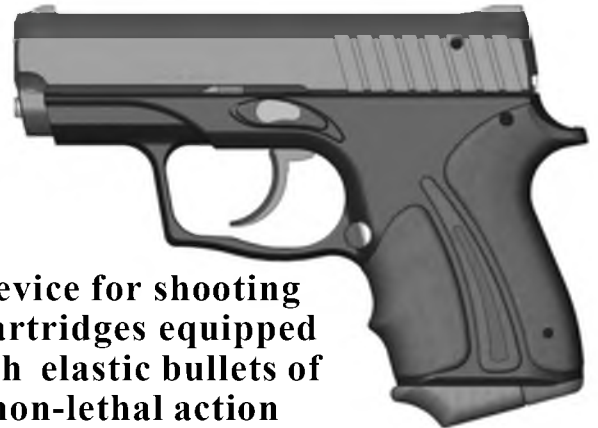


Science Industrial Association

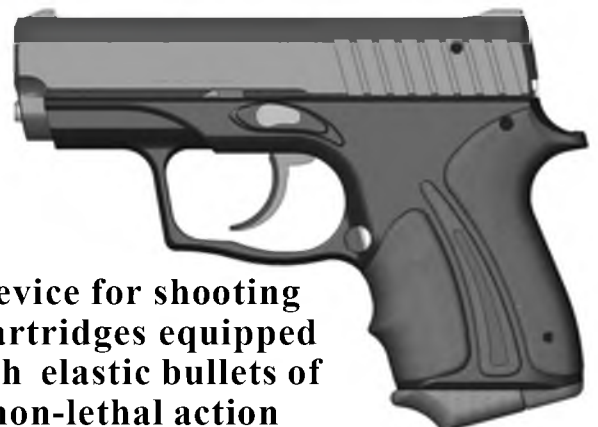


Device for shooting
cartridges equipped
with elastic bullets of
non-lethal action
"Fort-10R"
caliber 9 mm P.A.

SIA «Fort» of the MIA of Ukraine
600-richchya Street 27
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Operational Manual

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Operational Manual

“Fort-10R”: list of parts for figures 1, 2, 3

- | | |
|-----------------------------------|--|
| 1 Frame | 27 Catch of the recoil spring guide |
| 2 Barrel | 28 Pusher of the hammer |
| 3 Recoil spring guide | 29 Hammer |
| 4 Recoil spring | 30 Hammer pin of the firing spring guide |
| 5 Slide | 31 Firing spring stop |
| 6 Firing pin plug | 32 Firing spring |
| 7 Extractor axis | 33 Firing spring plug |
| 8 Extractor | 34 Pusher pin of the hammer |
| 9 Extractor spring | 35 Firing spring lever |
| 10 Firing pin spring | 36 Ejection slot |
| 11 Firing pin | 37 Magazine |
| 12 Plug of the firing spring stop | |
| 13 Magazine body | |
| 14 Magazine cover | |
| 15 Magazine base | |
| 16 Magazine spring | |
| 17 Magazine follower | |
| 18 Magazine catch | |
| 19 Magazine catch spring | |
| 20 Trigger | |
| 21 Trigger bar axis | |
| 22 Trigger bar spring | |
| 23 Trigger bar | |
| 24 Trigger axis | |
| 25 Ejector | |
| 26 Hammer axis | |

This operation manual is intended for the learning of the principle of action and rules of operations of device for shooting cartridges equipped with elastic bullets of non-lethal action “Fort-10R” caliber 9 mm P.A. (hereinafter - device) and contains information about the design, operating procedures, safety requirements, disassembly and assembly rules, cleaning, greasing, storage and guarantee statement.

You must always keep in mind that this device is a source of higher risk and can become the reason of unpredictable consequences both for shooter and surrounding people.

It always necessary to follow below safety indications to alert risks:

- 1 Only clean device is suitable for shooting.
- 2 Always handle with the device as if it is loaded and ready to shoot.
- 3 Always direct the barrel in safe direction no matter if device is loaded or not.
- 4 Clean and grease this device after shooting.

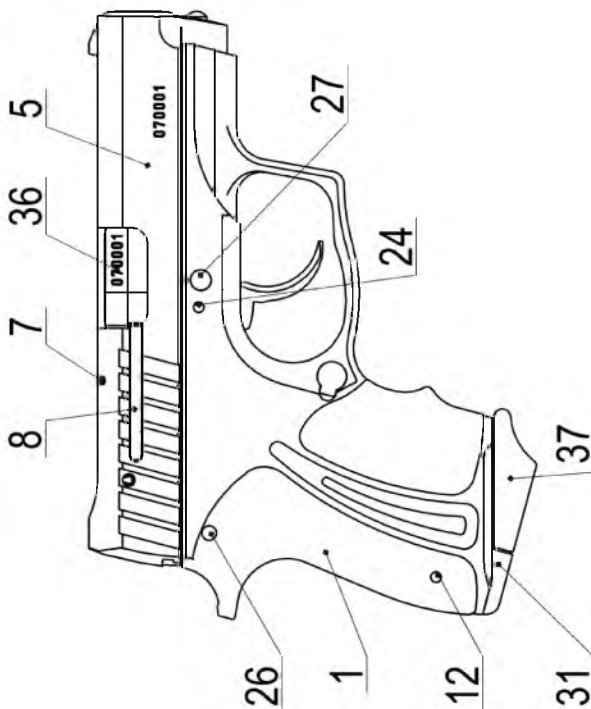


Figure 2

ATTENTION!
UNAUTHORIZED REPLACEMENT OF DETAILS AND CHANGE OF THEIR CONSTRUCTION IS FORBIDDEN AND PUNISHED IN COMPLIANCE WITH LAW.

1.3 Completeness

The device is supplied in such completeness:
 device with the magazine..... 1 piece
 wiper..... 1 piece
 operating manual..... 1 piece
 individual package..... 1 piece

1.4 Safety measures

Before usage of the device learn operating procedures, safety requirements, maintenance rules, which are mentioned in this manual.

It is forbidden: shooting on a live target for distance less than 3.5 m, aimed fire on head, neck, genitals, bust, pegggers.

A device construction disallows shooting by ball ammunition, because it can lead to traumatize shooter and surrounding persons.

A device construction disallows replacement of details for similar parts of sport or combat arms.

During loading or discharging of the device, point the barrel in the safe direction.

Discharge the device after end of the firing, and before disassembling, cleaning and greasing.

1 PRODUCT DESCRIPTION

1.1 Function

The device is intended for self-defense of persons, which have the right of its use, carry and keeping, according with the law.

1.2 Technical data:

1.2.1 Device technical parameters

Caliber.....	9 mm P.A.
Minimum distance for live target shooting, m.....	3,5
Maximum firing range, m.....	10
Trigger pull, (N), not more than.....	55
Magazine capacity, cartridges.....	6
Overall sizes, mm, not more:	
length.....	145
height.....	114
width.....	25
Weight with an empty magazine, kg, not more.....	0,45

1.2.2 For shooting from the device you should use cartridges, equipped with the elastic bullet of nonlethal action, which are certificated.

1.2.3 The device design eliminates the possibility of shooting with ball-cartridges intended for firearms and provides impossibility of replacement of the basic parts with similar parts from military or sport guns.

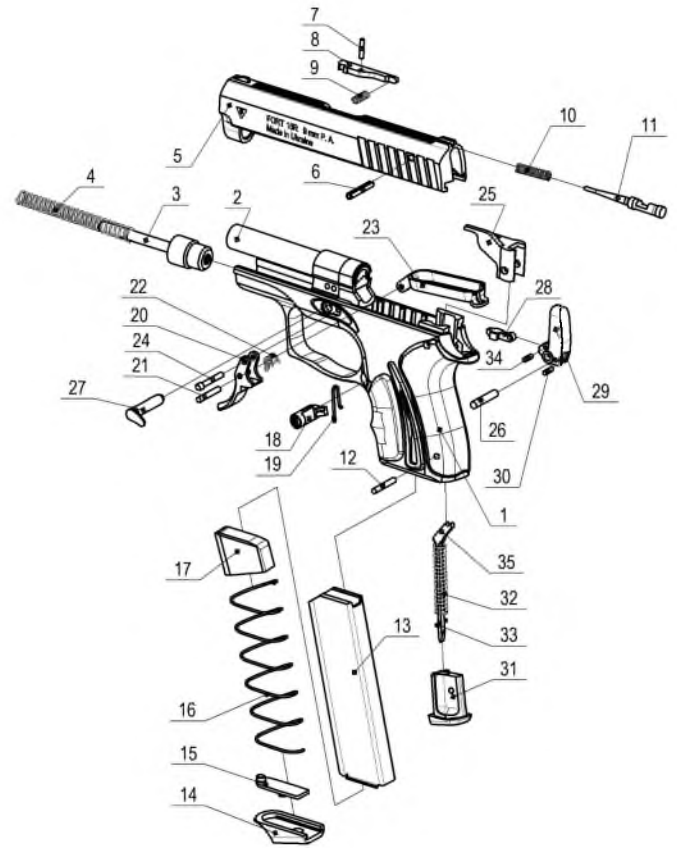


Figure 3

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Keep your finger away from the trigger until device is aimed to the target.

Keep the device and cartridges separately in places which are reliably closed and unattainable for others.

The device must be always clean and greased. Cleaning and greasing of the device should be done in accordance with instructions, which are given in section 3 of this manual.

Never load and do not keep the device loaded, if you aren't going to fire. Never leave a device with the cocked hammer even if it is unloaded.

ATTENTION!

UNAUTHORIZED REPLACEMENT OF DETAILS AND CHANGE OF THEIR CONSTRUCTION IS FORBIDDEN AND PUNISHED IN COMPLIANCE WITH LAW.

1.5 Device design and operation concept

This device is self-loading with magazine feed. The action principle is based on using recoil energy of blowback operated, reliability of locking of the cartridge chamber is provided by the recoil spring pressure and slide weight.

The appearance and location of the device controllers are shown in figures 1 and 2, and the location of its parts in figure 3.

The device consists of:

- frame with rigidly fixed barrel;
- magazine, inserted into the frame;

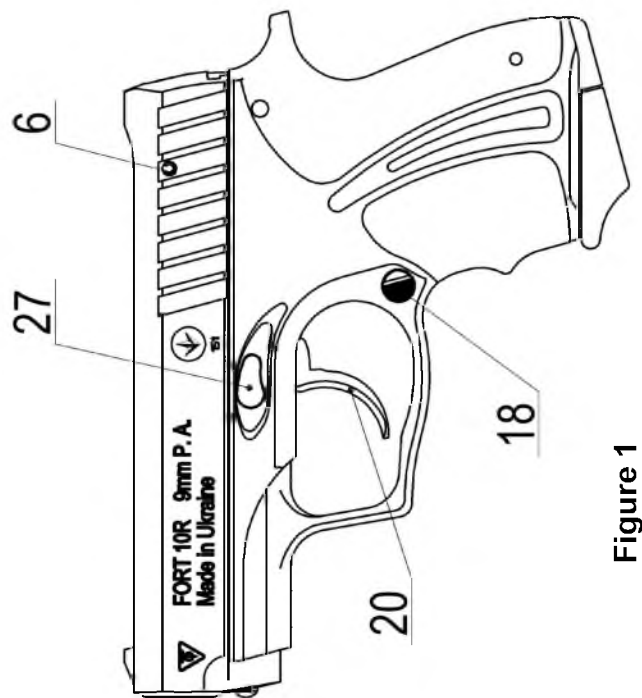


Figure 1

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9 INFORMATION ABOUT PRESERVING AND PACKING

The device "Fort-10R" caliber 9 mm P.A., factory number _____, is preserved and packed in accordance with requirements of valid technical documents.

Executed preservation _____

Executed packing _____

Preservation date « ____ » _____ 20 ____

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5 STORAGE OF THE DEVICE

For a long-term storage of the device it is necessary to carry out its preserving. Preserving procedure is done in the section 3.10 of this manual. Wrap up the device with paper after preserving.

Preserved and packed device must be stored in close storehouses, where temperature and humidity fluctuation are less than in open air.

Maximum storage term of the preserved device is no more than one year from the preserving.

6 TRANSPORTATION

The device in the original packing can be transported by any transport for any distances: in the covered railroad car, covered cars, air-tight apartments of airplanes in accordance with rules of transportation with the proper transport. During the transportation must be assured position of boxes, which excludes the possibility of their strokes at one another.

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- slide which glides in the frame grooves;
- recoil spring which surrounds the guide;
- hammer type trigger mechanism with self cocking. It performs cocking and release of the hammer while pressing the trigger.

The loading of device is carrying out by taking slide all the way back and releasing it. The slide, by moving back, presses the recoil spring. In rearmost position the top of slide reaches of back side of the magazine and allows put cartridge into magazine lips in front of breeching face. During releasing the slide moves forward under the action of the compressed recoil spring, pushes the cartridge from the magazine to the cartridge chamber and closes the cartridge chamber with cartridge inside by breeching face in the extreme front position. The extractor hook runs into circular part of the cartridge-case.

A shot is carried out by pressing the trigger. Herewith, the trigger bar which is connected with the trigger, moves back in the internal cavity of the frame and presses on the butt end of the pusher, connected with hammer, and forces hammer to turn around an axis. Herewith, firing spring guide, which bumps into hammer pin, squeezes the firing spring.

When compressed by firing spring hammer turns so, that pin, compressed by firing spring lever and hammer axis, stay at the same surface, previously compressed firing spring unclenches and forces upper part of the hammer to move forward towards back part of

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1.7 Packing

The device in completeness according to section 1.3 of this manual is packed in individual package, suitable for storage and transportation.

2 DEVICE OPERATIONS

2.1 Safety instructions

2.1.1 Always follow the safety instructions for your safety and safety of others.

Carry the checking of the device safety in following cases:

- when receiving or transferring the device;
- upon arrival to the place of fire;
- after the shooting;
- before exiting of the shooting range;
- before conducting of maintenance.

2.1.2 To test the safety of the device, follow the steps below:

- make sure that the magazine is disconnected from the device;
- point the barrel of the device in a safe direction;
- while holding the barrel of the device in safe direction, move slide in rearmost position, check the chamber through the ejection slot, make sure that it is empty, release the slide;
- by holding the barrel of the device in a safe direction, press the trigger (control shot).

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the slide with the firing pin. Firing pin makes an inertial hit on percussion primer of cartridge, which is located in the cartridge chamber, herewith the shot is happened. Simultaneous, back part of the trigger bar slides on forward part of the pusher and stays under its lower surface, which provides disconnecting of trigger and hammer.

The pressure of powder gases pushes the bullet forward on the barrel and forces slide to move back. The moving back slide presses the recoil spring; spent case engaged by the extractor hook, ejects from the cartridge chamber through the slide slot after meeting with ejector. When moving back slide gets of rearmost position, recoil spring begins to expand and pushes slide forward. Moving forward slide ejects out of magazine the cartridge into cartridge chamber, slide sets in forward position and locks the cartridge in the cartridge chamber. While slide is moving back and forth, hammer moves at the same time as it.

While releasing of the trigger, trigger bar under the pressure of trigger bar spring slides in pusher lower surface and lifts up, sets in front of the pusher, when the trigger sets in forward position.

1.6 Marking

At the device slide should be applied the following marking: manufacturer trademark; shot title of the device - Fort 10R, caliber - 9 mm P.A.; words "Made in Ukraine"; national certificate of conformity.

Serial number is on the device frame and slide.

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2.2 Magazine loading

Keep magazine in upright position, and put cartridge on follower, ahead magazine lips. Press on the cartridge and push it under the magazine lips, in the same way press another cartridges. To extract cartridges of the magazine, press cartridges by thumb in the forward direction.

2.3 Loading and firing instructions

2.3.1 Insert the loaded magazine into the device handle. Keystroke of magazine fixation is accompanied by a specific sound.

2.3.2 For shooting - point the device barrel in a safe direction. Take the slide all the way back and release. The cartridge is in the cartridge chamber.

Aim and press the trigger. After first shot the case ejection through the ejection slot and next cartridge feeding to the chamber will be performed automatically. To continue fire must release and press the trigger till using all magazine rounds.

2.4 Unloading instructions

Point the device barrel in the safe direction; press the magazine catch and remove the magazine. Pull the slide in the rearmost position, if cartridge is in the chamber - it will eject through the ejection slot.

Check the cartridge chamber, make sure that it is empty, and release the slide.

Pick up the drawn cartridge, pull out unused cartridges from the magazine, and insert the magazine into the device handle.

7 CERTIFICATE OF ACCEPTANCE

The device "Fort-10R" caliber 9 mm P.A., factory number _____, is made and accepted in accordance with requirements of the normative documents, technical documents and this device is recognized as suitable for exploitation.

Executed acceptance _____

L.S. «___» _____ 20___

Sold _____

L.S. «___» _____ 20___

8 WARRANTY

The manufacturer guarantees conformity of the device to requirements of the normative documents at the observance of exploitation rules, transportation and storage, which are described in this manual.

The warranty is 12 months from the day when the device was sold.

SIA «FORT» removes discovered defects during the warranty free of charge, under the condition of observing of all rules of exploitation and device storage, which are mentioned in this manual.

For fulfilling the guarantee repair the owner must send the device and this manual to SIA «FORT» to address:

600-richchya Street, 27, Vinnitsya, 21027, Ukraine

SIA «FORT» repairs the device after the end of warranty for the owner's cost.

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End of the table 4.1

Malfunction	Possible reason	Remedy
Pinching of the cartridge between the face of the slide and breech end of the barrel while sending the cartridge to the chamber	1. Magazine pollution 2. Straightening of magazine lips 3. The magazine is not fixed by magazine catch button	1. Pull out the magazine, take the slide back, pull out the pinched cartridge. Go on firing. 2. Unload the device, change the magazine. Send the defective magazine to the workshop. 3. Pull out the magazine. Take the slide back, pull out the damaged cartridge, insert magazine, go on firing.
Blocking of bullet in the bore. Slide is in the rearmost position. Increased recoil and intense sound were during previous shoot	1. Barrel bore pollution 2. Cartridge damage	Unload and disassembly the device, push by wiper the cartridge in the chamber direction. Clean the barrel bore, check the disassembled device; if there is no extractor - sent the device to the workshop, align the ejector if it is bend.

4 CURRENT REPAIR

Common troubles and remedies are listed in the table 4.1

Table 4.1

Malfunction	Possible reason	Remedy
Misfire. The slide is in the extreme front position, the hammer is decocked, but the shot is failed	1. Cartridge defect. 2. Condensation of lubricant; firing-pin channel is polluted or the firing-pin is rubbed out. 3. Precipitating or fracture of the firing spring	1. Reload the device. Go on the shooting. 2. Unload the device, disassemble it, examine and clean. If firing-pin is rubbing out, send the device to the workshop. 3. Unload the device and send it to the workshop
Delay of a cartridge by the slide. The slide stopped without reaching the extreme front position	1. Cartridge chamber pollution. 2. Damage or precipitation of the recoil spring	1. Push the slide manually forward and go on firing. 2. Discharge the device and send it to the workshop
Cartridge-case is jammed by the slide. The slide is in the midtravel position	1. Contamination of the device moving parts. Poor round charge. 2. The ejector is out of the order	1. Pull out the magazine, remove the case by taking of the slide back, throw away the cartridge-case and go on firing. 2. Unload the device and send it to the workshop

3.8 Lubrication and assembly of the device

After cleaning and inspection of the disassembled device, lubricate components and device mechanisms by weapon lubricating oil.

Apply a thin coat of oil with the cloth which is soaked in gun oil and squeezed out.

Remove oil flows by dry cloth.

Carry out the assembly of the device and magazine in the reverse sequence as described in section 3.3 "Field stripping instructions", 3.4 "Complete disassembly of the device" and 3.5 "Disassembly of the magazine".

3.9 Inspection of the device function

Direct the device barrel in safe direction. Insert an empty magazine into handle slot and check its fixation.

Take the slide in rearmost position and inspect the chamber through the slide slot, it must be empty.

Release the slide, slide and hammer should be set in forward position under the action of recoil spring. Press the trigger. Hammer cocks and strikes the firing pin.

3.10 Preserving

The manufacturer carries out preserving of the device. Maximum term of the device storage without repeated preserving is no more than one year.

For depreservation of the device it is necessary to carry out its complete disassembly and cleaning, in accordance with section 3 of this manual.

2.5 Handling operations in case of firing delay

The list of delays and handling operations are below:

1) if you press the trigger but the shot failed - reload the device and continue the shooting;

2) slide did not reach the extreme front position after automatic reloading - move with your hand the slide forward and continue the firing; if it is impossible, follow the actions according to item 3 section 2.5;

3) during automatic reloading when the cartridge is jammed between the breeching face and breech end of the barrel - point the barrel in the safe direction, press the magazine catch and disconnect the magazine, pull back the slide, pull out jammed cartridge, insert loaded magazine, reload the device and continue the shooting.

4) if you feel higher recoil and intense sound during shot, cartridge is jammed in the bore - pull out the magazine, take the slide back (cartridge is getting out of chamber and ejecting through the slide slot), disassembly the device, push jammed cartridge by the wiper towards the chamber, clean the bore according with section 3.6 of this manual. Check disassembled device: if ejector is bent, align it; if extractor is damaged, send device to the workshop.

3 MAINTENANCE INSTRUCTIONS

3.1 General

Carry out maintenance of the device immediately after end of the shooting.

3.4 Complete disassembly of the device

It is not recommended to carry out complete disassembly often, because it leads to premature wear of the device mechanism. Carry out complete disassembly only with strong pollution, continuous staying under adverse weather conditions (rain, snow, sand dust, high humidity).

Carry out field stripping of the device as directed by section 3.3 of this manual.

Press the firing spring stop upward; knock the pin of firing spring stop by drift pin. While slowly releasing the firing spring stop, pull it out of the frame; pull a lever with firing spring out of the frame.

Knock the hammer axis by drift pin or by lever. Pull an ejector out of the frame and then hammer with pusher.

By wiper through the slot of handle deflect the right (curved) end of magazine locking button spring left/up so, that curved end runs out of deepening of the button, by holding compressed spring pull out its direct end from the button hole, push the spring out of the frame groove, then pull magazine locking button out of the frame groove.

Push out the trigger axis by drift pin towards from right to left side of the device, and pull down the trigger so, that its end will enter into hole of the trigger bow, herewith the connectivity node of the trigger with trigger bar will be set out of the frame. Push out the trigger spring axis by drift pin, separate the trigger from the trigger bar and trigger spring. Pull out the trigger and trigger bar through top slot of the frame.

With a large number of shoots for one day, carry maintenance after every 60 rounds.

If the device is not used, maintenance must be made weekly.

Sequence of the maintenance:

- disassemble the device and the magazine;
- clean the device and magazines;
- check the disassembled device;
- lubricate and assemble the device;
- check the operation of the device after assembling.

3.2 Preparation for the disassembly

Check the safety of the device, as described in 2.1.2 of this manual.

3.3 Field stripping instructions

Push the catch of the recoil spring guide by wiper.

Hold the device handle by one hand. By trigger finger press the trigger till hammer angle of deflection will stay approximate 45°.

Holding the trigger in such position, by another hand take the slide in rearmost position, lift up the rear edge of the slide and, releasing it forward, separate it from the barrel. Pull out the recoil spring and recoil spring guide.

Push out the firing-pin plug by drift pin at right or left side of the slide. Holding the firing pin by hand, pull out the drift pin, then separate the firing pin from the slide, spring from the firing pin.

Holding the extractor by finger, knock the extractor axis by drift pin towards of center of the slide. Pull out the extractor and extractor spring.

3.5 Disassembly of the magazine

Before disassembly of the magazine, take out all cartridges. Press the catch of the magazine cover by drift pin and carefully move it, holding the magazine base. Put out the base and magazine spring with follower.

3.6 Cleaning of the device

Carry out the cleaning of the device by special lubricating oil. Cleaning of the barrel channel carry out by special cleaning fluid in the following order:

- stretch square of cloth through the wipe port. Mat thickness of cloth should be such that the cleaning brush enters into the barrel bore with little effort;
- moist the cloth by lubricating oil;
- insert the cleaning brush in the barrel bore and slowly slide it along the length of the bore several times;
- replace the cloth and clean again;
- repeat cleaning as long as on a clean cloth will not remain traces of dirt or soot;
- wipe dry the barrel bore by clean and dry cloth.

Clean the slide from dirt and moisture with a cloth moistened with lubricating oil and squeezed. Thoroughly clean places around ejector and firing pin.

At achieving of the maximum term of its storage or in case when the device is not used for a long time, it is necessary to carry out depreservation by using of the method of putting thick layer of gun oil on its internal and external surfaces.

Use the wiper, which is included in the set of supply, square of cloth and gun oil during carrying out of the device preservation and depreservation.

The rest of details and mechanisms, as well as magazine body, wipe dry with a cloth to the complete removal of traces of soot, dirt and moisture.

NOTE. During first cleaning it is necessary to clean storage compound, carefully wiping details with the square of cloth, which is slightly moistened by weapon lubricating oil and squeezed out.

3.7 Inspection of the disassembled device

The inspection of the disassembled device is carried out after cleaning.

There should not be any defects on details that affect for the working capacity, durability and safety of the device, namely:

- there must be no deformation, swellings and splits on the barrel and chamber;
- there must be no crack, stratifications, metal breach on the slide;
- there must be no breaks, especially in the back part and seat of the hammer, on the frame;
- the firing pin should move freely in the slide channel;
- there must be no chips on the extractor hook and hammer head;
- there must be no cracks and layers on the magazine follower;
- magazine lips must not be deformed;
- all details of device must not have any disunities, deformations and blight.