

Accident Preventive Bumper

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Abstract- Our project (ACCIDENT PREVENTIVE BUMPER) Reports a literature surveyor in vehicle safety devices. This studio give an overview of potentials for safety of current technologies available and trends in vehicle safety. The front side of when impact is touch then the vehicle has to be the less impact inside the vehicle. Generally front side of bumper has made in plastic or fiber that time they have lot of chances of vehicle damage and also injury chances are inside the vehicle. It should be the bumper spring are absorbing the front side of impact due to use of brake pedal and clutch pedal. Maximum time passenger goes to in accident case most of face to injury our project aim should be he was avoided.

Keywords- ACCIDENT PREVENTIVE BUMPER, causes of road accident, road safety measures, bumper.

I. INTRODUCTION

In almost all of the cases of vehicle accidents, the basic reason cited is failure to apply the brakes at the right time. If the brakes are applied at the right time the accidents can be prevented. Here we introduced such a system which is totally mechanical and apply the clutch and brake when obstacle compress the spring-loaded flexible bumper.

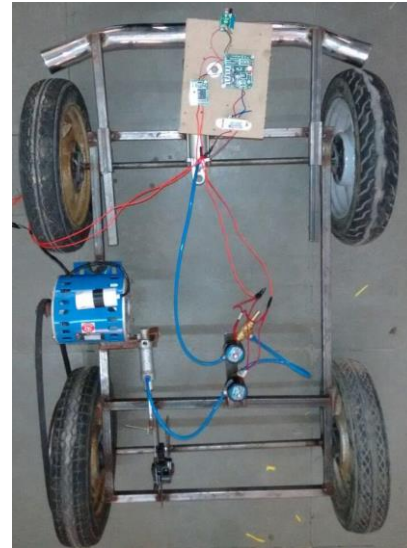
Need of Project

Accident in world serious problem The number of peoples which are dead during the vehicle accidents is also very large as compared to the other causes of death. Though there are different causes for these accidents but proper technology of braking system and technology to reduce the damage during accident are mainly affect on the accident rates.

II. LITERATURE SURVEY

Our project (ACCIDENT PREVENTIVE BUMPER) Reports a literature surveyor in vehicle safety devices. This studio give an overview of potentials for safety of current technologies available and trends in vehicle safety. The front side of when impact are touch then the vehicle has to be the less impact inside the vehicle. Generally front side of bumper has made in plastic or fiber that time they have lot of chances of vehicle damage and also injury chances are inside the

vehicle. It should be the bumper spring are absorbing the front side of impact due to use of brake pedal and clutch pedal. Maximum time passenger goes to in accident case most of face to injury our project aim should be he was avoided.



III. LIMITATION OF PREVIOUS SYSTEM

- It activates any time when any obstacle come in front of vehicle
- It demands proximity sensor which is costly.
- It requires intelligent braking system to stop the vehicle when bumper is activated.
- Compressor require for activating the pneumatic bumper
- Overall cost & size becomes high due to presence of sensor, intelligence braking system, pneumatic system with compressor.
- In this project we replace the sensor, pneumatic bumper system and intelligent braking system.
- When obstacle comes in front of vehicle then first it compresses the spring-loaded flexible bumper first and take some time to reach the actual chassis of vehicle.
- During this time interval flexible bumper rod drags the brake and clutch pedal by means of spring and it actuate clutch and brake of the vehicle.



Fig. 4.1 construction of project

- [2] Automatic Pneumatic Bumper And Break Actuation Before Collision” Srinivasa Chari.V1, Dr.venkatesh P.R2, Dr.Prasanna Rao N.S3, Adil Ahmed S 4,International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395 -0056.

Advantages

- It activates only obstacle compresses the flexible bumper of vehicle. Hence avoid unnecessary movement of bumper.
- It does not require any proximity sensor which is costly.
- It does not require any require intelligent braking system to stop the vehicle when bumper is activated.
- It does not require any Compressor for activating the bumper.
- Overall cost & size becomes low due to absence of sensor, intelligence braking system, pneumatic system with compressor.

Disadvantages

- For avoid total accident then this system requires for both the vehicle. Time interval require for obstacle to compress flexible bumper and chassis must be as high as possible.

IV. CONCLUSION

In that way here we introduced such a system which is totally mechanical and apply the clutch and brake when obstacle compress the spring-loaded flexible bumper. Here we lower the Overall cost & size due to absence of sensor, intelligence braking system, pneumatic system with compressor.

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