

MP-661K «DROZD» AIR CO₂ PISTOL
with bin loading

Instruction Manual

MP-661K.776325.012-01 ПС

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1 GENERAL

1.1 BEFORE USING THE PISTOL, READ THIS MANUAL! It contains the basic technical specifications of the pistol, brief description of its design and the instructions for use.

1.2 WARNING! KEEP IN MIND THAT ANY FIREARM MAY BE DANGEROUS TO PEOPLE'S LIFE. BE SURE TO READ, UNDERSTAND AND FOLLOW THE INSTRUCTIONS CONTAINED IN SECTIONS 5 AND 6 OF THIS INSTRUCTION MANUAL.

1.3 WARNING! Remove factory lubricants from a new pistol and then apply a gun oil on it following cleaning and lubricating instructions.

1.4 As the pistol design is constantly refined to improve its reliability and performance, specifications are subject to change without special notice.

2 BASIC DATA

2.1 The MP-661K Air CO₂ Pistol is designed for training and recreational shooting with 4.5 mm steel BBs intended for airguns. Ambient temperature range for shooting is allowed to be from 283 deg K (+10 deg C) to 303 deg K (+30 deg C).

2.2 For the basic technical specifications, refer to Table 1.

Table 1

Parameter	Value
Caliber, mm	4,5
Overall dimensions, mm	700x235x53
Weight (empty), kg	2,6
Magazine capacity	200
BB speed, m/s	120
Firing modes (symbols):	
- single shot firing	(1)
- automatic three shot firing	(3)
- automatic six shot firing	(6)
Automatic firing rate, adjustable, shots/min	300, 450, 600

3 COMPLETE DELIVERY

Table 2

Part Name	Qty	Item # (Fig. No.)
Pistol	1	
Ring 10,5x1,4	1	50 (A.3)
Seal ring 6x2 м	1	52 (A.3)
Ring 10,5x1,9	1	61 (A.3)
Valve ring 7,3x1,8	1	46 (A.3)
Seal ring 6x2 м	3	95 (A.3)
Seal ring 9,7x1,9	2	54 (A.3)
MP-851 BBs	200	
Diopter	1	32 (A.2)
Adapter	1	105 (A.3)
Instruction Manual	1	1
Packing		

Note - The seal-ring 6x2 м (item # 95, Fig. A.3) differs from the seal ring 6x2 м by having a higher hardness.

4 DESIGN AND PRINCIPLE OF OPERATION

4.1 For the pistol parts and assembly units, refer to Figs A.2-A.6.

4.2 A BB is propelled out of the barrel bore under the action of CO₂ gas compressed in the cylinder. The striking mechanism shuts off the sufficient gas amount for imparting speed to a BB.

4.3 Multishot capability of the pistol is provided for by the bin section of the magazine that holds BBs

which are fed to the barrel bore by the feeding unit.

4.4 The pistol uses an electromagnet striker to effect shooting. The striking mechanism operates on six AA (LR6) ALKALINE 1.5 V batteries.

4.5 The electronic control unit allows the trigger mechanism to fire in various modes.

4.6 Safe pistol handling is ensured by a button safety located on the left side of the battery power unit. Pushing the safety to the «safe» position opens the electric circuit and the battery power unit cannot apply power to the electronic control unit.

5 SAFETY MEASURES

5.1 Your pistol is dangerous if carelessly handled or used.

5.2 When choosing the direction of fire, remember that the pistol is dangerous within 100 m.

5.3 Point your pistol at the target only.

5.4 When handling/using the pistol:

- NEVER POINT IT AT PEOPLE;
- BEFORE LEAVING OR STORING THE PISTOL BE SURE THE MAGAZINE IS EMPTY;
- NEVER STRIP THE PISTOL WITH FILLED CO₂ CYLINDER PUSHED INTO IT.

5.5 After shooting, make sure the pistol is unloaded. If there are BBs in the magazine, remove them through the loading unit. Removal of BBs from the magazine is outlined in item 6.11.

5.6 To set the pistol to the «safe» position, push the safety button upward.

6 OPERATIONAL PROCEDURE

6.1 Remove rust-preventive lubricants from the barrel bore and surplus lubricants from the pistol outer surfaces.

6.2 To remove the cover 4 (Fig. A.4) from the battery compartment, press on it and pull down, then insert batteries into the battery compartment observing polarity as shown in Fig. A.6. Replace the cover 4. To ensure longevity of the pistol, use AA (LR6) ALKALINE 1.5 V batteries.

6.3 To prepare the pistol for firing:

- pull the magazine plug 10 from the socket on the electronic unit. To remove the magazine 7, depress the magazine catch 6 (Fig. A.4) and push it forward, then pull the magazine downward;

- prepare the magazine for firing (Fig. A.5). Insert three 12 g CO₂ cylinders into the puncturing mechanism 10 and tighten the clamping screw 11 to puncture the cylinder membrane; (if the 88 g CO₂ cylinder is to be used, loosen the screw 12 (Fig. A.5), unscrew the puncturing mechanism 10 (Fig. A.3) and replace it with adapter 105 (Fig. A.3). Then tighten the screw 12, insert the CO₂ cylinder into the adapter and screw-in the CO₂ cylinder to puncture the cylinder membrane);

- apply pressure on the magazine cover 8 in the direction of arrow A and turn it upward (Fig. A.5);

- fill the bin section B of the magazine with BBs and turn the cover downward;

- insert the magazine into the pistol;

- insert the plug 10 into the socket on the electronic unit (Fig. A.4);

- push the safety button 1 downward (Fig. A.4). The indicator 2 will light up and the feeding mechanism will be actuated. The feeding mechanism stops automatically after 3 seconds.

6.4 The pistol is now ready to fire.

6.5 Pull the trigger and the pistol will fire.

6.6 For changing the firing modes, use the sliders 3 located on the left and right sides of the electronic unit.

With the right-hand slider you can select a firing rate between 300, 450 and 600 shots a minute.

With the left-hand slider you can select any firing mode:

- single shot firing mode (1);

- automatic three or six shot firing mode (3 or 6) with shutoff of the specified number of shots.

6.7 When using the pistol, follow the safety measures in section 6 of this Instruction Manual.

6.8 To avoid early worn-out sealing elements, do not remove the charged CO₂ cylinder from the magazine.

6.9 To make the pistol smaller in size, you may remove the shoulder rest 12 (Fig. A.4). For removing it, loosen the screw 11 and move the shoulder rest rearward along rails that are inserted into shaped holes in the rear of the frame.

6.10 Before using this pistol, zero it, i.e. adjust its sighting device performing the following steps:

- 1) choose a distance at which you are going to shoot more often (max.10 m);

- 2) draw a black circle B with a diameter of 60 mm

on a paper sheet. Attach it to a wooden board or any other thing that can easily trap BBs;

3) prepare the air CO₂ pistol to shooting, point it at the target and fire several shots at a distance your have chosen.

4) adjust the rear sight for windage or elevation as instructed below:

- loosen the screw B that secures the rear sight blade Г and move the rear sight blade to the right (if hits are on the left of the black circle) or move it to the left (if hits are on the right of the black circle). Tighten the screw B;

- with the elevation screw 8 move the rear sight 5 up (Fig. A.2) (if hits are below the black circle) or move the rear sight down (if hits are above the black circle).

6.11 After shooting, up to 35 BBs are usually left unfired in the BB accumulator section of the magazine. Remove them performing the steps below (with the magazine in its place):

- depress the button 8 (Fig. A.4) located on the magazine body. Pull the cover with insert 9 downward to remove them. BBs will fall out of the BB accumulator through the unloading port;

- disengage the safety (apply power to the magazine). The feeding mechanism will be actuated and BBs will fall out of the bin through the unloading port.

Repeat these steps until the bin will be empty.

Note. We recommend that you place any container under the unloading port to collect falling-out BBs.

7 MAINTENANCE

7.1 Careful handling and proper maintenance prolong the lifetime of the pistol and ensure its trouble-free operation. Have the pistol disassembled completely only by a gunsmith qualified in repair of sporting and hunting guns.

7.2 For shooting, use the BBs specified in section «Basic Data» of this Instruction Manual only.

7.3 If the sealing elements of the valving become leaky, replace them with new ones that complete your pistol.

To release the gas through the sealing of the valve seat 51 (Fig. A.3):

- unscrew the valve seat 51 out of the valve body 45 and replace the sealing ring 50 with a new one.

To release the gas in the area of the loading port C (Fig. A.3):

- unscrew the valve seat 51, and remove the valving component parts from the valve body 45 and replace the valve sealing ring 46;

- use a dry fabric to clean the sealing of the valve seat if it is dirty.

After all new sealing elements are installed, reassemble the valving in the reverse order.

8 PROBABLE TROUBLES, CAUSES AND REMEDIES

Table 3

Trouble	Cause	Remedy
1	2	3
Check of magazine sealing elements for tightness		
a) leaky sealing 95 (Fig. A.3)	Untight clamp of cylinder. Cylinder was inserted askew into frame	Tighten clamping screw 11 (fig. A.5)
	Damaged sealing 95	Replace the sealing
b) gas leaks to a gap between valve body 45 and tube 53 (Fig. A.3)	Damaged ring 52	Replace the ring
c) gas leaks through hole C (Fig. A.5)	Damaged valve ring 46 (Fig. A.3)	Replace the ring
	Foreign materials on sealing in valve seat 51	Remove foreign materials from valve seat and clean it
d) gas leaks through thread connection of valve body 45 and valve seat 51 (Fig. A.3)	Loosed thread connection	Tighten valve seat 51
	Damaged sealing ring 50	Replace the sealing ring

Continued

1	2	3
Check of striking mechanism This check can be done without magazine in place 2 After installing batteries into electronic unit:		
a) indicator 2 does not light up when pushing safety button downward (fig. A.4)	Incorrectly installed batteries	Install batteries as shown in Fig. A.6
	Low battery power	Replace the batteries
b) indicator 2 lights up when pushing safety button 1 downward, but after several shots it goes out and electromagnet striker is not actuated	Incorrectly installed batteries	Install batteries as shown in Fig. A.6
	Low battery power	Replace the batteries
Check of firing mechanism This check can be done with magazine in place and cylinder connected to the magazine 3 After preparing the pistol to fire as described in item 6.3:		
a) firing mechanism comes quickly into action when pulling the trigger but pistol does not fire or BB velocity is too low	Low battery power	Replace batteries
	Cylinders are not punctured	Tighten the clamping screw 11 (Fig. A.5)
b) firing mechanism does not come into action when pulling the trigger	Slider 3 is in intermediate unfixed position (Fig. A.4)	Move the slider to correct position

9 CERTIFICATION

The MP-661K Air CO₂ Pistol complies with the Specifications MP-661K.776325.012 TY and meets the criminalistical requirements of the Russian Ministry of Internal Affairs and found fit for service.

The MP-661K Air CO₂ Pistol has been certified as to be in compliance with the safety requirements and holds the Certificate of Compliance POCC RU.MЖ03.B01236 which validity is from January 16, 2008 to January 15, 2011.

This Certificate of Compliance has granted by the Udmurt Certification Center's Certifier of Civil and Service Weapons and Ammunition. Reg. No. POCC RU.0001.11MЖ03.

10 MANUFACTURER

10.1 The MP-661K Pistol has been manufactured by FGUP «Izhevsky Mekhanichesky Zavod».

10.2 The Manufacturer's address: FGUP «Izhevsky Mekhanichesky Zavod», Promyshlennaya, 8, Izhevsk, 426063, Russia.

10.3 FGUP «Izhevsky Mekhanichesky Zavod» holds licence No.4896-B-OO-П (Reg.No. 1021801656909) dated June 27, 2007 to manufacture of civil and service weapons up to June 25, 2012. This licence has been granted by Federal Industry Agency.

Пистолет пневматический газобаллонный
MP-661K «Дрозд» с бункерным
заряжанием на англ. яз.
И.Зак. 792

11 CERTIFICATE OF ACCEPTANCE AND PACKING

The MP-661K Air CO₂ Pistol No. _____ has been manufactured and accepted in compliance with the Specifications MP-661K.776325.012 TY and found fit for service.

It has been given a preservative treatment and packed by the Manufacturer in compliance with the requirements of the Specifications MP-661K.776325.012 TY in force.

Date of manufacture _____

Accepted by _____
signature of a person in charge of acceptance

The period of storing of the MP-661K CO₂ Pistol kept in the Manufacturer's intact package is 24 months from the date of giving it a preservative treatment. On expiration of this period, the pistol must be preserved.

The pistol should be kept in air-ventilated storehouses (like stone, concrete or thermally insulated metal storehouses) where temperature and humidity vary less then outdoors. Storehouses with artificial environmental conditions should be avoided. Storehouses may be located in various regions including tropical ones.

APPENDIX A (For reference)



Fig. A.1 - MP-661K Air CO₂ Pistol with Bin Loading

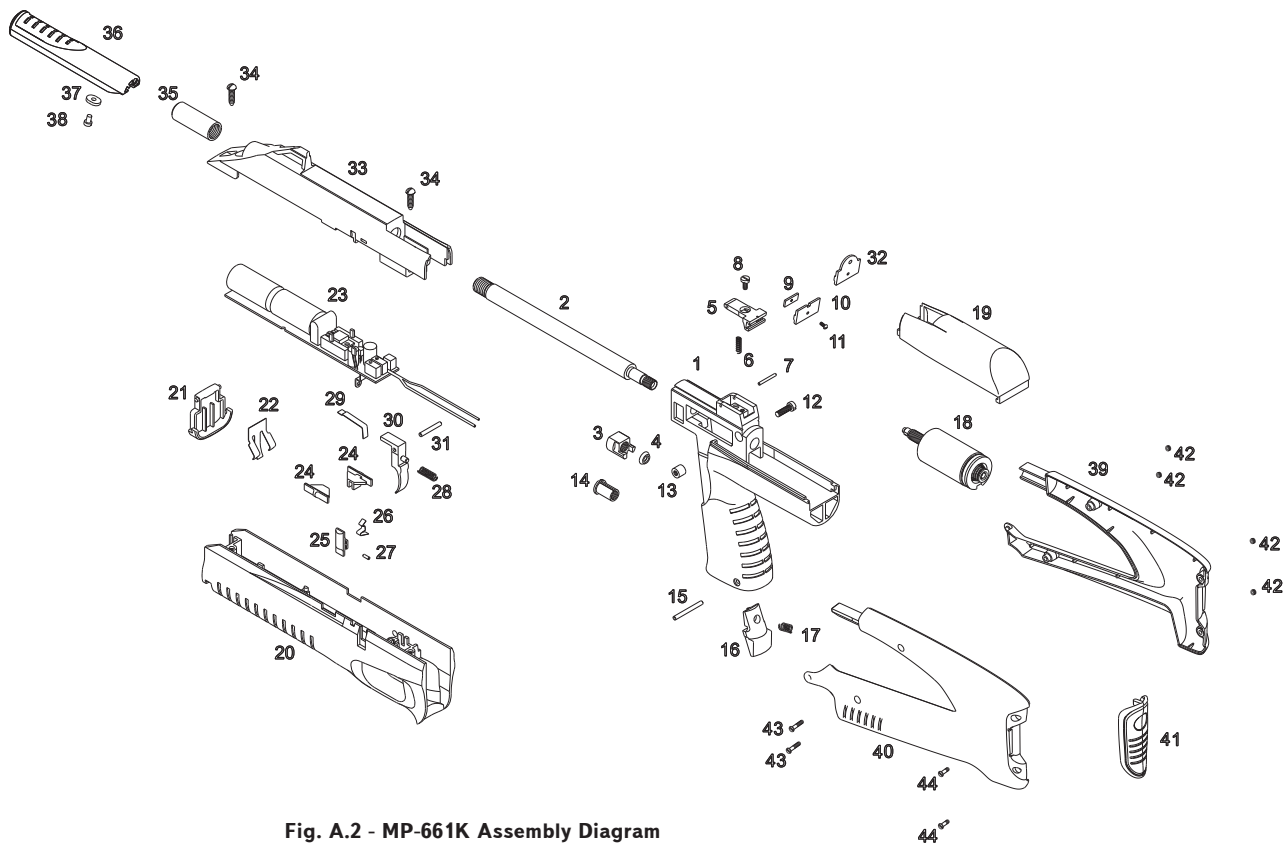


Fig. A.2 - MP-661K Assembly Diagram

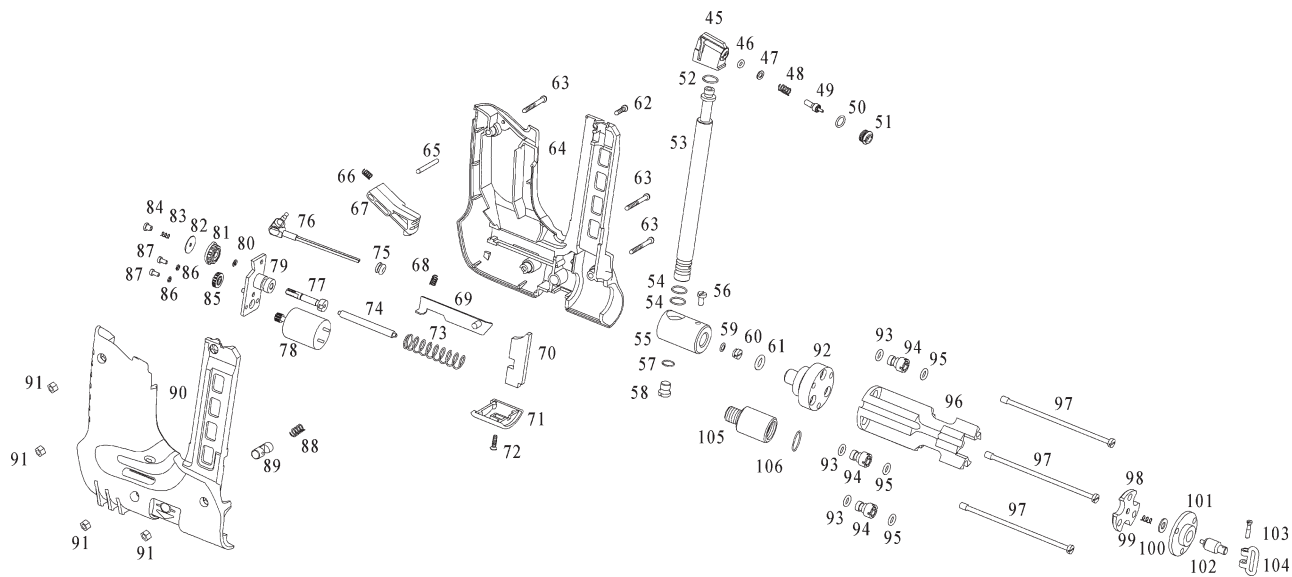


Fig. A.3 - Magazine Assembly Diagram

The list of pistol parts and assembly units is given in Table A.1

Table A.1

Item no. in Figs A.2, A.3	Part name	Qty
1	2	3
1	Frame	1
2	Barrel	1
3	Bushing	1
4	Barrel gasket	1
5	Sight leaf	1
6	Spring	1
7	Pin	1
8	Screw	1
9	Plate	1
10	Rear sight blade	1
11	Screw	1
12	Screw	1
13	Nut	1
14	Insert	1
15	Pin	1
16	Catch	1
17	Spring	1
18	Electromagnet	1
19	Electromagnet cover	1
20	Housing	1
21	Cover	1
22	Spring contact	1
23	Electronic unit board	1

Continued

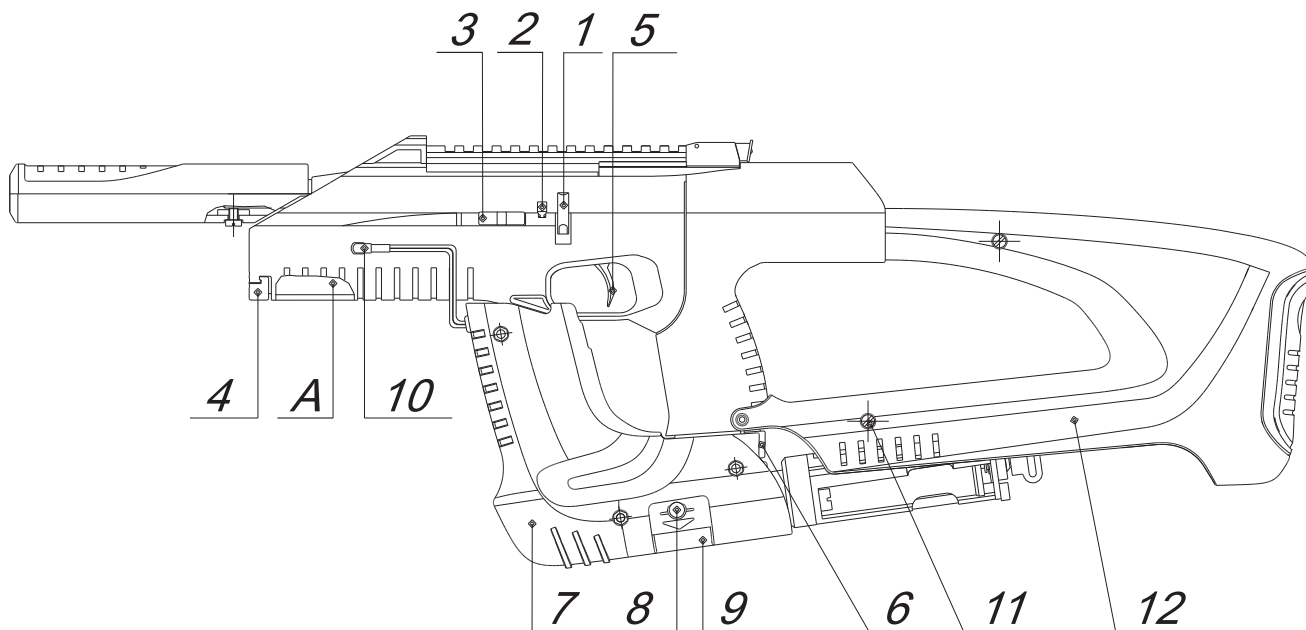
1	2	3
24	Slider	2
25	Button	1
26	Safety spring	1
27	Pin	1
28	Spring	1
29	Clamp	1
30	Trigger	1
31	Pin	1
32	Gasket	1
33	Slide	1
34	Screw	2
35	Muzzle device	1
36	False silencer	1
37	Nut	1
38	Screw	1
39	Housing RH	1
40	Housing LH	1
41	Butt plate	1
42	Eyelet	1
43	Screw	1
44	Screw	1
45	Valve body	1
46	Valve ring 7,3x1,8	1
47	Washer	1
48	Spring	1
49	Valve	1
50	Ring 10,5x1,4	1
51	Valve seat	1
52	Seal ring 6x2 M	1

Continued

1	2	3
53	Tube	1
54	Ring	1
55	Bushing	1
56	Screw	1
57	Ring	1
58	End-piece	1
59	Filter	1
60	Plug	1
61	Ring	1
62	Screw	1
63	Screw	3
64	Magazine body, RH	1
65	Pin	1
66	Spring	1
67	Bin cover	1
68	Spring	1
69	Plate, movable	1
70	Insert	1
71	Cover	1
72	Screw	1
73	Spring	1
74	Spring guide	1
75	End-piece	1
76	Cord	1
77	Output shaft	1
78	Electric motor	1
79	Pressure regulator plate	1
80	Thrust washer	1
81	Cam	1

Continued

1	2	3
82	Washer	1
83	Spring	1
84	Nut	1
85	Wheel	1
86	Washer	2
87	Screw	2
88	Spring	1
89	Button	1
90	Magazine body, LH	1
91	Nut	4
92	Base	1
93	Sealing ring	3
94	Shutter	3
95	Ring	3
96	Housing	1
97	Screw	3
98	Clamp	1
99	Spring	1
100	Washer	1
101	Support	1
102	Clamping screw	1
103	Axis pin	1
104	Swivel loop	1
105	Adapter	1
106	Ring 18,6x2,5	1



1 - safety button; 2 - indicator; 3 - slider; 4 - battery compartment cover; 5 - trigger; 6 - magazine catch; 7 - magazine; 8 - button; 9 - unloading unit cover; 10 - plug; 11 - screw; 12-shoulder rest.

Fig. A.4 - Schematic External Appearance of Pistol

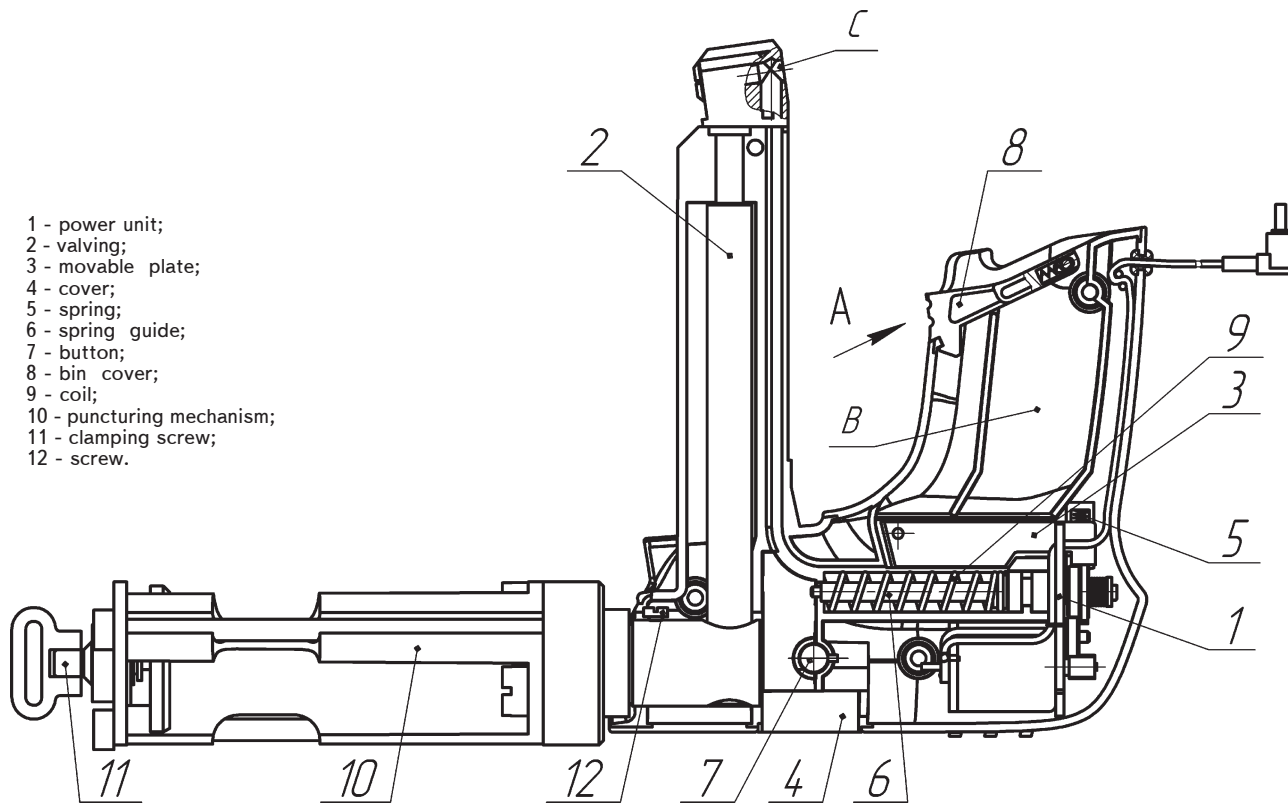


Fig. A.5 - Scheme of Magazine Mechanisms

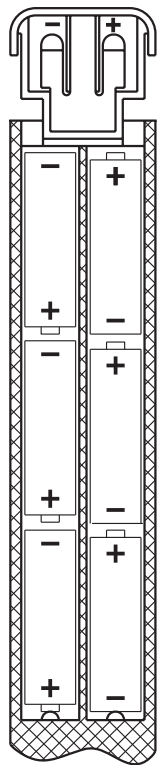


Fig. A.6 - Layout of batteries

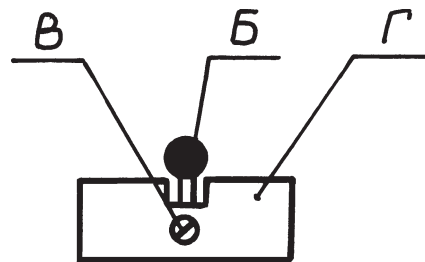


Fig. A.7 - Aiming Scheme