Anti-Theft, Wheel Locking System along with Side Locking Mechanism

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Abstract— In modern days, the technology is grown faster as much as customer satisfaction, but in every technology development, thus the hacking technology is also been occurs at the same time, by the more security system has been introduced to make safe and secure of the vehicle still it can be theft easily. A vehicle anti-theft system is of prime importance. Currently public having an own vehicle, theft is finding on parking and sometimes during insecurity places. The safe of vehicle is extremely essential for public vehicles. As the idea, we get into make a good secure and safety system of the vehicle. When the ignition cuts, the brake shoe gets locked into the wheel.

Key words: Side Locking Mechanism, Anti-Theft, Wheel Locking System

I. INTRODUCTION

In this project we are planned to ready the safety mechanism for two wheeler vehicles.
- With the help of sides lock mechanism to lock the brake shoe in wheel. Thus it has lock the wheel to move off.
- Reference models are been extract with sensors, but we planned with mechanically.

II. DESIGN

In our project we are planning to make a system of process of wheel locking.
- Antilock the vehicle, by using the side locks mechanism.
- This design is relate that the major design in to be altered in the two wheeler vehicle.
- When the ignition has been of and side lock has been locked, the rod of side lock lever that allow to push the extra lock of the vehicle. The brake cable has been assisted, to engage the wheel.
- This leads the good relation and it makes a comfort of the anti-theft lock system.

III. BLOCK DIAGRAM

![Block Diagram]

Fig. 1: Block Diagram

IV. WORKING

In our project, the system is working under the stress based objective.
- While the vehicle is engine OFF and turn into the side lock ON to lock the vehicle.
- Just turn the key to lock the vehicle the side lock rod has released outside and it leads to push the extra lock to lock the pliers to rotate.
- The one end in the pushed by side lock rod and the other end are connected by the brake cable.
- In the cable system has connected to the vehicle wheel and when it pulls up then the brake cam has tightened and engage the brake to move off.
- This has more reliable and safety measures to the two wheeler vehicle.
- When the key is has been reserved to side lock off to start the vehicle the brake engage has turn over to disengage.
- In the extra lock has the return spring which it return the extra lock lever to original place while the side lock rod has been pull ON.
- It is the working process of the Anti-lock, tracking system along with side lock mechanism.

V. COMPONENT DETAILS

A. Side Lock
- It is the type of lock using in the every two wheeler vehicle turn the major safety measure.
- When the key is leads to turn on the side lock. The rod has engaged with the cutting rod or been place fixed in the chassis or frame.
- It may vary forms the types. In olden days, side lock is in the cover part of chassis.
- But in latest vehicle, the side lock is been with the dentition lock set.

B. Brake Cable
- It is the long way of flexible cable with inner wire. Then the one side with the cable cap which it would be join in the cable lever thus is pull and push to work of the process.
- In the long cable on the other side the long thread cable end in joined with the brake drum cam lever with the adjustable nut.
- To make increase and decrease, the adjustable nut has been used.
- It may have varied from the different types of vehicles. Because the definition the vehicles and chassis are different from the each model and brand.

C. Extra Lock
- It is the lock system refers to been the alternative lock system for our project.
- It has been alternative lock used to weld or been foxed in the chassis and from which it would have the cable of push or pull down the brake lock.
- When neither the lock system has the spring that given a tension while they slide lock rod has been pulled to extra lock rod. The cable land in the lever of the brake has been engaged with the cable holder turn it puller up the cable to the side.
- This leads the away to lock the wheel while vehicle has side lock.

D. Brake Cam Lever
- It is the long lever which is only used in drum brake wheel has the brake show is been fixed with the brake cam and the drum plate in connected with the brake cam.
- While the cam has been joined with the lever and the lever has one end with the long middle treated to join with the Cam.
- On the other end has open to keep the cable turn the automobile cable has also been inserted, which the spring and adjustable nut has been used.
- This of increase or decrease to engage the wheel has it performance.
- In the cam lever has been are ordinary and it been used for most of vehicle.
- Especially, “Honda Activa” two wheeler vehicle brake cam lever has two lever holes to. Join the two cables to reduce the friction and it has been used for our project to engage the brake with cable.

E. Brake Shoe
- It has the asbestos, Aluminum component used in the wheel drum, turn it allows to engage the wheel drum tightly to rotate off while applying the brake.
- The brake shoe has wear white it rotates or the wheel and it may replace for every two months to months.

VI. ADVANTAGES

- Easy to use
- Cost is reliable

VII. DISADVANTAGES

- Speed wear product
- Lock of brake white the pads were wear.

VIII. CONCLUSION

In this project we plan to make a safety lock of vehicle, as per the system the lock has been engages the wheel and leads to get wheel lock along the function of side lock mechanism.
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REFERENCES