Design and Fabrication of a mechanism for comfort braking and horn in automobile (Scooters)

Rahul B, Rakesh Kumar J, Arun Prakash C Department of Mechanical Engineering, Sri Sivasubramaniya Nadar College of Engineering, Kalavakkam, Tamil Nadu

Abstract:

The problem faced by many people especially middle-aged women with small hand who ride a two-wheeler (especially scooters) is the immense pain in the palm while driving over long distances. While travelling long distances, applying the brakes regularly and controlling the vehicle during traffics results in over-straining of the palm. While turning the vehicles in street turns, some of the bike riders are not able to operate the brake and simultaneously apply the horn. The usage of horn is important in blind turns where riders cannot see what is there on the other side of the turn. This problem is faced basically because of the position of the horn which is far lower than the handle. This paper discusses the design and fabrication of an accessory that could be used to operate the brake lever and the horn switch of a scooter with comfort. A survey is conducted among the people of different age groups to validate this problem and the results are pleasing. Hence, the development of such an accessory has been worked out.

Keywords: Brake lever, Braking, Comfort mechanism, Horning.