

SERVICE MANUAL
СОК-АК.РЭ

«САЙГА»

“САЙГА”
SELF-LOADING HUNTING
CARBINE
SERVICE MANUAL

CONTENTS

Introduction.....	.....
1 Description and operation.....	.....
1.1 Application.....	.....
1.2 Specifications.....	.....
1.3 Carbine components.....	.....
1.4 Design and operation.....	.....
1.5 Marking.....	.....
2 Usage for its designated purpose.....	.....
2.1 Operational limitations.....	.....
2.2 Safety precautions.....	.....
2.3 Preparing for use.....	.....
2.4 Operation procedure.....	.....
3 Maintenance.....	.....
3.1 General directions.....	.....
3.2 Field stripping.....	.....
3.3 Complete disassembly.....	.....
3.4 Iron sighting device adjustment.....	.....
3.5 Optical sight adjustment.....	.....
3.6 Cleaning and lubrication.....	.....
4 Transportation.....	.....
5 Storage.....	.....
Appendix A. Components of “Сайга” carbines.....	.....

INTRODUCTION

WARNING! FOR YOUR SAFETY AND THE SAFETY OF OTHERS READ AND UNDERSTAND THIS SERVICE MANUAL BEFORE USING THE CARBINE.

The Service Manual COK-AK.PЭ (hereinafter in the text referred to as the SM) contains description of the "Caйra" carbine design, principle of its operation as well as other information, and is intended for studying, proper and safe using of the carbine, its modifications and versions and for maintaining it in a serviceable condition.

WARNING! THE CARBINES DIFFER IN THEIR DESIGN, THEREFORE STUDY SECTION 2 OF THIS SERVICE MANUAL IN ORDER TO SERVICE THE CARBINES PROPERLY AND NOT CAUSE DAMAGE TO THEM.

The carbine is under constant development, therefore some minor changes in the design may not be reflected in the SM.

The carbine may be complete with an optical sight. The design, principle of operation and specifications of the optical sight are given in the documentation for the optical sight.

The carbine design ensures safe functioning when firing is delivered with hunting cartridges and provided that the carbine is used in accordance with the said SM.

WARNING! WHEN FIRING THE CARBINE THE CAUSES OF DANGER ARE:

- AT FIRING: THE BULLET, ESCAPING THE BARREL; THE POWDER COMBUSTION GASES; THE BLAST WAVE; THE CARBINE BLOWBACK; THE EXTRACTED CASE; THE PROTRUDING ELEMENTS OF THE MOVING PARTS (OPERATING HANDLE); THE HOT CARBINE COMPONENTS (BARREL, GAS TUBE); THE CARTRIDGES.

- AT MAINTENANCE: SLUSHING AGENTS WHEN PACKING AT THE MANUFACTURING PLANT; THE SPRINGS, BEING IN COMPRESSED STATE OR WHICH ARE COMPRESSED IN THE PROCESS OF ASSEMBLING AND DISASSEMBLING.

READ AND UNDERSTAND SECTIONS 2 AND 3 OF THIS SERVICE MANUAL.

1 DESCRIPTION AND OPERATION

1.1 Application

The «Сайга» self-loading hunting carbine, its modifications and their versions (hereinafter in the text referred to as the carbine) in calibers 7.62x39, .223Rem (5.56x45), 5.6x39, 5.45x39, .308win are designated to professionally and non-professionally hunt the game animals and big fowl at the environmental temperature from minus 50 to plus 50 °C.

General view and design peculiarities of the «Сайга» carbine, its modifications and versions are given in Figures 1.1-1.10 and Table 1.1.



a)



b)

Figure 1.7 – «Сайра» carbines, caliber .308 win

- a) carbine version MK106 with folding polimer butt
- b) carbine version MKK106 with folding polimer butt



a)



b)

Figure 1.8 – «Сайра» carbines, caliber 5.45x39

- a) carbine version MK105 with folding polimer butt
- b) carbine version MKK105 with folding polimer butt



a)



b)

Figure 1.9 – «Caltra-MK» carbines, caliber 7.62x39

- a) carbine version MK103 with folding polymer butt
- b) carbine version MK104 with folding polymer butt



a)



b)

Figure 1.10 – «Саїга-МК» carbines, caliber .223Rem

- a) carbine version MK102 with folding polimer butt
- b) carbine version MKK102 with folding polimer butt

“Сайра” carbines

Table 1.1

Carbine		Distinctions					
Model, modification	Version	Barrel length, mm	Butt design	Fore end design	Gas cylinder and front sight bed	Fore end and butt material	Availability of trigger mechanism locking device
	MK102	415	Folding short	Short	Separate	Polymer	Provided
	MKK102	332	Folding short	Short	Separate	Polymer	Provided
«Сайра»	MK103	415	Folding short	Short	Separate	Polymer	Provided
	MKK104	341	Folding short	Short	Separate	Polymer	Provided
		314	Folding short	Short	Separate	Polymer	Provided
	MK105	415	Folding short	Short	Separate	Polymer	Provided
	MKK105	341	Folding short	Short	Separate	Polymer	Provided
	MK106	415	Folding short	Short	Separate	Polymer	Provided
	MKK106	350	Folding short	Short	Separate	Polymer	Provided

1.2 Specifications

Table 1.2

Distinctions

Carbine		Caliber (cartridge)	Barrel length, mm	Magazine (capacity, rounds)	Weight, kg, maxi- mum	Overall dimensions, mm, maximum
Model, modification	Version					
Саїра МК	102	.223 Rem	415	10	3,6	943x70x200
	103	7,62x39	415	10	3,6	943x70x200
	105	5,45x39	415	10	3,6	943x70x200
	106	.308 Win	415	8	3,8	945x70x200
Саїра МКК	102	.223 Rem	332	10	3,6	825x70x200
	104	7,62x39	341	10	3,6	833x70x200
		7,62x39	314	10	3,6	806x70x200
	105	5,45x39	341	10	3,6	833 x70x200
	106	.308 Win	350	8	3,8	840x70x200

1.3 Carbine components

1.3.1 The carbine consists of the following main components:

- barrel with the receiver;
- bolt support with the bolt;
- retracting mechanism;
- trigger and firing mechanism;
- gas tube;
- butt;
- fore end;
- magazine;
- receiver cover.

The carbine components are shown in Appendix A (Figures A.1 - A.4).

1.4 Design and operation

1.4.1 Details of design

The automatic reloading of the self-loading carbine is effected due to the energy of powder gases escaping from the barrel bore to the gas cylinder, and the energy of the return spring, as well, as to the "hand-operated" version (reloading by hand) the reloading is effected by pulling the bolt support to the rearmost position by hand and the energy of the return spring.

The barrel bore locks on turning the bolt round its axis while the bolt support is sliding.

The trigger and firing mechanism of a hammer type ensures single-shot firing and setting at safe.

To prolong the carbine service life and to improve resistance to corrosion, the barrel bore and the cartridge chamber are chrome-lined.

"Сайра-М3" carbine, "И" (Практика) (to be read Praktika) version

The carbine features an adjustable in length butt with a rotary cheek-piece and an adjustable in height butt pad, a control handle with enhanced ergonomic design. There is no need in taking a hand off the handle to control the selector and magazine latch; a hinged cover with the Picatinny rail allows for mounting the foreign-made optical sights. A polymer magazine guide speeds up the magazine change. The magazine is detached by gravity while pressing the magazine latch.

1.4.2 The principle of the carbine operation is as follows:

- when the bolt support with the bolt moves forth under the action of the return spring, the cartridge is fed from the magazine to the cartridge chamber. With the bolt turned, the barrel bore becomes locked, the hammer gets cocked, the extractor engages with the cartridge case rim;
- on pressing the trigger, the hammer disengages from the trigger-

mechanism (trigger) hook, turns under the action of the mainspring and energetically strikes against the firing pin. A shot is fired;

- under the energy of powder gases or when pulling to the rear during hand reloading the bolt support with the bolt moves to the rear, a cartridge case is extracted from the cartridge chamber, and after interaction with the ejector lug it is extracted from the receiver;

- under the action of the bolt support the hammer gets cocked and caught by the sear. The bolt support with the bolt recoils to the rearmost position, then moves forth under the tension of the return spring. The bolt by its ramming piece catches the next cartridge from the magazine and directs it to the cartridge chamber;

- on releasing the trigger, the sear disengages from the hammer, and the hammer engages with the trigger-mechanism (trigger) hook.

The cycle repeats, when the trigger is pressed again.

1.5 Marking

1.5.1 Marked on the carbine receiver are data on the firm and Manufacturing country, number and description of the product model (modification), as well as the following special marks and symbols as stated by EU directive 853/17



- proof mark of the official testing laboratory (Izhevsk, Russia), acknowledged by the Permanent International Commission for the proof of hand firearm (CIP), and two last digits of the year of the carbine proof;

CIP
N

- unified mark of the Permanent International Commission for the proof of firearm (CIP)

7.62x39,
.223 Rem,
308 Win,
5.45x39

- caliber of the cartridge to be used on frame and barrel

MADE IN RUSSIA - Manufacturing country

ITYY

- Last two digit of the year of import in EU



- Registered stamp of DTG with Italian national proof house

1.5.2 The carbine receiver may bear some other signs or lettering on the Customer's demand or pertaining to the manufacturing technique.

2 USAGE FOR ITS DESIGNATED PURPOSE

2.1 Operational limitations

2.1.1 Before using the carbine read and understand the present Service Manual and study the carbine design. Pay special attention to the safety precautions.

2.1.2 Use hunting cartridges for firing the carbine. Old military surplus will damage all the chromed surfaces and will waive the warranty.

2.1.3 To prevent the striker from breakage, never make dry shots, if no need be.

2.1.4 Use protective shooting glasses and hearing protection if it is necessary.

2.2 Safety precautions

2.2.1 To ensure safety in handling the carbine, follow the rules below:

- always handle the carbine, as if it is loaded;
 - never point the carbine at any person or domestic animals;
 - bear in mind that a fired bullet can travel 3 km;
 - take into account that there is a possibility of a ricochet;
 - while firing under conditions of impaired visibility remember that the bullet is capable of going through wooden and stone walls;
 - unload the carbine when reaching a settlement, halt, prior to boarding a vehicle and when riding within the hunting-grounds;
 - keep the carbine and cartridges separately beyond the reach of children and strangers;
 - always keep the carbine with the safety engaged to avoid an accidental discharge especially when crossing the broken country, forest and while running;
 - take the carbine in hands and make sure that there are no cartridges in the magazine and in the cartridge chamber, for which purpose pull the bolt support to the rear and inspect the magazine and the cartridge chamber;
 - prior to loading the carbine, be sure to inspect the barrel bore and the cartridge chamber – they should be free of any obstruction;
 - in case of a misfire, don't open the bolt within 30 s to prevent a hang-fire;
 - if you have dropped a carbine, unload it and check it for proper functioning before using it again;
 - don't use cartridges of non-industrial filling, with corrosion or with the expired storage period;
 - keep records of fired shots.
- DO NOT MODIFY THE CARBINE NOR USE ITS PARTS FOR OTHER CARBINES;**

- let the barrel cool to the ambient temperature after 90 shots have been fired.

2.2.2 When in service, every time you fire, thoroughly inspect the receiver, the bolt for absence of cracks, and barrel for absence of cracks or bulgings.

If one of these faults has been detected, or if ruptures have appeared in the bottom portion of cartridge cases, stop using the carbine.

The Manufacturing Plant bears no responsibility in case of the carbine damage resulting from non-observance of the safety precautions, laid down in this Section.

WARNING! Meeting the request of the Russian law enforcement authorities the chamber design of the carbines, cal. 7.62x39, provides for special distinctive element, which during firing produces circular stamping on the fired case mouth, not affecting the carbine reliability, trouble-free operation, service life or ballistic parameters and it is not a sign of fault. The cartridges extracted from the chamber at the carbine reloading and unloading, are fit for repeat usage.

2.3 Preparing for use

2.3.1 To put the carbine into operation, remove package and grease from the and accessories, clean and lubricate the carbine, check it for full delivery and make sure that it functions.

WARNING! THE CARBINE AND ACCESSORIES ARE PACKED IN THE INHIBITED PAPER OR ZERUST INHIBITED POLYETHYLENE FILM TO PROTECT THEM AGAINST CORROSION:

- NEVER USE THE INHIBITED PAPER OR ZERUST INHIBITED POLYETHYLENE FILM FOR PACKING FOOD, CLOTHES, BOOKS, PERSONAL THINGS, etc;

- AFTER THE DEPRESERVATION HAS BEEN DONE AND PRIOR TO TAKING FOOD WASH YOUR HANDS AND FACE WITH SOAP;

- NEVER STORE THE INHIBITED PAPER OR ZERUST INHIBITED POLYETHYLENE FILM EXPOSED NEAR THE HEATING DEVICES, ACIDS, ALKALIES;

- AFTER THE CARBINE DEPRESERVATION HAS BEEN OVER ANNIHILATE (INCINERATE) THE INHIBITED PAPER OR ZERUST INHIBITED POLYETHYLENE FILM.

2.3.2 When preparing the carbine for use, proceed as instructed below:

- wipe the barrel bore and the cartridge chamber dry to remove grease and fouling, if be;

- bring the butt to the operating position, to this end:

force out the latch pusher (in the butt end) and turn the butt so that to fix it, when the carbine is furnished with a folding butt;

engage the butt-piece lug with the butt pin in the receiver rear end and turn the butt so that to fix it, when the carbine is provided with a detachable butt;

when the carbine version features a rotary cheek-piece, to use an optical sight raise the cheek-piece; for the purpose move the cheek-piece rearward the butt, forcing the pusher, until the cheek-piece disengages from the butt-piece lug and rotate the cheek-piece so, that it is found on the butt-piece lug;

- when using the optical sight attach it to the carbine, for this purpose proceed as follows:

a) inspect the optical sight. Remove dirt, if any, from the surfaces of the eyepiece lenses and from the objective using a flannel napkin;

b) attach the sight to the carbine. To this end turn the handle towards the eyepiece, set the sight with the mount onto the receiver side rail and fix it by turning the handle towards the objective against the stop;

c) check the mount for reliable fixation. When the handle is locked, interference should be within 60-90°. The mount swinging is not permissible with the handle being locked;

d) to provide the interference in case of the swinging take off the latch and keep moving the handle for one tooth clockwise, every time fixing it until the sight swinging is eliminated, then put the latch home;

e) check the screws of the optical sight mount for proper tightening;

- check the carbine accuracy of fire, in case of necessity adjust the sighting devices as per items 3.4, 3.5 as the fire accuracy depends on the shooter's individual characteristics, type and lot of cartridges, weather conditions and other factors.

2.4 Operation procedure

WARNING! THE CARBINES WITH FOLDING BUTT ("САЙГА-МК", "САЙГА-5.56С" AND "САЙГА-М3 EXP-01" ON SPECIAL ORDER) ARE PROVIDED WITH TRIGGER AND FIRING MECHANISM LOCKING DEVICE WHEN THE BUTT IS IN NON-OPERATIVE (UNFIXED) POSITION. SETTING THE SAFETY TO THE "FIRE" (F) POSITION IS ONLY POSSIBLE WHEN THE BUTT IS IN THE OPERATIVE POSITION. FORCING OUT THE BUTT RETAINER IS ONLY POSSIBLE WHEN THE SAFETY IS SET TO THE "SAFE" (S) POSITION.

2.4.1 The safety engagement and disengagement.

2.4.1.1 Engage the safety - move the safety up to the "Safe" (S) position. The trigger is disabled.

2.4.1.2 Disengage the safety - move the safety down to the "Fire" (F)

position.

2.4.2 Loading and firing procedure:

- depress the magazine latch and detach the magazine from the carbine by moving it down and forth;
- fill the magazine with cartridges feeding them one by one under the magazine lips and moving each of them against the stop of the magazine rear wall;
- attach the loaded magazine to the carbine;
- disengage the safety;
- pull the moving parts against the stop to the rear and release them abruptly;
- set the sight-leaf slide in the position corresponding to the distance of fire (position "1" corresponds to the 100m range, positions "2" and "3" correspond to 200 and 300m ranges, respectively).

The carbine is loaded and found ready for firing.

Aim, let off.

To fire the next shot, release the trigger and press it again.

When the cartridges in the magazine come to an end, moving parts will remain in the front position.

Load the carbine anew.

2.4.3 Unloading procedure:

- engage the safety;
- detach the magazine;
- disengage the safety;
- pull the moving parts to the rear and extract a cartridge from the cartridge chamber;
- push the moving parts forth;
- press the trigger;
- engage the safety;
- empty the magazine;
- attach the magazine to the carbine;

2.4.4 To bring the butt to the march position, proceed as follows:

- depress the butt retainer, then turn it forth and to the left and fold the butt to obtain the butt latching as for the versions of the carbine with the folding butt;
- depress the butt retainer, turn it to the left and disengage the butt end-piece lug from the butt pin as for the versions of the carbine with the detachable butt. The butt is detached.

2.4.5 To examine the carbine, equipped with a bolt stop proceed as follows:

- disengage the safety;

- pull the bolt support to the rear to a positive stop, depress the bolt-stop head (found underneath the receiver, near the trigger guard), hold it in this position and gradually release the bolt support until it engages with the bolt stop;
- examine the chamber and magazine;
- disengage the bolt support from the bolt stop, to this purpose move the bolt support rearwards to a positive stop and release it;
- engage the safety.

3 MAINTENANCE

3.1 General directions

3.1.1 The maintenance consists in inspection, cleaning and lubrication of the carbine during field stripping or complete disassembly and the adjustment of the sighting devices as well. The field stripping of the carbine is carried out for its inspection, cleaning and lubrication after firing. Undertake the complete disassembly of the carbine if it is too dirty, and after it has been exposed to rain or snow or it is subjected to new lubricant or repair.

3.1.2 **WARNING! TO BEGIN THE DISASSEMBLY MAKE SURE THAT THE CARBINE IS NOT LOADED.** To this end detach the magazine, disengage the safety, pull the moving parts to the rear using the bolt-support handle, examine the chamber to make sure that it is empty, push the moving parts forth.

3.1.3 Disassemble and assemble the carbine on a table or clean canvas. When putting down parts and components follow the sequence of stripping, handle the detached parts with care, do not put one part on another, avoid excessive effort and sharp blows.

3.1.4 **WARNING! DO NOT USE NOT RECOMMENDED OR UNKNOWN CHEMICAL AGENTS FOR CLEANING AND LUBRICATING THE CARBINE. THEY MAY BE DANGEROUS FOR YOUR HEALTH AND THE CARBINE PARTS AND COMPONENTS.**

3.2 Field stripping

3.2.1 Field stripping procedure:

- detach the magazine according to Figure 3.1. Holding the carbine fore end with one hand, grip the magazine with another and depress the magazine latch with a thumb (towards the magazine), push the magazine lower portion forth and detach it;

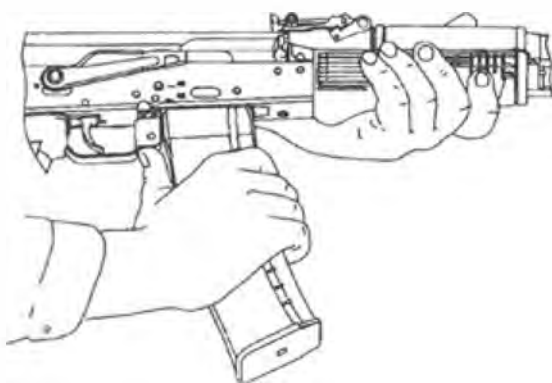


Figure 3.1 – Detaching the magazine

- detach the cleaning rod and container with accessories (for the version with the cleaning rod and container located on the carbine) for which purpose, according to Figure 3.2, pull the cleaning-rod end away from the barrel so that the rod head comes from under the stop of the front-sight bed. Pull the cleaning rod loose towards the barrel muzzle end. To detach the container

- sink flush the cap in the butt trap with a finger so that the container goes out of its seat under the tension of the spring. Turn the container cap counterclockwise and take it off the container body. Take out the accessories;

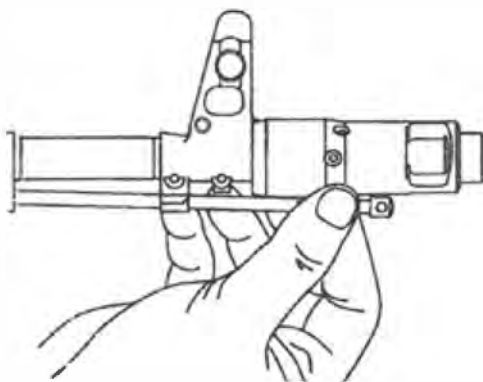


Figure 3.2 – Detaching the cleaning rod

- detach the receiver cover, to this end, according to Figure 3.3, take the receiver cover rear portion with one hand, and holding the small of the butt with another hand, sink flush the lug of the retracting-mechanism guide, pull the cover upwards and moving it rearwards separate the cover from the carbine;

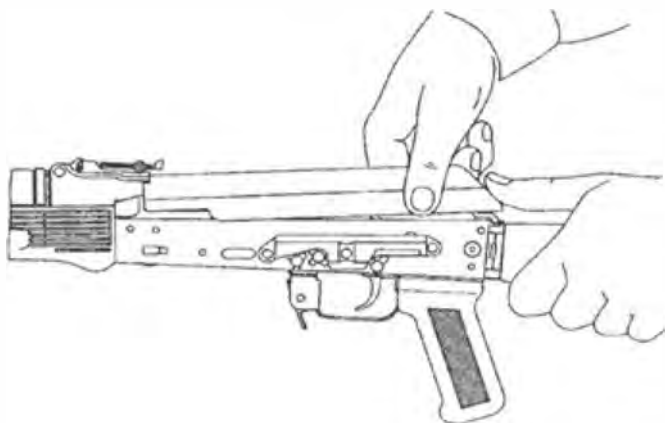


Figure 3.3 – Detaching the receiver cover

- detach the retracting mechanism, to this end, according to Figure 3.4, push the retracting-mechanism guide forth out of the receiver end slot and extract the retracting mechanism from the receiver and the bolt-support channel, moving it up and to the rear;

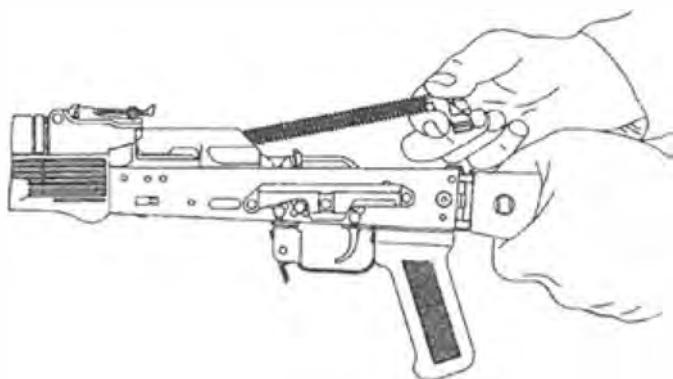


Figure 3.4 – Detaching the retracting mechanism

- separate the bolt support and the bolt. To this purpose, according to Figure 3.5, engage the safety, pull the bolt support to the rear as far as it will go, move it upwards and rearwards and take it out of the receiver together with the bolt;



Figure 3.5 – Detaching the bolt support and the bolt

- separate the bolt from the bolt support. Holding the bolt and the bolt support with one hand, according to Figure 3.6, turn the bolt head counterclockwise by another hand until the bolt lug disengages from the shaped slot of the bolt support and moving the bolt forth extract it out of the bolt-support channel;

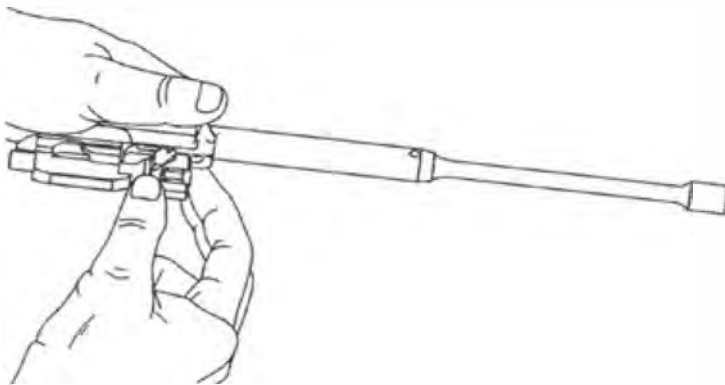


Figure 3.6 – Detaching the bolt from the bolt support

- detach the gas tube. To this end, according to Figure 3.7, turn the axle pin up (in the direction from the barrel) using the container, being slipped with its slot over the lug of the axle-pin tongue, extract the gas tube from the sight-bed recess moving it up, and remove the gas tube from the gas-cylinder connection moving it rearwards.

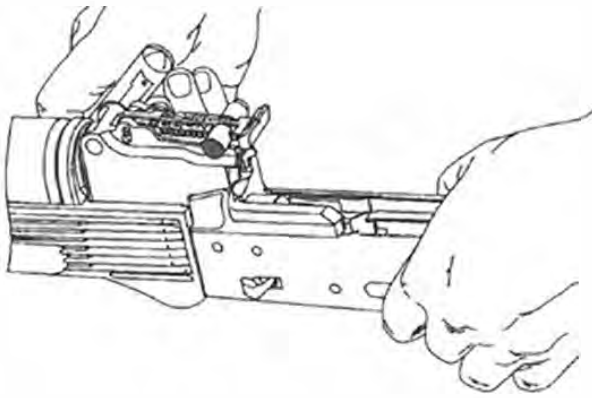


Figure 3.7 – Turning the axle pin: using the container

Reassemble in the reverse order. Prior to putting the bolt support with bolt into the receiver make sure that the hammer is engaged with the trigger-mechanism (trigger) hook. If the hammer is not engaged, turn the hammer by a finger rearwards and downwards until it engages the hook. Prior to attaching the magazine release the hammer and set the carbine at safe.

3.3 Complete disassembly (only for gunsmith)

3.3.1 WARNING! THE SPRINGS OF THE RETRACTING MECHANISM AND THE MAGAZINE ARE IN COMPRESSED STATE. THEY MAY CAUSE SERIOUS INJURY TO YOU AND OTHERS IN CASE OF THEIR ABRUPT RELEASE.

WARNING! FOR THE QUALIFIED CARBINE COMPLETE DISASSEMBLY AND ESPECIALLY ASSEMBLY AFTER THE COMPLETE DISASSEMBLY LET THE COMPETENT GUNSMITH OR SPECIALIZED WORKSHOP WORK ON YOUR CARBINE. DON'T DO BY YOURSELF

3.3.2 To disassemble and assemble the carbine use the accessories applied with a carbine. If detaching of the pins is hindered use a hammer. Avoid excessive effort in this case.

3.3.3 To disassemble the carbine completely, proceed as follows:

- perform field stripping;
- detach the fore end. As to the carbines with a hunting wooden fore end undo the fore-end screw and moving the fore end forth along the barrel take it off. For the carbines with a polymer hunting fore end, remove the fore end moving it forth along the barrel after the gas tube has been detached. As to the carbines with a short fore end, turn the axle pin of the fore-end ring through 180°, move the fore-end ring forth along the barrel, according to Figure 3.8, and take off the fore end moving it forth;

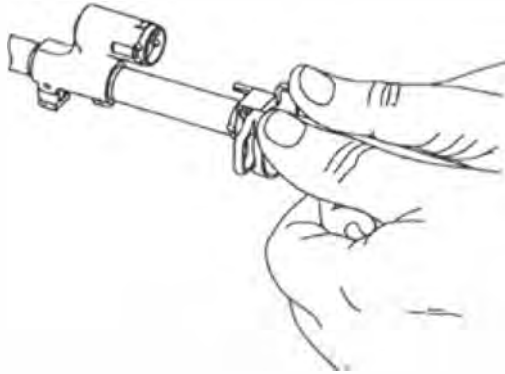


Figure 3.8 – Moving the fore-end ring

- disassemble the retracting mechanism. For this purpose, according to Figure 3.9, rest the retracting-mechanism guide against a table, compress the spring by one hand downwards until the movable rod becomes free, turn the rod through 90° by another hand and shift it a little, move the rod ends apart and take off a sleeve, straighten the movable rod, release the spring and take it off, detach the movable rod from the guide.

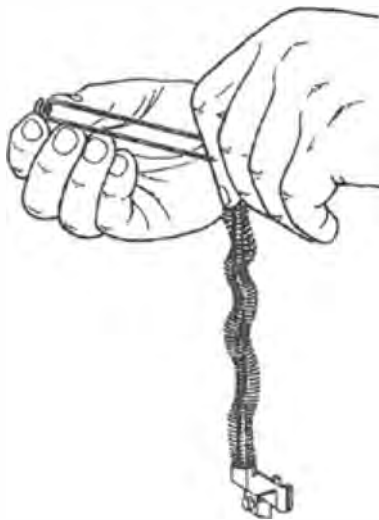


Figure 3.9 – Disassembling the retracting mechanism

- disassemble the bolt. Use a drift to force out the firing-pin stud and take the firing pin from the bolt channel. Drive out the extractor pin and take the extractor with the spring out of the bolt seat.

WARNING! THE EXTRACTOR SPRING IS IN THE COMPRESSED STATE AND THE .223REM CAL. CARBINES ARE PROVIDED WITH THE SPRING-LOADED FIRING PINS. WHEN THE DRIFT IS REMOVED THE EXTRACTOR OR THE FIRING PIN MIGHT BE EJECTED OUT OF THEIR SEATS UNDER THE TENSION OF THE SPRINGS.



Figure 3.10 – Disassembling the bolt

- disassemble the trigger and firing mechanism, to this end:

a) using a drift raise the ends of the mainspring in turn and force them behind the lugs of the hammer upper according to Figure 3.11.

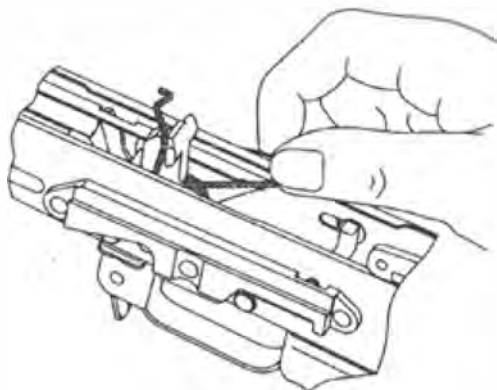


Figure 3.11 – Forcing the ends of the mainspring behind the hammer lugs

WARNING! CONNECT THE ENDS OF THE MAINSPRING WITH A RING OF A SOFT WIRE TO PREVENT THEM FROM FALLING OUT;

b) using a screwdriver bring the long end of the trigger-mechanism spring out of the circular groove of the trigger-mechanism (trigger) pin; push out the pin by the drift, take the trigger mechanism (trigger) and the bolt-stop spring out of the receiver;

c) using a screwdriver bring the long end of the trigger-mechanism spring out of the circular groove of the hammer pin, force out the pin using the drift, extract the bolt stop and the hammer with the mainspring according to Figure 3.12, turn through 90° and take out of the receiver;



Figure 3.12 – Taking the hammer from the receiver

d) take off the wire ring from the mainspring ends, bring them from behind the hammer lugs in turn and detach the mainspring from the hammer trunnions.

- detach the magazine, to this end take the magazine in your left hand with its cover up and the cover rear part forth, take a drift in the right hand and use it to sink the nib of the locking plate so that the nib comes out of the cover hole. Move the magazine forth a little with your left thumb. Retaining the locking plate in the magazine body with your left thumb, remove the cover with the right hand. Holding the locking plate with the right hand release the spring gradually and take it together with the follower and the locking plate from the body.

Re-assemble the carbine in the reverse order.

3.4 Iron sighting device adjustment

3.4.1 To adjust the accuracy of fire move the front-sight base to the “right - left” and “up and down”. To move the front-sight base, knock it slightly with a hammer or use a special attachment. The front sight is moved when the front sight is screwing in/out with the use of a wrench – front-sight adjuster, which is made integral with a screwdriver. The container for accessories is used as a handle, for this purpose insert the screwdriver into the container slots.

3.4.2 When adjustment is performed, move the front sight towards the deviation of the point of impact. When moving the front-sight base for 1 mm the bullet point of impact is shifted for 200 mm, when turning the front sight through one revolution the point of impact is shifted for 150 mm. Registering is performed at a 100m range.

3.5 Optical sight adjustment

The carbine optical sight is registered at a 100m range, scales are set to the graduation "0". If the said registration does not satisfy the shooter, register the optical sight again over the iron sighting device. To this end:

- set the iron sighting device slide to the graduation "1" of the sight leaf;
- put the carbine on a rest and aim at any point at a 100m range through the iron sighting device;
- check the position of the optical sight aiming mark relative to the aiming point. In case of misalignment match them by turning the knobs not moving the carbine;
- test the performed registration by shooting. If deviation of hits from the aiming point is not satisfactory as to accuracy of fire, make the proper corrections by turning the knobs (a scale graduation of knobs is given in the optical sight Certificate), after that set scales to the graduation "0". To this end carefully loosen the scale fastening screws, align the graduation "0" of the lateral corrections scale and the graduation "0" of the distance scale with the fixed indices provided on the sight body, tighten the scale fastening screws. In this case turning of the knobs is not permissible.

If it is necessary to register the optical sight for other ranges, do it by turning the distance knob. Make marks corresponding to the ranges onto the distance scale against the index, and write down scale values into Table 3.1.

Table 3.1

Range, m	100	200	300
Scale graduation			

3.6 Cleaning and lubrication

3.6.1 Clean the carbine using the accessories included in the carbine complete set or use the other, corresponding to the carbine caliber, not later than in one day after firing. In winter clean the carbine indoors at air temperature $(+20\pm 5)$ °C after it has been warmed up to the indoor temperature. Clean the barrel bore and the chamber with the use of clean waste (wiping rags, tow) free from sand and hard particles. The process of cleaning is as follows:

- lubricate the barrel bore and the cartridge chamber by a bristle brush preliminarily immersed into the rifle oil (see Table 3.2);
- wipe the barrel bore dry using a pull-through with the wiping material tightly wrapped on it;
- perform lubrication and wiping operations 8-10 times until the carbon deposit is completely removed (it is checked by inspecting the barrel bore);

- after cleaning has been done, lubricate the barrel bore and the cartridge chamber with clean rifle oil (see Table 3.2).

To ensure normal functioning of the carbine, remove the carbon deposit from the gas cylinder, gas tube and bolt-support gas piston in due time.

Do lubrication depending on the temperature conditions in accordance with Table 3.2. Thickening of the lubricant in the bolt channel for the firing pin, in the seat for the extractor and on the mainspring is inadmissible.

Table 3.2

Name of lubricant	Lubrication point	Method of lubricant application
Rifle oil corresponding to temperature conditions	Barrel bore	Lubricate the barrel bore from the muzzle using a bristle brush (two or three double strokes of the cleaning rod lengthwise the barrel).
Ditto	Bolt, bolt support, receiver guides	Wipe the components with the wiping material preliminarily moistened with rifle oil and wrung out.

4 TRANSPORTATION

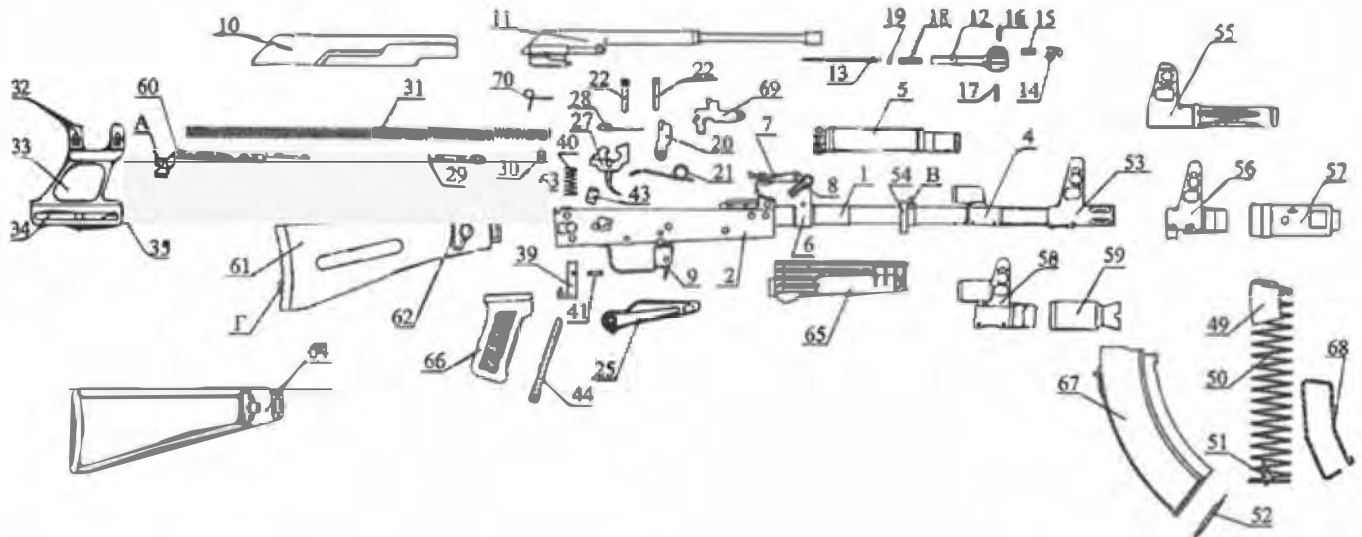
4.1 The carbine is transported by all kinds of transport in a carrying case to protect it from impacts and drops.

4.2 The carbine is carried on the sling while hunting. The sling should be fit so as to avoid the carbine impact against hard items of the accoutrements. The carbine is carried with the attached magazine.

5 STORAGE

5.1 Period of storage of the carbine packed by the Manufacturer without reprservation is not more than 60 months.

5.2 Store the carbine in dry premises without sharp temperature fluctuations, far from heating devices. Aggressive impurities should be absent in the ambient air. The carbine should be always unloaded, the magazine detached, the hammer released, the safety should be in the "S" (safe) position. The carbine should be stored in the carrying case if need be, cleaned and lubricated, the carrying case and the sling are to be clean and dry.



Barrel with receiver

- 1 – barrel;
- 2 – receiver;
- 4 – gas cylinder;
- 5 – gas tube with hand guard;
- 6 – sight bed;
- 7 – sight leaf;
- 8 – gas-tube axle pin;
- 9 – magazine latch;
- 10 – receiver cover;
- 53 – front-sight bed with short flash suppressor;
- 54 – fore-end ring;
- B – ring axle pin;
- 55 – front-sight bed with long flash suppressor;
- 56 – threaded front-sight bed;
- 57 – cylindrical flash suppressor;
- 58 – front-sight bed combined with gas cylinder;
- 59 – flash suppressor

Bolt support with bolt

- 11 – bolt support;
- 12 – bolt;
- 13 – firing pin;
- 14 – extractor;
- 15 – extractor spring;
- 16 – extractor pin;
- 17 – firing-pin stud;
- 18 – firing-pin spring;
- 19 – bush

Trigger and firing mechanism

- 20 – hammer;
- 21 – mainspring;
- 22 – trigger-mechanism pin;
- 25 – safety;
- 27 – trigger;
- 28 – trigger-mechanism spring;
- 69 – bolt stop;
- 70 – bolt-stop spring

Retracting mechanism

- 29 – movable rod;
- 30 – sleeve;
- 31 – retracting-mechanism spring;
- 60 – guide;
- A – guide nib

NPZ Optical sight mount

- 32 – clamp;
- 33 – strut;
- 34 – guide;
- 35 – handle

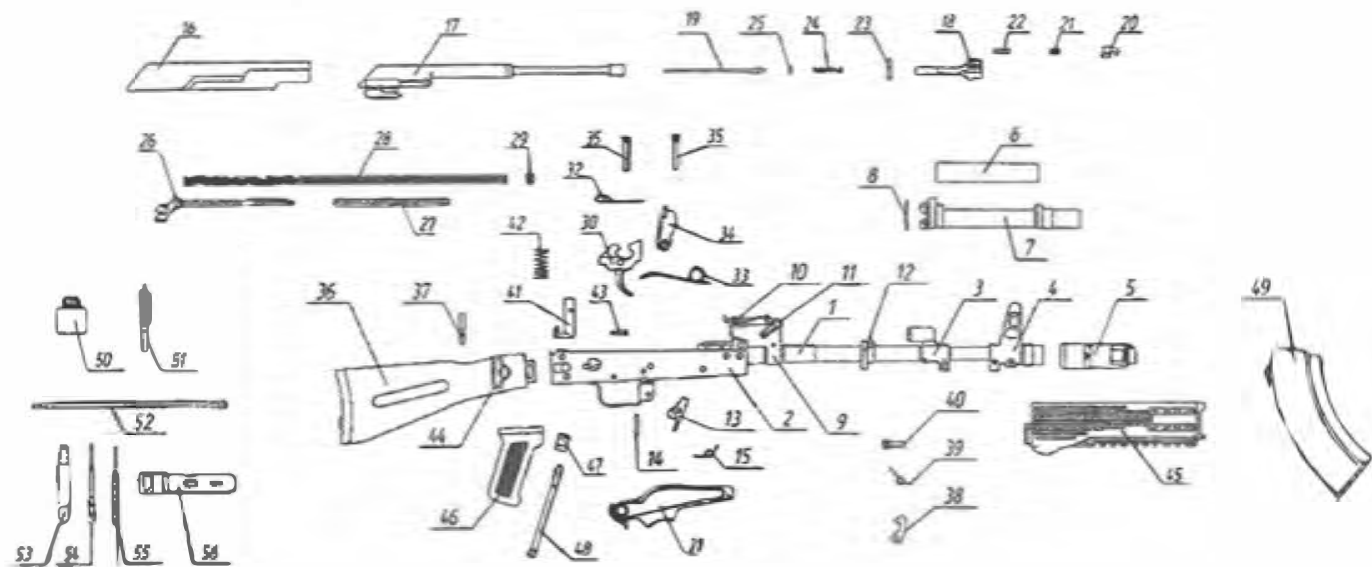
Butt and fore end

- 39 – butt retainer;
- 40 – retainer spring;
- 41 – retainer pin;
- 43 – nut;
- 44 – connecting screw;
- 61 – folding butt;
- 62 – swivel;
- 63 – butt pin;
- 64 – frame metal butt (spare);
- 65 – short fore end;
- 66 – pistol grip

Magazine

- 49 – follower;
- 50 – magazine spring;
- 51 – locking plate;
- 52 – magazine cover;
- 67 – extended body;
- 68 – stop

Figure A2 – Components of “Cañra” carbines version MK



Barrel with receiver

- 1 – barrel;
- 2 – receiver;
- 3 – front-sight bed;
- 4 – flash suppressor;
- 5 – hand guard;
- 6 – hand-guard base;
- 7 – hand-guard spring;
- 8 – sight bed;
- 9 – sight leaf;
- 10 – axle pin;
- 11 – fore-end ring;
- 12 – magazine latch;
- 13 – magazine-latch pin;
- 14 – magazine-latch spring;
- 15 – receiver cover

Bolt support with bolt

- 16 – bolt support;
- 17 – bolt;
- 18 – firing pin;
- 19 – extractor;
- 20 – extractor spring;
- 21 – extractor pin;
- 22 – firing-pin stud;
- 23 – firing-pin spring;
- 24 – bush

Retracting mechanism

- 25 – return-spring guide;
- 26 – guide rod;
- 27 – return spring;
- 28 – sleeve

Trigger and firing mechanism

- 29 – trigger mechanism;
- 30 – safety;
- 31 – trigger-mechanism spring;
- 32 – mainspring;
- 33 – hammer;
- 34 – trigger-mechanism pin

Butt and fore end

- 35 – butt;
- 36 – butt pin;
- 37 – butt latch;
- 38 – latch spring;
- 39 – latch pin;
- 40 – butt retainer;
- 41 – butt-retainer spring;
- 42 – butt-retainer pin;
- 43 – swivel;
- 44 – fore end;
- 45 – pistol grip;
- 46 – nut;
- 47 – connecting screw

48 – magazine**Accessories**

- 50 – oiler;
- 51 – bristle brush assembly;
- 52 – cleaning rod ;
- 53 – screwdriver;
- 54 – pull-through;
- 55 – drift;
- 56 – container assembly

Figure A4 – Components of “Саїра” version MKK