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# HEAVY CLIMATE OF MILITARY VEHICLE TECHNOLOGIES PREPARING TO WORK IN CONDITIONS

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### **Abstract:**

The Republic of Uzbekistan is located in the heart of Asian countries, where the exploitation of military vehicles is carried out under different conditions. Flat roads with high-quality road cover, which remain unchanged throughout the year, and in mountainous and stepped areas, there are ways in which the climate is warmer in summer and much colder in winter, with dramatic changes in temperature. The reliable and safe operation of military vehicles depends in many ways on the quality of transportation in working in certain climatic conditions. The article outlines such problematic issues.

**Keywords**: automobile, technology, operation, road cover, military car, safe operation, transportation.

The work of automobile technologies in the desert area. The operation of light and trucks in desert sandy areas differs from automobile technologies for a variety of reasons in temperate climates. In remote areas with a harsh climate, water shortages, solar radiation, dry air and dust are very abundant. In addition, settlements often significantly distance from each other, and at the same time very few high-quality road covers.

In such conditions, automobile technologies are difficult to operate because because of the large number of dust particles in the air, the sedimentation of elements (institutions) increases in all machine systems. Extreme parts of the car manufacturing company's high-quality automotive technologies will help solve such a serious problem, but, of course, measures to combat extreme environmental conditions will not end there [1].

What happens to automotive equipment when used under such conditions?

First of all, if the air temperature exceeds 40 degrees Fahrenheit [-40°C], the engine power decreases by almost 15%. This is due to a decrease in the density of the air charge, which directly affects the filling of car cylinders.

The car's cooling system also does not fully work, as the water temperature on the cooling hill rises. This adversely affects the performance of the firewalk and the combustion chamber.

The resulting rise in sea levels from the meltwater could spell disaster for hundreds of millions of people.

For the same reason, intensive evaporation of electrolyte in the battery, as well as destruction of insulation materials, fat is oxidized.

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However, this is not all. In these extreme working conditions, the elasticity of trucks decreases in the elasticity of such materials as oil compresses, manjets, brake diaphragms, arousal belts, and, of course, tires [2].

The operation of trucks in the highlands. With special climatic conditions, the exploitation of automotive equipment in mountainous regions differs significantly from that of vehicles in other parts of the country. After all, even if the automotive equipment rises 1000 meters above sea level, the capacity of its engine is reduced by more than 10 percent! The coefficient of replenishment of rare air-related cylinders high in these mountains decreases.

The same reason affects the operation of the engine cooling system of automotive equipment: it decreases by 5% every 1500 meters above sea level, and therefore the radiator's heat transmission decreases. Since this problem requires the constant replenishment of the cooling liquid, this leads to the formation of a salt cover sediment in the system.

It is especially important to monitor the brake system of trucking equipment while driving in the highlands. Its work efficiency is significantly reduced, since the performance of the compressor inevitably decreases. This happens especially often in long falls in the mountains. Under such conditions, the friction coefficient of brake covers is lower, so trucking machinery is an element of the brake system of brake covers (nakladka), which should be monitored very carefully.

When automobile technologies move on mountainous and mountainous roads, they move snakes, circular, high and low because they are almost always needed. The resulting embryo was allowed to develop in nutrients and then inserted into her womber, where it implanted [3]. When preparing for the use of military trucking in mountainous regions, a number of important activities are required, referred to in the instructions for the use of the vehicle, taking into account certain area conditions.

Management of automotive equipment in a cold climate. Automotive equipment has been recognized as particularly difficult to control at low temperatures. In Uzbekistan, such areas occupy about 30%. The trophic ambient temperature can drop below 15°C, and this is almost always accompanied by strong winds, snow and snowstorms. In such areas of the country, the network of routes brings a number of inconveniences.

When operating in low-temperature weather, diesel-fueled vehicles reduce their conductivity through filters through the fuel's pipelines. The energy consumption of batteries is also reduced. The effective operation of automotive engineering transmission mechanisms greatly depends on the fluidity of fat. In severe frosts, this parameter increases, significantly reducing the performance of aggregates and extensions.

The hardness of the diaphragms increases, and the density of the brake system of automotive engineering worsens, and the volume of condensate accumulated in the moisture and fat-separating filter increases. Condensate also begins to accumulate in air cylinders and pipes. This is very dangerous, because the ice tigris formed by these processes can cause the brake system to go out of business.

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The roll control efficiency of automotive technologies decreases. This is due to an increase in the sliverability of the fat in the hydraulic amplifier. Excess poured oil is absorbed very badly (sucking) through filter elements, calibrated holes and system pipes.

Automobile tires worsen their performance in severe frosts. The same can be said of the rest of the rubber elements of different automotive systems. Exposure to low temperature will result in the loss of elasticity and elasticity of rubber objects, due to which cracks appear on their surface. Cold temperatures adversely affect the rubber and make it very fragile. The same thing happens with plastic parts of the car.

In general, the performance of vehicle equipment in these weather conditions decreases, as vehicles move slower. Snow, cold, strong winds, ice and other natural factors directly affect the appearance and operation of the vehicle.

In order for cars to be satisfactory in conditions of low temperature, it is necessary to regularly check all machine systems before heading.

Instead, the military capabilities of our Armed Forces in our country have been counted over the years and have played a significant role among the armies of advanced countries.

At a time when modern weapons and military equipment have reached the peak of new development, the power and power of our National Army is required to be skillfully controlled by our automobile technologies and to prevent the expected malfunctions in preparation for the situation in advance.

To this end, it is important to take seriously the above-mentioned solutions to the above-mentioned problems from all technical specialists and automobile drivers. To assist individuals desiring to benefit the worldwide work of Jehovah's Witnesses through some form of charitable giving, a brochure entitled Charitable Planning to Benefit Kingdom Service Worldwide has been prepared.

On the other hand, it requires that all automobile drivers skillfully manage their controlled equipment, remember the information about their technical structure, especially technical services and repair practices.

### **List of Available Publications:**

- 1. Automobile Service Guide. Order of the Ministry of Defence of the Republic of Uzbekistan, February 11, 2020.
- 2. I.Borovskix, V. Buralev. Automobile structure, maintenance and repair. Tashkent-2001
- 3. S.M. Intelligence, S.YE. Nikitin. Automobile and tractor engines. Tashkent-1992.