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STAND FOR PRESS WORKS

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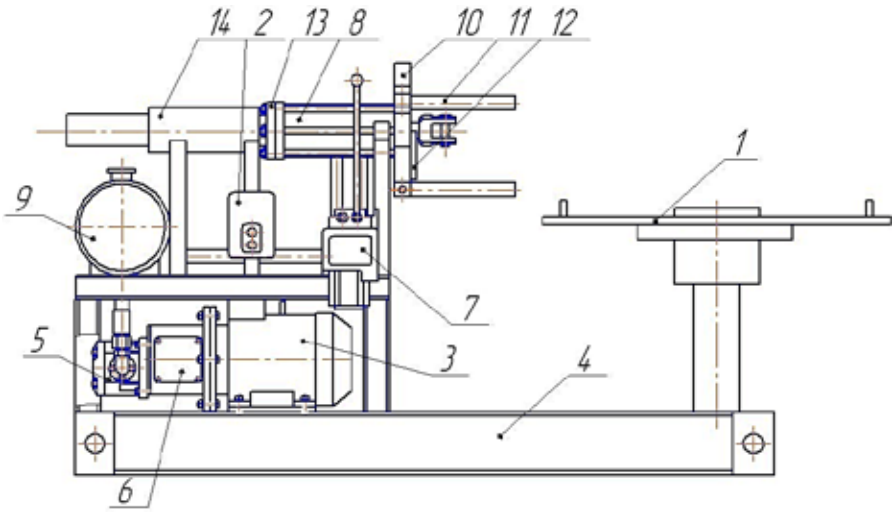
The technological process of machine repair is associated with the performance of a large volume of disassembly and assembly work. Up to 35% of the disassembly and assembly operations are for pressing and unpressing various joints and connections. Various types of presses are used to perform these works. According to the principle of operation, they can be both mechanical (rail and screw), and hydraulic, pneumatic. The drive of the presses can be machine (all specified types of presses) and manual (mechanical and hydraulic) [1]. The forces that these presses develop can range from 1 to 100 kN. As a rule, the direction of action of the working rod of universal presses is vertical from top to bottom.

Presses are installed stationary. The main disadvantage of stationary presses is the inconvenience of installing large-sized parts and machine assemblies on them, so in such cases it is better to use presses with remote power elements.

The design of the stand is a monoblock of a hydraulic pumping station and a power cylinder, thanks to its compactness and low weight it can be used both in a stationary version and in a mobile one (on a hanging crane, trolley, etc.).

The stand consists of a rotary table 1 (Figure 1), hydraulic drive units, a magnetic starter 2 and a pumping station with an electric motor 3. All mechanisms are installed on a frame 4. The hydraulic drive of the stand includes a pump 5, which receives rotation from an electric motor 3 through a coupling 6, hoses of high pressure, distributor 7, hydraulic cylinder 8 and tank for working fluid 9.



1 – rotary table, 2 – magnetic starter, 3 – electric motor, 4 – frame, 5 – pump, 6 – clutch, 7 – hydraulic distributor, 8 – hydraulic cylinder, 9 – tank for working fluid, 10 – special disk, 11 – detent, 12 – fixing arc, 13 – shank, 14 – guide

Fig. 1. Stand for press work

References.

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