

New Generator Producing Energy in a Closed Circuit

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After Hurricane Maria devastated the island's power grid. Most of the people were left without electricity for a long time. It is not cost effective to invest from \$500-\$2,000 plus \$504 monthly in fuel for a generator. This study was aimed to create a closed circuit generator to produce enough energy to give power to domestic appliances. The hypothesis of this research states that if the design of a close circuit generator produces 13 volts, then it will turn on a watts light bulb, a fan, a television, a computer and a refrigerator and produce less noise. To create a transmission that produces enough strength and speed, a motorcycle ring with 2 dampers was assembled. Other parts used for assembling the close circuit generator were: a 3 amps motor engine with a $\frac{1}{4}$ horsepower, 2 batteries, and an inverter. To test the hypothesis 10 tests were made to prove that the generator could produce sufficient energy to light a bulb of (7.2 volt), a fan (98.4 volt), a computer (30 volt), a television (2.4 volt) and a refrigerator (118.8 volt) for an hour and a half. Also, during testing, the noise level was measured. The result was 60 decibels at a distance of 4.88 meters compared to a gasoline powered generator that produces 76 decibels from the same distance. This study showed that the closed circuit generator could produce 13 volts to turn on up to five domestic appliances, produce less noise, and is more cost-effective.