

NARNARAYAN SHASTRI INSTITUTE OF TECHNOLOGY

Project detail

DEVELOPMENT OF FOUR WHEEL STEERING MECHANISM

❖ Student detail :-

Student name	Enrollment no.	Contact no.
Gajjar Vishal M.	110340119083	9558259202
Patel Yash G.	110340119116	8460407753
Modi Harsh S.	110340119085	9824663009
Patel Ronak C.	110340119115	9925141834

Name of Project :- Development of Four Wheel Steering Mechanism

❖ Working principle :-

Four wheel steering is a method developed in automobile industry for the effective turning of the vehicle and to increase the maneuverability. In a typical front wheel steering system the rear wheels do not turn in the direction of the curve and thus curb on the efficiency of the steering. In four wheel steering the rear wheels turn with the front wheels thus increasing the efficiency of the vehicle. The direction of steering the rear wheels relative to the front wheels depends on the operating conditions. At low speed wheel movement is pronounced, so that rear wheels are steered in the opposite direction to that of front wheels. By changing the direction of the rear wheels there is reduction in turning radius of the vehicle which is efficient in parking, high speed cornering.



❖ Applications :-

1. It can be used for stability during high speed turning.(above 40km/h)
2. It can be used to reduce the turning radius of vehicle.
3. It increase the high speed straight line stability.

❖ Cost :-

4 wheel and 4 wheel hub	5000 INR
2 rack axle	1000 INR
Other material	2000 INR
Fabrication	3000 INR
Total Cost	11000 INR

Project Guide(Internal)	Mr. Tejas Wadiya	9428046808
--------------------------------	------------------	------------