Penambahan *Buck Boost Converter* Sebagai Perbaikan dan Penstabil Tegangan Pada Kelistrikan *Alternating Current* Motor. *(Addition of a Buck Boost Converter as a Repair and Voltage Stabilizer in the Electricity of Alternating Current Gasoline Motorcycles.)*

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ABSTRACT

This research aims to determine the effect of adding a buck boost converter to motorbikes that still use alternating current electricity on voltage, current and light intensity with variations in engine speed tests of 1500, 4000 and 8000. This research uses experimental methods. Voltage testing on an engine speed of 1500 produces an average value of 12.3 volts. On an engine speed of 4000, the voltage produced is an average of 8.4 volts. For an engine speed of 8000, the voltage produced is an average of 11.7 volts. Testing the current on an engine speed of 1500 produces an average of 0.36 amperes on an engine speed of 4000 produces an average of 0.27 amperes for an engine speed of 8000 produces an average of 0.36 amperes. Light intensity testing at 1500 engine speed produces an average of 23 lumens at 4000 engine speed produces an average of 11 lumens for 8000 engine speed produces an average of 22 lumens. The addition of a buck boost converter to motorbikes that still use alternating current electricity. This research can improve the voltage and current values. It can be seen from the increasingly large research results. However, it is inversely proportional to the light intensity value. The intensity of the light produced decreases.

Keywords: *buck boost converter, motorbike electrical system*