The Transfer of Electricity Using Induction Coils

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The enormous demand for electricity and with a growing population we need to supply more electricity. Majority of our electricity is from a non-renewable energy source. This initiative allows for an alternative way to create and transfer electricity and electric energy. To find an alternative manner in which to produce and transfer electricity which will not influence people's lives in a negative manner. The model will have to follow and succeed the following specifications to ensure that it is the correct prototype that will be chosen to fulfill the purpose as well as, be the solution to the problem stated. The electricity will be transferred using wireless power transfer (WPT). The energy will be transferred from the kinetic source by inductive energy transfer. This will create less of a demand for non-renewable resources to create electricity and instead vehicles can be used to increase the electricity supply. The investigation was conducted by creating two electrical circuits that were connected to induction pancake coils which were different sizes. The one circuit was placed in the vehicle which was connected to a 12V battery which stored the energy until it had to be transferred. The secondary circuit was connected on the model board on which the vehicle had driven directly over to transfer the electric energy wirelessly. Data was collected and recorded, results show that the coils are efficient. The different size coils do affect the efficiency of the coils.

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