No More Heat Awaiting in the Car

Martin, Virginia
Martinez, Esteban

This experiment has the purpose to create a system of air recirculation using solar energy that allows high temperatures of a vehicle to decrease when parked under the sun. Once the person turns off the vehicle, the system will immediately activate. Its goal is to prevent the death of people and animals due to high temperatures inside the vehicle, and in the future have automotive companies to implement this system in their next models. If we use an extractor and a fan to eliminate the highest concentration of hot air in the vehicle, this will obtain effective results since the main function of the recirculation system is to allow the exchange of hot air by fresh air in a determined space. The experiment was carried out with different cars. The next procedure was the creation of an air recirculation model with a fan, an exhaust pipe, cables, a solar panel, and a battery. After building the model, it was placed in one of the vehicles, and finally five tests were performed. With the results of the obtained data it was confirmed that the goals were meet. Although the decrease of the temperature was not significant, it was proved that the recirculation system worked since the exchange of hot air with fresh air was possible. The level of energy would reduce the expense of energy needed cool, and here is where the environmental and economic impact lies. In conclusion, we can say that, despite the variables and possible errors, the idea of creating an air recirculation system was an effective one. Maybe in the future, there will be a new car with an integrated system that works based on renewable energy; then you will be able to say: “NO MORE HEAT WAITING FOR ME IN THE CAR”.

Awards Won: