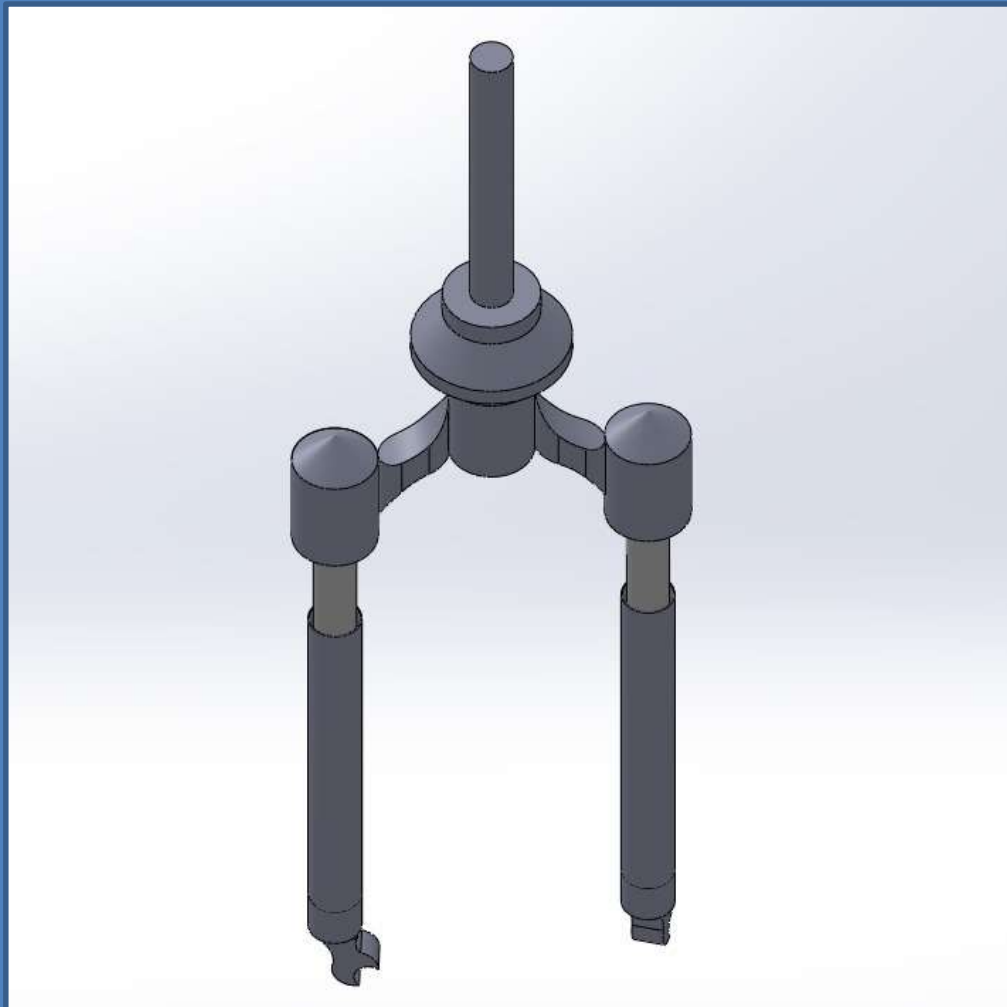
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MANUFACTURING DRAWINGS:

FRAME:



FORK:



PROTOTYPE CONSULTATION:



The E-BOM and prototype of CONDOR BIKE is presented to the vendor. The major innovation is done in the frame of the bicycle and most of the parts used are available in the market such as saddle, pedal, handlebar etc... The center design is used to hold the 3 set of sprockets which is connected through chain with a single sprocket in pedal system. Then from the center sprockets the chain is connected to the rear gears.

In brake system, Disc brakes are introduced which fits in the rear wheel hub as well as reduced the number of components used in the brake system such as brake pedal, brake booster, brake master cylinder, brake lines and hoses, brake callipers and pistons etc...

All the manufacturing drawings along with E-BOM is submitted for inspection and the inspection report is attached below.



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SAE BICYCLE DESIGN COMPETITION -2024

PART INSPECTION REPORT

TEAM ID: BDC242026

TEAMNAME: VISIONARYFLYERS

TEAM CAPTAIN: GOKURAM

COLLEGE: M. KUMARASAMY COLLEGE OF ENGINEERING

The parts to be inspected are as follows,

S.NO	PARTS/ASSEMBLY	INSPECTION
1.	FRAME	
2.	FORK ASSEMBLY	
3.	CRANK ASSEMBLY	
4.	BRAKE ASSEMBLY	
5.	TRANSMISSION SYSTEM	
6.	FRONT WHEEL ASSEMBLY	
7.	REAR WHEEL ASSEMBLY	
8.	STEERING	
9.	SADDLE	

This is to certify that the above-mentioned parts are inspected and the E-BOM cost estimation done by the team VISIONARY FLYERS of M. KUMARASAMY COLLEGE OF ENGINEERING are verified.