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INSTRUCTIONS FOR THE STRUCTURE OF THE CAR

Farg'ona viloyati Oltiariq tumani
2-son kasb – hunar maktabi
Ishlab chiqarish ta'lim ustasi
Aliyeva Gulasal Akmaldin qizi

Annotation: *This article provides information about the structure, main and additional parts of the car. Knowledge of the general structure of the car, the separation of additional and main parts is considered important for the automotive industry.*

Keywords: *Equipment, structure, device, service, complex, equipment, maintenance.*

ИНСТРУКЦИЯ ПО УСТРОЙСТВУ АВТОМОБИЛЯ

Аннотация: *В этой статье представлена информация о конструкции, основных и дополнительных частях автомобиля. Знание общей конструкции автомобиля, разделение дополнительных и основных частей считается важным для автомобильной промышленности.*

Ключевые слова: *Оборудование, структура, устройство, сервис, комплекс, оснастка, техническое обслуживание.*

Introduction: the development of auto industry is leading to the development of other industries. The production of the necessary spare parts for cars, namely the accumulator, various types of Windows, enterprises for the production of a number of components are being built. Currently, the constructive features of vehicles are changing rapidly. Their use characteristics and qualities are improving, and the amount of spending is decreasing. Therefore, it is required to train highly qualified specialists who can work in this field. A modern car is a

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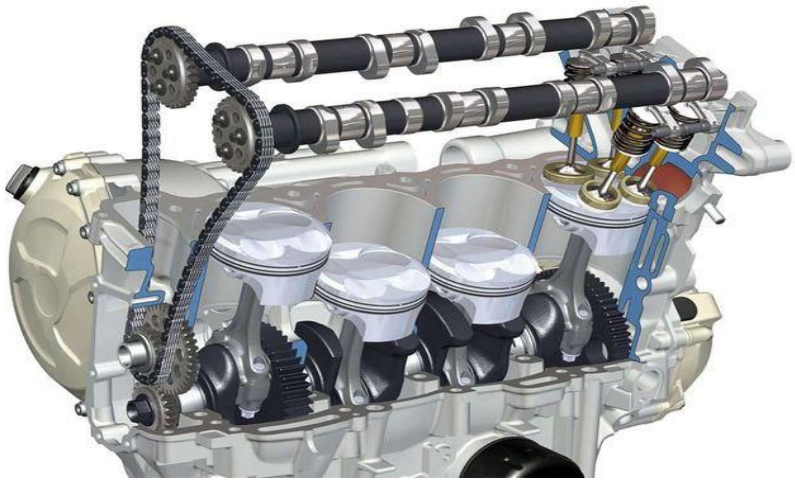
rather complex car, which, depending on each other, is made up of several mechanisms that perform a certain function. The scheme of the general structure of most cars,the principle of operation of their mechanisms and systems and the operating conditions are similar to one another.

Main part: the car consists of the sum of details,nodes, mechanisms, aggregates and systems. Detail-separate parts made without assembly operations of the mechanism and machines (e.g. bolt, China finger, shesternya, etc.k.). Node-a combination of several details performing a certain independent function in the



machine. A mechanism is a structure that absorbs and modifies movement in a certain order. Aggregate is a device that combines several structures into one whole. A system is the sum of parts that perform one common task (e.g. supply system, lubrication system or cooling system, etc.k.). Regardless of the structural features and functions of the car, the main one consists of three parts: body, engine and chassis. The body is designed for the transportation of passengers in light cars and buses, cargo cars, installed on the chassis. Body trucks consist of a platform for cargo, a cabin for the driver, a hood for closing the engine and struts. The engine serves as a source of mechanical energy necessary for the movement of the car. Mechanical energy, on the other hand, is generated by the conversion of the chemical energy generated by the combustion of fuel in the engine into thermal energy. Mechanical energy from the engine is supplied to the leading wheels through a series of mechanisms and aggregates. In modern cars, mainly internal combustion engines with a piston are installed.

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Chassis-in turn, divided into 3 parts: transmission, walking part and

control structure.

The control structure is divided into two parts: steering and brake control. The transmission extends to the leading wheels by changing the torque coming from the engine shaft. The structures of cars can vary, but the principle of operation, structure of the mechanisms and systems of many of them are similar to each other.

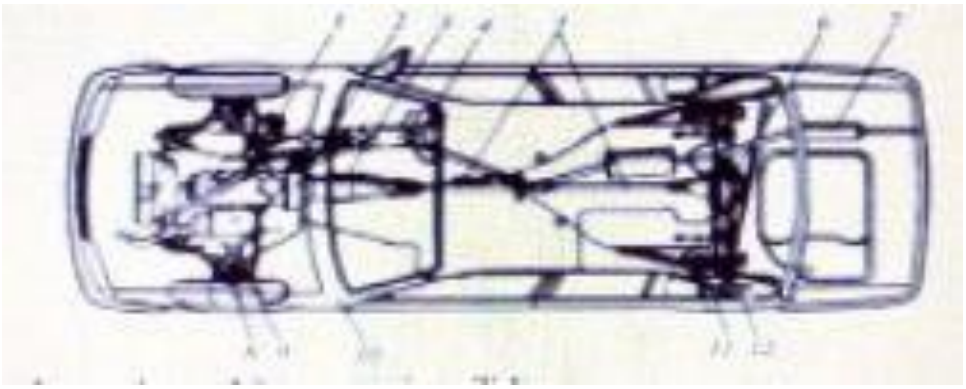

Figure 1. General structure of the car. Engine 1; 2-headband; 3-gearbox; Rule 4; 5-Cardan extension; 6th leading bridge; 7th sucker; 8-front wheel brake mechanism; 9-front wheel column (suspension; Body 10; 11-rear suspension; 12-rear wheels brake mechanism.

The power transmission extends the torque coming from the engine shaft to the leading wheels in a modified fashion. The power transmission includes the following mechanism: coupling coupling, gearbox, Cardan transmission, main transmission, differential and semi-axles. The coupling serves to disconnect the engine from the gearbox for a short time, smoothly connect the gears and

smoothly mirror the car. The transmission case delivers to the cardanley transmission by increasing the torque magnitude generated by the engine.At the same time, the engine is poured with a short load, separating it from the power transmission mechanisms for a long time. Also, the gearbox ensures that the car runs backwards.

The engine, ignition coupling and gearbox are arranged in the form of a block, and since their main axes reach in one straight line, they are referred to as power blocks. The Cardan gear is located after the gearbox, which delivers the torque it receives from it to the main gear at a variable angle. The main transmission, differential and semi-axles are located on the rear bridge, supplying torque coming from the Cardan with boost to the leading wheels. The control system serves to change, slow down and stop the car's character* direction.

The control system consists of two separate systems: steering and braking system.The steering wheel is made up of a steering wheel , a steering mechanism ,a longitudinal torque and a richag. In this system,the steering wheel is twisted, using the torque and richages generated by the trapezoid, the front wheels turn, and the car changes its direction of travel. Conclusion: judging from the above, it can be said that autobiles are structured in almost the same order in terms of their general structure. They differ only in location, type. It is necessary to focus on the condition of the engine, body and control parts, the main part of the cars.

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