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Physical and Mechanical Properties of the Device that Ensures the Safety of Children in Light Vehicles

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ABSTRACT

This article examines the main physical and mechanical properties of a child safety device in passenger cars, as well as the classification, design features and the degree of relevance of its installation. And the level of quality of the device is determined, as well as its safety for human life.

KEYWORDS: *quality control, modern technologies, important factors, car's interior, stretch material, length, width, weight.*

This article outlines the main requirements for today's automotive industry. In addition, the automotive industry is characterized by aesthetic, economic and social needs. In my article works of other researchers have been used taking into consideration the importance of our own native design models rather than importing and adopting the foreign car designs.

The automotive industry of Uzbekistan is a modern enterprise, which today has the opportunity to produce products that meet the highest international standards, and in turn, are equipped with unique and modern technologies that are adapted to produce new types of products. Cars manufactured by local car makers today demonstrate the reliability, quality and strength of Uzbek cars on the roads of many countries around the world.

High quality is one of the most important factors of the high demand of Uzbek cars in the domestic and foreign markets. In order to improve the quality of products, gradual implementation of measures, covering the production system, quality control processes and the supply of spare parts, is yielding little results. Localization is essential for the development of automotive industry and its production capacities. This allows for sustainable development of the economy, accelerate introduction of new and effective technologies in production. Extensive use of local raw materials and production resources contributes to the currency saving through encouraging modern, competitive products and reducing imports of component parts. That is why our car makers are constantly working to reduce the production of the necessary spare parts for cars. Bumpers, car windows and seats, interior parts of car's interior, lacquer materials, loudspeakers and shockproof shields, fuel tanks, outdoor lighting fixtures, electric jacks, automobiles, electric cocks, batteries, wheels and chassis carriages, fuel pumps, generators, compressors, and many others.

The Decree of the President of the Republic of Uzbekistan on measures to continue implementation of promising projects of localization of production of finished products, components and materials for 2017 2019 reflects the problems which are given above.

The GM Action Plan has a very basic motto: - *"Design, build and sell one of the best cars in the world"*.

Despite the fact that GM Uzbekistan is intensively working in two and three sectors, we can see that the car is in the process of running new projects. The purpose of the design of the machine is to create new types and models of automobiles and parts that meet high tech level, social benefits, handyness and convenience. In addition, safety of human especially children`s safety is the most

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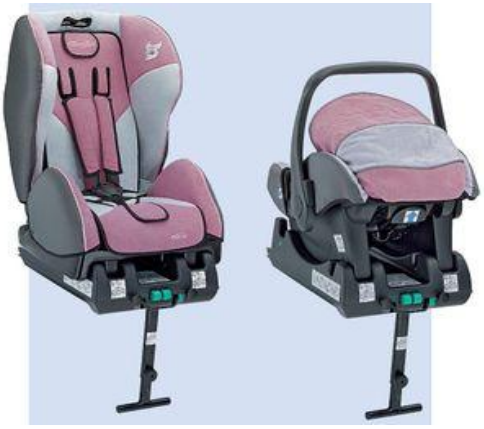
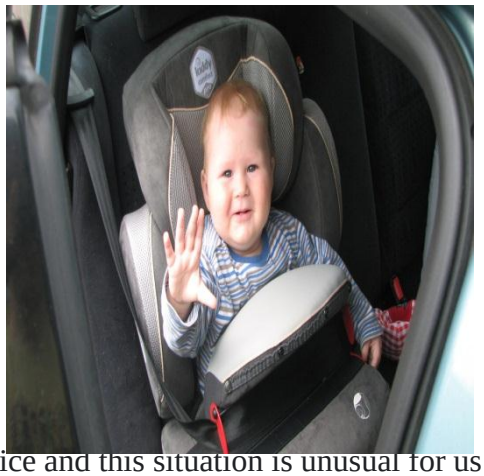
significant field of machine building industry in the world.

In today's fast-paced world, most homes have at least one car. Cars are used for our daily needs and bring us closer. Naturally, all our children are our companions in the car. The World Health Organization and the World Organization for Child Safety have introduced special chairs for children aged 1 to 3 years. These seats are mainly intended for children aged1 to 3 years. Picture1 and 2.

Picture 1- Special safety chairs for children aged 1 to 3 years



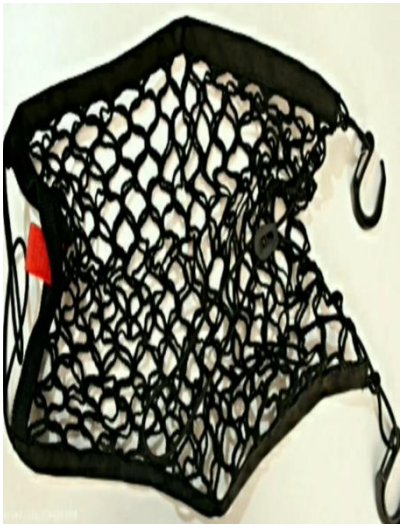
Picture 2- Installed version of special safety chair



But unfortunately, most of us do not use this device and this situation is unusual for us or for children from 3 to 5 years old, this device is cramped and children do not want to sit on it. This, in turn, can lead to injuries and even deaths in various car accidents. According to statistics from the World Health Organization, an average of 186,300 young children die each year as a result of road traffic accidents. About 3/1 of these statistics, or 460,000, are children in the salon. This figure is growing in our country. This is because our failure to follow simple basic rules does not ensure the safety of our children. It is no secret that when a car is moving, seats due to curiosity. This causes a young child in the cabin to lose control and fly out of the windshield when the brakes are suddenly applied.

This network will help prevent the problems mentioned above. This net is woven from stretch material and is easy to install on a variety of cars. The net is mounted between the front seats and protects young children from getting out of the front or windshield when a sharp brake is applied. This device can also be used for other purposes, for example, various items or thermos, etc. Picture 3 and 4.

Picture 3-Device for safety of children in the car



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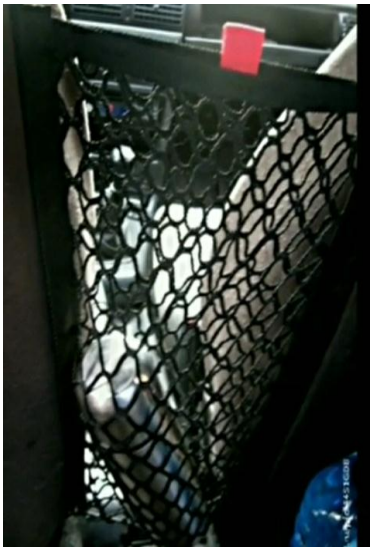
Picture 4-Installed version of device in the car



This proposed car is designed to use a child safety device. This device is designed to ensure the safety of young children in the passenger compartment of moving cars. This device is easy to install in cars and can be used for other purposes than child safety. The material of the device is a mixture of synthetic and rubber and is safe for human life. Unging dimensions can fully meet the standards and consist of the following parameters: length 60 cm, width 30 cm, weight 400 gr.

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