

# **Vibration Analysis of Suspension Variations Using The Arduino HC-SR04 Sensor on a 110 cc Honda Motorbike**

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## **ABSTRACT**

*The aim of this reserch is to analyze comfort level of shock arbsorber.Vibration and amplitudo will be the main issue that the research will do. Experimental method will be use duringthis research. The research will be be place at State Polytechnic of Jember during October – December 2018. The experiment will be focus on vibration (Hertz) for futhermore observed trend of amplitudo from each variable. The result show all of shock arbsorber still under Janeway criteria that 2 inch. All variant of shock arbsorber passed Janeway comfort level. Maximum amplitudo with 1 person load is reached on KTC with 1,139 inch on 40 km/h. Maximum amplitudo with 2 person load is reached on Ride It with 0,316 inch on 60 km/h.*

**Keywords:** *Aluminium, Glasswool, Heat, Reducer.*