

# Design and Fabrication of Seat Belt Assisted Hand Brake Lever

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**Abstract:** In India, 15 to 30 percent accident are occurs while driving cars, due to not wearing a seat belt. By wearing seat belt 45% of risk of death or life losses can be avoided and 50% risk of serious injury can be avoided. In this project we have designed the mechanism which is used to operate hand brake using seat belt assist. Means if we wear the seat belt then only handbrake is released otherwise handbrake is remain operated. Here we have use limit switch, when we press the limit switch then it sends it output to microcontroller. Where we have relay which is operated through battery. We have use two relays which allow clockwise and anticlockwise rotation of wiper motor which activates or release brake.

**Keywords:** Seat Belt Assist Handbrake, Limit Switch, Wiper Motor, Microcontroller, etc.

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