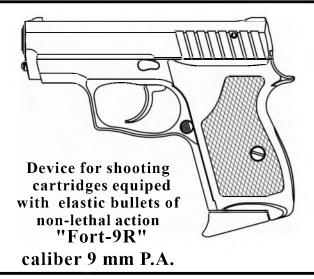


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# Operational Manual

Science Industrial association





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Operational Manual

This operation manual is intended for the learning of the principle of action and rules of operations of device for shooting cartridges equiped with elastic bullets of non-lethal action "Fort-9R" 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.

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#### 1.3 Completeness:

# 1.4 Principle of action and device design

This device is self-loading with magazine feed. The action principle is based on using recoil energy of free slide, reliability of locking of 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;
- 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 pulling slide all the way back and release it. The slide, moving back, presses the recoil spring. In rearmost position the top of slide reaches of back side of the magazine and allows put cartridge to the magazine bends in front of breeching face. During releasing the slide moves forward under the action of the compressed recoil spring, pushing the cartridge from the magazine to the cartridge chamber

# 1 PRODUCT DESCRIPTION

#### 1.1 Function

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

#### 1.2 Technical data

1.2.1 Device technical parameters:	
Caliber	Α.
Minimum distance while shooting	
for live target, m3	,5
Maximum firing range,m	0
Trigger pull, (N), not more than	55
Magazine capacity, cartridges	7
Overall sizes, mm, not more:	
length14	-5
height11	4
width2	25
Weight with an empty magazine,	
kg, not more0,5	52

- 1.2.2 For shooting from the device you should use cartridges, equipped with the elastic bullet of non-lethal 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.

#### ATTENTION!

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

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and in the extreme front position closes the cartridge chamber with chamber inside by breeching face. The extractor hook runs into circular part of the cartridge-case.

A shot is carried out by pressing the trigger. Herewith, the rod which is connected with the trigger, moves back in the internal cavity of the frame and presses on the cross shoulders of the pusher, connected with hammer, and forces returning it around an axis. Herewith, firing pin guide, which bumps hammer plunger, squeezes the firing spring.

Simultaneous, pusher with hammer turns around hammer axis so, that cross shoulders of the pusher allow to slide down to rod back part. The pusher disconnects with rod, and released hammer strikes firing pin under the action of firing spring, the acute end of firing pin broke percussing cup of cartridge which is in cartridge chambe and shot is happen.

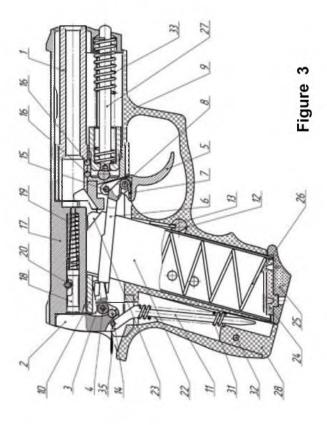
The pressure of powder gases pushes the bullet forward on the barrel and forces slide to move back. The moving back slide presses the recoil spring; spent case engaged by the extractor hook, ejectes out from the cartridge chamber through the slide slot. When moving back slide gets of rearmost position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

To continue shooting you must release and press the trigger till using all magazine rounds. While releasing

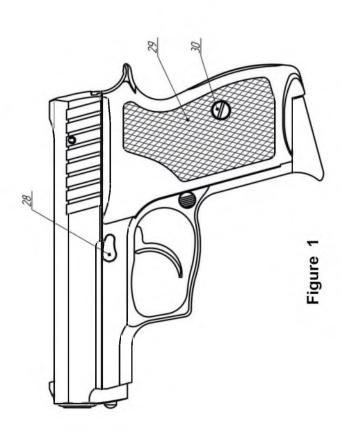
# Parts list of "Fort-9R" for figures 1, 2, 3

7	Barrei	26 Magazine satety
2	Hammer	27 Recoil spring guide
3	Interrupter	28 Slide lock
4	Interrupter pin	29 Handle plate
5	Trigger	30 Grip screws
6	Rod	31 Recoil spring
7	Rod spring	32 Firing spring stop
8	Trigger bar pin	33 Extractor pin

- 9 Frame
- 10 Ejector
- 11 Firing spring lever
- 12 Magazine locking
- 13 Magazine locking spring
- 14 Hammer pin
- 15 Trigger axis
- 16 Barrel pins
- 17 Slide
- 18 Firing pin
- 19 Firing pin spring
- 20 Firing pin pin
- 21 Extractor
- 22 Magazine body
- 23 Magazine follower
- 24 Magazine bottom
- 25 Magazine plate



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the trigger, rod under the pressure of rod spring slides in pusher lower side and lifts up, sets in front of pusher, when trigger sets in forward position.

#### 1.5 Marking

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

Serial number is on the device frame and slide.

#### 1.8 Packing

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

#### **2 DEVICE OPERATION**

#### 2.1 Safety measures

Before carrying out any actions with the device, it is necessary to learn all rules and methods of firing, operation principles and maintenance of the device, which are given in this manual.

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

Discharge the device after firing, and before disassembly, cleaning and greasing.

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.

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

2.3.3 Slide is in forward position after shot.

# 2.4 Unloading of the device

Point the device barrel in safe direction, turn out the magazine by pressing the magazine release. Pull the slide in the rearmost position, if cartridge was in the chamber - eject it through ejection slot.

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

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

# 2.5 Handling operations in case of firing delay The list of delays and handling operations are

line list of delays and handling operations ar below:

- 1) if you press the trigger but the shot failed reload the device and continue shooting;
- 2) slide did not reach the extreme front position after the automatic reloading move with your hand the slide forward and continue firing, if it is impossible, follow the actions according to item 3 of section 2.5;
- 3) during automatic reloading when the cartridge is jammed between the face of slide and breech end of the barrel point the barrel in a safe direction, press the magazine locking button and disconnect magazine, pull

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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.

# 2.2 Preparation for firing

2.2.1 Checking of the device before firing.

Point the barrel of the device in safe direction, examine the external part of the device, press by thumb the magazine release, which is located on the left side of the device, and with another hand support falling magazine.

Aiming the device barrel in safe direction, pull the slide into extreme back position and examine the cartridge chamber through the slide slot, make sure that it is empty, release the slide.

# 2.2.2 Magazine loading.

Keep magazine in the vertical position, place a cartridge on the magazine follower in front of magazine lips. Press on the cartridge and push it under the magazine lips, in the same way press another cartridges. To extract cartridges out of the magazine, press the head of the cartridge case by thumb in the forward direction.

# 2.3 Loading and firing instructions

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

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

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back the slide, pull out the jammed cartridge, insert loaded magazine, reload device and continue shooting.

4) if you feel higher recoil and intense sound during shot, cartridge is jammed in the bore - pull out the magazine, pull back the slide (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 bend, align it; if extractor is damage, send device to the workshop.

# 3 TECHNICAL MAINTENANCE 3.1 General

Carry out maintenance of the device immediately after shooting.

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

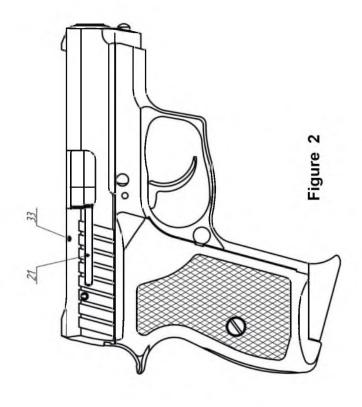
If the device is not used, maintenance is made weekly.

Sequence of maintenance:

- disassembly the device and the magazine;
- clean the device and magazine;
- check the disassembled device;
- lubricate and assemble device and magazine;
- check the operation of the device.

# 3.2 Preparation for disassembly

Direct the device barrel in safe direction, press the magazine locking button and support the falling magazine.



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### **8 WARRANTY**

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

The warranty is 12 months from the shipping date.

Average operation time of the device is not less five year or 10000 shots, which depends from earlier event.

SIA "FORT" removes discovered defects during the warranty free of charge, under the condition of observing all the 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.

# 9 INFORMATION ABOUT CANNING AND PACKING

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is	canned	and	packed	in	accor	dance	with	the
rec	quirement	s of th	e valid ted	chn	ical doc	uments		

Executed preservation		
Executed packing		
Preservation date "	"	20

#### **5 STORAGE OF THE DEVICE**

For a long-term storage of the device it is necessary to carry out its preservation. Procedure for the carry out preservation is done in the section 3.10 of this manual. After canning you should wrap up the device with paper .

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

Maximum storage term of the canned device is not more one year from the canning.

#### **6 TRANSPORTATION**

The device in the package of the origanal packing is transported by any transport for any distances: in the covered railroad car, covered cars, air-tight apartments of airplanes in accordance with the 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.

# **7 CERTIFICATE OF ACCEPTANCE**

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

Execute	ed acceptance _	
L.S.	""	20
Sold		
L.S.	""	20
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# **4 CURRENT REPAIR**

Table 4.1

Name of failure while shooting	Possible reason	Troubleshooting method
Misfire. The slide is in the forward most position, the hammer is deflated, 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. Carry out the shot. 2 Unload the device of central centra
Delay of cartridge by the slide. The slide stopped without reaching the forward most position.	Cartridge chamber pollution.     Damage or precipitation of the recoil spring	1 Push the slide manually forward and go on firing. 2 Unload the device and send it to the workshop.
Cartridge-case is jammed by the slide. Slide is in midtravel	Contamination of the device mobile parts. Poor round charge      Ejector defect.	1 Pull out the magazine, take the slide back, throw away the cartridge-case and go on firing. 2 Unload the device and send it to the workshop.

Pull the slide in rearmost position. Check the cartridge chamber and make sure that it is empty. Release the slide.

### 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 pass slide back in rearmost position, lifting up the rear edge of the slide and realesing it forward, separate it from the barrel. Pull out the recoil spring and recoil spring guide.

#### 3.4 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.

By drift pin untwist the screws of handle plate and disconnect them from frame.

Press on the firing spring stop bottom-up by drift pin and disconnect it with frame.

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

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#### Cleaning of the bore:

- stretch square of cloth through the wipe port. Mat thickness of cloth should be such that the cleaning brush enters into the bore with little effort;
  - moist the cloth by lubricating oil;
- insert the cleaning brush in the 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 bore by clean and dry cloth.

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

The rest of the 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 the 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;

By wiper through the slot of handle retract right (curved) end of magazine locking button spring left/up so, that curved end run out of button deepening, holding pressed spring, pull out it direct end from button hole, push out the spring of frame groove, then pull out magazine locking button from frame hole.

Push out the trigger axis by drift pin and pull down the trigger so, that its end will enter into hole of trigger bow, herewith connectivity node of trigger with rod will be out of frame.

Push out the rod spring axis by drift pin, separate trigger from rod and rod spring. Pull out trigger and rod through top slot of the frame .

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

Knock the extractor pin by drift pin, by holding the extractor by hand pull the drift pin, get out extractor and extractor spring.

#### 3.5 Disassembly of the magazine

Before disassembly of the magazine, take out all cartridges. Press magazine floor plate by the drift pin and carefully move it forward, holding the bottom of the magazine. Put out the bottom and magazine spring with follower.

# 3.6 Cleaning of the device

Cleaning of the device carry out by special lubricating oil, cleaning of the bore carry out by special cleaning fluid in the following order.

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- 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 have no any disunities, deformations and blight.

#### 3.8 Lubrication and assembly of the device

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

Apply a thin coat of oil with a cloth moistened with oil and squeezed out.

Remove oil flows by dry cloth.

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

# 3.9 Inspection of the device function

Direct device barrel in safe direction without inserting magazine into handle slot.

Set the slide in rearmost position and inspect the chamber through the slide slot, it must be empty. Release the slide, slide should be set in the

#### End of the table 4.1

Name of failure while shooting	Possible reason	Troubleshooting method		
Pinching of the cartridge between the face of the slide and barrel body by sending the cartridge to the chamber	Magazine pollution     Straightening of magazine lips     Magazine is not fixed by magazine locking button	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 the m a g a z i n e. Continue shooting		
Cartridge-case is jammed in the bore. Slide is in backside position. During shot there was higher recoil and intense sound	Contamination of the bore.      Cartridge damage	Unload the device and disassembly it, push jammed cartridge by the wiper towards the chamber, clean the bore. Check disassemble d device: if ejector is bend, align it; if extractor is damage, send device to the workshop.		

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forward position under the action of recoil spring. Insert the magazine and check its fixation.

Pull out the magazine, set the slide in rearmost position and release, slide will set in forward position.

Press the trigger. Hammer is cocking and striking the firing pin.

#### 3.10 Preservation

The manufacturer carries out canning/preserving of the device. Maximum term of storage of the device without repeated preservation is no more than one year. For depreservation of the device it is necessary to carry out its disassembly and cleaning, in accordance with section 3 of this manual.

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

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