# Warning Device to Alert Driver in Case a Child Is Forgotten within a Vehicle

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According to Salas et.al. (2016) since 2002, 689 children have died for being forgotten in a vehicle in the United States. The main objective of this investigation is to determine if it is possible to incorporate an alert device in car seats of children in case they were forgotten in a vehicle. A local alarm device was inserted into an existing car seat in order to create a prototype. This alarm device consists of a visible and audible system, like fire protection systems. The device is inserted in the upper part of the car seat so that it can be seen easily through the vehicle's glass. To operate this alarm, a circuit was designed that is powered by a 24-volt battery that is placed in the rear of the car seat. This design consists of a weight sensor, several relays, a time delay and a lighter adapter that served as a signal to indicate if the vehicle is on or off. These components were combined allowing the activation of the alarm in case the vehicle is turned off and the sensor detects presence of the infant sitting. According to the data obtained, the micro switch had an active consistency from a weight of 0.21875 to 36 pounds. Results have indicated that the device was successfully proven due to alert driver in case a child is forgotten within a vehicle. As a future goal, an app will be created for electronical devices to alert whether the child is in the vehicle.

**Awards Won:**