



METHODS OF DETERMINING TYPES OF FAILURES OF BRAKE SYSTEM AND TRANSMISSION DETAILS THROUGH EXAMINATION.

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<https://doi.org/10.5281/zenodo.10803333>

Abstract; The urgent directions of ensuring road safety in our country should be defined as: improving the infrastructure of highways and improving their quality, reliable conditions for the safe movement of road users based on the priority of "pedestrian - public transport - bicycle transport - motor transport" creating conditions; bringing the educational process to a qualitatively new level by introducing innovative pedagogical technologies into the system of driver training, retraining and upgrading their qualifications; to increase the culture of compliance of drivers and pedestrians with traffic rules, to ensure the inevitability of punishment for any violation, to introduce the basics of traffic rules from childhood, to implement this practice in preschool educational institutions and general education schools reach; complete digitization of traffic organization, implementation of new management and control systems, introducing advanced information and communication technologies.

Keywords; brake, system, fluid, pressure, piston, valve, axle, pad.

Analysis and results; The main malfunctions of the brake system. The malfunctions include wear of friction linings and brake drums (discs), malfunction of the brake force regulator, wear and swelling of rubber cuffs in the hydraulic brake system, wear of the cylinder, piston, brake and protective valves in the pneumatic brake system, perforation of the diaphragm in the brake chamber, power for example, failure of battery cuffs. In the 1st test station, the tightness of all connections and pipes of the brake system, the pressure created by the compressor, the quality of the brake operation in the device, the placement of details and connections, the free and working movement of the brake shaft are checked. In the 2nd TXK together with the works in the 1st TXK, brake drums (discs), pads, wheel bearings, fluid level in the hydraulic brake system, contours and brake power in multi-circuit pneumatic systems the operation of the regulators is checked. In addition, during daily maintenance, the condensate in the cylinders is poured, and the liquid level in the heater is checked in the autumn and winter. During seasonal service, the filter in the pressure regulator is washed with kerosene, and a wet separator is prepared for the season (when the temperature drops below +5°C, the wet separator holder is set to the upper position).

Hydraulic drive transmits the force applied by the source to the brake mechanism by amplifying it with the help of fluid. The use of a vacuum intensifier in hydraulic operation increases the effectiveness of this operation. A vacuum booster makes the liquid even stronger. It works based on the difference between atmospheric pressure and the pressure in the intake tract. Maintenance work on cars with such a brake system is to check and adjust the fluid level in the master brake cylinder, if there is air in the system, to expel it, to make the

brake rod free. It consists of adjusting the tread, clearance between the pads and brake drums, cleaning the oil on the surface of the brake linings.

External control of the braking system. Check that all mechanisms of the brake system are fixed and tight, and check and adjust the free travel path of the brake rod by hanging the car wheel (Fig. 1). One end of the ruler is placed on the floor, the other side is leveled with the surface of the wheel, and the distance is determined. In this case, the reaction is pressed until resistance is formed, and the interval is determined again. Then the difference between the first and second values is calculated and adjusted if it does not match the standard value. The gap between the lining of the brake pads and the drum is automatically adjusted on GAZ-3110, VAZ, and UZDEO passenger cars.

Figure 1: Adjustment of the free travel of the car brake lever. Adjusting the free travel path of the brake shaft on VAZ cars: 1st vacuum booster; 2nd pusher; 3-brake lever; 4-turn on the stop light; 5-fuel nut; 6-stop light switch; 7-spring pulling the rod; 8-master cylinder. Adjusting the gap between the lining of the brake pads and the drum. In cars with a different fluid brake system (Gazelavtomobil), the gap is from the rear side of the wheel (Fig. 2) the support disk (1) the nut of the support fingers of the front and rear pads is released and the air brake lever is pressed with a force of 150-200 N. The support fingers are twisted without much effort and the nuts are pulled out. The brake rod is placed and the drum is checked for light rotation. If the pad touches the drum, the operation is performed again. The drum is removed, a special measuring drum is installed, and the gap between the pad and the drum is determined with the help of a flat probe. The notch is determined at a distance of 25-30 mm from the end of the pad on the finger (0.15 mm), which in turn makes the notch on the opposite side 0.4 mm. Bleeding of the hydraulic brake system. The main brake cylinder and the wheel working cylinder are cleaned of dust and dirt. The cover of the brake fluid tank is opened and the fluid level is checked. The level is 15-20 mm from the grooved part of the container. should not be lower than or below the "min" mark. The rubber cover of the exhaust valve (1) in the working cylinder is removed, and a rubber hose (2) is inserted in its place, and one end is lowered into a glass container filled with 1/3...1/2 volume of brake fluid. is pressed frequently until the travel path of the rod does not change, then the valve is turned 1/2...3/4 circle while pressing the rod, and when the rod is pressed to the end, the valve is closed and the rod is slowly released. This situation is continued until there are no air bubbles in the glass container. During the operation, the brake fluid level in the tank is periodically checked and adjusted. Finally, the valve is tightened and the hose is removed. This bleeding sequence is performed step by step, starting with the most distant cylinder. In UZDEU passenger cars, the sequence of air release is carried out diagonally starting from the rear wheel (rear left-front right, rear right-front left). The wear of the rear pad covers, the stretching of the cable, the increase in the handbrake lever travel. The rear wheels are fully braked when the lever is pulled 2/3 of the way with a force of 400 N. Adjusting it Currently, brake fluids (DOT-2, DOT-3, DOT-4, etc.) produced by foreign companies of the type BSK (TU-6-10-1553-75) and NEVA (TU-6-09-550-73) is widely used. BSK liquid is made from sesame oil (47%) and butyl alcohol (53%) and an organic substance that gives red color. Its disadvantage is below minus 15°C and above 25°C. Because in them, the power transmitted to the brake mechanism can be extremely increased. Compressed air in cylinders is the source of energy. The use of compressed air in a car for resting the wheels, keeping the pressure on the wheels, opening and closing the doors in buses, making it easier

to organize the brakes of trailers, shows the advantage of using the pneumatic type of brake operation.

Conclusions and suggestions; Every year, 1 out of every 3 traffic accidents involve a pedestrian collision. The main reasons for this are: non-observance of traffic rules and unsatisfactory condition of pedestrian crossings. The causes of accidents are regularly investigated. The use of information technologies in the collection and analysis of human resources is one of the current topics today. Currently, in all developed countries, the use of information technologies in the collection and analysis of the accident report is widely established. For this purpose, "**Traffic safety automatic information search system**" was created. This system solves the following issues:

1. Development of programs to reduce the number of accidents at the state and various levels.
2. To control the issuance of licenses to drivers, their violations of the order, re-examination (this work has been established in our republic at the scale of most cities and regions).
3. Registration of vehicles, technical inspection, registration of vehicle body, engine and other aggregates (these works are also partially started in the Republic).
4. Collecting information about accidents and disseminating it to requested organizations.
5. Control of road conditions, identification of road sections where accidents occur frequently, control of ongoing works on improving road conditions.
6. Operational use of available opportunities in traffic management, management of emergency and emergency services.

At the time of maximum braking, its deceleration is taken at the maximum value, it is found by the change of the distance when the conditional distance of 1 m (S_0) is not taken into account when the second car decelerates. The braking system and the engine are controlled according to the change of the actual distance S .

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