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Design and development of automatic inner mirror endurance test system   (Article)

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Abstract   ⌄ View references (7)

The main role of inner rear mirror is to prevent an accident from happening by giving the driver a line of sight to the rear of the vehicle. In this study, we design and develop an automatic inner rear-view mirror endurance system with an integration of Human Machine Interface (HMI) and the actuator. The objective is to test the endurance of the pivot point of the inner rear-view motor by equipping it with force sensor to measure the force applied in moving the inner rear-view mirror to its limit angle. HMI is used as interaction between user and the actuator because the system requires limit angle and the number of repeated cycles from the user. This paper covers the initial works of the development process. It discusses the design of the system's actuator, design of the HMI and component selection. A few experiments are conducted to establish communication between PC and the microcontroller. There are still more things need to be done to make the inner rear-view mirror endurance test system a reality. © BEIESP.

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Author keywords

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