

Suspension System Designing for an Electric Track day car



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Abstract

The following consists of a full report, on a project done regarding the design of a suspension system for a car which is both track and road worthy, simply known as a track day car. The innovative suspension system designed in this project has been done according to the existing standards for automobiles. This report consists of all the calculations done regarding all suspension matters where at some points, the standards have been negotiated and assumed. The full designing of the suspension system has also been stated in the report where the manual calculation with values have also been clearly delineated in this report. The development of the computer aided design has been developed using the SolidWorks software. Furthermore, the analyzing of the CAD model to obtain positive results on the suspension system has been done using the SolidWorks simulation and the results have been included in this report. Moreover, the mockup design is also clearly shown to get an approximated idea regarding the placement of the suspension components.