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IMPROVEMENT OF THE LIFT BALCONY TYPE FOR VEHICLES

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Vehicle maintenance carried out promptly and efficiently, allows you to troubleshoot and maintain the technical state at the required level.

When carrying out maintenance and repair used inspection and handling equipment. This is because the whole volume of works on TS-1 and TS-2 side is 10-20% of the work, bottom 40-45%, top 40-45% of the work [1].

Nowadays, one lift among the fundamental equipment at auto-repair must withstand the heavy weight of car. Therefore, the strong lift which is easy to make repairs on cars is the indispensable equipment. The durability of lifts due to each configuration can be estimated on the background of study results and the data to be contributed to the development of new lift for car with safety and durability can be accumulated ultimately [2].

In 2015 the joint staff of the departments of the technical universities had developed a design lift of balcony type for vehicles. The lift refers to lifting-transport equipment and can be used in the production of works on repair of vehicles.

The problem to be solved by the proposed invention is to improve the lift of balcony type for vehicles, by installing sliding drawers on the side fence of balcony areas.

The technical result of the invention is to improve the efficiency of maintenance work in the form of the possibility to storage tools and spare parts. This technical result is achieved by the fact that the discussed lift of balcony type for vehicles, the construction, which comprises a hydraulic power unit, columns, cross, traverse, rope lifting system, front balcony area, drive-ladders, side balcony areas and fences, the following changes: fences in the side balcony platforms are mounted sliding drawers, made in the form of four sections.

The lift of balcony type for vehicles includes (figure 1): side balcony platform 1, cross 2, drive-ladders 3, traverse 4, front balcony area 5, columns 6, a hydraulic power unit 7, cable lifting system 8, the sliding boxes 9, the fence 10, handle 11, sheds 12, the clamps 13.

The work lift of balcony type for vehicles is as follows (figure 1): platform with mobile platforms installed on the balcony crossbars; to the platforms in the place of arrival of the car on the lift, fixed approach ramps; between platforms mounted traverse to further lift the car under the front or rear axle; front balcony stationary platform secured to the two front columns of the lift; a hydraulic power

unit mounted at the front left control column; raise the vehicle is mounted on the lifting platform; hydraulic power unit drives the lifting rope system that provides lifting crossbeams parallel to each other; when the balcony platform with movable platforms have reached a predetermined height is included blocking system to ensure steady position and lift for safe work conditions; when required by a hydraulic power unit is driven traverse additional car lift; lifting platforms can be done together with the workers, located on the balcony platforms; on the side fences of the balcony platforms are the sliding drawers for tools and spare parts; sliding drawers made in four sections along the entire length of the outermost side of the balcony fencing of the site; each section is executed in the expandable embodiment, independently of each other; section shelf has a handle and is made from a single sheet of metal that attaches to the bottom of the three canopies side rails; on top of each of the sides of the shelf is mounted latch, which allows advancing to the inside section of the balcony area [3].

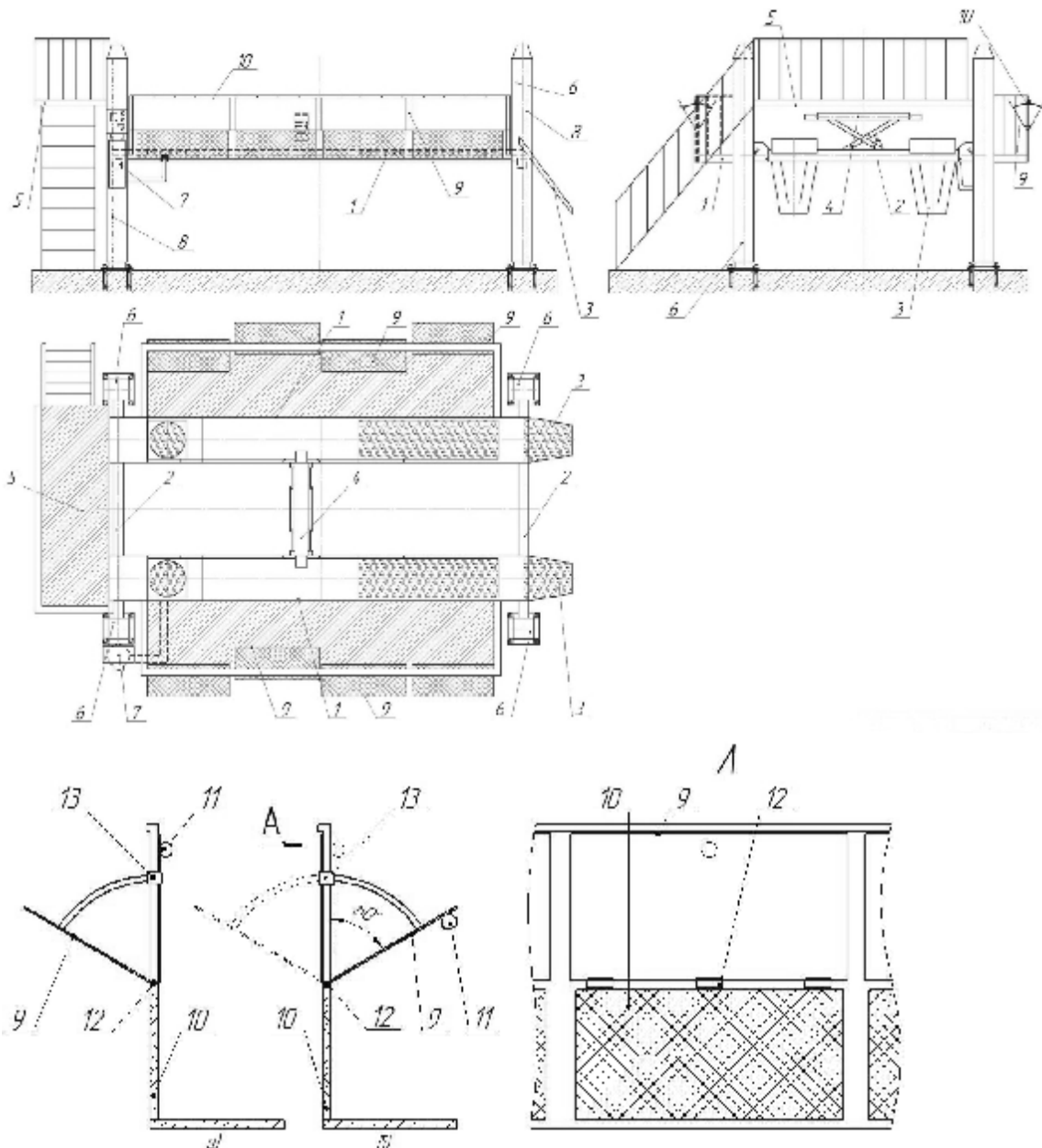


Figure 1 – The lift of balcony type for vehicles:

- a) the lift of balcony type;
- b) a sliding drawer for tools and spare parts.

Thus the developed lift of balcony type for vehicles has the advantage of being able to store tools and spare parts, which consequently increases the efficiency of repair work.

References:

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