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Movable Headlight with Steering

Mr. Navnath Bolij[1], Mr Rushikesh Chavan[2], Mr Rohan Chawan[3], Mr Vinod Turkane[4], Mr Mangesh Gaikwad[5]
Lecturer, Mechanical Engineering [1]
Students, Mechanical Engineering[2-5]
Santosh N Darade Polytechnic , Yeola , India

Abstract: *The aim is to design and develop a "Steering Controlled Headlight Mechanism" which acts as directional headlights. This is done by connecting steering and headlight. Now in days automobiles don't have any effective steering controlled headlight mechanism. that's why more accidents take place during night times in curve sections. The accidents can be avoided by incorporating the steering controlled headlight mechanism. This mechanism modify its lighting pattern while travelling turning of road or curvature of road. By using rack and pinion steering gear mechanism spur gear bevel gear mechanism. When steering wheel rotated and rotary motion is converted to translator motion through the rack and pinion mechanism. The objective of this work is to controlled the headlight when steering wheel is rotated the result used as a rack and pinion arrangement which give drive the optical axes on which headlight are mounted so when tie rod arms moved with steering arm that give motion to the wheel as well as headlight. When steering wheel rotate the headlights move the same path and light is focused on curve area. Steering controlled headlight mechanism is helps to improve the drivers visibility at night time left or right as per requirement along with the turn and can help to reduce the accidents at night times. To great importance to use available mechanism to contribute the road safety by improving the steering controlled headlight mechanism*

Keywords*:* Headlight, Bevel gear, Rack and pinion

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